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The Occupational Attainment of American Jewish Men in the Mid-19th Century

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and

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Abstract:

This paper is concerned with analyzing the occupational status of American Jewish men compared to other free men in the mid-19th century to help fill a gap in the literature. It does this by using the 1/100 microdata sample from the 1850 Census of Population, the first census to ask occupation. Two independent lists of surnames are used to identify men with a higher probability of being Jewish. The men identified as Jews had a higher probability of being professionals, managers, and craft workers, and were less likely to be in farm occupations or in operative jobs. Using the Duncan Socioeconomic Index (SEI), the Jewish men have a higher SEI overall. In the multiple regression analysis, it is found that among Jewish and other free men occupational status increases with age (up to about age 44 for all men), literacy, being married, being native born, living in the South, and living in an urban area. Controlling for a set of these variables, Jews have a significantly higher SEI, which is the equivalent of about half the size of the effect of being literate. This higher occupational status is consistent with patterns found elsewhere for American Jews throughout the 20th century.

Keywords: Jews, Occupational Status, Duncan Socioeconomic Index, 1850 Census of Population, Antebellum America, Labor Market Analysis, Human Capital

JEL Codes: N31, J62, J15

The Occupational Attainment of American Jewish Men in the Mid-19th Century

Epigram

"But it is time we got to know the history of the weekday Jews… [and] the history of Jewish working life."

--Ignacy Schipper, 1911, a Polish Jewish historian, quoted in Kobrin, 2012, p. 2

I. Introduction

The nineteenth century was a period of rapid growth in the American Jewish population, from an estimated 2,000 or 2,500 in 1800, to between 50,000 and 100,000 people in 1850 , to about one million by 1900 (Table 1). Sarna (2004, p. 375) put the Jewish population in 1850 at 50,000, or 0.2 percent of the total US population.[1] Fueled by immigration primarily from Central and Eastern Europe, its growth was moderate during the first half of the century and accelerated in the second half. The growth to 1850 represented a rapid increase over previous decades due to a substantial increase in overall immigration in the 1830s and especially in the 1840s (Table 2).

In writing about Jewish immigrants to the United States in the middle 19th century, Sarna (2004, p. 64) notes: "The great majority of the Jews who immigrated to the United States between the mid-1820s and the mid-1870s were Central European Jews from three specific regions: Bavaria, Western Prussia, and Posen (in addition several thousand Jews from Alsace emigrated to the American South)…. [Most were] lower middle-class Jews stymied on the road to economic advancement."

Using qualitative data from diaries, autobiographies, and public records, Marcus (1970, Chapter 27) found that in the Colonial period American Jews had a more favorable occupational

[1]. De Bow (1954) reports (Table 137, p. 134) that of the 38,183 "churches" enumerated in 1850, 37 were Jewish, that is, 0.1 percent.

attainment than other free men, but were generally not found among the higher status merchants and plantation owners. Systematic empirical research using data on individuals (microdata) regarding the economic status of American Jews compared to their non-Jewish counterparts has been conducted for nearly every decade in the 20th century (Chiswick 2020). This research has established that the primarily Eastern European and Russian immigrants who arrived in the late 19th and early 20th centuries, and their U.S.-born descendants have been remarkably successful in the U.S. labor market. The present study investigates whether this was also the case in the middle of the 19th century for the earlier Jewish immigrants who came disproportionately from Central (Germanic) Europe.

This is the first systematic nationwide microdata analysis for 1850 of the determinants of socioeconomic status (SEI) for free men in general, and the relative occupational achievement of American Jewish men.[2] The 1850 Census of Population of the United States has been referred to as the "first modern census" as it began collecting data on "social statistics" on individuals and for the first time free people were listed individually instead of by family.[3] It asked more questions of the population than any previous census, including, for the first time, the occupation of free men.[4] Although the Minnesota Population Center has released a full-count (100 percent sample) data set for the 1850 Census, it does not include the string variables that are necessary

[2] Ferrie (1999) used passenger ship records in the 1840s and microdata from the 1850 and 1860 censuses in selected counties to create matching records (longitudinal data) to study the mobility (economic and geographic) of the British, Irish, and German male immigrants compared to native-born White men.

[3] Description of the 1850 Census as the "first modern census" by Morris B. Ullman, former chief of the Historical Statistics Division, US Bureau of the Census, to the first named co-author.

[4] The occupations of free women were not asked until the 1860 Census. The Census never inquired into the work activities of enslaved peoples (US Bureau of the Census, 1979).

for this study, specifically the surname of the respondent. Therefore, the 1/100 1850 Census sample, which includes surnames, is used.

By analyzing microdata on the relative economic status of American Jewish men at mid-19th century, this paper shows that on average in 1850 Jewish men had a more favorable occupational distribution and a higher socio-economic status than other White men, both overall and when other relevant determinants of socioeconomic status are held constant. This higher status in 1850 is consistent with the greater achievement of American Jewish men observed in the previous and the next century.

Section II presents a review of the literature on the economic status, focusing on occupation, of adult Jewish compared to other free men in the US during colonial times and the 20th century. Important conclusions of this literature review are the relatively high achievements of American Jewish men in the 18th and 20th centuries and the relative dearth of research on the 19th century. Section III considers the problem of identifying Jews in the 1850 Census data. There was no question on religion or on typical early 20th century Jewish identifiers (e.g., speaking a traditional Jewish language). Another indirect technique, using distinctive Jewish surnames, is applied here, and Section III explains how men with a higher probability of being Jewish can be distinguished from other White men. The occupational distribution of the men considered more likely to be Jewish (referred to here as Jews) is compared to all free men in Section IV.[5] The Duncan socioeconomic index (SEI) is introduced in Section V, and for each man with a recorded occupation a score is assigned, with a higher score representing a higher socioeconomic status.

[5] The 1 percent public use microdata sample (PUMS) file was used for this study as the available full-count data file did not have the surname variable that is essential for this study.

A model is developed and estimated using the 1/100 microdata sample of the 1850 Census in Section VI in which the SEI is hypothesized to vary with demographic and skill characteristics, as well as the Jewish identifier. In this manner, it is possible to demonstrate that men identified as more likely to be Jews have a higher SEI than other free men, both overall and when other measured variables are the same. Section VII is a summary and conclusion.

II. Literature Review: American Jewish Occupations

An analysis of the occupational attainment of American Jewish men in the antebellum period needs to be placed within the broader context of American Jewish economic history.

A. The Colonial Period

Although individual Jews arrived earlier, the first Jewish community was established in 1654 in the Dutch colony of New Amsterdam with the arrival of 23 Jewish refugees from Recife, Brazil after the Portuguese replaced the Dutch authorities amidst fears they would reintroduce the Inquisition (Sarna, 2004, p. 6-9; Marcus, 1970, Vol I, p. 215 and p. 242-243). Although this Jewish community was short-lived, it was the first in what would become the United States.

The Jewish population of British North American in colonial times was very small. Marcus (1967, p. 7) estimates that there were about 250 Jews in the North American continent in 1700, which grew to about 2,500 by 1776, although other estimates put it between 2,000 and 2,500 (Jewish Virtual Library, 2022). They were never more than one-tenth of one percent of the total population. Marcus (1970, Vol II, p. xxiii) writes in the late 1960s: “They were in colonial days – and still are – largely a middle-class urban group engaged in trade.” They lived predominantly in the tidewater towns of New York, Philadelphia, Charleston, Savannah, and Providence.

