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Abstract

This paper uses empirical evidence drawn from newly constructed datasets to assess the impact of geographic clustering on the assimilation and occupational mobility of Irish immigrants in the United States in the late nineteenth century. It finds that geographic clustering was quite pronounced for Irish immigrants in this time period. Irish immigrants were primarily drawn to the large metropolitan areas of the Northeast, reflecting the importance of these areas as points of entry to the US, areas of prior settlement by previous generations of Irish immigrants, as well as major centres for employment for new immigrants. This paper also finds that higher levels of geographic clustering were associated with both lower degrees of assimilation and lower occupational outcomes. The benefits of geographic clustering in the job market often described in this literature do not appear to have existed for Irish immigrants in the late nineteenth century. These results would also support the view that living in a more ethnically concentrated community, though perhaps improving the initial starting position of Irish immigrants in America, may have come at the expense of slower subsequent assimilation and reduced occupational mobility.

Keywords: International migration, Geographic Mobility, Immigrant, Immigrant Labour, Immigration, Economic History

JEL Codes: F22, J60, N30, N31

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Introduction

Do ethnic enclaves accelerate or delay the assimilation of immigrants into their new society? And do they enhance the occupational mobility of immigrant groups? This paper assesses the impact of geographic clustering on the degree of assimilation achieved by Irish immigrants in the US in the late nineteenth century. By geographic clustering, I refer to the decision by an Irish immigrant to live in an area which contained a relatively large percentage of Irish immigrants.

In the literature on immigrant assimilation, there is much debate regarding these issues. Economists and sociologists such as Chiswick (2002), Borjas (1999) and Light and Isralowitz (1996) have argued that geographic clustering delays immigrant assimilation. Borjas (1999) found that this was particularly true in cases where the human capital of an ethnic group is lower than that of the host society.¹ However, there is a literature on late nineteenth century Irish immigrants which argues that the networking opportunities and support systems which had developed in cities with large concentrations of Irish immigrants aided these immigrants in finding work and successfully settling into American life. McCaffrey (1996) argues that the Irish were able to make advances in local government, trade unions and the Catholic Church, and that “employment connected to politics” in particular “provided a base of confidence that eventually launched the Irish into the middle class.”² McKivigan and Robertson (1996) argue that the Irish in New York City used political connections to entrench themselves “in city government jobs for policemen, firefighters, rapid transit workers and school teachers.” They also argue that by 1900, significant numbers of the city’s Irish had

¹ George J. Borjas, *Heaven’s Door* (Princeton: Princeton University Press, 1999), p. 56.

² Lawrence J. McCaffrey, “Forging Forward and Looking Back”, in *The New York Irish*, Ronald H. Bayor and Timothy J. Meagher (eds) (Baltimore: Johns Hopkins University Press, 1996), p.222.

moved up into the ranks of professionals and entrepreneurs.”³ Chiswick (2002) also finds that “immigrant/ethnic concentrations provide information networks that can be very valuable in ... employment activities.”⁴ Sociologists Portes and Rumbaut (1996) and Gordon (1964) have argued that ethnic enclaves provided significant advantages for new immigrants and immigrant entrepreneurs, and allowed politics to become ‘an avenue of individual upward mobility when other paths remain blocked.’⁵ Cutler et al. (2008) found that the impact of geographic clustering to be more nuanced, with positive educational and labor market outcomes for some immigrant groups, but negative ones for those with comparatively low levels of education.⁶

This paper utilises sample data on Irish immigrants to assess the impact of geographic clustering on the assimilation and occupational mobility of Irish immigrants in late nineteenth century America. It finds that geographic clustering was quite pronounced for Irish immigrants in late nineteenth century America. Irish immigrants were primarily drawn to the large metropolitan areas of the Northeast, reflecting the importance of these areas as points of entry to the US, areas of prior settlement by previous generations of Irish immigrants, as well as major centres for employment for new immigrants. My analysis also finds that higher levels of geographic clustering were associated with both lower degrees of assimilation and lower occupational outcomes. The benefits of geographic clustering in the job market often described in this literature do not appear to have existed for Irish immigrants in the late nineteenth century. These results also support the view that living in a more ethnically

³ John R. McKivigan and Thomas J. Robertson, “The Irish American Worker in Transition, 1877-1914” in *The New York Irish*, Ronald H. Bayor and Timothy J. Meagher (eds) (Baltimore: Johns Hopkins University Press, 1996), p. 312.

⁴ Barry R. Chiswick, “Do Enclaves Matter in Immigrant Adjustment?”, *Discussion Paper No. 449, The Institute for the Study of Labor* (2002), p. 4.

⁵ Alejandro Portes and Ruben G. Rumbaut, *Immigrant America* (Berkeley: 1996), p. 54.

⁶ David M. Cutler, Edward L. Glaeser and Jacob L. Vigdor, “When are Ghettos Bad? Lessons from immigrant segregation in the United States”, *Journal of Urban Economics* 63, 759-774. (2008), p. 772.

concentrated community, though perhaps improving the initial starting position of Irish immigrants in America, may have come at the expense of slower subsequent assimilation and reduced occupational mobility.

Data

My unit of measurement for this analysis is the county, the primary legal division of states in America and often the most local level of government. Counties are also the smallest unit of measurement for which it is possible to obtain complete US census information for immigrants and the overall population in the late nineteenth century.⁷ I have used the University of Virginia Historical Census Browser⁸ to create a database with the percentage of Irish immigrants living in each county in the US in 1900. The University of Virginia census data is based on a complete sample of the relevant censuses, and thus provides a robust basis for examining the issue of geographic clustering in late nineteenth century America. Separately, I have also created a sample of Irish immigrants who came to the US prior to 1900 using the IPUMS 2.5% US census sample for 1900⁹. This sample is comprised of 26,722 male immigrants between the ages of 25 and 65 years old, who were in the workforce in 1900. In addition to capturing the broad range of socio-economic variables available in US census data, I have also included their county of residence. This sample, when cross referenced with the complete county level data available from the University of Virginia Historical Census Browser, allows me to examine in a robust manner the effect of geographic clustering on the assimilation of Irish immigrants in the late nineteenth century. To assess the influence of previous generations of Irish immigrants on the geographic settlement patterns of

⁷ Obtaining 100% of the census sample information is crucial, as a partial sample would not be sufficiently robust for measuring the percentage of Irish immigrants in any given location.

⁸ Historical Census Browser. The University of Virginia, Geospatial and Statistical Data Center: <http://fisher.lib.virginia.edu/collections/stats/histcensus/index.html>. (2004).

⁹ Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

the Irish immigrants living in America in 1900, I also accessed the University of Virginia Historical Census Browser to determine the percentage of Irish immigrants living in each county in the US in each decade from 1870 until 1900.¹⁰

Extent of geographic clustering

The first question to be addressed is to what extent geographic clustering existed for the Irish in late nineteenth century America. Using data from the University of Virginia Historical Census Browser, I have created a map of the US which illustrates the percentage of Irish born residents relative to the total population of each county in the US in 1900. The map in Figure 1 shows each county based on its percentage of Irish immigrants to the total population, and groups the counties into five categories based on this percentage (0-2.5%, 2.5-5%, 5-10%, more than 10%, and counties for which there were no data available). As can be seen from Figure 1, there was a significant concentration of Irish immigrants in the Northeastern section of the US in 1900. In and around of the cities of Boston, Providence, New York and Philadelphia were found the highest percentages of Irish immigrants. Regional cities such as Springfield, Hartford and Albany also exhibited relatively high percentages of Irish immigrants. The Chicago metropolitan area had a lower but still prominent percentage of Irish immigrants relative to its total population. In the West, there were also a few counties with a relatively high percentage of Irish immigrants, though the absolute number of Irish was quite limited. Table 1 lists the 25 counties in the US in 1900 that had the highest percentage of Irish immigrants relative to their total populations.

So what conclusions can we draw from this data? First of all, there is clear evidence of geographic clustering of Irish immigrants in this timeframe. The Irish were not evenly spread

¹⁰ I would have preferred to have had historical data for periods prior to 1870, but complete county level data is only available from 1870 onwards.

across the country, but tended to live in certain regions where they constituted a much higher percentage of the overall population. In many sections of the US, the percentage of Irish immigrants was extremely low. For example, in the underlying data there are 2,172 counties where the Irish constituted less than 1% of the total population.¹¹ There were also 379 counties where the Irish constituted less than .01% of the total population. With the exception of one county in rural Pennsylvania, all of these 379 counties were located in the Southern and Western regions of the US. What is quite clear from the evidence is that the Irish tended to cluster in or near the major cities of the Northeast. In fact, 22 of the 25 counties with the highest percentage of Irish immigrants in 1900 were located in Northeastern states. Several of the main cities in this region, in particular Boston, New York and Philadelphia, were also leading ports of entry for immigrants coming from Europe in this timeframe. So it would appear that Irish immigrants often settled in locations that were near to where they may have first entered the US. In addition, these cities were also the largest in the US in this time period and thus would have been a logical place for immigrants to seek employment. Finally, it is also striking that some Irish immigrants were willing to travel clear across the vast heartland of the US to find work in frontier areas in the West. In counties such as Storey, Nevada, and Silver Bow and Deer Lodge in the state of Montana, mining jobs drew Irish immigrants to live and work in these remote, sparsely populated areas of the US.

