

The Great Depression: An International Economic Crisis

Lecture 9

25 April 2025

Overview of the Great Depression (1929–1939)

- The Great Depression, which began in 1929, is considered the most severe global economic and financial crisis in recorded history.
- Between 1929 and 1932, global economic output decreased by approximately 10%.
- The magnitude of the impact varied across countries; for instance, the United States experienced a sharp 25% decline in its GDP, while Great Britain saw a relatively mild decline of around 5%.
- During this period, commodity prices fell dramatically, international trade volumes collapsed, and global capital flows dried up.
- Investment fell and unemployment rates rose to unprecedented levels in many parts of the world.
- The economic downturn affected almost every country across the world, highlighting its widespread nature.
- No previous or subsequent economic crisis has matched the Great Depression in terms of its global reach, depth, and duration.

The Great Depression: Some Facts and Figures

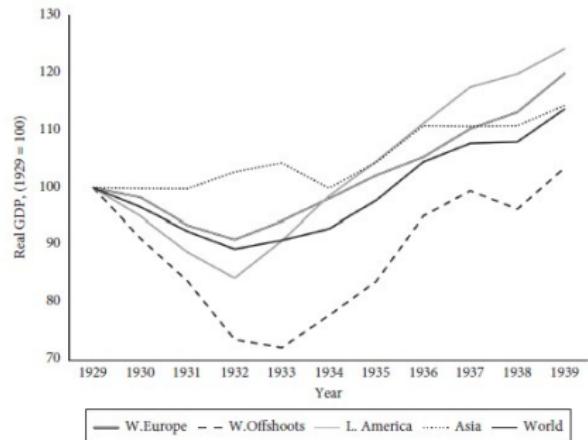


Figure 9.1 Real GDP for Four Regions and the World (1929 = 100), 1929–1939
Source: Bolt et al. (2018)

- The Great Depression was a global economic crisis of unprecedented scale and severity.
- As indicated in Figure 9.1, world GDP decreased by approximately 10% between 1929 and 1932.
- The downturn initially affected commodity exporting countries such as Australia, Brazil, and the Dutch East Indies.

The Great Depression: Some Facts and Figures

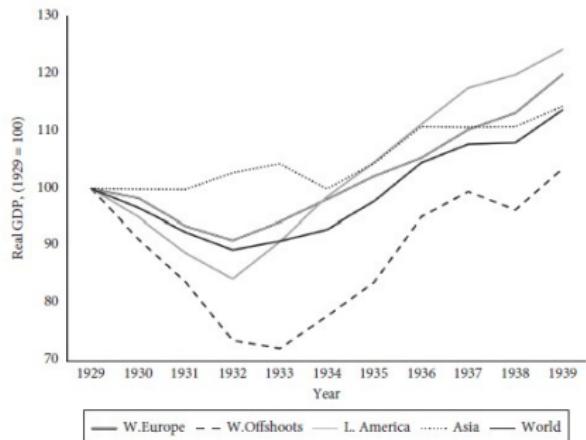


Figure 9.1 Real GDP for Four Regions and the World (1929 = 100), 1929–1939

Source: Bolt et al. (2018)

- Recovery began in Japan in 1931 and in the US and Germany in 1933, leading to historically high growth rates.
- Despite partial recovery, the global economy faced prolonged stagnation and unemployment remained high in many regions.
- Unemployment was still exceptionally high in 1939, ten years after the onset of the crisis.

Global Trade Collapse During the Great Depression



Figure 8.2 Ratio of World Exports to World GDP, 1913–1939

Source: Author's calculations based on data from Federico and Tena-Junguito (2019).
Notes: constant 1913 prices and borders

- The Great Depression had a devastating impact on the international economy, particularly on global trade.
- As shown in Figure 8.2, the ratio of world exports to global GDP fell dramatically, falling approximately 50% between 1929 and 1933.
- This trade collapse occurred more rapidly than the fall in global GDP due to a rapid rise in trade costs.

