# Online Data Appendix for:

# Francine D. Blau and Lawrence M. Kahn, "The Gender Wage Gap: Extent, Trends, and Sources," *Journal of Economic Literature*, forthcoming, manuscript 20160995.

This Appendix describes the construction of variables and samples used in our analysis of the PSID and CPS. It also provides means and regression results from the PSID data (see section IV).

## I. PSID Documentation

**Race and Ethnicity**

- Race and ethnicity are controlled for using four mutually-exclusive categories: white non-Hispanic (the excluded category), black non-Hispanic, other non-Hispanic, and Hispanic.
- Classified as other non-Hispanic if the respondent ever reports being "other race"
- Classified as black non-Hispanic if the respondent ever reports being black
- Classified as Hispanic if the respondent ever reports being Hispanic or is of Spanish decent
- Otherwise, classified as white, non-Hispanic

**Marital Status**

- Marital Status is coded as:
  1. *Married* if report married
  2. *Never Married* if report ``never married"
  3. *other* if report, widowed, divorced, or separated

### Computation of Actual Experience

Data on actual experience from the PSID is obtained as follows. Whenever people join the PSID panel for the first time as a head or partner, they are asked how many years they worked since they were 18 years old, and, of these years, how many involved full-time work. In addition, in other years (1976 and 1985), the PSID asked all heads and partners these two questions regardless of when they joined the panel. The answers to these questions form the base from which we calculate actual full-time experience and part-time experience (which is defined as total experience minus full-time experience). Once we have these initial values for full-time and part time experience, we fill in the period between the date these questions were asked and the focal year by using the longitudinal work history data collected for all heads and partners in the years after they join the panel or in the years after 1976 or 1985, whichever comes last. For example, suppose the respondent joined the panel in 1987 and we want to compute full-time and part-time experience as of the 1990 survey. These were collected as of 1987. We then add 1 to total labor market experience for each year between 1987 and 1990 in which the person worked positive hours and 1 for full time experience for each year the person worked at least 1500 hours.

Part time experience is increased by 1 for each year there were positive but less than 1500 hours of employment.

One complication that arises is that the PSID began skipping alternate years with the 1999 survey, meaning that for 1999 and beyond we need to fill in two years of prior experience. Each wave contains different information that can be used to extract work status in the gap-year (e.g., 1997-98). Upon extracting as much information as possible, remaining missing values were filled in using statistical methods to impute the probability of working and full-time/part-time employment. For example, suppose we do not have information on annual work hours between 1997 and 1998. To fill in this missing year of experience, we estimate logit models separately by gender for having positive work hours and for working at least 1500 hours in the previous year for both 1997 and 1999. To estimate total and full-time experience for the missing year (i.e. the year between 1997 and 1998), we average the two predicted values for these variables from the 1999 logit and the 1997 logit. (This procedure is described in greater detail below.) Note that we do not fill in missing observations for other variables in this fashion. Our rationale for doing so for work experience is that it accumulates over time. If a respondent has a single missing value for any wave, then all subsequent work experience values will also be missing. Due to this cumulative nature, we fill in missing values for this variable.

**Miscellaneous Experience Documentation**

- For total and FT years of experience, we censor experience that is strictly greater than age 18 to instead take the value of age 18
  - After censoring, we replace any negative values with 0
- We censor FT years of experience to be total experience if FT > total experience

**Identifying Year that Experience was asked of Respondent (R)**

As noted above, experience variables are only asked when there is a new head or partner, so it is important to be able to identify if a head or partner is new for any given wave. To generate a variable containing the year that the current R moved into the sample:

- For 1981 we:
  - Set the year moved in to be **1976** (because experience was asked of everyone in 1976)
  - We then iterate through years 1977 to 1981 and check if the R moved into the PSID in the given years and if so, then assign that year as the year experience is asked of them
- For waves 1989 and 1990
  - Set the year moved in to be **1985** (because experience was asked of everyone in 1985)
  - For these years there is a variable that simply gives the year that the respondent entered the PSID. So we check this variable and assign the given year as the year that experience was asked
  - For consistency, we then iterate through years 1986 to the given year and check if the R moved into the PSID in the given years and if so, then assign that year as the year experience is asked of them only if we still have 1985 recorded as the year moved in (i.e,. step two did not reassign the variable)

- For waves 1997, 1999, and 2001
    - Set the year moved in to be **1985** (because experience was asked of everyone in 1985)
    - For these years the most recent variable that simply gives the year that the respondent entered the PSID is in 1993. So we check this variable and assign the given year as the year that experience was asked
    - For consistency, we then iterate through years 1986 to the given year and check if the R moved into the PSID in the given years and if so, then assign that year as the year experience is asked of them only if we still have 1985 recorded as the year moved in (i.e., step two did not reassign the variable)
- For waves 2003 - 2011
    - Set the year moved in to be **1985** (because experience was asked of everyone in 1985)
    - For these years there is a variable that simply gives the year that the respondent entered the PSID. So we check this variable and assign the given year as the year that experience was asked
    - For consistency, we then iterate through years 1986 to the given year and check if the R moved into the PSID in the given years and if so, then assign that year as the year experience is asked of them only if we still have 1985 recorded as the year moved in (i.e., step two did not reassign the variable)

We generate experience independently for each wave of interest (1981, 1990, 1999, and 2011[1]). For waves 1981 through 1997, we employ the following algorithm. First we limit the sample to include only head, wives, and cohabitors for the given wave of interest. We identify the year that the respondent first enters the PSID. Generally, the PSID asks cumulative experience questions only to new heads and partners; however, each year they obtain the amount of work the respondent has completed since the last interview. The main exceptions are in 1976 and 1985, where total work histories were collected for all respondents.

Consider, for example, determining experience in 1981. We first determine when the respondent entered the sample in relation to 1976. If they entered after 1976 we use the total work history question asked of them in the year they entered and then increment up to 1981 experience values. (The PSID collects annual hours worked each year and we increment experience if annual hours are positive and increment full-time experience if annual hours are greater than or equal to 1500.) For respondents entering before 1976, we instead use the 1976 total work histories information as a base and similarly increment up to 1981 values. We employ similar strategies using the 1985 general experience questions for respondents entering the sample after 1985.

Beginning in 1997, the PSID began collecting survey information in alternating years. The PSID provides enough T-2 information to connect experience to 1998, 2000, 2008, and 2010 gap years directly.[2] As described below, for these waves, we employ statistical methods to impute the

[1] These years comprise our main focus. We also created a data set along similar lines for 2007 to check whether some of the results were sensitive to the impact of the Great Recession.

[2] The gap year is the year preceding the indicated year. For example, the 1999 survey provides information on work experience in the previous year as is routinely done in each survey. However, the alternate year survey frame creates a gap year for work experience in the year preceding 1998. This is filled by the T-2 variable.

probability of work status for respondents with missing values of these T-2 annual hours variables.

Each wave contains different information that can be used to extract work experience for the gap-year. Upon extracting as much information as possible, remaining missing values are filled using statistical methods to impute the probability of working and working full time. Below, Table 1 displays the specific variables used to fill in employment in the gap year. The bolded terms highlight which variables were used in the construction of the gap year annual hours worked, the remaining terms show which variables were used to determine whether or not the respondent worked at all during the gap year. For each wave respondents were asked about a number of jobs they had including start and stop months/years and hours worked per week. For each of these jobs we calculate the number of weeks worked during the gap year and then calculate an estimate for the annual work hours using the hours worked per week variable.

**Table 1: Variables Used to Construct Gap Year Experience**

| Gap Year | PSID Variables |
|---|---|
| 1998 | Annual Earnings in 1997; **Annual Hours in 1997; 6 J-Variables** |
| 2000 | Annual Earnings in 1999; **Annual Hours in 1999; 6 J-Variables** |
| 2002 | Annual Earnings in 2001; 4 **J-Variables; #** of Add'l Jobs; Whether Worked Since Jan. 1 of Gap Year |
| 2004 | Annual Earnings in 2003; 4 **J-Variables; #** of Add'l Jobs; Whether Worked Since Jan. 1 of Gap Year |
| 2006 | Annual Earnings in 2005; 4 **J-Variables; #** of Add'l Jobs; Whether Worked Since Jan. 1 of Gap Year |
| 2008 | Annual Earnings in 2007; 4 **J-Variables; #** of Add'l Jobs; Whether Worked Since Jan. 1 of Gap Year |
| 2010 | Annual Earnings in 2009; 4 **J-Variables; #** of Add'l Jobs; Whether Worked Since Jan. 1 of Gap Year |

Note: "J-Variables refer to information about jobs held during the period between interviews. These include start and stop dates for each job as well as average hours per week on each job. The bold variables show which data allow us to fill in the gap year annual hours.

For example, to fill in total work experience for 1998, a respondent is considered working if the T-2 annual hours > 0 or if they reported working across the gap year for any of the jobs variables or if annual earnings in the gap year does not equal 0. A respondent is considered to gain a year of FT experience in the gap year if T-2 annual hours $\geq$ 1,500, or if the constructed annual hours for the job variables $\geq$ 1,500. If both annual hours variables are below 1,500 but positive, then we consider the respondent to have gained a year of experience but not FT experience. Remaining missing values of either experience type are then filled in via the logit procedure explained below.

It is important to note that for waves 2003 and later instead of asking about 6 jobs, the PSID asked about 4 jobs and had a question asking how many other additional jobs were worked. T-2 annual hours is constructed the same way as before; the only difference comes in the calculation of FT work experience. If the respondent reports annual hours < 1,500 and also reports working additional jobs, then these values are set to missing instead of 0, because we cannot be sure that their other jobs would not boost their annual hours worked over the 1,500 threshold. Also, there

was a variable asking if they worked at all since the beginning of the gap year. This is used to fill in for total work experience.

