

Learning from the first globalisation (1870-1914)

- The current globalization, which began in the 1970s, is not unprecedented: between 1870 and 1914, the opening of national economies went hand in hand with a rapid expansion of trade and investment beyond national borders. The period also saw financial crises comparable to those of the late twentieth and early twenty-first centuries.
- As for goods markets, the first globalization was characterized by a growth in trade (see chart), despite the adoption of protectionist measures in most advanced economies. Lessons have since been drawn from the lack of reciprocity and trade-policy coordination in the late nineteenth century, which had prematurely exposed certain developing economies to international trade. The establishment of international organizations now guarantees a gradual opening and closer trade-policy coordination for countries in different stages of development.
- As for capital markets, the first globalization saw the growing financial integration of the advanced economies. This process was promoted by the exchange-rate stability made possible by the gold standard. Capital-flow recipients in both globalizations display common characteristics: investment goes to countries offering abundant natural resources, a skilled labour force, moderate transportation costs, and an institutional framework conducive to debt collection. In the first globalization, international capital flows were facilitated by the reduction in the exchange-rate risk and transaction costs due to the gold standard.
- In the first globalization, the internationalization of financial markets and-to a lesser extent-the integration of the world's banking sector were accompanied by financial crises similar to those of today. This precedent underscores the advantages of having emerging-country debt denominated in local currencies and of current-account rebalancing: it reduces the vulnerability of national economies to sudden stops in capital flows.
- Between 1870 and 1914, the opening of developed and less advanced economies was associated with swift growth in trade, investment, and financing beyond national borders. This period, described as the first globalization, displays similarities with the second globalization, which began in the 1970s. There are lessons to be drawn from the first globalization regarding trade policies and economic-policy measures capable of reducing vulnerability to financial crises.

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry for the Economy, Finance and Industry.



Source: A. Maddison (2003).

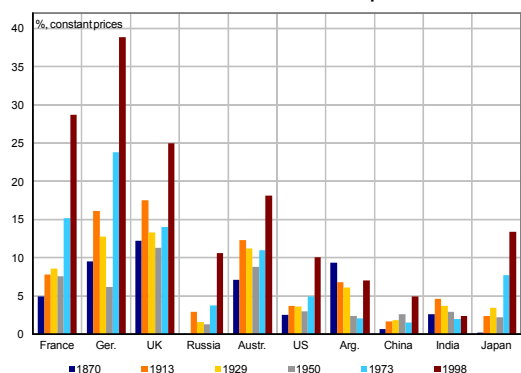
1. Although large trade flows are a common feature of both globalizations, the differences in the nature and intensity of the flows make the trade integration of the second globalization without precedent

1.1 Both globalizations were triggered by the decline in transportation and communication costs, which facilitated trade integration

Both globalization waves were characterized by a growing integration of goods markets, which was helped along by declining transportation and communication costs.

The advent of railroads and steamships significantly reduced transportation costs in the second half of the nineteenth century. The real price of freight between the United States and Britain, for example, fell 40% from 1870 to 1913. Cheaper transportation stimulated international trade, which grew by an estimated annual average of 4% between 1870 and 1913—i.e., faster than the 2.5% increase in world output during the same period.¹ In Europe (see chart 1), the export share of total output (in real terms)² rose from 10% to 16% between 1870 and 1913; at world level, it rose from 4.6% to 8% during the period (see chart on front page). The pace of trade opening was most spectacular in Germany; Great Britain and France, which industrialized earlier, had largely completed their opening by 1860.

Chart 1: Export share of GDP (real)



Source: R. Findlay and K.H. O'Rourke (2001).

Lower transportation costs also helped to reduce price differentials between developed economies in certain sectors. Food commodity prices partly converged between United States and Britain. The price gap narrowed fivefold between 1870 and 1913, but was still running at 10.6% in 1913. The second globalization distinguished itself from the first by the acceleration in technological innovations, which helped to lower transaction costs.³

In both periods, trade growth also coincided with the rise of a new power—the United States in the late nineteenth century, China today. As the U.S. asserted its power in the early twentieth century, its trade surplus grew, while the European trade deficit steadily widened. In nominal terms, the excess of European imports over exports rose from 7%

in 1830 to 20% in 1910. The protectionist U.S. purchased few European manufactured goods, despite the growth in low-value-added U.S. exports (primary products). China's present trade profile—characterized by a small volume of manufactured imports from industrialized economies for final consumption—resembles that of the U.S. in the early twentieth century.

