**Appendix 3: Logit estimations for having social security, construction workers**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Male† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Female | -0.354 | 0.138 | 0.324 | -0.096 | 0.122 | 0.193 |
|  | (0.235) | (0.205) | (0.225) | (0.226) | (0.237) | (0.213) |
| Aged 15-19† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Aged 20-24 | 1.113\*\*\* | 0.958\*\*\* | 0.848\*\*\* | 1.139\*\*\* | 0.777\*\*\* | 1.121\*\*\* |
|  | (0.171) | (0.143) | (0.129) | (0.131) | (0.120) | (0.114) |
| Aged 25-29 | 1.394\*\*\* | 1.436\*\*\* | 1.251\*\*\* | 1.454\*\*\* | 1.188\*\*\* | 1.395\*\*\* |
|  | (0.163) | (0.144) | (0.130) | (0.130) | (0.119) | (0.117) |
| Aged 30-34 | 1.503\*\*\* | 1.555\*\*\* | 1.353\*\*\* | 1.555\*\*\* | 1.033\*\*\* | 1.425\*\*\* |
|  | (0.167) | (0.146) | (0.133) | (0.132) | (0.123) | (0.123) |
| Aged 35-39 | 1.392\*\*\* | 1.469\*\*\* | 1.271\*\*\* | 1.701\*\*\* | 1.139\*\*\* | 1.598\*\*\* |
|  | (0.169) | (0.149) | (0.137) | (0.138) | (0.128) | (0.127) |
| Aged 40-44 | 1.576\*\*\* | 1.584\*\*\* | 1.326\*\*\* | 1.631\*\*\* | 1.193\*\*\* | 1.364\*\*\* |
|  | (0.174) | (0.151) | (0.137) | (0.137) | (0.130) | (0.127) |
| Aged 45-49 | 1.463\*\*\* | 1.428\*\*\* | 1.066\*\*\* | 1.454\*\*\* | 0.997\*\*\* | 1.289\*\*\* |
|  | (0.180) | (0.157) | (0.140) | (0.139) | (0.132) | (0.132) |
| Aged 50-54 | 0.785\*\*\* | 0.970\*\*\* | 0.616\*\*\* | 0.747\*\*\* | 0.319\*\* | 0.782\*\*\* |
|  | (0.202) | (0.172) | (0.157) | (0.155) | (0.145) | (0.142) |
| Aged 55-59 | 0.370 | 0.141 | 0.110 | 0.254 | 0.056 | 0.194 |
|  | (0.262) | (0.226) | (0.192) | (0.192) | (0.181) | (0.181) |
| Aged 60-64 | -0.481 | 0.218 | -0.762\*\* | -0.155 | -0.222 | -0.341 |
|  | (0.405) | (0.329) | (0.315) | (0.283) | (0.270) | (0.258) |
| Illiterate† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Literate with no degree | 0.161 | 0.581\* | -0.033 | -0.018 | -0.073 | 0.095 |
|  | (0.317) | (0.306) | (0.244) | (0.213) | (0.203) | (0.207) |
| Primary school educ. | 0.642\*\* | 0.845\*\*\* | 0.351\* | -0.035 | 0.126 | 0.253 |
|  | (0.272) | (0.276) | (0.212) | (0.190) | (0.183) | (0.185) |
| Secondary school educ. | 0.678\*\* | 0.930\*\*\* | 0.412\* | 0.076 | 0.167 | 0.447\*\* |
|  | (0.282) | (0.284) | (0.220) | (0.198) | (0.190) | (0.191) |
| High school educ. | 1.004\*\*\* | 1.153\*\*\* | 0.524\*\* | 0.314 | 0.379\* | 0.442\*\* |
|  | (0.296) | (0.296) | (0.232) | (0.213) | (0.205) | (0.206) |
| Vocational high sch | 1.111\*\*\* | 1.340\*\*\* | 0.692\*\*\* | -0.095 | 0.360\* | 0.618\*\*\* |