Marcus' analysis of the occupational status of American Jews is based on qualitative data derived from diaries, autobiographies, and public records. Relatively few of the Jews were engaged in farming, although this was the occupation of the vast majority of free men. They were mostly involved in the two types of trade – small scale merchants engaged in the importation of manufactured goods and the exporting of primary products from farming, fishing, and the forests, and retail trade, generally as small shopkeepers. Referring to the tidewater towns and backcountry villages, Marcus writes: "The percentage of Jews in business – minuscule as it was, compared to the total number of American businessmen – was far out of proportion to the percentage of Jews in the country" (Marcus, 1970, Vol II, p. 550). Jews were not among the major merchants. Some Jews were also engaged in craft occupations, especially those "that were sedentary in nature" (Marcus, 1970, Vol II, p. 537-540). Marcus notes that there were no records of Jewish carpenters or blacksmiths, but rather they were in other crafts, such as silversmiths, chandlers, watchmakers, butchers, bakers, tailors, and furriers, among others (Marcus, 1970, Vol II, p. 537). The Jewish craftsmen were small businessmen, typically with only one or two employees, apprentices, or laborers.

There were Jewish professionals, but "aside from physicians and surgeons and congregational employees, there were few professionals among the Jews (Marcus, 1970, Vol II, p. 540). Jews were also employed as translators, given their prior exposure to Dutch, Spanish, and Portuguese. Most Jewish professionals and craftsmen were also engaged in trade.

The most conspicuous occupational difference between Jews and other free people in colonial America was their relative absence from agriculture, the primary occupation in the economy.

Although there are no direct data available, given their occupational distribution, we can infer that their income, on average, would have been higher than the average free American as small scale family farming was the norm among free people. Nor were many Jews among the wealthy or aristocratic classes comprised of merchants engaged in large-scale international trade or large plantations owning many slaves. Whereas most of the free population in colonial times would, using current terminology, be termed as poor or working class, as Marcus noted, the Jews were predominantly middle-class shopkeepers, merchants, and, to a lesser extent, craftsmen.

B. The 20th Century

With the large immigration of Eastern European and Russian Jews from the 1880s to the early 1920s, the Jewish population increased in numbers and as a share of the US population, reaching a peak of just below 4 percent in the late 1930s. Although its numbers have increased, due to relatively low birthrates and small proportion among immigrants, the Jewish share of the US population declined to about 2 percent today by the end of the 20th century.

The most comprehensive analysis of the economic or occupational status of American Jews over the 20th century is to be found in Chiswick, *Jews at Work: Their Economic Progress in the American Labor Market* (2020). This study uses quantitative data from 1890 to 2000, with a data set for nearly every decade in between, to study the occupational status, and in more recent decades the earnings as well, of Jewish men compared to white men who are not Jewish. The Jewish identifiers vary across the data sets, sometimes a direct Jewish identifier, and sometimes and indirect identifier, such as having a Yiddish mother tongue, being of Russian or Russian/Polish ancestry, or having a typical Jewish surname. For the decades during and after the mass immigration of Eastern European and Russian (Ashkenazic) Jews, from 1880 to the early

1920s, the analyses were also performed by immigrant generation, and in more recent decades also for women.

The technique for identifying Jews where there is no direct Jewish identifier has two types of measurement errors: missing Jews who do not have the Jewish identifier and including as Jews those non-Jews who do have this characteristic. It is shown that both of these two measurement errors bias downwards the measured Jewish – non-Jewish differences in occupational status and earnings.

To summarize the findings, the analyses across the 20th century demonstrate that, on average, Jewish men in the labor market have attained higher levels of occupational status and earnings than non-Jewish white men. Moreover, these patterns persist even after statistical controls for schooling and marital status, among other variables. Jewish men who in the early decades of the 20th century were predominantly employed as operatives, craft workers, and shopkeepers/sales clerks, by the end of the 20th century were predominantly in the professional and technical occupations, and this transition over the course of the 20th century was faster than among their non-Jewish counterparts. These patterns may have been facilitated by the finding that Jewish men not only made greater investments in their human capital (schooling and labor market training), but also appear to have higher rates of return from this skill formation. Chiswick (2020) provides and tests hypotheses for this success.

C. The 19th Century – Occupation Specific Studies

These studies indicate that for the 18th and 20th centuries, Jewish men, on average, achieved a higher level of economic attainment than other white men. But what of the 19th century? We know of no comprehensive quantitative study of the labor market success of Jewish

men that covers the century. There are several studies of Jews, sometimes in comparison to others, that focus on particular industries in the economy, such as peddling and the garment industry ("the rag trade"). Although these 19th century studies provide important insights regarding the particular industries and the role of Jewish workers and entrepreneurs in them, they are missing the broad perspective of the role played by Jews in the labor force overall and, in particular, their socioeconomic status compared to that of others.

(a) On-the-Road Peddling

Hasia Diner's *Roads Taken* (2015) is an engaging qualitative history of on-the-road peddlers in the US (and in a few other countries) in the 19th century who traversed the countryside with their wares on their backs, or with packhorses, or with wagons to sell household goods and minor "luxuries" to primarily rural farm families. Their customers were typically the housewives from poor, often marginalized, families (immigrants, Native Americans, slaves, or former slaves). The Jewish peddlers were themselves typically marginalized people, young, unmarried, recent immigrant, German-speaking males with few if any assets other than their own initiative, enterprise, and ability to quickly learn and adapt to the language and customs of their new country. They needed to be entrepreneurial in terms of working for a wholesaler (often a former peddler who owned a country store in a town or village) and in marketing their wares. But few remained in it for long. After a few years of peddling, they often opened their own retail establishment in an economically developing village or town, sometimes expanding into what became a department store, and a few became major department store magnets. Others opened repair shops to fix watches and other household goods, sold by peddlers, while others opened small factories to manufacture the items they had previously sold. Still others who carried photographic equipment with them on their routes opened photography studios in towns.

The Jewish peddlers were not at the bottom of the socioeconomic ladder, although they might appear to be, because they were investing in skills and acquiring resources needed to advance economically in their new country. An emphasis throughout Diner's (2015) study is on the upward economic and social advancement of those who started out as Jewish peddlers in the US, and the other countries in which they settled.

(b) The Garment Industry

Another important industry study is Adam D. Mendelsohn's *The Rag Race*, a historical analysis of the production of clothing primarily in New York and London, two major cities of Jewish life and the garment industry. From collecting, patching, repairing, and reselling of rags and other discarded fabrics in the early 19th century to the modern industrial production, distribution and selling of garments in the late nineteenth century, Jews were heavily involved in the industry. The industry well suited the Jews, starting with Jewish peddlers acquiring discarded materials and then reselling the refurbished garments, to workshops and then factories where entry was easy – relatively little capital was needed to get started, there were few government regulations, competition was fierce so that profit margins were small creating niche opportunities, and there were low wage employment opportunities for newcomers.[6] In the late 19th and early 20th centuries Jews worked in all of the roles in this industry, from entrepreneurs/proprietors, designers, sewers and pressers, office staff, laborers, and salespeople. The industry also employed many young women before marriage, whether migrants from rural areas to the factory towns or new immigrants to this country. As the industry expanded and evolved, so too did the functions of Jews, with a decline in their role as production workers and

[6] See Godley (2001) on Jewish entrepreneurs in the garment industry in New York and London in the late 19th and early 20th centuries.

their increasing importance in the growing professional occupations related to the garment industry. Mendelson closes *The Rag Race* with the classic question: Did the Jews make the garment industry or did the garment industry make the Jews? He argues compellingly that both are correct.