**Additional Detail on Filling Gap Year Work Experience**

- For 2003 and later the PSID provides a variable for whether or not the R worked at all during the gap year
- For 1999 and 2001, gap year work experience is determined as follows:
    - Respondents (R's) are asked about start and stop dates for 6 jobs (1 current employer and 5 other employers)
    - For current employers, there are no end dates recorded (obviously), so for these we code the ending month to be 12 and the ending year to be the current year if the R provides valid start dates for the current employer
    - Now for each of the 5 other employers:
        - Because some of these employers may also be current employers, we recode ending month to be 12 and ending year to be the current year if R report to be still working for that employer based on another PSID question
- A similar routine is used for 2003 – 2011, but instead there are only 4 jobs
    - Also, the PSID does not provide whether (WTR) the R is still working for that employer. Instead that is imbedded into the inappropriate flag of the end date. So we condition on all the other possibilities in the inappropriate flag to isolate the cases where the R is still working for that employer. Only for these cases are end dates set to December of the given wave
- Next, we create a binary indicating WTR the R worked during the gap year. This is done by:
    - For each job, checking if the year that the R started or stopped a job is the same year as the gap year or if the gap year falls between the start and stop year
    - For each job, record R as not working in the gap year if the start year is after the gap year, or the end year is prior to the gap year
    - Then, using the results from this routine, if R reports working in ANY job during the gap year, they are counted as working in the gap year
    - Also if R reports NEVER working a job, then they couldn't have worked in the gap year
- Next, we create an estimate for the annual hours worked during the gap year using information about the months worked on each job as well as the number of hours worked per week on each job. Specifically for each job we:
    - Create a "Months working during t-2" variable. This is done by:
        - First, setting to missing beginning/ending months for jobs starting during or after t-1.
        - Also set to missing beginning/ending months for jobs ending before t-2
        - For remaining jobs, if the year beginning the job is before t-2 then replace beginning month of job to be January.
        - For remaining jobs, if the year ending the job is after t-1 then replace ending month of the job to be December.
        - ***Note:*** Now we should have a beginning month variable with values of "January" for all jobs starting before t-2 and an ending month variable with

values of "December" for all jobs ending after t-2 and for jobs starting or ending exactly during t-2. The month variable should reflect the true month beginning/ending that job.
        - Finally, we take the difference between the ending and beginning months (plus 1) to get the number of months working during t-2
    - Annual hours on each jobs is then created by multiplying this # of months variable by 4.33 and then multiplying that value by the number of hours per week worked on that job in year t.
    - Our measure of total hours worked is then created by adding up all the hours worked across all the jobs recorded in the PSID (4 for '03 and later, and 6 for '99 and '01)
        - For '03 and later:
            - We replace missing values of this t-2 annual hours measure with zero if our previous gap year dummy indicates they didn't work in the gap year AND if they report no additional jobs worked
                - Note: This is done because if they report additional jobs, since we don't have the month worked info on these jobs, we have no way of knowing if the work crossed over the gap year for that job
            - We also replace missing values of this t-2 annual hours measure to be zero if the PSID provided gap year work status variable indicates they didn't work (regardless of how many additional jobs they report)
        - For '99 and '01
            - We replace missing values of this t-2 annual hours measure to be zero if our previous gap year dummy indicates they didn't work in the gap year (this variable was described above)
            - Note: In these waves, the PSID did not ask the t-2 work status question and also there are no additional jobs reported, so we do not include that information as we did above
    - Waves '99, '01, '09, and '11 all have t-2 annual hours (provided by the PSID), but the rest need to be created. The final annual hours measures used in later analyses are created by simply using our created variable for waves '03, '05, and '07; and for the other waves, using the PSID provided variable as a base and filling in missing values with our created values.
    - ***NOTE:*** The PSID does provide t-2 information for '03, '05, and '07, but these variables are very sparse. Values are flagged as inappropriate if the R was the head (HD) or wife (or cohabiting female partner) (WF) in the family unit (FU), so we do not use T-2 information even though it is technically available.
- Misc.
    - For months, some R instead report seasons, we recode seasons as Winter = 2, Spring = 5, Summer = 8, Autumn = 11
    - For the year variables, there is an option for an unknown year range. e.g. for 2009, R can report starting work in "2007-2009DK which year". We treat these responses as missing.

**Logit Imputation**

For some respondents, we have enough information to know whether they worked at all during the gap year, and for others we don't. For those whom we know worked during the gap year, if they have missing information on the number of hours they worked, we employ logistic regression to estimate the probability that these employed respondents worked full-time during the gap year. First, we condition our logistic regressions on respondents who report positive earnings during the gap year and we run four logistic regressions, two for each year surrounding the gap by sex. For each respective year, we regress a binary for full-time work status on a set of year specific covariates.[3] These gender-specific regressions are weighted using family weights. We then use the predicted probabilities to increment total full-time experience for the gap year.[4]

For those for whom we don't know if they worked during the gap year, we estimate logits for working and for full-time experience but not conditioning the latter on work status. We then use predicted probabilities to increment experience and full-time experience for the gap year.

Finally, we also considered using the T-2 annual labor income as a regressor in the FT experience regressions, but upon including this variable, the logits would fail to converge.

**Education**

In an effort to reduce costs, between 1994 to 2007, the PSID only collected education information for *new* heads and wives (or partners) entering the sample. As a result, any extra schooling obtained by heads and wives already in the sample during these years is not updated. However, in 2009 the PSID collected background information on *all* Heads and Wives. The PSID also collected the year in which the latest degree was received. Using this information we retroactively update education variables during the 1990 to 2007 period.[5] We also are able to retroactively update 1981 with 1985 values using an identical algorithm.

The retroactive updating is done by first making linear schooling measures from the individual file comparable across waves. Education variables are created using the highest level of schooling reported in the individual files. Specifically, to make all later waves match the 1981 coding, we code years of schooling to be 12 if the R got a GED and didn't go to college. We also are careful to add in true zeroes instead of just inappropriate flags for each wave.

In the PSID, information is collected in both family files as well as individual files. It turns out that there are a few discrepancies between reported education across these files. As a result, before any retroactive updating is done, education is recoded to be the maximum (accounting for missing values) education reported in the individual and family files. This max routine is done for linear schooling in each wave (including the '85 and '09 variables) used for retroactively updating.[6]

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[3] Specifically, we control for the number of children, single and married status, other race, black, or Hispanic status, linear and squared terms for total years of part-time and full-time experience to that year (for the year following the gap, we just use again the values from the year preceding the gap), and the highest number of years of school completed as well as binaries for bachelors and advanced degree receipt.

[4] Note: This implies that years of experience are no longer limited to integer values.

[5] Note that for participants that leave the sample prior to 2009, we cannot perform this retroactive updating.

[6] Note: For waves '85, '89 and '90, family file linear schooling needs to be reconstructed manually by going through questions for last year in school for HS dropouts, graduates, and college attendees, because the PSID doesn't provide linear schooling for family files in these years.

Once these are ready, we update schooling for a given wave if the last year in school (as asked in 2009) is less than or equal to the wave of interest and the new schooling value is not below the value to be updated (accounting for missing values appropriately).

After the retroactive updating occurs, we then update the years of schooling variable using these updated degree variables.[7] We use a similar procedure to update 1981 values using 1985 education that was re-asked of everyone in the sample.

We also recode the linear schooling variables with a value of 18 if the respondent reports having an advanced degree following Jaeger (1997).

Finally, for any respondent with a valid education value in a previous main wave and a missing education value in a subsequent wave, the value is brought forward to the later wave.

**Degrees**

- "No Degree" includes Associate degrees, Honorary Degrees, and "Other"
- DK, and NA are coded as missing
- BA degrees include BA and BS
- Advanced degrees include:
  1. Master of Arts/Science; MA; MS; MBA
  2. Doctorate; Ph.D.
  3. LLB; JD
  4. MD; DDS; DVM; DO

Degrees are also retroactively updated using the same procedure mentioned above.

**Annual Earnings**

- For 1981 sample, we adjust the top censored annual labor earnings to be 1.45 * 99,999
- For the other waves, the censoring value is high enough that no respondents received censored values

**Sample Restrictions**

- Wage Sample
  - Ages between 25 and 64, non-military, heads wives and cohabitators
  - AND also restricts to individuals who were full-time, non-farm, wage and salary workers and who worked at least 26 weeks during the preceding year, were non-self-employed, and had non-missing values on the hourly wage, experience, race, schooling, industry, occupation, and unionization variables
    - This implicitly drops observations with real hourly wages below $2 because there are set to missing (see Real Hourly Wage Section)
  - Full-time status is defined as working greater than or equal to 35 hours per week and also being classified as employed

[7] We update the years of schooling to 16 if the respondent reports having a BA degree by the current year in question. Similarly we update years of schooling to be 18 for Advanced degrees in light of Jaeger (1997).

- In the PSID, we also drop R's from the immigrant sample and the 1990 Latino sample
- In the PSID we don't include any farm income restrictions due to problems with missing data, but we do include farm income restrictions for the CPS

**Real Hourly Wage**

- For early years of the PSID, separate values for wage and salary income and self-employment/farm income are not available for wives. Therefore, for analyses using the PSID, we use total labor earnings for people who report that they were not self employed on any job. In earlier work (Blau and Kahn 2004), we showed that this did not have an important effect on average hourly earnings among household heads, a group for which we had data on both total labor earnings and wage and salary earnings.
- 2010 is used as the base year and real hourly earnings are created using the personal consumption expenses deflator from the BEA.
- We replace to missing if the respondent is self-employed or earns a real hourly wage below $2.

**Public Sector Work**

- Beyond the industry and occupation codes, the PSID also asks respondents if they are currently (or previously in the case of unemployed respondents) employed by the government.
- This question is asked for every type job reported by the respondent
- For each question, we code a binary where:
    - 1= Federal, state, and local government position
    - 0=private company, self-employed, other, DK, NA, or inappropriate flags
- These binaries for the different jobs are combined into one measure =1 if *any* of the jobs are coded as a government position

**Occupation and Industry**

- For the 1981, 1990, and 1999 waves of the PSID, we convert 1970 occupation codes to 2000 census codes
- We do this by first merging a crosswalk based on the 1970 codes, using gender-specific data for the occupation crosswalk, from Blau, Brummund and Liu (2013).
- The specific occupation and industry dummy variables used in the regressions are listed in Section III of this Appendix.

**Miscellaneous re: PSID**

- For 1978 annual hours, we set to missing values of 7980, there are 23 observations. It appears to be a wild code
- A respondent is considered self-employed if they respond being self-employed for *any* job
- SMSA questions in 1981 were based on Primary Sampling Unit and every wave after, it is at the county level
- Labor Part of Business Income Censoring
    - 1981 & 1990
        - $99,999 or more

- 1999
  - $999,999 or more
- 2007, 2009, 2011
  - $9,999,999 or more

# II. CPS Documentation

Wage sample restrictions are similar to those for the PSID.

**Earnings/Wages**

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Data on wage and salary income are used to compute wages. Wages are set to missing if any of the earnings variables are allocated. While the PSID does not topcode earnings, the CPS does, although the method for doing so changed.[8] From 1981 through 1995, topcodes represent true topcodes. These were multiplied by 1.45 for the CPS waves in that interval. Starting in 1996, "[t]he topcode was replaced with the mean earnings for topcoded individuals with similar characteristics[9]." For 1999, we used the CPS's mean earnings value for the topcode. "Starting in 2011, the Census Bureau shifted from the average replacement value system to a rank proximity swapping procedure. In this technique, all values greater than or equal to the income topcode are ranked from lowest to highest and systematically swapped with other values within a bounded interval. All swapped values are also rounded to two significant digits."[10] For 2011, we used the values provided in the CPS.

# III. PSID Industry and Occupation Codes

## Industry Codes

Our system of Industry Classifications is based on the 2000 Census Industry Codes. Since the 2000 system does not specify its own 2-digit codes, we created our own based on broad categorizations suggested by IPUMS, with some adjustment. The 2-digit categories, which are the dummy variable categories for the regressions, are provided in bold and underlined, and the 3-digit codes falling under them are listed below. Our regressions drop all with agriculture industry, and use the Education industry as the base category.

[8] See, IPUMS CPS, 'Income Components: Topcodes, Replacement Values, and Swap Values," available at https://cps.ipums.org/cps/topcodes_tables.shtml , accessed January 17, 2017. Unless otherwise indicated, quotations are from that document.

