Understanding the Success of the Know-Nothing Party[*]

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August 2020

Abstract

This paper studies the contribution of economic conditions to the success of the first avowedly nativist political party in the United States. The Know-Nothing Party took control of a number of state governments in the 1854-1856 elections running on a staunchly anti-Catholic and anti-Irish platform. Our analysis focuses on the case of Massachusetts which during this period, industrialized early and fast, and faced a wave of Irish Famine immigration. Towns with more *exposure* to Irish labor market crowdout and deskilling in manufacturing were more likely to vote for the Know-Nothing candidate in the state elections. These two forces played a decisive role in some, but not all, years of the Know-Nothing's electoral success. We find suggestive evidence of reduced wealth accumulation for native workers most *exposed* to labor market crowdout and deskilling consistent with economic harm increasing support for the anti-immigrant party. The Know-Nothings lost power in 1857 to the abolitionist Republicans as the crisis over slavery came to a head, culminating in the U.S. Civil War.

JEL Classification Codes: J61, D72, N00
Keywords: Populism, Nativism, Economic Inequality

I Introduction

The Know-Nothing, or American, Party was the first major avowedly nativist party to achieve widespread electoral success in the United States. The party swept to power in 1854 to control the governorships of five states and several mayorships in the Northeast. To what extent is nativist voting behavior driven by labor market competition or technological shocks to production versus non-labor market factors, such as ethnic or racial animus? This question has been at the core of much research attempting to understand such tendencies, historically and today.[1] The Know-Nothings' electoral success came on the heels of millions of low-skilled Irish-Catholic immigrants and during a period of rapid industrialization and urbanization. Fogel (1989) emphasized these factors for nativist sentiment, whereas other historians argued that widespread anti-Catholicism and xenophobia outweighed any contribution from economic factors, Foner (1970) and Anbinder (1992) being two prominent examples. We bring new data and modern methods to bear on this debate.

The Know-Nothings most "striking" victory was in Massachusetts, on which we focus our analysis. In 1854, the Know-Nothing party secured all but three seats in the Massachusetts legislature and won the governorship with over 60% of the popular vote. Massachusetts was the vanguard of industrialization during this period and received a disproportionate share of the immigrants from Ireland. Know Nothing popularity throughout the U.S. was correlated most strongly with manufacturing employment (Figure 1) and less so with immigration and urbanization more generally. [2]

In this paper, we study the role of immigrant labor market competition (or crowdout) and deskilling in manufacturing in determining the electoral success of the Know-Nothing Party in the Massachusetts. On the labor supply side, a shock came in the form of mass migration of Irish. An estimated one million Irish fled their homeland during the Potato Famine of 1846 (see Figure 2). Over the period 1841 to 1851, Boston absorbed over 100,000 Irish immigrants, and by 1855 the Irish comprised one-quarter of the city's overall population and 85% of its foreign-born population (Handlin 1959). These Irish immigrants were low-skilled and competed with native-born workers as laborers, as factory operatives, and in fishing (Ferrie 1997). On the labor demand side, the shock came from deskilling in manufacturing. As early as the mid-1820s, manufacturing had grown to be the largest sector of the Massachusetts economy. By the 1850s, the movement to factory production led to the hollowing out of the skill distribution in manufacturing as skilled-mechanics and artisans were replaced with unskilled factory operatives (Field 1980; Atack *et al.* 2005; Katz

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[1]See Scheve & Slaughter (2001), Autor *et al.* (2016) and Margalit (2019).

[2]This analysis focuses on Northern and border states in which the Know-Nothing Party fielded a candidate. Anbinder (1992) argues that the party platform was dramatically different between these states and the South.

& Margo 2013). Although this process occurred in many Northern states at the time, the Commonwealth was at the leading edge (Temin 1999).

Our primary outcome variable is town-level gubernatorial race vote counts for the Know-Nothing candidate digitized from the *The Massachusetts Register* for various years. The Know-Nothings were widely known as *the* nativist party, and placed anti-immigrant grievances and policies at the center of the party's identity. Thus, votes for the Know-Nothing Party largely reflect nativist sentiment. Following Autor *et al.* (2016), we produce cross-sectional measures of exposure to labor market shocks and test which, if any, were of political consequence. To construct measures of exposure to immigrant labor market competition and deskilling in manufacturing, we digitize the 1845 Census of Manufacturers from Massachusetts in its entirety, the 1855 Census of Manufactures for the state of Massachusetts and approximately 300,000 individual occupations from the 1855 Population Census of Massachusetts. We also use the 100% population census from IPUMS for the state of Massachusetts for the years 1840 and 1850.

Our measure of exposure to deskilling is constructed by weighting the state-level shift in average establishment size between 1845 and 1855 with the town-specific specialization in a given industry in 1845. A negative wage-establishment-size gradient has been documented in the 20th and 19th century, by Goldin & Katz (1998) and Atack *et al.* (2004), respectively.[3] The exposure of native workers to immigrant labor market competition is constructed similarly in that state-level shifts are weighted by local shares and summed. The state-level 1850 to 1855 occupation-specific shift in Irish-born employment relative to initial employment in that occupation is multiplied by the initial 1850 town-specific *native-born* occupational shares.[4]

Our identifying assumption is that, conditional on other variables that proxy for competing explanations, these indices capture the causal effect of crowd-out and deskilling on political outcomes. We include controls for cultural and fiscal factors, urbanization, pre-famine political and economic structure, size of immigrant population shock, and include county fixed-effects. For both exposure measures, the identification concern remains that local shares may be endogenous, even conditional on the broad set of controls included. One advantage of our context is that the Know-Nothings focused their animosity solely on the Irish, and not other immigrant groups. Irish immigrants were generally lower-skilled than the German "forty-eighters", the British, or even pre-Famine Irish immigrants (Ferrie 1997),(Dippel & Heblich 2019), (Collins & Zimran 2019). This allows us to test whether

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[3] Atack *et al.* (2004) p.174 note this correlation is "broadly consistent with the deskilling hypothesis."

[4] Given data constraints during this early period, we use the earliest high quality data to construct the exposure measures.

results are similar when using German and British shifts in place of Irish in the crowd-out index. Separate identification of the crowdout and deskilling effects is complicated by the notion that low-skill migrants spurred industrialization (Rosenbloom 2002). Indeed, Sequeira *et al.* (2020) document how immigration during the Age of Mass Migration (1860-1920) increased the number of manufacturing establishments, and, by 1930, increased output per capita. To address the question of endogenous industrialization – we test whether changes in the average establishment size or value per capita are correlated with Irish immigration, for which we find no evidence.

Our main findings support the historians and economic historians who have argued negative economic shocks spurred native support for the Know-Nothings (Fogel 1989; Mulkern 1990; Fogel 1992). We find that direct labor market competition from low-skill Irish immigration had a positive and significant effect on nativist sentiment and aided the Know-Nothing party. A one-standard deviation increase in labor market crowd-out was associated with about a 3.5 percentage point increase in the Know-Nothing vote share in 1854. Deskilling associated with industrialization played an equally prominent role, with a one standard deviation increase associated with approximately a 1.4 percentage point increase in Know-Nothing vote shares. The two estimates are not distinguishable statistically. Taken together, labor market competition and deskilling explain approximately 15% of the mean Know-Nothing vote share in 1854. We repeat the analysis for subsequent elections and find these factors were decisive in Know-Nothing victories in 1855 and 1856, and to their loss in 1857. Our results are thus consistent with Margalit (2019) who distinguishes between *outcome* and *explanatory* significance of economic factors in the rise of populism throughout history; arguing economic factors tend to become decisive for the *outcome* of electoral success for populist leaders but these marginal factors are dwarfed in explanatory significance by non-economic factors (e.g. culture). However, highly persistent or near ubiquitous cultural factors can be challenging to identify. In our context, an Irish assimilation index does not predict vote shares; however, the role of noneconomic factors is hinted at by the fact Know Nothing strongholds are unmoved by deskilling or crowdout.[5]

Our findings are robust to the inclusion of county fixed effects, controlling for Irish immigration and proxies for Irish enfranchisement, urbanization, pre-famine voting patterns as well as measures of fiscal burden and assimilation. In addition, we find much weaker and statistically insignificant effects of British or German labor market crowdout

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[5]A possible interpretation of our findings is that these economic factors are set against a backdrop of (somewhat universal) animus towards Irish Catholics by the primarily Protestant native-born population of New England. We thank William J. Collins for this suggestion.

on nativism. We also fail to find evidence that Irish crowdout or deskilling positively predicted voting behavior prior to the immigration wave from the Irish Potato Famine, and a decade prior to the Know-Nothing victory. The results are unaffected by using or including controls of the pre-period economic structure, namely employment shares by industry constructed with the 1840 Population census.[6] Finally, we find negative impacts on wealth accumulation over the medium-term between 1850-60 for native-born workers more exposed to crowdout and deskilling, consistent with economic harm leading to nativist support. Though, as argued by Haynes (1897), these effects were partially offset by migration and occupational upgrading.

When examining stronghold locations – townships that continued to support the Know-Nothing party even when there was a viable alternative for progressive and abolitionist voters in the Republican party – the explanatory power of economic factors is significantly diminished. Taken together, these findings may indicate in some areas – nativist political behavior is immune to economic pressures.

An exploration of heterogeneity reveals that crowdout strongly interacts with the percent Irish in a given location, whereas deskilling (which captures movement into larger central establishments) interacts strongly with the growth of cottage or "putting out" systems. As discussed by Hazard (1913) in her detailed examination of the boots and shoe industries in New England, cottage industries represented a step in the evolution from home to factory production.

The rest of the article is structured as follows. First, we provide historical background on the Irish immigration and the long history of anti-Catholic sentiment in the United States. We then move to discussing industrialization and deskilling in antebellum Massachusetts and the success of the Know-Nothings. In Section III, we introduce the data we use in the analysis and the construction of the indices. Section IV describes the empirical framework. Section V reports the results and Section VI concludes.

II Historical Background

In this section, we describe the Know-Nothing as a party and their platform. Next, we discuss key historical factors postulated to have contributed to the rise of the Know-Nothing party. Then, we describe Irish immigration and explore the fears it engendered such as pauperism, labor market competition and "papist" enfranchisement. Finally, we turn to discussing broader changes in the economy including the shift to factory production and the ramifications for skilled and unskilled native workers in our conceptual framework.

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[6]Note that we cannot construct our crowdout measure using these shares because they do not provide ethnicity.

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II.A   Know-Nothing Origins, Principles and Platform

The Know-Nothing party grew from the union of oath-bound secret societies that merged into the Order of the Star-Spangled Banner in 1852.[7] Know-Nothing structure centered around the lodges which were established in each town. Membership required being a native-born citizen, a Protestant, born of Protestant parents, and not married to a Roman Catholic.[8] According to Desmond (1904, 52), the Know-Nothings were unique from other secret orders such as the Free Masons in that they were dedicated to political advancement. The oath used to induct members required them to "not vote or give your influence for any man for any office in the gift of the people, unless he be an American-born citizen in favor of Americans ruling America, nor if he a Roman Catholic." Only native-born Protestants could be supported for public office and political appointments (Massachusetts Constitution of the State Council, 1854; Connecticut Constitution of the State Council, 1854).[9]

Less than two years after its formation, the party had branches in every state and claimed over 1 million members (Gienapp 1985). Nationally, the Know-Nothings captured nine gubernatorial seats, dozens of national legislative seats and mayorships in major cities along the Eastern Seaboard. Nowhere did the party enjoy such unparalleled success as in Massachusetts, as described by Mulkern (1990, 76):

> *...the American party had managed the greatest election upset in the history of the state. Every constitutional state officer, the entire congressional delegation, all forty state senators, and all but 3 of the 379 representatives bore the Know-Nothing stamp. Henry Gardner's 63% majority and his 81,500 vote total for governor were the largest ever. He carried every city and all but twenty of the state's more than three hundred towns.*

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[7]Because lodge members were not sworn to secrecy, they were instructed to say that they "knew nothing" about the party if queried.

[8]Strictness on native-born parentage varied across states. Connecticut required that a member's parents also be native-born Protestants. Massachusetts initially required one set of grandparents to be native-born. Indiana chapters did not even require the member to be native-born as these chapters recruited from a population whose ancestry's only recently arrived in the U.S. (Massachusetts Register, 1853-1862)

[9]What type of men joined the secret lodges of the Know-Nothing party? We replicate and extend the analysis of Anbinder (1992) who first linked Know-Nothing members listed in chapter books to their records in the decennial U.S. census manuscripts. We digitized the names of members of the East Boston and Worcester Membership lists, and hand-matched them to the 1850 census. Relative to the average 18-65 year old man, members of the party are slightly older (36 versus 33 years old), slightly more likely to hold a profession rather than being a common laborer, and have about the same average occupational income (occscore). Over 10 percent of Know-Nothing members report positive real estate wealth, relative to 3.6 percent of male residents. The occupational distribution for Worcester is shown in Appendix Figure A.4 and can be compared to the occupation distribution. Members of the Know-Nothing party were much more likely to be mechanics than those in the general population, where mechanics includes carpenters, mechanics, blacksmiths, wheelwrights, etc. We conclude from this preliminary comparison that Know-Nothing party members were average working class men, not poor, but not the elite members of Boston society either.

Once in power the Know-Nothings pursued the platform outlined in Gardner's inaugural speech - including circumscribing foreign enfranchisement. The party pushed for a constitutional amendment for a literacy test for new voters – which was ultimately successful. But was not able to push through an amendment that immigrants must wait 21 years from entry before gaining suffrage. Other legislation targeting Catholics included convent inspections, a ban on (Irish) militias, and the required reading of the King James bible daily in public schools. The Know-Nothings of Massachusetts also absorbed progressive elements of the Whig and Democratic party - and under their leadership, funding for schools and hospitals was increased, while anti-corruption reforms were enacted and taxes raised.[10]

II.B   Irish Immigration and Native Fears

The Know-Nothing party's success followed an increase in the numbers of immigrants entering the state fleeing the Irish Potato Famine and the German revolutions. At the national level, immigration was 1.5 million in the decade prior to the Know-Nothing victory, a vast increase over the approximately 100,000 for the twenty year period between 1790 to 1810, the 200,000 between 1820 and 1830, and nearly 800,000 in the 1830s (Gardner 1855).

Irish immigration flows accounted for much of that surge, picking up in 1845, but slowing down after 1855. In Massachusetts, immigrants moved to Boston, but also to manufacturing hubs and mill towns which stretched across the state – see Figure 3 panel (A). Over 40 percent of the working age male population of Boston was foreign-born by 1850 growing to 48 percent by 1860. The rapid demographic change stirred long held fears about Catholics in the mostly Protestant native population of New England.[11]

Anti-Catholicism: Anti-Catholic prejudice permeated the culture of the colonies well before Famine-induced immigration, and was widespread throughout New England and nationally (Billington 1938).[12] Early Americans feared that Catholics lacked experience with democratic institutions of government, which the colonists had fought for, and the early Americans had sustained. Many in New England believed immigration could lead to the U.S. becoming a Papal state, despite the fact that Roman Catholic power – as proxied by

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[10]Many of the campaign promises for labor reform went unfulfilled. These included a secret ballot for laborers and 10-hour workdays. Although political insiders predicted the American party would be the future major oppositional power to the Democratic party - replacing the beleaguered Whigs, within three years the party had all but disbanded in the wake of growing anti-slavery sentiment and the Republican Party.

[11]The port of Boston recorded 5,560 immigrants in 1840 jumping to nearly 30,000 by 1849 (Shattuck (1845) quoted in Meckel (1985, 400).

[12]As evidence of the widespread nature of anti-Catholic prejudice, the most widely read contemporary book was an anti-catholic screed "The Awful Disclosures of Maria Monk," which described alleged horrific abuses of nuns carried out by priests.

Church property value – was not unusually high in the region, as evidenced by its location on the distribution of valuations across states.[13] Much of the hatred stemmed from the anti-national nature of the Catholic church combined with the fear that Catholicism was a force to overthrow Protestant governments (Billington 1938).

Events in the early 1850s appeared to increase anti-Catholic sentiment, though the United States had earlier experienced periodic outbursts of violence aimed at Catholics between in the 1820-40s (Anbinder 1992). School controversies developed in 1852 when a council of American Catholic Bishops called for Catholics to be educated in *state funded* parochial schools, a use of public funds to which Protestants dissented. The sects also clashed on the use of the Bible in the classroom. Catholics refused to let their children read Bible verses in school, and Protestants saw a Papal conspiracy to "...overthrow and demolish our Common schools."[14] Fanning the flames of Protestant conspiracy theories, the Vatican sent a papal nuncio, Gaetano Bedini, to settle a number of church property disputes by giving title to Bishops and removing ownership from local congregants. Bedini was a poor choice for the job. As, essentially, a military governor of Bologna in 1849 he acted to suppress revolutionary activity in the Papal States. The exiled Italian Forty-Eighters got wind of Bedini's speaking tour, and used the event to further foment hatred of Catholics for their anti-republican nature (Billington 1938). These events in the early 1850s can help explain the *timing* of the Know-Nothing's rise.

Fear of the Irish Voter: These deep-seated concerns about the inability of the Catholic to embrace democracy were stoked by the flood of Irish immigrants. Allowing the Irish to vote could jeopardize the separation of church and state, a concern highlighted in Gardner's inauguration speech: "Believing these dangers and probabilities real, it is a solemn duty to restrict alien franchise, that while entire toleration is granted to others to worship their Maker according to the dictates of their own judgment, we preserve the same right to us and ours untrammeled and unendangered (Gardner 1855)."

Two events reinforced Protestants' worries about the political leanings of potential Irish voters. First, there was also a well-founded concern among abolitionists that the Irish would favor the Fugitive Slave Law and the Kansas-Nebraska Act, and that they were generally *not* anti-slavery if not pro-slavery (McPherson 1988, 137). An Irish militia in Massachusetts, the *Columbian Artillery*, prevented the *Sons of Liberty* from freeing an imprisoned fugitive person who had been enslaved in Virginia.[15] Second, a proposed new state constitution in 1853 of the Democratic, Free-Soil, and "Locofoco" coalition aimed to

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[13]See Appendix Figure A.1 Panel B)

[14]? quoted in Anbinder (1992, 25)

[15]See www.masshist.org/object-of-the-month/march-2017.

reform the state political system and overhaul representation by giving more representation to rural areas where Democrats held a stronghold. Nativist language was used in the defense of this reapportionment.[16] When the constitution failed to pass, many contemporaries of the time blamed the Irish vote (O'Connor 1983). Indeed, the Catholic newspaper, *The Pilot* did delight in the defeat of the Constitution (as quoted in Oconnor1983), "The new Constitution rejected! Waterloo defeat of the Coalition!". More recent analyses have suggested that turnout among Whig strongholds was a more decisive factor (Sweeney 1976); with Irish shares not correlating strongly with the vote percent (see Figure 3 panel (B)). However, given the *perception* of contemporaries that the Irish vote helped defeat the Constitution – we use "nay" votes as measure of organized Irish electoral power in our empirical exercise.

Fear of the Irish Pauper: In most of the ante-bellum period, local governments were responsible for providing poor relief, and the increase in pauperism during the 1840s and 50s placed tremendous pressure on local budgets (Kiesling & Margo 1997). Amplifying these concerns, was that the fact that a large and growing share of relief spending went to provide for indigent Irish immigrants. A report to the legislature captured the scale of the problem. Over 10,000 people without legal residence in the state applied for poor relief in 1851, with 8,527 being foreign-born or children of the foreign-born. That year Massachusetts (towns and state inclusive) spent $212,000 on paupers without legal residence (Report of the Joint Committee to the Senate, April 29, 1852, *Boston Advertiser*, May 8, 1852).[17] Figure A.2 Panel (A) from the 1850 census indeed demonstrates that foreign-born paupers dominated those born in the U.S., and Massachusetts was second only to New York in the total annual cost to support the pauper population.

