

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Chiswick, Barry R.; Huang, Jidong

#### **Working Paper**

The earnings of American Jewish men: human capital, denomination and religiosity

IZA Discussion Papers, No. 2301

#### **Provided in Cooperation with:**

IZA - Institute of Labor Economics

*Suggested Citation:* Chiswick, Barry R.; Huang, Jidong (2006): The earnings of American Jewish men: human capital, denomination and religiosity, IZA Discussion Papers, No. 2301, Institute for the Study of Labor (IZA), Bonn

This Version is available at: https://hdl.handle.net/10419/33893

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





IZA DP No. 2301

The Earnings of American Jewish Men: Human Capital, Denomination and Religiosity

Barry R. Chiswick Jidong Huang

September 2006

Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

# The Earnings of American Jewish Men: Human Capital, Denomination and Religiosity

## **Barry R. Chiswick**

University of Illinois at Chicago and IZA Bonn

### **Jidong Huang**

University of Illinois at Chicago

Discussion Paper No. 2301 September 2006

IZA

P.O. Box 7240 53072 Bonn Germany

Phone: +49-228-3894-0 Fax: +49-228-3894-180 Email: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of the institute. Research disseminated by IZA may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit company supported by Deutsche Post World Net. The center is associated with the University of Bonn and offers a stimulating research environment through its research networks, research support, and visitors and doctoral programs. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

#### **ABSTRACT**

# The Earnings of American Jewish Men: Human Capital, Denomination and Religiosity\*

This paper analyzes the determinants of the earnings of American Jewish men using the 2000/01 National Jewish Population Survey. Non-response to the question on earnings is analyzed. Earnings are related to conventional human capital variables, as well as Jewish-specific variables. Except for the size of place and region variables, the standard human capital variables have similar effects for Jews and the general population. Jewish day schooling as a youth enhances earnings. Earnings vary by denomination, with Conservative Jews earning the most. The effect on earnings of religiosity (measured by synagogue attendance) is not monotonic. Earnings are highest for those who attend only once a week.

JEL Classification: J310, J150, Z120, C810

Keywords: earnings, Jews, religion, denomination

Corresponding author:

Barry R. Chiswick
Department of Economics (M/C 144)
University of Illinois at Chicago
601 South Morgan Street
Chicago, IL 60607-7121
USA

E-mail: brchis@uic.edu

\_

<sup>\*</sup> We appreciate the comments on an earlier draft from Paul Burnstein, Carmel U. Chiswick, Danny Cohen-Zada, Roberta Farber, Allan Glicksman, Robert Goldfarb, Allan Kensky, Evelyn Lehrer, Uzi Rebhun, and William Sander.

#### "The Earnings of American Jewish Men: Human Capital, Denomination and Religiosity"

#### I. INTRODUCTION

Research has shown that there is substantial variation by race, ethnicity and religion in the educational attainment and earnings of adult men and women in the United States. American Jews, for example, have been shown to have a higher educational level, higher occupational status and higher earnings than other whites, both overall and when education and other variables are held constant.<sup>1,2</sup>

The U.S. Census of Population has never explicitly included a question on religion.<sup>3</sup> Since Jews are currently only about 2 percent of the population of the United States, the sample sizes for Jews in privately collected surveys are relatively small. As a result, studies that have identified Jews have tended to use indirect Jewish identifiers or,

\_

<sup>&</sup>lt;sup>1</sup> For recent research regarding Jewish men and women, see, for example, B. Chiswick (1993, 1999, 2006), Burstein (2005), Lehrer (2006a, 2006b) and Lieberson and Waters (1988), and the references therein.

<sup>&</sup>lt;sup>2</sup> The comparison with other whites is appropriate. Of the male Jewish respondents in the 2000/01 National Jewish Population Survey (NJPS), 97 percent report their race as white. This is consistent with the racial distribution of Jews in the General Social Survey, 96 percent white non-Hispanic, 1 percent Hispanic, 2 percent Black and 1 percent Asian (Smith, 2005, p. 287).

<sup>&</sup>lt;sup>3</sup> The Census Office conducted a special survey of about 10,000 American Jewish families in 1890, and asked occupation but not earnings. In March 1957, the Current Population Survey (conducted by the Census Bureau for the Bureau of Labor Statistics) for the first and last time included a question on religion, in addition to the standard questions on employment, earnings and occupation. Microdata files do not exist for either sample. See Billings (1980), B. Chiswick (2001) and the U.S. Bureau of the Census (1958, no date). Since 1970, the dicennial census has included a question on ancestry, but when the responses are coded, the coding system masks any response that might reveal the person's religion.

if there is a direct Jewish identifier, to be of relatively modest size. Data on Jews are also available from surveys conducted by local Jewish communities and from the 1970, 1990 and 2000/01 National Jewish Population Surveys. With the exception of the 2000/01 NJPS, these Jewish surveys generally do not ask about individual earnings. Yet, even with these data limitations, when roughly comparable results emerge from a variety of independent data sets one has considerable confidence in the robustness of the findings of higher levels of schooling and earnings among American Jews.

The data sets that revealed the higher levels of schooling and earnings of American Jews have generally had too few observations on Jews to perform statistically meaningful analyses for Jews using multivariate techniques. Pooling the data from different surveys is not practical because these surveys used somewhat different methodologies and questions for identifying Jews and for other variables. Moreover, some matters of interest that relate specifically to Jews cannot be addressed because relevant questions are not included. For example, does Jewish denomination matter for the earnings of Jews, and does this depend on whether it is childhood or current denomination?

Fortunately, the National Jewish Population Survey 2000/01 (NJPS 2000/01) asked earnings and other relevant questions for a sufficiently large sample of adult Jewish men to conduct a statistical analysis of their earnings. These data are analyzed here to provide the first systematic analysis of the determinants of earnings of adult (age 25 to 64) American Jewish men. The analysis is limited to male respondents because of the additional complexity of incorporating labor supply into the analysis of earnings for women and the limited data on labor supply in the NJPS.

#### II. NATIONAL JEWISH POPULATION SURVEY

The National Jewish Population Survey (NJPS) 2000/01 employed a two step survey procedure. A set of screener questions was administered by telephone to a large stratified random sample of the U.S. population, selected by random digit dialing, to identify households that included at least one person who is currently Jewish or is of Jewish ancestry or origin, broadly defined.<sup>4</sup> Using these data, a stratified random sample of about 4,500 households was selected that had been identified in the screener survey as including at least one Jewish person. One randomly selected adult in the household was designated the respondent, without regard for that person's current religion or Jewish origin or ancestry. That respondent was interviewed by telephone about himself or herself, and about other household members.

The questionnaire inquired about the respondent's current demographic and labor market characteristics, and about the respondent's religion, parent's religion, religious practices, Jewish education, and involvement in Jewish-related activities while the respondent was being raised and currently. Many of the same questions, but not all, were asked about other household members, including the respondent's spouse, if any.

<sup>4</sup> For descriptions of and access to the NJPS data (as of August 29, 2006), see: NJPS Description at http://www.ujc.org/content\_display.html?ArticleID=10451

NJPS Methodological Appendix at http://www.ujc.org/content\_display.html?ArticleID=83786

NJPS Methodology Series Index at <a href="http://www.ujc.org/content\_display.html?ArticleID=84100">http://www.ujc.org/content\_display.html?ArticleID=84100</a>

The NJPS 2000/01 data are available from the North American Jewish Data Bank at <a href="http://www.jewishdatabank.org/">http://www.jewishdatabank.org/</a>

The NJPS 2000/01 serves as the basis for this study's analysis of the earnings of adult male American Jewish respondents. The previous NJPS surveys (1990 and 1970) and most communal Jewish surveys cannot be used for this purpose because they do not ask the earnings of individuals, although they may ask about household income. Note that the NJPS 2000/01 was a stratified random sample with an oversampling of denser Jewish communities. Thus respondent weights are applied in the analysis conducted here. Because earnings and other labor market information was inadvertently not asked of the spouses of the respondents in some of the "replicates" the sample size for spouses is substantially reduced.

