# online appendix for: Tax Progressivity and Self-Employment Dynamics

Wiji Arulampalam* and Andrea Papini†

*Department of Economics, University of Warwick, Coventry, CV4 7AL, UK. Email: wiji.arulampalam@warwick.ac.uk. Additional affiliations: IZA, Oxford CBT, and OFS Oslo.
†European Commission, Joint Research Centre, Email: andrea.papini@ec.europa.eu

# A Appendix (on-line material)

## A.1 The generation of tax variables[1]

In the following, we discuss how the two tax variables *netincdiff* and *convexity*, are derived. Individual index is omitted for ease of exposition.

Assume gross income $y_j$ in occupation $j$ ($j = s$ for self-employment and $e$ for wage employment) is log normally distributed with parameters $\mu_j$ and $\sigma_j$. i.e. $y_j = exp(Y_j) \sim LN(\mu_j, \sigma_j)$ which implies that $Y_j = \ln y_j \sim N(\mu_j, \sigma_j^2)$

The mean and the variance of $y_j$ are respectively:

$$\overline{y}_j \equiv E(y_j) = \exp(\mu_j + \frac{\sigma_j^2}{2}) \tag{A.1}$$

$$Var(y_j) = \left[\exp(2\mu_j + \sigma_j^2)\right] \left[\exp(\sigma_j^2) - 1\right]. \tag{A.2}$$

Under risk-neutrality and an expected utility maximisation framework, Wen and Gordon (2014) show that the occupational choice is dependent on the following two terms which they call *netincdiff* and *convexity* respectively:

$$netincdiff = (1 - \tau) \ln \left[\overline{y}_s / \overline{y}_e\right] \simeq \ln \left[netincome_s / netincome_e\right] \tag{A.3}$$

and[2]

$$convexity = \frac{1}{2}(1 - \tau_s)\tau_s \sigma_s^2 \simeq \frac{E[T(y_s)] - T(\overline{y}_s)}{\overline{x}_s} \tag{A.4}$$

[1] This appendix is based on Wen and Gordon (2014). However, we allow the tax regimes to be different in the two occupations, since we model both self-employment and wage employment exits.

[2] Similar to Wen and Gordon (2014), we also set the variability of wage income to be 0 and hence only use the one related to self-employment income.

The net incomes $netincome_s$ and $netincome_e$ are evaluated at the estimated expected values of the pre-tax income ($\overline{y}_j$) from each of the occupations. $(1-\tau)$ is the elasticity of after-tax income with respect to pre-tax income. $\overline{y}_j$ is the expected income in occupation $j$, i.e. $\overline{y}_j = E(y_j)$ and $T(y_j)$ is the tax burden defined as $(y_j - x_j)$. Finally, $\overline{x}_j$ is the net-of-tax income evaluated at $\overline{y}_j$. The *convexity* variable measures the increase in tax liability taken on by the individuals in self-employment due to the volatility of their earnings, expressed as a proportion of their net income.[3] The higher the *convexity* the lower the probability of choosing self-employment relative to wage employment.

*Steps involved in the estimation of netincdiff and convexity*

We need three terms for each occupation:

1. $\overline{y}_j$ which is the $E(y_j)$;
2. $T(y_j)$ and hence $E[T(y_j)]$;
3. $\overline{x}_j$ which is $\overline{y}_j - T(\overline{y}_j)$.

i.e. we need a distribution for $y_j$ and a distribution for the corresponding $T(y_j)$. Remember $\ln y_j$ is assumed to be lognormally distributed. The steps are listed below.

**Estimation of** *netincdiff*

*Step 1*: Using the actual reported *pre-tax* self-employment income and wage employment income for each time period separately, estimate a log linear switching regression model that accounts for selection into the two occupations (self-employment and wage employment), and calculate the predicted income ($\widehat{y}_j$) using equation A.1 in each occupation. The variables used in the income regressions are: quadratic polynomial in age, labour regional dummies, dummies accounting for both the level and the field of education and gender dummy.[4] The variables that enter the selection equation and not the income equations are binary indicators

[3] Note, $x_s = (y_s)^{1-\tau}(y_0)^{\tau}$ which is the after-tax income. Tax liability is zero at $y_0$ and the tax liability is given by $T(y_s) \equiv (y_s - x_s)$ which is assumed to be strictly convex.

[4] The selection model is estimated as a probit and the correction term is the well known Inverse Mills Ratio (IMR) which is the generalised residual from the probit model.

for the presence of children, family members and head of family.[5] The results are provided in online Appendix A.3.

*Step 2*: Add other types of income to this predicted income to get $\widetilde{y}_j$. We include interest income, dividends, capital gains, and other capital incomes.

*Step 3*: Estimate individual specific variances under the assumption that errors are heteroskedastic and given by

$$\sigma_j^2 = \exp(z'\delta) \tag{A.5}$$

We use the selection corrected log earnings equations to estimate $z'\delta$ using the predicted values from a regression of $\ln(\text{residual}^2)$ on a constant term, a set of individual specific characteristics. $\widehat{\sigma_j^2}$ then follows from equation (A.5).

*Step 4:* Use the tax simulator to generate the tax payments $T(\widetilde{y}_j)$ and hence the net incomes $(\widetilde{y}_j - T(\widetilde{y}_j))$. The tax simulator takes into account the different rules in each year for taxing labour income, self-employment income and capital income and the most relevant deductions rules in each year for individual tax returns.

*Step 5:* log difference in the net incomes provides the estimate of *netincdiff* as per equation (A.3). For example, the relevant variable for the self-employment decision would be $\ln(\widetilde{y}_s - T(\widetilde{y}_s)) - \ln(\widetilde{y}_e - T(\widetilde{y}_e))$.

**Estimation of *convexity***

As discussed earlier, we only estimate the *convexity* variable for the self-employment occupation. We have the mean (predicted income $\widehat{y}_s$ from *step 1*) and the variance of the distribution of $\ln(y_s)$ ($\sigma_s^2$ from *step 3*) for each individual. The relevant equations are (A.1) and (A.5).

*Step 6*: Using the expected income and variance estimated in *steps one* and *two* as before,

[5] Household background and the presence of kids have been found to have an influence on the probability of undertaking risky entrepreneurial activities (Parker, 2008; Taylor, 1996; Berglann et al., 2011) but are not expected to influence gross earnings, so similarly to other studies, we use them as exclusion restrictions (Wen and Gordon, 2014; Rees and Shah, 1986). The selectivity correction terms as measured by rho, and the instruments, are significantly different from 0 at conventional levels of significance (see Appendix A.3).

we generate *200* draws from $N(\widehat{\ln y_s}, \widehat{\sigma_s^2})$. The exponentiated values of each draw are added to the "other income" which is then used to generate the $T(y_s)$ using the tax-simulator. $\overline{y}_s$ is the mean of the values that feed into the tax-simulator. The corresponding $T(\overline{y}_s)$ is calculated next.

*Step 7*: The expected after-tax income is calculated as $\bar{x}_s = \bar{y}_s - T(\bar{y}_s)$.

*Step 8*: $E[T(y_s)]$ is estimated as the sample mean of the generated $T(y_s)$ calculated from the draws.

*Step 9:* We then generate the *convexity* variable as given in equation (A.4) for each individual.

## A.2 Main features of the Tax Simulator

Given some limitations of the information we had in the tax returns data, a simplified tax simulator that considers the most important tax rules, deductions, and allowances, was developed. We briefly discuss the simplifications here.

The initial intention of the 1992 reform was to tax "labour income" similarly for wage earners and self-employed individuals. However, many modifications were introduced during the period 1993 to 2004, which saw high incomes from self-employment (*SE*) exempted from personal income taxation. For example, *SE* income from non-liberal professions were only subject to the flat capital tax rates for amounts exceeding a certain threshold.[6] [7] We are not able to identify the type of occupation from our tax returns register and hence we do not take into account these differences in taxation of *SE* income. However, only approximately 2% of our sample members report *SE* income that exceeds the thresholds, and this problem arises for just a handful of observations when predicted *SE* income is used in the calculation of our tax variables. This distinction between liberal and non-liberal occupation was dropped

[6] Liberal professions include lawyers, dentists, doctors and other independent contractors delivering services to the public.

[7] The threshold varied between 16g and 32g in different year, where g is the *basic amount*. g is used as a starting point for payment related to social insurance and is defined as approximately five times the monthly wage of a blue collar worker.

in 2005, and labour income from *SE* would follow the same schedule as wage income. Other differences to the wage income case are the lack of the basic allowance and the higher social security contribution paid (10.7% in 2005).

There are two tax classes in Norway and the difference between the two is the level of the personal allowance. The personal allowance in class 2 is higher than in tax class 1, and, in some years, the surtax. The vast majority of individuals are taxed under tax class 1 schedule. However, single parents and individuals supporting their low-income spouses, can be placed in tax class 2, and hence be subject to a higher personal allowance. Because of limitations in the information available, we assume that all individuals are taxed under the class 1 schedule.

In our simplified tax simulator, we set the capital income component within the net self-employment income to zero. That is, we assume that all the *SE* income is coming from the labour income component of the net *SE* income. We believe this simplification is a good approximation for the following reason. Among the self-employed group, about two thirds report a labour income component which is at least 85% of the total net *SE* income. Table 4, Panel [H] reports the results from our investigation where we replace the zero-capital income component with the median value of 3.7% in our generation of the tax variables.

## A.3 Wage and self-employment income equations

**A.3 Equations used to generate the tax variables**

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | 0.034 | | | -0.016 | | -0.027 | | | -0.046 | | 0.027 | | | -0.049 | | -0.018 | | | -0.056 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.107 | | | -0.270 | | 0.283 | | | -0.171 | | -0.097 | | | -0.202 | | 0.276 | | | -0.193 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.057 | | | -0.149 | | 0.044 | | | -0.124 | | 0.052 | | | -0.107 | | 0.054 | | | -0.126 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.092 | 0.080 | | | -0.049 | 0.099 | -0.090 | | | -0.190 | 0.081 | 0.080 | | | -0.025 | 0.099 | -0.093 | | | -0.187 |
| | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.001 | | | 0.000 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | 0 | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.062 | 0.004 | | | -0.003 | -0.101 | 0.040 | | | 0.078 | 0.028 | 0.015 | | | 0.024 | -0.096 | 0.022 | | | 0.074 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.065 | -0.094 | | | -0.054 | -0.032 | 0.105 | | | 0.010 | 0.064 | -0.096 | | | -0.110 | -0.035 | 0.097 | | | 0.005 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.016 | -0.115 | | | -0.113 | -0.083 | 0.023 | | | -0.084 | -0.028 | -0.121 | | | -0.121 | -0.086 | 0.029 | | | -0.078 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | 0.124 | -0.069 | | | 0.091 | -0.061 | -0.052 | | | -0.073 | 0.068 | -0.073 | | | 0.113 | -0.065 | -0.044 | | | -0.077 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.118 | 0.141 | | | 0.013 | -0.101 | 0.061 | | | 0.204 | -0.108 | 0.124 | | | 0.359 | -0.086 | 0.055 | | | 0.141 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.052 | -0.065 | | | 0.016 | 0.060 | 0.071 | | | 0.046 | 0.035 | -0.075 | | | 0.134 | 0.062 | 0.079 | | | 0.013 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_5 | -0.031 | -0.030 | | | -0.057 | 0.080 | -0.054 | | | -0.140 | -0.027 | -0.026 | | | -0.026 | 0.081 | -0.064 | | | -0.164 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_6 | -0.081 | -0.277 | | | 0.039 | -0.020 | 0.091 | | | -0.143 | -0.054 | -0.283 | | | -0.162 | -0.020 | 0.086 | | | -0.215 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | 0.001 | 0.192 | | | -0.100 | 0.022 | -0.193 | | | -0.073 | -0.011 | 0.196 | | | 0.249 | 0.020 | -0.201 | | | -0.019 |
| | (0.04) | (0.03) | | | (0.11) | (0.01) | (0.02) | | | (0.04) | (0.03) | (0.03) | | | (0.10) | (0.01) | (0.02) | | | (0.04) |
| educ_1_8 | -0.052 | -0.189 | | | -0.172 | 0.157 | 0.018 | | | -0.230 | -0.049 | -0.191 | | | -0.078 | 0.156 | 0.023 | | | -0.161 |
| | (0.04) | (0.02) | | | (0.11) | (0.01) | (0.02) | | | (0.03) | (0.04) | (0.02) | | | (0.11) | (0.01) | (0.02) | | | (0.03) |
| educ_2_2 | 0.063 | -0.157 | | | 0.235 | 0.160 | 0.286 | | | 0.155 | 0.056 | -0.147 | | | 0.304 | 0.162 | 0.281 | | | 0.120 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | 0.004 | 0.451 | | | 0.438 | 0.149 | -0.141 | | | 0.364 | -0.110 | 0.452 | | | 0.444 | 0.143 | -0.138 | | | 0.291 |
| | (0.05) | (0.04) | | | (0.14) | (0.01) | (0.03) | | | (0.05) | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.05) |
| educ_2_4 | 0.084 | -0.037 | | | -0.214 | 0.259 | 0.038 | | | -0.154 | 0.092 | -0.046 | | | -0.151 | 0.258 | 0.051 | | | -0.195 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_2_5 | -0.057 | -0.169 | | | -0.183 | 0.186 | 0.028 | | | -0.198 | -0.003 | -0.174 | | | -0.237 | 0.191 | 0.008 | | | -0.267 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.312 | 0.051 | | | 0.085 | 0.108 | -0.153 | | | -0.336 | 0.214 | 0.006 | | | 0.135 | 0.098 | -0.131 | | | -0.396 |
| | (0.07) | (0.04) | | | (0.20) | (0.01) | (0.04) | | | (0.04) | (0.06) | (0.04) | | | (0.19) | (0.01) | (0.03) | | | (0.04) |
| educ_2_7 | -0.189 | -0.333 | | | 0.327 | 0.001 | 0.087 | | | -0.309 | -0.153 | -0.341 | | | -0.005 | 0.013 | 0.124 | | | -0.257 |
| | (0.12) | (0.07) | | | (0.35) | (0.02) | (0.06) | | | (0.07) | (0.11) | (0.07) | | | (0.34) | (0.02) | (0.06) | | | (0.06) |
| educ_2_8 | 0.011 | 0.295 | | | 0.086 | 0.283 | -0.164 | | | 0.037 | 0.028 | 0.302 | | | 0.011 | 0.279 | -0.176 | | | 0.021 |
| | (0.03) | (0.02) | | | (0.08) | (0.01) | (0.02) | | | (0.03) | (0.03) | (0.02) | | | (0.08) | (0.01) | (0.02) | | | (0.03) |
| educ_3_2 | 0.094 | -0.358 | | | 1.055 | 0.143 | 0.682 | | | 0.611 | 0.055 | -0.343 | | | 0.979 | 0.142 | 0.642 | | | 0.611 |
| | (0.15) | (0.09) | | | (0.45) | (0.02) | (0.09) | | | (0.08) | (0.14) | (0.08) | | | (0.42) | (0.02) | (0.08) | | | (0.07) |
| educ_3_3 | -0.145 | -0.276 | | | 0.453 | 0.087 | 0.395 | | | 0.672 | -0.132 | -0.249 | | | 0.652 | 0.078 | 0.398 | | | 0.698 |
| | (0.03) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_3_4 | 0.057 | -0.705 | | | 0.339 | 0.226 | 0.245 | | | -0.421 | 0.078 | -0.693 | | | 0.206 | 0.220 | 0.242 | | | -0.412 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 1.004 | 0.064 | | | 0.348 | 0.256 | 0.236 | | | 0.543 | 0.991 | 0.056 | | | 0.427 | 0.242 | 0.255 | | | 0.587 |
| | (0.03) | (0.02) | | | (0.08) | (0.01) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.01) | (0.02) | | | (0.02) |
| educ_3_6 | 0.524 | -0.301 | | | 0.453 | 0.429 | 0.479 | | | 0.048 | 0.570 | -0.315 | | | 0.436 | 0.438 | 0.523 | | | -0.047 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_3_7 | 0.138 | -0.531 | | | 0.448 | 0.384 | 0.424 | | | 0.150 | 0.148 | -0.534 | | | 0.347 | 0.377 | 0.432 | | | 0.120 |
| | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.385 | -0.586 | | | 0.319 | 0.279 | 0.190 | | | -0.514 | 0.423 | -0.588 | | | 0.345 | 0.276 | 0.187 | | | -0.570 |
| | (0.05) | (0.02) | | | (0.14) | (0.00) | (0.02) | | | (0.02) | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.808 | 0.861 | | | -0.532 | 0.686 | -0.650 | | | 0.108 | 0.759 | 0.865 | | | -0.589 | 0.686 | -0.668 | | | 0.047 |
| | (0.03) | (0.02) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) |
| educ_3_10 | 0.344 | -0.688 | | | 1.306 | 0.261 | 0.610 | | | -0.427 | 0.648 | -0.776 | | | 0.297 | 0.251 | 0.703 | | | -0.371 |
| | (0.16) | (0.08) | | | (0.46) | (0.01) | (0.09) | | | (0.06) | (0.17) | (0.09) | | | (0.50) | (0.01) | (0.10) | | | (0.06) |
| educ_3_11 | 0.243 | -0.957 | | | 0.232 | 0.361 | 0.728 | | | -0.333 | 0.094 | -0.967 | | | 0.317 | 0.343 | 0.878 | | | -0.251 |
| | (0.13) | (0.06) | | | (0.39) | (0.01) | (0.06) | | | (0.03) | (0.13) | (0.06) | | | (0.38) | (0.01) | (0.06) | | | (0.03) |
| female | -0.575 | -0.483 | | | 0.161 | -0.471 | 0.480 | | | 0.833 | -0.562 | -0.468 | | | 0.200 | -0.461 | 0.463 | | | 0.776 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.843 | -3.086 | 0.111 | -0.259 | -0.734 | 10.054 | 2.940 | -1.563 | -0.591 | 0.986 | 10.163 | -3.126 | 0.089 | -0.278 | -1.446 | 10.054 | 3.017 | | -0.6 | 0.995 |
| | (0.16) | (0.06) | (0.05) | (0.01) | (0.30) | (0.01) | (0.05) | (0.01) | (0.00) | (0.06) | (0.16) | (0.06) | (0.05) | (0.01) | (0.28) | (0.01) | (0.05) | | (0.00) | (0.06) |
| rho | 0.111 | | | | | -1.563 | | | | | 0.089 | | | | | -1.541 | | | | |
| | (0.05) | | | | | (0.01) | | | | | (0.05) | | | | | (0.01) | | | | |
| ln(sigma) | -0.259 | | | | | -0.591 | | | | | -0.278 | | | | | -0.600 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 582,947 | 582,947 | 582,947 | 582,947 | 30,839 | 582,947 | 582,947 | 582,947 | 582,947 | 552,108 | 617,044 | 617,044 | 617,044 | 617,044 | 32,392 | 617,044 | 617,044 | 617,044 | 617,044 | 584,652 |
| R-squared | | | | | 0.019 | | | | | 0.069 | | | | | 0.020 | | | | | 0.066 |

