## Appendix A

#### Table A.1. Percentage of individuals working different than usual hours

|  |  |  |  |
| --- | --- | --- | --- |
|  | Head |  | Partner |
|  | Actual<Usual | Actual>Usual |  | Actual<Usual | Actual>Usual |
| 2019.Q2 | 12.1% | 4.1% |  | 11.6% | 3.4% |
| 2019.Q3 | 8.8% | 4.3% |  | 8.0% | 3.6% |
| 2019.Q4 | 12.9% | 4.5% |  | 12.4% | 3.5% |
| 2020.Q2 | 19.0% | 6.4% |  | 17.8% | 6.5% |
| 2020.Q3 | 9.6% | 5.0% |  | 8.5% | 4.6% |
| 2020.Q4 | 14.7% | 5.0% |  | 14.1% | 4.5% |
| Total | 12.8% | 4.8% |  | 12.1% | 4.3% |

Note: Own calculations based on EPA microdata (2019.Q2-2019.Q4 and 2020.Q2-2020.Q4). Sample: “twin” heterosexual-couple households with adults aged 24–64 (married or not) with both partners working full-time. Military occupations and the cities of Ceuta and Melilla are excluded.

#### Table A.2. Estimation results (selection mechanism)

|  |  |  |
| --- | --- | --- |
|  | *Male-headed households* | *Female-headed households* |
|  | Q2 | Q3 | Q4 | Q2 | Q3 | Q4 |
| 2020.Q2 | -0.340\*\*\* |  |  |  | -0.279\*\*\* |  |
|  | (0.024) |  |  |  | (0.034) |  |
| 2020.Q3 |  | -0.103\*\*\* |  |  |  | -0.082\*\*\* |
|  |  | (0.019) |  |  |  | (0.025) |
| 2020.Q4 |  |  | -0.056\*\*\* |  |  |  |
|  |  |  | (0.017) |  |  |  |
| *Child* |  |  |  |  |  |  |
| 0-6 years old | -0.03 | -0.135\*\*\* | -0.076\* |  | -0.110\* | -0.227\*\*\* |
|  | (0.034) | (0.033) | (0.033) |  | (0.045) | (0.042) |
| Over 6 years old | 0.180\*\*\* | 0.098\*\*\* | 0.145\*\*\* |  | 0.089\* | -0.015 |
|  | (0.028) | (0.027) | (0.027) |  | (0.039) | (0.036) |
| *Younger than average* | 0.224\*\*\* | 0.265\*\*\* | 0.266\*\*\* |  | 0.179\*\*\* | 0.235\*\*\* |
|  | (0.020) | (0.020) | (0.020) |  | (0.027) | (0.026) |
| *Size\_hh* | -0.021+ | -0.033\*\* | -0.017 |  | 0.006 | 0.027+ |
|  | (0.011) | (0.010) | (0.011) |  | (0.016) | (0.014) |
| *Education\_hh* |  |  |  |  |  |  |
| Head non-tertiary | 0.589\*\*\* | 0.390\*\*\* | 0.544\*\*\* |  | 0.149\*\*\* | 0.116\*\* |
|  | (0.025) | (0.025) | (0.024) |  | (0.045) | (0.043) |
| Head tertiary | 0.209\*\*\* | 0.103\*\*\* | 0.179\*\*\* |  | 0.563\*\*\* | 0.394\*\*\* |
|  | (0.031) | (0.031) | (0.030) |  | (0.033) | (0.032) |
| Both tertiary | 0.818\*\*\* | 0.488\*\*\* | 0.706\*\*\* |  | 0.758\*\*\* | 0.434\*\*\* |
|  | (0.021) | (0.021) | (0.021) |  | (0.028) | (0.028) |
| *Immigrant\_hh* |  |  |  |  |  |  |
| Head native | -0.283\*\*\* | -0.138\*\*\* | -0.264\*\*\* |  | -0.09 | -0.039 |
|  | (0.041) | (0.036) | (0.037) |  | (0.060) | (0.053) |
| Head immigrant | -0.196\* | -0.05 | -0.193\* |  | -0.226\*\* | -0.074 |
|  | (0.080) | (0.072) | (0.078) |  | (0.085) | (0.070) |
| Both immigrant | -0.242\*\*\* | -0.148\*\*\* | -0.231\*\*\* |  | -0.231\*\*\* | -0.153\*\* |
|  | (0.038) | (0.033) | (0.035) |  | (0.056) | (0.051) |
| Region characteristics |  |  |  |  |  |  |
| Female Activity rate | 0.010\*\* | 0.011\*\*\* | 0.015\*\*\* |  | 0.009\* | 0.008\* |
|  | (0.003) | (0.003) | (0.003) |  | (0.005) | (0.004) |
| Female Partial time rate | -0.013\*\*\* | -0.005 | -0.015\*\*\* |  | -0.013\* | -0.009+ |
|  | (0.004) | (0.004) | (0.004) |  | (0.005) | (0.005) |
| Enrolment rate (childcare) | 0.004 | 0.008\*\*\* | 0.004+ |  | 0.009\* | 0.008\* |
|  | (0.003) | (0.002) | (0.002) |  | (0.004) | (0.003) |
| Unemployment rate | -0.018 | -0.020+ | -0.009 |  | -0.025 | -0.006 |
|  | (0.012) | (0.011) | (0.011) |  | (0.018) | (0.016) |
| Underemployment rate | 0.003 | 0.002 | 0 |  | 0.048\*\* | 0.009 |
|  | (0.011) | (0.008) | (0.010) |  | (0.017) | (0.011) |
| Constant | -1.356\*\*\* | -1.708\*\*\* | -1.617\*\*\* |  | -1.774\*\*\* | -1.706\*\*\* |
|   | (0.266) | (0.241) | (0.228) |  | (0.385) | (0.342) |
| REGION fixed effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 27,303 | 26,066 | 25,579 | 14,142 | 14,183 | 14,853 |