¹¹ To put this number in perspective, there were only 2771 counties listed in the University of Virginia Historical Census Browser for 1900.

Figure 1

Percentage Irish by county in the United States in 1900

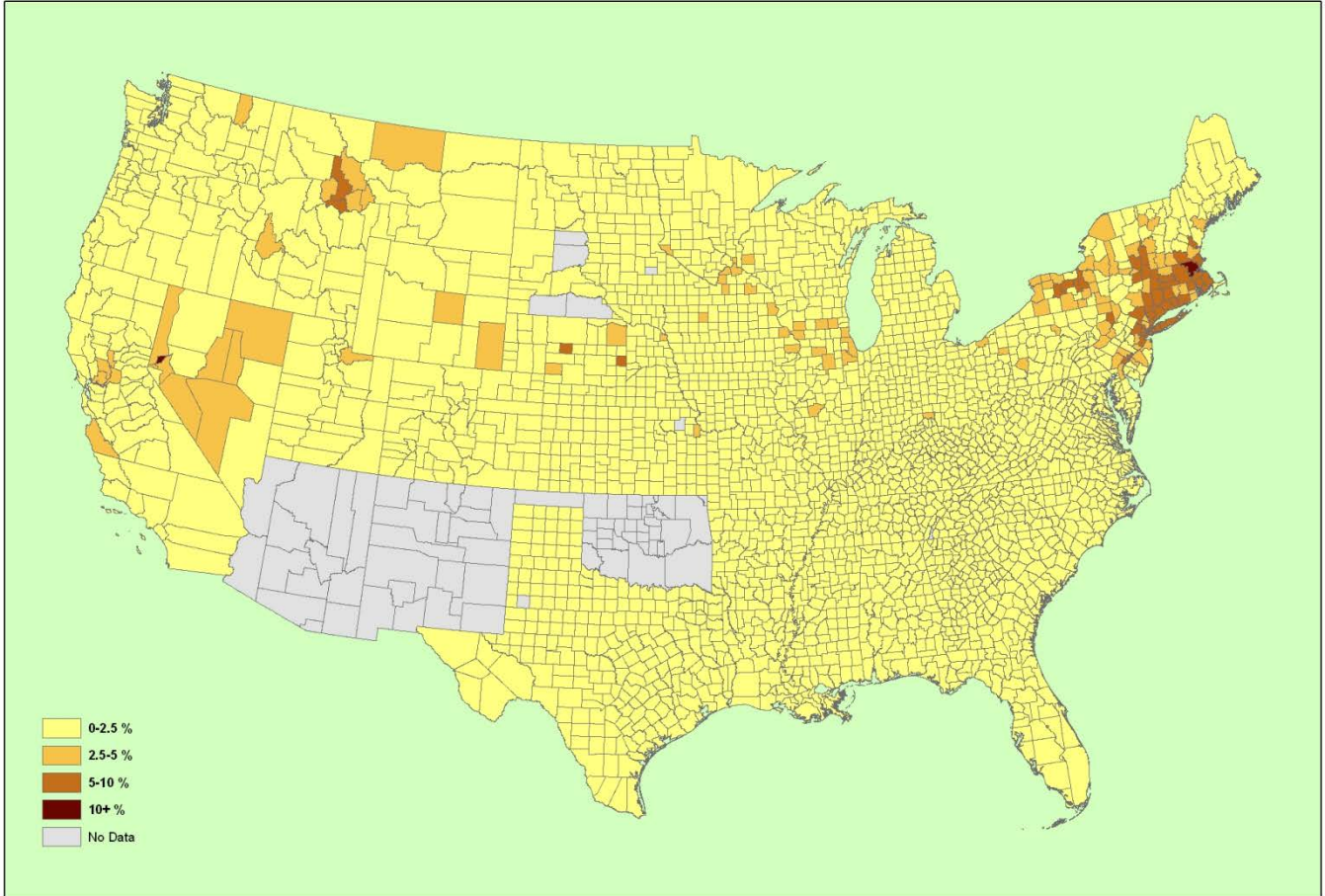


Table 1
Top 25 Counties Ranked by Percentage of Irish-born Population in 1900

County	State	Description	Number of Irish-born	% Irish-born
Suffolk	Massachusetts	Boston metropolitan area	73,501	12.02%
Storey	Nevada	Mining region	400	10.89
Middlesex	Massachusetts	Boston metropolitan area	57,496	10.16
Norfolk	Massachusetts	Boston metropolitan area	14,716	9.71
Silver Bow	Montana	Mining region	4,582	9.62
New Haven	Connecticut	New York metropolitan area	24,666	9.16
Newport	Rhode Island	Providence metropolitan area	2,962	9.09
Providence	Rhode Island	Regional city	29,740	9.05
Hampden	Massachusetts	Springfield metropolitan area	15,891	9.05
New York	New York	New York metropolitan area	178,886	8.72
Hartford	Connecticut	Regional city	17,044	8.72
Westchester	New York	New York metropolitan area	16,047	8.71
Rensselaer	New York	Albany metropolitan area	10,389	8.54
Hudson	New Jersey	New York metropolitan area	31,225	8.09
Deer Lodge	Montana	Mining region	1,295	8.02
Fairfield	Connecticut	New York metropolitan area	14,348	7.79
Worcester	Massachusetts	Regional city	26,873	7.75
Essex	Massachusetts	Boston metropolitan area	27,488	7.70
Philadelphia	Pennsylvania	Philadelphia metropolitan area	98,427	7.61
Richmond	New York	New York metropolitan area	4,858	7.25
Kings	New York	New York metropolitan area	83,400	7.15
Bristol	Rhode Island	Providence metropolitan area	898	6.83
Hampshire	Massachusetts	Springfield metropolitan area	3,970	6.75
Union	New Jersey	New York metropolitan area	6,610	6.65
New London	Connecticut	Regional city	5,506	6.65

To what extent were Irish immigrants drawn to areas where earlier generations of Irish immigrants had also settled after arriving in the US? Using the University of Virginia Historical Census Browser, I have created maps of the US which illustrate the percentage of Irish born residents relative to the total population of each county in the US in each of 1870, 1880 and 1890, in addition to 1900. These maps group the counties into six categories based on the percentage of Irish immigrants to the total population (0-2.5%, 2.5-5%, 5-10%, 10-15% and more than 15%, and counties for which there were no data available). As these maps illustrate, there is a clear pattern of settlement of Irish immigrants in the major metropolitan areas of the Northeast as far back as 1870 which is very similar to the settlement patterns we observed for Irish immigrants in 1900. In 1870, in addition to the major metropolitan areas in the Northeast, Midwestern cities such as Chicago and Western counties in states including Nebraska, Minnesota and California also had high percentages of Irish immigrants in their populations. In terms of the absolute numbers, the New York and Boston metropolitan areas were much more significant than any other regions in the analysis (as they continue to be in 1900). The maps for 1880, 1890 and 1900 illustrate the continued importance of the major metropolitan areas of the Northeast, coupled with a decline in the number of Midwestern and Western counties with very high percentages of Irish immigrants. There are several likely reasons for this trend. Whereas Irish immigrants were the dominant immigrant group in the decades following 1850, other immigrant groups from Southern and Eastern Europe were becoming more important as the twentieth century approached. In addition, these maps only capture first generation Irish immigrants, and do not show the presence of second and third generation Irish immigrants who also would have been a very sizeable presence in these communities. Finally, general population growth would also contribute to a reduction in the percentage of Irish immigrants in the US over this time period.