Notes: (i) Models estimated using Maximum likelihood method.

(ii) sigma is the variance of the wage/self-employment income equation error term.

(iii) rho is the correlation coeff between the wage/SE income equation and the selection eq errors.

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | 0.024 | | | 0.012 | | -0.014 | | | -0.055 | | 0.024 | | | 0.029 | | -0.011 | | | -0.055 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.103 | | | -0.285 | | 0.285 | | | -0.202 | | -0.104 | | | -0.161 | | 0.289 | | | -0.198 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.044 | | | -0.148 | | 0.067 | | | -0.115 | | 0.033 | | | -0.169 | | 0.078 | | | -0.102 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.094 | 0.076 | | | -0.048 | 0.099 | -0.092 | | | -0.191 | 0.093 | 0.078 | | | -0.065 | 0.100 | -0.097 | | | -0.195 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.009 | 0.022 | | | -0.030 | -0.102 | 0.010 | | | 0.079 | 0.029 | 0.032 | | | 0.053 | -0.096 | -0.012 | | | 0.068 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.030 | -0.097 | | | -0.078 | -0.038 | 0.103 | | | 0.018 | 0.021 | -0.090 | | | -0.102 | -0.039 | 0.091 | | | 0.011 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.047 | -0.121 | | | -0.046 | -0.088 | 0.028 | | | -0.086 | -0.019 | -0.118 | | | -0.118 | -0.083 | 0.025 | | | -0.096 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | 0.026 | -0.087 | | | 0.091 | -0.079 | -0.022 | | | -0.034 | 0.017 | -0.072 | | | 0.045 | -0.079 | -0.035 | | | -0.042 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.053 | 0.122 | | | 0.169 | -0.100 | 0.053 | | | 0.205 | -0.062 | 0.095 | | | 0.082 | -0.082 | 0.053 | | | 0.185 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.023 | -0.076 | | | 0.162 | 0.062 | 0.078 | | | 0.029 | 0.029 | -0.091 | | | 0.167 | 0.060 | 0.094 | | | 0.029 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_5 | -0.015 | -0.021 | | | 0.005 | 0.082 | -0.062 | | | -0.178 | -0.002 | -0.031 | | | -0.028 | 0.082 | -0.052 | | | -0.167 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_6 | -0.083 | -0.291 | | | 0.094 | -0.021 | 0.096 | | | -0.203 | -0.114 | -0.307 | | | -0.121 | -0.015 | 0.105 | | | -0.235 |
| | (0.03) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | -0.025 | 0.161 | | | 0.110 | 0.013 | -0.174 | | | -0.019 | 0.019 | 0.149 | | | 0.051 | 0.015 | -0.164 | | | -0.051 |
| | (0.04) | (0.03) | | | (0.11) | (0.01) | (0.02) | | | (0.04) | (0.04) | (0.03) | | | (0.11) | (0.01) | (0.02) | | | (0.04) |
| educ_1_8 | -0.086 | -0.184 | | | 0.057 | 0.151 | 0.027 | | | -0.228 | -0.069 | -0.166 | | | -0.024 | 0.152 | 0.025 | | | -0.193 |
| | (0.04) | (0.02) | | | (0.11) | (0.01) | (0.02) | | | (0.03) | (0.04) | (0.02) | | | (0.11) | (0.01) | (0.02) | | | (0.03) |
| educ_2_2 | 0.078 | -0.153 | | | 0.198 | 0.155 | 0.297 | | | 0.159 | 0.064 | -0.162 | | | 0.095 | 0.158 | 0.311 | | | 0.158 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | 0.014 | 0.463 | | | 0.023 | 0.132 | -0.173 | | | 0.375 | -0.092 | 0.464 | | | 0.107 | 0.132 | -0.215 | | | 0.365 |
| | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.05) | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.05) |
| educ_2_4 | 0.087 | -0.048 | | | -0.111 | 0.251 | 0.062 | | | -0.192 | 0.114 | -0.062 | | | -0.213 | 0.240 | 0.080 | | | -0.158 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.009 | -0.176 | | | -0.220 | 0.199 | 0.014 | | | -0.273 | 0.033 | -0.178 | | | -0.288 | 0.198 | 0.016 | | | -0.273 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.177 | -0.041 | | | 0.075 | 0.089 | -0.089 | | | -0.346 | 0.207 | -0.087 | | | -0.067 | 0.075 | -0.051 | | | -0.304 |
| | (0.06) | (0.04) | | | (0.19) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.04) | | | (0.19) | (0.01) | (0.03) | | | (0.03) |
| educ_2_7 | -0.020 | -0.449 | | | -0.231 | -0.010 | 0.235 | | | -0.098 | -0.365 | -0.277 | | | 0.655 | 0.013 | 0.105 | | | -0.114 |
| | (0.12) | (0.07) | | | (0.37) | (0.01) | (0.06) | | | (0.06) | (0.10) | (0.06) | | | (0.29) | (0.01) | (0.05) | | | (0.06) |
| educ_2_8 | 0.078 | 0.288 | | | -0.055 | 0.272 | -0.169 | | | -0.002 | 0.087 | 0.275 | | | -0.150 | 0.263 | -0.154 | | | 0.018 |
| | (0.03) | (0.02) | | | (0.07) | (0.01) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.01) | (0.02) | | | (0.02) |
| educ_3_2 | -0.145 | -0.377 | | | 1.209 | 0.114 | 0.658 | | | 0.739 | -0.141 | -0.431 | | | 1.119 | 0.122 | 0.717 | | | 0.720 |
| | (0.14) | (0.08) | | | (0.42) | (0.02) | (0.08) | | | (0.07) | (0.15) | (0.08) | | | (0.44) | (0.01) | (0.08) | | | (0.06) |
| educ_3_3 | -0.105 | -0.230 | | | 0.565 | 0.064 | 0.408 | | | 0.737 | -0.128 | -0.220 | | | 0.554 | 0.059 | 0.422 | | | 0.765 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_3_4 | 0.019 | -0.673 | | | 0.291 | 0.207 | 0.246 | | | -0.393 | -0.037 | -0.659 | | | 0.048 | 0.204 | 0.264 | | | -0.353 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.944 | 0.056 | | | 0.294 | 0.223 | 0.272 | | | 0.645 | 0.875 | 0.031 | | | 0.417 | 0.208 | 0.293 | | | 0.689 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.512 | -0.314 | | | 0.549 | 0.438 | 0.508 | | | -0.037 | 0.407 | -0.341 | | | 0.409 | 0.438 | 0.525 | | | -0.026 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_3_7 | 0.159 | -0.536 | | | 0.530 | 0.382 | 0.448 | | | 0.127 | 0.141 | -0.546 | | | 0.349 | 0.392 | 0.476 | | | 0.118 |
| | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.409 | -0.569 | | | 0.191 | 0.266 | 0.192 | | | -0.508 | 0.435 | -0.621 | | | 0.031 | 0.260 | 0.247 | | | -0.497 |
| | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.773 | 0.886 | | | -0.550 | 0.673 | -0.690 | | | 0.099 | 0.770 | 0.845 | | | -0.612 | 0.645 | -0.594 | | | 0.398 |
| | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) |
| educ_3_10 | 0.435 | -0.665 | | | 0.378 | 0.256 | 0.571 | | | -0.347 | 0.236 | -0.654 | | | 0.258 | 0.256 | 0.623 | | | -0.269 |
| | (0.15) | (0.08) | | | (0.44) | (0.01) | (0.08) | | | (0.06) | (0.15) | (0.08) | | | (0.43) | (0.01) | (0.08) | | | (0.06) |
| educ_3_11 | 0.122 | -0.910 | | | -0.064 | 0.325 | 0.803 | | | -0.212 | -0.021 | -0.843 | | | 0.058 | 0.330 | 0.858 | | | -0.066 |
| | (0.12) | (0.05) | | | (0.34) | (0.01) | (0.05) | | | (0.03) | (0.11) | (0.05) | | | (0.31) | (0.01) | (0.05) | | | (0.03) |
| female | -0.573 | -0.470 | | | 0.142 | -0.452 | 0.468 | | | 0.717 | -0.561 | -0.461 | | | 0.303 | -0.439 | 0.462 | | | 0.665 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.865 | -3.056 | 0.105 | -0.267 | -0.808 | 10.089 | 3.020 | -1.485 | -0.632 | 0.981 | 9.938 | -3.129 | 0.117 | -0.243 | -0.558 | 10.113 | 3.161 | -1.422 | -0.656 | 0.988 |
| | (0.15) | (0.06) | (0.05) | (0.01) | (0.27) | (0.01) | (0.05) | 0 | 0 | (0.05) | (0.15) | (0.06) | (0.05) | -0.01 | (0.28) | (0.01) | (0.05) | 0 | (0.00) | (0.05) |
| rho | 0.105 | | | | | -1.485 | | | | | 0.117 | | | | | -1.422 | | | | |
| | (0.05) | | | | | (0.00) | | | | | (0.05) | | | | | (0.00) | | | | |
| ln(sigma) | -0.267 | | | | | -0.632 | | | | | -0.243 | | | | | -0.656 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 643,183 | 643,183 | 643,183 | 643,183 | 33,226 | 643,183 | 643,183 | 643,183 | 643,183 | 609,956 | 654,810 | 654,810 | 654,810 | 654,810 | 32,078 | 654,810 | 654,810 | 654,810 | 654,810 | 622,732 |
| R-squared | | | | | 0.019 | | | | | 0.062 | | | | | 0.021 | | | | | 0.057 |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | 0.023 | | | -0.080 | | -0.010 | | | -0.049 | | 0.013 | | | -0.064 | | -0.004 | | | -0.055 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.110 | | | -0.209 | | 0.288 | | | -0.189 | | -0.106 | | | -0.173 | | 0.286 | | | -0.188 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.021 | | | -0.137 | | 0.080 | | | -0.078 | | 0.023 | | | -0.132 | | 0.080 | | | -0.068 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.099 | 0.080 | | | -0.054 | 0.100 | -0.101 | | | -0.190 | 0.098 | 0.082 | | | -0.066 | 0.098 | -0.104 | | | -0.190 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.053 | 0.035 | | | -0.045 | -0.091 | -0.011 | | | 0.062 | 0.050 | 0.029 | | | -0.084 | -0.093 | -0.007 | | | 0.073 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.016 | -0.094 | | | -0.096 | -0.042 | 0.100 | | | 0.026 | 0.013 | -0.096 | | | -0.088 | -0.039 | 0.100 | | | 0.035 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.070 | -0.124 | | | 0.047 | -0.090 | 0.039 | | | -0.090 | -0.072 | -0.141 | | | 0.031 | -0.096 | 0.057 | | | -0.069 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.000 | -0.086 | | | 0.114 | -0.086 | -0.022 | | | -0.039 | -0.068 | -0.094 | | | 0.111 | -0.088 | -0.012 | | | -0.058 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.033 | 0.102 | | | 0.357 | -0.081 | 0.032 | | | 0.152 | -0.057 | 0.108 | | | 0.299 | -0.074 | -0.004 | | | 0.197 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.053 | -0.097 | | | 0.094 | 0.057 | 0.097 | | | 0.038 | 0.040 | -0.104 | | | 0.117 | 0.058 | 0.102 | | | 0.029 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_5 | 0.022 | -0.031 | | | -0.161 | 0.086 | -0.049 | | | -0.137 | 0.010 | -0.035 | | | -0.073 | 0.088 | -0.040 | | | -0.118 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_6 | -0.092 | -0.284 | | | -0.060 | -0.031 | 0.117 | | | -0.217 | -0.056 | -0.278 | | | -0.084 | -0.035 | 0.126 | | | -0.168 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | 0.051 | 0.163 | | | -0.078 | 0.008 | -0.179 | | | -0.079 | 0.028 | 0.154 | | | 0.121 | 0.010 | -0.177 | | | -0.131 |
| | (0.04) | (0.03) | | | (0.11) | (0.01) | (0.02) | | | (0.04) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.04) |
| educ_1_8 | -0.104 | -0.161 | | | 0.116 | 0.152 | 0.029 | | | -0.215 | -0.124 | -0.157 | | | -0.027 | 0.154 | 0.029 | | | -0.238 |
| | (0.04) | (0.02) | | | (0.12) | (0.01) | (0.02) | | | (0.03) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.02) | | | (0.03) |
| educ_2_2 | 0.098 | -0.160 | | | 0.098 | 0.147 | 0.311 | | | 0.211 | 0.059 | -0.169 | | | 0.098 | 0.141 | 0.330 | | | 0.238 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.108 | 0.423 | | | 0.294 | 0.133 | -0.189 | | | 0.395 | -0.111 | 0.437 | | | 0.383 | 0.149 | -0.255 | | | 0.316 |
| | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.05) | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.05) |
| educ_2_4 | 0.106 | -0.061 | | | -0.081 | 0.232 | 0.087 | | | -0.118 | 0.129 | -0.069 | | | -0.138 | 0.223 | 0.095 | | | -0.100 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.042 | -0.175 | | | -0.260 | 0.205 | 0.016 | | | -0.271 | 0.044 | -0.173 | | | -0.271 | 0.205 | 0.030 | | | -0.222 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | | Probit | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.198 | -0.175 | | | -0.022 | 0.053 | -0.005 | | | -0.406 | 0.158 | -0.280 | | | -0.161 | 0.047 | 0.065 | | | -0.430 |
