International Finance

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Session 5

Financial integration and global financial markets

Roadmap

1. **Financial Globalization : past and present**
2. The case for opening capital markets and the empirical evidence
3. Financial globalization and the international transmission of shocks
4. International capital flows during the recent crisis

Financial globalization: stylized facts

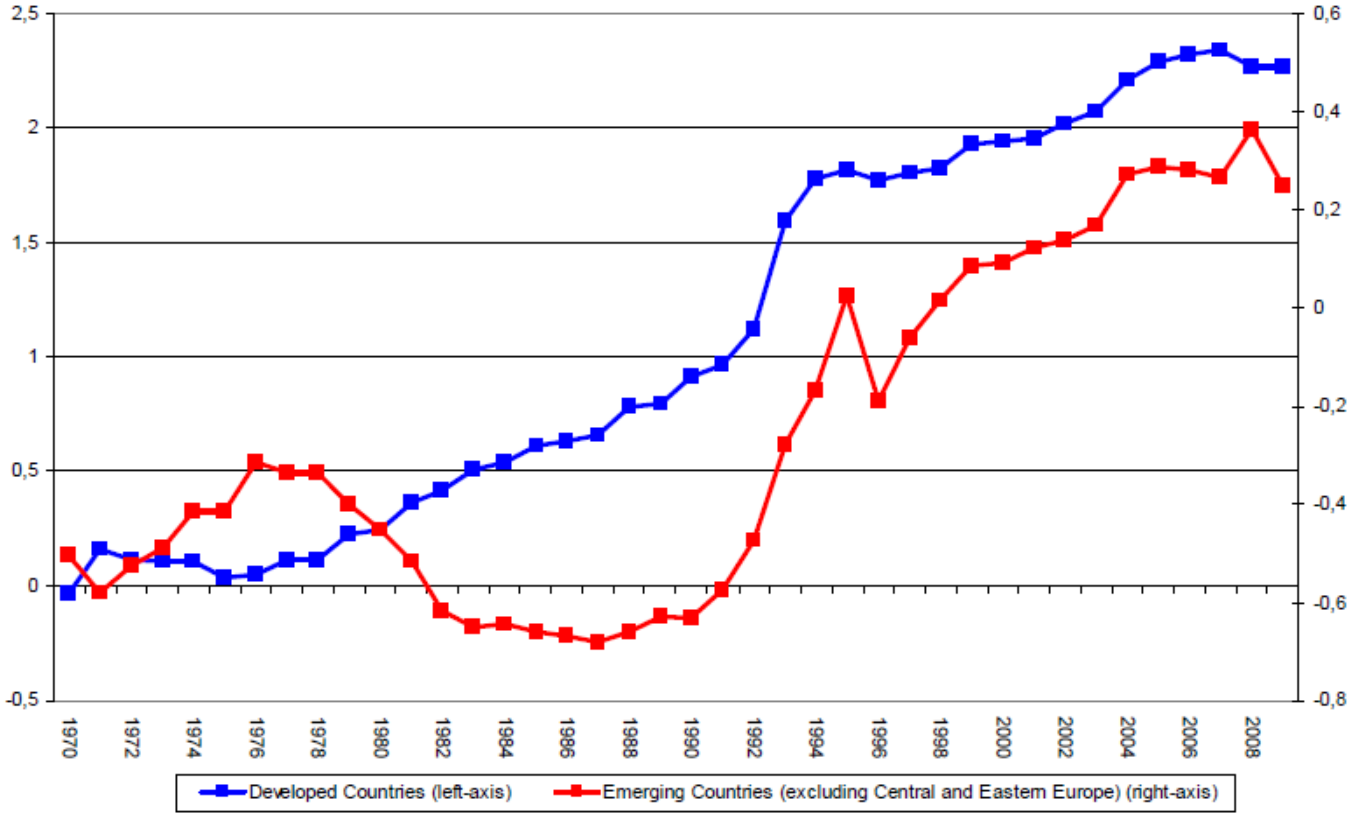
- Financial globalization ≠ Trade globalization
- Measures of trade openness :
  - What are the restrictions (tariffs and regulations) to free trade?
  - (Exports + Imports)/GDP
- Measure of financial globalization: extent of the openness in cross-border financial transactions
- De Jure and de Facto financial openness measures
  - De Jure: What are the restrictions to international capital movements based on the information from the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER);* example: In October 09, Brazil decided to tax capital inflows to discourage short-term hot money from flowing in.
  - De Facto: how much international trade in financial assets ?

Which assets?

- Characteristics of financial assets: mean to transfer some purchasing power over periods
  - Portfolio investment: equity or debt
  - Foreign direct investment: > 10% ownership
  - Other investments: loans, trade credit
  - Derivatives (futures, options)
  - Reserves (central banks)

Financial openness (De Jure)

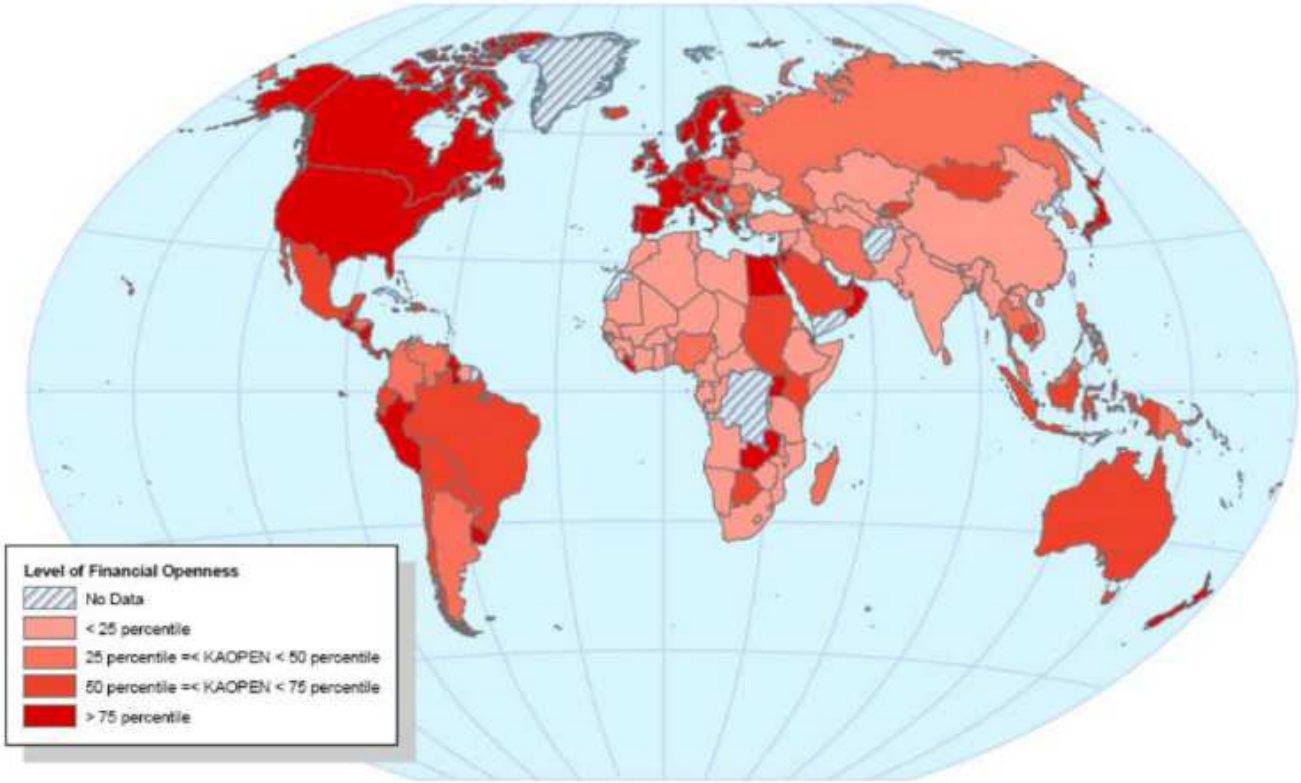
Chinn-Ito index based on IMF information on restrictions to capital movements