+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001 Robust standard error in parenthesis.

Note: Estimations with Heckman Model based on EPA microdata (2019.Q2-2019.Q4 and 2020.Q2-2020.Q4). Sample: “twin” heterosexual-couple households with adults aged 24–64 (married or not) with both partners working full-time. Military occupations and the cities of Ceuta and Melilla are excluded.

#### Table A.3. Estimation results without selection mechanism

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Male-headed households* |  | *Female-headed households* |
|  | Q2 | Q3 | Q4 |  | Q2 | Q3 | Q4 |
| 2020.Q2 | 0.37 |  |  |  | 1.27 |  |  |
|  | (0.670) |  |  |  | (0.939) |  |  |
| 2020.Q3 |  | 1.019+ |  |  |  | 0.451 |  |
|  |  | (0.603) |  |  |  | (0.813) |  |
| 2020.Q4 |  |  | 0.015 |  |  |  | 0.574 |
|  |  |  | (0.544) |  |  |  | (0.769) |
| *Child* |  |  |  |  |  |  |  |
| 0-6 years old | 0.275 | 0.738+ | 1.015\*\* |  | 0.946\* | 1.225\* | 1.254\*\* |
|  | (0.359) | (0.388) | (0.340) |  | (0.466) | (0.514) | (0.448) |
| Older than 6 years | 0.416 | 0.357 | 1.225\*\*\* |  | 0.847\* | 1.316\*\* | 0.512 |
|  | (0.288) | (0.307) | (0.270) |  | (0.388) | (0.414) | (0.367) |
| 0-6 years old × 20.Q | 1.339\* | 0.444 | -0.635 |  | -0.307 | -0.109 | -0.251 |
|  | (0.538) | (0.553) | (0.482) |  | (0.708) | (0.720) | (0.627) |
| Over 6 years old × 20.Q | 0.776+ | 0.552 | -0.751+ |  | -0.822 | -0.598 | -0.024 |
|  | (0.444) | (0.444) | (0.395) |  | (0.612) | (0.605) | (0.535) |
| *Younger than average* | -0.148 | 0.007 | 0.322+ |  | -0.131 | 0.345 | -0.174 |
|  | (0.211) | (0.219) | (0.192) |  | (0.293) | (0.299) | (0.259) |
| *Education\_hh* |  |  |  |  |  |  |  |
| Head non-tertiary | 0.615\* | 0.041 | 0.639\* |  | 0.717 | -0.171 | 0.966\* |
|  | (0.293) | (0.292) | (0.259) |  | (0.555) | (0.531) | (0.478) |
| Head tertiary | 0.148 | -0.357 | 0.488 |  | 1.290\*\* | 0.378 | 0.920\*\* |
|  | (0.373) | (0.372) | (0.329) |  | (0.403) | (0.389) | (0.346) |
| Both tertiary | 0.457 | -0.476 | 0.235 |  | 0.403 | 0.082 | 0.677+ |
|  | (0.290) | (0.297) | (0.263) |  | (0.411) | (0.401) | (0.359) |
| *Occupation\_hh* |  |  |  |  |  |  |  |
| Both white collar+ Head teleworkable | 0.845 | 1.568\*\* | -0.389 |  | 0.912 | 1.300+ | 0.296 |
|  | (0.517) | (0.547) | (0.466) |  | (0.643) | (0.676) | (0.596) |
| Both white collar+ Partner teleworkable | 1.231\*\* | 1.521\*\* | 0.626 |  | 0.018 | 0.788 | 0.037 |
|  | (0.442) | (0.473) | (0.413) |  | (0.673) | (0.740) | (0.642) |
| Both white collar+ Both teleworkable | 0.662 | 0.664 | -0.092 |  | 0.864 | 1.456\* | 0.411 |
|  | (0.420) | (0.463) | (0.394) |  | (0.597) | (0.649) | (0.556) |
| Head\_white-collar+ Non-teleworkable | 1.056 | 0.354 | 0.586 |  | -0.307 | 0.163 | 0.000 |
|  | (0.734) | (0.741) | (0.716) |  | (0.573) | (0.593) | (0.521) |
| Head\_white-collar+ Teleworkable | 2.443+ | -0.452 | 1.197 |  | 0.212 | 0.233 | 0.227 |
|  | (1.339) | (1.194) | (1.133) |  | (0.730) | (0.787) | (0.691) |
| Partner white-collar + Non teleworkable | 1.037\* | 0.933\* | 0.003 |  | 1.331 | 0.191 | 1.776+ |
|  | (0.406) | (0.430) | (0.378) |  | (1.129) | (1.078) | (1.038) |
| Partner white-collar+ Teleworkable | 0.978+ | 0.831 | -0.442 |  | 3.980\* | -1.613 | 2.018 |