(c) Other Industries

In the Introduction to the conference volume she edited, Kobrin (2012, p. 83) wrote: "So little scholarship exists on the American Jewish economic life that the beautifully realized portraits of Jews in specific industries, unions, and political parties presented in this volume enter a virtually uncharted scholarship terrain… [w]e know far too little on the spatial and occupational niches that served as the safe launching pads for immigrant Jews in the American economy at the turn of the twentieth century…" There are chapters on several specific industries in which Jews, particularly as entrepreneurs, played an important role. In addition to the garment industry, these industries included scrap and second-hand goods, liquor, and Indian curios.[7]

But what of studies of the overall socioeconomic status of American Jews from the Declaration of Independence in 1776 to the arrival of the mass immigration from Eastern Europe and Russia starting in the 1880s? There is largely a century-long gap in the literature. This paper fills part of this gap by analyzing the occupational status of American Jewish men in the middle of the century – 1850. It does this through the analyses of data that have only recently become available, that is, the microdata transcription of the information recorded by the enumerators of

[7] Among the Jewish peddlers in the 19th century were those who engaged in the "Indian trade," that is, the selling to the Native Americans (American Indians) on the Great Plains, the Southwest, and the Pacific Northwest manufactured goods and buying from them American Indian-made products, including artifacts and handicrafts. Among the latter were the "Indian curios," that is, American Indian-made objects that were sold to individual collectors and to museums in the US and elsewhere for displays of American Indian life (Koffman, 2012).

the 1850 Census of Population. This is the first US Census to ask for the labor market activities of individuals, namely, the gainful occupation of free men.

III. Identifying "Jews" in the 1850 Census

The first requirement for a microdata analysis of the occupational achievements of American Jewish men in census data is the identification of Jews. The US decennial census has never included a question on a respondent's religion. [8] Moreover, many other publicly and privately collected data sources do not include a question on religion. Efforts have been made to infer who is Jewish using proxy measures, including whether the respondent's "mother tongue" is a traditionally Jewish language (Yiddish, Ladino, or Hebrew), or ancestry (i.e., Russian origin or parentage in the late 19th or early 20th centuries), or has a distinctive Jewish surname (DJN). There was no question on languages spoken or known by the respondent in the 1850 Census. There was no question on ethnicity or ancestry. There is a question on country of birth. While most immigrants to the US in the decades before 1850 were from the British Isles, many were also from the various German-speaking states of Central Europe, although most immigrants from these lands were not Jewish.[9] There were few recorded immigrants to the US in these decades from Eastern Europe, Russia, or other areas (Table 2).

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[8] The only caveat is that the census enumerators in 1850 were instructed to "insert the denomination to which he belongs" for all clergymen (U.S. Bureau of the Census, 1979, p. 22). Of the 270 clergymen reported in this sample, only 1 was identified as a "Jew minister," about 0.3 percent of the total, whose last name was Michelbacker. As this name is not included in the lists of distinctive Jewish surnames used in this paper, this name was not identified as Jewish for the purposes of this study.

[9] In his study of immigrants to the US in the antebellum period, Ferrie (1999, p. 185) concludes that while all of the immigrant groups experienced extensive economic mobility, "the Irish fared considerably worse than the British or Germans who arrived over the 1840s." He did not attempt to study Jews.

For this study, two variants of the distinctive Jewish name technique are used.[10] Not all people with a distinctive Jewish name are Jewish or even of Jewish origin or ancestry, but they have a higher (but often unknown) *probability* of being Jewish than those who do not have a distinctive Jewish name. One source will be referred to as "Union Jews" (see Appendix A). These are the surnames of Union Army veterans from the list of individuals who were likely Jewish (based on reported religion and whether they were married by a Rabbi or in a Synagogue) in the Union Army veteran data (Fogel, 2000). Note that the Jewish Union Army veterans would have been from the Northern states and had predominantly German (Ashkenazic) surnames, yet much of the Jewish population in 1850 would have lived in the Southern states and would not have become Union Army veterans.

Roudiez (2017), who compiled the list of Union Jews, wrote in an email: "Religion is only recorded in the Union Army data with marriage info. This can be a marriage certificate, a widow's pension application, or the family circular (a long form about the soldier's family filled out in 1898 or 1912…). It also allowed me to add some soldiers married by rabbis that weren't explicitly labeled as Jewish." The marriage records occasionally included the officiant's name and title. Although the surnames Brown and Davis were included on the list of Jews in the Union Army data, for this paper individuals with these surnames, which are more common among those who are not Jewish, were not included among the Union Jews.

In his study of Jewish soldiers in the Union Army in the Civil War, Mendelsohn (2022, p. 102) write that to avoid antisemitism some Jews Americanized their name at enlistment, and

[10] For a discussion of the pros and cons of the distinctive Jewish name technique, see Hartman and Sheskin (2013). The Americanization of Jewish surnames was apparently much more common in the 20th century than in the 19th century (Fermaglich, 2018).

some of these reverted back to their original name when demobilized. He gives the example of Simon Guggenheimer who enlisted as Charles Brown, but we do not learn whether he retained that name after military service.

The Union Jews surnames that were included in this study are reported in the Appendix, Table A-1.

A second Jewish identifier, to be referred to as "DJN Jews," are names from a modern list of distinctively Jewish surnames compiled by Ira Sheskin (1998). See also Hartman and Sheskin (2013). Based on several studies of distinctive Jewish names, "the list of 35 names… are held by 11–15 percent of Jews, with about 90 percent of individuals with these surnames being Jewish," although the exact proportions vary over time and locale (see Himmelfarb et al 1983), see also Hartman and Sheskin (2013), Sheskin (1998), Kohs and Blumenthal (1942), and Chiswick (2020, p. 175). The DJN surnames are reported in the Appendix, Table A-1.

The Jewish population of the United States in 1850 was not as geographically concentrated as it had been in the 18th century or would be in the 20th century. Perhaps the greatest geographic dispersion of American Jews was during the middle of the 19th century. Colonial Jews were largely of Sephardic (Iberian) or Central European origin and concentrated in the east coast port cities (primarily Charleston, Savannah, Philadelphia, New York, and Newport, Rhode Island). The larger Eastern European and Russian Ashkenazic Jewish immigration from 1881 through the 1920s settled primarily in the major industrial and commercial metropolitan areas in the East and the Midwest, and especially in New York City. Regarding the geographic distribution of Jews in the US antebellum period, Sarna (2004, pp. 69-70) wrote: "Jews never distributed themselves evenly across the American landscape: over a quarter of all the nation's Jews in 1860 still lived in New York City. Still, the fact that as a group

they had dispersed throughout the country by the Civil War remains deeply significant, securing Judaism's position as a national American faith. Adherents had voted with their feet (and their packs) neither to confine themselves to a few major port cities, as colonial Jews largely had done, nor to form … enclaves… Instead, like the bulk of immigrants to America's shores, Jews pursued opportunities wherever they found them."[11] Rosen (2012, p. 6) in an article entitled "Jewish Confederates" writes that in 1860 about one-fifth of American Jews lived in the South. New Orleans had the seventh largest Jewish population in the US. After identifying Jewish communities in ten additional Southern cities, he concluded that Jews lived in "many small towns throughout the South."

