

Effects of War After War: A Quantitative Comparison of the Economic Performance of Jewish
World War II Veterans to Non-Jewish World War II Veterans

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Abstract

Using data from the 1970 United States Census, the income and the influences on the income of Jewish World War II veterans were compared to the income and the influences on the income of non-Jewish World War II veterans. The same analyses were then performed on veterans of the Korean War and the Vietnam War and compared to World War II veterans. Additionally, a novel approach was used to quantify the effect of military service on the income of World War II veterans. Jewish World War II veterans and Jewish Korean War veterans earn a greater amount of income than non-Jewish World War II veterans and non-Jewish Korean War veterans. Military service during World War II has a small negative effect on the income of Jews and has a greater positive effect on the income of non-Jews. The influences on income differ by religion, war, and veteran status. The results are discussed within a framework of sociological theory.

1. Introduction

“...I was addressed at one point as ‘Lefferts you Jew’...by an officer in basic training, not by an enlisted man. I knew right away that it was not going to be so easy for Jews in the Army.”

-George Lefferts, an enlisted soldier in the United States Army during World War II
(Personal communication, 2012)

Military veterans are a significant part of American society. The 2000 United States Census classified more than 26.4 million people or nearly 13 percent of people 18 years old or older in the civilian population as veterans and previous censuses classified an even greater percentage of the civilian population as veterans (United States Census Bureau, 2003). In 2009, the Department of Veterans Affairs budget was \$87.6 billion (United States Department of Veterans Affairs, 2009).

1.1 The Lack of Research Studying Religious Subgroups of Veterans

Much of the comparative research studying subgroups of veterans focusses on racial or ethnic subgroups rather than religious subgroups (e.g., Browning, Lopreato, & Poston, 1973; Villemez & Kasarda, 1976; Martindale & Poston, 1979). The lack of research studying if, how, and, why being a member of a specific religious group affects veteran outcomes is surprising considering that research has studied the relationship between religion and health (e.g., Chatters, 2000; George, Ellison, & Larson, 2002; Lee & Newberg, 2005) and the relationship between religion and socioeconomic status (e.g., Steen, 2004; Smith & Faris, 2005), both topics that have also been studied separately among veterans (e.g., Martindale & Poston, 1979; Gray, Gackstetter, Kang, Graham, & Scott, 2004).

Studying religious subgroups of veterans will provide a unique insight into a neglected important influence on the income of millions of American veterans. For example, even though

all veterans are provided with the same post-war benefits regardless of religion, which should help to equalize income between religious subgroups of veterans, the usage of post-war benefits differs by religious subgroups (Mettler, 2005), resulting in socioeconomic differences between religious subgroups of veterans. Additionally, studying the factors contributing to income differences between religious subgroups of veterans will provide information about the pathways that lead to income differences, suggesting methods to increase the income of veterans of religious groups with a lower socioeconomic status.

Jewish veterans. During World War II, 550,000 Jews served in the United States military (Mosesson, 1971). American Jewish servicemen enlisted in the military during World War II had a unique experience compared to non-Jewish American servicemen. While all servicemen had to live with the stresses of military life, Jewish servicemen had additional stress as a consequence of having different beliefs, values, backgrounds, and experiencing anti-Semitism. However, research studying Jews or veterans almost never focuses specifically on Jewish World War II veterans. For example, neither Heilman's (1982) review of sociology literature about Jews during the 1970s, nor Burstein's (2007) review of the literature studying the socioeconomic status of Jews in the United States make any mention of veterans. The existing research that does consider Jewish veterans usually have small sample sizes and do not study the economic outcome of Jewish veterans (e.g., Acheson, 1960; Hammarberg & Silver, 1994) or are of a historical nature (e.g., Mosesson, 1971; Bendersky, 2000; Moore, 2004) rather than an empirical sociological or economic comparison between Jews and non-Jews. Likewise, although some research has been conducted on the overall income difference between Jews and non-Jews (e.g., Featherman, 1971; Chiswick, 1983; Chiswick, 1993), little research has been specifically conducted on the economic performance of Jewish veterans.

1.2 Methodological Advantages of Using World War II Veterans for Subgroup Analyses

During World War II, of the 16,354,000 people in the military, 10,110,104, or nearly 62 percent of the total, were inducted into the military via conscription (Selective Service System, 2003). Conscription laws required all men 18-65 years old to register for the draft and men who were 18-45 years old were eligible for immediate induction (Clifford & Spencer, 1986). While some men were drafted via a lottery, other men were drafted by birth date. For part of the war, voluntary enlistments were prohibited (Angrist & Krueger, 1994) and men who were drafted were unable to select their choice of service branch (Kaufmann & Kaufmann, 2008). Attending college was not an acceptable reason for deferment (Card & Lemieux, 2001) and enlistments cut across all socioeconomic groups, geographic regions of the country (Rudnick, Smith, & Rubin, 2005), and religions. Of the nearly 36.68 million men classified and the nearly 17.96 million men examined, 6.42 million men were rejected (United States Census Bureau, 1998). Of the men who were rejected, 64 percent were considered to not be physically or mentally desirable to the military and 34 percent were rejected for occupational reasons (Angrist & Krueger, 1994). Conscription during World War II was so extensive that there was a civilian manpower shortage (Fairchild & Grossman, 1959) and 75 percent or more of white men born in each quarter of 1920 through the middle of 1926 (men turning 18 between 1938 and 1944) served in the military. At the conclusion of the war, benefits were awarded to all veterans equally (Bound & Turner, 2002).

A difficulty in the study of the outcome of veterans is that sample characteristics can confound the results because the sample is not random or representative of the population. While a military draft will not yield a completely random sample because of deferments or rejections, a military draft is the method most similar to random sampling available to study veteran outcomes. Conscription has been used in other studies of veteran outcomes. For

example, Angrist and Krueger (1992) used the randomization of the draft during the Vietnam War to study the earnings and educational achievements in men at risk of being drafted, Angrist (1990) used the randomization of the draft to study the effect of military service during the Vietnam War on post-war earnings, and Bailey and Cargill (1969) investigated the effect of the draft on income. World War II is the ideal war for comparative economic research of Jewish and non-Jewish World War II veterans because both Jews and non-Jews had an equal chance of being conscripted and assigned to various roles in the military, enlistments cut across social classes, and both Jews and non-Jews were awarded post-war benefits equally.

The paper is organized as follows. Section two reviews research about the income of Jews in the United States, the income of military veterans, military service of Jews during World War II, the lack of research studying Jewish World War II veterans, and presents my hypotheses. Section three provides information about the data and variables used for the analyses, management of missing data, and additional analysis to quantify the effect of military service during World War II. Section four discusses the setup and type of analyses used, and provides and compares the results of the descriptive analyses of each sample group. Section five presents the results of the regression analyses, a discussion of the results of the descriptive and regression analyses, a review of my hypotheses, and the limitations to the study. Section six concludes by summarizing the paper, discussing the importance of research on veterans considering the effect of religion, and discussing the broader theoretical implications of the findings of the study.

2. Literature Review

2.1 The Income of Jews in the United States

The Jews in the United States are a unique population because while Jewish Americans are linked by religion, Jewish Americans also exhibit characteristics of an ethnic group (Winter, 1996). The majority of Jews arrived in the United States from Eastern Europe between 1880 and the mid-1920s (Goldscheider, 1986), poor and fleeing religious persecution (Soyer, 1997). The Jewish immigrants highly valued education – data from a 1910 survey of New York City’s slums show that out of people who were 16 years old, Jews were the most likely to stay in school and by the end of the first decade of the 20th century, Jews made up more than 10 percent (and in some cases, more than 30 percent) of the student body at some colleges and universities in New York City (Simon, 1997). Possibly as a result of immigrant selectivity (Goldscheider & Zuckerman, 1984), Jewish immigrants were also more likely than members of other immigrant groups to work in business management or trades requiring skilled workers (Dwork, 1981; Bodnar, 1985) and made economic gains more quickly than other immigrant groups, catching up to the earnings of native-born Americans within 10-15 years (Kahan, 1978). Jews who had immigrated to the United States in earlier decades provided financial support to the new Jewish immigrants (Hertzberg, 1989). Cohesion and possibly social capital, both factors contributing to the economic success of the Jewish immigrants, were likely further increased by concern over the growth of anti-Semitism in the United States (McWilliams, 1975). By 1939, 50 percent of the Jews in the United States were employed in business and 25 percent “practiced a liberal profession,” such as law or medicine, both sectors of the economy that facilitate social advancement (Attali, 2010 p. 425). However, even though the Jewish immigrants and their children began to assimilate into American society by learning English, obtaining an education,

successfully making economic gains, and having children that grew up in the United States, the economic growth of the second generation was still hindered by anti-Semitism (Dwork, 1981; Alba, 2006).

Following World War II, as the tolerance of Jews increased, the average income of Jews similarly increased (McDermott, 2002; Burstein, 2007). Studies conducted as early as the late 1950s and mid-1960s (Goldstein, 1969; Featherman, 1971; Ayal & Chiswick, 1983) found that the household income of Jewish families was significantly greater than the household income of non-Jewish families or the general population. The socioeconomic differences between Jews and non-Jews have continued to widen (Burstein, 2007).

In a comprehensive literature review, Burstein (2007) explains that marginality (a conflict arising from the loss of traditional Jewish life and a lack of acceptance by a Jewish immigrant's country of residence (Veblen, 1919)), human capital (attributes of an individual, such as education, that increase earnings (Becker, 1993)), "Jewish particularity" (the unique beliefs or behaviors of Jews (Chiswick, 1983)), and social capital (the value of membership in a group (Coleman, 1988)) are the four "reputable social-scientific" (p. 214) causes of the extraordinary economic growth of Jews in the United States. As Jews tend to be more highly educated than non-Jews, education is frequently cited as one of the main causes of the income difference between Jews and non-Jews (e.g., Chiswick, 1983). However, even when controlling for years of schooling, Jews still earn a greater amount of income and have a greater return to education than non-Jews (Chiswick, 1983; Chiswick, 1988).

2.2 The Income of Veterans in the United States

The majority of the research studying the income of veterans falls into two categories, neither of which compares subgroups of veterans of the same era. The first type of research

compares the income of veterans to the income of non-veterans of the same era (e.g., Berger & Hirsch, 1983; Angrist & Krueger, 1994; Teachman, 2004). However, when comparing the income of veterans to non-veterans, two important sample issues arise. First, the time since the veteran was discharged from the military has a major effect on the income of the veteran, leading to inconsistent results depending on the time period of data collection. Second, as men who enter the military are screened for a certain level of physical and mental health, men who enter the military are not a random selection of men, resulting in uncontrolled confounding variables between the veteran and non-veteran groups being compared (Teachman, 2004). Rather than military service being the reason for the greater amount of income, veterans may earn a greater amount of income than non-veterans because veterans are more physically and cognitively healthy than non-veterans. The second type of research compares the income of veterans across different wars (e.g., Rosen & Taubman, 1982; Teachman & Call, 1996). However, this type of research is subject to historical, economic, and social differences between wars (Villemez & Kasarda, 1976; Bordieri & Drehmer, 1984; Teachman & Call, 1996).

Research both comparing the income of veterans to the income of non-veterans of the same era and to the income of veterans of different wars indicates that World War II veterans earn the greatest amount of income and Vietnam War veterans earn the lowest amount of income (Villemez & Kasarda, 1976; Little & Fredland, 1979; Berger & Hirsch, 1983). However, some research found no income difference between veterans and non-veterans of the World War II and Vietnam War eras when the data were analyzed over a longer time period (Teachman, 2004) or when controlling for the selectivity bias among men accepted for military service (Angrist & Krueger, 1994).