Town coffers were strained by immigrant arrivals, and the system of reimbursement led to conflict and fraud. The State's response to the "futile struggle between the towns and the Commonwealth over the support of unsettled paupers was the opening in 1855 of three large (but not large enough) almshouses," (Meltsner 2012, 70). The constant friction

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[16]From the Free-soiler newspaper, *Commonwealth*, quoted by Sweeney (1976, 126) "what with vast accommodation of capital on one hand and the influx of a poor, ignorant foreign population on the other they [cities] no longer represent the Historical Massachusetts."

[17]Legislative efforts aimed to stem the tide of Irish paupers backfired. An 1848 law created a Superintendent of Alien Passengers to inspect all ships carrying immigrants before allowing them to land in a Massachusetts port. Passengers deemed unlikely to become paupers were charged $2 a head from the ship-owner. For alien passengers thought likely to become a burden to any city or town at any time in the future, the Superintendent required a bond from the ship-owner of $1,000 (Haynes 1897, 76). The per head charge and size of the bond was onerous compared to those legislated in New York, leading to the practice of landing passengers in New York who then completed the remainder of the journey to Massachusetts by rail. In this case, New York received the benefit of the bond and fees without any of the expenditure risk (Haynes 1897).

between towns and the state about the adjustments of the per capita reimbursements eased after the almshouses opened, though not before cementing the stereotype of the Irish as beggars, paupers and criminals.

Fear of the Irish Laborer: Just as concerning was the threat the Irish influx might pose to native workers, which was frequently cited by Know-Nothing newspapers: *"[T]he enormous influx of foreigners will in the end prove ruinous to American workingmen by reducing the wages of labor to a standard that will drive them the farm and workshops altogether"* from the Sun (1854) quoted in Ferrie (1999, 163). The party platform listed reducing the immigrant threat to native workers as a primary political goal; a view espoused by their most prominent member in Massachusetts; as stated by Henry Gardner in his acceptance speech for Governor in 1855, *"The present European immigration is deeply prejudicial to the fair remuneration of American labor. The mechanic, the artisan, the agriculturist, daily suffer from its influence...Those who hourly feel the oppressing competition of alien labor...properly believe that their own as well the interests of the Republic demand that their elective franchise should be exercised for the protection of American labor,"* (Gardner 1855).

Despite contemporaries clear belief in negative wage effects from immigration in the 1850s, economic historians have debated their existence. As described by Haynes (1897) *"The fear of the immigrant as a wage earner...the rank and file of the laboring class proved themselves devoted believers in the wage fund theory."* Haynes' view was that the antebellum economy could absorb the migrants, while opening up better opportunities for native workers as supervisors. Haynes (1897, 75) defended his position quoting Edward Everett Hale from *Letters on Irish Immigration* (1852) who states: *"They (the Irish) do the manual labor. It does not follow that natives who must otherwise have performed it, do nothing or starve. They are simply pushed up into foremen of factories, superintendents of farms, railroad agents, machinists, inventors, etc."*[18]

A century later, the question of whether direct competition for jobs between Irish and native-born workers contributed to the wave of support for the Know-Nothing party remained unsettled. Fogel writes that *"[T]he timing of immigration and the distribution of immigrants over space are very important for understanding the economic distress suffered by native northern labor during the last two decades of the antebellum era"* (Fogel 1992, 17). Fogel argued (1992, 6): *"It is unlikely that the nativist political movement would have come close to the northern successes it obtained in 1853-1855 without the pressures on labor markets generated by the massive immigration of 1848-1854...."*. The prominence of labor market explanations was not

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[18]Haynes also cites lectures by Carroll D. Wright at Johns Hopkins as corroborating his stance. Indeed empirical evidence for such an effect is found by Tabellini (2020) during the epoch of mass migration extending from the latter part of the 19th to the early 20th century.

without detraction, however (Foner 1970). Mulkern (1990) notes that other states experienced mass immigration yet did not turn with such enthusiasm to Know-Nothingism.[19] The Irish immigrants into Massachusetts were generally lower-skilled than the German "forty-eighters", the British, or pre-Famine Irish immigrants (Ferrie 1997; see also Dippel & Heblich 2019 and Collins & Zimran 2019). Since the Irish immigrants were generally low-skilled, direct job competition and economic distress would have predicted to be worse for this group of native workers. Yet, precisely the group Gardner references, artisans, mechanics and agriculturalists, who were considered semi- to high- skill at the time, would have been affected by changes to the Massachusetts economy that began decades earlier.[20] Here, detractors conflate two labor market shocks leading to nativist sentiment: direct labor market competition from Irish immigrants and the rapid industrialization of New England leading to a hollowing out of the skill-distribution in the manufacturing sector.

II.C   Industrialization and Deskilling in Antebellum Massachusetts

As early as the mid-1820s, manufacturing had grown to be the largest sector of the Massachusetts economy. Industrial statistics taken in 1845 and 1855 showed the value of manufacturing output increased from $83 million to $215 million 10 years later (nominal dollars). The 1850 U.S. Manufacturing Census showed Massachusetts as the undisputed leader of textile and boot and shoe manufacturing, the first and third largest industries in the country. At the same time, the share of labor force in agriculture in the Commonwealth fell from 0.57 in 1820 to 0.15 by 1850 with 65 percent of the decline occurring between 1840 and 1850 (Field 1978, 153). Field (1978, 1980) attributes the rapid sectoral shift to competition from Midwestern agricultural products with increased East-West trade from improved transportation networks (see also Atack *et al.* (2010)). Although some of this labor was absorbed via an exodus to the frontier, credit and information constraints coupled with opportunities in cities slowed adjustment along this margin and aided urbanization.[21]

Field, in a series of papers, described the sectoral shift from agriculture to industry in

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[19]Mulkern (1990, 5) writes: *Explosive urban and industrial growth had thrust the Commonwealth into the forefront of the industrializing states in the antebellum period, creating, in the process, wrenching social and economic dislocations. The failure of the established parties to mount a significant response to the myriad issues and problems spawned in the matrix of modernization weakened partisan attachments and set the rank and file of the established parties on a quest for a political vehicle that would make a difference in their lives. In 1854, such a vehicle materialized in the form of an antiparty, antipolitician populist movement that promised to cleanse the statehouse of corruption and self-serving political careerists and turn the government over to the people..."*

[20]According to our data, the occupations listed by Gardner experienced only slight increases in the share Irish (see Figure A.4).

[21]According to Field (1978), such constraints explain why the overall "land abundant" U.S. industrialized at all.

antebellum Massachusetts, finding that the process overall was deskilling.[22] Production shifted to factories and increased the demand for less skilled labor (Atack *et al.* 2005). The factory and putting out systems primarily displaced semi-skilled (i.e. artisan) labor leading to a "hollowing out" of the occupational structure (Katz & Margo 2013).[23] Other well-documented factors that contributed to the growth in establishment size in manufacturing, included the development of financial markets (Rousseau & Sylla 2005), and legal changes in business organization (Lamoreaux 2006; Hilt 2008). Although this process was occurring in many Northern states at the time (see (Temin 1999)); the Commonwealth was at the leading edge.

The rise of manufacturing meant population growth in cities. By 1840, Massachusetts was the most densely populated state in the nation at 127 inhabitants per square mile. [24] The proportion of the population living in towns of 2,500 residents or more increased from 11 percent in 1790 to 23 percent in 1820, to 50 percent in 1850 (see Appendix Figure A.3). With the exception of Rhode Island, Massachusetts was the most urbanized state, and faced the most rapid increase in urbanization.[25]

II.D   Conceptual Framework: Crowd-out, Deskilling and Native-born Living Standards

Our framework for understanding this time period is a model in which deskilling and immigration create differential shocks to high-skill and low-skill labor markets, thereby affecting their equilibrium wages (see Figure 4). Deskilling would have reduced demand for semi-skilled workers thus depressing their wages. This would have been exacerbated by competition from immigration, though Irish were generally involved in low-skill jobs. On the other hand, deskilling was complementary to low-skill workers at the time, pushing out the demand for factory workers. Although this alone might have increased equilibrium low-skill wages, an increase in supply of Irish workers could still lead to a lower overall equilibrium wage.

We lack high-quality, high-frequency wage data during this time period which would

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[22]Field (1980, 165) writes: *[A] very large share of manufacturing employment in the period of early industrialization in Massachusetts was in industries which, because of the nature of the materials being processed, were then, and are today, relatively unskilled industries. Second, a relatively small share – perhaps 5 percent of the manufacturing labor force, ...was employed in the relatively high-skill machine-building industry.*

[23]Field (1978) argues that Massachusetts farming involved expertise and thus any movement out of the agriculture sector furthered overall deskilling.

[24]See Table XII in DeBow (1854, 40).

[25] Indeed, although by 1850 Massachusetts had the largest percent Irish, it was not very different from New York or Rhode Island in that regard (they were all around 12% - see Figure A.1 Panel A). Mulkern points out these other states did not overwhelmingly elect nativist leaders. Instead, he argues it was the "transcendent force of modernization" including "explosive urban and industrial growth" - and the "failure of the established parties to mount a significant response" that led to their dominance in the Bay state.

allow us to accurately test these hypotheses. Wage data for this time period has been criticized for not accurately capturing the living standards of ordinary workingmen and generally being of low frequency and quality (Fogel 1992, 482-84). One notable exception is the series created by Margo & Villaflor (1987) using payroll data from civilian members of the US Army. Based on these data, wages of artisans and laborers fell by 18% and 10%, in the Northeast over the 1848 to 1855 period. Fogel remarks these are likely underestimates as they are not adjusted for unemployment. Moreover this figure neglects to other margins of adjustment - such as migration and occupational upgrading by the native-born.

Ferrie (1999) examines the specific question of whether immigration depressed native incomes in the antebellum period.[26] With a sample of approximately 3,000 adult native-born men linked across the 1850 and 1860 decennial censuses, Ferrie finds a positive effect of foreign-born on occupational upgrading of native-born low-skill workers but a negative effect for skilled workers. We conduct a similar exercise looking at the effect of labor market crowdout and deskilling on wealth accumulation for native-born men between 1850 and 1860. We discuss these findings in the results section.

III   Data and Measurement

III.A   Election Returns Data

Our primary outcome variable is town-level gubernatorial race vote counts for the Know-Nothing candidate published in the *The Massachusetts Register (1853-1862)*. We digitized votes using hand-double-entry, and verified the data with original hand-written returns for the 1854 and 1857 elections held at the Massachusetts State Archives. Massachusetts provides the finest geographic detail for election returns during the period based on using the town as the primary political unit (see Figure A.7). Summary statistics for election returns are reported in Appendix Table A.1.

Massachusetts towns were meaningful political and economic units with local elections conducted at this level. Know-Nothing vote share is calculated as the number of votes for the Know-Nothing candidate divided by the total votes in the town. The benefit of election data is that it measures actual behavior as opposed to self-reported perceptions, since the latter can be contaminated with demand bias.[27] One drawback of using vote data as a proxy for anti-immigrant sentiment is that voters select a candidate based on a bundle of attributes such as valence as well as policy positions. Note that the Know-

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[26]Two other notable historical references are Goldin (1994) and Hatton & Williamson (1998) who find that mass immigration at the turn of the 20th century had a negative effect on native wages, in contrast to many contemporary results which generally find a positive effect. These differences may be related to the demand for low-skill labor at different points in time.

[27]Opinion polls provide another measure of the extent of nativist views and are commonly used in the modern literature (Hainmueller & Hopkins 2014; Inglehart & Norris 2016)

Nothings were widely known as *the* nativist party, and placed anti-immigrant grievances and policies at the center of the party's identity. Thus, votes for the Know-Nothing Party largely, but not solely, reflect nativist sentiment.

III.B Exposure to Immigrant Labor Market Competition:

We measure town-level exposure to Irish labor market competition as the change in the number of Irish-born workers in each skill cell between 1850 and 1855 normalized by total employment in that cell in 1850, and weighted by the skill cell's share in each local labor market's initial native-born employment:[28]

$$(1) \qquad Crowdout_i = \sum_j \frac{L_{Native,j}^{1850,i}}{L_{TotNative}^{1850,i}} \cdot \frac{(L_{Irish,j}^{1855,Mass} - L_{Irish,j}^{1850,Mass})}{L_{Total,j}^{1850,Mass}} \quad ,$$

where i indexes local labor markets, j represents skill groups, and the time step is between the 1850 Federal Census and the 1855 Massachusetts Census.

Skill-groups are defined by broad occupational categories, comparable across datasets: agriculturalists, boot and shoe makers, factory operatives, laborers, manufacturers, mariners, low-skill mechanics, high-skill mechanics, merchants, professionals, and miscellaneous.[29] We restrict the sample to men between the ages of 18 and 65. Female employment during this period was heavily concentrated in the cottage industries (the boot and shoe industry as well as straw hat making) as well as in textile mills. We include cottage employment (the sum of employment in boot and shoe and hat making) as a control variable.[30] Moreover, women could not vote in state and presidential elections in Massachusetts at this time. The voting data does not include the political views of women, except to the extent that men took them, or the economic effects of immigration on women's labor market outcomes, into account.

State-level changes in foreign-born penetration for each skill group are constructed from a combination of the 1850 complete count census provided by IPUMS, and the 1855 Massachusetts Population Census microdata provided by FamilySearch.org (Ruggles *et al.* 2018; FamilySearch 2016). The latter required digitizing the 1855 Massachusetts micro-

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[28]Acemoglu & Restrepo (2017) and Collins & Niemesh (2019) use a similar construction of local *exposure* to a labor market shock, industrial robots in manufacturing and labor unions, respectively. See also Card & Peri (2016) for the link to theory.

[29]The eleven broad categories correspond to those used in the published aggregate statistics of the 1855 Massachusetts census. We use these to verify that our data digitization of the microdata aligns closely with the published aggregates. Card (2001) and Friedberg (2001) used occupations as a measure of skill when estimating the impact of immigration in the modern United States.

[30]Employment was only asked of men ages 15 and older in the 1850 census, not for women.

data, hand-entering occupations for 300,000 working age men.[31]

Figure 6 plots the share of state-level native employment in each occupation in 1850 and the occupation-specific Irish employment shift, the first and second terms of equation 1, respectively. Although we are using town-level shares in our empirical exercise, the figure provides a visualization of the variation in the shift and a summary of the native occupational distribution. The largest shifts in foreign-born penetration occurred in factory operatives, boot and shoe makers, and laborers. Native-born employment, on the other hand, was concentrated in farming, mechanics of all type, boot and shoe making, and laborers. [32] Variation in $Crowdout_i$ across local labor markets comes from variation in the local skill-structure of employment during the initial period, prior to the Irish immigration. Towns where native employment was concentrated in occupations with large shifts were more *exposed* to Irish labor market crowdout.

III.C Exposure to Deskilling

Exposure to deskilling in manufacturing follows the general setup of equation 1 – industry-specific changes in average establishment size interacted with lagged local industry employment shares:

$$(2) \qquad Deskilling_i = \sum_k \frac{L_k^{1845,i}}{L_{Tot}^{1840,i}} \cdot \left(\frac{L_k^{1855,Mass}}{N_k^{1855,Mass}} - \frac{L_k^{1845,Mass}}{N_k^{1845,Mass}} \right) \quad ,$$

where i denotes town, k denotes industry, L denotes employment and N represents the number of establishments. The initial industry shares by town are constructed from town-level reports in the 1845 Massachusetts Manufacturing Census, which were hand-entered by the authors (Palfrey 1846). Note that the denominator for the share of employed is taken from the 1840 census. This is so we could normalize by all employment in a town, not just manufacturing employment as reported in the 1845 Manufacturing Census.

We focus on average establishment size since it is often viewed as a signpost of industrialization. Atack *et al.* (2004) demonstrate that average establishment wage declines with establishment size consistent with deskilling. Additionally, see Sokoloff (1984) Goldin & Sokoloff (1984), and Atack *et al.* (2010). [33] To operationalize this measure, we digitized

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[31]First, occupation strings were coded into the 1880 specific IPUMS occupation codes (OCC). The 1850 IPUMS complete count census microdata contains OCC codes. For both the 1850 and 1855 data, we then constructed the state-level foreign-born (or Irish) proportion in each of the 11 broad occupation categories.

[32]The mechanics category includes carpenters, blacksmiths, and all jobs ending in "maker" such as paper-maker, etc., except for boot and shoe makers, which we place in its own category. Boot and shoe making was the second largest manufacturing industry in the state by output value after textiles. Production occurred primarily through the putting-out system of home production, not in factories.

[33]The average establishment size increased from around 20 to 35 over 1837 to 1855 – thus further evidence

town-level aggregate reports from the 1837, 1845, and 1855 Massachusetts censuses of manufacturing (Bigelow 1838; Palfrey 1846; DeWitt 1856).

The average establishment size for the years 1837, 1845 and 1855 is shown in Figure 5. The distribution of size shifted to the right over time consistent with larger establishments. Our preferred specification uses the shares available from 1845, and shifts from 1845-55, as this specification provides the most industrial detail and coverage of manufacturing employment.[34]

III.D   Control Variables

We collect a variety of town-level characteristics from various sources. The Data Appendix provides details on the construction and sources of all control variables. Summary statistics for all control variables are reported in Appendix Table A.2.

To distinguish our Irish labor crowdout measure from simply facing more Irish immigration, we include the share of town population in 1855 that was born in Ireland (see Figure 3). This variable also partially captures Irish voting patterns, though in robustness checks we include a better measure: the 1853 vote for a new Massachusetts Constitution. As noted above, the defeat of the proposed Constitution was widely blamed on the Irish voter (see Chapter 2 of Mulkern (1990)). A map of the nay vote is shown in Figure 3.

We measure the fiscal burden posed by Irish immigration by digitizing the number and nativity of paupers by town from the 1850 Census of Social Statistics schedules. Included in our control set is an indicator for *any* foreign pauper in the town as the distribution is highly skewed. However, normalizing foreign paupers by ratable polls (as a measure of population of taxable adults/voting population) or total pauper population does not alter our main results.

To capture urbanization more broadly, we include an urban indicator equal to one for towns with populations greater than 2,500 in 1855. In robustness checks we include log population in 1855. We also include the town-level number of manufacturing establishments per capita in 1855. We also include the 1840 share of the population that is involved in manufacturing and the number of individuals in cottage employment in 1837. The latter is defined as those in industries dominated by women but are not organized into establishments (i.e. the putting out system). [35]

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than Massachusetts was well on the path to industrialization before the Irish famine.

[34]Industry coverage in the 1837 manufacturing census is less complete than in 1845. We explore other year combinations in robustness checks in the Appendix.

[35]Cottage industries include: boots and shoes (71% of all cottage employment); straw bonnets and hats (27%); snuff, tobacco, and cigars ($< 1\%$); whips; port-monnaies, pocket-books, etc. ($< 1\%$); clothing ($< 1\%$); bookbinding ($< 1\%$). The boot and shoe, and straw bonnet and hat industries make up 45 percent of total manufacturing employment in the state. See Appendix for more details.

Many contemporaries were worried the Irish could not assimilate to the democratic tenets of the U.S. To proxy for assimilation – we construct measures of the fraction of Irish-born immigrants granting their U.S. born children traditionally Irish names, using methods described in Abramitzky *et al.* (2019). Some of the more Irish names include Brigit and Pat, whereas less Irish names are Willie and Georgeanna.

To account for potential pre-existing differences in the structure of town economies, we include the share of men who were in the following seven activities: manufacturing, commerce, agriculture, mining, river navigation, ocean navigation and professional staff/engineering using the IPUMS 1840 Population Census schedule for Massachusetts (Ruggles *et al.* 2018).