Global Trade Collapse During the Great Depression



Figure 8.2 Ratio of World Exports to World GDP, 1913–1939

Source: Author's calculations based on data from Federico and Tena-Junguito (2019).
Notes: constant 1913 prices and borders

- Factors contributing to rising trade costs included higher tariffs, the emergence of new preferential trade agreements, and widespread declines in commodity prices.
- The demand for highly tradable goods—particularly durable and investment goods—dropped significantly during this period.
- By 1933, global exports were only about 56% of their long-term trend value, highlighting the depth of the trade contraction.

Collapse of Capital Markets and Migration During the Great Depression

- The Great Depression led to the near-total collapse of global capital markets after 1929.
- New foreign investments and long-term lending stopped.
- Short-term trade finance also dried up, reflecting not only the dramatic fall in global trade but also the result of the tight monetary conditions prevalent during the era.
- Global migration, already restricted significantly during the 1920s, declined to historically low levels.
- Between 1900 and 1913, the United States received an annual average of 843,000 immigrants, while the number fell to 450,000 between 1920 and 1929.
- In contrast, the annual average dropped sharply to just 68,000 immigrants between 1929 and 1939, with a total of only 616,000 arriving in the US during the entire decade.

International Spillovers and Contagion Effects

- The Great Depression demonstrated the powerful international spillovers that can occur in highly interconnected global economies.
- Modern economists refer to this phenomenon as *contagion*, economic shocks in one country can spread to others.
- Economists analyze the Depression in *real* and *monetary/financial* shocks that spread across national borders.
- Real shocks refer to exogenous or endogenous changes in aggregate demand and supply for goods and services.
- Financial shocks arise from the financial sector and involve changes in monetary policy, banking crises, or the supply and demand for loanable funds.

International Spillovers and Contagion Effects

- Both types of shocks were transmitted internationally in the early 1930s, contributing to widespread economic distress.
- This is particularly evident in the persistent deflation that affected almost all countries, particularly those adhering to the gold standard.
- Exchange rate volatility increased significantly, with sharp and unexpected depreciations occurring throughout the 1930s.
- Dramatic tariff hikes during this period also disrupted international trade and negatively impacted trading partners.
- Cross-border banking operations and unresolved international financial obligations, such as Allied war debts and German reparations, further intensified the spread of financial crises across countries.

What Started It? U.S. Monetary Tightening Before the Crash

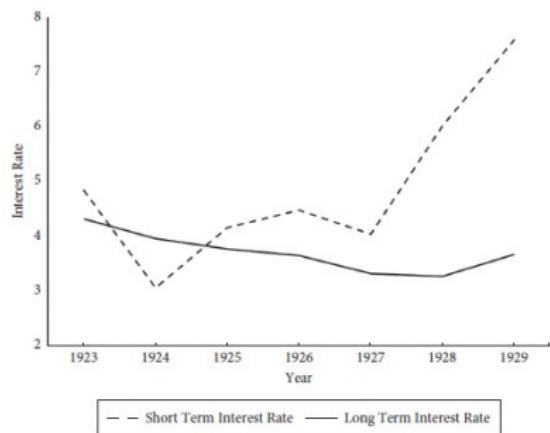


Figure 9.3 US Interest Rates, 1923–1929

Source: Author's calculations based on data in Jordà, Schularick, and Taylor (2021)

- In 1928, the Federal Reserve Bank of New York began tightening monetary policy in response to concerns over speculative activity in financial markets.
- Policymakers believed that overvaluation of the New York stock market diverted capital from productive investment to financial speculation.
- By mid-1929, both the Federal Reserve Board and the New York Fed concurred that aggressive speculation had to be restrained.

