International Capital Flow

Lecture 4

28 February 2025

Flourishing Global Capital Markets (Late 19th Century)

- The late 19th century saw unprecedented foreign investment, driven by economic expansion and financial innovation.
- Great Britain was the largest foreign lender, followed by France, Germany, Belgium, and the Netherlands, reflecting their strong savings and financial institutions.
- British capital outflows were so significant that they sparked debates on whether domestic industries were being deprived of funds.
- After 1914, capital markets became disrupted due to global conflicts and policy shifts, leading to a prolonged period of stagnation until the 1970s.

Integration of Global Capital Markets

- By 1910, capital markets were as integrated as they were by the late 20th century, showcasing an earlier era of globalization.
- A key measure of integration, the ratio of foreign assets to world GDP, indicated a high degree of international financial openness.
- Bond yields across different countries converged significantly, reflecting investors' confidence in international financial stability.
- European and U.S. investors participated actively in global markets, financing infrastructure projects and government borrowing worldwide.

Investment Patterns and Economic Theory

- Investors typically sought high returns while managing risks, leading them to strategically allocate capital across regions.
- Economic theory suggests that capital should flow to capital-scarce regions where it is expected to generate the highest returns.
- In the 19th century, investors were more willing to invest in emerging economies compared to their counterparts in the late 20th century.
- However, the poorest countries still struggled to attract substantial foreign investment due to institutional weaknesses and political instability.

The Sources of Global Capital Flows

- The largest borrowers included the USA, Canada, Australia, Argentina, and Brazil, which were rapidly industrializing and expanding.
- Other borrowers, such as India, the Ottoman Empire, and Egypt, received foreign capital but in smaller quantities due to political uncertainties.
- Britain was the leading lender, with foreign investments growing from 35% of GDP in 1850 to 175% of GDP by 1914, illustrating its global financial dominance.
- France, Germany, Belgium, the Netherlands, and the USA also played crucial roles in international lending, financing infrastructure and development projects worldwide.

Financial Intermediation and Investment Channels

- Financial institutions played a crucial role in intermediating capital flows, ensuring efficient allocation of savings to productive investments.
- London's merchant banks facilitated cross-border investments by arranging bond sales and managing financial risks.
- Technological advancements like the telegraph and telephone improved financial communication, enabling rapid investment decisions.
- British investment banks, insurance firms, and trusts were among the key players in these financial networks, fostering the growth of international markets.

Equalization of Returns and Arbitrage

- Returns on investments, after accounting for risk and transaction costs, should be equalized across markets.
- Arbitrage ensures that investors move funds from low-return markets to high-return markets, leading to convergence in returns.
- However, persistent return differentials suggest that barriers to full integration existed in capital markets.

Barriers to Capital Market Integration

- Differences in rates of return persisted due to various frictions in financial markets.
- Foreign exchange transaction costs limited international capital flows.
- Illiquid markets increased the difficulty of buying and selling assets, raising costs for investors.

Risk and Investment Returns

- Investors required higher returns to compensate for risk factors.
- Default risk, political instability, and economic volatility influenced return differentials.
- These risks reduced international lending relative to an idealized world without capital market frictions.

Interest Rate Convergence and Market Integration

- Despite frictions, interest rates across major economies converged in the late 19th century.
- Long-term government bond yields fell from an average of 6% in 1870 to 4.3% by 1913.
- Short-term interest rates in London, New York, Berlin, and Paris moved in sync, showing growing integration.

British Portfolio Diversification

- British investors allocated capital across a range of assets and geographies.
- Key investments included railways, government bonds, utilities, and industrial enterprises.
- By 1900, 80% of British investment was placed abroad, primarily in North America and Latin America.

Long-Term Government Bond Yields (Figure 4.1)

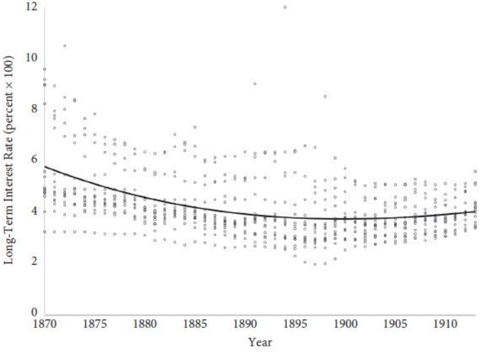

Figure 4.1 Long-Term Interest Rates, Sovereign Debt, Seventeen Countries, 1870–1913

Source: Author's calculations based on data in Jordà, Schularick, and Taylor (2021) and Jordà, Schularick, and Taylor (2017)

- Long-term borrowing costs for seventeen economies declined significantly from 1870 to 1913.

Short-Term Interest Rate Convergence (Figure 4.2)

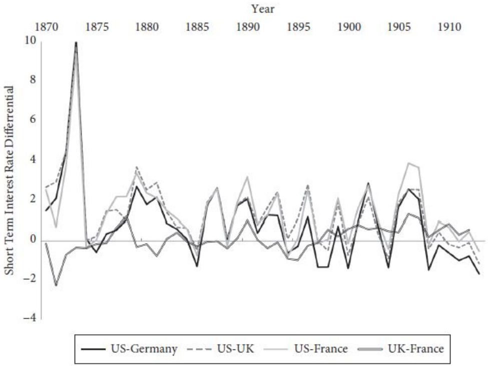

Figure 4.2 Short-Term Interest Differentials, 1870–2013
Source: Author's calculations based on data in Jordà, Schularick, and Taylor (2021) and Jordà, Schularick, and Taylor (2017)

- Short-term interest rates across major financial centers synchronized by the 1880s.