[9] "Topcoded individuals are divided into twelve groups depending on characteristics such as race, gender, and full time status. Income values are reassigned according to the mean income within each group. If less than 5 individuals are topcoded within a characteristic group, groups are pooled and a new average is given to each group."

[10] For further explanation, see CPS March 2011 Technical documentation pg.5-3, available at https://www.census.gov/prod/techdoc/cps/cpsmar11.pdf , accessed January 17, 2017.

**Agriculture**

| | |
|---|---|
| 017 | Crop production |
| 018 | Animal production |
| 019 | Forestry except logging |
| 027 | Logging |
| 028 | Fishing, hunting, and trapping |
| 029 | Support activities for agriculture and forestry |

**Mining and Construction**

| | |
|---|---|
| 037 | Oil and gas extraction |
| 038 | Coal mining |
| 039 | Metal ore mining |
| 047 | Nonmetallic mineral mining and quarrying |
| 048 | Not specified type of mining |
| 049 | Support activities for mining |
| 077 | Construction |

**Utilities**

| | |
|---|---|
| 057 | Electric power generation, transmission and distribution |
| 058 | Natural gas distribution |
| 059 | Electric and gas and other combinations |
| 067 | Water, steam, air-conditioning, and irrigation systems |
| 068 | Sewage treatment facilities |
| 069 | Not specified utilities |

**Non-Durable Manufacturing**

| | |
|---|---|
| 107 | Animal food, grain, and oilseed milling |
| 108 | Sugar and confectionery products |
| 109 | Fruit and vegetable preserving and specialty food manufacturing |

| | |
|---|---|
| 117 | Dairy product manufacturing |
| 118 | Animal slaughtering and processing |
| 119 | Retail bakeries |
| 127 | Bakeries except retail |
| 128 | Seafood and other miscellaneous foods n.e.c. |
| 129 | Not specified food industries |
| 137 | Beverage manufacturing |
| 139 | Tobacco manufacturing |
| 147 | Fiber, yarn, and thread mills |
| 148 | Fabric mills, except knitting |
| 149 | Textile and fabric finishing and coating mills |
| 157 | Carpets and rugs manufacturing |
| 159 | Textile product mills except carpets and rugs |
| 167 | Knitting mills |
| 168 | Cut and sew apparel manufacturing |
| 169 | Apparel accessories and other apparel manufacturing |
| 177 | Footwear manufacturing |
| 179 | Leather tanning and products, except footwear manufacturing |
| 187 | Pulp, paper, and paperboard mills |
| 188 | Paperboard containers and boxes |
| 189 | Miscellaneous paper and pulp products |
| 199 | Printing and related support activities |
| 207 | Petroleum refining |
| 209 | Miscellaneous petroleum and coal products |
| 217 | Resin, synthetic rubber and fibers, and filaments manufacturing |
| 218 | Agricultural chemical manufacturing |
| 219 | Pharmaceutical and medicine manufacturing |
| 227 | Paint, coating, and adhesives manufacturing |
| 228 | Soap, cleaning compound, and cosmetic manufacturing |
| 229 | Industrial and miscellaneous chemicals |

| | |
|---|---|
| 237 | Plastics product manufacturing |
| 238 | Tire manufacturing |
| 239 | Rubber products, except tires, manufacturing |

**Durable Manufacturing**

| | |
|---|---|
| 247 | Pottery, ceramics, and related products manufacturing |
| 248 | Structural clay product manufacturing |
| 249 | Glass and glass product manufacturing |
| 257 | Cement, concrete, lime, and gypsum product manufacturing |
| 259 | Miscellaneous nonmetallic mineral product manufacturing |
| 267 | Iron and steel mills and steel product manufacturing |
| 268 | Aluminum production and processing |
| 269 | Nonferrous metal, except aluminum, production and processing |
| 277 | Foundries |
| 278 | Metal forgings and stampings |
| 279 | Cutlery and hand tool manufacturing |
| 287 | Structural metals and tank and shipping container manufacturing |
| 288 | Machine shops; turned product; screw nut and bolt activities |
| 289 | Coating, engraving, heat treating and allied activities |
| 297 | Ordnance |
| 298 | Miscellaneous fabricated metal products manufacturing |
| 299 | Not specified metal industries |
| 307 | Agricultural implement manufacturing |

| | |
|---|---|
| 308 | Construction, mining and oil field manufacturing |
| 309 | Commercial and service industry machinery manufacturing |
| 317 | Metalworking machinery manufacturing |
| 318 | Engines, turbines, and power transmission equipment manufacturing |
| 319 | Machinery manufacturing, n.e.c. |
| 329 | Not specified machinery manufacturing |
| 336 | Computer and peripheral equipment manufacturing |
| 337 | Communications, audio, and video equipment manufacturing |
| 338 | Navigational, measuring, electromedical, and control instruments manufacturing |
| 339 | Electronic component and product manufacturing, n.e.c. |
| 347 | Household appliance manufacturing |
| 349 | Electrical machinery, equipment, and and supplies manufacturing, n.e.c. |
| 357 | Motor vehicles and motor vehicle equipment manufacturing |
| 358 | Aircrafts and parts manufacturing |
| 359 | Aerospace products and parts manufacturing |
| 367 | Railroad rolling stock manufacturing |
| 368 | Ship and boat building |
| 369 | Other transportation equipment manufacturing |
| 377 | Sawmills and wood preservation |
| 378 | Veneer, plywood, and engineered wood product manufacturing |

| | |
|---|---|
| 379 | Prefabricated wood buildings and mobile homes manufacturing |
| 387 | Miscellaneous wood product manufacturing |
| 389 | Furniture and fixtures |
| 396 | Medical equipment and supplies manufacturing |
| 397 | Toys, amusement and sporting goods manufacturing |
| 398 | Miscellaneous manufacturing, n.e.c. |
| 399 | Not specified manufacturing |

**Wholesale Trade**

| | |
|---|---|
| 407 | Motor vehicles, parts and supplies wholesalers |
| 408 | Furniture and home furnishing wholesalers |
| 409 | Lumber and other construction materials wholesalers |
| 417 | Professional and commercial equipment and supplies wholesalers |
| 418 | Metals and minerals, except petroleum wholesalers |
| 419 | Electrical goods wholesalers |
| 426 | Hardware, plumbing and heating equipment, and supplies wholesalers |
| 427 | Machinery, equipment, and supplies wholesalers |
| 428 | Recyclable material wholesalers |
| 429 | Misc durable goods wholesalers |
| 437 | Paper and paper product wholesalers |

| | |
|---|---|
| 438 | Drugs, sundries, and chemical and allied product wholesalers |
| 439 | Apparel, fabrics, and notions wholesalers |
| 447 | Groceries and related product wholesalers |
| 448 | Farm product raw material wholesalers |
| 449 | Petroleum and petroleum product wholesalers |
| 456 | Alcoholic beverage wholesalers |
| 457 | Farm supplies wholesalers |
| 458 | Misc. nondurable goods wholesalers |
| 459 | Not specified wholesale trade |

**Retail Trade**

| | |
|---|---|
| 467 | Automobile dealers |
| 468 | Other motor vehicle dealers |
| 469 | Auto parts, accessories, and tire stores |
| 477 | Furniture and home furnishings stores |
| 478 | Household appliance stores |
| 479 | Radio, TV, and computer stores |
| 487 | Building material and supplies dealers |
| 488 | Hardware stores |
| 489 | Lawn and garden equipment and supplies stores |
| 497 | Grocery stores |
| 498 | Specialty food stores |
| 499 | Beer, wine, and liquor stores |
| 507 | Pharmacies and drug stores |
| 508 | Health and personal care, except drug, stores |
| 509 | Gasoline stations |

| | |
|---|---|
| 517 | Clothing and accessories, except shoe, stores |
| 518 | Shoe stores |
| 519 | Jewelry, luggage, and leather goods stores |
| 527 | Sporting goods, camera, and hobby and toy stores |
| 528 | Sewing, needlework and piece goods stores |
| 529 | Music stores |
| 537 | Book stores and news dealers |
| 538 | Department stores |
| 539 | Miscellaneous general merchandise stores |
| 547 | Retail florists |
| 548 | Office supplies and stationary stores |
| 549 | Used merchandise stores |
| 557 | Gift, novelty, and souvenir shops |
| 558 | Miscellaneous retail stores |
| 559 | Electronic shopping and mail-order houses |
| 567 | Vending machine operators |
| 568 | Fuel dealers |
| 569 | Other direct selling establishments |
| 579 | Not specified retail trade |
| 708 | Automotive equipment rental and leasing |
| 717 | Video Tape and Disk Rental |
| 718 | Other Consumer Goods Rental |

**Transport**

| | |
|---|---|
| 607 | Air transportation |
| 608 | Rail transportation |
| 609 | Water transportation |
| 617 | Truck transportation |
| 618 | Bus service and urban transit |
| 619 | Taxi and limousine service |
| 627 | Pipeline transportation |
| 628 | Scenic and sightseeing transportation |
| 629 | Services incidental to transportation |

| | |
|---|---|
| 637 | Postal Service |
| 638 | Courier and messengers |
| 639 | Warehousing and storage |

**Communications**

| | |
|---|---|
| 647 | Newspaper publishers |
| 648 | Publishing except newspapers and software |
| 649 | Software publishing |
| 657 | Motion pictures and video industries |
| 659 | Sound recording industries |
| 667 | Radio and television broadcasting and cable |
| 668 | Wired telecommunications carriers |
| 669 | Other telecommunication services |
| 677 | Libraries and archives |
| 678 | Other information services |
| 679 | Data processing services |

**Finance**

| | |
|---|---|
| 687 | Banking and related activities |
| 688 | Savings institutions, including credit unions |
| 689 | Non-depository credit and related activities |
| 697 | Securities, commodities, funds, trusts, and other financial investments |
| 699 | Insurance carriers and related activities |
| 707 | Real estate |

**Professional**

| | |
|---|---|
| 719 | Commercial, industrial, and other intangible assets rental and leasing |

| | |
|---|---|
| 727 | Legal services |
| 728 | Accounting, tax preparation, bookkeeping and payroll services |
| 729 | Architectural, engineering, and related services |
| 737 | Specialized design services |
| 738 | Computer systems design and related services |
| 739 | Management, scientific and technical consulting services |
| 746 | Scientific research and development services |
| 747 | Advertising and related services |
| 748 | Veterinary services |
| 749 | Other professional, scientific and technical services |
| 757 | Management of companies and enterprises |
| 758 | Employment services |
| 759 | Business support services |
| 767 | Travel arrangement and reservation services |
| 768 | Investigation and security services |
| 769 | Services to buildings and dwellings |
| 777 | Landscaping services |
| 778 | Other administrative and other support services |
| 779 | Waste management and remediation services |

**Education**

| | |
|---|---|
| 786 | Elementary and secondary schools |
| 787 | Colleges and universities, including junior colleges |
| 788 | Business, technical, and trade schools and training |
| 789 | Other schools, instruction, and educational services |