For placebo outcomes, we digitize additional election returns from ten years prior to the rise of the Know-Nothing party and before increase in immigration from the Irish famine. In robustness checks, we use the earlier vote shares for the Whig gubernatorial candidate in 1844 as a control for pre-existing variation in voting patterns. There is some narrative evidence that the Whigs were the home of the anti-catholic nativists (Mulkern 1990), and this control potentially captures any pre-existing "cultural" nativist sentiment separate from that driven by economic factors, in particular, Irish labor market crowdout from the post-1845 influx of Irish immigrants. We also construct *placebo exposures* to labor market crowdout from the British and Germans following the construction of Irish crowdout in equation 1.

IV Empirical Framework

To test the relevance of labor market crowdout and deskilling to the Know-Nothing ascendancy in Massachusetts, we estimate:

$$(3) \quad KnowNothingShare_{i,1854} = \alpha + \tau Crowdout_i + \gamma Deskilling_i + X_i\beta' + \delta_{county} + \varepsilon_i$$

where X includes the elements described above, and δ_{county} is a set of county indicators. Our primary outcome of interest is the Know-Nothing rise to power in 1854, shown in Figure A.7 Panel A.

Identification of τ and γ, the coefficients of interest, comes from within-county variation in the exposure to direct Irish labor market competition and deskilling, conditional on X_i. Regressions are weighted by eligible voters by town from the registration reports (i.e. ratable polls). Because the governor was elected by state-wide popular vote, weighting provides a better estimate for the effect that factors had on driving the outcome of the election. Additionally, some of the towns are small – and weighting helps reduce the noise in our estimates. We reduce concerns of one major outlier driving the results by dropping

16

Boston from the main analysis. But we show results without weighting and with including Boston in robustness checks. Finally, both the deskilling and crowdout measures are standardized to have mean zero and a standard deviation of one.

Identification of τ and γ as the causal effect of labor market crowd-out and deskilling rely on our construction of indices using time-lagged shares and state-level shifts and the conditional independence assumption. Still, the occupational and industrial composition that identifies these indices is not randomly assigned. To increase our confidence in the estimates, we develop alternative measures of labor market crowd-out that use placebo immigrant groups as shifters - such as the Germans/British. We conduct a permutation test to see how extreme the estimated coefficients are in a distribution of placebo estimates.

Although lagged values of indices reduce simultaneity bias, they engender the concern that native workers might move between the time of our shocks and the Know-Nothing vote. In the best case scenario, this would only lead to measurement error in our exposure estimates. However, the moves may be systematic; indeed they may be *caused* by crowd-out or deskilling. Although nativists could continue to stay in areas affected by a shock, or move in a coordinated fashion to a largely unaffected area, we find economically small effects of either factor on migration rates of natives (see Table 5).

V Results

V.A Main Results

Results from estimating equation (3) are in Table 1, where the outcome is the share of votes for the Know-Nothing candidate for Massachusetts governor in 1854, Henry J. Gardner. We add additional controls moving across columns. In Column (1) we include only the main variables of interest – the deskilling and crowdout indices. We find that a one standard deviation increase in Labor Market Crowdout increases the Know-Nothing vote share by 3.1 percentage points. Similarly, a one standard deviation increase in the deskilling index increases the vote share by 0.8 percentage points.

In column (2) we add county fixed effects (combining Dukes and Nantucket for 13 indicator variables). Column (3) adds the controls for urbanization discussed above, an indicator for towns with greater than 2,500 people in 1850; the employment in cottage industries in 1845; and manufacturing establishments per capita at the town level in 1855. Column (4) adds the percent Irish in 1855; column (5) adds the controls for culture and fiscal burden. Finally, column (6) adds share of employment in manufacturing and in agriculture as recorded in the 1840 U.S. census. The results across all columns are fairly consistent and column (6) is our preferred specification. The magnitude of the crowdout effect is roughly double the effect of deskilling for a one standard deviation increase in the

variables, respectively. However, the Wald test that the coefficients between crowdout and deskilling is only marginally statistically significant when the full controls are included.

Despite their seemingly similar magnitudes, the economic factors are not highly correlated nor are they driven by outliers. Figure 7 panel (A) and (B) demonstrates the marginal effect of crowdout and deskilling holding all other variables constant from our preferred specification (column (6)). The unadjusted scatter plot between the two measures is shown in Panel (C). Deskilling takes on zeros in some locations either because the industrial employment shares are empty in the 1845 census or average establishment size in an industry did not increase over 1845-55 (i.e. the shift was zero).[36] In these instances, we set deskilling to the minimum value in the sample when standardizing.

To benchmark their relative importance, we conduct a counterfactual exercise that corresponds to a case where Irish immigration was nonexistent between 1850-55, and manufacturing establishment size remained unchanged between 1845-55. We obtain coefficient estimates using our observed data, then set each observation, for one exposure at a time, to the sample minimum and predict the outcome. The counterfactual Know-Nothing vote share drops 5% when deskilling is set to its minimum and approximately 10% when crowdout is so minimized. We find that these factors were not decisive in 1854, when the Know-Nothing party victory was overwhelming - but as the support began to wane in subsequent years, reshuffling Know-Nothing votes from economic factors to other parties would have changed the electoral outcome.[37]

V.B   Robustness and Falsification Checks

We next check that our results are not overly sensitive to different specifications. Table 2 reports these exercises. In column (1) we add the vote share from the constitution of 1853 as a proxy for perceived Irish enfranchisement. Moving to column (2) we add the historical vote for the Whigs in 1844. Neither of these additions change the results significantly. Columns (3) and (4) expand the control set for urbanization by adding an indicator for a mill town and the log of 1855 population. The results are fairly constant. Column (5) and (6) provide additional controls for the economic environment of given towns. Column (5) controls for native labor demand by using the change in employment of natives between 1850 and 1855 across all industries normalized by their initial value. Column (6) accounts for early industrial development by including all categories reported in the 1840 Population Census are Manufacturing, Commerce, Professional, River Transportation, Ocean

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[36]Out of 106 industries listed, establishments were reported for 62 in both 1845 and 1855. Six of the remaining industries are considered cottage industries with shift equal to zero as deskilling was already complete by 1845.

[37]We reach this conclusion by setting each economic factor to the minimum, predicting votes and reallocating the votes to other parties.

Transportation, Mining, and Agriculture. Column (7) includes Boston in the sample. Finally in column (8), we drop weighting by eligible voters. The standard errors increase and the magnitudes do decline, but not substantially.

Tables 1 and 2 convey a robust association between the Know-Nothing vote share and Irish labor market crowdout and deskilling. As an additional robustness check against spurious correlations, we run permutation tests. We replace the actual exposures in a town with randomly chosen values of the crowdout and deskilling indices from the full sample of towns. We create 1,000 samples and re-estimate equation 3, placing our actual estimates in the distribution of the placebo estimates. Appendix Figure A.6 presents the distribution of coefficients on deskilling and crowdout. Our main results are in the tails of the distribution: the actual effect of crowdout is greater than the 99th percentile of the placebo distribution, and the actual effect of deskilling is greater than the 94th percentile.

Finally, we show by using multiple methods that spatial correlation in the data does not artificially inflate the p-values for our main findings. Regressions with geographic data for dependent and independent variables may lead to spuriously low estimated standard errors and incorrect inference (Kelly 2019). See Appendix Table A.3 for these results. The spatial correlation of residuals and Moran's I statistics suggest a potential for bias from spatial correlation at very short distances only. Moreover, the potential for bias is smaller than that found by Kelly (2019) in a number of papers. [38] Moreover, the standard errors are insensitive to allowing for spatial autocorrelation using the method developed by Conley (1999). Finally, we directly control for the spatial lag of the exposure variables of interest, which does not change the interpretation of the effects of exposure to Irish labor market crowd out or deskilling in manufacturing. We find no evidence of spatial spillovers for crowdout, and only slight evidence of local spillovers for the deskilling index.

Placebo Outcomes and Exposures: The deskilling and crowdout indicies do not provide much predictive power for *pre*-Irish famine immigration political outcomes. Table 3 repeats our main specification from Table 1 with Democratic Governor Vote Share in 1844 and Whig Vote Share in 1844 as the outcome (columns (1) and (2), respectively). We fail to find strong evidence that either factor predicts Democratic votes. The deskilling variable continues to have no effect for the outcome of 1844 Whig Vote Share, and, although crowdout is marginally significant, it has the wrong sign. Note that we include the 1844 Whig vote share as a control in a robustness check in Table 2, to which our main results are robust.

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[38]The null of no spatial correlation is rejected at very short distances, such as 20km, but allowing for correlation of residuals as longer distances we fail to reject the null. For reference, Massachusetts is 296km East to West and 186km North to South. In general, the tests indicate that our data do not suffer from a high degree of spatial correlation.

We exploit the anti-Irish and Catholic sentiment at the center of the Know-Nothing platform to construct placebo *exposures* for crowdout from non-Irish immigrants. In our setting, there is little overlap in the occupational structure of Irish immigrants with that of German and British immigrants. Figure 8 demonstrates that almost 60% of the Irish were laborers compared to only 20% of Germans. Germans were more likely to be employed as mechanics (40%) than Irish (20%). Moreover, there were far fewer German immigrants to Massachusetts than the Irish (see Figure 8 Panel (B) for frequencies). Although Germans tended to be Catholic as well, their much smaller numbers might not have provoked as much hostility from the native-born.

Columns (3) to (5) of Table 3 examine the robustness of our findings to these additional placebo crowdout measures using occupational shifts for Germans, the British, and the two groups combined. The magnitudes on Irish crowdout and deskilling remain essentially unchanged. Moreover, the coefficients on these "falsification" crowdout measures are economically small and statistically insignificant. Note that the shifts for these groups are smaller but are somewhat correlated with the shifts from Irish immigrants, particularly for factory operatives (see Figure 8 Panel (C)). The fact that the distribution of skill/occupations in Panels (A) and (B) are so different across ethnic groups, but the shifts are similar suggests that there was growing demand for labor in these occupations – potentially independent from the Irish per se; a point we turn to next.

V.C Short- and Medium-term Effects on Industrialization and Native-born Living Standards

One threat not addressed in the robustness analyses above is whether the Irish aided in industrialization. Furthermore, no evidence has been presented that demonstrates native-born workers materially suffered from these economic exposures. We address both these issues in this section.

Did the Irish Cause Short-Run Industrialization? We find no evidence that Irish immigrants were more likely to settle in areas that experienced faster industrialization between 1845 and 1855 consistent with immigration not causing short-run industrialization in our setting. Table 4 investigates whether Irish settlement patterns predict either levels or changes in manufacturing measures. In column (1), we find that the percent Irish in a town in 1855 is negatively associated with the number of manufacturing establishments per capita in 1855, and in column (4) is positively associated with the dollar value of manufacturing output per capita in 1855. These results are consistent with Irish immigrants being more likely to reside in larger cities, mill towns, and mill villages with a small number of large establishments. However, the more relevant test is whether the level or change

in Irish employment predicts *growth* in manufacturing. We find no evidence that this was the case for the change in establishments in columns (2) and (3), or for the change in output value in columns (5) and (6).

Effects of State-level Irish Crowdout on Native Wealth, Migration and Occupational Upgrading Although the results in Table 4 suggest that there was no short-run benefit to industrialization from Irish immigration, there could still have been effects on the native-born worker. As discussed above, we lack detailed wage data from this period, but there are other margins of adjustment we can explore.

Following Ferrie (1997), we construct a linked sample of 50,587 native-born Massachusetts men from the 1850 to 1860 Census. The individual-level data on economic outcomes and occupation enables us perform an analysis using a crowdout measure specific to the individuals' occupational group as defined in 1850. Such an analysis is not possible with aggregate town-level voting outcome data. Specifically, we define state-level crowdout as the 1850 to 1855 growth of Irish-born into the native individual's 1850 occupational group, essentially the occupation-specific "shift" portion of our crowdout measure. [39]

We use the town-level deskilling exposure from the main analysis, because unlike for crowdout, a person-specific measure for deskilling is impossible to construct. The 1850 census reports occupation, not industry. Thus, industry-level changes in average establishment size cannot be linked to individual workers. Instead, we include town-level exposure to deskilling as a proxy. Deskilling is interacted with an indicator for mechanics to capture the likely heterogeneity of effects across occupations.[40]

The outcomes of interest include property wealth in 1860 (dollar value of personal and real estate property), occupational upgrading (an increase in the wealth score of the occupation between 1850 and 1860) and migration. Migration is an indicator for any individual who has changed towns between the two censuses. Approximately 60% of the movers in the sample migrate within state. All regressions condition on county and age group fixed effects as well as 1850 real estate wealth and an indicator for any positive amount of property in 1850.

The results are gathered in Table 5. In column (1), a one standard deviation increase in crowdout reduces wealth by 22%. The effect of deskilling is concentrated in native Mechanics, with a one standard deviation increase associated with an 8% decrease in wealth.

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[39]This is the state-level change in Irish-born individuals in occupational group j between 1855 to 1850 divided by the total employed in occupational group j in 1850.

[40]Using the individual matched sample, we could recover the town-level Irish crowdout exposure measure used in the main analysis. Collapsing the occupational frequencies in the individual data to the town level would provide the weights for a weighted sum of the state-level occupation specific shifts. Doing so results in noisy estimates of negative impacts on property wealth from both Irish crowdout and deskilling.

In column (2), we add an indicator for whether the individual moved and the interaction between crowdout and migration. We find that the negative effects of crowdout on wealth are mitigated to some extent by migration. Similarly, in column (3) the negative effects of crowdout on wealth are offset by occupational grading.[41] Column (4) to (6) replicate the results from columns (1) to (3) for the outcome of any positive wealth in 1860. Results are consistent with crowdout decreasing property wealth on the extensive margin, and deskilling having no effect. Column (7) demonstrates that a one standard deviation increase in deskilling increases the propensity to move by 1.4 percentage points (5% of the mean), but is not concentrated solely in Mechanics. Crowdout is not associated with increased migration. Finally in column (8), a one-standard deviation increase in Irish crowdout is associated with a 13.7 percentage point increase in occupational upgrading (49% of the mean), and a one standard deviation increase in deskilling with a 1.7 percentage point increase in occupational upgrading (6% of the mean).

V.D Strongholds, Heterogeneity and Turnout

Although the Know-Nothings lost popular support rather quickly, some voters clearly continued to prefer them – despite having alternatives in the new Republican party to the former Whig hegemony. Know-Nothing support declined from 63 percent of the state-wide vote in 1854 to 29 percent in 1857 when they lost the governorship to the Republicans.[42] We turn our attention to understanding whether economic factors have predictive power in "stronghold locations". Since there is no universally accepted definition of a stronghold location - we use several. These definitions all share the general notion that a stronghold is a place where Know-Nothing support is consistently, relatively high. We then use such definitions to examine whether the Know-Nothing rise in 1854 in stronghold locations is affected by economic factors.

These results are gathered in Table 7. The outcome is the Know-Nothing vote share in 1854. Column (1) replicates the preferred specification from Table 1 column (6) for comparison. In Column (2) we define Stronghold as a town that was in the upper 75th percentile of the Know-Nothing vote share in both 1854 as well as in 1855 – when there existed another viable alternative for abolitionists and progressives in the Republican candidate. Column (3) uses a definition of stronghold based on the other year a Republican candidate was fielded – 1857. Finally column (5) defines a stronghold as a place that was in the top 50th percentile of Know-Nothing votes in every year from 1854 to 1858. A map

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[41]There are differences between the two adaptations to economic pressures, whereby the main effect of moving is negative but of occupational upgrading is positive on wealth. Though these must be interpreted with caution as they do not take into account the interaction, plausibly capture selection into migration and upgrading, and we do not have instruments for either.

[42]Table 6 lists vote totals for all major parties in the 1852-1858 elections.

of these locations according to this last definition is shown in Panel (D) of Figure A.7.

Across all columns, we see a pattern in which economic factors, particularly crowdout, seem less relevant in predicting Know-Nothing early success in stronghold locations. In the last column – among locations where the vote shares are more reliably at the upper end of the distribution for Know-Nothings – there is no effect of crowdout or deskilling once adding the main and marginal effect.

In sum, our results document a brief jolt of Know-Nothing support related to both long-simmering (i.e. industrialization and deskilling) and more acute (i.e. immigration and crowdout) economic changes. This support was brief however and economic factors do not well explain nativist patterns for the most ardent supporters. Importantly, these suggest that our economic exposure measures are not capturing cultural anti-Catholic nativism, which the strongholds represent.

In Table 8 we examine whether interactions with our main economic factors can further elucidate the relationship between crowdout, deskilling and the Know-Nothing vote share in 1854. In column (1) we find that there is not a strong interaction between deskilling and crowdout. This may now not be very surprising since the two measures are not highly correlated and are designed to pick up different shocks for different skill levels in the occupational distribution (see Figure 7 Panel (C)).

Column (2) demonstrates that crowdout has a larger effect where there are more Irish living in a location. Evaluated at the 75th percentile share Irish in 1855 (approximately .25) - the results suggest that a one standard deviation increase in crowdout would increase Know-Nothing vote share by about seven percentage points. The next column of interest is the interaction of deskilling with cottage industries. Our main specification includes a lagged control for cottage employment, and in this interaction we assess whether the growth in cottage industries interacts with the shift towards factory production. We find suggestive evidence that these two effects are indeed multiplicative. Lastly, we test whether there is an interaction between lack of assimilation, fiscal burden and crowdout or deskilling. Using the measures we have at hand for these postulated "non-economic" factors – we fail to find consistent support for their importance in the movement.

We find no evidence that Irish labor market crowdout and deskilling in manufacturing increased the Know-Nothing vote share by increasing voter turnout. Table 9 reports regression results using turnout in a given election year as the dependent variable in our preferred specification from column (6) in Table 1. In general, deskilling and crowdout do not strongly predict turnout. If anything, increased crowdout reduced turnout, working against Know-Nothing success. These results are consistent with economic factors increasing Know-Nothing vote share through the movement of marginal voters away from the

other established parties.

V.E Results in Broader Context: the Dynamics of Realignment

In this section, we place our results in the broader context of the realignment and disruptions occurring in the lead-up to the Civil War. In the 1850s, it became increasingly difficult for a national party to straddle the North and South regions of the United States (Foner 1970; Holt 1992; Howe 1976). The Whig party dissolved after its capitulation on the expansion of slavery caused many Northerners to abandon it (Holt 1973). The collapse of the Whigs coupled with changing views on slavery, immigration and labor reform created an opportunity for new parties to emerge: including the Free Soilers, Know-Nothings, and (later) the Republicans (Anbinder 1992). In Massachusetts, the platforms of all three parties overlapped to some extent. For instance, before the emergence of the Know-Nothing party, the anti-slavery Free Soilers embraced pro-labor reforms and provided the workingman with an alternative to the feckless Democratic party (Mulkern 1990).[43]

Table 6 reports vote shares for gubernatorial elections between 1852 and 1858 with bold font denoting winners. The table reveals the fluidity that characterized this time period. The Whigs were the dominant party prior to 1854, but the Free Soil party began to gain momentum with over 20 percent of the vote share in the early 1850s. Free Soil momentum stalled with the entrance of the Know-Nothings in 1854, who held the Governor's office for three years. In 1857, the Republicans gained control of all branches of power in the state, which they then held for decades.

How did the economic forces described above affect voters over time? Figure 9 plots the estimated coefficients and confidence intervals for crowdout and deskilling for the Know-Nothing party. The results demonstrate that economic factors were important for the years in which they were in power (1854 to 1857, see Panels (A) and (B)). Once they lost power, however, economic factors cease to be predictive of vote share. In sharp contrast, Panel (C) demonstrates that the non-economic factors pauperism and assimilation, as we measure them, were never important predictors in *any* year.

