IMEP 2013 Lectures 5 and 6

Globalisation:

Convergence, Inequality and Capital Flows

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Outline of today's lectures

Lecture 5

- Globalisation and inequality
- Globalisation and convergence
- Comparing convergence in G1 and G2

Lecture 6

- Capital flows in historical context and capital market integration
- Capital flows and 19th century Atlantic economy convergence
- Capital flows in recent decades and the Lucas paradox
- Lessons from two centuries of globalisation

Lecture 5 – Globalisation, inequality and convergence

Key readings:

1. Lindert and Williamson (2001), NBER working paper 8228

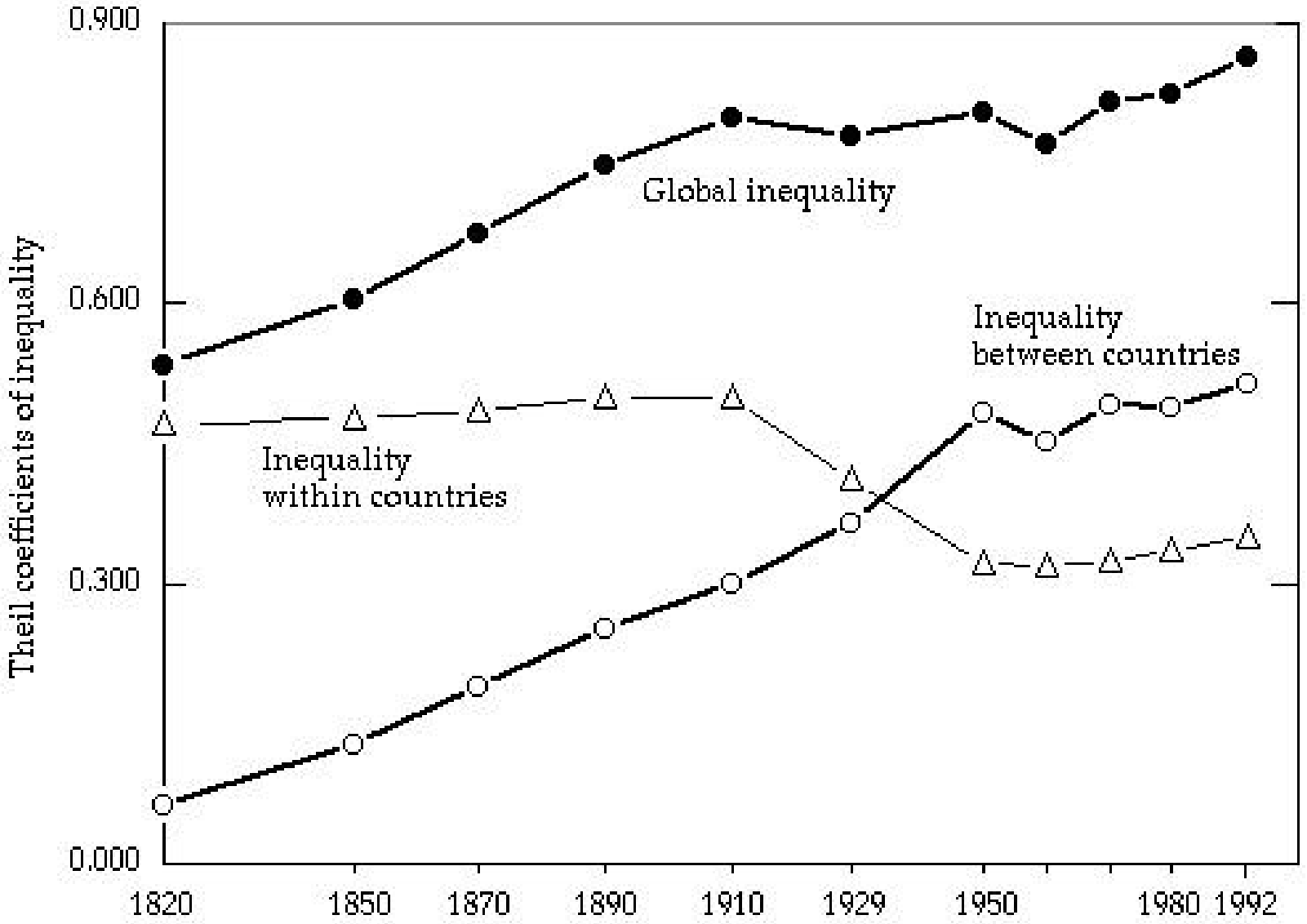
Globalisation and inequality

- **Lindert and Williamson (2001): Does globalisation make the world more unequal?**
- L&W point out that if globalisation increases inequality, then we should have seen a reduction in inequality in the Interwar Period
- Is this what we see in the data?
- The short answer is 'no': inequality *within countries* did fall, but inequality *between countries* rose more rapidly in the Interwar Period
- The net effect is that global inequality follows no clear trend during the Interwar Period

L&W, Table 5 – Globalisation and inequality

Epoch	Global inequality trend	Inequality between nations: Trend	Inequality between nations: Effects of globalization	Inequality within nations: Trend	Inequality within nations: Effects of globalization
1500-1820	Rising inequality	Rising inequality	No clear net effect.	Rising inequality (W. Europe)	No clear net effect.
1820 - 1914	Rising inequality	Rising inequality	Participants gain on non-partic. countries. Among participants, migration reduced ineq. more than capital flows raised it. Freer trade may have reduced ineq., with exceptions.	No clear trend	Globalization raised inequality in the New World, reduced it in participating Old World nations.
1914 - 1950	No clear inequality trend	Rising inequality	Retreat from globalization widened the gaps between nations.	Falling inequality (in OECD)	No clear net effect.
1950 - 2000	Slightly rising inequality	Slightly rising inequality	Globalized trade and migration narrowed the gaps among participants. Non-participants fell further behind.	Slightly rising inequality (in OECD)	Globalization raised inequality within OECD countries. In other countries, non-participating regions fell behind.

L&W, Fig 1 – Globalisation and inequality



Globalisation and inequality

- **L&W summarise their main findings in 5 key conclusions**

1. The widening in income gaps across nations has been lessened, not increased, by globalisation, *at least for participating countries*
