Lecture 12:
Benefits of International Financial Integration

- Pros and Cons of Open Financial Markets
- Advantages of financial integration
  - The theory of intertemporal optimization
  - Other advantages
- Do financial markets work as they should?
  - The Lucas paradox
  - Procyclical capital inflows
  - Periodic crises
- Capital Flows to Developing Countries
  - An international debt cycle.
  - Reasons for flows to emerging markets.
Advantages of financial opening

• For a successfully-developing country, with high return to domestic capital, investment can be financed more cheaply by borrowing from abroad than out of domestic saving alone.

• Investors in richer countries can earn a higher return on their saving by investing in the emerging market than they could domestically.

• Everyone benefits from the opportunity
  – to smooth disturbances
  – and to diversify away risks.
Further advantages of financial opening in emerging-market countries

- Letting foreign financial institutions into the country improves the efficiency of domestic financial markets. It subjects over-regulated & inefficient domestic institutions – to the harsh discipline of competition and – to the demonstration effect of examples to emulate.

- Governments face the discipline of the international capital markets in the event they make policy mistakes.
Classic gains from trade

In autarky, Portugal can only consume what it produces. (Price mechanism puts it on full-employment PPF & at the point maximizing consumers' utility.) Textiles are cheaper on world markets. Under free trade, Portugal responds to new relative prices by shifting into wine, where it has a comparative advantage. Portuguese consumption in textiles rises, which it imports, thereby reaching a higher indifference curve.

Next, we do the gains from trade again, substituting period 0 & period 1, in place of wine & textiles.
Welfare gains from open capital markets:

1. Even without intertemporal reallocation of output, \( Y_0 \) & \( Y_1 \), consumers are better off (borrowing from abroad to smooth consumption).

2. In addition, firms can borrow abroad to finance investment.
The intertemporal-optimization theory of the current account, and welfare gains from international borrowing

1. Financial opening with fixed output

Assume interest rates in the outside world are closer to 0 than they were at home (the slope of the line is closer to -1.0).

High interest rate encourages agents to postpone consumption.

Welfare is higher at point B.

=> domestic residents borrow from abroad, so that they can consume more in Period 0.

The intertemporal-optimization theory of the current account, and welfare gains from international borrowing, continued

2. Financial opening with elastic output

Assume interest rates in the outside world are closer to 0 than they were at home.

Shift production from Period 0 to 1, and yet consume more in Period 0, thanks to foreign capital inflows.

Welfare is higher at point C.

Does this theory ever work in practice?

Effect when countries open their stock markets to foreign investors on cost of equity capital to domestic firms.

Liberalization occurs in “Year 0.”

Cost of capital falls.

Peter Henry (2007)
“Capital Account Liberalization: Theory, Evidence, and Speculation,”
Effect when countries open their stock markets to foreign investors on investment.

Rate of capital formation rises.

Does this theory work in practice? continued

Peter Henry (2007)

Figure 4. Investment Booms When Countries Liberalize the Capital Account.
Does this theory ever work in practice? continued

Norway discovered North Sea oil in 1970s. It temporarily ran a large CA deficit,

- to finance investment (while the oil fields were being developed)
- & to finance consumption (as was rational, since Norwegians knew they would be richer in the future).

Subsequently, Norway ran CA surpluses (>10% after 2000).

Figure 1.2
Norway’s saving-investment balance, 1973–94. (Source: OECD)
Indications that financial markets do not always work as advertised

1) The Lucas Paradox: Capital flows have generally *not* on average gone from rich (high K/L) to poor (low K/L) countries

2) Capital flows have been pro-cyclical more often rather than countercyclical.

3) Crises recur.
Indications that financial markets do not always work as advertised

Crashes

• Debt crises, currency crises, banking crises
  ➢ The 1982 international debt crisis;
  ➢ 1992-93 crisis in the European Exchange Rate Mechanism;
  ➢ EM currency crashes of the late 1990s:
    ➢ 1994-95 Mexico;
    1997 E.Asia, esp. Thailand, Korea & Indonesia;
  ➢ 2008-2015
    ➢ Iceland, Hungary, Latvia, Ukraine, Pakistan...;
    ➢ The 2010-15 euro crisis (Greece, Ireland, Portugal, Spain, Cyprus...).
Indications that financial markets do not always work as advertised, cont.

