READ ME

This package includes data and code for the replication of the results in ”Making a Market: Infrastructure, Integration, and the Rise of Innovation”, by David Andersson, Thor Berger, and Erik Prawitz. Accepted for publication in the Review of Economics and Statistics.

Included do-files:

1. tables_and_figures.do: Stata do file (using version MP 15.1) to produce all tables and figures in the paper (except the maps in Figure 2).

Included data-files:

1. main_MaM.dta: Main data 1830-1900 to produce Figure 3 and Tables 1-6.
2. aggregate1.dta: Aggregate data used to produce figure 1A.
3. aggregate2.dta: Aggregate data used to produce figure 1B.
4. aggregate3.dta: Aggregate data used to produce figure 1C.
5. aggregate4.dta: Aggregate data used to produce figure 1D.

Data sources:

Below we have appended a codebook for all variables in main_MaM.dta. We here briefly describe the data sources for each set of variables. See the main text for a more detailed description of sources and variable construction. All variables listed under “Regional units” are derived from maps obtained from the Swedish National Archives. Variables listed under “Railroads” are constructed from georeferenced maps of the historical railroad network based on map collections mainly obtained from Statistics Sweden. The data used to construct the variables listed under “Instrumental variables and geography” are drawn from several different GIS databases detailed in the main text. “Population and manufacturing” data is drawn from Statistics Sweden and *Palm, L.A. (2000). Folkmängden i Sveriges socknar och kommuner 1571-1997: med särskild hänsyn till perioden 1571-1751. Göteborg: Nomen förlag*. All variables listed under “Patents, inventors, and transfers” are derived from data collected from the Swedish National Archives and the Swedish Patent and Registration Office.

Codebook:

| Variable name | Description |
|---|---|
| *Regional units* | |
| m_id | Municipality id |
| year | Decade |
| muniname | Municipality name |
| region8 | Regional division, 8 national areas (NUTS-II) |
| region3 | Regional division, 3 national areas |
| urban | Urban indicator |
| llon | ln(Longitude) |
| llat | ln(Latitude) |

| | |
|---|---|
| larea | ln(Area) |
| ldisttown | ln(Distance to town) |

*Railroads*

| | |
|---|---|
| d5km_rail | Rail (5km) |
| d5km_rail1900 | Rail 1900 (5km) |
| d10km_rail | Rail (10km) |
| d10km_rail1900 | Rail 1900 (10km) |
| dist_rail | ln(Dist. rail) |
| ldist_rail1900 | ln(Dist. rail 1900) |
| ldist_rail | ln(Dist. rail) |
| ldist_rail1900 | ln(Dist. rail 1900) |
| ldist_ericson | ln(Dist. Ericson Plan) |
| p_e | Placebo line (Ericson's proposal) |
| p_v | Placebo line (von Rosen's proposal) |
| p_k | Placebo line (1870 committee proposal) |
| p_o | Placebo line (1870 municipality proposal) |

*Instrumental variables and geography*

| | |
|---|---|
| ldist_leastcost | ln(Dist. Least-Cost Path) |
| ldist_leastcostnw | ln(Dist. Least-Cost Path) |
| elev_mean | mean(Elevation) |
| elev_std | sd(Elevation) |
| slope_mean | mean(Slope) |
| cost_mean | mean(Cost) |
| ldistnearestnode | ln(Dist. to Nearest Node) |
| endpoint | Node municipality |

*Population and manufacturing*

| | |
|---|---|
| lpop1865 | ln(Population 1865) |
| pop1865 | Population 1865 |
| mfgpopshare1865 | Share mfg. workers 1865 |
| firmspercap1865 | Mfg. firms p.c. 1865 |

| *Patents, inventors, and transfers* | |
|---|---|
| patents | #Patents |
| numpois | #Inventors |
| numfirms | #Firm inventors |
| numpersons | #Independent inventors |
| anypatents | Any patent |
| patentspc | Patents per 1,000 inhabitants 1865 |
| numpoispc | Inventors per 1,000 inhabitants 1865 |
| numpersonspc | Independent inventors per 1,000 inhabitants 1865 |
| numfirmspc | Firm inventors per 1,000 inhabitants 1865 |
| patperpoi | Patents per inventor |
| patperperson | Patents per independent inventor |
| patperfirm | Patents per firm inventor |
| patents_newclasspc | Patents in novel tech field per 1,000 inhabitants 1865 |
| patents_oldclasspc | Patents in non-novel tech field per 1,000 inhabitants 1865 |
| patents_newindustrypc | Patents in novel industrial sector per 1,000 inhabitants 1865 |
| patents_oldindustrypc | Patents in non-novel industrial sector per 1,000 inhabitants 1865 |
| patents_toppc | Patents in existing industrial sector per 1,000 inhabitants 1865 |
| patents_nontoppc | Patents in non-existing industrial sector per 1,000 inhabitants 1865 |
| patents_top1pc | Patents in leading industrial sector per 1,000 inhabitants 1865 |
| patents_nontop1pc | Patents in non-leading industrial sector per 1,000 inhabitants 1865 |
| jaffe | Tech proximity (fields) |
| jaffe_14 | Tech proximity (sectors) |
| anytransfers | Any patent transfer |
| anyrail_transfer5km | Any connected patent transfer |
| anynonrail_transfer5km | Any non-connected patent transfer |
| anymuni_transfer | Any in-municipality patent transfer |
| transferspc | Patent transfers per 1,000 inhabitants 1865 |
| rail_transfer5kmpc | Connected patent transfers per 1,000 inhabitants 1865 |
| nonrail_transfer5kmpc | Non-connected patent transfers per 1,000 inhabitants 1865 |
| muni_transferpc | In-municipality patent transfers per 1,000 inhabitants 1865 |
| transfers_newclasspc | Patent transfers in novel tech field per 1,000 inhabitants 1865 |
| transfers_oldclasspc | Patent transfers in non-novel tech field per 1,000 inhabitants 1865 |

| | |
|---|---|
| transfers_newindustrypc | Patent transfers in novel industrial sector per 1,000 inhabitants 1865 |
| transfers_oldindustrypc | Patent transfers in non-novel industrial sector per 1,000 inhabitants 1865 |
| transfers_toppc | Patent transfers in existing industrial sector per 1,000 inhabitants 1865 |
| transfers_nontoppc | Patent transfers in non-existing industrial sector per 1,000 inhabitants 1865 |
| transfers_top1pc | Patent transfers in leading industrial sector per 1,000 inhabitants 1865 |
| transfers_nontop1pc | Patent transfers in non-leading industrial sector per 1,000 inhabitants 1865 |
| transfers_indp2firmpc | Independent to firm patent transfers per 1,000 inhabitants 1865 |
| transfers_indp2indppc | Independent to independent patent transfers per 1,000 inhabitants 1865 |
| transfers_firm2indppc | Firm to independent patent transfers per 1,000 inhabitants 1865 |
| transfers_firm2firmpc | Firm to firm patent transfers per 1,000 inhabitants 1865 |
| transfers_NOTindp2firmpc | Not independent to firm patent transfers per 1,000 inhabitants 1865 |
| anypatpre60 | Any patent before 1860 |