|  | (0.547) | (0.582) | (0.513) |  | (1.770) | (1.967) | (1.577) |
| Both blue-collar | 0.858+ | 1.015\* | 0.563 |  | 1.176+ | 0.255 | 0.696 |
|  | (0.484) | (0.496) | (0.444) |  | (0.659) | (0.690) | (0.633) |
| Both white collar+ Head teleworkable × 20.Q | 0.08 | -2.210\*\* | -0.131 |  | -0.833 | -1.325 | -0.902 |
|  | (0.740) | (0.785) | (0.650) |  | (0.941) | (0.924) | (0.810) |
| Both white collar+ Partner teleworkable × 20.Q | -0.222 | -0.612 | -0.218 |  | -1.347 | -1.438 | 0.049 |
|  | (0.655) | (0.665) | (0.589) |  | (1.031) | (1.046) | (0.888) |
| Both white collar+ Both teleworkable × 20.Q | -0.106 | -0.368 | 0.296 |  | -0.633 | -0.963 | -0.470 |
|  | (0.570) | (0.606) | (0.521) |  | (0.806) | (0.836) | (0.716) |
| Head\_white-collar+ Non-teleworkable × 20.Q | -0.673 | 0.35 | -0.005 |  | -0.352 | -0.884 | -0.394 |
|  | (1.257) | (1.125) | (1.048) |  | (0.870) | (0.804) | (0.729) |
| Head\_white-collar+ Teleworkable × 20.Q | -0.688 | 1.946 | -2.08 |  | -0.11 | 0.026 | -0.671 |
|  | (1.925) | (1.808) | (1.658) |  | (1.071) | (1.071) | (0.924) |
| Partner white-collar+ Non teleworkable × 20.Q | -1.174+ | -1.477\* | 0.128 |  | -0.541 | 3.266+ | -2.719+ |
|  | (0.616) | (0.594) | (0.534) |  | (1.903) | (1.709) | (1.590) |
| Partner white-collar+ Teleworkable × 20.Q | -1.551\* | -1.097 | 0.816 |  | -1.155 | 0.919 | -2.944 |
|  | (0.779) | (0.817) | (0.705) |  | (2.916) | (2.767) | (2.202) |
| Both blue-collar × 20.Q | 0.096 | -0.84 | -0.489 |  | 0.12 | 0.482 | -0.888 |
|  | (0.714) | (0.685) | (0.612) |  | (1.010) | (0.953) | (0.877) |
| *Activity\_hh* |   |   |   |  |   |   |   |
| Head non-essential | -0.038 | -0.064 | 0.24 |  | 0.939 | -0.166 | -0.050 |
|  | (0.431) | (0.454) | (0.406) |  | (0.609) | (0.645) | (0.590) |
| Partner non-essential | 1.227\*\* | 0.465 | 0.501 |  | 0.62 | -0.284 | 0.626 |
|  | (0.442) | (0.464) | (0.407) |  | (0.579) | (0.613) | (0.545) |
| Both essential | 0.717+ | 0.943\* | 0.437 |  | 0.586 | -0.058 | 0.38 |
|  | (0.389) | (0.407) | (0.359) |  | (0.534) | (0.563) | (0.506) |
| Head non-essential × 20.Q | -0.365 | -1.037+ | 0.105 |  | -0.081 | 1.009 | 0.573 |
|  | (0.637) | (0.605) | (0.542) |  | (0.974) | (0.881) | (0.806) |
| Partner non-essential × 20.Q | -1.165+ | -0.422 | 0.693 |  | -1.596+ | -0.143 | -0.426 |
|  | (0.687) | (0.640) | (0.575) |  | (0.879) | (0.805) | (0.723) |
| Both essential × 20.Q | -0.882 | -0.885+ | 0.355 |  | -0.471 | 0.232 | -0.239 |
|  | (0.553) | (0.520) | (0.465) |  | (0.775) | (0.710) | (0.647) |

+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001. Robust standard error in parenthesis. Note: Estimations with Heckman Model based on EPA microdata (2019.Q2-2019.Q4 and 2020.Q2-2020.Q4). Sample: “twin” heterosexual-couple households with adults aged 24–64 (married or not) with both partners working full-time. Military occupations and the cities of Ceuta and Melilla are excluded.

Note: This table is equivalent to results in Table 3, but in here, we present a matching diff-in-diff methodology but without considering the selection mechanism (not follow Heckman’s approach). The list of covariates is the same as in the main case, where selection mechanism is included.