|  | (0.294) | (0.295) | (0.233) | (0.214) | (0.208) | (0.213) |
| Higher education | 1.094\*\*\* | 1.052\*\*\* | 0.634\*\* | 0.319 | 0.870\*\*\* | 0.511\*\* |
|  | (0.333) | (0.330) | (0.271) | (0.255) | (0.260) | (0.252) |
| Managers† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Professionals | 0.665 | 1.659\*\*\* | 0.307 | 0.829 | 0.538 | 0.398 |
|  | (0.457) | (0.504) | (0.457) | (0.507) | (0.555) | (0.567) |
| Associate professionals | 0.202 | 0.563 | -0.162 | 0.552 | 0.524 | 0.485 |
|  | (0.392) | (0.359) | (0.390) | (0.391) | (0.436) | (0.484) |
| Clerks | 0.143 | 0.344 | -0.345 | 0.539 | 0.277 | -0.161 |
|  | (0.377) | (0.331) | (0.377) | (0.390) | (0.442) | (0.468) |
| Service workers | 0.103 | 0.236 | -0.322 | -0.186 | 0.030 | 0.291 |
|  | (0.448) | (0.413) | (0.437) | (0.420) | (0.411) | (0.466) |
| Agricultural & fishery | 0.000 | 0.000 | -1.240 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (1.408) | (0.000) | (0.000) | (0.000) |
| Crafts & related trades | -0.412 | -0.033 | -0.741\*\* | -0.064 | -0.318 | -0.718\* |
|  | (0.331) | (0.303) | (0.341) | (0.341) | (0.386) | (0.435) |
| Machine operators | 0.376 | 0.362 | -0.376 | 0.323 | 0.183 | -0.212 |
|  | (0.345) | (0.313) | (0.350) | (0.352) | (0.397) | (0.447) |
| Elementary occ.s | -0.637\* | -0.366 | -1.231\*\*\* | -0.449 | -0.831\*\* | -1.172\*\*\* |
|  | (0.334) | (0.306) | (0.343) | (0.343) | (0.388) | (0.437) |
| Small workplace | -2.161\*\*\* | -2.702\*\*\* | -2.309\*\*\* | -2.338\*\*\* | -2.177\*\*\* | -2.518\*\*\* |
|  | (0.124) | (0.127) | (0.109) | (0.115) | (0.115) | (0.124) |
| Medium workplace | -0.688\*\*\* | -0.972\*\*\* | -0.659\*\*\* | -0.686\*\*\* | -0.655\*\*\* | -0.983\*\*\* |
|  | (0.132) | (0.134) | (0.117) | (0.124) | (0.123) | (0.137) |
| Large workplace† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Permanent job† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Temporary job | -1.601\*\*\* | -1.367\*\*\* | -1.366\*\*\* | -1.363\*\*\* | -1.170\*\*\* | -1.274\*\*\* |
|  | (0.075) | (0.068) | (0.062) | (0.064) | (0.062) | (0.065) |
| Born in Türkiye† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Born abroad | -0.356 | -0.943\*\*\* | -0.166 | -0.548\*\* | -0.923\*\*\* | -0.961\*\*\* |
|  | (0.316) | (0.320) | (0.336) | (0.277) | (0.291) | (0.246) |
| Nuts2 dummies incl. | Yes | Yes | Yes | Yes | Yes | Yes |
| Constant | 0.361 | 0.272 | 1.911\*\*\* | 1.714\*\*\* | 2.356\*\*\* | 2.683\*\*\* |
|  | (0.468) | (0.450) | (0.440) | (0.428) | (0.463) | (0.505) |
| No of observations | 6759 | 7770 | 9158 | 8974 | 9135 | 9531 |

