Lecture Eight

International Monetary System

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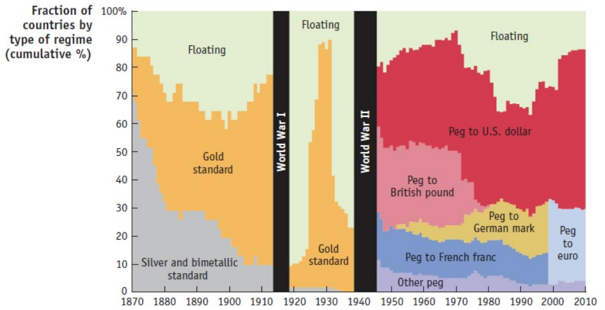
Outline

1. A Brief History of the International Monetary System
2. Classical Gold Standard: 1870–1913
3. The Rise of Dollar during the Interwar Years: 1919–1939
4. Bretton Woods System: 1944–1971
5. Reform of the International Monetary System

Exchange Rate Regime Choice: 1870∼2010

FIGURE 8-1



Exchange Rates Regimes of the World, 1870–2010 The shaded regions show the fraction of countries on each type of regime by year, and they add up to 100%. From 1870 to 1913, the gold standard became the dominant regime. During World War I (1914–1918), most countries suspended the gold standard, and resumptions in the late 1920s were brief. After further suspensions in World War II (1939–1945), most countries were fixed against the U.S. dollar (the pound, franc, and mark blocs were indirectly pegged to the dollar). Starting in the 1970s, more countries opted to float. In 1999 the euro replaced the franc and the mark as the base currency for many pegs.

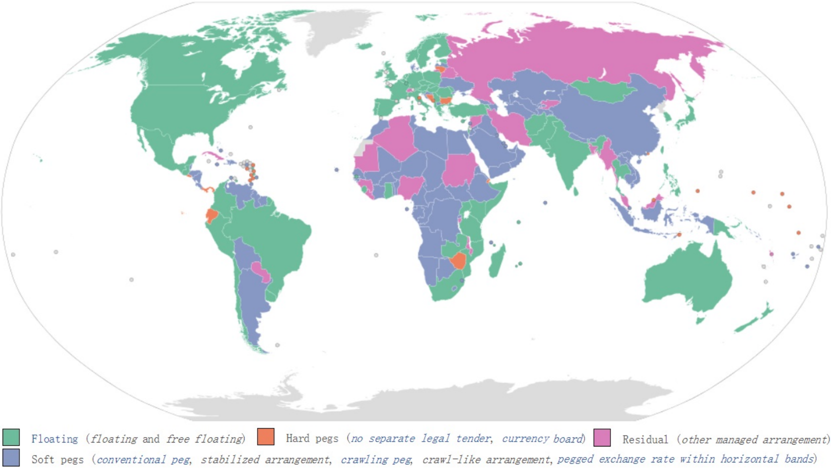
Sources: Christopher M. Meissner, 2005, "A New World Order: Explaining the International Diffusion of the Gold Standard, 1870–1913," Journal of International Economics, 66(2), 385–406; Christopher M. Meissner and Nienke Oomes, 2006, "Why Do Countries Peg the Way They Peg? The Determinants of Anchor Currency Choice," Cambridge Working Papers in Economics 0643, Faculty of Economics, University of Cambridge, and later updates; and extended with Ethan Ilzetzki, Carmen M. Reinhart, and Kenneth S. Rogoff, 2010, "Exchange Rate Arrangements Entering the 21st Century: Which Anchor Will Hold?" unpublished.

Wikiwand: International Monetary System

An international monetary system is a set of internationally agreed rules, conventions and supporting institutions that facilitate international trade, cross border investment and generally the reallocation of capital between nation states.

Date	System	Reserve assets	Leaders
1870–1913	Classical gold standard	Gold, pound	UK
1914–1919	World War I	Gold, pound	UK
1920–1938	Gold standard	Gold, dollar, pound	US, UK
1939–1945	World War II	Gold, dollar	US
1944–1971	Bretton Woods System	Dollar, gold	US
1971–1985	Flexible exchange rates	Dollar, mark, pound	US, Germany, Japan
1985–1999	Managed exchange rates	Dollar, mark, yen	US, G7, IMF
1999–	Dollar, euro	Dollar, euro, yen	US, Eurozone, IMF

Exchange Rate Regime Choice: 2014



Source: Wikiwand. Original data from Annual Report on Exchange Arrangements and Exchange Restrictions, IMF.

