

## Online Appendix

“Global Cycles: Capital Flows, Commodities, and Sovereign Defaults, 1815-2015”  
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Forthcoming in the *American Economic Review Papers & Proceedings*

### 1. Sovereign bond issuances and capital flows from the US and the UK, 1815-2015

The data underlying the aggregate capital flow cycles in this paper are taken from Reinhart et al. (2016) and stem from a variety of sources. These can be listed alphabetically:

- Branco, Amelia, Valerio, Nuno, and Rita Martins de Sousa. 2012. “Echoes from the Past: Portuguese Stabilizations of the 1890s and 1920s.” Gabinete de História Económica e Social: Working paper no. 47.
- Caiola, Marcello. 1962. “Balance of Payments of the USSR, 1955-58.” *Staff Papers-International Monetary Fund* 9(1), pp 1-36.
- Central Bank of the Republic of China (Taiwan), Statistics and Publications.
- Clarke, Hyde. 1878. “Sovereign and Quasi Sovereign States: Their Debts to Foreign Countries.” *Journal of the Statistical Society*, June 1878.
- Corporation of Foreign Bondholders. Annual Reports, various years.
- Fenn's Compendium, various years.
- Flandreau, Marc and Frederic Zumer. 2004. “The Making of Global Finance, 1880–1913.” Paris: OECD.
- Fortune's Epitome of the Stock and Public Funds, various years.
- Klovland, Jan T., and Jan F. Qvigstad. 2004. “Historical Monetary Statistics for Norway 1819-2003.” *Norges bank* 35, pp. 241-288.
- International Monetary Fund. 2015. *World Economic Outlook: Adjusting to Lower Commodity Prices*. Washington, DC.
- International Monetary Fund. International Financial Statistics.
- International Monetary Fund. 1984. International Financial Statistics: Supplement on Balance of Payments, No.7.
- Jones, Matthew T. and Maurice Obstfeld. 1997. “Saving, Investment, and Gold: A Reassessment of Historical Current Account Data.” NBER Working Paper 6103.
- Lane, Philip R., and Gian Maria Milesi-Ferretti. 2007. “The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004.” *Journal of International Economics* 73(2), pp. 223-250.
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- Mitchell, Brian R. 2000. *International Historical Statistics: North America, South America, Europe, and Africa and Oceania*.
- Oechsler, Ronald and Leyla Woods. 1986. "Statistical Abstract of East-West Trade and Finance." US Department of Commerce: International Trade Administration.
- Prados de las Escosura, Leandro. 2009. "Spain's International Position, 1850-1913." Universidad Carlos III de Madrid Working Paper 09-09.
- Reinhart, Carmen M. and Kenneth S. Rogoff. 2004. "The Modern History of Exchange Rate Arrangements: A Reinterpretation." *The Quarterly Journal of Economics* 119(1), pp. 1-48.
- Reinhart, Carmen M. and Kenneth S. Rogoff. 2009. *This time is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press.
- Suter, Christian. 1990. *Debt Cycles in the World-Economy: Foreign Loans, financial Crises, and Debt Settlements, 1820-1990*. Westview Press Inc.
- Statemen's Yearbooks, various issues.
- Stone, Irving. 1999. *The Global Export of Capital from Great Britain, 1865-1914: A Statistical Survey*, New York: St. Martin's Press.
- United Nations. 1946. "International Capital Movement during the Inter-War Period." Department of Economic Affairs, United Nations Publications: No. 1949.II.D.2.
- United States. Central Intelligence Agency. 1966. "Communist China's Balance of Payments, 1950-1965." Directorate of Intelligence Agency 66(17).
- United States Federal Reserve Bulletin, various issues.
- World Bank. World Development Indicators.
- World Bank. Global Development Finance.