While it would be desirable for comparative purposes to have a sufficiently large random sample of non-Jews in the NJPS, this is not the case. The non-Jewish respondents are in households with at least one Jewish person. They do not constitute a random sample of non-Jews.

#### III. STATISTICAL METHODOLOGY

The analysis of earnings among adult Jewish men is conducted in a two-stage procedure. Among the adult male respondents, age 25 to 64 years, who worked and had an occupation in the year prior to the survey, about one-third refused to respond to the question on their earnings. Thus, the analysis of the data on earnings might be subject to sample selectivity bias. That is, the individuals who reported their earnings may not be a random sample of the Jewish survey respondents.

Thus, the first stage in the study of earnings is the analysis of the determinants of who responded to the earnings question. For this stage a dichotomous variable is created which equals one if the respondent answered the question on earnings and equals zero if

the respondent did not answer the question. This analysis is first performed using Ordinary Least Squares (OLS) analysis and then, because of the dichotomous dependent variable, performed using Logit analysis. The results are shown to be independent of the statistical methodology.

In the second stage, earnings are analyzed for those who reported their earnings. Using the "human capital earnings function", a standard technique for analyzing earnings, the natural logarithm of annual earnings as reported in the NJPS 2000/01 is regressed on a set of explanatory variables, including years of schooling, years of labor market experience, marital status, region in the U.S., nativity, denomination when raised, current denomination, and whether the respondent converted to Judaism, among other variables. Data on the type and extent of Jewish education are also analyzed. The analysis of earnings is performed in two ways, using Ordinary Least Squares and using the Heckman selectivity correction technique to adjust for sample selection bias due to the non-reporting of earnings.

#### IV. STATISTICAL ANALYSIS

Appendix Table A lists the dependent and explanatory variables used in this analysis, defines these variables, and indicates the relevant questions from the NJPS 2000/01. Appendix Table B lists the variables, the sample size, and descriptive statistics (mean, standard deviation, and minimum and maximum values).

The American Jewish men have a high level of schooling, a mean of 15.7 years, and are older, 44 years, than the general population of adult white men in the United

States.<sup>5</sup> Nearly two thirds are currently married (62 percent), nearly all (90 percent) live in metropolitan areas, and less than a quarter (23 percent) live in the 17 Southern states and the District of Columbia. About 15 percent were foreign born, with one-third of these from the Former Soviet Union and nearly one-third from other Developed Countries (primarily Europe). By occupation, over half (54 percent) are in professional and managerial jobs, with 21 percent in sales and clerical jobs, and 10 percent in blue collar work, with another 15 percent in other occupations or have occupation missing.<sup>6</sup> The self-employed, who can be in any occupation, comprise 15 percent of the men in the sample.

Table 1 is an analysis (using OLS in columns 1 and 2 and Logit analysis in column 3) of the determinants of who reported earnings among adult male respondents who worked in the year prior to the NJPS survey. The dependent variable is coded as 1 if the respondent answered the earnings question. The explanatory power of the equation is very low, only 6 percent. Very few variables are statistically significant. Responding to the earnings question is unrelated to educational attainment, nativity, the density of the Jewish population in the state (the concentration ratio in column 2), and whether the respondent lives in a metropolitan area. The propensity to respond is greater among those in sales and clerical occupations than among those in other jobs. Responding

\_

<sup>&</sup>lt;sup>5</sup> Those identified as non-Jews in the NJPS constituted less than one percent of the sample of adult male respondents in the NJPS. They are not representative of the non-Jewish population of the U.S.

<sup>&</sup>lt;sup>6</sup> For an analysis of the occupational distribution and self-employment of American Jewish men in the 1990 and 2000/01 NJPS in comparison to non-Jewish white men in the U.S. Census, see B. Chiswick (2006).

decreases with age, and is greater for those who are separated compared to those currently married (the benchmark). It is less common among Jews in the South.

The equations in Tables 2 and 3, columns (1) to (3), parallel equations computed for adult men in the general U.S. labor market. The regression analysis of earnings is reported in Table 2 using Ordinary Least Squares and in Table 3 using the Heckman selectivity technique to correct for sample selection bias, in this case, that the respondent reported earnings. The selection equation is based on Table 1, column 2. The statistically significant positive "lambda" term in Table 3 indicates positive selectivity into the category of reporting earnings. That is, for unmeasured reasons, those who report their earnings have higher earnings in the NJPS than those who refuse to do so. By comparing Tables 2 and 3 it is clear that the adjustment for selectivity does not have any substantive effects on the interpretation of the findings for the explanatory variables in the analysis of earnings.

Years of schooling has a highly statistically significant effect on earnings. Earnings increase by about 11 percent for each additional year of schooling in the OLS analysis and by about 10 percent in the selectivity corrected analyses (Tables 2 and 3). Earnings increase at a decreasing marginal rate for each additional year of labor market experience. Although only the squared experience term in Table 2 is statistically significant, the set of experience variables is statistically significant. In this table, earnings increase by about 2 percent per year during the early years in the labor market, and the effect diminishes slightly with a longer experience in the labor market. Men who are currently married earn about 26 percent more than men who never married, other variables being the same, and they earn about 5 percent more than previously married

(widowed, divorced, separated) men, but this latter difference is not statistically significant. These findings are of the same order of magnitude as the effects on earnings for the general native-born white male population in the 2000 Census (Chiswick and Miller, 2006).

At arrival the foreign born Jewish men earn about 24 percent less than U.S.-born Jewish men, but the gap narrows by about one percentage point per year that the immigrant has lived in the United States (Tables 2 and 3, column 1). This suggests an earnings "catch-up" at about 20 to 25 years of residence among the immigrants. When specific regions of birth are separately identified it appears that only those born in the former Soviet Union have earnings that differ significantly, and substantially, from those of the native born (Tables 2 and 3, columns 2 and 3). Those from the other Developed Countries, Israel and Less Developed Countries had a longer period of residence in the United States and they essentially closed the earnings gap, in contrast to the recently arrived immigrants from the former Soviet Union.<sup>7</sup>

Thus far, the analysis for American Jews has paralleled analyses for adult men in general in the U.S. labor market. The results for schooling, labor market experience, marital status and nativity are quite similar to the results for the general labor market. It should be noted, however, that while in the general labor market the earnings of white men are lower in the South and higher in metropolitan areas, there is no effect of region among Jews. This implies that compared to non-Jews living in the same areas, Jewish

\_

<sup>&</sup>lt;sup>7</sup> For an analysis of the earnings of Soviet Jewish immigrants compared to other immigrants and the native born in the United States using census data, see Chiswick and Wenz (2006).

men earn relatively more in the South and in non-metropolitan areas. That is, Jewish men appear to earn more in areas where there are relatively fewer Jews.<sup>8</sup>

The last three columns in Tables 2 and 3 add variables that are unique to the NJPS – the denomination in which the respondent was raised and the current denomination. The detailed list of denominations identified in the NJPS was collapsed into six categories (see Appendix Table A). The Conservative Jews serve as the benchmark. When the analysis is performed using denomination raised, Conservative Jews have the highest earnings, but their earnings do not differ significantly from those who say they were raised Orthodox or Reform. Those who report that they were raised "just Jewish",

-

<sup>&</sup>lt;sup>8</sup> This is consistent with Jews requiring a wage premium to live and work in areas where there is a smaller or non-existent Jewish community. This may be due to the higher cost of Jewish-specific ethnic goods, defined broadly, in such areas. For a further development of this approach, see Chiswick and Miller (2005).