Military service is known to have a different influence on the income of racial or ethnic subgroups of veterans. The “bridging hypothesis” posits that military service provides an opportunity for members of minority racial or ethnic groups with a lower socioeconomic status to develop skills that apply to civilian occupations, resulting in veterans of minority racial or ethnic groups earning a greater amount of income than comparable non-veterans of those minority racial or ethnic groups, regardless of the conflict. Conversely, military service appears to have the opposite effect or no effect on the income of members of a non-minority group with a higher socioeconomic status (e.g., Browning, Lopreato, & Poston, 1973; Villemez & Kasarda, 1976; Martindale & Poston, 1979).

Similar to non-veterans, education is one of the most important factors¹ that influence the income of veterans (Schwartz, 1986). However, certain factors may influence the income of veterans of different wars differently. For example, Schwartz (1986) found that Korean War veterans had a greater return to education than Vietnam War veterans compared to non-veterans within the same era, possibly because of employer discrimination and less generous post-war benefits being awarded to Vietnam War veterans.

2.3 Jews in the United States Military During World War II

The percentage of Jews in the United States military during World War II was disproportionate to the percentage of Jews in the American population. While Jews made up three percent of the population of the United States, four percent of the military was composed of Jews (Mosesson, 1971).

The motives for joining the military and the backgrounds of Jewish servicemen were different than the motives for joining the military and the backgrounds of non-Jewish

¹ Other important factors that influence the income of veterans include age, race, marriage status, region of the country, and urbanicity (Schwartz, 1986).

servicemen. Many Jews joined the military, when volunteers were still accepted, hoping to fight against Nazi Germany. Conversely, most non-Jewish servicemen joined the military to fight against Japan as a result of the attack on Pearl Harbor.

The experiences of Jewish servicemen were sometimes different than the experiences of non-Jewish servicemen. Many Jewish servicemen were second generation immigrants who grew up in urban areas with a large population of Jews. These servicemen experienced culture shock when sent to other regions of the country for their military service with fewer or no Jews in their military unit (Moore, 2004). Furthermore, many of the Jewish servicemen experienced anti-Semitism both inside the military from fellow low ranking servicemen and commanding officers and outside the military (Bendersky, 2000; Moore, 2004; Berger, 2010). While the Army officially condemned religious discrimination, complaints sometimes just served to hide the discrimination rather than eliminate it (Bendersky, 2000).

For their service during World War II, Jews were awarded over 50,000 decorations, citations, and awards, 1,600 Silver Stars, 157 Distinguished Service and Navy Crosses, and one Congressional Medal of Honor (Mosesson, 1971). Even though there were rumors of Jewish servicemen avoiding combat, the percentage of Jewish servicemen who were wounded or killed “approximated their proportion of the American population” (Bendersky, 2000 p. 297). At the end of World War II, while all returning servicemen needed to readjust to civilian life, returning Jewish servicemen also had to face anti-Semitism in the United States and their feelings about the Holocaust in Europe (Mosesson, 1971).

The assimilation and economic advancement of the second generation of Jews that began prior to World War II continued at a more rapid pace following the war (Goldscheider & Zuckerman, 1984). Military service built skills and instilled confidence in the Jewish veterans.

Having served in the military with non-Jews, Jewish veterans felt more comfortable around non-Jews than their parents had felt. Military service also provided the opportunity for Jewish veterans to pursue higher education, via the GI Bill (Moore, 2004). Overt anti-Semitism was no longer acceptable (Berger, 2010), tolerance of Jews increased (Hertzberg, 1989), and Jews had new educational and occupational opportunities (Dawidowicz, 1982; Goldscheider & Zuckerman, 1984; Brodtkin, 1998; Berger, 2010). Overall, World War II changed both how Jews thought of themselves and how non-Jews thought of Jews (Dawidowicz, 1982). Jews in the United States felt fully American for the first time (Shapiro, 1990).

2.4 The Lack of Research Studying Jewish World War II Veterans

As a result of the lack of research studying Jewish veterans, although Jews are known to earn a greater amount of income than non-Jews (Burstein, 2007), it is not known if there is an income difference between Jewish World War II veterans and non-Jewish World War II veterans and if there is a difference, whether that difference is unique to World War II veterans.

Likewise, it is not known if and how the same variables that affect any income difference between Jewish World War II veterans and non-Jewish World War II veterans also affect the income difference between Jewish veterans and non-Jewish veterans of other wars. Finally, there has been no attempt to quantify the effect of military service during World War II on the income of Jewish veterans or non-Jewish veterans.

It is puzzling that such little research has been completed on Jewish veterans. Jewish veteran organizations, such as Jewish War Veterans, could provide sample for studies and would be interested in the results. Additionally, many research studies ask both veteran status and religion among other demographic questions, providing a low-cost method to perform analyses on religious subgroups of veterans. Finally, comparing subgroups of veterans of the same era

avoids methodological issues that arise when comparing veterans to non-veterans (Angrist & Krueger, 1994; Teachman, 2004). Reasons for the dearth of research about Jewish veterans (and Jews overall) may include most social science research focusing on minority racial or ethnic groups with a lower socioeconomic status, a lack of available methodologically sound data, and fears that studying the economic success of Jews may provoke anti-Semitism (Burstein, 2007).

2.5 Hypotheses

My hypotheses are as follows:

- 1) I expect to find that Jewish World War II veterans earn a greater amount of income compared to non-Jewish World War II veterans because research on Jews overall indicates that Jews earn a greater amount of income compared to non-Jews (e.g., Chiswick, 1983).
- 2) I expect the income difference between Jewish World War II veterans and non-Jewish World War II veterans to be similar to the income difference between Jewish non-veterans and non-Jewish non-veterans because the salience of culture associated with religion is stronger than the equalization influence of the military.
- 3) I expect the income difference between Jews and non-Jews to be statistically significant but with not as great of a difference for Korean War veterans and Vietnam War veterans compared to World War II veterans as a result of the less random selection of servicemen for the Korean War and the Vietnam War.
- 4) I expect the same variables to have a similar relative magnitude of effect on the income difference between Jews and non-Jews regardless of era or veteran status because the salience of culture associated with religion is stronger than the equalization influence of the military.

3. Data

All analyses used microdata from the 1970 United States Census. The microdata were obtained from the Integrated Public Use Microdata Series (IPUMS) website and are made up of a one percent representative national random sample.

The 1970 United States Census is the ideal tool for a post-war comparison of income between different subgroups of veterans. Many World War II veterans were at their peak income level as most were in the 45-54 age group (Kreps, 1977) and likely already attained their highest educational level as GI Bill benefits for World War II veterans expired in 1956 (Berkhart, 2008). Similarly, Korean War veterans were also close to the age of earning their peak income level² and likely already attained their highest educational level as Korean War veterans needed to enter the military on or before January 30th, 1955 to use GI Bill benefits (Stanley, 2003). To prevent gender and age from confounding the results, only male veterans from World War II, the Korean War, and the Vietnam War³ who were ages 25-64 at the time of the 1970 United States Census were included in the analyses. Six percent of the veterans eligible for the study who reported being veterans of more than one war⁴ were excluded from the analyses to ensure that the

² Bound and Turner (2002) report that the majority of Korean War veterans were born during the late 1920s and early 1930s, resulting in most Korean War veterans being in their late 30s or early 40s at the time of the 1970 United States Census.

³ Respondents who reported serving in the Army, Air Force (which was part of the Army during World War II), Navy, Marine Corps, or Coast Guard during the 1970 United States Census defined World War II era (September 1940 through July 1947), Korean War era (June 1950 through January 1955), or Vietnam War era (since August 1964) were classified as veterans of those wars. Respondents who reported serving in the National Guard or military Reserves were excluded unless they served in active duty (Ruggles et al., 2010). Excluding respondents who reported serving in the National Guard or military Reserves is especially important for the Vietnam War veterans because serving in the National Guard or military Reserves would result in a deferment from the draft (MacInnis, 2006).

⁴ The 1970 United States Census categorizes respondents as veterans of World War I, World War II, the Korean War, the Vietnam War, or as serving during peacetime. No veterans in the study reported military service during World War I. A greater percentage of non-Jews reported serving in more than one war than Jews (while not mutually exclusive, three percent of Jewish World War II veterans, eight percent of non-Jewish World War II veterans, 13 percent of Jewish Korean War veterans, 21 percent of non-Jewish Korean War veterans, three percent of Jewish Vietnam War veterans and 14 percent of non-Jewish Vietnam War veterans reported serving in more than one war).

observed effects were from a specific war. As only a small percentage of veterans were removed, removing veterans of more than one war is not expected to have a significant effect on the analyses.

1970 United States Census data are an appropriate source of data to use for a statistical comparison of Jews to non-Jews because it is possible to identify Jewish respondents through the use of a language question, and unlike most studies where the sample size of Jews is too small to make robust comparisons between subgroups of Jews, or Jews and non-Jews were sampled differently, a large number of Jewish respondents and non-Jewish respondents were included in the 1970 United States Census in exactly the same way. Similarly, census microdata are appropriate to use for a statistical comparison of Jews and non-Jews because a sufficient number of Jews and non-Jews remain for robust subgroup comparisons. As the census microdata are a random sample of the 1970 United States Census data, both Jews and non-Jews had the same probability of being selected for the study (Ruggles et al., 2010).

The United States Census Bureau collected the majority of the 1970 United States Census data via postal mail. An enumerator was used if a household did not respond to the mailed census questionnaire or if the household was not within the 60 percent of the country that was selected to receive the census questionnaire via postal mail (United States Census Bureau, 1970). The data are at the individual level and as people are only sampled once for the decennial census, the data are cross-sectional as opposed to longitudinal.

3.1 Variables Used for Analyses

Income⁵ was selected as the dependent variable to be studied because income inequality between Jews and non-Jews overall is well studied (Burstein, 2007), is directly related to post-war military benefits, and is a major component of socioeconomic status (Winkleby, Jatulis, Frank, & Fortmann, 1992). Furthermore, income is highly influenced by educational achievement (Chiswick, 1983), which is available in the census data to be included in the analyses, and is not directly related to any known uncontrollable variables associated with American Jewish culture.

With the exception of the lowest value (\$0) and the greatest value (\$50,000), the income variable values are midpoints of hundred-dollar intervals such as \$50, \$150, and \$250 (Ruggles et al., 2010). IPUMS assigns an income value of \$50,000 to respondents reporting an income of \$50,000 or greater. To more accurately reflect the income of both groups, respondents reporting no income were included in the analyses. The percentage of respondents reporting no income was similar between both Jews and non-Jews, with a maximum difference of seven percentage points among Vietnam War veterans, among each of the four sample groups (analyses not shown).

Religion has never been directly asked on any United States census (Smith, 1990). However, using a method similar to Chiswick's (1983) identification of Jewish respondents in the 1970 United States Census, respondents who indicated that "Yiddish/Jewish" was spoken in their childhood household⁶ were classified as Jews. Respondents who reported speaking another Jewish language (such as Ladino or Hebrew) in their childhood household were excluded from all analyses. By only classifying Yiddish speakers as Jews, only Ashkenazi Jews (Jews of

⁵ "Income" refers to the respondent's amount of pre-tax salary income for the previous calendar year received from an employer and is the income for the single respondent, as opposed to the income for the household.

⁶ The language collected at this census question is referred to as the "mother tongue."

European ancestry, which are the majority of American Jews) were included in the analyses, preventing the different cultural backgrounds of Jews with non-European ancestry from affecting the analyses. Chiswick explains that while classifying respondents as Jews by “mother tongue” may result in some Jews being misclassified as non-Jews, because the overall number of Jews in the United States is small, misclassifying some Jews adds little bias to the analyses. All respondents answering the “form 2” version of the 1970 United States Census, which was randomly given to 15 percent of the population, were asked the “mother tongue” question (Ruggles et al., 2010).

Unfortunately, Jews are one of the only major religious groups in the United States that can be reliably identified in the 1970 United States Census data. While comparing Jews to a single non-Jewish religion rather than to a general group of “non-Jews” by using another survey that directly asked religion would have been preferred, the 1970 United States Census is one of the few surveys with a large enough sample of Jews for robust comparisons between subgroups of Jews.