Figure 2

Percentage Irish by county in the United States in 1870

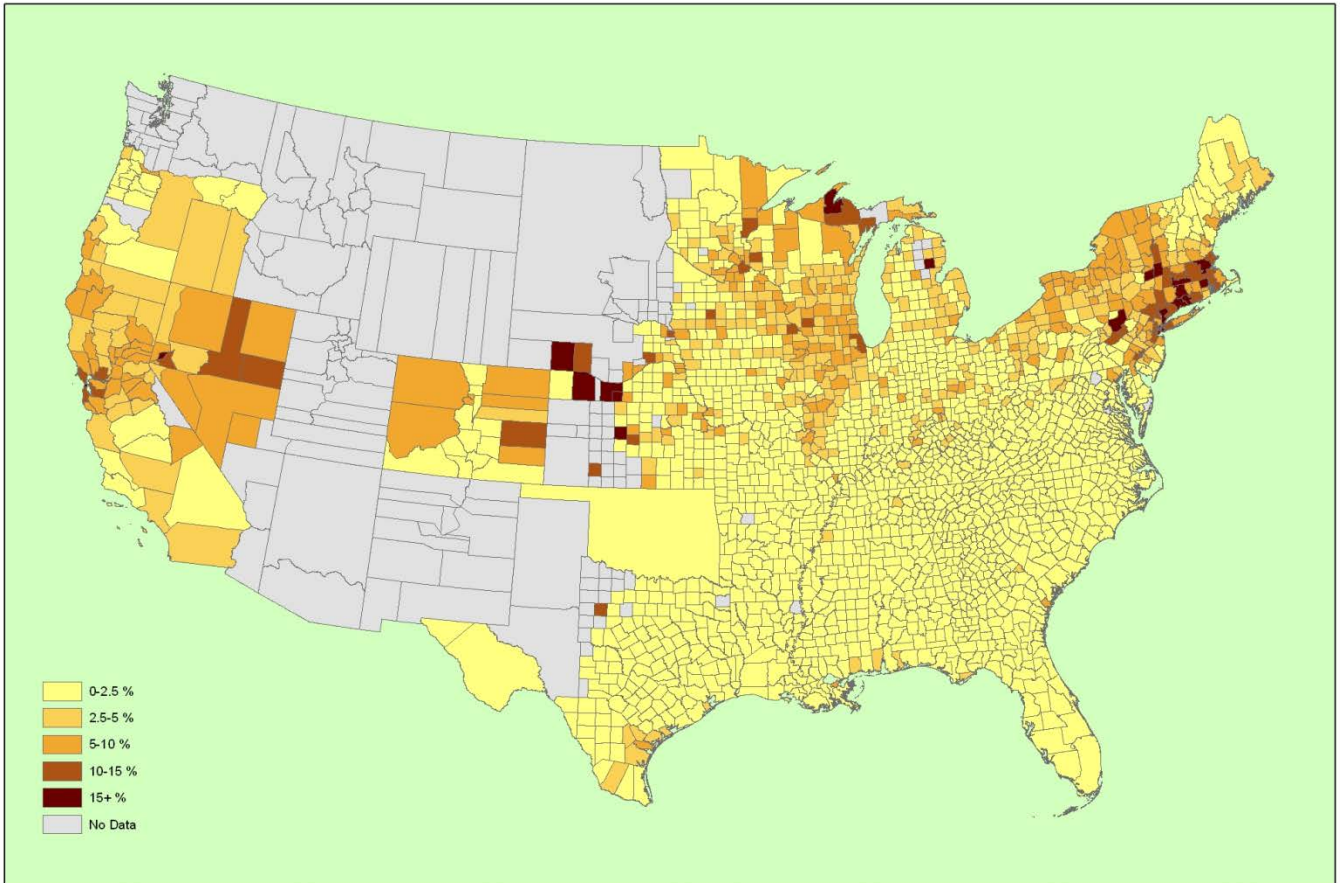


Figure 3

Percentage Irish by county in the United States in 1880

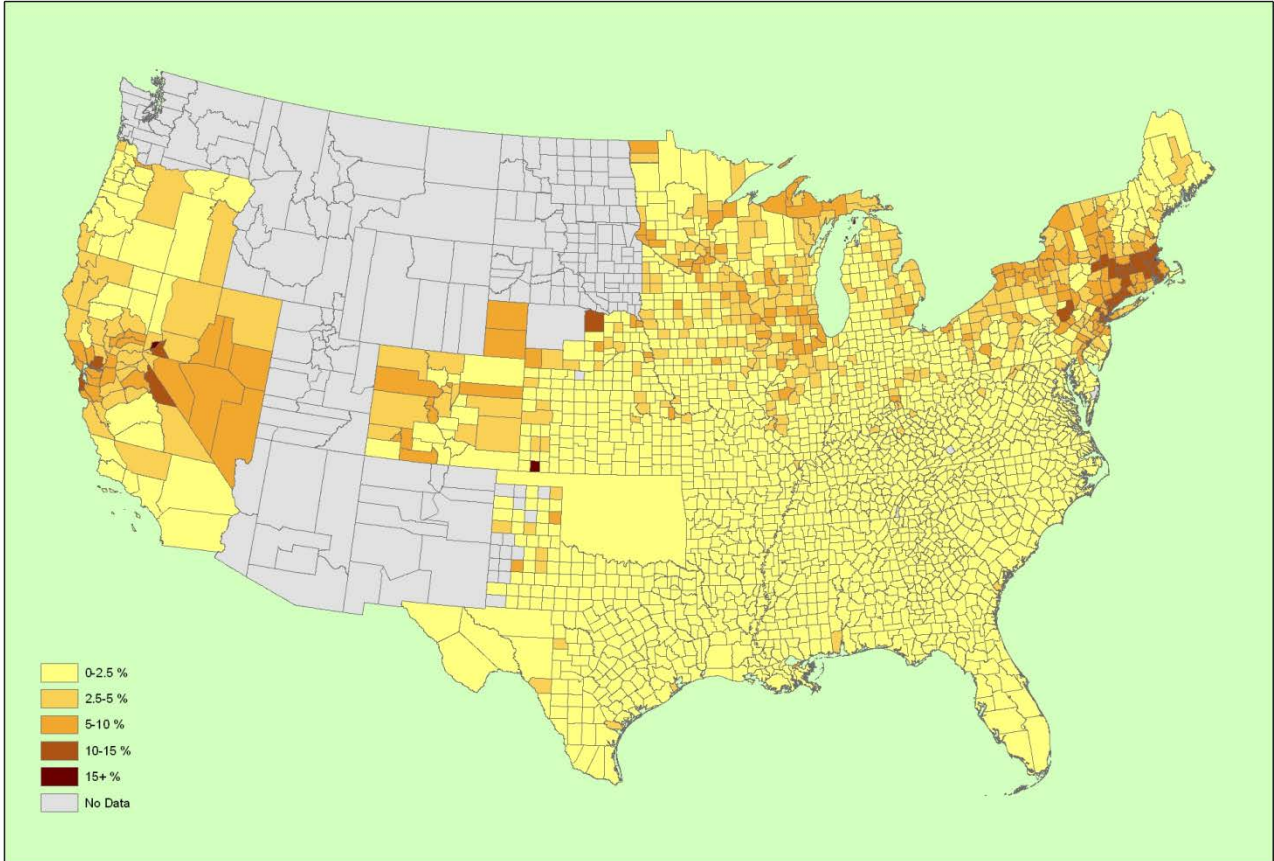


Figure 4

Percentage Irish by county in the United States in 1890

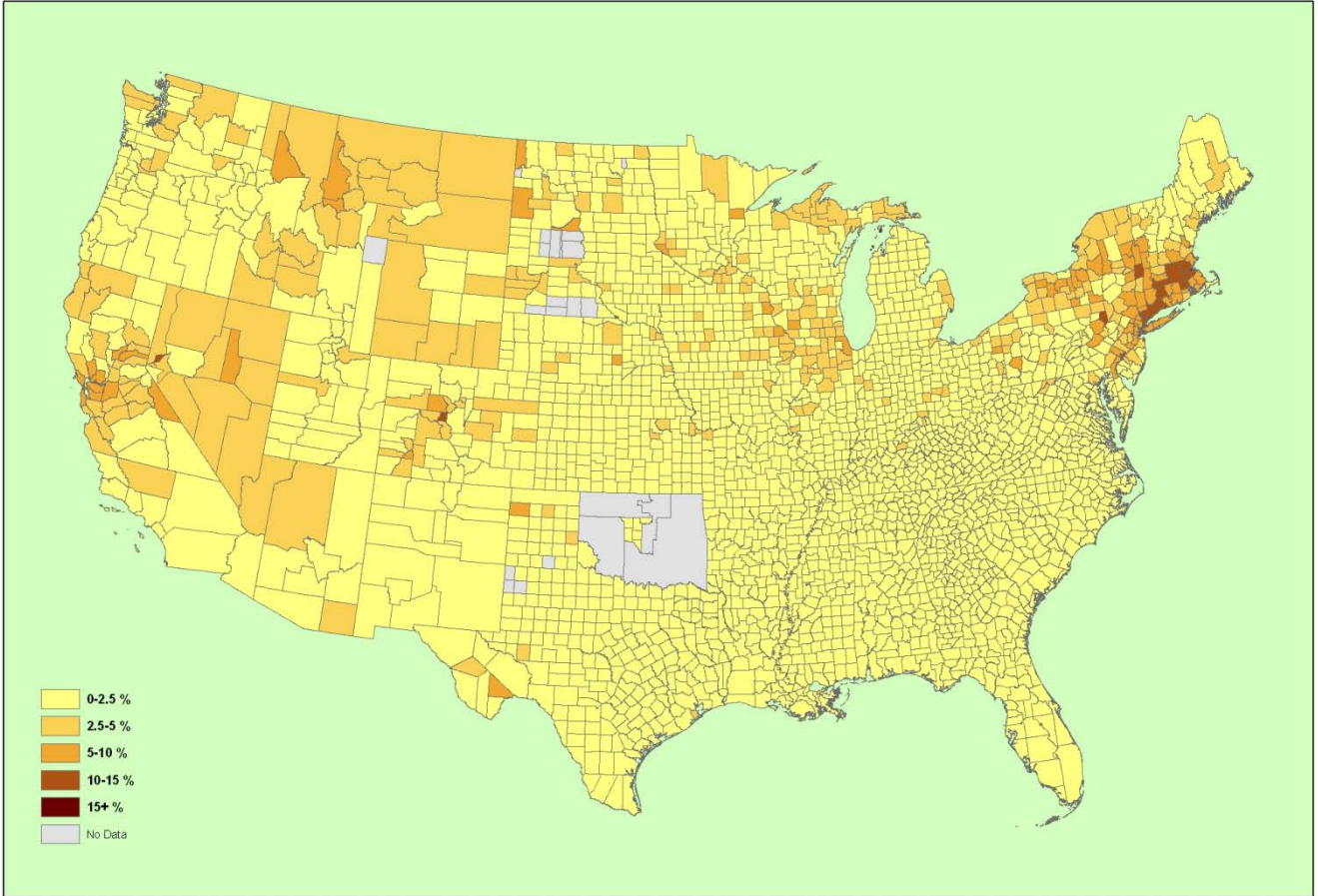
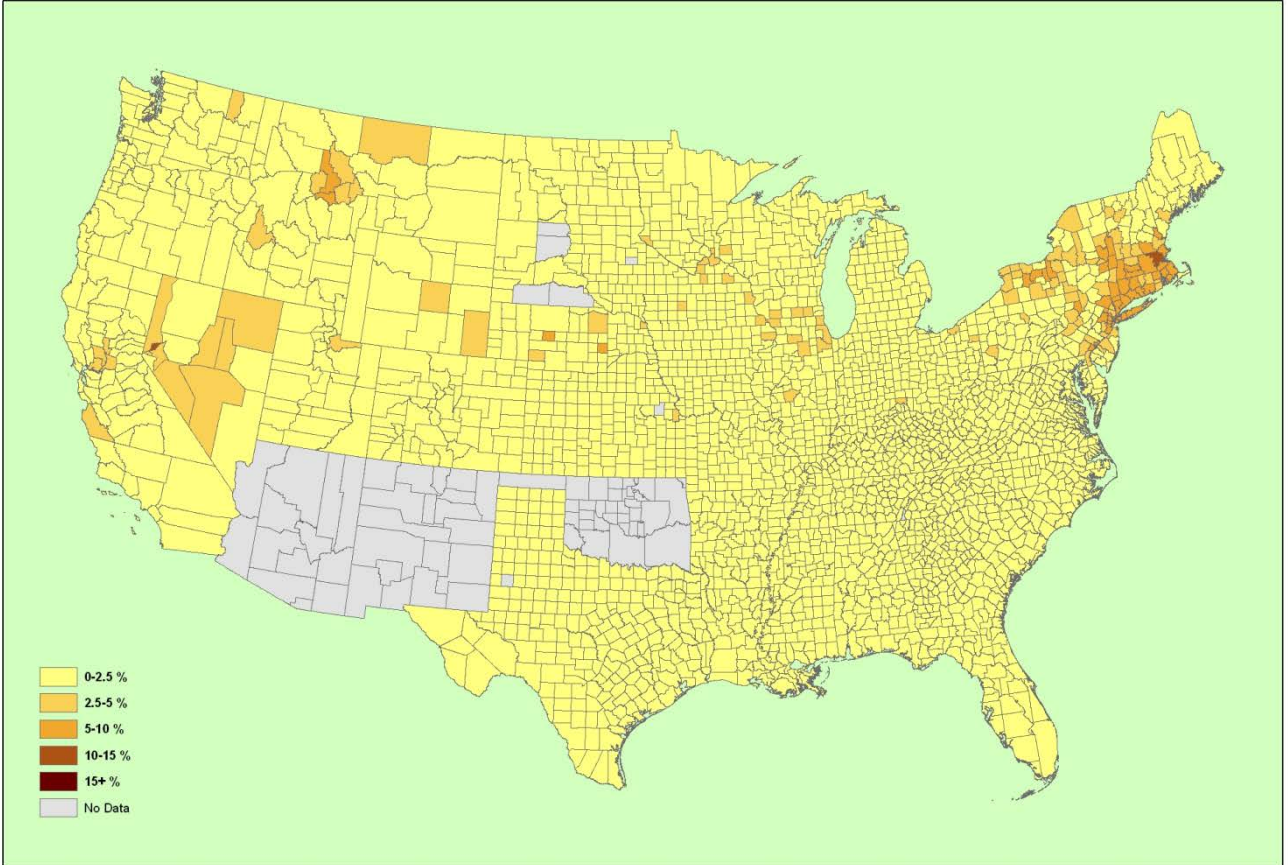


Figure 5

Percentage Irish by county in the United States in 1900



It is also useful to place the Irish experience in the context of other prominent immigrant groups in this timeframe. The two other leading European immigrant groups in the US in the late nineteenth century were the English and the Germans. For this analysis, I have also included the Scottish, perhaps the immigrant group most similar to the Irish. As can be seen from the Tables 2, 3 and 4, the most clustered areas where German, English and Scottish immigrants chose to live looked quite different from those chosen by the Irish. Whereas the Irish were most likely to cluster in and around the major cities of the Northeast, with smaller numbers willing to venture out to the West in search of employment primarily in the mining industry, none of the other immigrant groups in this comparison had a similar experience. The Germans, who were the largest European immigrant group in the US in this timeframe, were much more likely to congregate in the Midwest, in particular in the states of Wisconsin, Iowa and Minnesota, where farming was the primary occupation. None of the 25 counties where the German clustering levels were highest were in the East. As for the English and Scottish, these British groups were more likely to cluster in high percentages in the West, primarily in mining regions. They were not as well represented in the Eastern parts of the country as were the Irish. And for the Eastern counties that were among the highest in clustering levels for the English and Scottish, few were in and around the urban centres of New York, Boston and