What Started It? U.S. Monetary Tightening Before the Crash

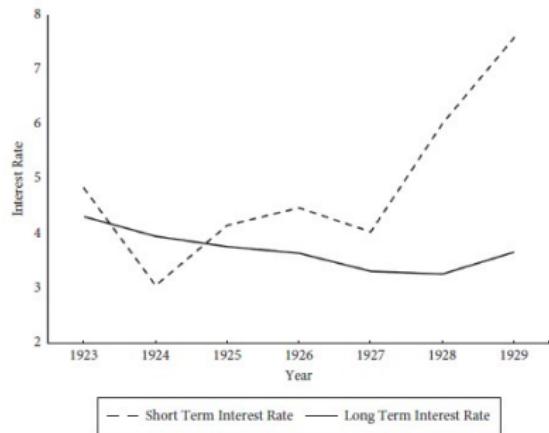


Figure 9.3 US Interest Rates, 1923–1929

Source: Author's calculations based on data in Jordà, Schularick, and Taylor (2021)

- As a result, monetary policy turned increasingly contractionary, and short-term interest rates began to increase significantly, as shown in Figure 9.3.
- The aim of contractionary monetary policy was to deflate the stock market without causing a broader economic recession, as had been done in 1920.

The Stock Market Crash in 1929

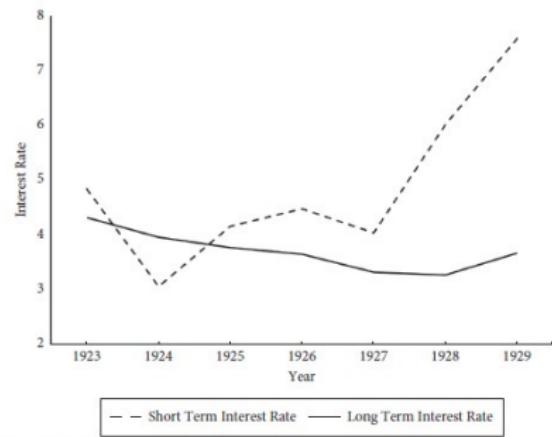


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- Despite expectations of a controlled deflation, the outcome in 1929 was far more severe than anticipated.
- On Thursday, October 24, 1929, **Black Thursday**, the New York stock market plunged by more than 10%.
- The collapse continued the following week: the market dropped another 12% on Monday, October 28, and fell by additional 11% on Tuesday, October 29.

The Stock Market Crash in 1929

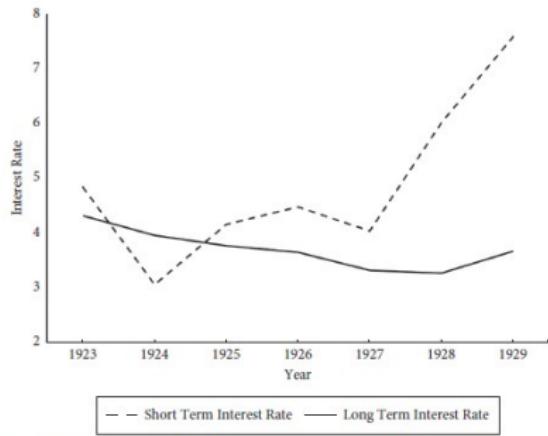


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- This crash marked the beginning of a broader economic collapse and set the stage for the global Great Depression.
- The dramatic fall in asset values destroyed investor confidence, severely collapsed household wealth, contracted credit availability, and decreased investment flows.

The Trilemma of Open-Economy Macroeconomics

The trilemma, **unholy trinity**, in open-economy macroeconomics states that a country can simultaneously choose only two out of the following three policies:

- A fixed exchange rate
- Free capital mobility
- An independent monetary policy

① During the late 1920s, most countries operated under the gold standard (fixed exchange rates) and maintained open capital accounts, thereby sacrificing control over monetary policy.

② In 1928–1929, when the U.S. Federal Reserve raised interest rates to suppress financial speculation, its policy had significant international spillovers.