<sup>&</sup>lt;sup>9</sup> Contemporary American Judaism is a decentralized congregation-based religion with three major synagogue movements, Reform, Conservative and Orthodox. These movements are confederations of synagogues which are managed by their congregants, rather than by central authorities. Each of these movements has evolved its practices over the past century and individuals are free to join any synagogue that they wish. Reform Judaism, originally the product of mid-19<sup>th</sup> century German Jewish immigrants, relaxed many of the "traditional" laws and customs to "Americanize" Judaism. Although many of its "reforms" have been reversed, it is still the least time intensive, imposes the fewest restrictions on the behavior of adherents, and generally requires of its congregants the least Jewish human capital (e.g., knowledge of Hebrew, the laws and customs, and prayers). Conservative Judaism, established in the late-19<sup>th</sup> century as a reaction to the Reform movement, sought to "conserve" elements of traditional practice while at the same time adapting to the Americanization of its congregants. Although Orthodox Judaism has its sub-denominations (e.g., Modern Orthodox, Hasidim), it adheres more closely to the "traditional" religious practice of late 19<sup>th</sup>-century Eastern Europe, is more time intensive and for full participation generally requires of its congregants more Jewish human capital than Conservative Judaism. The Orthodox are more likely to live in close communities because of the need to be near synagogues (e.g. riding and handling money is proscribed on the Sabbath and certain major holidays), Jewish schools, and for other ethnic goods (e.g., kosher foods).

secular, or non-Jewish have significantly lower earnings, with the latter two categories having earnings that are lower by about 40 percent compared to Conservative Jews. <sup>10</sup>

Denomination raised can be quite different from current denomination because of movements across these categories (See Appendix Tables C and D). Some become less attached while others become more attached to traditional religious practice. Considering current denomination, only the Orthodox and the secular Jews have earnings that are statistically different from the Conservative Jews, about 30 percent lower earnings for each group. The non-Jews in the sample have much lower earnings, but the difference is at the margin of statistical significance. Converts to Judaism, that is, men born non-Jewish but who converted to Judaism, have substantially lower earnings, but as with those currently not Jewish, the small sample size may be responsible for the lack of statistical significance (Tables 2 and 3).

Data are also available in the NJPS 2000/01 on whether the respondent received any Jewish education while in grades 1 to 7 or in grades 8 to 12, and, if so, the type and number of years of this Jewish education.<sup>11</sup> The "first mentioned" type of Jewish education in each age group is taken to be the predominant one in that age group.<sup>12</sup> The

\_

<sup>&</sup>lt;sup>10</sup> In a study of Protestants, Lehrer (2006a) finds that those unaffiliated as adults have wages significantly lower than those of mainline Protestants. She also finds (Lehrer 2006b) that young people who grow up with no religious affiliation achieve a lower level of schooling.

<sup>&</sup>lt;sup>11</sup> The NJPS questionnaire has the breakdown of Jewish education as grades 1 to 7 and 8 to 12. No finer detail is provided.

Most respondents in the NJPS reported only one type of Jewish education. Of the 3,111 respondents who reported receiving Jewish education in grades 1 to 7, only 358 (11 percent) reported a second type, 57 reported a third type and 6 four types. For grades 8 to 12, of the 1,591 respondents who received Jewish education, only 75 (5 percent) reported a second type, 10 a third type and 2 a fourth type. Source: National Jewish Population Survey, 2000/01.

responses on type were recoded into three dichotomous variables: <u>Day School</u> (full-time Jewish Day School or Yeshiva, or Israeli Secular/Public Schooling), <u>Other Jewish Education</u> (e.g., part time or one day a week, Bar/Bar Mitzvah lessons, Jewish Studies in public/private school, Jewish home schooling), and <u>None</u> (no Jewish education or only nursery/kindergarten or Jewish summer camp). The type of Jewish schooling received was strongly related to the denomination in which the respondent was raised, with those raised Orthodox receiving the most (particularly Day School), and those raised just Jewish or secular the least.<sup>13</sup>

When the two sets of variables for type of Jewish schooling in grades 1 to 7 and in grades 8 to 12 were entered into the earnings equations (with no Jewish schooling serving as the benchmark), the separate coefficients were not statistically significant, in part due to multicolinearity. When only the grade 8 to 12 Jewish schooling variables were entered, attending a Jewish Day School had a significant positive effect on earnings in the equation where current denomination was held constant.<sup>14</sup> Other Jewish schooling was

<sup>13</sup> Among adult Jewish men, the first mentioned type of Jewish education received in grades 8 to 12 was:

<u>Type of Jewish Schooling</u> (percent)			
Day School	<u>Other</u>	<u>None</u>	<u>Total</u>
46	21	33	100
7	40	52	100
0	42	58	100
4	12	83	100
7	5	87	100
	46	Day School         Other           46         21           7         40           0         42	Day School         Other         None           46         21         33           7         40         52           0         42         58

Detail may not add to total due to rounding.

<sup>&</sup>lt;sup>14</sup> Jewish day schools involve a longer school day than do the public schools as students learn both the secular (general) curriculum that they would be exposed to in public schools and the Jewish curriculum, including Hebrew, religious studies, prayers, Jewish

not significant. Compared to those with no Jewish education, those who reported attending a Jewish Day School for at least some time in grades 8 to 12 had earnings about 30 percent higher than those who had no Jewish education (coefficient=0.29, t-ratio=2.2) (Table 4). The "other Jewish education" variable has a very small coefficient and is not statistically significant (coefficient 0.032, t-ratio=0.42) in the equation where current denomination is held constant.

The dichotomous variable for Day School education in grades 8 to 12 can be replaced by a continuous variable for the number of years of this schooling (zero to 5 years). In the current denomination equation its coefficient implies an increase in earnings of 6 percent per year of Jewish Day Schooling (grades 8-12), which is statistically significant at the 10 percent level (coefficient 0.059, t-ratio 1.74). The coefficient of total schooling remains at 11 percent (t=7.84). Thus, controlling for current denomination and other variables, Jewish Day Schooling at the secondary level is associated with higher earnings.

The only dramatic changes in the coefficients of the other explanatory variables when the Jewish education variables (grades 8 to 12) are added to the equation are the increase in the negative effect (and the increase in its statistical significance) on earnings of currently being Orthodox or currently being secular. These coefficients imply that a currently Orthodox Jewish man who attended a Day School (including Yeshiva) in the 8 to 12 grade had earnings 15 percent below that of a currently Conservative Jew who did not attend a Day School, while a currently Orthodox man who did not attend a day school had an even greater earnings disadvantage (coefficient of -0.477). Currently secular

history, etc. In additional to the broader range of studies, the curriculum requires greater discipline and learning to multi-task.

13

Jews, who would have been far less likely to have attended a full time Jewish school, have very low earnings (coefficient -0.419) compared to otherwise comparable Conservative Jewish men who also did not attend a day school.

It appears, therefore, that the type of Jewish education received does have an association with earnings in the secular labor market. Receiving part-time Jewish education neither enhances nor detracts from Jewish men's earnings, but attending a Jewish Day School or Yeshiva is associated with substantially greater labor market earnings of about 6 percent per year of this day schooling.