#### Table A.3. Estimation results without selection mechanism (Cont.)

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Male-headed households* |  | *Female-headed households* |
|  | Q2 | Q3 | Q4 |  | Q2 | Q3 | Q4 |
| *Contract\_hh* |   |   |   |  |   |   |   |
| Head permanent | 0.418 | 0.202 | -0.324 |  | 0.536 | 0.153 | -0.452 |
|  | (0.300) | (0.320) | (0.278) |  | (0.524) | (0.561) | (0.469) |
| Partner permanent | 0.738+ | 0.148 | 0.213 |  | 0.448 | 0.804+ | 0.451 |
|  | (0.405) | (0.405) | (0.351) |  | (0.425) | (0.420) | (0.374) |
| Non-permanent | -0.902+ | 0.008 | -0.376 |  | -0.233 | -0.398 | -0.04 |
|  | (0.537) | (0.541) | (0.487) |  | (0.722) | (0.676) | (0.658) |
| *Employee* |   |   |   |  |   |   |   |
| Head\_pri + Partner\_pub | 1.401\*\*\* | 1.484\*\*\* | 1.099\*\* |  | -0.563 | -1.145 | -1.462\* |
|  | (0.373) | (0.402) | (0.344) |  | (0.774) | (0.828) | (0.669) |
| Head\_pri + Partner\_self | -3.044\*\*\* | -3.918\*\*\* | -4.095\*\*\* |  | 5.765\*\*\* | 7.566\*\*\* | 5.757\*\*\* |
|  | (0.442) | (0.441) | (0.395) |  | (0.505) | (0.492) | (0.438) |
| Head\_pub + Partner\_pri | -1.042\* | -1.249\* | -1.270\*\* |  | 1.084\* | 1.572\*\* | 1.140\* |
|  | (0.521) | (0.554) | (0.466) |  | (0.501) | (0.529) | (0.451) |
| Both public employees | 0.154 | 0.228 | -0.254 |  | -0.555 | -1.451\* | -0.638 |
|  | (0.489) | (0.550) | (0.455) |  | (0.680) | (0.719) | (0.604) |
| Head\_pub + Partner\_self | -5.842\*\*\* | -3.211\*\*\* | -5.630\*\*\* |  | 7.902\*\*\* | 8.959\*\*\* | 7.768\*\*\* |
|  | (0.822) | (0.852) | (0.755) |  | (0.682) | (0.756) | (0.607) |
| Head\_self + Partner\_pri | 6.124\*\*\* | 6.306\*\*\* | 5.850\*\*\* |  | -4.969\*\*\* | -4.664\*\*\* | -4.218\*\*\* |
|  | (0.351) | (0.355) | (0.316) |  | (0.595) | (0.570) | (0.522) |
| Head\_self + Partner\_pub | 7.692\*\*\* | 7.823\*\*\* | 7.440\*\*\* |  | -4.675\*\*\* | -6.198\*\*\* | -4.919\*\*\* |
|  | (0.508) | (0.533) | (0.456) |  | (1.270) | (1.278) | (1.123) |
| Both self-employed | 4.521\*\*\* | 4.136\*\*\* | 4.203\*\*\* |  | 2.908\*\*\* | 2.635\*\*\* | 2.661\*\*\* |
|  | (0.377) | (0.363) | (0.332) |  | (0.529) | (0.507) | (0.483) |
| *Gap actual vs. usual (Head)* |  |  |  |  |  |  |  |
| More | 9.445\*\*\* | 9.785\*\*\* | 8.940\*\*\* |  | -8.957\*\*\* | -7.426\*\*\* | -8.682\*\*\* |
|  | (0.393) | (0.435) | (0.361) |  | (0.551) | (0.614) | (0.526) |
| Less: Holidays/festivities | -11.889\*\*\* | -10.567\*\*\* | -10.877\*\*\* |  | 9.372\*\*\* | 11.034\*\*\* | 12.894\*\*\* |
|  | (0.719) | (0.768) | (0.643) |  | (0.726) | (0.743) | (0.674) |
| Less: Flexible schedule | -11.746\*\*\* | -14.064\*\*\* | -11.794\*\*\* |  | 10.474\*\*\* | 12.816\*\*\* | 8.946\*\*\* |
|  | (0.477) | (0.624) | (0.385) |  | (0.627) | (0.772) | (0.523) |
| Less: ERTE/ERE | -4.891\*\*\* | -6.092\*\*\* | -6.775\*\*\* |  | 4.838\*\*\* | 6.026\*\*\* | 4.303\*\*\* |
|  | (0.806) | (0.535) | (0.827) |  | (1.114) | (0.718) | (1.113) |
| Less: Other | -18.482\*\*\* | -19.143\*\*\* | -18.444\*\*\* |  | 18.607\*\*\* | 17.693\*\*\* | 14.600\*\*\* |
|  | (0.474) | (0.861) | (0.833) |  | (0.693) | (1.125) | (1.038) |
| *Gap actual vs. usual (Partner)* |  |  |  |  |  |  |  |
| More | -8.860\*\*\* | -7.888\*\*\* | -6.774\*\*\* |  | 9.262\*\*\* | 9.738\*\*\* | 9.964\*\*\* |
|  | (0.433) | (0.521) | (0.419) |  | (0.552) | (0.576) | (0.513) |
| Less: Holidays/festivities | 11.319\*\*\* | 10.362\*\*\* | 10.117\*\*\* |  | -9.277\*\*\* | -13.026\*\*\* | -10.883\*\*\* |
|  | (0.580) | (0.626) | (0.524) |  | (1.024) | (1.204) | (0.826) |
| Less: Flexible schedule | 11.210\*\*\* | 13.403\*\*\* | 10.920\*\*\* |  | -10.597\*\*\* | -13.886\*\*\* | -9.709\*\*\* |
|  | (0.470) | (0.622) | (0.389) |  | (0.647) | (0.874) | (0.535) |
| Less: ERTE/ERE | 6.743\*\*\* | 4.949\*\*\* | 5.017\*\*\* |  | -4.857\*\*\* | -5.716\*\*\* | -4.663\*\*\* |
|  | (0.902) | (0.577) | (0.865) |  | (1.202) | (0.856) | (1.130) |
| Less: Other | 16.867\*\*\* | 18.773\*\*\* | 14.526\*\*\* |  | -19.223\*\*\* | -14.404\*\*\* | -15.157\*\*\* |
|  | (0.518) | (0.815) | (0.914) |  | (0.698) | (1.299) | (1.206) |
| REGION fixed effects | Yes | Yes | Yes |  | Yes | Yes | Yes |
| Activity (head and partner) | Yes | Yes | Yes |  | Yes | Yes | Yes |