**Medical**

| | |
|---|---|
| 797 | Offices of physicians |
| 798 | Offices of dentists |
| 799 | Office of chiropractors |
| 807 | Offices of optometrists |
| 808 | Offices of other health practitioners |
| 809 | Outpatient care centers |
| 817 | Home health care services |
| 818 | Other health care services |
| 819 | Hospitals |
| 827 | Nursing care facilities |
| 829 | Residential care facilities, without nursing |

**Social Work, Arts & Recreation & Other Services**

| | |
|---|---|
| 837 | Individual and family services |
| 838 | Community food and housing, and emergency services |
| 839 | Vocational rehabilitation services |
| 847 | Child day care services |
| 856 | Independent artists, performing arts, spectator sports, and related industries |
| 857 | Museums, art galleries, historical sites, and similar institutions |
| 858 | Bowling centers |
| 859 | Other amusement, gambling, and recreation industries |
| 866 | Traveler accommodation |
| 867 | Recreational vehicle parks and camps, and rooming and boarding houses |
| 868 | Restaurants and other food services |
| 869 | Drinking places, alcoholic beverages |
| 877 | Automotive repair and maintenance |

| | |
|---|---|
| 878 | Car washes |
| 879 | Electronic and precision equipment repair and maintenance |
| 887 | Commercial and industrial machinery and equipment repair and maintenance |
| 888 | Personal and household goods repair and maintenance |
| 889 | Footwear and leather goods repair |
| 897 | Barber shops |
| 898 | Beauty salons |
| 899 | Nail salons and other personal care services |
| 907 | Drycleaning and laundry services |
| 908 | Funeral homes, cemeteries and crematories |
| 909 | Other personal services |
| 916 | Religious organizations |
| 917 | Civic, social, advocacy organizations, and grantmaking and giving services |
| 918 | Labor unions |
| 919 | Business, professional, political, and similar organizations |
| 929 | Private households |

**Public Administration**

| | |
|---|---|
| 937 | Executive offices and legislative bodies |
| 938 | Public finance activities |
| 939 | Other general government and support |
| 947 | Justice, public order, and safety activities |
| 948 | Administration of human resource programs |
| 949 | Administration of environmental quality and housing programs |
| 957 | Administration of economic programs and space research |
| 959 | National security and international affairs |
| 967 | U.S. Army |

| | |
|---|---|
| 968 | U. S. Air Force |
| 969 | U. S. Navy |
| 977 | U. S. Marines |
| 978 | U. S. Coast Guard |
| 979 | U. S. Armed Forces, branch not specified |
| 987 | Military Reserves or National Guard |

## Occupation Codes

Our final system of 2-digit Occupation Classifications is based on the 2000 Census Occupation Codes. Since the 2000 system does not offer its own 2-digit codes, we created our own based on broad categorizations suggested by IPUMS, with some adjustment. The 2-digit categories, which are the dummy variable categories for the regressions, are provided in bold, and the 3-digit codes falling under that category are listed below. Our regressions drop all observations with 2-digit Farming, Fishing and Forestry code (051) or 3-digit Farming / Ranching codes (20 & 21P). Managers is the omitted occupation category in the regressions.

**Managers**

001 Chief Executives
002 General and Operations Managers
003 Legislators
004 Advertising and Promotions Managers
005 Marketing and Sales Managers
006 Public Rbelations Managers
010 Administrative Services Managers
011 Computer and Information Systems Managers
012 Financial Managers
013 Human Resources Managers
014 Industrial Production Managers
015 Purchasing Managers
016 Transportation, Storage, and Distribution Managers
020 Farm, Ranch, and Other Agricultural Managers
021 Farmers and Ranchers
022 Construction Managers
023 Education Administrators
030 Engineering Managers

031 Food Service Managers
032 Funeral Directors
033 Gaming Managers
034 Lodging Managers
035 Medical and Health Services Managers
036 Natural Sciences Managers
040 Postmasters and Mail Superintendents
041 Property, Real Estate, and Community Association Managers
042 Social and Community Service Managers
043 Managers, All Other

**Business Operations Specialists**

050 Agents and Business Managers of Artists, Performers, and Athletes
051 Purchasing Agents and Buyers, Farm Products
052 Wholesale and Retail Buyers, Except Farm Products
053 Purchasing Agents, Except Wholesale, Retail, and Farm Products
054 Claims Adjusters, Appraisers, Examiners, and Investigators
056 Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
060 Cost Estimators
062 Human Resources, Training, and Labor Relations Specialists
070 Logisticians
071 Management Analysts
072 Meeting and Convention Planners
073 Other Business Operations Specialists

**Financial Operations Specialists**

080 Accountants and Auditors
081 Appraisers and Assessors of Real Estate
082 Budget Analysts
083 Credit Analysts
084 Financial Analysts
085 Personal Financial Advisors
086 Insurance Underwriters
090 Financial Examiners
091 Loan Counselors and Officers
093 Tax Examiners, Collectors, and Revenue Agents
094 Tax Preparers
095 Financial Specialists, All Other

**Computer and Math Technicians**

100 Computer Scientists and Systems Analysts ,
101 Computer Programmers
102 Computer Software Engineers
104 Computer Support Specialists

106 Database Administrators
110 Network and Computer Systems Administrators
111 Network Systems and Data Communications Analysts
120 Actuaries
121 Mathematicians
122 Operations Research Analysts
123 Statisticians
124 Miscellaneous Mathematical Science Occupations

**Architects and Engineers**

130 Architects, Except Naval
131 Surveyors, Cartographers, and Photogrammetrists
132 Aerospace Engineers
133 Agricultural Engineers
134 Biomedical Engineers
135 Chemical Engineers
136 Civil Engineers
140 Computer Hardware Engineers
141 Electrical and Electronics Engineers
142 Environmental Engineers
143 Industrial Engineers, Including Health and Safety
144 Marine Engineers and Naval Architects
145 Materials Engineers
146 Mechanical Engineers
150 Mining and Geological Engineers, Including Mining Safety Engineers
151 Nuclear Engineers
152 Petroleum Engineers
153 Engineers, All Other
154 Drafters
155 Engineering Technicians, Except Drafters
156 Surveying and Mapping Technicians

**Life, Physical and Social Science Technicians**

160 Agricultural and Food Scientists
161 Biological Scientists
164 Conservation Scientists and Foresters
165 Medical Scientists
170 Astronomers and Physicists
171 Atmospheric and Space Scientists
172 Chemists and Materials Scientists
174 Environmental Scientists and Geoscientists
176 Physical Scientists, All Other
180 Economists
181 Market and Survey Researchers
182 Psychologists
183 Sociologists

184 Urban and Regional Planners
186 Miscellaneous Social Scientists and Related Workers
190 Agricultural and Food Science Technicians
191 Biological Technicians
192 Chemical Technicians
193 Geological and Petroleum Technicians
194 Nuclear Technicians
196 Other Life, Physical, and Social Science Technicians,

**Community and Social Workers**

200 Counselors
201 Social Workers
202 Miscellaneous Community and Social Service Specialists
204 Clergy
205 Directors, Religious Activities and Education
206 Religious Workers, All Other

**Postsecondary Educators**

220 Postsecondary Teachers

**Other Education, Training, Legal and Library Workers**

214 Paralegals and Legal Assistants
215 Miscellaneous Legal Support Workers
230 Preschool and Kindergarten Teachers
231 Elementary and Middle School Teachers
232 Secondary School Teachers
233 Special Education Teachers
234 Other Teachers and Instructors
240 Archivists, Curators, and Museum Technicians
243 Librarians
244 Library Technicians
254 Teacher Assistants
255 Other Education, Training, and Library Workers ,

**Arts, Design, Entertainment, Sports and Media**

260 Artists and Related Workers
263 Designers
270 Actors
271 Producers and Directors
272 Athletes, Coaches, Umpires, and Related Workers
274 Dancers and Choreographers
275 Musicians, Singers, and Related Workers
276 Entertainers and Performers, Sports and Related Workers, All Other
280 Announcers
281 News Analysts, Reporters and Correspondents
282 Public Relations Specialists

283 Editors
284 Technical Writers
285 Writers and Authors
286 Miscellaneous Media and Communication Workers
290 Broadcast and Sound Engineering Technicians and Radio Operators
291 Photographers
292 Television, Video, and Motion Picture Camera Operators and Editors
296 Media and Communication Equipment Workers, All Other

**Lawyers, Judges, Physicians and Dentists**

210 Lawyers
211 Judges, Magistrates, and Other Judicial Workers
301 Dentists
306 Physicians and Surgeons

**Nurses and Healthcare Practitioners & Technicians**

300 Chiropractors
303 Dietitians and Nutritionists
304 Optometrists
305 Pharmacists
311 Physician Assistants
312 Podiatrists
313 Registered Nurses
314 Audiologists
315 Occupational Therapists
316 Physical Therapists
320 Radiation Therapists
321 Recreational Therapists
322 Respiratory Therapists
323 Speech-Language Pathologists
324 Therapists, All Other
325 Veterinarians
326 Health Diagnosing and Treating Practitioners, All Other
330 Clinical Laboratory Technologists and Technicians
331 Dental Hygienists
332 Diagnostic Related Technologists and Technicians
340 Emergency Medical Technicians and Paramedics
341 Health Diagnosing and Treating Practitioner Support Technicians
350 Licensed Practical and Licensed Vocational Nurses
351 Medical Records and Health Information Technicians
352 Opticians, Dispensing
353 Miscellaneous Health Technologists and Technicians
354 Other Healthcare Practitioners and Technical Occupations

**Healthcare Support Occupations**

360 Nursing, Psychiatric, and Home Health Aides

361 Occupational Therapist Assistants and Aides
362 Physical Therapist Assistants and Aides
363 Massage Therapists
364 Dental Assistants
365 Medical Assistants and Other Healthcare Support Occupations

**Protective Service Occupations**

370 First-Line Supervisors/Managers of Correctional Officers
371 First-Line Supervisors/Managers of Police and Detectives
372 First-Line Supervisors/Managers of Fire Fighting and Prevention Workers
373 Supervisors, Protective Service Workers, All Other
374 Fire Fighters
375 Fire Inspectors
380 Bailiffs, Correctional Officers, and Jailers
382 Detectives and Criminal Investigators
383 Fish and Game Wardens
384 Parking Enforcement Workers
385 Police and Sheriff's Patrol Officers
386 Transit and Railroad Police
390 Animal Control Workers
391 Private Detectives and Investigators
392 Security Guards and Gaming Surveillance Officers
394 Crossing Guards
395 Lifeguards and Other Protective Service Workers

**Food Preparation & Serving-related & Personal Care Occupations**

400 Chefs and Head Cooks
401 First-Line Supervisors/Managers of Food Preparation and Serving Workers
402 Cooks
403 Food Preparation Workers
404 Bartenders
405 Combined Food Preparation and Serving Workers, Including Fast Food
406 Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
411 Waiters and Waitresses
412 Food Servers, Non-restaurant
413 Dining Room and Cafeteria Attendants and Bartender Helpers
414 Dishwashers
415 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
416 Food Preparation and Serving Related Workers, All Other
430 First-Line Supervisors/Managers of Gaming Workers
432 First-Line Supervisors/Managers of Personal Service Workers
434 Animal Trainers
435 Nonfarm Animal Caretakers
440 Gaming Services Workers