This suggests that full-time Jewish education may enhance earnings because of the complementarity of Jewish focused education and secular studies, perhaps because of the dual curricular program (general and Jewish studies), the longer school day, the emphasis on learning a second language (in this case Hebrew), or learning the analysis of texts (C. Chiswick 2006). Given the limitations of the data, however, it is not possible to control for potentially important determinants of day school education, such as higher innate ability or parental income.

The variables for denomination can be replaced by a measure of religiosity, namely the frequency with which the men attended synagogue services last year. The data on frequency were provided in categories and were recoded as none (did not attend at all), seldom (a few days in the year), monthly (once to three times a month), weekly (once a week), and more than once a week. Using monthly attendance as the benchmark, there is no effect on earnings of not attending or attending only seldom, earnings are significantly greater among weekly attendees, and earnings are lower

<sup>&</sup>lt;sup>15</sup> Synagogue attendance is greatest for those reporting current denomination as Orthodox and least for those who report they are secular.

(although not always significantly so) among those attending more frequently than weekly. These patterns are largely invariant with respect to whether the Jewish education variables are held constant.<sup>16</sup>

These yearly attendance categories can be transformed into days per year, and entered into the earnings equation in a quadratic manner. The linear term has a positive coefficient and the squared term has a negative sign.<sup>17</sup> The coefficients imply a "peak" earnings at about 145 days per year, or less than three days per week.

The synagogue attendance data imply that weekly attendees or three day a week attendees have higher earnings than those who attend less often, but that earnings decline with a greater frequency of attendance.

<sup>16</sup> Partial effect of frequency of synagogue attendance on earnings (Monthly is benchmark)

	No Control for Jewish Schooing	Control for Jewish Schooling
None	-0.663	-0.099
	(-0.53)	(-0.91)
Seldom	0.062	0.022
	(0.52)	(0.20)
Weekly	0.361	0.291
	(2.02)	(1.64)
More than Weekly	-0.202	-0.357
	(-1.02)	(-1.98)

<sup>&</sup>lt;sup>17</sup> Partial effect of number of days of synagogue attendance last year on earnings:

	No Control for Jewish Schooling	Control for Jewish Schooling
Days	0.00349	0.00292
	(1.99)	(1.50)
Days Squared	-0.000012	000012
-	(-2.19)	(-2.06)

#### V. Summary and Conclusions

This paper has been concerned with an analysis of earnings among adult Jewish men as reported in the National Jewish Population Survey, 2000/01.

The analysis of the response to the question on earnings indicates that non-response is unrelated to education level. Those in sales and clerical jobs are more likely to report their earnings than the professionals and managers, possibly because they are more likely to be salaried workers and know their earnings with greater certainty. Older workers and those living in the South are less likely to report earnings, and those who are separated from their wives are more likely to respond. Overall, however, there appears to be little systematic pattern in who refused to respond to the question on earnings.

Earnings respond positively to schooling (by about 11 percent per year of schooling), labor market experience, being currently married, being born in the U.S., and, among the foreign born, living in the U.S. a longer period of time. These patterns are quite similar to those found in the general population. Other things the same, only those from the former Soviet Union, the most recent group of Jewish refugees, earn less than Jews born in the U.S. The Soviet Jews have labor market experiences consistent with their being disproportionately recent refugees.

Earnings are associated with denomination. Those raised "just Jewish" or secular have earnings significantly lower than those of Conservative Jews. Those currently Orthodox or secular have earnings lower than currently Conservative Jews. The earnings for other Jews (Reform or "just Jewish") are lower than those of currently Conservative Jews, other measured variables the same, but the differences are not statistically significant.

Labor market earnings appears to be associated with Jewish education. In the analysis that includes current denomination, those who attended a full-time Jewish day school (Day School, Yeshiva or Israeli school) at least part of the time in grades 8 to 12 report significantly higher earnings, by about 30 percent. Earnings are increased by about 6 percent per year of Jewish day schooling in grades 8 to 12. Compared to a currently Conservative Jew who did not attend a Day School, the earnings gap with the currently Orthodox is narrowed if the latter attended, and is widened if he did not. The earnings disadvantage of currently secular Jews is increased if, as is typically the case, they did not attend a Jewish Day School. Part time Jewish education appears to have no effect on earnings in the secular labor market. The Jewish day school effect may be due to its dual curriculum – general studies and Jewish education.

The data on frequency of synagogue attendance suggests a non-monotonic effect on earnings. Other variables the same, earnings are greater for those who attend once a week or a couple of times a week, but are lower for those who attend less frequently or more frequently (nearly daily).

These findings suggest a non-linear effect of religious practice among Jews on their labor market outcomes. Those who are raised without a religious involvement or who as adults are not religiously involved have lower earnings. This suggests that religious involvement as a youth and as an adult is associated with more favorable labor market outcomes. Yet, the less favorable findings for the Orthodox, other variables being the same, and those who attend the synagogue daily, suggests that beyond some point religious practice may have a negative effect on secular labor market earnings. This may arise because, beyond some point, time and effort devoted to religious activities detract

from the time and/or effort devoted to the labor market. Or, it may be that to maintain an Orthodox life style self-imposed restrictions (on where one lives and works, the days of the week one works, as well as choice of occupation, etc.) limits earnings. Discrimination in the labor market against the Orthodox might also be a factor.

The analysis indicates that in spite of the high rate of refusal to answer the question on earnings, insights can be gained regarding who refused to report their earnings and the determinants of earnings by including a question on individual earnings in communal and national surveys of American Jews, and in comparable surveys for other groups defined by religion or ethnicity.

Table 1. Determinants of Responding to Earnings Question among Adult Male Respondents Who Worked, NJPS 2000/01

	OLS	OLS	Logit (Marginal Effect)
Schooling (Years)	-0.005	-0.005	-0.005
	(0.65)	(0.67)	(0.64)
Age (Years)	-0.037	-0.037	-0.044
	(2.63)***	(2.66)***	(2.64)***
Age Squared	0.0003	0.0004	0.0004
	(2.20)**	(2.23)**	(2.32)**
Widowed	0.115	0.112	0.103
	(0.91)	(0.89)	(0.89)
Divorced	0.064	0.063	0.061
	(1.16)	(1.13)	(1.17)
Separated	0.201	0.211	0.191
	(2.00)**	(2.11)**	(2.26) **
Never Married	0.034	0.036	0.039
	(0.79)	(0.83)	(0.83)
Self-employed	-0.036	-0.035	-0.035
	(0.89)	(0.84)	(0.86)
Sales & Clerical	0.072	0.071	0.075
	(1.80)*	(1.78)*	(1.82)*
Blue Collar Jobs	-0.023	-0.025	-0.024
	(0.33)	(0.37)	(0.34)
Occupation Unspecified	-0.065	-0.064	-0.067
	(0.97)	(0.96)	(0.97)
South	-0.115	-0.126	-0.132
	(2.42)**	(2.50)**	(2.47)**
Metro	-0.020	-0.012	-0.013
	(0.29)	(0.17)	(0.18)
Foreign Born	-0.032	-0.024	-0.023
	(0.63)	(0.48)	(0.45)
Interview Time Trend	-0.0005	-0.0005	-0.0006
	(0.19)	(0.18)	(0.22)
Concentration Ratio		-0.001	-0.001
		(0.98)	(0.96)
Constant	1.674	1.689	
	(5.27)***	(5.39)***	
Observations	1278	1278	1278
R-squared	0.06	0.06	0.05

The dependent variable equals unity if the respondent reported his earnings, otherwise it is zero.
 Robust t statistics in parentheses.
 \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.
 All the regressions are weighed using respondent weights.

