

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Real Wages in Manufacturing, 1890-1914

Volume Author/Editor: Albert Rees

Volume Publisher: UMI

Volume ISBN: 0-87014-069-8

Volume URL: <http://www.nber.org/books/rees61-1>

Publication Date: 1961

Chapter Title: APPENDIX B Definitions of Industries and List of State Series Used

Chapter Author: Albert Rees

Chapter URL: <http://www.nber.org/chapters/c2290>

Chapter pages in book: (p. 137 - 144)

APPENDIX B

Definitions of Industries and List of State Series Used

THE industries for which wage series are provided in the text are defined below in terms of census industries as of 1914. In some cases, they are differently defined in earlier censuses; the 1914 census provides explanations of such differences.

Cotton

Census industry: cotton manufactures (includes cotton goods, cotton smallwares, and cotton lace).

Massachusetts—cotton goods, 1890–1914; cotton smallwares, 1908–14.

Pennsylvania—1892 series used 1892–1901: tapestries and tablecloths, cotton yarns, cotton goods, chenille goods. The 1896 series used 1901–5: cotton yarns, cotton goods, chenille goods, lace goods. Other series used were: towels, 1910–14; curtains, 1910–12; cotton goods, 1906–14; lace goods and draperies, 1906–14. (For 1906–10, the last two series are given separately for Philadelphia and the rest of the state.)

Connecticut—cotton mills, cotton goods, 1900–1903 (cotton goods include batts, thread and yarn, rope, cord, twine, netting, and webbing, which are products included in the census industry, plus a few items, such as laundered shirts, that are not included).

Rhode Island—cotton goods, 1893–1903.

Maine—cotton mills, 1895–1903.

South Carolina—textiles, 1910–14. This series covered 166 establishments in 1914, of which twelve did not produce cotton textiles. Seven produced hosiery; one each produced asbestos textiles, wool and cotton blankets, hair cloth, and jute bagging; and one did bleaching and finishing.

Wool

Census industry: wool manufactures except carpets and rugs (includes woolen goods, worsted goods, felt goods, and wool hats).

APPENDIX B

Massachusetts—woolen goods, 1890–1910; worsted goods, 1890–1910; woolen and worsted goods, 1910–14; wool hats, 1909–12; felt goods, 1908–14.

New Jersey—woolen and worsted goods, 1898–1914.

Pennsylvania—1892 series used 1892–96: worsted goods, worsted yarns, woolen goods, woolen yarns. The 1896 series used 1896–1905: woolen and worsted fabrics; woolen and worsted cassimeres; worsted, woolen, and cotton yarns; upholstery goods; woolen blankets, flannels, etc.; woolen and worsted yarns; and wool hats. Other series used were: woolens and worsteds, Philadelphia, 1906–9; woolens and worsteds, blankets and flannels, outside Philadelphia, 1906–9; woolen goods, 1910–12; cotton and woolen yarns, Philadelphia, 1907–9; yarns, 1910–12; upholstery and drapery goods, Philadelphia, 1906–9; upholstery goods, 1910–12; blankets and flannels, 1910–12.

Connecticut—woolen mills, 1900–1903.

Rhode Island—woolen goods, 1893–1903.

Maine—woolen mills, 1895–1902.

Silk

Census industry: silk goods, including throwsters.

Massachusetts—silk and silk goods, 1890–1914.

New Jersey—silk, broad and ribbon; silk throwing; silk dyeing, 1896–1914 (some of the establishments included in silk dyeing are probably in the census industry “dyeing and finishing of textiles”).

Pennsylvania—1892 series used 1892–96: silk broad goods; 1896 series used 1896–1905: silk broad goods and ribbons; silk—broad goods, thrown silk, yarns, etc., and ribbons. Other series used were silk dress goods and throwing, 1906–9; silk ribbons, dress goods, and throwing, 1906–9; silk throwing, 1906–9; silk, 1910–14.

Connecticut—silk goods, 1900–1903.

Rhode Island—silk goods, 1896–1903.

Hosiery and Knit Goods

Census industry: hosiery and knit goods.

Massachusetts—hosiery and knit goods, 1890–1914.

New Jersey—knit goods, 1898–1914.

Pennsylvania—1892 series used 1892–96: hosiery; hosiery and knit goods; knit goods. The 1896 series used 1896–1905: hosiery;

APPENDIX B

knit goods, underwear. Other series used were hosiery, 1906-12; knit goods, 1906-12 (for 1906-9, given separately in and outside of Philadelphia).

Wisconsin—knitting works, 1890-99 and 1903-7.

Connecticut—hosiery and knit goods, 1900-1903.

Rhode Island—hosiery and knit goods, 1893-1903.

Dyeing and Finishing Textiles

Census industry: dyeing and finishing textiles exclusive of that done in textile mills.

Massachusetts—print works, dye works, and bleacheries, 1890-1907; dyeing and finishing textiles, 1908-14.

New Jersey—dyeing and finishing cotton goods, 1898-1914.

Pennsylvania—dyers, bleachers, and finishers, 1906-12; dyeing and finishing textiles, 1913-14.

