Table 1: Travel costs and migration: first stage regressions

(in section 3.2, to be updated by Guillaume)

## The effect of migration on the decline (convergence) in fertility

**Table 2: Determinants of the fertility decline in France, 1861-1911: all migrants (Coale Fertility Index)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.543\*\*\* | 0.376\*\*\* | 0.331 | 0.764\*\* |
|  | [0.123] | [0.101] | [0.322] | [0.299] |
| Immigrants' Birthplace Norm (t) | 0.136 | -0.0957 | 1.331\*\*\* | 0.433 |
|  | [0.118] | [0.0910] | [0.268] | [0.294] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.739\*\*\* | -1.246\*\* | -2.962\*\*\* | -2.965\*\*\* |
|  | [0.649] | [0.591] | [0.884] | [0.826] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.548 | 2.808\*\*\* | -0.275 | 1.006 |
|  | [1.012] | [0.724] | [1.362] | [0.859] |
| Share of Emigrants (t) | -2.766\*\* | -1.906\*\* | -4.081\*\*\* | -3.942\*\*\* |
|  | [1.078] | [0.885] | [1.380] | [1.250] |
| Share of Immigrants (t) | 3.481\*\* | 4.669\*\*\* | 0.851 | 1.761 |
|  | [1.375] | [0.983] | [1.868] | [1.084] |
| Life Expectancy Age 15 (t) |  | -0.0091 |  | -0.0086 |
|  |  | [0.00914] |  | [0.0103] |
| Infant Mortality (t) |  | 0.707\*\* |  | 0.654\* |
|  |  | [0.297] |  | [0.332] |
| log(Urban) (t) |  | -0.0200 |  | 0.196 |
|  |  | [0.300] |  | [0.291] |
| log(Industries) (t) |  | -0.0128\* |  | -0.0029 |
|  |  | [0.0075] |  | [0.0070] |
| log(Professionals) (t) |  | -0.0131 |  | -0.0058 |
|  |  | [0.0131] |  | [0.0122] |
| log(Female Education (t)) |  | -0.0389 |  | -0.0211 |
|  |  | [0.0397] |  | [0.0395] |
| log(Male Education (t)) |  | 0.0146 |  | 0.0087 |
|  |  | [0.0475] |  | [0.0494] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0123 |  | 0.0164 |
|  |  | [0.0179] |  | [0.0208] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0004 |  | 0.0042 |
|  |  | [0.0158] |  | [0.0151] |
| Revue des Deux Mondes Outlets (t) |  | 0.0555 |  | 0.0099 |
|  |  | [0.0365] |  | [0.0402] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0390 |  | 0.0142 |
|  |  | [0.0246] |  | [0.0279] |
| Constant | -0.442\*\* | -0.797 | 0.724\*\* | 0.651 |
|  | [0.191] | [0.524] | [0.318] | [0.749] |
|  |  |  |  |  |
| Within R2 | 0.6 | 0.76 | 0.7 | 0.77 |
| F-stat | 40.7 | 47.74 | 40.7 | 57.98 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

Note: This table reports the full results of Table 2. All the variables are in logarithms. Robust standard errors clustered at the department-level are reported in brackets. \*\*\* indicates significance at the 1% level, \*\* at the 5%-level, \* at the 10%-level.

## Robustness checks

**4.2.1 Alternative measure of fertility**

**Table 3: Determinants of the fertility decline in France, 1861-1911: all migrants (Total Fertility Rate)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) (Total Fertility Rate) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.307\*\* | 0.180 | -1.364\*\*\* | -1.116\*\*\* |
|  | [0.152] | [0.135] | [0.420] | [0.364] |
| Immigrants' Birthplace Norm (t) | 0.157 | 0.0487 | 2.504\*\*\* | 2.037\*\*\* |
|  | [0.120] | [0.0935] | [0.345] | [0.337] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -0.315 | -0.152 | 0.0755 | 0.0975 |
|  | [0.453] | [0.504] | [0.458] | [0.491] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.686 | 1.131\*\* | -0.552 | -0.0851 |
|  | [0.530] | [0.492] | [0.789] | [0.723] |
| Share of Emigrants (t) | -2.123 | -1.439 | 0.446 | 0.482 |
|  | [1.769] | [1.918] | [1.794] | [1.918] |
| Share of Immigrants (t) | 3.470\* | 4.905\*\*\* | -1.999 | -0.404 |
|  | [1.985] | [1.844] | [3.147] | [2.838] |
| Life Expectancy Age 15 (t) |  | -0.0341\*\*\* |  | -0.0154\* |
|  |  | [0.0093] |  | [0.0093] |
| Infant Mortality (t) |  | -0.882\*\*\* |  | -0.237 |
|  |  | [0.324] |  | [0.320] |
| log(Urban) (t) |  | -0.146 |  | 0.047 |
|  |  | [0.124] |  | [0.128] |
| log(Industries) (t) |  | -0.004 |  | 0.001 |
|  |  | [0.0062] |  | [0.0058] |
| log(Professionals) (t) |  | 0.001 |  | -0.004 |
|  |  | [0.0105] |  | [0.0096] |
| log(Female Education (t)) |  | -0.043 |  | -0.014 |
|  |  | [0.0333] |  | [0.0342] |
| log(Male Education (t)) |  | 0.019 |  | 0.002 |
|  |  | [0.0473] |  | [0.0418] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.006 |  | -0.007 |
|  |  | [0.0165] |  | [0.0149] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0397\*\*\* |  | 0.0325\*\* |
|  |  | [0.0139] |  | [0.0136] |
| Revue des Deux Mondes Outlets (t) |  | 0.014 |  | 0.046 |
|  |  | [0.151] |  | [0.154] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.003 |  | 0.015 |
|  |  | [0.0383] |  | [0.0391] |
| Constant | -1.954\*\*\* | -0.957 | 0.471 | 0.690 |
|  | [0.581] | [0.795] | [0.847] | [1.070] |
|  |  |  |  |  |
| Within R2 | 0.8 | 0.81 | 0.8 | 0.82 |
| F-stat | 117.5 | 81.6 | 126.3 | 87.9 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 80 | 80 | 80 | 80 |
| Observations | 480 | 480 | 480 | 480 |

Note: This table reports the full results of Table 3. All the variables are in logarithms. Robust standard errors clustered at the department-level are reported in brackets. \*\*\* indicates significance at the 1% level, \*\* at the 5%-level, \* at the 10%-level.

**4.2.2 Timing of the fertility decline** (convergence)

**Table 4: Determinants of the fertility decline in France, 1821-1911: all migrants (Coale Fertility Index)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | OLS | OLS | OLS |
|  | Dependent variable is Fertility(t) | | |
|  | 1821-1911 | 1821-1851 | 1861-1911 |
|  |  |  |  |
| Emigrants' Residence Norm (t) | 0.265\*\*\* | 0.0915\* | 0.589\*\*\* |
|  | [0.077] | [0.047] | [0.122] |
| Immigrants' Birthplace Norm (t) | 0.079 | 0.008 | 0.130 |
|  | [0.0821] | [0.0838] | [0.121] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -0.369 | -0.458 | -1.908\*\*\* |
|  | [0.448] | [0.529] | [0.646] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.073 | 0.528 | 1.446 |
|  | [0.857] | [0.769] | [1.026] |
| Share of Emigrants (t) | -0.742\* | -0.669 | -3.016\*\*\* |
|  | [0.426] | [0.405] | [1.076] |
| Share of Immigrants (t) | 1.937\* | 0.954 | 3.387\*\* |
|  | [0.982] | [0.812] | [1.388] |
| Constant | -0.708\*\*\* | -0.902\*\*\* | -0.414\*\* |
|  | [0.123] | [0.105] | [0.204] |
|  |  |  |  |
| Within R2 | 0.72 | 0.51 | 0.65 |
| F-stat | 40.4 | 22.8 | 44.1 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes |
| Number of clusters | 80 | 80 | 80 |
| Observations | 800 | 320 | 480 |

**Table 5. Migration in 1861-1911 and lagged fertility in 1811-1861** **(Coale Fertility Index)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | -0.00352 | -0.149 | -0.402 | -0.295 |
|  | [0.144] | [0.138] | [0.316] | [0.304] |
| Immigrants' Birthplace Norm (t) | -0.0813 | -0.188 | 0.347 | -0.149 |
|  | [0.129] | [0.121] | [0.336] | [0.364] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | 0.547 | 0.874 | -0.473 | -0.227 |
|  | [0.936] | [0.871] | [1.165] | [1.217] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.0405 | 0.328 | 0.429 | 1.192 |
|  | [1.118] | [1.078] | [1.053] | [0.983] |
| Share of Emigrants (t) | 1.151 | 1.697 | -0.522 | -0.285 |
|  | [1.515] | [1.356] | [1.658] | [1.711] |
| Share of Immigrants (t) | 0.173 | 0.149 | -0.220 | 0.439 |
|  | [1.449] | [1.344] | [1.466] | [1.352] |
| Life Expectancy Age 15 (t) |  | 0.0252\* |  | 0.0279\*\* |
|  |  | [0.0141] |  | [0.0138] |
| Infant Mortality (t) |  | 0.936\*\* |  | 1.067\*\* |
|  |  | [0.447] |  | [0.430] |
| log(Urban) (t) |  | -0.131 |  | -0.225 |
|  |  | [0.192] |  | [0.152] |
| log(Industries) (t) |  | 0.0097 |  | 0.0030 |
|  |  | [0.00925] |  | [0.0101] |
| log(Professionals) (t) |  | -0.0093 |  | -0.0101 |
|  |  | [0.0170] |  | [0.0181] |
| log(Female Education (t)) |  | -0.1110 |  | -0.129\*\* |
|  |  | [0.0672] |  | [0.0575] |
| log(Male Education (t)) |  | -0.0084 |  | -0.0068 |
|  |  | [0.0614] |  | [0.0554] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | -0.0474\* |  | -0.0363 |
|  |  | [0.0280] |  | [0.0299] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0379\* |  | 0.0251 |
|  |  | [0.0198] |  | [0.0206] |
| Revue des Deux Mondes Outlets (t) |  | -0.0445 |  | -0.0435 |
|  |  | [0.0443] |  | [0.0444] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | -0.0194 |  | -0.0181 |
|  |  | [0.0279] |  | [0.0273] |
| Constant | -1.103\*\*\* | -2.857\*\*\* | -1.033\*\*\* | -3.543\*\*\* |
|  | [0.231] | [0.810] | [0.291] | [0.968] |
|  |  |  |  |  |
| Within R2 | 0.5 | 0.58 | 0.6 | 0.59 |
| F-stat | 22.6 | 22.63 | 27.9 | 20.9 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