| | (0.06) | (0.03) | | | (0.18) | (0.01) | (0.03) | | | (0.03) | (0.06) | (0.03) | | | (0.18) | (0.01) | (0.03) | | | (0.03) |
| educ_2_7 | -0.062 | -0.267 | | | 0.450 | 0.023 | 0.097 | | | -0.101 | -0.029 | -0.236 | | | 0.094 | 0.024 | 0.068 | | | -0.041 |
| | (0.09) | (0.05) | | | (0.28) | (0.01) | (0.05) | | | (0.05) | (0.09) | (0.05) | | | (0.26) | (0.01) | (0.05) | | | (0.05) |
| educ_2_8 | 0.122 | 0.284 | | | -0.112 | 0.260 | -0.184 | | | -0.008 | 0.161 | 0.295 | | | -0.052 | 0.245 | -0.209 | | | -0.002 |
| | (0.03) | (0.02) | | | (0.07) | (0.01) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | 0.131 | -0.481 | | | 0.484 | 0.144 | 0.622 | | | 0.623 | -0.142 | -0.468 | | | 1.092 | 0.125 | 0.685 | | | 0.703 |
| | (0.16) | (0.08) | | | (0.47) | (0.01) | (0.08) | | | (0.06) | (0.16) | (0.08) | | | (0.47) | (0.01) | (0.08) | | | (0.06) |
| educ_3_3 | -0.112 | -0.193 | | | 0.635 | 0.047 | 0.414 | | | 0.792 | -0.116 | -0.185 | | | 0.567 | 0.042 | 0.415 | | | 0.800 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_3_4 | -0.009 | -0.620 | | | 0.216 | 0.190 | 0.264 | | | -0.330 | 0.056 | -0.594 | | | 0.162 | 0.189 | 0.255 | | | -0.340 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.860 | 0.036 | | | 0.493 | 0.207 | 0.269 | | | 0.692 | 0.828 | 0.055 | | | 0.545 | 0.210 | 0.238 | | | 0.657 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.449 | -0.355 | | | 0.535 | 0.440 | 0.544 | | | 0.013 | 0.416 | -0.359 | | | 0.443 | 0.446 | 0.545 | | | 0.048 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.152 | -0.544 | | | 0.494 | 0.403 | 0.478 | | | 0.132 | 0.169 | -0.539 | | | 0.347 | 0.419 | 0.472 | | | 0.138 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.403 | -0.610 | | | -0.040 | 0.251 | 0.257 | | | -0.497 | 0.334 | -0.582 | | | 0.311 | 0.237 | 0.274 | | | -0.445 |
| | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.806 | 0.861 | | | -0.560 | 0.681 | -0.570 | | | 0.659 | 0.809 | 0.897 | | | -0.624 | 0.666 | -0.623 | | | 0.669 |
| | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) |
| educ_3_10 | 0.314 | -0.667 | | | 0.861 | 0.230 | 0.570 | | | -0.183 | 0.377 | -0.625 | | | 0.576 | 0.228 | 0.557 | | | -0.088 |
| | (0.15) | (0.08) | | | (0.45) | (0.01) | (0.08) | | | (0.06) | (0.14) | (0.08) | | | (0.43) | (0.01) | (0.08) | | | (0.05) |
| educ_3_11 | 0.119 | -0.872 | | | 0.276 | 0.337 | 0.883 | | | -0.097 | 0.103 | -0.841 | | | 0.615 | 0.347 | 0.841 | | | -0.113 |
| | (0.11) | (0.05) | | | (0.32) | (0.01) | (0.06) | | | (0.03) | (0.11) | (0.05) | | | (0.31) | (0.01) | (0.05) | | | (0.03) |
| female | -0.575 | -0.455 | | | 0.270 | -0.434 | 0.452 | | | 0.602 | -0.560 | -0.444 | | | 0.283 | -0.424 | 0.441 | | | 0.534 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.838 | -3.178 | 0.153 | -0.263 | -0.765 | 10.181 | 3.262 | -1.347 | -0.675 | 0.786 | 9.934 | -3.273 | 0.146 | -0.259 | -0.511 | 10.292 | 3.374 | -1.291 | -0.696 | 0.724 |
| | (0.15) | (0.06) | -0.04 | (0.01) | (0.28) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) | (0.16) | (0.06) | (0.05) | (0.01) | (0.29) | (0.01) | (0.05) | 0 | 0 | (0.05) |
| rho | 0.153 | | | | | -1.347 | | | | | 0.146 | | | | | -1.291 | | | | |
| | (0.04) | | | | | (0.00) | | | | | (0.05) | | | | | (0.00) | | | | |
| ln(sigma) | -0.263 | | | | | -0.675 | | | | | -0.259 | | | | | -0.696 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 664,020 | 664,020 | 664,020 | 664,020 | 31,672 | 664,020 | 664,020 | 664,020 | 664,020 | 632,347 | 671,231 | 671,231 | 671,231 | 671,231 | 30,584 | 671,231 | 671,231 | 671,231 | 671,231 | 640,645 |
| R-squared | | | | | 0.023 | | | | | 0.051 | | | | | 0.024 | | | | | 0.046 |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SEhet | WE | WE | WE | WE | WE het |
| kids | | 0.006 | | | -0.025 | | -0.001 | | | -0.053 | | 0.007 | | | -0.076 | | 0.000 | | | -0.057 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.104 | | | -0.205 | | 0.276 | | | -0.168 | | -0.093 | | | -0.146 | | 0.279 | | | -0.171 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.012 | | | -0.165 | | 0.090 | | | -0.054 | | 0.008 | | | -0.101 | | 0.097 | | | -0.042 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.104 | 0.081 | | | -0.078 | 0.099 | -0.105 | | | -0.206 | 0.110 | 0.076 | | | -0.077 | 0.098 | -0.102 | | | -0.211 |
| | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.051 | 0.023 | | | -0.074 | -0.104 | -0.001 | | | 0.093 | 0.036 | 0.010 | | | -0.014 | -0.107 | -0.001 | | | 0.084 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.001 | -0.104 | | | -0.138 | -0.044 | 0.100 | | | 0.024 | -0.006 | -0.118 | | | -0.111 | -0.054 | 0.111 | | | 0.017 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.089 | -0.147 | | | -0.036 | -0.103 | 0.064 | | | -0.074 | -0.082 | -0.148 | | | -0.115 | -0.106 | 0.062 | | | -0.071 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.063 | -0.108 | | | 0.024 | -0.096 | 0.011 | | | -0.038 | -0.070 | -0.127 | | | 0.043 | -0.095 | 0.015 | | | -0.064 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.110 | 0.110 | | | 0.300 | -0.077 | 0.002 | | | 0.185 | -0.184 | 0.136 | | | 0.197 | -0.068 | -0.036 | | | 0.222 |
| | (0.05) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.025 | -0.120 | | | 0.127 | 0.056 | 0.116 | | | 0.045 | 0.020 | -0.134 | | | 0.139 | 0.059 | 0.126 | | | 0.036 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_1_5 | 0.018 | -0.045 | | | -0.004 | 0.083 | -0.032 | | | -0.111 | 0.009 | -0.042 | | | -0.061 | 0.082 | -0.033 | | | -0.122 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) |
| educ_1_6 | -0.068 | -0.306 | | | 0.065 | -0.036 | 0.156 | | | -0.123 | -0.048 | -0.301 | | | -0.124 | -0.042 | 0.164 | | | -0.104 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | 0.028 | 0.143 | | | 0.176 | -0.002 | -0.159 | | | -0.089 | -0.017 | 0.161 | | | 0.233 | -0.004 | -0.173 | | | -0.023 |
| | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.04) |
| educ_1_8 | 0.009 | -0.140 | | | -0.140 | 0.153 | 0.038 | | | -0.209 | 0.032 | -0.132 | | | -0.270 | 0.154 | 0.041 | | | -0.188 |
| | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.02) | | | (0.03) | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.03) |
| educ_2_2 | 0.062 | -0.183 | | | 0.111 | 0.139 | 0.351 | | | 0.266 | 0.085 | -0.192 | | | 0.121 | 0.139 | 0.366 | | | 0.284 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.086 | 0.431 | | | 0.381 | 0.125 | -0.240 | | | 0.344 | -0.070 | 0.420 | | | 0.250 | 0.137 | -0.260 | | | 0.304 |
| | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.04) |
| educ_2_4 | 0.114 | -0.097 | | | -0.073 | 0.210 | 0.133 | | | -0.078 | 0.106 | -0.108 | | | -0.031 | 0.207 | 0.146 | | | -0.057 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.038 | -0.177 | | | -0.194 | 0.200 | 0.037 | | | -0.204 | 0.067 | -0.182 | | | -0.210 | 0.194 | 0.051 | | | -0.220 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SEhet | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.129 | -0.304 | | | -0.038 | 0.060 | 0.083 | | | -0.493 | 0.092 | -0.345 | | | 0.050 | 0.058 | 0.109 | | | -0.538 |
| | (0.06) | (0.03) | | | (0.17) | (0.01) | (0.03) | | | (0.02) | (0.06) | (0.03) | | | (0.16) | (0.00) | (0.03) | | | (0.02) |
| educ_2_7 | 0.142 | -0.126 | | | 0.124 | 0.039 | -0.005 | | | -0.096 | 0.141 | -0.085 | | | -0.094 | 0.051 | -0.009 | | | 0.010 |
| | (0.07) | (0.05) | | | (0.23) | (0.01) | (0.04) | | | (0.05) | (0.07) | (0.04) | | | (0.21) | (0.01) | (0.04) | | | (0.05) |
| educ_2_8 | 0.205 | 0.297 | | | -0.066 | 0.250 | -0.208 | | | -0.028 | 0.164 | 0.296 | | | 0.012 | 0.237 | -0.223 | | | -0.005 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | 0.147 | -0.453 | | | 0.806 | 0.126 | 0.647 | | | 0.720 | -0.120 | -0.391 | | | 1.027 | 0.144 | 0.614 | | | 0.583 |
| | (0.15) | (0.08) | | | (0.46) | (0.01) | (0.08) | | | (0.06) | (0.14) | (0.07) | | | (0.41) | (0.01) | (0.07) | | | (0.06) |
| educ_3_3 | -0.150 | -0.153 | | | 0.666 | 0.051 | 0.382 | | | 0.782 | -0.148 | -0.126 | | | 0.646 | 0.071 | 0.339 | | | 0.740 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | -0.017 | -0.568 | | | 0.229 | 0.188 | 0.252 | | | -0.316 | 0.010 | -0.568 | | | 0.115 | 0.197 | 0.260 | | | -0.319 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.874 | 0.049 | | | 0.545 | 0.219 | 0.246 | | | 0.634 | 0.859 | 0.049 | | | 0.653 | 0.240 | 0.221 | | | 0.613 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.404 | -0.370 | | | 0.466 | 0.454 | 0.570 | | | 0.100 | 0.467 | -0.352 | | | 0.530 | 0.464 | 0.567 | | | 0.180 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.203 | -0.578 | | | 0.300 | 0.420 | 0.529 | | | 0.155 | 0.200 | -0.572 | | | 0.455 | 0.420 | 0.556 | | | 0.207 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.414 | -0.587 | | | 0.206 | 0.238 | 0.298 | | | -0.398 | 0.314 | -0.574 | | | 0.112 | 0.244 | 0.300 | | | -0.396 |
| | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.01) | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.860 | 0.901 | | | -0.529 | 0.647 | -0.622 | | | 0.658 | 0.858 | 0.928 | | | -0.530 | 0.641 | -0.671 | | | 0.659 |
| | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) |
| educ_3_10 | 0.384 | -0.605 | | | 0.581 | 0.230 | 0.483 | | | -0.094 | 0.113 | -0.570 | | | 1.137 | 0.234 | 0.523 | | | -0.035 |
| | (0.14) | (0.07) | | | (0.43) | (0.01) | (0.07) | | | (0.05) | (0.14) | (0.07) | | | (0.40) | (0.01) | (0.07) | | | (0.05) |
| educ_3_11 | 0.012 | -0.816 | | | 0.592 | 0.363 | 0.747 | | | -0.084 | 0.206 | -0.784 | | | 0.178 | 0.361 | 0.754 | | | -0.030 |
| | (0.10) | (0.05) | | | (0.30) | (0.01) | (0.05) | | | (0.03) | (0.10) | (0.04) | | | (0.27) | (0.01) | (0.05) | | | (0.03) |
| female | -0.527 | -0.431 | | | 0.230 | -0.413 | 0.422 | | | 0.498 | -0.510 | -0.420 | | | 0.291 | -0.405 | 0.426 | | | 0.435 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.802 | -3.270 | 0.160 | -0.251 | -0.294 | 10.305 | 3.411 | -1.270 | -0.685 | 1.048 | 9.754 | -3.160 | 0.138 | -0.242 | -0.304 | 10.352 | 3.363 | -1.215 | -0.696 | 1.174 |
| | (0.16) | (0.06) | (0.04) | (0.01) | (0.30) | (0.01) | (0.05) | 0 | (0.00) | (0.05) | (0.16) | (0.06) | (0.05) | (0.01) | (0.29) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) |
| rho | 0.160 | | | | | -1.270 | | | | | 0.138 | | | | | -1.215 | | | | |
| | (0.04) | | | | | (0.00) | | | | | (0.05) | | | | | (0.00) | | | | |
| ln(sigma) | -0.251 | | | | | -0.685 | | | | | -0.242 | | | | | -0.696 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 677,851 | 677,851 | 677,851 | 677,851 | 29,633 | 677,851 | 677,851 | 677,851 | 677,851 | 648,218 | 681,648 | 681,648 | 681,648 | 681,648 | 29,615 | 681,648 | 681,648 | 681,648 | 681,648 | 652,033 |
| R-squared | | | | | 0.021 | | | | | 0.044 | | | | | 0.024 | | | | | 0.042 |