While there is some overlap in the list of names of Union Jews and DJN Jews, the overlap is far from complete. In the 1/100 sample from the 1850 Census microdata file, for the observations used in the econometric analysis of socio-economic status, there are 62 Union Jews and 52 DJN Jews, but a total of 109 Jews, as there were only 5 individuals whose name appeared on both lists (see Appendix, Table A-1). These five men varied considerably in their occupations – a farm laborer, a farmer, a teacher, and two merchants categorized as managers, officials, and proprietors (nec) (Table A-3).

The objective of this study is not to estimate the number of Jews, but to estimate the occupational status of Jews compared to others. It is important to acknowledge two types of errors in the procedure used here. One is that Jews with surnames not on these lists are not

[11] The regional distribution of Jews is shown in the 1850 Census data on religious institutions. A total of 37 Jewish "churches" were reported across 11 out of the 31 states in the country: Connecticut (2), Kentucky (1), Louisiana (1), Massachusetts (1), Missouri (2), New York (14), Ohio (3), Pennsylvania (8), Rhode Island (1), South Carolina (3), and Virginia (1) (De Bow, 1954, Table 137, p. 134).

identified as Jews. The majority of Jews in the US at that time may therefore be missed. Yet, there is no bias in our findings on occupational status among Jews if the socio-economic and occupational characteristics of Jews are independent of their surname.[12] Including unidentified Jews among the non-Jews would tend to bias downward Jewish/non-Jewish differences if the Jews are advantaged. This bias would be trivial, however, given that it is estimated that in 1850 Jews were only about 0.2 percent (two in a thousand) of the population. Indeed, the downward bias in the difference would be even greater if Jews who are not identified as such because of name changing are more successful in the labor market than identified Jews because they are subject to less discrimination.

The second potential bias is including among Jews the non-Jews who have a surname on the lists. Again, let us assume that among non-Jews there is no relation between surname and socio-economic and occupational status. If that is the case, then our procedure would again tend to bias downward any differences observed between men identified as Jews and non-Jews by including some who are not Jewish among those identified as Jews.

IV. The Occupational Distribution of Free Men: Jews and Non-Jews

Enumeration started for the 1850 Census of Populations in June, and while about 88 percent of the census was enumerated in July to October, it went fully through the following June. Remarkably, given the technology of the time, a statistical portrait of the population was

[12] Some mid-19th century Jews may have Americanized their surnames to enhance their economic and social positions. In her study of Jewish name changing, Fermaglich (2018, p. 184) indicates that it was more common in the 20th century than earlier and writes: "Name changing was an important part of class mobility in the mid-20th century – not a requirement but a significant aid, especially for Jews… who wanted to join a profession or live in a middle-class neighborhood that incorporated significant numbers of non-Jews." By relying on distinctive Jewish names, this tendency would tend to bias downward apparent Jewish achievement.

published by De Bow in 1854, including tables on the occupational distribution of free men. De Bow (1854, Chapter IV, Aggregate Population, Section 9, Occupation, pp. 125-129, Tables 129-132) reports from the 1850 Census data on "the particular employments of each white and free colored male over fifteen years of age…, where the person follows several occupations, the principal one" (p. 125). For the free males in the US as a whole, De Bow's Table 129 reports the numbers for detailed occupations (e.g., dentists 2,923, peddlers 10,669, etc.) and in Tables 130-132 counts by state and territory for broader occupation groups, ranging in the share of the total from agriculture (44.1 percent) to army (0.1 percent).

The occupational distribution of Jewish and non-Jewish free men in the 1/100 Public Use Microdata Sample (PUMS) from the 1850 Census of Population is reported in Table 3 for the ten major occupational categories. The Jewish immigrations to the US in this period were not from high socio-economic status groups. As Diner (2004, p. 81-82) writes: "From the 1820s through the 1840s tens of thousands of young Jewish men in particular left Bavaria for America… [These] immigrants appear to have been among the least Germanized of their group, the poorest, the most traditional, and the least able to take advantage of the fruits of emancipation at home." In spite of that, it appears that American Jews in 1850 had a higher occupational status or attainment than other free men in America.

Among all of the free men, nearly half (49 percent) worked in farming (owners, tenants, managers, and laborers) and another 12 percent were non-farm laborers; while among men identified as Jews, 45 percent were in farming occupations and 10 percent were non-farm laborers. On the other hand, although professionals (PTK) were relatively rare, Jews were more likely to be in professional occupations (5.5 percent compared to 2.9 percent). Jews were also more likely to be working as managers (8.3 percent compared to 5.0 percent), and in craft

occupations (21.1 percent compared to 18.0 percent), but less likely to be in the less skilled operative jobs (6.4 percent for Jews and 8.9 percent for all free men).[13]

The occupations of the six professionals in the Jewish sample were: teachers (2), surveyor, physician, pharmacist, and "daguerreotyper" (photographer) (Table 3). Diner (2015, p. 180) wrote: "Peddlers with wagons sometimes brought photographic equipment into their customers' homes, offering to take family portraits…" The negatives would be brought back to town for development and framing, and sold to the family on their next round. "Some peddlers recognized an opportunity in setting up studios in town…" (Diner, 2015, p. 180).

In her study of Jewish peddlers in the 19th century United States, Diner (2015) emphasizes the wide regional coverage of the Jewish peddlers and that after only a few years, and accumulating some Americanized skills and financial assets, they settled down and opened small retail establishments in rural areas, small towns, and cities across the country. Peddlers were likely to be under-enumerated if they were on the road when the enumerators called at their more permanent residence, assuming that they even had one and assuming they were not enumerated at wherever they were staying while on the road.

Unfortunately, there are no questions in the 1850 Census on self-employment status. However, among the men who were not in agricultural occupations, Jews were more heavily represented in occupations where they would be more likely to be self-employed or own-account

[13] With an increase in industrialization, there was a rapid increase in operative employment in this period. See US Civil War (1963) and De Bow (1854, Table 132, p. 129). This is also seen in the increased share of men working in operative occupations in 1860, 13.7 percent for Jews and 13.6 percent for other free men (Chiswick, 2020, Table 2.4, p. 20).

workers – i.e., professional, manager, sales, and craft occupations, in contrast to clerical, operative, and laborer jobs.

The occupational data on Jews can be separated into the sources for identifying Jews (Table 3). Although there is little overlap in the names in the lists, the two occupational distributions are quite similar. The small differences are the greater proportion of non-farm laborers among Union Jews, and their smaller proportion of professionals and operatives. Overall, from these data, one cannot infer that one group of Jews was more skilled than the other.

