# APPENDIX

Please refer to the description of variables provided below to decipher reported results.

**Variable Descriptions**

Variables used in the analysis of education, employment, occupational returns to education, and earnings returns to occupation (Appendix Tables 1–8).

ARACE: AFRICAN AMERICAN=1

GROUP: 1+ YEARS OF POST SECONDARY EDUCATION

AGE: REPORTED IN YEARS

BIRTH: DECADE OF BIRTH

SOUTH: SOUTH RESIDENCE=1

ERSCOR90: (OCCUPATIONAL INCOME) EARNINGS RETURNS TO OCCUPATION

EDSCOR90: (OCCUPATIONAL EDUCATION) OCCUPATIONAL RETURNS TO EDUCATION

RBIRTH: RACE\*BIRTH

RAAGE: RACE\*AGE

AGESO: AGE\*SOUTH

POPEMP: EMPLOYED=1

RASOUTH: RACE\*SOUTH

RGROUP: RACE\*1+ POSTSEC

RAYEAR: RACE\*YEAR

BIRYR: BIRTH\*YEAR

EDYEAR: 1+ YR. POSTSEC.\*YEAR

EDSO: 1+YR POSTSEC\*SOUTH

SOYEAR: SOUTH\*YEAR

BIRED: BIRTH\*1+YRS. POSTSEC

AGEED: AGE\*1+ POSTSEC

AGEYR: AGE\*YEAR

BIRSO: BIRTH\*SOUTH

DUMMY VARIABLES FOR AGE AND BIRTH COHORT

BORN 1930–1939 AGE IS 21–30 = COH3020

31–40 = COH3030

41–50 = COH3040

51–60 = COH3050

61–70 = COH3060

BORN 1940–1949 AGE IS 21–30 = COH4020

31–40 = COH4030

41–50 = COH4040

51–60 = COH4050

61–70 = COH4060

BORN 1950–1959 AGE IS 21–30 = COH5020

31–40 = COH5030

41–50 = COH5040

51–60 = COH5050

61–70 = COH5060

BORN 1960–1969 AGE IS 21–30 = COH6020

31–40 = COH6030

41–50 = COH6040

51–60 = COH6050

BORN 1970–1979 AGE IS 21–29 = COH7020

30-39 = COH7030

40-49 = COH7040

BORN 1980–1989 AGE IS 21–30 = COH8020

31–40 = COH8030

RACE\*BIRTH YEAR\*AGE

RACE\*COH3020=RCOH3020

RACE\*COH3030=RCOH3030

RACE\*COH3040=RCOH3040

RACE\*COH3050=RCOH3050

RACE\*COH3060=RCOH3060

RACE\*COH4020=RCOH4020

RACE\*COH4030=RCOH4030

RACE\*COH4040=RCOH4040

RACE\*COH4050=RCOH4050

RACE\*COH4060=RCOH4060

RACE\*COH5020=RCOH5020

RACE\*COH5030=RCOH5030

RACE\*COH5040=RCOH5040

RACE\*COH5050=RCOH5050

RACE\*COH5060=RCOH5060

RACE\*COH6020=RCOH6020

RACE\*COH6030=RCOH6030

RACE\*COH6040=RCOH6040

RACE\*COH6050=RCOH6050

RACE\*COH7020=RCOH7020

RACE\*COH7030=RCOH7030

RACE\*COH7040=RCOH7040

RACE\*COH8020=RCOH8020

RACE\*COH8030=RCOH8030

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| **Appendix Table 1 Log Odds of Postsecondary Education for Men: 1910–1979 Cohorts** | | | | |
| Number of Observations | | 4852639 | | |
| Root MSE | | 3.96589 | | |
| Dependent Mean | | 0.40229 | | |
| R-Square | | 0.1123 | | |
| Adj R-Sq | | 0.1123 | | |
| **Variable** | **Parameter Estimate** | | **Standard Error** | **Pr > |t|** |
| Intercept | -26.50568 | | 0.30693 | <.0001 |
| YEAR | 0.01386 | | 0.00016 | <.0001 |
| arace | 4.48010 | | 0.43524 | <.0001 |
| South | 0.46938 | | 0.28837 | 0.1036 |
| AGE | 0.08372 | | 0.00385 | <.0001 |
| birth | 0.77616 | | 0.05320 | <.0001 |
| Rbirth | 0.00744 | | 0.00243 | 0.0022 |
| RAAGE | 0.00024 | | 0.00023 | 0.2969 |
| rasouth | -0.01863 | | 0.00134 | <.0001 |
| Rayear | -0.00235 | | 0.00023 | <.0001 |
| BIRYR | -0.00046 | | 0.00003 | <.0001 |
| BIRAGE | 0.00232 | | 0.00004 | <.0001 |
| Birso | -0.00482 | | 0.00152 | 0.0015 |
| Ageso | 0.00036 | | 0.00015 | 0.0188 |
| ageyr | -0.00005 | | 0.00000 | <.0001 |
| Soyear | -0.00025 | | 0.00015 | 0.0949 |
| coh3030 | 0.03096 | | 0.00198 | <.0001 |
| coh3040 | 0.00525 | | 0.00194 | 0.0069 |
| coh3050 | -0.01839 | | 0.00199 | <.0001 |
| coh3060 | 0.06244 | | 0.00159 | <.0001 |
| coh4030 | -0.00582 | | 0.00181 | 0.0013 |
| coh4040 | -0.00320 | | 0.00175 | 0.0685 |
| coh4050 | 0.12971 | | 0.00181 | <.0001 |
| coh4060 | 0.04947 | | 0.00178 | <.0001 |
| coh5030 | -0.04364 | | 0.00176 | <.0001 |
| coh5040 | 0.15442 | | 0.00168 | <.0001 |
| coh5050 | 0.07561 | | 0.00170 | <.0001 |
| coh5060 | -0.00856 | | 0.00268 | 0.0014 |
| coh6030 | 0.14022 | | 0.00190 | <.0001 |
| coh6040 | 0.08464 | | 0.00181 | <.0001 |
| coh6050 | 0.00643 | | 0.00470 | 0.1714 |
| coh7030 | 0.07307 | | 0.00216 | <.0001 |
| coh7040 | 0.13492 | | 0.00743 | <.0001 |
| rcoh3030 | -0.06986 | | 0.00457 | <.0001 |
| rcoh3040 | -0.06117 | | 0.00448 | <.0001 |
| rcoh3050 | -0.02244 | | 0.00446 | <.0001 |
| rcoh3060 | -0.02622 | | 0.00472 | <.0001 |
| rcoh4030 | -0.10980 | | 0.00452 | <.0001 |
| rcoh4040 | -0.05143 | | 0.00429 | <.0001 |
| rcoh4050 | -0.04388 | | 0.00431 | <.0001 |
| rcoh4060 | -0.02049 | | 0.00449 | <.0001 |
| rcoh5030 | -0.01063 | | 0.00457 | 0.0200 |
| rcoh5040 | -0.01368 | | 0.00440 | 0.0019 |
| rcoh5050 | 0.01826 | | 0.00432 | <.0001 |
| rcoh5060 | 0.06082 | | 0.00443 | <.0001 |
| rcoh6030 | -0.00879 | | 0.00522 | 0.0922 |
| rcoh6040 | 0.01511 | | 0.00502 | 0.0026 |
| rcoh6050 | 0.06873 | | 0.00497 | <.0001 |
| rcoh7030 | -0.02616 | | 0.00595 | <.0001 |
| rcoh7040 | 0.04649 | | 0.00591 | <.0001 |