Figure 10 repeats the exercise for years 1852 to 1859 and for all parties. Consistent with the emphasis on economic factors made by Mulkern (1990) and Fogel (1989, 1992), we find that labor market crowdout reduced support of the Whig party, in Panel (A).[44] In the early years, the lost Whig votes went to the upstart Free Soilers, who combined fervent abolitionism and lukewarm support for labor reforms (Mulkern 1990). In 1854, the Know-

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[43] According to Mulkern (1990), the Whigs were the party of Boston capital, they were against the 10-hour workday and land redistribution in the West, and in favor of the Tariff. The Free Soilers, on the other hand, ran on pro-labor and anti-corruption platform in Massachusetts.

[44] Because vote shares across parties sum to one, lost votes to one party must be a gain to another.

Nothings provided a new outlet for a combined nativist and labor reform agenda. Now, crowdout shifted marginal voters to the Know-Nothings, away from the Whigs. In Panel (B) we find that deskilling slightly shifted voters to the Democratic Party prior to 1854, but again, this changed with the appearance of the Know-Nothing party as a potentially more effective political force for reform (Mulkern 1990).

The estimated effects of crowdout and deskilling remain consistent for the three election years in which Gardner was victorious, 1854-1856. In 1857, the Know-Nothings lost the governorship to the Republicans. In that year and after, the effect of crowdout and deskilling on Know-Nothing vote share declines, and remains essentially zero for *all* parties. Irish labor market crowdout and deskilling in manufacturing had lost their influence on election outcomes in the state. After the 1856 election, the Know-Nothings played only a minimal role in Massachusetts politics. Our results on the declining influence of Irish labor market competition and deskilling in manufacturing are consistent with many of the hypothesized causes of disappearance of the Know-Nothings. However, our empirical strategy and data do not allow us to distinguish between them.

Historians generally agree that the rising importance of anti-slavery as an issue was the main force that led to the decline of the Know-Nothings as a national party, although local particulars were specific to each state (Foner 1970; Baum 1978; Gienapp 1985; Fogel 1989; Mulkern 1990; Anbinder 1992). In the end, Republicans were better strategists and coalition builders than the Know-Nothings, and won the competition to replace the Whigs as the northern anti-Democrat party. Republican leaders learned from their defeat as a single-issue (abolitionist) party in 1855, and worked to expand their coalition by including parts of the nativist and labor-reform agenda of the Know-Nothings (Mulkern 1990).[45] [46] In addition to citing the importance of the anti-slavery issue, Fogel (1989) emphasizes a number of improvements in the economic situation in the mid-1850s that reduced the pull of nativism. First, there was a dramatic reduction in Irish immigration, falling to its pre-Famine levels, that reduced the pressures on native workers. Second, the northern

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[45]Some historians argue that the inclusion of nativist elements did not play an important role in Republican success in the late 1850s. See Foner (1970); Baum (1978). Republicans as a national party were wary to adopt the mantle of nativism. The Western states (WI, IL, IN, OH) needed the anti-slavery votes of a large group of German voters. In New England, however, German immigrants were a small minority, where most immigration was of Irish Catholics. Moreover, nativism earned its biggest successes in this region, leading other historians to point out that Republican coalitions in New England actively sought out former Know-Nothing voters, but went to great lengths to distance their nativist agenda from the national party (Gienapp 1985; Fogel 1989; Mulkern 1990; Holt 1992).

[46]The findings on Know-Nothing voters are similar to those on Know-Nothing legislators. Using data on town-level representatives from the elections of 1853 to 1857, we find that almost all Know-Nothing legislators who had prior experience in the General Court (11 individuals), defected from the Whig Party. For those Know-Nothing legislators that survived the party's demise, they moved to the Republican party (see Appendix Figure A.8 Panel (B)).

economy recovered from a long recession of 1853-1855, with New England manufacturing making the sharpest recovery. Finally, a reduction in the price of food ended over a decade of inflation reducing real wages. In summary, multiple factors worked against continued Know-Nothing success into the late-1850s.

VI   Conclusion

The collapse of the Second Party System left a vacuum in northern politics in the 1850s which upstart political parties competed to fill. For a time the nativist Know-Nothing Party looked to be in the best position to capitalize on the loss of Whig hegemony. The party's biggest success was in Massachusetts. Just a year after they were founded, in 1854 the Know-Nothings won the governorship by a 42 p.p. margin, took all but three seats in the lower house, the entire upper house, all state officers, and the entire congressional delegation.

We find that negative labor market shocks to native-born workers contributed to the surprising success of the Know-Nothings at the polls. Our evidence is based on newly digitized population and manufacturing censuses for Massachusetts that allow us to construct local measures of exposure to Irish labor market competition and deskilling in manufacturing. In particular, towns with occupational and industrial structures more exposed to Irish crowdout and deskilling were more likely to vote for the Know-Nothings. Consistent with Fogel's hypothesis, we find strong support for the notion that labor market competition among low-skill workers was an important factor accounting for approximately 10% of the rise. However, the process of industrialization and deskilling in manufacturing that started at least two decades before the great waves of Irish immigration also played a key role. Counterfactual estimates shutting down deskilling suggest that Know-Nothing support would have been 5% lower in the absence of drastic structural change to the economy. Our results are robust across a number of specifications.

We also find suggestive evidence of reduced wealth accumulation for native-born workers most *exposed* to labor market crowdout and deskilling using a linked sample of men from the 1850 to 1860 U.S. population censuses. These Native-born workers appeared to voice their frustrations by voting for the anti-immigrant Know-Nothings. However, the electoral impact of these economic shocks dissipated as the crisis over extension or abolition of slavery took prominence in the later 1850s. By 1857, the Know-Nothings had lost power, and soon vanished as a party. We find evidence that the remaining Know-Nothing voters in the lead up to the Civil-War were the hard-core nativists, not moved by economic factors. These voters were primarily in strongholds that *never* responded to Irish crowdout or deskilling, even in the years of overwhelming Know-Nothing success in (1854 & 1856).

Our findings fit into a larger narrative that revisits the antebellum period. Labor historians had long maintained that, despite positive income growth, many workers still struggled to maintain a decent standard of living. Economists were skeptical until Fogel (1992) uncovered a pattern of declining heights that led to a reassessment of the period. Semi-skilled workers, "the hollowed out", had already experienced two decades of rapid structural change from the movement to cottage production and were starting to see jobs move into centralized establishments. Although we detected adaptive responses by native-born men to economic pressures such as occupational upgrading and migration, there was still an electoral response. Economic factors only predict Know-Nothing vote shares for a handful of years but are decisive in some of them. Yet stronghold locations were never affected by economic circumstances during any election cycle. Taken together, these results suggest that economic factors may tip marginal locations/communities into a nativist movement and generate electoral success.

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VII Tables

Table 1: Main Findings – Know-Nothing Rise, 1854 Vote Share

	(1)	(2)	(3)	(4)	(5)	(6)
Irish Labor Crowdout	0.031***	0.034***	0.033***	0.034***	0.034***	0.035***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
Deskilling Index	0.008**	0.009**	0.009**	0.015***	0.014***	0.014**
	(0.003)	(0.004)	(0.005)	(0.005)	(0.005)	(0.006)
County FE	No	Yes	Yes	Yes	Yes	Yes
Urbanization	No	No	Yes	Yes	Yes	Yes
Pct Irish 1855	No	No	No	Yes	Yes	Yes
Culture & Fiscal Burden	No	No	No	No	Yes	Yes
Share Mfg & Ag 1840	No	No	No	No	No	Yes
No. of Observations	307	307	307	307	307	307
R-squared	0.056	0.189	0.189	0.199	0.193	0.188
P-value (Crowdout = Deskilling)	0.029	0.018	0.033	0.103	0.106	0.093
Mean of Dept. Var	0.628	0.628	0.628	0.628	0.628	0.628

Notes: Table reports OLS estimates from Equation 3. The outcome across all specifications is the Share of Know-Voting Vote for Governor in Massachusetts in 1854. Please see text for the formal definition of Crowdout and Deskilling. Urbanization controls refer to an urban indicator (population > 2500 in 1855), number employed in cottage industries (1837), share native males employed in manufacturing (1850) and establishments per capita (1855). Culture and Fiscal Burden control include an indicator for housing a foreign-born pauper in a given town and the assimilation index based on names of children of Irish-born parents. Share manufacturing and share agriculture are based on the 1840 census which asked employment at the household level. Regressions are weighted by ratable polls (similar to a measure of potential voters). The p-value from a Wald test of equality between the crowdout and deskilling coefficients is reported for each column. Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
Sources: See data appendix for a detailed list of data sources.

Table 2: Robustness Checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Added Controls					
	Irish Enfran- chisement	Share Whig 1844	Mill Town Indicator	Log Popu- lation 1855	Native Labor Demand	All Sector Shares 1840	Add Boston	No Weights
Irish Labor Crowdout	0.034***	0.034***	0.033***	0.034***	0.035***	0.028***	0.032***	0.020*
	(0.010)	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.010)	(0.011)
Deskilling Index	0.014**	0.014**	0.012*	0.014**	0.014**	0.009	0.012**	0.011
	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
Const. Vote 1853	0.024							
	(0.070)							
Share Whig 1844		-0.069						
		(0.075)						
Mill			0.019					
			(0.019)					
Log Population 1855				-0.011				
				(0.016)				
Native Labor Demand					0.007			
					(0.024)			
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Urbanization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pct Irish 1855	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Culture & Fiscal Burden	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Share Mfg & Ag 1840	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
All Sector Shares	No	No	No	No	No	Yes	No	No
No. of Observations	307	307	307	307	307	307	308	307
R-squared	0.186	0.189	0.188	0.187	0.186	0.216	0.202	0.153
P-value	0.098	0.115	0.089	0.123	0.094	0.118	0.110	0.523

Notes: Table reports OLS estimates from Equation 3. The outcome across all specifications is the Share of Know-Voting Vote for Governor in Massachusetts in 1854. Please see text or data appendix for the formal definition of Crowdout and Deskilling. Urbanization controls refer to an urban indicator (population > 2500 in 1855), number employed in cottage industries (1845), share native males employed in manufacturing (1850) and manufacturing establishments per capita (1855). Culture and Fiscal Burden control include an indicator for housing a foreign-born pauper in a given town and the assimilation index based on names of children of Irish-born parents. Share manufacturing and share agriculture are based on the 1840 census which asked employment at the household level. Each column is a slightly different specification indicated by the column table. Column (1) includes a proxy for Irish enfranchisement – the constitutional vote of 1853. Column (2) includes the Share Whig vote in 1844 as a control for historical voting patterns. Column (3) includes an indicator for mill town. Column (4) includes log population 1855. Column (5) includes a proxy for native labor demand - the shift in native men in manufacturing between 1850 and 1855. Column (6) includes employment shares that span all categories in the 1840 census. Column (7) includes Boston in the sample. Regressions are weighted by ratable polls (similar to a measure of potential voters) except in column (8). Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively. *Sources:* See data appendix for a detailed list of data sources.

Table 3: Placebo Outcomes and Exposures

	(1) Placebo Outcomes	(2)	(3) Placebo Crowdout Exposures	(4)	(5)
	1844 Democrats	1844 Whig	British Crowdout	German Crowdout	German & British Crowdout
Irish Labor Crowdout	0.007 (0.010)	-0.016* (0.010)	0.033*** (0.012)	0.034*** (0.011)	0.033*** (0.012)
Deskilling Index	0.003 (0.008)	0.005 (0.008)	0.013* (0.007)	0.013* (0.007)	0.013* (0.007)
British Labor Crowdout			0.004 (0.010)		
German Labor Crowdout				0.004 (0.010)	
British & German Crowdout					0.004 (0.010)
County FE	Yes	Yes	Yes	Yes	Yes
Urban Indicator	Yes	Yes	Yes	Yes	Yes
Pct Irish 1855	Yes	Yes	Yes	Yes	Yes
Culture & Fiscal Burden	Yes	Yes	Yes	Yes	Yes
Share Mfg & Ag 1840	Yes	Yes	Yes	Yes	Yes
No. of Observations	307	307	307	307	307
R-squared	0.181	0.170	0.186	0.186	0.186

Notes: Table reports OLS estimates from Equation 3. The outcome varies across the first two columns and is listed in the column heading. The outcome for columns (3) to (5) is the share of Know-Nothing vote in 1854 with British crowdout (column (3)), German Crowdout (column (4)) and British-German crowdout (column (5)) as added as controls. Please see text for the formal definition of Crowdout and Deskilling. Urbanization controls refer to an urban indicator (population > 2500 in 1855), number employed in cottage industries (1837), share native males employed in manufacturing (1850) and establishments per capita (1855). Culture and Fiscal Burden control include an indicator for housing a foreign-born pauper in a given town and the assimilation index based on names of children of Irish-born parents. Share manufacturing and share agriculture are based on the 1840 census which asked employment at the household level. Regressions are weighted by ratable polls. Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
Sources: See data appendix for a detailed list of data sources.

Table 4: Short-Run Industrial Response to Irish Immigration

	(1) 1855 Estab. p.c.	(2) Δ 1855-45 Estab. p.c.	(3) Δ 1855-45 Estab. p.c.	(4) 1855 Value p.c.	(5) Δ 1855-45 Value p.c.	(6) Δ 1855-45 Value p.c.
Percent Irish 1855	-0.018***	-0.006		3.267***	1.362	
	(0.005)	(0.005)		(0.852)	(0.873)	
Δ Share Mfg Labor Irish Males			0.004			0.557
			(0.004)			(0.702)
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Urban Indicator	Yes	Yes	Yes	Yes	Yes	Yes
Culture & Fiscal Burden	Yes	Yes	Yes	Yes	Yes	Yes
Share Mfg & Ag	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	307	307	307	307	307	307
R-squared	0.318	0.338	0.336	0.626	0.204	0.194

Notes: Table reports OLS estimates on the relationship between industrialization and the percent of Irish in 1855 (columns (1) (2) (4) and (5)) or the change in share manufacturing labor comprised of Irish males (columns (3) and (6)). The other controls are as described in the notes for Table 1. Regressions are weighted by registered voters. Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
Sources: See data appendix for a detailed list of data sources.

Table 5: Effects of State-level Irish Crowdout on Native Wealth, Migration and Occupational Upgrading

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) Occupational
	Ln(Total Wealth, 1860)			Any Wealth in 1860 (=1)			Moved (=1)	Upgrade
Irish Labor State Crowdout	-0.221***	-0.311***	-0.504***	-0.012***	-0.016***	-0.034***	0.004	0.137***
	(0.026)	(0.033)	(0.040)	(0.003)	(0.004)	(0.006)	(0.003)	(0.007)
Deskilling Exposure (Town)	-0.001	0.003	-0.022	-0.002	-0.001	-0.003	0.014**	0.017***
	(0.030)	(0.030)	(0.029)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)
Deskill X Mechanic	-0.080*	-0.075*	-0.062	-0.007	-0.007	-0.006	0.000	-0.012
	(0.043)	(0.044)	(0.042)	(0.007)	(0.007)	(0.006)	(0.004)	(0.008)
Mechanic (=1)	-0.109**	-0.087	-0.150***	0.004	0.006	0.001	0.043***	0.100***
	(0.051)	(0.053)	(0.046)	(0.006)	(0.006)	(0.006)	(0.007)	(0.018)
Crowdout X Moved (=1)		0.268***			0.013**			
		(0.037)			(0.006)			
Moved (=1)		-0.508***			-0.053***			
		(0.067)			(0.010)			
Crowdout X Occ. Upgrade			0.313***			0.024***		
			(0.045)			(0.006)		
Occ. Upgrade			0.740***			0.057***		
			(0.041)			(0.006)		
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ln(Real Property, 1850)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Any Real Property, 1850 (=1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	50587	50587	50587	50587	50587	50587	50587	50587
Mean of Dept. Var	5.862	5.862	5.862	0.796	0.796	0.796	0.266	0.282

Notes: Observations represent native-born Massachusetts men linked in the 1850 and 1860 censuses. Crowdout is the state-level shift of Irish into the occupation of the native-born individual in 1850. All regressions include county fixed effects for 1850 residence, age group fixed effects, and controls for real property in 1850. Standard errors are clustered at the town level are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
Sources: See data appendix for a detailed list of data sources.

Table 6: Massachusetts Gubernatorial Election Outcomes, 1852-1858

	(1) 1852	(2) 1853	(3) 1854	(4) 1855	(5) 1856	(6) 1857	(7) 1858
Share of state-wide votes							
Know-Nothing	.	.	**0.63**	**0.38**	**0.59**	0.29	0.10
Whig	**0.45**	**0.46**	0.21	0.10	0.05	.	.
Democrat	0.28	0.27	0.11	0.25	0.25	0.24	0.32
Republican	.	.	.	0.27	.	**0.47**	**0.58**
Free Soil	0.26	0.23	0.05	.	.	.	.

Notes: State-wide vote shares (including Boston). Winning party in bold. An empty cell implies no votes cast for the party in that year.
Sources: Various issues of the *Massachusetts Register* (1853-1860).

Table 7: Predictors of Know-Nothing Rise in Stronghold Locations

	(1) All towns	(2) Stronghold 75th pctile 1854 & 1855	(3) Stronghold 75th pctile 1854 & 1857	(4) Stronghold 75th pctile 1854 & 1858	(5) Stronghold $>$ 50th pctile every year
Irish Labor Crowdout	0.035*** (0.010)	0.029*** (0.010)	0.037*** (0.010)	0.040*** (0.010)	0.033*** (0.011)
Deskilling Index	0.014** (0.006)	0.014*** (0.005)	0.012** (0.005)	0.012** (0.006)	0.014** (0.007)
Stronghold1		0.167*** (0.013)			
Stronghold1xCrowdout		-0.030** (0.015)			
Stronghold1xDeskill		-0.021 (0.013)			
Stronghold2			0.166*** (0.016)		
Stronghold2xCrowdout			-0.044** (0.020)		
Stronghold2xDeskill			-0.047*** (0.010)		
Stronghold3				0.136*** (0.019)	
Stronghold3xCrowdout				-0.063*** (0.021)	
Stronghold3xDeskill				0.008 (0.021)	
Stronghold4					0.092*** (0.019)
Stronghold4xCrowdout					-0.029 (0.024)
Stronghold4xDeskill					-0.018** (0.008)
Full Controls	Yes	Yes	Yes	Yes	Yes
No. Stronghold	.	40	26	22	34
No. Observations	307	300	300	300	307
R-squared	0.188	0.382	0.317	0.275	0.230

Notes: Table reports OLS estimates on the relationship between Share of Gubernatorial Votes for 1854 Know Nothing Candidate and the Irish Labor Crowdout and Deskilling Index. Urbanization controls refer to an urban indicator (population > 2500 in 1855), number employed in cottage industries (1837), share native males employed in manufacturing (1850) and establishments per capita (1855). Culture and Fiscal Burden control include an indicator for housing a foreign-born pauper in a given town and the assimilation index based on names of children of Irish-born parents. Share manufacturing and share agriculture are based on the 1840 census which asked employment at the household level. Regressions are weighted by ratable polls. Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
*Sources:* See data appendix for a detailed list of data sources.