McKinnon(1993): Rules of the Gold Standard

1. Fix an official gold price or mint parity and convert freely between domestic money and gold at that price.
2. Do not restrict the export or import of gold by private citizens, nor impose any other exchange restrictions on current or capital account transacting.
3. Back national banknotes and coinage with earmarked gold reserves, and condition long-run growth in deposit money on availability of general gold reserves.

McKinnon(1993): Rules of the Gold Standard

4. In short-run liquidity crisis from an international gold drain, have the central bank lend freely to domestic banks at higher interest rates(Bagehot's Rule).
5. If Rule 1 is temporarily suspended, restore convertibility at traditional mint parity as soon as practicable – if necessary by deflating the domestic economy.
6. Allow the common price level (nominal anchor) to be endogenously determined by the worldwide demand for, and supply of, gold.

Mint Parity and Exchange Rate

- United States fixed the price of gold at \$20.67 per ounce from 1834 to 1933, and Britain fixed the price at £3 17s. 10.5p per ounce from 1816 to 1914. Therefore, the exchange rate between dollars and pounds – the "par exchange rate" – necessarily equaled \$4.867 per pound.
- Wikiwand: The pound sterling was equal to 4.87 United States dollars, 5.25 Canadian dollars, 12.10 Dutch guilders, 26.28 French francs (or equivalent currencies in the Latin Monetary Union), 20.43 German marks or 24.02 Austro-Hungarian krone.

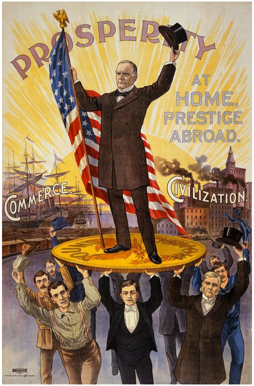
Adjustment of Trade Balance

The price–specie flow mechanism is a model developed by Scottish economist David Hume (1711–1776) to illustrate how trade imbalances can be self–correct and adjust under the gold standard.

- For a country with a positive balance of trade, gold would flow into the country.
- In a country with a gold standard, gold is money, and the increase of money supply will cause inflation.
- With fixed nominal exchange rate with gold, inflation will cause real appreciation, which will reduce trade balance in the end.

$$TB > 0 \Rightarrow \text{Gold}(M) \uparrow \Rightarrow P \uparrow \Rightarrow e \downarrow, \ TB \downarrow$$

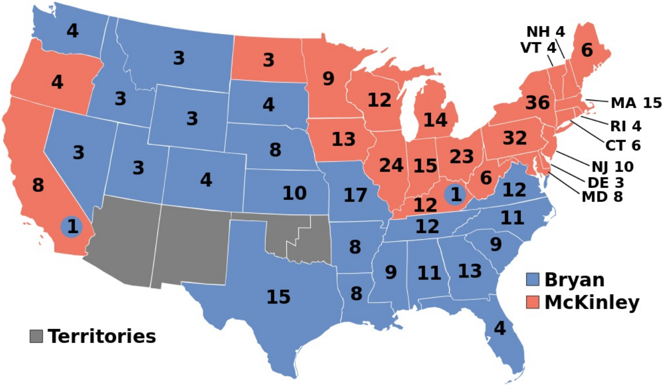
Case 1: Gold or Silver? It's a Question.



Note: 1900 reelection poster celebrates McKinley standing tall on the gold standard with support from soldiers, sailors, businessmen, factory workers and professionals, from Wikiwand.

