

## APPENDIX 1

### Nominal Wage, Cost of Living, Real Wage, and Land Price in Argentina, 1864-1940

#### APPENDIX TABLE 1.1: Nominal wage index

#### APPENDIX TABLE 1.2: Cost of living index

#### APPENDIX TABLE 1.3: Real wage index

*Nominal Wage, Cost of Living, and Real Wage, 1864-1940:* All three of these series are taken from Jeffrey G. Williamson, "The Evolution of Global Labor Markets since 1830," *Explorations in Economic History* 32(2), April 1995, pp. 141-196. Monthly wages of urban porteros and peones up to 1903, daily wages of peones up to 1914, and average wages in Buenos Aires thereafter. Cost of living is for Argentina up to 1914, and for Buenos Aires thereafter.

All three time series are indexed 1913=100.

#### APPENDIX TABLE 1.4: Land price index and Wage/Rent index

*Land Price and Wage/Rent Index, 1883-1913:* The land price data is taken from Kevin O'Rourke, Alan Taylor, and Jeffrey G. Williamson, "Factor Price Convergence in the Late 19th Century," *International Economic Review* 37, 1996, pp. 499-530. These land prices are based on rural land sales in Buenos Aires province.

*Land Price and Wage/Rent Index, 1913-1940:* The land price data is taken from Instituto de Estudios Económicos sobre la Realidad Argentina y Latinoamericana (IEERAL), "*Estadísticas de la evolución económica de Argentina, 1913-1984*," Estudios, Año IX, No 39, July/September 1986, p. 128, Cuadro 9. This source quotes the average price of land used for various agricultural purposes, namely livestock ranching, and the cultivation of wheat, corn, and fodder. It also indicates that the figures for 1913-1915 were obtained by extrapolating the available data, based on the trends of an agricultural wholesale price index presented in Cuadro 6 of the same article. We link this with the pre-1913 data to form the land price series.

The appendix table also reports the wage/rent index. Both time series are indexed 1913=100. Interpolated and extrapolated data, as well as figures calculated based on such data, are starred (\*).

Appendix Table 1.1

Nominal Wage in Argentina, 1864-1940 (1913=100)

Year	Nominal Wage Index (1913=100)	Year	Nominal Wage Index (1913=100)
1864	26.0	1903	78.7
1865	25.2	1904	80.3
1866	26.8	1905	81.9
1867	26.8	1906	81.9
1868	26.8	1907	85.8
1869	27.6	1908	85.8
1870	31.5	1909	89.0
1871	32.3	1910	96.1
1872	33.1	1911	96.1
1873	33.1	1912	102.4
1874	37.0	1913	100.0
1875	36.2	1914	96.9
1876	36.2	1915	93.7
1877	33.9	1916	93.7
1878	31.5	1917	94.5
1879	30.7	1918	102.4
1880	35.4	1919	129.9
1881	34.6	1920	158.3
1882	37.0	1921	174.0
1883	38.6	1922	168.5
1884	38.6	1923	169.3
1885	38.6	1924	170.1
1886	42.5	1925	174.0
1887	43.3	1926	170.9
1888	43.3	1927	178.0
1889	43.3	1928	187.4
1890	43.3	1929	187.4
1891	67.7	1930	172.4
1892	67.7	1931	159.8
1893	67.7	1932	152.0
1894	67.7	1933	158.3
1895	67.7	1934	144.9
1896	67.7	1935	157.5
1897	67.7	1936	162.2
1898	78.7	1937	167.7
1899	78.7	1938	165.4
1900	78.7	1939	170.1
1901	78.7	1940	175.6
1902	78.7		

Appendix Table 1.2

Cost of Living in Argentina, 1864-1940 (1913=100)

Year	Cost of Living Index (1913=100)	Year	Cost of Living Index (1913=100)
1864	56.8	1903	71.9
1865	51.4	1904	69.2
1866	46.6	1905	80.1
1867	47.9	1906	82.2
1868	47.9	1907	87.7
1869	45.2	1908	88.4
1870	47.3	1909	93.2
1871	50.7	1910	92.5
1872	59.6	1911	93.2
1873	59.6	1912	96.6
1874	58.2	1913	100.0
1875	56.2	1914	100.0
1876	57.5	1915	107.5
1877	64.4	1916	115.1
1878	65.8	1917	134.9
1879	69.2	1918	170.5
1880	70.5	1919	160.3
1881	54.8	1920	187.7
1882	50.7	1921	166.4
1883	47.3	1922	140.4
1884	50.0	1923	137.7
1885	63.0	1924	140.4
1886	54.8	1925	136.3
1887	50.0	1926	132.2
1888	42.5	1927	130.8
1889	48.6	1928	130.1
1890	68.5	1929	130.8
1891	76.0	1930	132.2
1892	68.5	1931	114.4
1893	62.3	1932	102.1
1894	72.6	1933	115.1
1895	78.8	1934	102.1
1896	84.2	1935	108.9
1897	78.8	1936	119.2
1898	70.5	1937	121.9
1899	63.7	1938	120.5
1900	68.5	1939	121.9
1901	72.6	1940	124.7
1902	72.6		

Appendix Table 1.3

Real Wage in Argentina, 1864-1940 (1913=100)

Year	Real Wage Index (1913=100)	Year	Real Wage Index (1913=100)
1864	45.7	1903	109.5
1865	49.0	1904	116.1
1866	57.5	1905	102.2
1867	55.8	1906	99.6
1868	55.8	1907	97.9
1869	61.0	1908	97.1
1870	66.6	1909	95.5
1871	63.7	1910	103.9
1872	55.5	1911	103.1
1873	55.5	1912	106.0
1874	63.6	1913	100.0
1875	64.5	1914	96.9
1876	63.0	1915	87.1
1877	52.6	1916	81.4
1878	47.9	1917	70.0
1879	44.4	1918	60.0
1880	50.2	1919	81.1
1881	63.2	1920	84.3
1882	73.0	1921	104.6
1883	81.6	1922	120.0
1884	77.2	1923	123.0
1885	61.2	1924	121.1
1886	77.6	1925	127.7
1887	86.6	1926	129.3
1888	102.0	1927	136.0
1889	89.1	1928	144.0
1890	63.2	1929	143.2
1891	89.1	1930	130.4
1892	98.9	1931	139.7
1893	108.6	1932	148.9
1894	93.3	1933	137.5
1895	86.0	1934	142.0
1896	80.4	1935	144.6
1897	86.0	1936	136.1
1898	111.6	1937	137.6
1899	123.6	1938	137.2
1900	115.0	1939	139.5
1901	108.5	1940	140.9
1902	108.5		

Appendix Table 1.4

Land Price Index and Wage/Rent Index in Argentina, 1883-1940 (1913=100)

Year	Land Price Index (1913=100)	Wage/Rent Index (1913=100)	Year	Land Price Index (1913=100)	Wage/Rent Index (1913=100)
1883	6.1	635.4	1912	120.7	84.8
1884	5.2	746.9	1913	100.0*	100.0*
1885	6.5	592.1	1914	105.6*	91.8*
1886	6.7	634.0	1915	115.3*	81.3*
1887	12.8	338.6	1916	140.3	66.8
1888	24.3	178.2	1917	148.6	63.6
1889	16.4	264.1	1918	195.8	52.3
1890	16.1*	269.1*	1919	236.1	55.0
1891	15.8	428.9	1920	256.9	61.6
1892	20.0	339.2	1921	275.0	63.3
1893	14.6	465.0	1922	272.2	61.9
1894	10.1	669.1	1923	270.8	62.5
1895	16.2	418.9	1924	254.2	66.9
1896	17.5	386.1	1925	262.5	66.3
1897	27.8	243.4	1926	325.0	52.6
1898	16.5	477.9	1927	309.7	57.5
1899	24.2	325.9	1928	295.8	63.3
1900	20.0*	393.3*	1929	293.1	63.9
1901	16.6	474.6	1930	238.9	72.2
1902	28.8	273.2	1931	259.7	61.5
1903	27.9	281.8	1932	236.1	64.4
1904	26.6	302.3	1933	209.7	75.5
1905	37.1	220.5	1934	195.8	74.0
1906	41.8	196.0	1935	184.7	85.3
1907	83.4	102.9	1936	216.7	74.9
1908	54.7	156.9	1937	251.4	66.7
1909	69.2	128.6	1938	270.8	61.1
1910	92.0	104.4	1939	255.6	66.6
1911	80.7	119.1	1940	248.6	70.6

## APPENDIX 2

### Nominal Wage, Cost of Living, and Real Wage in Brazil, 1830-1937

#### The Southeast: Rio de Janeiro

##### APPENDIX TABLE 2.1: Nominal wage index

##### APPENDIX TABLE 2.2: Cost of living index

##### APPENDIX TABLE 2.3: Real wage index

*Nominal Wage, Cost of Living, and Real Wage, 1830-1937:* All three time series are taken from Jeffrey G. Williamson, "The Evolution of Global Labor Markets since 1830," *Explorations in Economic History* 32(2), April 1995, pp. 141-196. Nominal wages are monthly wages for building laborers in Rio de Janeiro up to 1930, and hourly wages thereafter. The cost of living index for 1830-1850 is for Rio alone; that for 1850-1870 is for Brazil; that for 1870-1913 is a wholesale price index for Brazil; and that for 1913-1937 is a "global" Brazil price deflator.

All three Southeast time series are indexed 1913=100. Interpolated figures are starred (\*).

#### The Northeast: Pernambuco

From 1840 to 1930, Brazil was undergoing significant regional divergence. The Southeast, based on a rapidly expanding coffee industry, outstripped the sugar and cotton based Northeast, specifically the province of Pernambuco. Thus, to attempt to represent the evolution of nominal wages, prices, or real wages in Brazil by using data from the center of the Southeastern expansion (Rio de Janeiro) may be misleading. Unfortunately, data from the Northeast, the most well-documented region other than the Southeast, is incomplete. We have been able to construct nominal wage, price, and real wage indices for only rural Pernambuco, and starting only with 1855. Although the data is not continuous over the entire period, they are sufficient to imply general trends and turning points in the rural Northeast during this period of dramatic change. The sources used in constructing the Pernambuco indices are:

Peter L. Eisenberg, *The Sugar Industry in Pernambuco, Modernization Without Change, 1840-1910*. Berkeley, CA: University of California Press, 1974, pp. 154 & 190.

Robert M. Levine, *Pernambuco in the Brazilian Federation, 1889-1937*. Stanford, CA: Stanford University Press, 1978, p. 25.

Jaime Reis, "From *bangue* to *usina*: social aspects of growth and modernization in the sugar industry of Pernambuco, Brazil, 1850-1920." Chapter 15 of *Land and Labour in Latin America*, Kenneth Duncan and Ian Rutledge (eds.). Cambridge, Cambridge University Press, p. 383.

##### APPENDIX TABLE 2.4: Nominal wage index

*Nominal Wage, 1855-1874:* This data is taken from Eisenberg, who describes the workers as "unskilled rural labor" and the wages as "minimum daily wages for Pernambuco". Eisenberg lists his sources for each year (p. 190).