The Trilemma of Open-Economy Macroeconomics

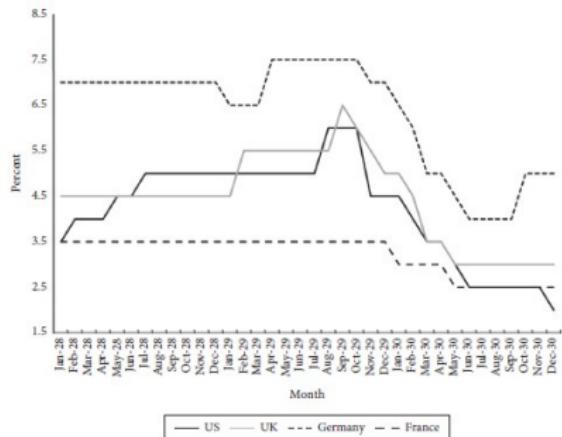


Figure 9.4 Central Bank Discount Rates, 1/1928–12/1930

Source: Author's calculations from data in Statistisches Reichsamt (1936)

- ③ Despite little attention to global effects, tightened US monetary policy forced other countries on the gold standard to raise their own interest rates in response.
- ④ Failure to match US interest rate increases would have led to capital outflows, gold losses, and depreciation pressure on their fixed exchange rates.
- ⑤ This dynamic is illustrated in Figure 9.4, which shows the synchronization of interest rate hikes among gold standard countries.
- ⑥ As a result, contractionary US monetary policy spread, worsening economic conditions globally.

Balance of Payments Pressures and Recession Spillovers

- As countries on the gold standard raised interest rates to match the United States, they experienced rising capital and gold outflows.
- These outflows often triggered balance-of-payments problems, requiring external adjustment under the constraints of the gold standard.
- According to the balance-of-payments identity, an increase in capital outflows would need to be offset by a higher current account surplus, achieved by improving the trade balance.
- Improving the trade balance under fixed exchange rates generally required a decline in imports, which could only be achieved through a fall in domestic consumption.
- This adjustment process often entailed outright deflation and rising real interest rates, which further suppressed investment and demand.
- As a result, economic recession or significant slowdown became nearly unavoidable in many gold-standard economies.
- The international transmission of U.S. monetary policy thus had severe contractionary effects across the global economy.

Global Impact of US Monetary Policy: Output Decline and Deflation

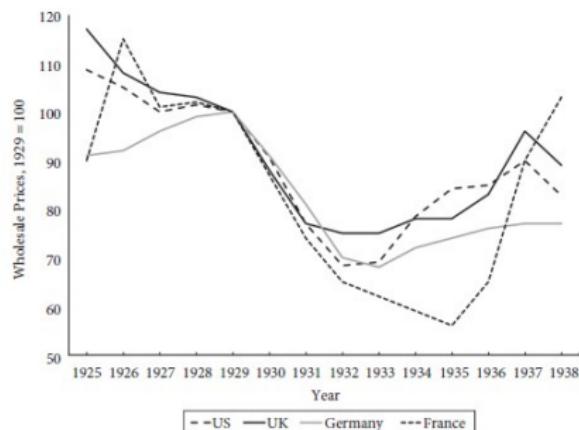


Figure 9.5 Industrial Production in Four Countries (1929 = 100)

Source: Author's calculations based on data from Mitchell (1998a, 1998b)

- The global transmission of U.S. monetary tightening had widespread contractionary effects, particularly in major industrial economies.
- Higher interest rates reduced aggregate demand, leading to steep declines in both consumption and investment.
- As shown in Figure 9.5, industrial production decreased simultaneously in the US, UK, Germany, and France.