**Table 6: Determinants of the fertility decline in France, 1861-1911, accounting for lagged variables (Coale Fertility Index)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | OLS | OLS | OLS | OLS | IV | IV | IV | IV |
|  | Dependent variable is Fertility(t) | | | | | | | |
|  |  |  |  |  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.475\*\* |  | 0.319\* |  | 0.440 |  | 0.845\*\* |  |
|  | [0.213] |  | [0.177] |  | [0.311] |  | [0.322] |  |
| Immigrants' Birthplace Norm (t) | 0.154 |  | -0.0118 |  | 0.735\*\* |  | 0.145 |  |
|  | [0.136] |  | [0.119] |  | [0.291] |  | [0.285] |  |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.521 |  | -0.865 |  | -1.116 |  | -1.811 |  |
|  | [1.344] |  | [1.130] |  | [1.443] |  | [1.303] |  |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | -0.0131 |  | 0.586 |  | -1.062 |  | -0.302 |  |
|  | [1.203] |  | [0.909] |  | [0.907] |  | [0.733] |  |
| Share of Emigrants (t) | -2.802 |  | -1.115 |  | -1.417 |  | -2.328 |  |
|  | [2.061] |  | [1.846] |  | [2.039] |  | [1.852] |  |
| Share of Immigrants (t) | 1.180 |  | 1.824 |  | -0.535 |  | -0.160 |  |
|  | [1.581] |  | [1.258] |  | [1.197] |  | [1.179] |  |
| Emigrants' Residence Norm (t-10) | 0.182 | 0.567\*\*\* | 0.0441 | 0.379\*\*\* | 0.811\*\* | 1.091\*\*\* | 0.426 | 1.036\*\*\* |
|  | [0.209] | [0.144] | [0.181] | [0.139] | [0.350] | [0.279] | [0.275] | [0.243] |
| Immigrants' Birthplace Norm (t-10) | 0.0683 | 0.198\* | -0.0440 | -0.0169 | -0.0366 | 0.219 | -0.238 | -0.247 |
|  | [0.113] | [0.118] | [0.0944] | [0.117] | [0.302] | [0.319] | [0.259] | [0.333] |
| Emigrants' Residence Norm (t-10) \* Share of Emigrants (t-10) | -0.170 | -2.306\*\* | 0.111 | -1.731\* | -3.283\*\* | -4.979\*\*\* | -1.645 | -4.397\*\*\* |
|  | [1.701] | [1.085] | [1.482] | [1.033] | [1.362] | [1.025] | [1.488] | [1.147] |
| Immigrants' Birthplace Norm (t-10) \* Share of Immigrants (t-10) | 1.475 | 1.131 | 1.720\*\* | 1.895\* | 1.580\*\* | 1.078 | 1.588\*\* | 1.813\*\* |
|  | [1.009] | [1.097] | [0.701] | [0.982] | [0.665] | [0.686] | [0.638] | [0.863] |
| Share of Emigrants (t-10) | 0.246 | -3.096\* | 0.213 | -2.286 | -4.859\*\*\* | -6.803\*\*\* | -2.460 | -6.028\*\*\* |
|  | [2.468] | [1.622] | [2.222] | [1.450] | [1.828] | [1.525] | [2.017] | [1.680] |
| Share of Immigrants (t-10) | 2.534\* | 2.786\*\* | 2.474\*\* | 3.601\*\*\* | 3.595\*\*\* | 3.728\*\*\* | 3.069\*\*\* | 4.160\*\*\* |
|  | [1.354] | [1.346] | [0.988] | [1.226] | [0.861] | [1.040] | [0.817] | [1.160] |
| Life Expectancy Age 15 (t) |  |  | -0.016 |  |  |  | -0.015 |  |
|  |  |  | [0.0103] |  |  |  | [0.00931] |  |
| Infant Mortality (t) |  |  | 0.712\*\* |  |  |  | 0.635\*\* |  |
|  |  |  | [0.331] |  |  |  | [0.312] |  |
| log(Urban) (t) |  |  | 0.417\*\* |  |  |  | 0.629\*\*\* |  |
|  |  |  | [0.185] |  |  |  | [0.139] |  |
| log(Industries) (t) |  |  | -0.012 |  |  |  | -0.001 |  |
|  |  |  | [0.007] |  |  |  | [0.0073] |  |
| log(Professionals) (t) |  |  | -0.014 |  |  |  | -0.003 |  |
|  |  |  | [0.0138] |  |  |  | [0.0120] |  |
| log(Female Education (t)) |  |  | -0.053 |  |  |  | -0.038 |  |
|  |  |  | [0.0533] |  |  |  | [0.0487] |  |
| log(Male Education (t)) |  |  | -0.009 |  |  |  | 0.013 |  |
|  |  |  | [0.0525] |  |  |  | [0.0521] |  |
| log(Share of Girls in Primary Catholic Schools) (t) |  |  | 0.030 |  |  |  | 0.0327\* |  |
|  |  |  | [0.0196] |  |  |  | [0.0196] |  |
| log(Share of Boys in Primary Catholic Schools) (t) |  |  | -0.029 |  |  |  | -0.014 |  |
|  |  |  | [0.0174] |  |  |  | [0.0152] |  |
| Revue des Deux Mondes Outlets (t) |  |  | 0.036 |  |  |  | -0.021 |  |
|  |  |  | [0.0376] |  |  |  | [0.0376] |  |
| Revue des Deux Mondes Outlets \* Fertility of Seine (t) |  |  | 0.027 |  |  |  | -0.002 |  |
|  |  |  | [0.0226] |  |  |  | [0.0230] |  |
| Life Expectancy Age 15 (t-10) |  |  | -0.019 | 0.022 |  |  | -0.021 | 0.019 |
|  |  |  | [0.0145] | [0.0153] |  |  | [0.0148] | [0.0163] |
| Infant Mortality (t-10) |  |  | -0.511 | 1.260\*\* |  |  | -0.555 | 1.028\* |
|  |  |  | [0.514] | [0.513] |  |  | [0.501] | [0.557] |
| log(Urban) (t-10) |  |  | -0.405\*\*\* | -0.385\*\*\* |  |  | -0.282\* | -0.253\* |
|  |  |  | [0.129] | [0.137] |  |  | [0.147] | [0.141] |
| log(Industries) (t-10) |  |  | -0.004 | -0.005 |  |  | 0.001 | 0.008 |
|  |  |  | [0.0088] | [0.0105] |  |  | [0.0071] | [0.0094] |
| log(Professionals) (t-10) |  |  | -0.0256\*\* | -0.025 |  |  | -0.0191\* | -0.0260\* |
|  |  |  | [0.0127] | [0.0160] |  |  | [0.0103] | [0.0154] |
| log(Female Education (t-10) |  |  | 0.104\*\* | 0.008 |  |  | 0.112\*\* | 0.018 |
|  |  |  | [0.0482] | [0.0459] |  |  | [0.0441] | [0.0438] |
| log(Male Education (t-10) |  |  | -0.177\*\*\* | -0.179\*\*\* |  |  | -0.168\*\*\* | -0.178\*\*\* |
|  |  |  | [0.0577] | [0.0621] |  |  | [0.0524] | [0.0532] |
| log(Share of Girls in Primary Catholic Schools) (t-10) |  |  | 0.005 | 0.013 |  |  | 0.003 | 0.039 |
|  |  |  | [0.0317] | [0.0370] |  |  | [0.0347] | [0.0420] |
| log(Share of Boys in Primary Catholic Schools) (t-10) |  |  | -0.006 | -0.027 |  |  | -0.002 | -0.021 |
|  |  |  | [0.0127] | [0.0184] |  |  | [0.0115] | [0.0171] |
| Revue des Deux Mondes Outlets (t-10) |  |  | 0.0759\*\* | 0.0830\* |  |  | 0.0732\*\* | 0.049 |
|  |  |  | [0.0333] | [0.0429] |  |  | [0.0346] | [0.0423] |
| Revue des Deux Mondes Outlets\* Fertility of Seine (t-10) |  |  | 0.0523\*\* | 0.0562\* |  |  | 0.0489\*\* | 0.028 |
|  |  |  | [0.0240] | [0.0301] |  |  | [0.0241] | [0.0303] |
| Constant | -0.372 | -0.549\*\* | 0.114 | -2.491\*\*\* | 1.024\*\*\* | 0.0953 | 1.504 | -1.716\* |
|  | [0.297] | [0.257] | [0.946] | [0.878] | [0.373] | [0.247] | [1.060] | [0.957] |
|  |  |  |  |  |  |  |  |  |
| Within R2 | 0.61 | 0.566 | 0.781 | 0.66 | 0.674 | 0.617 | 0.806 | 0.686 |
| F-stat | 29.18 | 36.85 | 38.49 | 38.32 | 38.40 | 41.11 | 78.83 | 40.99 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Observations | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 |