Rhode Island—print works, dye works, and bleacheries, 1893-1903.

All Textiles

Census industries: This is a combination of the census industries included in the five preceding series, plus two additional industries: carpets and rugs other than rag; and cordage, twine, jute, and linen goods. It excludes the manufacture of clothing and of such miscellaneous textile products as awnings, bags, belting, etc., and also excludes several related industries such as wool shoddy, haircloth, fur-felt hats, and mats and matting.

In computing this series, we have combined the component series for all industries by states and then combined the states using census employment weights. The list below gives the states series, *in addition to those listed in the five component industries above*, used in the "all textiles" series. Wisconsin, which is included in hosiery and knit goods, was not used in computing all textiles.

Massachusetts—carpetings, 1890-1907; carpets and rugs other than rag, 1908-14; cordage and twine, 1890-1914; mixed textiles, 1890-96; cotton, woolen, and other textiles, 1890-95.

New Jersey—cotton goods, 1899-1914 (not included in our series on the cotton industry because of poor correspondence with census industry); thread, 1899-1914; carpets, 1898-1914.

Pennsylvania—1892 series used 1892-96: carpets, mixed textiles,

APPENDIX B

cotton and woolen goods, miscellaneous yarns. The 1896 series used 1896-1905: carpets, cotton and woolen cloths, carpet yarns. Other series used were cordage and twine, 1906-14; carpets, 1906-14 (given separately in and outside Philadelphia, 1906-9); woolen, worsted, felt goods, and wool hats, 1913-14; hosiery and knit goods, 1913-14. (The last two series were omitted from their respective industry series because of sharp changes in employment and earnings in 1913-14. These changes seem to result from misclassifying some establishments by industry in 1913. When these series are combined with others in all textiles, the movement of both earnings and employment is reasonable.)

Boots and Shoes

Census industries: boots and shoes, not including rubber boots and shoes; boot and shoe cut stock, exclusive of that produced in boot and shoe factories; boot and shoe findings, exclusive of those produced in boot and shoe factories.

Massachusetts—boots and shoes, 1890-1914 (1890-1907 includes boots and shoes, factory product; soles, heels and cut stock; boot and shoe findings; stitching, heeling, etc.); boot and shoe findings, 1908-11; boot and shoe cut stock, 1908-11; boot and shoe cut stock and findings, 1912-14.

New Jersey—shoes, 1890-1914.

Pennsylvania—men's, women's, misses', and children's shoes, 1896-1905 (1896 series) and 1906-9; boots and shoes, 1910-14.

Ohio—boots and shoes, 1893-1912.

Wisconsin—boots and shoes, 1890-99 and 1903-7.

Leather

Census industry: leather, tanned, curried, and finished.

Massachusetts—leather, 1890-1907; leather, tanned, curried, and finished, 1908-14.

New Jersey—leather, 1899-1914.

Pennsylvania—leather, miscellaneous, 1906-12; shoe leather, enameled and glazed kid, 1906-12; sole and harness leather, 1906-9; sole leather, 1910-12; harness leather, 1910-12; tanneries, 1910-12.

Wisconsin—tanners and curriers, 1890-95; leather, 1896-99 and 1904-7.

APPENDIX B

Electrical Machinery

Census industry: electrical machinery, apparatus, and supplies.

Massachusetts—electrical apparatus and appliances, 1896–1907; electrical machinery, apparatus, and supplies, 1907–14.

New Jersey—electrical appliances, 1898–1914; lamps (light bulbs), 1898–1914; gas and electric fixtures, 1902–14.

Pennsylvania—electrical supplies, 1896–1905 (1896 series); electrical apparatus and lamps, 1906–9; electrical supplies, 1910–14; fixtures, gas and electric, 1912–14. (There is a separate census industry “gas and electric fixtures,” but it had fewer than half as many employees in Pennsylvania, according to the 1914 Census, as are covered by this state series.)

Ohio—electrical goods and supplies, 1896–1912.

Paper and Paper Products

Census industries: paper and wood pulp; bags, paper not made in paper mills; boxes, fancy and paper; labels and tags; paper patterns; card cutting and designing; cardboard, not made in paper mills; envelopes; paper goods, n.e.s.

Massachusetts—paper and paper goods, 1890–95; paper, 1896–1907; paper boxes, 1897–1907; paper goods, n.e.s., 1896–1914; paper and wood pulp, 1908–14; envelopes, 1909–14; boxes, fancy and paper, 1908–14.

New Jersey—paper, 1898–1914; boxes, wood and paper, 1898–1912 (over two-thirds of employment in wood and paper boxes combined in 1913 is in paper boxes); boxes, paper, 1913–14.

Pennsylvania—1896 series used 1896–1905: paper manufactories; paper, paper boxes, envelopes, etc.

Wisconsin—paper and pulp, 1890–99, 1903–7.

Connecticut—paper goods, 1900–1903.

Rubber

Census industry: rubber goods (includes rubber belting and hose, rubber boots and shoes, and rubber goods, n.e.s.).

Massachusetts—rubber and elastic goods, 1890–1908; boots and shoes, rubber, 1908–14; rubber goods, n.e.s., 1909–14.