2. In labour-abundant countries before 1914 (eg Europe), globalisation reduced inequality, particularly where emigration was substantial
3. In labour-scarce countries, globalisation increased inequality, with a powerful impact before 1914 where immigration substantial (eg US)
4. All in all, globalisation has meant less world inequality
5. World incomes would still be unequal under full integration of the world economy, but they would be less unequal than under full segmentation

Globalisation and inequality

- In a recent paper, Sala-i-Martin (2006) looks at individual incomes from 1970-2000
- The world economy Gini coefficient was stable in the 1970s and has fallen steadily since 1979, with a total reduction of around 4%
- Other inequality indexes point to an even stronger reduction in income inequality (see Table III, p. 384)
- Sala-i-Martin describes this substantial and sustained decline in inequality in individual incomes as "convergence, period."
- This finding contrasts with the "divergence, big time" conclusion Pritchett (1997) reaches using GDP per capita *across countries*

19th century globalisation and GDP convergence

- As we saw in Lecture 1, real wage convergence was an important feature of G1
- However, Atlantic economy convergence looks less compelling when we use GDP per capita instead (see O&W Fig 2.3)
- Indeed, using Maddison's data, their was convergence between 1890 and 1913 but not from 1870 to 1890
- That said, O&W do make some good arguments for why we should be interested in factor prices (see pp. 9-11) and Taylor and Williamson (1997, Table 2) show that, in terms of magnitude, convergence of real wages and GDP from 1870-1913 were similar

20th century globalisation and GDP convergence

- See Table 1 of Mussa (2000) for the results below
- Since 1950, real world GDP per-capita has almost tripled
- This rate of increase has been roughly matched in the UK, US and Asia (exc. Japan and China)
- In Japan and China, the increase has been closer to ten-fold!
- However, per-capita GDP has not even doubled over this period in Eastern Europe or Africa, and from 1973 to 2000 per-capita incomes fell significantly in Eastern Europe and were stagnant in Africa

Trade policy and growth in the Third World, 1963-92

- Based on their results and a review of the literature (pp. 21-26), L&W (2001) conclude that "*freer trade stimulates growth in Third World today*." (p. 25)

- Their Table 3 does not prove causation but is suggestive

Average annual growth rates of GDP per capita[a]

Trade policy orientation	**1963-73**	**1973-85**	**1980-92**
Strongly open to trade	6.9%	5.9%	6.4%
Moderately open	4.9%	1.6%	2.3%
Moderately anti-trade	4.0%	1.7%	-0.2%
Strongly anti-trade	1.6%	-0.1%	-0.4%

(a) Lindert and Williamson (2001), Table 3 (p. 48).