441 Motion Picture Projectionists
442 Ushers, Lobby Attendants, and Ticket Takers
443 Miscellaneous Entertainment Attendants and Related Workers
446 Funeral Service Workers
450 Barbers
451 Hairdressers, Hairstylists, and Cosmetologists
452 Miscellaneous Personal Appearance Workers
453 Baggage Porters, Bellhops, and Concierges
454 Tour and Travel Guides
455 Transportation Attendants
460 Child Care Workers
461 Personal and Home Care Aides
462 Recreation and Fitness Workers
464 Residential Advisors
465 Personal Care and Service Workers, All Other

**Building & Grounds Cleaning and Maintenance**

420 First-Line Supervisors/Managers of Housekeeping and Janitorial Workers
421 First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers
422 Janitors and Building Cleaners
423 Maids and Housekeeping Cleaners
424 Pest Control Workers
425 Grounds Maintenance Workers

**Sales and Related Occupations**

470 First-Line Supervisors/Managers of Retail Sales Workers
471 First-Line Supervisors/Managers of Non-Retail Sales Workers
472 Cashiers
474 Counter and Rental Clerks
475 Parts Salespersons
476 Retail Salespersons
480 Advertising Sales Agents
481 Insurance Sales Agents
482 Securities, Commodities, and Financial Services Sales Agents 41-483 Travel Agents
484 Sales Representatives, Services, All Other
485 Sales Representatives, Wholesale and Manufacturing
490 Models, Demonstrators, and Product Promoters
492 Real Estate Brokers and Sales Agents
493 Sales Engineers
494 Telemarketers
495 Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

496 Sales and Related Workers, All Other

**Office and Administrative Support**

500 First-Line Supervisors/Managers of Office and Administrative Support Workers
501 Switchboard Operators, Including Answering Service
502 Telephone Operators
503 Communications Equipment Operators, All Other
510 Bill and Account Collectors
511 Billing and Posting Clerks and Machine Operators
512 Bookkeeping, Accounting, and Auditing Clerks
513 Gaming Cage Workers
514 Payroll and Timekeeping Clerks
515 Procurement Clerks
516 Tellers
520 Brokerage Clerks
521 Correspondence Clerks
522 Court, Municipal, and License Clerks
523 Credit Authorizers, Checkers, and Clerks
524 Customer Service Representatives
525 Eligibility Interviewers, Government Programs
526 File Clerks
530 Hotel, Motel, and Resort Desk Clerks
531 Interviewers, Except Eligibility and Loan
532 Library Assistants, Clerical
533 Loan Interviewers and Clerks
534 New Accounts Clerks
535 Order Clerks
536 Human Resources Assistants, Except Payroll and Timekeeping
540 Receptionists and Information Clerks
541 Reservation and Transportation Ticket Agents and Travel Clerks
542 Information and Record Clerks, All Other
550 Cargo and Freight Agents
551 Couriers and Messengers
552 Dispatchers
553 Meter Readers, Utilities
554 Postal Service Clerks
555 Postal Service Mail Carriers
556 Postal Service Mail Sorters, Processors, and Processing Machine Operators
560 Production, Planning, and Expediting Clerks
561 Shipping, Receiving, and Traffic Clerks
562 Stock Clerks and Order Fillers
563 Weighers, Measurers, Checkers, and Samplers, Recordkeeping
570 Secretaries and Administrative Assistants
580 Computer Operators

581 Data Entry Keyers
582 Word Processors and Typists
583 Desktop Publishers
584 Insurance Claims and Policy Processing Clerks
585 Mail Clerks and Mail Machine Operators, Except Postal Service 43-586 Office Clerks, General
590 Office Machine Operators, Except Computer
591 Proofreaders and Copy Markers
592 Statistical Assistants
593 Office and Administrative Support Workers, All Other

**Farming, Fishing and Forestry Occupations**

600 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers
601 Agricultural Inspectors
602 Animal Breeders
604 Graders and Sorters, Agricultural Products
605 Miscellaneous Agricultural Workers
610 Fishers and Related Fishing Workers
611 Hunters and Trappers
612 Forest and Conservation Workers
613 Logging Workers

**Construction, Extraction and Installation Occupations**

620 First-Line Supervisors/Managers of Construction Trades and Extraction Workers
621 Boilermakers
622 Brickmasons, Blockmasons, and Stonemasons
623 Carpenters
624 Carpet, Floor, and Tile Installers and Finishers
625 Cement Masons, Concrete Finishers, and Terrazzo Workers
626 Construction Laborers
630 Paving, Surfacing, and Tamping Equipment Operators
631 Pile-Driver Operators
632 Operating Engineers and Other Construction Equipment Operators
633 Drywall Installers, Ceiling Tile Installers, and Tapers
635 Electricians
636 Glaziers
640 Insulation Workers
642 Painters, Construction and Maintenance
643 Paperhangers
644 Pipelayers, Plumbers, Pipefitters, and Steamfitters
646 Plasterers and Stucco Masons
650 Reinforcing Iron and Rebar Workers
651 Roofers
652 Sheet Metal Workers
653 Structural Iron and Steel Workers

660 Helpers, Construction Trades
666 Construction and Building Inspectors
670 Elevator Installers and Repairers
671 Fence Erectors
672 Hazardous Materials Removal Workers
673 Highway Maintenance Workers
674 Rail-Track Laying and Maintenance Equipment Operators
675 Septic Tank Servicers and Sewer Pipe Cleaners
676 Miscellaneous Construction and Related Workers
680 Derrick, Rotary Drill, and Service Unit Operators, Oil, Gas, and Mining
682 Earth Drillers, Except Oil and Gas
683 Explosives Workers, Ordnance Handling Experts, and Blasters 31
684 Mining Machine Operators
691 Roof Bolters, Mining
692 Roustabouts, Oil and Gas
693 Helpers--Extraction Workers
694 Other Extraction Workers
700 First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
701 Computer, Automated Teller, and Office Machine Repairers
702 Radio and Telecommunications Equipment Installers and Repairers 3 Avionics Technicians
704 Electric Motor, Power Tool, and Related Repairers
705 Electrical and Electronics Installers and Repairers, Transportation Equipment
710 Electrical and Electronics Repairers, Industrial and Utility
711 Electronic Equipment Installers and Repairers, Motor Vehicles
712 Electronic Home Entertainment Equipment Installers and Repairers
713 Security and Fire Alarm Systems Installers
714 Aircraft Mechanics and Service Technicians
715 Automotive Body and Related Repairers
716 Automotive Glass Installers and Repairers
720 Automotive Service Technicians and Mechanics
721 Bus and Truck Mechanics and Diesel Engine Specialists
722 Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics
724 Small Engine Mechanics
726 Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
730 Control and Valve Installers and Repairers
731 Heating, Air Conditioning, and Refrigeration Mechanics and Installers
732 Home Appliance Repairers
733 Industrial and Refractory Machinery Mechanics
734 Maintenance and Repair Workers, General
735 Maintenance Workers, Machinery
736 Millwrights

741 Electrical Power-Line Installers and Repairers
742 Telecommunications Line Installers and Repairers
743 Precision Instrument and Equipment Repairers
751 Coin, Vending, and Amusement Machine Servicers and Repairers
752 Commercial Divers
754 Locksmiths and Safe Repairers
755 Manufactured Building and Mobile Home Installers
756 Riggers
760 Signal and Track Switch Repairers
761 Helpers--Installation, Maintenance, and Repair Workers
762 Other Installation, Maintenance, and Repair Workers

**Production Occupations**

770 First-Line Supervisors/Managers of Production and Operating Workers
771 Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
772 Electrical, Electronics, and Electromechanical Assemblers
773 Engine and Other Machine Assemblers
774 Structural Metal Fabricators and Fitters
775 Miscellaneous Assemblers and Fabricators
780 Bakers
781 Butchers and Other Meat, Poultry, and Fish Processing Workers
783 Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
784 Food Batchmakers
785 Food Cooking Machine Operators and Tenders
790 Computer Control Programmers and Operators
792 Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
793 Forging Machine Setters, Operators, and Tenders, Metal and Plastic
794 Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
795 Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
796 Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
800 Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
801 Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
802 Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
803 Machinists
804 Metal Furnace and Kiln Operators and Tenders
806 Model Makers and Patternmakers, Metal and Plastic
810 Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic
812 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic

813 Tool and Die Makers
814 Welding, Soldering, and Brazing Workers
815 Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
816 Lay-Out Workers, Metal and Plastic
820 Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
821 Tool Grinders, Filers, and Sharpeners
822 Metalworkers and Plastic Workers, All Other
823 Bookbinders and Bindery Workers
824 Job Printers* (recoded to 823)
825 Prepress Technicians and Workers* (recoded to 823)
826 Printing Machine Operators* (recoded to 823)
830 Laundry and Dry-Cleaning Workers
831 Pressers, Textile, Garment, and Related Materials
832 Sewing Machine Operators
833 Shoe and Leather Workers and Repairers
834 Shoe Machine Operators and Tenders
835 Tailors, Dressmakers, and Sewers
836 Textile Bleaching and Dyeing Machine Operators and Tenders
840 Textile Cutting Machine Setters, Operators, and Tenders
841 Textile Knitting and Weaving Machine Setters, Operators, and Tenders
842 Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
843 Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers
844 Fabric and Apparel Patternmakers
845 Upholsterers
846 Textile, Apparel, and Furnishings Workers, All Other
850 Cabinetmakers and Bench Carpenters
851 Furniture Finishers
852 Model Makers and Patternmakers, Wood
853 Sawing Machine Setters, Operators, and Tenders, Wood
854 Woodworking Machine Setters, Operators, and Tenders, Except Sawing
855 Woodworkers, All Other
860 Power Plant Operators, Distributors, and Dispatchers
861 Stationary Engineers and Boiler Operators
862 Water and Liquid Waste Treatment Plant and System Operators
863 Miscellaneous Plant and System Operators
864 Chemical Processing Machine Setters, Operators, and Tenders
865 Crushing, Grinding, Polishing, Mixing, and Blending Workers
871 Cutting Workers
872 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
873 Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
874 Inspectors, Testers, Sorters, Samplers, and Weighers

875 Jewelers and Precious Stone and Metal Workers
876 Medical, Dental, and Ophthalmic Laboratory Technicians
880 Packaging and Filling Machine Operators and Tenders
881 Painting Workers
883 Photographic Process Workers and Processing Machine Operators
884 Semiconductor Processors
885 Cementing and Gluing Machine Operators and Tenders
886 Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders
890 Cooling and Freezing Equipment Operators and Tenders
891 Etchers and Engravers
892 Molders, Shapers, and Casters, Except Metal and Plastic
893 Paper Goods Machine Setters, Operators, and Tenders
894 Tire Builders
895 Helpers--Production Workers
896 Production Workers, All Other