Table 2. The Determinants of Earnings among Adult Male Respondents, NJPS 2000/01, (OLS)

	(1)	(2)	(3)	(4)	(5)	(6)
	Nativity	Country of		f Denomination		Current
	Status	Birth	Birth	Raised	Denomination	Denomination
Schooling (Years)	0.110	0.113	0.113	0.108	0.111	0.109
	(8.62)***	(8.87)***	(8.85)***	(8.00)***	(8.26)***	(8.02)***
Experience (Years)	0.022	0.022	0.022	0.024	0.021	0.021
	(1.52)	(1.53)	(1.53)	(1.63)	(1.41)	(1.41)
Experience Squared	-0.00050	-0.00051	-0.00051	-0.00055	-0.00044	-0.00043
	(-1.65)*	(-1.66)*	(-1.66)*	(-1.73)*	(-1.40)	(-1.36)
Widowed/ Divorced/ Separated	-0.062	-0.054	-0.054	-0.039	-0.060	-0.055
	(-0.66)	(-0.60)	(-0.60)	(-0.41)	(-0.63)	(-0.57)
Never Married	-0.273	-0.281	-0.281	-0.267	-0.271	-0.267
	(-3.41)***	(-3.45)***	(-3.45)***	(-3.27)***	(-3.36)***	(-3.27)***
Foreign Born	-0.228					
	(-1.52)					
Year Since Migration	0.010	0.004	0.003			
	(1.76)*	(0.49)	(0.46)			
South	0.017	0.024	0.024	0.032	0.006	0.005
	(0.19)	(0.29)	(0.29)	(0.39)	(0.07)	(0.07)
Metropolitan Area	-0.102	-0.104	-0.104	-0.122	-0.086	-0.095
	(-0.73)	(-0.74)	(-0.74)	(-0.85)	(-0.61)	(-0.67)
Developed Countries		0.106	0.108			
		(0.34)	(0.34)			
Former Soviet Union (FSU)		-0.365	-0.377			
		(-2.59)***	(-1.67)*			
Israel		0.180	0.182			
		(0.49)	(0.49)			
Less Developed Countries		-0.033	-0.031			
		(-0.16)	(-0.15)			
Country Missing		-0.583	-0.581			
		(-1.43)	(-1.42)			
Year Since Migration*FSU			0.001			
			(0.07)			
Orthodox				-0.099	-0.280	-0.290
				(-0.82)	(-1.99)**	(-2.08)**
Reform				-0.127	-0.100	-0.114
				(-1.49)	(-0.97)	-(1.13)
Just Jewish				-0.152	-0.078	-0.103
				(-1.72)*	(-0.81)	(-1.07)
Secular				-0.401	-0.292	-0.321
				(-2.50)**	(-2.27)**	(-2.50)**
Non Jews				-0.367	-0.389	-0.424
				(-2.49)**	(-1.49)	(-1.62)
Denomination Missing				-0.130	-0.006	-0.028
				(-1.36)	(-0.05)	(-0.26)

Convert						-0.306
						(-1.37)
Constant	9.322	9.280	9.279	9.451	9.360	9.420
	(30.59)***	(30.38)***	(30.33)***	(29.80)***	(29.65)***	(29.40)***
Observations	835	835	835	837	837	837
R-squared	0.16	0.17	0.17	0.17	0.17	0.18

- The dependent variable is the natural logarithm of annual earnings for males age 25 to 64 who worked full-time or part-time with earnings.
   Robust t statistics in parentheses.
   \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.
   All the regressions are weighed using respondent weights.

Table 3. The Determinants of Earnings among Adult Male Respondents, NJPS 2000/01, (Heckman Selection Model)

	(1)	(2)	(3)	(4)	(5)	(6)
	Nativity Status	Country of Birth	Birth	f Denomination Raised		Current Denomination
Schooling (Years)	0.098	0.100	0.100	0.095	0.100	0.097
	(6.86)***	(7.08)***	(7.08)***	(6.46)***	(6.69)***	(6.43)***
Experience (Years)	0.003	0.004	0.004	0.005	0.001	0.001
	(0.21)	(0.23)	(0.23)	(0.31)	(0.06)	(0.03)
Experience Squared	-0.00023	-0.00023	-0.00023	-0.00026	-0.00014	-0.00012
	(-0.71)	(-0.71)	(-0.71)	(-0.79)	(-0.43)	(-0.37)
Widowed/ Divorced/ Separated	0.031	0.036	0.036	0.049	0.028	0.036
	(0.30)	(0.36)	(0.37)	(0.46)	(0.27)	(0.35)
Never Married	-0.223	-0.232	-0.232	-0.216	-0.225	-0.218
	(-2.55)**	(-2.65)***	(-2.64)***	(-2.45)**	(-2.61)***	(-2.48)**
Foreign Born	-0.259					
	(-1.80)*					
Year Since Migration	0.009	0.003	0.003			
	(1.70)*	(0.49)	(0.39)			
South	-0.093	-0.084	-0.085	-0.078	-0.108	-0.111
	(-0.97)	(-0.89)	(-0.90)	(-0.83)	(-1.14)	(-1.17)
Metropolitan Area	-0.103	-0.106	-0.106	-0.131	-0.087	-0.096
	(-0.66)	(-0.68)	(-0.68)	(-0.82)	(-0.56)	(-0.61)
Developed Countries		0.033	0.048			
		(0.12)	(0.17)			
Former Soviet Union (FSU)		-0.393	-0.491			
		(-2.69)***	(-2.08)**			
Israel		0.046	0.057			
		(0.13)	(0.16)			
Less Developed Countries		-0.034	-0.024			
		(-0.19)	(-0.13)			
Country Missing		-0.581	-0.570			
		(-1.48)	(-1.45)			
Year Since Migration*FSU			0.009			
			(0.60)			
Orthodox				-0.138	-0.276	-0.288
				(-1.19)	(-2.06)**	(-2.18)**
Reform				-0.120	-0.073	-0.088
				(1.51)	(0.71)	(0.88)
Just Jewish				-0.122	-0.021	-0.047
				(-1.46)	(-0.22)	(-0.51)
Secular				-0.369	-0.253	-0.286
				(-2.22)**	(-1.79)*	(-2.03)**
Non Jews				-0.334	-0.379	-0.420
				(-2.47)**	(-1.39)	(-1.53)
Denomination Missing				-0.138	0.044	0.021
				(-1.51)	(0.41)	(0.20)

Convert						-0.363
						(-1.36)
Constant	9.426	9.390	9.387	9.571	9.418	9.484
	(28.15)***	(28.10)***	(28.08)***	(27.74)***	(27.67)***	(27.50)***
Rho	0.756***	0.754***	0.755***	0.762***	0.766***	0.782***
Sigma	0.861***	0.855***	0.855***	0.860***	0.859***	0.864***
Lambda	0.651***	0.644***	0.646***	0.655***	0.658***	0.676***
	(8.03)	(7.82)	(7.82)	(8.08)	(8.29)	(8.99)
Observations	835	835	835	837	837	837

<sup>(1)</sup> The dependent variable is the natural logarithm of annual earnings for males age 25 to 64 who worked full-time or part-time with earnings.

(2) Robust t statistics in parentheses.

(3) \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

(4) All the regressions are weighed using respondent weights.