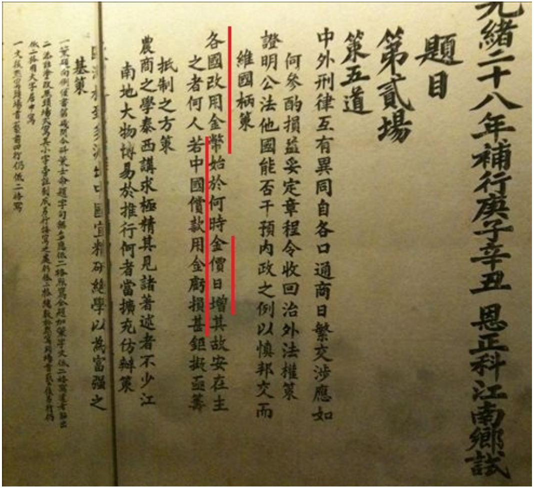
Note: Bryan's speech for Presidential campaign in 1896: "You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold."

Case 1: Gold or Silver? It's a Political Question.



Source: 1896 Electoral vote results, Wikiwand

Case 2: Question from the Emperor Guangxu


光緒二十八年補行庚子辛丑 恩正科江南鄉試

題目

第貳場

策五道

中外刑律互有異同自各口通商日繁交涉應如何參酌損益妥定章程令收回治外法權策

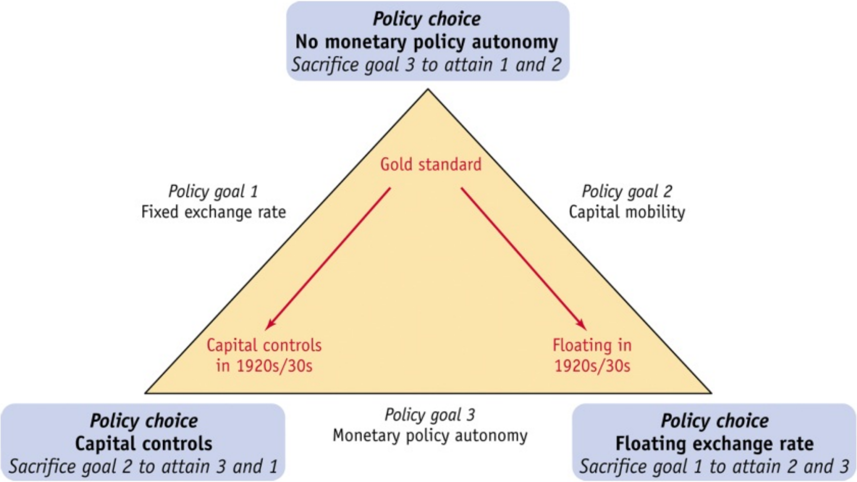
證明公法他國能否干預內政之例以愼邦交而維國柄策

各國改用金幣始於何時金價日增其故安在主之者何人若中國償款用金虧損甚鉅擬亟籌抵制之方策

農商之學泰西講求極精其見諸著述者不少江南地大物博易於推行何者當擴充仿辦策

…學以為富強之基策

Divergence after the End of Golden Standard



Data Source

Table 1. *Coverage*

Country	Source	Period	Valuation
Gold bloc countries			
France	Bank of France	1928–39	Market exchange rates
Italy	Collana Storica	1920–39	Market exchange rates
Switzerland	Swiss National Bank	1920–39	
Netherlands	Bank of the Netherlands	1920–1931	Market exchange rates
Central Europe			
Austria	Bank of Austria	1923–29, 1932–7	Market exchange rates
Czechoslovakia	Bank of Czechoslovakia	1921–38	Market exchange rates
Romania	Bank of Romania	1929–34, 1937	Market exchange rates
Sterling area			
Denmark	Bank of Denmark	1919–39	Book exchange rates
Finland	Bank of Finland	1921–38	Book exchange rates
Norway	Bank of Norway	1920–39	Book exchange rates
Portugal	Bank of Portugal	1931–9	Book exchange rates
Sweden	Riksbank	1926–39	Market exchange rates
Other Europe			
Spain	Bank of Spain	1920–36	Market exchange rates
Latin America			
Brazil	Reports of the *Caixa de Estabilização*	1927–9	Book values coincide with fixed exchange rate prevailing during available dates
Colombia	Bank of Chile	1926–9, 1932–3, 1936–9	Market exchange rates
Chile	Bank of the Republic	1923–39	Market exchange rates
Asia			
Japan	Bank of Japan	1920–39	Market exchange rates

Source: See text; Italy counted as member of the Gold Bloc.