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | 0.005 | | | -0.010 | | -0.001 | | | -0.050 | | 0.004 | | | -0.042 | | 0.003 | | | -0.045 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.099 | | | -0.171 | | 0.280 | | | -0.171 | | -0.090 | | | -0.196 | | 0.267 | | | -0.172 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.008 | | | -0.148 | | 0.095 | | | -0.030 | | 0.008 | | | -0.164 | | 0.097 | | | -0.030 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.117 | 0.072 | | | -0.095 | 0.097 | -0.098 | | | -0.211 | 0.112 | 0.072 | | | -0.087 | 0.101 | -0.102 | | | -0.231 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.01) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.028 | -0.010 | | | -0.085 | -0.106 | 0.015 | | | 0.047 | 0.041 | -0.024 | | | -0.142 | -0.102 | 0.029 | | | 0.045 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | -0.024 | -0.121 | | | -0.076 | -0.056 | 0.120 | | | 0.019 | 0.000 | -0.123 | | | -0.083 | -0.052 | 0.123 | | | 0.024 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.098 | -0.165 | | | -0.038 | -0.107 | 0.081 | | | -0.081 | -0.066 | -0.176 | | | -0.065 | -0.104 | 0.093 | | | -0.091 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.089 | -0.145 | | | 0.052 | -0.102 | 0.039 | | | -0.064 | -0.062 | -0.161 | | | 0.112 | -0.098 | 0.057 | | | -0.049 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.237 | 0.116 | | | 0.644 | -0.069 | -0.024 | | | 0.248 | -0.244 | 0.118 | | | 0.518 | -0.067 | -0.027 | | | 0.206 |
| | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.078 | -0.143 | | | 0.119 | 0.062 | 0.130 | | | 0.011 | 0.061 | -0.151 | | | 0.003 | 0.055 | 0.141 | | | 0.016 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_1_5 | 0.011 | -0.042 | | | -0.070 | 0.083 | -0.031 | | | -0.109 | 0.019 | -0.040 | | | -0.103 | 0.080 | -0.028 | | | -0.112 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) |
| educ_1_6 | -0.035 | -0.293 | | | -0.223 | -0.050 | 0.164 | | | -0.119 | -0.111 | -0.281 | | | 0.077 | -0.054 | 0.158 | | | -0.117 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | 0.032 | 0.162 | | | 0.263 | 0.010 | -0.192 | | | -0.062 | 0.050 | 0.180 | | | 0.078 | 0.003 | -0.190 | | | -0.029 |
| | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) |
| educ_1_8 | -0.007 | -0.118 | | | 0.064 | 0.159 | 0.037 | | | -0.203 | 0.016 | -0.113 | | | 0.010 | 0.145 | 0.034 | | | -0.139 |
| | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.03) | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.03) |
| educ_2_2 | 0.036 | -0.173 | | | 0.142 | 0.144 | 0.342 | | | 0.276 | 0.046 | -0.172 | | | 0.136 | 0.141 | 0.333 | | | 0.273 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.091 | 0.397 | | | 0.253 | 0.115 | -0.230 | | | 0.367 | -0.042 | 0.380 | | | 0.261 | 0.105 | -0.209 | | | 0.422 |
| | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.04) |
| educ_2_4 | 0.103 | -0.125 | | | 0.025 | 0.204 | 0.164 | | | -0.043 | 0.132 | -0.145 | | | -0.034 | 0.196 | 0.182 | | | -0.043 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.060 | -0.180 | | | -0.257 | 0.195 | 0.054 | | | -0.201 | 0.068 | -0.174 | | | -0.271 | 0.196 | 0.046 | | | -0.198 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.134 | -0.332 | | | -0.045 | 0.038 | 0.134 | | | -0.446 | 0.058 | -0.340 | | | -0.025 | 0.038 | 0.144 | | | -0.426 |
| | (0.05) | (0.03) | | | (0.15) | (0.00) | (0.03) | | | (0.02) | (0.05) | (0.03) | | | (0.15) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | 0.033 | -0.089 | | | 0.222 | 0.069 | -0.010 | | | 0.029 | -0.011 | -0.095 | | | 0.055 | 0.064 | -0.008 | | | 0.015 |
| | (0.07) | (0.04) | | | (0.20) | (0.01) | (0.04) | | | (0.04) | (0.07) | (0.04) | | | (0.19) | (0.01) | (0.04) | | | (0.04) |
| educ_2_8 | 0.187 | 0.290 | | | -0.063 | 0.237 | -0.216 | | | 0.024 | 0.174 | 0.288 | | | -0.038 | 0.234 | -0.220 | | | 0.050 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | 0.082 | -0.301 | | | 0.760 | 0.174 | 0.447 | | | 0.516 | 0.159 | -0.265 | | | 0.812 | 0.185 | 0.394 | | | 0.552 |
| | (0.12) | (0.07) | | | (0.35) | (0.01) | (0.06) | | | (0.06) | (0.12) | (0.06) | | | (0.34) | (0.01) | (0.06) | | | (0.06) |
| educ_3_3 | -0.154 | -0.089 | | | 0.534 | 0.088 | 0.290 | | | 0.699 | -0.196 | -0.100 | | | 0.528 | 0.076 | 0.317 | | | 0.751 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | -0.030 | -0.538 | | | 0.258 | 0.222 | 0.238 | | | -0.334 | -0.044 | -0.542 | | | 0.382 | 0.228 | 0.231 | | | -0.328 |
| | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.01) | | | (0.01) |
| educ_3_5 | 0.899 | 0.062 | | | 0.680 | 0.270 | 0.185 | | | 0.545 | 0.769 | 0.073 | | | 0.640 | 0.286 | 0.169 | | | 0.514 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.495 | -0.347 | | | 0.526 | 0.466 | 0.571 | | | 0.240 | 0.542 | -0.361 | | | 0.546 | 0.452 | 0.585 | | | 0.247 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.219 | -0.548 | | | 0.388 | 0.426 | 0.516 | | | 0.205 | 0.181 | -0.557 | | | 0.373 | 0.413 | 0.542 | | | 0.221 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.332 | -0.581 | | | 0.261 | 0.244 | 0.327 | | | -0.329 | 0.259 | -0.587 | | | 0.192 | 0.246 | 0.344 | | | -0.332 |
| | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.906 | 0.939 | | | -0.383 | 0.645 | -0.692 | | | 0.638 | 0.911 | 0.950 | | | -0.416 | 0.643 | -0.700 | | | 0.599 |
| | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) |
| educ_3_10 | 0.121 | -0.579 | | | 0.457 | 0.232 | 0.516 | | | -0.052 | 0.119 | -0.613 | | | 0.585 | 0.223 | 0.580 | | | 0.021 |
| | (0.14) | (0.07) | | | (0.40) | (0.01) | (0.07) | | | (0.05) | (0.14) | (0.07) | | | (0.41) | (0.01) | (0.07) | | | (0.05) |
| educ_3_11 | 0.003 | -0.736 | | | 0.997 | 0.380 | 0.698 | | | 0.011 | 0.010 | -0.746 | | | 0.369 | 0.391 | 0.672 | | | 0.058 |
| | (0.09) | (0.04) | | | (0.25) | (0.01) | (0.04) | | | (0.03) | (0.09) | (0.04) | | | (0.25) | (0.01) | (0.04) | | | (0.03) |
| female | -0.504 | -0.420 | | | 0.240 | -0.400 | 0.422 | | | 0.391 | -0.471 | -0.417 | | | 0.257 | -0.388 | 0.405 | | | 0.339 |
| | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.631 | -3.053 | 0.144 | -0.233 | 0.112 | 10.415 | 3.271 | -1.201 | -0.701 | 1.165 | 9.806 | -3.031 | 0.120 | -0.235 | -0.068 | 10.381 | 3.337 | -1.210 | -0.699 | 1.619 |
| | (0.15) | (0.06) | (0.04) | (0.01) | (0.28) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) | (0.15) | (0.06) | (0.05) | (0.01) | (0.29) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) |
| rho | 0.144 | | | | | -1.201 | | | | | 0.120 | | | | | -1.210 | | | | |
| | (0.04) | | | | | (0.00) | | | | | (0.05) | | | | | (0.00) | | | | |
| ln(sigma) | -0.233 | | | | | -0.701 | | | | | -0.235 | | | | | -0.699 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 683,816 | 683,816 | 683,816 | 683,816 | 29,812 | 683,816 | 683,816 | 683,816 | 683,816 | 654,002 | 685,711 | 685,711 | 685,711 | 685,711 | 29,819 | 685,711 | 685,711 | 685,711 | 685,711 | 655,891 |
| R-squared | | | | | 0.024 | | | | | 0.039 | | | | | 0.025 | | | | | 0.040 |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | -0.006 | | | -0.046 | | 0.016 | | | -0.037 | | -0.010 | | | -0.036 | | 0.018 | | | -0.034 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.082 | | | -0.224 | | 0.257 | | | -0.191 | | -0.094 | | | -0.273 | | 0.257 | | | -0.204 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.007 | | | -0.094 | | 0.097 | | | -0.052 | | 0.006 | | | -0.113 | | 0.098 | | | -0.057 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.123 | 0.064 | | | -0.111 | 0.106 | -0.103 | | | -0.263 | 0.127 | 0.063 | | | -0.099 | 0.113 | -0.110 | | | -0.286 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.003 | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.003 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.039 | -0.025 | | | -0.101 | -0.100 | 0.037 | | | 0.071 | 0.023 | -0.037 | | | -0.131 | -0.101 | 0.041 | | | 0.074 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.010 | -0.129 | | | -0.098 | -0.049 | 0.133 | | | 0.046 | -0.004 | -0.131 | | | -0.050 | -0.049 | 0.131 | | | 0.042 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.082 | -0.188 | | | 0.037 | -0.097 | 0.111 | | | -0.072 | -0.084 | -0.203 | | | 0.003 | -0.098 | 0.121 | | | -0.076 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.022 | -0.179 | | | 0.035 | -0.088 | 0.070 | | | -0.058 | -0.064 | -0.186 | | | 0.082 | -0.088 | 0.082 | | | -0.060 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.200 | 0.112 | | | 0.401 | -0.063 | -0.026 | | | 0.211 | -0.288 | 0.093 | | | 0.609 | -0.068 | -0.030 | | | 0.196 |
| | (0.06) | (0.04) | | | (0.17) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.04) | | | (0.18) | (0.01) | (0.03) | | | (0.04) |
| educ_1_4 | 0.050 | -0.157 | | | -0.002 | 0.052 | 0.143 | | | 0.030 | 0.025 | -0.156 | | | 0.115 | 0.054 | 0.148 | | | 0.020 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.01) | | | (0.02) |
| educ_1_5 | 0.024 | -0.039 | | | -0.060 | 0.079 | -0.031 | | | -0.105 | 0.009 | -0.034 | | | -0.078 | 0.074 | -0.038 | | | -0.108 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) |
| educ_1_6 | -0.066 | -0.271 | | | -0.100 | -0.051 | 0.143 | | | -0.117 | -0.085 | -0.276 | | | 0.008 | -0.055 | 0.142 | | | -0.152 |
| | (0.04) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | -0.032 | 0.204 | | | 0.054 | 0.001 | -0.203 | | | 0.029 | -0.069 | 0.189 | | | 0.047 | -0.001 | -0.209 | | | -0.020 |
| | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) |
| educ_1_8 | -0.016 | -0.115 | | | 0.138 | 0.142 | 0.040 | | | -0.171 | -0.068 | -0.097 | | | 0.075 | 0.132 | 0.029 | | | -0.180 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.03) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) |
| educ_2_2 | 0.024 | -0.158 | | | 0.260 | 0.147 | 0.305 | | | 0.240 | 0.036 | -0.150 | | | 0.213 | 0.149 | 0.292 | | | 0.188 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.094 | 0.344 | | | 0.236 | 0.098 | -0.189 | | | 0.306 | -0.060 | 0.377 | | | 0.332 | 0.091 | -0.222 | | | 0.326 |
| | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) |
| educ_2_4 | 0.073 | -0.142 | | | -0.008 | 0.198 | 0.165 | | | -0.073 | 0.089 | -0.142 | | | 0.037 | 0.197 | 0.167 | | | -0.091 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.062 | -0.166 | | | -0.218 | 0.199 | 0.036 | | | -0.189 | 0.075 | -0.154 | | | -0.278 | 0.198 | 0.020 | | | -0.189 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.041 | -0.349 | | | 0.030 | 0.049 | 0.148 | | | -0.451 | 0.085 | -0.376 | | | 0.163 | 0.046 | 0.159 | | | -0.463 |
| | (0.05) | (0.03) | | | (0.14) | (0.00) | (0.02) | | | (0.02) | (0.05) | (0.02) | | | (0.14) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | -0.050 | -0.035 | | | 0.298 | 0.074 | -0.057 | | | -0.017 | 0.070 | 0.020 | | | -0.080 | 0.084 | -0.108 | | | -0.079 |
| | (0.06) | (0.04) | | | (0.18) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.04) | | | (0.17) | (0.01) | (0.03) | | | (0.04) |
| educ_2_8 | 0.165 | 0.292 | | | -0.060 | 0.240 | -0.214 | | | 0.050 | 0.196 | 0.312 | | | -0.149 | 0.233 | -0.251 | | | 0.021 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | -0.263 | -0.261 | | | 1.233 | 0.175 | 0.388 | | | 0.552 | -0.067 | -0.286 | | | 0.862 | 0.193 | 0.389 | | | 0.399 |
| | (0.11) | (0.06) | | | (0.33) | (0.01) | (0.06) | | | (0.05) | (0.12) | (0.06) | | | (0.33) | (0.01) | (0.06) | | | (0.05) |
| educ_3_3 | -0.187 | -0.062 | | | 0.528 | 0.099 | 0.266 | | | 0.692 | -0.201 | -0.018 | | | 0.597 | 0.121 | 0.183 | | | 0.561 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | -0.017 | -0.529 | | | 0.352 | 0.241 | 0.205 | | | -0.358 | -0.073 | -0.533 | | | 0.435 | 0.232 | 0.214 | | | -0.375 |
| | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.01) | | | (0.01) | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.01) | | | (0.01) |
| educ_3_5 | 0.761 | 0.064 | | | 0.652 | 0.301 | 0.168 | | | 0.431 | 0.721 | 0.078 | | | 0.664 | 0.288 | 0.157 | | | 0.415 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_6 | 0.477 | -0.339 | | | 0.651 | 0.442 | 0.543 | | | 0.208 | 0.523 | -0.315 | | | 0.704 | 0.431 | 0.560 | | | 0.237 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.148 | -0.543 | | | 0.363 | 0.403 | 0.531 | | | 0.203 | 0.057 | -0.516 | | | 0.522 | 0.386 | 0.529 | | | 0.213 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.196 | -0.586 | | | 0.270 | 0.263 | 0.333 | | | -0.336 | 0.127 | -0.572 | | | 0.179 | 0.255 | 0.341 | | | -0.329 |
| | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.960 | 0.943 | | | -0.519 | 0.682 | -0.657 | | | 0.675 | 0.953 | 0.982 | | | -0.466 | 0.691 | -0.733 | | | 0.552 |
| | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.03) | (0.03) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.02) |
| educ_3_10 | 0.210 | -0.454 | | | 0.104 | 0.252 | 0.379 | | | -0.075 | 0.126 | -0.478 | | | -0.067 | 0.233 | 0.434 | | | -0.032 |
| | (0.12) | (0.06) | | | (0.34) | (0.01) | (0.06) | | | (0.05) | (0.12) | (0.06) | | | (0.35) | (0.01) | (0.06) | | | (0.05) |
| educ_3_11 | 0.122 | -0.703 | | | 0.504 | 0.413 | 0.608 | | | -0.015 | 0.112 | -0.689 | | | 0.300 | 0.396 | 0.601 | | | -0.096 |
| | (0.08) | (0.04) | | | (0.23) | (0.01) | (0.04) | | | (0.03) | (0.08) | (0.04) | | | (0.22) | (0.01) | (0.04) | | | (0.03) |
| female | -0.434 | -0.414 | | | 0.202 | -0.371 | 0.385 | | | 0.288 | -0.442 | -0.415 | | | 0.116 | -0.365 | 0.382 | | | 0.264 |
| | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.531 | -2.864 | 0.127 | -0.221 | 0.474 | 10.256 | 3.351 | -1.246 | -0.689 | 2.407 | 9.439 | -2.822 | 0.155 | -0.220 | 0.288 | 10.142 | 3.509 | -1.215 | -0.688 | 2.960 |
| | (0.15) | (0.06) | (0.05) | (0.01) | (0.29) | (0.01) | (0.05) | (0.01) | (0.00) | (0.05) | (0.15) | (0.06) | (0.05) | (0.01) | (0.28) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) |
| rho | 0.127 | | | | | -1.246 | | | | | 0.155 | | | | | -1.215 | | | | |
| | (0.05) | | | | | (0.01) | | | | | (0.05) | | | | | (0.00) | | | | |
| ln(sigma) | -0.221 | | | | | -0.689 | | | | | -0.220 | | | | | -0.688 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 687,888 | 687,888 | 687,888 | 687,888 | 29,776 | 687,888 | 687,888 | 687,888 | 687,888 | 658,109 | 689,009 | 689,009 | 689,009 | 689,009 | 30,202 | 689,009 | 689,009 | 689,009 | 689,009 | 658,807 |
| R-squared | | | | | 0.027 | | | | | 0.043 | | | | | 0.028 | | | | | 0.046 |