+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001. Robust standard error in parenthesis. Note: Estimations with Heckman Model based on EPA microdata (2019.Q2-2019.Q4 and 2020.Q2-2020.Q4). Sample: “twin” heterosexual-couple households with adults aged 24–64 (married or not) with both partners working full-time. Military occupations and the cities of Ceuta and Melilla are excluded.

Note: This table is equivalent to results in Table 3, but in here, we present a matching diff-in-diff methodology but without considering the selection mechanism (not follow Heckman’s approach). The list of covariates is the same as in the main case, where selection mechanism is included.

**Table A.4. Estimation results with different classification of occupation status**

|  |  |  |
| --- | --- | --- |
|  | *Male-headed households* | *Female-headed households* |
| PANEL A | Q2 | Q3 | Q4 | Q2 | Q3 | Q4 |
| Head\_white-collar | -1.226\* | -1.676\*\* | -1.568\*\* | -0.533 | -1.916\*\*\* | -0.156 |
|  | (0.621) | (0.573) | (0.569) | (0.432) | (0.435) | (0.412) |
| Partner\_white-collar | -0.609\* | -0.891\*\* | -1.154\*\*\* | 1212 | -2.242\*\* | 1343 |
|  | (0.305) | (0.305) | (0.276) | (0.938) | (0.830) | (0.859) |
| Both blue-collar | -1.781\*\*\* | -1.833\*\*\* | -1.976\*\*\* | 0.029 | -2.211\*\*\* | 0.558 |
|  | (0.420) | (0.413) | (0.384) | (0.636) | (0.602) | (0.613) |
| Head\_white-collar × 20.Q | 0.044 | 1.384+ | 1.118 | -0.072 | 1.156\* | 0.019 |
|  | (0.957) | (0.821) | (0.798) | (0.588) | (0.552) | (0.510) |
| Partner\_white-collar × 20.Q | -0.575 | 0.084 | 0.894\* | -0.001 | 1.514 | -2.215+ |
|  | (0.414) | (0.393) | (0.361) | (1.521) | (1.299) | (1.261) |
| Both blue-collar × 20.Q | -0.155 | 0.116 | 0.311 | 1.148 | 1.116 | -1.290+ |
|  | (0.566) | (0.528) | (0.487) | (0.836) | (0.778) | (0.746) |
| PANEL B |
| Head telework | 0.686+ | 0.656+ | 0.424 | -0.108 | -0.188 | -0.076 |
|  | (0.371) | (0.369) | (0.335) | (0.473) | (0.496) | (0.465) |
| Partner telework | 0.298 | 0.573 | -0.555+ | 1.255\* | 1.182\* | 0.33 |
|  | (0.367) | (0.367) | (0.330) | (0.520) | (0.535) | (0.506) |
| Both telework | 0.234 | 0.292 | -0.162 | 0.851+ | 1.066\* | 0.291 |
|  | (0.359) | (0.378) | (0.330) | (0.496) | (0.532) | (0.480) |
| Head telework × 20.Q | 0.733 | 0.427 | -0.13 | -0.285 | 0.13 | 0.218 |
|  | (0.522) | (0.506) | (0.461) | (0.672) | (0.667) | (0.604) |
| Partner telework × 20.Q | 0.17 | -0.664 | 0.56 | -0.706 | -0.649 | -0.403 |
|  | (0.497) | (0.502) | (0.433) | (0.734) | (0.713) | (0.658) |
| Both telework × 20.Q | 0.774+ | 0.489 | 0.655 | -0.193 | -0.312 | 0.007 |
|  | (0.446) | (0.463) | (0.405) | (0.610) | (0.649) | (0.574) |

+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001. Robust standard error in parenthesis. Note: Estimations with Heckman Model based on EPA microdata (2019.Q2-2019.Q4 and 2020.Q2-2020.Q4). Sample: “twin” heterosexual-couple households with adults aged 24–64 (married or not) with both partners working full-time. Military occupations and the cities of Ceuta and Melilla are excluded.