*Nominal Wage, 1874-1935:* This data is taken from Levine, who describes them as "agricultural salaries of adult male workers in Pernambuco," although communication with Professor Levine has established that these are, in fact, minimum daily wages. Where a range of nominal wages was given for a particular year, we took the midpoint of the stated range. Levine gives data for 1874, 1896, 1900, 1910, 1920, 1926, 1931, and 1935. His 1874 and 1910 observations match exactly with Eisenberg's. However, Levine's data for 1896

and 1900 show significantly different trends, a distressing contradiction. We chose to use Levine after 1874 and Eisenberg only for years before 1874 for several reasons. First, we must use the Levine data from 1910-1935 (a period not covered by Eisenberg) and thus it seems wisest to use as much of it as possible to maintain the maximum consistency over time. Second, Levine published his book later (1978 versus 1974). Since Levine knew of Eisenberg's work (he cites it on p. 25), there is a presumption that he thought Eisenberg's data was imperfect. Third, Reis gives nominal wage data for sugar workers that fits well with the Levine data. Finally, communication with Professor Levine has established that he carefully screened "official" data for exaggeration and dishonest reporting, and that he strove to construct an index, which would truly reflect the economic status of common rural laborers. We have been unable to communicate with Dr. Eisenberg.

The Northeast nominal wage time series is indexed 1913=100. Interpolated figures are starred (\*).

#### **APPENDIX TABLE 2.5: Cost of living index**

*Cost of Living, 1855-1874:* This cost of living index is taken from Eisenberg (p. 154). His index is a weighted average of prices of flour, beans, and sometimes meat. Eisenberg cites another source that would be valuable, a doctoral thesis by Gadiel Perucci entitled "Le Pernambouc (1889-1930): Contribution à l'Histoire Quantitative du Brésil." Thèse de doctorat de 3ème cycle. Paris, 1972. However, we have not been able to locate this source.

*Cost of Living, 1874-1935:* This cost of living index comes from Levine (p. 25), and is calculated by dividing his nominal wage index by his real wage index. Levine does not make explicit the source of this price series nor does he list the series. Elsewhere in his book, Levine presents one other price index (pp. 189, 192), which is constructed based on foodstuffs prices in Rio de Janeiro. We found however that this index was not entirely consistent with that which we had deduced from Levine's Pernambuco wage data. Hence, we have chosen to use the series which we calculated from the data on p. 25.

The Northeast cost of living time series is indexed 1913=100. Interpolated figures are starred (\*).

#### **APPENDIX TABLE 2.6: Real wage index**

*Real Wage, 1855-1935:* The real wage series for the Northeast is simply the nominal wage series divided by the price series.

The Northeast real wage time series is indexed 1913=100. Calculations based on interpolated figures are starred (\*).

**Appendix Table 2.1**

**Nominal Wage in Rio de Janeiro, Southeast Brazil, 1830-1937 (1913=100)**

Year	Nominal Wage Index	Year	Nominal Wage Index	Year	Nominal Wage Index
1830	13.6	1866	34.0	1902	101.0
1831	13.4	1867	38.1	1903	102.1
1832	9.6	1868	39.2	1904	106.2
1833	7.6	1869	34.0	1905	107.2
1834	8.6	1870	34.0	1906	103.1
1835	10.9	1871	38.1	1907	97.9
1836	12.6	1872	40.2	1908	106.2
1837	14.4	1873	43.3	1909	103.1
1838	14.1	1874	42.3	1910	101.0
1839	14.3	1875	46.4	1911	103.1
1840	13.4	1876	49.5	1912	103.1
1841	14.4	1877	49.5	1913	100.0
1842	14.4	1878	45.4	1914	100.0
1843	17.5	1879	48.5	1915	97.9
1844	15.5	1880	46.4	1916	109.3
1845	14.4	1881	45.4	1917	94.8
1846	15.5	1882	52.6	1918	81.4
1847	16.5	1883	48.5	1919	88.7
1848	17.5	1884	52.6	1920	95.9
1849	18.6	1885	53.6	1921	120.6
1850	18.6	1886	52.6	1922	128.9
1851	17.5	1887	53.6	1923	142.3
1852	19.6	1888	52.6	1924	160.8
1853	20.6	1889	54.6	1925	184.5
1854	20.6	1890	54.6	1926	194.8
1855	21.6	1891	66.0	1927	197.9
1856	23.7	1892	76.3	1928	213.4
1857	24.7	1893	82.5	1929	213.4
1858	26.8	1894	84.5	1930	217.5
1859	27.8	1895	97.9	1931	216.5*
1860	32.0	1896	87.6	1932	215.4*
1861	32.0	1897	105.2	1933	214.4*
1862	32.0	1898	94.8	1934	213.4*
1863	29.9	1899	106.2	1935	212.3*
1864	29.9	1900	103.1	1936	211.3*
1865	33.0	1901	105.2	1937	210.3



**Appendix Table 2.2**

**Cost of Living in Rio de Janeiro, Southeast Brazil, 1830-1937 (1913=100)**

Year	Cost of Living Index	Year	Cost of Living Index	Year	Cost of Living Index
1830	32.0	1866	68.0	1902	101.3
1831	32.0	1867	69.3	1903	100.0
1832	17.3	1868	76.0	1904	105.3
1833	30.7	1869	77.3	1905	98.7
1834	34.7	1870	76.0	1906	94.7
1835	29.3	1871	70.7	1907	100.0
1836	33.3	1872	76.0	1908	105.3
1837	41.3	1873	74.7	1909	104.0
1838	46.7	1874	77.3	1910	102.7
1839	44.0	1875	69.3	1911	100.0
1840	52.0	1876	74.7	1912	110.7
1841	52.0	1877	77.3	1913	100.0
1842	34.7	1878	74.7	1914	86.7
1843	42.7	1879	72.0	1915	98.7
1844	36.0	1880	66.7	1916	118.7
1845	41.3	1881	68.0	1917	129.3
1846	48.0	1882	69.3	1918	140.0
1847	45.3	1883	68.0	1919	152.0
1848	49.3	1884	66.7	1920	181.3
1849	44.0	1885	66.7	1921	153.3
1850	38.7	1886	64.0	1922	168.0
1851	41.3	1887	61.3	1923	217.3
1852	42.7	1888	60.0	1924	241.3
1853	38.7	1889	69.3	1925	286.7
1854	50.7	1890	69.3	1926	234.7
1855	53.3	1891	86.7	1927	229.3
1856	56.0	1892	108.0	1928	256.0
1857	58.7	1893	125.3	1929	246.7
1858	56.0	1894	126.7	1930	216.0
1859	57.3	1895	116.0	1931	218.9*
1860	57.3	1896	122.7	1932	221.9*
1861	57.3	1897	144.0	1933	224.9*
1862	58.7	1898	150.7	1934	227.9*
1863	58.7	1899	146.7	1935	231.0*
1864	62.7	1900	133.3	1936	234.2*
1865	66.7	1901	116.0	1937	237.3

**Appendix Table 2.3**

**Real Wage in Rio de Janeiro, Southeast Brazil, 1830-1937 (1913=100)**

Year	Real Wage Index	Year	Real Wage Index	Year	Real Wage Index
1830	42.5	1866	50.0	1902	99.7
1831	41.8	1867	55.0	1903	102.1
1832	55.7	1868	51.5	1904	100.8
1833	24.7	1869	44.0	1905	108.7
1834	24.7	1870	44.8	1906	108.9
1835	37.1	1871	54.0	1907	97.9
1836	37.9	1872	52.9	1908	100.8
1837	34.8	1873	58.0	1909	99.1
1838	30.2	1874	54.7	1910	98.4
1839	32.5	1875	66.9	1911	103.1
1840	25.8	1876	66.3	1912	93.2
1841	27.8	1877	64.0	1913	100.0
1842	41.6	1878	60.8	1914	115.4
1843	41.1	1879	67.3	1915	99.3
1844	43.0	1880	69.6	1916	92.1
1845	34.9	1881	66.7	1917	73.3
1846	32.2	1882	75.8	1918	58.2
1847	36.4	1883	71.3	1919	58.3
1848	35.5	1884	78.9	1920	52.9
1849	42.2	1885	80.4	1921	78.7
1850	48.0	1886	82.2	1922	76.7
1851	42.4	1887	87.4	1923	65.5
1852	45.9	1888	87.6	1924	66.6
1853	53.3	1889	78.8	1925	64.4
1854	40.7	1890	78.8	1926	83.0
1855	40.6	1891	76.1	1927	86.3
1856	42.3	1892	70.6	1928	83.4
1857	42.2	1893	65.8	1929	86.5
1858	47.9	1894	66.7	1930	100.7
1859	48.5	1895	84.4	1931	98.9*
1860	55.7	1896	71.4	1932	97.1*
1861	55.7	1897	73.0	1933	95.3*
1862	54.5	1898	63.0	1934	93.6*
1863	51.0	1899	72.4	1935	91.9*
1864	47.7	1900	77.3	1936	90.2*
1865	49.5	1901	90.7	1937	88.6

Appendix Table 2.4

Nominal Wage in Pernambuco, Northeast Brazil, 1853-1935 (1913=100)

Year	Nominal Wage Index	Year	Nominal Wage Index	Year	Nominal Wage Index
1855	50.3	1882	64.6*	1909	87.1*
1856	56.6	1883	62.3*	1910	89.3
1857	84.8	1884	60.0*	1911	92.8*
1858	89.0*	1885	57.9*	1912	96.3*
1859	93.3	1886	55.8*	1913	100.0*
1860	92.4*	1887	53.8*	1914	103.8*
1861	91.4*	1888	51.8*	1915	107.8*
1862	90.5	1889	49.9*	1916	111.9*
1863	90.1*	1890	48.1*	1917	116.2*
1864	89.8*	1891	46.4*	1918	120.7*
1865	89.5*	1892	44.7*	1919	125.3*
1866	89.2*	1893	43.1*	1920	130.1
1867	88.9*	1894	41.5*	1921	138.9*
1868	88.6*	1895	40.0*	1922	148.3*
1869	88.3*	1896	38.6	1923	158.3*
1870	88.0*	1897	44.7*	1924	169.0*
1871	87.7*	1898	51.8*	1925	180.4*
1872	87.3*	1899	59.9*	1926	192.5
1873	87.0*	1900	69.4	1927	164.2*
1874	86.7	1901	71.2*	1928	140.0*
1875	83.6*	1902	73.0*	1929	119.3*
1876	80.6*	1903	74.9*	1930	101.7*
1877	77.7*	1904	76.8*	1931	86.7
1878	74.9*	1905	78.7*	1932	106.2*
1879	72.2*	1906	80.7*	1933	130.1*
1880	69.5*	1907	82.8*	1934	159.3*
1881	67.0*	1908	84.9*	1935	195.2

**Appendix Table 2.5**

**Cost of Living in Pernambuco, Northeast Brazil, 1853-1935 (1913=100)**

Year	Cost of Living Index	Year	Cost of Living Index	Year	Cost of Living Index
1855	144.2	1882	111.9*	1909	70.3*
1856	181.4	1883	109.7*	1910	68.4
1857	175.2	1884	107.5*	1911	77.7*
1858	223.3	1885	105.3*	1912	88.1*
1859	204.7	1886	103.2*	1913	100.0*
1860	167.5	1887	101.1*	1914	113.5*
1861	152.0	1888	99.0*	1915	128.8*
1862	113.2	1889	97.0*	1916	146.1*
1863	116.3	1890	95.1*	1917	165.8*
1864	96.1	1891	93.1*	1918	188.2*
1865	99.3	1892	91.2*	1919	213.5*
1866	103.9	1893	89.4*	1920	242.3
1867	144.2	1894	87.6*	1921	247.2*
1868	130.3	1895	85.8*	1922	252.1*
1869	134.9	1896	84.1	1923	257.2*
1870	138.0	1897	85.3*	1924	262.3*
1871	142.7	1898	86.5*	1925	267.6*
1872	138.0	1899	87.8*	1926	273.0
1873	134.9*	1900	89.1	1927	265.0*
1874	131.8	1901	86.7*	1928	257.3*
1875	129.2*	1902	84.5*	1929	249.8*
1876	126.5*	1903	82.3*	1930	242.5*
1877	124.0*	1904	80.2*	1931	235.4
1878	121.5*	1905	78.1*	1932	251.9*
1879	119.0*	1906	76.0*	1933	269.7*
1880	116.6*	1907	74.1*	1934	288.6*
1881	114.2*	1908	72.1*	1935	308.9