The main independent variable is a derived dummy variable categorizing respondents as Jewish veterans (1) or non-Jewish veterans (0) using a combination of the “mother tongue” question and a census question asking if the respondent served in the military and if so, in which conflict era the respondent served in the military. For example, respondents reporting that their “mother tongue” was Yiddish and that they served in the military during the World War II era were categorized as Jewish World War II veterans. Respondents who reported serving in the military during peacetime⁷ were excluded from the analyses. Table 1 indicates the sample size of each group. The “similar cohort” group was used for additional analyses as described below.

⁷ A small number (ranging from one percent to five percent depending on war) of respondents in roughly equal percentages between the Jewish and non-Jewish veterans of each war who reported serving during both peacetime and in one of the three wars were not excluded from the analyses.

As the data are cross-sectional, adjusting for inflation was not necessary. Weighting was not necessary for any analyses using the 1970 United States Census data (Ruggles et al., 2010).

Control variables. Following similar research (Chiswick, 1983; Teachman, 2004), I controlled for the estimated years of employment experience,⁸ years of schooling, urbanicity,⁹ region of the country,¹⁰ marital status,¹¹ nativity,¹² parental country of birth,¹³ and race.¹⁴ A second set of analyses included a variable to control for occupational “prestige” (socioeconomic index or SEI).¹⁵ The estimated years of employment experience and years of schooling are continuous variables, while urbanicity, region of the country, marital status, nativity, parental country of birth, and race are nominal variables. Age was not included as a control variable to

⁸ Following other studies (e.g., Papanicolaou & Psacharopoulos, 1979), the estimated years of employment experience variable was calculated by the following formula: age-years of schooling-5.

⁹ The urbanicity status variable holds whether a household was within an urban area or a rural area. Census microdata confidentiality rules require that respondents residing in households in states with an urban or rural (or both) population of 250,000 or less be coded as “N/A.” The confidentiality requirement affected the states of Alaska, Delaware, Hawaii, Nevada, Rhode Island, Utah, Vermont, and Wyoming. A household was considered to be in an “urban” area if the household met one of the following criteria: it was in an incorporated city or village; it was in a borough or town (except in New England, New York, and Wisconsin) with 2,500 residents or greater; it was in a “census-designated place” with 2,500 residents or greater; or it was in an “urbanized area” with at least 50,000 residents in a central city with “an urban fringe” and at least 1,000 people per square mile (Ruggles et al., 2010).

¹⁰ Following Chiswick (1983), the region variable is a dummy variable and was coded as 1=south, 0=other region. Following the United States Census Bureau regions (United States Census Bureau, n.d.), the census divisions of South Atlantic, East South Central, and West South Central were classified as “South.”

¹¹ The marital status variable is a dummy variable and was coded as 1=married with spouse present and 0=other marital status.

¹² The nativity variable categorized respondents as foreign born or native born. If the respondent was native born, the variable holds which parent, if either, was foreign born.

¹³ Following Chiswick (1983), the parental country of birth variable holds the father’s country of birth, if the father was foreign born. If the father was not foreign born, the variable holds the mother’s country of birth. The parental country of birth was categorized into 10 world regions – British Isles, Western Europe, Southern Europe, Eastern Europe, Canada/Australia/New Zealand, Mexico, Other Latin America/Caribbean Area, Asia/Africa, United States, or other region. Along with race, the parental country of birth variable is also used as a rough control for ethnicity.

¹⁴ Following Schwartz (1986), race is a dummy variable and was coded as 1=white and 0=other race.

¹⁵ Hauser and Warren’s socioeconomic index (1997) was used as an estimate of the prestige of various occupations. Respondents who were employed over the previous 10 years, even if they were not employed at the time of the 1970 United States Census, were assigned an occupational prestige score (Ruggles et al., 2010). Even though Hauser and Warren’s index used the 1990 United States Census occupational classes, the index still serves as a good estimate of the prestige of various occupations. Although Hauser and Warren’s index is based off of income and educational attainment, because this index is designed to measure occupational prestige, including SEI in the analyses provided further insight into the possible causes for any income differences. Furthermore, as the r^2 value increases only a small amount when including SEI (compare tables 5 and 7 to table 9), income appears to be a minor role in the construction of this variable.

avoid collinearity and because analyses (not shown) indicated that the maximum age difference between Jews and non-Jews within any of the four sample groups was less than 1.5 years.

Urbanicity and region of the country are uniquely important to include as controls in studies of Jews because Jews tend to reside in urban areas and in certain regions of the country (Chiswick, 1983) which may artificially inflate their income. Nativity and parental country of birth were included as controls to investigate how nativity and parental country of birth influenced income because a large number of World War II veterans were second generation immigrants (Moore, 2004). The categories of the nativity variable and parental country of birth variable were broken out into dummy variables to explore any effect that nativity and parental country of birth from a specific region of the world may have on the income of veterans. Finally, unlike Chiswick (1983), I also controlled for race to remove the effects of race among non-Jews because a greater percentage of Jews were white than non-Jews (analyses not shown).

Management of missing data. As a consequence of the nature of the data and analyses, missing data was a concern. To be consistent with similar research (Chiswick, 1983) and to avoid potentially introducing biases through data imputation techniques, respondents missing data in the “mother tongue” variable and/or information about in which era veterans served were excluded from the analyses. As less than five percent¹⁶ of respondents were missing information about their “mother tongue” and although a greater percentage of non-Jewish veterans were missing information about in which era they served than Jews, as less than three percent of the Jewish and non-Jewish veterans were missing information about in which era they served, excluding the respondents with missing information about their “mother tongue” or in which era

¹⁶ Because respondents missing information about their “mother tongue” and in which era they served were not mutually exclusive, it is not possible to report an exact percentage of respondents missing data at these two variables. The percentages reported were calculated prior to the removal of respondents missing data at either of these variables.

the veteran served is not expected to affect the results. No respondents were missing data at the dependent variable. Among the control variables, the urbanicity status variable and the socioeconomic index variable were missing data. Two additional variables were created to control for missing data in both variables.

3.2 Additional Analysis to Quantify the Effect of Military Service During World War II

While the study is concerned with comparing Jewish veterans to non-Jewish veterans, it is also important to check for the counterfactual – it is possible that military service had no effect on income and the same income difference would exist between the same Jews and non-Jews. Checking for the counterfactual is difficult – because the majority of men born during the 1920s are World War II veterans (Angrist & Krueger, 1994), and the men born during the 1920s who are *not* veterans may be different from men who *are* veterans, comparing non-veterans to veterans born in the same years of birth is not an accurate comparison.

To quantify the effect of military service during World War II on the income of Jewish and non-Jewish World War II veterans, a *similar* non-veteran cohort group made up of non-veterans who were born in similar years of birth with a lower percentage of World War II veterans was created.¹⁷ Angrist and Krueger (1994) explain that the percentage of men who served in World War II who were born during the 1920s declines sharply after 1927 – while nearly 66 percent of men born in 1927 are World War II veterans, fewer than 31 percent of men born in 1928 and just over 12 percent of men born in 1929 are World War II veterans. Using this information, the “similar cohort” is composed of male non-veterans from any war born in 1928 and 1929. Although men born in 1928 and 1929 may have served in the Korean War or the Vietnam War, as a smaller number of men were drafted and served in the Korean War and the

¹⁷ The similar non-veteran cohort group is referred to as the “similar cohort.”

Vietnam War than World War II (Selective Service System, 2003), there are a greater number of non-veterans similar to veterans who were born in 1928 and 1929. Men born in 1930 were excluded from the “similar cohort” because there was a sharp increase in the number of men serving in the Korean War among those born in 1930 (Bound & Turner, 2002), possibly creating differences between those who served in the military and those who did not.

4. Methods

Using descriptive and regression analyses, the study estimated the income disparity between Jewish World War II veterans and non-Jewish World War II veterans and the influences on the income of Jewish World War II veterans and non-Jewish World War II veterans. The same analyses were then performed on veterans of the Korean War, the Vietnam War, and a similar non-veteran cohort to investigate if and how the factors that influence the income of Jewish and non-Jewish World War II veterans also influence the income of Jewish and non-Jewish Korean War and Vietnam War veterans. Comparing a non-veteran “similar cohort” group to World War II veterans allowed the study to quantify the effect of military service during World War II on the income of Jewish veterans and non-Jewish veterans.

Descriptive analyses were performed to examine and compare the characteristics of the Jews and non-Jews within each of the sample groups. Ordinary least squares (OLS) regression analyses were run three times for each sample group – once including both Jews and non-Jews to estimate the income disparity between Jews and non-Jews while controlling for potential confounding variables, and then twice more for Jews and non-Jews separately to investigate the interaction of all variables with Jewish status to explore the effect of specific influences on the income of Jews and non-Jews. The following regression equations were used:

$$1) \quad y = a + \beta_x + \beta_z + u$$

$$2) \quad y = a + \beta_z + u$$

Equation 1 was used to estimate the income disparity between Jews and non-Jews and equation 2 was used to explore the effect of specific influences on the income of Jews and non-Jews.

Where X is a dummy variable for Jewish status, Z is a vector of controls (see above for the full list), and u is an error term.

Data availability limit the type of analyses that can be conducted. For example, as the data are cross-sectional and limited by the questions asked in the 1970 United States Census, instrumental variables were not able to be used. Similarly, because there is no comparable group that was not affected by World War II, difference-in-differences could not be used. Finally, the study methodology, data, and variables used were selected based off of similar previous research (Chiswick, 1983) to allow for a comparison of results.

4.1 Descriptive Analyses

Income and estimated years of employment experience of World War II veterans.

Chart 1 graphically displays the mean amounts of income and income differences and table 2 displays the distributions of income for each of the sample groups. Jewish World War II veterans earn a greater mean amount of income than non-Jewish World War II veterans (\$11,447 and \$8,404 for Jews and non-Jews, respectively). The percentage of Jewish World War II veterans and non-Jewish World War II veterans are similar in the \$0-\$4,999 income category (26.5 percent and 27.1 percent for Jews and non-Jews, respectively) and in the \$10,000-\$14,999 income category (23.1 percent and 22.6 percent for Jews and non-Jews, respectively). However, in the \$5,000-\$9,999 income category, the percentage of Jewish World War II veterans is nearly

half the percentage of non-Jewish World War II veterans (21.7 percent and 38.8 percent for Jews and non-Jews, respectively), in the \$15,000 to \$19,999 income category, the percentage of Jewish World War II veterans is nearly twice the percentage of non-Jewish World War II veterans (12.3 percent and 6.5 percent for Jews and non-Jews, respectively), and in the \$20,000 or greater (the highest) income category, the percentage of Jewish World War II veterans is more than three times the percentage of non-Jewish World War II veterans (16.3 percent and 5.1 percent for Jews and non-Jews, respectively). Turning to the estimated years of employment experience, Jewish World War II veterans have a statistically significant fewer mean number of estimated years of employment experience (see table 3; 32.7 and 33.4 for Jews and non-Jews, respectively).

Comparison to Korean War veterans and Vietnam War veterans. Similar to the Jewish World War II veterans, Jewish veterans of the Korean War and the Vietnam War earn a greater mean amount of income than non-Jewish veterans (\$13,095 and \$8,890 for Korean War veterans, and \$8,449 and \$7,000 for Vietnam War veterans for Jews and non-Jews, respectively). Although the mean income of both Jewish Korean War veterans and non-Jewish Korean War veterans increased in comparison to World War II veterans, the income disparity between Jews and non-Jews widened (\$3,043 for World War II veterans and \$4,205 for Korean War veterans). Vietnam War veterans have the lowest mean amount of income and the least income difference (\$1,449). The distribution of income between Jews and non-Jews is similar between the veterans of all three wars. Similar to Jewish World War II veterans, Jewish Korean War and Vietnam War veterans have a statistically significant fewer mean number of estimated years of employment experience (32.7 and 33.4 for World War II veterans, 19.5 and 20.9 for Korean War veterans, and 8.2 and 9.8 for Vietnam War veterans for Jews and non-Jews, respectively).

