**Annex A**

**Table A 1: Immigration in Italy in 2006**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Immigrants(rate wrt native population) | Of which… |  |  |
|  |  | High skilled | Low skilled | Male | Female | Romania |
| Italy | 0.046 | 0.104 | 0.795 | 0.432 | 0.568 | 0.098 |
| **By Macroarea** |
| North West | 0.057 | 0.117 | 0.762 | 0.460 | 0.540 | 0.134 |
| Nort East | 0.069 | 0.088 | 0.824 | 0.424 | 0.576 | 0.073 |
| Centre | 0.055 | 0.113 | 0.779 | 0.419 | 0.581 | 0.145 |
| South | 0.030 | 0.102 | 0.810 | 0.412 | 0.588 | 0.054 |
| Islands | 0.018 | 0.088 | 0.831 | 0.432 | 0.568 | 0.028 |
| **By Sector** |
| Agriculture | 0.060 | 0.033 | 0.967 | 0.514 | 0.486 | 0.137 |
| Natural Resources | 0.033 | . | 1.000 | 1.000 | . | . |
| Manufacturing | 0.083 | 0.082 | 0.918 | 0.766 | 0.234 | 0.075 |
| Constructions | 0.106 | 0.005 | 0.995 | 0.977 | 0.023 | 0.281 |
| Retail Trade | 0.057 | 0.072 | 0.928 | 0.640 | 0.360 | 0.091 |
| Hotels and Restaurants | 0.122 | 0.078 | 0.922 | 0.448 | 0.552 | 0.135 |
| Transports | 0.070 | 0.125 | 0.875 | 0.864 | 0.136 | 0.090 |
| Finance | 0.018 | 0.248 | 0.752 | 0.434 | 0.566 | 0.035 |
| Services | 0.055 | 0.200 | 0.800 | 0.392 | 0.608 | 0.105 |
| Public Sector | 0.030 | 0.219 | 0.781 | 0.490 | 0.510 | 0.027 |
| Health | 0.041 | 0.491 | 0.509 | 0.181 | 0.819 | 0.087 |
| Personal Services | 0.191 | 0.094 | 0.906 | 0.179 | 0.821 | 0.139 |
| Notes: authors’ elaboration on Istat data. |

**Table A 2: Immigration in Italy in 2007**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Immigrants(rate wrt native population) | Of which… |  |  |
|  |  | High-skilled | Low-skilled | Male | Female | Romania |
| Italy | 0.060 | 0.092 | 0.811 | 0.440 | 0.560 | 0.113 |
| **By Macroarea** |
| North West | 0.078 | 0.089 | 0.818 | 0.419 | 0.581 | 0.127 |
| Nort East | 0.091 | 0.081 | 0.801 | 0.458 | 0.542 | 0.094 |
| Centre | 0.068 | 0.117 | 0.800 | 0.443 | 0.557 | 0.194 |
| South | 0.035 | 0.106 | 0.809 | 0.427 | 0.573 | 0.054 |
| Islands | 0.024 | 0.040 | 0.864 | 0.501 | 0.499 | 0.041 |
| **By Sector** |
| Agriculture | 0.070 | 0.018 | 0.982 | 0.770 | 0.230 | 0.124 |
| Natural Resources | 0.024 | 0.147 | 0.853 | 0.853 | 0.147 | 0.147 |
| Manufacturing | 0.108 | 0.057 | 0.943 | 0.760 | 0.240 | 0.097 |
| Constructions | 0.152 | 0.042 | 0.958 | 0.988 | 0.012 | 0.239 |
| Retail Trade | 0.068 | 0.091 | 0.909 | 0.588 | 0.412 | 0.056 |
| Hotels and Restaurants | 0.147 | 0.146 | 0.854 | 0.379 | 0.621 | 0.142 |
| Transports | 0.080 | 0.158 | 0.842 | 0.826 | 0.174 | 0.117 |
| Finance | 0.045 | 0.207 | 0.793 | 0.355 | 0.645 | 0.021 |
| Services | 0.075 | 0.180 | 0.820 | 0.411 | 0.589 | 0.136 |
| Public Sector | 0.015 | 0.219 | 0.781 | 0.499 | 0.501 | . |
| Health | 0.038 | 0.414 | 0.586 | 0.163 | 0.837 | 0.117 |
| Personal Services | 0.246 | 0.158 | 0.842 | 0.205 | 0.795 | 0.124 |
| Notes: authors’ elaboration on Istat data. |