Appendix Table 2.6

Real Wage in Pernambuco, Northeast Brazil, 1853-1935 (1913=100)

Year	Real Wage Index	Year	Real Wage Index	Year	Real Wage Index
1855	34.9	1882	57.7*	1909	124.0*
1856	31.2	1883	56.8*	1910	130.5
1857	48.4	1884	55.9*	1911	119.4*
1858	39.8*	1885	55.0*	1912	109.3*
1859	45.6	1886	54.1*	1913	100.0*
1860	55.1*	1887	53.2*	1914	91.5*
1861	60.1*	1888	52.3*	1915	83.7*
1862	79.9	1889	51.5*	1916	76.6*
1863	77.5*	1890	50.6*	1917	70.1*
1864	93.4*	1891	49.8*	1918	64.1*
1865	90.2*	1892	49.0*	1919	58.7*
1866	85.9*	1893	48.2*	1920	53.7
1867	61.6*	1894	47.4*	1921	56.2*
1868	68.0*	1895	46.7*	1922	58.8*
1869	65.4*	1896	45.9	1923	61.5*
1870	63.7*	1897	52.4*	1924	64.4*
1871	61.4*	1898	59.8*	1925	67.4*
1872	63.3*	1899	68.3*	1926	70.5
1873	64.5*	1900	77.9	1927	61.9*
1874	65.8	1901	82.0*	1928	54.4*
1875	64.7*	1902	86.4*	1929	47.8*
1876	63.7*	1903	91.0*	1930	42.0*
1877	62.6*	1904	95.8*	1931	36.8
1878	61.6*	1905	100.8*	1932	42.2*
1879	60.6*	1906	106.2*	1933	48.2*
1880	59.6*	1907	111.8*	1934	55.2*
1881	58.7*	1908	117.7*	1935	63.2

## APPENDIX 3

### Nominal Wage, Cost of Living, and Real Wage in Colombia, 1863-1940

**Overview:** In all time series for Colombia, the years 1901-1908 have been omitted. Serious hyperinflation during this period made figures so unreliable as to be essentially useless and perhaps misleading. The Colombia time series were constructed using:

Alberto Pardo, *Geografía Económica y Humana de Colombia*. Bogotá, Colombia: Ediciones Tercer Mundo, 1972, p. 221, Cuadro 107; pp. 234-5, Cuadro 110.

Miguel Urrutia M., and Mario Arrubla (eds.), *Compendio de Estadísticas Históricas de Colombia*. Bogotá: Dirección de Divulgación Cultural, Universidad Nacional de Colombia, 1970, pp. 35-6, Cuadro 1; pp. 47-53, Cuadro 6; pp. 55-7, Cuadro 7A.

#### APPENDIX TABLE 3.1: Nominal wage index

**Nominal Wage, 1863-1940:** The nominal wage series is an unweighted average of three other nominal wage indices. The first links the following series in Urrutia and Arrubla, each of which gives average daily wages in Bogota:

1863-1881, Cuadro 7A, p. 55. Public Workers (unskilled).

1881-1895, Cuadro 1, pp. 35-6. Public construction workers (unskilled). Average of January, April, July, and October wages.

1895-1905, Cuadro 7A, p. 55-7. Public Workers (unskilled).

1905-1940, Cuadro 6, pp. 47-53. Private sector peones. Average of April, August, and December wages. In the handful of years for which wages for one or more of these months was not available, the observations for that year were dropped in favor of an interpolation.

The second nominal wage index uses only Cuadro 7A, pp. 55-7 (unskilled public workers) from Urrutia and Arrubla. This series provides unparalleled consistency by maintaining a stable mix of workers, employers, and occupations. The third nominal wage index is based on a daily wage series for peones (apparently from Bogota) which is taken from Pardo, pp. 234-5, Cuadro 110. The correlation between these three indices is strong, but we have averaged them to diminish the impact of aberrations in any one series.

The nominal wage time series is indexed 1913=100. Data based on interpolated figures is starred (\*).

#### APPENDIX TABLE 3.2: Cost of living index

**Cost of Living, 1863-1940:** The cost of living index comes from Pardo, p. 221, Cuadro 107. His index is for Bogota, and is a linked combination of several indices, as indicated in the source (pp. 190-220). The cost of living index is based on as many as 13 food items and fuel. The weights are taken from workers' households in 1840, 1890 and 1923.

The cost of living time series is indexed 1913=100. Interpolated figures are starred (\*).

#### APPENDIX TABLE 3.3: Real wage index

**Real Wage, 1863-1940:** By deflating the nominal wage series by the cost of living series, we construct a real wage index.

The real wage time series is indexed 1913=100. Data based on interpolated figures is starred (\*).

**Appendix Table 3.1**

**Nominal Wage in Colombia, 1863-1940 (1913=100)**

Year	Nominal Wage Index (1913=100)	Year	Nominal Wage Index (1913=100)
1863	66.9	1902	--
1864	66.2*	1903	--
1865	65.6*	1904	--
1866	64.9	1905	--
1867	64.9*	1906	--
1868	64.9*	1907	--
1869	64.9*	1908	--
1870	64.9*	1909	107.2
1871	64.9*	1910	98.3
1872	64.9	1911	101.4
1873	59.4*	1912	101.8*
1874	54.9	1913	100.0
1875	61.3*	1914	116.6*
1876	68.6*	1915	124.8*
1877	73.6*	1916	131.8
1878	79.3*	1917	123.9
1879	85.8*	1918	137.9
1880	93.2	1919	153.2
1881	91.2*	1920	183.1
1882	92.8*	1921	213.1
1883	97.1*	1922	194.2
1884	114.5*	1923	196.2
1885	119.3*	1924	225.1
1886	106.3*	1925	220.1
1887	115.5*	1926	256.9
1888	112.3	1927	303.2
1889	124.8	1928	336.6
1890	135.5	1929	372.5
1891	138.9	1930	346.7
1892	147.9	1931	302.8
1893	145.3	1932	282.8*
1894	146.6	1933	280.7
1895	160.0	1934	287.1
1896	209.3	1935	350.0
1897	245.9*	1936	336.2*
1898	263.5	1937	348.9
1899	257.6	1938	338.6
1900	272.5	1939	363.0*
1901	--	1940	369.7

**Appendix Table 3.2**

**Cost of Living in Colombia, 1863-1940 (1913=100)**

Year	Cost of Living Index (1913=100)	Year	Cost of Living Index (1913=100)
1863	50.0	1902	--
1864	50.0	1903	--
1865	63.2	1904	--
1866	63.2	1905	--
1867	64.4*	1906	--
1868	65.5*	1907	--
1869	66.7*	1908	--
1870	67.9	1909	77.4
1871	67.9	1910	69.8
1872	69.8	1911	66.0
1873	83.0	1912	82.1
1874	91.5	1913	100.0
1875	100.1*	1914	88.7
1876	109.4	1915	80.2
1877	103.8	1916	68.9
1878	103.8	1917	79.2
1879	103.8	1918	90.6
1880	103.8	1919	110.4
1881	103.8	1920	122.6
1882	159.4	1921	106.6
1883	115.1	1922	101.9
1884	115.1	1923	94.3
1885	95.3	1924	100.9
1886	95.3	1925	96.2
1887	105.7	1926	134.0
1888	83.0	1927	114.2
1889	106.6	1928	111.3
1890	102.8	1929	134.9
1891	101.9	1930	98.1
1892	101.9	1931	79.2
1893	108.5	1932	58.5
1894	120.8	1933	72.6
1895	127.4	1934	105.7
1896	145.3	1935	114.2
1897	156.6	1936	115.1
1898	150.0	1937	111.3
1899	147.2	1938	114.2
1900	202.8	1939	119.8
1901	--	1940	115.1



**Appendix Table 3.3**

**Real Wage in Colombia, 1863-1940 (1913=100)**

Year	Real Wage Index (1913=100)	Year	Real Wage Index (1913=100)
1863	133.8	1902	--
1864	132.5*	1903	--
1865	103.8*	1904	--
1866	102.8	1905	--
1867	100.9*	1906	--
1868	99.1*	1907	--
1869	97.4*	1908	--
1870	95.6*	1909	138.6
1871	95.6*	1910	140.9
1872	93.0	1911	153.6
1873	71.5*	1912	124.0*
1874	60.0	1913	100.0
1875	61.3*	1914	131.5*
1876	62.7*	1915	155.6*
1877	70.9*	1916	191.4
1878	76.4*	1917	156.4
1879	82.6*	1918	152.3
1880	89.8	1919	138.8
1881	87.9*	1920	149.3
1882	58.2*	1921	199.9
1883	84.3*	1922	190.6
1884	99.5*	1923	208.0
1885	125.2*	1924	223.0
1886	111.5*	1925	228.7
1887	109.3*	1926	191.7
1888	135.3	1927	265.6
1889	117.0	1928	302.4
1890	131.7	1929	276.1
1891	136.3	1930	353.3
1892	145.2	1931	382.1
1893	133.9	1932	483.4*
1894	121.4	1933	386.5
1895	125.6	1934	271.7
1896	144.1	1935	306.6
1897	157.0*	1936	292.1*
1898	175.7	1937	313.4
1899	175.0	1938	296.6
1900	134.4	1939	303.0*
1901	--	1940	321.2

## APPENDIX 4

### Nominal Wage, Cost of Living, and Real Wage in Cuba, 1905-1939

**Overview:** The data for Cuba was taken from the following two sources:

Leandro Prados de la Escosura, *Output and Expenditure in Spain, 1850-1990: New GDP Series*,  
Forthcoming 1997.

Oscar Zanetti, and Alejandro García, *United Fruit Company: Un Caso Del Dominio Imperialista En Cuba*.  
La Habana: Editorial De Ciencias Sociales, 1976.

#### APPENDIX TABLE 4.1: Nominal Wage Index

**Nominal Wage, 1905-1939:** For 1905-1913, we use a nominal wage index from Zanetti and García's study of the living conditions of workers of the United Fruit Company in Cuba (p. 441, Cuadro VI). This data is based on the Boston Central in Cuba. Thereafter, the series was linked with the Prados data for 1913-1939. The nominal wage series is indexed 1913=100.

#### APPENDIX TABLE 4.2: Cost of Living Index

**Cost of Living, 1905-1939:** The data for 1905-1913 is based on a food price index for Havana taken from Zanetti and García (p. 441, Cuadro VI). This is then linked at 1913 to Prados's consumer price index, extending coverage up to 1939. Prados's index was based on actual cost of living data for only 1919-1920, 1923, 1925-1926, and 1928-1939. Based on the close correlation between this cost of living data and the imports deflator for the Cuban economy during these years, Prados interpolated the missing years to construct a cost of living index for 1913-1939.

The cost of living series is indexed 1913=100. Interpolated figures are starred (\*).

#### APPENDIX TABLE 4.3: Real Wage Index

**Real Wage, 1905-1939:** The real wage index is derived by dividing our nominal wage series by the cost of living series.

The real wage series is indexed 1913=100. Calculations based on interpolated figures are starred (\*).