**4.2.3 Migration and the fertility decline, 1861-1911, accounting for potentially endogenous variables**

**Table 7. Migration and the fertility decline, 1861-1911, accounting for newspapers and new religious buildings** **(Coale Fertility Index)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | IV | OLS | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.361\*\*\* | 0.758\*\* | 0.381\*\*\* | 1.056\*\*\* |
|  | [0.101] | [0.297] | [0.102] | [0.271] |
| Immigrants' Birthplace Norm (t) | -0.0722 | 0.449 | -0.100 | 0.192 |
|  | [0.0945] | [0.293] | [0.0916] | [0.279] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.211\*\* | -2.949\*\*\* | -1.239\*\* | -3.277\*\*\* |
|  | [0.604] | [0.819] | [0.590] | [0.831] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 2.640\*\*\* | 0.815 | 2.768\*\*\* | 1.014 |
|  | [0.729] | [0.811] | [0.729] | [0.863] |
| Share of Emigrants (t) | -1.853\*\* | -3.932\*\*\* | -1.896\*\* | -4.469\*\*\* |
|  | [0.908] | [1.237] | [0.882] | [1.260] |
| Share of Immigrants (t) | 4.451\*\*\* | 1.520 | 4.609\*\*\* | 1.886 |
|  | [0.980] | [0.998] | [0.988] | [1.134] |
| Life Expectancy Age 15 (t) | -0.0091 | -0.0086 | -0.0079 | -0.0093 |
|  | [0.00923] | [0.0103] | [0.00925] | [0.0101] |
| Infant Mortality (t) | 0.704\*\* | 0.650\* | 0.741\*\* | 0.631\* |
|  | [0.297] | [0.330] | [0.301] | [0.327] |
| log(Urban) (t) | 0.0123 | 0.2270 | -0.0034 | 0.2240 |
|  | [0.298] | [0.286] | [0.294] | [0.280] |
| log(Industries) (t) | -0.0125\* | -0.0025 | -0.0154\* | -0.0070 |
|  | [0.0075] | [0.007] | [0.0081] | [0.0075] |
| log(Professionals) (t) | -0.0115 | -0.0040 | -0.0145 | -0.0046 |
|  | [0.0130] | [0.0123] | [0.0132] | [0.0121] |
| log(Female Education (t)) | -0.0390 | -0.0208 | -0.0322 | -0.0211 |
|  | [0.0393] | [0.0385] | [0.0388] | [0.0393] |
| log(Male Education (t)) | 0.0127 | 0.0068 | 0.0114 | 0.0126 |
|  | [0.0467] | [0.0481] | [0.0479] | [0.0517] |
| log(Share of Girls in Primary Catholic Schools) (t) | 0.0144 | 0.0182 | 0.0092 | 0.0127 |
|  | [0.0179] | [0.0214] | [0.0182] | [0.0205] |
| log(Share of Boys in Primary Catholic Schools) (t) | -0.0012 | 0.0027 | 0.0034 | 0.0063 |
|  | [0.0157] | [0.0153] | [0.0161] | [0.0156] |
| Revue des Deux Mondes Outlets (t) | 0.0546 | 0.0090 | 0.0572 | 0.0088 |
|  | [0.0356] | [0.0391] | [0.0360] | [0.0393] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) | 0.0386 | 0.0137 | 0.0397 | 0.0133 |
|  | [0.0240] | [0.0271] | [0.0244] | [0.0274] |
| Total Number of Periodicals | -0.0220 | -0.0237 |  |  |
|  | [0.0161] | [0.0146] |  |  |
| New Catholic Church |  |  | -0.0050 | -0.0004 |
|  |  |  | [0.0065] | [0.0053] |
| New Orthodox Church |  |  | -0.169\*\*\* | -0.260\*\*\* |
|  |  |  | [0.0247] | [0.0423] |
| New Protestant Temple |  |  | 0.0198 | 0.0238 |
|  |  |  | [0.0155] | [0.0232] |
| Constant | -0.753 | 0.756 | -0.861 | 0.795 |
|  | [0.528] | [0.750] | [0.530] | [0.739] |
|  |  |  |  |  |
| Within R2 | 0.756 | 0.769 | 0.761 | 0.777 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes |
| Number of dptresid | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

Table 8. Migration and the fertility decline, 1861-1911, accounting, out-of-wedlock births and age at marriage (Coale Fertility Index)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | IV | OLS | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.365\*\*\* | 0.749\*\* | 0.369\*\*\* | 0.734\*\* |
|  | [0.104] | [0.296] | [0.101] | [0.287] |
| Immigrants' Birthplace Norm (t) | -0.0973 | 0.442 | -0.103 | 0.430 |
|  | [0.0941] | [0.290] | [0.0975] | [0.292] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.206\*\* | -2.918\*\*\* | -1.189\*\* | -2.836\*\*\* |
|  | [0.598] | [0.832] | [0.579] | [0.804] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 2.809\*\*\* | 0.971 | 2.957\*\*\* | 1.095 |
|  | [0.727] | [0.872] | [0.810] | [0.844] |
| Share of Emigrants (t) | -1.853\*\* | -3.868\*\*\* | -1.809\*\* | -3.736\*\*\* |
|  | [0.903] | [1.255] | [0.861] | [1.213] |
| Share of Immigrants (t) | 4.674\*\*\* | 1.722 | 4.915\*\*\* | 1.827\* |
|  | [0.982] | [1.098] | [1.098] | [1.054] |
| Life Expectancy Age 15 (t) | -0.009 | -0.009 | -0.010 | -0.009 |
|  | [0.0091] | [0.0103] | [0.0094] | [0.0102] |
| Infant Mortality (t) | 0.712\*\* | 0.651\* | 0.667\*\* | 0.623\* |
|  | [0.295] | [0.332] | [0.304] | [0.328] |
| log(Urban) (t) | -0.025 | 0.187 | -0.016 | 0.199 |
|  | [0.301] | [0.294] | [0.310] | [0.294] |
| log(Industries) (t) | -0.012 | -0.002 | -0.012 | -0.003 |
|  | [0.0076 | [0.0070] | [0.0075] | [0.0072] |
| log(Professionals) (t) | -0.014 | -0.007 | -0.013 | -0.005 |
|  | [0.0133] | [0.0123] | [0.0126] | [0.0120] |
| log(Female Education (t)) | -0.039 | -0.020 | -0.044 | -0.029 |
|  | [0.0398] | [0.0395] | [0.0404] | [0.0400] |
| log(Male Education (t)) | 0.013 | 0.008 | 0.017 | 0.011 |
|  | [0.0476] | [0.0495] | [0.0474] | [0.0490] |
| log(Share of Girls in Primary Catholic Schools) (t) | 0.012 | 0.016 | 0.017 | 0.019 |
|  | [0.0181] | [0.0210] | [0.0179] | [0.0201] |
| log(Share of Boys in Primary Catholic Schools) (t) | 0.001 | 0.005 | -0.001 | 0.004 |
|  | [0.0160] | [0.0151] | [0.0157] | [0.0152] |
| Revue des Deux Mondes Outlets | 0.056 | 0.010 | 0.056 | 0.009 |
|  | [0.0365] | [0.0404] | [0.0364] | [0.0408] |
| Revue des Deux Mondes Outlets\* Fertility of Seine | 0.039 | 0.014 | 0.041 | 0.014 |
|  | [0.0247] | [0.0280] | [0.0247] | [0.0282] |
| Share of Children Born out of Wedlock | -0.075 | -0.0986\* |  |  |
| out of the Total Number of Births (t) | [0.0558] | [0.0507] |  |  |
| Share of Not Legitimized Children | -0.005 | -0.026 |  |  |
| out of Those who were Born out of Wedlock (t) | [0.0468] | [0.0396] |  |  |
| Share of Married Men Age 20-24 (t) |  |  | 0.153 | 0.0276 |
|  |  |  | [0.153] | [0.152] |
| Share of Married Women Age 20-24 (t) |  |  | 0.0361 | 0.0681 |
|  |  |  | [0.143] | [0.131] |
| Share of Married Men Age 25-29 (t) |  |  | -0.0174 | -0.0409 |
|  |  |  | [0.124] | [0.126] |
| Share of Married Women Age 25-29 (t) |  |  | 0.0671 | 0.102 |
|  |  |  | [0.178] | [0.166] |
| Share of Married Men Age 30-34 (t) |  |  | -0.0939 | -0.114 |
|  |  |  | [0.113] | [0.128] |
| Share of Married Women Age 30-34 (t) |  |  | -0.213 | -0.139 |
|  |  |  | [0.215] | [0.195] |
| Constant | -0.812 | 0.664 | -0.705 | 0.712 |
|  | [0.522] | [0.751] | [0.558] | [0.741] |
|  |  |  |  |  |
| Within R2 | 0.755 | 0.768 | 0.757 | 0.769 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

**4.2.4 Migration and the fertility decline, 1861-1911, accounting for spatial autocorrelation**

**Table 9: Determinants of the fertility decline in France, 1861-1911: accounting for spatial autocorrelation (Coale Fertility Index)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.504\*\*\* | 0.336\*\*\* | 0.398\*\*\* | 0.607\*\*\* |
|  | [0.0937] | [0.0985] | [0.122] | [0.177] |
| Immigrants' Birthplace Norm (t) | 0.0864 | -0.0813 | 0.814\*\*\* | 0.258 |
|  | [0.110] | [0.0883] | [0.193] | [0.194] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.982\*\*\* | -1.318\*\* | -1.902\*\*\* | -2.786\*\*\* |
|  | [0.532] | [0.589] | [0.634] | [0.791] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.413 | 2.154\*\*\* | 0.0960 | 0.688 |
|  | [0.934] | [0.734] | [1.310] | [0.710] |
| Share of Emigrants (t) | -3.149\*\*\* | -1.742\*\* | -2.607\*\*\* | -3.583\*\*\* |
|  | [0.857] | [0.869] | [0.978] | [1.168] |
| Share of Immigrants (t) | 3.184\*\* | 4.055\*\*\* | 1.066 | 1.637\* |
|  | [1.270] | [0.982] | [1.883] | [0.912] |
| Life Expectancy Age 15 (t) |  | 0.0135\*\*\* |  | 0.0098\*\*\* |
|  |  | [0.0021] |  | [0.0025] |
| Infant Mortality (t) |  | 1.369\*\*\* |  | 1.180\*\*\* |
|  |  | [0.160] |  | [0.189] |
| log(Urban) (t) |  | 0.0778 |  | 0.345\* |
|  |  | [0.232] |  | [0.206] |
| log(Industries) (t) |  | -0.0092\*\*\* |  | -0.0048 |
|  |  | [0.0035] |  | [0.0033] |
| log(Professionals) (t) |  | 0.0127\* |  | 0.0078 |
|  |  | [0.0071] |  | [0.0097] |
| log(Female Education (t)) |  | -0.0316 |  | -0.0126 |
|  |  | [0.0318] |  | [0.0339] |
| log(Male Education (t)) |  | 0.0240 |  | 0.0398 |
|  |  | [0.0387] |  | [0.0435] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0021 |  | 0.0167 |
|  |  | [0.0162] |  | [0.0193] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | -0.0017 |  | 0.0039 |
|  |  | [0.0158] |  | [0.0143] |
| Revue des Deux Mondes Outlets (t) |  | 0.0725\*\* |  | 0.0234 |
|  |  | [0.0346] |  | [0.0375] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0494\*\* |  | 0.0192 |
|  |  | [0.0239] |  | [0.0264] |
|  | 2.722\*\*\* | 2.608\*\*\* | 1.142\* | 1.794\*\*\* |
|  | [0.253] | [0.289] | [0.609] | [0.528] |
| σ2 | 0.0046\*\*\* | 0.0033\*\*\* | 0.0047\*\*\* | 0.0032\*\*\* |
|  | [0.00053] | [0.00034] | [0.00052] | [0.00033] |
|  |  |  |  |  |
| Within R2 | 0.6 | 0.8 | 0.6 | 0.8 |
| Log-pseudolikelihood | 612.6 | 698.9 | 613.5 | 701.7 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