Philadelphia. These immigrant groups, in particular the English and Scottish, did resemble the Irish in that in many parts of the US, the percentage of these immigrants in the population was quite low. The Germans were somewhat less concentrated, settling in larger percentages in more counties throughout the US than did the other groups. In this respect, the Germans more closely resembled the native born.

Table 2
Top 25 Counties Ranked by Percentage of German-born Population in 1900

County	State	Number of German-born	% German-born
Taylor	Wisconsin	2,462	21.86%
Marathon	Wisconsin	8,712	20.14
Sheboygan	Wisconsin	10,067	20.00
Milwaukee	Wisconsin	63,952	19.38
Jefferson	Wisconsin	6,739	19.37
Dodge	Wisconsin	8,868	19.02
Carver	Minnesota	3,198	18.23
Ozaukee	Wisconsin	2,972	18.16
Scott	Iowa	9,234	17.91
Cuming	Nebraska	2,571	17.63
Green Lake	Wisconsin	2,705	17.12
Washington	Wisconsin	3,984	16.89
Brown	Minnesota	3,326	16.81
Grundy	Iowa	2,280	16.57
Shawano	Wisconsin	4,524	16.47
Calumet	Wisconsin	2,738	16.03
Crawford	Iowa	3,436	15.85
Ottawa	Ohio	3,515	15.82
Du Page	Illinois	4,418	15.67
Douglas	Nevada	240	15.65
Sibley	Minnesota	2,634	15.62
Lincoln	Wisconsin	2,526	15.53
Outagamie	Wisconsin	6,786	14.67
Marquette	Wisconsin	1,506	14.33
Winnebago	Wisconsin	8,299	14.25

Table 3
Top 25 Counties Ranked by Percentage of English-born Population in 1900

County	State	Number of English-born	% English-born
Bailey	Texas	1	25.00%
Davis	Utah	838	10.48
Salt Lake	Utah	7,130	9.17
Summit	Utah	859	9.10
Bristol	Massachusetts	20,584	8.17
Beaver	Utah	295	8.16
Morgan	Utah	166	8.12
Juab	Utah	816	8.09
Rich	Utah	154	7.91
Weber	Utah	1,942	7.69
Owyhee	Idaho	289	7.60
Silver Bow	Montana	3,555	7.46
Tooele	Utah	541	7.35
Marquette	Michigan	3,020	7.32
Iron	Utah	255	7.19
Utah	Utah	2,205	6.79
Uinta	Wyoming	815	6.67
Granite	Montana	281	6.49
Eureka	Nevada	123	6.29
Cache	Utah	1,088	6.00
Houghton	Michigan	3,955	5.99
Storey	Nevada	220	5.99
Hansford	Texas	10	5.99
Providence	Rhode Island	19,624	5.97
Bear Lake	Idaho	419	5.94