**Appendix Table 4.1**

**Nominal Wage in Cuba, 1905-1939 (1913=100)**

Year	Nominal Wage Index (1913=100)	Year	Nominal Wage Index (1913=100)
1905	96.8	1923	183.3
1906	99.1	1924	184.7
1907	98.8	1925	183.3
1908	104.0	1926	183.3
1909	104.4	1927	175.3
1910	97.8	1928	172.6
1911	96.8	1929	174.0
1912	95.8	1930	168.6
1913	100.0	1931	157.9
1914	104.2	1932	123.1
1915	108.7	1933	105.7
1916	113.6	1934	131.1
1917	153.3	1935	131.1
1918	159.0	1936	132.5
1919	194.0	1937	133.8
1920	210.1	1938	135.1
1921	210.1	1939	135.1
1922	178.0		

**Appendix Table 4.2**

**Cost of Living in Cuba, 1905-1939 (1913=100)**

Year	Cost of Living Index (1913=100)	Year	Cost of Living Index (1913=100)
1905	84.8	1923	132.4
1906	92.1*	1924	132.8*
1907	100.0	1925	145.2
1908	97.4*	1926	138.3
1909	94.9	1927	129.8*
1910	96.9*	1928	119.7
1911	99.0	1929	122.6
1912	99.5*	1930	105.0
1913	100.0*	1931	87.3
1914	101.8*	1932	98.1
1915	103.9*	1933	92.2
1916	118.7*	1934	105.9
1917	160.0*	1935	106.9
1918	201.7*	1936	100.8
1919	222.7	1937	98.1
1920	266.0	1938	98.1
1921	215.5*	1939	92.2
1922	133.4*		

**Appendix Table 4.3**

**Real Wage in Cuba, 1905-1939 (1913=100)**

Year	Real Wage Index (1913=100)	Year	Real Wage Index (1913=100)
1905	114.1	1923	138.4
1906	107.6*	1924	139.1*
1907	98.8	1925	126.3
1908	106.7*	1926	132.5
1909	109.9	1927	135.0*
1910	100.8*	1928	144.2
1911	97.8	1929	141.9
1912	96.3*	1930	160.6
1913	100.0*	1931	180.9
1914	102.4*	1932	125.5
1915	104.6*	1933	114.6
1916	95.7*	1934	123.8
1917	95.8*	1935	122.6
1918	78.8*	1936	131.5
1919	87.1	1937	136.4
1920	79.0	1938	137.8
1921	97.5*	1939	146.6
1922	133.4*		

## APPENDIX 5

### Nominal Wage, Cost of Living, and Real Wage in Mexico, 1877-1940

**Overview:** The data for Mexico was taken from:

- Fausto Alzati, *The Political Economy of Growth in Modern Mexico*. Harvard University, April 1997, unpublished doctoral dissertation, Appendix Sections 3 & 5.
- Aurora Gómez, “The Evolution of Prices and Real Wages in Mexico from the Porfiriato to the Revolution.” In J. H. Coatsworth and A. M. Taylor (eds.), *Latin America and the World Economy in the 19th and 20th Centuries*. Forthcoming 1998, Tables 1 & 2.
- Aurora Gomez and Aldo Musacchio, “*Un Nuevo Indice de Precios para Mexico, 1886-1929*”, Centro de Investigación y Docencia Económicas A. C., División de Economía, México D.F.
- Instituto Nacional de Estadística, Geografía e Informática, *Estadísticas Históricas de México*. Mexico City: 1986, Tomo I, p. 165, Cuadro 5.1; Tomo II, p. 733, Cuadro 20.2.

#### APPENDIX TABLE 5.1: Nominal wage index

**Nominal Wage, 1877-1940:** The nominal wage series was constructed using three sources. We used *Estadísticas* (Tomo I, p. 165, Cuadro 5.1) from 1877 to 1900, at which point it was linked to the Gómez (Table 1) series up to 1913. The Gómez series was linked, in turn, to the Alzati (Appendix Section 5) series for 1913 to 1917. We again used the Gómez (Table 2) series for 1917 to 1920, after which we used the Alzati (Appendix Section 5) series to 1940. The *Estadísticas* series gives minimum daily wages for common labor, aggregated for all of Mexico. The Alzati series consists of minimum yearly agricultural wages in Oaxaca state. Lastly, Gómez offers a weighted average of hourly wages in textiles for Mexico City.

The nominal wage series is indexed 1913=100.

#### APPENDIX TABLE 5.2: Cost of living index

**Cost of Living, 1877-1885:** The cost of living series for this period comes from *Estadísticas* (Tomo II, p. 733, Cuadro 20.2) and corresponds to a general price index for Mexico. We link this series to the one of Gómez and Musacchio (1886-1929), using as link the year 1886.

**Cost of Living, 1886-1929:** Gómez and Musacchio present two alternative (monthly) cost of living indices for Mexico, which were constructed using prices' weights arising from different consumption bundles (i.e., for high and low income families respectively). While the first of these indices (index A) has the advantage of being constructed with a good methodology, it also has the problem of being only representative of high-income families. The second one (index B), in turn, is more representative of low-income families but its methodology is not as good as the first one (e.g., the sample used to know the weights was quite small). Therefore, the authors considered these two indices as an upper and lower bound respectively and constructed a third one (index AB), which correspond to a geometric average of the other two. We use this last index (AB) as the cost of living for Mexico for 1886-1929.

Given that there was no reliable information to construct the indices since the end (November) of 1913 to the beginning (February) of 1917 (the authors do not present indices for this period), we interpolated geometrically this gap. Finally, we linked this series to the one of Alzati, using as link the year 1929.

**Cost of Living 1930-1940:** The cost of living index for this period comes from Alzati (Appendix Section 3) and correspond to a GDP deflator for Mexico.

The whole cost of living series is indexed 1913=100. Interpolated figures are starred (\*).

**APPENDIX TABLE 5.3: Real wage index**

*Real Wage, 1877-1940:* This index is derived by dividing the nominal wage index by the cost of living index.

The real wage time series is indexed 1913=100. Calculations based on interpolated figures are starred (\*).

**Appendix Table 5.1**

**Nominal Wage in Mexico, 1877-1940 (1913=100)**

Year	Nominal Wage Index (1913=100)	Year	Nominal Wage Index (1913=100)
1877	32.9	1909	71.0
1878	33.1	1910	70.9
1879	33.3	1911	67.8
1880	33.7	1912	95.3
1881	34.1	1913	100.0
1882	34.3	1914	69.3
1883	34.5	1915	57.4
1884	34.8	1916	82.0
1885	35.0	1917	65.4
1886	35.3	1918	72.4
1887	35.6	1919	75.4
1888	36.3	1920	80.9
1889	39.0	1921	93.8
1890	39.2	1922	101.4
1891	42.5	1923	98.6
1892	45.4	1924	108.1
1893	48.1	1925	105.7
1894	48.3	1926	109.5
1895	48.6	1927	122.9
1896	48.9	1928	127.9
1897	49.2	1929	114.0
1898	49.6	1930	100.5
1899	50.0	1931	108.8
1900	50.3	1932	130.1
1901	57.8	1933	131.9
1902	61.2	1934	136.5
1903	59.2	1935	134.1
1904	64.9	1936	135.8
1905	62.1	1937	111.6
1906	63.6	1938	109.9
1907	69.3	1939	107.5
1908	68.0	1940	110.5



**Appendix Table 5.2****Cost of Living in Mexico, 1877-1940 (1913=100)**

Year	Cost of Living Index (1913=100)	Year	Cost of Living Index (1913=100)
1877	41.5	1909	82.4
1878	42.1*	1910	96.1
1879	42.7*	1911	96.4
1880	43.3*	1912	98.1
1881	43.9*	1913	100.0*
1882	44.5*	1914	109.0*
1883	45.1*	1915	121.7*
1884	45.8*	1916	135.9*
1885	46.4*	1917	166.2*
1886	47.1	1918	203.6
1887	48.9	1919	195.3
1888	53.2	1920	212.3
1889	56.5	1921	190.1
1890	53.1	1922	151.6
1891	50.0	1923	136.1
1892	55.9	1924	142.0
1893	58.5	1925	162.9
1894	59.4	1926	163.9
1895	57.5	1927	152.6
1896	57.6	1928	137.0
1897	57.7	1929	138.9
1898	56.1	1930	141.5
1899	58.3	1931	124.5
1900	62.7	1932	110.1
1901	64.4	1933	117.9
1902	73.6	1934	120.5
1903	74.2	1935	123.2
1904	73.4	1936	133.6
1905	73.5	1937	165.1
1906	72.3	1938	174.3
1907	75.7	1939	176.9
1908	75.9	1940	182.1

**Appendix Table 5.3**

**Real Wage in Mexico, 1877-1940 (1913=100)**

Year	Real Wage Index (1913=100)	Year	Real Wage Index (1913=100)
1877	79.3	1909	86.1
1878	78.7*	1910	73.8
1879	78.1*	1911	70.4
1880	77.9*	1912	97.1
1881	77.7*	1913	100.0*
1882	77.1*	1914	63.6*
1883	76.6*	1915	47.2*
1884	76.0*	1916	60.3*
1885	75.5*	1917	39.3*
1886	75.0	1918	35.6
1887	72.7	1919	38.6
1888	68.2	1920	38.1
1889	68.9	1921	49.3
1890	74.0	1922	66.9
1891	85.0	1923	72.4
1892	81.1	1924	76.1
1893	82.2	1925	64.9
1894	81.4	1926	66.8
1895	84.5	1927	80.5
1896	84.9	1928	93.4
1897	85.3	1929	82.1
1898	88.3	1930	71.0
1899	85.7	1931	87.4
1900	80.1	1932	118.3
1901	89.6	1933	111.9
1902	83.1	1934	113.3
1903	79.8	1935	108.9
1904	88.4	1936	101.6
1905	84.4	1937	67.6
1906	88.0	1938	63.1
1907	91.5	1939	60.8
1908	89.6	1940	60.7

## APPENDIX 6

### Nominal Wage, Cost of Living, Real Wage and Land Price in Uruguay, 1870-1940

**Overview:** Luis Bértola supplied the database containing all four time series which underlay the analysis in:

Luis Bértola, Leonardo Calicchio, Maria Camou, and Gabriel Porcile, “Southern Cone Real Wages Compared: A Purchasing Power Parity Approach to Convergence and Divergence Trends, 1870-1996”, *Documento de Trabajo No. 44*, Montevideo: Programa de Historia Económica y Social, Facultad de Ciencias Sociales, Universidad de la República, February 1999.

Luis Bértola, Maria Camou, and Gabriel Porcile, *Comparación Internacional del Poder Adquisitivo de los Salarios Reales de los Países del Cono Sur, 1870-1945*, paper presented at the symposium “Mercado del Trabajo y Nivel de Vida” of the Segundas Jornadas de Historia Económica, Montevideo, July 1999.

The details of the index number construction can be found in the following earlier papers leading up to the 1999 surveys just cited:

Luis Bértola, Leonardo Calicchio, Maria Camou, and G. Porcile, *Uruguayan Real Wages 1870-1996 Compared: A Purchasing Power Parity Approach to Convergence and Divergence Trends*, Programa de Historia Económica y Social, Facultad de Ciencias Sociales, Universidad de la República, August 1997 (first draft).

Luis Bértola, “The Manufacturing Industry of Uruguay, 1913-1961: A Sectoral Approach to Growth, Fluctuations and Crisis,” *Institute of Latin American Studies of Stockholm University, Monograph no. 20*, 1990.

Leonardo Calicchio, “Salario y Costo de Vida en el Río de la Plata. 1907-1930,” *Documento de Trabajo No. 33*. Montevideo: Programa de Historia Económica y Social, Facultad de Ciencias Sociales, Universidad de la República, June 1996.