Table 8: Heterogeneity

	(1) Deskill x Crowdout	(2) Crowdout x Irish	(3) Deskill x Irish	(4) Crowdout x Cottage	(5) Deskill x Cottage	(6) Crowdout x Assim.	(7) Deskill x Assim.	(8) Crowdout x Pauper	(9) Deskill x Pauper
Irish Crowdout	0.032***	-0.001	0.035***	0.037***	0.034***	-0.016	0.035***	0.010	0.035***
	(0.011)	(0.017)	(0.010)	(0.011)	(0.011)	(0.063)	(0.010)	(0.017)	(0.010)
Deskilling Index	0.010	0.013**	0.027**	0.014**	0.008	0.014**	-0.005	0.013**	0.024
	(0.007)	(0.006)	(0.014)	(0.006)	(0.007)	(0.006)	(0.058)	(0.006)	(0.021)
CrowdoutxDeskill	0.009								
	(0.005)								
CrowdoutxIrish		0.273***							
		(0.090)							
DeskillxIrish			-0.059						
			(0.056)						
CrowdoutxCottage				-0.014					
				(0.019)					
DeskillxCottage					0.035**				
					(0.015)				
CrowdoutxAssim.						0.074			
						(0.094)			
DeskillxAssim.							0.028		
							(0.086)		
CrowdoutxPauper								0.039**	
								(0.019)	
DeskillxPauper									-0.011
									(0.021)
Full Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimate	0.040	0.272	-0.024	0.023	0.069	0.058	0.063	0.049	0.024
Standard Error	0.009	0.077	0.055	0.018	0.018	0.033	0.087	0.012	0.022

Notes: Table reports OLS estimates from Equation 3. The outcome across all specifications is the Share of Know-Voting Vote for Governor in Massachusetts in 1854. Please see text for the formal definition of Crowdout and Deskilling. Each of these indices is interacted and the name of the interaction is given by the column heading. Irish is the share of population that is Irish-born in 1855 (ranges from 0-1). Cottage industry employment in 1845 is measured in thousands of employed. Pauper is an indicator for the presence of any foreign-born pauper in 1850. See the text and data appendix for detailed explanations of variable construction. Regressions are weighted by ratable polls (similar to a measure of potential voters). Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
Sources: See data appendix for sources.

42

Table 9: Turnout by Year

	(1) 1852 Turnout	(2) 1853 Turnout	(3) 1854 Turnout	(4) 1855 Turnout	(5) 1856 Turnout	(6) 1857 Turnout
Irish Labor Crowdout	-0.013* (0.007)	-0.015* (0.008)	-0.017* (0.009)	-0.007 (0.010)	-0.007 (0.010)	-0.000 (0.010)
Deskilling Index	-0.004 (0.007)	-0.002 (0.008)	0.000 (0.008)	0.005 (0.012)	-0.001 (0.011)	0.007 (0.012)
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Urban Indicator	Yes	Yes	Yes	Yes	Yes	Yes
Pct Irish 1855	Yes	Yes	Yes	Yes	Yes	Yes
Culture & Fiscal Burden	Yes	Yes	Yes	Yes	Yes	Yes
Share Mfg & Ag 1840	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	307	306	307	306	307	306
R-squared	0.480	0.412	0.198	0.277	0.337	0.269
P-value	0.304	0.174	0.096	0.308	0.600	0.522

Notes: Table reports OLS estimates from Equation 3. The outcome varies across the columns and is given by the column heading. See notes from Table 1 or the Appendix for further details. Robust standard errors are in parentheses. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.

Figure 1: Correlates of Know-Nothing Governor Vote Share

Panel (A): Manufacturing Employment

Slope = 0.68 (0.33)
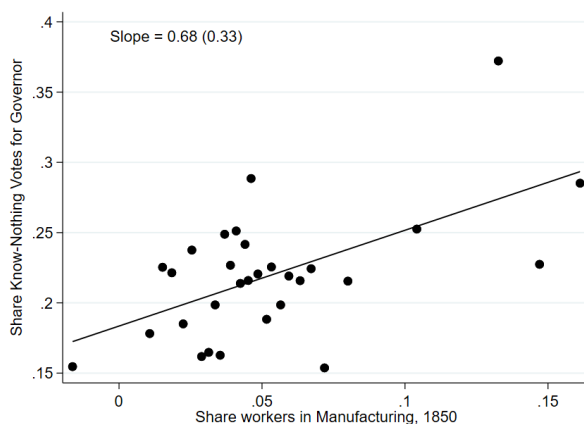
Panel (B): Share Population Foreign-born

Slope = 0.13 (0.09)
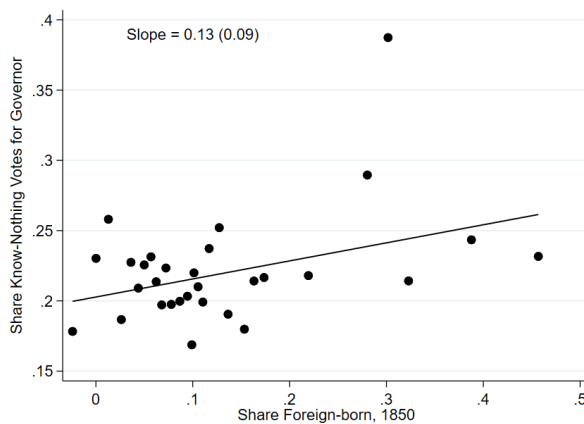
Panel (C): Share Population Urban

Slope = 0.10 (0.05)
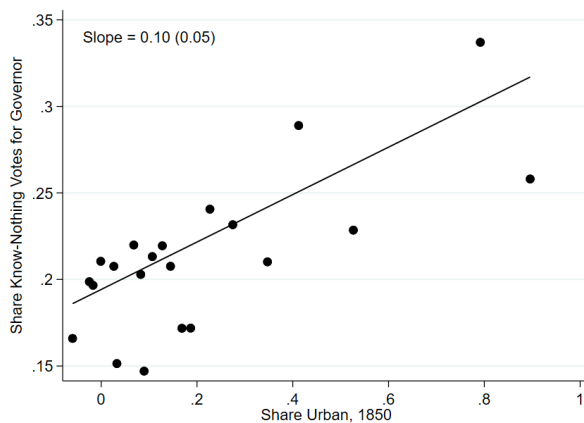
Notes: These binned scatterplots depict the bivariate relationship between county-level vote share for Know-Nothing gubernatorial candidates and socio-economic variables measured in the 1850 Census. The sample is limited to Northern and border states in which the American Party fielded a candidate (e.g. 1854: Delaware, Massachusetts, New York; 1855: Kentucky, New Hampshire, Vermont; 1856: Illinois; 1857: Iowa, Maryland, Ohio, Pennsylvania). The underlying regressions include state fixed effects and are weighted by county vote totals. The slope estimates reported with standard errors clustered by state. *Sources*: ICPSR Governor Votes, Haines ICPSR for X variables.

Figure 2: Irish Immigration into U.S.

Panel (A): Irish Immigration 1820 – 1870
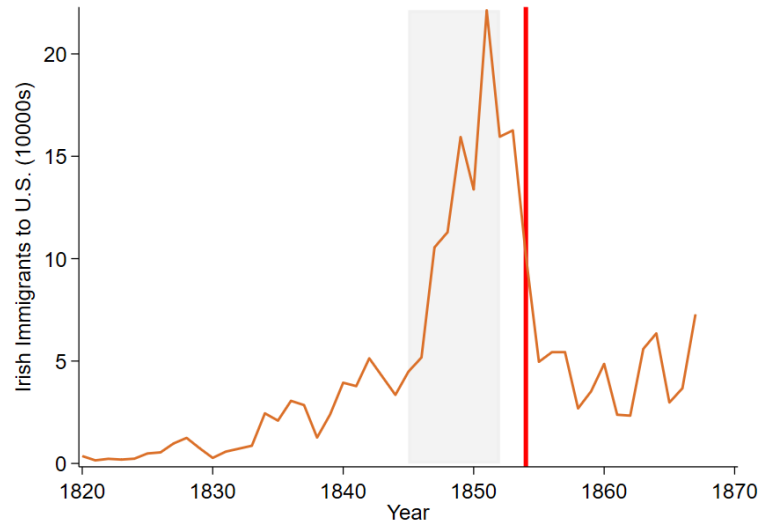
Panel (B): Immigration Inflows 1820 – 2000
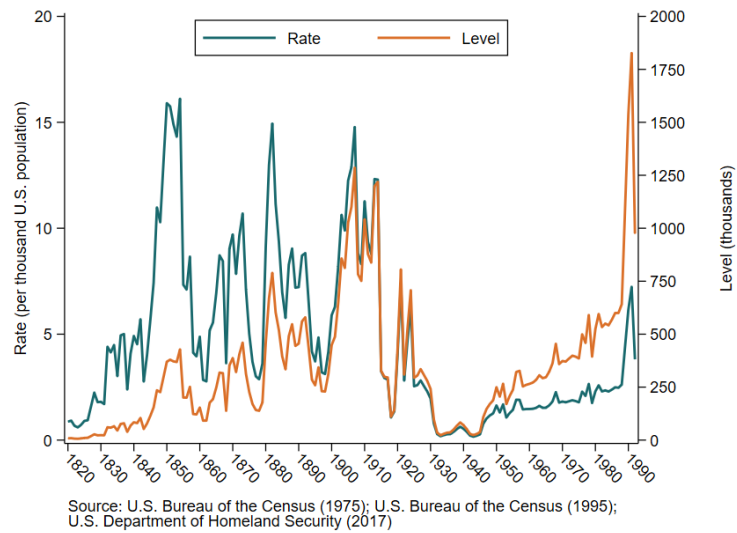
Notes: Shaded area is the timing of the Potato Famine in Ireland (1845-1852). Dark red line is the timing of the Know-Nothing landslide in Massachusetts. *Source: International Migrations, Vol I: Statistics* Walter F. Willcox 1929.

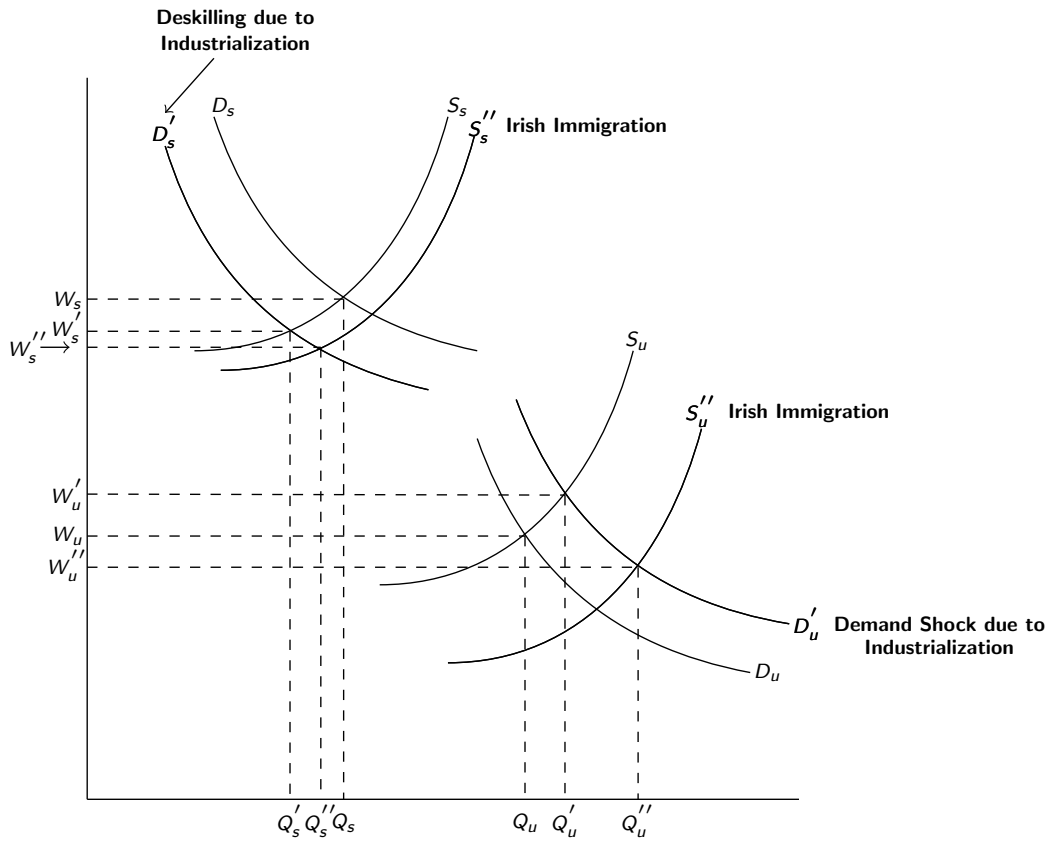# Figure 3: Percent Irish and Nay Votes

Panel (A): Percent Irish (1855)

(18,35]
(12,18]
(9,12]
(7,9]
(4,7]
(2,4]
[0,2]
No Data or Not in Sample
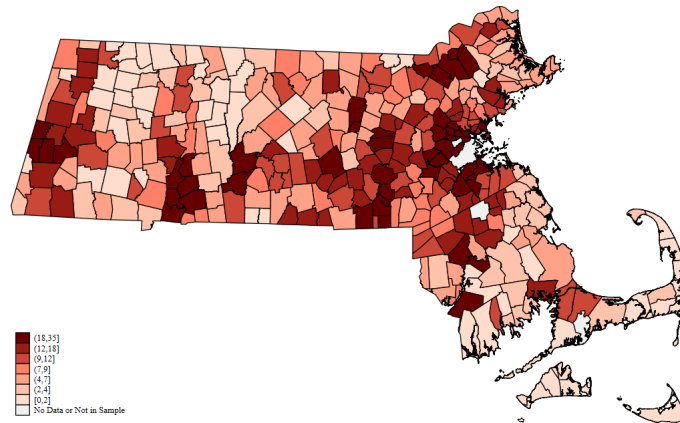
Panel (B): Percent Vote Nay 1853 Constitution

(68,98]
(61,68]
(54,61]
(51,54]
(46,51]
(38,46]
[13,38]
No Data or Not in Sample
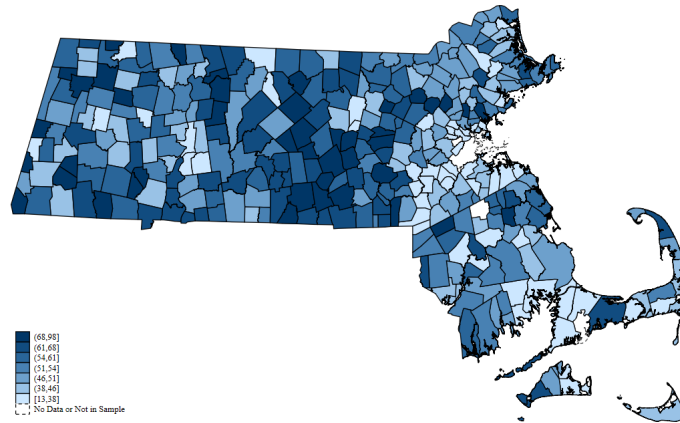
Note: Data from for Panel (A) from the 1855 Massachusetts Census and data from Panel (B) are from the *Daily Advertiser*. Values for Boston are not included in the maps.

Figure 4: Conceptual Framework

Deskilling due to Industrialization

D_s' D_s S_s S_s'' **Irish Immigration**

W_s
W_s'
$W_s''\rightarrow$

S_u

S_u'' **Irish Immigration**

W_u'
W_u
W_u''

D_u' **Demand Shock due to Industrialization**

D_u

Q_s' $Q_s''Q_s$ Q_u Q_u' Q_u''

Notes: Supply and Demand Shocks in Antebellum Massachusetts.

47

Figure 5: Change in Average Establishment Size, Massachusetts
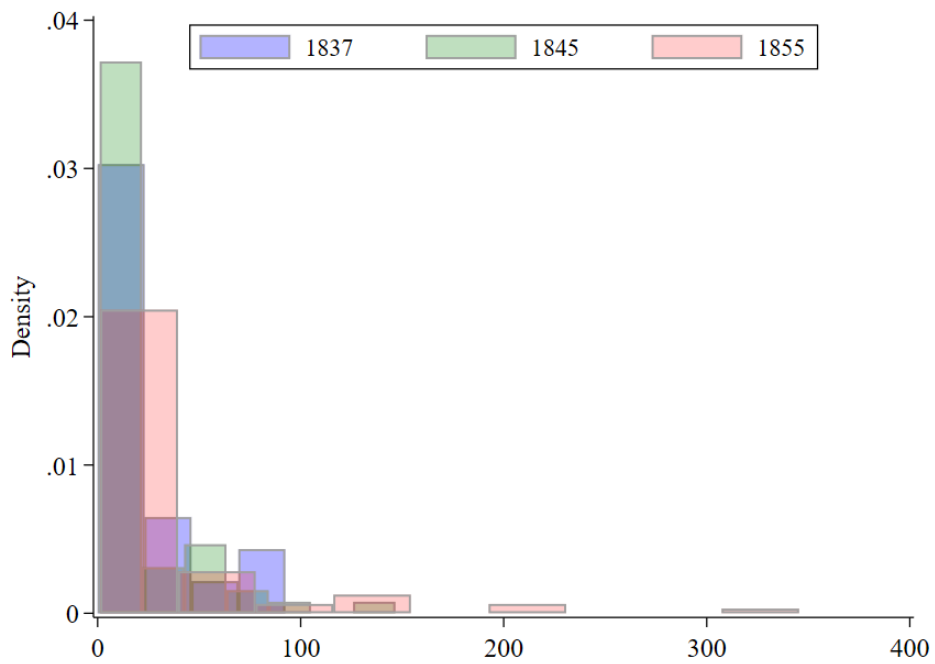
Notes: Data from the Massachusetts Manufacturing Census in 1837, 1845 and 1855. Histogram of average establishment size (number of workers per establishment by industry) over the three time periods.