The Rise and Fall of Dollars

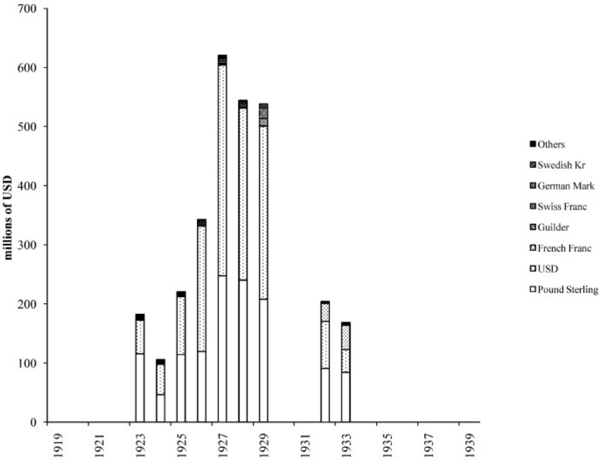


Figure 4. *G9 reserves (Austria, Czechoslovakia, Denmark, Finland, Italy, Japan, Norway, Spain, Switzerland)*

Duopoly of Pound and Dollar

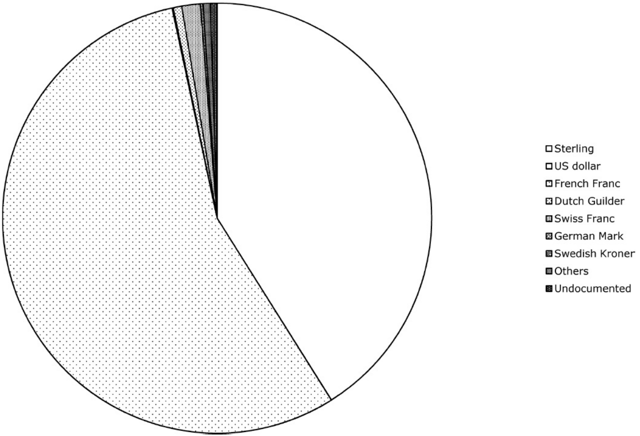


Figure 2. *Aggregate foreign currency holdings in 1929: a snapshot (16 countries)*

Regional Choice of Reserve Currency

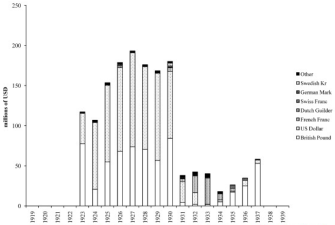


Figure 7. *Central European countries' reserves (Austria, Czechoslovakia and Romania)*

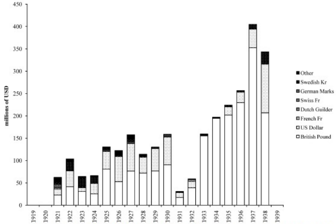


Figure 8. *Non-English-speaking sterling area reserves (4 Scandinavian)*

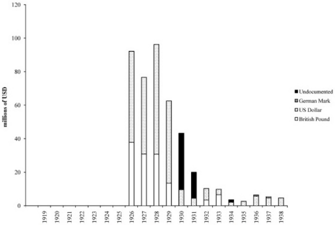


Figure 10. *Two Latin American countries (Chile and Colombia)*

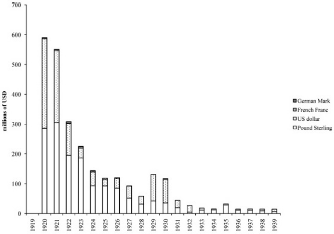


Figure 11. *Japan's reserves*

Choice of Debt Currency: 1914–1945

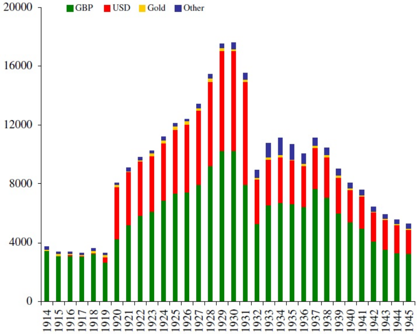


Fig. 2. Global foreign public debt (currency breakdown in USD million; at current exchange rates).