Maria Camou, “Salarios y Costos de Vida en el Río de la Plata,” *Documento de Trabajo No. 28*. Montevideo: Programa de Historia Económica y Social, Facultad de Ciencias Sociales, Universidad de la República, April 1996.

Julio Millot, Carlos Silva, and Lindor Silva, *El Desarrollo Industrial del Uruguay*. Montevideo: Instituto de Economía, Universidad de la República, 1972.

Ministerio de Industrias, *El Salario Real (1914-1926)*, Montevideo, Uruguay: Imprenta Nacional, 1927.

#### APPENDIX TABLE 6.1: Nominal wage index

#### APPENDIX TABLE 6.2: Cost of living index

#### APPENDIX TABLE 6.3: Real wage index

**Nominal Wage, Cost of Living, Real Wage and Land Price 1870-1940:** All nominal wages referred to in the construction of the time series are urban wages. Up to 1926, wages are that of unskilled building labor; from 1926 to 1936, that of casual workers; and thereafter, that of workers in manufacturing. Note that the years 1902-1906 were interpolated. The cost of living series is also a linked urban series. The real wage series was obtained by dividing the nominal wage series by the cost of living series. Finally, the land price series correspond to rural land.

All three time series are indexed 1913=100. Interpolated figures and calculations based on interpolated figures are starred (\*).

**Appendix Table 6.1**

**Nominal Wage in Uruguay, 1870-1940 (1913=100)**

Year	Nominal Wage Index (1913=100)	Year	Nominal Wage Index (1913=100)
1870	83.7	1906	80.0*
1871	100.5	1907	83.3
1872	100.5	1908	86.7
1873	91.7	1909	100.0
1874	83.7	1910	100.0
1875	83.7	1911	100.0
1876	83.7	1912	100.0
1877	83.7	1913	100.0
1878	83.7	1914	100.0
1879	83.7	1915	95.8
1880	83.7	1916	83.3
1881	83.7	1917	83.3
1882	83.7	1918	83.3
1883	83.7	1919	91.7
1884	83.7	1920	132.3
1885	85.5	1921	150.0
1886	85.4	1922	150.0
1887	85.4	1923	150.0
1888	85.4	1924	150.0
1889	69.9	1925	150.0
1890	85.4	1926	150.0
1891	85.4	1927	152.2
1892	84.6	1928	154.6
1893	85.4	1929	162.5
1894	85.4	1930	168.5
1895	77.6	1931	172.8
1896	69.9	1932	173.2
1897	77.6	1933	170.0
1898	64.7	1934	168.0
1899	62.5	1935	161.4
1900	67.5	1936	164.6
1901	68.0	1937	163.1
1902	71.3*	1938	161.6
1903	74.0*	1939	165.5
1904	74.0*	1940	168.5
1905	80.0*		

**Appendix Table 6.2**

**Cost of Living in Uruguay, 1870-1940 (1913=100)**

Year	Cost of Living Index (1913=100)	Year	Cost of Living Index (1913=100)
1870	80.5	1906	88.9
1871	84.3	1907	85.5
1872	85.8	1908	85.7
1873	88.2	1909	84.7
1874	87.7	1910	88.4
1875	90.0	1911	90.3
1876	89.3	1912	91.3
1877	92.9	1913	100.0
1878	93.9	1914	106.5
1879	100.7	1915	115.2
1880	100.3	1916	114.8
1881	92.7	1917	117.5
1882	92.6	1918	124.2
1883	97.6	1919	136.5
1884	98.1	1920	158.5
1885	83.3	1921	147.9
1886	78.8	1922	137.2
1887	74.2	1923	132.9
1888	75.7	1924	130.9
1889	101.6	1925	131.3
1890	83.6	1926	131.3
1891	75.7	1927	125.8
1892	68.4	1928	127.0
1893	59.4	1929	130.9
1894	62.0	1930	130.9
1895	66.3	1931	130.9
1896	70.2	1932	128.6
1897	68.3	1933	122.3
1898	78.5	1934	122.3
1899	72.1	1935	126.2
1900	81.1	1936	125.0
1901	86.9	1937	128.6
1902	70.2	1938	128.2
1903	78.6	1939	135.3
1904	72.2	1940	141.2
1905	83.1		

**Appendix Table 6.3**

**Real Wage in Uruguay, 1870-1940 (1913=100)**

Year	Real Wage Index (1913=100)	Year	Real Wage Index (1913=100)
1870	104.1	1906	90.0*
1871	119.1	1907	97.5
1872	117.2	1908	101.1
1873	103.9	1909	118.0
1874	95.5	1910	113.1
1875	93.1	1911	110.7
1876	93.8	1912	109.6
1877	90.1	1913	100.0
1878	89.2	1914	93.9
1879	83.1	1915	83.2
1880	83.5	1916	72.6
1881	90.3	1917	70.9
1882	90.5	1918	67.1
1883	85.8	1919	67.2
1884	85.4	1920	83.4
1885	102.6	1921	101.4
1886	108.4	1922	109.3
1887	115.1	1923	112.9
1888	112.8	1924	114.6
1889	68.8	1925	114.2
1890	102.1	1926	114.2
1891	112.9	1927	121.0
1892	123.8	1928	121.8
1893	143.8	1929	124.1
1894	137.7	1930	128.7
1895	117.1	1931	132.0
1896	99.6	1932	134.7
1897	113.6	1933	139.1
1898	82.5	1934	137.4
1899	86.8	1935	127.9
1900	83.2	1936	131.7
1901	78.3	1937	126.9
1902	101.6*	1938	126.1
1903	94.1*	1939	122.4
1904	102.5*	1940	119.3
1905	96.3*		

Appendix Table 6.4

Land Price Index and Wage/Rent Index in Uruguay, 1870-1940 (1913=100)

Year	Land Price Index (1913=100)	Wage/Rent Index (1913=100)	Year	Land Price Index (1913=100)	Wage/Rent Index (1913=100)
1870	7.2	1166.3	1906	58.9	135.9*
1871	7.2	1399.6	1907	58.9	141.6
1872	9.2	1091.1	1908	58.9	147.2
1873	9.2	996.0	1909	58.9	169.9
1874	9.2	909.3	1910	58.9	169.9
1875	9.2	909.3	1911	100.0	100.0
1876	9.2	909.3	1912	100.0	100.0
1877	9.5	879.3	1913	100.0	100.0
1878	9.5	879.3	1914	83.7	119.5
1879	9.5	879.3	1915	68.8	139.3
1880	9.5	879.3	1916	59.6	139.8
1881	9.5	879.3	1917	68.5	121.7
1882	13.3	627.5	1918	81.5	102.2
1883	13.3	627.5	1919	90.7	101.1
1884	13.3	627.5	1920	120.0	110.3
1885	13.3	640.6	1921	98.3	152.5
1886	24.0	356.3	1922	99.6	150.5
1887	24.0	356.3	1923	88.8	168.9
1888	24.0	356.3	1924	88.8	169.0
1889	24.0	291.5	1925	99.2	151.2
1890	24.0	356.3	1926	118.6	126.4
1891	22.3	383.3	1927	126.0	120.9
1892	22.3	379.8	1928	87.7	176.2
1893	22.3	383.3	1929	92.2	176.2
1894	22.3	383.3	1930	95.1	177.2
1895	22.3	348.4	1931	115.8	149.2
1896	23.5	297.5	1932	97.9	176.9
1897	23.5	330.5	1933	100.7	168.8
1898	23.5	275.4	1934	84.2	199.6
1899	23.5	266.2	1935	63.6	253.9
1900	23.5	287.4	1936	68.0	242.0
1901	32.7	207.7	1937	82.7	197.3
1902	32.7	217.9*	1938	83.7	193.0
1903	32.7	226.0*	1939	91.2	181.5
1904	32.7	226.0*	1940	94.6	178.1
1905	32.7	244.3*			

## APPENDIX 7

### PPP-Adjusted Real Wages for Latin America

**Overview:** The country time series need a purchasing power parity (PPP) benchmark before we can compare real wage levels across these countries, or with countries outside the region. The latter include Great Britain, the United States, and the Mediterranean Basin countries, which were so important in the mass migrations to Latin America. Once these benchmarks are established, the country time series can then be used to extend PPP-adjusted real wages backward and forward in time. Full descriptions of the procedure for creating these benchmarks follow below. The primary sources used in constructing the benchmarks were:

Pablo Astorga and Valpy FitzGerald, "The Standard of Living in Latin America during the Twentieth Century," *Centro Studi Luca d'Agliano -- Queen Elizabeth House Development Studies Working Papers*, N. 117, May 1998, p. 31, Table A-4.

Luis Bértola, Maria Camou, and Gabriel Porcile, *Comparación Internacional del Poder Adquisitivo de los Salarios Reales de los Países del Cono Sur, 1870-1945*, paper presented at the symposium "Mercado del Trabajo y Nivel de Vida" of the "Segundas Jornadas de Historia Económica", Montevideo, July 1999.

Gustavo Maia Gomes, *The Roots of State Intervention in the Brazilian Economy*. New York: Praeger Publishers, 1986, p. 38, Table 2.6.

Angus Maddison, *Monitoring the World Economy: 1820-1992*. Paris: OECD Development Centre, 1995, p. 104, Table A-3a; & p. 108, Table A-3b.

Jeffrey G. Williamson, "The Evolution of Global Labor Markets since 1830," *Explorations in Economic History* 32(2), April 1995, pp. 141-196. Revised in Kevin O'Rourke, and Jeffrey G. Williamson, "Around the European Periphery 1870-1913: Globalization, Schooling and Growth," *European Review of Economic History*, 1(2), August 1997, pp. 153-90.

#### APPENDIX TABLE 7.1: PPP-adjusted real wages, Argentina in 1913=100

##### *PPP-Adjustment Within Latin America:*

To construct real wage series which can be compared between Latin American nations, we have rebased our national real wage series with a PPP-adjusted benchmark inferred from Astorga and FitzGerald (1998, p. 31, Table A-4) for Argentina, Colombia, Cuba and Mexico and inferred from Bértola et al. for Argentina, Uruguay and Southeast Brazil.

We used the PPP-adjusted GDP per capita figures for 1910 in Astorga and FitzGerald to establish the real wage benchmark comparing Argentina with Colombia, Cuba, and Mexico. This procedure assumes, of course, that the 1910 ratio of any two Latin American nations' real wages was equal to the ratio of their PPP-adjusted GDP per capita. Only to illustrate, if Argentina had twice the GDP per capita of Colombia in 1910, with Argentina's real wage index equal to 103.9 in 1910, this would imply for Colombia a relative real wage of 51.9 for the same year.

The Latin American indices of PPP-adjusted real wages in 1910 implied by this exercise, with Argentina in 1913=100, are:

Argentina = 103.9  
Colombia = 27.2  
Cuba = 76.9  
Mexico = 58.9



For the remaining Latin American countries (Uruguay and Brazil), we constructed their PPP-adjusted real wages following two steps. First, we used the PPP-adjusted benchmarks presented by Bértola et al. (July 1999) in order to calculate PPP-adjusted real wages for Argentina, Uruguay and Brazil (Southeast and Northeast) with respect to Great Britain (see explanation below). Then, we adjusted the series -maintaining their relative relationship with each other- in order to construct PPP-adjusted real wages with respect to Argentina.

The Latin American indices of PPP-adjusted real wages in 1910 implied by this exercise, with Argentina in 1913=100, are:

Argentina = 103.9

Uruguay = 114.6

Brazil, Southeast = 44.6

Brazil, Northeast = 17.6

## **APPENDIX TABLE 7.2: PPP-adjusted real wages, Great Britain in 1913=100**

### ***PPP-Adjustment Between Latin America and Great Britain:***

Bértola et al. (July 1999) present PPP-adjusted benchmarks for Argentina, Uruguay, and Southeast Brazil with respect to Great Britain. We use their benchmarks, along with Williamson's Atlantic economy real wage data (1995; revised in O'Rourke and Williamson 1997), to construct PPP-adjusted real wages for Argentina, Uruguay and Southeast Brazil with respect to Great Britain = 100 in 1913.