Note: Index between -2.5 and 2.5. -2.5=Closed capital market; 2.5=Fully opened

Source: Chinn and Ito, 2008

The world map of financial openness (De Jure) : index based on IMF information on restrictions to capital movements



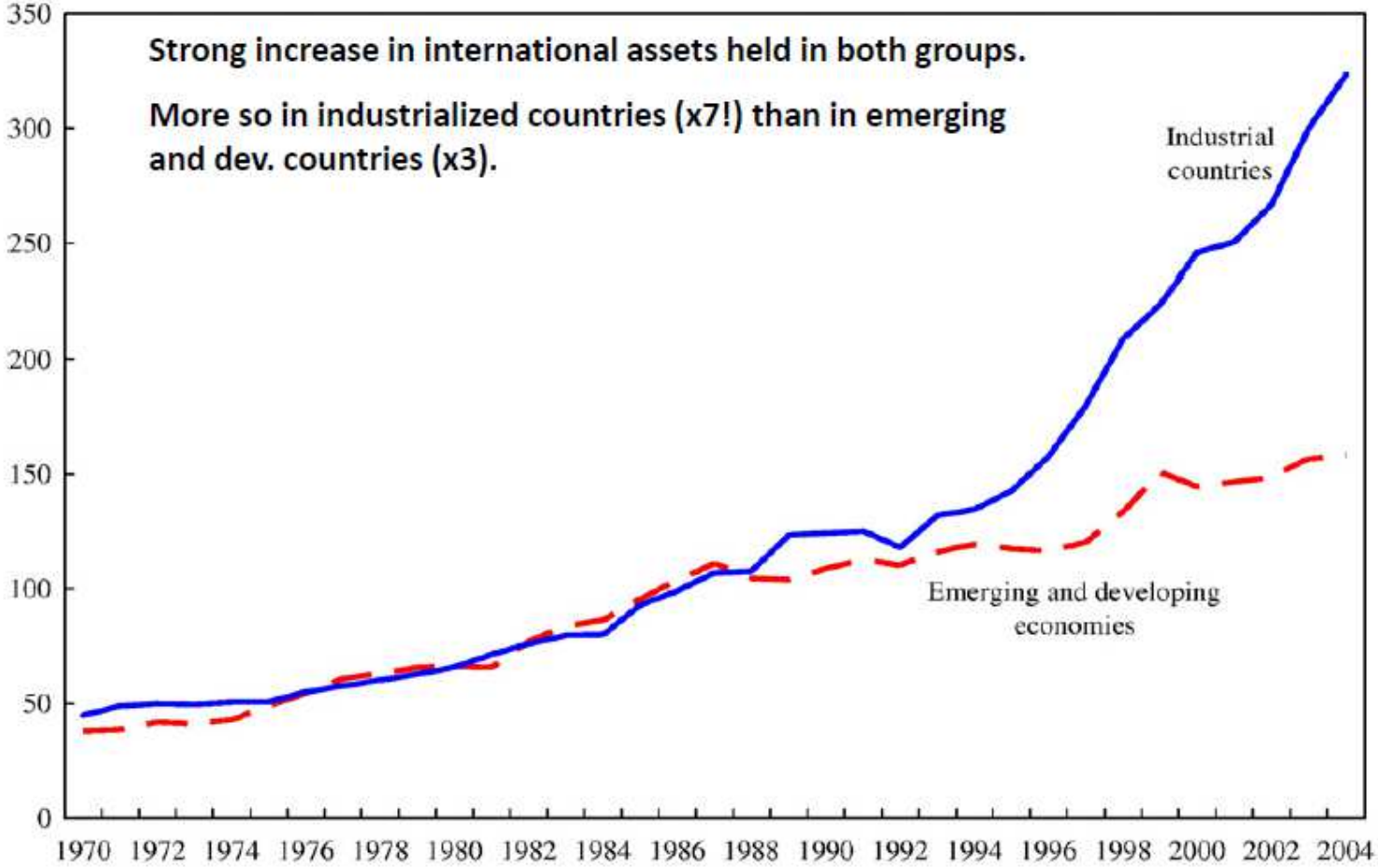
Source: Chinn and Ito, 2008

Inflows, outflows and stocks

- Important distinction: flows and stocks
  - Flows: the value of assets **traded** for a given year : at
  - Stocks: the value of assets **held** in a given year:
  - Stocks are cumulated flows