Comparing convergence in G1 and G2

- Taylor and Williamson (1997) attempt to assess magnitude and speed of Atlantic economy convergence during G1 and G2
- Their results suggest there was convergence of both wages and GDP per capita in G1 and G2, but the amount and speed of convergence appear to have been faster in G2 than G1 (Table 2, p. 31)
- This conclusion holds even with Williamson's wage data, albeit that the difference is smallest in this case
- **Example:** the implied convergence speed of GDP per capita was 2.97% per year from 1950-87, compared to 0.34% from 1870-1913

Summary

- The impact of globalisation on incomes and wages is not straightforward
- On the one hand, globalisation seems to have led to convergence in GDP per capita and wages *across countries* in the Atlantic economy
- On the other hand, there is evidence that globalisation increased wage inequality *within* New World countries in G1
- Sala-i-Martin's results suggest that globalisation may have reduced world income inequality after 1979, but much of this reduction is likely to be driven by fast-growing countries with large populations (eg China), so we must be careful when interpreting these results

THE END

Lecture 6 – Globalisation and capital markets

Key readings:

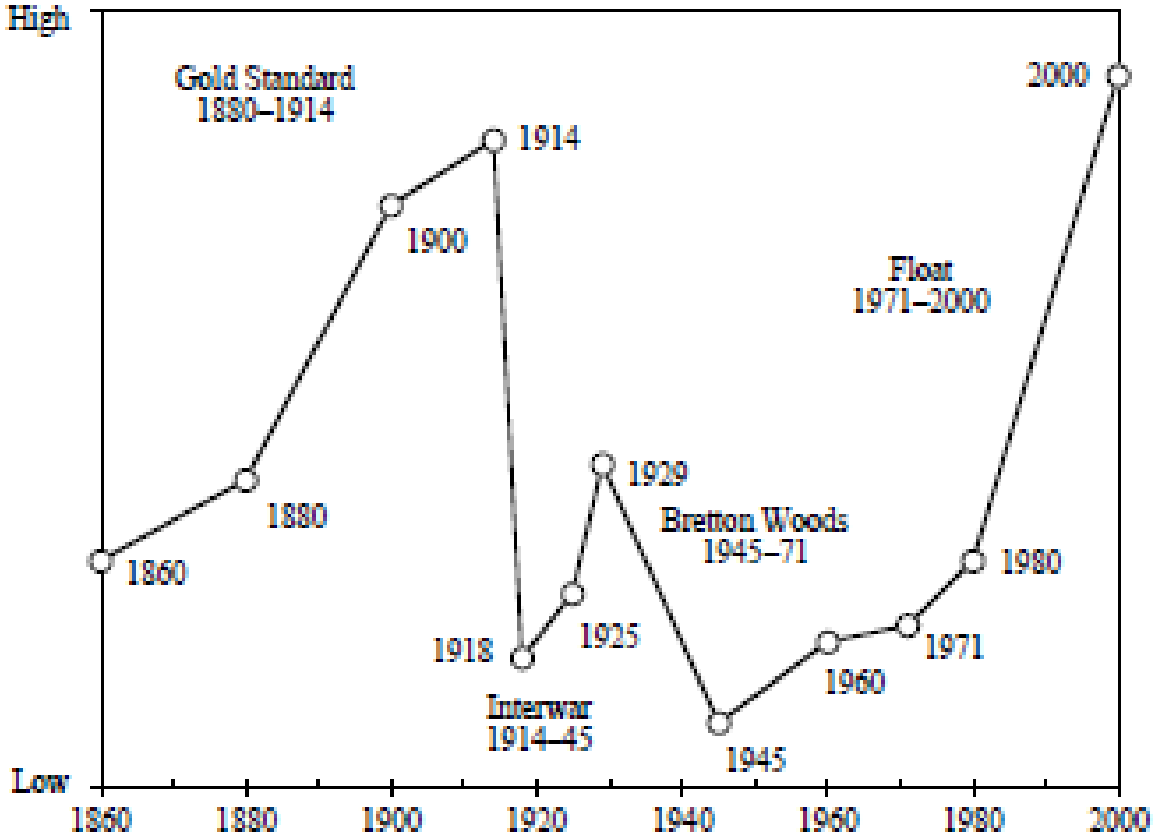
1. Obstfeld and Taylor (2002), NBER working paper 8846
2. O'Rourke and Williamson, Chapter 12