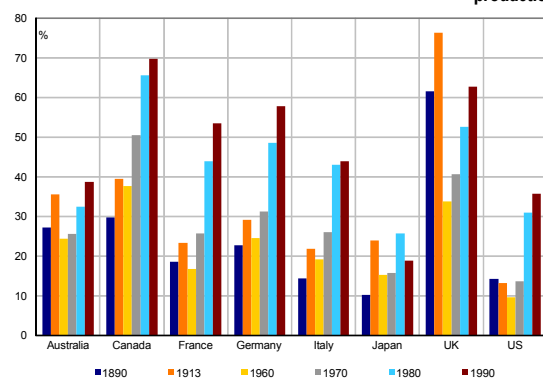
1.2 Trade integration during the second globalization is, however, unprecedented

The high trade intensity recorded in 1914 was only matched, and then surpassed, in the 1970s, after the inter-war decline. However, steep growth in the share of international trade in tradable sectors since the 1970s has pushed trade integration to unprecedented levels.

The export share of GDP increased only slightly in certain countries between the two globalizations. In India, for example, the trade share—expressed as the sum of imports and exports in GDP at constant prices—was lower in the late twentieth century than in the early twentieth century (see chart 1).

The relevance of a historical comparison based on the ratio of international trade to GDP is, however, limited in the long run, given the drastic change in GDP composition between the two globalizations. The service share of GDP grew in the twentieth century, at the expense of tradable goods. A more relevant comparison, therefore, concerns the share of international trade in tradable goods (primary and secondary goods) in total tradable-goods production (see chart 2). In the United States, for instance, the weak rise in the export share of total value added between the late nineteenth and late twentieth centuries (see charts 1 and 2) masks the robust growth in international trade as a share of the tradable sector over the period.⁴

Chart 2: International trade in tradable goods as share of tradable-goods production



Source: R.C. Feenstra (1998).

- (1) Maddison, A. (1989), *The World Economy in the Twentieth Century*, Paris, OECD.
- (2) Findlay, R. and O'Rourke, K.H. (2001), "Commodity Market Integration 1500-2000," *NBER Working Paper*, No. 8579, November.
- (3) Baldwin, R.E. and Martin, P. (1999), "Two Waves of Globalization: Superficial Similarities, Fundamental Differences," *NBER Working Paper*, No. 6904, January.
- (4) Bordo, M.D., Eichengreen, B., and Irwin, D.A. (1999), "Is Globalization Today Really Different than Globalization a Hundred Years Ago?," *NBER Working Paper*, No. 7195, June.

In sum, while the trade share of total tradable-goods output rose during the first globalization, the levels reached in the late twentieth century are unprecedented. The drivers are trade liberalization, lower transportation costs, and the increasing internationalization of production, combined with a rise in intra-industry trade.⁵

Differences in trade-flow composition and the growing weight of emerging economies in international trade also account for the stronger trade integration observed in the second globalization. Whereas trade between industrialized economies was the prevalent form of trade before 1914, the second globalization has been characterized by the expansion of trade between countries in different stages of development. The share of trade between industrialized economies in total world trade declined between the two globalizations, from 60% in 1913 to 41% in 2009.⁶

As most service trade now occurs between developed economies, the growing role of the emerging economies is more visible when we confine the analysis to manufactured goods: the developing economies' share of world exports of manufactured goods rose from 6% in 1914 to 40% in 2009. The types of goods traded have changed as well. Today, trade is more diversified. In 1914, primary goods accounted for the bulk of international trade (68% of total trade in 1890, 62.5% in 1913). By 2009, their share had fallen below one-third.

1.3 The first globalization was marked by the lack of reciprocity in trade policy, but the lessons of that shortcoming seem to have been drawn with the establishment of GATT (and, later, the WTO)

During the first globalization, the expansion of trade between developed economies paradoxically took place in a relatively protectionist setting. Although 1870-1914 is generally perceived as a laissez-faire period, the growth in world trade coincided with the implementation of strong tariff barriers designed to protect nascent national industries. After a free-trade spell between 1860 and 1879, the main European countries had turned protectionist by 1913, with the exception of Britain. The period 1879-92 witnessed a gradual return of protectionism in Europe. The

first step was the change in German customs policy in 1879, designed to protect nascent industries from international competition. In France, the free-trade era ended with the adoption of the Méline tariff in 1892. The United States did not conduct tariff disarmament during the period: the tariff enforced between 1866 and 1883 set customs duties of 25-60% on manufactured goods. Despite a trade-policy shift in October 1913 (Underwood tariff), U.S. tariffs remained among the world's highest on the eve of World War I.