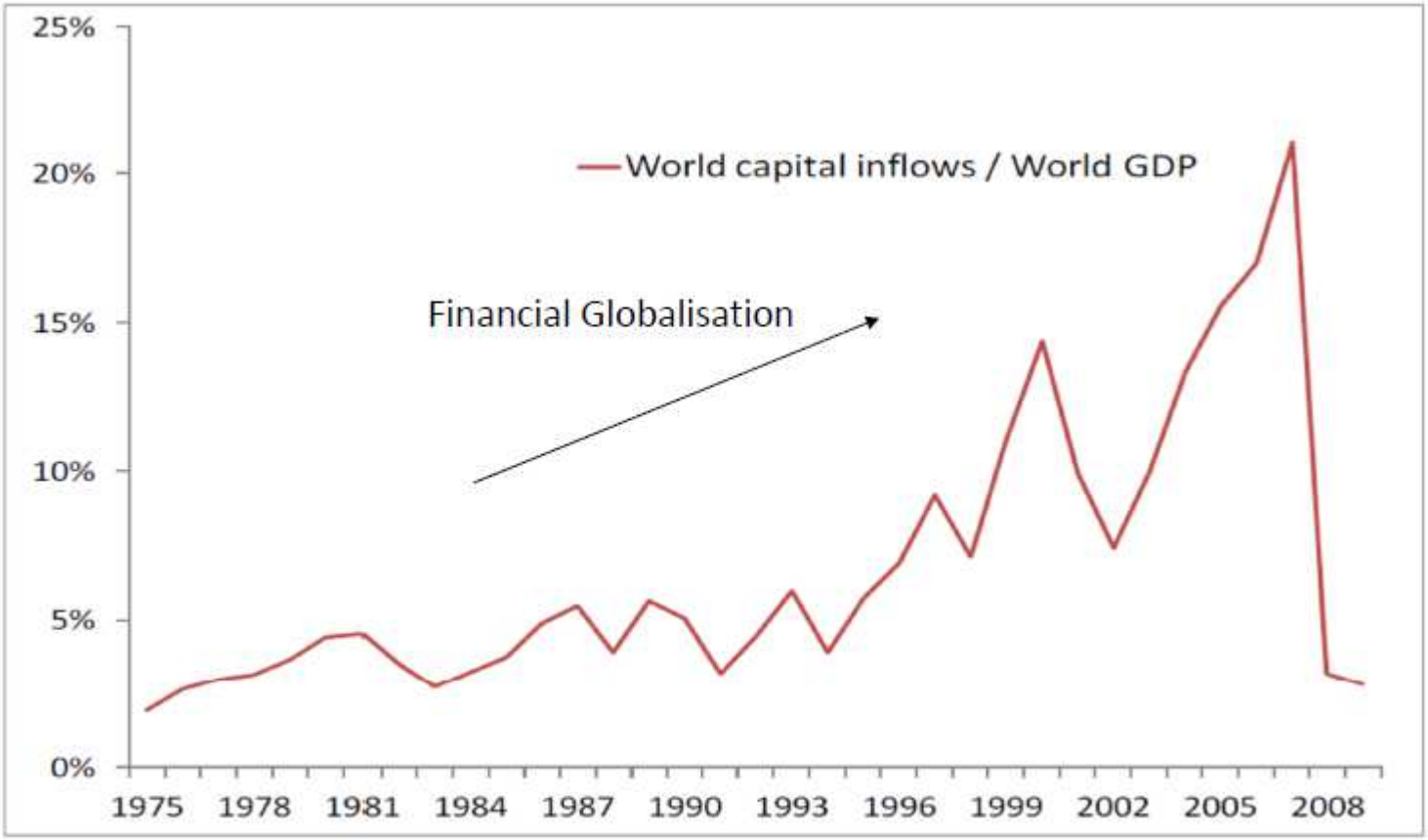
- Measures of financial integration
  - Stocks: (Domestic assets held by foreigners + Foreign assets held by domestic agents) / GDP but valuation issue (change every day)
  - Flows:
    - capital inflows/GDP: net purchases of domestic assets by foreign investors
    - Capital outflows/GDP: net purchases of foreign assets by domestic investors

International financial openness, 1970–2004



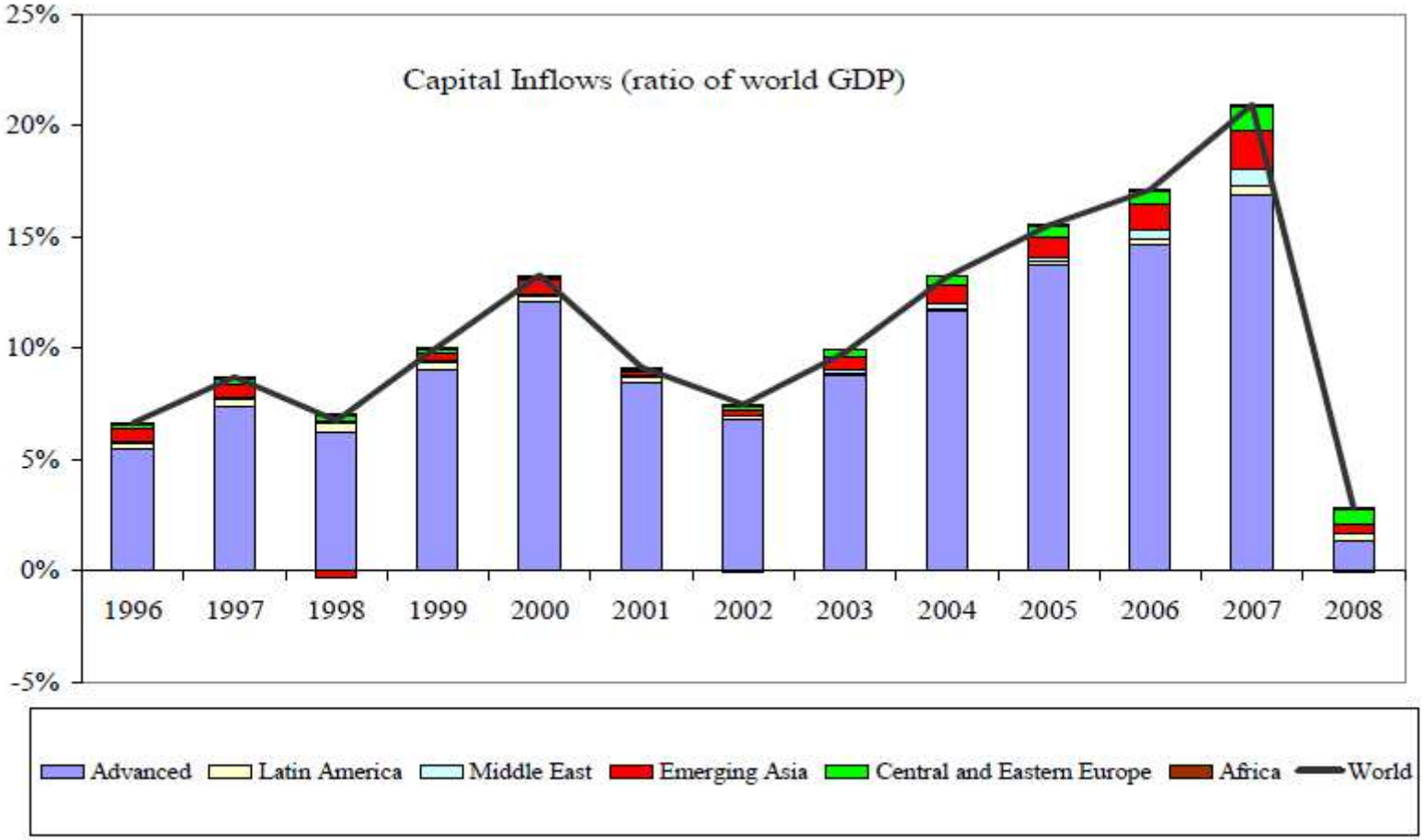
(Domestic assets held by foreigners + Foreign assets held by domestic agents)/ GDP
source Lane and Milesi-Ferreti (2007)