Capital flows and globalisation

- World capital markets emerged mid to late 19th century
- Just as technological factors revolutionised commodity trade, there was a revolution in finance
- Financial instruments became common and financial centres emerged in London, New York, Amsterdam, Frankfurt and Paris
- After 1870, these developments progressed further due to technological advances – eg the telegraph and trans-oceanic cables
- As financial markets became more sophisticated, banks became a part of everyday life and the threats posed by banking collapses and speculative 'bubbles' became more important considerations

Capital flows in historical context

Figure 1: Conjecture? A Stylized View of Capital Mobility in Modern History



- Fig 1 is from Obstfeld and Taylor (2002). It is not based on actual data but it does highlight the main trends in capital mobility.

Capital flows in historical context

- Capital mobility grew in two distinct waves. These waves were separated by the interwar period and correspond to G1 and G2.
- Capital mobility was broadly similar during G1 and G2 but was initially low after WWII (see also O&W, pp. 213-16)
- The increase in capital mobility since the move to floating exchange rates in 1971 is striking, with an acceleration from the early 1980s
- However, capital mobility grew almost as rapidly during the classical Gold Standard period from 1880-1914
- **What factors were driving these trends in capital mobility?**

Capital flows in historical context

- The period up to 1914 was one of booming trade. The Gold Standard was a credible and stable fixed exchange rate system, which encouraged trade and capital flows.
- There was also a transport and communications revolution (see O&W, p. 219-20). This speeded up transfer of information between financial centers.
- Securities markets in equities and government bonds were crucial. Swedish railroad construction was financed by government debt held mainly by France (see O&W, p. 235).
- Political support for the Gold Standard was crucial as it helped prevent a backlash against the loss of independent monetary policy

Capital flows in historical context

- In the interwar period, capital markets became segmented and trade barriers were increased, partly in response to the Great Depression
- Interwar capital controls were often introduced as a way of devaluing the exchange rate (O&T, p. 10)
- After WWII, global trade increased as trade barriers were reduced – eg the EU can be traced back to 1951
- But capital controls were not fully dismantled for many years – 1979 in the UK. Once they were, trade rapidly increased.
- The move to floating in the early 1970s was driven by a desire for capital mobility AND monetary policy independence (O&T, p. 13)

Capital market integration

- Obstfeld and Taylor (2002) assess capital market integration using:
  1. Gross stocks of foreign capital
  2. Interest rate convergence
  3. Equity and bond returns
- The idea behind (2) and (3) is that returns across countries should converge if capital market integration increases, because arbitrage should eliminate return differentials
- (1) is simply an attempt to measure the importance of international capital stocks

Gross stocks of foreign capital

- Obstfeld and Taylor add up foreign assets and liabilities and then sum across countries (see Table 2).