The first globalization was also characterized by the lack of trade-policy reciprocity and coordination. In countries under colonial domination, home-country products were favoured over other goods⁷ (British "imperial preference" principle). European countries engaged in uncoordinated tariff revisions in the 1892-1914 period. While Britain practiced free trade, its manufactured products were denied free entry into the European markets. This lack of reciprocity fostered the emergence of "fair trade" campaigns in Britain for the adoption of retaliatory tariffs against countries imposing duties on British imports. Some lessons have been drawn from the premature exposure of certain developing economies to international trade in the first globalization. The exposure of developing economies manufacturing sectors to competition from more mature economies coincided with the collapse of manufacturing output in those countries.⁸ Home-country products enjoyed free access to colonial markets, whereas trade treaties between Britain and independent countries (Latin America, China, Thailand, Middle East) called for the elimination of customs duties or the capping of import duties in developing countries at modest levels-typically, 5% of the import value. The inflow of cheaper British and European products entailed the collapse of manufacturing output in the Ottoman Empire, India,⁹ and-to a lesser extent-China in the late nineteenth century. The establishment of international organizations now guarantees a gradual opening and better coordination of trade policies between countries in different stages of development. For instance, the WTO safeguard clause allows developing economies to apply high customs duties in order to protect their infant industries, while ensuring that such duties are not maintained for an undue length of time.

(5) "Intra-industry trade" denotes trade in similar but not necessarily homogeneous products, as prices and quality may differ. On the internationalization of production, see Feenstra, R.C. (1998), "Integration of Trade and Disintegration of Production in the Global Economy," *Journal of Economic Perspectives*, vol. 12, no. 4, pp. 31-50.

(6) Data for 2009 are from the World Trade Organization.

(7) The British dominions (Canada, Australia, and New Zealand) also implemented protectionist measures starting in the nineteenth century, but without challenging the imperial-preference principle. Canada raised customs duties between 1878 and 1887 but applied a preferential rate to British products. Australia introduced a new protectionist tariff in 1908 but maintained preferences for British imports.

(8) Bairoch, P. (1993), *Mythes et paradoxes de l'histoire économique*, Paris, La Découverte

(9) India, a net exporter of textile (cotton) to Europe in the eighteenth century, was importing two-thirds of its textile consumption by the late nineteenth century, chiefly from Britain. After the abolition of the East India Company's trade monopoly in 1813, which had banned textile imports to India, the Indian market was flooded with textile products manufactured more cheaply by the developed countries. This opening hastened the decline of the local textile industry.

2. Financial integration in the first globalization was significant, but confined to a small set of assets because of informational and technological barriers

2.1 During the first globalization, capital markets displayed strong integration, which appears to have weakened in the inter-war years

The first globalization also witnessed the growth of international financial flows. Can be estimated the size of capital flows in the 1870-1913 period by using absolute current-account values to proxy net capital flows.¹⁰ This method (see table 1) shows that capital flows were high during the period, then declined in many countries during the inter-war years. In the aggregate, international investment outpaced trade: between 1825 and 1913, world exports rose twentyfold (in nominal terms), while real gross stock of capital invested abroad increased fiftyfold.

Table 1: Capital flows (average absolute value of current-account balance as % of GDP)

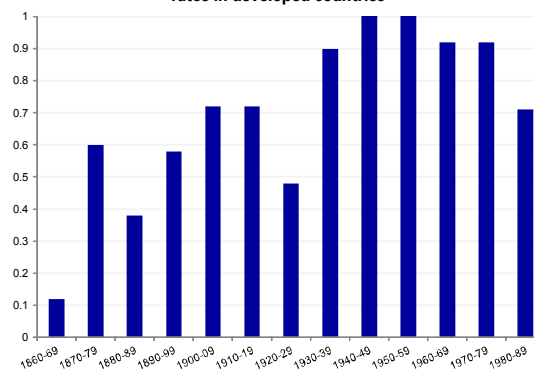
	UK	EU	Argentina	Australia	Canada	France	Germany	Italy	Japan
1870-1913	4.6	0.9	12.5	6.2	7.0	1.9	1.6	1.5	1.5
1919-1939	1.9	0.9	3.4	3.9	2.6	1.7	1.7	2.1	1.2

Source: A.M. Taylor (1996).

Box 1: Measuring financial-market integration

The weak correlation observed between national saving rates and investment rates in the 1860-1910 period shows the close integration of financial markets: Feldstein and Horioka (1980) argue that the correlation should be weak if international capital markets are well integrated, as domestic investment can be financed by inflows of foreign capital. The weak correlation between 1860 and 1890 seems consistent with the high capital mobility during that period, when investment flowed to European settlement colonies (such as Australia, Canada, and Argentina) and to the development of railroads in Europe.

Chart 3: Correlation between national saving rates and investment rates in developed countries



Source: Alan M. Taylor (1996), "International capital mobility in history: the saving-investment relationship," NBER Working Paper 5743.