**Transport & Materials Moving Occupations**

900 Supervisors, Transportation and Material Moving Workers
903 Aircraft Pilots and Flight Engineers
904 Air Traffic Controllers and Airfield Operations Specialists
911 Ambulance Drivers and Attendants, Except Emergency Medical Technicians
912 Bus Drivers
913 Driver/Sales Workers and Truck Drivers
914 Taxi Drivers and Chauffeurs
915 Motor Vehicle Operators, All Other
920 Locomotive Engineers and Operators
923 Railroad Brake, Signal, and Switch Operators
924 Railroad Conductors and Yardmasters
926 Subway, Streetcar, and Other Rail Transportation Workers
930 Sailors and Marine Oilers
931 Ship and Boat Captains and Operators
933 Ship Engineers
934 Bridge and Lock Tenders
935 Parking Lot Attendants
936 Service Station Attendants
941 Transportation Inspectors
942 Other Transportation Workers
950 Conveyor Operators and Tenders
951 Crane and Tower Operators
952 Dredge, Excavating, and Loading Machine Operators
956 Hoist and Winch Operators
960 Industrial Truck and Tractor Operators
961 Cleaners of Vehicles and Equipment
962 Laborers and Freight, Stock, and Material Movers, Hand
963 Machine Feeders and Offbearers

964 Packers and Packagers, Hand
965 Pumping Station Operators
972 Refuse and Recyclable Material Collectors
973 Shuttle Car Operators
974 Tank Car, Truck, and Ship Loaders
975 Material Moving Workers, All Other
980 Military Officer Special and Tactical Operations Leaders/Managers
981 First-Line Enlisted Military Supervisors/Managers
982 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members
983 Military, Rank Not Specified

# IV. Means and Regression Results from the PSID

**Table 2: Means for PSID Waves 1981, 1990, 1999, and 2011**

| | 1981 | | 1990 | | 1999 | | 2011 | |
|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Men | Women |
| log hourly earnings | 3.071 | 2.594 | 3.054 | 2.753 | 3.110 | 2.851 | 3.235 | 3.003 |
| years of FT experience (expf) | 20.328 | 13.510 | 19.153 | 14.683 | 19.753 | 15.905 | 17.801 | 16.354 |
| yrs FT Exp squared(expfsq) | 540.988 | 263.441 | 472.502 | 290.199 | 491.586 | 338.542 | 414.745 | 358.915 |
| years of PT experience (expp) | 1.333 | 2.783 | 1.862 | 2.853 | 2.020 | 3.719 | 2.100 | 3.584 |
| yrs of PT exp squared (exppsq) | 7.794 | 23.496 | 15.497 | 26.868 | 11.462 | 33.749 | 10.473 | 31.210 |
| years of schooling (edyrs) | 13.349 | 13.177 | 13.764 | 13.739 | 14.199 | 14.288 | 14.345 | 14.512 |
| college degree only (colldeg) | 0.181 | 0.153 | 0.200 | 0.176 | 0.234 | 0.222 | 0.262 | 0.247 |
| advanced degree (advdeg) | 0.100 | 0.074 | 0.103 | 0.087 | 0.117 | 0.108 | 0.129 | 0.157 |
| msa dummy (msa) | 0.698 | 0.714 | 0.553 | 0.571 | 0.512 | 0.513 | 0.507 | 0.531 |
| northeast | 0.241 | 0.220 | 0.231 | 0.225 | 0.199 | 0.184 | 0.202 | 0.192 |
| northcentral | 0.290 | 0.254 | 0.286 | 0.256 | 0.307 | 0.279 | 0.280 | 0.291 |
| south | 0.286 | 0.346 | 0.308 | 0.348 | 0.302 | 0.353 | 0.324 | 0.329 |
| west | 0.183 | 0.180 | 0.174 | 0.171 | 0.191 | 0.184 | 0.194 | 0.188 |
| black | 0.086 | 0.132 | 0.092 | 0.156 | 0.089 | 0.147 | 0.108 | 0.157 |
| hispanic | 0.027 | 0.030 | 0.036 | 0.042 | 0.018 | 0.012 | 0.052 | 0.040 |
| otherrace | 0.006 | 0.004 | 0.010 | 0.004 | 0.028 | 0.019 | 0.015 | 0.012 |
| collective bargaining cov. (cb) | 0.345 | 0.211 | 0.254 | 0.194 | 0.215 | 0.182 | 0.174 | 0.189 |
| govt | 0.202 | 0.263 | 0.195 | 0.277 | 0.218 | 0.303 | 0.212 | 0.302 |
| mining, construction | 0.089 | 0.008 | 0.087 | 0.013 | 0.086 | 0.010 | 0.095 | 0.011 |
| durables | 0.236 | 0.117 | 0.213 | 0.092 | 0.167 | 0.079 | 0.133 | 0.059 |
| nondurables | 0.105 | 0.109 | 0.092 | 0.080 | 0.085 | 0.057 | 0.064 | 0.031 |
| transportation | 0.085 | 0.016 | 0.065 | 0.026 | 0.070 | 0.023 | 0.060 | 0.035 |
| Utilities | 0.022 | 0.007 | 0.028 | 0.008 | 0.023 | 0.005 | 0.027 | 0.008 |
| communications | 0.032 | 0.032 | 0.031 | 0.030 | 0.041 | 0.023 | 0.036 | 0.026 |
| retailtrade | 0.082 | 0.069 | 0.090 | 0.072 | 0.078 | 0.075 | 0.088 | 0.066 |
| wholesale trade | 0.036 | 0.022 | 0.055 | 0.027 | 0.045 | 0.023 | 0.050 | 0.026 |
| finance, ins, real est. | 0.046 | 0.089 | 0.048 | 0.095 | 0.050 | 0.092 | 0.057 | 0.087 |
| soc. work, arts, rec, oth svcs | 0.041 | 0.046 | 0.043 | 0.036 | 0.060 | 0.049 | 0.054 | 0.068 |
| hotels, restaurants | 0.012 | 0.038 | 0.021 | 0.048 | 0.018 | 0.037 | 0.024 | 0.044 |
| medical svcs | 0.026 | 0.169 | 0.034 | 0.177 | 0.039 | 0.175 | 0.062 | 0.206 |
| education | 0.072 | 0.169 | 0.064 | 0.169 | 0.064 | 0.190 | 0.067 | 0.170 |
| professional svcs | 0.044 | 0.052 | 0.064 | 0.064 | 0.081 | 0.084 | 0.086 | 0.072 |
| pub admin | 0.073 | 0.056 | 0.064 | 0.062 | 0.093 | 0.078 | 0.097 | 0.093 |

**Table 2: Means for PSID Waves 1981, 1990, 1999, and 2011 (ctd)**

| | 1981 | | 1990 | | 1999 | | 2011 | |
|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Men | Women |
| manager | 0.179 | 0.063 | 0.182 | 0.071 | 0.177 | 0.089 | 0.132 | 0.095 |
| business operator | 0.019 | 0.020 | 0.014 | 0.025 | 0.020 | 0.041 | 0.026 | 0.037 |
| financial operator | 0.016 | 0.009 | 0.015 | 0.013 | 0.022 | 0.023 | 0.025 | 0.030 |
| computer, math tech | 0.019 | 0.013 | 0.037 | 0.020 | 0.039 | 0.017 | 0.049 | 0.019 |
| architect, engineer | 0.060 | 0.004 | 0.065 | 0.012 | 0.060 | 0.004 | 0.042 | 0.006 |
| life, phys, soc sci tech | 0.013 | 0.008 | 0.017 | 0.007 | 0.017 | 0.009 | 0.018 | 0.015 |
| community, soc worker | 0.013 | 0.017 | 0.012 | 0.013 | 0.010 | 0.013 | 0.014 | 0.035 |
| postsecondary educ | 0.012 | 0.008 | 0.009 | 0.009 | 0.008 | 0.006 | 0.007 | 0.009 |
| other education | 0.025 | 0.087 | 0.021 | 0.098 | 0.029 | 0.111 | 0.034 | 0.113 |
| art, design, entertainment | 0.011 | 0.010 | 0.012 | 0.018 | 0.014 | 0.015 | 0.013 | 0.012 |
| lawyer, physician | 0.008 | 0.001 | 0.011 | 0.006 | 0.015 | 0.012 | 0.019 | 0.012 |
| nurses, hlt practioner, tech | 0.010 | 0.070 | 0.011 | 0.078 | 0.012 | 0.081 | 0.020 | 0.090 |
| health support | 0.003 | 0.048 | 0.003 | 0.040 | 0.005 | 0.029 | 0.003 | 0.043 |
| protective svc | 0.027 | 0.008 | 0.031 | 0.008 | 0.044 | 0.007 | 0.051 | 0.011 |
| food prep, pers care | 0.007 | 0.051 | 0.010 | 0.051 | 0.016 | 0.049 | 0.022 | 0.058 |
| bldg maintenance | 0.023 | 0.024 | 0.022 | 0.023 | 0.029 | 0.022 | 0.032 | 0.008 |
| sales | 0.053 | 0.082 | 0.065 | 0.112 | 0.070 | 0.132 | 0.092 | 0.073 |
| office admin | 0.059 | 0.316 | 0.058 | 0.283 | 0.060 | 0.254 | 0.065 | 0.262 |
| const, extract, installation | 0.153 | 0.004 | 0.144 | 0.007 | 0.145 | 0.006 | 0.156 | 0.006 |
| production occ | 0.188 | 0.133 | 0.158 | 0.090 | 0.123 | 0.067 | 0.091 | 0.039 |
| transport, materials moving occs (transport occs) | 0.101 | 0.024 | 0.105 | 0.016 | 0.086 | 0.013 | 0.089 | 0.027 |
| Sample Size | 2282 | 1491 | 2617 | 2068 | 2391 | 2146 | 2368 | 2456 |

**Table 3: Male Human Capital Wage Regressions**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| expf | 0.0415** | 0.0385** | 0.0402** | 0.0538** |
| | (0.0036) | (0.0035) | (0.0040) | (0.0045) |
| expfsq | -0.0007** | -0.0005** | -0.0007** | -0.0011** |
| | (0.0001) | (0.0001) | (0.0001) | (0.0001) |
| expp | -0.0068 | -0.0059 | -0.0084 | -0.0070 |
| | (0.0068) | (0.0056) | (0.0068) | (0.0086) |
| exppsq | -0.0002 | 0.0006** | 0.0004 | -0.0005 |
| | (0.0004) | (0.0002) | (0.0005) | (0.0008) |
| edyrs | 0.0516** | 0.0671** | 0.0667** | 0.0784** |
| | (0.0052) | (0.0062) | (0.0078) | (0.0096) |
| colldeg | 0.0921** | 0.1509** | 0.1195** | 0.2323** |
| | (0.0321) | (0.0329) | (0.0366) | (0.0409) |
| advdeg | 0.0608 | 0.1608** | 0.2518** | 0.3112** |
| | (0.0433) | (0.0455) | (0.0517) | (0.0601) |
| msa | 0.1723** | 0.1117** | 0.0990** | 0.0716** |
| | (0.0195) | (0.0186) | (0.0209) | (0.0229) |
| northeast | -0.0493+ | 0.0806** | 0.0362 | 0.0517 |
| | (0.0277) | (0.0284) | (0.0323) | (0.0349) |
| northcentral | -0.0097 | -0.0467+ | -0.0575+ | -0.1035** |
| | (0.0267) | (0.0276) | (0.0295) | (0.0328) |
| south | -0.1001** | -0.0867** | -0.0966** | -0.0753* |
| | (0.0275) | (0.0278) | (0.0307) | (0.0325) |
| black | -0.1577** | -0.1893** | -0.2570** | -0.3120** |
| | (0.0321) | (0.0315) | (0.0360) | (0.0367) |
| hisp | -0.1588** | -0.0574 | -0.2855** | -0.0250 |
| | (0.0550) | (0.0481) | (0.0767) | (0.0502) |
| otherrace | 0.0052 | -0.0605 | 0.0414 | 0.1407 |
| | (0.1145) | (0.0912) | (0.0607) | (0.0887) |
| _cons | 1.8217** | 1.5745** | 1.6852** | 1.5603** |
| | (0.0809) | (0.0899) | (0.1114) | (0.1363) |
| N | 2282 | 2617 | 2391 | 2368 |
| Adj. R squ. | 0.2601 | 0.3118 | 0.2903 | 0.3155 |

+ p<.10, * p<.05, ** p<.01

Source: PSID. For variable definitions, see
20160995_blau_kahn_psid_regression_file_variable_list.pdf
Acronyms are defined in Table 2 of this Appendix.