Table 4. The Determinants of Earnings among Adult Male Respondents, NJPS 2000/01, (OLS)

	(1)	(2)	(3)	(4)	(5)	(6)
	Nativity	Country of		f Denomination		Current
	Status	Birth	Birth	Raised	Denomination	Denomination
Schooling (Years)	0.112	0.116	0.116	0.116	0.109	0.109
	(8.41)***	(8.75)***	(8.73)***	(8.32)***	(7.73)***	(7.73)***
Jewish Ed: Day School (8-12)	0.035	0.028	0.028	0.103	0.295	0.294
	(0.22)	(0.19)	(0.19)	(0.70)	(2.22)**	(2.21)**
Jewish Ed: Other (8-12)	0.012	-0.010	-0.011	0.022	0.032	0.032
	(0.16)	(0.14)	(0.14)	(0.27)	(0.42)	(0.42)
Experience (Years)	0.025	0.025	0.025	0.026	0.025	0.025
	(1.64)	(1.65)*	(1.65)	(1.73)*	(1.67)*	(1.66)*
Experience Squared	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000
	(1.69)*	(1.68)*	(1.67)*	(1.68)*	(1.52)	(1.52)
Widowed/ Divorced/ Separated	-0.055	-0.046	-0.046	-0.031	-0.050	-0.050
	(0.57)	(0.50)	(0.50)	(0.32)	(0.51)	(0.50)
Never Married	-0.217	-0.223	-0.223	-0.212	-0.182	-0.182
	(2.63)***	(2.70)***	(2.69)***	(2.61)***	(2.26)**	(2.25)**
Foreign Born	-0.200					
	(1.16)					
Year Since Migration	0.008	-0.001	-0.001			
	(1.30)	(0.08)	(0.12)			
South	0.015	0.024	0.023	0.033	-0.011	-0.011
	(0.17)	(0.28)	(0.28)	(0.40)	(0.12)	(0.12)
Metropolitan Area	-0.107	-0.111	-0.111	-0.096	-0.080	-0.080
	(0.70)	(0.72)	(0.72)	(0.63)	(0.53)	(0.52)
Developed Countries		0.194	0.206			
		(0.57)	(0.58)			
Former Soviet Union (FSU)		-0.340	-0.400			
		(2.25)**	(1.77)*			
Israel		0.251	0.260			
		(0.66)	(0.67)			
Less Developed Countries		0.181	0.192			
		(0.64)	(0.64)			
Country Missing		-0.522	-0.513			
		(1.28)	(1.24)			
Year Since Migration*FSU			0.006			
			(0.35)			
Orthodox				-0.130	-0.477	-0.477
				(1.10)	(3.86)***	(3.86)***
Reform				-0.117	-0.104	-0.105
				(1.34)	(1.14)	(1.12)
Just Jewish				-0.139	-0.129	-0.129
				(1.51)	(1.44)	(1.42)
Secular				-0.382	-0.419	-0.419
				(2.41)**	(3.43)***	(3.38)***

Non Jews				-0.333	-0.440	-0.441
				(2.21)**	(1.37)	(1.37)
Denomination Missing				0.002	-0.000	-0.000
				(0.02)	(0.00)	(0.00)
Convert						-0.005
						(0.02)
Constant	9.270	9.220	9.218	9.231	9.343	9.343
	(29.52)***	(29.32)***	(29.28)***	(28.91)***	(28.29)***	(28.09)***
Observations	794	794	794	796	796	796
R-squared	0.16	0.18	0.18	0.17	0.19	0.19

<sup>(1)</sup> The dependent variable is the natural logarithm of annual earnings for males age 25 to 64 who worked full-time or part-time with earnings.
(2) Robust t statistics in parentheses.
(3) \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.
(4) All the regressions are weighed using respondent weights.

Appendix A. Explanation of Variables

Category	Variables	Explanations	Source from NJPS 2000/01
Dependent Variables	Earnings	Earnings data are constructed from a categorical variable (Q299_A) using a mid point method. (If the earnings are, for example, between \$15000 and \$19999, a value of \$17500 is assigned. The value for the highest category is obtained by multiplying its lower bound by 1.5)	Q299_A
	Log Earnings	Natural logarithm of earnings	Q299_A
	Answer	A dichotomous variable with 1 indicating those who answered the earnings question, 0 indicating those who refused to answer.	Q299_A, Q286_A1
Demographic	Schooling (Years)	Years of Schooling	Q030_A1
Variables	Age (Years)	Age	Q007AB_A
	Experience (Years)	Experience = $Age - Schooling - 5$	
	Married	Currently married	Q066_A
	Widowed/Divorced/Separated	Currently widowed, divorced or separated	Q066_A
	Never Married	Never married	Q066_A
	Marital Status Missing	Marital status missing	Q066_A
	Widowed	Currently widowed	Q066_A
	Divorced	Currently divorced	Q066_A
	Separated	Currently separated	Q066_A
	South	A dichotomous variable with 1 indicating if the respondent resides in one of the states in the South	ZIPCEN4
	Metropolitan	A dichotomous variable with 1 indicating residing in a metropolitan area	METSTAT
	Concentration Ratio	The percentage of respondents in a particular state among all NJPS 2000/01 respondents	STATE
Foreign Born Status	Foreign Born	A dichotomous variable with 1 indicating those who were not born in the US	Q052_A
	Yeas Since Migration	Year since migration = 2000.5 – Q055_A(year came to the US)	Q055_A
Foreign Country of Birth	Former Soviet Union	Countries that were part of the former Soviet Union, includes for example Belarus, Georgia, Lithuania, Russia, Ukraine etc.	Q054_A
	Israel	Israel	Q054_A
	Developed Countries	European countries exclude those that were part of the former Soviet Union countries, Canada, Australia, New Zealand, Japan, and South Africa	Q054_A
	Less Developed Countries	Countries in Latin America, Middle East (excluding Israel), Africa (excluding South Africa), and Asia (excluding Japan).	Q054_A
	Country Missing	Country of birth missing (foreign-born)	Q054_A
Conversion to Judaism	Convert	Those who are not born Jewish but converted to Judaism	Q018_A
	Conservative	Conservative, Conservadox; Reconstructionist,	Q114_A1 – Q114_A7
Current Jewish Denomination	Orthodox	Hasidic, Lubavitch, Satmar, Haredi; Orthodox, Traditional (Jewish)	Q114_A1 – Q114_A7
Jenommation	Reform	Reform and Liberal (Jewish); Post-denominational, Jewish Renewal	Q114_A1 – Q114_A7
	Just Jewish	Just Jewish, Sephardic, Israelite/Hebrew, No Jewish denomination, Other Jewish	Q114_A1 – Q114_A7
		Secular, Ethnically/Nationality Jewish, Culturally Jewish, Humanistic Jews, non-practicing Jews; Jewish by background/birth/heritage, Agnostic,	Q114_A1 – Q114_A7
	Secular	Atheist, No religion/none/(nothing Jewish), Other	