Education. Jews having a greater number of years of schooling is a common explanation for the greater amount of income of Jews (Burstein, 2007). Similar to Jews and non-Jews overall, Jewish veterans of all three wars have a statistically significant greater mean number of years of schooling than non-Jewish veterans (see table 4; 13.3 and 11.2 for World War II veterans, 14.4 and 12.0 for Korean War veterans, and 14.9 and 12.8 for Vietnam War veterans for Jews and non-Jews, respectively). Even though the mean number of years of schooling of both Jews and non-Jews increased from World War II through the Vietnam War, in each of the veteran sample groups, Jewish veterans have roughly two more years of schooling.

Comparison to the “similar cohort.” Turning to the “similar cohort,” similar to the veteran sample groups, Jewish non-veterans earn a greater mean amount of income than non-Jewish non-veterans (\$12,012 and \$7,506 for Jews and non-Jews, respectively). Jewish World War II veterans earn a slightly lower (five percent) mean amount of income than Jewish non-veterans (\$11,447 and \$12,012 for Jewish World War II veterans and non-veterans, respectively) while non-Jewish World War II veterans earn a considerably greater (12 percent) mean amount of income than non-Jewish non-veterans (\$8,404 and \$7,506 for non-Jewish World War II veterans and non-veterans, respectively), resulting in the income difference between Jews and non-Jews in the “similar cohort” being greater than the income difference between the Jewish and non-Jewish World War II veterans (\$4,506 and \$3,043 for non-veterans and veterans, respectively). Non-veterans have a similar distribution of income to World War II veterans.

Jews in the “similar cohort” have a mean number of years of schooling that are comparable to Jewish World War II veterans (13.5 and 13.3 for Jewish non-veterans and World War II veterans, respectively). Conversely, the mean number of years of schooling of non-Jews in the “similar cohort” is nearly one full year less than the mean number of years of schooling of

non-Jewish World War II veterans (10.3 and 11.2 for non-Jewish non-veterans and World War II veterans, respectively), resulting in Jewish and non-Jewish non-veterans having a total difference of three years of schooling, and Jewish and non-Jewish World War II veterans having a total difference of two years of schooling. Finally, similar to Jewish World War II veterans, Jewish non-veterans have a statistically significant fewer mean number of estimated years of employment experience (22.3 and 25.4 for Jews and non-Jews, respectively) and both the Jewish and the non-Jewish World War II veterans have a greater mean number of estimated years of employment experience than the Jewish and non-Jewish non-veterans.

5. Results

5.1 World War II

Jewish World War II veterans earn \$816 more than non-Jewish World War II veterans, when controlling for the other variables in the regression model (see table 5).

Influences on the income of Jewish World War II veterans and non-Jewish World War II veterans. The results of the analyses investigating the influences on the income of Jewish World War II veterans and non-Jewish World War II veterans are displayed in table 6. The estimated years of employment experience has a negative influence on the income of both Jewish World War II veterans and non-Jewish World War II veterans, resulting in World War II veterans with a greater number of estimated years of employment experience earning less income. However, the influence of the estimated years of employment experience is more negative for Jewish World War II veterans (-\$211 and -\$109 per estimated year of employment experience for Jews and non-Jews, respectively), indicating that Jewish World War II veterans earn a lower amount of income than non-Jewish World War II veterans when working the same

number of years. Similarly, although education has a positive influence on the income of both Jewish and non-Jewish World War II veterans, Jewish World War II veterans have a lower return to education (\$316 and \$516 per year of schooling for Jews and non-Jews, respectively) indicating that Jewish World War II veterans earn a lower amount of income than non-Jewish World War II veterans with the same number of years of schooling. Finally, although nativity¹⁸ has no effect on the income of neither Jewish World War II veterans nor non-Jewish World War II veterans, the parental birthplace¹⁹ of Jewish World War II veterans has no effect on income while the parental birthplace of non-Jewish World War II veterans from certain regions of the world has an effect on income.

5.2 The Korean War and the Vietnam War

While Jewish veterans of the Korean War earn \$1,756 more than non-Jewish veterans of the Korean War, there is no statistically significant difference between the income of Jewish Vietnam War veterans and non-Jewish Vietnam War veterans, when controlling for the other variables in the regression model (see table 7).

Influences on the income of Jewish Korean War and Vietnam War veterans and non-Jewish Korean War and Vietnam War veterans. The results of the analyses investigating the influences on the income of Jewish Korean War and Vietnam War veterans and non-Jewish Korean War and Vietnam War veterans are displayed in table 8. The estimated years of employment experience do not have a statistically significant influence on the income of Jewish Korean War veterans, yet have a positive influence on the income of non-Jewish Korean War veterans (\$39 per estimated year of employment experience). Jewish Vietnam War veterans have a greater return to the estimated years of employment experience than non-Jewish Vietnam

¹⁸ Nativity is relative to being born in the United States and having both parents being born in the United States.

¹⁹ Parental birthplace is relative to the British Isles.

War veterans (\$652 and \$113 per estimated year of employment experience for Jews and non-Jews, respectively). Additionally, Jewish veterans of both the Korean War and the Vietnam War have a greater return to education than non-Jewish veterans (\$806 and \$634 for Korean War veterans and \$903 and \$390 for Vietnam War veterans per year of schooling for Jews and non-Jews, respectively). Notably, the return to education for Jews increases between the Korean War and the Vietnam War while the return to education for non-Jews decreases between the Korean War and the Vietnam War. Among Jewish veterans and non-Jewish veterans of both wars, nativity has no effect on income while having a parental birthplace from certain regions among non-Jewish veterans of both wars and Jewish veterans of the Vietnam War has an effect on income.

Comparison to World War II veterans. While Jewish World War II and Korean War veterans earn a greater amount of income than non-Jewish World War II and Korean War veterans, the difference between Korean War veterans is greater.

Compared to the negative return to the estimated years of employment experience of both Jewish and non-Jewish World War II veterans (with Jews having a more negative return to the estimated years of employment experience than non-Jews), Jewish Korean War veterans do not have a statistically significant return to the estimated years of employment experience and non-Jewish Korean War veterans have a small positive return to the estimated years of employment experience.

While both Jewish veterans and non-Jewish veterans of the Vietnam War have a positive return to the estimated years of employment experience, Jews have a greater return. Similarly, while both Jews and non-Jews have a positive return to years of schooling, World War II is the only war in which Jews have a lower return to years of schooling than non-Jews.

Nativity has no statistically significant influence on the income of Jewish or non-Jewish veterans of any war and parental birthplace has a greater influence on the income of non-Jewish veterans than on Jewish veterans – while parental birthplace only influences the income of Jewish Vietnam War veterans, parental birthplace influences the income of non-Jewish veterans of all three wars.

5.3 Comparison to the “Similar Cohort”

Jewish non-veterans earn \$1,819 more than non-Jewish non-veterans (see table 7), when controlling for the other variables in the regression model. Although Jewish World War II veterans also earn a greater amount of income than non-Jewish World War II veterans, the income difference between Jewish and non-Jewish non-veterans is greater.

Influences on the income of Jewish non-veterans and non-Jewish non-veterans.

None of the included variables have a statistically significant influence on the income of Jewish non-veterans, and the estimated years of employment experience do not have a statistically significant influence on the income of non-Jewish non-veterans. Non-Jewish World War II veterans have a greater return to education than non-Jewish non-veterans (\$516 and \$427 per year of schooling for non-Jewish World War II veterans and non-veterans, respectively). Similar to the non-Jewish World War II veterans, nativity has no statistically significant influence on the income of non-Jewish non-veterans. Finally, having a parental birthplace from the two regions with a statistically significant influence on the income of non-Jewish non-veterans has a less negative influence on the income of non-Jewish World War II veterans than non-Jewish non-veterans.²⁰

²⁰ The two regions are Mexico and Other Latin America and Caribbean Area. The values are \$-1,156 and \$-1,322 for non-Jewish World War II veterans and \$-1,275 and \$-2,271 for non-Jewish non-veterans for Mexico and Other Latin America and Caribbean Area, respectively. The less negative values for the World War II veterans with a

5.4 Discussion of the Results

Even after controlling for reasons cited why Jews earn a greater amount of income, such as having a higher educational achievement, living in specific regions of the country, and being concentrated in urban areas, Jews still earn a greater amount of income in three out of the four sample groups. Although there are different influences on the income of Jews and non-Jews who are veterans of different wars and non-veterans, Jews earning a greater amount of income is not unique to World War II, expanding research positing that Jews overall earn a greater amount of income (Burstein, 2007) to veterans. Furthermore, the income disparity between Jews and non-Jews increasing between World War II and the Korean War is consistent with research positing that the income difference between Jews and non-Jews overall widened (Burstein, 2007).

The lack of a statistically significant income difference between Jewish and non-Jewish Vietnam War veterans in the regression analyses is neither consistent with research on Jews overall nor the results of the regression analyses of World War II veterans and Korean War veterans. It is possible that the lack of a statistically significant difference may be a consequence of the young age of Vietnam War veterans at the time of the 1970 United States Census or biases arising from the avoidance of military service during the Vietnam War.

In all veteran sample groups, Jews had a greater number of years of schooling than non-Jews, even though Jewish veterans and non-Jewish veterans were offered the same post-war educational benefits, expanding research that Jews overall (Burstein, 2007) have a greater number of years of schooling to veterans. Jewish veterans being more highly educated is also consistent with research finding that Jewish World War II veterans were more likely to use GI Bill benefits (Mettler, 2005). However, Jews still earn a greater amount of income in three out of

parental birthplace from these two Hispanic regions are consistent with the “bridging” hypothesis positing that military service is economically beneficial for members of minority racial or ethnic groups with a lower socioeconomic status.

the four sample groups even after controlling for years of schooling indicating that simply having more education is not the only reason for the income difference between Jews and non-Jews.

The combination of Jewish Korean War veterans having a greater number of years of schooling and a greater return to education compared to Jewish World War II veterans and non-Jewish Korean War veterans is an important contributor to the greater income disparity of Jewish and non-Jewish Korean War veterans.

Increasing occupational opportunities for Jews may be the reason for the increasing return to education and estimated years of employment experience among Jews in each of the three veteran sample groups (although the estimated years of employment experience has no effect on the income of Jewish Korean War veterans, it is still more positive because the estimated years of employment experience had a negative effect on the income of Jewish World War II veterans). It is possible that anti-Semitism limited the occupational opportunities for Jewish World War II veterans. As Jews continued to assimilate into American society and tolerance of Jews increased, occupational opportunities for Jews also continued to increase, leading to a greater return to education and employment experience of subsequent generations.

As nativity has no influence on income regardless of religion or veteran status, military service appears to have no effect on the influence of nativity on income. The lack of influence of parental birthplace on the income of Jews in three out of the four sample groups suggests that an overall “Jewish culture” has the same overall effect (or no effect) on income. Conversely, the influence of parental birthplace on the income of non-Jews in all four of the sample groups suggests that the income of non-Jews may be more affected by the culture of the parental birthplace.

Military service during World War II is more beneficial for non-Jews. Military service of non-Jews is associated with a greater return to education, a greater number of years of schooling, and a less negative influence on income when having a parental birthplace from certain regions, resulting in non-Jewish World War II veterans having an overall greater amount of income than non-Jewish non-veterans. Conversely, although there are no statistically significant influences on the income of Jewish non-veterans, Jewish non-veterans earn a greater amount of income and years of schooling than Jewish veterans. Military service during World War II does not provide an additional benefit to Jews beyond the income that Jews would have had without military service.

