Online Appendix

*The Wage Series*

The wage series underlying Figures 2 and 8 in the paper are given in Table OA1 and Table OA2. Table OA1 shows the level of real wages by occupation, and Table OA2 gives the level of nominal wages by rural and urban status.

*Table OA1:* Welfare Ratio by Occupation, 1831–1900

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Helper | Carpenter | Mason | Teamster |
| 1831 | 0.84 | 1.19 | 1.80 | 2.34 |
| 1835 | 0.87 | 1.20 | 1.87 | 2.11 |
| 1840 | 0.94 | 1.36 | 2.09 | 2.50 |
| 1845 | 1.09 | 1.67 | 2.42 | 2.97 |
| 1850 | 1.07 | 1.69 | 2.42 | 2.95 |
| 1855 | 0.97 | 1.49 | 2.04 | 2.61 |
| 1860 | 1.11 | 1.73 | 2.38 | 3.11 |
| 1865 | 1.23 | 1.87 | 2.67 | 3.44 |
| 1870 | 1.11 | 1.70 | 2.42 | 3.20 |
| 1875 | 1.57 | 2.36 | 3.17 | 4.39 |
| 1880 | 1.40 | 2.18 | 3.16 | 4.19 |
| 1885 | 1.60 | 2.42 | 3.46 | 4.56 |
| 1890 | 1.80 | 2.57 | 3.62 | 4.54 |
| 1895 | 2.03 | 2.87 | 4.07 | 5.18 |
| 1900 | 2.32 | 3.18 | 4.39 | 5.86 |

*Note:* Nominal wages by occupation is calculated using hedonic wage regression, keeping all variables except year and occupation at the mean of the sample.

*Source:* Nominal wages from the present database; calculation of the cost of respectability baskets is explained in Appendix B.

*Table OA2:* Nominal Wage by Rural and Urban Status, 1831–1900

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Helper |  | Carpenter |  | Mason |  | Teamster |  |
|  | *Rural* | *Urban* | *Rural* | *Urban* | *Rural* | *Urban* | *Rural* | *Urban* |
| 1831 | 0.63 | 0.75 | 0.89 | 1.03 | 1.31 | 1.58 | 1.70 | 2.08 |
| 1835 | 0.67 | 0.75 | 0.95 | 1.01 | 1.45 | 1.62 | 1.62 | 1.85 |
| 1840 | 0.70 | 0.76 | 1.03 | 1.08 | 1.55 | 1.70 | 1.84 | 2.05 |
| 1845 | 0.73 | 0.79 | 1.14 | 1.19 | 1.62 | 1.77 | 1.97 | 2.20 |
| 1850 | 0.79 | 0.83 | 1.27 | 1.27 | 1.79 | 1.88 | 2.16 | 2.32 |
| 1855 | 0.98 | 1 | 1.54 | 1.50 | 2.07 | 2.12 | 2.62 | 2.73 |
| 1860 | 1.06 | 1.11 | 1.68 | 1.69 | 2.27 | 2.40 | 2.94 | 3.16 |
| 1865 | 1.11 | 1.20 | 1.72 | 1.78 | 2.41 | 2.61 | 3.08 | 3.40 |
| 1870 | 1.03 | 1.12 | 1.62 | 1.68 | 2.25 | 2.45 | 2.95 | 3.28 |
| 1875 | 1.65 | 1.73 | 2.52 | 2.55 | 3.32 | 3.51 | 4.56 | 4.92 |
| 1880 | 1.29 | 1.43 | 2.05 | 2.17 | 2.92 | 3.24 | 3.83 | 4.34 |
| 1885 | 1.42 | 1.54 | 2.20 | 2.28 | 3.07 | 3.34 | 4.02 | 4.46 |
| 1890 | 1.65 | 1.67 | 2.39 | 2.32 | 3.31 | 3.36 | 4.12 | 4.26 |
| 1895 | 1.73 | 1.78 | 2.50 | 2.47 | 3.47 | 3.59 | 4.38 | 4.62 |
| 1900 | 2.36 | 2.17 | 3.29 | 2.90 | 4.46 | 4.12 | 5.88 | 5.55 |

*Note:* Nominal wages in urban and rural areas for each occupation are calculated using hedonic wage regression and keeping all variables except year and urban/rural status at the mean of the sample*.*

*Source:* Nominal wages from the present database.

*Regional Convergence*

Table OA3 shows the regressions results for convergence of real wages for the four occupations pooled together as well as for each individual occupation. Table OA4 gives the regression results for convergence of real wages by five-year period.

*Table OA3:* Regression Results for Unconditional and Conditional Convergence of Real Wages

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *All* | *Helper* | *Carpenter* | *Mason* | *Teamster* |
|  | Uncond. | Cond. | Uncond. | Cond. | Uncond. | Cond. | Uncond. | Cond. | Uncond. | Cond. |
| (log(Real wage)-log(Mean wage) | -0.069 | -0.089 | -0.067 | -0.160 | -0.108 | -0.183 | -0.091 | -0.152 | -0.082 | -0.149 |
|  |  |  |  |  |  |  |  |  |  |  |
| Implied convergence rate: $β$ | 0.085 | 0.118 | 0.082 | 0.321 | 0.155 | 0.493 | 0.121 | 0.285 | 0.105 | 0.273 |
|  |  |  |  |  |  |  |  |  |  |  |
| Occupation fixed effects | Yes | Yes |  |  |  |  |  |  |  |  |
| Period fixed effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| County fixed effects | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| No obs | 1,110 | 1,110 | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 278 |

*Note:* The table shows estimates of unconditional and conditional real wage convergence. All point estimates are statistically significant at the 1 percent level.

*Table OA4:* Regression Results for Unconditional and Conditional Convergence of Real Wages by Five-Year Period

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *1840–45* | *1845–50* | *1850–55* | *1855–60* | *1860–65* | *1865–70* | *1870–75* | *1875–80* | *1880–85* | *1885–90* | *1890–95* | *1895–90* |
|  | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C |
| (log(Real wage)-log(Mean wage) | -0.103 | -0.115 | -0.111 | -0.100 | -0.064 | -0.084 | -0.093 | -0.106 | -0.128 | -0.106 | -0.063 | -0.056 | -0.073 | -0.100 | -0.071 | -0.063 | - 0.074 | -0.089 | -0.069 | -0.118 | -0.070 | -0.084 | -0.075 | -0.093 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Implied convergence rate: $β$ | 0.145 | 0.171 | 0.162 | 0.139 | 0.077 | 0.109 | 0.125 | 0.151 | 0.204 | 0.151 | 0.076 | 0.066 | 0.091 | 0.139 | 0.088 | 0.076 | 0.092 | 0.118 | 0.085 | 0.178 | 0.861 | 0.109 | 0.094 | 0.125 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Occupation fixed effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| County fixed effects | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| No obs | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 86 | 86 | 91 | 91 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |

*Note:* The table shows estimates of unconditional and conditional real wage convergence for each five-year period between 1840 and 1900. All point estimates are statistically significant at the 1 percent level. “U” signifies results for unconditional convergence, and “C” signifies results for conditional convergence.

*Urban-Rural Wage Gaps*

Figure OA1 shows nominal wages for helpers in the eight largest cities and the rural areas in their surrounding countries.

*Figure OA1:* Nominal Wages for Helpers in the Eight Largest Cities and Their Surrounding Counties, 1831–1900



*Note:* Rural wages are calculated by taking the median of wages in all rural areas reporting wages in the same county.

*Source:* Stockholm before 1865 from Söderberg (2010); Stockholm after 1865 from Bagge, Lundberg and Svennilson (1935); all other wages from the present database.