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | -0.019 | | | -0.044 | | 0.028 | | | -0.030 | | -0.008 | | | -0.061 | | 0.016 | | | -0.035 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.093 | | | -0.277 | | 0.249 | | | -0.229 | | -0.097 | | | -0.239 | | 0.248 | | | -0.217 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | 0.001 | | | -0.107 | | 0.103 | | | -0.066 | | -0.013 | | | -0.129 | | 0.111 | | | -0.050 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.133 | 0.058 | | | -0.088 | 0.116 | -0.109 | | | -0.291 | 0.129 | 0.051 | | | -0.109 | 0.114 | -0.098 | | | -0.264 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.001 | | | 0.001 | -0.001 | 0.001 | | | 0.003 | -0.001 | -0.000 | | | 0.001 | -0.001 | 0.001 | | | 0.003 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.080 | -0.034 | | | -0.124 | -0.091 | 0.037 | | | 0.048 | 0.051 | -0.051 | | | -0.221 | -0.084 | 0.057 | | | 0.029 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | -0.005 | -0.140 | | | -0.090 | -0.045 | 0.144 | | | 0.023 | 0.008 | -0.144 | | | -0.120 | -0.031 | 0.151 | | | 0.008 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.103 | -0.204 | | | -0.053 | -0.097 | 0.130 | | | -0.080 | -0.108 | -0.212 | | | -0.077 | -0.095 | 0.152 | | | -0.091 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.086 | -0.199 | | | 0.020 | -0.089 | 0.103 | | | -0.054 | -0.097 | -0.215 | | | -0.073 | -0.084 | 0.134 | | | -0.079 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.214 | 0.096 | | | 0.673 | -0.077 | -0.026 | | | 0.208 | -0.334 | 0.098 | | | 0.784 | -0.078 | -0.039 | | | 0.239 |
| | (0.07) | (0.04) | | | (0.18) | (0.01) | (0.04) | | | (0.04) | (0.07) | (0.04) | | | (0.19) | (0.01) | (0.04) | | | (0.04) |
| educ_1_4 | 0.084 | -0.168 | | | 0.038 | 0.050 | 0.165 | | | 0.026 | 0.036 | -0.180 | | | 0.022 | 0.048 | 0.181 | | | 0.014 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) |
| educ_1_5 | 0.023 | -0.037 | | | -0.187 | 0.075 | -0.033 | | | -0.111 | 0.029 | -0.036 | | | -0.207 | 0.073 | -0.025 | | | -0.111 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_1_6 | -0.066 | -0.277 | | | -0.066 | -0.057 | 0.144 | | | -0.179 | -0.119 | -0.292 | | | 0.063 | -0.064 | 0.173 | | | -0.195 |
| | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.02) | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | 0.022 | 0.223 | | | 0.092 | 0.001 | -0.231 | | | -0.042 | -0.029 | 0.205 | | | 0.183 | -0.013 | -0.212 | | | -0.031 |
| | (0.05) | (0.03) | | | (0.14) | (0.01) | (0.03) | | | (0.05) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.05) |
| educ_1_8 | -0.007 | -0.064 | | | 0.046 | 0.128 | 0.015 | | | -0.154 | -0.039 | -0.044 | | | 0.027 | 0.119 | 0.010 | | | -0.152 |
| | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_2_2 | 0.060 | -0.132 | | | 0.203 | 0.154 | 0.256 | | | 0.206 | -0.021 | -0.143 | | | 0.348 | 0.157 | 0.260 | | | 0.198 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.052 | 0.375 | | | 0.319 | 0.087 | -0.254 | | | 0.249 | -0.085 | 0.364 | | | 0.354 | 0.080 | -0.267 | | | 0.255 |
| | (0.05) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.04) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.04) |
| educ_2_4 | 0.103 | -0.142 | | | 0.043 | 0.193 | 0.170 | | | -0.094 | 0.064 | -0.167 | | | 0.119 | 0.183 | 0.188 | | | -0.064 |
| | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_5 | 0.098 | -0.145 | | | -0.280 | 0.202 | 0.012 | | | -0.162 | 0.088 | -0.136 | | | -0.232 | 0.207 | 0.017 | | | -0.144 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.038 | -0.383 | | | 0.131 | 0.042 | 0.178 | | | -0.451 | -0.014 | -0.368 | | | -0.045 | 0.041 | 0.184 | | | -0.474 |
| | (0.05) | (0.02) | | | (0.14) | (0.00) | (0.02) | | | (0.02) | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | 0.067 | 0.038 | | | -0.084 | 0.084 | -0.118 | | | -0.075 | -0.056 | 0.053 | | | 0.315 | 0.089 | -0.128 | | | -0.045 |
| | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_2_8 | 0.199 | 0.314 | | | -0.197 | 0.224 | -0.271 | | | 0.040 | 0.165 | 0.317 | | | -0.123 | 0.221 | -0.279 | | | 0.115 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | 0.118 | -0.274 | | | 0.655 | 0.226 | 0.339 | | | 0.252 | 0.160 | -0.316 | | | 0.335 | 0.250 | 0.346 | | | 0.120 |
| | (0.12) | (0.06) | | | (0.33) | (0.01) | (0.06) | | | (0.05) | (0.12) | (0.07) | | | (0.36) | (0.01) | (0.06) | | | (0.05) |
| educ_3_3 | -0.185 | -0.001 | | | 0.492 | 0.125 | 0.146 | | | 0.502 | -0.219 | 0.033 | | | 0.518 | 0.125 | 0.100 | | | 0.467 |
| | (0.03) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | 0.020 | -0.516 | | | 0.338 | 0.219 | 0.222 | | | -0.348 | 0.003 | -0.515 | | | 0.458 | 0.202 | 0.257 | | | -0.372 |
| | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.01) | | | (0.01) | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.808 | 0.087 | | | 0.616 | 0.275 | 0.142 | | | 0.492 | 0.704 | 0.074 | | | 0.623 | 0.263 | 0.141 | | | 0.505 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_6 | 0.615 | -0.308 | | | 0.853 | 0.429 | 0.559 | | | 0.258 | 0.412 | -0.350 | | | 0.769 | 0.442 | 0.603 | | | 0.265 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.138 | -0.514 | | | 0.400 | 0.384 | 0.537 | | | 0.206 | 0.129 | -0.524 | | | 0.412 | 0.407 | 0.543 | | | 0.165 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) |
| educ_3_8 | 0.193 | -0.552 | | | 0.188 | 0.243 | 0.321 | | | -0.315 | 0.077 | -0.573 | | | 0.192 | 0.228 | 0.368 | | | -0.284 |
| | (0.05) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 1.006 | 1.016 | | | -0.524 | 0.704 | -0.818 | | | 0.469 | 0.923 | 0.979 | | | -0.469 | 0.657 | -0.804 | | | 0.520 |
| | (0.04) | (0.01) | | | (0.05) | (0.01) | (0.01) | | | (0.02) | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) |
| educ_3_10 | 0.125 | -0.515 | | | 0.489 | 0.201 | 0.487 | | | 0.050 | 0.039 | -0.516 | | | 0.276 | 0.210 | 0.538 | | | 0.049 |
| | (0.13) | (0.06) | | | (0.37) | (0.01) | (0.06) | | | (0.05) | (0.13) | (0.07) | | | (0.37) | (0.01) | (0.07) | | | (0.05) |
| educ_3_11 | 0.033 | -0.664 | | | 0.376 | 0.402 | 0.567 | | | -0.103 | 0.112 | -0.638 | | | 0.390 | 0.420 | 0.580 | | | 0.019 |
| | (0.08) | (0.04) | | | (0.22) | (0.01) | (0.04) | | | (0.03) | (0.08) | (0.04) | | | (0.21) | (0.01) | (0.04) | | | (0.03) |
| female | -0.438 | -0.415 | | | 0.115 | -0.361 | 0.380 | | | 0.205 | -0.419 | -0.402 | | | 0.076 | -0.357 | 0.373 | | | 0.129 |
| | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.289 | -2.687 | 0.166 | -0.168 | 0.090 | 10.088 | 3.501 | -1.151 | -0.691 | 3.112 | 9.504 | -2.557 | 0.161 | -0.214 | 0.472 | 10.195 | 3.318 | -1.038 | -0.712 | 2.520 |
| | (0.15) | (0.05) | (0.05) | (0.01) | (0.28) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) | (0.14) | (0.06) | (0.04) | (0.01) | (0.28) | (0.01) | (0.05) | (0.00) | (0.00) | (0.05) |
| rho | 0.166 | | | | | -1.151 | | | | | 0.161 | | | | | -1.038 | | | | |
| | (0.05) | | | | | (0.00) | | | | | (0.04) | | | | | (0.00) | | | | |
| ln(sigma) | -0.168 | | | | | -0.691 | | | | | -0.214 | | | | | -0.712 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 690,316 | 690,316 | 690,316 | 690,316 | 30,638 | 690,316 | 690,316 | 690,316 | 690,316 | 659,678 | 690,842 | 690,842 | 690,842 | 690,842 | 28,977 | 690,842 | 690,842 | 690,842 | 690,842 | 661,864 |
| R-squared | | | | | 0.028 | | | | | 0.046 | | | | | 0.029 | | | | | 0.038 |

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | -0.004 | | | -0.044 | | 0.019 | | | -0.038 | | -0.004 | | | -0.036 | | 0.020 | | | -0.047 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.103 | | | -0.233 | | 0.250 | | | -0.209 | | -0.112 | | | -0.278 | | 0.249 | | | -0.207 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | -0.016 | | | -0.154 | | 0.114 | | | -0.038 | | -0.028 | | | -0.170 | | 0.119 | | | -0.043 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.124 | 0.050 | | | -0.101 | 0.107 | -0.092 | | | -0.231 | 0.119 | 0.048 | | | -0.077 | 0.099 | -0.079 | | | -0.186 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.000 | | | 0.001 | -0.001 | 0.001 | | | 0.003 | -0.001 | -0.000 | | | 0.001 | -0.001 | 0.001 | | | 0.002 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.046 | -0.049 | | | -0.166 | -0.068 | 0.056 | | | 0.010 | 0.080 | -0.046 | | | -0.139 | -0.060 | 0.060 | | | 0.010 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.001 | -0.148 | | | -0.103 | -0.021 | 0.157 | | | 0.019 | 0.018 | -0.150 | | | -0.095 | -0.011 | 0.155 | | | 0.010 |
| | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.03) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.109 | -0.220 | | | -0.098 | -0.090 | 0.168 | | | -0.087 | -0.118 | -0.216 | | | -0.138 | -0.086 | 0.164 | | | -0.097 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.099 | -0.232 | | | -0.026 | -0.078 | 0.160 | | | -0.088 | -0.132 | -0.236 | | | -0.033 | -0.075 | 0.172 | | | -0.096 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.324 | 0.106 | | | 0.756 | -0.085 | -0.046 | | | 0.164 | -0.267 | 0.100 | | | 0.592 | -0.082 | -0.055 | | | 0.187 |
| | (0.07) | (0.04) | | | (0.20) | (0.01) | (0.04) | | | (0.05) | (0.07) | (0.04) | | | (0.20) | (0.01) | (0.04) | | | (0.05) |
| educ_1_4 | 0.012 | -0.187 | | | 0.085 | 0.049 | 0.189 | | | -0.026 | 0.019 | -0.204 | | | 0.057 | 0.050 | 0.221 | | | -0.007 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) |
| educ_1_5 | -0.011 | -0.043 | | | -0.112 | 0.071 | -0.013 | | | -0.104 | -0.009 | -0.031 | | | -0.068 | 0.070 | -0.019 | | | -0.125 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_1_6 | -0.148 | -0.297 | | | 0.022 | -0.071 | 0.198 | | | -0.216 | -0.194 | -0.296 | | | 0.227 | -0.069 | 0.207 | | | -0.213 |
| | (0.05) | (0.02) | | | (0.14) | (0.00) | (0.02) | | | (0.02) | (0.05) | (0.03) | | | (0.14) | (0.00) | (0.02) | | | (0.02) |
| educ_1_7 | -0.076 | 0.239 | | | 0.233 | -0.021 | -0.236 | | | -0.001 | -0.028 | 0.265 | | | 0.038 | -0.035 | -0.251 | | | -0.053 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.05) | (0.05) | (0.04) | | | (0.15) | (0.01) | (0.03) | | | (0.05) |
| educ_1_8 | -0.094 | -0.030 | | | -0.073 | 0.126 | 0.000 | | | -0.152 | -0.062 | -0.029 | | | -0.120 | 0.123 | 0.009 | | | -0.114 |
| | (0.06) | (0.04) | | | (0.18) | (0.01) | (0.03) | | | (0.04) | (0.06) | (0.04) | | | (0.18) | (0.01) | (0.04) | | | (0.04) |
| educ_2_2 | -0.023 | -0.156 | | | 0.335 | 0.152 | 0.271 | | | 0.210 | -0.014 | -0.158 | | | 0.295 | 0.152 | 0.265 | | | 0.234 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.031 | 0.334 | | | 0.345 | 0.063 | -0.252 | | | 0.308 | -0.060 | 0.322 | | | 0.412 | 0.055 | -0.257 | | | 0.310 |
| | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.03) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.03) |
| educ_2_4 | 0.072 | -0.189 | | | 0.010 | 0.176 | 0.214 | | | -0.040 | 0.073 | -0.203 | | | 0.088 | 0.173 | 0.243 | | | 0.036 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_2_5 | 0.086 | -0.136 | | | -0.341 | 0.205 | 0.032 | | | -0.125 | 0.078 | -0.133 | | | -0.285 | 0.201 | 0.046 | | | -0.087 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 | 2008 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | 0.005 | -0.372 | | | -0.104 | 0.035 | 0.203 | | | -0.462 | 0.018 | -0.382 | | | -0.109 | 0.030 | 0.233 | | | -0.430 |
| | (0.05) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | 0.040 | 0.069 | | | -0.066 | 0.092 | -0.129 | | | -0.059 | 0.065 | 0.096 | | | -0.159 | 0.086 | -0.136 | | | -0.006 |
| | (0.05) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) |
| educ_2_8 | 0.142 | 0.306 | | | -0.061 | 0.220 | -0.274 | | | 0.162 | 0.190 | 0.297 | | | -0.211 | 0.209 | -0.266 | | | 0.142 |
| | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | -0.047 | -0.318 | | | 0.617 | 0.264 | 0.319 | | | 0.063 | 0.063 | -0.333 | | | 0.601 | 0.267 | 0.364 | | | 0.076 |
| | (0.12) | (0.07) | | | (0.37) | (0.01) | (0.07) | | | (0.06) | (0.13) | (0.07) | | | (0.38) | (0.01) | (0.07) | | | (0.06) |
| educ_3_3 | -0.242 | 0.021 | | | 0.480 | 0.127 | 0.090 | | | 0.427 | -0.213 | 0.052 | | | 0.481 | 0.135 | 0.041 | | | 0.390 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | -0.057 | -0.497 | | | 0.514 | 0.185 | 0.276 | | | -0.378 | -0.053 | -0.492 | | | 0.298 | 0.174 | 0.290 | | | -0.377 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.719 | 0.062 | | | 0.742 | 0.265 | 0.125 | | | 0.468 | 0.724 | 0.069 | | | 0.849 | 0.281 | 0.094 | | | 0.432 |
| | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.469 | -0.364 | | | 0.799 | 0.457 | 0.603 | | | 0.298 | 0.508 | -0.386 | | | 0.858 | 0.458 | 0.612 | | | 0.331 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.171 | -0.549 | | | 0.517 | 0.419 | 0.584 | | | 0.161 | 0.212 | -0.552 | | | 0.688 | 0.432 | 0.581 | | | 0.135 |
| | (0.03) | (0.01) | | | (0.08) | (0.00) | (0.01) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_8 | 0.128 | -0.536 | | | 0.167 | 0.214 | 0.359 | | | -0.278 | 0.198 | -0.514 | | | 0.104 | 0.201 | 0.361 | | | -0.230 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.884 | 0.974 | | | -0.457 | 0.622 | -0.829 | | | 0.500 | 0.928 | 0.989 | | | -0.481 | 0.598 | -0.860 | | | 0.572 |
| | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) |
| educ_3_10 | -0.169 | -0.461 | | | 0.164 | 0.226 | 0.464 | | | 0.019 | -0.002 | -0.398 | | | -0.220 | 0.239 | 0.381 | | | 0.033 |
| | (0.12) | (0.06) | | | (0.36) | (0.01) | (0.06) | | | (0.05) | (0.11) | (0.06) | | | (0.33) | (0.01) | (0.06) | | | (0.05) |
| educ_3_11 | 0.217 | -0.685 | | | 0.665 | 0.411 | 0.651 | | | 0.033 | 0.137 | -0.729 | | | 0.580 | 0.396 | 0.724 | | | 0.075 |
| | (0.08) | (0.04) | | | (0.23) | (0.01) | (0.04) | | | (0.03) | (0.08) | (0.04) | | | (0.24) | (0.01) | (0.04) | | | (0.03) |
| female | -0.411 | -0.408 | | | 0.054 | -0.353 | 0.384 | | | 0.049 | -0.408 | -0.401 | | | -0.005 | -0.340 | 0.383 | | | -0.013 |
| | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.710 | -2.552 | 0.158 | -0.228 | 0.254 | 10.404 | 3.203 | -0.944 | -0.734 | 1.790 | 9.789 | -2.509 | 0.202 | -0.239 | -0.173 | 10.652 | 2.948 | -0.878 | -0.771 | 0.765 |
| | (0.14) | (0.06) | (0.04) | (0.01) | (0.28) | (0.01) | (0.05) | (0.01) | (0.00) | (0.05) | (0.13) | (0.06) | (0.04) | (0.01) | (0.28) | (0.01) | (0.05) | (0.01) | (0.00) | (0.05) |
| rho | 0.158 | | | | | -0.944 | | | | | 0.202 | | | | | -0.878 | | | | |
| | (0.04) | | | | | (0.01) | | | | | (0.04) | | | | | (0.01) | | | | |
| ln(sigma) | -0.228 | | | | | -0.734 | | | | | -0.239 | | | | | -0.771 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 691,196 | 691,196 | 691,196 | 691,196 | 28,257 | 691,196 | 691,196 | 691,196 | 691,196 | 662,938 | 688,870 | 688,870 | 688,870 | 688,870 | 27,255 | 688,870 | 688,870 | 688,870 | 688,870 | 661,615 |
| R-squared | | | | | 0.031 | | | | | 0.031 | | | | | 0.032 | | | | | 0.023 |