Occupational “prestige.” It is possible that similar to Jews overall (Smith, 2005), Jewish World War II veterans earn a greater amount of income from being employed in more “prestigious” occupations. However, while controlling for SEI (see table 9) does decrease the income difference between Jewish and non-Jewish World War II veterans from \$816 to \$491 (a 40 percent decrease) and Jewish and non-Jewish Korean War veterans from \$1,756 to \$1,512 (a 14 percent decrease), the income difference of both groups is still statistically significant. Controlling for SEI among Vietnam War veterans has no effect on the lack of a statistically significant income difference. Controlling for SEI in the “similar cohort” group however, decreases the income difference between Jewish and non-Jewish non-veterans from \$1,819 to \$1,237 (a 32 percent decrease) and removes the statistical significance of the income difference.

The decreasing income difference between Jewish and non-Jewish World War II veterans without the loss of statistical significance indicates that Jewish World War II veterans working in more “prestigious” occupations only partially explains why Jewish World War II veterans earn a greater amount of income. The smaller decline of the income difference between Jewish and

non-Jewish Korean War veterans indicates that Jewish Korean War veterans work in occupations with an even wider range of “prestige” than Jewish World War II veterans. The wider range of occupational “prestige” of Jewish Korean War veterans is possibly related to the expanding range of occupations available to Jews. The loss of statistical significance after controlling for SEI in the “similar cohort” group indicates that the reason for Jewish non-veterans earning a greater amount of income is because Jewish non-veterans work in more “prestigious” occupations. It is possible that military service encourages the diversification of Jews working in occupations of varying “prestige” through the development of skills that non-veterans do not have and/or a larger social network established through military service.

5.5 Review of Hypotheses

- 1) I expect to find that Jewish World War II veterans earn a greater amount of income compared to non-Jewish World War II veterans because research on Jews overall indicates that Jews earn a greater amount of income compared to non-Jews (e.g., Chiswick, 1983).

The results indicate that my first hypothesis was correct. Jewish World War II veterans do earn a greater amount of income compared to non-Jewish World War II veterans. However, the results also indicate that different variables influence the income of Jews and non-Jews differently.

- 2) I expect the income difference between Jewish World War II veterans and non-Jewish World War II veterans to be similar to the income difference between Jewish non-veterans and non-Jewish non-veterans because the salience of culture associated with religion is stronger than the equalization influence of the military.

The results indicate that my second hypothesis was only partially correct. While Jews earn a greater amount of income than non-Jews regardless of veteran status, the income difference between Jewish World War II veterans and non-Jewish World War II veterans was less than the income difference between Jewish non-veterans and non-Jewish non-veterans because military service was associated with a small negative effect on the income of Jews and a greater positive effect on the income of non-Jews. Furthermore, while controlling for occupational “prestige” only decreased the statistically significant income difference between Jewish World War II veterans and non-Jewish World War II veterans, controlling for occupational “prestige” among non-veterans resulted in the income difference between Jewish and non-Jewish non-veterans no longer being statistically significant, indicating that there are different reasons for Jewish World War II veterans earning a greater amount of income than Jewish non-veterans.

- 3) I expect the income difference between Jews and non-Jews to be statistically significant but with not as great of a difference for Korean War veterans and Vietnam War veterans compared to World War II veterans as a result of the less random selection of servicemen for the Korean War and the Vietnam War.

The results indicate that my third hypothesis was incorrect. The income difference between Jewish Korean War veterans and non-Jewish Korean War veterans is greater than the income difference between Jewish World War II veterans and non-Jewish World War II veterans. Furthermore, after controlling for variables that may increase the income of Jews, Jewish Vietnam War veterans do not earn a statistically significant greater amount of income.

- 4) I expect the same variables to have a similar relative magnitude of effect on the income difference between Jews and non-Jews regardless of era or veteran status

because the salience of culture associated with religion is stronger than the equalization influence of the military.

The results indicate that my fourth hypothesis was incorrect. Different variables affect the income of Jews and non-Jews differently in each of the four sample groups.

5.6 Limitations

There are four limitations to the study. First, even though the sample size of Jews is greater than some other studies comparing Jews to non-Jews, there is still a large discrepancy in the number of Jews to non-Jews in each sample group. The small sample size of Jews may be the reason for the lack of statistical significance of some variables on the income of Jews in the veteran sample groups and the reason for the lack of statistical significance of any variables on the income of Jews in the “similar cohort” group.

Second, as a consequence of the method used to identify Jews, Jews who are of the third generation and later were likely classified as non-Jews. It is unlikely that a Jewish person who had both parents born in the United States spoke a language other than English in their childhood household. While classifying Jewish respondents as non-Jews will not have a large effect on the non-Jewish group because the overall number of Jews is small, although nativity was controlled, it is possible that the Jewish sample is skewed toward first and second generation Jews. A skewed sample is not an issue for the World War II and “similar cohort” sample groups because the majority of Jews immigrated to the United States during the late 1800s through the first two decades of the 1900s (Diner, 2004) resulting in many Jews born during the 1920s and earlier being second generation Americans. However, the Korean War and Vietnam War sample groups may not be representative of Jewish veterans of those wars.

Third, as discussed above, the available data limits the comparison of Jews to a general non-Jewish group, rather than to a specific non-Jewish religion. However, the results are *not* confounded by a comparison of “Jewish *culture*” to “non-Jewish *culture*” in its entirety. Although “Jewish culture” is likely intertwined with the Jewish religion, because both race and parental birthplace were controlled, the effects of “non-Jewish culture,” other than culture caused by religion, were minimal. Variance among the incomes of different races or ethnic groups of either group cannot explain the lower amount of income of non-Jews.

Finally, assigning an income value of \$50,000 to respondents earning an income of \$50,000 or greater may have created a “ceiling effect” and artificially reduced the income difference between Jews and non-Jews or introduced other biases into the analyses because a greater percentage of Jews have an income value of \$50,000 than non-Jews. However, any biases caused by a “ceiling effect” are expected to be minimal for two reasons. First, while a greater percentage of Jews have an income value of \$50,000 in nearly all²¹ sample groups, fewer than two percent of Jews and fewer than one percent of non-Jews in each sample group have an income value of \$50,000 (analyses not shown). Second, rerunning the regression analyses using tobit regression to account for a “ceiling effect” indicates that there is no change in the statistical significance of any of the income differences in all four sample groups and that the increases in the income differences are minimal (analyses not shown).²²

²¹ The Vietnam War sample group is the only sample group in which a lower percentage of Jews have an income value of \$50,000 (zero percent and 0.04 percent for Jews and non-Jews, respectively).

²² The greatest increase, \$11, was between Jewish and non-Jewish Korean War veterans when not controlling for SEI.

6. Conclusion

While a significant amount of research has been conducted on World War II veterans and some research has been conducted on American Jews, little research has been conducted specifically on American Jewish World War II veterans. Jews in the United States have had a different social experience than other Americans as a consequence of their European history, cultural characteristics, socioeconomic success, and minority status.

The military draft and large number of enlistments during World War II present a unique opportunity to compare subgroups of veterans. Using data from the 1970 United States Census, the income and the influences on the income of Jewish World War II veterans were compared to the income and the influences on the income of non-Jewish World War II veterans through descriptive and regression analyses. The same analyses were then performed on veterans of the Korean War, the Vietnam War, and a similar non-veteran cohort.

The results indicate that Jewish World War II veterans and Jewish Korean War veterans earn a greater amount of income than non-Jewish World War II veterans and non-Jewish Korean War veterans, demonstrating that similar to Jews overall (Chiswick, 1983; Burstein, 2007), Jewish veterans also earn a greater amount of income than non-Jews. Possibly because of the young age of Vietnam War veterans at the time of the 1970 census or biases arising from the avoidance of military service during the Vietnam War, there was no statistically significant income difference between Jewish and non-Jewish Vietnam War veterans. Although all military veterans were offered the same post-war benefits regardless of religion, when compared to non-veterans, military service during World War II is more beneficial for non-Jews.

The same variables influence income differently depending on religion, the war in which the veteran served, and veteran status. The minimal effect of parental birthplace on the income

of Jews support hypotheses of Jews exhibiting behaviors of a “Jewish” ethnic group,²³ rather than Judaism being composed of individuals with different ethnic cultures from various countries. Finally, while Jews working in more “prestigious” occupations partially explains the income difference of World War II veterans and Korean War veterans, occupational “prestige” is not the reason for Jewish veterans earning a greater amount of income. However, occupational “prestige” is the reason for Jewish non-veterans earning a greater amount of income.

The salience of culture associated with religion. Overall, the study has proven the salience and importance of culture associated with religion by finding that the components of military service that should facilitate economic equality, such as the awarding of post-war educational benefits equally to all veterans, do not equalize the economic performance of military veterans of different religions. Jews earning a greater amount of income in three sample groups (or two sample groups after controlling for SEI), Jews and non-Jews having a similar distribution of income, Jews having a greater number of years of schooling in all four sample groups, and the minimal effect of military service on the income of Jews, with a positive, yet still not equalizing effect on the income of non-Jews, indicate a more powerful outside influence on income. The aspect(s) of religious culture related to income is salient enough to withstand the effects of post-war benefits and different historical, social, economic, and selection contexts.

The failure of most studies of veterans to consider and control for the effects of religion result in inaccurate analyses because of the important influence of religion on military veterans. For example, Schwartz (1986) claims that Vietnam War veterans have a lower return to education than Korean War veterans. While non-Jewish Vietnam War veterans do have a lower return to education than non-Jewish Korean War veterans, Jewish Vietnam War veterans have a greater return to education than Jewish Korean War veterans, indicating that not all subgroups of

²³ As data from only Ashkenazi Jews were used, the results of the study only apply to Ashkenazi Jews.

Vietnam War veterans have a lower return to education than Korean War veterans. Similar to controlling for the effects of race or ethnicity, it is essential to consider and control for the effects of religion.

Broader theoretical implications. There are two broader theoretical implications from the study. First, the results of the study suggest that the same limitations to the “bridging hypothesis” found using racial or ethnic comparisons expand to religion – military service will provide a greater economic benefit to members of religious groups with a lower socioeconomic status than to members of religious groups with a higher socioeconomic status. It is valid to expand theories about the effect of military service on the income of different ethnic or racial groups to religion because the results are similar to research studying the effects of military service on specific ethnic or racial groups, even after controlling for ethnicity and race.

The results are still applicable to military veterans today – even after serving in the military, a member of a religious group will still exhibit overall trends of that religious group. Even though all military veterans are offered the same post-service benefits, not all veterans of all religions will utilize the post-service benefits equally. Educational assistance beyond the typical post-service benefits, such as the establishment of academic scholarships targeted toward veterans of religious groups with a lower socioeconomic status, can be developed to encourage all veterans to utilize post-service benefits equally in an effort to increase socioeconomic status. The development of skills that will apply to civilian life is also essential. While the effect of religious culture will still be stronger than any efforts by the military to reduce income differences, it is possible to minimize the disparity in income between religions by maximizing the effectiveness of post-service benefits for veterans of religious groups with a lower socioeconomic status.

Second, the underlying cause of military service having a different socioeconomic benefit on Jews remains unclear. The marginality, human capital, “Jewish particularity,” and social capital aspects of American Jewish culture discussed above are closely related to the results of the study, yet are still not the definitive reason for the income disparity between Jews and non-Jews.

Marginality does not explain the continued socioeconomic success of Jews because the vast majority of American Jews have fully assimilated into American society, yet still continue to have a significantly higher, and still increasing, socioeconomic status compared to non-Jews (Burstein, 2007). Furthermore, while religious study or religious observance is usually a component of the majority of the human capital, Jewish particularity (e.g., Chiswick, 1999; Lehrer, 2004), and social capital explanations, there is a negative relationship between increased religiosity and income (Wilder and Walters, 1998). Furthermore, the literature that posits the historical religious practice of Judaism itself as having an important role in the later socioeconomic success of Jews does not take into account the relatively less successful yet more religiously observant (Medding, 2007) Sephardic Jews (Jews of Spanish origin) who, unlike Ashkenazi Jews, are not overrepresented in cognitively demanding occupations (Cochran, Hardy, & Harpending, 2006). The current-day socioeconomic differences appear to be caused by historical, cultural, and/or social experiences, rather than religious observance.