**Table 4: Female Human Capital Wage Regressions**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| expf | 0.0256** | 0.0430** | 0.0362** | 0.0381** |
| | (0.0039) | (0.0036) | (0.0038) | (0.0039) |
| expfsq | -0.0004** | -0.0008** | -0.0006** | -0.0007** |
| | (0.0001) | (0.0001) | (0.0001) | (0.0001) |
| expp | -0.0146** | -0.0114* | -0.0090+ | -0.0027 |
| | (0.0052) | (0.0048) | (0.0049) | (0.0046) |
| exppsq | 0.0010** | 0.0008** | 0.0002 | 0.0000 |
| | (0.0002) | (0.0002) | (0.0002) | (0.0002) |
| edyrs | 0.0685** | 0.0916** | 0.0740** | 0.0862** |
| | (0.0068) | (0.0066) | (0.0078) | (0.0092) |
| colldeg | 0.1434** | 0.1083** | 0.1545** | 0.1360** |
| | (0.0402) | (0.0343) | (0.0348) | (0.0378) |
| advdeg | 0.1979** | 0.1177* | 0.2665** | 0.2056** |
| | (0.0560) | (0.0483) | (0.0505) | (0.0545) |
| msa | 0.1663** | 0.0929** | 0.0986** | 0.1158** |
| | (0.0231) | (0.0189) | (0.0208) | (0.0199) |
| northeast | 0.0809* | 0.0461 | 0.0133 | 0.0778* |
| | (0.0330) | (0.0290) | (0.0325) | (0.0313) |
| northcentral | 0.0270 | -0.0850** | -0.1321** | -0.1121** |
| | (0.0320) | (0.0284) | (0.0300) | (0.0286) |
| south | -0.0419 | -0.1424** | -0.1720** | -0.0980** |
| | (0.0305) | (0.0277) | (0.0298) | (0.0287) |
| black | -0.0674* | -0.1344** | -0.0777** | -0.1360** |
| | (0.0305) | (0.0259) | (0.0287) | (0.0275) |
| hisp | -0.0581 | -0.0205 | 0.0767 | 0.0124 |
| | (0.0610) | (0.0451) | (0.0906) | (0.0494) |
| otherrace | -0.0694 | -0.0002 | -0.1273+ | -0.2332** |
| | (0.1631) | (0.1401) | (0.0707) | (0.0859) |
| _cons | 1.3172** | 1.1023** | 1.4428** | 1.3278** |
| | (0.0961) | (0.0944) | (0.1102) | (0.1279) |
| N | 1491 | 2068 | 2146 | 2456 |
| Adj. R squ. | 0.3282 | 0.3824 | 0.3255 | 0.3210 |

+ p<.10, * p<.05, ** p<.01

Source: PSID. For variable definitions, see
20160995_blau_kahn_psid_regression_file_variable_list.pdf
Acronyms are defined in Table 2 of this Appendix.

**Table 5: Male Wage Regressions, Full Specification**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| expf | 0.0377** | 0.0314** | 0.0375** | 0.0433** |
| | (0.0033) | (0.0032) | (0.0037) | (0.0040) |
| expfsq | -0.0006** | -0.0004** | -0.0007** | -0.0008** |
| | (0.0001) | (0.0001) | (0.0001) | (0.0001) |
| expp | -0.0056 | -0.0024 | -0.0041 | -0.0039 |
| | (0.0063) | (0.0051) | (0.0063) | (0.0078) |
| exppsq | -0.0002 | 0.0005* | 0.0002 | -0.0005 |
| | (0.0004) | (0.0002) | (0.0004) | (0.0007) |
| edyrs | 0.0492** | 0.0536** | 0.0455** | 0.0523** |
| | (0.0051) | (0.0061) | (0.0078) | (0.0089) |
| colldeg | 0.0663* | 0.1297** | 0.1095** | 0.1786** |
| | (0.0309) | (0.0313) | (0.0347) | (0.0378) |
| advdeg | 0.0824+ | 0.2096** | 0.2836** | 0.2669** |
| | (0.0444) | (0.0444) | (0.0504) | (0.0558) |
| msa | 0.1283** | 0.0890** | 0.0829** | 0.0502* |
| | (0.0184) | (0.0172) | (0.0194) | (0.0206) |
| northeast | -0.0428+ | 0.0472+ | 0.0113 | 0.0476 |
| | (0.0258) | (0.0262) | (0.0299) | (0.0316) |
| northcentral | -0.0193 | -0.0770** | -0.0624* | -0.1052** |
| | (0.0248) | (0.0253) | (0.0273) | (0.0296) |
| south | -0.0619* | -0.0885** | -0.0598* | -0.0694* |
| | (0.0256) | (0.0258) | (0.0286) | (0.0294) |
| black | -0.1350** | -0.1199** | -0.1819** | -0.2029** |
| | (0.0301) | (0.0292) | (0.0338) | (0.0337) |
| hisp | -0.1498** | -0.0752+ | -0.1756* | -0.0284 |
| | (0.0510) | (0.0442) | (0.0710) | (0.0452) |
| otherrace | 0.0626 | -0.0854 | 0.0823 | 0.1079 |
| | (0.1076) | (0.0837) | (0.0563) | (0.0800) |
| cb | 0.2235** | 0.2345** | 0.2505** | 0.2050** |
| | (0.0201) | (0.0211) | (0.0256) | (0.0287) |
| govt | -0.0638* | -0.0887** | -0.0648+ | -0.0835* |
| | (0.0298) | (0.0297) | (0.0354) | (0.0348) |
| durables | 0.0099 | 0.0492 | 0.1680** | 0.0962* |
| | (0.0349) | (0.0349) | (0.0411) | (0.0449) |
| nondurables | -0.0518 | -0.0265 | 0.1262** | 0.1559** |
| | (0.0397) | (0.0406) | (0.0464) | (0.0532) |
| Transportation | -0.0055 | 0.0625 | 0.1219* | 0.1002+ |
| | (0.0421) | (0.0442) | (0.0488) | (0.0551) |
| Utilities | 0.0235 | 0.1370* | 0.2777** | 0.1727* |
| | (0.0613) | (0.0558) | (0.0683) | (0.0683) |
| Communications | -0.0306 | 0.1005+ | 0.2350** | 0.1080+ |
| | (0.0546) | (0.0548) | (0.0565) | (0.0622) |

**Table 5: Male Wage Regressions, Full Specification (ctd)**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| retailtrade | -0.2237** | -0.1833** | -0.0795+ | -0.2152** |
| | (0.0427) | (0.0403) | (0.0479) | (0.0497) |
| wholesaletrade | -0.1715** | -0.0243 | 0.0440 | -0.0406 |
| | (0.0538) | (0.0466) | (0.0559) | (0.0570) |
| finance | -0.0724 | -0.0363 | 0.1587** | 0.2320** |
| | (0.0506) | (0.0489) | (0.0554) | (0.0564) |
| SocArtOther | -0.2815** | -0.2236** | -0.1554** | -0.1865** |
| | (0.0506) | (0.0496) | (0.0500) | (0.0561) |
| hotelsrestaurants | -0.4712** | -0.2284** | -0.1809* | -0.2622** |
| | (0.0873) | (0.0671) | (0.0855) | (0.0956) |
| Medical | -0.0479 | -0.1217* | 0.0900 | -0.0333 |
| | (0.0660) | (0.0594) | (0.0663) | (0.0603) |
| Education | -0.2075** | -0.0607 | -0.0595 | -0.1249+ |
| | (0.0583) | (0.0581) | (0.0642) | (0.0683) |
| professional | -0.1502** | -0.0417 | 0.2076** | 0.0484 |
| | (0.0507) | (0.0440) | (0.0479) | (0.0494) |
| publicadmin | 0.0394 | 0.0132 | 0.0413 | 0.0614 |
| | (0.0528) | (0.0543) | (0.0576) | (0.0601) |
| business | -0.0911 | 0.0481 | 0.0204 | -0.2987** |
| | (0.0626) | (0.0700) | (0.0685) | (0.0668) |
| financialop | -0.0039 | 0.0170 | -0.0989 | -0.4481** |
| | (0.0667) | (0.0707) | (0.0659) | (0.0684) |
| computer | -0.0406 | 0.0201 | 0.0092 | -0.2773** |
| | (0.0627) | (0.0465) | (0.0514) | (0.0519) |
| architect | -0.0773+ | 0.0151 | -0.0550 | -0.1185* |
| | (0.0400) | (0.0387) | (0.0439) | (0.0550) |
| scientist | -0.0937 | -0.1160+ | -0.1665* | -0.3675** |
| | (0.0747) | (0.0658) | (0.0742) | (0.0781) |
| socialworker | -0.3925** | -0.5446** | -0.2842** | -0.6391** |
| | (0.0779) | (0.0815) | (0.0940) | (0.0888) |
| postseceduc | -0.1163 | -0.2353* | -0.0921 | -0.1972 |
| | (0.0867) | (0.0962) | (0.1190) | (0.1212) |
| legaleduc | -0.2456** | -0.3249** | -0.4145** | -0.4658** |
| | (0.0692) | (0.0712) | (0.0730) | (0.0779) |
| artist | -0.1939* | -0.1897* | -0.1836* | -0.2244* |
| | (0.0816) | (0.0776) | (0.0799) | (0.0913) |
| lawyerphysician | 0.1605 | 0.0550 | 0.2119* | 0.2946** |
| | (0.1008) | (0.0848) | (0.0835) | (0.0816) |
| healthcare | -0.2889** | -0.0856 | -0.2414** | -0.1776* |
| | (0.0872) | (0.0869) | (0.0935) | (0.0825) |
| healthsupport | -0.4567** | -0.5429** | -0.6776** | -0.8819** |
| | (0.1554) | (0.1471) | (0.1365) | (0.1968) |