We also calculated PPP-adjusted real wages for Northeast Brazil, based on information in Gomes (1986, p. 38, Table 2.6). Gomes gives estimated income levels for the whole of Brazil, as well as a breakdown by regions, for the years 1900, 1907, 1912, 1919, 1930, and 1939. We used the ratio of the Southeast and Northeast Brazilian regions' income levels as a benchmark for the year 1912. We were assuming, of course, that the ratio of income levels of these two regions was equivalent to their ratio of real wages in this year. Then, using this benchmark along with the PPP-adjusted real wage of the Southeast region with respect to Great Britain, we were able to construct the PPP-adjusted real wage for the Northeast Brazilian region.

For the remaining Latin American countries (Colombia, Cuba, and Mexico), we constructed their PPP-adjusted real wages with respect to Great Britain, based on their relative position with Argentina (see explanation above) and the relative position of the latter with Great Britain. That is, we adjusted the series in order to maintain their relative relationship with each other.

## **APPENDIX TABLE 7.3: PPP-adjusted real wages, United States in 1913=100**

### ***PPP-Adjustment Between Latin America and the United States:***

As with the Great Britain, we have created another comparison by setting Williamson's US PPP-adjusted real wages at 1913=100. We used information from the PPP-adjusted real wage series with respect to Great Britain (explained above) and from Williamson's Atlantic economy PPP-adjusted real wage data (1995; revised in O'Rourke and Williamson 1997). The ratio of Argentina's PPP-adjusted real wages to those of the United States in 1910 was 0.496 (i.e. Argentina's wages were about 50% lower in 1910). Given that the US 1910 real wage index had a value of 100.6, this implied a 1910 relative real wage index value of 49.9 for Argentina. The ratio of Southeast and Northeast Brazil's PPP-adjusted real wages to those of the United States in 1910 were 0.213 and 0.084 (i.e. Southeast and Northeast Brazil's wages were about 79% and 92%

respectively lower this year). This, in turn, implied a 1910 relative real wage index value of 21.4 and 8.4 respectively for Southeast and Northeast Brazil. Finally, the ratio of Uruguay's PPP-adjusted real wages to those of the United States in 1910 was 0.547, which implied a 1910 relative real wage index value of 55.0 for Uruguay.

The real wage series of the remaining Latin American countries (Colombia, Cuba, and Mexico) were then adjusted to maintain their relative relationships with each other.

#### **APPENDIX TABLE 7.4: PPP-adjusted real wages, emigrating Mediterranean countries in 1913=100**

##### ***PPP-Adjustment Between Latin America and the Emigrating Mediterranean Countries:***

As with Great Britain and the United States, we created another comparison by constructing a weighted average of Williamson's PPP-adjusted real wages for Italy, Portugal, and Spain. Fixed weights were used based on population figures for 1910 given in Maddison (1995, p. 104, Table A-3a; and p. 108, Table A-3b). For years when the wage data was not available for all three of the Mediterranean countries, the weights were adjusted accordingly. That is, where the wage data for all three nations was available: Italy 58.6%, Portugal 9.5%, and Spain 31.8%. Only Spanish wage data was available for 1840-1849. Where Italian wage data was missing for 1850-1869: Portugal 23.0%, and Spain 77.0%. After 1912, Portuguese wage data is often missing, in which case: Italy 64.8%, and Spain 35.2%. Fixed weights do not matter much since the population distributions in 1850 and 1940 are very similar to those in 1910; accounting for any shifts in population distribution over time would thus make very little difference in the results. The various segments were then linked to create an Emigrating Mediterranean Basin series for the full period, where the index is based with 1913=100.

The procedure to estimate relative real wages for Latin America with respect to the Mediterranean countries is similar to the one explained above for the USA. The ratio of Argentina's 1910 PPP-adjusted real wages to that of the weighted Emigrating Mediterranean Basin series was 1.975 (i.e. Argentina's wages were about 98% higher). Given that the 1910 Emigrating Mediterranean Basin real wage index had a value of 92.7, this implied a 1910 Argentina relative real wage index value of 183.1. In turn, the ratio of Southeast Brazil, Northeast Brazil, and Uruguay's 1910 PPP-adjusted real wages to those of the weighted Emigrating Mediterranean Basin were 0.848, 0.339, and 2.178 respectively. This implied relative real wages index values of 78.6 for Northeast Brazil, of 31.0 for Southeast Brazil, and of 201.9 for Uruguay in 1910.

The real wage series of the remaining Latin American countries (Colombia, Cuba, and Mexico) were then adjusted to maintain their relative relationships with each other.

Appendix Table 7.1

PPP-Adjusted Real Wages, Argentina in 1913=100

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1830	--	19.3	--	--	--	--	--
1831	--	18.9	--	--	--	--	--
1832	--	25.2	--	--	--	--	--
1833	--	11.2	--	--	--	--	--
1834	--	11.2	--	--	--	--	--
1835	--	16.8	--	--	--	--	--
1836	--	17.2	--	--	--	--	--
1837	--	15.8	--	--	--	--	--
1838	--	13.7	--	--	--	--	--
1839	--	14.7	--	--	--	--	--
1840	--	11.7	--	--	--	--	--
1841	--	12.6	--	--	--	--	--
1842	--	18.9	--	--	--	--	--
1843	--	18.6	--	--	--	--	--
1844	--	19.5	--	--	--	--	--
1845	--	15.8	--	--	--	--	--
1846	--	14.6	--	--	--	--	--
1847	--	16.5	--	--	--	--	--
1848	--	16.1	--	--	--	--	--
1849	--	19.1	--	--	--	--	--
1850	--	21.8	--	--	--	--	--
1851	--	19.2	--	--	--	--	--
1852	--	20.8	--	--	--	--	--
1853	--	24.2	--	--	--	--	--
1854	--	18.5	--	--	--	--	--
1855	--	18.4	4.7	--	--	--	--
1856	--	19.2	4.2	--	--	--	--
1857	--	19.1	6.5	--	--	--	--
1858	--	21.7	5.4	--	--	--	--
1859	--	22.0	6.1	--	--	--	--
1860	--	25.3	7.4	--	--	--	--
1861	--	25.3	8.1	--	--	--	--
1862	--	24.7	10.8	--	--	--	--
1863	--	23.1	10.4	25.9	--	--	--
1864	45.7	21.6	12.6	25.6	--	--	--
1865	49.0	22.4	12.2	20.1	--	--	--
1866	57.5	22.7	11.6	19.9	--	--	--
1867	55.8	25.0	8.3	19.5	--	--	--
1868	55.8	23.4	9.2	19.2	--	--	--
1869	61.0	20.0	8.8	18.8	--	--	--
1870	66.6	20.3	8.6	18.5	--	--	105.4

**Appendix Table 7.1**  
(continued)  
**PPP-Adjusted Real Wages, Argentina in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1871	63.7	24.5	8.3	18.5	--	--	120.7
1872	55.5	24.0	8.5	18.0	--	--	118.7
1873	55.5	26.3	8.7	13.8	--	--	105.3
1874	63.6	24.8	8.9	11.6	--	--	96.7
1875	64.5	30.3	8.7	11.8	--	--	94.3
1876	63.0	30.1	8.6	12.1	--	--	95.0
1877	52.6	29.0	8.4	13.7	--	63.3	91.3
1878	47.9	27.6	8.3	14.8	--	62.8	90.3
1879	44.4	30.5	8.2	16.0	--	62.3	84.2
1880	50.2	31.6	8.0	17.4	--	62.2	84.5
1881	63.2	30.3	7.9	17.0	--	62.0	91.5
1882	73.0	34.4	7.8	11.3	--	61.6	91.6
1883	81.6	32.3	7.6	16.3	--	61.1	86.9
1884	77.2	35.8	7.5	19.2	--	60.7	86.5
1885	61.2	36.5	7.4	24.2	--	60.3	103.9
1886	77.6	37.3	7.3	21.6	--	59.9	109.8
1887	86.6	39.6	7.2	21.1	--	58.1	116.6
1888	102.0	39.7	7.0	26.2	--	54.4	114.2
1889	89.1	35.7	6.9	22.6	--	55.0	69.6
1890	63.2	35.7	6.8	25.5	--	59.1	103.4
1891	89.1	34.5	6.7	26.3	--	67.9	114.3
1892	98.9	32.0	6.6	28.1	--	64.8	125.4
1893	108.6	29.8	6.5	25.9	--	65.6	145.7
1894	93.3	30.3	6.4	23.5	--	65.0	139.4
1895	86.0	38.3	6.3	24.3	--	67.5	118.6
1896	80.4	32.4	6.2	27.8	--	67.8	100.9
1897	86.0	33.1	7.1	30.4	--	68.1	115.1
1898	111.6	28.6	8.1	34.0	--	70.5	83.5
1899	123.6	32.8	9.2	33.8	--	68.4	87.9
1900	115.0	35.1	10.5	26.0	--	64.0	84.3
1901	108.5	41.1	11.1	--	--	71.6	79.3
1902	108.5	45.2	11.6	--	--	66.3	103.0
1903	109.5	46.3	12.3	--	--	63.7	95.3
1904	116.1	45.7	12.9	--	--	70.6	103.8
1905	102.2	49.3	13.6	--	87.0	67.4	97.6
1906	99.6	49.4	14.3	--	82.0	70.3	91.2
1907	97.9	44.4	15.1	--	75.3	73.1	98.8
1908	97.1	45.7	15.9	--	81.3	71.5	102.4
1909	95.5	45.0	16.7	26.8	83.8	68.8	119.6
1910	103.9	44.6	17.6	27.2	76.8	58.9	114.6

**Appendix Table 7.1**  
(continued)  
**PPP-Adjusted Real Wages, Argentina in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1911	103.1	46.8	16.1	29.7	74.5	56.2	112.2
1912	106.0	42.3	14.7	24.0	73.4	77.6	111.0
1913	100.0	45.4	13.5	19.3	76.2	79.9	101.3
1914	96.9	52.3	12.3	25.4	78.1	50.8	95.1
1915	87.1	45.0	11.3	30.1	79.7	37.7	84.3
1916	81.4	41.8	10.3	37.0	72.9	48.2	73.6
1917	70.0	33.3	9.4	30.2	73.0	31.4	71.8
1918	60.0	26.4	8.6	29.4	60.1	28.4	67.9
1919	81.1	26.5	7.9	26.8	66.4	30.8	68.0
1920	84.3	24.0	7.2	28.9	60.2	30.4	84.5
1921	104.6	35.7	7.6	38.6	74.3	39.4	102.7
1922	120.0	34.8	7.9	36.8	101.6	53.4	110.7
1923	123.0	29.7	8.3	40.2	105.5	57.8	114.3
1924	121.1	30.2	8.7	43.1	106.0	60.8	116.0
1925	127.7	29.2	9.1	44.2	96.2	51.8	115.7
1926	129.3	37.7	9.5	37.1	101.0	53.4	115.7
1927	136.0	39.1	8.3	51.3	102.9	64.3	122.6
1928	144.0	37.8	7.3	58.5	109.9	74.6	123.3
1929	143.2	39.2	6.4	53.4	108.1	65.5	125.7
1930	130.4	45.7	5.7	68.3	122.4	56.7	130.3
1931	139.7	44.8	5.0	73.9	137.8	69.8	133.7
1932	148.9	44.0	5.7	93.4	95.6	94.4	136.5
1933	137.5	43.2	6.5	74.7	87.4	89.4	140.9
1934	142.0	42.5	7.4	52.5	94.3	90.4	139.2
1935	144.6	41.7	8.5	59.3	93.5	87.0	129.5
1936	136.1	40.9	--	56.5	100.2	81.1	133.4
1937	137.6	40.2	--	60.6	104.0	54.0	128.5
1938	137.2	--	--	57.3	105.0	50.4	127.7
1939	139.5	--	--	58.6	111.7	48.5	123.9
1940	140.9	--	--	62.1	--	48.5	120.9

