

Data Appendix

In this appendix we describe the sources of the data used in the analysis. We first describe the data on the dependent variable and follow with the covariates, grouped according to the six blocks of variables used in the factor analysis.

Independent variable

Capital flows to the corporate sector were reconstituted by joining the databases of British capital exports of Stone (1999), French capital flows of Esteves (2011) and German capital flows of Esteves (2007a). All these databases contain information on *gross* capital exports constructed for the greater part by aggregating the statistics on the issue of individual foreign securities in the three countries considered. These statistics of flotations were then completed with information on direct acquisitions of assets abroad not intermediated by the stock markets in the UK, France, and Germany. The interested reader can check details in the references listed above. Although certainly not full-proof, we find this direct method of reconstituting capital flows more accurate than the indirect estimation as the residual from bilateral current accounts (Tiberi 2005). Trade flows are the best known component of pre-1914 current accounts, but exhibit significant inconsistencies and measurement errors. Furthermore, other current account components are very imperfectly known or not at all –depending on the country. In particular, net factor income and cash transfers (e.g. emigrant remittances) can only be approximated for a very small number of countries (Esteves and Khoudour-Castéras 2011). The majority of these securities were issued in gold currencies (namely those of the exporting nations) and we converted all money values to a common unit of account (pounds sterling) by using the sources on market exchange rates listed below. We then deflated them by the recipient nations' price indices (see below) to account for possible local distortions to the relative prices of capital goods (Taylor 1998).

Dependent variables for factor analysis (Table 2)

Terms of Trade: net barter terms of trade were taken from Blattman, Hwang and Williamson (2007). The authors collected the prices of traded goods in the consumption markets (typically Europe), making this an exogenous measure of price shocks to the exporting nations.

External Trade: the values for exports and imports expressed in local currency units were mainly obtained from Mitchell (1998a, 1998b, 1998c) with the following exceptions. Brazil from Motta et al. (1990); Chile from Wagner et al. (2000); Mexico from INEGI (2009) and El Colegio de Mexico

(1960); Turkey from Pamuk (1995); Portugal from Valério (2001) and Spain from Carreras and Tafunel (2005). These values were then converted into sterling.

Tariffs: total value of government revenue from import duties divided by the total value of imports from Clemens and Williamson (2004).

Debt service and government revenue: total cost of service (as far as possible excluding repayment instalments) of domestic and foreign debt and total government revenue, in local currency units, were obtained from Accominotti et al. (2011) for the period 1880-1913. For countries not covered in this database, information was gathered from the following sources. Colombia and Peru from Ferguson and Schularick (2006); Chile from Wagner et al. (2000) and the *Sinópsis Estadística* (1918); Colombia from Mitchell (1998c) and Kalmanovitz (2010); Japan from Japanese Statistical Association (1987); Mexico from El Colegio de Mexico (1960), Wilkie (1967) and Mitchell (1998c); Turkey from Pamuk (1987) and Güran (2003); Peru from Mitchell (1998c) and Tantaléan Arbulú (1983); Philippines from Mitchell (1998a); Serbia from Mitchell (1998b) and Gnjatović (2009); Siam from Mitchell (1998a) and Uruguay from Millot and Bertino (1996, 2005) and the Uruguayan Statistical Yearbooks.

Price levels: were proxied by GDP deflators for all countries where they were available, or by the CPI if not and were all rebased to 1913=100. Apart from Mitchell (1998a, 1998b, 1998c) and Accominotti et al. (2011) we used the following sources. Colombia, Mexico and Uruguay from Williamson (1999); India, Japan and Siam from Williamson (2000a); Egypt and Serbia from Williamson (2000b); Chile from Díaz et al. (2010); Greece from Kostelenos et al. (2007); Turkey from Pamuk (2001); Peru from Quiroz (1993) and Portugal from Valério (2001).

Gold standard membership was established from Accominotti et al. (2011) and Meissner (2005).

Long-run economic fundamentals were obtained from Clemens and Williamson (2004) and Esteves (2007a). These include:

Size of **arable land** (in sq miles) and **population** (in thousands).

Effective distance from Europe is given by the product of the distance of actual navigation routes between the main ports of each nation and London (established from Philip 1914) and the index of tramp freight prices calculated by Isserlis (1938).

Net migration is a discrete index ranging from -3 (large emigration) +3 (large immigration) coded by Clemens and Williamson (2004).

Schooling level is defined as the percentage of population under 14 enrolled in primary education.

Urbanisation rate corresponds to the percentage of population living in cities with 100,000 and more inhabitants and

Share of primary products as a percentage of total exports.

The global cost of capital was proxied by one long-term and one short-term interest rate in the UK. The **yields on British consols** were obtained from Accominotti et al. (2011) and Homer and Sylla (2005). For the proxy of short-term rates we used the **3 months banks' bills** traded in London and reported in Mitchell (1962).

The four measures of **political stability** include instances of extrastate and internal wars as well as two levels of interstate conflict –wars and disputes– and were coded by the Correlates of War project at <http://www.correlatesofwar.org>.

Other dependent variables

Nominal exchange rates are measured in local currency units per pound sterling, whilst **real exchange rates** were calculated from the product of nominal rates by the ratio of price levels in Britain and each country (normalized to 1913=100). The majority of data on nominal rates comes from the compilation by Schneider et al. (1911) or Accominotti et al. (2011) with the following exceptions. Argentina from Cortes Conde (1989); Australia and Canada from the Global Financial Database at www.globalfinancialdata.com; Brazil from Motta et al. (1990); Colombia from Ocampo (1984) and the OxLAD database at <http://oxlad.geh.ox.ac.uk/>; Egypt (partially) and Siam from the Global Financial Database; Japan from Japanese Statistical Association (1987); Mexico from INEGI (2009); Norway from Eitrheim et al. (2004); Portugal from Esteves (2002); Serbia from data kindly shared by Dr Milan Sojic; Sweden from the project 'Historical Monetary Statistics of Sweden 1668-2008,' available at <http://www.riksbank.se/templates/Page.aspx?id=27394> and the US from Sutch and Carter (2006).

Sovereign spreads equal the difference between the secondary market yields of each nation's sovereign benchmarks and the British consol yields (in basis points). The information comes from four sources: Accominotti et al. (2011), Ferguson and Schularick (2006), Esteves (2007b) and Clemens and Williamson (2004).

Banking crises are dated from Reinhart and Rogoff (2009) and for **currency crises** we used the same source and Bordo and Meissner (2007).

Sovereign defaults were coded from Esteves (2007b) and Suter (1990).

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