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| **Appendix Table 2 Log Odds of Employment for Men: 1910–1979 Cohorts** | | | |
| Number of Observations | 4852639 |  |  |
| Root MSE | 3.12755 |  |  |
| Dependent Mean | 0.8033 |  |  |
| R-Square | 0.1599 |  |  |
| Adj R-Sq | 0.1599 |  |  |
|  |  |  |  |
| Coeff Var | 389.33622 |  |  |
|  |  |  |  |
|  | | | |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -63.88042 | 0.24795 | <.0001 |
| YEAR | 0.03340 | 0.00013 | <.0001 |
| arace | 5.47555 | 0.34548 | <.0001 |
| South | 0.33345 | 0.22777 | 0.1432 |
| AGE | 1.62314 | 0.00304 | <.0001 |
| group | -1.19381 | 0.22946 | <.0001 |
| birth | -0.20294 | 0.04313 | <.0001 |
| Rbirth | 0.01811 | 0.00192 | <.0001 |
| RAAGE | 0.00305 | 0.00018 | <.0001 |
| rasouth | 0.06175 | 0.00107 | <.0001 |
| rgroup | 0.09139 | 0.00124 | <.0001 |
| Rayear | -0.00293 | 0.00018 | <.0001 |
| BIRYR | -0.00007 | 0.00002 | 0.0037 |
| BIRAGE | 0.00801 | 0.00003 | <.0001 |
| Birso | 0.00168 | 0.00120 | 0.1603 |
| Bired | 0.02192 | 0.00120 | <.0001 |
| Ageed | 0.00499 | 0.00012 | <.0001 |
| Ageso | -0.00127 | 0.00012 | <.0001 |
| ageyr | -0.00084 | 0.00000 | <.0001 |
| Edso | 0.00339 | 0.00076 | <.0001 |
| Soyear | -0.00015 | 0.00012 | 0.2183 |
| Edyear | 0.00049 | 0.00012 | <.0001 |
| coh3030 | 0.08462 | 0.00156 | <.0001 |
| coh3040 | 0.02025 | 0.00153 | <.0001 |
| coh3050 | -0.06762 | 0.00157 | <.0001 |
| coh3060 | 0.02519 | 0.00125 | <.0001 |
| coh4030 | 0.08795 | 0.00143 | <.0001 |
| coh4040 | 0.01814 | 0.00139 | <.0001 |
| coh4050 | -0.06754 | 0.00143 | <.0001 |
| coh4060 | 0.00467 | 0.00141 | 0.0009 |
| coh5030 | 0.08298 | 0.00139 | <.0001 |
| coh5040 | 0.01717 | 0.00133 | <.0001 |
| coh5050 | -0.07540 | 0.00135 | <.0001 |
| coh5060 | -0.00761 | 0.00215 | 0.0004 |
| coh6030 | 0.10994 | 0.00150 | <.0001 |
| coh6040 | 0.02570 | 0.00143 | <.0001 |
| coh6050 | -0.11201 | 0.00380 | <.0001 |
| coh7030 | 0.12681 | 0.00172 | <.0001 |
| coh7040 | -0.11661 | 0.00604 | <.0001 |
| rcoh3030 | -0.02327 | 0.00360 | <.0001 |
| rcoh3040 | 0.00476 | 0.00353 | 0.1782 |
| rcoh3050 | -0.03029 | 0.00352 | <.0001 |
| rcoh3060 | -0.03055 | 0.00372 | <.0001 |
| rcoh4030 | 0.00591 | 0.00357 | 0.0974 |
| rcoh4040 | -0.05108 | 0.00338 | <.0001 |
| rcoh4050 | -0.05231 | 0.00340 | <.0001 |
| rcoh4060 | -0.08831 | 0.00354 | <.0001 |
| rcoh5030 | -0.06422 | 0.00360 | <.0001 |
| rcoh5040 | -0.09496 | 0.00347 | <.0001 |
| rcoh5050 | -0.11641 | 0.00340 | <.0001 |
| rcoh5060 | -0.07615 | 0.00349 | <.0001 |
| rcoh6030 | -0.10250 | 0.00412 | <.0001 |
| rcoh6040 | -0.11175 | 0.00396 | <.0001 |
| rcoh6050 | -0.06475 | 0.00392 | <.0001 |
| rcoh7030 | -0.14247 | 0.00469 | <.0001 |
| rcoh7040 | -0.08251 | 0.00466 | <.0001 |

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| **Appendix Table 3 Occupational Rreturns to Education Men: 1910–1979 Cohorts** | | | |
| Number of Observations | 4229153 |  |  |
| Root MSE | 5.47484 |  |  |
| Dependent Mean | 3.34175 |  |  |
| R-Square | 0.5458 |  |  |
| Adj R-Sq | 0.5458 |  |  |
| Coeff Var | 163.83152 |  |  |
|  |  |  |  |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -76.55935 | 0.55129 | <.0001 |
| YEAR | 0.04027 | 0.00029 | <.0001 |
| arace | -24.24643 | 0.68712 | <.0001 |
| South | -3.58477 | 0.43411 | <.0001 |
| AGE | -0.00512 | 0.00743 | 0.4909 |
| group | 26.00290 | 0.42899 | <.0001 |
| birth | 8.92235 | 0.08714 | <.0001 |
| Rbirth | -0.00832 | 0.00380 | 0.0284 |
| RAAGE | -0.00560 | 0.00036 | <.0001 |
| rasouth | -0.09131 | 0.00207 | <.0001 |
| rgroup | -0.08069 | 0.00236 | <.0001 |
| Rayear | 0.01225 | 0.00036 | <.0001 |
| BIRYR | -0.00461 | 0.00005 | <.0001 |
| BIRAGE | 0.00254 | 0.00006 | <.0001 |
| Birso | -0.01339 | 0.00227 | <.0001 |
| Bired | -0.01051 | 0.00222 | <.0001 |
| Ageed | 0.00309 | 0.00022 | <.0001 |
| Ageso | -0.00111 | 0.00023 | <.0001 |
| ageyr | 0.00000 | 0.00000 | 0.6039 |
| Edso | 0.00643 | 0.00141 | <.0001 |
| Soyear | 0.00186 | 0.00023 | <.0001 |
| Edyear | -0.01274 | 0.00022 | <.0001 |
| coh3030 | -0.24030 | 0.00300 | <.0001 |
| coh3040 | -0.18276 | 0.00276 | <.0001 |
| coh3050 | -0.01899 | 0.00287 | <.0001 |
| coh3060 | 0.27776 | 0.00241 | <.0001 |
| coh4030 | -0.35015 | 0.00268 | <.0001 |
| coh4040 | -0.07034 | 0.00251 | <.0001 |
| coh4050 | 0.30837 | 0.00267 | <.0001 |
| coh4060 | 0.13313 | 0.00280 | <.0001 |
| coh5030 | -0.24571 | 0.00259 | <.0001 |
| coh5040 | 0.26513 | 0.00248 | <.0001 |
| coh5050 | 0.11376 | 0.00261 | <.0001 |
| coh5060 | 0.26211 | 0.00429 | <.0001 |
| coh6030 | 0.17937 | 0.00283 | <.0001 |
| coh6040 | 0.07589 | 0.00274 | <.0001 |
| coh6050 | 0.60895 | 0.00756 | <.0001 |
| coh7030 | -0.03071 | 0.00327 | <.0001 |
| coh7040 | 1.01381 | 0.01194 | <.0001 |
| rcoh3030 | 0.00403 | 0.00725 | 0.5783 |
| rcoh3040 | -0.05479 | 0.00660 | <.0001 |
| rcoh3050 | 0.04634 | 0.00661 | <.0001 |
| rcoh3060 | 0.11121 | 0.00727 | <.0001 |
| rcoh4030 | 0.09019 | 0.00701 | <.0001 |
| rcoh4040 | 0.04484 | 0.00650 | <.0001 |
| rcoh4050 | 0.08421 | 0.00657 | <.0001 |
| rcoh4060 | -0.04552 | 0.00724 | <.0001 |
| rcoh5030 | 0.12578 | 0.00721 | <.0001 |
| rcoh5040 | 0.04562 | 0.00690 | <.0001 |
| rcoh5050 | -0.07869 | 0.00689 | <.0001 |
| rcoh5060 | -0.13524 | 0.00737 | <.0001 |
| rcoh6030 | 0.07260 | 0.00829 | <.0001 |
| rcoh6040 | -0.10497 | 0.00801 | <.0001 |
| rcoh6050 | -0.16572 | 0.00809 | <.0001 |
| rcoh7030 | -0.10108 | 0.00954 | <.0001 |
| rcoh7040 | -0.19620 | 0.00954 | <.0001 |