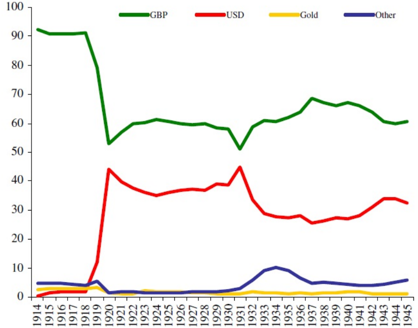


Fig. 5. a: Global foreign public debt?Full sample (selected currency shares as a % of total; at current exchange rates).

Regional Choice of Public Debt Currency

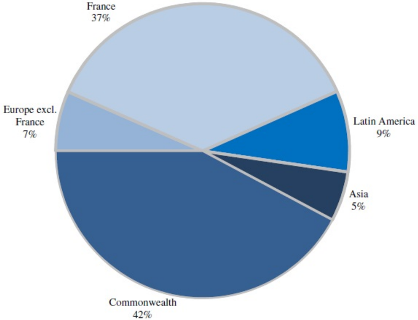


Fig. 4. Global foreign public debt in sterling – Main debtors. (as a % of total, at current exchange rates; in 1929).

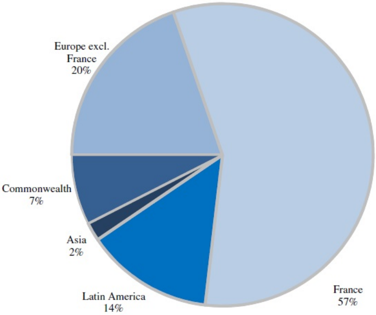


Fig. 3. Global foreign public debt in US dollar – Main debtors (as a % of total; at current exchange rates; in 1929).

McKinnon(1993): Rules of the Bretton Woods System

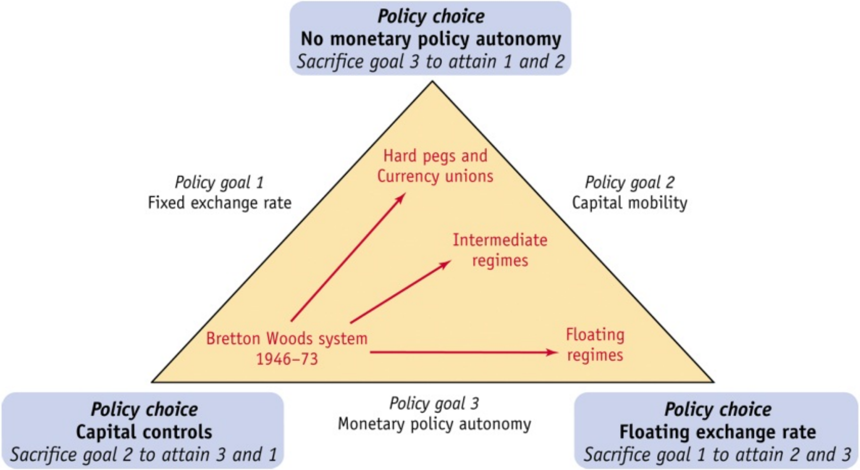
To rebuild the international monetary system, 44 Allied nations signed The Bretton Woods Agreement in July, 1944. The rules included:

1. Fix a foreign par value for the domestic currency by using gold, or a currency tied to gold, as the numeraire; otherwise demonetize gold in all private transacting.
2. In the short run, keep the exchange rate within 10% of its par value, but leave its long-run par value unilaterally adjustable if the IMF concurs.
3. Free currency convertibility for current account payments; use capital controls to dampen currency speculation.