Table 4
Top 25 Counties Ranked by Percentage of Scottish-born Population in 1900

County	State	Number of Scottish-born	% Scottish-born
Sweetwater	Wyoming	291	3.44%
Washington	Vermont	1,189	3.25
Uinta	Wyoming	359	2.94
Grundy	Illinois	698	2.89
Meagher	Montana	63	2.49
Wasatch	Utah	116	2.45
Carbon	Utah	113	2.26
Passaic	New Jersey	3,401	2.19
Carbon	Montana	160	2.12
Fergus	Montana	147	2.12
Park	Montana	155	2.11
Washington	Rhode Island	505	2.09
Terry	Texas	1	2.08
Allegany	Maryland	1,093	2.04
Natrona	Wyoming	36	2.02
Rich	Utah	38	1.95
Fresno	California	734	1.94
Hooker	Nebraska	8	1.85
Tooele	Utah	131	1.78
Glasscock	Texas	5	1.75
Jefferson	Pennsylvania	985	1.67
Summit	Utah	154	1.63
Cascade	Montana	395	1.53
Bottineau	North Dakota	114	1.51
Salt Lake	Utah	1,167	1.50

Geographic clustering and assimilation

Table 5 presents summary statistics from my sample of Irish immigrants based on their level of geographic clustering. The table separates the sample into those immigrants who lived in counties with above and below average levels of geographic clustering. The results are striking. The two groups have marked and statistically significant differences in virtually every characteristic under review. Those Irish immigrants who lived in counties with below average levels of Irish immigrants were substantially more rural, more likely to own a home and more likely to have married a non-Irish born spouse. In addition, their spouses had lower levels of infant mortality and were less likely to be in the workforce. In all these respects, these Irish immigrants more closely resembled the native born sample. Only in the area of literacy did the above average clustered Irish more closely resemble the native born, and in this instance the difference, though statistically significant, is not very meaningful as more than nine out of ten of both groups were classified as literate in the 1900 US census.

One possible explanation for these results is that perhaps the Irish living in more clustered areas (which were generally more urban) had more recently arrived in the US and would then gradually move to less clustered areas over time. Table 5 does show that the more clustered Irish immigrants were younger and had lived in the US almost five years less than those Irish immigrants who lived in less clustered areas. Notwithstanding this possible explanation, it would appear that geographic clustering did in fact have a significant effect on the assimilation of Irish immigrants in the US in the late nineteenth century. Those Irish immigrants who lived in less geographically clustered areas differed significantly from those who lived in more clustered areas across a range of socio-economic characteristics. And in virtually all of these characteristics, they also more closely resembled the native born,

reflecting a greater degree of assimilation.¹² These results support the views of Chiswick (2002), Borjas (1999) and Light and Isralowitz (1996), who argue that geographic clustering delays immigrant assimilation.

¹² To control for the potential influence of an immigrant living in an urban area on these results, I also generated the summary statistics presented in Table 5 including only those Irish immigrants who lived in urban areas. The purpose of this analysis was to examine whether the differences which exist in Table 5 may have reflected wider differences in socio-economic conditions between rural and urban areas in this timeframe. The results showed that although the differences between the above and below average clustered groups did narrow slightly when restricted to a comparison of urban populations, they were still statistically significant at the 1% level in every category with the exception of spouse literacy.

Table 5
Summary Statistics of Irish Immigrants Based on Level of Geographic Clustering
relative to Native Born

Variable	Above Avg.	Below Avg.	Native Born
Observations	13,552	13,170	15,985
Age	42.1 years***	46.0 years	48.0 years
Age at Marriage	27.0 years***	27.9 years	27.2 years
Years in US	22.9 years***	27.8 years	N.A.
Rural Status	12.8%***	36.0%	74.7%
Home Ownership	24.2%***	46.9%	60.2%
Literacy			
Read and write English	93.4%***	91.6%	94.0%
Read or write only	1.2%	1.8%	1.5%
Spouse Fertility			
Avg. Children Ever Born	5.4***	5.9	5.3
Avg. Children Surviving	4.1***	4.7	4.4
Implied Mortality Rate	24.4%	21.1%	16.7%
Spouse Age	40.0 years***	42.9 years	42.8 years
Spouse Age at Marriage	23.7 years***	23.4 years	22.5 years
Spouse Birthplace			
Ireland	74.7%***	53.5%	0.4%
Other Foreign Country	6.1%***	9.6%	2.7%
US	19.2%***	37.0%	96.9%
Spouse Literacy			
Read and write English	90.2%	89.9%	93.6%
Read or write only	2.1%	2.2%	1.7%
Spouse in workforce	3.0%***	1.8%	2.3%

***Differences between the individuals in the two Irish samples are significant at the 1, 5 and 10% levels, respectively, using a t test for age and fertility variables, and the chi squared test of independence for the remaining variables.

Geographic clustering and occupational mobility

In order to measure occupational mobility, it is necessary to create a framework in which to evaluate occupational levels and changes in those levels over time. As noted by Sobek (1996), “our understanding of historical social structure and where people fit in is bound up with the interpretation of occupations.”¹³ Thernstrom (1973) argued that the measurement of occupational mobility “requires a specification of the broad occupational categories that may be considered socially distinct, and a definition of which jobs fit in which category.”¹⁴ He noted that such a specification is not straightforward, requires flexibility, and is subject to change over time. In creating occupational categories for the late nineteenth century, I have drawn on Thernstrom’s studies (1964, 1973). I have created six occupational categories (High White Collar, Low White Collar, Farmer, Skilled, Semi-skilled and Unskilled). The primary change I have made to Thernstrom’s approach is to explicitly break out the results for farmers into a separate category. As Thernstrom had researched primarily urban workers in his ground breaking studies of Newburyport and Boston, Massachusetts, he had included farmers as part of the low white collar category and had not chosen to show them as a separate group.¹⁵ As my sample includes a higher percentage of farmers, I found that separating them into their own group was critical to assessing their role in the results of my occupational analysis.

The results presented in Table 6 demonstrate that geographic clustering had a significant impact on the occupations of Irish immigrants in this timeframe. Those Irish immigrants who

¹³ Matthew Sobek, “Work, Status and Income – Men in the American Occupational Structure since the Late Nineteenth Century”, *Social Science Review* 20:2 (summer 1996), p. 170.

¹⁴ Thernstrom (1973), p 46.

¹⁵ In creating the farmer category, I specifically excluded workers who were classified in the census data as farm labourers. Labourers who worked on farms were classified as unskilled. The farmer category is designed to capture only those individuals who either owned or managed farms.

lived in above average clustered areas were less likely to be in the white collar categories and in farming, and were more likely to be in semi- and un-skilled work. We find that only 15.4% of those Irish who lived in above average clustered counties were engaged in white collar work or in farming, versus a figure of 30.7% for the less clustered group. Similarly, almost two thirds of the more clustered Irish were engaged in semi- or un-skilled work, versus approximately 55% for those Irish who lived in less Irish neighbourhoods.¹⁶ A limitation of this analysis is that it does not control for the influence of other socio-economic characteristics of these Irish immigrants. In order to confirm the statistical significance of these characteristics on occupational outcomes, it is necessary to undertake a regression analysis.¹⁷

¹⁶ I also created comparisons for Irish immigrants who lived in the top and bottom quartile, as well as in the top and bottom decile based on their level of geographic clustering. The occupational outcomes for these comparisons were progressively more differentiated as the degree of clustering moved from halves to quartiles to deciles. The less clustered Irish became even more likely to be in white collar work and in farming, whereas the more clustered Irish were even more likely to be in semi-and un-skilled work.

¹⁷ I also controlled for the potential influence of an immigrant living in an urban area by generating the occupational mobility results presented in Table 6 including only those Irish immigrants who lived in urban areas. The results confirm those in Table 6, with the differences in occupational mobility between the two groups actually increasing slightly in the white collar and skilled categories.

Table 6
Irish Immigrant Occupational Groupings in 1900
Based on Level of Geographic Clustering

Above average clustered Irish

	No.	%	Cum %
High WC	944	6.97	6.97
Low WC	931	6.87	13.84
Farmer	212	1.56	15.40
Skilled	2,365	17.45	32.85
Semi-skilled	4,119	30.39	63.25
Unskilled	4,981	36.75	100.00
Total	13,552	100.00	

Below average clustered Irish

	No.	%	Cum %
High WC	1,203	9.13	9.13
Low WC	958	7.27	16.41
Farmer	1,888	14.34	30.74
Skilled	1,861	14.13	44.87
Semi-skilled	2,937	22.30	67.18
Unskilled	4,323	32.82	100.00
Total	13,170	100.00	

Table 7 presents the results of a multinomial logistic regression on the likelihood of an Irish immigrant in my sample being in one of the six occupational categories. This form of regression allows me to assess the impact of individual variables on the likelihood of being in one of these occupational categories, while controlling for the impact of other variables.¹⁸ The results in Table 7 show the marginal effects of these variables for each occupational category. With this approach, one can demonstrate the impact which these variables have on the likelihood of an Irish immigrant being in a particular occupational group. In particular, this approach allows me to observe the influence of geographic clustering on occupational outcomes, while controlling for a host of other socio-economic variables including age and years living in the US. As a result, it will allow me to reach more definitive conclusions about the specific impact of geographic clustering on occupational outcomes.