	Non Jews	Messianic (e.g., Jews for Jesus), Catholic, Protestant, Mormon, and Other Christian religions	Q114_A1 – Q114_A7
	Denomination Missing	Current Jewish denomination missing	Q114_A1 - Q114_A7
Jewish	Conservative	Conservative, Conservadox; Reconstructionist,	Q115_A1 - Q115_A5
Denomination Raised	Orthodox	Hasidic, Lubavitch, Satmar, Haredi; Orthodox, Traditional (Jewish)	Q115_A1 - Q115_A5
	Reform	Reform and Liberal (Jewish); Post-denominational, Jewish Renewal	Q115_A1 – Q115_A5
	Just Jewish	Just Jewish, Sephardic, Israelite/Hebrew, No Jewish denomination, Other Jewish	Q115_A1 – Q115_A5
	Secular	Secular, Ethnically/Nationality Jewish, Culturally Jewish, Humanistic Jews, non-practicing Jews; Jewish by background/birth/heritage, Agnostic, Atheist, No religion/none/(nothing Jewish), Other	Q115_A1 – Q115_A5
	Non Jews	Messianic (e.g., Jews for Jesus), Catholic, Protestant, Mormon, and Other Christian religions	Q115_A1 – Q115_A5
	Denomination Missing	Jewish denomination raised missing	Q115_A1 – Q115_A5
Jewish Education	Grade 1 – 7: Day School	"A full-time Jewish day school or yeshiva" or "Israeli Secular/Public School"	Q168_A, Q169_A1- Q169_A4
	Grade 1 – 7: Other Jewish Education	"A one-day-a-week Jewish education program/Sunday school" or "A part-time Jewish school that met more than once a week" or "Private tutoring" or "Yiddish school/Workman's Circle/Arbiter Ring" or "Other informal Jewish education" or "Jewish studies in public/private school" or "Jewish home schooling" or "Unspecified Jewish/Hebrew studies"	Q168_A, Q169_A1- Q169_A4
	Grade 1 – 7: None	Did not have Jewish education, or Jewish education type is "Summer Camp" or "Jewish nursery/kindergarten"	Q168_A, Q169_A1- Q169_A4
	Grade 8 – 12: Day School	"A full-time Jewish day school or yeshiva" or "Israeli Secular/Public School"	Q171_A, Q172_A1- Q172_A4
	Grade 8 – 12: Other Jewish Education	"A one-day-a-week Jewish education program/Sunday school" or "A part-time Jewish school that met more than once a week" or "Private tutoring" or "Yiddish school/Workman's Circle/Arbiter Ring" or "Other informal Jewish education" or "Jewish studies in public/private school" or "Jewish home schooling" or "Unspecified Jewish/Hebrew studies"	Q171_A, Q172_A1- Q172_A4
	Grade 8 – 12: None	Did not have Jewish education, or Jewish education type is "Summer Camp"	Q171_A, Q172_A1- Q172_A4
	Years Day School (Grades 8-12)	Years of Day School (Grades 8-12)	Q173 C_A, Q173 G-A
Occupation	Professional & Managerial	Professional and Managerial occupations	Q289_A
Categories	Sales & Clerical	Sales, Offices, Services occupations	Q289_A
	Blue Collar Jobs	Farming, Construction, Transportation and Production occupations	Q289_A
	Occupation Unspecified	Occupation unspecified	Q289_A
	Occupation Not Asked	Occupation not asked*	Q289_A
Self-employed Status	Self-employed	Self-employed status	Q293_A
Interview Time Trend	Interview Time Trend	Interview Time Trend	REPLIC
			1

<sup>\*</sup> Occupation asked only for respondents who reported that they had worked either full-time or part-time.

Appendix B. Summary Statistics of the Sample

Category	Variable	N	Mean	Std Dev	Minimum	Maximum
Dependent	Earnings	844	93289.750	118231.670	7500	750000
Variables	Log Earnings	844	11.078	0.810	8.923	13.528
	Answer	1292	0.654	0.476	0	1
Demographic	Schooling (Years)	1518	15.731	2.432	6	20
Variables	Age (Years)	1534	43.704	10.727	25	64
	Experience (Years)	1518	22.950	10.793	2	50
	Married	1534	0.617	0.496	0	1
	Widowed/Divorced/Separated	1534	0.139	0.368	0	1
	Never Married	1534	0.242	0.446	0	1
	Marital Status Missing	1534	0.003	0.057	0	1
	Widowed	1534	0.020	0.134	0	1
	Divorced	1534	0.111	0.334	0	1
	Separated	1534	0.008	0.122	0	1
	South	1531	0.227	0.388	0	1
	Metropolitan	1534	0.899	0.225	0	1
	Concentration Ratio	1534	11.411	12.483	0.058	32.110
Foreign Born	Foreign Born	1533	0.148	0.345	0.050	32.110
Status	Yeas Since Migration	1530	2.945	8.895	0	60.5
Foreign	Former Soviet Union	1534	0.051	0.217	0	1
Country of	Israel	1534	0.031	0.134	0	1
Birth	Developed Countries	1534	0.013	0.134	0	1
	Less Developed Countries	1534	0.041	0.167	0	1
	Country Missing	1534	0.034	0.107	0	1 1
Conversion	Conversion to Judaism	1534	0.000	0.076		
Current	Conservative				0	1
Jewish	Orthodox	1534 1534	0.171	0.403		1
Denomination	Reform		0.082	0.287	0	1
		1534	0.246	0.446	0	1
	Just Jewish	1534	0.156	0.390	0	1
	Secular	1534	0.052	0.263	0	1
	Non Jews	1534	0.008	0.098	0	1
	Denomination Missing	1534	0.286	0.368	0	1
Jewish Denomination	Conservative	1534	0.234	0.442	0	1
Denomination Raised	Orthodox	1534	0.105	0.332	0	1
	Reform	1534	0.214	0.428	0	1
	Just Jewish	1534	0.099	0.316	0	1
	Secular	1534	0.030	0.151	0	1
	Non Jews	1534	0.007	0.072	0	1
	Denomination Missing	1534	0.311	0.418	0	1
Jewish	Grade 1 – 7: Day School	1451	0.084	0.307	0	1
Education	Grade 1 – 7: Other Jewish Education	1451	0.535	0.490	0	1
	Grade 1 – 7: None	1451	0.374	0.451	0	1
	Grade 8 – 12: Day School	1453	0.078	0.286	0	1
	Grade 8 – 12: Other Jewish Education	1453	0.244	0.444	0	1
	Grade 8 – 12: None	1453	0.671	0.482	0	1
	Years of Day School (Grades 8-12)	1453	0.293	1.122	0	1
Occupation	Professional & Managerial	1534	0.544	0.497	0	1
Categories	Sales & Clerical	1534	0.208	0.412	0	1
	Blue Collar Jobs	1534	0.100	0.258	0	1

	Occupation Unspecified	1534	0.060	0.250	0	1
	Occupation Not Asked	1534	0.088	0.282	0	1
Self-	•					
employed	Self-employed Status	1534	0.147	0.401	0	1
Time Trend	Interview Time Trend	1534	11.874	6.245	1	22

Notes: weighed using respondent weight Source: National Jewish Population Survey, 2000/01

Appendix C
Cross Tabulation between Current Jewish Denomination and Jewish Denomination
Raised (Unweighted)