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| **Appendix Table 4 Earnings Return to Occupation for Men: 1910–1970 Cohorts** | | | |
| Number of Observations | 4229153 |  |  |
| Root MSE | 5.07464 |  |  |
| Dependent Mean | 3.87202 |  |  |
| R-Square | 0.198 |  |  |
| Adj R-Sq | 0.198 |  |  |
| Coeff Var | 131.05923 |  |  |
|  |  |  |  |
|  | | | |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -74.15324 | 0.51099 | <.0001 |
| YEAR | 0.04012 | 0.00027 | <.0001 |
| arace | -9.19456 | 0.63689 | <.0001 |
| South | -7.41715 | 0.40237 | <.0001 |
| AGE | 1.45395 | 0.00689 | <.0001 |
| group | 4.86460 | 0.39763 | <.0001 |
| birth | 4.99779 | 0.08077 | <.0001 |
| Rbirth | -0.00048 | 0.00352 | 0.8919 |
| RAAGE | -0.00003 | 0.00033 | 0.9300 |
| rasouth | -0.07181 | 0.00192 | <.0001 |
| rgroup | 0.04360 | 0.00218 | <.0001 |
| Rayear | 0.00450 | 0.00033 | <.0001 |
| BIRYR | -0.00275 | 0.00004 | <.0001 |
| BIRAGE | 0.00936 | 0.00006 | <.0001 |
| Birso | -0.01062 | 0.00210 | <.0001 |
| Bired | 0.04209 | 0.00206 | <.0001 |
| Ageed | 0.00867 | 0.00021 | <.0001 |
| Ageso | -0.00193 | 0.00021 | <.0001 |
| ageyr | -0.00075 | 0.00000 | <.0001 |
| Edso | -0.01135 | 0.00131 | <.0001 |
| Soyear | 0.00380 | 0.00021 | <.0001 |
| Edyear | -0.00257 | 0.00021 | <.0001 |
| coh3030 | 0.02234 | 0.00278 | <.0001 |
| coh3040 | 0.12115 | 0.00256 | <.0001 |
| coh3050 | 0.07431 | 0.00266 | <.0001 |
| coh3060 | -0.12307 | 0.00224 | <.0001 |
| coh4030 | 0.09016 | 0.00249 | <.0001 |
| coh4040 | 0.17372 | 0.00233 | <.0001 |
| coh4050 | -0.00711 | 0.00248 | 0.0042 |
| coh4060 | -0.10363 | 0.00259 | <.0001 |
| coh5030 | 0.15231 | 0.00240 | <.0001 |
| coh5040 | 0.07092 | 0.00229 | <.0001 |
| coh5050 | -0.03825 | 0.00242 | <.0001 |
| coh5060 | -0.01791 | 0.00397 | <.0001 |
| coh6030 | 0.04538 | 0.00262 | <.0001 |
| coh6040 | 0.05622 | 0.00254 | <.0001 |
| coh6050 | 0.08663 | 0.00701 | <.0001 |
| coh7030 | 0.01655 | 0.00303 | <.0001 |
| coh7040 | 0.32422 | 0.01106 | <.0001 |
| rcoh3030 | -0.02877 | 0.00672 | <.0001 |
| rcoh3040 | 0.01677 | 0.00612 | 0.0062 |
| rcoh3050 | 0.07322 | 0.00613 | <.0001 |
| rcoh3060 | 0.04124 | 0.00673 | <.0001 |
| rcoh4030 | 0.11358 | 0.00650 | <.0001 |
| rcoh4040 | 0.08231 | 0.00603 | <.0001 |
| rcoh4050 | 0.04030 | 0.00609 | <.0001 |
| rcoh4060 | 0.00221 | 0.00671 | 0.7415 |
| rcoh5030 | 0.10653 | 0.00668 | <.0001 |
| rcoh5040 | -0.00668 | 0.00639 | 0.2957 |
| rcoh5050 | -0.04058 | 0.00639 | <.0001 |
| rcoh5060 | -0.08913 | 0.00683 | <.0001 |
| rcoh6030 | -0.00874 | 0.00769 | 0.2556 |
| rcoh6040 | -0.04619 | 0.00742 | <.0001 |
| rcoh6050 | -0.09428 | 0.00750 | <.0001 |
| rcoh7030 | 0.01450 | 0.00884 | 0.1008 |
| rcoh7040 | -0.09523 | 0.00884 | <.0001 |