Global Impact of US Monetary Policy: Output Decline and Deflation

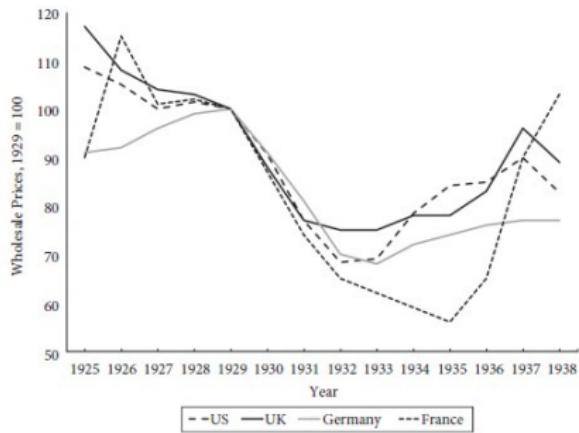


Figure 9.5 Industrial Production in Four Countries (1929 = 100)

Source: Author's calculations based on data from Mitchell (1998a, 1998b)

- Consumers who had financed durable goods purchases on credit during the 1920s faced higher borrowing costs, which dampened consumption.
- The housing sector, already weakening in the US since 1927, tightened further as credit contracted more rapidly than the fall of demand.
- Wholesale prices fell approximately 10% between 1929 and 1930, marking the onset of a widespread deflationary period.
- Falling prices increased the real value of debt, rising the financial burden on borrowers and contributing to defaults

The Severity of the Great Depression: Why So Deep and Long?

- ① For countries adhering to the gold standard, the orthodox response to rising global interest rates in 1928–1929 was economic retrenchment.
- ② Retrenchment included raising interest rates, cutting government spending, increasing taxes, limiting consumption, and shrinking the money supply.
- ③ These contractionary policies aimed to restore balance-of-payments equilibrium and maintain the gold-peg but caused falling output, deflation, weak demand, and soaring unemployment.
- ④ While such measures had been politically viable in the 19th century, they became increasingly untenable amid growing public opposition during the Depression.
- ⑤ Financial markets correctly anticipated that many countries lacked the credibility to maintain their gold parities; speculative attacks on currencies were often successful.

The Severity of the Great Depression: Why So Deep and Long?

- ⑥ In an attempt to defend their currencies, many governments raised interest rates further, the economic and political costs proved too high.
- ⑦ One by one, countries abandoned the gold standard in the early 1930s, beginning with major commodity exporters such as Australia, Argentina, and Brazil.
- ⑧ Leaving the gold standard allowed exchange rates to depreciate, acting as automatic stabilizers, and enabled domestic monetary expansion.
- ⑨ This policy shift helped prevent further economic collapse by increasing domestic prices and easing financial constraints.
- ⑩ Simultaneously, global commodity prices collapsed, reducing the terms of trade by roughly 20%, and capital flows dried up.
- ⑪ With external debt repayments averaging 15–20% of export earnings, countries like Argentina and Brazil struggled to service foreign debts amid declining export revenues.

Austerity in Germany and the Rise of Nazi

- Germany provides a cautionary example of how fiscal and monetary austerity can deepen economic crises and political instability.
- Between 1930 and 1932, the Chancellor Brüning pursued deflationary policies under the gold standard, cutting public expenditure and increasing taxes.
- These austerity measures fueled public discontent and contributed to the electoral rise of the Nazi Party.
- German policymakers were constrained by their commitment to the gold standard and fears of currency depreciation and external debt burdens.
- Memories of Weimar-era hyperinflation further discouraged monetary expansion, while external financial assistance was unavailable.
- The failure to adopt counter-cyclical policies severely limited Germany's ability to respond effectively to the Depression.

The 1930–1931 Financial Crisis and Global Contagion

- Despite loosening in early 1930, the Federal Reserve was hesitant to provide significant support, believing that tight money would purge financial excesses.
- The resulting contraction led to a wave of financial instability and further collapse in economic activity.
- In October 1930, the first of three major U.S. banking panics occurred, spreading fear across the financial system.
- The failure of the Bank of United States, a major commercial bank, contributed to widespread uncertainty, especially in the American Midwest.