How to read this chart: a weak correlation between national saving and national investment indicates easy access to capital markets, hence strong financial integration.

2.2 Capital flows in the two globalizations are very different in kind, owing to technological and informational changes

Unlike today, the first globalization was not characterized by the internationalization of production. In 1913, multinational firms accounted for 3-6% of global output. According to Bordo *et al.* (1999), overseas operations did not contribute significantly to U.S. corporate profits. Foreign direct investment (FDI) made up a mere 10-20% of investment abroad, which consisted mainly of portfolio investment. Today, the relative shares of FDI and portfolio investment are more evenly balanced.

In 1914, FDI was mainly aimed at facilitating access to raw materials rather than internationalizing production. The main FDI destinations were the raw-materials-rich United States and Russia: 55% of the global FDI stock went to the primary sector, 15% to manufacturing, and 10% to banking. True, the introduction of protectionist measures in Europe from 1879 on had triggered the relocation of production units to countries where customs barriers

While powerful, this financial integration was confined to the developed economies before 1914 (see box 1). European industrialized economies were the main source of finance, with Britain the leading investor. In 1913, 40% of the stock of capital invested abroad was of British origin, and 86% of European origin (Britain included). Between 1870 and 1913, overseas investment (proxied by the opposite of the current account, i.e., the capital account) averaged 5% of British GDP, peaking at 9% at the end of the period. The adoption of the gold standard made it possible to increase capital flows, and the London market played a key role in the functioning of the international financial system.

hampered market penetration.¹¹ One notable example was the Swiss textile industry, which shifted production to Italy after the adoption of protectionist tariffs there. However, these circumvention practices did not represent a full-fledged internationalization of the production process.

Technological obstacles and imperfect information restricted capital flows to the small set of assets least affected by information asymmetry. Investors concentrated on tangible assets (raw materials, railroads) and transparent assets (sovereign financing), and on bonds rather than stocks. Sovereign financing, railroads, and raw-materials industries attracted the bulk of investments: 40% of British portfolio investment (see chart 4) went to railroads, 30% to sovereign debt, and 10% to raw materials. At the time, technological and informational constraints limited short-term investment opportunities. The modest status of international financial institutions also restricted the scope for verifying information and enforcing contracts.¹² Today, these constraints have been lifted.

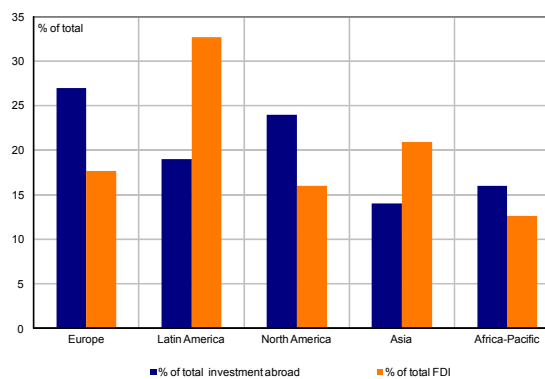
(10) Absent data on raw capital flows for the period, net capital flows are used as proxies. Net flows are proxied by the current-account balance. This approximation, commonly used in the literature on economic history, relies on the accounting identity whereby the current account, capital account, financial account, and "errors and omissions" sum to zero. This approach therefore assumes no accumulation of reserves.

(11) Bairoch, P., "Victoires et déboires", vol. 2, *Folio histoire series*, Éditions Gallimard, 1997.

2.3 Capital-flows recipients in the two globalizations display common characteristics: investors go where total factor productivity is high and the institutional framework is conducive to debt collection

Geographically, international investment in the late nineteenth century was highly concentrated. Most of it went to developed economies rich in natural resources offering a skilled labour force and low transportation costs.¹³ In the first globalization, capital flows facilitated industrialization and technology transfers toward European-settlement countries, and helped to establish the United States as a global power. One-quarter of the flows went to the U.S. (see chart 5), while most investment in Latin America (60%) was channelled to Argentina and Uruguay, the most developed economies.

Chart 5: Destinations of international investment in 1913

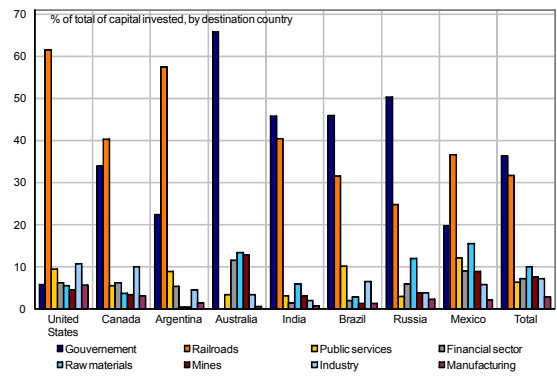


Source: P. Bairoch (1996).