# *Channels of the fertility decline: a counterfactual analysis*

**Table 10: The fertility decline in France, 1861-1911: only male migration (Coale Fertility Index)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.450\*\*\* | 0.319\*\*\* | 0.396 | 0.806\*\*\* |
|  | [0.111] | [0.0932] | [0.318] | [0.292] |
| Immigrants' Birthplace Norm (t) | 0.0574 | -0.108 | 1.279\*\*\* | 0.356 |
|  | [0.0945] | [0.0712] | [0.260] | [0.278] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -1.266\*\* | -0.953\* | -2.905\*\*\* | -2.773\*\*\* |
|  | [0.531] | [0.505] | [0.791] | [0.770] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.020 | 1.994\*\*\* | -0.308 | 0.876 |
|  | [0.820] | [0.581] | [1.336] | [0.843] |
| Share of Emigrants (t) | -2.132\*\* | -1.489\*\* | -3.999\*\*\* | -3.711\*\*\* |
|  | [0.820] | [0.697] | [1.227] | [1.164] |
| Share of Immigrants (t) | 2.405\*\* | 3.367\*\*\* | 0.693 | 1.558 |
|  | [1.145] | [0.779] | [1.877] | [1.087] |
| Life Expectancy Age 15 (t) |  | -0.0058 |  | -0.0098 |
|  |  | [0.00889] |  | [0.0103] |
| Infant Mortality (t) |  | 0.836\*\*\* |  | 0.613\* |
|  |  | [0.294] |  | [0.334] |
| log(Urban) (t) |  | -0.0526 |  | 0.1670 |
|  |  | [0.298] |  | [0.299] |
| log(Industries) (t) |  | -0.0137\* |  | -0.0030 |
|  |  | [0.00763] |  | [0.00711] |
| log(Professionals) (t) |  | -0.0164 |  | -0.0052 |
|  |  | [0.0132] |  | [0.0126] |
| log(Female Education (t)) |  | -0.0335 |  | -0.0333 |
|  |  | [0.0396] |  | [0.0389] |
| log(Male Education (t)) |  | 0.0029 |  | 0.0115 |
|  |  | [0.0448] |  | [0.0493] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0097 |  | 0.0106 |
|  |  | [0.0176] |  | [0.0202] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0003 |  | 0.0082 |
|  |  | [0.0162] |  | [0.0148] |
| Revue des Deux Mondes Outlets (t) |  | 0.0535 |  | 0.0141 |
|  |  | [0.0370] |  | [0.0413] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0376 |  | 0.0167 |
|  |  | [0.0253] |  | [0.0287] |
| Constant | -0.621\*\*\* | -1.061\*\* | 0.747\*\* | 0.703 |
|  | [0.191] | [0.502] | [0.331] | [0.753] |
|  |  |  |  |  |
| Within R2 | 0.6 | 0.75 | 0.70 | 0.77 |
| F-stat | 40.8 | 51.14 | 38.70 | 54.49 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

Table 11: The fertility decline in France, 1861-1911: only female migration (Coale Fertility Index)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.502\*\*\* | 0.250\*\*\* | 0.237 | 0.663\*\* |
|  | [0.100] | [0.0898] | [0.321] | [0.302] |
| Immigrants' Birthplace Norm (t) | 0.0352 | -0.127 | 1.377\*\*\* | 0.516\* |
|  | [0.101] | [0.0775] | [0.278] | [0.299] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -2.163\*\*\* | -1.057\* | -2.917\*\*\* | -2.817\*\*\* |
|  | [0.645] | [0.608] | [0.912] | [0.830] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.914\* | 2.719\*\*\* | 0.426 | 1.376\* |
|  | [0.993] | [0.685] | [1.321] | [0.770] |
| Share of Emigrants (t) | -3.470\*\*\* | -1.611 | -4.033\*\*\* | -3.708\*\*\* |
|  | [1.117] | [0.981] | [1.411] | [1.251] |
| Share of Immigrants (t) | 3.676\*\*\* | 4.232\*\*\* | 1.724 | 2.093\*\* |
|  | [1.321] | [0.929] | [1.780] | [0.950] |
| Life Expectancy Age 15 (t) |  | -0.0056 |  | -0.0064 |
|  |  | [0.0106] |  | [0.0104] |
| Infant Mortality (t) |  | 0.847\*\* |  | 0.758\*\* |
|  |  | [0.335] |  | [0.333] |
| log(Urban) (t) |  | -0.0681 |  | 0.2030 |
|  |  | [0.325] |  | [0.288] |
| log(Industries) (t) |  | -0.0131 |  | -0.0049 |
|  |  | [0.0080] |  | [0.0071] |
| log(Professionals) (t) |  | -0.0081 |  | -0.0046 |
|  |  | [0.0148] |  | [0.0123] |
| log(Female Education (t)) |  | -0.0666 |  | -0.0155 |
|  |  | [0.0424] |  | [0.0403] |
| log(Male Education (t)) |  | 0.0201 |  | 0.0089 |
|  |  | [0.0534] |  | [0.0499] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | -0.0042 |  | 0.0184 |
|  |  | [0.0188] |  | [0.0217] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0132 |  | 0.0024 |
|  |  | [0.0164] |  | [0.0154] |
| Revue des Deux Mondes Outlets (t) |  | 0.0719\* |  | 0.0113 |
|  |  | [0.0389] |  | [0.0404] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0488\* |  | 0.0156 |
|  |  | [0.0261] |  | [0.0279] |
| Constant | -0.563\*\*\* | -1.143\* | 0.668\*\* | 0.500 |
|  | [0.168] | [0.591] | [0.313] | [0.757] |
|  |  |  |  |  |
| Within R2 | 0.6 | 0.74 | 0.7 | 0.77 |
| F-stat | 41.3 | 52.20 | 41.5 | 66.91 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 81 | 81 | 81 | 81 |
| Observations | 486 | 486 | 486 | 486 |

Table 12: The fertility decline in France, 1861-1911, excluding migration to and from Seine (Paris and suburbs) (Coale Fertility Index)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.335\*\*\* | 0.229\*\*\* | 0.844\* | 0.469 |
|  | [0.0963] | [0.0856] | [0.439] | [0.401] |
| Immigrants' Birthplace Norm (t) | 0.172 | -0.109 | 0.625 | 0.503 |
|  | [0.132] | [0.0982] | [0.413] | [0.394] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | 0.0258 | -0.191 | -2.594 | -2.629\* |
|  | [0.759] | [0.658] | [1.711] | [1.545] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.450 | 2.859\*\*\* | 1.554 | 2.073\* |
|  | [1.264] | [0.863] | [1.565] | [1.152] |
| Share of Emigrants (t) | -0.103 | -0.270 | -3.716 | -3.606 |
|  | [1.137] | [0.912] | [2.681] | [2.380] |
| Share of Immigrants (t) | 3.037\* | 4.585\*\*\* | 3.892 | 3.687\*\* |
|  | [1.744] | [1.231] | [2.340] | [1.795] |
| Life Expectancy Age 15 (t) |  | -0.0020 |  | -0.0030 |
|  |  | [0.0100] |  | [0.0100] |
| Infant Mortality (t) |  | 0.923\*\*\* |  | 0.787\*\* |
|  |  | [0.313] |  | [0.332] |
| log(Urban) (t) |  | -0.0490 |  | 0.0596 |
|  |  | [0.312] |  | [0.329] |
| log(Industries) (t) |  | -0.0124 |  | -0.0054 |
|  |  | [0.0084] |  | [0.0080] |
| log(Professionals) (t) |  | -0.0177 |  | -0.0114 |
|  |  | [0.0128] |  | [0.0126] |
| log(Female Education (t)) |  | -0.0428 |  | -0.0177 |
|  |  | [0.0406] |  | [0.0408] |
| log(Male Education (t)) |  | 0.0020 |  | -0.0011 |
|  |  | [0.0490] |  | [0.0515] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0017 |  | 0.0014 |
|  |  | [0.0184] |  | [0.0194] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0035 |  | 0.0097 |
|  |  | [0.0165] |  | [0.0151] |
| Revue des Deux Mondes Outlets (t) |  | 0.0868\*\* |  | 0.0538 |
|  |  | [0.0363] |  | [0.0373] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0570\*\* |  | 0.0390 |
|  |  | [0.0246] |  | [0.0255] |
| Constant | -0.671\*\*\* | -1.417\*\* | 0.460 | -0.0767 |
|  | [0.210] | [0.592] | [0.425] | [0.833] |
|  |  |  |  |  |
| Within R2 | 0.6 | 0.746 | 0.7 | 0.752 |
| F-stat | 39.5 | 44.60 | 47.80 | 48.12 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 80 | 80 | 80 | 80 |
| Observations | 480 | 480 | 480 | 480 |