V. Socio-Economic Index and Descriptive Statistics

The ten occupational categories in Table 3 are useful for a broad overview analysis, but much information can be lost by ignoring detailed occupational variations within each of these categories. There are many potential socioeconomic indices that can be used to convert the categorical data on detailed occupation into a continuous quantitative measure (see, for example, Hauser and Warren (1997) and Warren, Sheridan, and Hauser (1998)). To avoid an arbitrary selection of an index, it is best to employ the widely recognized measure that the Minnesota Population Center attached to the data file. This is the Duncan Socioeconomic Index (SEI).

The SEI variable is constructed using the individual responses to occupation, 1950 basis, from the 1850 Census data.[14] The Minnesota Population Center assigned a Duncan SEI score to each occupation using the 1950 occupational classification scheme (Duncan 1961, and IPUMS-USA (n.d.) User Guide). It is a measure of occupational status based on the income level and educational attainment (years of schooling) associated with each occupation in 1950.

[14] See Appendix A for the discussion of the SEI and the definitions of the other variables used in the analysis. The Appendix includes a list of selected occupations with their SEI values.

Table 4 reports the means (and standard deviations in parentheses) of the SEI for all free men and Jewish men age 16 to 60, as well as of the variables used in the regression analysis. The SEI for all free men and for the combined sample of Jews are 19.8 and 23.7, respectively, the difference being statistically significant. To provide context, an SEI of 19 to 20 is equivalent to the SEI for carpenters, bartenders, and farm foremen, while an SEI of 23 to 24 is equivalent to tailors, cabinetmakers, and boatmen (water transport workers) (Table A-3). Clearly the Jewish men in the data have a higher SEI score than the non-Jewish men. There is no significant difference in the SEI scores between the Union Jews and the DJN Jews, 24.5 for the former and 25.0 for the latter.[15]

The standard deviations of the SEI also differ between the Jews (SD=20.2) and the other free men (SD=17.3) (Table 4). The non-Jewish men are more heavily concentrated in low SEI occupations compared to the greater dispersion in occupational SEI among the Jewish men.

VI. Multiple Regression Analyses

Due to the positive skewness in the SEI scores, the natural logarithm of the SEI (LnSEI) is used as the dependent variable in the regression analysis and its mean is also reported in Table 4.

In general, the means of the explanatory variables differ by little between Jews and all free men. They are very similar in mean age, proportion illiterate (cannot read or write in any language), proportion living in the South, and inferred family structure (married spouse present

[15] Three of the five individuals who were categorized as both DJN Jews and Union Jews have very high SEI scores (2 were merchant proprietors with an SEI score of 68, and one was a teacher with an SEI score of 72). As these individuals were not, of course, double counted in the combined Jewish sample, the average SEI of the combined sample is lower than the two individual groups of Jews.

and number of children). The Jews were less likely to live in rural areas (70 percent compared to 81 percent), but are more likely to be foreign born (26 percent compared to 18 percent). There is no direct information on when the foreign born came to the US, but the data in Table 2 suggests that immigrants in general were fairly recent arrivals. While only 2 percent of all free men were non-White (primarily Blacks, with some Native Americans), there were no non-Whites in the Jewish sample.

Table 5 reports the multiple regression analysis with the natural logarithm of the socioeconomic index (LnSEI) as the dependent variable for all free men with Jewish dichotomous variables (Columns (1) and (2)) and for only the Jewish sample (Column (3)). Because of the much smaller sample size, the levels of statistical significance are much lower in the regression limited to Jews.

Among all men, the SEI increases with age (but at a decreasing rate as age increases, with a peak at about age 44), is significantly higher for those currently married, and is significantly lower for the illiterate, the foreign born, and those living in rural areas, especially for those living on a farm. Among all free men, being non-White has the largest (negative) effect on SEI, even after controlling for the other variables. Among the Jews in these data, the most significant effects (all negative) are being illiterate, foreign born, and living in a rural area, especially on a farm.

Unlike what would be found for 20th century analyses, living in the South has a positive effect on a man's SEI for all free men, and an even larger positive effect for Jews. The likely explanation for the higher SEI in the South among free men is that the lowest skilled jobs in the South were performed by enslaved people. Partly for this reason, immigrants tended to avoid the Southern states. Among White men age 16 to 60 in 1850 in the microdata, the proportion foreign

born was 10.0 percent in the South and 22.0 percent in the rest of the country. While 11.5 percent of the total White population of the US in 1850 was foreign born, only two Southern states had a foreign-born share above the national average – Missouri (12.9 percent) and Louisiana (26.3 percent) (De Bow, 1854, Table 40, p. 61).[16]

A seeming anomaly is the significant negative relation between having children on a man's SEI for all men, but there is no effect of children on Jewish SEI. The negative relation for free men may arise if lower SEI men have more children due to the lower cost of children, in part because their children (boys and girls) started working at very young ages. Although the 1850 Census did not inquire into work activities of those under age 15, child labor was common among farming and lower income families (see Craig (1993), Schuman (2017), and Whaples (2005)). That is, income effects of a higher SEI are more children but the substitution effect is that children are more expensive because they do not work, thereby raising the cost of additional children (Becker and Lewis, 1973). Apparently, the substitution effect was larger than the income effect.[17]

Other measured variables the same, the coefficient on the Jewish variable is positive and statistically significant (coefficient 0.116, t=2.15) (Table 5, Column (1)). The observed difference of 0.14 log points is reduced to 0.116 log points when the other variables are held constant. Thus, the control variables explain only 17 percent of the observed difference, and the statistically significant difference persists. This effect is nearly three times greater than the

[16] For an analysis of the substitution between free and enslaved persons in household work in the antebellum South, see Chiswick and Robinson (2022).

[17] For an analysis of the negative effect of slave children on the fertility of their White slaveholding families, see Wanamaker (2014).

impact of being currently married, and almost half the positive effect of being literate. This arises in spite of the methodology for identifying Jews that is expected to bias downward the Jewish/non-Jewish differences in occupational status.[18] Moreover, the greater than average economic attainment of American Jewish men in 1850 is consistent with findings from the 18th and 20th centuries analyses of Jewish labor market attainment compared to other white men (Marcus, 1970, Chapter 27; Chiswick, 2020).

When the Jewish variable is split into DJN and Union Jews (Table 5, Column (2)), both have positive coefficients but only the DJN Jews variable is statistically significant (coefficient 0.17, t=2.21). In the analysis limited to Jews (Table 5, Column (3)) there is no statistically significant difference between DJN Jews and Union Jews.

It is noteworthy that literacy has a larger positive significant effect on the SEI for Jews than for the full sample (coefficients of 0.42 for Jews compared to 0.27). This may arise because the Jews have a higher level of literacy among the literate, or because of a larger impact of literacy on their occupational attainment, or some combination of the two. This is consistent with the findings for the 20th century analyses of a higher level of schooling and a larger positive effect of schooling on the earnings of Jewish compared to non-Jewish men (Chiswick, 2020).