Flows are more volatile than stocks



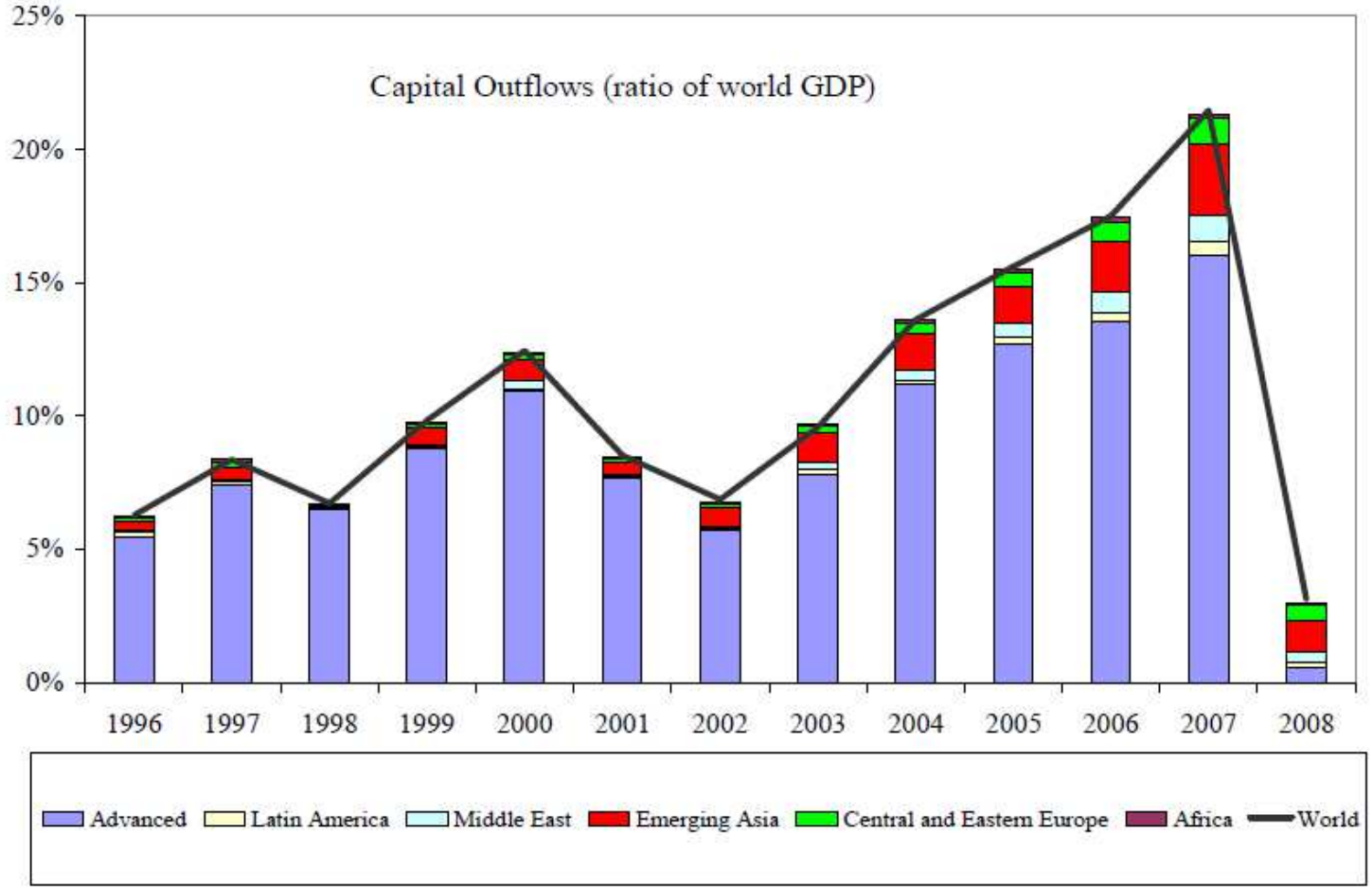
Note: sum of gross capital inflows across the world's countries, as a ratio of world GDP. Source: Lane and Milesi-Ferretti, EWN II database, and IMF, Balance of Payments Statistics.

The big retrenchment during the crisis



Source: Milesi-Ferretti and Tille

The big retrenchment during the crisis



Source: Milesi-Ferretti and Tille

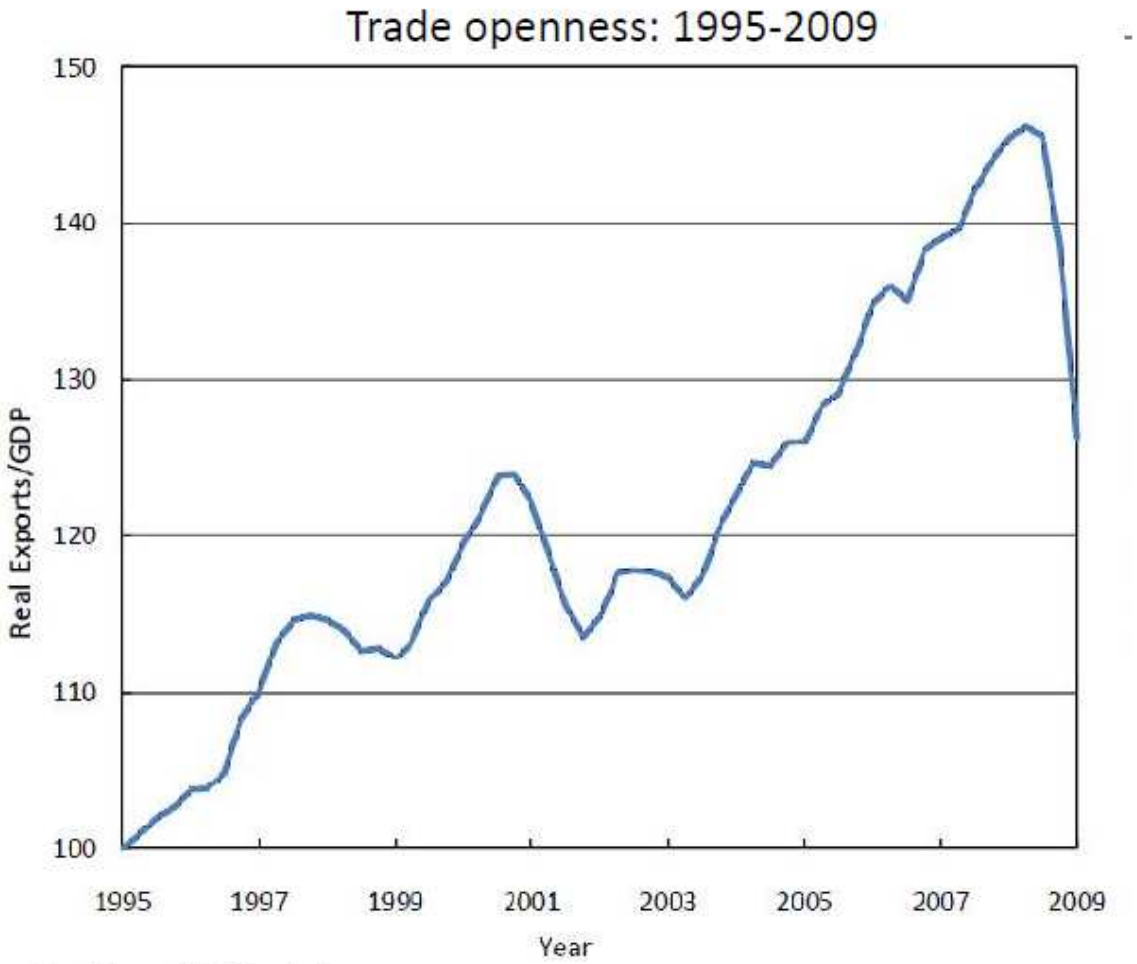
Relative Globalizations

- Two forms of globalization
  - « Real »: trade flows
  - Financial: financial flows