The results confirm that geographic clustering was an important factor in the occupational outcomes of Irish immigrants at the turn of the century. In every category except the unskilled, the influence of geographic clustering was statistically significant. For the high white collar category, geographic clustering was significant at the 1% confidence level and was negative, indicating that those Irish who lived in more heavily concentrated Irish counties were less likely to be in the highest occupational category in 1900. The marginal effect output also allows us to calculate the magnitude of this effect. If we were to assume that an Irish immigrant moved from a county with no other Irish immigrants to the county in the greater Boston area with the highest percentage of Irish immigrants (12.02%), the effect of this change in geographic clustering, holding other variables constant, would be to reduce his likelihood of being in a high white collar occupation by 2.4%. While this may not sound

¹⁸ Which include age, spouse age, years living in the US, duration of marriage, literacy, spouse literacy, home ownership, urban status, employment status, intermarriage, and the percent of population in the immigrant's county of residence whom were born in Ireland.

significant, it represents a 30% reduction in the share of Irish immigrants who held high white collar occupations in 1900 (Irish immigrants in this category being approximately 8% in my sample). The results for the low white collar category were similar, with the marginal effect of geographic clustering indicating a 3.6% reduction in the likelihood of being in a low white collar occupation. This figure represents a 51% reduction in the share of Irish immigrants who would have held low white collar occupations. As for farming, the results indicate that the impact of geographic clustering was similar to that for the white collar categories with a 30% reduction in the share of Irish immigrants in this occupational group. The results for the farming category were also significant at the 1% confidence level. These results indicate that geographic clustering did not aid Irish immigrants in reaching the higher occupational categories in 1900, but was in fact a hindrance to advancing up the occupational ladder. In each of these occupational categories, Irish immigrants who lived in more geographically clustered counties were less likely to be employed in 1900. As for the skilled and semi-skilled categories, Irish immigrants who lived in more geographically clustered counties were more likely to work in these sectors of the workforce. The relationship between geographic clustering and working in these occupational categories in 1900 was statistically significant and positive, reflecting a 1% confidence level for the skilled worker level and a 5% confidence level for the semi-skilled category. The marginal effects calculations indicate a 2% and 8% increase in the likelihood of being in these two categories, respectively. These effects would have resulted in increases in the share of Irish immigrant workers in these categories of 15% and 32%, respectively. Only in the unskilled category was the effect of geographic clustering not statistically significant. In this category, factors such as years living in the US, literacy and intermarriage were critical, in each case with the relationship being negative. Irish immigrants that were newer to the US, married to an Irish born spouse, and less literate were more likely to find themselves in unskilled work. These factors were more

important than whether an Irish immigrant lived in a geographically clustered area for unskilled workers.¹⁹

The multinomial logistic regression analysis clearly shows that Irish immigrants who lived in more ethnically clustered environments were less likely to work in the higher occupational categories, and were more likely to find employment in the skilled and semi-skilled categories. Even when the analysis was limited solely to urban workers, the results were unchanged. Returning to the literature, these results would appear to refute the views of Chiswick (2002), Portes and Rumbaut (1996) and Gordon (1964) who argue that immigrant enclaves were advantageous to immigrants seeking work in a new society. These results, which control for the influence of factors such as age, years living in the US, literacy and other factors, clearly show that for Irish immigrants in this timeframe, geographic clustering did not help them to advance up the occupational ladder.

¹⁹ In further results not reported here, I also generated a multinomial logistic regression on the likelihood of an Irish immigrant being in a particular occupational category, in this case excluding farmers and those immigrants living in rural areas. The purpose of this additional regression was to examine the impact of geographic clustering solely on urban workers, where most Irish immigrants lived and where their networks were likely to have been strongest. The results of this regression support the conclusion that geographic clustering did not aid Irish immigrants in reaching the highest occupational categories (i.e. high and low white collar), but in fact had a negative relationship with these two categories. Geographic clustering did have a positive effect on Irish immigrants in the skilled and semi-skilled categories, but not for the unskilled. All of the results were statistically significant.

Table 7
Multinomial Logistic Regression Results for Occupational Groups

High WC	dy/dx	std err	z	P> z	x
age	0.003	0.000	6.28	0.000	45.31
spouse age	-0.001	0.000	-2.00	0.046	41.39
yrsinUS	0.001	0.000	5.04	0.000	26.75
yrsmarried	-0.001	0.000	-3.68	0.000	17.85
literacy*	0.053	0.006	8.24	0.000	0.94
spouse literacy*	0.044	0.007	6.49	0.000	0.92
home*	0.050	0.005	10.07	0.000	0.39
urban*	0.021	0.004	4.62	0.000	0.77
employed*	0.089	0.004	23.38	0.000	0.77
intermarried*	0.047	0.005	9.31	0.000	0.36
% Irish	-0.002	0.001	-2.74	0.006	5.53
Low WC	dy/dx	std err	z	P> z	x
age	0.001	0.000	1.40	0.162	45.31
spouse age	-0.001	0.000	-2.39	0.017	41.39
yrsinUS	0.000	0.000	1.63	0.103	26.75
yrsmarried	-0.000	0.000	-0.52	0.605	17.85
literacy*	0.054	0.006	9.22	0.000	0.94
spouse literacy*	0.035	0.007	4.73	0.000	0.92
home*	0.001	0.004	0.34	0.732	0.39
urban*	0.024	0.004	5.50	0.000	0.77
employed*	0.071	0.004	18.74	0.000	0.77
intermarried*	0.046	0.005	9.22	0.000	0.36
% Irish	-0.003	0.001	-4.08	0.000	5.53
Farmer	dy/dx	std err	z	P> z	x
age	0.000	0.000	4.17	0.000	45.31
spouse age	0.000	0.000	0.51	0.608	41.39
yrsinUS	0.000	0.000	3.75	0.000	26.75
yrsmarried	-0.000	0.000	-0.97	0.334	17.85
literacy*	0.002	0.001	2.10	0.036	0.94
spouse literacy*	0.002	0.001	1.22	0.224	0.92
home*	0.012	0.001	8.45	0.000	0.39
urban*	-0.148	0.009	-17.39	0.000	0.77
employed*	0.015	0.001	11.27	0.000	0.77
intermarried*	0.001	0.001	1.62	0.106	0.36
% Irish	-0.002	0.000	-10.87	0.000	5.53

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Skilled	dy/dx	std err	z	P> z	x
age	-0.002	0.001	-2.29	0.022	45.31
spouse age	0.000	0.001	0.25	0.804	41.39
yrsinUS	0.003	0.000	7.63	0.000	26.75
yrsmarried	0.000	0.001	0.44	0.657	17.85
literacy*	0.138	0.010	13.91	0.000	0.94
spouse literacy*	0.088	0.011	7.78	0.000	0.92
home*	0.004	0.007	0.59	0.555	0.39
urban*	0.084	0.008	11.26	0.000	0.77
employed*	-0.033	0.008	-4.36	0.000	0.77
intermarried*	0.061	0.008	8.06	0.000	0.36
% Irish	0.002	0.001	1.97	0.049	5.53
Semi-skilled	dy/dx	std err	z	P> z	x
age	-0.003	0.001	-3.11	0.002	45.31
spouse age	-0.001	0.001	-1.06	0.289	41.39
yrsinUS	0.001	0.001	2.12	0.034	26.75
yrsmarried	0.000	0.001	0.36	0.717	17.85
literacy*	0.006	0.018	0.33	0.743	0.94
spouse literacy*	-0.033	0.017	-2.03	0.043	0.92
home*	0.005	0.009	0.59	0.555	0.39
urban*	-0.002	0.010	-0.19	0.847	0.77
employed*	0.060	0.009	6.87	0.000	0.77
intermarried*	0.017	0.009	1.94	0.052	0.36
% Irish	0.007	0.001	5.27	0.000	5.53
Un-skilled	dy/dx	std err	z	P> z	x
age	0.001	0.001	0.96	0.339	45.31
spouse age	0.003	0.001	2.89	0.004	41.39
yrsinUS	-0.006	0.001	-11.47	0.000	26.75
yrsmarried	0.001	0.001	1.28	0.201	17.85
literacy*	-0.253	0.019	-13.61	0.000	0.94
spouse literacy*	-0.135	0.017	-8.11	0.000	0.92
home*	-0.073	0.009	-8.04	0.000	0.39
urban*	0.020	0.011	1.89	0.058	0.77
employed*	-0.202	0.010	-21.17	0.000	0.77
intermarried*	-0.172	0.009	-20.00	0.000	0.36
% Irish	-0.002	0.001	-1.58	0.114	5.53

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Occupational benefits of geographic clustering?

