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# Working Paper Jewish occupational attainment in the antebellum United States: Filling a gap in the literature

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Jewish occupational attainment in the antebellum United States:

Filling a gap in the literature Barry R. Chiswick\* and RaeAnn H. Robinson\*

# Abstract:

This paper is concerned with analyzing the occupational attainment of American Jewish men compared to other free men in the mid-19<sup>th</sup> century to help fill a gap in the literature on Jewish achievement. It does this by using the full count (100 percent) microdata file from the 1850 Census of Population, the first census to ask the occupation of free men. Independent lists of surnames are used to identify men with a higher probability of being Jewish. These men were more likely than others to be managers, salesmen, and craft workers, and were less likely to be farmers and laborers. The Jewish men have a higher occupational income score on average. In the multiple regression analysis, it is found that among Jewish and other free men occupational income scores increase with age (up to about age 43 for all men), literacy, being married, having fewer children, being native born, living in the South, and living in an urban area. Even after controlling for these variables that impact the occupational income score, Jews have a significantly higher score, which is the equivalent of about the size of the positive effect of being married. Similar patterns are found using the Duncan Socioeconomic Index. This higher occupational status is consistent with patterns found elsewhere for American Jews for the 18<sup>th</sup> century and throughout the 20<sup>th</sup> century.

Keywords: Jews, Occupational Status, Occupational Income Score, Duncan Socioeconomic Index, 1850 Census of Population

JEL Codes: N31, J62, J15

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"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: 2)

I. Introduction

The period leading up to the 1850 Census of Population was transitional for the American economy. In the previous two decades the U.S. economy was experiencing its own Industrial Revolution, with substantial growth in manufacturing, and expansion of agricultural lands. Factories established in the Northeast could take advantage of expanding cotton production in the South, grown on plantations using slave labor, as well as on smaller farms. The manufacture of cheap consumer goods in the Northeast expanded. Railroad mileage grew ninefold, from about 1,000 miles in 1835 to 9,000 miles in 1850, connecting areas year-round that could not be served otherwise or by existing water-based transportation networks (Carter et al. 2006: 874). This facilitated the movement of free-labor in the increasingly mechanized and export-oriented agriculture into what we now call the Midwest. Railroads, agricultural equipment, new factories and housing all increased the demand for iron. As a result of the Mexican American War (1846), the U.S. acquired vast new territories in the West, including California where the discovery of gold in 1848 stimulated in-migration and statehood in 1850.

The US in 1850 was also in the early stages of a rapid transformation of the American population. Immigration had accelerated in the 1830s and particularly in the 1840s (see Table 1), especially from Ireland (due to famine) and Central Europe (due to political turmoil). The American Jewish population grew from an estimated 2,000 or 2,500 in 1800 to between 50,000

and 100,000 people in 1850 (Table 2).<sup>1</sup> Jews immigrating to the US during this period came primarily from Central Europe, in particular the German-speaking states, and are often referred to as German Jews. Most of the "German" Jewish immigrants in this period were lower middleclass workers from Bavaria, Western Prussia, Posen and Alsace (Sarna 2004: 64). For these Jews and other immigrants, the U.S. economy provided ample employment opportunities in both production and trade, including retail trade.

Economic growth and development of the 1830s and 1840s was not uniform across the country. It was concentrated in the industrializing Northeast and free-labor agriculture in the Midwest, while the South focused on Westward expansion of plantation-produced cotton and sugar cane. It was into this economy that the native Jewish population (most of whom were descendants of Colonial Jews) and the German-Jewish immigrants integrated, bringing their own skills and adaptability. As will be shown below, the Jews participated in the economy of 1850 primarily as merchants, salesmen, and craftsmen, and much less than non-Jews as farmers and laborers.

\* \* \* \*

This paper is the first systematic nationwide microdata analysis for the 19<sup>th</sup> century of the determinants of the occupational status for free men in general, and the relative occupational

<sup>&</sup>lt;sup>1</sup> Sarna (2004: 375) put the Jewish population in 1850 at 50,000, or 0.2 percent of the total US population. De Bow (1854: 134, Table 137) reports that of the 38,183 "churches" enumerated in 1850, 37 were Jewish, that is, 0.1 percent.

achievement of American Jewish men.<sup>2</sup> It thus provides insights as to the determinants of success in the American labor market in the antebellum period among free men in general, with a focus on the relative attainment of American Jews, a small but growing minority group. It also offers a methodological advance by applying the distinctive surname technique for identifying men with a higher probability of being Jewish. This methodology can be applied to other racial, ethnic, and religious minority groups in the American population and in other times and places.

In this paper the statistical analysis of the relative occupational status of American Jewish men is focused on 1850. It thus fills a gap in the literature on the comparative occupational attainment of American Jews between the Colonial period and the 20<sup>th</sup> century. Using qualitative data from diaries, autobiographies, and public records, Marcus (1970: Chapter 27) found that Colonial American Jews had a more favorable occupational attainment than other free men, primarily working in retail and small-scale international trade, but were generally not found among the higher status merchants and plantation owners or farmers.<sup>3</sup> Using comprehensive

<sup>&</sup>lt;sup>2</sup> 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. Ferrie (1999: 195) concluded 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."

See also Anbinder et al. (2019) for a longitudinal analysis of Irish Famine immigrants' economic mobility in New York, which is attributed largely to favorable selectivity in who among the Irish emigrated to New York, a reliance on networks for housing and employment opportunities, and a higher savings rate even among unskilled laborers. They conclude that "their hard work and thrift, entrepreneurial skills and networking ingenuity enabled them to survive, and in many cases thrive, in New York and beyond" (Anbinder et al. 2019: 1629).

For the first systematic microdata analysis of the determinants of the occupational status of free women in the antebellum period, see Chiswick and Robinson (2023).

While these three studies included Jews in their data, they did not seek to identify Jews. <sup>3</sup> J. R. Marcus's 1970 seminal three volume *The Colonial American Jew: 1492-1776* is still the most comprehensive study of Jews in the Colonial period. Chapter 27 focuses on the occupations of Jews.

studies for the primarily Eastern European and Russian Jewish immigrants who arrived in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, and their U.S.-born descendants, Chiswick (2020) showed that they were also consistently very successful in the U.S. labor market.<sup>4</sup> The 20<sup>th</sup> century analyses indicate that the American Jews, whether native-born or foreign-born, achieved higher levels of occupational status and earnings (or income) compared to the non-Jewish White men, both overall and when other measured variables that influence labor market achievement are held constant. This was found regardless of the methodology used for identifying Jews, and across all of the decades of the 20<sup>th</sup> century.

While the industry-based studies of the achievement of American Jews in the 19<sup>th</sup> century have been very important, there is a largely century-long gap (from the Declaration of Independence in 1776 to the beginning of mass immigration in the 1880s from Eastern Europe and Russia) for the overall economic and occupational status of ordinary American Jews compared to other free men. This paper partially fills this gap by analyzing the occupational status of American Jewish men in 1850, the middle of the 19<sup>th</sup> century. It does this through the analysis of data that have only recently become available, that is, the transcription as microdata of the information recorded by the enumerators of the 1850 Census of Population.

The 1850 Census of Population of the United States has been referred to as "the first modern census" as it listed free people individually instead of by family and for the first time

<sup>&</sup>lt;sup>4</sup> B. R. Chiswick's 2020 *Jews at Work: Their Economic Progress in the American Labor Market* presents the only systematic empirical research using census and survey data on individuals (microdata) regarding the labor market status of American Jews compared to their non-Jewish counterparts for nearly every decade in the 20th century.

collected data on the social and economic characteristics of individuals.<sup>5</sup> It asked more questions of the population than any previous census, including, for the first time, the occupation of free men.<sup>6</sup> The Minnesota Population Center has released a full-count (100 percent sample) data set for the 1850 Census, which includes the string variables that are necessary for this study, specifically the surname of the respondent and a transcription of the detailed occupation reported in the Census by free men (Minnesota Population Center 2020).

By analyzing microdata on the relative economic status of American Jewish men at mid-19<sup>th</sup> century, this paper shows that on average in 1850 Jewish men had a more favorable occupational distribution (a higher occupational income score and a higher Socioeconomic Index) than other White men, both overall and when other relevant determinants of occupational status are the same. This higher status in 1850 is consistent with the greater achievement of American Jewish men observed in the previous and the following century.

\* \* \* \*

Section II presents a review of American Jewish occupational attainment compared to other free men since Colonial times. Important conclusions of this review are the relatively high achievements of American Jewish men in the 18<sup>th</sup> and 20<sup>th</sup> centuries (both overall and other variables the same) and the relative dearth of research on their overall achievement in the 19<sup>th</sup> century. Jews participated in the transformation of the American economy in this century, but there is no systematic analysis of their relative occupational attainment.