- Compare the two forms of globalization: Ratio of financial openness (financial assets) to real openess (goods)

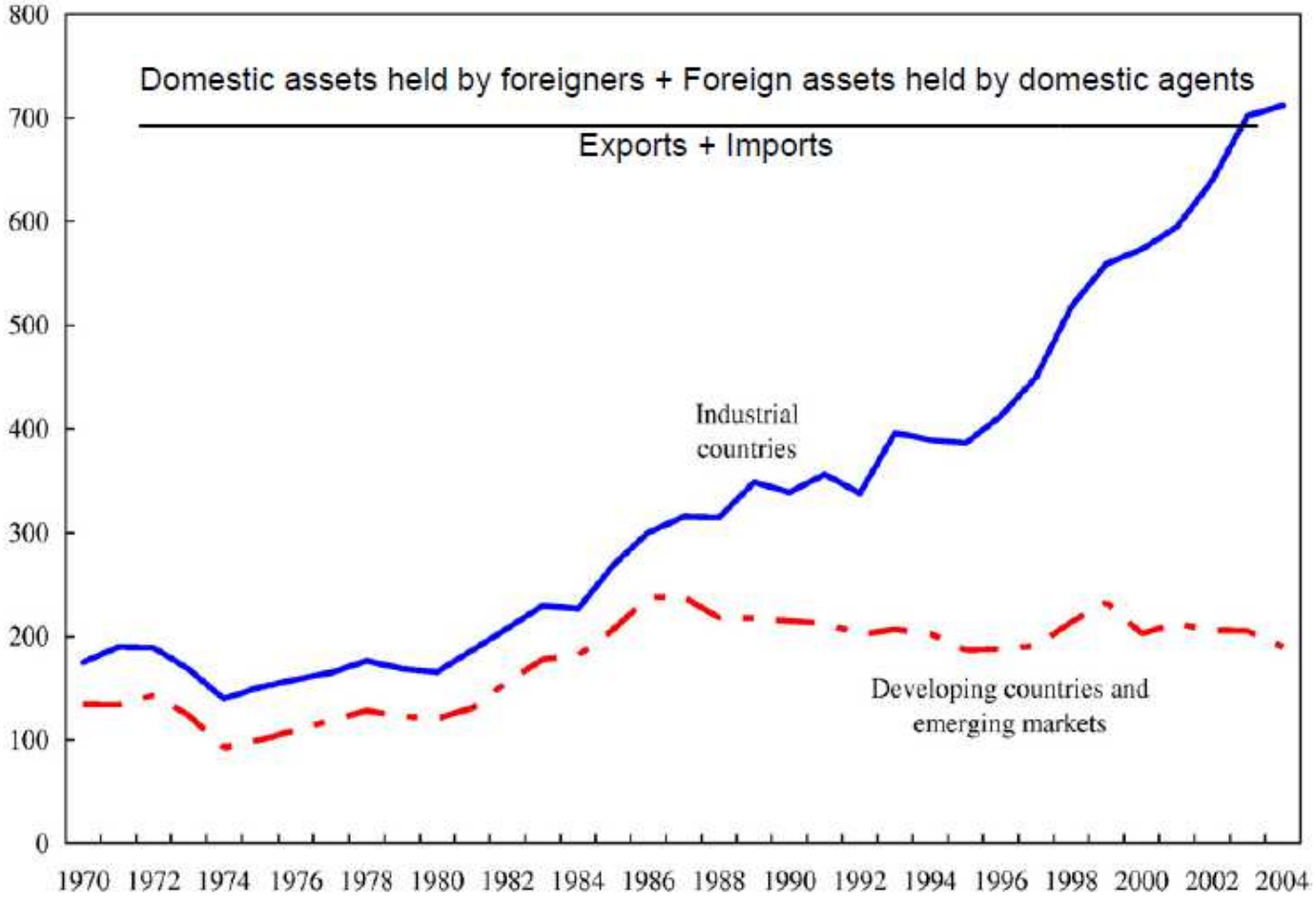
$$\frac{\text{Domestic assets held by foreigners} + \text{Foreign assets held by domestic agents}}{\text{Exports} + \text{Imports}}$$

Trade openess



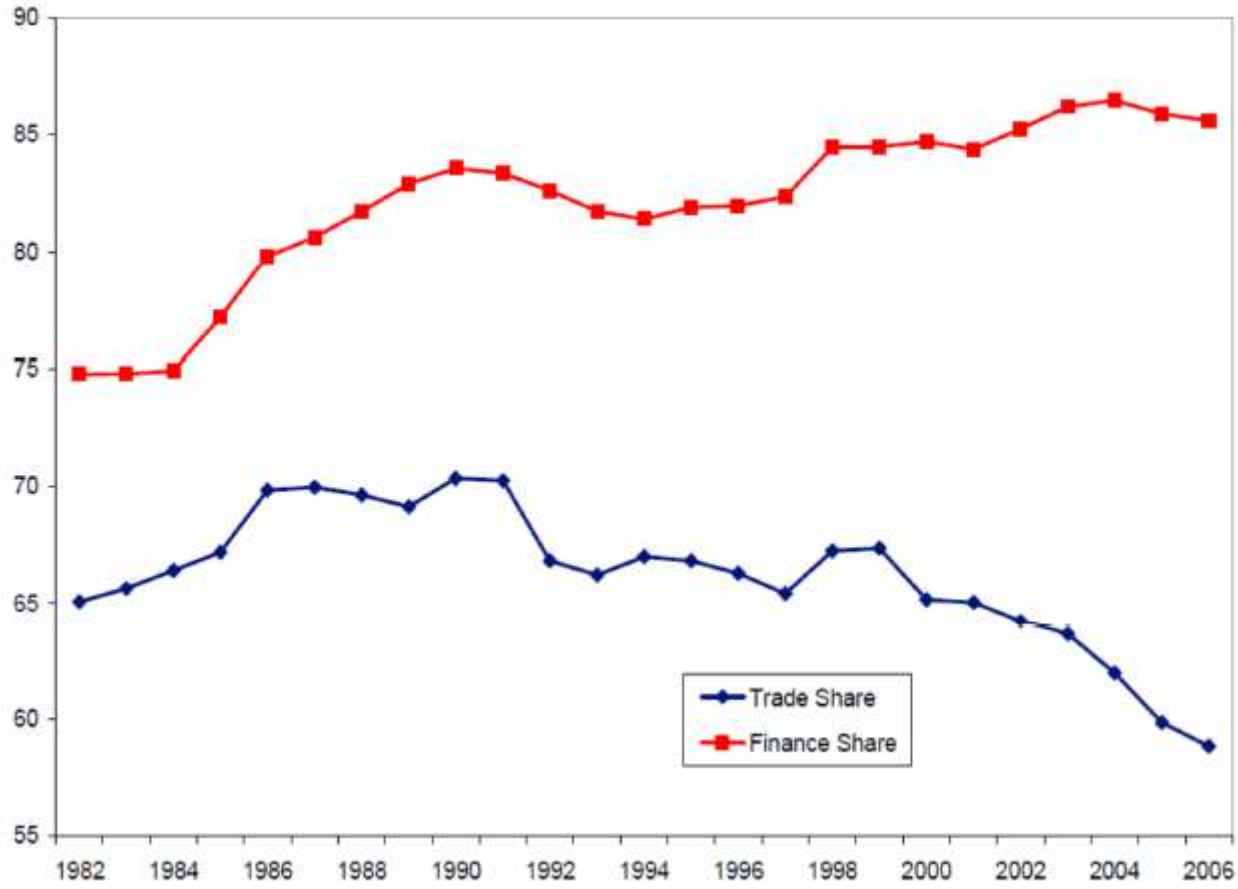
Source: Amiti and Weinstein,

Trade and financial integration, 1970–2004



Source: Lane and Milesi-Ferreti (2007)