• Do investors punish countries when and only when governments follow bad policies?
  
  ➢ Large inflows often give way suddenly to large outflows, with little news appearing in between to explain the change in sentiment.
  
  ➢ Contagion sometimes spreads to countries that are unrelated, or where fundamentals appear stronger.
  
  ➢ Recessions have been so big, it seems hard to argue that the system works well.
Cycle in capital flows to emerging markets

• 1\textsuperscript{st} developing country lending boom ("recycling petro dollars"): 1975-1981
  – Ended in international debt crisis 1982
  – Lean years ("Lost Decade"): 1982-1989

• 2\textsuperscript{nd} lending boom ("emerging markets"): 1990-96
  – Ended in East Asia crisis 1997-98

• 3\textsuperscript{rd} boom (incl. China & India this time): 2003-2008

• 4\textsuperscript{th} boom: 2010-2012
  – Perhaps ended in taper tantrum of 2013 & "China tantrum" of 2015?
Cycles in capital flows to Emerging Markets:

- late 1970s, ended in the Intl. debt crisis of 1982-89;
- 1990-97, ended in East Asia crisis of 1997-98;
- 2003-08, ended in GFC of 2008-09;
- 2010-12, ended...2015?
Causes of renewed capital flows to emerging market countries in early 1990s and 2003-12

“Pull” factors (domestic): Economic reforms in the South
1. Economic liberalization => pro-market environment
2. Privatization => assets for sale
3. Monetary stabilization => higher returns
4. Removal of capital controls => open to inflows

“Push” factors (external): Global financial environment
1. More Northern portfolios in mutual funds, ETFs, etc.
2. Low interest rates in the North.
Appendix 1:

More on opening equity markets to foreign investment.
Effect on growth when countries open their stock markets to foreign investors.


Figure 5. The Growth Rate of Output Per Worker Increases When Countries Liberalize.
Appendix 2: Cycles of capital flows to EMs

1. **1975-81** -- Recycling of petrodollars, via bank loans

   **1982**, Aug. -- *International debt crisis* starts in Mexico and spreads

   **1982-89** -- The “lost decade” in Latin America.

2. **1990-96** -- New record capital flows to emerging markets

   **1994**, Dec. -- Mexican peso crisis

   **1997**, July -- Thailand forced to devalue & seek IMF assistance =>

   beginning of *East Asia crisis* (Indonesia, Malaysia, Korea...)


   **2001**, Feb. -- Turkey abandons exchange rate target


3. **2003-08** -- New capital flows into EM countries, incl. BRICs...

   **2008-09** -- Global Financial. Crisis;

   **2010-15** -- Euro crisis: Greece, Ireland, Portugal...
Three booms in capital flows to developing countries

1st boom (recycling petro-dollars)
Stop (international debt crisis)

2nd boom (emerging markets)
Stop (Asia crisis)

3rd boom (carry trade / BRICs)
Although EM countries used capital inflows to finance CA deficits in 1976-1982 & 1990-97; they did not in 2003-07.

1st boom (recycling petro-dollars)

Stop (international debt crisis)

2nd boom (emerging markets)

Stop (Asia crisis)

3rd boom (carry trade & BRICs)

Current account balance (% of GDP)

EME
LATAM
DEV. ASIA

CA surpluses

CA deficits


Source: International Monetary Fund, World Economic Outlook. Latin America and developing Asia are simple averages across countries. Latin America: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela. Developing Asia: China, India, Indonesia, Korea, Malaysia, Philippines and Thailand. Emerging markets (EME) corresponds to the IMF’s weighted average definition.
EM countries used post-2003 inflows to build international reserves


Figure 15: Emerging Market International Reserves
Source: IMF IFS, April 2014, Deutsche Bank Research
EM capital flows fell in the 2008-09 Global Financial Crisis, especially portfolio flows, but then came back in 2010-11.
Capital flows to Asia (billions of US dollars) in the 1990s, 2003-07, and 2010-12

2nd boom (emerging markets)

3rd boom (carry trade & BRICs)

stop (Asia crisis)

4th boom

start (GFC)

Capital flows to Latin America (billions of US dollars)
in the 1990s, 2004-07 and 2010-12


4th boom
3rd boom (carry trade & BRICs)
2nd boom (emerging markets)
start