## Appendix B

The data presents detailed information on economic activity at a three-digit level (272 activities; NACE Rev. 2). We have classified these activities into essential activities and non-essential activities based on the restrictions imposed by the Spanish government under Royal Decree 463/2020 of March 14, 2020 declaring the state of emergency to manage the health crisis caused by COVID-19 and Royal Decree 465/2020 of March 17, 2020 amending Royal Decree 463/2020. We completed our classification with the List of four-digit codes of economic activities suspended as a direct consequence of the declaration of the state of emergency published by a group of Spanish insurance companies known as *Mutuas* to help entrepreneurs and self-employed workers.[[1]](#footnote-1)

#### Table B.1. Classification of essential activities (CNAE-2009; NACE Rev. 2)

| **Essential activities** |
| --- |
| 011-Growing of non-perennial crops | 467-Other specialised wholesale |
| 012-Growing of perennial crops | 472-Retail sale of food, beverages and tobacco in specialised stores |
| 013-Plant propagation | 473-Retail sale of automotive fuel in specialised stores |
| 014-Animal production | 491-Passenger rail transport, interurban |
| 015-Mixed farming | 492-Freight rail transport |
| 016-Support activities to agriculture and post-harvest crop activities | 494-Freight transport by road and removal services |
| 017-Hunting, trapping and related service activities | 495-Transport via pipeline |
| 021-Silviculture and other forestry activities | 502-Sea and coastal freight water transport |
| 022-Logging | 504-Inland freight water transport |
| 023-Gathering of wild growing non-wood products | 512-Freight air transport and space transport |
| 024-Support services to forestry | 521-Warehousing and storage |
| 031-Fishing | 522-Support activities for transportation |
| 032-Aquaculture | 531-Postal activities under universal service obligation |
| 061-Extraction of crude petroleum | 532-Other postal and courier activities |
| 062-Extraction of natural gas | 581-Publishing of books, periodicals and other publishing activities |
| 091-Support activities for petroleum and natural gas extraction | 582-Software publishing |
| 101-Processing and preserving of meat and production of meat products | 601-Radio broadcasting |
| 102-Processing and preserving of fish, crustaceans and molluscs | 602-Television programming and broadcasting activities |
| 103-Processing and preserving of fruit and vegetables | 611-Wired telecommunications activities |
| 104-Manufacture of vegetable and animal oils and fats | 612-Wireless telecommunications activities |
| 105-Manufacture of dairy products | 613-Satellite telecommunications activities |
| 106-Manufacture of grain mill products, starches and starch products | 619-Other telecommunications activities |
| 107-Manufacture of bakery and farinaceous products | 620-Computer programming, consultancy and related activities |
| 108-Manufacture of other food products | 631-Data processing, hosting and related activities; web portals |
| 109-Manufacture of prepared animal feeds | 639-Other information service activities |
| 110-Manufacture of beverages | 641-Monetary intermediation |
| 172-Manufacture of articles of paper and paperboard | 642-Activities of holding companies |
| 181-Printing and service activities related to printing | 643-Trusts, funds and similar financial entities |
| 191-Manufacture of coke oven products | 649-Other financial service activities, except insurance and pension funding |
| 192-Manufacture of refined petroleum products | 651-Insurance |
| 201-Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms | 652-Reinsurance |
| 202-Manufacture of pesticides and other agrochemical products | 653-Pension funding |
| 203-Manufacture of paints, varnishes and similar coatings, printing ink and mastics | 661-Activities auxiliary to financial services, except insurance and pension funding |
| 204-Manufacture of soap and detergents, cleaning and polishing preparations, perfu- mes and toilet preparations | 662-Activities auxiliary to insurance and pension funding |
| 205-Manufacture of other chemical products | 663-Fund management activities |
| 206-Manufacture of man-made fibres | 681-Buying and selling of own real estate |
| 211-Manufacture of basic pharmaceutical products | 682-Renting and operating of own or leased real estate |