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> 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).

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 Jewish surnames, is applied here, and Section III explains how men with a higher probability of being Jewish can be distinguished from other free men. The occupational distribution of the men considered more likely to include Jews (which for simplicity are referred to here as Jewish men) is compared to all free men in Section IV. The occupational income score (OccInc) and the Duncan socio-economic index (SEI) are introduced in Section V; scores are assigned to each man based on his recorded occupation in 1850, with a higher score representing a higher occupational status.

A model is developed and estimated in Section VI using the full count microdata from the 1850 Census in which the occupational status is hypothesized to vary with demographic and skill characteristics, as well as the Jewish identifier. These hypotheses are confirmed by empirical analysis. They also demonstrate that men identified as more likely to be Jewish have a higher occupational status than other free men, both overall and when other measured variables are the same. Section VII is a summary and conclusion.

# II. American Jewish occupations: Background

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

The Jewish population of British North American in colonial times was very small. Marcus (1967: 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). Jews were never more than one-tenth of one percent of the Colonial population. They lived predominantly in the tidewater towns of New York, Philadelphia, Charleston, Savannah, and Newport, RI.

The most comprehensive analysis of the occupational attainment and distribution of Jewish men in Colonial American is to be found in Jacob R. Marcus (1970: Chapter 27), The *Colonial American Jew: 1492-1776.*<sup>7</sup> Marcus analyzes the occupational status of American Jews compared to other free men based on qualitative data derived from diaries, autobiographies, and public records. He reports that 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 – retail trade, generally as small shopkeepers, and international trade, as small-scale importers of manufactured goods and exporters of primarily products from farming, fishing, and the forests. Referring to the tidewater port 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, II: 550). Jews were not among the major merchants or plantation owners. Some Jews were engaged in craft occupations, especially those "that were sedentary in nature" (Marcus 1970, II: 537-540). There are no records of Jewish carpenters or blacksmiths, but rather they were in other crafts, such as silversmiths, chandlers, watchmakers, butchers, bakers, tailors, and furriers

<sup>&</sup>lt;sup>7</sup> For a compelling seminal analysis as to how the rabbinic requirement that fathers teach their sons how to study the Talmud (and hence to be literate) over the centuries resulted in predominantly Jewish farmers becoming predominantly literate urban workers (as compared to their non-Jewish neighbors) long before immigration to the US, see Botticini and Eckstein (2012). Guild restrictions, that varied across time and space, limited Jewish employment in certain crafts in Europe.

(Marcus 1970, II: 537). The Jewish craftsmen were small businessmen, typically with only one or two employees, apprentices, or laborers.

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. Aside from physicians and surgeons and congregational employees, there were few professionals among the Jews (Marcus 1970, II: 540). Most Jewish professionals and craftsmen were also engaged in part-time trade. Jews were also employed as translators, given their prior exposure to Dutch, Spanish, and Portuguese.

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, the Jews were predominantly middle-class shopkeepers, merchants, and, to a lesser extent, craftsmen (Marcus 1970, II: xxii).

# B. The 20<sup>th</sup> 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, the Jewish share of the US population declined to about 2 percent by the end of the 20<sup>th</sup> century, due to their relatively low birthrates and small proportion among immigrants.

The most comprehensive analysis of the economic or occupational status of American Jews over the 20<sup>th</sup> century is to be found in Chiswick (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 an 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.

To summarize the findings, the analyses across the 20<sup>th</sup> century demonstrate that, on average, Jewish men in the labor market attained higher levels of occupational status and earnings than non-Jewish white men (Chiswick 2020). Moreover, the higher attainment persists even after including statistical controls for schooling, labor market experience, and marital status, among other variables. As the US economy evolved, so too did the Jewish occupations. Jewish men who in the early decades of the 20<sup>th</sup> century were predominantly employed as operatives, craft workers, and shopkeepers/sales clerks, by the end of the 20<sup>th</sup> century were predominantly in the professional and technical occupations, and this transition over the course of the 20<sup>th</sup> century was faster than among their non-Jewish counterparts. These patterns may have been facilitated by Jewish men not only making greater investments in their human capital (schooling and labor market training), but also receiving higher rates of return from this skill formation (Chiswick 1988).

C. The 19<sup>th</sup> century: Industry-specific studies

With little immigration overall and of Jews to the United States from the end of the colonial period until the 1830s and 1840s, the colonial-era Jews were the predominant ancestors of the native-born Jews in the US in 1850. In part due to immigration, the Jewish population increased rapidly in the two decades prior to 1850, from an estimated approximately 5,000 in 1830 to between 50,000 and 100,000 by 1850 (Table 2). The immigrants arrived in the US at a time when the country was at the start of its transition from an agrarian economy to one more oriented to the manufacturing of goods.

We know of no comprehensive quantitative study of the labor market success of Jewish men compared to other white men that covers the 19<sup>th</sup> century or even a particular point in that period. There are, however, several studies of Jews, sometimes in comparison to others, that focus on particular industries in the economy, such as peddling, merchant lenders, and the garment industry. Although these studies of the 19<sup>th</sup> century 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 occupational status compared to that of others. They do not provide a broad "history of Jewish working life."

# (a) On-the-road peddling

In the predominantly rural society of nineteenth century America, in which the majority of the population was dispersed around the countryside, scattered with small market towns, peddlers were a common source of retail trade, such that they have earned a place in popular culture.<sup>8</sup> On-the-road peddlers traversed the countryside with their wares on their backs, or with packhorses, or with wagons to sell household goods and minor "luxuries" primarily to rural farm families, as described in the engaging qualitative history *Roads Taken* (2015) by Hasia Diner. Their customers were typically the housewives from poor, often marginalized, families (poor farmers, immigrants, Native Americans, slaves, or former slaves). The Jewish peddlers were themselves typically marginalized people: young, unmarried, recent immigrant, Germanspeaking 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.

Among the Jewish peddlers in the 19<sup>th</sup> 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 Indian-made products, including artifacts and handicrafts. Among the latter were the "Indian curios," that is, 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).

Few remained as peddlers for long. Uselding (1975: 62-63) comments that: "especially in the case of Jewish immigrants from Germany, peddling was a 'start in life' and a means of acquiring sufficient capital to move upward in the mercantile world..." Peddling served "as a training ground for entrepreneurs, especially those in mercantile pursuits..." and "for those whose careers were to move along other than strictly mercantile lines." Diner (2015) also

<sup>&</sup>lt;sup>8</sup> A Jewish on-the-road peddler was the protagonist in John Reese's western novel, *Sure Shot Shapiro* (1968). "Sure Shot" (every westerner needed a nickname) was a peddler in the wild west, who received his supplies from his merchant brother in St. Louis who also supplied other peddlers, who in turn received his imported goods from a third brother in New York who was a prosperous importer-exporter.

emphasizes that on-the-road peddling was a short-term occupation for Jewish immigrants. After a few years, the Jewish peddlers 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 magnates (Diner 2015). Some 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.

Peddling was a physically difficult and lonely occupation. Long separation from family and community were only part of the problem. Regarding Jewish peddlers in the 1840s and 1850s, Friedman (1954: 4) wrote: "Peddling was a hard life and only too often fraught with danger and failure." Goodman (1951: 81-111) reports on the frustrations of a German Jewish peddler in the antebellum period. Diner (2015: 73-78) comments that although Jewish women were seldom on-the-road peddlers, they did play an important role in the peddling industry. They minded the family-operated store when their husbands were peddling or went to larger cities to buy goods to re-supply the store. Moreover, at home they repaired items, including clothing, that was then resold. They also often ran formal or informal boarding houses for itinerant peddlers.

The Jewish peddlers were not at the bottom of the socioeconomic ladder, although they might appear to be, because they were investing in skills, including English language and American culture knowledge, and acquiring resources needed to advance economically in their new country.<sup>9</sup> An emphasis throughout Diner's (2015) study is on the upward economic and

<sup>&</sup>lt;sup>9</sup> Some peddlers of diverse origins did very well financially. See, for example, Anbinder, et al. (2022) on successful Irish immigrants in New York.

social advancement of those who started out as Jewish peddlers in the US, and the other countries in which they settled. Jewish on-the-road peddling was a new immigrant transition phase, as is illustrated through the many industry studies of 19<sup>th</sup> century American Jews that describe the role of peddling in their subsequent success.