It is possible that historical external pressures, rather than Judaism itself, are the underlying cause of the higher amount of income of Ashkenazi Jews. As Ashkenazi Jews in Christian countries lived in anti-Semitic environments following the Middle Ages (Chiswick, 1999), it is possible that the sense of community and work ethic that was needed for survival led to greater amounts of human capital and social capital. For example, many Jews in Eastern

Europe from the late 1700s through the early 1900s owed their survival to Jewish charitable organizations (Gilbert, 2010). The same sense of community and work ethic was then passed down to subsequent generations, ultimately leading to later economic success.

The advantages of anti-Semitism in earlier Jewish history is not a new idea – Flannery (1985), explains that segregating Jews from Christians increased Jewish “solidarity, an attachment to the synagogue, and a devotion to study...which in time became the very basis for survival” (p. 146) and Burstein (2007) explains that anti-Semitism resulted in higher levels of social capital and literacy in Jewish communities which ultimately led to greater secular success in the United States. It is also possible that historical external pressures resulted in a genetic selection for higher intelligence (Cochran, Hardy, & Harpending, 2006).

Whether caused by purely social, purely genetic, or a combination of social and genetic, previous research (e.g., Cochran, Hardy, & Harpending, 2006; Burstein, 2007) support that historical external pressures, such as anti-Semitism, rather than internal components of the Jewish community, such as religious observance, are the underlying cause of the higher amount of income of Jews. The synergy of societal changes in the post-World War II era discussed above, with the components of Judaism developed through centuries of resisting anti-Semitism, explain the widening of socioeconomic differences between Jews and non-Jews in the post-World War II United States.

References

- Acheson, E. (1960). The distribution of ulcerative colitis and regional enteritis in United States veterans with particular reference to the Jewish religion. *Gut*, 1(4), 291-293.
- Alba, R. (2006). On the sociological significance of the American Jewish experience: Boundary blurring, assimilation, and pluralism. *Sociology of Religion*, 67(4), 347-358.
- Angrist, J. D. (1990). Lifetime earnings and the Vietnam era draft lottery: evidence from social security administrative records. *The American Economic Review*, 80(3), 313-336.
- Angrist, J., & Krueger, A. B. (1992). *Estimating the payoff to schooling using the Vietnam-era draft lottery*. Cambridge, MA: National Bureau of Economic Research. (NBER Working Paper No. 4067).
- Angrist, J., & Krueger, A. B. (1994). Why do World War II veterans earn more than nonveterans? *Journal of Labor Economics*, 12(1), 74-97.
- Attali, J. (2010). *The Economic History of the Jewish People*. Paris: Eska Publishing.
- Ayal, E. B., & Chiswick, B. R. (1983). The Economics of the Diaspora Revisited. *Economic Development and Cultural Change*, 31(4), 861-875.
- Bailey, D., & Cargill, T. F. (1969). The military draft and future income. *Economic Inquiry*, 7(4), 365-370.
- Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (3 ed.). Chicago: University of Chicago Press.
- Bendersky, J. W. (2000). *The "Jewish Threat": Anti-Semitic Politics of the US Army*. New York: Basic Books.
- Berger, M. C., & Hirsch, B. T. (1983). The civilian earnings experience of Vietnam-era veterans. *Journal of Human Resources*, 18(4), 455-479.
- Berger, R. J. (2010). Jewish Americans and the Holocaust. *Contexts*, 9(1), 40-45.
- Berkhart, P. H. (2008). *No Child Left Behind: Issues and Developments*. New York: Nova Science Publishers, Inc.
- Bodnar, J. (1985). *The Transplanted: A History of Immigrants in Urban America*. Bloomington, IN: Indiana University Press.
- Bordieri, J. E., & Drehmer, D. E. (1984). Vietnam veterans: Fighting the employment war. *Journal of Applied Social Psychology*, 14(4), 341-347.

- Bound, J., & Turner, S. (2002). Going to war and going to college: Did World War II and the GI Bill increase educational attainment for returning veterans? *Journal of Labor Economics*, 20(4), 784-815.
- Brodkin, K. (1998). *How Jews Became White Folks and What That Says About Race in America*. Piscataway, NJ: Rutgers University Press.
- Browning, H. L., Lopreato, S. C., & Poston Jr, D. L. (1973). Income and veteran status: variations among Mexican Americans, blacks and anglos. *American Sociological Review*, 38(1), 74-85.
- Burstein, P. (2007). Jewish educational and economic success in the United States: A search for explanations. *Sociological Perspectives*, 50(2), 209-228.
- Card, D., & Lemieux, T. (2001). Going to college to avoid the draft: The unintended legacy of the Vietnam War. *The American Economic Review*, 91(2), 97-102.
- Chatters, L. M. (2000). Religion and health: Public health research and practice. *Annual Review of Public Health*, 21(1), 335-367.
- Chiswick, B. R. (1983). The earnings and human capital of American Jews. *Journal of Human Resources*, 18(3), 313-336.
- Chiswick, B. R. (1988). Differences in education and earnings across racial and ethnic groups: Tastes, discrimination, and investments in child quality. *The Quarterly Journal of Economics*, 103(3), 571-597.
- Chiswick, B. R. (1993). The skills and economic status of American Jewry: Trends over the Last Half-Century. *Journal of Labor Economics*, 11(1), 229-242.
- Chiswick, C. U. (1999). The economics of Jewish continuity. *Contemporary Jewry*, 20(1), 30-56.
- Clifford, J. G., & Spencer, S. R. (1986). *The First Peacetime Draft*. Lawrence, KS: University Press of Kansas.
- Cochran, G., Hardy, J., & Harpending, H. (2006). Natural history of Ashkenazi intelligence. *Journal of Biosocial Science*, 38(5), 659-693.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- Dawidowicz, L. S. (1982). *On Equal Terms: Jews in America, 1881-1981*. New York: Holt, Rinehart and Winston.
- Diner, H. R. (2004). *The Jews of the United States, 1654 to 2000*. London: University of California Press.

- Dwork, D. (1981). Health conditions of immigrant Jews on the lower East Side of New York: 1880-1914. *Medical History*, 25(1), 1-40.
- Fairchild, B., & Grossman, J. (1959). *The Army and Industrial Manpower*. Washington, D.C.: US Government Printing Office.
- Featherman, D. L. (1971). The socioeconomic achievement of white religio-ethnic subgroups: social and psychological explanations. *American Sociological Review*, 36(2), 207-222.
- Flannery, E. H. (1985). *The Anguish of the Jews: Twenty-Three Centuries of Antisemitism*. Mahwah, NJ: Paulist Press.
- George, L. K., Ellison, C. G., & Larson, D. B. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry*, 13(3), 190-200.
- Gilbert, M. (2010). *The Routledge Atlas of Jewish History* (8 ed.). New York: Routledge.
- Goldscheider, C. (1986). *Jewish Continuity and Change: Emerging patterns in America*. Bloomington, IN: Indiana University Press.
- Goldscheider, C., & Zuckerman, A. S. (1984). *The Transformation of the Jews*. Chicago: University of Chicago Press.
- Goldstein, S. (1969). Socioeconomic differentials among religious groups in the United States. *American Journal of Sociology*, 74(6), 612-631.
- Hammarberg, M., & Silver, S. M. (1994). Outcome of treatment for post-traumatic stress disorder in a primary care unit serving Vietnam veterans. *Journal of traumatic stress*, 7(2), 195-216.
- Hauser, R. M., & Warren, J. R. (1997). Socioeconomic Indexes for Occupations: A Review, Update, and Critique. *Sociological Methodology*, 27(1), 177-298.
- Heilman, S. C. (1982). The sociology of American Jewry: The last ten years. *Annual Review of Sociology*, 8, 135-160.
- Hertzberg, A. (1989). *The Jews in America: Four Centuries of an Uneasy Encounter: A History*. New York: Simon & Schuster.
- Kahan, A. (1978). Economic Opportunities and Some Pilgrims' Progress: Jewish Immigrants from Eastern Europe in the US, 1890-1914. *Journal of Economic History*, 38(1), 235-251.
- Kaufmann, J. E., & Kaufmann, H. W. (2008). *GI Joe in France: From Normandy to Berchtesgaden*. Westport, CT: Praeger Security International.

- Kreps, J. M. (1977). Age, work, and income. *Southern Economic Journal*, 43(4), 1423-1437.
- Lee, B. Y., & Newberg, A. B. (2005). Religion and health: a review and critical analysis. *Zygon: Journal of Religion and Science*, 40(2), 443-468.
- Lefferts, G. (2012). [Interview with George Lefferts].
- Lehrer, E. L. (2004). Religion as a determinant of economic and demographic behavior in the United States. *Population and Development Review*, 30(4), 707-726.
- Little, R. D., & Fredland, J. E. (1979). Veteran Status, Earnings, and Race Some Long Term Results. *Armed Forces & Society*, 5(2), 244-260.
- MacInnis, B. (2006). Does College Education Impact Health? Evidence from the Pre-Lottery Vietnam Draft: *Mimeo, Department of Agricultural and Resource Economics, UC Berkeley*.
- Martindale, M., & Poston, D. L. (1979). Variations in veteran/nonveteran earnings patterns among World War II, Korea, and Vietnam War cohorts. *Armed Forces & Society*, 5(2), 219-243.
- McDermott, M. (2002). Trends in the Race and Ethnicity of Eminent Americans. *Sociological Forum*, 17(1), 137-160.
- McWilliams, C. (1975). *A Mask for Privilege: Anti-Semitism in America*. Piscataway, NJ: Transaction Publishers.
- Medding, P. (2007). *Sephardic Jewry and Mizrahi Jews* (Vol. 22). New York: Oxford University Press, USA.
- Mettler, S. (2005). *Soldiers to Citizens: The GI Bill and the Making of the Greatest Generation*. New York: Oxford University Press.
- Moore, D. D. (2004). *GI Jews: How World War II Changed a Generation*. Cambridge, MA: Belknap Press.
- Mosesson, G. R. (1971). *The Jewish War Veterans Story*. Washington, D C: Jewish War Veterans of the United States of America.
- Papanicolaou, J., & Psacharopoulos, G. (1979). Socioeconomic background, schooling and monetary rewards in the United Kingdom. *Economica*, 46(184), 435-439.
- Rudnick, L. P. , Smith, J. E., & Rubin, R. L. (2005). *American Identities: An Introductory Textbook*. Malden, MA: Wiley-Blackwell.

- Rosen, S., & Taubman, P. (1982). Changes in Life-Cycle Earnings: What Do Social Security Data Show? *Journal of Human Resources*, 17(3), 321-338.
- Ruggles, S. J., Alexander, T., Genadek, K., Goeken, R., Schroeder, M.B., & Sobek, M. (2010). *Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]*. Minneapolis: University of Minnesota.
- Schwartz, S. (1986). The Relative Earnings of Vietnam and Korean-Era Veterans. *Industrial and Labor Relations Review*, 39(4), 564-572.
- Selective Service System. (2003). Induction Statistics Retrieved 11-13, 2011, from <http://www.sss.gov/induct.htm>
- Shapiro, E. S. (1990). World War II and American Jewish Identity. *Modern Judaism*, 10(1), 65-84.
- Simon, R. J. (1997). *In the Golden Land: A Century of Russian and Soviet Jewish Immigration in America*. Westport, CT: Praeger Publishers.
- Smith, C., & Faris, R. (2005). Socioeconomic inequality in the American religious system: An update and assessment. *Journal for the Scientific Study of Religion*, 44(1), 95-104.
- Smith, T. W. (1990). Classifying protestant denominations. *Review of Religious Research*, 31(3), 225-245.
- Smith, T. W. (2005). *Jewish Distinctiveness in America: A Statistical Portrait*. New York: American Jewish Committee.
- Soyer, D. (1997). *Jewish Immigrant Associations and American Identity in New York, 1880-1939*. Cambridge, MA: Harvard University Press.
- Stanley, M. (2003). College education and the midcentury GI Bills. *The Quarterly Journal of Economics*, 118(2), 671-708.
- Steen, T. P. (2004). The relationship between religion and earnings: recent evidence from the NLS Youth Cohort. *International Journal of Social Economics*, 31(5/6), 572-581.
- Teachman, J. D., & Call, V. R. A. (1996). The effect of military service on educational, occupational, and income attainment. *Social Science Research*, 25(1), 1-31.
- Teachman, J. (2004). Military service during the Vietnam era: Were there consequences for subsequent civilian earnings? *Social Forces*, 83(2), 709-730.
- United States Census Bureau. (1970). *1970 Census User's Guide*. Washington, D.C.: U.S. Government Printing Office.