Key findings

- Until the interwar period, the UK share of total global foreign investment was around 80%. The US share of global foreign assets in 1995 was only 22%.
- The 1900-1914 ratio of foreign investment to GDP was not matched until 1980, and has now been approximately doubled
- In 1870 foreign assets were 7% of world GDP, rising to almost 20% in 1900-1914. In the interwar period, foreign assets fell to 8% of world GDP in 1930 and 5% in 1945.
- Looking at liabilities rather than assets tells a similar story

Interest rate convergence

- Obstfeld and Taylor examine long-term real interest differentials between Britain, France and Germany, excluding WWI, WWII and German hyperinflation (1919-23)
- If capital markets are integrated, we should expect interest rates to be similar across countries, and any differentials should be mean-reverting
- Visual inspection (see Fig 4) suggests no interest rate divergence, and unit root tests suggest differentials are mean-reverting
- O&T also provide supportive evidence from exchange-risk-free nominal interest parity (see Fig 5)
- $\Longrightarrow$ Capital markets highly integrated before WWI and after WWII

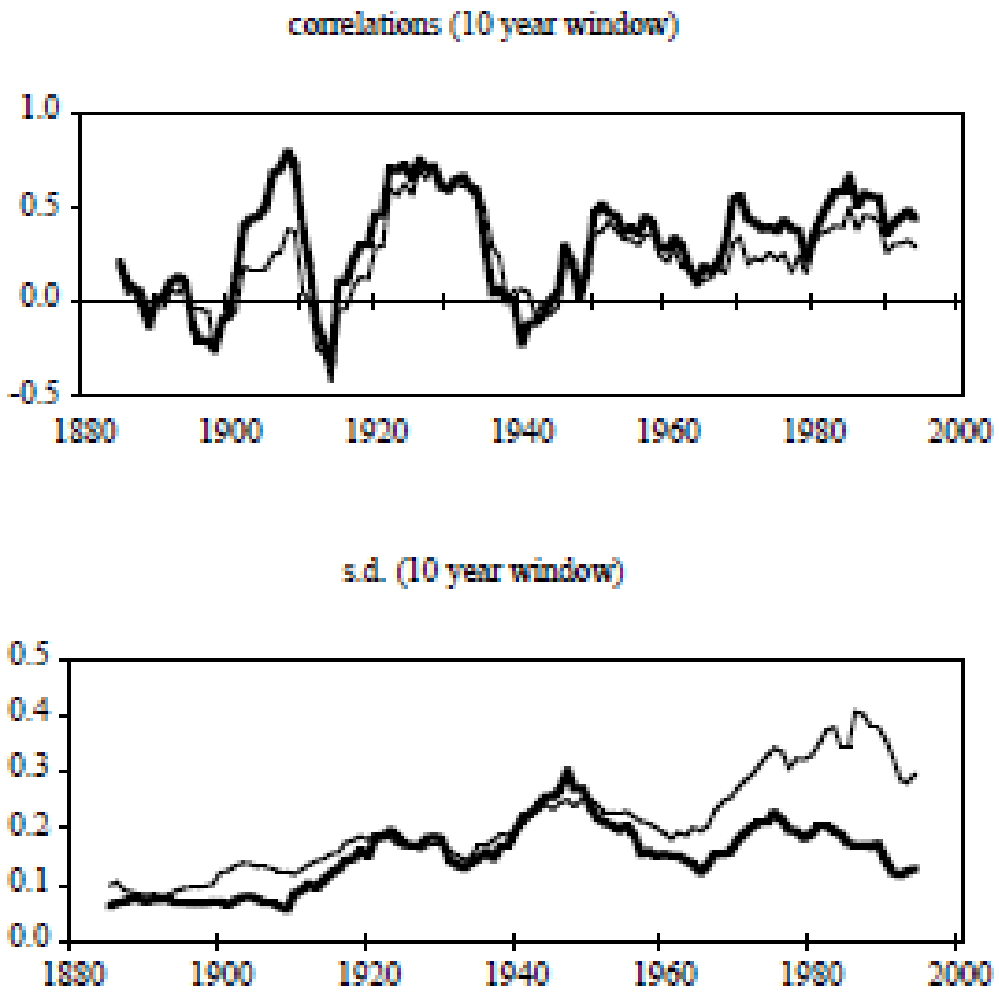
Equity and bond returns

1. Have stock market returns diverged or converged?
2. Have correlations of stock returns changed?

Key findings

- Returns showed little dispersion prior to 1914, but larger gaps opened up in the interwar period. Convergence was more notable after 1980 when G7 capital controls were removed (see next slide).
- Return correlations tend to be positive and more stable outside the war years
- Overall, these results suggest capital market integration was high except for an interwar interruption
- Bond returns likewise diverge during the Interwar Period (see Fig 8)

Equity returns: G7 and 22 global stock markets 1880-2000



- Thick line shows G7 only. Source: Fig 6, O&T (2002).