## 2. Sovereign defaults

The data on sovereign defaults in Figure 3 and Table 2 comes from the most recent vintage of the dataset compiled by Reinhart and Rogoff (2009). Only sovereign defaults to private external creditors are included. The data does not consider sovereign defaults and arrears to official creditors (e.g. other governments or the IMF). See Reinhart and Trebesch (2014, 2015) for data updates and default data on official creditors.

- Reinhart, Carmen M. and Kenneth S. Rogoff. 2009. *This time is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press.
- Reinhart, Carmen M. and Christoph Trebesch. 2016. Sovereign Debt Relief and its Aftermath. Forthcoming in the *Journal of the European Economic Association*.
- Reinhart, Carmen M. and Christoph Trebesch. 2016. The International Monetary Fund: 70 Years of Reinvention. Forthcoming in the *Journal of Economic Perspectives*.

### 3. Commodity prices and commodity price cycles

The dating of commodity cycles is summarized in Table A1 below. The underlying data on commodity prices come from three main sources:

- For the years 1790-1850: Gayer, Arthur D., W. W. Rostow, and Anna J. Schwartz. 1953. *The Growth and Fluctuation of the British Economy, 1790–1850*, Clarendon Press.
- For the years 1854-1979: Boughton, James. 1991. “Commodity and Manufactures Prices in the Long Run.” IMF WP No. 91/47.
- For the years 1980-2015: IMF Index of Primary Commodity Prices. <http://www.imf.org/external/np/res/commod/index.aspx>

Table A1. Global Cycles in Non-oil Real Commodity Prices: 1790-2015

<b>Global Booms:</b> Increases in Real Commodity Prices						<b>Global Busts:</b> Declines in Real Commodity Prices				
Episode	Trough	Peak	Duration	Change (percent)	Boom criteria	Peak	Trough	Duration	Change (percent)	Bust criteria
1	1792	1801	9	76.7	yes	1801	1802	1	-21.5	yes
2	1802	1809	7	26.8	yes	1809	1811	2	-6.2	
3	1811	1813	2	16.2	yes	1813	1816	3	-29.8	yes
4	1816	1818	2	16.9	yes	1818	1822	4	-36.6	yes
5	1822	1825	3	28.6	yes	1825	1835	10	-25.2	yes
6	1835	1839	4	23.4	yes	1839	1843	4	-23.6	yes
7	1843	1847	4	21.5	yes	1847	1850	3	-24.1	yes
8	1854	1857	3	7.2		1857	1866	9	-19.8	yes
9	1866	1868	2	9.5		1868	1871	3	-8.3	
10	1871	1877	6	13.4		1877	1880	3	-10.3	
11	1880	1881	1	7.5		1881	1896	15	-15.5	yes
12	1896	1902	6	4.7		1902	1908	6	-4.4	
13	1920	1925	5	56.3	yes	1910	1920	10	-39.3	yes
14	1908	1910	2	9.4		1925	1932	7	-36.4	yes
15	1932	1937	5	34.3	yes	1937	1938	1	-17.3	yes
16	1938	1951	13	68.8	yes	1951	1961	10	-27.6	yes
17	1961	1966	5	8.9		1966	1972	6	-13.1	
18	1972	1973	1	38.9	yes	1973	1975	2	-26.0	yes
19	1975	1977	2	9.9		1977	1986	9	-31.5	yes
20	1986	1988	2	14.3		1988	1992	4	-23.1	yes
21	1992	1997	5	15.7	yes	1997	1999	2	-16.7	yes
22	1999	2011	12	88.7	yes	2011	2015	4	-25.1	yes
Average, all			5	27.2		Average, all		5	-21.9	
Average boom			6	39.1		Average busts		6	-25.8	

Sources: Gayer, Rostow, Schwartz (1790-1850); Boughton (1854-1979); IMF (1980-2015) and author's calculations.

Notes: The downturn in prices since the 2011 peak is still ongoing. A peak-to-trough price (trough-to-peak) decline (increase) greater than or equal to 15% is classified as a bust (boom). Export prices of manufactures (in US dollars) is used to deflate commodity prices.