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[18] When a Jewish-foreign born interaction variable is added to the regression in Table 5, Column (1), the Jewish term remains significant and the interaction term has a positive but not statistically significant coefficient. The coefficients with t-ratios in parentheses: Jews 0.104 (t=1.78), Jews*Foreign Born 0.049 (t=0.57).

When a comparable analysis is performed for the 1860 Census, 1/100 microdata file (Chiswick, 2020, Chapter 2) there is a larger sample of Jews (229 observations), Jews had a significantly higher SEI (24.8 for Jews, 20.3 for non-Jews), and, other variable the same, Jews had a higher natural logarithm of the SEI, 0.143 (t=3.46). When the Jewish and Foreign Born terms are interacted, the coefficient on Jews is 0.060 (t=1.20) and the coefficient on Jews*Foreign Born is 0.191 (t=2.91).

In summary, the regression analysis indicates that even after controlling for other variables that determine a man's socioeconomic score, mid-19th century Jewish men have a higher SEI value than other free men and appear to obtain a higher return from literacy.

VII. Summary and Conclusions

This paper extends back in time to 1850 the findings from 20th-century analyses that American Jewish men have a higher occupational status than other White men, both overall and when other measured variables used to explain occupational status are held constant.

The 1850 Census was the first to record the occupation of free males, and this paper appears to be the first systematic nationwide analysis of microdata from the 1850 Census of Population (one-in-a-hundred sample) to study the occupational status of free American men. It is also the first to study the occupations and socioeconomic status in 1850 of American Jews compared to other free men. In the absence of other data, Jewish men are identified using two independent lists of Jewish surnames, one modern and the other based on data for Civil War veterans in the Union Army.

American Jews in 1850 comprised about 0.2 percent of the US population and were primarily of Central European origins, with a geographic distribution in the U.S. that was wider than either the colonial-era Jews or the later 20th-century Eastern European and Russian Jews.

By major occupational category, in 1850, men identified as having a higher probability of being Jewish are more likely than other men to be working as professionals, managers, and craftsmen, and less likely as farmers, farm workers, or operatives. The Duncan Socioeconomic Index (SEI) is applied to the census' detailed occupation data to yield a quantitative measure of occupational status. SEI scores are found to be higher for free American men who are older, literate, married, White, Southern, and urban. These determinants, however, explain only about

17 percent of the observed higher SEI scores of Jews than other free men. Overall and other variables the same, Jews have a statistically significant higher SEI. The magnitude of this effect when other variables are the same is about half the positive effect of being literate. Yet, there are no differences in the SEI scores depending on which of the two techniques are used to identify Jews.

Note that American Jewish men in 1850, as was the case in the colonial period and in the 20th century, were disproportionately engaged in occupations in which decision-making skills, or "allocative efficiency," are particularly important for economic success. This suggests that it was not a characteristic of a particular cohort of Jewish immigrants and their descendants, or their particular country of origin, that was responsible for their economic success in the American context, but something general among Jews. Their choice of occupations was presumably not random, but rather a consequence of their religious experience, culture, and history.

Moreover, the methodology developed in this study can be applied to other ethnic and minority groups in the American population and in other places.

Tables

Table 1

Estimated Jewish Population of the United States, 1776-1900[(a)]

Year	Jewish Population
1776	1000-2500
1800	2000-2500
1820	2650-5000
1830	4000-6000
1840	15,000
1850	50,000-100,000
1860	150,000-200,000
1870	200,000
1880	230,000-280,000
1890	400,000-475,000
1900	937,800-1,058,135

(a) Estimated number of persons born to Jewish parents or of Jewish parentage or converted to Judaism.

Source: Jewish Virtual Library, Total Jewish Population in the United States, https://www.jewishvirtuallibrary.org/jewish-population-in-the-united-states-nationally, Accessed 7/7/2022.

Table 2

Admission of Permanent Resident Aliens by Country of Birth, by Decade, 1820-1849[(a)]

(in thousands)

	1820-29	1830-39	1840-49
Total	128.5	538.4	1427.3
Europe	99.6	422.9	1369.4
Germany[(b)]	5.8	124.7	385.4
Ireland	51.6	170.7	656.2
England, Scotland, and Wales	26.3	74.4	218.6
Russia	0.1	0.3	0.5

(a) No data prior to 1820. Rounded to nearest hundred. Russia refers to Russian Empire, including Russian occupied Poland. Land arrivals not completely enumerated in these years.

(b) German-speaking states

Source: 2013 Yearbook of Immigration Statistics, U.S. Department of Homeland Security, Office of Immigration Statistics, Washington, D.C., August 2014, Table 2.

Table 3

Occupational Distribution of Free Men, Age 16 to 60, 1850 Census[(a)]

(Percent)

Occupation	All	All Jews	DJN Jews	Union Jews
PTK [(b)]	2.9	5.5	7.7	4.8
Farmers	43.6	40.4	40.4	38.7
Managers	5.0	8.3	7.7	11.3
Clerical	0.3	0.0	0.0	0.0
Sales	2.3	2.8	5.8	0.0
Craft	18.0	21.1	19.2	21.0
Operatives	8.9	6.4	7.7	4.8
Service	1.1	0.9	0.0	1.6
Farm Laborers	5.5	4.6	5.8	4.8
Non-Farm Laborers	12.4	10.1	5.8	12.9
Total	100.0	100.0	100.0	100.0
Sample Size	49,019	109	52	62

(a) Men who reported an occupation. Excludes slaves. Excludes “Brown” and “Davis” from Union Jews. PTK is Professional, Technical and Kindred occupations, Farmers includes farm owners, farm tenants, and farm managers, Managers is limited to non-farm managers. Detail may not add to total due to rounding.

(b) Among the PTK workers, the distribution by occupation in this sample was:

Percent of PTK	All Men	All Jews
Clergymen	18.8	0.0
Pharmacists	3.6	16.7
Physicians and Surgeons	28.6	16.7
Lawyers and Judges	15.8	0.0
Surveyors	0.8	16.7
Teachers	20.2	33.3
Photographers (Daguerreotypers)	0.6	16.7
Other PTK	11.6	0.0
Total	100.0	100.0
Sample Size	1,433	6

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

Table 4

Means and Standard Deviations of the Variables in the Regression Analysis, 1850 Census[(a)]

Variable	All	Jews		
		All	DJN Jews	Union Jews
Socio-Economic Index	19.83 (17.31)	23.73 (20.19)	24.98 (20.84)	24.45 (21.58)
Ln SEI	2.76 (0.616)	2.90 (0.681)	2.95 (0.700)	2.91 (0.720)
Age	32.35 (11.58)	32.66 (12.14)	30.94 (11.60)	33.92 (12.32)
Age Squared	1180.80 (835.8)	1212.72 (882.1)	1089.48 (822.0)	1299.92 (908.7)
Illiterate	0.07 (0.257)	0.06 (0.246)	0.06 (0.235)	0.06 (0.248)
Non-White	0.02 (0.134)	0.00 (0)	0.00 (0)	0.00 (0)
Married	0.55 (0.497)	0.54 (0.501)	0.44 (0.502)	0.61 (0.491)
Number of Children	1.74 (2.325)	1.72 (2.245)	1.37 (2.318)	2.10 (2.295)
Foreign Born	0.18 (0.386)	0.26 (0.439)	0.27 (0.448)	0.24 (0.432)
Rural Farm	0.51 (0.500)	0.47 (0.501)	0.50 (0.505)	0.45 (0.502)
Rural Non-Farm	0.30 (0.457)	0.23 (0.422)	0.17 (0.382)	0.26 (0.441)
South	0.30 (0.460)	0.29 (0.458)	0.27 (0.448)	0.34 (0.477)
Jews	0.002 (0.0471)	1.00 (0)	1.00 (0)	1.00 (0)
Jews Foreign Born	0.0005 (0.0322)	0.26 (0.439)	0.27 (0.448)	0.24 (0.432)
Sample Size	49019	109	52	62

(a) Men with an occupation, age 16-60. Excludes slaves. Union Jews excludes “Brown” and “Davis” surnames. Standard deviations in parentheses.