| 212-Manufacture of pharmaceutical preparations | 683-Real estate activities on a fee or contract basis |
| 221-Manufacture of rubber products | 691-Legal activities |
| 222-Manufacture of plastics products | 692-Accounting, bookkeeping and auditing activities; tax consultancy |
| 252-Manufacture of tanks, reservoirs and containers of metal | 701-Activities of head offices |
| 253-Manufacture of steam generators, except central heating hot water boilers | 711-Architectural and engineering activities and related technical consultancy |
| 261-Manufacture of electronic components and boards | 712-Technical testing and analysis |
| 262-Manufacture of computers and peripheral equipment | 721-Research and experimental development on natural sciences and engineering |
| 263-Manufacture of communication equipment | 722-Research and experimental development on social sciences and humanities |
| 264-Manufacture of consumer electronics | 731-Advertising |
| 265-Manufacture of instruments and appliances for measuring, testing and naviga- tion; watches and clocks | 743-Translation and interpretation activities |
| 266-Manufacture of irradiation, electromedical and electrotherapeutic equipment | 749-Other professional, scientific and technical activities n.e.c. |
| 267-Manufacture of optical instruments and photographic equipment | 750-Veterinary activities |
| 268-Manufacture of magnetic and optical media | 774-Leasing of intellectual property and similar products, except copyrighted |
| 271-Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus | 781-Activities of employment placement agencies |
| 272-Manufacture of batteries and accumulators | 782-Temporaryemployment agency activities |
| 273-Manufacture of wiring and wiring devices | 783-Other human resources provision |
| 274-Manufacture of electric lighting equipment | 801-Private security activities |
| 279-Manufacture of other electrical equipment | 802-Security systems service activities |
| 283-Manufacture of agricultural and forestry machinery | 803-Investigation activities |
| 284-Manufacture of metal forming machineryand machine tools | 811-Combined facilities support activities |
| 289-Manufacture of other special-purpose machinery | 812-Cleaning activities |
| 301-Building of ships and boats | 813-Landscape service activities |
| 302-Manufacture of railway locomotives and rolling stock | 822-Activities of call centres |
| 304-Manufacture of militaryfighting vehicles | 829-Business support service activities n.e.c. |
| 309-Manufacture of transport equipment n.e.c. | 841-Administration of the State and the economic and social policy of the community |
| 325-Manufacture of medical and dental instruments and supplies | 842-Provision of services to the community as a whole |
| 331-Repair of fabricated metal products, machinery and equipment | 843-Compulsorysocial security activities |
| 351-Electric power generation, transmission and distribution | 852-Primary education |
| 352-Manufacture of gas; distribution of gaseous fuels through mains | 853-Secondary education |
| 353-Steam and air conditioning supply | 854-Higher education |
| 360-Water collection, treatment and supply | 861-Hospital activities |
| 370-Sewerage | 862-Medical and dental practice activities |
| 381-Waste collection | 869-Other human health activities |
| 382-Waste treatment and disposal | 871-Residential nursing care activities |
| 383-Materials recovery | 872-Residential care activities for mental retardation, mental health and substance abuse |
| 390-Remediation activities and other waste management services | 873-Residential care activities for the elderly and disabled |
| 461-Wholesale on a fee or contract basis | 879-Other residential care activities |
| 462-Wholesale of agricultural raw materials and live animals | 881-Social work activities without accommodation for the elderly and disabled |
| 463-Wholesale of food, beverages and tobacco | 889-Other social work activities without accommodation |
| 464-Wholesale of household goods | 951-Repair of computers and communication equipment |
| 465-Wholesale of information and communication equipment | 981-Undifferentiated goods-producing activities of private households for own use |
| 466-Wholesale of other machinery, equipment and supplies | 982-Undifferentiated service-producing activities of private households for own use |