Figure 6: Irish Shift (1850 to 1855) and Baseline (1850) Share Native in Occupational Categories
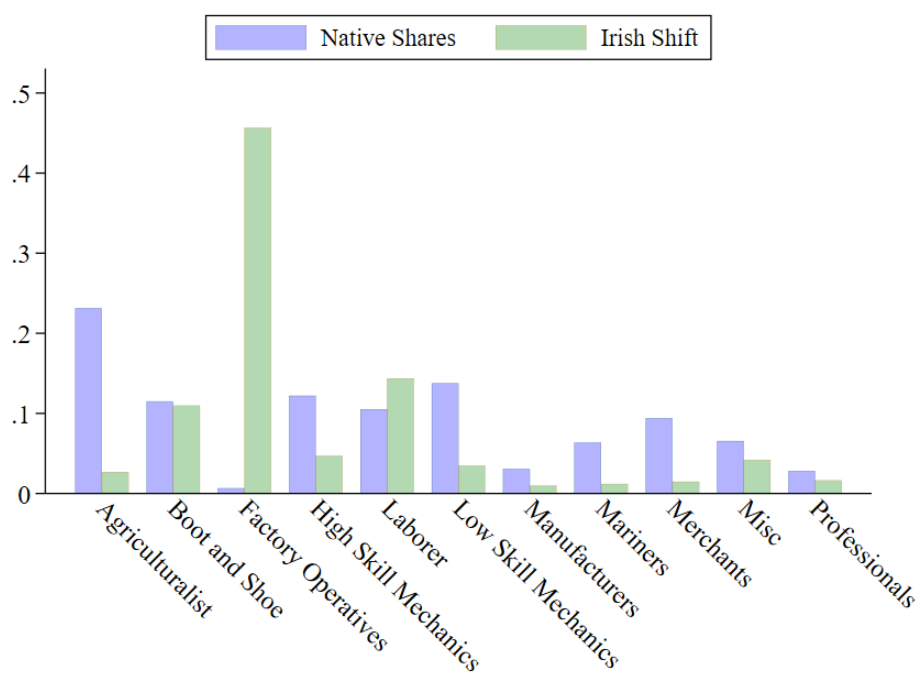
Notes: Figure depicts the state-level Irish shift across 11 occupational categories used in Equation 1. Baseline native employment shares in 1850 (males 15-65 years of age) average across state. The actual crowdout measure uses town-level variation in native shares. *Source: Massachusetts and Federal Population Censuses, 1850-1855.*

Figure 7: Correlation Plots: Rise of Know Nothing

Panel (A): Crowdout
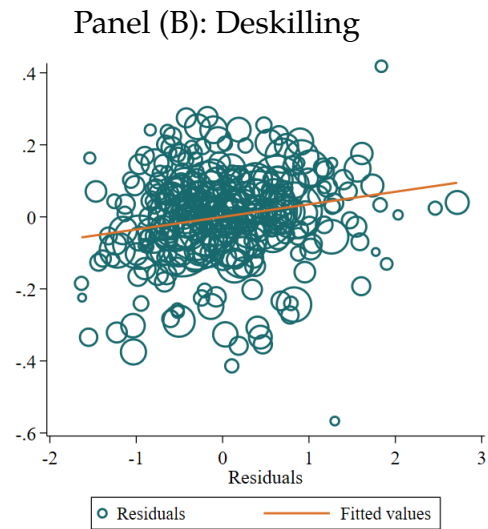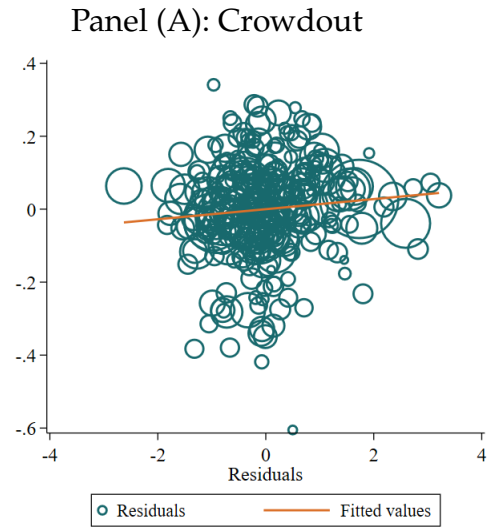
Panel (B): Deskilling

## Panel (C): Correlation between Crowdout and Deskilling
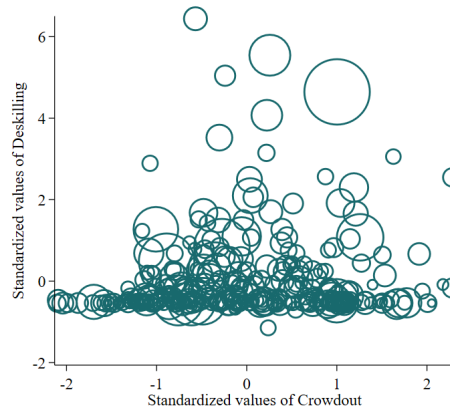
Note: Partial correlation plots from Equation 3 between crowdout in Panel (A) and deskilling in (B) and the outcome of Share Know-Nothing votes for Governor in Massachusetts, 1854. Panel (C) depicts a simple correlation between crowdout and deskilling. See text for details.
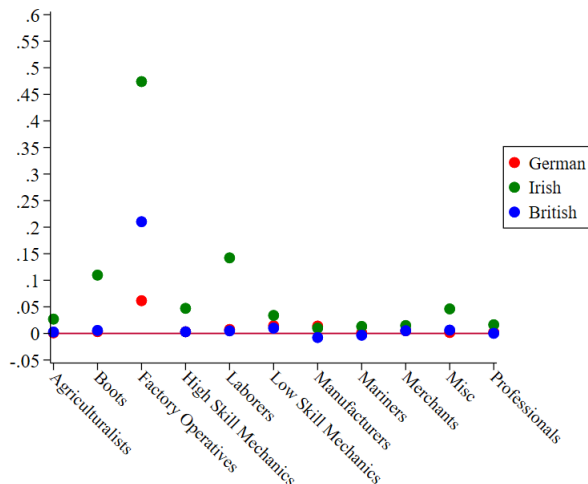
Figure 8: Occupations by Ethnicity

Panel A: Percent of Ethnicity in an Occupation
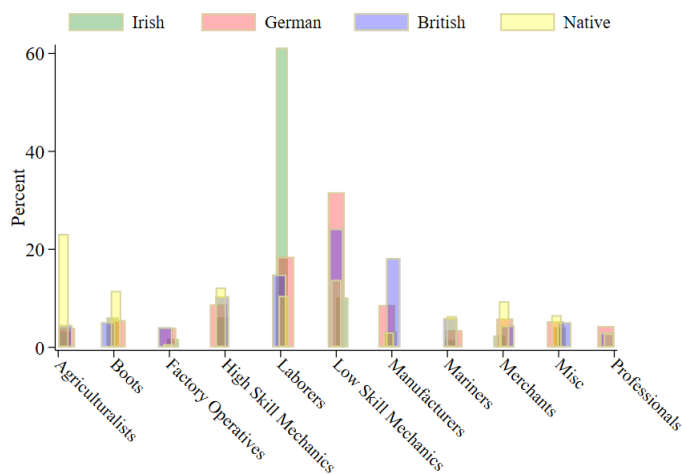
Panel B: Frequencies of Ethnicity in an Occ
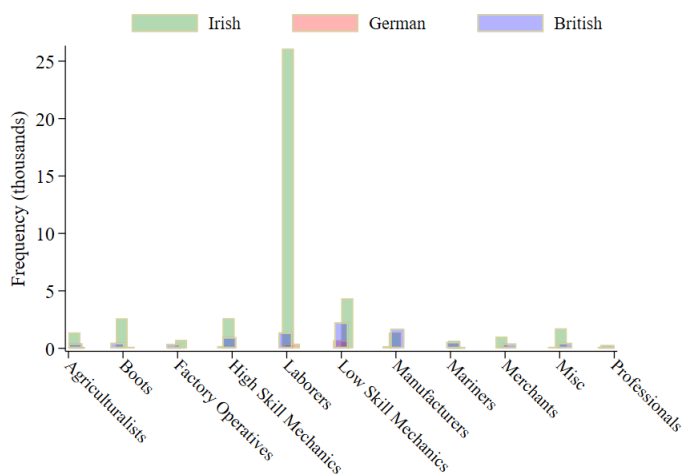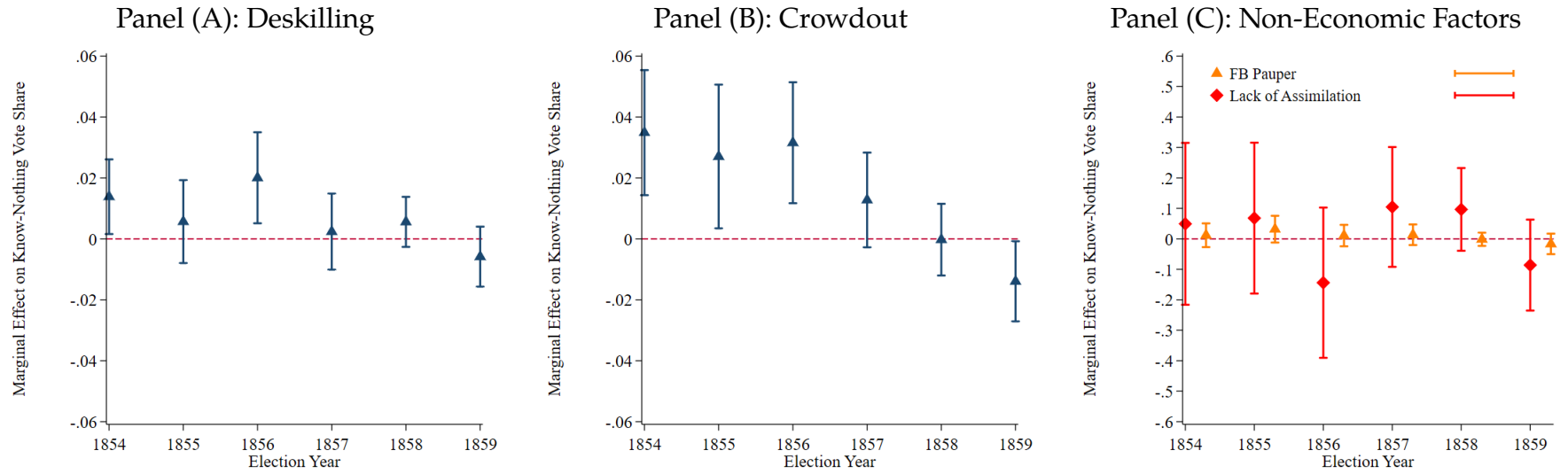

Panel C: Shift by Ethnicities

Notes: Distribution of occupations by Ethnicity in 1850 (Panel (A))
– frequencies in Panel (B). Panel (C) demonstrates the shift for each
occupational group by ethnicity.

Figure 9: Regression Results: Hypothesized Factors

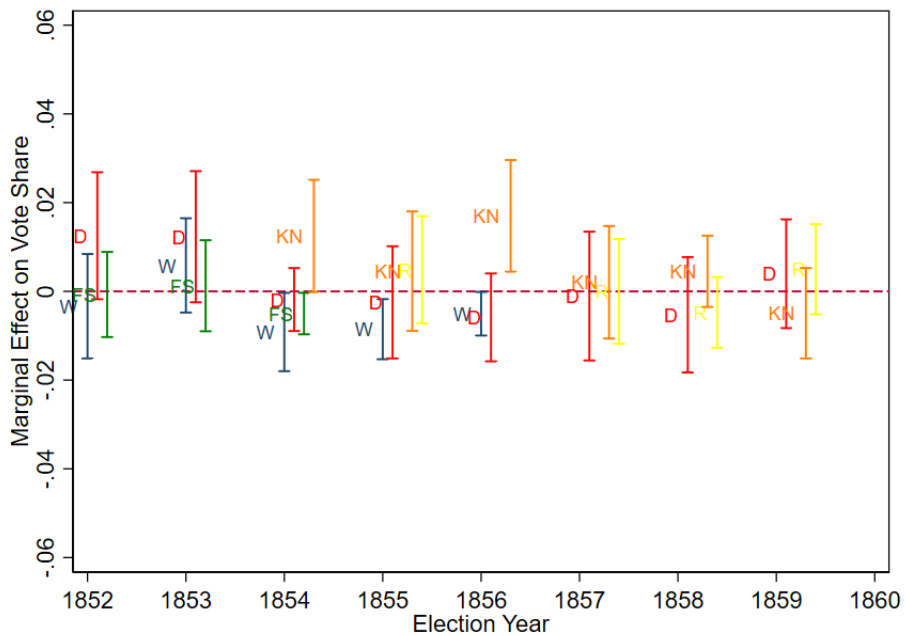Panel (A): Deskilling — Panel (B): Crowdout — Panel (C): Non-Economic Factors

Note: Standardized coefficients and 95% confidence intervals from equation 3 over time. The Panel heading provides the coefficient plotted. See text for details.

Figure 10: Regression Results for All Political Parties

Panel A: Irish Labor Market Crowdout
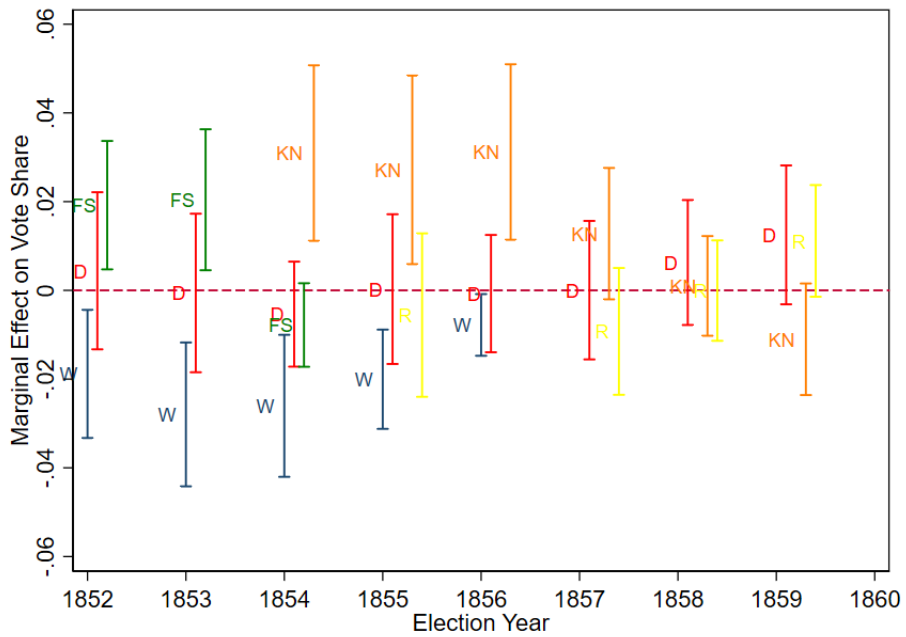
Panel B: Deskilling

Note: Standardized coefficients and 95% confidence intervals from equation 3 over time. See text for details.

A Supplemental Appendix

Table A.1: Summary Statistics: Voting Outcomes

	(1) Mean	(2) s.d.	(3) 25th	(4) 50th	(5) 75th	(6) N
Know-Nothing Vote Share						
1854	0.61	0.15	0.52	0.63	0.71	307
1855	0.35	0.16	0.22	0.36	0.46	306
1856	0.61	0.16	0.51	0.63	0.73	305
1857	0.25	0.15	0.14	0.25	0.36	306
1858	0.08	0.08	0.02	0.05	0.12	307
1859	0.11	0.10	0.03	0.09	0.16	303
Turnout						
1852	0.63	0.13	0.56	0.64	0.71	307
1853	0.59	0.13	0.52	0.60	0.68	306
1854	0.56	0.13	0.48	0.56	0.63	307
1855	0.58	0.13	0.50	0.59	0.66	306
1856	0.66	0.14	0.59	0.67	0.73	307
1857	0.55	0.14	0.48	0.54	0.62	306
Legislator "Yea" on 1857 Literacy Amendment						
Mean within town	0.76	0.40	0.50	1.00	1.00	221

Notes: Unweighted summary statistics for towns in the main estimation sample (excludes Boston). Turnout is measured as the number of votes cast for governor in an election divided by ratable polls in 1854. The 1857 literacy amendment enforced literacy tests for voters whose grandfathers could not vote, (e.g. immigrants and the formerly enslaved and their descendants). Votes for the amendment were in the legislature. This variable is the proportion of legislatures for a given town that voted "Yea" for the amendment.
Sources: See Data Appendix for detailed information on the construction and data sources for all variables.

Table A.2: Summary Statistics: Controls

	(1) Mean	(2) s.d.	(3) 25th	(4) 50th	(5) 75th	(6) N
Irish Labor Crowdout	-0.011	0.934	-0.761	-0.065	0.756	307
Deskilling Index	0.001	1.002	-0.534	-0.447	0.139	307
Population in 1855	3,165	4,298	1,112	1,876	3,246	307
Ln(Population) in 1855	7.615	0.869	7.014	7.537	8.085	307
Urban (=1)	0.384	0.487	0.000	0.000	1.000	307
Share population Irish in 1855	0.092	0.073	0.034	0.075	0.135	307
Any foreign-born pauper in 1850	0.505	0.501	0.000	1.000	1.000	307
Failure to assimilate	0.682	0.124	0.649	0.681	0.715	307
Share labor in manufacturing (1840)	0.316	0.191	0.160	0.274	0.446	307
Share in agriculture (1840)	0.581	0.241	0.388	0.621	0.785	307
Share in mining (1840)	0.003	0.019	0.000	0.000	0.000	307
Share in commerce (1840)	0.022	0.027	0.004	0.015	0.029	307
Share in professional (1840)	0.016	0.012	0.009	0.013	0.018	307
Share in river transport (1840)	0.002	0.009	0.000	0.000	0.000	307
Share in ocean transport (1840)	0.060	0.158	0.000	0.001	0.013	307
Native-born share of employment (1850)	0.894	0.061	0.875	0.908	0.932	307
Change in labor demand of native-born	-0.055	0.311	-0.105	0.005	0.104	307
Cottage industry employment (1845)	203	512	8	46	203	307
Manufacturing estab. per capita (1855)	0.007	0.006	0.003	0.005	0.008	307
Change in man. estab. p.c. (1855-45)	0.001	0.006	-0.001	0.001	0.003	307
$ value of man. output p.c. (1855)	4.557	1.111	3.989	4.731	5.337	307
Change in $ val. of man. out. p.c. (1855-45)	0.783	0.850	0.327	0.689	1.191	307
Change in p.p. of Irish emp. (1855-45)	0.037	0.077	0.006	0.029	0.063	307

Notes: Unweighted summary statistics for the 307 towns included in the main results.
*Sources:* See Data Appendix for detailed information on the construction and data sources for all variables.

Table A.3: Robustness to Spatial Correlation

	(1)	(2)	(3)	(4)	(5)
	Distance Cutoff				
	20km	50km	100km	150km	None
Panel A: Moran's *I* Statistic of Global Correlation					
Chi-square	4.43	2.99	2.60	2.32	2.44
p-value	0.04	0.08	0.11	0.13	0.12
Panel B: Standard Errors Adjusted for Spatial Correlation					
Irish Labor Crowdout	0.035***	0.035**	0.035**	0.035**	0.035***
	(0.011)	(0.014)	(0.015)	(0.014)	(0.005)
Deskilling Index	0.014**	0.014**	0.014***	0.014***	0.014***
	(0.006)	(0.006)	(0.005)	(0.004)	(0.002)
Panel C: Local Spillovers of Crowdout and Deskilling					
Irish Labor Crowdout	0.029**	0.034***	0.033***	0.031***	0.033***
	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)
Deskilling Index	0.014**	0.014**	0.015***	0.015***	0.015**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Lagged Crowdout	0.017	-0.003	0.008	0.015	0.006
	(0.018)	(0.022)	(0.022)	(0.024)	(0.024)
Lagged Deskilling	0.027	0.023	0.025	0.033*	0.032*
	(0.016)	(0.015)	(0.018)	(0.018)	(0.018)
County FE	Yes	Yes	Yes	Yes	Yes
Urbanization	Yes	Yes	Yes	Yes	Yes
Pct Irish 1855	Yes	Yes	Yes	Yes	Yes
Culture & Fiscal Burden	Yes	Yes	Yes	Yes	Yes
Share Mfg & Ag 1840	Yes	Yes	Yes	Yes	Yes