† Base category

\*\*\* significant at 1% level; \*\* significant at 5% level; \* significant at 10% level

Standard errors reported in parentheses

**Appendix 3: Logit estimations for having social security, construction workers, *continued***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Male† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Female | -0.042 | 0.294 | 0.308 | 0.495\*\* | 0.673\*\* | 0.979\*\*\* |
|  | (0.238) | (0.223) | (0.216) | (0.236) | (0.303) | (0.294) |
| Aged 15-19† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Aged 20-24 | 1.176\*\*\* | 1.186\*\*\* | 1.133\*\*\* | 1.026\*\*\* | 0.798\*\*\* | 0.379\*\*\* |
|  | (0.111) | (0.113) | (0.113) | (0.121) | (0.144) | (0.137) |
| Aged 25-29 | 1.322\*\*\* | 1.355\*\*\* | 1.062\*\*\* | 0.939\*\*\* | 0.921\*\*\* | 0.545\*\*\* |
|  | (0.114) | (0.117) | (0.114) | (0.121) | (0.143) | (0.136) |
| Aged 30-34 | 1.362\*\*\* | 1.459\*\*\* | 1.215\*\*\* | 1.046\*\*\* | 1.009\*\*\* | 0.609\*\*\* |
|  | (0.121) | (0.124) | (0.120) | (0.123) | (0.146) | (0.135) |
| Aged 35-39 | 1.309\*\*\* | 1.324\*\*\* | 1.294\*\*\* | 0.911\*\*\* | 1.197\*\*\* | 0.839\*\*\* |
|  | (0.124) | (0.124) | (0.122) | (0.125) | (0.149) | (0.140) |
| Aged 40-44 | 1.202\*\*\* | 1.368\*\*\* | 1.186\*\*\* | 0.840\*\*\* | 0.939\*\*\* | 0.698\*\*\* |
|  | (0.125) | (0.127) | (0.126) | (0.126) | (0.156) | (0.140) |
| Aged 45-49 | 1.156\*\*\* | 1.303\*\*\* | 1.093\*\*\* | 0.783\*\*\* | 0.729\*\*\* | 0.641\*\*\* |
|  | (0.131) | (0.133) | (0.131) | (0.132) | (0.157) | (0.145) |
| Aged 50-54 | 0.844\*\*\* | 0.761\*\*\* | 0.377\*\*\* | 0.199 | 0.281\* | 0.446\*\*\* |
|  | (0.139) | (0.143) | (0.137) | (0.140) | (0.170) | (0.156) |
| Aged 55-59 | -0.038 | -0.026 | -0.153 | -0.407\*\* | -0.167 | 0.100 |
|  | (0.166) | (0.171) | (0.159) | (0.162) | (0.191) | (0.167) |
| Aged 60-64 | -0.480\* | -0.747\*\*\* | -0.766\*\*\* | -0.951\*\*\* | -0.731\*\*\* | -0.708\*\*\* |
|  | (0.251) | (0.239) | (0.226) | (0.217) | (0.281) | (0.241) |
| Illiterate† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Literate with no degree | 0.019 | 0.262 | -0.084 | -0.049 | 0.238 | 0.482\*\* |
|  | (0.223) | (0.226) | (0.233) | (0.218) | (0.258) | (0.233) |
| Primary school educ. | 0.295 | 0.633\*\*\* | 0.210 | 0.330\* | 0.384\* | 0.195 |
|  | (0.197) | (0.200) | (0.209) | (0.194) | (0.224) | (0.196) |
| Secondary school educ. | 0.292 | 0.669\*\*\* | 0.261 | 0.320 | 0.380\* | 0.354\* |
|  | (0.203) | (0.207) | (0.214) | (0.198) | (0.229) | (0.202) |
| High school educ. | 0.316 | 0.804\*\*\* | 0.305 | 0.332 | 0.510\*\* | 0.448\*\* |
|  | (0.220) | (0.225) | (0.230) | (0.215) | (0.247) | (0.218) |
| Vocational high sch | 0.528\*\* | 0.879\*\*\* | 0.399\* | 0.300 | 0.441\* | 0.545\*\* |