Source: The authors

#### Table B.2. Classification of non-essential activities (CNAE-2009; NACE Rev. 2)

| **Non-essential activities** |
| --- |
| 051-Mining of hard coal | 422-Construction of utility projects |
| 052-Mining of lignite | 429-Construction of other civil engineering projects |
| 071-Mining of iron ores | 431-Demolition and site preparation |
| 072-Mining of non-ferrous metal ores | 432-Electrical, plumbing and other construction installation activities |
| 081-Quarrying of stone, sand and clay | 433-Building completion and finishing |
| 089-Mining and quarrying n.e.c. | 439-Other specialised construction activities |
| 099-Support activities for other mining and quarrying | 451-Sale of motor vehicles |
| 120-Manufacture of tobacco products | 452-Maintenance and repair of motor vehicles |
| 131-Preparation and spinning of textile fibres | 453-Sale of motor vehicle parts and accessories |
| 132-Weaving of textiles | 454-Sale, maintenance and repair of motorcycles and related parts and accessories |
| 133-Finishing of textiles | 469-Non-specialised wholesale trade |
| 139-Manufacture of other textiles | 471-Retail sale in non-specialised stores |
| 141-Manufacture of wearing apparel, except fur apparel | 474-Retail sale of information and communication equipment in specialised stores |
| 142-Manufacture of articles of fur | 475-Retail sale of other household equipment in specialised stores |
| 143-Manufacture of knitted and crocheted apparel | 476-Retail sale of cultural and recreation goods in specialised stores |
| 151-Tanning and dressing of leather;manufacture of luggage, handbags, saddleryand harness; dressing and dyeing of fur | 477-Retail sale of other goods in specialised stores |
| 152-Manufacture of footwear | 478-Retail sale via stalls and markets |
| 161-Sawmilling and planing of wood | 479-Retail trade not in stores, stalls or markets |
| 162-Manufacture of products of wood, cork, straw and plaiting materials | 493-Other passenger land transport |
| 171-Manufacture of pulp, paper and paperboard | 501-Sea and coastal passenger water transport |
| 182-Reproduction of recorded media | 503-Inland passenger water transport |
| 231-Manufacture of glass and glass products | 511-Passenger air transport |
| 232-Manufacture of refractoryproducts | 551-Hotels and similar accommodation |
| 233-Manufacture of clay building materials | 552-Holiday and other short-stay accommodation |
| 234-Manufacture of other porcelain and ceramic products | 553-Camping grounds, recreational vehicle parks and trailer parks |
| 235-Manufacture of cement, lime and plaster | 559-Other accommodation |
| 236-Manufacture of articles of concrete, cement and plaster | 561-Restaurants and mobile food service activities |
| 237-Cutting, shaping and finishing of stone | 562-Event catering and other food service activities |
| 239-Manufacture of abrasive products and non-metallic mineral products  | 563-Beverage serving activities |
| 241-Manufacture of basic iron and steel and of ferro-alloys | 591-Motion picture, video and television programme activities |
| 242-Manufacture of tubes, pipes, hollow profiles and related fittings, of steel | 592-Sound recording and music publishing activities |
| 243-Manufacture of other products of first processing of steel | 702-Management consultancy activities |
| 244-Manufacture of basic precious and other non-ferrous metals | 732-Market research and public opinion polling |
| 245-Casting of metals | 741-Specialised design activities |
| 251-Manufacture of structural metal products | 742-Photographic activities |
| 254-Manufacture of weapons and ammunition | 771-Renting and leasing of motor vehicles |
| 255-Forging, pressing, stampingand roll-forming of metal; powder metallurgy | 772-Renting and leasing of personal and household goods |
| 256-Treatment and coating of metals; machining | 773-Renting and leasing of other machinery, equipment and tangible goods |
| 257-Manufacture of cutlery, tools and general hardware | 791-Travel agency and tour operator activities |
| 259-Manufacture of other fabricated metal products | 799-Other reservation service and related activities |
| 275-Manufacture of domestic appliances | 821-Office administrative and support activities |
| 281-Manufacture of general — purpose machinery | 823-Organisation of conventions and trade shows |
| 282-Manufacture of other general-purpose machinery | 851-Pre-primaryeducation |
| 291-Manufacture of motor vehicles | 855-Other education |
| 292-Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers | 856-Educational support activities |
| 293-Manufacture of parts and accessories for motor vehicles | 900-Creative, arts and entertainment activities |
| 303-Manufacture of air and spacecraft and related machinery | 910-Libraries, archives, museums and other cultural activities |
| 310-Manufacture of furniture | 920-Gambling and betting activities |
| 321-Manufacture of jewellery, bijouterie and related articles | 931-Sports activities |
| 322-Manufacture of musical instruments | 932-Amusement and recreation activities |
| 323-Manufacture of sports goods | 941-Activities of business, employers and professional membership organisations |
| 324-Manufacture of games and toys | 942-Activities of trade unions |
| 329-Manufacturing n.e.c. | 949-Activities of other membership organisations |
| 332-Installation of industrial machineryand equipment | 952-Repair of personal and household goods |
| 411-Development of building projects | 960-Other personal service activities |
| 412-Construction of residential and non-residential buildings | 970-Activities of households as employers of domestic personnel |
| 421-Construction of roads and railways | 990-Activities of extraterritorial organisations and bodies |

Source: The authors

#### Table B.3. Activity codification (Sections NACE Rev.2)

|  |  |
| --- | --- |
| Section | ACTIVITY |
| A | Agriculture, forestry and fishing |
| B | Mining and quarrying |
| C | Manufacturing |
| D | Electricity, gas, steam and air conditioning supply |
| E | Water supply; sewerage, waste management and remediation activities |
| F | Construction |
| G | Wholesale and retail trade; repair of motor vehicles and motorcycles |
| H | Transportation and storage |
| I | Accommodation and food service activities |
| J | Information and communication |
| K | Financial and insurance activities |
| L | Real estate activities |
| M | Professional, scientific and technical activities |
| N | Administrative and support service activities |
| O | Public administration and defence; compulsory social security |
| P | Education |
| Q | Human health and social work activities |
| E | Arts, entertainment and recreation |
| S | Other service activities |
| T | Households’ activities as employers; goods-andservices-producing activities of households for own use |
| U | Activities of extraterritorial organisations and bodies |

1. See, for example, <https://www.ibermutua.es/wp-content/uploads/2020/04/Listado-de-actividades-econ%C3%B3micas-suspendidas-por-la-declaraci%C3%B3n-del-estado-de-alarma-seg%C3%BAn-CNAE.pdf>. [↑](#footnote-ref-1)