British Investment Portfolio (Figure 4.3)

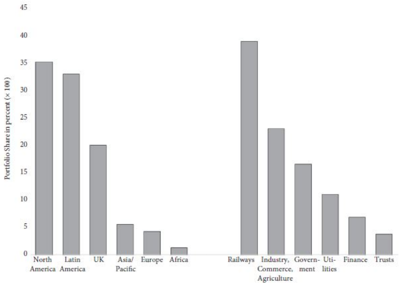

Figure 4.3 Portfolio Shares by Region and Sector for British Investment Trusts, 1900

Source: Author's calculations based on Sotiropoulos, Rutterford, and Keber (2020), pp. 800 and 802

- British investors diversified heavily, with a major focus on railways and government bonds.

The Lucas Paradox: Missing Capital

- Despite capital market integration, investment was not evenly distributed across countries.
- Nobel laureate Robert Lucas identified a paradox: capital shied away from less developed countries (LDCs).
- Capital flows favored high-GDP countries, reinforcing income gaps rather than reducing them.

Although capital was expected to flow towards poorer regions due to higher returns, it largely favored wealthier nations. This phenomenon, known as the Lucas Paradox, highlights the persistent inequality in global capital distribution.

Determinants of Investment Flows

- Investment is forward-looking: capital moves where growth potential is strongest.
- Key factors: labor force expansion, natural resources, and agricultural productivity.
- British capital followed European emigrants to settler economies, boosting infrastructure and industries.

Investors seek profitability and stability. Capital was drawn to places with economic expansion, labor supply, and resource availability, leading to a preference for settler economies.

Risk and Adverse Selection

- Borrowers varied in their ability and willingness to repay debts.
- Asymmetric information led to adverse selection, where lenders struggled to assess borrower credibility.
- Economic shocks (harvest failures, political instability) heightened default risks and discouraged investment in certain regions.

Investors faced challenges in assessing the reliability of borrowers. Unexpected economic and political disruptions further increased uncertainty, discouraging capital flow to high-risk regions.

The Gold Standard and Capital Flows

- Countries on the gold standard attracted more investment due to stable exchange rates.
- The gold standard signaled commitment to sound monetary policy, reassuring investors.
- This reduced borrowing costs and increased the supply of loanable funds for compliant nations.

Adhering to the gold standard demonstrated economic discipline, making borrowing more affordable. Investors trusted these economies, directing capital toward them.

Imperial Ties and Investment Confidence

- Colonial ties played a major role in reducing borrowing costs.
- The British government encouraged investments in colonial stocks and bonds, ensuring oversight.
- Colonial budgets required approval from the imperial powers, reducing default risk and boosting investor confidence.

Colonial affiliations provided financial security, as colonial administrations had to ensure fiscal responsibility. British backing reassured investors, increasing investment in colonies.

Capital Flows and Economic Theory

- Free international capital flows promote efficient allocation of scarce resources, directing funds to where they yield the highest returns.
- Before 1914, investors actively sought profitable opportunities abroad, leading to significant cross-border capital movement.
- A significant portion of investment portfolios was allocated to foreign economies, showing confidence in international financial systems.

Economic theory suggests that capital flows towards regions where it can be most productive, ensuring optimal allocation of financial resources. Historical evidence indicates that investors favored foreign economies with high growth potential, influencing global economic structures.

Protectionist Views on Capital Outflows

- British critics feared that capital outflows stifled domestic economic growth by diverting funds away from local industries.
- They argued that investing abroad deprived British entrepreneurs of essential capital needed for domestic expansion and industrialization.
- However, risk-adjusted returns were higher abroad, particularly in railway and government bonds in British dominions and other developing regions.

While protectionists worried about a potential shortage of domestic investment, the higher returns abroad justified capital outflows. This demonstrates that economic decision-making is often driven by profit-maximizing behaviors rather than nationalist concerns.

Great Britain as the World's Banker

- The British pound functioned as the "safe asset" of the 19th century, much like the US dollar does today, making it a preferred store of value.
- The City of London acted as a global financial hub, taking in short-term deposits and reinvesting them in foreign economies with higher returns.
- This process contributed to slower domestic growth and real currency appreciation, which weakened British manufacturing competitiveness by making exports more expensive.

Britain's role as a global financial center strengthened its banking sector but may have harmed its industrial sector by reducing the availability of domestic credit and causing currency overvaluation, a phenomenon akin to the modern "Dutch disease."

Neo-Classical Model and Capital Inflows

- Kevin O'Rourke and Jeffrey Williamson examined capital inflows using a neo-classical economic model.
- Capital inflows increased the capital-labor ratio, raising wages and productivity in recipient countries by making workers more efficient.
- These effects contributed to economic growth, allowing developing regions to industrialize and expand their economies.

The neo-classical model emphasizes that capital accumulation leads to higher wages and economic prosperity. Historical capital inflows played a key role in driving industrialization and wage growth in developing economies.

Effects of Capital Inflows on Borrowing Nations

- The increase in capital per worker boosted economic capacity, leading to higher production and economic expansion.
- Governments and businesses in developing regions benefited from better access to financial resources, which allowed them to fund large infrastructure projects.
- However, capital inflows also carried risks, including dependency on foreign investments and vulnerability to economic downturns and market fluctuations.

While capital inflows facilitated economic growth, they also introduced financial dependencies and increased exposure to global market volatility. Countries reliant on foreign capital often faced economic instability when international capital markets shifted.