**Table 5: Male Wage Regressions, Full Specification (ctd)**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| protective | -0.3785** | -0.1807** | -0.2453** | -0.2211** |
| | (0.0601) | (0.0581) | (0.0591) | (0.0629) |
| foodcare | -0.1764 | -0.4295** | -0.3352** | -0.5318** |
| | (0.1090) | (0.0906) | (0.0849) | (0.0945) |
| building | -0.4744** | -0.5587** | -0.5325** | -0.6478** |
| | (0.0611) | (0.0640) | (0.0631) | (0.0665) |
| sales | -0.1604** | -0.1635** | -0.1096** | -0.2092** |
| | (0.0411) | (0.0379) | (0.0422) | (0.0455) |
| officeadmin | -0.2851** | -0.3579** | -0.3685** | -0.5906** |
| | (0.0414) | (0.0399) | (0.0447) | (0.0491) |
| construct | -0.2377** | -0.1576** | -0.1799** | -0.3739** |
| | (0.0341) | (0.0325) | (0.0376) | (0.0416) |
| production | -0.2606** | -0.2611** | -0.2866** | -0.5754** |
| | (0.0323) | (0.0329) | (0.0385) | (0.0476) |
| transport occs | -0.3632** | -0.3722** | -0.3434** | -0.5986** |
| | (0.0371) | (0.0357) | (0.0428) | (0.0488) |
| _cons | 2.1237** | 2.0132** | 2.0762** | 2.3400** |
| | (0.0908) | (0.0964) | (0.1186) | (0.1351) |
| N | 2282 | 2617 | 2391 | 2368 |
| Adj. R squ. | 0.3800 | 0.4375 | 0.4103 | 0.4607 |

+ p<.10, * p<.05, ** p<.01

Source: PSID. For variable definitions, see
20160995_blau_kahn_psid_regression_file_variable_list.pdf
Acronyms are defined in Table 2 of this Appendix.

**Table 6: Female Wage Regressions, Full Specification**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| expf | 0.0194** | 0.0360** | 0.0297** | 0.0357** |
| | (0.0036) | (0.0034) | (0.0035) | (0.0035) |
| expfsq | -0.0003** | -0.0006** | -0.0005** | -0.0007** |
| | (0.0001) | (0.0001) | (0.0001) | (0.0001) |
| expp | -0.0104* | -0.0068 | -0.0086+ | 0.0012 |
| | (0.0049) | (0.0045) | (0.0045) | (0.0042) |
| exppsq | 0.0008** | 0.0005* | 0.0001 | -0.0001 |
| | (0.0002) | (0.0002) | (0.0002) | (0.0002) |
| edyrs | 0.0361** | 0.0553** | 0.0444** | 0.0525** |
| | (0.0069) | (0.0065) | (0.0075) | (0.0088) |
| colldeg | 0.0591 | 0.1273** | 0.1483** | 0.1295** |
| | (0.0396) | (0.0327) | (0.0325) | (0.0353) |
| advdeg | 0.1698** | 0.2189** | 0.2988** | 0.2504** |
| | (0.0568) | (0.0484) | (0.0489) | (0.0519) |
| msa | 0.1349** | 0.0705** | 0.0721** | 0.0707** |
| | (0.0216) | (0.0177) | (0.0193) | (0.0182) |
| northeast | 0.0288 | 0.0348 | 0.0099 | 0.0671* |
| | (0.0301) | (0.0267) | (0.0298) | (0.0283) |
| northcentral | -0.0008 | -0.0790** | -0.0940** | -0.0977** |
| | (0.0292) | (0.0261) | (0.0275) | (0.0261) |
| south | -0.0656* | -0.0891** | -0.1372** | -0.0750** |
| | (0.0282) | (0.0262) | (0.0277) | (0.0263) |
| black | -0.0218 | -0.1042** | -0.0498+ | -0.0951** |
| | (0.0284) | (0.0247) | (0.0271) | (0.0255) |
| hisp | -0.0878 | -0.0413 | 0.0712 | 0.0169 |
| | (0.0554) | (0.0415) | (0.0835) | (0.0447) |
| otherrace | -0.0761 | -0.0202 | -0.0615 | -0.1976* |
| | (0.1504) | (0.1275) | (0.0650) | (0.0779) |
| cb | 0.1454** | 0.2181** | 0.1903** | 0.1850** |
| | (0.0257) | (0.0247) | (0.0277) | (0.0263) |
| govt | 0.0709* | 0.0237 | -0.0361 | -0.0192 |
| | (0.0306) | (0.0298) | (0.0312) | (0.0277) |
| durables | -0.0850 | -0.1109 | 0.0476 | 0.1135 |
| | (0.1084) | (0.0779) | (0.0946) | (0.0925) |
| nondurables | -0.1226 | -0.2014* | -0.0289 | 0.0709 |
| | (0.1096) | (0.0789) | (0.0962) | (0.0975) |
| Transportation | 0.0615 | -0.0952 | 0.1494 | 0.0534 |
| | (0.1266) | (0.0898) | (0.1067) | (0.0975) |
| Utilities | 0.0014 | -0.0816 | 0.0588 | -0.0316 |
| | (0.1513) | (0.1158) | (0.1479) | (0.1269) |
| Communications | 0.0278 | -0.0744 | 0.1024 | 0.0533 |
| | (0.1158) | (0.0860) | (0.1057) | (0.0997) |

**Table 6: Female Wage Regressions, Full Specification (ctd)**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| retailtrade | -0.2207* | -0.3749** | -0.3176** | -0.2328* |
| | (0.1117) | (0.0788) | (0.0929) | (0.0908) |
| wholesaletrade | -0.1404 | -0.2327** | -0.0732 | 0.0008 |
| | (0.1201) | (0.0874) | (0.1047) | (0.0995) |
| finance | -0.1586 | -0.1095 | 0.0085 | 0.0460 |
| | (0.1075) | (0.0768) | (0.0919) | (0.0881) |
| SocArtOther | -0.3830** | -0.2771** | -0.2004* | -0.2806** |
| | (0.1144) | (0.0850) | (0.0966) | (0.0899) |
| hotelsrestaurants | -0.4019** | -0.4485** | -0.3259** | -0.2587** |
| | (0.1177) | (0.0837) | (0.1025) | (0.0962) |
| Medical | -0.2210* | -0.2600** | -0.1439 | -0.0512 |
| | (0.1083) | (0.0767) | (0.0920) | (0.0868) |
| Education | -0.2910** | -0.3066** | -0.1663+ | -0.1629+ |
| | (0.1099) | (0.0804) | (0.0947) | (0.0899) |
| professional | -0.2244* | -0.1766* | -0.0369 | -0.0192 |
| | (0.1110) | (0.0788) | (0.0923) | (0.0892) |
| publicadmin | -0.1660 | -0.1399+ | 0.0158 | -0.0051 |
| | (0.1136) | (0.0833) | (0.0962) | (0.0904) |
| business | 0.1923** | 0.0137 | 0.0429 | -0.1041* |
| | (0.0745) | (0.0598) | (0.0534) | (0.0528) |
| financialop | 0.0902 | -0.0635 | 0.0136 | -0.1910** |
| | (0.1042) | (0.0780) | (0.0660) | (0.0576) |
| computer | 0.3189** | 0.1299* | 0.2628** | 0.0462 |
| | (0.0909) | (0.0661) | (0.0734) | (0.0684) |
| architect | 0.0250 | -0.0438 | 0.2239 | -0.0855 |
| | (0.1544) | (0.0826) | (0.1447) | (0.1126) |
| scientist | -0.2280* | -0.1385 | -0.0627 | -0.2493** |
| | (0.1093) | (0.1028) | (0.1000) | (0.0755) |
| socialworker | 0.0307 | -0.1707* | -0.0215 | -0.3877** |
| | (0.0882) | (0.0811) | (0.0834) | (0.0544) |
| postseceduc | -0.0270 | -0.0789 | -0.1703 | -0.2391* |
| | (0.1102) | (0.0990) | (0.1166) | (0.0959) |
| legaleduc | 0.1608** | -0.1265* | -0.0517 | -0.3928** |
| | (0.0564) | (0.0496) | (0.0498) | (0.0437) |
| artist | -0.1880+ | -0.0047 | -0.0028 | -0.0481 |
| | (0.0974) | (0.0692) | (0.0808) | (0.0886) |
| lawyerphysician | 0.0302 | -0.0854 | 0.3791** | 0.0359 |
| | (0.2605) | (0.1094) | (0.0906) | (0.0840) |
| healthcare | 0.0812 | -0.0201 | 0.1774** | -0.0859+ |
| | (0.0555) | (0.0460) | (0.0465) | (0.0440) |
| healthsupport | -0.3002** | -0.3358** | -0.2100** | -0.5490** |
| | (0.0607) | (0.0552) | (0.0638) | (0.0549) |

**Table 6: Female Wage Regressions, Full Specification (ctd)**

| Wave | 1981 | 1990 | 1999 | 2011 |
|---|---|---|---|---|
| protective | 0.1328 | 0.1226 | 0.0870 | -0.3584** |
| | (0.1094) | (0.0966) | (0.1091) | (0.0878) |
| foodcare | -0.4588** | -0.4142** | -0.2990** | -0.5420** |
| | (0.0616) | (0.0527) | (0.0546) | (0.0511) |
| building | -0.3965** | -0.2987** | -0.4572** | -0.6396** |
| | (0.0738) | (0.0651) | (0.0687) | (0.0993) |
| sales | -0.1652** | -0.0716+ | 0.0947* | -0.2552** |
| | (0.0534) | (0.0413) | (0.0408) | (0.0459) |
| officeadmin | -0.1847** | -0.2053** | -0.1678** | -0.3998** |
| | (0.0413) | (0.0354) | (0.0358) | (0.0343) |
| construct | -0.1577 | -0.3445** | -0.1080 | -0.4988** |
| | (0.1458) | (0.1070) | (0.1209) | (0.1154) |
| production | -0.3383** | -0.4130** | -0.3018** | -0.5840** |
| | (0.0562) | (0.0481) | (0.0550) | (0.0579) |
| transport occs | -0.3239** | -0.3722** | -0.2892** | -0.6789** |
| | (0.0757) | (0.0754) | (0.0873) | (0.0689) |
| _cons | 2.1349** | 1.9761** | 2.0544** | 2.1964** |
| | (0.1481) | (0.1194) | (0.1420) | (0.1518) |
| N | 1491 | 2068 | 2146 | 2456 |
| Adj. R squ. | 0.4683 | 0.4947 | 0.4533 | 0.4603 |

+ p<.10, * p<.05, ** p<.01

Source: PSID. For variable definitions, see
20160995_blau_kahn_psid_regression_file_variable_list.pdf
Acronyms are defined in Table 2 of this Appendix.

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