Capital flows and 19th century Atlantic convergence

- O&W Ch 12 investigates capital flows and convergence
- Most British investment went to the New World, but France and Germany invested heavily in Europe prior to 1914

Foreign investment in European core, 1913-14[a]
(% home-country FI to destination area)

Destination	Britain	France	Germany
Europe	6.4	61.1	53.2
N. America & Australasia	44.8	4.4	15.7
Asia and Africa	25.9	21.1	12.8

(a) O&W , Table 12.2, p. 229. Figures are percentages: eg 6.4% UK FI.

- **Did these capital flows help the European periphery catch up?**

Capital flows and 19th century Atlantic convergence

- Capital flows to Scandinavia were a source of convergence
- Capital imports since 1870 made the 1910 capital stock in Sweden 50% higher than it would otherwise have been (pp. 235-6)
- This differential accounts for an increase in real wages in Sweden of 25% and a fall in British wages of 7%, implying that 43% of Swedish wage convergence on Britain was due to capital flows (see Table 12.3)
- Capital flows also explain around 1/3 of Swedish real wage convergence on the US
- In Norway and Denmark capital inflows were a source of convergence, but the impact was not as large as in Sweden

Capital flows and 19th century Atlantic convergence

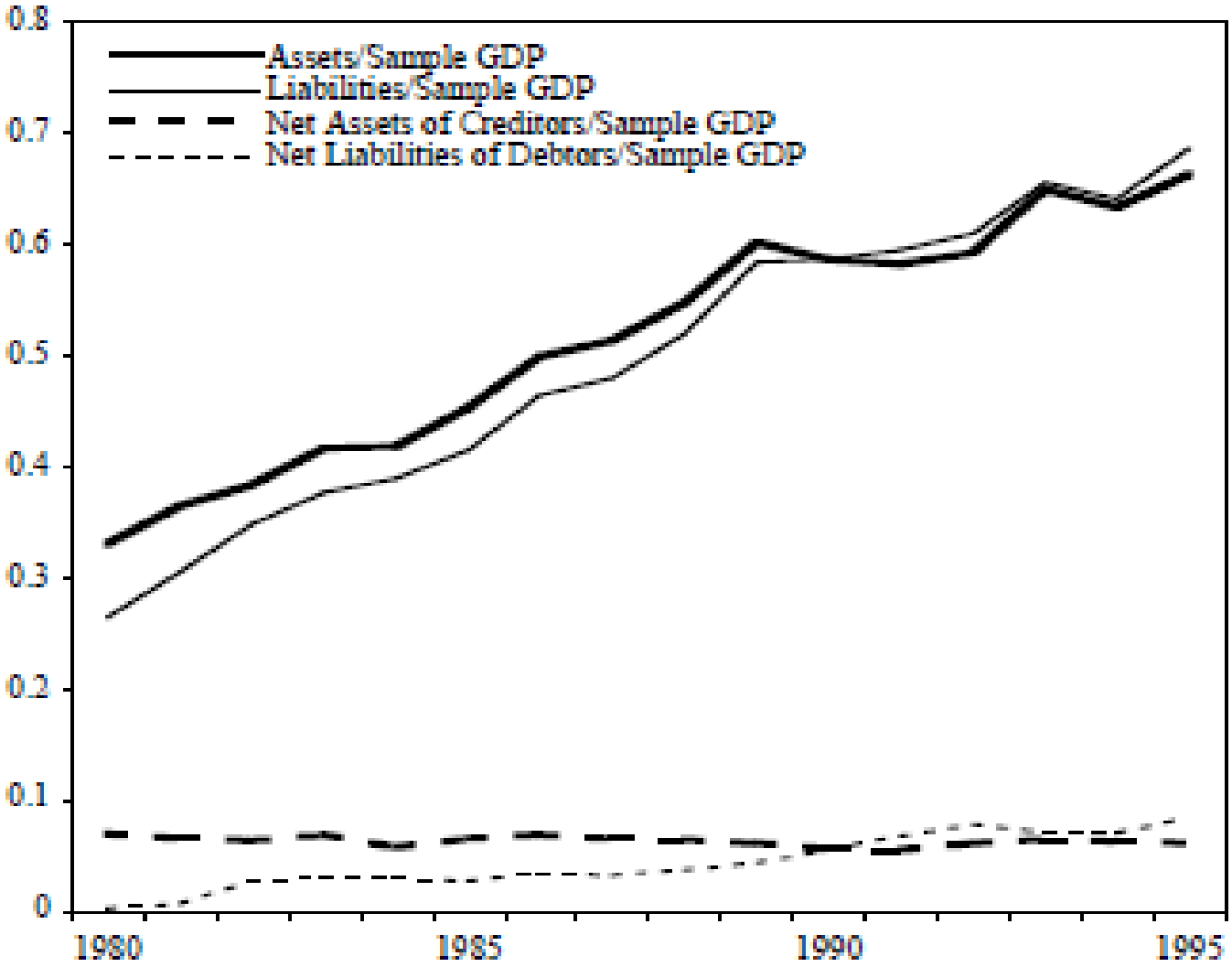
- However, the impact was very different outside of Scandinavia – at least as far as we can tell given the limited data available
- **Example:** it is likely Ireland was a *capital exporter* during the late 19th century (see p. 238)
- And official statistics suggest that Italy was a net capital exporter from 1870-1913 (p. 239), while best estimates suggest than Spain and Portugal could have had only small net capital inflows (pp. 239-40)
- Capital flows therefore made *little or no contribution* to Irish, Italian or Iberian growth (see Table 12.3 and p. 240). In short, capital mainly followed labour to the rich New World.