**Table A 3: Sample Means**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Overall | Above 50th  | Below 50th  | Above 75th  | Below 75th  | PrePolicy | PostPolicy |
| Shares (2006) | 0.002 | 0.003 | 0.000 | 0.006 | 0.000 | 0.002 | 0.002 |
| Stock (Romania) | 462 | 857 | 67 | 1480 | 125 | 251 | 674 |
| Flow (Romania) | 106 | 189 | 23 | 314 | 37 | 49 | 163 |
| Births | 819 | 1 316 | 323 | 1 919 | 454 | 824 | 815 |
| Native Women (15-49) | 20 818 | 33 134 | 8 502 | 47 658 | 11 911 | 21 091 | 20 546 |
| Observations | 3660 | 1830 | 1830 | 912 | 2748 | 1830 | 1830 |
| Notes: authors’ elaboration on Istat data. |

**Figure A 1: Shares of Immigrant Workers in Personal Service Activities by Nationality**

|  |
| --- |
|  |
| Notes: authors’ elaboration on LFS data. The graph shows the shares of immigrant workers by nationality employed in the sector of “Personal Services”. The top 5 most present nationalities in the sector are reported. Also immigrants from Bulgaria are added, since the 2007 Eu-enlargement included Romania and Bulgaria. |

**Table A 4: Summary Statistics (2005 - 2010)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mean | St. Dev. | Min | Max |
| New-Born Babies | 819 | 2 318 | 13 | 32 532 |
| Native Women (15-49) | 20 818 | 55 285 | 583 | 760 782 |
| Fertility Rate | 0.038 | 0.005 | 0.020 | 0.068 |
| Share of Immigrants from Romania (2006) | 0.002 | 0.008 | 0 | 0.159 |
| Female Immigrants from Romania (Stock 2004-2006) | 126 | 895 | 0 | 27,168 |
| Female Immigrants from Romania (Stock 2007-2009) | 386 | 2086 | 0 | 62,284 |
| Female Immigrants from Romania (Flow 2004-2006) | 24 | 176 | -9 | 6 320 |
| Female Immigrants from Romania (Flow 2007-2010) | 82 | 457 | -161 | 13 557 |
| Per Capita Child-Care Services (2006) | 162.93 | 132.07 | 0 | 959.64 |
| Per Capita Income (2006) | 8 954 | 3 117 | 3 122 | 27 136 |
| Employment Rate (2006) | 43.49 | 7.92 | 23.1 | 63.7 |
| Share of Native Women 15-24 | 0.224 | 0.032 | 0.154 | 0.340 |
| Share of Native Women 25-34 | 0.277 | 0.017 | 0.206 | 0.353 |
| Share of Native Women 35-44 | 0.339 | 0.027 | 0.264 | 0.423 |
| Share of Native Women 44-49 | 0.160 | 0.0162 | 0.109 | 0.231 |
| Share of Population Over 65 | 0.208 | 0.036 | 0.110 | 0.331 |
| Observations | 3660 |  |  |  |
| Notes: authors’ elaboration on Istat data. Yearly public expenditure in child-care services and per capita income are measured in Euros. |