Comparison of industrialized countries: Trade vs Finance



Source: Nicolas Coeurdacier

The first globalization

- ≪ What an extraordinary episode in the economic progress of man that age was which came to an end in August, 2014! … *The inhabitant of London could order by smart phone*, sipping his morning tea in bed, *the various products of the whole earth*, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; *he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world*, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. ≫.

The first globalization

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- John Maynard Keynes, Chapter II Europe Before the War, in *The Economic Consequences of the Peace* (1920).

The first financial globalization

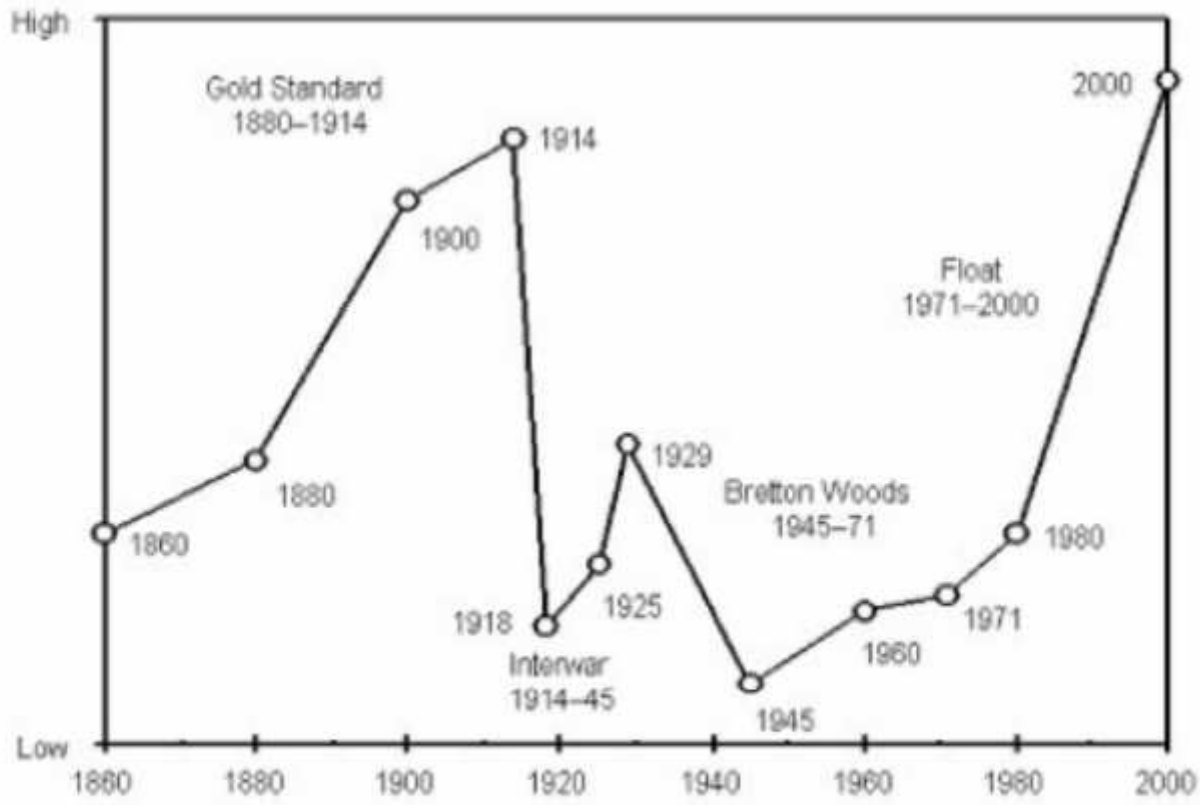
- World capital markets very integrated at the end of the 19th century:
  - Share of British wealth invested overseas: 17% in 1870 and 33% in 1913 (larger than any country today).
  - Similar in France, Germany

- Capital outflows from UK (purchase of foreign assets): mostly to the « New World » with natural resources: Canada + Australia (28%), US (15%), Latin America (24%)

  source Taylor and Williamson (1994)

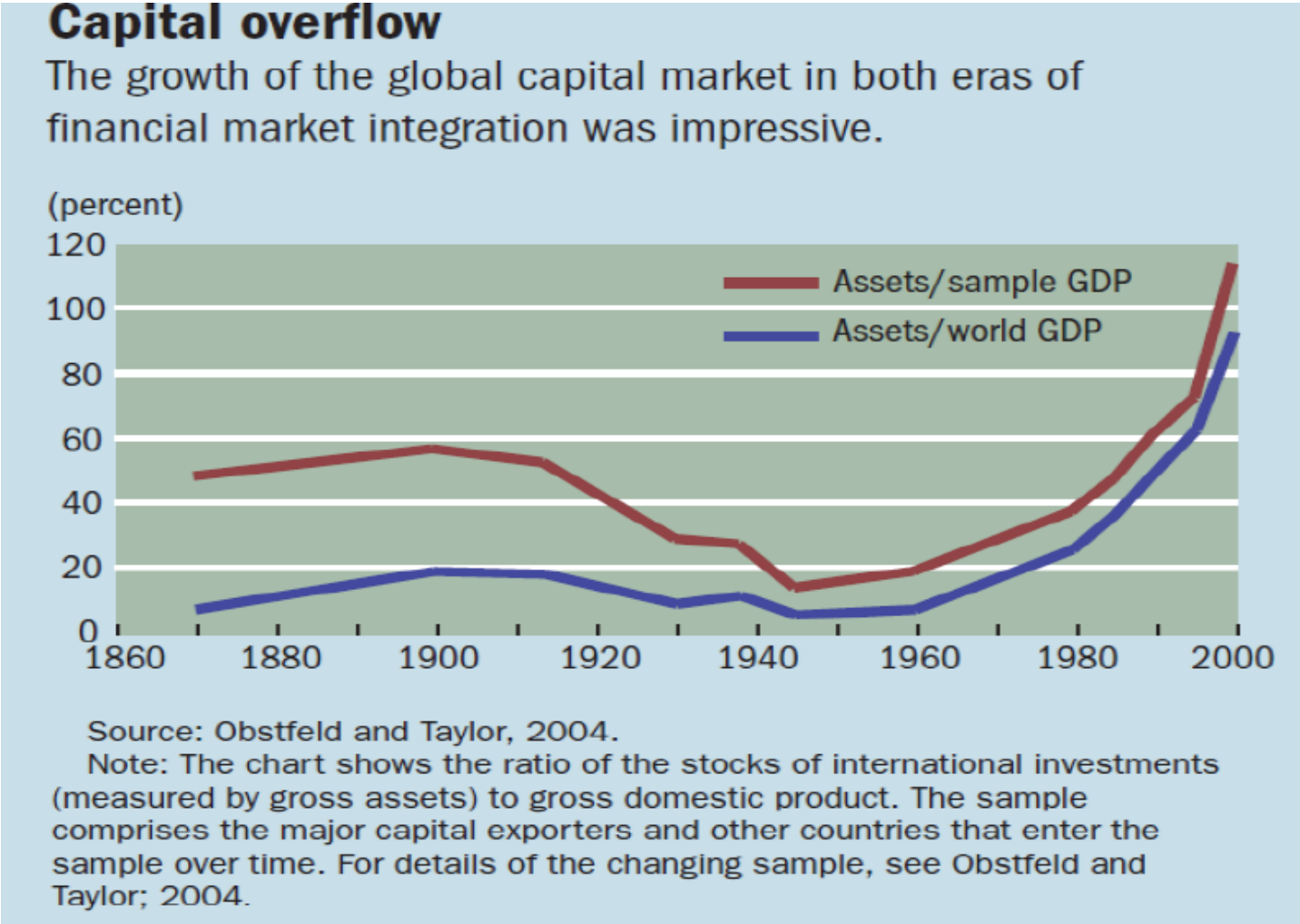
- What form? Portfolio investment (equity and bonds to invest in railroads, harbors)