|  |  |  |  |
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| **Appendix Table 5 Log Odds of Postsecondary Education for Women: 1910–1979 Cohorts** | | | |
| Number of Observations | 5134651 |  |  |
| Root MSE | 3.82419 |  |  |
| Dependent Mean | 0.37631 |  |  |
| R-Square | 0.1437 |  |  |
| Adj R-Sq | 0.1437 |  |  |
| Coeff Var | 1016.23737 |  |  |
|  |  |  |  |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -14.12428 | 0.28651 | <.0001 |
| YEAR | 0.00743 | 0.00015 | <.0001 |
| arace | 3.17077 | 0.39191 | <.0001 |
| South | 0.58372 | 0.27221 | 0.0320 |
| AGE | 0.02399 | 0.00357 | <.0001 |
| birth | -1.99317 | 0.04991 | <.0001 |
| Rbirth | 0.01381 | 0.00221 | <.0001 |
| RAAGE | 0.00121 | 0.00021 | <.0001 |
| rasouth | -0.00546 | 0.00121 | <.0001 |
| Rayear | -0.00169 | 0.00021 | <.0001 |
| BIRYR | 0.00099 | 0.00003 | <.0001 |
| BIRAGE | 0.00033 | 0.00004 | <.0001 |
| Birso | -0.00550 | 0.00143 | 0.0001 |
| Ageso | -0.00001 | 0.00014 | 0.9284 |
| ageyr | -0.00001 | 0.00000 | <.0001 |
| Soyear | -0.00030 | 0.00014 | 0.0356 |
| coh3030 | 0.03413 | 0.00189 | <.0001 |
| coh3040 | 0.00016 | 0.00185 | 0.9293 |
| coh3050 | -0.04324 | 0.00189 | <.0001 |
| coh3060 | 0.06498 | 0.00149 | <.0001 |
| coh4030 | -0.00109 | 0.00172 | 0.5262 |
| coh4040 | -0.06009 | 0.00168 | <.0001 |
| coh4050 | 0.12350 | 0.00173 | <.0001 |
| coh4060 | 0.05445 | 0.00167 | <.0001 |
| coh5030 | -0.07846 | 0.00168 | <.0001 |
| coh5040 | 0.12585 | 0.00161 | <.0001 |
| coh5050 | 0.05642 | 0.00162 | <.0001 |
| coh5060 | 0.04126 | 0.00251 | <.0001 |
| coh6030 | 0.11218 | 0.00182 | <.0001 |
| coh6040 | 0.05286 | 0.00173 | <.0001 |
| coh6050 | 0.02234 | 0.00441 | <.0001 |
| coh7030 | 0.03390 | 0.00207 | <.0001 |
| coh7040 | 0.05651 | 0.00698 | <.0001 |
| rcoh3030 | -0.02036 | 0.00411 | <.0001 |
| rcoh3040 | -0.01642 | 0.00395 | <.0001 |
| rcoh3050 | 0.01420 | 0.00392 | 0.0003 |
| rcoh3060 | -0.02040 | 0.00411 | <.0001 |
| rcoh4030 | -0.06945 | 0.00410 | <.0001 |
| rcoh4040 | -0.02234 | 0.00386 | <.0001 |
| rcoh4050 | -0.03710 | 0.00387 | <.0001 |
| rcoh4060 | -0.01579 | 0.00399 | <.0001 |
| rcoh5030 | -0.01352 | 0.00420 | 0.0013 |
| rcoh5040 | -0.02316 | 0.00403 | <.0001 |
| rcoh5050 | -0.01017 | 0.00393 | 0.0097 |
| rcoh5060 | 0.02303 | 0.00398 | <.0001 |
| rcoh6030 | -0.03868 | 0.00482 | <.0001 |
| rcoh6040 | -0.02654 | 0.00462 | <.0001 |
| rcoh6050 | 0.01880 | 0.00455 | <.0001 |
| rcoh7030 | -0.08399 | 0.00551 | <.0001 |
| rcoh7040 | -0.00926 | 0.00545 | 0.0891 |
|  |  |  |  |
|  |  |  |  |
| **Appendix Table 6 Log Odds of Employment for Women: 1910–1979 Cohorts** | | | |
| Number of Observations | 5134651 |  |  |
| Root MSE | 3.96473 |  |  |
| Dependent Mean | 0.55836 |  |  |
| R-Square | 0.1240 |  |  |
| Adj R-Sq | 0.1240 |  |  |
| Coeff Var | 7106660 |  |  |
|  |  |  |  |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -44.00891 | 0.30051 | <.0001 |
| YEAR | 0.02298 | 0.00016 | <.0001 |
| arace | 11.22877 | 0.40759 | <.0001 |
| South | 0.12304 | 0.28269 | 0.6634 |
| AGE | 0.67962 | 0.00370 | <.0001 |
| group | 1.91925 | 0.29235 | <.0001 |
| birth | 0.06317 | 0.05370 | 0.2395 |
| Rbirth | 0.01278 | 0.00229 | <.0001 |
| RAAGE | 0.00485 | 0.00021 | <.0001 |
| rasouth | 0.05700 | 0.00126 | <.0001 |
| rgroup | 0.08403 | 0.00144 | <.0001 |
| Rayear | -0.00582 | 0.00021 | <.0001 |
| BIRYR | -0.00014 | 0.00003 | <.0001 |
| BIRAGE | 0.00382 | 0.00004 | <.0001 |
| Birso | 0.00097 | 0.00149 | 0.5126 |
| Bired | 0.01368 | 0.00152 | <.0001 |
| Ageed | 0.00076 | 0.00015 | <.0001 |
| Ageso | -0.00046 | 0.00015 | 0.0021 |
| ageyr | -0.00035 | 0.00000 | <.0001 |
| Edso | 0.00849 | 0.00097 | <.0001 |
| Soyear | -0.00007 | 0.00015 | 0.6485 |
| Edyear | -0.00095 | 0.00015 | <.0001 |
| coh3030 | 0.04660 | 0.00196 | <.0001 |
| coh3040 | -0.14931 | 0.00192 | <.0001 |
| coh3050 | -0.02148 | 0.00196 | <.0001 |
| coh3060 | 0.13176 | 0.00155 | <.0001 |
| coh4030 | -0.02085 | 0.00179 | <.0001 |
| coh4040 | -0.10645 | 0.00175 | <.0001 |
| coh4050 | 0.02798 | 0.00180 | <.0001 |
| coh4060 | 0.16975 | 0.00175 | <.0001 |
| coh5030 | 0.02199 | 0.00175 | <.0001 |
| coh5040 | -0.02120 | 0.00168 | <.0001 |
| coh5050 | 0.02597 | 0.00169 | <.0001 |
| coh5060 | 0.17304 | 0.00267 | <.0001 |
| coh6030 | 0.08297 | 0.00190 | <.0001 |
| coh6040 | 0.01611 | 0.00181 | <.0001 |
| coh6050 | 0.15296 | 0.00475 | <.0001 |
| coh7030 | 0.11224 | 0.00217 | <.0001 |
| coh7040 | 0.14424 | 0.00758 | <.0001 |
| rcoh3030 | 0.00599 | 0.00426 | 0.1603 |
| rcoh3040 | 0.12585 | 0.00409 | <.0001 |
| rcoh3050 | 0.02983 | 0.00406 | <.0001 |
| rcoh3060 | -0.00909 | 0.00426 | 0.0330 |
| rcoh4030 | 0.07636 | 0.00425 | <.0001 |
| rcoh4040 | 0.08949 | 0.00400 | <.0001 |
| rcoh4050 | -0.00477 | 0.00402 | 0.2350 |
| rcoh4060 | -0.04522 | 0.00413 | <.0001 |
| rcoh5030 | -0.01968 | 0.00436 | <.0001 |
| rcoh5040 | 0.02825 | 0.00418 | <.0001 |
| rcoh5050 | -0.02479 | 0.00407 | <.0001 |
| rcoh5060 | 0.00722 | 0.00412 | 0.0800 |
| rcoh6030 | -0.04023 | 0.00500 | <.0001 |
| rcoh6040 | 0.05589 | 0.00479 | <.0001 |
| rcoh6050 | 0.07616 | 0.00472 | <.0001 |
| rcoh7030 | 0.04630 | 0.00572 | <.0001 |
| rcoh7040 | 0.13953 | 0.00565 | <.0001 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Appendix Table 7 Occupational Returns to Education Women: 1910–1979 Cohorts** | | | |
| Number of Observations | 3791689 |  |  |
| Root MSE | 57580 |  |  |
| Dependent Mean | 3.58335 |  |  |
| R-Square | 0.5119 |  |  |
| Adj R-Sq | 0.5119 |  |  |
| Coeff Var | 141.64972 |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | -49.83840 | 0.60198 | <.0001 |
| YEAR | 0.02700 | 0.00031 | <.0001 |
| arace | -20.69285 | 0.63148 | <.0001 |
| South | -3.74503 | 0.43123 | <.0001 |
| AGE | -0.68791 | 0.00814 | <.0001 |
| group | 28.82748 | 0.42670 | <.0001 |
| birth | 7.99521 | 0.09444 | <.0001 |
| Rbirth | 0.00111 | 0.00349 | 0.7501 |
| RAAGE | -0.00279 | 0.00032 | <.0001 |
| rasouth | -0.11152 | 0.00188 | <.0001 |
| rgroup | 0.09637 | 0.00204 | <.0001 |
| Rayear | 0.01034 | 0.00033 | <.0001 |
| BIRYR | -0.00412 | 0.00005 | <.0001 |
| BIRAGE | 0.00115 | 0.00006 | <.0001 |
| Birso | -0.00931 | 0.00224 | <.0001 |
| Bired | -0.00909 | 0.00220 | <.0001 |
| Ageed | 0.00446 | 0.00022 | <.0001 |
| Ageso | -0.00027 | 0.00022 | 0.2367 |
| ageyr | 0.00034 | 0.00000 | <.0001 |
| Edso | 0.07376 | 0.00140 | <.0001 |
| Soyear | 0.00189 | 0.00023 | <.0001 |
| Edyear | -0.01427 | 0.00022 | <.0001 |
| coh3030 | -0.04838 | 0.00306 | <.0001 |
| coh3040 | -0.24375 | 0.00290 | <.0001 |
| coh3050 | -0.06055 | 0.00296 | <.0001 |
| coh3060 | 0.31884 | 0.00252 | <.0001 |
| coh4030 | -0.35613 | 0.00269 | <.0001 |
| coh4040 | -0.12441 | 0.00255 | <.0001 |
| coh4050 | 0.30729 | 0.00267 | <.0001 |
| coh4060 | 0.19784 | 0.00285 | <.0001 |
| coh5030 | -0.28726 | 0.00262 | <.0001 |
| coh5040 | 0.21781 | 0.00249 | <.0001 |
| coh5050 | 0.14580 | 0.00264 | <.0001 |
| coh5060 | 0.33029 | 0.00434 | <.0001 |
| coh6030 | 0.11158 | 0.00288 | <.0001 |
| coh6040 | 0.06235 | 0.00280 | <.0001 |
| coh6050 | 0.68422 | 0.00784 | <.0001 |
| coh7030 | -0.08799 | 0.00337 | <.0001 |
| coh7040 | 1.09647 | 0.01246 | <.0001 |
| rcoh3030 | -0.12578 | 0.00686 | <.0001 |
| rcoh3040 | 0.00739 | 0.00612 | 0.2277 |
| rcoh3050 | 0.10117 | 0.00605 | <.0001 |
| rcoh3060 | 0.12669 | 0.00660 | <.0001 |
| rcoh4030 | 0.09448 | 0.00645 | <.0001 |
| rcoh4040 | 0.10343 | 0.00594 | <.0001 |
| rcoh4050 | 0.10658 | 0.00590 | <.0001 |
| rcoh4060 | 0.03109 | 0.00637 | <.0001 |
| rcoh5030 | 0.13014 | 0.00668 | <.0001 |
| rcoh5040 | 0.07415 | 0.00627 | <.0001 |
| rcoh5050 | -0.01467 | 0.00617 | 0.0173 |
| rcoh5060 | -0.06712 | 0.00651 | <.0001 |
| rcoh6030 | 0.06820 | 0.00766 | <.0001 |
| rcoh6040 | -0.02744 | 0.00729 | 0.0002 |
| rcoh6050 | -0.08576 | 0.00731 | <.0001 |
| rcoh7030 | -0.01434 | 0.00879 | 0.1028 |
| rcoh7040 | -0.10889 | 0.00868 | <.0001 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Appendix Table 8 Earnings Return to Occupation for Women: 1910–1970 Cohorts** | | | |
| Number of Observations | 3791689 |  |  |
| Root MSE | 5.83118 |  |  |
| Dependent Mean | 3.43063 |  |  |
| R-Square | 0.1711 |  |  |
| Adj R-Sq | 0.1711 |  |  |
| Coeff Var | 169.97412 |  |  |
|  |  |  |  |
|  |  |  |  |
|  | | | |
| Variable | Parameter Estimate | Standard Error | Pr > |t| |
| Intercept | 9.07432 | 0.69157 | <.0001 |
| YEAR | -0.00247 | 0.00036 | <.0001 |
| arace | -41.53420 | 0.72545 | <.0001 |
| South | -5.52316 | 0.49541 | <.0001 |
| AGE | -0.11233 | 0.00935 | <.0001 |
| group | 4.72876 | 0.49020 | <.0001 |
| birth | -1.70688 | 0.10850 | <.0001 |
| Rbirth | -0.03095 | 0.00401 | <.0001 |
| RAAGE | -0.00345 | 0.00037 | <.0001 |
| rasouth | -0.16944 | 0.00215 | <.0001 |
| rgroup | 0.08093 | 0.00235 | <.0001 |
| Rayear | 0.02088 | 0.00038 | <.0001 |
| BIRYR | 0.00071 | 0.00006 | <.0001 |
| BIRAGE | 0.00526 | 0.00007 | <.0001 |
| Birso | -0.01111 | 0.00257 | <.0001 |
| Bired | 0.02946 | 0.00253 | <.0001 |
| Ageed | 0.00622 | 0.00025 | <.0001 |
| Ageso | -0.00144 | 0.00026 | <.0001 |
| ageyr | 0.00005 | 0.00000 | <.0001 |
| Edso | 0.03618 | 0.00161 | <.0001 |
| Soyear | 0.00283 | 0.00026 | <.0001 |
| Edyear | -0.00234 | 0.00026 | <.0001 |
| coh3030 | 0.10638 | 0.00351 | <.0001 |
| coh3040 | -0.05695 | 0.00333 | <.0001 |
| coh3050 | -0.03403 | 0.00340 | <.0001 |
| coh3060 | 0.05112 | 0.00289 | <.0001 |
| coh4030 | -0.05299 | 0.00309 | <.0001 |
| coh4040 | -0.01754 | 0.00293 | <.0001 |
| coh4050 | 0.05574 | 0.00307 | <.0001 |
| coh4060 | 0.07610 | 0.00327 | <.0001 |
| coh5030 | -0.06810 | 0.00301 | <.0001 |
| coh5040 | 0.06895 | 0.00286 | <.0001 |
| coh5050 | 0.09507 | 0.00304 | <.0001 |
| coh5060 | 0.08727 | 0.00499 | <.0001 |
| coh6030 | -0.00189 | 0.00330 | 0.5675 |
| coh6040 | 0.12363 | 0.00321 | <.0001 |
| coh6050 | 0.21799 | 0.00901 | <.0001 |
| coh7030 | 0.00894 | 0.00387 | 0.0209 |
| coh7040 | 0.44296 | 0.01431 | <.0001 |
| rcoh3030 | -0.02552 | 0.00788 | 0.0012 |
| rcoh3040 | 0.35548 | 0.00703 | <.0001 |
| rcoh3050 | 0.30351 | 0.00695 | <.0001 |
| rcoh3060 | 0.13828 | 0.00758 | <.0001 |
| rcoh4030 | 0.50530 | 0.00740 | <.0001 |
| rcoh4040 | 0.40814 | 0.00682 | <.0001 |
| rcoh4050 | 0.17850 | 0.00677 | <.0001 |
| rcoh4060 | 0.00006 | 0.00731 | 0.9932 |
| rcoh5030 | 0.40804 | 0.00767 | <.0001 |
| rcoh5040 | 0.16591 | 0.00720 | <.0001 |
| rcoh5050 | -0.00935 | 0.00708 | 0.1868 |
| rcoh5060 | -0.20486 | 0.00748 | <.0001 |
| rcoh6030 | 0.14696 | 0.00881 | <.0001 |
| rcoh6040 | -0.01446 | 0.00838 | 0.0843 |
| rcoh6050 | -0.19453 | 0.00839 | <.0001 |
| rcoh7030 | 0.05537 | 0.01010 | <.0001 |
| rcoh7040 | -0.19493 | 0.00997 | <.0001 |