#### (b) The cotton economy

While the cotton economy may seem synonymous with slave culture and wealthy, white Southern society, it was also the setting of one of the early forms of American Jewish entrepreneurship, a quality which has contributed to the economic success of American Jews through the 20<sup>th</sup> century. One notable study of the evolution of nineteenth century Jewish peddlers into settled merchants is Michael Cohen's *Cotton Capitalism: American Jewish Entrepreneurship in the Reconstruction Era* (2017).<sup>10</sup> Along the Mississippi River and its tributaries in Louisiana and Mississippi, in the antebellum period, Jewish peddlers started setting up small shops, primarily selling dry goods, seeds, and farm equipment in rural areas and small towns. As cash was scarce, they would sell to neighboring farmers on credit, with repayment made after the harvest, often in the form of bales of cotton. These merchants would buy their supplies from wholesalers, often also Jewish, on credit, to be repaid when they received payments from the farmers. This evolved into an efficient exchange system based on credit.

Because Jews faced discrimination in access to the more formal credit markets, Jewish merchants relied on networks of Jewish relatives, friends, and partners for this revolving credit system to function efficiently (Cohen 2017). These networks, based on mutual trust and personal relationships, provided private information about credit-worthiness, thereby reducing the risks of

<sup>&</sup>lt;sup>10</sup> For another study of Jews evolving from peddlers to entrepreneurs in the South, see Vecchio (2024).

extending credit. These networks also served as informal insurance systems against adverse business circumstances.

As a result, these merchants became active in both local finance and the cotton market as they increasingly served as middlemen in the cotton trade. The latter was facilitated by their mercantile contacts, which provided them with information on the fluctuating market price of cotton. This system, which started in the antebellum period, grew in the postbellum era for about two decades, after which it declined because of increased efficiency in credit markets and information networks and the decline in the price of cotton.

#### (c) The garment industry

Another important industry for nineteenth century Jews was the garment industry. Jews were heavily involved in the industry, from collecting, patching, repairing, and reselling of rags and other discarded fabrics in the early 19<sup>th</sup> century to the modern industrial production, distribution and selling of garments in the late nineteenth century. This is studied in Adam D. Mendelsohn's *The Rag Race* (2015), a historical analysis of the production of clothing primarily in New York and London, two major cities of Jewish life and the garment industry.<sup>11</sup>

The Civil War had a profound effect on Jewish participation in the garment industry (Mendelsohn 2015: Chapter 7). The sudden onset of the war resulted in a sharp increased demand for ready-made military uniforms. Jews, among others, expanded the production of ready-to-wear clothes with the contracts they won to manufacture military uniforms for both sides during the Civil War. Mendelsohn (2015: 182) writes that "...the most significant legacy

<sup>&</sup>lt;sup>11</sup> See also Godley (2001) on Jewish entrepreneurs in the garment industry in New York and London in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

of the war for Jews was in the dramatic broadening of Jewish production of ready-made clothing" for the military. Prior to the Civil War, the ready-made clothing industry was small and dominated by non-Jewish firms, but by the war's end, "Jews found themselves in a commanding position in several key sectors of the garment industry. Without the Civil War the ready-made clothing industry might have remained the preserve of non-Jewish firms" (Mendelsohn 2015: 182).

In the late 19<sup>th</sup> and early 20<sup>th</sup> 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 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.

#### (d) Jewish entrepreneurs

The sectors that Jews entered as entrepreneurs in the 19<sup>th</sup> century had several common traits.<sup>12</sup> They were heavily focused, at least in their origins, on retail trade. There were low capital requirements for entry. There were few, if any, "economies of scale" so that small firms could thrive. There was little government regulation to inhibit or limit Jewish entry. As a result,

<sup>&</sup>lt;sup>12</sup> In her edited conference volume, Kobrin (2012: 83) wrote: "[w]e know far too little on the spatial and occupational niches that served as the launching pads for immigrant Jews in the American economy at the turn of the twentieth century..."

entry of new firms in niche activities was easy, as was reentry after initial and subsequent business failures. There was little or no social esteem associated with these industries, which did not deter the already socially marginalized Jewish entrepreneurs. As a result, there was less interest in entering these sectors on the part of the better capital-endowed, socially secure segments of society.

#### III. Identifying "Jews" in the 1850 Census

The first requirement for an analysis of the occupational achievements of American Jewish men using census data is the identification of Jews. The US decennial census has never included a question on a respondent's religion.<sup>13</sup> 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 19<sup>th</sup> or early 20<sup>th</sup> centuries), or has a distinctive Jewish surname. There was no question on languages spoken or known by the respondent in the 1850 Census, nor was there a question on ethnicity or ancestry. There was 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. There were few recorded immigrants to the US in these decades from Eastern Europe, Russia, or other areas (Table 1).

(a) Antebellum rabbis and Jewish Union army veteran surnames

<sup>&</sup>lt;sup>13</sup> One exception 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: 22).

For this study, variants of the distinctive Jewish name technique are used.<sup>14</sup> 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 list of Jewish surnames will be labelled as "Antebellum Jewish Surnames" (AJS Jews). These are men in the 1850 Census with surnames that are the same as men identified as Jews in mid-19<sup>th</sup> century records.

The AJS list comes from two sources. One is the 1850 Census occupational string data, which list 32 men as having the occupation of rabbi or Jewish minister or some variant of those terms, while a 33<sup>rd</sup> is listed as a "Jew trader" (see Appendix A, available from the authors by request). A second source for mid-19<sup>th</sup> century Jewish surnames comes from Union Civil War Veteran pension files. These are the surnames of Union Army veterans from the list of individuals who were likely Jewish (based on reported religion or whether they were married by a rabbi or in a synagogue) in the Union Army veteran data (Fogel 2000).<sup>15</sup> Note that the Jewish Union Army veterans would have been from the Northern states and had predominantly German (Ashkenazic) surnames, yet about one-fifth of the Jewish population in 1850 lived in the Southern states and would not have become Union Army veterans (Rosen 2012: 6).<sup>16</sup> Moreover,

<sup>&</sup>lt;sup>14</sup> For a discussion of the pros and cons of the distinctive Jewish name technique, see Hartman and Sheskin (2013).

<sup>&</sup>lt;sup>15</sup> Some of the men married by a rabbi or in a synagogue may not themselves have been Jewish but married a Jewish woman.

<sup>&</sup>lt;sup>16</sup> Of the 37 Jewish "churches" identified in 1850, 8 (22 percent) were located in the South (De Bow 1854, Table 137: 134).

these were the surnames of men who served in the military over a decade after the 1850 Census.<sup>17</sup>

Roudiez (pers. comm., April 22, 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 a few Anglo-Saxon surnames were included on the list of Jews in the Union Army data, for this paper individuals with these surnames, which would have been far 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: 102) wrote that to avoid antisemitism some Jews Americanized their name at enlistment, and 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.<sup>18</sup>

The surnames of antebellum rabbis and Jewish Union Army veterans included in this study are referred to here as Antebellum Jewish Surnames (AJS Jews) and are reported in the Appendix, Table A-1.

<sup>&</sup>lt;sup>17</sup> Mendelsohn (2022: 45-69) implies that the less successful among the Northern Jews were more likely to join the Union army, attracted, in part, by signing bonuses.

<sup>&</sup>lt;sup>18</sup> There is nobody enumerated as Simon Guggenheimer in the string data for the full 1850 Census data.

(b) 20<sup>th</sup> century Jewish surnames

Another Jewish identifier, to be referred to as Distinctive Jewish Names (DJN Jews) are names from a late 20<sup>th</sup> century 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 Chiswick 2020: 175, Hartman and Sheskin 2013, Kohs and Blumenthal 1942, and Sheskin 1998). The "DJN Jews" surnames are reported in the Appendix, Table A-1.

While there is some overlap in the list of surnames of AJS Jews and DJN Jews, the overlap is far from complete (Table A-1). The surnames on both lists are Cohen, Jacobs, Kohn, Levin, and Rosenthal, three of which relate to ancient Jewish religious functions. Those on the joint list would have an even higher probability of being Jewish. In the full count 1850 census, for the observations used in the statistical analysis, there are 14,529 AJS Jews and 7,013 DJN Jews, with 2,954 men whose name appeared on both lists.<sup>19</sup> In the statistical analysis three Jewish groups are considered: those only on the AJS list, those only on the DJN list, and those on both lists.