| | Probit | | | | | | Probit | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | -0.004 | | | -0.056 | | 0.024 | | | -0.067 | | 0.001 | | | -0.042 | | 0.022 | | | -0.071 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.113 | | | -0.263 | | 0.244 | | | -0.200 | | -0.112 | | | -0.238 | | 0.235 | | | -0.181 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | -0.029 | | | -0.129 | | 0.117 | | | -0.038 | | -0.030 | | | -0.179 | | 0.116 | | | -0.025 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| age | 0.110 | 0.051 | | | -0.065 | 0.089 | -0.074 | | | -0.147 | 0.104 | 0.046 | | | -0.039 | 0.080 | -0.060 | | | -0.095 |
| | (0.00) | (0.00) | | | (0.01) | (0.00) | (0.00) | | | (0.00) | (0.01) | (0.00) | | | (0.02) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.000 | | | 0.001 | -0.001 | 0.001 | | | 0.002 | -0.001 | -0.000 | | | 0.000 | -0.001 | 0.001 | | | 0.001 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.065 | -0.047 | | | -0.111 | -0.051 | 0.069 | | | 0.040 | 0.018 | -0.045 | | | 0.137 | -0.051 | 0.060 | | | 0.010 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.030 | -0.160 | | | -0.086 | 0.002 | 0.174 | | | 0.027 | 0.016 | -0.159 | | | -0.076 | 0.003 | 0.173 | | | 0.032 |
| | (0.01) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.01) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.107 | -0.225 | | | -0.002 | -0.075 | 0.181 | | | -0.101 | -0.117 | -0.212 | | | -0.034 | -0.067 | 0.171 | | | -0.125 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.089 | -0.240 | | | -0.018 | -0.064 | 0.187 | | | -0.094 | -0.086 | -0.246 | | | -0.043 | -0.054 | 0.200 | | | -0.115 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.259 | 0.103 | | | 0.287 | -0.070 | -0.064 | | | 0.157 | -0.225 | 0.119 | | | 0.410 | -0.068 | -0.089 | | | 0.145 |
| | (0.07) | (0.04) | | | (0.21) | (0.01) | (0.04) | | | (0.05) | (0.07) | (0.05) | | | (0.22) | (0.01) | (0.04) | | | (0.05) |
| educ_1_4 | 0.053 | -0.204 | | | 0.028 | 0.050 | 0.204 | | | -0.043 | 0.049 | -0.200 | | | 0.067 | 0.056 | 0.200 | | | -0.028 |
| | (0.03) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.02) |
| educ_1_5 | -0.039 | -0.035 | | | -0.139 | 0.072 | -0.012 | | | -0.081 | -0.009 | -0.053 | | | -0.127 | 0.067 | 0.008 | | | -0.094 |
| | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_1_6 | -0.019 | -0.275 | | | -0.411 | -0.052 | 0.194 | | | -0.207 | -0.036 | -0.293 | | | -0.059 | -0.049 | 0.222 | | | -0.208 |
| | (0.05) | (0.03) | | | (0.15) | (0.00) | (0.03) | | | (0.02) | (0.05) | (0.03) | | | (0.16) | (0.00) | (0.03) | | | (0.02) |
| educ_1_7 | -0.050 | 0.266 | | | 0.104 | -0.031 | -0.264 | | | -0.031 | -0.087 | 0.219 | | | -0.160 | -0.033 | -0.222 | | | -0.071 |
| | (0.05) | (0.04) | | | (0.16) | (0.01) | (0.04) | | | (0.05) | (0.06) | (0.04) | | | (0.17) | (0.01) | (0.04) | | | (0.05) |
| educ_1_8 | -0.061 | -0.003 | | | -0.117 | 0.135 | -0.015 | | | -0.025 | -0.018 | -0.016 | | | -0.263 | 0.124 | 0.008 | | | -0.037 |
| | (0.07) | (0.04) | | | (0.20) | (0.01) | (0.04) | | | (0.05) | (0.07) | (0.04) | | | (0.21) | (0.01) | (0.04) | | | (0.05) |
| educ_2_2 | 0.003 | -0.153 | | | 0.288 | 0.156 | 0.241 | | | 0.216 | -0.010 | -0.159 | | | 0.217 | 0.166 | 0.230 | | | 0.215 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.079 | 0.334 | | | 0.291 | 0.049 | -0.272 | | | 0.324 | -0.091 | 0.332 | | | 0.204 | 0.056 | -0.290 | | | 0.313 |
| | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.03) | (0.04) | (0.03) | | | (0.12) | (0.01) | (0.03) | | | (0.03) |
| educ_2_4 | 0.077 | -0.200 | | | -0.003 | 0.164 | 0.224 | | | -0.018 | 0.057 | -0.205 | | | -0.046 | 0.167 | 0.225 | | | -0.020 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_2_5 | 0.079 | -0.134 | | | -0.344 | 0.201 | 0.063 | | | -0.074 | 0.077 | -0.146 | | | -0.308 | 0.194 | 0.085 | | | -0.081 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| | | Probit | | | | | Probit | | | | | Probit | | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 | 2010 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| educ_2_6 | -0.015 | -0.355 | | | -0.013 | 0.044 | 0.224 | | | -0.414 | 0.067 | -0.363 | | | -0.359 | 0.037 | 0.253 | | | -0.426 |
| | (0.04) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) | (0.04) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | 0.082 | 0.133 | | | -0.258 | 0.091 | -0.179 | | | -0.066 | 0.124 | 0.060 | | | -0.218 | 0.080 | -0.096 | | | 0.004 |
| | (0.05) | (0.03) | | | (0.15) | (0.01) | (0.03) | | | (0.04) | (0.05) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_2_8 | 0.251 | 0.319 | | | -0.297 | 0.219 | -0.287 | | | 0.166 | 0.243 | 0.302 | | | -0.308 | 0.205 | -0.283 | | | 0.174 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | -0.009 | -0.295 | | | 0.632 | 0.276 | 0.317 | | | 0.035 | -0.058 | -0.271 | | | 0.108 | 0.298 | 0.269 | | | 0.020 |
| | (0.12) | (0.07) | | | (0.37) | (0.01) | (0.07) | | | (0.06) | (0.12) | (0.07) | | | (0.37) | (0.01) | (0.07) | | | (0.06) |
| educ_3_3 | -0.197 | 0.064 | | | 0.315 | 0.156 | 0.006 | | | 0.345 | -0.195 | 0.078 | | | 0.257 | 0.172 | -0.029 | | | 0.299 |
| | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.01) | | | (0.02) |
| educ_3_4 | -0.023 | -0.483 | | | 0.336 | 0.200 | 0.285 | | | -0.420 | -0.007 | -0.482 | | | 0.191 | 0.205 | 0.310 | | | -0.431 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.839 | 0.094 | | | 0.797 | 0.323 | 0.021 | | | 0.331 | 0.893 | 0.093 | | | 0.837 | 0.356 | -0.020 | | | 0.259 |
| | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) | (0.02) | (0.02) | | | (0.07) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.563 | -0.370 | | | 0.704 | 0.454 | 0.541 | | | 0.290 | 0.632 | -0.369 | | | 0.775 | 0.469 | 0.528 | | | 0.336 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.183 | -0.571 | | | 0.605 | 0.455 | 0.581 | | | 0.100 | 0.130 | -0.590 | | | 0.657 | 0.475 | 0.586 | | | 0.067 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_8 | 0.241 | -0.478 | | | 0.103 | 0.225 | 0.332 | | | -0.288 | 0.263 | -0.477 | | | -0.056 | 0.222 | 0.355 | | | -0.300 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 1.004 | 1.014 | | | -0.571 | 0.608 | -0.898 | | | 0.614 | 0.979 | 1.016 | | | -0.627 | 0.612 | -0.936 | | | 0.651 |
| | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) |
| educ_3_10 | -0.024 | -0.417 | | | 0.172 | 0.274 | 0.389 | | | 0.030 | 0.230 | -0.452 | | | 0.324 | 0.291 | 0.410 | | | -0.053 |
| | (0.12) | (0.06) | | | (0.35) | (0.01) | (0.06) | | | (0.05) | (0.12) | (0.07) | | | (0.37) | (0.01) | (0.07) | | | (0.05) |
| educ_3_11 | 0.145 | -0.717 | | | 0.134 | 0.413 | 0.688 | | | 0.010 | -0.064 | -0.762 | | | 0.723 | 0.426 | 0.730 | | | -0.085 |
| | (0.08) | (0.04) | | | (0.24) | (0.00) | (0.04) | | | (0.03) | (0.09) | (0.04) | | | (0.25) | (0.00) | (0.04) | | | (0.03) |
| female | -0.380 | -0.405 | | | 0.009 | -0.317 | 0.384 | | | -0.076 | -0.389 | -0.401 | | | 0.037 | -0.313 | 0.392 | | | -0.108 |
| | (0.02) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 9.924 | -2.603 | 0.208 | -0.255 | -0.397 | 10.865 | 2.871 | -0.825 | -0.817 | -0.091 | 10.157 | -2.492 | 0.180 | -0.246 | -0.986 | 11.079 | 2.600 | -0.734 | -0.844 | -1.261 |
| | (0.14) | (0.06) | (0.04) | (0.01) | (0.29) | (0.01) | (0.06) | (0.01) | (0.00) | (0.05) | (0.14) | (0.06) | (0.04) | (0.01) | (0.32) | (0.01) | (0.06) | (0.01) | (0.00) | (0.06) |
| rho | 0.208 | | | | | -0.825 | | | | | 0.180 | | | | | -0.734 | | | | |
| | (0.04) | | | | | (0.01) | | | | | (0.04) | | | | | (0.01) | | | | |
| ln(sigma) | -0.255 | | | | | -0.817 | | | | | -0.246 | | | | | -0.844 | | | | |
| | (0.01) | | | | | (0.00) | | | | | (0.01) | | | | | (0.00) | | | | |
| Observations | 683,369 | 683,369 | 683,369 | 683,369 | 26,056 | 683,369 | 683,369 | 683,369 | 683,369 | 657,313 | 657,493 | 657,493 | 657,493 | 657,493 | 24,873 | 657,493 | 657,493 | 657,493 | 657,493 | 632,618 |
| R-squared | | | | | 0.031 | | | | | 0.018 | | | | | 0.032 | | | | | 0.014 |

| | | Probit | | | | | Probit | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 | 2011 | 2011 | 2011 | 2011 | 2011 | 2011 | 2011 | 2011 | 2011 |
| Variables | SE | SE | SE | SE | SE het | WE | WE | WE | WE | WE het |
| kids | | 0.012 | | | -0.097 | | 0.012 | | | -0.076 |
| | | (0.01) | | | (0.03) | | (0.01) | | | (0.01) |
| headfam | | -0.116 | | | -0.194 | | 0.231 | | | -0.168 |
| | | (0.01) | | | (0.05) | | (0.01) | | | (0.01) |
| married | | -0.032 | | | -0.092 | | 0.113 | | | -0.016 |
| | | (0.01) | | | (0.04) | | (0.01) | | | (0.01) |
| age | 0.106 | 0.038 | | | -0.037 | 0.077 | -0.051 | | | -0.073 |
| | (0.01) | (0.00) | | | (0.02) | (0.00) | (0.00) | | | (0.00) |
| agesquared | -0.001 | -0.000 | | | 0.000 | -0.001 | 0.000 | | | 0.001 |
| | (0.00) | (0.00) | | | (0.00) | (0.00) | (0.00) | | | (0.00) |
| region_2 | 0.025 | -0.051 | | | 0.003 | -0.056 | 0.067 | | | 0.028 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| region_3 | 0.013 | -0.166 | | | -0.073 | 0.005 | 0.180 | | | 0.038 |
| | (0.01) | (0.01) | | | (0.04) | (0.00) | (0.01) | | | (0.01) |
| region_4 | -0.101 | -0.223 | | | -0.025 | -0.064 | 0.186 | | | -0.134 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| region_5 | -0.057 | -0.254 | | | -0.164 | -0.051 | 0.216 | | | -0.113 |
| | (0.02) | (0.01) | | | (0.06) | (0.00) | (0.01) | | | (0.01) |
| educ_1_3 | -0.157 | 0.117 | | | 0.620 | -0.063 | -0.095 | | | 0.121 |
| | (0.08) | (0.05) | | | (0.23) | (0.01) | (0.05) | | | (0.05) |
| educ_1_4 | 0.050 | -0.221 | | | -0.112 | 0.060 | 0.220 | | | -0.031 |
| | (0.04) | (0.02) | | | (0.12) | (0.00) | (0.02) | | | (0.02) |
| educ_1_5 | -0.014 | -0.047 | | | -0.229 | 0.066 | 0.008 | | | -0.063 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_1_6 | -0.028 | -0.281 | | | -0.143 | -0.049 | 0.220 | | | -0.232 |
| | (0.05) | (0.03) | | | (0.16) | (0.00) | (0.03) | | | (0.02) |
| educ_1_7 | -0.080 | 0.214 | | | 0.031 | -0.039 | -0.220 | | | -0.061 |
| | (0.06) | (0.04) | | | (0.18) | (0.01) | (0.04) | | | (0.06) |
| educ_1_8 | -0.035 | 0.009 | | | -0.203 | 0.119 | -0.017 | | | -0.078 |
| | (0.07) | (0.05) | | | (0.22) | (0.01) | (0.05) | | | (0.05) |
| educ_2_2 | 0.019 | -0.168 | | | 0.170 | 0.168 | 0.232 | | | 0.237 |
| | (0.02) | (0.01) | | | (0.07) | (0.00) | (0.01) | | | (0.01) |
| educ_2_3 | -0.071 | 0.326 | | | 0.164 | 0.047 | -0.286 | | | 0.308 |
| | (0.04) | (0.03) | | | (0.13) | (0.01) | (0.03) | | | (0.03) |
| educ_2_4 | 0.035 | -0.216 | | | -0.001 | 0.170 | 0.228 | | | -0.001 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_2_5 | 0.068 | -0.161 | | | -0.274 | 0.189 | 0.106 | | | -0.067 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |

| Variables | 2011 SE | Probit 2011 SE | 2011 SE | 2011 SE | 2011 SE het | 2011 WE | Probit 2011 WE | 2011 WE | 2011 WE | 2011 WE het |
|---|---|---|---|---|---|---|---|---|---|---|
| educ_2_6 | 0.048 | -0.372 | | | -0.239 | 0.036 | 0.271 | | | -0.451 |
| | (0.04) | (0.02) | | | (0.13) | (0.00) | (0.02) | | | (0.02) |
| educ_2_7 | 0.077 | 0.072 | | | -0.327 | 0.078 | -0.105 | | | -0.002 |
| | (0.05) | (0.03) | | | (0.16) | (0.01) | (0.03) | | | (0.04) |
| educ_2_8 | 0.222 | 0.296 | | | -0.330 | 0.197 | -0.278 | | | 0.190 |
| | (0.03) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_2 | -0.292 | -0.315 | | | 1.551 | 0.297 | 0.323 | | | -0.002 |
| | (0.13) | (0.07) | | | (0.39) | (0.01) | (0.07) | | | (0.06) |
| educ_3_3 | -0.218 | 0.082 | | | 0.363 | 0.184 | -0.049 | | | 0.249 |
| | (0.02) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_4 | -0.022 | -0.487 | | | 0.307 | 0.205 | 0.334 | | | -0.424 |
| | (0.04) | (0.02) | | | (0.10) | (0.00) | (0.02) | | | (0.01) |
| educ_3_5 | 0.936 | 0.086 | | | 0.802 | 0.378 | -0.038 | | | 0.211 |
| | (0.02) | (0.02) | | | (0.08) | (0.00) | (0.02) | | | (0.02) |
| educ_3_6 | 0.542 | -0.387 | | | 0.735 | 0.479 | 0.522 | | | 0.376 |
| | (0.03) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_7 | 0.201 | -0.614 | | | 0.548 | 0.488 | 0.612 | | | 0.079 |
| | (0.04) | (0.02) | | | (0.09) | (0.00) | (0.02) | | | (0.01) |
| educ_3_8 | 0.245 | -0.457 | | | -0.278 | 0.222 | 0.348 | | | -0.324 |
| | (0.04) | (0.02) | | | (0.11) | (0.00) | (0.02) | | | (0.01) |
| educ_3_9 | 0.955 | 1.010 | | | -0.575 | 0.611 | -0.948 | | | 0.658 |
| | (0.03) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.02) |
| educ_3_10 | 0.093 | -0.520 | | | -0.071 | 0.291 | 0.492 | | | 0.004 |
| | (0.13) | (0.07) | | | (0.40) | (0.01) | (0.07) | | | (0.05) |
| educ_3_11 | 0.041 | -0.740 | | | 0.526 | 0.428 | 0.710 | | | -0.015 |
| | (0.08) | (0.04) | | | (0.25) | (0.00) | (0.04) | | | (0.03) |
| female | -0.382 | -0.400 | | | 0.069 | -0.311 | 0.400 | | | -0.142 |
| | (0.02) | (0.01) | | | (0.05) | (0.00) | (0.01) | | | (0.01) |
| Constant | 10.216 | -2.335 | 0.165 | -0.270 | -1.130 | 11.191 | 2.420 | -0.666 | -0.862 | -1.763 |
| | (0.15) | (0.07) | (0.05) | (0.01) | (0.35) | (0.01) | (0.07) | (0.01) | (0.00) | (0.07) |
| rho | 0.165 | | | | | -0.666 | | | | |
| | (0.05) | | | | | (0.01) | | | | |
| ln(sigma) | -0.270 | | | | | -0.862 | | | | |
| | (0.01) | | | | | (0.00) | | | | |
| Observations | 629,981 | 629,981 | 629,981 | 629,981 | 23,476 | 629,981 | 629,981 | 629,981 | 629,981 | 606,505 |
| R-squared | | | | | 0.030 | | | | | 0.014 |

## A.4 Detailed results for Table 2 and Table 4

**A.4 Detailed results for Table 2 and Table 3**

| | Base model | | | New Sample definition | | | No left censored | | | Trimmed Netincdiff | | | Regional unemployment rate 1996-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Variable** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** |
| **hazardE** | | | | | | | | | | | | | | | |
| Netincdiff | -0.429 | 0.053 | -8.11 | -0.493 | 0.016 | -30.31 | -0.405 | 0.053 | -7.68 | -0.333 | 0.068 | -4.9 | -0.531 | 0.057 | -9.34 |
| Convexity | 0.049 | 0.015 | 3.2 | 0.011 | 0.005 | 2.25 | 0.055 | 0.015 | 3.59 | 0.065 | 0.017 | 3.83 | 0.045 | 0.018 | 2.58 |
| Male | -0.024 | 0.027 | -0.9 | 0.042 | 0.009 | 4.84 | -0.024 | 0.027 | -0.89 | -0.043 | 0.030 | -1.46 | 0.037 | 0.029 | 1.27 |
| Age at the start of the spell | -0.012 | 0.001 | -9.47 | -0.011 | 0.000 | -27.41 | -0.009 | 0.001 | -7.42 | -0.013 | 0.001 | -9.47 | -0.008 | 0.001 | -5.7 |
| Upper secondary school | 0.006 | 0.029 | 0.21 | -0.013 | 0.009 | -1.42 | 0.018 | 0.029 | 0.64 | 0.018 | 0.030 | 0.62 | -0.008 | 0.032 | -0.26 |
| University | 0.220 | 0.028 | 7.87 | 0.210 | 0.009 | 23.64 | 0.234 | 0.028 | 8.38 | 0.168 | 0.031 | 5.47 | 0.213 | 0.031 | 6.77 |
| Years 1999-2002 | -0.092 | 0.034 | -2.68 | -0.066 | 0.011 | -6.10 | -0.100 | 0.034 | -2.92 | -0.083 | 0.036 | -2.28 | | | |
| Years 2003-2007 | 0.021 | 0.032 | 0.64 | 0.056 | 0.010 | 5.47 | 0.000 | 0.033 | 0.01 | 0.019 | 0.035 | 0.55 | 0.184 | 0.030 | 6.06 |
| Years 2008-2011 | -0.221 | 0.040 | -5.57 | -0.315 | 0.012 | -26.09 | -0.258 | 0.040 | -6.42 | -0.234 | 0.043 | -5.43 | -0.133 | 0.037 | -3.57 |
| Southern Norway | 0.038 | 0.040 | 0.96 | 0.044 | 0.013 | 3.45 | 0.030 | 0.040 | 0.75 | 0.037 | 0.042 | 0.89 | | | |
| West Norway | 0.015 | 0.028 | 0.55 | 0.002 | 0.009 | 0.22 | 0.014 | 0.028 | 0.51 | 0.021 | 0.030 | 0.72 | | | |
| Central Norway | 0.038 | 0.042 | 0.92 | 0.054 | 0.013 | 4.07 | 0.034 | 0.042 | 0.82 | 0.050 | 0.045 | 1.12 | | | |
| Northern Norway | 0.096 | 0.047 | 2.06 | 0.100 | 0.014 | 6.94 | 0.094 | 0.047 | 2 | 0.096 | 0.049 | 1.95 | | | |
| Ln(t) | -0.519 | 0.016 | -32.08 | -0.511 | 0.005 | -100.37 | -0.507 | 0.016 | -30.75 | -0.524 | 0.017 | -30.1 | -0.553 | 0.017 | -31.73 |
| Constant | -1.135 | 0.094 | -12.11 | -1.239 | 0.030 | -41.70 | -1.091 | 0.092 | -11.8 | -1.011 | 0.106 | -9.51 | -1.421 | 0.099 | -14.32 |
| Local Unemployment Rate | | | | | | | | | | | | | -8.089 | 1.685 | -4.8 |
| | | | | | | | | | | | | | | | |
| **hazardU** | | | | | | | | | | | | | | | |
| Netincdiff | 1.685 | 0.082 | 20.53 | 1.734 | 0.026 | 67.17 | 1.920 | 0.083 | 23.21 | 2.281 | 0.108 | 21.2 | 1.709 | 0.096 | 17.85 |
| Convexity | -0.246 | 0.021 | -11.45 | -0.277 | 0.007 | -39.61 | -0.292 | 0.022 | -13.1 | -0.222 | 0.025 | -9.07 | -0.292 | 0.026 | -11.16 |
| Male | 0.602 | 0.030 | 19.8 | 0.587 | 0.010 | 61.24 | 0.688 | 0.030 | 22.62 | 0.644 | 0.034 | 19.04 | 0.623 | 0.034 | 18.08 |
| Age at the start of the spell | 0.030 | 0.002 | 18.97 | 0.028 | 0.000 | 57.74 | 0.049 | 0.001 | 33.45 | 0.027 | 0.002 | 16.21 | 0.054 | 0.001 | 40.16 |
| Upper secondary school | 0.115 | 0.035 | 3.27 | 0.137 | 0.011 | 12.23 | 0.177 | 0.036 | 4.94 | 0.158 | 0.037 | 4.34 | 0.217 | 0.042 | 5.19 |
| University | 0.131 | 0.037 | 3.53 | 0.211 | 0.012 | 17.89 | 0.225 | 0.039 | 5.83 | 0.038 | 0.042 | 0.9 | 0.419 | 0.044 | 9.56 |
| Years 1999-2002 | 0.246 | 0.040 | 6.21 | 0.221 | 0.013 | 17.56 | 0.269 | 0.040 | 6.79 | 0.253 | 0.043 | 5.94 | 0.160 | 0.037459 | 4.26 |
| Years 2003-2007 | 0.305 | 0.040 | 7.66 | 0.280 | 0.013 | 22.02 | 0.327 | 0.040 | 8.19 | 0.339 | 0.043 | 7.91 | -0.139 | 0.045 | -3.07 |
| Years 2008-2011 | -0.145 | 0.048 | -3.04 | -0.202 | 0.015 | -13.65 | -0.130 | 0.048 | -2.72 | -0.108 | 0.052 | -2.09 | | | |
| Southern Norway | -0.222 | 0.047 | -4.71 | -0.249 | 0.015 | -16.49 | -0.276 | 0.048 | -5.76 | -0.257 | 0.050 | -5.1 | | | |
| West Norway | -0.326 | 0.033 | -9.77 | -0.364 | 0.011 | -34.45 | -0.377 | 0.034 | -11.18 | -0.335 | 0.036 | -9.34 | | | |
| Central Norway | -0.418 | 0.049 | -8.47 | -0.380 | 0.016 | -24.34 | -0.476 | 0.049 | -9.61 | -0.415 | 0.054 | -7.72 | | | |
| Northern Norway | -0.473 | 0.055 | -8.54 | -0.402 | 0.017 | -23.46 | -0.545 | 0.056 | -9.81 | -0.466 | 0.059 | -7.87 | | | |
| Ln(t) | -0.490 | 0.018 | -27.14 | -0.432 | 0.006 | -76.22 | -0.489 | 0.018 | -26.91 | -0.496 | 0.020 | -25.18 | -0.643 | 0.019795 | -32.5 |
| Constant | -3.106 | 0.103 | -30.3 | -3.075 | 0.033 | -93.13 | -3.445 | 0.104 | -32.99 | -2.801 | 0.116 | -24.17 | -5.415 | 0.10645 | -50.87 |
| Local Unemployment Rate | | | | | | | | | | | | | 7.356 | 1.951 | 3.77 |
| | | | | | | | | | | | | | | | |
| **hazard ELF** | | | | | | | | | | | | | | | |
| Netincdiff | -0.725 | 0.109 | -6.65 | -0.615 | 0.034 | -18.11 | | | | -0.871 | 0.138 | -6.32 | -0.718 | 0.110 | -6.54 |
| Convexity | -0.017 | 0.030 | -0.56 | 0.016 | 0.009 | 1.77 | | | | -0.061 | 0.032 | -1.91 | 0.047 | 0.029 | 1.6 |
| Male | 0.191 | 0.058 | 3.28 | 0.118 | 0.018 | 6.65 | | | | 0.221 | 0.063 | 3.52 | 0.038 | 0.054 | 0.71 |
| Age at the start of the spell | -0.034 | 0.002 | -13.86 | -0.036 | 0.001 | -47.73 | | | | -0.036 | 0.003 | -13.73 | -0.038 | 0.002 | -17.33 |
| Upper secondary school | -0.131 | 0.048 | -2.76 | -0.072 | 0.015 | -4.83 | | | | -0.151 | 0.050 | -3 | -0.026 | 0.044 | -0.59 |
| University | 0.052 | 0.051 | 1.01 | 0.075 | 0.016 | 4.65 | | | | 0.031 | 0.058 | 0.54 | 0.101 | 0.048 | 2.11 |
| Years 1999-2002 | -0.160 | 0.061 | -2.62 | -0.221 | 0.020 | -11.28 | | | | -0.185 | 0.065 | -2.85 | | | |
| Years 2003-2007 | -0.310 | 0.078 | -3.95 | -0.308 | 0.025 | -12.44 | | | | -0.362 | 0.083 | -4.35 | -0.090 | 0.075 | -1.21 |
| Years 2008-2011 | -0.739 | 0.122 | -6.05 | -0.815 | 0.038 | -21.22 | | | | -0.797 | 0.131 | -6.1 | -0.615 | 0.109 | -5.66 |
| Southern Norway | 0.034 | 0.068 | 0.5 | 0.021 | 0.021 | 1.02 | | | | 0.036 | 0.072 | 0.49 | | | |
| West Norway | -0.042 | 0.048 | -0.89 | -0.019 | 0.015 | -1.25 | | | | -0.056 | 0.050 | -1.11 | | | |
| Central Norway | 0.181 | 0.066 | 2.73 | 0.103 | 0.021 | 4.81 | | | | 0.169 | 0.069 | 2.46 | | | |
| Northern Norway | 0.139 | 0.069 | 2.01 | 0.106 | 0.023 | 4.71 | | | | 0.131 | 0.071 | 1.84 | | | |
| Ln(t) | -0.016 | 0.037 | -0.43 | -0.025 | 0.011 | -2.14 | | | | 0.008 | 0.040 | 0.2 | -0.359 | 0.042 | -8.45 |
| Constant | -0.892 | 0.192 | -4.66 | -0.723 | 0.059 | -12.24 | | | | -0.883 | 0.220 | -4.01 | -1.033 | 0.206 | -5 |
| Local Unemployment Rate | | | | | | | | | | | | | -7.009 | 2.910 | -2.41 |
| | | | | | | | | | | | | | | | |
| **hazardULF** | | | | | | | | | | | | | | | |
| Netincdiff | 1.753 | 0.087 | 20.18 | 1.768 | 0.028 | 62.98 | | | | 2.998 | 0.134 | 22.36 | 1.568 | 0.083 | 18.950 |
| Convexity | -0.163 | 0.023 | -7.13 | -0.187 | 0.007 | -26.04 | | | | -0.237 | 0.026 | -9.04 | -0.115 | 0.025 | -4.640 |
| Male | 0.776 | 0.037 | 20.89 | 0.704 | 0.011 | 62.39 | | | | 0.814 | 0.041 | 19.74 | 0.576 | 0.036 | 16.180 |
| Age at the start of the spell | -0.046 | 0.002 | -24.48 | -0.041 | 0.001 | -70.58 | | | | -0.046 | 0.002 | -23 | -0.042 | 0.002 | -24.190 |
| Upper secondary school | -0.008 | 0.038 | -0.22 | 0.128 | 0.012 | 10.55 | | | | 0.079 | 0.040 | 2.01 | 0.095 | 0.037 | 2.580 |
| University | 0.100 | 0.038 | 2.63 | 0.222 | 0.012 | 18.20 | | | | 0.218 | 0.041 | 5.33 | 0.162 | 0.040 | 4.080 |
| Years 1999-2002 | 0.152 | 0.050 | 3.02 | 0.145 | 0.016 | 9.15 | | | | 0.100 | 0.053 | 1.88 | -0.120 | 0.049 | -2.450 |
| Years 2003-2007 | 0.030 | 0.063 | 0.48 | 0.037 | 0.020 | 1.89 | | | | -0.024 | 0.066 | -0.37 | -0.820 | 0.069 | -11.8 |
| Years 2008-2011 | -0.748 | 0.088 | -8.47 | -0.656 | 0.027 | -24.08 | | | | -0.764 | 0.094 | -8.15 | | | |
| Southern Norway | -0.295 | 0.053 | -5.57 | 0.481 | 0.019 | 25.49 | | | | -0.428 | 0.056 | -7.66 | | | |
| West Norway | -0.482 | 0.037 | -13.1 | 0.188 | 0.024 | 7.98 | | | | -0.519 | 0.039 | -13.47 | | | |
| Central Norway | -0.559 | 0.056 | -9.96 | 0.069 | 0.020 | 3.41 | | | | -0.554 | 0.058 | -9.52 | | | |
| Northern Norway | -0.536 | 0.060 | -8.87 | -0.094 | 0.024 | -3.83 | | | | -0.584 | 0.063 | -9.24 | | | |
| Ln(t) | -0.234 | 0.032 | -7.39 | -0.226 | 0.010 | -22.96 | | | | -0.171 | 0.034 | -5.05 | -0.16406 | 0.030712 | -5.34 |
| Constant | -1.930 | 0.118 | -16.32 | -2.538 | 0.040 | -63.88 | | | | -1.503 | 0.136 | -11.09 | -3.73514 | 0.118278 | -31.58 |
| Local Unemployment Rate | | | | | | | | | | | | | 7.379 | 1.938 | 3.81 |
| | | | | | | | | | | | | | | | |
| support points | | | | | | | | | | | | | | | |
| a1 | -0.531 | 0.049 | -10.9 | -0.582 | 0.016 | -36.71 | -0.505 | 0.043 | -11.77 | -0.516 | 0.054 | -9.57 | | | |
| a2 | -1.337 | 0.072 | -18.67 | -1.319 | 0.022 | -60.72 | | | | -1.336 | 0.082 | -16.24 | | | |
| b1 | -3.042 | 0.200 | -15.23 | -2.943 | 0.051 | -57.39 | -2.366 | 0.051 | -46.56 | -2.747 | 0.138 | -19.95 | | | |
| b2 | -1.839 | 0.094 | -19.66 | -1.981 | 0.031 | -63.86 | | | | -1.856 | 0.096 | -19.42 | | | |
| logit(p) | -1.418 | 0.124 | -11.42 | -1.498 | 0.040 | -37.74 | -1.945 | 0.134 | -14.47 | -1.597 | 0.151 | -10.59 | | | |
| | | | | | | | | | | | | | | | |
| p1 | 0.805 | 0.019 | 41.31 | 0.817 | 0.006 | 137.87 | 0.875 | 0.015 | 59.47 | 0.832 | 0.021 | 39.37 | | | |
| | | | | | | | | | | | | | | | |
| p2 | 0.195 | 0.019 | 10 | 0.183 | 0.006 | 30.82 | 0.125 | 0.015 | 8.5 | 0.168 | 0.021 | 7.98 | | | |
| Loglikelihod | -105688 | | | -1064749 | | | -60573.1 | | | -93800.6 | | | | | |
| # of Obs | 476,275 | | | 4813827.000 | | | 229,036 | | | 432,409 | | | | | |
| | | | | | | | | | | | | | | | |
| Loglikelihod_GLM1 | | | | | | | | | | | | | -18064.7 | | |
| # of Obs_GLM1 | | | | | | | | | | | | | 44,601 | | |
| Loglikelihod_GLM2 | | | | | | | | | | | | | -19441.3 | | |
| # of Obs_GLM2 | | | | | | | | | | | | | 112,330 | | |
| Loglikelihod_GLM3 | | | | | | | | | | | | | -11130.6 | | |
| # of Obs_GLM3 | | | | | | | | | | | | | 47,973 | | |
| Loglikelihod_GLM4 | | | | | | | | | | | | | -23766.4 | | |
| # of Obs_GLM4 | | | | | | | | | | | | | 201,920 | | |