**Variable Descriptions**

Variables used in the analysis of unemployment are listed below (Appendix Tables 9–12).

EMPLOY: UNEMPLOYMENT=0

BIRTH: COHORTS BORN IN THE SAME DECADE, 1940 TO 1970

EDUCATE:

4= HIGH SCHOOL OR LESS

5= SOME COLLEGE

6= BA/BS DEGREE

7= GRADUATE OR PROFESSIONAL DEGREE

OCCUP:

1= MANAGERS, OFFICIALS

2= PROFESSIONALS

3= TECHNICAL

4= CLERICAL

5= SERVICE

6= PRECISION MANUFACT, CRAFTS

7= OPERATIVES AND LABORERS

8= OCCUPATION NOT REPORTED

RACE: African American = 1

AGE1 = age in years

YEAR1 = year in 5 year averages, 1971**–**1975,…,2006**–**2010

SOUTH: residence in south = 1

METRO: metropolitan residence = 1

FULL: work full time = 1

SELF: self employment = 1

**Appendix Table 9**

**The Net Effects of Education Attainment on the LOG Odds of Unemployment of Men: 1970-2010**

854626 Observations

Procedure: SAS Proc Genmod

Criteria For Assessing Goodness Of Fit

Criterion DF Value Value/DF

Log Likelihood -258850017.9

Full Log Likelihood -258850017.9

AIC (smaller is better) 517700117.90

AICC (smaller is better) 517700117.90

BIC (smaller is better) 517700595.89

Algorithm converged.

STANDARD

Parameter Estimate Error Pr > ChiSq

Intercept -1.9719 0.0876 <.0001

RACE 0.6630 0.0023 <.0001

AGE1 -0.0017 0.0001 <.0001

YEAR1 -0.0005 0.0000 <.0001

BIRTH 4 1.1479 0.0034 <.0001

BIRTH 5 1.1708 0.0032 <.0001

BIRTH 6 0.9508 0.0033 <.0001

BIRTH 7 0.0000 0.0000

EDUCATE 4 1.3396 0.0020 <.0001

EDUCATE 5 0.6133 0.0021 <.0001

EDUCATE 6 0.2651 0.0022 <.0001

EDUCATE 7 0.0000 0.0000

RACE\*educate 4 0.3623 0.0021 <.0001

RACE\*educate 5 0.3223 0.0021 <.0001

RACE\*educate 6 0.1576 0.0023 <.0001

RACE\*educate 7 0.0000 0.

SOUTH -0.0220 0.0016 <.0001

METRO -0.1297 0.0003 <.0001

SELF -1.1345 0.0008 <.0001

FULL -1.0483 0.0003 <.0001

RACE\*birth 4 -0.2453 0.0010 <.0001

RACE\*birth 5 -0.0074 0.0009 <.0001

RACE\*birth 6 1 0.0349 0.0009 <.0001

RACE\*birth 7 0 0.0000

RACE\*south 1 -0.1683 0.0006 <.0001

RACE\*metro -0.0201 0.0008 <.0001

RACE\*self 0.4888 0.0021 <.0001

south\*birth 4 1 -0.1474 0.0009 <.0001

south\*birth 5 1 -0.0956 0.0008 <.0001

south\*birth 6 -0.0169 0.0008 <.0001

south\*birth 7 0 0.0000 0.0000

age1\*birth 4 -0.0230 0.0001 <.0001

age1\*birth 5 -0.0282 0.0001 <.0001

age1\*birth 6 -0.0251 0.0001 <.0001

age1\*birth 7 0.0000 0.0000

south\*educate 4 0.0637 0.0015 <.0001

south\*educate 5 0.0354 0.0015 <.0001

south\*educate 6 -0.1065 0.0017 <.0001

south\*educate 7 0.0000 0.0000

Birth\*educate 4 4 -0.5791 0.0023 <.0001

birth\*educate 4 5 -0.1409 0.0024 <.0001

birth\*educate 4 6 -0.0071 0.0026 <0.0053

birth\*educate 4 7 0.0000 0.0000

birth\*educate 5 4 -0.3169 0.0022 <.0001

birth\*educate 5 5 -0.0296 0.0023 <.0001

birth\*educate 5 6 0.0722 0.0024 <.0001

birth\*educate 5 7 0.0000 0.0000

birth\*educate 6 4 -0.2517 0.0024 <.0001

birth\*educate 6 5 -0.1173 0.0024 <.0001

birth\*educate 6 6 -0.1218 0.0026 <.0001

birth\*educate 6 7 0.0000 0.0000

Scale 1.0000 0.0000

NOTE: The scale parameter was held fixed.