# (c) Biases in using Distinctive Jewish Names

The objective of this study is not to estimate the number of Jews, but to ascertain the occupational status of men with a higher probability of being Jewish compared to others. It is

<sup>&</sup>lt;sup>19</sup> Approximately 0.27 percent of free men age 16-60 with an occupation are categorized as only AJS Jews, 0.13 percent as only DJN Jews, 0.06 percent as both DJN and AJS Jews, and 0.35 percent as either DJN or AJS or both (that is, Jewish men, for the purposes of this study).

important to acknowledge two types of errors in the procedure used here. One is that Jews with surnames not on these lists are not identified as Jews. The majority of Jews in the US at that time (or even currently) may therefore be missed. Yet, there is no statistical bias in our findings on the relative occupational status among Jews if the demographic and occupational characteristics of Jews are independent of their surname.

Some mid-19<sup>th</sup> century Jews may have Americanized their surnames to enhance their economic and social positions. By relying on distinctive Jewish names, this practice would tend to decrease apparent Jewish achievement. However, in her study of Jewish name changing, Fermaglich (2018: 184) indicates that it was more common in the 20<sup>th</sup> century than earlier and writes: "Name changing was an important part of class mobility in the mid-20<sup>th</sup> 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."

Including unidentified Jews among the non-Jews would tend to lower the measured difference if the Jews are more successful. 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 underestimate of the Jewish success would be even greater if Jews who are not identified as such because of adopting non-Jewish names are more successful in the labor market than identified Jews because name-changers are subject to less discrimination.<sup>20</sup>

The second potential bias is including among Jews the non-Jews who have a surname on the "Jewish" lists. Again, let us assume that among non-Jews there is no relation between surname and economic and occupational status. If that is the case, then our procedure would

<sup>&</sup>lt;sup>20</sup> Fermaglich (2018) reports that most changes in surnames among Jews did not occur at immigration or ports of entry, but some time thereafter.

again tend to decrease any differences observed between men identified as Jews and not Jewish by including some who are not Jewish among those identified as Jews.

Both types of errors indicate that the measured difference in occupational status between Jews and others would be smaller than the true but, of course, unknown difference. Recall, however, that the objective is not identifying particular individuals in the 1850 Census who are either Jewish or non-Jewish. Rather, we are identifying a group that has a higher probability of including Jews and comparing that to a group with a lower probability of including Jews.

#### (d) Geographic distribution of American Jews

Emphasizing the wide geographic distribution of the Jewish population of the United States in the mid-19<sup>th</sup> century, Sarna (2004: 69-70) wrote that the Jews spread out across the country, as did other immigrants. The mid-19<sup>th</sup> century Jews did not confine themselves to port cities as they did in Colonial times or to concentrate in enclaves in industrial and commercial centers in the Northeast (especially New York City) and the Midwest as did late 19<sup>th</sup> century and early 20<sup>th</sup> century Jewish immigrants. Perhaps the greatest geographic dispersion of American Jews was during the middle of the 19<sup>th</sup> century.

In an article entitled "Jewish Confederates," Rosen (2012: 6) 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."

The wide regional distribution of Jews is also 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 1854, Table 137: 134).

IV. The occupational distribution of free men in 1850

#### (a) 1850 Census of Population

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, statistical portraits of the population were published by De Bow in 1853 and 1854, including tables on the occupational distribution of free men. De Bow (1854, Chapter IV, Tables 129-132: 125-129) reports from the 1850 Census data "the particular employments of each white and free colored male over fifteen years of age..., where the person follows several occupations, the principal one" (De Bow 1854: 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).

#### (b) Jewish and non-Jewish differences

The occupational distribution of Jewish and all free men in the full count Public Use Microdata Sample (PUMS) from the 1850 Census of Population is reported in Table 3 for the ten major occupational categories. The Jewish immigrants to the US in this period were not originally from high socio-economic status groups. As Diner (2004: 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." Sarna (2004: 64) makes the same point, that "the great majority of Jews who immigrated to the United States [in the decades prior to the 1850 Census were mostly] lower middle-class Jews stymied on the road to economic advancement" (Sarna 2004: 64). In spite of that, it will be shown that American Jews in 1850 had a higher occupational status or attainment than other free men in America.

Based on occupations classified into 10 broad categories, there is relatively little difference in the distribution between men with identified Jewish surnames and all free men (Table 3). Among all of the free men, nearly half (48 percent) worked in farming (owners, tenants, managers, and laborers) and another 14 percent were non-farm laborers; while among men identified as having Jewish surnames, 43 percent were in farming occupations and 13 percent were non-farm laborers (Table 3). On the other hand, although professionals (PTK) were relatively rare, Jews were about as likely to be in professional occupations (3.1 percent compared to 2.8 percent). The most common occupations of the 572 professionals in the Jewish sample were: teachers (19 percent), physicians and surgeons (26 percent), and lawyers and judges (15 percent).<sup>21</sup>

At 3.8 percent, Jews were more likely to be in sales occupations (which includes peddlers and hucksters), in contrast to 2.2 percent among all free men. Although among non-Jews peddlers were more numerous, the detailed occupational string data indicates a higher proportion

<sup>&</sup>lt;sup>21</sup> There were also 0.3 percent (12 men) reported as daguerreotypers (photographers). Diner (2015: 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 then set up photographic studios in town.

of the Jewish men, 1.1 percent, were reported as peddlers, hucksters, or related occupational descriptions, than was the situation among non-Jewish free men (0.2 percent). Jews were also more likely to be working as managers – a category that included merchants – (7.0 percent compared to 4.8 percent), but were as likely to be in the less-skilled operative jobs (about 10.6 percent for both groups).<sup>22</sup> Jewish men were also slightly more likely to be employed in craft occupations (18.1 percent compared to 16.5 percent), although among that group they were less likely to be carpenters (23.2 percent Jewish versus 25.9 percent) and much more likely to be tailors (10.5 percent Jewish versus 6.4 percent), a more sedentary occupation. Note that these patterns in the broad occupational distribution between Jews and all free men are similar to those found in the colonial period which ended three-quarters of a century earlier (see Section II A, above).

In her study of Jewish peddlers in the 19<sup>th</sup> 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 (including the English language and knowledge of American customer preferences) 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 undercounted 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. Moreover, some merchants with stores would leave them in the care of their wives while they went on the road peddling (Diner 2015: 73-78).

<sup>&</sup>lt;sup>22</sup> 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: 129).

To the extent possible, census enumerators made efforts to include on-the-road peddlers in their counts. They were instructed to include individuals who were temporarily absent (either for a short time or on a more protracted journey) from the household. Further, enumerators were directed to make inquiries at all stores, shops, eating houses, and other similar places to take note of individuals who might otherwise not be enumerated (U.S. Bureau of the Census 2002: 10). The diligence with which they implemented these directions is, of course, unknown. Yet, peddling was one of the more enumerated occupations, being in the top 16 percent of occupations with 10,669 free men reporting peddling as their occupation in 1850 across 35 of the 36 states and territories (De Bow 1853, Appendix, Table L: lxxiv; De Bow 1854, Table 129: 126-128). It is not known how many were on-the road peddlers in contrast to more stationary peddlers. Note that in the full count microdata there are 12,372 free men reported as hucksters and peddlers (1.4 percent of whom are identified as likely Jewish, far greater than the proportion of Jews in the population).

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 workers – i.e., professional, manager, sales, and craft occupations (32 percent of employment among Jews versus 27 percent for all men), in contrast to clerical, operative, and laborer jobs.

The occupational data on Jews can be separated into the sources for identifying those with a higher probability of being Jewish. The DJN Jews were more likely than the AJS Jews to be managers, sales, and craft workers and less likely to be farmers or non-farm laborers, but, except for farmers, these differences are relatively small (Table 3).

V. Quantitative measures of occupational status

The ten occupational categories in Table 3 are useful for an overview analysis, but much important information is lost by ignoring detailed occupational variations within each of these broad categories. The 1850 Census microdata file used in this study identifies 225 detailed occupations based on the 1950 Census Bureau occupational classification system. An analysis conducted for hundreds of detailed occupations is not feasible unless the categorical variable is converted into a quantitative measure. It will be shown below that, when this is done, those identified as Jews have a statistically significant higher occupational status, both overall and when holding constant other measured variables that determine occupational status. This holds for each of the subgroups for identifying Jews (AJS and DJN). Moreover, there are no statistically significant differences in occupational status among the Jewish identifiers.