Notes: The outcome across all specifications is the Share of Know-Voting Vote for Governor in Massachusetts in 1854. Panel A reports results from estimating Moran's I using residuals from equation 3 from Column 6 of Table 1, and an inverse distance weighting matrix. Panel B adjusts standard errors for spatial autocorrelation using the procedure developed by Conley (1999) and a weighting matrix with a linear distance decay. Panel C estimates a SLX model using an inverse distance weighting matrix and includes first-order spatial lags of the two exposure variables of interest. Regressions are weighted by ratable polls in 1854. * ** *** refer to statistical significance at the 10, 5 and 1 percent level, respectively.
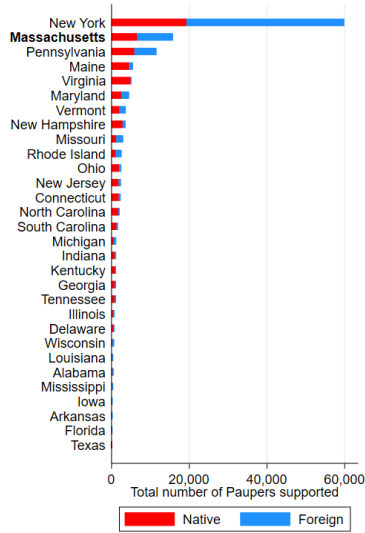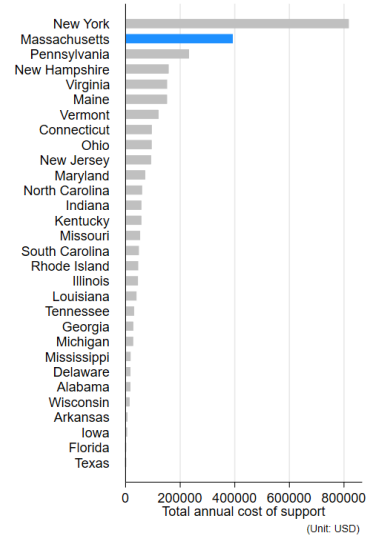
Figure A.1: State Characteristics
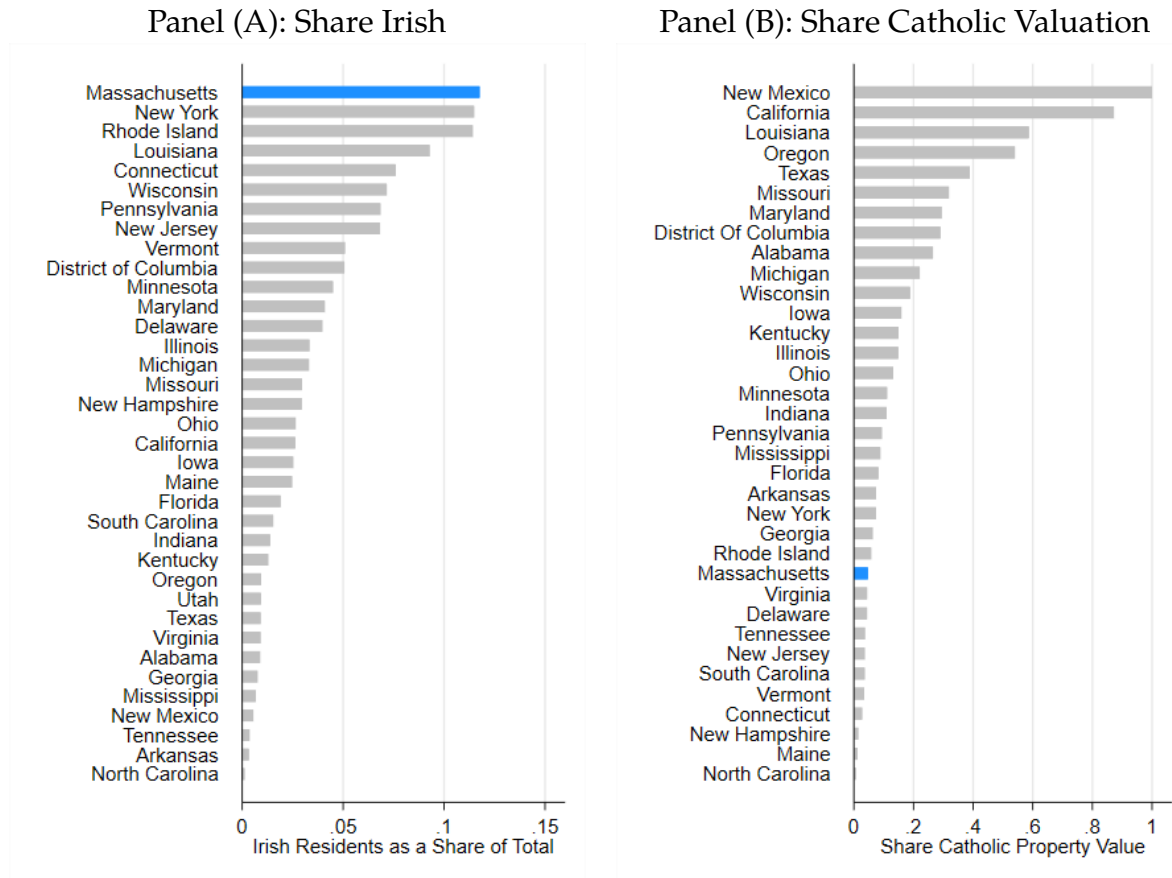
Notes: Data from 1850 U.S. Census. Panel (A) describes the share of population that is Irish-born, Panel (B) describes the share of church property value that is owned by Roman Catholics.
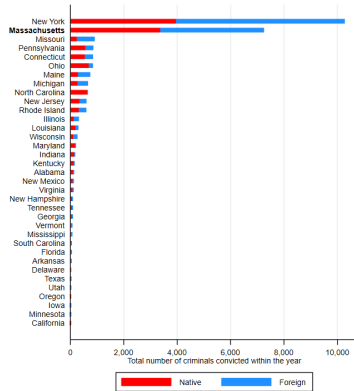
Figure A.2: Pauperism and Criminals
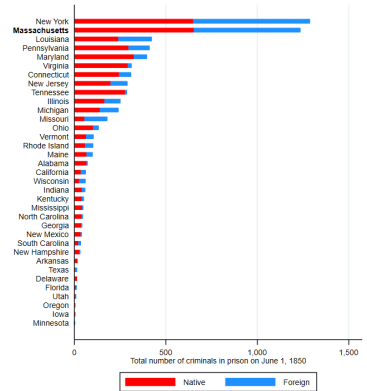
Panel (A): Total Number of Paupers Supported

Panel (B): Total Annual Cost of Support

### Panel (C): Total Number of Criminals Convicted

### Panel (D): Total Number of Criminals In Prison

Notes: Data from Table CLXXIII. Pauperism in the United States, 1850. Panel (A) describes the whole number of native and foreign Paupers supported in whole or part within the year ending June 1, Panel (B) describes an annual cost of support. Data from Table CLXXVI. Statistics of Criminals. Panel (C) describes the whole number of criminals convicted within the year of 1850, Panel (D) describes the whole number of criminals in prison on June 1, 1850.

Figure A.3: Urbanization Rates by State (1790-1860)
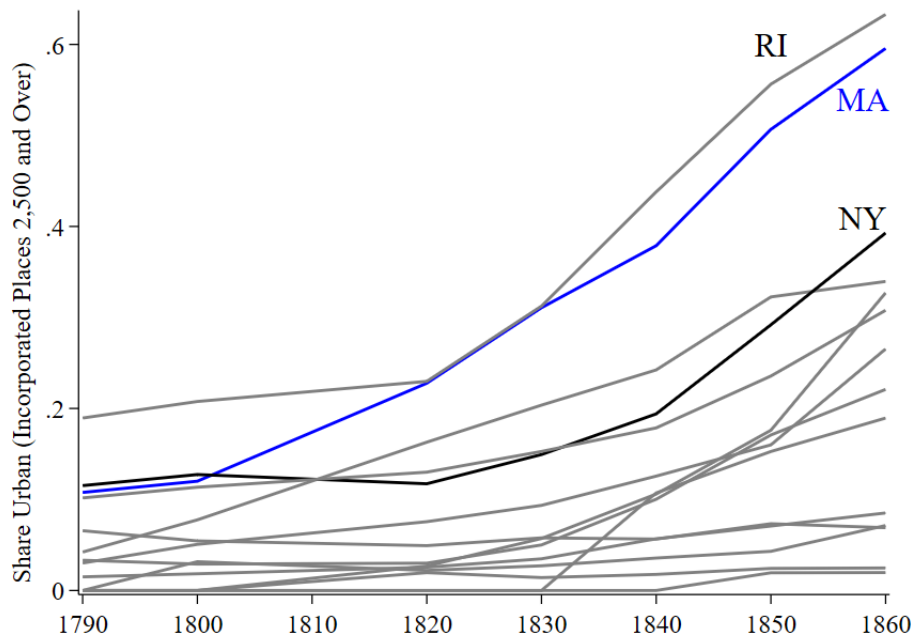
Notes: Blue line is Massachusetts. Black line is New York. *Source*: Author calculation from 1790 - 1860 Census: US Population Data provided by NHGIS

Figure A.4: Occupational Distribution for Know-Nothing Members and All Native Males in Massachusetts
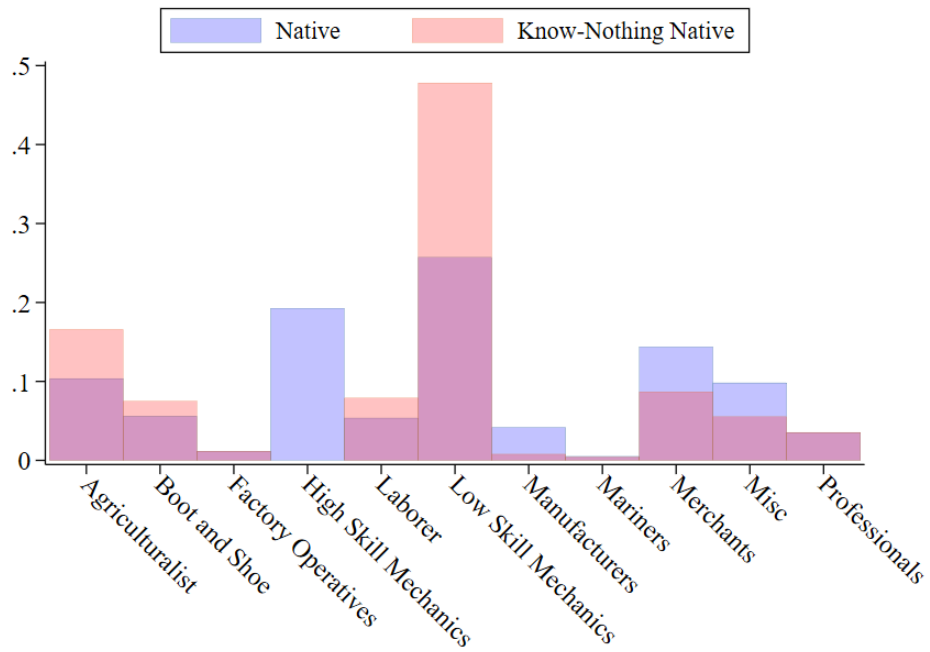

Notes: Data from Archives of Massachusetts Historical Society provided by Tyler Anbinder. Pink bars describe the occupational distribution for Know-Nothing members using lists from Worcester and purple bars provide the same for the Commonwealth of Massachusetts.

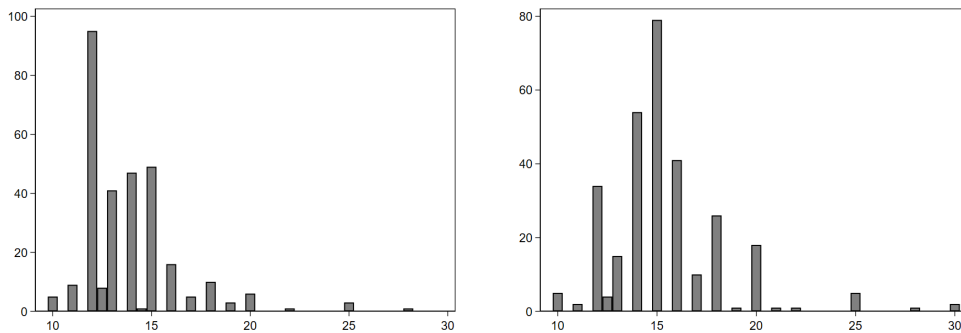## Figure A.5: Wage Observations from Census of Social Statistics (1850 & 1860)

Panel (A): Daily wage without board for day laborers
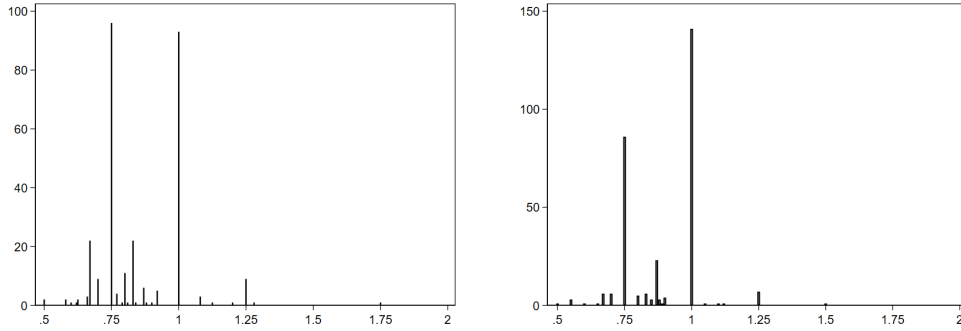
Panel (B): Daily wage carpenters
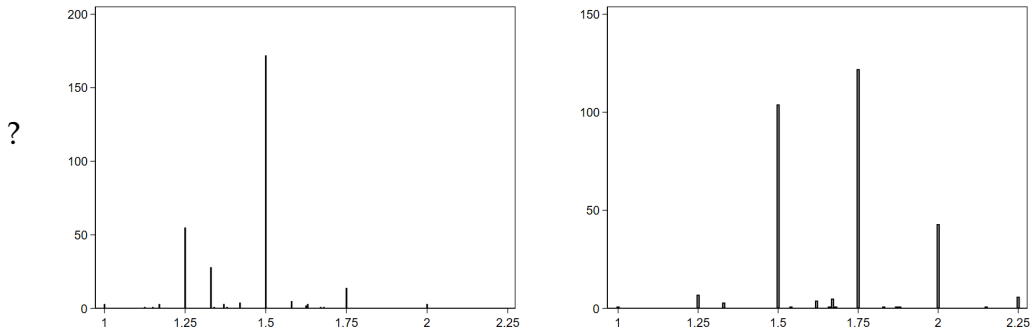
Panel (C): Monthly wage for farm laborers

Notes: Histograms provide the frequency of exact reported wages in contemporary dollars. The sample size varies between 299 and 302 towns. Census Marshalln Directions as to how to collect and report local wage information consisted entirely of the following statement *"The information called for in the six columns relating to wages is so simple, and so plainly set forth in the headings thereof, that it is deemed unnecessary to add thereto."* (DeBow 1854, pg. xxv)

Source: Manuscripts of the census of social statistics of 1850 and 1860. Data was hand entered by authors from manuscript images published on Ancestry.com.

Figure A.6: Permutation Tests

Panel A: Crowdout
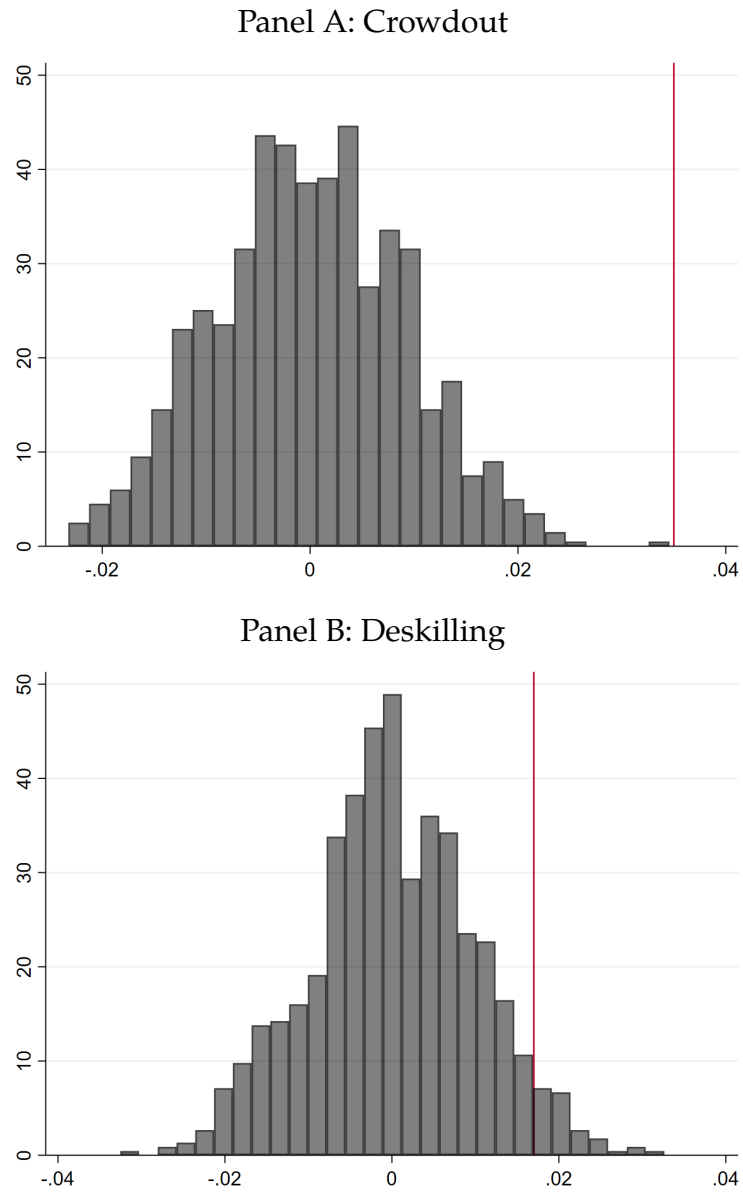
Panel B: Deskilling

Notes: Distribution of coefficients from permutation test of crowd-out and deskilling indicies, respectively.

Figure A.7: Know Nothing Gubernatorial Votes Over Time (Percent)

Panel (A): Map of Votes in 1854 and 1857

(a) 1854

(b) 1857

Panel (B): Map of Republicans in 1857 and Stronghold

(c) 1857

(d) Stronghold

Note: Color scheme held constant across exhibits (a)-(c) with breakpoints at 0, 20, 40, 60, 80 and 100. Stronghold defined as municipalities where the Know-Nothing vote is greater than 50 pctile in every year. *Sources*: Various years of the *Massachusetts Register*.

Figure A.8: Know Nothing Legislators

Panel A: Know-Nothing Town Representatives

Note: labels on each marker represent a total number of observations.
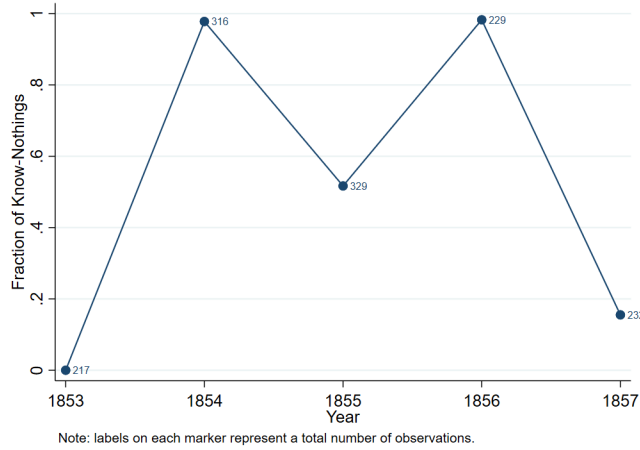
Panel B: Know-Nothing Legislators Shifting Parties

Note: Base year = 1854
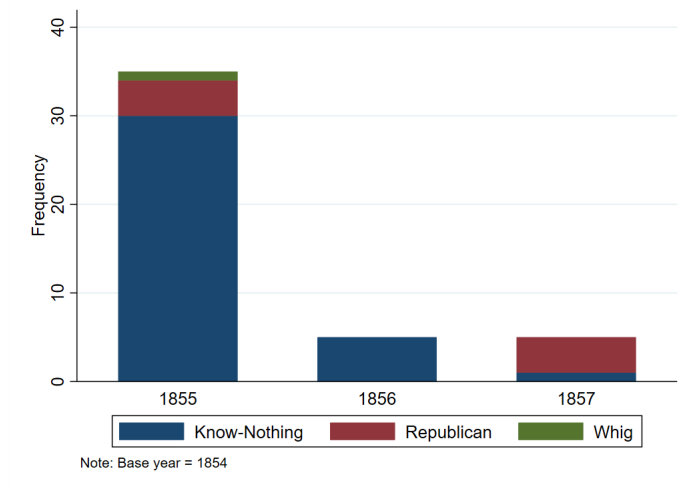
Note: Data from the *Daily Advertiser* entered for the election cycles 1853 to 1857 and demonstrates the number of legislators of a given party and, for those Know-Nothing legislators that could be linked, their party affiliation over time.