(CURRENT JEWISH DENOMINATION) (JEWISH DENOMINATION RAISED)								
Frequency Percent Row Pct Col Pct	      DENOM MI  SS	CONSERVA  TIVE	ORTHODOX	REFORM	JUST JEW  ISH	SECULAR	NON JEWS	Total
DENOM MISS	184   11.99   74.49   53.18	18   1.17   7.29   4.47	4   0.26   1.62   2.00	18   1.17   7.29   4.88	20   1.30   8.10   10.47	1   0.07   0.40   5.88	2   0.13   0.81   25.00	247 16.10
CONSERVATIVE	20   1.30   6.99   5.78	195   12.71   68.18   48.39	40 2.61 13.99 20.00	15   0.98   5.24   4.07	14   0.91   4.90   7.33	2   0.13   0.70   11.76	0.00	286 18.64
ORTHODOX	14 0.91 8.33 4.05	33 2.15 19.64 8.19	100   6.52   59.52   50.00	8   0.52   4.76   2.17	11   0.72   6.55   5.76	1   0.07   0.60   5.88	1   0.07   0.60   12.50	168 10.95
REFORM	29   1.89   6.95   8.38	82   5.35   19.66   20.35	24   1.56   5.76   12.00	260   16.95   62.35   70.46	21   1.37   5.04   10.99	1   0.07   0.24   5.88	0.00	417 27.18
JUST JEWISH	68 4.43 20.12 19.65	64 4.17 18.93 15.88	27   1.76   7.99   13.50	54 3.52 15.98 14.63	119   7.76   35.21   62.30	4   0.26   1.18   23.53	2     0.13     0.59     25.00	338 22.03
SECULAR	23   1.50   36.51   6.65	9   0.59   14.29   2.23	5   0.33   7.94   2.50	13   0.85   20.63   3.52	5   0.33   7.94   2.62	8   0.52   12.70   47.06	0.00	63 4.11
NON JEWS	8   0.52   53.33   2.31	2   0.13   13.33   0.50	0.00	1   0.07   6.67   0.27	1   0.07   6.67   0.52	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3     0.20     20.00     37.50	15 0.98
Total	346 22.56	403 26.27	200	369 24.05	191 12.45	17 1.11	8 0.52	1534 100.00

Appendix D
Cross Tabulation between Current Jewish Denomination and Jewish Denomination
Raised (Weighted)

(CURRENT JEWISH DENOMINATION) (JEWISH DENOMINATION RAISED) Frequency Percent Row Pct Col Pct DENOM MI CONSERVA ORTHODOX REFORM JUST JEW SECULAR NON JEWS Total Iss TIVE ISH | 325759 | 33166 | 3479.8 | 28650 | 35779 | 2233.5 | 6781.1 | 435849 DENOM MISS 21.38 2.18 0.23 1.88 2.35 0.15 0.44 74.74 0.80 6.57 8.21 0.51 7.61 1.56 9.43 68.84 2.11 8.78 19.71 14.60 62.25 CONSERVATIVE | 19248 | 161473 | 29023 | 12545 | 10530 | 1109.1 | 0 | 233928 1.26 10.60 1.90 0.82 0.69 0.07 0.00 15.35 5.36 4.50 0.00 8.23 69.03 l 12.41 0.47 4.07 | 45.92 | 17.57 | 5.80 7.25 3.85 0.00 ORTHODOX 17557 29151 82044 | 9491.5 | 11716 | 1206.5 | 939.84 | 152106 1.15 1.91 5.38 0.62 0.77 0.08 0.06 9.98 11.54 19.16 53.94 6.24 7.70 0.79 0.62 7.89 3.71 8.29 49.68 2.91 6.45 8.63 \_\_\_\_\_ 32170 | 71548 17222 | 512.32 | 0 | 373188 REFORM 23618 228118 4.69 1.55 0.00 2.11 14.97 1.13 0.03 24.49 19.17 6.33 61.13 4.61 0.14 0.00 8.62 6.80 20.34 14.30 69.93 9.49 3.35 0.00 56576 48968 23991 40172 | 101934 | 2946.1 275652 JUST JEWISH 1066 l 3.71 3.21 1.57 2.64 6.69 0.19 0.07 18.09 20.52 17.76 8.70 14.57 36.98 1.07 0.39 11.96 13.92 14.53 12.32 56.16 19.26 9.79 SECULAR 14912 5919 | 2991.7 | 6898.3 | 3543.3 | 7292.6 | 41557 0.98 0.39 0.20 0.45 0.23 0.48 0.00 35.88 14.24 7.20 16.60 8.53 17.55 0.00 3.15 1.68 1.81 2.11 1.95 47.66 0.00 NON JEWS 7011.3 1448.3 Ω 315.95 784.51 Ω 2105.7 11666 0.10 0.00 0.02 0.05 0.00 0.14 6.72 60.10 12.42 0.00 2.71 0.00 18.05 0.00 | 19.33 1.48 0.41 0.00 0.10 0.43 Total 473233 351673 165147 326191 181509 15300.1 10892.7 1523945 23.08 21.40 11.91 1.00 31.05 10.84 0.71

#### REFERENCES

Billings, John S. (1890). <u>Vital Statistics of the Jews in the United States</u>, Census Bulletin No. 19, Census Office, Department of the Interior, Washington, D.C., December 30.

Burnstein, Paul (2005). "Jewish Educational and Economic Success in the United States: A Search for Explanations," Department of Sociology, University of Washington, photocopy.

Chiswick, Barry R. (1988). "Differences in Education and Earnings Across Racial and Ethnic Groups: Tastes, Discrimination and Investments in Child Quality," Quarterly Journal of Economics, August, pp. 571-597.

Chiswick, Barry R. (1993). "The Skills and the Economic Status of American Jewry: Trends Over the Last Half Century," <u>Journal of Human Resources</u>, 11(1), January, pp. 229-242.

Chiswick, Barry R. (1999). "The Occupational Attainment and Earnings of American Jewry, 1890-1990," <u>Contemporary Jewry</u>, 20, pp. 68-98.

Chiswick, Barry R. (2001). "The Billings Report and the Occupational Attainment of American Jewry, 1890" Shofar: An Interdisciplinary Journal of Jewish Studies, 19(2), pp. 53-75.

Chiswick, Barry R. (2006). "The Occupational Attainment of American Jewry: 1990 to 2000" Department of Economics, University of Illinois at Chicago, photocopy.

Chiswick, Barry R. and Paul W. Miller (2005). "Do Enclaves Matter in Immigrant Adjustment?" <u>City and Community</u>, Vol. 4, No. 1, March, pp. 5-36.

Chiswick, Barry R. and Paul W. Miller (2006) "Why is the Payoff to Schooling Smaller for Immigrants?," Department of Economics, University of Illinois at Chicago, photocopy.

Chiswick, Barry R. and Michael Wenz (2006). "The Linguistic and Economic Adjustment of Soviet Jewish Immigrants in the United States, 1980 to 2000" Research in Labor Economics, 24, pp. 179-216.

Chiswick, Carmel U. (2006). "An Economic Perspective on Religious Education: Complements and Substitutes in a Human Capital Portfolio," <u>Research in Labor Economics</u>, 24, pp. 449-467.

Lehrer, Evelyn (2006a). "Religious Affiliation and Participation as Determinants of Women's Educational Attainment and Wages," in Robert Hummer and Christopher Ellison, eds., Religion, Family and Health in the United States. (forthcoming).

Lehrer, Evelyn (2006b). "Young Women's Religious Affiliation and Participation as Determinants of High School Graduation," Department of Economics, University of Illinois at Chicago, February 15, Xerox.

Lieberson, Stanley and Mary C. Waters (1988) <u>From Many Strands: Ethnic and</u> Racial Groups in Contemporary America New York: Russell Sage Foundation

Smith, Tom W. (2005) <u>Jewish Distinctiveness in America: A Statistical Portrait</u> New York: American Jewish Committee

- U.S. Bureau of the Census (1958). "Religion Reported by the Civilian Population of the United States: March 1957," <u>Current Population Reports</u>, <u>Population Characteristics</u>, Series p. 20, No. 72, February 2, 1958, Washington, D.C..
- U.S. Bureau of the Census (no date) "Tabulations of Data on the Social and Economic Characteristics of Major Religious Groups, 1957," Washington, D.C., mimeo.