The SAS System 12:51 Friday, December 4, 2015 14

The GENMOD Procedure

LR Statistics For Type 1 Analysis

Chi-

Source Deviance DF Square Pr > ChiSq

Intercept 565252162

RACE 556014387 1 9237774 <.0001

age1 548216699 1 7797688 <.0001

year1 547579051 1 637648 <.0001

birth 547506387 3 72663.6 <.0001

educate 537484221 3 1.002E7 <.0001

RACE\*educate 537319433 3 164788 <.0001

south 537013654 1 305778 <.0001

metro 536778842 1 234812 <.0001

self 535174747 1 1604095 <.0001

full 518694426 1 1.648E7 <.0001

RACE\*birth 518494181 3 200246 <.0001

RACE\*south 518430140 1 64040.3 <.0001

RACE\*metro 518429545 1 595.51 <.0001

RACE\*self 518381104 1 48441.0 <.0001

south\*birth 518330603 3 50501.3 <.0001

age1\*birth 518152334 3 178269 <.0001

south\*educate 518106929 3 45404.1 <.0001

birth\*educate 517700036 9 406894 <.0001

**Appendix Table 10**

**The Net Effects of Occupational Attainment on the LOG ODDS of Unemployment of Men: 1970-2010**

854626 Observations

Procedure: SAS Proc Genmod

Criteria For Assessing Goodness Of Fit

Criterion DF Value Value/DF

Log Likelihood -250542277.6

Full Log Likelihood -250542277.6

AIC (smaller is better) 501084763.23

AICC (smaller is better) 501084763.26

BIC (smaller is better) 501085975.71

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates

Standard

Parameter Estimate Error Pr > ChiSq

Intercept 1.0816 0.0896 <.0001

RACE 0.6523 0.0282 <.0001

age1 0.0030 0.0001 <.0001

year1 0.0002 0.0000 <.0001

birth 4 1.1601 0.0076 <.0001

birth 5 1.1066 0.0066 <.0001

birth 6 1.1393 0.0069 <.0001

birth 7 0.0000 0.0000 .

OCCUP 1 -4.5715 0.0053 <.0001

OCCUP 2 -4.9977 0.0053 <.0001

OCCUP 3 -4.5515 0.0052 <.0001

OCCUP 4 -4.4008 0.0052 <.0001

OCCUP 5 -4.4001 0.0052 <.0001

OCCUP 6 -4.0381 0.0052 <.0001

OCCUP 7 -4.0281 0.0052 <.0001

OCCUP 8 0.0000 0.0000 .

educate 4 0.8747 0.0022 <.0001

educate 5 0.2706 0.0022 <.0001

educate 6 0.0882 0.0022 <.0001

educate 7 0.0000 0.0000 .

RACE\*educate 4 0.7612 0.0288 <.0001

RACE\*educate 5 -0.1378 0.0289 <.0001

RACE\*educate 6 -0.5433 0.0300 <.0001

RACE\*educate 7 0.0000 0.0000 .

birth\*educate 4 4 0.6344 0.0025 <.0001

birth\*educate 4 5 -0.1194 0.0026 <.0001

birth\*educate 4 6 0.0332 0.0026 <.0001

birth\*educate 4 7 0.0000 0.0000 .

birth\*educate 5 4 -0.3913 0.0024 <.0001

birth\*educate 5 5 -0.0319 0.0025 <.0001

birth\*educate 5 6 0.0803 0.0025 <.0001

birth\*educate 5 7 0.0000 0.0000 .

birth\*educate 6 4 -0.2709 0.0026 <.0001

birth\*educate 6 5 -0.0928 0.0026 <.0001

birth\*educate 6 6 -0.1056 0.0027 <.0001

birth\*educate 6 7 0.0000 0.0000 .

south 0.1955 0.0046 <.0001

metro -0.0682 0.0003 <.0001

self -1.1689 0.0008 <.0001

full -0.9817 0.0003 <.0001

RACE\*birth 4 -0.2802 0.0010 <.0001

RACE\*birth 5 -0.0492 0.0009 <.0001

RACE\*birth 6 -0.0081 0.0009 <.0001

RACE\*birth 7 0.0000 0.0000 .

RACE\*south -0.1993 0.0006 <.0001

RACE\*metro 0.0323 0.0008 <.0001

RACE\*self 0.6292 0.0021 <.0001

RACE\*OCCUP 1 1 -0.1538 0.0285 <.0001

RACE\*OCCUP 2 1 -0.1400 0.0283 <.0001

RACE\*OCCUP 3 1 0.1966 0.0290 <.0001

RACE\*OCCUP 4 1 0.2708 0.0286 <.0001

RACE\*OCCUP 5 1 0.1297 0.0294 <.0001

RACE\*OCCUP 6 1 -16.7064 65.9120 0.7999

RACE\*OCCUP 7 1 -0.1679 0.0314 <.0001

RACE\*OCCUP 8 0.0000 0.0000 .

south\*birth 4 1 -0.1338 0.0009 <.0001

south\*birth 5 1 -0.0809 0.0008 <.0001

south\*birth 6 1 -0.0077 0.0008 <.0001

south\*birth 6 0 0.0000 0.0000 .

age1\*birth 4 -0.0279 0.0001 <.0001

age1\*birth 5 1 -0.0306 0.0001 <.0001

age1\*birth 6 1 -0.0248 0.0001 <.0001

age1\*birth 7 0 0.0000 0.0000 .

south\*OCCUP 1 1 -0.2511 0.0044 <.0001

south\*OCCUP 2 1 -0.2244 0.0045 <.0001

south\*OCCUP 3 1 -0.1190 0.0044 <.0001

south\*OCCUP 4 1 -0.1753 0.0043 <.0001

south\*OCCUP 5 1 -0.0772 0.0044 <.0001

south\*OCCUP 6 1 -.1529 0.0044 <.0001

south\*OCCUP 7 1 -0.2785 0.0044 <.0001

south\*OCCUP 8 0 0.0000 0.0000 .

birth\*OCCUP 4 1 0.3556 0.0069 <.0001

birth\*OCCUP 4 2 0.1239 0.0069 <.0001

birth\*OCCUP 4 3 0.2047 0.0068 <.0001

birth\*OCCUP 4 4 0.0473 0.0067 <.0001

birth\*OCCUP 4 5 0.2465 0.0068 <.0001

birth\*OCCUP 4 6 0.3116 0.0075 <.0001

birth\*OCCUP 4 7 0.2538 0.0068 <.0001

birth\*OCCUP 4 8 0.0000 0.0000 .

birth\*OCCUP 5 1 0.3215 0.0060 <.0001

birth\*OCCUP 5 2 0.0301 0.0060 <.0001

birth\*OCCUP 5 3 0.1460 0.0059 <.0001

birth\*OCCUP 5 4 0.0426 0.0058 <.0001

birth\*OCCUP 5 5 0.2272 0.0058 <.0001

birth\*OCCUP 5 6 0.3998 0.0065 <.0001

birth\*OCCUP 5 7 0.2648 0.0059 <.0001

birth\*OCCUP 5 8 0.0000 0.0000 .

birth\*OCCUP 6 1 -0.1845 0.0062 <.0001

birth\*OCCUP 6 2 -0.2935 0.0062 <.0001

birth\*OCCUP 6 3 -0.1699 0.0062 <.0001

birth\*OCCUP 6 4 -0.2976 0.0061 <.0001

birth\*OCCUP 6 5 -0.1884 0.0061 <.0001

birth\*OCCUP 6 6 -0.0796 0.0068 <.0001

birth\*OCCUP 6 7 -0.1509 0.0061 <.0001

birth\*OCCUP 6 8 0.0000 0.0000 .

south\*educate 4 1 0.0203 0.0016 <.0001

south\*educate 5 1 -0.0154 0.0017 <.0001

south\*educate 6 1 -0.1238 0.0017 <.0001

south\*educate 7 0 0.0000 0.0000 .

RA\*educat\*OCCUP 411 -0.8178 0.0291 <.0001

RA\*educat\*OCCUP 421 -0.1505 0.0290 <.0001

RA\*educat\*OCCUP 431 -0.6423 0.0296 <.0001

RA\*educat\*OCCUP 441 -0.6299 0.0292 <.0001

RA\*educat\*OCCUP 451 -0.6576 0.0300 <.0001

RA\*educat\*OCCUP 461 16.0329 65.9120 0.8078

RA\*educat\*OCCUP 471 -0.4723 0.0319 <.0001

RA\*educat\*OCCUP 480 0.0000 0.0000 .

RA\*educat\*OCCUP 511 0.1558 0.0292 <.0001

RA\*educat\*OCCUP 521 0.6528 0.0291 <.0001

RA\*educat\*OCCUP 531 0.0536 0.0297 0.0709

RA\*educat\*OCCUP 541 0.1395 0.0293 <.0001

RA\*educat\*OCCUP 551 0.2534 0.0301 <.0001

RA\*educat\*OCCUP 561 16.7449 65.9120 0.7995

RA\*educat\*OCCUP 571 0.6152 0.0320 <.0001

RA\*educat\*OCCUP 580 0.0000 0.0000 .