**Table 13. Actual, predicted and counterfactual fertility rates in France, 1861-1911 (Coale Fertility Index)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | OLS |  |  |  |  |  |  | IV |  |  |  |
|  | 1861 | 1871 | 1881 | 1891 | 1901 | 1911 |  | 1861 | 1871 | 1881 | 1891 | 1901 | 1911 |
|  | No Changes in Migration after 1861 | | | | | |  | No Change in Migration after 1861 | | | | | |
| Actual Data | 0.310 | 0.287 | 0.293 | 0.254 | 0.254 | 0.244 |  | 0.310 | 0.287 | 0.293 | 0.254 | 0.254 | 0.244 |
|  | [0.061] | [0.063] | [0.065] | [0.049] | [0.043] | [0.037] |  | [0.061] | [0.063] | [0.065] | [0.049] | [0.043] | [0.037] |
| Basic Model (Predicted Values) | 0.308 | 0.283 | 0.289 | 0.250 | 0.251 | 0.241 |  | 0.308 | 0.283 | 0.289 | 0.251 | 0.251 | 0.241 |
|  | [0.049] | [0.035] | [0.034] | [0.022] | [0.020] | [0.011] |  | [0.045] | [0.035] | [0.034] | [0.025] | [0.023] | [0.014] |
| Counterfactual fertility in France | 0.308 | 0.295 | 0.294 | 0.269 | 0.270 | 0.268 |  | 0.308 | 0.317 | 0.314 | 0.303 | 0.303 | 0.297 |
| under no changes in migration after 1861 | [0.049] | [0.040] | [0.042] | [0.035] | [0.034] | [0.028] |  | [0.045] | [0.038] | [0.041] | [0.036] | [0.033] | [0.027] |
| Counterfactual fertility in France | 0.308 | 0.283 | 0.283 | 0.252 | 0.250 | 0.244 |  | 0.308 | 0.294 | 0.297 | 0.277 | 0.276 | 0.270 |
| under no changes in immigration after 1861 | [0.049] | [0.039] | [0.039] | [0.032] | [0.030] | [0.023] |  | [0.045] | [0.037] | [0.037] | [0.030] | [0.027] | [0.018] |
| Counterfactual fertility in France | 0.308 | 0.298 | 0.302 | 0.272 | 0.277 | 0.272 |  | 0.308 | 0.306 | 0.305 | 0.276 | 0.277 | 0.268 |
| under no changes in emigration after 1861 | [0.049] | [0.037] | [0.038] | [0.028] | [0.026] | [0.018] |  | [0.045] | [0.037] | [0.037] | [0.030] | [0.028] | [0.019] |
| Pearson Χ2 | 0.593 | 0.887 | 0.942 | 0.633 | 0.644 | 0.558 |  | 0.503 | 0.764 | 0.849 | 0.589 | 0.565 | 0.456 |
|  | No Changes in Female Migration after 1861 | | | | | |  | No Changes in Female Migration after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.308 | 0.282 | 0.288 | 0.250 | 0.251 | 0.241 |  | 0.308 | 0.283 | 0.289 | 0.250 | 0.251 | 0.241 |
|  | [0.044] | [0.029] | [0.030] | [0.019] | [0.016] | [0.009] |  | [0.045] | [0.034] | [0.033] | [0.024] | [0.022] | [0.014] |
| Counterfactual fertility in France | 0.308 | 0.291 | 0.292 | 0.263 | 0.265 | 0.261 |  | 0.308 | 0.318 | 0.315 | 0.307 | 0.306 | 0.301 |
| under no changes in female migration after 1861 | [0.044] | [0.033] | [0.035] | [0.028] | [0.026] | [0.021] |  | [0.045] | [0.037] | [0.040] | [0.035] | [0.032] | [0.026] |
| Pearson Χ2 | 0.512 | 0.747 | 0.794 | 0.555 | 0.553 | 0.467 |  | 0.477 | 0.723 | 0.800 | 0.550 | 0.526 | 0.417 |
|  | No Changes in Male Migration after 1861 | | | | | |  | No Changes in Male Migration after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.308 | 0.282 | 0.288 | 0.250 | 0.251 | 0.241 |  | 0.308 | 0.283 | 0.289 | 0.251 | 0.251 | 0.241 |
|  | [0.045] | [0.032] | [0.031] | [0.020] | [0.018] | [0.010] |  | [0.045] | [0.035] | [0.034] | [0.025] | [0.022] | [0.013] |
| Counterfactual fertility in France | 0.308 | 0.293 | 0.294 | 0.265 | 0.266 | 0.263 |  | 0.308 | 0.317 | 0.314 | 0.302 | 0.302 | 0.297 |
| under no changes in male migration after 1861 | [0.045] | [0.036] | [0.037] | [0.030] | [0.028] | [0.022] |  | [0.045] | [0.037] | [0.040] | [0.035] | [0.033] | [0.027] |
| Pearson Χ2 | 0.519 | 0.817 | 0.842 | 0.592 | 0.594 | 0.527 |  | 0.490 | 0.734 | 0.819 | 0.568 | 0.546 | 0.444 |
|  | No changes in migration from and to Paris after 1861 | | | | | |  | No changes in migration from and to Paris after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.307 | 0.283 | 0.288 | 0.250 | 0.251 | 0.242 |  | 0.307 | 0.283 | 0.289 | 0.250 | 0.252 | 0.243 |
|  | [0.041] | [0.029] | [0.026] | [0.018] | [0.015] | [0.009] |  | [0.043] | [0.030] | [0.030] | [0.022] | [0.020] | [0.012] |
| Counterfactual fertility in France under no changes | 0.307 | 0.290 | 0.290 | 0.266 | 0.266 | 0.264 |  | 0.307 | 0.303 | 0.304 | 0.297 | 0.292 | 0.286 |
| in migration from and to Paris after 1861 | [0.041] | [0.032] | [0.034] | [0.029] | [0.027] | [0.023] |  | [0.043] | [0.035] | [0.037] | [0.034] | [0.031] | [0.026] |
| Pearson Χ2 | 0.486 | 0.719 | 0.778 | 0.550 | 0.514 | 0.449 |  | 0.530 | 0.742 | 0.907 | 0.613 | 0.561 | 0.473 |

**Note: This table reports the mean an standard deviation at the national level for the actual, predicted and counterfactual values under the assumption that no changes in fertility norms and in the shares of migrants had occurred after 1861 at the national level using the OLS and IV regression results with the control variables in Columns 2 and 4 of Tables 2, 5, 6 and 7. The counterfactual values obtained from the IV regression results are graphed in Figure 3.**

**Table 14. Actual, predicted and counterfactual fertility rates in France, 1861-1911 (Total Fertility Rate)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | OLS |  |  |  |  |  |  | IV |  |  |  |
|  | 1861 | 1871 | 1881 | 1891 | 1901 | 1911 |  | 1861 | 1871 | 1881 | 1891 | 1901 | 1911 |
|  | No Changes in Migration after 1861 | | | | | |  | No Change in Migration after 1861 | | | | | |
| Actual Data | 0.026 | 0.027 | 0.025 | 0.023 | 0.022 | 0.019 |  | 0.026 | 0.027 | 0.025 | 0.023 | 0.022 | 0.019 |
|  | [0.004] | [0.004] | [0.004] | [0.004] | [0.003] | [0.003] |  | [0.004] | [0.004] | [0.004] | [0.004] | [0.003] | [0.003] |
| Basic Model (Predicted Values) | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |  | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |
|  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] | [0.001] |
| Counterfactual fertility in France | 0.026 | 0.027 | 0.026 | 0.024 | 0.024 | 0.022 |  | 0.026 | 0.026 | 0.026 | 0.026 | 0.025 | 0.025 |
| under no changes in migration after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Counterfactual fertility in France | 0.026 | 0.026 | 0.025 | 0.022 | 0.022 | 0.019 |  | 0.026 | 0.024 | 0.027 | 0.031 | 0.032 | 0.038 |
| under no changes in immigration after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.003] |
| Counterfactual fertility in France | 0.026 | 0.027 | 0.026 | 0.024 | 0.024 | 0.022 |  | 0.026 | 0.028 | 0.023 | 0.019 | 0.018 | 0.012 |
| under no changes in emigration after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Pearson Χ2 | 0.033 | 0.048 | 0.045 | 0.057 | 0.041 | 0.033 |  | 0.028 | 0.038 | 0.032 | 0.042 | 0.025 | 0.021 |
|  | No Changes in Female Migration after 1861 | | | | | |  | No Changes in Female Migration after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |  | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |
|  | [0.002] | [0.002] | [0.002] | [0.001] | [0.001] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] | [0.001] |
| Counterfactual fertility in France | 0.026 | 0.027 | 0.026 | 0.024 | 0.024 | 0.022 |  | 0.026 | 0.026 | 0.026 | 0.026 | 0.025 | 0.025 |
| under no changes in female migration after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Pearson Χ2 | 0.033 | 0.042 | 0.039 | 0.051 | 0.037 | 0.029 |  | 0.026 | 0.036 | 0.031 | 0.041 | 0.024 | 0.020 |
|  | No Changes in Male Migration after 1861 | | | | | |  | No Changes in Male Migration after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |  | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |
|  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] |
| Counterfactual fertility in France | 0.026 | 0.027 | 0.025 | 0.023 | 0.023 | 0.021 |  | 0.026 | 0.026 | 0.026 | 0.026 | 0.025 | 0.025 |
| under no changes in male migration after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Pearson Χ2 | 0.034 | 0.047 | 0.043 | 0.058 | 0.040 | 0.033 |  | 0.027 | 0.038 | 0.033 | 0.042 | 0.025 | 0.022 |
|  | No changes in migration from and to Paris after 1861 | | | | | |  | No changes in migration from and to Paris after 1861 | | | | | |
| Basic Model (Predicted Values) | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |  | 0.026 | 0.027 | 0.025 | 0.022 | 0.022 | 0.019 |
|  | [0.002] | [0.002] | [0.002] | [0.001] | [0.001] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Counterfactual fertility in France under no changes | 0.026 | 0.026 | 0.025 | 0.023 | 0.023 | 0.021 |  | 0.026 | 0.025 | 0.026 | 0.028 | 0.028 | 0.030 |
| in migration from and to Paris after 1861 | [0.002] | [0.002] | [0.002] | [0.002] | [0.001] | [0.001] |  | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] | [0.002] |
| Pearson Χ2 | 0.030 | 0.045 | 0.040 | 0.052 | 0.036 | 0.031 |  | 0.029 | 0.039 | 0.034 | 0.043 | 0.026 | 0.022 |