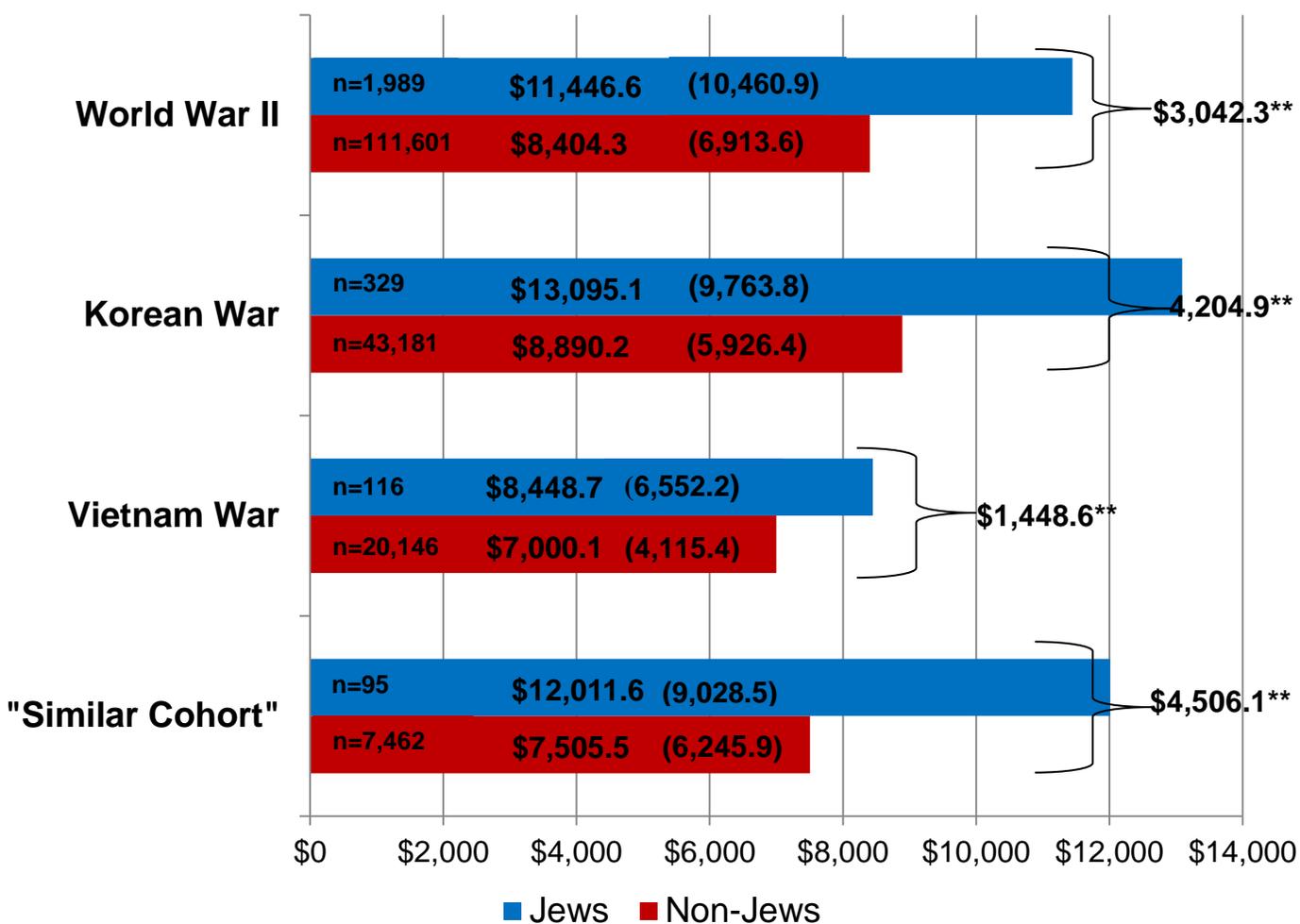
- United States Census Bureau. (1998). Table 585 Retrieved 11-13, 2011, from <http://www.census.gov/prod/3/98pubs/98statab/sasec11.pdf>
- United States Census Bureau. (2003). Veterans Retrieved 11-13, 2011, from http://factfinder.census.gov/jsp/saff/SAFFInfo.jsp?_pageId=tp12_veterans
- United States Census Bureau. (n.d.). Census Regions and Divisions of the United States Retrieved 2-27, 2013, from https://www.census.gov/geo/www/us_regdiv.pdf
- United States Department of Veterans Affairs. (2009). Fact Sheet Retrieved 11-13, 2011, from http://www.va.gov/opa/publications/factsheets/fs_department_of_veterans_affairs.pdf
- Veblen, T. (1919). The intellectual pre-eminence of Jews in modern Europe. *Political Science Quarterly*, 34(1), 33-42.
- Villemez, W. J., & Kasarda, J. D. (1976). Veteran status and socioeconomic attainment. *Armed Forces & Society*, 2(3), 407-420.
- Wilder, E., & Walters, W. (1998). Ethnic and religious components of the Jewish income advantage, 1969 and 1989. *Sociological Inquiry*, 68(3), 426-436.
- Winkleby, M. A., Jatulis, D. E., Frank, E., & Fortmann, S. P. (1992). Socioeconomic status and health: how education, income, and occupation contribute to risk factors for cardiovascular disease. *American Journal of Public Health*, 82(6), 816-820.
- Winter, J. A. (1996). Symbolic ethnicity or religion among Jews in the United States: a test of Gansian hypotheses. *Review of Religious Research*, 37(3), 233-247.

Note: In all regression tables, the two variables that were created to control for missing data in the variables holding urbanicity status and the socioeconomic index value are excluded from the regression tables for clarity. As the urbanicity status variable was recoded to control for missing data, the urbanicity status variable is excluded from all regression tables. The values reported for parental birthplace are relative to the British Isles and the values reported for nativity are relative to being born in the United States and having both parents being born in the United States. All monetary values are in 1970 dollars.

Table 1. Sample Groups by Jewish Status

Sample Group	Jews	Non-Jews	Total n
World War II Veterans	1,989	111,601	113,590
Korean War Veterans	329	43,181	43,510
Vietnam War Veterans	116	20,146	20,262
“Similar Cohort”	95	7,462	7,557
Grand Total n	2,529	182,390	184,919

Chart 1. Mean Income and Mean Income Difference by Sample Group and Jewish Status



The mean income differences between Jews and non-Jews within each sample group were tested for statistical significance using t-tests. Standard deviations are shown in parentheses. Mean income differences are shown to the right of the brace. ** p<=0.01

Table 2. Income Distribution by Sample Group and Jewish Status

Sample Group	Income Range (Percentages)					Total n
	\$0- \$4,999	\$5,000- \$9,999	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000+	
<i>World War II</i>						
Jews	26.5	21.7**	23.1	12.3**	16.3**	1,989
Non-Jews	27.1	38.8	22.6	6.5	5.1	111,601
<i>Korean War</i>						
Jews	16.4	18.5**	30.7	17.3**	17.0**	329
Non-Jews	19.8	41.4	27.9	7.0	3.9	43,181
<i>Vietnam War</i>						
Jews	29.3	31.9**	27.6**	6.0**	5.2**	116
Non-Jews	26.4	54.4	16.2	2.1	0.9	20,146
<i>"Similar Cohort"</i>						
Jews	20.0**	24.2**	19.0	19.0**	17.9**	95
Non-Jews	32.7	38.8	19.0	5.8	3.8	7,462

Percentages were tested for statistical significance between Jews and non-Jews within each sample group using tests of proportions. ** $p < 0.01$

Table 3. Mean Estimated Years of Employment Experience by Sample Group and Jewish Status

Sample Group	Jews	Non-Jews	Total n
World War II Veterans	32.7** (6.8)	33.4 (6.8)	113,590
Korean War Veterans	19.5** (3.8)	20.9 (4.3)	43,510
Vietnam War Veterans	8.2** (2.7)	9.8 (4.0)	20,262
“Similar Cohort”	22.3** (3.5)	25.4 (4.0)	7,557

The mean estimated years of employment experience were tested for statistical significance between Jews and non-Jews within each sample group using t-tests. Standard deviations are shown in parentheses. ** $p < 0.01$

Table 4. Mean Years of Schooling by Sample Group and Jewish Status

Sample Group	Jews	Non-Jews	Total n
World War II Veterans	13.3** (2.8)	11.2 (3.3)	113,590
Korean War Veterans	14.4** (2.6)	12.0 (2.9)	43,510
Vietnam War Veterans	14.9** (2.1)	12.8 (2.2)	20,262
“Similar Cohort”	13.5** (3.5)	10.3 (3.9)	7,557

The mean years of schooling were tested for statistical significance between Jews and non-Jews within each sample group using t-tests. Standard deviations are shown in parentheses. ** $p \leq 0.01$

Table 5. Regression Coefficients Measuring the Income Difference between Jewish and Non-Jewish World War II Veterans

<u>Variables</u>	
Jewish World War II Veterans (=1)	816.4** (239.8)
Estimated Years of Employment Experience	-110.0** (3.4)
Years of Schooling	513.9** (8.5)
Region (South=1, Other Region=0)	-763.8** (44.7)
Married (=1)	2,622.3** (45.8)
Race (White=1, Other Race=0)	1,715.0** (50.0)
<u>Parental Birthplace</u>	
Western Europe	-284.5* (139.9)
Southern Europe	-615.4** (139.7)
Eastern Europe	-203.1 (143.6)
Canada, Australia, and New Zealand	-361.9* (178.8)
Mexico	-1,169.1** (181.9)
Other Latin America and Caribbean Area	-1,340.3** (307.3)
Asia and Africa	-277.9 (266.4)
United States	-287.7 (439.7)
Other Region	-369.3 (256.7)
<u>Nativity</u>	
Native Born and Father Foreign Born, Mother Native Born	299.9 (437.0)
Native Born and Mother Foreign Born, Father Native Born	385.4 (446.5)
Native Born and Both Parents Foreign Born	184.8 (430.1)
Foreign Born	514.0 (407.7)
Constant	-343.9 (489.6)
Total n	113,590
R²	0.17
Root Mean Squared Error	6,386.2

Standard errors are shown in parentheses and are robust standard errors. * p<= 0.05 ** p<=0.01

Table 6. Regression Coefficients Comparing the Influences on the Income of Jewish and Non-Jewish World War II Veterans

<u>Variables</u>	<u>Jews</u>	<u>Non-Jews</u>
Estimated Years of Employment Experience	-211.4** (41.6)	-108.5** (3.4)
Years of Schooling	316.2** (97.6)	516.1** (8.5)
Region (South=1, Other Region=0)	1,466.5 (902.3)	-780.8** (44.4)
Married (=1)	2,902.9** (689.1)	2,618.7** (45.5)
Race (White=1, Other Race=0)	6,498.0* (2,984.4)	1,711.7** (50.0)
<u>Parental Birthplace</u>		
Western Europe	734.2 (1,854.6)	-274.1* (139.9)
Southern Europe	10,254.4 (11,824.3)	-618.3** (139.7)
Eastern Europe	1,418.3 (1,663.7)	-221.0 (143.9)
Canada, Australia, and New Zealand	-2,555.4 (6,474.8)	-359.7* (178.9)
Mexico	(No Obs.)	-1,156.1** (182.0)
Other Latin America and Caribbean Area	(No Obs.)	-1,322.4** (307.5)
Asia and Africa	123.7 (2,467.5)	-269.0 (267.8)
United States	-1,700.0 (1,992.5)	-258.5 (439.5)
Other Region	1,681.3 (1,955.5)	-406.4 (258.3)
<u>Nativity</u>		
Native Born and Father Foreign Born, Mother Native Born	-2,688.4 (1,463.9)	347.8 (436.5)
Native Born and Mother Foreign Born, Father Native Born	-1,359.5 (2,051.4)	402.6 (445.9)
Native Born and Both Parents Foreign Born	-1,109.7 (848.5)	204.4 (429.5)
Foreign Born	†	507.4 (407.8)
Constant	8,914.9 (6,634.4)	-438.4 (489.2)
Total n	1,989	111,601
R²	0.05	0.17
Root Mean Squared Error	10,230.0	6,295.9

Standard errors are shown in parentheses and are robust standard errors. * p<= 0.05 ** p<=0.01 † Omitted because of collinearity.