One final question to be addressed is whether the more geographically clustered Irish were disproportionately represented in certain occupations. In the literature, McCaffrey (1996) and McKivigan and Robertson (1996) argue that nineteenth century Irish immigrants benefited from the networking opportunities and support systems which had developed in cities such as New York which had large concentrations of Irish immigrants. McCaffrey (1996) argues that the Irish were able to make occupational advances in local government, trade unions and the Catholic Church,²⁰ while McKivigan and Robertson (1996) argue that the Irish in New York City had particular success in obtaining work “in city government jobs for policemen, firefighters, rapid transit workers and school teachers.” McKivigan and Robertson (1996) also argue that by 1900, significant numbers of the city’s Irish had moved up into the ranks of professionals and entrepreneurs.”²¹ Chiswick (2002), Portes and Rumbaut (1996) and Gordon (1964) also argue that ethnic enclaves provided significant advantages for new immigrants and immigrant entrepreneurs. These potential benefits of living in an immigrant enclave can be tested against the evidence which I have assembled using my sample data. If this literature is correct, I should find evidence that Irish immigrants benefited from geographic clustering and were able to gain access to jobs in areas such as city government (government workers, policemen, firemen, public transit workers), in the Roman Catholic church, as well as in jobs where trade union ties were important in this timeframe (longshoremen, railroad, mining, lumbermen). This literature implies that Irish immigrants living in these enclaves would have had an advantage in the employment market versus Irish immigrants who did not live in such areas. Using my sample data, I examine these arguments.

²⁰ McCaffrey (1996), p.222.

²¹ McKivigan and Robertson (1996), p. 312.

I have calculated the average level of geographic clustering for each occupation held by an Irish immigrant in 1900. I have then indexed this average to the highest level of clustering in any county in my sample in 1900 (Suffolk County, Massachusetts). This resultant index thus shows the average level of geographic clustering for each occupation as a ratio of the highest concentration of Irish immigrants in a county in this time period. Appendix 1 presents the complete list of occupations held by Irish immigrants in my sample, along with the number of immigrants who held this occupation and the clustering ratio described above. The list is sorted from those occupations with the lowest average level of geographic clustering to the highest. Table 8 shows the average clustering ratio for each occupational category. Table 9 provides these results for a selection of notable occupations. There are several conclusions that can be drawn from this data. First of all, as my prior analyses in this paper have shown, geographic clustering appears to have an inverse relationship with occupational category. The ratio of geographic clustering is higher for the lower occupational categories than it is for the white collar or farming categories. In terms of particular occupations, white collar jobs such as managers, teachers, physicians and surgeons, lawyers and judges, officials and administrators all have relatively low clustering ratios. Interestingly, clergymen also have a low ratio at just .292. This result would suggest that those Irish immigrants who entered the church did not live in more clustered areas in 1900.²² What is also interesting is that there are many jobs that were more likely to be unionised, such as lumbermen, railroad repairmen, and mine workers, where the clustering ratio is also relatively low. This result likely reflects the fact these occupations frequently required workers to live in the more remote regions of the country where the mines, railroads and forests were located and/or being constructed. Though as we have seen there were some remote counties where Irish immigrants were highly concentrated (such as Storey, Nevada, and Silver Bow and Deer Lodge, Montana), these

²² What this data does not show, unfortunately, is where the Irish immigrants who entered the clergy were living at the time that they joined the church. It may have been the case that some of these immigrants may have lived in more clustered areas when they joined the church, and were later assigned to parishes in less clustered areas.

results would indicate that, for the most part, Irish immigrants working in these unionised occupations did not live in more clustered areas.²³ With respect to local government related jobs such as government workers, policemen, firemen, and public transit workers, the results are also instructive. Firemen, policemen and motormen have clustering ratios that would place them near the middle of the distribution, reflecting that they did not live, on average, in particularly highly clustered counties. Public officials and administrators actually had a relatively low ratio of .329 while teachers had an even lower ratio at just .190. The primary occupational area where one does find consistently high clustering ratios was in textiles (spinners, weavers, dyers, loom fixers) as well as in urban service occupations such as waiters and waitresses, and taxicab drivers. In the latter case, this pattern may reflect local demand for services from other Irish immigrants.

This analysis only serves to reinforce my prior conclusions that the occupational levels of Irish immigrants in this time frame were inversely related to their level of geographic clustering. What these results also demonstrate is that the benefits of living in an area with a high concentration of Irish immigrants as described by McCaffrey (1996) and McKivigan and Robertson (1996) may not have been as significant as these authors have suggested. I find scarce evidence that geographic clustering led to greater employment opportunities in local government and unionised work. In fact, the bulk of evidence presented herein would refute that claim. One could argue that these results do not undermine the idea that Irish immigrants could have initially benefited from living in immigrant enclaves, and that as they spent more time living in the US, they migrated towards less ethnically concentrated areas of the country. However, these results might also support the view that living in a more ethnically concentrated community, though it may have improved the initial starting position of Irish

²³ Among occupations more likely to have been unionised in 1900, only longshoremen had a relatively high clustering ratio.

immigrants in America, came at the expense of slower subsequent assimilation and reduced occupational mobility. In my analysis, I find very limited support for the view that living in an area with a high concentration of Irish immigrants enhanced the occupational outcomes of Irish immigrants versus those that lived in less geographically clustered areas.

Table 8
Irish Immigrant Occupational Levels Based on Clustering Index

Occupational Level	Clustering Ratio
High White Collar	.407
Low White Collar	.450
Farmer	.183
Skilled	.483
Semi-skilled	.498
Unskilled	.479

Table 9
Selected List of Irish Immigrant Occupations Based on Clustering Index

Occupation	Occupational Level	Clustering Ratio
Teachers	High White Collar	.190
Managers and superintendents	High White Collar	.281
Physicians and surgeons	High White Collar	.284
Clergymen	High White Collar	.292
Lawyers and judges	High White Collar	.314
Officials and administrators	High White Collar	.329
Lumbermen	Unskilled	.166
Mine operatives	Semi-skilled	.301
Locomotive engineers	Skilled	.302
Locomotive firemen	Semi-skilled	.310
Brakemen, railroad	Semi-skilled	.394
Firemen	Semi-skilled	.421
Policemen and detectives	Semi-skilled	.486
Motormen	Semi-skilled	.493
Spinners	Semi-skilled	.575
Weavers	Semi-skilled	.582
Taxicab drivers and chauffeurs	Semi-skilled	.592
Dyers	Semi-skilled	.613
Waiter and waitresses	Semi-skilled	.687

Conclusion

In this paper, I have demonstrated that geographic clustering did exist for Irish immigrants in late nineteenth century America. Irish immigrants were primarily drawn to the large metropolitan areas of the Northeast, reflecting the importance of these areas as points of entry to the US, as well as major centres for employment for new immigrants. In smaller numbers, Irish immigrants also concentrated in certain Western regions to work in the mining, railroad and farming industries. The settlement choices of earlier cohorts of Irish immigrants also seem to have been important for the late nineteenth century Irish. Thus it would appear that proximity to ports of entry, job opportunities, and the settlement choices of earlier groups of Irish immigrants were critical to the geographic location of the Irish immigrants at the turn of the century.

What is also clear from the analysis presented in this paper is that geographic clustering directly impacted the degree of assimilation and occupational mobility of Irish immigrants in this timeframe. Higher levels of geographic clustering were associated with both lower degrees of assimilation and lower occupational outcomes. Irish immigrants who lived in less geographically clustered areas much more closely resembled the native born. In addition, those Irish who lived in more heavily concentrated Irish counties were less likely to be in the higher occupational categories in 1900, and more likely to be in less skilled work. Geographic clustering also did not appear to assist Irish immigrants in gaining preferential access to jobs in city government, the Roman Catholic Church, or where trade union ties were important. The benefits of geographic clustering in the job market do not appear to have existed for Irish immigrants in the late nineteenth century, and this research provides further support for the argument that such clustering delays the assimilation process.