The 1930–1931 Financial Crisis and Global Contagion

- As the Fed failed to act decisively, global risk aversion surged, resulting in **Sudden Stop**.
- Capital outflows from the US declined sharply, triggering debt crises in capital-dependent countries such as Germany and many South American nations.
- Between 1929 and 1931, all South American countries except Argentina defaulted on their debts and abandoned the gold standard.
- In June 1931, following Germany's financial distress, the Hoover Moratorium was enacted, delaying European debt and reparation payments for one year.

The 1931 Global Financial Crisis and the Collapse of the Gold Standard

- The global financial crisis of 1931, which began in Austria and spread to Germany and the UK, marked a turning point in the Great Depression.
- Confidence in Germany collapsed in June 1931 as investors reacted to the Austrian banking crisis; the Reichsbank reluctantly intervened while simultaneously raising interest rates.
- The crisis spread to London, as German institutions withdrew funds, straining British financial markets.
- In response to speculative pressure and rising interest rates, the UK suspended the gold standard on September 21, 1931.
- The pound depreciated by 25% against the U.S. dollar, leading many countries to follow Britain in abandoning the gold standard.

The 1931 Global Financial Crisis and the Collapse of the Gold Standard

- Countries that remained on gold experienced real exchange rate appreciation, damaging their export competitiveness.
- To counter trade imbalances, many gold standard countries raised tariffs or implemented capital controls.
- Capital controls—first imposed by Germany in mid-1931—restricted access to foreign exchange and impeded both capital and commodity trade, reducing global economic integration.

The Failure of Central Banks and International Cooperation

- ① A key policy failure during the early 1930s was the refusal of central banks to act as lenders of last resort in the face of systemic banking crises.
- ② Central banks prioritized maintaining gold convertibility, which was fundamentally incompatible with providing large-scale liquidity support.
- ③ The memory of hyperinflation in the 1920s, especially in countries like France, Germany, and Poland, reinforced adherence to the discipline of the gold standard.
- ④ Another breakdown was the collapse of international cooperation, a key pillar of pre-1914 economic stability.
- ⑤ In 1931, the Bank of France refused to provide reserves to Austria during its banking crisis, fearing this would encourage further financial excess.

The Failure of Central Banks and International Cooperation

- ⑥ In the same year, Germany received no debt relief and no foreign rescue loans, despite severe financial instability.
- ⑦ The Reichsbank was unable to replenish its gold reserves, and German policymakers were left without support for balance-of-payments adjustment.
- ⑧ Efforts to resolve multiple crises simultaneously were constrained by a narrow set of tools and rigid policy commitments.

The Gold-Exchange Standard and Currency Instability

- The re-establishment of the gold standard as the “gold-exchange standard” played a significant role in intensifying the Great Depression.
- During banking panics, international capital markets feared that countries would abandon gold convertibility through sudden devaluation.
- In anticipation of a 20%–30% devaluation, markets and central banks sold vulnerable currencies aggressively.
- These sales involved exchanging foreign exchange reserves—government bonds held in strong currencies—for physical gold.
- This reaction further weakened confidence and accelerated the outflow of gold from vulnerable countries.
- The gold-exchange system thereby created a self-reinforcing cycle of reserve depletion and monetary tightening.

Global Monetary Contraction and Deflation under the Gold-Exchange Standard

- The global money supply can be expressed as: $M = G + R$, where money equals gold plus foreign exchange reserves.
- As reserves (R) were exchanged for gold (G), the reserve share backing world money supplies fell from 37% in 1929 to only 11% by the end of 1931.
- To restore balance, monetary policy was tightened, and the global money supply (M) contracted sharply.
- Depositors hoarded gold or transferred it to perceived safer currencies, such as the Swiss franc, further draining banking systems.
- The resulting shrinkage in global liquidity led to severe deflation across major economies.
- Falling asset prices raised borrowing costs, as lenders demanded risk premiums from countries with vulnerable currencies.
- Higher interest rates, in turn, reduced interest-sensitive spending, deepened unemployment, and prolonged the global recession.