B   Data Appendix

B.A   Town Harmonization

Over the period from which we draw data sources, 1840-1860, Massachusetts newly incorporated 26 towns and cities. We begin with towns listed in the 1840 U.S. Decennial Census to create a base list used to construct a panel of consistent towns across data sources. We aggregate data from the post-1840 incorporated towns into the original town from which they were split, leaving us with 309 towns in the base list (dropping Boston in the main regressions leaves a sample size of 308). Appendix Table B.4 provides a crosswalk of newly incorporated towns to original towns in the 1840 town base list.

Table B.4: Town Crosswalk

Town	Year of Incorporation	Original/Aggregate Town
Achushnet	1860	Dartmouth
Agawam	1855	West Springfield
Ashland	1846	Framingham
Belmont	1859	Cambridge
Blackstone	1845	Mendon
Chicopee	1848	Springfield
Clinton	1850	Lancaster
Holyoke	1850	West Springfield
Lakeville	1853	Middleborough
Lawrence	1847	Andover
Marion	1852	Rochester
Mattapoisett	1857	Rochester
Melrose	1850	Malden
Monterey	1847	Tyringham
Nahant	1853	Lynn
North Andover	1855	Andover
North Reading	1853	Reading
Norwell	1849	Scituate
Peabody	1855	Danvers
Revere	1852	Chelsea
Swampscott	1852	Lynn
West Brookfield	1848	Brookfield
Winchester	1850	Woburn
Winthrop	1852	Chelsea

Two towns additional towns - Boston Corner and Mashpee - are dropped from the analysis that infrequently appear in reported sources. Boston Corner was ceded from Massachusetts to New York in 1853. Mashpee was a reservation for the Wampanoag tribe of indigenous peoples.

B.B Voting Data

The primary outcome variables are town-level annual election returns for governor of the Commonwealth of Massachusetts from various years of the *Massachusetts Register* (1856), and various newspapers. Election returns for governor for 1852-1859 were hand-entered from the *Massachusetts Register*, an annually published state almanac during the period. We corroborate the reported vote totals for 1854 and 1857 in the *Massachusetts Registers* with the original hand-written tallies from the Secretary of Commonwealth's office kept in the Massachusetts State Archives. Returns for the 1853 State Constitution vote also come from the *Massachusetts Register*. Election returns for the 1844 gubernatorial election and were entered from the hand-written records of the Secretary of the Commonwealth held at the Massachusetts State Archives.

We convert the candidate votes in the share of votes received by each political party by dividing by the total votes cast in the town. Turnout in a given year is calculated from the total votes cast in the town divided by the ratable polls in 1854. Ratable polls were the concept used at the time to measure the number of potential voters, and were reported in the *Massachusetts Register* (1855).

Infrequently, a few towns did not send returns to the State. These towns are dropped from regressions in years in which vote totals are not reported, but are included in the sample in years for which totals were reported. This is the reason why the sample size varies across years in the election outcomes regressions. These anomalies in the reporting are listed below and any adjustments that we make:

1. 1852 - Governor votes not reported in Sharon. Used presidential votes for turnout.
2. 1853 - Governor votes not reported in Tisbury. Missing turnout.
3. 1855 - Governor votes not reported in Chilmark. Missing turnout.
4. 1854 - All towns reported.
5. 1856 - Governor votes not reported in Holland and Tolland. Used presidential votes for turnout.
6. 1857 - Governor votes not reported in New Ashford. Missing turnout.
7. 1858 - Used unofficial results reported in footnotes for Oxford and Wellfleet.

In addition, ratable polls in 1854 were not reported for Sherbourn and Weymouth. For these two towns, we predicted ratable polls as a function of 1855 town population, using the regression coefficient of ratable polls on population.

B.C Exposure to Labor Market Crowdout

Labor market crowdout measures a town's *exposure* to the state-wide labor supply shock from Irish immigration. It interacts the initial town-level occupation distribution of native-born workers with the state-wide growth in Irish employment in those same occupational categories:

$$
(4) \qquad Crowdout_i = \sum_j \frac{L_{Native,j}^{1850,i}}{L_{TotNative}^{1850,i}} \frac{\cdot (L_{Irish,j}^{1855,Mass} - L_{Irish,j}^{1850,Mass})}{L_{Total,j}^{1850,Mass}} \quad ,
$$

where i indexes local labor markets, j represents skill groups, and the time step is between the 1850 Federal Census and the 1855 Massachusetts Census. State-wide shifts in skill cell-specific labor market competition from Irish immigrants - the second term in equation 4 - is measured as the change in the number of each skill cell that is Irish-born between 1850 and 1855 normalized by total labor in that occupation in 1850. These shifts are weighted by the skill cell's share in each local labor market's initial native-born employment.

Skill-groups are defined by broad occupational categories, comparable across datasets: agriculturalists, boot and shoe makers, factory operatives, laborers, manufacturers, mariners, low-skill mechanics, high-skill mechanics, merchants, professionals, and miscellaneous. The eleven broad categories correspond to those used in the published aggregate statistics of the 1855 Massachusetts census (DeWitt 1856). We use these to verify that our data digitization of the 1855 microdata aligns closely with the published aggregates.

The initial occupation distributions are constructed from the 1850 Decennial Census microdata provided by (Ruggles *et al.* 2018). State-level changes in foreign-born penetration for each skill group are constructed from a combination of the 1850 complete count census, and the 1855 Massachusetts Population Census microdata provided by Family-Search.org (FamilySearch 2016). The latter required digitizing the 1855 Massachusetts microdata, hand-entering occupations for 300,000 working age men. First, occupation strings were coded into the 1880 specific IPUMS occupation codes (OCC). The 1850 IPUMS complete count census microdata contains OCC codes. For both the 1850 and 1855 data, we then constructed the state-level foreign-born (or Irish) proportion in each of the eight broad occupation categories. The sample is limited to men, at least 16 years old, with a reported occupation and reported country of birth for both the 1850 and 1855 data. A reported occupation corresponds to an 1880 IPUMS OCC code of less than 300.

The primary labor market crowdout variable includes only the increase in Irish workers in each broad occupational category between 1850 and 1855. However, we also construct a number of other shocks based on immigrant ethnicity to use in robustness checks: British, German, and a combined British and German category.

B.D Exposure to Deskilling

Exposure to deskilling follows the general setup of a shift-share variable equation – state-wide industry-specific changes in average establishment size are interacted with lagged local industry employment shares:

$$(5) \qquad Deskilling_i = \sum_k \frac{L_k^{1845,i}}{L_{Tot}^{1840,i}} \cdot \left(\frac{L_k^{1855,Mass}}{N_k^{1855,Mass}} - \frac{L_k^{1845,Mass}}{N_k^{1845,Mass}} \right) \qquad ,$$

where i denotes town, k denotes industry, L denotes employment and N represents the number of establishments. The initial industry employment levels $L_k^{1845,i}$ by town are constructed from town-level reports in the 1845 Massachusetts Manufacturing Census, which we hand-entered (Palfrey 1846). The census reported town by industry aggregates, not firm-level microdata. An example of the type of information provided can be seen in Appendix Figure B.9. A total of 106 industry categories were reported in the 1845 Manufacturing Census, which are listed in Appendix Table B.5. Note that the denominator for

the share of employed is taken from the 1840 U.S. Decennial Population Census provided by IPUMS (Ruggles *et al.* 2018). This is so we could normalize by all employment in both manufacturing and agriculture, since the latter is not reported in the manufacturing census. Transportation workers, merchants, and professionals are also included in the total labor force.

Atack *et al.* (2004) demonstrate that average establishment wage declines with establishment size consistent with deskilling. See also Sokoloff (1984), Goldin & Sokoloff (1984) and Atack *et al.* (2010) for additional motivation for the use of establishment size as related to deskilling. Thus, the shifts in the deskilling exposure variable comes from the industry-specific state-wide changes in average establishment size. We use the 1845 and 1855 Massachusetts Manufacturing Censuses to construct this shift (Palfrey 1846; DeWitt 1856). State-wide totals of establishments and employment by industry were hand-entered to construct the shift. Per the instructions to assessors, information on the number of establishments was not requested for all industries. We are left with 62 industries in 1845 and 83 in 1855 where we can estimate average establishment size. The industries that did not report number of establishments fit into one of two categories: cottage industries using the putting-out system where the idea of an establishment lacks much meaning in our measure, or in industries with relatively small employment that resembled small shops.

By construction, our deskilling index gives a shift of zero in the industries where we cannot estimate average establishment size in both years. However, cottage industries had already experienced the deskilling process. These industries that formerly relied on itinerant artisans fo all aspects of production now moved to using the putting out system. Production was divided into a series of low- and high-skill tasks, with low-skill tasks given to private households to complete during free time, say when not working in fields. For example, according to Hazard (1913) the boot and shoe industry in Massachusetts had already switched from skilled artisan cobblers to the low-skilled putting out system by the late 1830s. Thus, the fact that cottage industries experience no deskilling in the construction of our exposure variable is not an issue.

B.E   Other variables

1. **Population, urbanization, and share Irish population in 1855:** Controls for log population, an indicator for urban (town population >= 2,500), and the share of town population that was Irish immigrants are constructed using the 1855 Massachusetts Census microdata provided by FamilySearch (2016).

2. **Fiscal Burden of Immigration:** We measure the fiscal burden of immigration using the number of foreign-born paupers in the 1855 Massachusetts Census microdata. The primary variable to measure fiscal burden is an indicator equal to 1 if there are any foreign-born paupers in a town. As a robustness check, we use the share of paupers that are foreign-born. The distribution of the share is highly skewed with a majority of zeroes, and thus suggests our use of the indicator.

3. **Pre-existing industry composition:** In regressions, we control for some or all town-level industry shares of employment from the 1840 U.S. Population Census provided by IPUMS (Ruggles *et al.* 2018). The industry categories include: agriculture, manufacturing, commerce, professional, mining, river transportation, and ocean trans-

Table B.5: Industries Used in Exposure to Factories Variable

No.	MA Census Code	1845 Listed Industries	No.	MA Census Code	1845 Listed Industries
1	1	Cotton Mills	54	58	Fire Arms
2	2	Calico Manufactures	55	59	Cannon
3	3	Bleaching and Coloring	56	60	Chocolate Mills
4	4	Woollen	57	61	Chair and Cabinet Manufacturers
5	5	Carpeting	58	62	Tin ware
6	6	Worsted	59	63	Comb Manufactories
7	7	Hosiery	60	64	White Lead and Other Paints
8	8	Linen	61	65	Linseed Oil
9	9	Silk	62	66	Camphene or Burning Fluid
10	10	Rolling, Slitting, and Nail Machines	63	67	Glue and Gum Manufactories
11	11	Forges	64	68	Cotton Gins
12	12	Pig-iron	65	69	Flour Mills
13	13	Hollow Ware and Castings	66	70	Tanneries
14	14	Machinery	67	71	Currying Establishments
15	15	Steam Engines and Boilers	68	72	Patent and Enamelled Leather
16	16	Fire Engines	69	73	Boots and Shoes
17	17	Scythes	70	74	Straw Bonnets and hats
18	18	Axes, Hatchets, and Edge Tools	71	75	Bricks
19	19	Cutlery, Door Handles and Latches	72	76	Mathematical Instruments
20	20	Screws	73	77	Snuff, Tobacco, and Cigars
21	21	Butts or Hinges	74	78	Building Stone
22	23	Locks	75	79	Marble
23	24	Tacks and Brads	76	80	Lime
24	25	Shovels, Spades, Forks, and Hoes	77	81	Mineral Coal and Iron Ore
25	26	Ploughs and Other Agricultural Implements	78	82	Charcoal
26	27	Iron Railings, Fences, and Safes	79	83	Whips
27	28	Copper	80	84	Blacking
28	29	Brass Founderies	81	85	Blocks and Pumps
29	30	Brittania Ware	82	86	Mechanics Tools
30	31	Buttons	83	87	Wooden Ware
31	32	Glass	84	88	Corn and Other Brooms
32	33	Starch	85	90	Lasts and Shoe Pegs
33	34	Chemical Preparations	86	91	Lumber
34	35	Paper	87	92	Firewood
35	36	Piano-Fortes and Other Musical Instruments	88	117	Casks
36	37	Clocks	89	118	Fringe and Tassels
37	38	Sewing Machines	90	119	Stone and Earthen Ware
38	40	Chronometers, Watches, Gold and Silver Ware and Jewelry, Gold Pens	91	120	Sashes, Doors, and Blinds
39	41	Brushes	92	121	Gas
40	42	Saddles, Harness, and Trunks	93	122	Pickles and Preserves
41	43	Upholstery	94	123	Alcohol and other Distilled Liquors
42	44	Hats and Caps	95	124	Beer
43	45	Cordage	96	125	Friction Matches
44	46	Boats	97	126	India Rubber Goods
45	48	Masts and Spars	98	127	Bread
46	50	Cards	99	128	Types and Stereotype Plates
47	51	Salt	100	129	Boxes of all kinds
48	52	Railroad Cars, Coaches, Chaises, Wagons, Sleighs, and Other Vehicles	101	130	Confectionery
49	53	Lead	102	132	Porte-monnaies, Pocket-books, etc.
50	54	Sugar Refined	103	133	Clothing
51	55	Oil and Sperm Candles	104	138	Printing
52	56	Soap and Tallow Candles	105	139	Bookbinding
53	57	Powder Mills	106	140	Gravestones, Wheelwright Stock, Baskets, Umbrellas and a variety of other articles not elsewhere enumerated

Figure B.9: Example of 1845 Massachusetts Manufacturing Census Town-level Tabulation

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LYNNFIELD.

Woollen Mills, 1 ; sets of machinery, 1 ; wool consumed, 11,000 lbs. ; flannel or blanketing, m'd, 30,350 yds. ; V. $8,269 ; C. $5,000 ; M. E. 7 ; F. E. 2.   •

Establishments for m. of Rail-road Cars, Coaches, Chaises and other vehicles, 2 ; V. of vehicles m'd, $1,000 ; C. $500 ; E. 4.

Shoes m'd, 36,661 pairs ; V. $23,717 ; M. E. 62 ; F. E. 43.

Lumber prepared, 90,000 feet ; V. $1,038 ; E. 7.

Fire Wood prepared, 1,418 cords ; V. $4,098 ; E. 25.

Sheep, 6 ; V. $12 ; wool produced, 30 lbs ; V. $15.

Horses, 58 ; V. $2,505 ; neat cattle, 311 ; V. $6,814 ; swine, 103 ; V. $997.

Indian Corn or Maize raised, 2,341 bush. ; V. $1,404 ; rye, 354 bush. ; V. $283 ; barley, 37 bush. ; V. $29 ; oats, 321 bush. ; V. $128 ; potatoes, 7,095 bush. ; V. $2,128 ; other esculent vegetables, 750 bush. ; V. $112 ; hay, 714 tons ; V. $7,464.

Fruit raised, 3,755 bush. ; V. $750.

Butter, 11,026 lbs. ; V. $1,874.

Source: Palfrey (1846)

portation. There were nine towns that existed in 1840 and should have been included in the census microdata, but were not. We use the county average industry shares for these towns: Boxford, Brookline, Easthampton, Essex, Georgetown, Hanover, Rowley, Somerville, Westhampton.

4. **Mill Town Indicator:** A mill town is defined as a settlement that developed around one or more textile mills. The mill town indicator is equal to one if the town had a high proportion of town employment in textile mills in the 1845 Massachusetts Manufacturing Census (Palfrey 1846).

5. **Native Labor Demand Shift:** Meant to control for potential changes in demand for native labor, the native demand shift is measured as: $D_{i,native} = \frac{L_{i,native}^{1855} - L_{i,native}^{1850}}{L_{i,native}^{1850}}$, using data from the 1850 U.S. and 1855 Massachusetts population censuses (Ruggles *et al.* 2018; FamilySearch 2016).

6. **Industrialization variables:** Our results on the short-run industrial response to Irish immigration use the level and change in establishments per capita and log output dollar value per capita at the town level. Establishments per capita is calculated as the total number of manufacturing establishments in a town in 1855 (or 1850) divided by the population in the town in 1855 (1850). The log dollar value of manufacturing output per capita is calculated similarly. Change in establishments per capita is the difference in levels. Change in output value is the difference in log dollars per capita. Establishments and output value was digitized from the 1845 and 1855 Massachusetts Manufacturing Censuses (Palfrey 1846; DeWitt 1856). Population is calculated from the 1850 U.S. census and 1855 Massachusetts census microdata (Ruggles *et al.* 2018; FamilySearch 2016).

7. **Cottage industry exposure:** Town cottage industry employment is measured using the employment counts in the 1845 Massachusetts Manufacturing Census (Palfrey 1846). We code an industry as "cottage" if it has a high percentage of female workers and a high percentage of hand power in 1850, or there is narrative evidence that production was primarily done by the putting out system. Cottage industries include: boots and shoes (71% of all cottage employment); straw bonnets and hats (27%); snuff, tobacco, and cigars ($< 1\%$); whips; port-monnaies, pocket-books, etc. ($< 1\%$); clothing ($< 1\%$); bookbinding ($< 1\%$). The boot and shoe, and straw bonnet and hat industries make up 45 percent of total manufacturing employment in the state.

8. **Town latitude and longitude:** Robustness to forms of spatial correlation requires the use of location information for each historical town. We calculate the latitude and longitude of the centroid of each modern town using the shapefile produced by the Massachusetts Bureau of Geographic Information.[47] The shapefile uses the state plane coordinate system (Massachusetts - 2001), which we convert to latitude and longitude and calculate town centroids using ArcMap. The modern shapefile includes towns incorporated after our 1840 town base list, and does not include historical towns that no longer exist. To handle towns incorporated after 1840, we use two methods. First, we apply the modern geographic centroid of the original town

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[47]Source: (Accessed on June 17, 2020) http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/townsurvey.html

from which the newly incorporated town seceded. Second, we average the latitude and longitude of all modern town centroids that were part of the 1840 town. Results are not affected by this choice. Nine historical towns no longer exist: four were annexed by Boston, four were flooded by the construction of the Quabbin Reservoir in 1938, and one town was ceded to Rhode Island.[48]

(a) Brighton - annexed by Boston in 1874, dropped pin by eyeballing centroid in google maps, 42.34; -71.15

(b) Charlestown - annexed by Boston in 1874. See `https://tools.wmflabs.org/geohack/geohack.php?pagename=Charlestown,_Boston&params=42_22_31_N_71_03_52_W_region:US-MA_type:city`

(c) Dorchester - annexed by Boston in 1870, dropped pin by eyeballing centroid in google maps, 42.29; -71.06

(d) West Roxbury - annexed by Boston in 1868, dropped pin by eyeballing centroid in google maps, 42.28; -71.16

(e) Dana - disincorporated as part of Quabbin Reservoir. See `https://tools.wmflabs.org/geohack/geohack.php?pagename=Dana,_Massachusetts&params=42_25_19_N_72_13_39_W_type:city_region:US-MA`

(f) Enfield - disincorporated as part of Quabbin Reservoir. See `https://tools.wmflabs.org/geohack/geohack.php?pagename=Enfield,_Massachusetts&params=42_19_0_N_72_19_58_W_type:city_region:US-MA`

(g) Greenwich - disincorporated as part of Quabbin Reservoir. See `https://tools.wmflabs.org/geohack/geohack.php?pagename=Greenwich,_Massachusetts&params=42_21_33_N_72_17_47_W_type:city_region:US-MA`

(h) Prescott - disincorporated as part of Quabbin Reservoir. See `https://tools.wmflabs.org/geohack/geohack.php/pagename=Prescott,_Massachusetts&params=42_23_30_N_72_20_41_W_type:city_region:US-MA`

(i) Pawtucket - ceded to Rhode island in 1862. See `https://tools.wmflabs.org/geohack/geohack.php?pagename=Pawtucket,_Rhode_Island&params=41_52_32_N_71_22_34_W_type:city`

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[48] All websites accessed on June 17, 2020.