China is currently an FDI recipient and a capital exporter seeking to ensure access to raw materials. Its current strategy resembles that of the United States in the early twentieth century. At the same time as it asserted itself on the world stage, the U.S. directed its FDI (see chart 6) to raw-materials-rich countries. In 1914, 40% of American FDI went to mining and oil, compared with a modest 20% each for services and manufacturing.

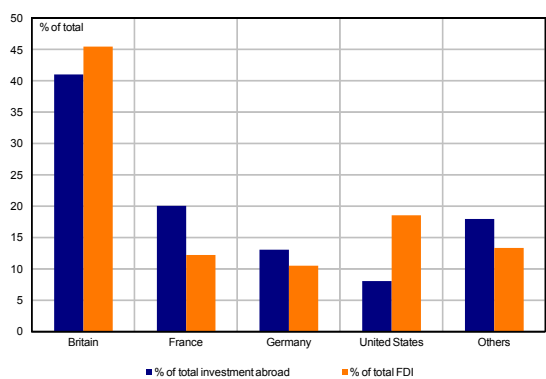
Capital flowed toward countries whose institutional framework was conducive to debt collection. Between 1865 and 1914, the main destinations of British FDI were the

Chart 4: Destinations of British international investment by sector (1885-1914)



Source: B. Eichengreen and M.D. Bordo (2002).

Chart 6: Main international investors in 1913



Source: P. Bairoch (1996).

United States (20.5%), Australia (8.3%), Canada (10%), and India (7.8%). This geographic concentration was due to Britain's cultural and legal proximity with its dominions and former colonies. The guarantee that property rights would be respected in the British Empire was thus conducive to debt collection. Likewise, the monetary stability of Canada and Australia—thanks to the gold standard—favoured investment. The establishment of good trade relations also facilitated financial integration. A country's good standing acquired through trade reassured investors about the sustainability of longer-term financial relations.¹⁴

- (12) Bordo, M. D., Eichengreen, B., and Kim, J. (1998), "Was there Really an Earlier Period of Financial Integration Comparable to Today?," *NBER Working Paper*, No. 6738, September.
- (13) To a certain extent, the "Lucas paradox" applies to the first globalization. Robert Lucas (1990), observing the lack of U.S. investment in labour-rich India, noted the absence of capital transfers from rich to capital-poor economies. This is despite the fact that economic theory suggests that capital, if it were perfectly mobile, should be invested in places where its marginal productivity is highest—i.e., in labour-rich but capital-poor economies. Lucas's finding applies, in part, to the first globalization. Before 1914, 75% of British international investment went to Canada, Australia, Argentina, and the U.S., where 10% of the world population lived; only one-quarter went to Asia and Africa, home to 58% and 7% of the world population respectively. Similarly, before 1914, Germany and France exported most of their capital to Europe, the U.S., Canada, Australia, and Argentina, and less than a third to Asia and Africa. The econometric study by Clemens and Williamson (2000) suggests that these investment choices were dictated by the quest for skilled labour, natural resources, and the opportunity to take advantage of low transportation costs. In other words, capital went to places where total factor productivity was potentially high. See Clemens, M.A., and Jeffrey, G.W. (2000), "Where did British Foreign Capital Go? Fundamentals, Failures and the Lucas Paradox, 1870-1913," *NBER Working Paper*, No. 8028, December.
- (14) Taylor, A.M., and Wilson, J.L.F. (2008), "International Trade and Finance under the Two Hegemons: Complementaries in the United Kingdom 1870-1913 and the United States 1920-30," *NBER Working Paper*, No. 12543, September.

3. The experience of the first globalization underscores the advantages of exchange-rate stability and current-account rebalancing in promoting financial integration and limiting vulnerability to crises

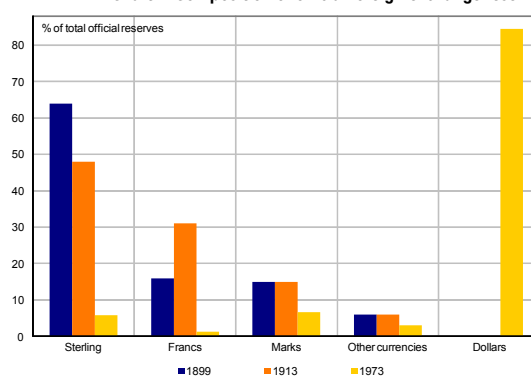
3.1 The exchange-rate stability provided by the gold standard fostered financial integration