**Annex B**

**Table B 1: Interaction Between 2006-Shares and Yearly Dummies**

|  |  |
| --- | --- |
|  | (1) |
|  | Births |
|  |  |
| Share (2006) \* 2005 | -3,624 |
|  | (2,418) |
| Share (2006) \* 2006 | 2,405 |
|  | (2,328) |
| Share (2006) \* 2007 | 1,841 |
|  | (3,990) |
| Share (2006) \* 2008 | 16,333\*\*\* |
|  | (4,557) |
| Share (2006) \* 2009 | 9,226\* |
|  | (5,429) |
| Share (2006) \* 2010 | 9,094 |
|  | (6,752) |
| Native Women (15-49) | 0.0562\*\* |
|  | (0.0222) |
|  |  |
| Observations | 4,263 |
| R-squared | 0.999 |
| Controls | YES |
| Year FE | YES |
| LMA FE | YES |
| Notes: authors’ elaboration on Istat data. Robust standard errors are clustered at the LMA level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |

**Table B 2: Epps-Singleton Two-Sample Empirical Characteristic Function Test**

|  |  |
| --- | --- |
| Group variable  | Treatment period |
| **Test statistic W2** | **118.376** |
| Null hypothesis | distributions are identical |
| P-value | 0.000 |
| Critical value at .10 | 7.779 |
| Critical value at .05 | 9.488 |
| Critical value at .01 | 13.277 |
| Notes: Authors’ elaboration on Istat data.  |

**Table B 3: Dickey-Fuller Test for Unit Root**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Stocks | $Δ $Stocks | Births | $Δ $Births |
| DF Test | 121.63 | 1465.59 | 662.74 | 2082.99 |
| P-Value | 1.00 | 0.00 | 1.00 | 0.00 |
| Notes: authors' elaboration on Istat data. DF Test is the augmented Dickey-Fuller test (1 lags). |

**Annex C**

**Table C 1: First-Stage Regressions**

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
|  | Network Instrument | Distance Instrument |
|  | Immigrants | Immigrants |
| Instrument \* Post | 1.63\*\*\* | -0.00\*\*\* |
|  | (11.35) | (-4.00) |
| Native Women (15-49) | -0.66\* | -1.00\*\* |
|  | (-2.38) | (-2.68) |
| Child-Care Services (2006) | 0.00\*\* | 0.01\*\* |
|  | (2.65) | (3.02) |
| Per Capita Income (2006) | -0.33\*\*\* | -0.39\*\*\* |
|  | (-3.54) | (-3.66) |
| Employment Rate (2006) | -702.65\* | -1037.33\*\* |
|  | (-2.56) | (-2.87) |
| Share of Women 15-24 | -3006.49 | -2900.93 |
|  | (-0.91) | (-0.65) |
| Share of Women 25-34 | -8824.06\*\* | -7881.48 |
|  | (-2.65) | (-1.77) |
| Share of Women 35-44 | -2472.74 | -1810.85 |
|  | (-0.61) | (-0.36) |
| Share of Population over 65 | -1.8e+04\*\* | -2.3e+04\*\* |
|  | (-2.80) | (-2.82) |
| Observations | 3654 | 3654 |
| Notes: authors’ elaboration on Istat data. Column (1) refers to the First-stage regression of the shift-share instrument model. Column (2) refers to the First-stage regression of the distance instrument model. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |

**Annex D**

As a falsification test we estimate the baseline model (equation 2) with the number of female immigrants from Bulgaria as explanatory variable. As shown in Table 9, Bulgarian women did not significantly increase the number of native children after the EU-Enlargement in 2007. This is not surprisingly, since, as we have shown, after the open of the borders the newly-arrived immigrants were mostly from Romania.