Overall verdict: capital flows probably a source of divergence

Capital flows in recent decades

- Capital flows differed somewhat between the pre-WWI era and the post-WWII era
- In the late 19th century, the principal flows were long-term investment and the advanced economies were net lenders
- Britain, France and Germany financed developing countries' capital accumulation and developed a huge capital account surplus
- The 1980s and 1990s were very different (see next slide) – eg the US was the world's largest net and gross creditor and debtor nation!
- Since 1980, net foreign asset (and liability) positions have been low, unlike gross stocks

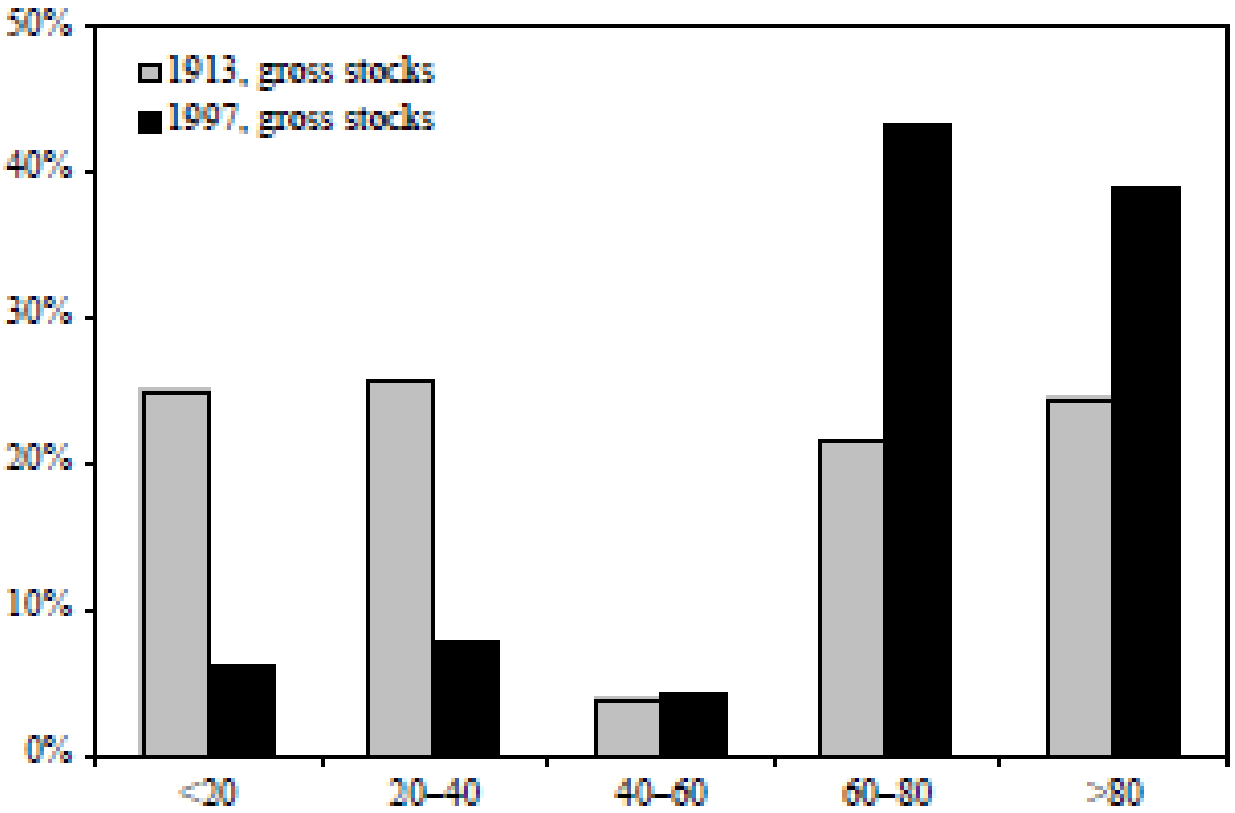
Foreign capital stocks 1980-95: net versus gross