(b) Three of the five individuals who were categorized as both DJN Jews and Union Jews have very high SEI scores, resulting in the average SEI of the combined sample is lower than the two individual groups of Jews.

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

Table 5

Regression Analysis of LnSEI for Free Men Age 16 to 60, 1850 Census[(a)]

Variable	All - 1	All-2	Jews
Age	0.0291921***	0.0291891***	0.00898470
	(19.00)	(19.00)	(0.25)
Age Squared	-0.000331281***	-0.000331232***	-1.60602e-05
	(-16.31)	(-16.31)	(-0.03)
Illiterate	-0.267408***	-0.267396***	-0.417612#
	(-26.28)	(-26.27)	(-1.85)
Non-White	-0.525513***	-0.525481***	0
	(-27.00)	(-26.99)	(.)
Married	0.0439564***	0.0440051***	-0.0804205
	(6.23)	(6.23)	(-0.50)
Number of Children	-0.00631274***	-0.00631598***	0.00522734
	(-4.14)	(-4.14)	(0.13)
Foreign Born	-0.302193***	-0.302206***	-0.315339*
	(-42.49)	(-42.49)	(-2.21)
Rural Farm	-0.581717***	-0.581690***	-0.902556***
	(-77.97)	(-77.97)	(-6.19)
Rural Non-Farm	-0.275690***	-0.275624***	-0.562774***
	(-35.89)	(-35.88)	(-3.43)
South	0.0748266***	0.0748242***	0.266798#
	(13.14)	(13.14)	(1.98)
Jews	0.116118*	(b)	(b)
	(2.15)		
DJN Jews	(b)	0.173075*	0.113113
		(2.21)	(1.00)
Union Jews	(b)	0.0872412	(b)
		(1.21)	
Constant	2.632218***	2.632168***	3.192239***
	(101.89)	(101.89)	(5.46)
Sample Size	49,019	49,019	109
Adjusted R^2	0.165	0.165	0.298

(a) Men with a socio-economic status score. Excludes slaves. Union Jews excludes “Brown” and “Davis” surnames. T-ratios in parentheses. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

(b) Variable not entered.

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

Appendix A - Statistical Appendix: Definitions of Variables Used in the Regression Analysis of the 1850 Census of Population

The variables used in the statistical analyses are defined below.

Data source: 1850 Census of Population, Public Use Microdata Sample, 1 percent free people sample, PUMS, Minnesota Population Center (MPC), University of Minnesota

Definition of population: 16–60-year-old free males with an occupation according to the 1850 Census. Where the person is employed in multiple occupations, the principal one is listed.

Dependent Variable

Duncan Socioeconomic Index (SEI): This is a measure constructed by the Minnesota Population Center (MPC) that assigns an SEI score to each occupation using the 1950 occupational classification scheme (Duncan, 1961). The SEI is a measure of occupational status based on the income level and educational attainment associated with each occupation in 1950. The SEI variable is constructed using the individual responses to occupation, 1950 basis, from the 1850 Census data. The 1950 Census Bureau occupational classification system is applied to the occupational data, to enhance comparability across years. For pre-1940 samples created at MPC, the alphabetic responses supplied by enumerators were directly coded into the 1950 classification. See Appendix Tables A-2 and A-3 for a list of selected occupations with their SEI values. Any laborer with no specified industry living in a household with a farmer is recoded into farm labor. The range of the SEI is from a low of 4 for Lumbermen and Woodchoppers and Porters to a high of 96 for Dentists.

In the regression analysis, because of the positive skewness in the SEI distribution, the natural logarithm of the SEI is the dependent variable.

Explanatory Variables

- Age: This is the self-reported age of the respondent in years as of his last birthday. Age squared is also included in the analysis.

- Illiterate: This is a dichotomous variable that takes the value of 1 if the individual is recorded as "cannot read and write." The census enumerators were instructed to record those individuals who could not read and write in any language (English or their native language). However, the degree of literacy was not defined; therefore, it is unknown whether being able to read/write one's own name qualified them as literate or how individuals who could read but not write were classified. Further, this question was only asked of individuals 20 years of age and older. Therefore, for this study, a predicted literacy value was computed for individuals age 16-19 based on their race, nativity, rural-farm status, region, and labor force participation. The model for predicting literacy was correct for 90.2 percent of individuals age 20-25.

- Non-White: This is a dichotomous variable that distinguishes individuals based on their racial origin, as categorized by the census enumerator. All individuals who were categorized as a racial origin other than "White" have been coded as "non-White." Non-Whites include Black/Negro, Mulatto, and American Indian/Alaska Native.

- Married: This is a dichotomous variable that indicates the individual is presumed to be married with their spouse present (in the same household). Marital status was not asked in the 1850 Census. Therefore, this variable is constructed using the IPUMS pointer variable for spouse, which identifies the imputed relationships between household members with an estimated 99 percent accuracy rate (IPUMS-USA, n.d.)

- Number of Children: This variable counts the number of own children (of any age or marital status) residing with each individual. It includes step-children and adopted children as well as biological children.

- Foreign Born: This is a dichotomous variable that distinguishes those with a birthplace outside the United States from individuals born in the United States. Birthplace was considered to be the United States if the respondent was born in a state or territory of the United States; all others were considered foreign born. Additional dichotomous variables were created for specific countries of birth. There is no question on when the foreign-born person came to the United States.

- Rural-Farm: This is a dichotomous variable that distinguishes individuals living in a rural and farm household from all others. The "rural" definition was applied ex-post by the 1940 Census Bureau, in which cities and incorporated places of 2500 inhabitants or more and townships or other subdivisions having a total population of 10,000 or more as well as a population density of 1000 or more per square mile were coded as "urban"; all other areas were considered rural. Any household that contained a person with the occupation "farmer" was coded as a farm household.

- Rural-Non-Farm: This is a dichotomous variable that distinguished individuals living in a rural and non-farm household from all others.

- South: This is a dichotomous variable that distinguishes all slave-holding states in 1850 from all other states: Delaware, Missouri, Virginia (includes West Virginia), Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, Kentucky, Maryland, Tennessee, and the District of Columbia.