|  | (0.223) | (0.223) | (0.231) | (0.216) | (0.248) | (0.219) |
| Higher education | 0.564\*\* | 0.619\*\* | 0.142 | 0.297 | 0.744\*\*\* | 0.508\*\* |
|  | (0.272) | (0.258) | (0.251) | (0.245) | (0.276) | (0.242) |
| Managers† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Professionals | 0.019 | 0.672 | 1.086\* | 1.242\*\* | 1.419\* | 1.367\*\* |
|  | (0.628) | (0.749) | (0.620) | (0.629) | (0.794) | (0.541) |
| Associate professionals | 0.004 | -0.253 | 0.331 | 0.531 | 0.467 | 0.827\* |
|  | (0.563) | (0.576) | (0.485) | (0.530) | (0.601) | (0.481) |
| Clerks | 0.145 | -0.340 | -0.219 | 0.171 | 0.015 | 0.434 |
|  | (0.566) | (0.584) | (0.482) | (0.524) | (0.590) | (0.475) |
| Service workers | -0.126 | -0.378 | 0.155 | 0.177 | 0.144 | 0.999\*\* |
|  | (0.554) | (0.575) | (0.478) | (0.523) | (0.571) | (0.472) |
| Agricultural & fishery | -0.737 | 0.000 | -0.326 | 0.000 | -1.583 | -2.947\* |
|  | (1.246) | (0.000) | (1.286) | (0.000) | (1.572) | (1.636) |
| Crafts & related trades | -0.837 | -1.105\*\* | -0.633 | -0.242 | -0.757 | 0.016 |
|  | (0.529) | (0.550) | (0.453) | (0.494) | (0.539) | (0.419) |
| Machine operators | -0.544 | -0.885 | -0.222 | 0.101 | -0.035 | 0.493 |
|  | (0.537) | (0.558) | (0.464) | (0.505) | (0.552) | (0.433) |
| Elementary occ.s | -1.391\*\*\* | -1.537\*\*\* | -1.070\*\* | -0.683 | -0.998\* | -0.428 |
|  | (0.531) | (0.552) | (0.455) | (0.496) | (0.542) | (0.421) |
| Small workplace | -2.490\*\*\* | -2.559\*\*\* | -2.491\*\*\* | -2.274\*\*\* | -2.324\*\*\* | -2.565\*\*\* |
|  | (0.120) | (0.122) | (0.116) | (0.111) | (0.130) | (0.135) |
| Medium workplace | -0.853\*\*\* | -0.862\*\*\* | -1.041\*\*\* | -0.609\*\*\* | -0.654\*\*\* | -0.878\*\*\* |
|  | (0.133) | (0.134) | (0.126) | (0.122) | (0.142) | (0.153) |
| Large workplace† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Permanent job† | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Temporary job | -1.314\*\*\* | -1.322\*\*\* | -1.262\*\*\* | -1.311\*\*\* | -1.234\*\*\* | -1.218\*\*\* |
|  | (0.066) | (0.067) | (0.065) | (0.069) | (0.076) | (0.070) |
| Born in Turkiye | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Born abroad | -2.054\*\*\* | -2.113\*\*\* | -2.426\*\*\* | -1.972\*\*\* | -2.401\*\*\* | -2.224\*\*\* |
|  | (0.250) | (0.219) | (0.203) | (0.197) | (0.268) | (0.238) |
| Nuts2 dummies incl. | Yes | Yes | Yes | Yes | Yes | Yes |
| Constant | 3.134\*\*\* | 2.780\*\*\* | 2.732\*\*\* | 2.617\*\*\* | 2.612\*\*\* | 2.659\*\*\* |
|  | (0.591) | (0.610) | (0.528) | (0.557) | (0.614) | (0.505) |
| No of observations | 9445 | 9335 | 9391 | 8786 | 6485 | 8133 |

† Base category

\*\*\* significant at 1% level; \*\* significant at 5% level; \* significant at 10% level

Standard errors reported in parentheses