| | Regional dummies 1996-2011 | | | Unemp ben dummy | | | 3.7% capital income in SE | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variable** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** | **Ceoff** | **Std Err** | **z** |
| **hazardE** | | | | | | | | | |
| Netincdiff | -0.519 | 0.057 | -9.13 | -0.415 | 0.053 | -7.85 | -0.434 | 0.052 | -8.29 |
| Convexity | 0.036 | 0.018 | 2.08 | 0.049 | 0.015 | 3.17 | 0.058 | 0.016 | 3.62 |
| Male | 0.037 | 0.029 | 1.25 | -0.027 | 0.027 | -0.98 | -0.027 | 0.027 | -0.99 |
| Age at the start of the spell | -0.008 | 0.001 | -5.74 | -0.012 | 0.001 | -9.48 | -0.013 | 0.001 | -9.54 |
| Upper secondary school | -0.005 | 0.032 | -0.17 | 0.009 | 0.029 | 0.32 | 0.004 | 0.029 | 0.13 |
| University | 0.216 | 0.031 | 6.86 | 0.228 | 0.028 | 8.15 | 0.216 | 0.028 | 7.68 |
| Years 1999-2002 | | | | -0.078 | 0.034 | -2.27 | -0.091 | 0.034 | -2.67 |
| Years 2003-2007 | 0.150 | 0.029 | 5.09 | 0.033 | 0.033 | 1.02 | 0.024 | 0.032 | 0.74 |
| Years 2008-2011 | -0.121 | 0.037 | -3.25 | -0.213 | 0.040 | -5.36 | -0.217 | 0.040 | -5.46 |
| Southern Norway | 0.044 | 0.043 | 1.01 | 0.033 | 0.040 | 0.83 | 0.038 | 0.040 | 0.97 |
| West Norway | -0.023 | 0.031 | -0.74 | 0.017 | 0.028 | 0.61 | 0.016 | 0.028 | 0.57 |
| Central Norway | 0.030 | 0.047 | 0.65 | 0.033 | 0.042 | 0.79 | 0.040 | 0.042 | 0.96 |
| Northern Norway | 0.160 | 0.049 | 3.26 | 0.091 | 0.047 | 1.96 | 0.097 | 0.047 | 2.08 |
| Ln(t) | -0.551 | 0.017 | -31.61 | 0.269 | 0.045 | 6.01 | -0.519 | 0.016 | -32.08 |
| Constant | -1.620 | 0.092 | -17.55 | -0.505 | 0.016 | -30.89 | -1.132 | 0.093 | -12.1 |
| Local Unemployment Rate | | | | -1.159 | 0.094 | -12.38 | | | |
| | | | | | | | | | |
| **hazardU** | | | | | | | | | |
| Netincdiff | 1.762 | 0.095 | 18.51 | 1.698 | 0.082 | 20.62 | 1.712 | 0.083 | 20.57 |
| Convexity | -0.314 | 0.026 | -11.99 | -0.252 | 0.022 | -11.66 | -0.264 | 0.024 | -11.19 |
| Male | 0.619 | 0.034 | 17.98 | 0.605 | 0.030 | 19.86 | 0.596 | 0.030 | 19.65 |
| Age at the start of the spell | 0.054 | 0.001 | 40.42 | 0.031 | 0.002 | 19.54 | 0.029 | 0.002 | 18.8 |
| Upper secondary school | 0.228 | 0.042 | 5.47 | 0.130 | 0.035 | 3.69 | 0.117 | 0.035 | 3.33 |
| University | 0.404 | 0.044 | 9.26 | 0.163 | 0.037 | 4.36 | 0.134 | 0.037 | 3.57 |
| Years 1999-2002 | | | | 0.281 | 0.040 | 7.03 | 0.247 | 0.040 | 6.24 |
| Years 2003-2007 | 0.181 | 0.037 | 4.86 | 0.344 | 0.040 | 8.55 | 0.312 | 0.040 | 7.83 |
| Years 2008-2011 | -0.159 | 0.045 | -3.55 | -0.109 | 0.048 | -2.28 | -0.134 | 0.048 | -2.82 |
| Southern Norway | -0.25141 | 0.053591 | -4.69 | -0.237 | 0.047 | -5.01 | -0.224 | 0.047 | -4.75 |
| West Norway | -0.403 | 0.038 | -10.57 | -0.331 | 0.033 | -9.90 | -0.326 | 0.033 | -9.77 |
| Central Norway | -0.280 | 0.055 | -5.06 | -0.436 | 0.049 | -8.80 | -0.417 | 0.049 | -8.45 |
| Northern Norway | -0.358 | 0.061 | -5.88 | -0.494 | 0.055 | -8.90 | -0.473 | 0.055 | -8.54 |
| Ln(t) | -0.646 | 0.020 | -32.75 | 0.411 | 0.043 | 9.62 | -0.491 | 0.018 | -27.17 |
| Constant | -5.009 | 0.091 | -55.25 | -0.483 | 0.018 | -26.66 | -3.107 | 0.102 | -30.34 |
| Local Unemployment Rate | | | | -3.198 | 0.104 | -30.82 | | | |
| | | | | | | | | | |
| **hazard ELF** | | | | | | | | | |
| Netincdiff | -0.754 | 0.110 | -6.86 | -0.694 | 0.109 | -6.37 | -0.719 | 0.108 | -6.64 |
| Convexity | 0.038 | 0.030 | 1.29 | -0.014 | 0.030 | -0.46 | -0.008 | 0.031 | -0.28 |
| Male | 0.057 | 0.054 | 1.05 | 0.178 | 0.058 | 3.06 | 0.185 | 0.059 | 3.16 |
| Age at the start of the spell | -0.038 | 0.002 | -17.31 | -0.034 | 0.002 | -13.59 | -0.034 | 0.002 | -13.75 |
| Upper secondary school | -0.018 | 0.044 | -0.41 | -0.127 | 0.047 | -2.68 | -0.128 | 0.047 | -2.71 |
| University | 0.112 | 0.048 | 2.32 | 0.056 | 0.051 | 1.09 | 0.058 | 0.051 | 1.15 |
| Years 1999-2002 | | | | -0.182 | 0.061 | -2.98 | -0.161 | 0.061 | -2.63 |
| Years 2003-2007 | -0.186 | 0.062 | -2.99 | -0.348 | 0.079 | -4.42 | -0.312 | 0.079 | -3.96 |
| Years 2008-2011 | -0.676 | 0.105 | -6.46 | -0.790 | 0.122 | -6.46 | -0.738 | 0.122 | -6.03 |
| Southern Norway | 0.126 | 0.060 | 2.11 | 0.034 | 0.068 | 0.50 | 0.035 | 0.068 | 0.52 |
| West Norway | -0.014 | 0.045 | -0.3 | -0.045 | 0.048 | -0.94 | -0.041 | 0.048 | -0.86 |
| Central Norway | 0.198 | 0.065 | 3.03 | 0.174 | 0.066 | 2.64 | 0.180 | 0.066 | 2.73 |
| Northern Norway | 0.164 | 0.066 | 2.47 | 0.134 | 0.069 | 1.94 | 0.138 | 0.069 | 2 |
| Ln(t) | -0.287 | 0.031 | -9.36 | 0.823 | 0.109 | 7.58 | -0.017 | 0.037 | -0.46 |
| Constant | -1.393 | 0.170 | -8.18 | 0.015 | 0.037 | 0.39 | -0.891 | 0.192 | -4.630 |
| Local Unemployment Rate | | | | -0.941 | 0.191 | -4.92 | | | |
| | | | | | | | | | |
| **hazardULF** | | | | | | | | | |
| Netincdiff | 1.607 | 0.081 | 19.76 | 1.762911 | 0.087 | 20.33 | 1.761 | 0.086 | 20.52 |
| Convexity | -0.140 | 0.025 | -5.66 | -0.16489 | 0.023 | -7.21 | -0.166 | 0.025 | -6.72 |
| Male | 0.583 | 0.036 | 16.23 | 0.770675 | 0.037 | 20.77 | 0.761 | 0.037 | 20.79 |
| Age at the start of the spell | -0.042 | 0.002 | -24.26 | -0.04351 | 0.002 | -23.06 | -0.047 | 0.002 | -24.7 |
| Upper secondary school | 0.120 | 0.037 | 3.26 | 0.020918 | 0.038 | 0.55 | -0.010 | 0.038 | -0.25 |
| University | 0.158 | 0.039 | 4.01 | 0.165148 | 0.038 | 4.31 | 0.102 | 0.039 | 2.63 |
| Years 1999-2002 | | | | 0.140265 | 0.050 | 2.78 | 0.152 | 0.050 | 3.03 |
| Years 2003-2007 | -0.040 | 0.045 | -0.88 | 0.0073 | 0.063 | 0.12 | 0.037 | 0.063 | 0.6 |
| Years 2008-2011 | -0.766 | 0.068 | -11.27 | -0.78838 | 0.089 | -8.90 | -0.737 | 0.088 | -8.36 |
| Southern Norway | -0.22244 | 0.050492 | -4.41 | -0.31726 | 0.053 | -5.99 | -0.296 | 0.053 | -5.6 |
| West Norway | -0.430 | 0.036 | -12.01 | -0.4956 | 0.037 | -13.46 | -0.482 | 0.037 | -13.1 |
| Central Norway | -0.678 | 0.057 | -11.96 | -0.59283 | 0.056 | -10.55 | -0.558 | 0.056 | -9.93 |
| Northern Norway | -0.376 | 0.057 | -6.57 | -0.58159 | 0.061 | -9.61 | -0.538 | 0.060 | -8.9 |
| Ln(t) | -0.233 | 0.026 | -8.98 | 0.877099 | 0.047 | 18.52 | -0.236 | 0.032 | -7.45 |
| Constant | -3.208 | 0.090 | -35.53 | -0.17287 | 0.032 | -5.39 | -1.935 | 0.118 | -16.42 |
| Local Unemployment Rate | | | | -2.19894 | 0.119 | -18.40 | | | |
| | | | | | | | | | |
| support points | | | | | | | | | |
| a1 | | | | -0.522 | 0.048 | -10.81 | -0.532 | 0.049 | -10.93 |
| a2 | | | | -1.323 | 0.071 | -18.58 | -1.334 | 0.072 | -18.65 |
| b1 | | | | -3.004 | 0.184 | -16.29 | -3.048 | 0.201 | -15.12 |
| b2 | | | | -1.812 | 0.091 | -19.97 | -1.834 | 0.093 | -19.65 |
| logit(p) | | | | -1.450 | 0.126 | -11.46 | -1.418 | 0.124 | -11.42 |
| | | | | | | | | | |
| p1 | | | | 0.810 | 0.019 | 41.61 | 0.805 | 0.019 | 41.31 |
| | | | | | | | | | |
| p2 | | | | 0.190 | 0.019 | 9.76 | 0.195 | 0.019 | 10.01 |
| Loglikelihod | | | | -105462 | | | -105693 | | |
| # of Obs | | | | 476,275 | | | 476,275 | | |
| | | | | | | | | | |
| Loglikelihod_GLM1 | -18069.7 | | | | | | | | |
| # of Obs_GLM1 | 44,601 | | | | | | | | |
| Loglikelihod_GLM2 | -19416 | | | | | | | | |
| # of Obs_GLM2 | 112,330 | | | | | | | | |
| Loglikelihod_GLM3 | -11124.6 | | | | | | | | |
| # of Obs_GLM3 | 47,973 | | | | | | | | |
| Loglikelihod_GLM4 | -23678.3 | | | | | | | | |
| # of Obs_GLM4 | 201,920 | | | | | | | | |

# References

**Berglann, Helge, Espen R. Moen, Knut Røed, and Jens Fredrik Skogstrøm.** 2011. "Entrepreneurship: Origins and returns." *Labour Economics*, 18(2): 180–193.

**Parker, Simon C.** 2008. "Entrepreneurship among married couples in the United States: A simultaneous probit approach." *Labour Economics*, 15(3): 459–481.

**Rees, Hedley, and Anup Shah.** 1986. "An empirical analysis of self-employment in the U.K." *Journal of Applied Econometrics*, 1(1): 95–108.

**Taylor, Mark P.** 1996. "Earnings, independence or unemployment: why become self-employed?" *Oxford Bulletin of Economics and Statistics*, 58(2): 253–266.

**Wen, Jean-François, and Daniel V. Gordon.** 2014. "An empirical model of tax convexity and self-employment." *The Review of Economics and Statistics*, 96(3): 471–482.