Trade Wars

- In 1930, the United States enacted the Hawley–Smoot Tariff, raising average tariffs by approximately 50%.
- The legislation, named after Senator Reed Smoot and Congressman Willis C. Hawley, was intended to protect American farmers and fulfilled a campaign promise of President Herbert Hoover.
- Although unrelated to the monetary tightening of 1928–1929 or the initial downturn, the tariff was introduced amidst a fragile global economic environment.
- The measure triggered immediate and widespread retaliation from trading partners, contributing to a global trade war.
- As tariffs rose globally, markets became increasingly fragmented and world trade volumes fell sharply.
- The Hawley–Smoot Tariff also undermined the ability of foreign countries to earn U.S. dollars needed to service their external debts.
- The trade conflict exacerbated balance-of-payments difficulties, particularly for smaller exporting economies.

Economic Policy Changes and Economic Recovery

- While monetary and financial shocks deepened the Depression, monetary policy also played a key role in economic recovery.
- Abandoning the gold standard reliably predicted earlier recovery during the 1930s.
- Countries that devalued their currencies and expanded their money supply recovered more rapidly than those that maintained gold convertibility.
- Exiting the gold standard enabled domestic monetary expansion, which stimulated output, investment, and employment.

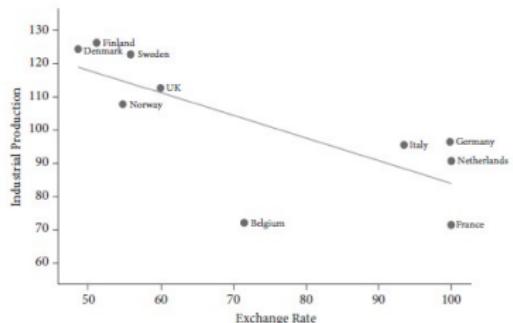


Figure 9.8 Exchange Rates and Industrial Production, 1929–1935

Source: Author's calculations. Exchange Rates: Jordà, Schularick, and Taylor (2021); Industrial production: Mitchell (1998a, 1998b). Notes: Exchange rate is the number of gold-based local currency units at the 1929 gold parity to buy the local currency in 1935 (1929 = 100)

Economic Policy Changes and Economic Recovery

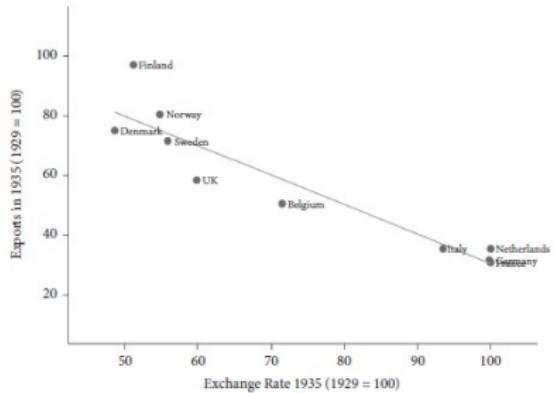


Figure 9.9 Exchange Rates and Exports, 1929–1935

Source: Author's calculations based on Jordà, Schularick, and Taylor (2021). Notes: Exchange rate is the number of gold-based local currency units at the 1929 gold parity to buy the local currency in 1935 (1929 = 100)

- Currency depreciation made exports cheaper for gold-standard trade partners, boosting foreign demand for domestic goods.
- Higher exports raised aggregate demand, leading to increases in output and industrial production—key components of GDP.
- Countries that retained gold convertibility often protested these “competitive devaluations” and responded with higher tariffs.
- Ending the gold standard allowed money supply expansion, which lowered real interest rates and encouraged investment.