There are many potential 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; Inwood, Minns, and Summerfield 2019; Saavedra and Twinam 2020; Warren, Sheridan, and Hauser 1998). To avoid an arbitrary selection of an index and to increase comparability with other studies, we employ two widely recognized long standing measures that the Minnesota Population Center attached to the data file. These are the Occupational Income Score (OccInc) and the Duncan Socioeconomic Index (SEI).<sup>23</sup>

For discussions of the pros and cons of using the occupational income scores, see, especially Inwood, Minns, and Summerfield (2019) and Saavedra and Twinam (2020). The latter indicates that occupational income scores based on median incomes in 1950 have been

<sup>&</sup>lt;sup>23</sup> Chiswick (2020) used the Duncan SEI in studies of Jewish labor market attainment in the early 20<sup>th</sup> century before the Census began reporting data on earnings or income.

widely used in top social science journals studying labor market outcomes as far back as 1850 and discusses that the biases in doing so can be reduced by adjusting occupational income scores for demographic and geographic variables. This is done in the regression analysis in this paper through statistical controls for demographic characteristics, and urban/rural and South/non-South residence.<sup>24</sup>

The OccInc is an occupational standing variable based on each man's recorded occupation, as classified by the IPUMS team into the 1950 occupational classification scheme. The Occupational Income Score indicates "the median total income – in hundreds of dollars – for persons in each occupation in 1950 with positive income...calculated using data from a published 1950 census report" (IPUMS-USA n.d., b). The IPUMS User Guide describes occupations with high scores as "well-rewarded and probably high-status" occupations, but notes that it is an *economic* measure, not a *socio-economic* measure.

The SEI variable is also constructed using the individual responses for occupation data. The Minnesota Population Center assigned a Duncan SEI score to each occupation using the 1950 occupational classification scheme (Duncan 1961; IPUMS-USA, n.d., b). It is a measure of occupational standing based on the relation between the occupational prestige ratings of the 1947 National Opinion Research Study Center survey and the income level and educational attainment (years of schooling) associated with each occupation in 1950. SEI is, therefore, a socio-economic indicator unlike OccInc.

<sup>&</sup>lt;sup>24</sup> This tends to be standard practice in the literature, although Saavedra and Twinam (2020) show that the bias is reduced when the dependent variable index is reconstructed to take into account these characteristics.

Both measures are described in the Appendix, which includes a comparison of the OccInc and SEI scores for various detailed occupations in each broad occupational category, in addition to a panel that emphasizes occupations that score high on one measure but low on the other (Table A-2). Overall, there is a high degree of correlation between the two measures of occupational status.

There are, however, limitations to both measures. They are based on relative income levels (and, for SEI, also educational levels) for 1950, one hundred years after the 1850 Census. To the extent that relative occupational positions have changed over the century, the two measures would be biased. However, Saavedra and Twinam (2020) report that median earnings within an occupation are highly correlated over time, although the correlation decreases the longer the gap in time.

Moreover, the two measures cannot account for income differences among individuals within the narrowly defined occupations.<sup>25</sup> It cannot be determined whether those identified as Jews have a higher or lower mean level of income in 1850 within the detailed occupations. Furthermore, it cannot be determined whether in 1850 there is a systematic pattern in the relative intra-occupational mean income of Jews compared to others.

It is not clear what biases, if any, these limitations introduce into the analyses of Jewish/non-Jewish occupational status. We use these two measures because of an interest in occupational status and in the absence of direct information on the income or earnings data for individuals in 1850.

<sup>&</sup>lt;sup>25</sup> Both Inwood, Minns, and Summerfield (2019) and Saavedra and Twinam (2020) emphasize this point.

# VI. Multiple regression analyses

Table 4 reports the means (and standard deviations in parentheses) of the dependent variables, the OccInc and SEI scores, for all free men and Jewish men age 16 to 60 with a reported occupation. The men with Jewish surnames have higher occupational scores than other men. The OccInc score for the DJN Jews and AJS Jews were 21.8 and 21.0, respectively, compared to 20.3 for all free men. An OccInc score of 22 is equivalent to occupations such as bookkeepers and coachmen, while a score of 20 is equivalent to laborers (n.e.c.), shoe repairmen, and landlord or building superintendents (see Appendix A, Table A-2). Similarly, the mean SEI scores for DJN and AJS Jews are 22.6 and 21.2, respectively, compared to 19.7 for all men. The ranking by occupational scores appears to be DJN Jews, AJS Jews, and then all free men, although the differences are small.<sup>26</sup>

The standard deviations of the occupational measures are greater for the Jews than for all free men (Table 4). This may be due, in part, to the inclusion of unidentified non-Jews among those in what we label as the Jewish group or the greater share of immigrants in the Jewish population.

		Jews	Non-Jews	t-test
OccInc	Mean	21.2	20.3	12.0
	S.D.	10.3	9.8	
SEI	Mean	21.5	19.7	13.9
	S.D.	18.6	17.0	
Sample Size		18,588	5,346,744	

<sup>26</sup> The differences between Jews and non-Jews in the OccInc and SEI scores are statistically significant:

Source: 1850 Census of Population (2020)

Due to the positive skewness in the occupational standing scores, the natural logarithms of these scores are used as the dependent variables in the regression analysis.<sup>27</sup> The means and standard deviations of the logs of the outcome variables are reported in Table 4.

In general, the means of most of the explanatory variables differ little between Jews and all free men (Table 4). They are very similar in mean age (31.8 years for all men), proportion illiterate (cannot read or write in any language, 7 percent), proportion living in the South (30 percent), inferred family structure (married spouse present, 53 percent, and number of children, 1.6 (IPUMS-USA n.d., a)), and proportion non-white (2 percent). The Jews were less likely to live in rural areas (78 percent compared to 82 percent), but are more likely to be foreign born (25 percent compared to 19 percent).<sup>28</sup> There is no direct information on when the foreign born came to the US, but the data in Table 1 on immigration to the US in the three decades prior to 1850 suggests that immigrants in general were fairly recent arrivals.

Table 5 reports the multiple regression analysis with the natural logarithm of the occupational income score (LnOccInc) as the dependent variable for all free men with Jewish identifiers as dichotomous variables (Columns 1 and 2) and for only the Jewish sample (Column 3).<sup>29</sup>

<sup>&</sup>lt;sup>27</sup> Using the log form of the dependent variables results in regression residuals that are closer to being normally distributed and homoscedastic, desired properties for a regression analysis. Saavedra and Twinam (2020) report that the majority of studies using the occupational income score as the dependent variable use the log of the variable.

<sup>&</sup>lt;sup>28</sup> Among the men identified as Jewish immigrants, nearly half were born in Germany, in contrast to only one-quarter among the non-Jewish immigrants.

<sup>&</sup>lt;sup>29</sup> The regression equations for the Socioeconomic Index (SEI) are reported in Appendix A, Table A-3.

Among all men and Jewish men, the OccInc increases with age (but at a decreasing rate as age increases, with a peak at about age 43), is significantly higher for those currently married, and is significantly lower for the illiterate, the foreign-born, the non-whites, among those with more children, and those living in rural areas. The regression coefficients are very similar in the all men and the Jewish men equations, although there is a larger partial effect of being married and being native-born among the Jewish sample.

Except for living in the south, the signs of the effects for all men and for Jewish men are the same as what is found in 20<sup>th</sup> century analyses (Chiswick 2020). Living in the South has a positive effect on a man's OccInc for all free men in 1850, and an even larger positive effect for Jews. The likely explanation for the higher scores in the South among free men is that the lowest skilled jobs in the South in 1850 were performed by enslaved people. <sup>30</sup> Partly for this reason, new immigrants tended to avoid the Southern states. While 11.5 percent of the total White population of the US in 1850 were foreign born, <sup>31</sup> 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 XL: 61). Among White men age 16 to 60 in the 1850 Census full count data, the proportion foreign born was 10 percent in the South and 22 percent in the rest of the country, while the proportions were 17 percent and 28 percent, respectively, among the Jews.

<sup>&</sup>lt;sup>30</sup> For an analysis of the substitution between free and enslaved persons in household work in the antebellum South, see Chiswick and Robinson (2023).

<sup>&</sup>lt;sup>31</sup> This statistic – from the official Census Report released in 1854 – includes White women and children, a smaller proportion of whom were foreign born than among White men (De Bow 1854, Table XL: 61). In the full count microdata, 18.8 percent of White men age 16-60 were foreign born.

The significant negative effect of the number of children in the household on the father's OccInc should not be interpreted as children causing a decline in their father's occupational income score. Rather, it is likely the consequence of the children of lower occupational income fathers being more likely to begin working – and contributing financially to the household – at a younger age, thereby inducing the parents to have more children (Becker and Lewis 1973). <sup>32</sup> Although the 1850 Census did not inquire into work activities of those under age 15, child labor was common at that time among farming and lower income non-farm families (see Craig 1993; Schuman 2017; and, Whaples 2005).