- Union Jews (See Table A-1): This is a dichotomous variable that distinguishes individuals whose surname was included on the list of individuals who were likely Jewish (based on reported religion whether they were married by a Rabbi or in a Synagogue) in the Union Army data (University of Chicago) from all others (Fogel, 2000). "Religion is only recorded in the Union Army data with marriage info. This can be a marriage certificate, a widow's pension application, or the family circular (a long form about the soldier's family filled out in 1898 or 1912…). It also allowed me to add some soldiers married by rabbis that weren't explicitly labeled as Jewish" (E-mail from Christopher Roudiez, Center for Population Economics, to Barry R. Chiswick, Friday, April 21, 2017). The marriage records occasionally included the officiant's name and title. Although the surnames Brown and Davis were included on this list of Jews in the Union Army data, for this paper individuals with these surnames were not coded as part of the Union Jews variable. Surnames that were included are: Asch, Basch, Berwin, Bloomenthal, Blumenthal, Blumingthal, Bowers, Breslaum, Burgheim, Cahen, Cohen, Cohn, Cowan, Cowen, Dessan, Dessau, Dessaw, Desson, Hersch, Hess, Hirch, Hirish, Hirsch, Hirsh, Hurch, Hursh, Jessel, Kohn, Koff, Kopf, Lasalle, Levin, Lewin, Moses, Neuman, Newman, Newmann, Rosenthal, Rothschild, Stahl, Steinhard, Steinhart, Strauss, Uhlfeld, Vohlfeld, Walberg, Zoellner, Zollmer, and Zollner. For some individuals, the spelling of the surname varied over time and these various spellings were used.

- DJN Jews (See Table A-1): This is a dichotomous variable that distinguishes individuals with a surname that is considered a "distinctive Jewish name" from all others. For this variable, Jews are identified as individuals having a surname that is on a list of 36 DJNs in Sheskin (1998). These names are Berman, Caplan, Cohen, Epstein, Feldman, Freedman, Friedman, Goldberg, Goldman, Goldstein, Goodman, Greenberg, Gross, Grossman, Jacobs, Jaffe, Kahn,

Kaplan, Katz, Kohn, Levin, Levine, Levinson, Levy, Lieberman, Rosen, Rosenberg, Rosenthal, Rubin, Schwartz, Shapiro, Siegel, Silverman, Stern, Weinstein, and Weiss.

- Jewish: Individuals were considered to be more likely Jewish if they fell into either the DJN Jews or Union Jews categories.

- Occupational Category: This variable was constructed based on the occupation data, 1950 basis. The occupational categories used are as follows: PTK (Professional, Technical, and Kindred); Farmers (owners, tenants, and managers); Managers (non-farm); Clerical; Sales; Craft (including military and apprentices); Operatives; Service; Farm Workers for wages and farm laborers and fishermen; Laborers (non-farm); No Occupation; and, Not Applicable. Any laborer with no specified industry living in a household with a farmer is recoded into farm labor.

Table A-1

List of Surnames for the 109 Observation in the Regression Analysis

(Number in parentheses if more than one observation)

DJN Jews	Union Jews
Berman	Bowers (12)
Cohen (4) *	Cohen (4) *
Friedman	Cowan (4)
Goodman (11)	Cowen
Gross (4)	Hess (6)
Grossman	Hirsh
Jacobs (17)	Levin *
Katz	Moses (10)
Levin *	Newman (22)
Levy (7)	Stahl
Schwartz (2)	
Silverman	
Stern	

* Designates names that were on both lists

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

Table A-2

Socio-Economic Index (SEI) Scores for Selected Occupations

Occupation[(a)]	**SEI**	**Ln SEI**
PTK		
Physicians & Surgeons (075)	92	4.52
Lawyers & Judges (055)	93	4.53
Clergymen (009)	52	3.95
Farmers		
Farmers (owners & tenants) (100)	14	2.64
Farm laborers (wage workers) (820)	6	1.79
Managers		
Managers (buildings) (230)	32	3.47
Officers, ships (240)	54	3.99
Officers & Administrators (nec), Public Administration (250)	66	4.19
Postmasters (270)	60	4.09
Clerical		
Bank Tellers (305)	52	3.95
Shipping and Receiving Clerks (342)	22	3.09
Clerical & Kindred Workers (nec) (390)	44	3.78
Sales		
Hucksters & Peddlers (430)	8	2.08
Real Estate Agents (470)	62	4.13
Salesmen & Sales Clerks (nec) (490)	47	3.85
Craft		
Bakers (500)	22	3.09
Carpenters (510)	19	2.94
Jewelers, Watchmakers (534)	36	3.58
Plumbers & Pipe Fitters (574)	34	3.53
Shoemakers & Repairers (except factory) (582)	12	2.48
Tailors (590)	23	3.14
Operatives		
Sailors & Deck Hands (673)	16	2.77
Boatmen, Canalmen, & Lock Keepers (623)	24	3.18
Deliverymen & Routemen (632)	32	3.47
Switchmen, Railroad (681)	44	3.78
Furnacemen (641)	18	2.89
Services		
Bartenders (750)	19	2.94
Janitors & Sextons (770)	9	2.20
Policemen & Detectives (773)	39	3.66
Cooks (except private household) (754)	15	2.71

Table A-2 continued

Laborers (non-farm)		
Gardeners, except farm and groundskeepers (930)	11	2.40
Longshoremen & Stevedores (940)	11	2.40
Laborers (nec) (970)	8	2.08
Range:		
Highest SEI: Dentists (032)	96	4.56
Lowest SEI: Lumbermen, Raftsmen, & Woodchoppers (950) Porters (780)	4	1.39

[a] nec means not elsewhere classified. Occupation code number in parentheses.

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

Table A-3

SEI Scores by Occupation for Occupations of Jews, 1850 Census

Occupations	SEI	Number of Jews	Number of DJN Jews	Number of Union Jews
Farm laborers	6	5	3	3
Hucksters and peddlers; Laborers (nec)	8	12	4	8
Shoemakers and repairers	12	1	0	1
Farmers (owners and tenants)	14	44	21	24
Blacksmiths; Painters; Sailors and deck hands	16	6	3	3
Members of the armed services; Operatives (nec); Guards, watchmen, and doorkeepers	18	7	3	4
Carpenters	19	5	3	2
Cabinetmakers	23	1	0	1
Boatmen, canalmen, and lock keepers	24	1	1	0
Plasterers	25	1	0	1
Brickmasons, stonemasons, and tile setters; Mechanics and repairmen (nec)	27	2	1	1
Machinists	33	1	1	0
Jewelers, watchmakers, and goldsmiths	36	4	2	2
Apprentices, trade not specified	39	1	0	1
Salesmen and sales clerks (nec)	47	2	2	0
Surveyors	48	1	1	0
Photographers	50	1	0	1
Compositors and typesetters	52	1	0	1
Managers, officials, and proprietors (nec)	68	9	4	7
Teachers (nec)	72	2	2	1
Pharmacists	82	1	1	0
Physicians and surgeons	92	1	0	1
Total		109	52	62
Average SEI		23.7	25.0	24.5

Note: nec means not elsewhere classified. Number of Jews can be less than the sum of DJN Jews and Union Jews because some surnames are on both lists (5 individuals).

Source: 1850 Census of Population, one-in-a-hundred, PUMS, Minnesota Population Center, University of Minnesota, microdata initially released in 1998, current version 2021.

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