**Note: This table reports the mean an standard deviation at the national level for the actual, predicted and counterfactual values under the assumption that no changes in fertility norms and in the shares of migrants had occurred after 1861 at the national level using the OLS and IV regression results with the control variables in Columns 2 and 4 of Tables 2, 5, 6 and 7. The counterfactual values obtained from the IV regression results are graphed in Figure 3.**

**For Online Publication -- Supplementary Appendix**

*Supplementary Appendix A.*

**Table A1: Descriptive statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Obs. | Mean | Std.Dev | Min | Max |
| **Coale Fertility Index** |  |  |  |  |  |
| Inhabitants' Residence Norm | 486 | 0.274 | 0.059 | 0.158 | 0.566 |
| Inhabitants' Residence Norm (1811-1861) | 486 | 0.360 | 0.099 | 0.205 | 0.871 |
| *Fertility Norms and Share of Emigrants - Main Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 486 | 0.257 | 0.038 | 0.168 | 0.395 |
| Immigrants' Birthplace Norm | 486 | 0.274 | 0.035 | 0.207 | 0.422 |
| Share of Emigrants | 486 | 0.169 | 0.074 | 0.031 | 0.467 |
| Share of Immigrants | 486 | 0.123 | 0.081 | 0.006 | 0.554 |
| *Fertility Norms and Share of Emigrants - Female Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 486 | 0.255 | 0.039 | 0.161 | 0.390 |
| Immigrants' Birthplace Norm | 486 | 0.275 | 0.040 | 0.198 | 0.496 |
| Share of Emigrants | 486 | 0.164 | 0.076 | 0.022 | 0.471 |
| Share of Immigrants | 486 | 0.119 | 0.087 | 0.002 | 0.583 |
| *Fertility Norms and Share of Emigrants - Male Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 486 | 0.259 | 0.042 | 0.173 | 0.484 |
| Immigrants' Birthplace Norm | 486 | 0.273 | 0.040 | 0.190 | 0.459 |
| Share of Emigrants | 486 | 0.182 | 0.079 | 0.039 | 0.519 |
| Share of Immigrants | 486 | 0.136 | 0.089 | 0.009 | 0.616 |
| *Fertility Norms and Share of Emigrants - Excluding Paris* |  |  |  |  |  |
| Emigrants' Residence Norm | 480 | 0.266 | 0.037 | 0.168 | 0.437 |
| Immigrants' Birthplace Norm | 480 | 0.276 | 0.034 | 0.207 | 0.422 |
| Share of Emigrants | 480 | 0.127 | 0.064 | 0.011 | 0.467 |
| Share of Immigrants | 480 | 0.111 | 0.060 | 0.006 | 0.372 |
| *Fertility Norms and Share of Emigrants - Extended Sample 1821-1911* |  |  |  |  |  |
| Emigrants' Residence Norm | 800 | 0.306 | 0.084 | 0.168 | 0.774 |
| Immigrants' Birthplace Norm | 800 | 0.303 | 0.053 | 0.207 | 0.510 |
| Share of Emigrants | 800 | 0.146 | 0.096 | 0.001 | 1.258 |
| Share of Immigrants | 800 | 0.114 | 0.093 | 0.000 | 1.069 |
| **Total Fertility Rate** |  |  |  |  |  |
| Inhabitants' Residence Norm | 480 | 0.024 | 0.005 | 0.008 | 0.038 |
| *Fertility Norms and Share of Emigrants - Main Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 480 | 0.025 | 0.004 | 0.015 | 0.034 |
| Immigrants' Birthplace Norm | 480 | 0.024 | 0.004 | 0.016 | 0.047 |
| Share of Emigrants | 480 | 0.168 | 0.074 | 0.031 | 0.467 |
| Share of Immigrants | 480 | 0.124 | 0.082 | 0.006 | 0.554 |
| *Fertility Norms and Share of Emigrants - Female Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 480 | 0.024 | 0.004 | 0.014 | 0.033 |
| Immigrants' Birthplace Norm | 480 | 0.024 | 0.004 | 0.015 | 0.047 |
| Share of Emigrants | 480 | 0.164 | 0.076 | 0.022 | 0.471 |
| Share of Immigrants | 480 | 0.119 | 0.087 | 0.002 | 0.583 |
| *Fertility Norms and Share of Emigrants - Male Sample* |  |  |  |  |  |
| Emigrants' Residence Norm | 480 | 0.025 | 0.004 | 0.014 | 0.038 |
| Immigrants' Birthplace Norm | 480 | 0.024 | 0.004 | 0.015 | 0.053 |
| Share of Emigrants | 480 | 0.182 | 0.079 | 0.039 | 0.518 |
| Share of Immigrants | 480 | 0.136 | 0.089 | 0.009 | 0.616 |
| *Fertility Norms and Share of Emigrants - Excluding Paris* |  |  |  |  |  |
| Emigrants' Residence Norm | 474 | 0.024 | 0.003 | 0.014 | 0.035 |
| Immigrants' Birthplace Norm | 474 | 0.024 | 0.004 | 0.016 | 0.047 |
| Share of Emigrants | 474 | 0.127 | 0.064 | 0.011 | 0.467 |
| Share of Immigrants | 474 | 0.112 | 0.060 | 0.006 | 0.372 |
| **Instrumental Variable** |  |  |  |  |  |
| Travel Costs |  |  |  |  |  |
| **Education, health and the workforce** |  |  |  |  |  |
| Life Expectancy at Age 15 | 486 | 48.72 | 7.55 | 34.76 | 65.91 |
| Infant Mortality (under age 1, in %) | 486 | 0.217 | 0.108 | 0.019 | 0.626 |
| Urban (% residents living in jurisdictions of more than 2,000 inhabitants) | 486 | 0.280 | 0.162 | 0.082 | 1.000 |
| Industries (% of the workforce in the industrial sector) | 486 | 0.211 | 0.134 | 0.001 | 0.677 |
| Professionals (% of professionals, e.g. lawyers, doctors..., in workforce) | 486 | 0.027 | 0.016 | 0.001 | 0.160 |
| Female Education (% 5-19 year old females in primary and secondary schools) | 486 | 0.499 | 0.136 | 0.075 | 0.792 |
| Male Education (% 5-19 year old males in primary and secondary schools) | 486 | 0.528 | 0.129 | 0.149 | 1.071 |
| Share of girls in Catholic primary schools | 486 | 0.437 | 0.182 | 0.026 | 0.939 |
| (in %, out of the total number of girls in Catholic and secular primary schools) |  |  |  |  |  |
| Share of boys in Catholic primary schools | 486 | 0.166 | 0.122 | 0.010 | 0.727 |
| (in %, out of the total number of boys in Catholic and secular primary schools) |  |  |  |  |  |
| Revue des Deux Mondes Outlets (t) | 486 | 0.597 | 0.816 | 0 | 4 |
| **Variables for robustness checks** |  |  |  |  |  |
| Total Number of Periodicals | 486 | 51.31 | 253.45 | 2 | 4021 |
| New Catholic Church | 486 | 0.506 | 0.990 | 0 | 11 |
| New Orthodox Church | 486 | 0.004 | 0.064 | 0 | 1 |
| New Protestant Temple | 486 | 0.029 | 0.179 | 0 | 2 |
| Share of Children Born out of Wedlock out of the Total Number of Births | 486 | 0.063 | 0.055 | 0 | 1 |
| Share of not legitimized Children out of those who were Born out of Wedlock | 486 | 0.664 | 0.185 | 0.095 | 1 |
| Share of Married Men Age 20-24 | 486 | 0.119 | 0.056 | 0.021 | 0.431 |
| Share of Married Women Age 20-24 | 486 | 0.462 | 0.142 | 0.172 | 0.899 |
| Share of Married Men Age 25-29 | 486 | 0.488 | 0.113 | 0.072 | 0.871 |
| Share of Married Women Age 25-29 | 486 | 0.699 | 0.091 | 0.277 | 0.868 |
| Share of Married Men Age 30-34 | 486 | 0.678 | 0.132 | 0.248 | 0.860 |
| Share of Married Women Age 30-34 | 486 | 0.772 | 0.070 | 0.472 | 0.968 |