Appendix Table 7.2

PPP-Adjusted Real Wages, Great Britain in 1913=100

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1830	--	16.0	--	--	--	--	--
1831	--	15.7	--	--	--	--	--
1832	--	20.9	--	--	--	--	--
1833	--	9.3	--	--	--	--	--
1834	--	9.3	--	--	--	--	--
1835	--	13.9	--	--	--	--	--
1836	--	14.2	--	--	--	--	--
1837	--	13.1	--	--	--	--	--
1838	--	11.3	--	--	--	--	--
1839	--	12.2	--	--	--	--	--
1840	--	9.7	--	--	--	--	--
1841	--	10.4	--	--	--	--	--
1842	--	15.6	--	--	--	--	--
1843	--	15.4	--	--	--	--	--
1844	--	16.1	--	--	--	--	--
1845	--	13.1	--	--	--	--	--
1846	--	12.1	--	--	--	--	--
1847	--	13.7	--	--	--	--	--
1848	--	13.3	--	--	--	--	--
1849	--	15.8	--	--	--	--	--
1850	--	18.0	--	--	--	--	--
1851	--	15.9	--	--	--	--	--
1852	--	17.2	--	--	--	--	--
1853	--	20.0	--	--	--	--	--
1854	--	15.3	--	--	--	--	--
1855	--	15.2	3.9	--	--	--	--
1856	--	15.9	3.5	--	--	--	--
1857	--	15.8	5.4	--	--	--	--
1858	--	18.0	4.4	--	--	--	--
1859	--	18.2	5.1	--	--	--	--
1860	--	20.9	6.2	--	--	--	--
1861	--	20.9	6.7	--	--	--	--
1862	--	20.5	8.9	--	--	--	--
1863	--	19.1	8.6	21.4	--	--	--
1864	37.9	17.9	10.4	21.2	--	--	--
1865	40.6	18.6	10.1	16.6	--	--	--
1866	47.6	18.8	9.6	16.4	--	--	--
1867	46.2	20.7	6.9	16.2	--	--	--
1868	46.2	19.4	7.6	15.9	--	--	--
1869	50.5	16.5	7.3	15.6	--	--	--
1870	55.2	16.8	7.1	15.3	--	--	87.3

**Appendix Table 7.2**  
(continued)  
**PPP-Adjusted Real Wages, Great Britain in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1871	52.7	20.3	6.9	15.3	--	--	99.9
1872	46.0	19.9	7.1	14.9	--	--	98.3
1873	46.0	21.8	7.2	11.4	--	--	87.2
1874	52.6	20.5	7.3	9.6	--	--	80.1
1875	53.4	25.1	7.2	9.8	--	--	78.1
1876	52.1	24.9	7.1	10.0	--	--	78.7
1877	43.5	24.0	7.0	11.3	--	52.4	75.6
1878	39.7	22.8	6.9	12.2	--	52.0	74.8
1879	36.8	25.3	6.8	13.2	--	51.6	69.7
1880	41.6	26.1	6.7	14.4	--	51.5	70.0
1881	52.4	25.1	6.5	14.1	--	51.4	75.7
1882	60.5	28.5	6.4	9.3	--	51.0	75.9
1883	67.6	26.8	6.3	13.5	--	50.6	72.0
1884	63.9	29.6	6.2	15.9	--	50.3	71.6
1885	50.7	30.2	6.1	20.0	--	49.9	86.1
1886	64.3	30.9	6.0	17.9	--	49.6	90.9
1887	71.7	32.8	5.9	17.5	--	48.1	96.6
1888	84.5	32.9	5.8	21.7	--	45.1	94.6
1889	73.7	29.6	5.7	18.7	--	45.6	57.7
1890	52.4	29.6	5.6	21.1	--	48.9	85.6
1891	73.8	28.6	5.6	21.8	--	56.2	94.7
1892	81.9	26.5	5.5	23.2	--	53.6	103.8
1893	90.0	24.7	5.4	21.4	--	54.3	120.6
1894	77.2	25.1	5.3	19.4	--	53.8	115.5
1895	71.2	31.7	5.2	20.1	--	55.9	98.3
1896	66.6	26.8	5.1	23.1	--	56.1	83.5
1897	71.2	27.4	5.8	25.1	--	56.4	95.3
1898	92.4	23.6	6.7	28.1	--	58.4	69.2
1899	102.4	27.2	7.6	28.0	--	56.7	72.8
1900	95.2	29.0	8.7	21.5	--	53.0	69.8
1901	89.8	34.0	9.2	--	--	59.3	65.7
1902	89.8	37.4	9.6	--	--	54.9	85.3
1903	90.7	38.3	10.1	--	--	52.7	78.9
1904	96.1	37.9	10.7	--	--	58.4	85.9
1905	84.6	40.8	11.3	--	72.0	55.8	80.8
1906	82.5	40.9	11.8	--	67.9	58.2	75.5
1907	81.1	36.8	12.5	--	62.3	60.5	81.8
1908	80.4	37.9	13.1	--	67.4	59.2	84.8
1909	79.1	37.2	13.8	22.2	69.4	57.0	99.0
1910	86.0	37.0	14.6	22.6	63.6	48.8	94.9

**Appendix Table 7.2**  
(continued)  
**PPP-Adjusted Real Wages, Great Britain in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1911	85.4	38.7	13.3	24.6	61.7	46.6	92.9
1912	87.8	35.0	12.2	19.9	60.8	64.2	91.9
1913	82.8	37.6	11.2	16.0	63.1	66.1	83.9
1914	80.2	43.3	10.2	21.0	64.6	42.0	78.8
1915	72.2	37.3	9.3	24.9	66.0	31.2	69.8
1916	67.4	34.6	8.5	30.6	60.4	39.9	60.9
1917	58.0	27.5	7.8	25.0	60.5	26.0	59.5
1918	49.7	21.8	7.2	24.4	49.7	23.5	56.3
1919	67.1	21.9	6.5	22.2	55.0	25.5	56.3
1920	69.8	19.9	6.0	23.9	49.8	25.2	70.0
1921	86.6	29.5	6.3	32.0	61.5	32.6	85.1
1922	99.4	28.8	6.6	30.5	84.2	44.2	91.7
1923	101.8	24.6	6.9	33.3	87.4	47.9	94.7
1924	100.3	25.0	7.2	35.7	87.8	50.3	96.1
1925	105.7	24.2	7.5	36.6	79.7	42.9	95.8
1926	107.0	31.2	7.9	30.7	83.6	44.2	95.8
1927	112.6	32.4	6.9	42.5	85.2	53.2	101.5
1928	119.3	31.3	6.1	48.4	91.0	61.7	102.1
1929	118.6	32.5	5.3	44.2	89.5	54.3	104.1
1930	108.0	37.8	4.7	56.6	101.4	47.0	107.9
1931	115.7	37.1	4.1	61.2	114.1	57.8	110.7
1932	123.3	36.5	4.7	77.4	79.2	78.2	113.0
1933	113.9	35.8	5.4	61.9	72.3	74.0	116.7
1934	117.6	35.2	6.2	43.5	78.1	74.9	115.2
1935	119.8	34.5	7.0	49.1	77.4	72.0	107.3
1936	112.7	33.9	--	46.8	83.0	67.2	110.5
1937	113.9	33.3	--	50.2	86.1	44.7	106.4
1938	113.6	--	--	47.5	86.9	41.7	105.8
1939	115.5	--	--	48.5	92.5	40.2	102.6
1940	116.6	--	--	51.4	--	40.1	100.1



Appendix Table 7.3

PPP-Adjusted Real Wages, United States in 1913=100

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1830	--	9.3	--	--	--	--	--
1831	--	9.1	--	--	--	--	--
1832	--	12.1	--	--	--	--	--
1833	--	5.4	--	--	--	--	--
1834	--	5.4	--	--	--	--	--
1835	--	8.1	--	--	--	--	--
1836	--	8.3	--	--	--	--	--
1837	--	7.6	--	--	--	--	--
1838	--	6.6	--	--	--	--	--
1839	--	7.1	--	--	--	--	--
1840	--	5.6	--	--	--	--	--
1841	--	6.0	--	--	--	--	--
1842	--	9.1	--	--	--	--	--
1843	--	8.9	--	--	--	--	--
1844	--	9.4	--	--	--	--	--
1845	--	7.6	--	--	--	--	--
1846	--	7.0	--	--	--	--	--
1847	--	7.9	--	--	--	--	--
1848	--	7.7	--	--	--	--	--
1849	--	9.2	--	--	--	--	--
1850	--	10.5	--	--	--	--	--
1851	--	9.2	--	--	--	--	--
1852	--	10.0	--	--	--	--	--
1853	--	11.6	--	--	--	--	--
1854	--	8.9	--	--	--	--	--
1855	--	8.8	2.3	--	--	--	--
1856	--	9.2	2.0	--	--	--	--
1857	--	9.2	3.1	--	--	--	--
1858	--	10.4	2.6	--	--	--	--
1859	--	10.6	2.9	--	--	--	--
1860	--	12.1	3.6	--	--	--	--
1861	--	12.1	3.9	--	--	--	--
1862	--	11.9	5.2	--	--	--	--
1863	--	11.1	5.0	12.4	--	--	--
1864	22.0	10.4	6.0	12.3	--	--	--
1865	23.6	10.8	5.8	9.6	--	--	--
1866	27.6	10.9	5.6	9.5	--	--	--
1867	26.8	12.0	4.0	9.4	--	--	--
1868	26.8	11.2	4.4	9.2	--	--	--
1869	29.3	9.6	4.2	9.0	--	--	--
1870	32.0	9.8	4.1	8.9	--	--	50.6