RA\*educat\*OCCUP 611 0.4129 0.0304 <.0001

RA\*educat\*OCCUP 621 0.7515 0.0302 <.0001

RA\*educat\*OCCUP 631 0.1625 0.0309 <.0001

RA\*educat\*OCCUP 641 0.5821 0.0304 <.0001

RA\*educat\*OCCUP 651 0.6994 0.0313 <.0001

RA\*educat\*OCCUP 661 16.4773 65.9120 0.8026

RA\*educat\*OCCUP 671 1.1224 0.0333 <.0001

RA\*educat\*OCCUP 680 0.0000 0.0000 .

Scale 0 1.0000 0.0000 1.0000 1.0000

NOTE: The scale parameter was held fixed.

LR Statistics For Type 1 Analysis

Chi-

Source Deviance DF Square Pr > ChiSq

Intercept 565252162

RACE 556014387 1 9237774 <.0001

age1 548216699 1 7797688 <.0001

year1 547579051 1 637648 <.0001

birth 547506387 3 72663.6 <.0001

OCCUP 520483485 7 2.702E7 <.0001

educate 518274126 3 2209358 <.0001

RACE\*educate 518189056 3 85070.5 <.0001

birth\*educate 517611645 9 577411 <.0001

south 517259234 1 352411 <.0001

metro 517232506 1 26728.5 <.0001

self 515486319 1 1746187 <.0001

full 502223398 1 1.326E7 <.0001

RACE\*birth 502061707 3 161691 <.0001

RACE\*south 501949891 1 111816 <.0001

RACE\*metro 501942285 1 7605.68 <.0001

RACE\*self 501872613 1 69671.5 <.0001

RACE\*OCCUP 501651913 7 220700 <.0001

south\*birth 501609844 3 42069.8 <.0001

age1\*birth 501408180 3 201664 <.0001

south\*OCCUP 501322924 7 85255.6 <.0001

birth\*OCCUP 501213643 21 109281 <.0001

south\*educate 501193561 3 20082.3 <.0001

RACE\*educate\*OCCUP 501084555 21 109006 <.0001

**Appendix Table 11**

**The Net Effects of Education Attainment on the LOG Odds of Unemployment of Women: 1970-2010**

966143 Observations

Procedure: SAS Proc Genmod

Criteria For Assessing Goodness Of Fit

Criterion DF Value Value/DF

Log Likelihood -337099598.5

Full Log Likelihood -337099598.5

AIC (smaller is better) 674199278.92

AICC (smaller is better) 674199278.92

BIC (smaller is better) 674199761.94

Algorithm converged.

STANDARD

Parameter Estimate Error Pr > ChiSq

intercept -7.4697 0.0755 <.0001

RACE 0.8116 0.0021 <.0001

age1 0.0061 0.0001 <.0001

year1 0.0025 0.0000 <.0001

birth 4 0.7163 0.0031 <.0001

birth 5 1.1371 0.0030 <.0001

birth 6 0.7509 0.0031 <.0001

birth 7 0.0000 0.0000 .

educate 4 1.5833 0.0021 <.0001

educate 5 0.8032 0.0021 <.0001

educate 6 0.3562 0.0022 <.0001

educate 7 0.0000 0.0000 .

RACE\*educate 4 -0.1252 0.0019 <.0001

RACE\*educate 5 -0.0628 0.0020 <.0001

RACE\*educate 6 -0.0923 0.0021 <.0001

RACE\*educate 7 0.0000 0.0000 .

south -0.2435 0.0014 <.0001

metro -0.1823 0.0003 <.0001

self -1.1625 0.0006 <.0001

full -1.4956 0.0003 <.0001

RACE\*birth 4 -0.1728 0.0009 <.0001

RACE\*birth 5 -0.0091 0.0008 <.0001

RACE\*birth 6 -0.0130 0.0008 <.0001

RACE\*birth 7 0.0000 0.0000 .

RACE\*south -0.0591 0.0006 <.0001

RACE\*metro 0.0545 0.0007 <.0001

RACE\*self 0.4030 0.0015 <.0001

south\*birth 4 -0.1128 0.0008 <.0001

south\*birth 5 -0.1348 0.0007 <.0001

south\*birth 6 -0.0794 0.0007 <.0001

south\*birth 7 0.0000 0.0000 .

age1\*birth 4 -0.0177 0.0001 <.0001

age1\*birth 5 -0.0278 0.0001 <.0001

age1\*birth 6 -0.0226 0.0001 <.0001

age1\*birth 7 0.0000 0.0000 .

south\*educate 4 -0.0820 0.0013 <.0001

south\*educate 5 0.0028 0.0014 0.0429

south\*educate 6 0.0280 0.0015 <.0001

south\*educate 7 0.0000 0.0000 .

birth\*educate 4 4 -0.3257 0.0022 <.0001

birth\*educate 4 5 -0.0171 0.0023 <.0001

birth\*educate 4 6 0.1008 0.0024 <.0001

birth\*educate 4 7 0.0000 0.0000 .

birth\*educate 5 4 -0.1769 0.0022 <.0001

birth\*educate 5 5 -0.0268 0.0023 <.0001

birth\*educate 5 6 0.0573 0.0024 <.0001

birth\*educate 5 7 0.0000 0.0000 .

birth\*educate 6 4 -0.0418 0.0024 <.0001

birth\*educate 6 5 -0.0498 0.0024 <.0001

birth\*educate 6 6 -0.0034 0.0026 0.1946

birth\*educate 6 7 0.0000 0.0000 .

Scale 0 1.0000 0.0000 1.0000 1.0000

NOTE: The scale parameter was held fixed.

LR Statistics For Type 1 Analysis

Chi-

Source Deviance DF Square Pr > ChiSq

Intercept 748686353

RACE 738118787 1 1.057E7 <.0001

age1 729182139 1 8936648 <.0001

year1 729167379 1 14759.5 <.0001

birth 728834896 3 332483 <.0001

educate 712314118 3 1.652E7 <.0001

RACE\*educate 712312381 3 1736.82 <.0001

south 709078664 1 3233717 <.0001

metro 708802907 1 275757 <.0001

self 704026331 1 4776575 <.0001

full 675136535 1 2.889E7 <.0001

RACE\*birth 675042641 3 93893.7 <.0001

RACE\*south 675022533 1 20107.7 <.0001

RACE\*metro 675015051 1 7482.62 <.0001

RACE\*self 674943314 1 71736.9 <.0001

south\*birth 674893845 3 49469.4 <.0001

age1\*birth 674562314 3 331530 <.0001

south\*educate 674534823 3 27491.1 <.0001

birth\*educate 674199197 9 335626 <.0001

**Appendix Table 12**

**The Net Effects of Occupational Attainment on the LOG ODDS of Unemployment of Women: 1970-2010**

966143 Observations

Procedure: SAS Proc Genmod

to specify the DESCENDING option in the PROC statement.

Criteria For Assessing Goodness Of Fit

Criterion DF Value Value/DF

Log Likelihood -329043359.1

Full Log Likelihood -329043359.1

AIC (smaller is better) 658086926.11

AICC (smaller is better) 658086926.13

BIC (smaller is better) 658088151.34

Algorithm converged.

Parameter Estimate Error Pr > ChiSq

Intercept -5.6168 0.0765 <.0001

RACE 1.0630 0.0147 <.0001

age1 0.0078 0.0001 <.0001

year1 0.0033 0.0000 <.0001

birth 4 -0.2541 0.0052 <.0001

birth 5 0.4276 0.0046 <.0001

birth 6 0.5472 0.0047 <.0001

birth 7 0.0000 0.0000 .

OCCUP 1 -3.6205 0.0033 <.0001

OCCUP 2 -3.8902 0.0034 <.0001

OCCUP 3 -3.5761 0.0032 <.0001

OCCUP 4 -3.3956 0.0032 <.0001

OCCUP 5 -3.4431 0.0032 <.0001

OCCUP 6 -2.8110 0.0031 <.0001

OCCUP 7 -2.7231 0.0031 <.0001

OCCUP 8 0.0000 0.0000 .

educate 4 0.8939 0.0022 <.0001

educate 5 0.3200 0.0022 <.0001

educate 6 0.1960 0.0023 <.0001

educate 7 0.0000 0.0000 .