Table 7. Regression Coefficients Measuring the Income Difference between Jewish and Non-Jewish Korean War Veterans, Vietnam War Veterans, and Non-Veterans (“Similar Cohort”)

Variables	Kor. War	Viet. War	"Sim. Cohort"
Jewish (=1)	1,755.7** (540.7)	-97.8 (604.5)	1,818.7* (918.5)
Estimated Years of Employment Experience	37.8** (8.7)	114.1** (10.8)	-88.5 (95.8)
Years of Schooling	634.4** (14.8)	391.9** (19.4)	430.1** (98.3)
Region (South=1, Other Region=0)	-764.5** (58.9)	-612.1** (61.5)	-645.3** (136.9)
Married (=1)	2,442.7** (71.4)	1,864.3** (61.8)	3,062.9** (143.2)
Race (White=1, Other Race=0)	2,080.3** (72.1)	1,153.4** (94.7)	1,443.8** (135.2)
<u>Parental Birthplace</u>			
Western Europe	-786.8** (249.8)	-26.6 (347.3)	-754.4 (596.3)
Southern Europe	-1,101.1** (239.1)	263.1 (378.0)	-541.9 (635.2)
Eastern Europe	-704.1** (263.3)	263.6 (406.3)	-1,004.1 (638.5)
Canada, Australia, and New Zealand	-808.2** (286.6)	-3.5 (356.9)	-363.5 (752.7)
Mexico	-1,898.0** (266.7)	-1,498.9** (341.7)	-1,221.6* (597.2)
Other Latin America and Caribbean Area	-2,144.3** (348.5)	-838.4* (394.1)	-2,246.3** (580.8)
Asia and Africa	-533.6 (378.1)	-365.3 (571.4)	-998.8 (682.2)
United States	-844.6 (569.5)	285.0 (729.3)	-835.5 (1,375.6)
Other Region	-1,685.7** (352.5)	-76.8 (629.0)	-531.3 (877.0)
<u>Nativity</u>			
Native Born and Father Foreign Born, Mother Native Born	252.5 (550.4)	907.9 (706.7)	-237.6 (1,333.4)
Native Born and Mother Foreign Born, Father Native Born	50.0 (564.6)	808.1 (712.3)	505.3 (1,412.8)
Native Born and Both Parents Foreign Born	243.8 (542.6)	1,225.7 (721.5)	185.2 (1,321.1)
Foreign Born	38.0 (482.3)	503.8 (653.7)	213.6 (1,275.5)
Constant	-5,304.0** (681.9)	-3,247.3** (815.4)	-986.0 (3,722.5)
Total n	43,510	20,262	7,557
R²	0.17	0.10	0.22
Root Mean Squared Error	5,453.1	3,918.6	5,563.6

Standard errors are shown in parentheses and are robust standard errors. * p<= 0.05 ** p<=0.01

Table 8. Regression Coefficients Comparing the Influences on the Income of Jewish and Non-Jewish Korean War Veterans, Vietnam War Veterans, and Non-Veterans (“Similar Cohort”)

<u>Variables</u>	<u>Korean War</u>		<u>Vietnam War</u>		<u>“Similar Cohort”</u>	
	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews
Estimated Years of Employment Experience	-174.9 (164.0)	39.0** (8.7)	652.3* (292.0)	112.8** (10.7)	-338.8 (1,293.8)	-92.0 (96.1)
Years of Schooling	806.1** (248.5)	633.8** (14.8)	902.5** (350.9)	389.6** (19.4)	334.8 (1,276.1)	426.6** (98.8)
Region (South=1, Other Region=0)	-862.7 (1,517.3)	-765.3** (58.9)	2,728.5 (1,561.0)	-625.6** (61.4)	-3,247.9 (3,062.6)	-642.6** (137.0)
Married (=1)	4,192.1** (1,087.4)	2,431.4** (71.4)	2,847.7* (1,147.8)	1,858.5** (61.9)	2,477.4 (2,508.6)	3,045.5** (142.4)
Race (White=1, Other Race=0)	†	2,081.6** (72.0)	4,576.3** (1,361.3)	1,149.6** (94.6)	†	1,451.4** (135.1)
<u>Parental Birthplace</u>						
Western Europe	1,312.1 (5,055.1)	-777.0** (248.3)	4,482.4** (1,198.1)	-55.4 (350.0)	4,985.8 (2,821.2)	-853.0 (599.4)
Southern Europe	(No Obs.)	-1,113.3** (238.0)	(No Obs.)	240.7 (379.5)	(No Obs.)	-613.0 (636.3)
Eastern Europe	2,379.7 (4,637.0)	-695.8** (260.7)	3,827.8* (1,774.5)	177.3 (417.3)	3,020.1 (1,762.7)	-1,137.4 (646.7)
Canada, Australia, and New Zealand	-7,046.3 (4,786.1)	-810.8** (285.8)	-5,077.7* (2,068.0)	25.7 (357.4)	(No Obs.)	-394.2 (755.5)
Mexico	(No Obs.)	-1,916.5** (265.6)	(No Obs.)	-1,512.3** (343.0)	(No Obs.)	-1,274.8* (598.4)
Other Latin America and Caribbean Area	-735.7 (5,236.0)	-2,158.9** (348.6)	(No Obs.)	-840.5* (394.7)	(No Obs.)	-2,271.2** (581.8)
Asia and Africa	1,285.1 (6,636.3)	-540.9 (377.3)	484.0 (3,999.7)	-372.7 (571.0)	2,424.0 (6,028.7)	-1,019.8 (684.3)
United States	6,408.5 (5,270.7)	-916.8 (571.2)	-2,075.3 (5,986.3)	415.5 (730.8)	-4,830.6 (4,648.7)	-852.4 (1,376.2)
Other Region	3,267.9 (5,196.1)	-1,722.0** (353.8)	6,007.3** (1,910.0)	-142.2 (642.7)	1,046.5 (4,021.7)	-479.9 (898.2)
<u>Nativity</u>						
Native Born and Father Foreign Born, Mother Native Born	3,909.8 (3,364.5)	166.0 (552.3)	-5,275.5 (5,801.4)	1,091.4 (707.4)	-5,504.5 (3,877.3)	-142.7 (1,334.0)
Native Born and Mother Foreign Born, Father Native Born	1,251.6 (3,676.2)	6.5 (567.1)	-5,247.8 (5,942.9)	956.4 (712.9)	1,576.4 (4,897.4)	311.4 (1,410.2)
Native Born and Both Parents Foreign Born	2,536.8 (3,317.3)	198.8 (544.6)	-4,905.8 (5,927.2)	1,338.5 (722.6)	-3,583.0 (2,744.3)	277.2 (1,321.8)
Foreign Born	2,129.9 (2,134.8)	-15.8 (484.0)	†	628.5 (655.5)	†	209.9 (1,275.6)
Constant	-12,319.8 (8,418.7)	-5,237.4** (683.3)	-15,401.1 (11,928.7)	-3,326.6** (816.3)	3,511.5 (49,538.4)	-830.5 (3,733.4)
Total n	329	43,181	116	20,146	95	7,462
R²	0.10	0.17	0.22	0.10	0.15	0.22
Root Mean Squared Error	9,504.9	5,411.9	6,219.2	3,900.8	8,949.2	5,514.3

Standard errors are shown in parentheses and are robust standard errors. * p<= 0.05 ** p<=0.01 † Omitted because of collinearity.

Table 9. Regression Coefficients Measuring the Income Difference between Jewish and Non-Jewish World War II Veterans, Korean War Veterans, Vietnam War Veterans, and Non-Veterans ("Similar Cohort") with Control for Occupational Prestige (SEI)

Variables	WW II	Kor. War	Viet. War	"Sim. Cohort"
Jewish (=1)	490.8* (241.0)	1,512.0** (548.3)	-369.1 (594.7)	1,236.8 (920.1)
Estimated Years of Employment Experience	-105.2** (3.4)	23.6** (8.6)	97.9** (10.0)	-106.3 (94.1)
Years of Schooling	289.4** (8.4)	405.0** (14.7)	215.7** (19.0)	261.1** (96.4)
Region (South=1, Other Region=0)	-905.9** (44.0)	-828.8** (57.8)	-636.7** (60.2)	-688.8** (135.3)
Married (=1)	2,080.6** (44.4)	2,031.1** (69.7)	1,650.7** (59.9)	2,921.2** (142.0)
Race (White=1, Other Race=0)	1,288.5** (47.7)	1,615.1** (70.0)	875.2** (92.7)	1,215.7** (132.4)
Occupational Prestige (SEI)	93.8** (2.2)	78.6** (2.8)	53.9** (2.8)	87.8** (7.8)
Parental Birthplace				
Western Europe	-223.4 (137.2)	-723.5** (245.9)	-1.1 (337.2)	-543.1 (573.1)
Southern Europe	-499.7** (136.7)	-974.1** (235.7)	224.1 (367.3)	-211.8 (614.6)
Eastern Europe	-145.8 (141.2)	-658.1** (261.0)	136.4 (392.3)	-856.5 (618.9)
Canada, Australia, and New Zealand	-325.1 (174.4)	-729.8** (280.8)	74.8 (347.8)	-148.7 (741.3)
Mexico	-1,074.8** (173.3)	-1,681.7** (259.0)	-1,229.9** (330.8)	-993.2 (573.8)
Other Latin America and Caribbean Area	-1,169.2** (296.9)	-1,927.5** (333.4)	-882.0* (373.8)	-1,897.2** (552.5)
Asia and Africa	-439.9 (262.6)	-731.0* (370.3)	-428.6 (555.1)	-1,070.1 (637.5)
United States	-290.2 (428.9)	-933.1 (550.9)	420.7 (713.3)	-435.4 (1,410.6)
Other Region	-273.7 (253.2)	-1,655.7** (345.2)	0.9 (618.7)	-704.4 (855.7)
Nativity				
Native Born and Father Foreign Born, Mother Native Born	205.4 (426.4)	71.4 (531.7)	945.6 (693.6)	-17.3 (1,377.8)
Native Born and Mother Foreign Born, Father Native Born	275.1 (435.8)	-159.7 (545.6)	763.4 (700.0)	716.2 (1,450.0)
Native Born and Both Parents Foreign Born	133.3 (419.5)	83.7 (523.7)	1,211.1 (707.7)	379.2 (1,365.0)
Foreign Born	446.0 (397.5)	-126.5 (464.6)	662.0 (642.9)	291.9 (1,323.5)
Constant	3.5 (478.0)	-3,873.4** (663.0)	-2,162.3** (792.7)	-1,454.2 (3,681.4)
Total n	113,590	43,510	20,262	7,557
R²	0.20	0.20	0.14	0.25
Root Mean Squared Error	6,263.3	5,355.1	3,829.7	5,483.6

Standard errors are shown in parentheses and are robust standard errors. * p<= 0.05 ** p<=0.01