Other measured variables the same, the coefficient on the Jewish identifer is positive and statistically significant (coefficient 0.013, t=6.3) (Table 5, Column 1). The observed difference of 0.037 log points is reduced to 0.013 log points when the other variables are held constant. Thus, the control variables explain about two-thirds of the observed difference, but a statistically significant positive difference persists. <sup>33</sup> The magnitude of the effect of being in the Jewish group on the occupational income score, other variables the same, is larger than the positive effect of being married and about two-thirds of the size of the positive effect of living in the South.

<sup>&</sup>lt;sup>32</sup> Another interpretation is that men who start fatherhood at a younger age are more likely to have had more children and less likely to have invested in occupational trainings, and therefore have lower skilled jobs. For an analysis of the negative effect of owning enslaved children who would provide labor services on the fertility of their White slaveholding families, see Wanamaker (2014).

<sup>&</sup>lt;sup>33</sup> In a preliminary test of the methodology used in this paper, Chiswick (2020, Chapter 2) analyses the occupational status (using the socioeconomic index) of Jewish men compared to non-Jewish men in the one-in-a-hundred sample of the 1860 Census. Although the sample size of men with a higher probability of being Jewish is much smaller in a 1/100 sample, overall and other variables the same, the Jews have a higher socioeconomic index. The patterns found for 1850 mirror those found for 1860.

This arises in spite of the methodology for identifying Jews that is expected to underestimate the Jewish/non-Jewish differences in occupational status. Moreover, the greater than average economic attainment of American Jewish men in 1850 is consistent with findings from the 18<sup>th</sup> and 20<sup>th</sup> 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 three groups – the surname is only on the DJN list, only on the AJS list, and the name appears on both lists – all three Jewish identifiers have a significantly higher occupational status than other free men (Table 5, Column 2). In the analysis limited to Jews (Table 5, Column 3), with DJN only Jews as the benchmark, the coefficients on the other two Jewish identifiers are very small and are not statistically significant. Thus, each of the Jewish groups has a higher occupational status than free non-Jewish men, other variables the same, but there are no significant differences among the three Jewish categories.

The other measure of occupational status, the Duncan Socio-economic Index (SEI) can also be used as the dependent variable in the regression analysis, also in logarithm form (Appendix Table A-3). When this is done, the signs and statistical significance of the explanatory variables are the same as in the Occupational Income Score analysis (compare Table A-3 and Table 5). The Jewish variable shows a highly statistically significant (t=11.6) positive effect on occupational status, and when split into three components, each has a highly significant positive effect compared to the benchmark, free men who do not have a Jewish surname (Table A-3, Columns 1 and 2).

When the SEI analysis is limited to Jews, however, the surnames for the AJS-Only Jews have an SEI significantly lower than the DJN-Only Jews (Table A-3, Column 3). This suggests that the DJN Jews in 1850 appear to be more likely to be in occupations that (a century later,

when the Index was constructed) were associated with a higher level of educational attainment or prestige than those on the AJS list, and hence a higher SEI score. The AJS-Only list is largely derived from the list of names of Jewish Union Army veterans. This finding is, therefore, consistent with Mendelsohn's (2022: 45-69) finding that among the Northern Jewish men the Civil War soldiers were disproportionately drawn from wage workers and those in marginal occupations, while proprietors and entrepreneurs were under-represented in the Union Army. Even among Jewish merchants, Mendelsohn finds that the less successful were more likely to volunteer for the army, attracted in part by the signing bonuses. Otherwise, the analyses show identical results for the two measures of occupational attainment.

In summary, the regression analysis indicates that, for both measures of occupational attainment, both overall and even after controlling for other variables that determine a free man's occupational status, mid-19<sup>th</sup> century men with a Jewish surname have a higher occupational status than other free men. There was little difference among Jews by the surname list used to identify them.

#### VII. Summary and conclusions

This paper extends back in time to 1850 the findings from 20<sup>th</sup>-century microdata analyses that American Jewish men had a higher labor market 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 occupations of free males, and this paper is the first systematic nationwide analysis of microdata from the full count of the 1850 Census of Population to study the occupational status of free American men. It is also the first to use microdata to study the occupations in 1850 of American Jews compared to other free men. In the absence of other data, Jewish men are identified using independent lists of Jewish surnames, one modern and the other based on the surnames of rabbis in the 1850 Census and Jewish Civil War veterans of the Union Army.

American Jews in 1850 comprised about two in every thousand (0.2 percent) of the US population, with a geographic distribution in the U.S. that was wider than either the colonial-era Jews or the later 20<sup>th</sup>-century Eastern European and Russian Jews.

By major occupational category in 1850, men identified as having a higher probability of being Jewish were more likely than other free men to be working as managers, salesmen (including as peddlers), and craftsmen, and less likely as laborers and farmers, the primary occupation in the economy. The Occupational Income Score (OccInc) is applied to the census' detailed occupation data (225 occupations) to yield a quantitative measure of occupational status. These scores are found to be higher for free American men who are older, literate, married, White, native born, Southern, urban and with fewer children. These determinants, however, explain only part of the observed higher occupational attainment scores of men with Jewish surnames compared other free men; overall and other variables the same, Jews have a statistically significant higher occupational status. The magnitude of this effect, when other variables are the same, is larger than the positive effect of being married. Yet, there are no significant differences in the occupational income scores depending on which of the techniques are used to identify those men with a higher probability of being Jewish. Similar patterns are found when the Duncan Socioeconomic Index (SEI) is used as the measure of labor market attainment. The data do not permit an analysis of intra-occupational income differences, so it cannot be determined whether within the detailed occupational categories Jews had higher or lower average incomes than other free men in 1850.

Much attention is given in the literature on Jewish occupations in the mid-19<sup>th</sup> century to on-the-road peddlers. Jewish men were more likely to report being in peddler, huckster, and related occupations than other free men in the 1850 Census. This was an important, but temporary, activity for young, low-skilled, immigrant Jewish men from Central Europe to acquire some financial assets, English-language proficiency, and knowledge of the needs and preferences of their American customers. Being an on-the-road peddler was not a permanent or long-term occupation; it was a start-up or transitional activity. They are not as numerous in the data because they fairly quickly moved up to being store owners, non-peddler salesmen, repairmen, and manufacturers of the items that they had previously sold. The proportion of adult Jewish men who ever worked as peddlers at some point in their life history would be far greater than the proportion of those working as peddlers at any given point in time.

Note that American Jewish men in 1850, as was the case in the colonial period and in the 20<sup>th</sup> 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 countries of origin, that was responsible for their three centuries long economic success in the American economy, but something general among Jews. Their choice of occupations and their success in them was presumably not random, but rather a consequence of their culture and historic experiences.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> Botticini and Eckstein (2012) document that the rabbinic requirements that fathers teach their sons an occupation and how to study religious texts (Talmud and Torah in particular) resulted in a higher level of literacy among Jews. Once one is literate in one language, acquiring literacy in another language is that much easier. Chiswick (2020, Chapter 17) analyzes several alternative hypotheses as to how cultural and historical experiences contributed to male Jewish occupational and income success in the United States.

	1820-29	1830-39	1840-49
Total	128.5	538.4	1427.3
Europe	99.6	422.9	1369.4
Germany <sup>(b)</sup>	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

Admission of Permanent Resident Aliens by Country of Birth, by Decade, 1820-1849<sup>(a)</sup>

(in thousands)

Source: U.S. Department of Homeland Security, Office of Immigration Statistics 2014: Table 2.

<sup>(a)</sup> 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.

<sup>(b)</sup> German-speaking states

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	

Estimated Jewish Population of the United States, 1776-1900<sup>(a)</sup>

Source: Jewish Virtual Library n.d.

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

Occupation	All	All Jews	DJN Jews	AJS Jews
РТК	2.8	3.1	2.7	3.2
Farmers	43.4	39.0	34.6	40.0
Managers	4.8	7.0	8.9	6.3
Clerical	0.3	0.2	0.2	0.2
Sales	2.2	3.8	4.8	3.5
Craft	16.5	18.1	20.1	17.9
Operatives	10.6	10.5	11.3	10.1
Service	0.9	1.0	1.1	1.0
Farm Laborers	4.9	4.4	4.5	4.5
Non-Farm Laborers	13.6	12.9	11.8	13.2
Total	100.0	100.0	100.0	100.0
Sample Size	5,365,332	18,588	7,013	14,529

# Occupational Distribution of Free Men, Age 16 to 60, 1850 Census<sup>(a)</sup> (Percent)

Source: Minnesota Population Center (2020)

Note: 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.

<sup>(a)</sup> Free men who reported an occupation.