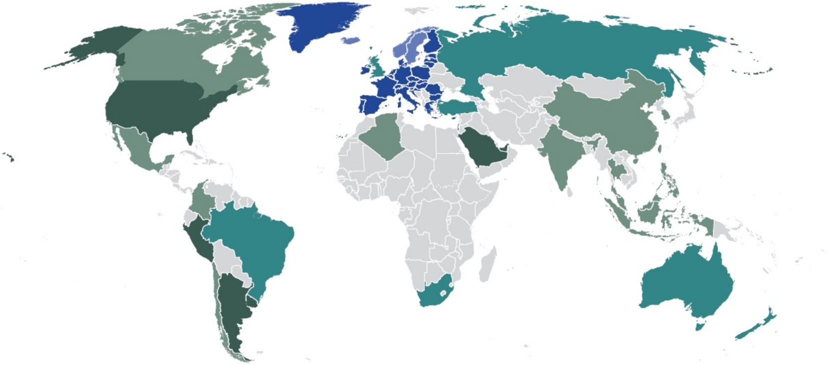
McKinnon(1993): Rules of the Bretton Woods System

4. Use national monies symmetrically in foreign transacting, including dealings with the IMF.
5. Buffer short-run payments imbalances by drawing on official exchange reserves and IMF credits; sterilize the domestic monetary impact of exchange-market interventions.
6. National macroeconomic autonomy: each member government to pursue its own price level and employment objectives unconstrained by a common nominal anchor or price rule.

Divergence after the End of Bretton Woods System



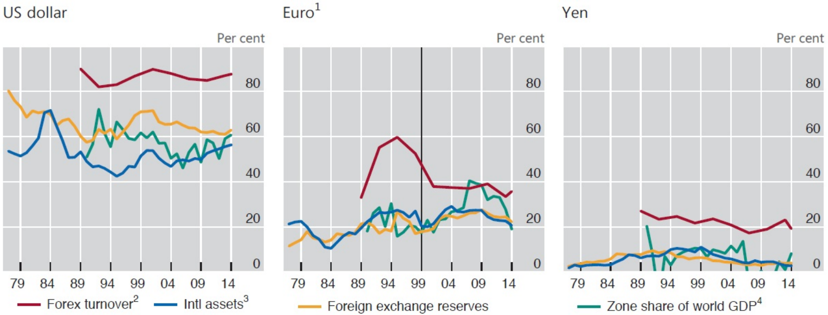
BIS(2015): Dollar Zone is Larger than Euro Zone



US dollar weight: >95% 70–95% 30–70% 5–30% <5%

Source: BIS calculation based on average elasticities of the national currency's dollar exchange rate with respect to euro/dollar and yen/dollar rates for 2011–14, inclusive.

BIS(2015): US Dollar Remains Dominant



[1] Before 1999, "euro" aggregates available predecessor currencies. [2] The shares sum to 200% because each transaction involves two currencies. 2014 is estimated based on CLS trading data for April. [3] Includes bank deposits of non-banks and debt securities. Bank deposits are proxied by all bank liabilities before 1995. For the euro area, bank deposits exclude deposits vis-à-vis euro area banks. Debt securities are based on BIS international debt securities statistics before 1999 and the ECB's narrow measure of euro bonds since 1999, which excludes euro area residents' euro issues. [4] Estimated as each economy's share of PPP GDP, plus the elasticity-weighted share of all other economies' PPP GDPs; see Box V.A.

Sources: ECB; IMF; CLS; Datastream; national data; BIS international debt securities statistics; BIS calculations.

Where Are We Standing?

The international monetary and financial system, then and now

	Bretton Woods	Current
Monetary anchor	External: ultimately gold	Internal: domestic mandates (eg price stability)
Exchange rates	Fixed but adjustable	Hybrid (floating at the centre)
Key currencies	De facto, US dollar	Dollar dominance (less exclusive)
Capital mobility	Restricted	Hybrid (unrestricted at broad centre)

Source: "Chapter 5 The international monetary and financial system", in *85th Annual Report*, BIS.

Wikiwand: Reform of International Monetary Systems

System	Reserve Assets	Leaders
Flexible exchange rates	Dollar, Euro, Renminbi	US, Eurozone, China
Special drawing rights standard	SDR	US, G-20, IMF
Gold standard	Gold, Dollar	US
Delhi Declaration	Currency basket	BRICS

Discussion

Watch the video of the interview with James Richards and discuss the following questions:

1. Please summarize the possible directions for the reform of the international monetary system mentioned in the video.
2. Do you think the future international monetary system will be the "SDR standard system" dominated by the IMF? If not, what's your proposal?