**Table D 1: Estimation Results of the DiD with a Continous Treatment (Immigrants from Bulgaria)**

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
|  | Births | Births |
|  |  |  |
| Female Immigrants (Bulgaria) \* Post | 0.173 | 0.750\* |
|  | (0.173) | (0.390) |
| Native Women (15-49) | 0.0386\*\*\* | 0.0636\*\*\* |
|  | (0.0128) | (0.0234) |
|  |  |  |
| Observations | 3,517 | 3,374 |
| R-squared | 0.191 | 0.087 |
| Controls | YES | YES |
| Year FE | YES | YES |
| LMA FE | YES | YES |
| F Stat |  | 31.823 |
| Notes: authors' elaboration on ISTAT dataset. Controls include yearly age-specific population shares, per-capita income, child-care services and the employment rate in 2006. Data on per-capita income comes from the Ministry of Finance which uses an older classification for the LMAs, so data on the per-capita income of “Corigliano-Rossano” (1845) LMA are missing. Model in column (1) refers to a DiD with a continuous treatment estimated with an OLS method. Model in column (2) refers to a DiD with a continuous treatment estimated with a 2SLS method. In particular, the instrumental variable is the shift-share instrument explained in equation (3). The reported F Statistics is the Kleinbergen-Paap rk Wald F Statistics. Robust standard errors are clustered at the LMA level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |

**Annex E**

**Table E 1: DiD Estimation with a Continuous Treatment by Macroarea**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Baseline | North West | North East | Centre | South | Island |
|  |  |  |  |  |  |  |
| Flow (Rom) \* Post | 0.0579\*\*\* | 0.0203\*\* | -0.00488 | 0.107\*\*\* | 0.0187 | 0.0457 |
|  | (0.0174) | (0.00853) | (0.00613) | (0.0167) | (0.0366) | (0.0556) |
|  |  |  |  |  |  |  |
| Observations | 3,654 | 636 | 714 | 630 | 1,014 | 660 |
| R-squared | 0.061 | 0.621 | 0.920 | 0.634 | 0.752 | 0.180 |
| Controls | YES | YES | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES | YES | YES |
| LLM FE | YES | YES | YES | YES | YES | YES |
| F Stat | 128.925 | 753.972 | 161.831 | 49.163 | 180.554 | 95.053 |
| Notes: authors' elaboration on Istat dataset. Controls include the number of native women (15-49), age-specific population shares, per capita income, child-care services and the employment rate in 2006. Robust standard errors are clustered at the LMA level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |

**Table E 2: DiD Estimation with a Continuous Treatment by Year**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Baseline | 2008 | 2009 | 2010 |
|  |  |  |  |  |
| Flow (Rom) \* Post | 0.0561\*\*\* | 0.0602\*\*\* | 0.0286\*\*\* | 0.0236\* |
|  | (0.0151) | (0.0165) | (0.0104) | (0.0135) |
|  |  |  |  |  |
| Observations | 4,263 | 2,436 | 2,436 | 2,436 |
| R-squared | 0.202 | 0.340 | 0.349 | 0.387 |
| Controls | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES |
| LLM FE | YES | YES | YES | YES |
| F Stat | 154.516 | 631.798 | 6554.936 | 924.956 |
| Notes: authors' elaboration on Istat dataset. Controls include the number of native women (15-49), age-specific population shares, per capita income, child-care services and the employment rate in 2006. Robust standard errors are clustered at the LMA level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |

**Table E 3: D-i-D Estimation with Continuous Treatment by Population Size**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Baseline | Less 100 | Less 250 | More 250 |
|  |  |  |  |  |
| Flow (Rom) \* Post | 0.0579\*\*\* | 0.0378\*\*\* | 0.0259\* | 0.0580\*\*\* |
|  | (0.0174) | (0.0132) | (0.0144) | (0.0195) |
|  |  |  |  |  |
| Observations | 3,654 | 2,886 | 522 | 246 |
| R-squared | 0.061 | 0.096 | 0.504 | 0.919 |
| Controls | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES |
| LLM FE | YES | YES | YES | YES |
| F Stat | 128.925 | 453.264 | 348.988 | 95.444 |
| Notes: authors' elaboration on Istat dataset. Controls include the number of native women (15-49), age-specific population shares, per capita income, child-care services and the employment rate in 2006. Robust standard errors are clustered at the LMA level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01 |