	A 11		Jews			
Variable	All	All	DJN	AJS		
Occupational	20.30	21.17	21.79	21.00		
Income Score	(9.878)	(10.32)	(10.25)	(10.29)		
Ln Occ Score	2.92	2.96	2.99	2.95		
	(0.395)	(0.410)	(0.416)	(0.407)		
Socio-Economic	19.74	21.47	22.58	21.16		
Index	(17.04)	(18.62)	(19.24)	(18.36)		
Ln SEI	2.76	2.82	2.86	2.81		
	(0.609)	(0.652)	(0.673)	(0.644)		
Age	31.77	31.65	31.68	31.64		
C	(11.57)	(11.36)	(11.26)	(11.40)		
Age Squared	1143.13	1130.65	1130.41	1130.91		
	(828.0)	(810.7)	(807.3)	(812.5)		
Illiterate	0.07	0.06	0.07	0.06		
	(0.255)	(0.242)	(0.252)	(0.235)		
Non-White	0.02	0.03	0.04	0.02		
	(0.140)	(0.157)	(0.199)	(0.156)		
Married	0.53	0.53	0.53	0.53		
	(0.499)	(0.499)	(0.499)	(0.499)		
Number of	1.64	1.64	1.58	1.64		
Children	(2.276)	(2.279)	(2.226)	(2.285)		
Foreign Born	0.19	0.25	0.29	0.23		
C	(0.390)	(0.434)	(0.455)	(0.420)		
Rural Farm	0.50	0.46	0.41	0.47		
	(0.500)	(0.498)	(0.492)	(0.499)		
Rural Non-Farm	0.32	0.32	0.31	0.32		
	(0.468)	(0.465)	(0.462)	(0.466)		
South	0.30	0.30	0.32	0.30		
	(0.459)	(0.460)	(0.467)	(0.457)		
Jews	0.003	1.00	1.00	1.00		
	(0.0588)	(0)	(0)	(0)		
Sample Size	5,365,332	18,588	7,013	14,529		

Means and Standard Deviations of the Variables in the Regression Analysis, 1850 Census<sup>(a)</sup>

Source: Minnesota Population Center (2020)

Note: A t-test of equality of means shows that Jews had significantly higher OccInc scores than non-Jews, t=12.0, as well as significantly higher SEI scores (t=13.9).

<sup>(a)</sup> Free men with an occupation, age 16-60. Standard deviations in parentheses.

Regression Analysis of the Logarithm of the Occupational Income Score (LnOccInc) for Free Men Age 16 to 60, 1850 Census<sup>(a)</sup>

Variable	All - 1	All-2	Jews
Age	0.0143952***	0.0143953***	0.0146580***
	(200.17)	(200.17)	(11.28)
Age Squared	-0.000170151***	$-0.000170152^{***}$	-0.000168572***
	(-177.36)	(-177.36)	(-9.70)
Illiterate	-0.0966217***	-0.0966220***	-0.0923293***
	(-198.82)	(-198.82)	(-10.14)
Non-White	-0.185325***	-0.185336***	-0.187638***
	(-210.88)	(-210.89)	(-13.34)
Married	$0.00934984^{***}$	0.00934918***	$0.0146841^{*}$
	(27.69)	(27.69)	(2.46)
Number of Children	-0.00502617***	-0.00502603***	-0.00691811***
	(-67.63)	(-67.63)	(-5.25)
Foreign Born	$-0.0889742^{***}$	-0.0889776***	$-0.0597045^{***}$
	(-264.52)	(-264.52)	(-10.59)
Rural Farm	-0.610787***	-0.610783***	-0.626624***
	(-1667.23)	(-1667.20)	(-100.19)
Rural Non-Farm	-0.0742051***	-0.0742012***	-0.0769485***
	(-200.18)	(-200.17)	(-12.38)
South	$0.0186024^{***}$	$0.0186007^{***}$	0.0347634***
	(68.74)	(68.73)	(7.32)
Jews	$0.0129615^{***}$	(b)	(b)
	(6.32)		
DJN-Only Jews	(b)	$0.0205325^{***}$	(b)
		(4.68)	
AJS-Only Jews	(b)	$0.00868942^{***}$	-0.00666802
-		(3.34)	(-1.25)
Both DJN & AJS	(b)	0.0193013***	0.00233471
Jews		(3.76)	(0.33)
Constant	3.018393***	3.018391***	3.020915***
	(2501.96)	(2501.96)	(138.00)
Sample Size	5,365,332	5,365,332	18,588
Adjusted R <sup>2</sup>	0.500	0.500	0.497

Source: Minnesota Population Center (2020)

<sup>(a)</sup> Free men with a non-zero occupational income score. t-ratios in parentheses.

<sup>(b)</sup> Variable not entered.

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Appendix A – Statistical Appendix: Definitions of Variables Used in the Regression Analysis of the 1850 Census of Population and Analysis for Socioeconomic Index (SEI)

The variables used in the statistical analyses are defined below.

Data source: 1850 Census of Population, Public Use Microdata Sample, full count free people sample, Version 7.3, IPUMS International, Minnesota Population Center (MPC), University of Minnesota, Accessed August 2, 2023.

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 Variables

Occupational Income Score (OccInc): This is a measure constructed by the Minnesota Population Center (MPC) that assigns a score to each occupation using the 1950 occupational classification scheme. According to the IPUMS codebook, OccInc assigns each occupation a value representing the median total annual income (in hundreds of 1950 dollars) of all persons with that particular occupation in 1950 (IPUMS-USA, n.d., b). That is, it provides a continuous measure of occupations according to the economic rewards enjoyed by people working at them in 1950. See Appendix Table A-2 for a list of selected occupations with their OccInc values. The range of OccInc is from a low of 3 for Newsboys to a high of 80 for Physicians and Surgeons.

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 occupation's prestige predicted from a regression of the prestige score on the annual income level and years of schooling associated with each occupation in 1950. The occupational prestige ratings are from a 1947 National Opinion Research Study. The SEI variable is constructed using the individual responses to occupation, 1950 basis, from the 1850 Census data (IPUMS-USA, n.d., b). See Appendix Table A-2 for a list of selected occupations with their SEI values. The range of the SEI is from a low of 4 for Lumbermen and Woodchoppers and Porters to a high of 96 for Dentists.

The two measures are interrelated as they both include occupational income in their construction. When the SEI is regressed on OccInc and its square, the adjusted R-square is 0.71 for all free men and 0.73 for the men in the Jewish groups.

In the regression analysis, because of the positive skewness in the OccInc and SEI distributions, the natural logarithm of these indices are the dependent variables.

### 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" 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 whether they reported an occupation. The model for predicting literacy was correct for 92.5 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.

- 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., a)
- 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 a state or territory of the United States, with all others considered foreign born. There is no question on when the foreign-born person came to the United States.
- Urban, Rural-Non-Farm, and Rural-Farm: These are dichotomous variables that distinguishes individuals living in an urban, rural farm, and rural non-farm household. The "urban" 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 rural household that contained a person with the occupation "farmer" was coded as a rural farm household.

- 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.
- AJS Jews (See Table A-1): Antebellum Jewish Surnames. This includes Union Jewish surnames and surnames with Jewish religion indicated on their occupational string variables in the 1850 full count census microdata files. It is a dichotomous variable that distinguishes individuals whose surname was included on either of those lists.

The Union Jewish surnames is 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 Author 1, Friday, April 21, 2017). The marriage records occasionally included the officiant's name and title. Although the surnames Bowers, Brown, Davis, and Newman were included on this list of Jews in the Union Army data, for this paper individuals with these Anglo surnames were not coded as part of the Union Jews variable. Surnames that were included are: Asch, Basch, Berwin, Bloomenthal, Blumenthal, Blumingthal, 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, 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.

The AJS Jews also includes surnames of individuals in the 1850 census microdata files whose occupational string data, as it was recorded by the census enumerator, listed a Jewish affiliation. This was primarily Jewish religious practitioners – rabbis, "Jewish clergymen," "Jew ministers," or some variation of the same – but also included the surname of an individual whose occupation was listed as a "Jewish trader." The surnames included are: Barrett, Carless, Casellon, Catcenbouth, Cohen, Danzinger, Davidson, Emanuel, Feine, Fnid, Gotthelf, Gunsburg, Guthien, Hockemer, Isaacs, Jacobs, Judah, Kalisck, Landrin, Leeser, Leo, Lilienthal, Lyons, Manzbacker, Michelbacker, Poppy, Pursly, Raphall, Samuelson, Strams, Strapir, Zeidlinger, and Zunder.

- DJN Jews (See Table A-1): Distinctive Jewish Names. This is a dichotomous variable that distinguishes individuals with a surname that is considered a "distinctive Jewish name" in the late 20<sup>th</sup> century 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 AJS Jews categories, regardless of their own (but unknown) religion.