Financial integration in the first globalization was promoted by the exchange-rate stability made possible by the gold standard. Exchange-rate stability curbed transaction costs and the exchange-rate risk. It offered security to lenders, who could collect their receivables in gold. Between 1853 and 1900, most developed economies abandoned bimetallism¹⁵ and the silver standard for the gold standard. Germany, Denmark, and Sweden adopted the latter in 1873, followed by the Latin Union (Belgium, France, Italy, Greece, and Switzerland) in 1878, Austria-Hungary in 1892, Russia in 1897, and the United States in 1900. The gold standard supplied a network externality: countries adopted it all the faster if they were trading with economies that had already embraced it.¹⁶ By switching to the gold standard, a country also signalled its commitment to stable fiscal and monetary policies, since the enforcement of the fixed parity with gold curbed money creation and the scope for monetizing the public debt. The subordination of other economic-policy goals to preserving stable exchange rates against gold—hence against sterling—guaranteed a credibility that facilitated the accumulation of sterling-denominated claims and access to international markets.

The financial integration of the developed economies can be illustrated by the increase in official currency reserves, facilitated by the growth in capital flows and international loans denominated in foreign currencies. Currency holdings by central banks are a relatively recent development, coinciding with the emergence of the international gold-standard system before 1914. P. Lindert estimates that the currency share of central-bank gold and currency reserves rose from 10% in 1880 to 20% in 1914 (see chart 7).¹⁷ This growth is due to the generalization of the gold standard, which, by allowing currencies to be converted to gold, fostered asset diversification into currencies, which had the advantage of yielding returns. For example, the foreign-exchange reserves of Japan, Russia, and India partly consisted of British sovereign bonds and deposits with London banks,¹⁸ easily convertible to gold thanks to the extreme liquidity of the sterling market. In nominal terms, foreign-exchange reserves grew fourfold

between 1900 and 1913, in step with the expansion of international trade and loans and the monetization of the economy. In 1913, sterling reserves accounted for one-half of total currency reserves, a figure that underscores the credibility of the sterling/gold peg and the key role of the London financial market.¹⁹ However, the proportion of sterling reserves in total foreign-exchange reserves declined between 1890 and 1913 with the rise of other financial markets, notably Paris and Berlin. By 1913, one-third of currency reserves were in francs, notably on account of the franc-denominated loans to Russia. No currency reserves were held in dollars. Before the establishment of the Fed in 1914, there was no centralized institution to ensure the liquidity of the dollar market.

Chart 7: Composition of official foreign-exchange reserves



In the sovereign-bond market, the credibility of the commitment to the gold standard gave access to the London market. Macroeconomic fundamentals such as public debt and inflation mattered less.²⁰ Membership in the British Empire was neither necessary nor sufficient for gaining entry to the London capital market before 1914. The countries that embraced the gold standard exhibited a lower country risk, reflected in moderate bond-yield spreads against Britain (see chart 8). By contrast, loans to countries with fluctuating monetary standards carried substantially higher interest rates.²¹ For example, uncertainties surrounding the U.S. bimetallic monetary system²² and fears of the dollar's non-convertibility to gold in the early 1880s led

(15) Before 1871, Portugal and the British Empire used the gold standard. The German States, Austria-Hungary, the Netherlands, and Scandinavian countries pegged their currencies to silver. France, Belgium, Switzerland, and Italy, which formed the Latin Union, had adopted a bimetallic monetary system, i.e., a joint gold/silver standard. The system was based on the Franc, defined as containing 4.5 grams of silver and 0.29 grams of gold. The Latin Union stabilized the ratio of the gold price to the silver price at around 15.5, allowing the joint use of gold and silver coins. The switch from bimetallism to a gold-only standard in the 1870s was precipitated by the German monetary reform of 1871-73. The adoption of the gold standard by Germany in 1871 and France's payment in gold of reparations consecutive to the Franco-Prussian War had promoted the depreciation of silver against gold.

(16) Meissner, C.M. (2002), "A New World Order: Explaining the Emergence of the Classical Gold Standard," *NBER Working Paper*, No. 9233, September.

(17) Lindert, P. (1969), "Key currencies and gold," *Princeton Studies in International Finance* No. 24, Princeton University.

(18) Eichengreen, B. (2008), "Globalizing capital: a history of the international monetary system," Princeton University Press.

(19) Between 1860 and 1914, 60% of world trade was denominated in sterling. See Eichengreen, B. (2005), "Sterling's Past, Dollar's Future: Historical Perspective on Reserve Currency Competition," *NBER Working Paper*, No. 11336, May.