**Table A2: The fertility decline in France, 1861-1911: only male migration (Total Fertility Rate)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.231\*\* | 0.161\* | -1.378\*\*\* | -1.056\*\*\* |
|  | [0.102] | [0.0939] | [0.391] | [0.343] |
| Immigrants' Birthplace Norm (t) | 0.135 | 0.0445 | 2.499\*\*\* | 1.984\*\*\* |
|  | [0.0934] | [0.0821] | [0.334] | [0.323] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -0.00689 | -0.0976 | 0.0598 | 0.0368 |
|  | [0.384] | [0.437] | [0.436] | [0.473] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.256 | 0.679 | -0.503 | -0.0683 |
|  | [0.501] | [0.468] | [0.717] | [0.659] |
| Share of Emigrants (t) | -0.820 | -1.081 | 0.381 | 0.231 |
|  | [1.379] | [1.559] | [1.715] | [1.860] |
| Share of Immigrants (t) | 1.737 | 3.156\* | -1.737 | -0.245 |
|  | [1.880] | [1.745] | [2.867] | [2.584] |
| Life Expectancy Age 15 (t) |  | -0.0361\*\*\* |  | -0.0158\* |
|  |  | [0.0094] |  | [0.0090] |
| Infant Mortality (t) |  | -0.930\*\*\* |  | -0.256 |
|  |  | [0.326] |  | [0.310] |
| log(Urban) (t) |  | -0.147 |  | 0.0482 |
|  |  | [0.128] |  | [0.131] |
| log(Industries) (t) |  | -0.0035 |  | 0.0014 |
|  |  | [0.0064] |  | [0.0058] |
| log(Professionals) (t) |  | -0.0023 |  | -0.0043 |
|  |  | [0.0102] |  | [0.00958] |
| log(Female Education (t)) |  | -0.0300 |  | -0.0165 |
|  |  | [0.0331] |  | [0.0336] |
| log(Male Education (t)) |  | 0.0122 |  | -0.0008 |
|  |  | [0.0464] |  | [0.0421] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0087 |  | -0.0101 |
|  |  | [0.0163] |  | [0.0151] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0381\*\*\* |  | 0.0348\*\* |
|  |  | [0.0140] |  | [0.0140] |
| Revue des Deux Mondes Outlets (t) |  | -0.0278 |  | 0.0468 |
|  |  | [0.145] |  | [0.151] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | -0.00884 |  | 0.0151 |
|  |  | [0.0367] |  | [0.0384] |
| Constant | -2.307\*\*\* | -0.948 | 0.392 | 0.726 |
|  | [0.482] | [0.761] | [0.804] | [1.021] |
|  |  |  |  |  |
| Within R2 | 0.8 | 0.81 | 0.8 | 0.82 |
| F-stat | 111.6 | 80.30 | 129.7 | 88.71 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Observations | 480 | 480 | 480 | 480 |
| Number of dptresid | 80 | 80 | 80 | 80 |

Table A3: The fertility decline in France, 1861-1911: only female migration (Total Fertility Rate)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.158 | 0.0305 | -1.471\*\*\* | -1.209\*\*\* |
|  | [0.146] | [0.125] | [0.432] | [0.385] |
| Immigrants' Birthplace Norm (t) | 0.0584 | -0.0134 | 2.569\*\*\* | 2.052\*\*\* |
|  | [0.0772] | [0.0537] | [0.354] | [0.338] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -0.424 | 0.0598 | 0.179 | 0.242 |
|  | [0.590] | [0.589] | [0.449] | [0.496] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.113\*\* | 1.338\*\*\* | -0.430 | 0.0325 |
|  | [0.493] | [0.421] | [0.769] | [0.660] |
| Share of Emigrants (t) | -2.702 | -0.677 | 0.870 | 1.059 |
|  | [2.387] | [2.325] | [1.768] | [1.938] |
| Share of Immigrants (t) | 4.761\*\* | 5.351\*\*\* | -1.613 | -0.129 |
|  | [1.864] | [1.619] | [3.095] | [2.615] |
| Life Expectancy Age 15 (t) |  | -0.0353\*\*\* |  | -0.0164\* |
|  |  | [0.0106] |  | [0.00902] |
| Infant Mortality (t) |  | -0.857\*\* |  | -0.244 |
|  |  | [0.356] |  | [0.310] |
| log(Urban) (t) |  | -0.159 |  | 0.0502 |
|  |  | [0.129] |  | [0.124] |
| log(Industries) (t) |  | -0.0047 |  | 0.0001 |
|  |  | [0.00660] |  | [0.00567] |
| log(Professionals) (t) |  | 0.0010 |  | -0.0040 |
|  |  | [0.0119] |  | [0.00960] |
| log(Female Education (t)) |  | -0.0748\*\* |  | -0.0255 |
|  |  | [0.0349] |  | [0.0350] |
| log(Male Education (t)) |  | 0.0334 |  | -0.0005 |
|  |  | [0.0486] |  | [0.0418] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | -0.0038 |  | -0.0081 |
|  |  | [0.0179] |  | [0.0153] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0423\*\*\* |  | 0.0331\*\* |
|  |  | [0.0142] |  | [0.0138] |
| Revue des Deux Mondes Outlets (t) |  | 0.0577 |  | 0.0556 |
|  |  | [0.158] |  | [0.153] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0158 |  | 0.0178 |
|  |  | [0.0402] |  | [0.0391] |
| Constant | -2.814\*\*\* | -1.681\*\* | 0.326 | 0.453 |
|  | [0.535] | [0.796] | [0.882] | [1.123] |
|  |  |  |  |  |
| Within R2 | 0.8 | 0.80 | 0.8 | 0.82 |
| F-stat | 100.1 | 75.98 | 125.5 | 87.49 |
| Prob>F-stat | 0.0 | 0.0 | 0.0 | 0.0 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 80 | 80 | 80 | 80 |
| Observations | 480 | 480 | 480 | 480 |

Table A4: The fertility decline in France, 1861-1911, excluding migration to and from Seine (Paris and suburbs) (Total Fertility Rate)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | OLS | OLS | IV | IV |
|  | Dependent variable is Fertility(t) | | | |
|  |  |  |  |  |
| Emigrants' Residence Norm (t) | 0.275\*\* | 0.188\* | 0.0584 | 0.0233 |
|  | [0.128] | [0.101] | [0.576] | [0.592] |
| Immigrants' Birthplace Norm (t) | 0.183 | 0.0667 | 1.475\*\* | 1.261\* |
|  | [0.126] | [0.108] | [0.650] | [0.651] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | 0.328 | 0.203 | 0.0885 | 0.103 |
|  | [0.586] | [0.552] | [0.587] | [0.642] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.484 | 0.962 | 0.139 | 0.130 |
|  | [0.702] | [0.639] | [0.686] | [0.646] |
| Share of Emigrants (t) | 0.910 | 0.515 | 0.282 | 0.337 |
|  | [2.302] | [2.177] | [2.322] | [2.550] |
| Share of Immigrants (t) | 2.485 | 4.114\* | 0.916 | 0.512 |
|  | [2.659] | [2.380] | [2.748] | [2.554] |
| Life Expectancy Age 15 (t) |  | -0.0328\*\*\* |  | -0.0159\* |
|  |  | [0.00926] |  | [0.00878] |
| Infant Mortality (t) |  | -0.827\*\*\* |  | -0.279 |
|  |  | [0.313] |  | [0.308] |
| log(Urban) (t) |  | -0.0307 |  | -0.0231 |
|  |  | [0.133] |  | [0.120] |
| log(Industries) (t) |  | -0.0048 |  | -0.0040 |
|  |  | [0.0066] |  | [0.0064] |
| log(Professionals) (t) |  | -0.0033 |  | -0.0010 |
|  |  | [0.0103] |  | [0.00975] |
| log(Female Education (t)) |  | -0.0400 |  | -0.0221 |
|  |  | [0.0381] |  | [0.0345] |
| log(Male Education (t)) |  | 0.0066 |  | 0.0023 |
|  |  | [0.0494] |  | [0.0448] |
| log(Share of Girls in Primary Catholic Schools) (t) |  | 0.0011 |  | -0.0098 |
|  |  | [0.0182] |  | [0.0148] |
| log(Share of Boys in Primary Catholic Schools) (t) |  | 0.0416\*\* |  | 0.0270\*\* |
|  |  | [0.0168] |  | [0.0129] |
| Revue des Deux Mondes Outlets (t) |  | 0.0196 |  | 0.0886 |
|  |  | [0.131] |  | [0.151] |
| Revue des Deux Mondes Outlets (t) \* Fertility of Seine (t) |  | 0.0049 |  | 0.0263 |
|  |  | [0.0329] |  | [0.0383] |
| Constant | -2.021\*\*\* | -1.040 | 1.843\*\* | 2.199\*\* |
|  | [0.603] | [0.831] | [0.773] | [0.983] |
|  |  |  |  |  |
| Within R2 | 0.8 | 0.81 | 0.8 | 0.82 |
| F-stat | 100.0 | 65.00 | 152.0 | 100.52 |
| Prob>F-stat | 0.00 | 0.00 | 0.00 | 0.00 |
| Year-fixed effects | Yes | Yes | Yes | Yes |
| *Département*-fixed effects | Yes | Yes | Yes | Yes |
| Number of clusters | 79 | 79 | 79 | 79 |
| Observations | 474 | 474 | 474 | 474 |

**TABLES on the TRARE THAT DON'T WORK AND WON'T BE IN THE ARTICLE**

**Table X1: Determinants of the fertility decline in France, 1821-1911: all migrants (Total Fertility Rate)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | OLS | OLS | OLS |
|  | Dependent variable is Fertility(t)  (Total Fertility Rate) | | |
|  | 1821-1911 | 1821-1851 | 1861-1911 |
|  |  |  |  |
| Emigrants' Residence Norm (t) | 0.0700 | 0.0254 | 0.307\*\* |
|  | [0.117] | [0.101] | [0.152] |
| Immigrants' Birthplace Norm (t) | 0.137 | 0.181\* | 0.157 |
|  | [0.0968] | [0.106] | [0.120] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | 0.795 | -0.0961 | -0.315 |
|  | [0.539] | [0.974] | [0.453] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.440 | -0.949 | 0.686 |
|  | [0.605] | [1.013] | [0.530] |
| Share of Emigrants (t) | 2.717 | -0.281 | -2.123 |
|  | [1.865] | [3.364] | [1.769] |
| Share of Immigrants (t) | 1.472 | -3.467 | 3.470\* |
|  | [2.140] | [3.493] | [1.985] |
| Constant | -2.746\*\*\* | -2.741\*\*\* | -1.933\*\*\* |
|  | [0.568] | [0.548] | [0.577] |
|  |  |  |  |
| Within R2 | 0.8 | 0.5 | 0.8 |
| F-stat | 137.0 | 21.9 | 117.5 |
| Prob>F-stat | 0.0 | 0.0 | 0.0 |
| Year-fixed effects | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes |
| Number of clusters | 80 | 80 | 80 |
| Observations | 800 | 320 | 480 |