Capital mobility



Capital mobility: Obstfeld and Taylor, 2002 (a narrative based measure)

The 1st and 2nd globalization: the financial side



Understanding the first globalization wave

- Causes of first globalization wave:
  - Transportation and communication (telegraph): information!
  - Global UK banks.
- Basic theory: neoclassical growth model.
  - Capital scarce countries should have high returns to capital.
- End of 19th century = first globalization wave
  - Capital flows from capital abundant countries (Europe or UK) to capital scarce ones (say US).
  - Why? European capital chased European labor (and vice versa): both migrated to New World

The neoclassical production function

- Output y_t (at date t) is produced using inputs (capital k_t) more or less efficiently (abstracting from labour).
- Production function:

$$y_t = A_t {k_t}^{\alpha}$$

A_t is an efficiency parameter (think 'technology'). Also called 'Total Factor Productivity' (TFP).

$0 < \alpha < 1$= decreasing marginal productivity of capital (MPK).

y_t is increasing in k_t and efficiency A_t.

The neoclassical production function

$$y_t = A_t {k_t}^{\alpha}$$

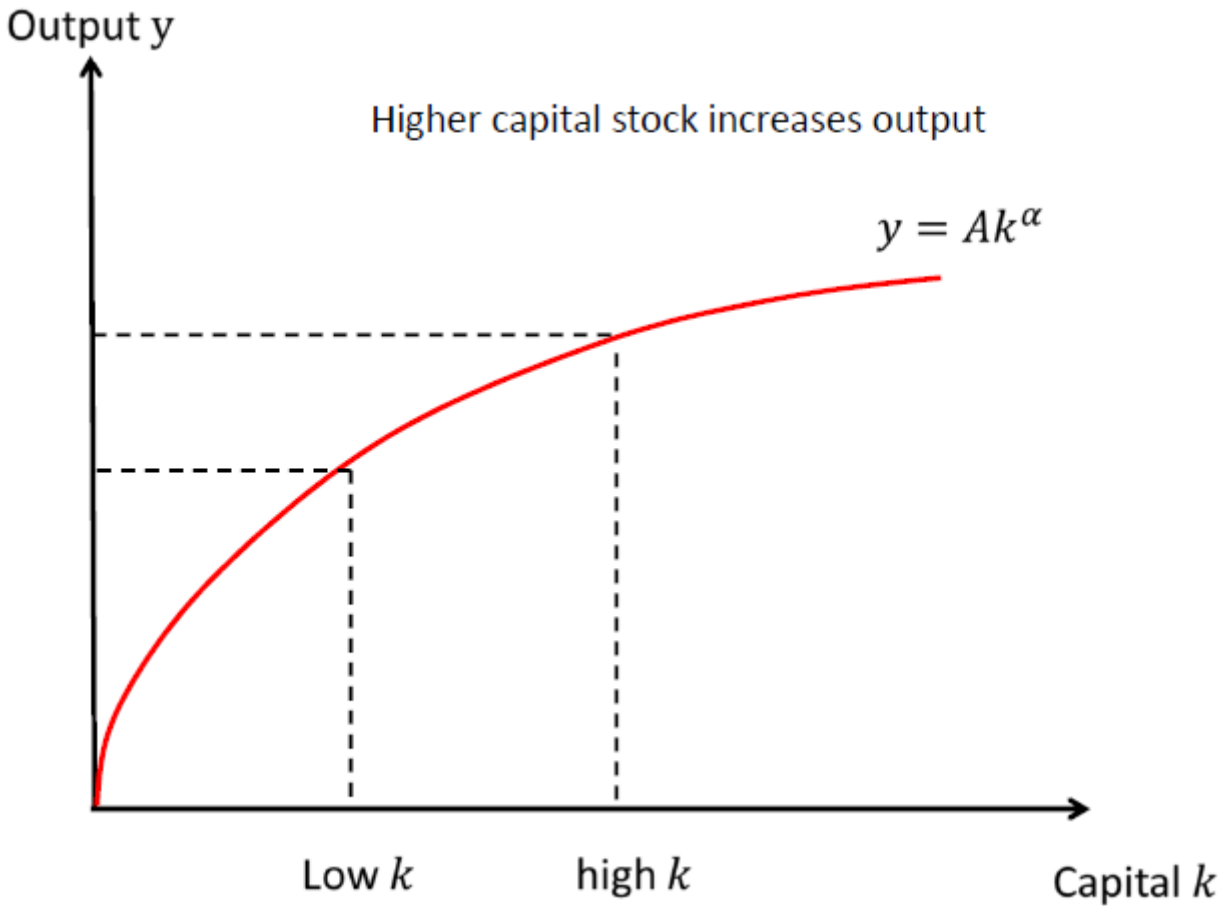
Constant returns to scale with respect to both inputs.
Double K_t and L_t, double Y_t.

Decreasing returns to scale to each input $(0 < \alpha < 1)$:
each additional unit of input brings less and less output.