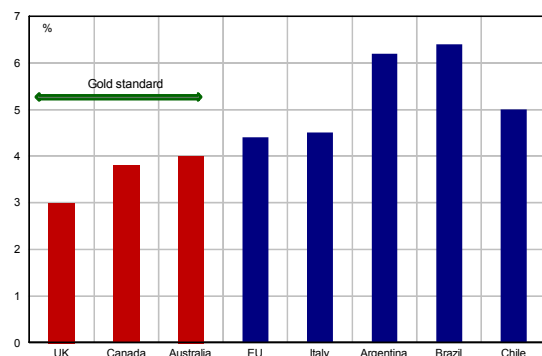
(20) Obstfeld, M. and Taylor, A.M. (2002), "Sovereign Risk, Credibility and the Gold Standard: 1870-1913 versus 1925-1931," *NBER Working Paper*, No. 9345, November.

(21) Bordo, M.D. and Rockoff, H. (1996), "The Gold Standard as a Good Housekeeping Seal of Approval," *NBER Working Paper*, No. 5340, November.

(22) Until the Gold Standard Act of 1900, the dollar was defined in both silver and gold. After 1861, the discovery of silver mines and a more efficient silver-extraction process depreciated silver and drastically modified the relative prices of the two metals. With silver depreciating, U.S. bimetallism created a "silver risk" for creditors.

British investors to move out of U.S. securities into colonial bonds, and drove up the premium on U.S. bonds and the dollar exchange rate. Borrowers had to pay a higher premium when their debt was denominated in national currencies. Unlike a fixed gold parity, a fluctuating monetary standard did not protect lenders from the depreciation risk. Accordingly, the average yield on dollar-denominated U.S. bonds stood at 4% versus 3% for gold-denominated U.S. paper.

Chart 8: Reconstructed yields on treasury bonds repaid in gold, 1870-1914



Source: M.D. Bordo and K. Rockoff (1996).

3.2 As today, a small current-account deficit, large reserves, and a modest volume of debt denominated in foreign currency reduced capital-recipient countries' vulnerability to financial crises

The "sudden stops" in capital inflows observed in recent decades recall similar episodes in the early 1890s (table 2).²³ In the 1880s, while Europe was mired in depression, the combination of low interest rates in Europe and prospects of high yields in the emerging economies had stimulated capital flows to the latter. The decline in the Bank of England's gold reserves-reflecting strong capital outflows-and the improvement in European economic conditions eventually led the Bank of England to lift its rates from 2.5% to 4% in the late 1880s. This move by the chief capital exporter, imitated by other European powers, had drastically shrunk capital flows to the emerging economies, making it hard for them to finance their current-account deficits. The drop in capital inflows required these economies to balance their external accounts. This could be achieved only through a contraction in domestic demand and/or a real exchange-rate depreciation.²⁴ During the first globalization, 40% of sudden stops in capital inflows triggered financial crises.²⁵

As today, the significant share of debt denominated in foreign currency (sterling) or gold in total debt-combined with large current-account deficits and heavy dependence on foreign capital-significantly raised the probability of experiencing "sudden stops" in capital inflows.

Table 2: Sudden stops

Argentina	1891, 1899	India	1902, 1910
Australia	1891	Italy	1888
Austria	1899	Japan	1891, 1899, 1901, 1908
Brazil	1906	N. Zealand	1883, 1887
Canada	1891, 1908	Norway	1902
Chile	1885, 1893, 1904	Portugal	1892
Finland	1901	Russia	1885, 1888, 1899
Greece	1883, 1886, 1892, 1900, 1906	Sweden	1886, 1911

Source: M.D. Bordo et al. (2007).

Conversely, a country's capacity to pay its debts was correlated with a low probability of experiencing a financial crisis.²⁶ A high ratio of gold reserves to money supply indicated the ability to maintain gold parity. This sent a positive signal to investors, fuelling their confidence in the debtor country's monetary system and moderating the risk of panic. Some players-such as Canada, Australia, and the Scandinavian countries-managed to avert crises thanks to the credibility of their monetary and financial systems. For example, in the late 1890s, Canada experienced a decline in capital flows far more modest than the one endured by Argentina, whose lax fiscal policy had led it to drop the gold standard in 1876 and 1885. The capacity to maintain gold parity, a stable banking system, and a moderate level thus plausibly explain the financial markets' enduring confidence in Canada.

The first globalization therefore provides historical perspective for the current period. In terms of similarities, both episodes were triggered by lower transportation and communication costs. Second, as in the late nineteenth century, capital is now flowing to countries offering a stable institutional and monetary framework, abundant natural resources, and a skilled labour force. China's present trade expansion shares certain features with America's trade growth before 1914. At that time, the U.S. asserted itself as a trade power thanks to export-driven growth, sustained by a large labour supply and technology transfers, while investing abroad to secure access to natural resources.²⁷ Today's crises also recall the financial crises of the first globalization: monetary stability, moderate current-account deficits, and the small share of debt denominated in foreign currency have all helped to limit the scope of crises in both globalizations.