**Table X2: Determinants of the fertility decline in France, 1821-1911: excluding migration to and from Seine (Paris and suburbs)** **(Coale Fertility Index)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | OLS | OLS | OLS |
|  | Dependent variable is Fertility(t) | | |
|  | 1821-1911 | 1821-1851 | 1861-1911 |
|  |  |  |  |
| Emigrants' Residence Norm (t) | 0.236\*\*\* | 0.0707 | 0.363\*\*\* |
|  | [0.0731] | [0.0523] | [0.0986] |
| Immigrants' Birthplace Norm (t) | 0.0757 | 0.00415 | 0.180 |
|  | [0.0895] | [0.0867] | [0.136] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | -0.0247 | -0.223 | -0.119 |
|  | [0.506] | [0.658] | [0.765] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 1.470 | 0.669 | 1.304 |
|  | [1.115] | [0.835] | [1.283] |
| Share of Emigrants (t) | -0.313 | -0.441 | -0.290 |
|  | [0.496] | [0.515] | [1.149] |
| Share of Immigrants (t) | 2.279\* | 1.084 | 2.894 |
|  | [1.236] | [0.886] | [1.769] |
| Constant | -0.746\*\*\* | -0.926\*\*\* | -0.678\*\*\* |
|  | [0.127] | [0.109] | [0.224] |
|  |  |  |  |
| Within R2 | 0.7 | 0.5 | 0.6 |
| F-stat | 39.9 | 23.2 | 39.7 |
| Prob>F-stat | 0.0 | 0.0 | 0.0 |
| Year-fixed effects | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes |
| Number of dptresid | 79 | 79 | 79 |
| Observations | 790 | 316 | 474 |

**Table X3: Determinants of the fertility decline in France, 1821-1911** **excluding migration to and from Seine (Paris and suburbs)** **(Total Fertility Rate)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | OLS | OLS | OLS |
|  | Dependent variable is Fertility(t)  (Total Fertility Rate) | | |
|  | 1821-1911 | 1821-1851 | 1861-1911 |
|  |  |  |  |
| Emigrants' Residence Norm (t) | 0.155 | 0.0585 | 0.275\*\* |
|  | [0.0988] | [0.111] | [0.128] |
| Immigrants' Birthplace Norm (t) | 0.114 | 0.205 | 0.183 |
|  | [0.111] | [0.129] | [0.126] |
| Emigrants' Residence Norm (t) \* Share of Emigrants(t) | 0.903 | -0.0522 | 0.328 |
|  | [0.550] | [1.152] | [0.586] |
| Immigrants' Birthplace Norm (t)\* Share of Immigrants (t) | 0.560 | -1.620 | 0.484 |
|  | [0.749] | [1.643] | [0.702] |
| Share of Emigrants (t) | 3.227\* | -0.0913 | 0.910 |
|  | [1.931] | [3.995] | [2.302] |
| Share of Immigrants (t) | 1.806 | -5.803 | 2.485 |
|  | [2.658] | [5.666] | [2.659] |
| Constant | -2.532\*\*\* | -2.546\*\*\* | -2.010\*\*\* |
|  | [0.537] | [0.612] | [0.600] |
|  |  |  |  |
| Within R2 | 0.8 | 0.5 | 0.8 |
| F-stat | 125.3 | 21.8 | 100.0 |
| Prob>F-stat | 0.0 | 0.0 | 0.0 |
| Year-fixed effects | Yes | Yes | Yes |
| Department*-*fixed effects | Yes | Yes | Yes |
| Number of clusters | 79 | 79 | 79 |
| Observations | 790 | 316 | 474 |

Figures

2. Data

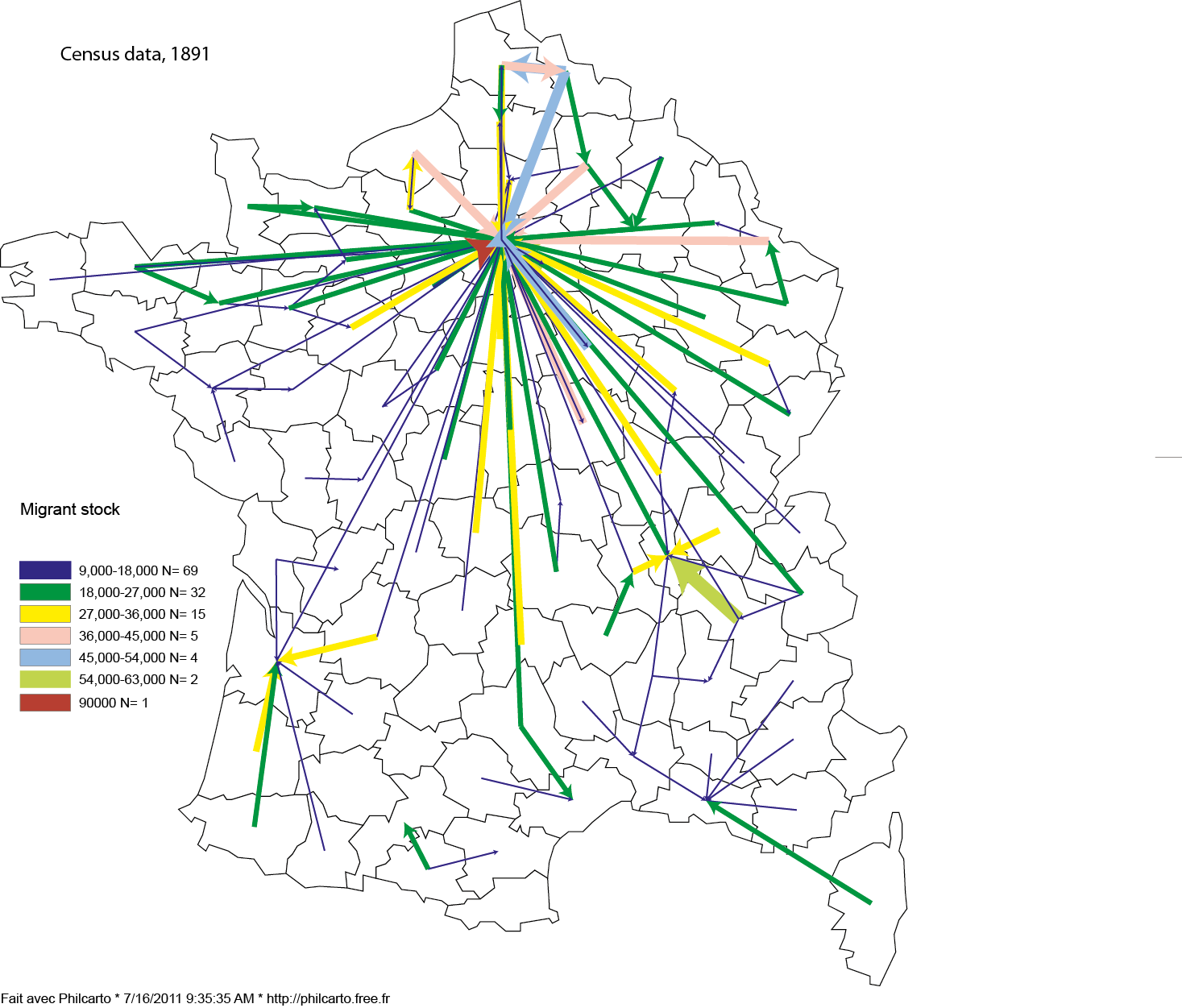
*2.1 Fertility rates*

**Figure 1. Fertility across French departments, 1861-1911 (Coale Fertility Index)**



*2.2 Migration in 19th century France*

Figure 2: Main bilateral migration corridors - 1891 Census data



**NEW Figure 3. Fertility across French departments, 1861-1911 (Total Fertility Rate)**



**UPDATED Figure 4. Counterfactual fertility in France, 1861-1911 (formerly Figure 3) (Coale Fertility Index)**

Panel 4a. Counterfactual fertility in France under no change in migration after 1861



Panel 4b. Counterfactual fertility in France under no changes in migration from and to Paris after 1861



Panel 4c. Counterfactual fertility in France under no changes in female migration after 1861



Panel 4d. Counterfactual fertility in France under no changes in male migration after 1861



Panel 5e. Counterfactual fertility in France under no change in immigration after 1861



Panel 4f. Counterfactual fertility in France under no change in emigration after 1861



**UPDATED Figure 5. Counterfactual histogram of fertility in France, 1861-1911 (formerly Figure 4) (Coale Fertility Index)**

Panel 5a. Counterfactual fertility in France under no change in migration after 1861



Panel 5b. Counterfactual fertility in France under no changes in migration from and to Paris after 1861



Panel 5c. Counterfactual fertility in France under no changes in female migration after 1861



Panel 5d. Counterfactual fertility in France under no changes in male migration after 1861



Panel 5e. Counterfactual fertility in France under no change in immigration after 1861



Panel 5f. Counterfactual fertility in France under no change in emigration after 1861



**UPDATED Figure 6. Counterfactual fertility in France, 1861-1911 (Total Fertility Rate)**

Panel 6a. Counterfactual fertility in France under no change in migration after 1861



Panel 6b. Counterfactual fertility in France under no changes in migration from and to Paris after 1861



Panel 6c. Counterfactual fertility in France under no changes in female migration after 1861



Panel 6d. Counterfactual fertility in France under no changes in male migration after 1861



Panel 6e. Counterfactual fertility in France under no change in immigration after 1861



Panel 6f. Counterfactual fertility in France under no change in emigration after 1861



**UPDATED Figure 7. Counterfactual histogram of fertility in France, 1861-1911 (Total Fertility Rate)**

Panel 7a. Counterfactual fertility in France under no change in migration after 1861



Panel 7b. Counterfactual fertility in France under no changes in migration from and to Paris after 1861



Panel 7c. Counterfactual fertility in France under no changes in female migration after 1861



Panel 7d. Counterfactual fertility in France under no changes in male migration after 1861



Panel 7e. Counterfactual fertility in France under no change in immigration after 1861



Panel 7f. Counterfactual fertility in France under no change in emigration after 1861