**Appendix Table 7.3**  
(continued)  
**PPP-Adjusted Real Wages, United States in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1871	30.6	11.8	4.0	8.9	--	--	57.9
1872	26.7	11.5	4.1	8.6	--	--	57.0
1873	26.7	12.6	4.2	6.6	--	--	50.6
1874	30.5	11.9	4.3	5.6	--	--	46.5
1875	31.0	14.6	4.2	5.7	--	--	45.3
1876	30.2	14.4	4.1	5.8	--	--	45.6
1877	25.3	13.9	4.1	6.6	--	30.4	43.8
1878	23.0	13.2	4.0	7.1	--	30.2	43.4
1879	21.3	14.7	3.9	7.7	--	29.9	40.4
1880	24.1	15.2	3.9	8.3	--	29.9	40.6
1881	30.4	14.5	3.8	8.2	--	29.8	43.9
1882	35.1	16.5	3.7	5.4	--	29.6	44.0
1883	39.2	15.5	3.7	7.8	--	29.4	41.7
1884	37.1	17.2	3.6	9.2	--	29.2	41.5
1885	29.4	17.5	3.6	11.6	--	29.0	49.9
1886	37.3	17.9	3.5	10.4	--	28.8	52.7
1887	41.6	19.0	3.4	10.1	--	27.9	56.0
1888	49.0	19.1	3.4	12.6	--	26.1	54.9
1889	42.8	17.2	3.3	10.9	--	26.4	33.4
1890	30.4	17.2	3.3	12.2	--	28.4	49.7
1891	42.8	16.6	3.2	12.7	--	32.6	54.9
1892	47.5	15.4	3.2	13.5	--	31.1	60.2
1893	52.2	14.3	3.1	12.4	--	31.5	70.0
1894	44.8	14.5	3.1	11.3	--	31.2	67.0
1895	41.3	18.4	3.0	11.7	--	32.4	57.0
1896	38.6	15.6	3.0	13.4	--	32.5	48.4
1897	41.3	15.9	3.4	14.6	--	32.7	55.3
1898	53.6	13.7	3.9	16.3	--	33.9	40.1
1899	59.4	15.8	4.4	16.3	--	32.9	42.2
1900	55.2	16.8	5.0	12.5	--	30.7	40.5
1901	52.1	19.7	5.3	0.0	--	34.4	38.1
1902	52.1	21.7	5.6	0.0	--	31.9	49.4
1903	52.6	22.2	5.9	0.0	--	30.6	45.8
1904	55.8	22.0	6.2	0.0	--	33.9	49.8
1905	49.1	23.7	6.5	0.0	41.8	32.4	46.9
1906	47.8	23.7	6.9	0.0	39.4	33.8	43.8
1907	47.0	21.3	7.2	0.0	36.2	35.1	47.4
1908	46.7	22.0	7.6	0.0	39.1	34.4	49.2
1909	45.9	21.6	8.0	12.9	40.2	33.0	57.4
1910	49.9	21.4	8.4	13.1	36.9	28.3	55.0

**Appendix Table 7.3**  
**(continued)**  
**PPP-Adjusted Real Wages, United States in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1911	49.5	22.5	7.7	14.3	35.8	27.0	53.9
1912	50.9	20.3	7.1	11.5	35.2	37.2	53.3
1913	48.0	21.8	6.5	9.3	36.6	38.3	48.6
1914	46.5	25.1	5.9	12.2	37.5	24.4	45.7
1915	41.8	21.6	5.4	14.4	38.3	18.1	40.5
1916	39.1	20.1	5.0	17.8	35.0	23.1	35.3
1917	33.6	16.0	4.5	14.5	35.1	15.1	34.5
1918	28.8	12.7	4.1	14.1	28.8	13.6	32.6
1919	38.9	12.7	3.8	12.9	31.9	14.8	32.7
1920	40.5	11.5	3.5	13.9	28.9	14.6	40.6
1921	50.2	17.1	3.6	18.6	35.7	18.9	49.3
1922	57.6	16.7	3.8	17.7	48.8	25.6	53.2
1923	59.1	14.3	4.0	19.3	50.7	27.8	54.9
1924	58.2	14.5	4.2	20.7	50.9	29.2	55.7
1925	61.3	14.0	4.4	21.2	46.2	24.9	55.6
1926	62.1	18.1	4.6	17.8	48.5	25.6	55.6
1927	65.3	18.8	4.0	24.7	49.4	30.9	58.9
1928	69.2	18.2	3.5	28.1	52.8	35.8	59.2
1929	68.8	18.8	3.1	25.6	51.9	31.5	60.4
1930	62.6	21.9	2.7	32.8	58.8	27.2	62.6
1931	67.1	21.5	2.4	35.5	66.2	33.5	64.2
1932	71.5	21.1	2.7	44.9	45.9	45.4	65.5
1933	66.1	20.8	3.1	35.9	42.0	42.9	67.7
1934	68.2	20.4	3.6	25.2	45.3	43.4	66.8
1935	69.4	20.0	4.1	28.5	44.9	41.8	62.2
1936	65.4	19.7	--	27.1	48.1	39.0	64.1
1937	66.1	19.3	--	29.1	49.9	25.9	61.7
1938	65.9	--	--	27.5	50.4	24.2	61.3
1939	67.0	--	--	28.1	53.6	23.3	59.5
1940	67.6	--	--	29.8	--	23.3	58.0

Appendix Table 7.4

PPP-Adjusted Real Wages, Emigrating Mediterranean Countries in 1913=100

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1830	--	34.0	--	--	--	--	--
1831	--	33.4	--	--	--	--	--
1832	--	44.5	--	--	--	--	--
1833	--	19.8	--	--	--	--	--
1834	--	19.8	--	--	--	--	--
1835	--	29.7	--	--	--	--	--
1836	--	30.3	--	--	--	--	--
1837	--	27.8	--	--	--	--	--
1838	--	24.1	--	--	--	--	--
1839	--	25.9	--	--	--	--	--
1840	--	20.6	--	--	--	--	--
1841	--	22.2	--	--	--	--	--
1842	--	33.3	--	--	--	--	--
1843	--	32.8	--	--	--	--	--
1844	--	34.3	--	--	--	--	--
1845	--	27.9	--	--	--	--	--
1846	--	25.7	--	--	--	--	--
1847	--	29.1	--	--	--	--	--
1848	--	28.4	--	--	--	--	--
1849	--	33.7	--	--	--	--	--
1850	--	38.3	--	--	--	--	--
1851	--	33.9	--	--	--	--	--
1852	--	36.7	--	--	--	--	--
1853	--	42.6	--	--	--	--	--
1854	--	32.5	--	--	--	--	--
1855	--	32.4	8.3	--	--	--	--
1856	--	33.8	7.4	--	--	--	--
1857	--	33.7	11.5	--	--	--	--
1858	--	38.2	9.5	--	--	--	--
1859	--	38.8	10.8	--	--	--	--
1860	--	44.5	13.1	--	--	--	--
1861	--	44.5	14.3	--	--	--	--
1862	--	43.5	19.0	--	--	--	--
1863	--	40.7	18.4	45.6	--	--	--
1864	80.6	38.1	22.2	45.1	--	--	--
1865	86.5	39.5	21.4	35.4	--	--	--
1866	101.3	40.0	20.4	35.0	--	--	--
1867	98.4	44.0	14.6	34.4	--	--	--
1868	98.4	41.2	16.1	33.8	--	--	--
1869	107.5	35.2	15.5	33.2	--	--	--
1870	117.5	35.8	15.1	32.6	--	--	185.8

**Appendix Table 7.4**  
(continued)  
**PPP-Adjusted Real Wages, Emigrating Mediterranean Countries in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1871	112.3	43.1	14.6	32.6	--	--	212.7
1872	97.8	42.3	15.0	31.7	--	--	209.2
1873	97.8	46.3	15.3	24.4	--	--	185.6
1874	112.0	43.7	15.6	20.4	--	--	170.5
1875	113.7	53.5	15.4	20.9	--	--	166.2
1876	111.0	53.0	15.1	21.3	--	--	167.5
1877	92.7	51.1	14.9	24.2	--	111.6	160.9
1878	84.4	48.5	14.6	26.0	--	110.7	159.2
1879	78.2	53.8	14.4	28.2	--	109.9	148.4
1880	88.5	55.6	14.2	30.6	--	109.6	149.0
1881	111.5	53.3	13.9	29.9	--	109.3	161.2
1882	128.7	60.6	13.7	19.8	--	108.5	161.5
1883	143.9	56.9	13.5	28.7	--	107.8	153.2
1884	136.0	63.0	13.3	33.9	--	107.0	152.4
1885	107.9	64.3	13.1	42.7	--	106.3	183.2
1886	136.8	65.6	12.8	38.0	--	105.6	193.5
1887	152.7	69.8	12.6	37.2	--	102.4	205.5
1888	179.8	70.0	12.4	46.1	--	95.9	201.4
1889	157.0	63.0	12.2	39.9	--	97.0	122.8
1890	111.5	63.0	12.0	44.9	--	104.1	182.3
1891	157.0	60.8	11.8	46.4	--	119.7	201.5
1892	174.3	56.4	11.6	49.5	--	114.2	221.0
1893	191.5	52.6	11.4	45.6	--	115.6	256.8
1894	164.4	53.3	11.3	41.4	--	114.5	245.8
1895	151.5	67.5	11.1	42.8	--	119.0	209.1
1896	141.7	57.1	10.9	49.1	--	119.5	177.8
1897	151.5	58.3	12.4	53.5	--	120.0	202.9
1898	196.7	50.3	14.2	59.8	--	124.3	147.2
1899	217.9	57.8	16.2	59.6	--	120.6	154.9
1900	202.6	61.8	18.5	45.8	--	112.8	148.6
1901	191.2	72.4	19.5	0.0	--	126.2	139.8
1902	191.2	79.7	20.5	0.0	--	116.9	181.5
1903	193.0	81.6	21.6	0.0	--	112.3	168.0
1904	204.6	80.5	22.7	0.0	--	124.4	182.9
1905	180.1	86.8	23.9	0.0	153.3	118.8	172.0
1906	175.6	87.0	25.2	0.0	144.5	123.9	160.7
1907	172.6	78.3	26.6	0.0	132.7	128.8	174.1
1908	171.2	80.5	28.0	0.0	143.4	126.1	180.5
1909	168.4	79.2	29.4	47.2	147.7	121.2	210.7
1910	183.1	78.6	31.0	48.0	135.5	103.9	202.0

**Appendix Table 7.4**  
(continued)  
**PPP-Adjusted Real Wages, Emigrating Mediterranean Countries in 1913=100**

Year	Argentina	Brazil, Southeast	Brazil, Northeast	Colombia	Cuba	Mexico	Uruguay
1911	181.8	82.4	28.4	52.3	131.4	99.1	197.7
1912	186.8	74.4	26.0	42.3	129.3	136.7	195.6
1913	176.3	79.9	23.7	34.1	134.3	140.8	178.5
1914	170.7	92.2	21.7	44.8	137.6	89.5	167.7
1915	153.6	79.3	19.9	53.0	140.5	66.4	148.6
1916	143.5	73.6	18.2	65.2	128.5	84.9	129.6
1917	123.4	58.6	16.6	53.3	128.7	55.4	126.6
1918	105.8	46.5	15.2	51.9	105.9	50.1	119.8
1919	142.9	46.6	13.9	47.3	117.0	54.4	119.9
1920	148.7	42.2	12.7	50.9	106.1	53.7	149.0
1921	184.3	62.9	13.3	68.1	131.0	69.4	181.1
1922	211.5	61.3	14.0	64.9	179.2	94.1	195.1
1923	216.8	52.3	14.6	70.9	186.0	102.0	201.5
1924	213.5	53.2	15.3	76.0	186.8	107.1	204.5
1925	225.0	51.4	16.0	77.9	169.6	91.3	203.9
1926	227.8	66.3	16.7	65.3	178.0	94.0	203.9
1927	239.8	69.0	14.7	90.5	181.4	113.3	216.1
1928	253.8	66.6	12.9	103.0	193.7	131.4	217.4
1929	252.5	69.1	11.3	94.1	190.6	115.5	221.6
1930	229.9	80.5	10.0	120.4	215.8	100.0	229.7
1931	246.3	79.0	8.7	130.2	242.9	123.0	235.6
1932	262.5	77.6	10.0	164.7	168.6	166.4	240.5
1933	242.4	76.2	11.5	131.7	154.0	157.5	248.3
1934	250.2	74.8	13.1	92.6	166.3	159.4	245.3
1935	254.9	73.4	15.0	104.5	164.7	153.3	228.3
1936	239.9	72.1	--	99.5	176.6	143.0	235.1
1937	242.5	70.8	--	106.8	183.2	95.2	226.5
1938	241.8	--	--	101.1	185.1	88.8	225.1
1939	245.9	--	--	103.2	196.9	85.6	218.5
1940	248.3	--	--	109.4	--	85.4	213.0