Source: Fig 9, O&T (2002)

The Lucas paradox

Capital flows to LDCs are much smaller in the present era as a proportion of the world stock of foreign capital:



Horizontal axis = index for per-capita GDP of the receiving region (U.S. = 100).

Source: Fig 10, O&T.

The Lucas paradox

Obstfeld and Taylor intrepret these results are follows (p. 59):

- "*Capital transactions seem to be mostly a rich-rich affair, a process of diversification finance rather than development finance.*"
- "*In other words, we see again the paradox noted by Lucas, of capital failing to flow to capital-poor countries, places where we would presume the marginal product of capital to be very high.*"
- **Why does capital not flow from rich to poor countries?**
- Lucas asks this question and attempts to answer it. So will we in the next lecture, with his help!

Lessons from two centuries of globalisation

Lesson 1: No clear link between globalisation and inequality

- There is no conclusive relationship between globalisation and inequality in two centuries' data
- Compared to autarky, globalisation lowers inequality *across countries* (L&W), and it also seems to have lowered inequality in individual incomes since 1979 (Sala-i-Martin)
- The latter is encouraging because in this period globalisation was rapid due to the removal of capital controls
- Overall, globalisation does seem to raise inequality *within countries* (L&W). O&W Ch. 9 provide evidence of this in the 19th century Atlantic economy, but inequality only rose in rich countries (eg US).

Lessons from two centuries of globalisation

Lesson 2: Participation brings prosperity

- The Atlantic economy countries that converged most rapidly were those with free trade and open borders
- For example, Spain and Portugal were reluctant to trade and did not see any convergence, while the fastest convergers (eg Sweden) had mass emigration from their borders
- Likewise, L&W conclude that economies open to trade have benefited most from G2. However, G1 is a cautionary tale because discontent led to the interwar retreat to autarky (see O&W Ch. 9)

Policy implication:

- Balance exposure to open economy forces against the political risks of creating 'winners' and 'losers'

Lessons from two centuries of globalisation

Lesson 3: Modern globalisation is different

- The major difference with G2 is that there is no longer mass migration in the world economy
- The distributional effects of globalisation are likely to be lower as a result, though the significant increase in trade during G2 has probably pushed in the opposite direction (at least if the H-O model is correct)
- Another difference is that capital flows are now more short-term and the Lucas paradox has strengthened
- **Policy implications:**
  1. Immigration controls are one way governments can lessen discontent about globalisation, but they are clearly second best
  2. Capital *inflows* are a source of convergence so capital flows to LDCs may be important for their development

THE END

References

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