Occupational Category: This variable used for Table 3 was constructed based on the occupation data, 1950 basis. The occupational categories are: 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 as a farm laborer.

# Table A-1

List of Surnames for the DJN and AJS Groups in the Regression Analysis

DJN Jews	AJS Jews
Berman (51)	Asch (3)
Caplan (4)	Barrett (2,114)
Cohen (362) *	Basch (9)
Epstein (6)	Berwin
Feldman (14)	Blumenthal (7)
Freedman (20)	Cahen (3)
Friedman (39)	Carless (10)
Goldberg (7)	Casellon
Goldman (64)	Catcenbouth
Goldstein (29)	Cohen (362) *
Goodman (1,319)	Cohn (66)
Greenberg (3)	Cowan (755)
Gross (1,046)	Cowen (523)
Grossman (60)	Danzinger (3)
Jacobs (2,423) *	Davidson (2,846)
Jaffe (2)	Dessan (2)
Kahn (64)	Dessau
Kaplan (2)	Emanuel (63)
Katz (46)	Feine (8)
Kohn (82) *	Fnid
Levin (56) *	Gotthelf
Levine (47)	Gunsburg
Levinson (9)	Guthien
Levy (354)	Hersch (18)
Lieberman (3)	Hess (1,356)
Rosen (39)	Hirch (4)
Rosenberg (58)	Hirsch (41)
Rosenthal (31) *	Hirsh (38)
Rubin (10)	Hockemer
Schwartz (296)	Hurch (2)
Siegel (12)	Hursh (67)
Silverman (24)	Isaacs (253)
Stern (255)	Jacobs (2,423) *
Weinstein (2)	Jessel (4)
Weiss (174)	Judah (47)
	Kalisck
	Koff (5)
	Kohn (82) *
	Kopf (9)
	Landrin (3)

(Number in parentheses if more than one observation)

DJN Jews	AJS Jews
	Lasalle (15)
	Leeser (14)
	Leo (69)
	Levin (59) *
	Lewin (65)
	Lilienthal (7)
	Lyons (1,840)
	Manzbacker
	Michelbacker
	Moses (767)
	Neuman (99)
	Newmann (5)
	Poppy (13)
	Pursly (8)
	Raphall (2)
	Rosenthal (31) *
	Rothschild (10)
	Samuelson (14)
	Stahl (268)
	Steinhard (2)
	Steinhart (4)
	Strams (7)
	Strapir
	Strauss (93)
	Walberg
	Zeidlinger
	Zunder

Table A-1 continued

\* Designates names that were on both lists (2,954 men) out of the 15,794 total observations

Source: Minnesota Population Center (2020)

# Table A-2

Selected Occupations				
Occupation <sup>(a)</sup>	SEI	Ln SEI	OccInc	Ln OccInc
PTK				
Physicians & Surgeons (075)	92	4.52	80	4.38
Lawyers & Judges (055)	93	4.53	62	4.13
Clergymen (009)	52	3.95	24	3.18
Farmers				
Farmers (owners & tenants) (100)	14	2.64	14	2.64
Farm laborers (wage workers) (820)	6	1.79	9	2.20
Managers				
Managers (buildings) (230)	32	3.47	20	3.00
Officers, ships (240)	54	3.99	42	3.74
Officers & Administrators (nec), Public	66	4.19	36	3.58
Administration (250)				
Postmasters (270)	60	4.09	29	3.37
Clerical				
Bank Tellers (305)	52	3.95	26	3.26
Shipping and Receiving Clerks (342)	22	3.09	26	3.26
Clerical & Kindred Workers (nec) (390)	44	3.78	25	3.22
Sales		•		
Hucksters & Peddlers (430)	8	2.08	13	2.56
Real Estate Agents (470)	62	4.13	35	3.56
Salesmen & Sales Clerks (nec) (490)	47	3.85	24	3.18
Craft		•		
Bakers (500)	22	3.09	28	3.33
Carpenters (510)	19	2.94	24	3.18
Jewelers, Watchmakers (534)	36	3.58	27	3.30
Plumbers & Pipe Fitters (574)	34	3.53	33	3.50
Shoemakers & Repairers (except factory) (582)	12	2.48	20	3.00
Tailors (590)	23	3.14	26	3.26
Operatives		•		
Sailors & Deck Hands (673)	16	2.77	23	3.24
Boatmen, Canalmen, & Lock Keepers (623)	24	3.18	30	3.40
Deliverymen & Routemen (632)	32	3.47	27	3.30
Switchmen, Railroad (681)	44	3.78	36	3.58
Furnacemen (641)	18	2.89	29	3.37
Services	-		_	
Bartenders (750)	19	2.94	25	3.22
Janitors & Sextons (770)	9	2.20	19	2.94
Policemen & Detectives (773)	39	3.66	32	3.47
Cooks (except private household) (754)	15	2.71	16	2.77

(A) Occupational Income Scores (OccInc) and Socio-Economic Index (SEI) Scores for Selected Occupations

Occupation <sup>(a)</sup>	SEI	Ln SEI	OccInc	Ln OccInc
Laborers (non-farm)				
Gardeners, except farm and groundskeepers (930)	11	2.40	17	2.83
Longshoremen & Stevedores (940)	11	2.40	25	3.22
Laborers (nec) (970)	8	2.08	20	3.00
Range:				
Highest SEI: Dentists (032)	96	4.56	63	4.14
Lowest SEI: Lumbermen, Raftsmen, &	4	1.39	12	2.48
Woodchoppers (950)				
Porters (780)			18	2.89
Highest OccInc: Physicians and Surgeons (075)	92	4.52	80	4.38
Lowest OccInc: Newsboys (460)	27	3.30	3	1.10

**Table A-2 continued** 

<sup>(a)</sup> nec means not elsewhere classified. Occupation code number in parentheses.

(B) The "Mismatching" of Scores for Selected Occupations for OccInc and SEI among White Men, Age 20 and Over, with a Reported Occupation, 1850

Occupation	OccInc	SEI	Difference
Weavers, Textiles	23	6	17
Mine Operatives and	24	10	14
Laborers			
Laborers (nec)	22	10	12
Porters	18	4	14
Teachers (nec)	27	72	-45
Pharmacists	40	82	-42
Musicians and Music	15	56	-41
Teachers			
Clergymen	24	52	-28

Notes: nec means "not elsewhere classified"

Source: Minnesota Population Center (2020)

## Table A-3

Regression Analysis of the Logarithm of the Duncan Socioeconomic Index (LnSEI) for Free Men Age 16 to 60, 1850 Census<sup>(a)</sup>

Variable	All - 1	All-2	Jews
Age	$0.0257491^{***}$	0.0257491***	0.0251530***
	(179.14)	(179.15)	(9.51)
Age Squared	-0.000294204***	-0.000294205***	-0.000277846***
	(-153.44)	(-153.44)	(-7.85)
Illiterate	-0.276244***	-0.276245***	-0.268383***
	(-284.41)	(-284.41)	(-14.49)
Non-White	-0.495913***	-0.495962***	-0.562505***
	(-282.33)	(-282.36)	(-19.64)
Married	$0.0479235^{***}$	$0.0479207^{***}$	0.0397319**
	(71.01)	(71.01)	(3.27)
Number of Children	$-0.00709020^{***}$	-0.00708957***	-0.00790004**
	(-47.73)	(-47.73)	(-2.95)
Foreign Born	-0.292931***	-0.292945***	-0.158236***
-	(-435.72)	(-435.74)	(-13.79)
Rural Farm	-0.594114***	-0.594094***	-0.653826***
	(-811.38)	(-811.35)	(-51.35)
Rural Non-Farm	-0.316249***	-0.316231***	-0.335702***
	(-426.85)	(-426.82)	(-26.54)
South	$0.0738752^{***}$	$0.0738678^{***}$	0.119452***
	(136.58)	(136.57)	(12.36)
Jews	$0.0474201^{***}$	(b)	(b)
	(11.56)		
DJN-Only Jews	(b)	$0.0794501^{***}$	(b)
		(9.07)	
AJS-Only Jews	(b)	$0.0284554^{***}$	-0.0307278**
		(5.48)	(-2.82)
Both DJN & AJS	(b)	$0.0777345^{***}$	0.0156374
Jews		(7.57)	(1.09)
Constant	$2.725877^{***}$	$2.725868^{***}$	2.782817***
	(1130.48)	(1130.48)	(62.45)
Sample Size	5,365,332	5,365,332	18,588
Adjusted R <sup>2</sup>	0.160	0.160	0.175

(a) Free men with a socio-economic status score. t-ratios in parentheses. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

(b) Variable not entered.

Source: Minnesota Population Center (2020)

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