New Jersey—rubber goods (hard and soft), 1898–1914.

Ohio—rubber goods, 1900–1910.

Connecticut—rubber goods, 1900–1903.

Glass

Census industries: glass; glass cutting, staining, and ornamenting.

New Jersey—glass, window and bottle, 1899–1914; glass, cut tableware, 1908–14.

Pennsylvania—1896 series used 1899–1905: window glass, bottles, and table goods. Other series were glass, window, 1908–14; glass bottles, 1908–14; glass, plate, 1908–14; glass, decorative, 1910–14; lamps and chimneys, 1910–14; glass, tableware, 1910–14; glass, cut, 1910–14; glass, stained, 1910–12.

Ohio—glass and glassware, 1901–12.

Foundries and Machine Shops

Census industries: engines, steam, gas, and water; foundry and machine shop products; gas machines and gas and water meters; hardware; iron and steel—cast-iron pipe; locomotives not made by railroad companies; plumbers' supplies, n.e.s.; pumps, steam, and other power; steam fittings and steam and hot-water heating apparatus; stoves and hot-air furnaces; stoves, gas and oil; structural ironwork not made in steel works or rolling mills. (This list, except for the two stove industries and locomotives, makes up the industry "foundry and machine shop products" as used in the data by states of the Census of 1909. Stoves and hot-air furnaces and locomotives were included in foundry and machine shop products in the Censuses of 1889 and 1899. Stoves, gas and oil, were combined with stoves and hot-air furnaces in the data by states of the Census of 1909.)

Massachusetts—machines and machinery; cooking, lighting, and heating apparatus, 1890–1907; foundry and machine-shop products, hardware, steam fittings and heating apparatus, stoves and hot-air furnaces, structural ironwork not made in steel works or rolling mills, 1908–14.

New Jersey—boilers, tanks, etc.; foundry (iron); furnaces, ranges and heaters; machinery; steel and iron, structural, 1899–1914. (The Census of 1914 shows no structural shapes produced in rolling mills in New Jersey in 1914, and only one rolling mill producing structural shapes in 1909. The state series "iron and steel, structural," covers twenty-three establishments in 1909.)

Pennsylvania—1892 series used 1892–96: iron foundries and machine works; stoves, ranges, heaters, etc.; hardware; engines and boilers; bridges; locomotives and engines; car couplers. The

APPENDIX B

1896 series used 1896–1905: iron and steel bridges; stoves, ranges, and heaters; bath boilers, tanks, etc.; hardware specialties; cast-iron pipe; building and structural ironwork; engines, boilers, etc.; iron vessels and engines; boilers, tanks, stacks, etc.; machinery; foundries and machine shops; locomotives, stationary engines, etc.; plumbers' supplies; steam pumps; iron fences and rails. Other series were machinery and castings, 1906–7; iron and steel bridges and structural work; gas, gasoline, and steam engines and oil well supplies; locomotives, stationary engines, and metallic packing; hardware specialties 1906–9; foundries and machine shops, 1908–9; structural iron; iron and steel bridges; gas and gasoline engines; foundries; machinery; machine tools; stoves, heaters, and ranges; gas meters; boilers, tanks, and vats; castings; engines and boilers; plumbers' supplies; pumps and valves; radiators and steam fittings; ventilators, elevators, and fire escapes, 1910–12.

Ohio—boilers, engines, and tanks; foundry and machine shop products; machinery; stoves, ranges, and furnaces, 1893–1912; iron (structural and architectural), 1894–1912.

Connecticut—general hardware, iron and iron foundries, machine shops, 1900–1903.

Iron and Steel

Census industries: blast furnaces; steel works and rolling mills; tin plate and terne plate.

Massachusetts—iron and steel: steel works and rolling mills, 1909–14.

New Jersey—pig iron, 1899–1913; steel and iron (bar), 1899–1914.

Pennsylvania—1892 series used 1892–96: pig iron; malleable iron; steel; iron and steel sheets and plates; plate and bar; rolling mills, general products; nails and spikes. The 1896 series used 1896–1905: pig iron; steel plants and rolling mills that make a rolled product; steel mills that do not roll or finish their product; tin plate, black plate works. Other series used were pig iron; iron and steel, ingots and castings; iron and steel, rolled; tin and terne plate, 1906–12. The following series are used in 1914 only (affecting only weighted days in operation for 1914): iron, pig, basic foundry and forge; ferro-alloys; bars, rolled iron; bars, muck iron; ingots, crucible; castings, steel; billets, blooms, and slabs, steel; bars, rolled steel; plates, universal; plates, sheared; plates, black for tinning; rails; shapes, structural, heavy; shapes, structural, light; shapes, other iron and steel;

APPENDIX B

sheets; tin plate; rods, steel in coils; pipes and tubing, rolled; hoops, bands, and cotton ties; bolts, nuts, and rivets; nails and spikes, cut and wrought; wire nails; axles; horse shoes (the last five series include some establishments other than rolling mills, but such establishments include less than half the employment covered by the series in each case).

Ohio—steel, iron, and tin, 1901-12.