RACE\*educate 4 0.2967 0.0151 <.0001

RACE\*educate 5 -0.2309 0.0153 <.0001

RACE\*educate 6 -0.2360 0.0173 <.0001

RACE\*educate 7 0.0000 0.0000 .

birth\*educate 4 4 -0.3710 0.0025 <.0001

birth\*educate 4 5 -0.0401 0.0025 <.0001

birth\*educate 4 6 0.0453 0.0025 <.0001

birth\*educate 4 7 0.0000 0.0000 .

birth\*educate 5 4 -0.1571 0.0024 <.0001

birth\*educate 5 5 -0.0035 0.0024 0.1469

birth\*educate 5 6 0.0550 0.0025 <.0001

birth\*educate 5 7 0.0000 0.0000 .

birth\*educate 6 4 -0.0804 0.0026 <.0001

birth\*educate 6 5 -0.0654 0.0026 <.0001

birth\*educate 6 6 -0.0031 0.0027 0.4351

BIrth\*educate 6 7 0.0000 0.0000 .

birth\*educate 7 4 0.0000 0.0000 .

birth\*educate 7 5 0.0000 0.0000 .

birth\*educate 7 6 0.0000 0.0000 .

birth\*educate 7 7 0.0000 0.0000 .

south -0.1890 0.0029 <.0001

metro -0.1126 0.0003 <.0001

self -1.1735 0.0006 <.0001

full -1.4802 0.0003 <.0001

RACE\*birth 4 -0.2025 0.0010 <.0001

RACE\*birth 5 -0.0076 0.0008 <.0001

RACE\*birth 6 -0.0059 0.0009 <.0001

RACE\*birth 7 0.0000 0.0000 .

RACE\*south -0.1163 0.0006 <.0001

RACE\*metro 0.0387 0.0007 <.0001

RACE\*self 0.4917 0.0015 <.0001

RACE\*OCCUP 1 -0.6246 0.0153 <.0001

RACE\*OCCUP 2 -0.3776 0.0150 <.0001

RACE\*OCCUP 3 -0.0443 0.0154 <.0041

RACE\*OCCUP 4 0.3273 0.0157 <.0001

RACE\*OCCUP 5 -0.0677 0.0160 <.0001

RACE\*OCCUP 6 -0.8976 0.0177 <.0001

RACE\*OCCUP 7 -0.3387 0.0157 <.0001

RACE\*OCCUP 8 0.0000 0.0000 .

south\*birth 4 -0.0891 0.0008 <.0001

south\*birth 5 -0.1134 0.0007 <.0001

south\*birth 6 -0.0740 0.0008 <.0001

south\*birth 7 0.0000 0.0000 .

age1\*birth 4 -0.0189 0.0001 <.0001

age1\*birth 5 -0.0279 0.0001 <.0001

age1\*birth 6 -0.0220 0.0001 <.0001

age1\*birth 7 0.0000 0.0000 .

south\*OCCUP 1 0.0051 0.0026 0.0519

south\*OCCUP 2 -0.1554 0.0027 <.0001

south\*OCCUP 3 0.0975 0.0026 <.0001

south\*OCCUP 4 0.0115 0.0026 <.0001

south\*OCCUP 5 0.0587 0.0026 <.0001

south\*OCCUP 6 -0.1199 0.0025 <.0001

south\*OCCUP 7 -0.1117 0.0025 <.0001

south\*OCCUP 8 0.0000 0.0000 .

birth\*OCCUP 4 1 1.0677 0.0043 <.0001

birth\*OCCUP 4 2 0.9992 0.0044 <.0001

birth\*OCCUP 4 3 1.1072 0.0042 <.0001

birth\*OCCUP 4 4 0.8978 0.0042 <.0001

birth\*OCCUP 4 5 1.0903 0.0042 <.0001

birth\*OCCUP 4 6 1.0431 0.0041 <.0001

birth\*OCCUP 4 7 1.0743 0.0041 <.0001

birth\*OCCUP 4 8 0.0000 0.0000 .

birth\*OCCUP 5 1 0.6784 0.0038 <.0001

birth\*OCCUP 5 2 0.7405 0.0039 <.0001

birth\*OCCUP 5 3 0.6505 0.0037 <.0001

birth\*OCCUP 5 4 0.5476 0.0037 <.0001

birth\*OCCUP 5 5 0.6545 0.0037 <.0001

birth\*OCCUP 5 6 0.6713 0.0036 <.0001

birth\*OCCUP 5 7 0.6729 0.0036 <.0001

birth\*OCCUP 5 8 0.0000 0.0000 .

birth\*OCCUP 6 1 0.0674 0.0038 <.0001

birth\*OCCUP 6 2 0.2254 0.0039 <.0001

birth\*OCCUP 6 3 0.1202 0.0037 <.0001

birth\*OCCUP 6 4 0.0100 0.0037 0.0065

birth\*OCCUP 6 5 0.2359 0.0036 <.0001

birth\*OCCUP 6 6 0.2335 0.0035 <.0001

birth\*OCCUP 6 7 0.1953 0.0035 <.0001

birth\*OCCUP 6 8 0.0000 0.0000 .

south\*educate 4 -0.0698 0.0015 <.0001

south\*educate 5 0.0022 0.0015 0.1433

south\*educate 6 -0.0088 0.0016 <.0001

south\*educate 7 0.0000 0.0000 .

RA\*educat\*OCCUP 4 1 -0.2658 0.0158 <.0001

RA\*educat\*OCCUP 4 2 -0.1598 0.0156 <.0001

RA\*educateOCCUP 4 3 -0.7367 0.0159 <.0001

RA\*educat\*OCCUP 4 4 -0.8166 0.0161 <.0001

RA\*educat\*OCCUP 4 5 -0.3533 0.0164 <.0001

RA\*educat\*OCCUP 4 6 0.2315 0.0180 <.0001

RA\*educat\*OCCUP 4 7 -0.3809 0.0161 <.0001

RA\*educat\*OCCUP 4 8 0.0000 0.0000 .

RA\*educat\*OCCUP 5 1 0.5084 0.0161 <.0001

RA\*educat\*OCCUP 5 2 0.4417 0.0158 <.0001

RA\*educat\*OCCUP 5 3 0.2029 0.0161 <.0001

RA\*educat\*OCCUP 5 4 -0.3305 0.0163 <.0001

RA\*educat\*OCCUP 5 5 -0.0397 0.0166 0.0168

RA\*educat\*OCCUP 5 6 0.6806 0.0183 <.0001

RA\*educat\*OCCUP 5 7 0.1572 0.0163 <.0001

RA\*educat\*OCCUP 5 8 0.0000 0.0000 .

RA\*educat\*OCCUP 6 1 0.4561 0.0180 <.0001

RA\*educat\*OCCUP 6 2 0.4331 0.0177 <.0001

RA\*educat\*OCCUP 6 3 0.0745 0.0181 <.0001

RA\*educat\*OCCUP 6 4 -0.4911 0.0184 <.0001

RA\*educat\*OCCUP 6 5 -0.4581 0.0188 <.0001

RA\*educat\*OCCUP 6 6 0.3408 0.0203 <.0001

RA\*educat\*OCCUP 6 7 0.1931 0.0183 <.0001

RA\*educat\*OCCUP 6 8 0.0000 0.0000 .

NOTE: The scale parameter was held fixed.

LR Statistics For Type 1 Analysis

Chi-

Source Deviance DF Square Pr > ChiSq

Intercept 748686353

RACE 738118787 1 1.057E7 <.0001

age1 729182139 1 8936648 <.0001

year1 729167379 1 14759.5 <.0001

birth 728834896 3 332483 <.0001

OCCUP 697097604 7 3.174E7 <.0001

educate 694180829 3 2916775 <.0001

RACE\*educate 694177363 3 3465.69 <.0001

birth\*educate 693898875 9 278488 <.0001

south 690592149 1 3306726 <.0001

metro 690557259 1 34890.0 <.0001

self 686066738 1 4490521 <.0001

full 659313264 1 2.675E7 <.0001

RACE\*birth 659212842 3 100422 <.0001

RACE\*south 659153680 1 59161.8 <.0001

RACE\*metro 659142825 1 10855.6 <.0001

RACE\*self 659048775 1 94049.6 <.0001

RACE\*OCCUP 658852135 7 196640 <.0001

south\*birth 658817823 3 34311.4 <.0001

age1\*birth 658530679 3 287145 <.0001

south\*OCCUP 658401252 7 129427 <.0001

birth\*OCCUP 658224147 21 177104 <.0001

south\*educate 658208802 3 15345.1 <.0001

RACE\*educate\*OCCUP 658086718 21 122084 <.0001