Appendix 1
List of Irish Immigrant Occupations Based on Clustering Index

No. of Observations	Occupation	Occupational Level	Clustering Ratio
1	Officials, lodge, society, union, etc.	High WC	0.005
1	Apprentices, printing trades	Semi-skilled	0.009
3	Opticians and lens grinders and polishers	Low WC	0.045
1	Counter and fountain workers	Semi-skilled	0.048
4	Postmasters	Low WC	0.085
1	Blasters and powdermen	Semi-skilled	0.131
1	Apprentices, other specified trades	Semi-skilled	0.151
7	Inspectors, scalers, and graders log and lumber	Skilled	0.157
1	Dancers and dancing teachers	Low WC	0.158
1	Architects	High WC	0.166
48	Lumbermen, raftsmen, and woodchoppers	Unskilled	0.166
1	Technicians	Low WC	0.173
2094	Farmers (owners and tenants)	Farmer	0.183
39	Teachers	High WC	0.190
1	Plumbers and pipe fitters apprentice	Semi-skilled	0.200
24	Railroad and car shop-mechanics and repairmen	Skilled	0.210
10	Religious workers	High WC	0.237
1	Credit men	Low WC	0.244
6	Farm managers	Farmer	0.248
19	Buyers and shippers, farm products	High WC	0.248
3	Therapists and healers	Low WC	0.250
6	Subject not specified-Professors and instructors	High WC	0.253
1	Entertainers	Low WC	0.266
13	Millers, grain, flour, feed, etc	Skilled	0.268
93	Managers and superintendents, building	High WC	0.281
3	Marshals and constables	Semi-skilled	0.282
35	Physicians and surgeons	High WC	0.284
133	Clergymen	High WC	0.292
1	Apprentices, metalworking trades	Semi-skilled	0.300
876	Mine operatives and labourers	Semi-skilled	0.301
112	Locomotive engineers	Skilled	0.302
13	Musicians and music teachers	Low WC	0.307
61	Locomotive firemen	Skilled	0.310
47	Lawyers and judges	High WC	0.314
4	Photoengravers and lithographers	Skilled	0.315
11	Sawyers	Semi-skilled	0.320
12	Sports instructors and officials	Low WC	0.323
31	Officials and administrators, public administration	High WC	0.329
16	Baggagemen, transportation	Low WC	0.338
10	Civil-Engineers	High WC	0.342
1	Photographic process workers	Skilled	0.344
1	Chainmen, rodmen, and axmen, surveying	Semi-skilled	0.344
384	Foremen	Low WC	0.348
7	Stenographers, typists, and secretaries	Low WC	0.357
11	Telegraph operators	Low WC	0.360
96	Furnacemen, smeltermen and pourers	Semi-skilled	0.361
27	Members of the armed services	Semi-skilled	0.363
706	Farm labourers, wage workers	Unskilled	0.366

6	Actors and actresses	Low WC	0.368
5	Millwrights	Skilled	0.371
19	Officers, pilots, pursers and engineers, ship	Low WC	0.374
7	Veterinarians	High WC	0.376
124	Boilermakers	Skilled	0.377
66	Inspectors	Skilled	0.378
9	Messengers and office boys	Low WC	0.380
31	Linemen, servicemen, telegraph, telephone and power	Skilled	0.380
18	Heaters, metal	Semi-skilled	0.384
15	Pharmacists	High WC	0.391
104	Brakemen, railroad	Semi-skilled	0.394
23	Mechanical-Engineers	High WC	0.407
75	Sailors and deck hands	Semi-skilled	0.407
4	Athletes	Low WC	0.408
17	Boarding and lodging house keepers	Semi-skilled	0.411
55	Switchmen, railroad	Semi-skilled	0.411
4	Draftsmen	Low WC	0.413
5	Oilers and greaser, except auto	Semi-skilled	0.417
47	Firemen, fire protection	Semi-skilled	0.421
14	Inspectors, public administration	Low WC	0.425
75	Insurance agents and brokers	Low WC	0.428
205	Clerical and kindred workers	Low WC	0.430
9	Paperhangers	Skilled	0.431
2	Nurses, professional	Low WC	0.433
28	Watchmen (crossing) and bridge tenders	Semi-skilled	0.434
2	Farm foremen	Unskilled	0.434
6	Cashiers	Low WC	0.435
1636	Managers, officials, and proprietors	High WC	0.437
15	Sheriffs and bailiffs	Semi-skilled	0.443
47	Real estate agents and brokers	Low WC	0.443
16	Ticket, station, and express agents	Low WC	0.446
26	Deliverymen and routemen	Semi-skilled	0.446
22	Laundry and dry cleaning Operatives	Semi-skilled	0.447
409	Blacksmiths	Skilled	0.447
3	Professional, technical and kindred workers	High WC	0.449
77	Bookkeepers	Low WC	0.450
3	Attendants, professional and personal service	Semi-skilled	0.455
35	Barbers, beauticians, and manicurists	Semi-skilled	0.460
328	Stationary engineers	Skilled	0.463
25	Rollers and roll hands, metal	Skilled	0.465
370	Guards, watchmen, and doorkeepers	Semi-skilled	0.467
4	Advertising agents and salesmen	Low WC	0.467
8	Photographers	Low WC	0.469
8	Chemists	High WC	0.470
5	Express messengers and railway mail clerks	Low WC	0.470
149	Craftsmen and kindred workers	Skilled	0.470
31	Collectors, bill and account	Low WC	0.476
20	Jewellers, watchmakers, goldsmiths, and silversmiths	Skilled	0.478
12	Funeral directors and embalmers	Low WC	0.480
84	Meat cutters, except slaughter and packing house	Semi-skilled	0.480
36	Boatmen, canalmen, and lock keepers	Semi-skilled	0.484
278	Policemen and detectives	Semi-skilled	0.486
7972	Labourers	Unskilled	0.487
181	Painters, construction and maintenance	Skilled	0.488

301	Stationary firemen	Semi-skilled	0.488
19	Fishermen and oystermen	Unskilled	0.492
156	Motormen, street, subway, and elevated railway	Semi-skilled	0.493
544	Carpenters	Skilled	0.493
51	Tinsmiths, coppersmiths, and sheet metal workers	Skilled	0.494
160	Stone cutters and stone carvers	Skilled	0.495
425	Brickmasons,stonemasons, and tile setters	Skilled	0.496
54	Conductors, bus and street railway	Semi-skilled	0.497
143	Tailors and tailoresses	Skilled	0.497
9	Artists and art teachers	Low WC	0.498
109	Conductors, railroad	Low WC	0.499
268	Molders, metal	Skilled	0.500
6	Dentists	High WC	0.502
2	Engravers, except engravers	Skilled	0.503
5	Laundresses, private household	Semi-skilled	0.505
72	Hucksters and peddlers	Low WC	0.506
46	Attendants, hospital and other institution	Semi-skilled	0.507
590	Salesmen and sales clerks	Low WC	0.511
4	Charwomen and cleaners	Semi-skilled	0.515
134	Janitors and sextons	Semi-skilled	0.518
14	Upholsterers	Skilled	0.518
12	Agents	Low WC	0.519
32	Mail carriers	Low WC	0.521
332	Machinists	Skilled	0.521
128	Plasterers	Skilled	0.523
61	Cooks, except private household	Semi-skilled	0.525
18	Editors and reporters	High WC	0.527
7	Pressmen and plate printers, printing	Skilled	0.527
15	Service workers, except private household	Semi-skilled	0.527
102	Private household workers	Semi-skilled	0.529
6	Cement and concrete finishers	Skilled	0.531
298	Gardeners, except farm, and groundskeepers	Unskilled	0.532
17	Practical nurses	Semi-skilled	0.533
1657	Operative and kindred workers	Semi-skilled	0.535
269	Bartenders	Semi-skilled	0.536
188	Plumbers and pipe fitters	Skilled	0.539
44	Filers, grinders, and polishers, metal	Semi-skilled	0.548
15	Housekeepers and stewards, except private household	Semi-skilled	0.550
58	Compositors and typesetters	Skilled	0.552
256	Longshoremen and stevedores	Unskilled	0.552
14	Bookbinders	Skilled	0.554
92	Bakers	Skilled	0.560
20	Structural metal workers	Skilled	0.565
48	Electricians	Skilled	0.567
51	Shipping and receiving clerks	Low WC	0.569
7	Pattern and model makers, except paper	Skilled	0.570
38	Mechanics and repairmen	Skilled	0.571
943	Truck and tractor drivers	Semi-skilled	0.572
51	Painters, except construction or maintenance	Semi-skilled	0.574
46	Spinners, textile	Semi-skilled	0.575
168	Porters	Semi-skilled	0.575
160	Weavers, textile	Semi-skilled	0.582
2	Auctioneers	Low WC	0.586
16	Bus drivers	Semi-skilled	0.587

20	Elevator operators	Semi-skilled	0.590
4	Buyers and dept heads, store	High WC	0.590
373	Taxicab drivers and chauffeurs	Semi-skilled	0.592
1	Telephone operators	Low WC	0.595
68	Dyers	Semi-skilled	0.598
8	Dressmakers and seamstresses except factory	Semi-skilled	0.613
9	Tool makers, and die makers and setters	Skilled	0.614
3	Farm service labourers, self-employed	Unskilled	0.615
1	Cranemen,derrickmen, and hoistmen	Skilled	0.633
1	Welders and flame cutters	Semi-skilled	0.633
1	Social and welfare workers, except group	High WC	0.641
29	Roofers and slaters	Skilled	0.649
17	Shoemakers and repairers, except factory	Skilled	0.654
17	Cabinetmakers	Skilled	0.668
2	Dispatchers and starters, vehicle	Low WC	0.673
28	Loom fixers	Skilled	0.675
3	Electrotypers and stereotypers	Skilled	0.678
8	Accountants and auditors	Low WC	0.684
83	Waiters and waitresses	Semi-skilled	0.687
2	Glaziers	Skilled	0.720
1	Teamsters	Skilled	0.725
1	Forgemen and hammermen	Skilled	0.725
1	Mining-Engineers	High WC	0.725
2	Machinists and toolmakers apprentice	Semi-skilled	0.725
3	Furriers	Skilled	0.857

Total 26,722

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