(23) For more details on sudden stops, see Berthaud, F. and Colliac, S. (2010), "Which emerging countries have experienced a sudden stop of capital inflows during the recent crisis?," *Trésor-Economies* No. 76, Direction Générale du Trésor, July.

(24) Under the fixed exchange rates of the gold standard, depreciation could be achieved either by a devaluation or by abandoning gold parity, an option that accelerated real depreciation.

(25) Bordo, M.D., Cavallo, A.F., and Meissner, C.M. (2007), "Sudden Stops: Determinants and Output Effects in the First Era of Globalization, 1880-1913," *NBER Working Paper*, No. 13489, October.

(26) Trade opening, which allowed a rapid adjustment of current-account imbalances, was also a factor that diminished the likelihood of a financial crisis.

(27) One can draw parallels between the adjustments in external imbalances by countries on the gold standard before 1914 and the approach used by present-day China, whose currency is pegged to the dollar. According to the Cunliffe Committee (1919), when a country was running a current-account deficit-implying an outflow of currencies convertible to gold-before 1914, the monetary authorities were theoretically obliged to shrink the money supply by raising interest rates so to avoid a drawdown of gold reserves and maintain parity. This adjustment attracted external capital and curbed investment, income, and the general price level. Import demand was restrained while exports were stimulated, narrowing the current-account deficit. In practice, these "rules of the game" were violated. Adjustments were performed more often through sterilized exchange-rate interventions than via interest-rate variations. The reason is that monetary authorities pursued domestic-policy goals (maintaining stable production, price levels, and interest rates) rather than convertibility goals. China's current situation displays some similarities with the gold-standard system, as the country performs its adjustments through capital controls and the sterilization of capital inflows.

However, major differences²⁸ in the organization of production and the composition of trade flows make the intensity of today's globalization unprecedented. Although trade between industrialized economies during the first globalization was significant, intra-industry trade is a specific feature of the present globalization. Moreover, the role of multinational firms in the early twentieth century was limited; now, they are leading FDI players. There are differences in financial integration between the two globalizations. Bonds predominated in 1914, whereas the allocation between stocks and bonds is now more balanced, a characteristic that

could influence risk-sharing at international level.²⁹ The allocation between portfolio investment and FDI has also shifted. During the first globalization, portfolio investment prevailed. Today, the two are broadly equivalent. The first globalization was limited by informational and technological constraints, which restricted financial integration to the sectors least affected by information asymmetry, and minimized short-term investment opportunities.

Violaine FAUBERT

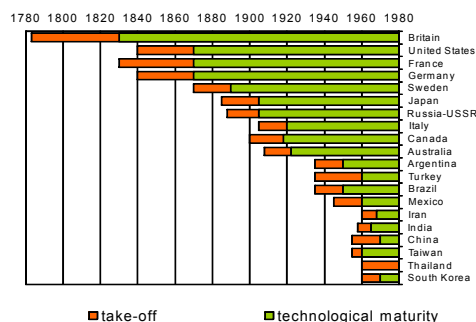
Annex: The world economy between 1870 and 1914

Table 3: Composition of international trade in 1913 (%)

	Share of world exports	Trade with developed countries	Manufactured-goods share of total exports	Manufactured-goods exports to industrialized countries as share of total manufactured exports	Share of world GDP in 1913	Share of world population in 1913
Britain	22.8	37.9	76.6	31.8	8.2	2.6
France	12.1	68.2	57.9	63.8	5.3	2.3
Germany	21.4	53.4	71.7	53.5	9.7	3.6
Other European countries	15.0	70.3	49.4	62.0	9.8	6.1
United States	22.1	74.5	34.1	63.2	18.9	5.5

Sources: P. Bairoch, *Victoires et déboires*, vol. II, Éditions Gallimard (1997), A. Maddison (2003).

Chart 9: Rostow's stages of economic growth



Source: W.W. Rostow, *The Stages of Economic Growth*, 3rd ed., 1990.

- (28) Baldwin, R.E. and Martin, P. (1999), "Two Waves of Globalization: Superficial Similarities, Fundamental Differences," *NBER Working Paper*, No. 6904, January.
- (29) Some authors now describe the United States as the "world's banker," raising short-term funds to invest in risky long-term assets. See Gourinchas, P.O. and Rey, H. (2005), "From World Banker to World Venture Capitalist: US External Adjustment and the Exorbitant Privilege," *NBER Working Paper*, No. 11563, August.

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