Output per capita (with $k_t = \frac{K_t}{L_t}$ =capital per capita):

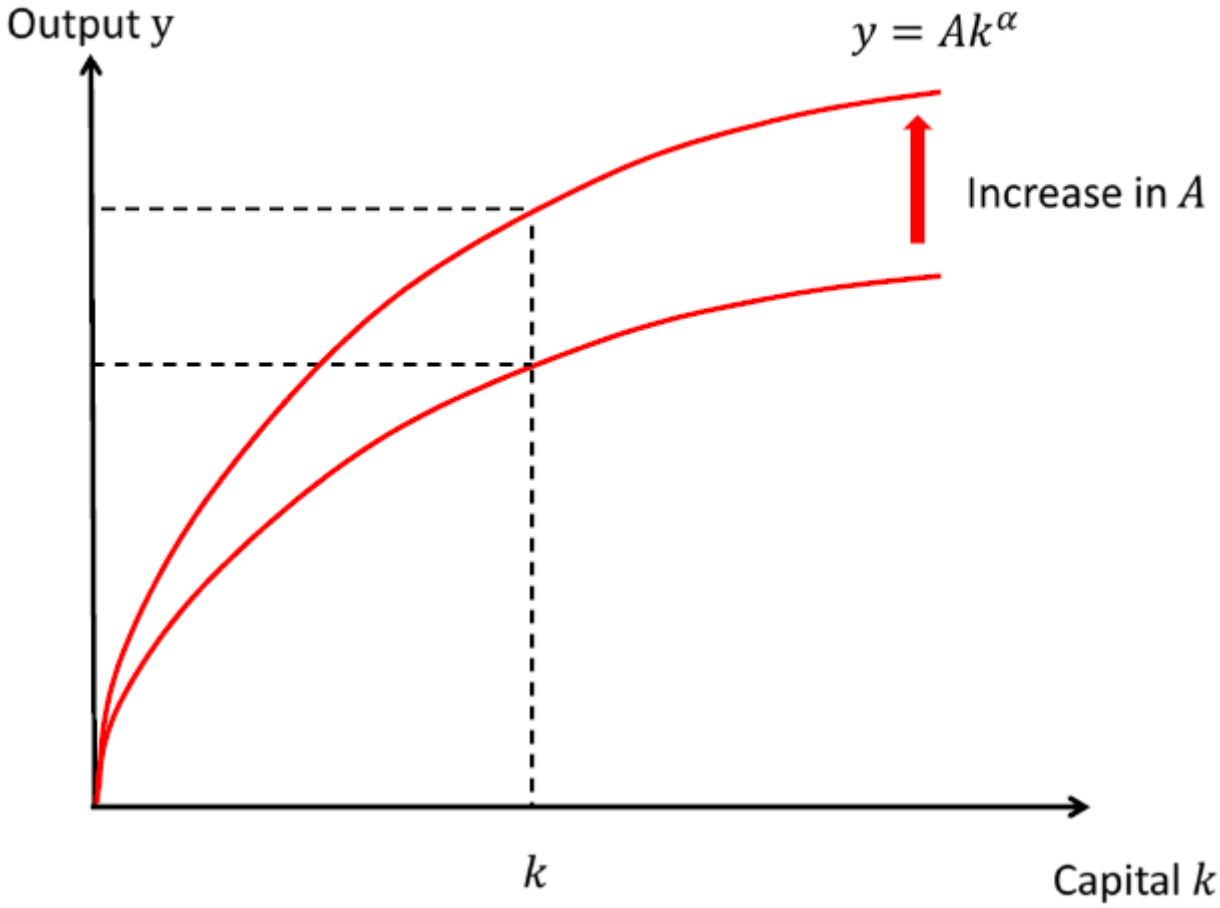
$$Y_t/L_t = y_t = A_t(K_t/L_t)^{\alpha} = A_t(k_t)^{\alpha}$$

The neoclassical production function



The neoclassical production function

Better technology increases output

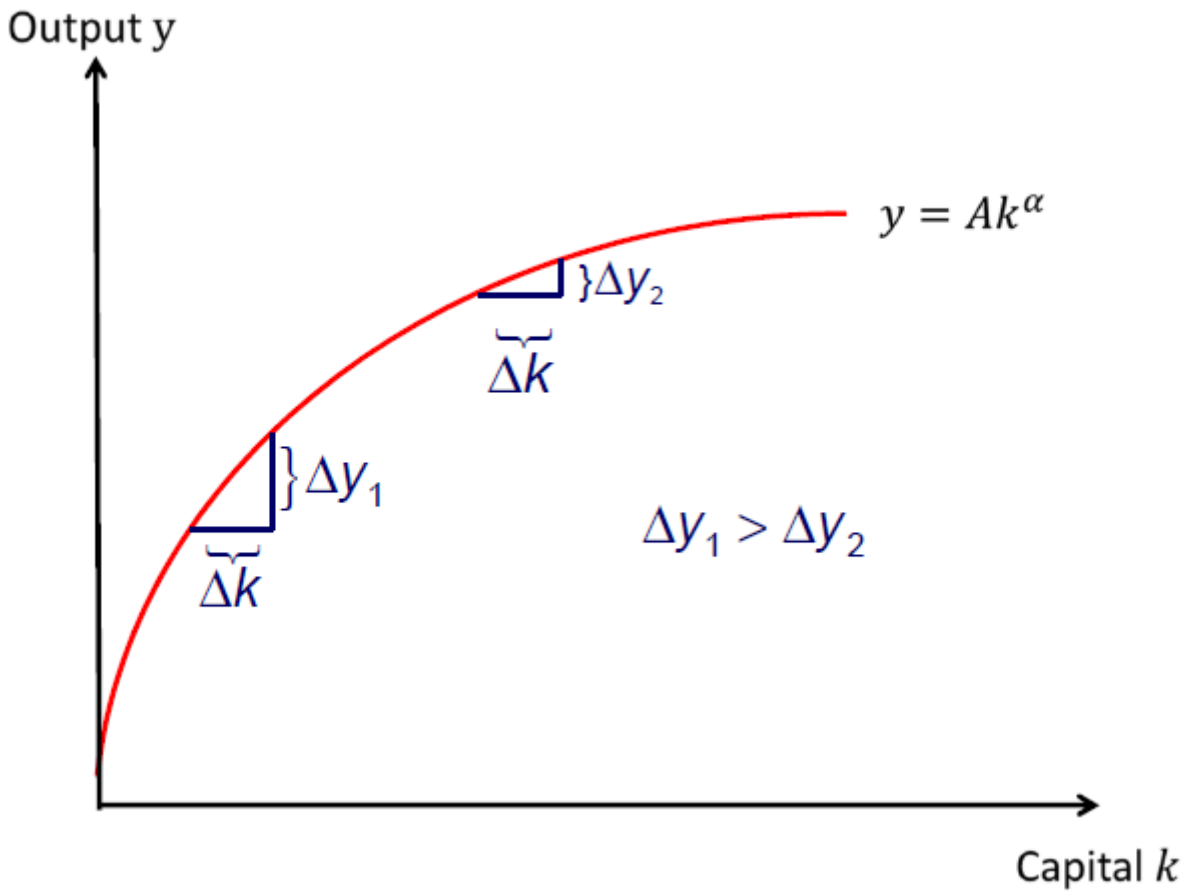


The marginal productivity of capital (MPK)

- MPK = additional unit of output per unit of capital = return on capital.
- Assumptions about MPK purely technological – no economics involved.. Different assumptions may be needed for different technologies.
- We assume **decreasing** returns - neoclassical production function with $0 < \alpha < 1$:

$$MPK = \frac{\partial y}{\partial k} = \alpha \mathrm{A}(k)^{\alpha-1}$$

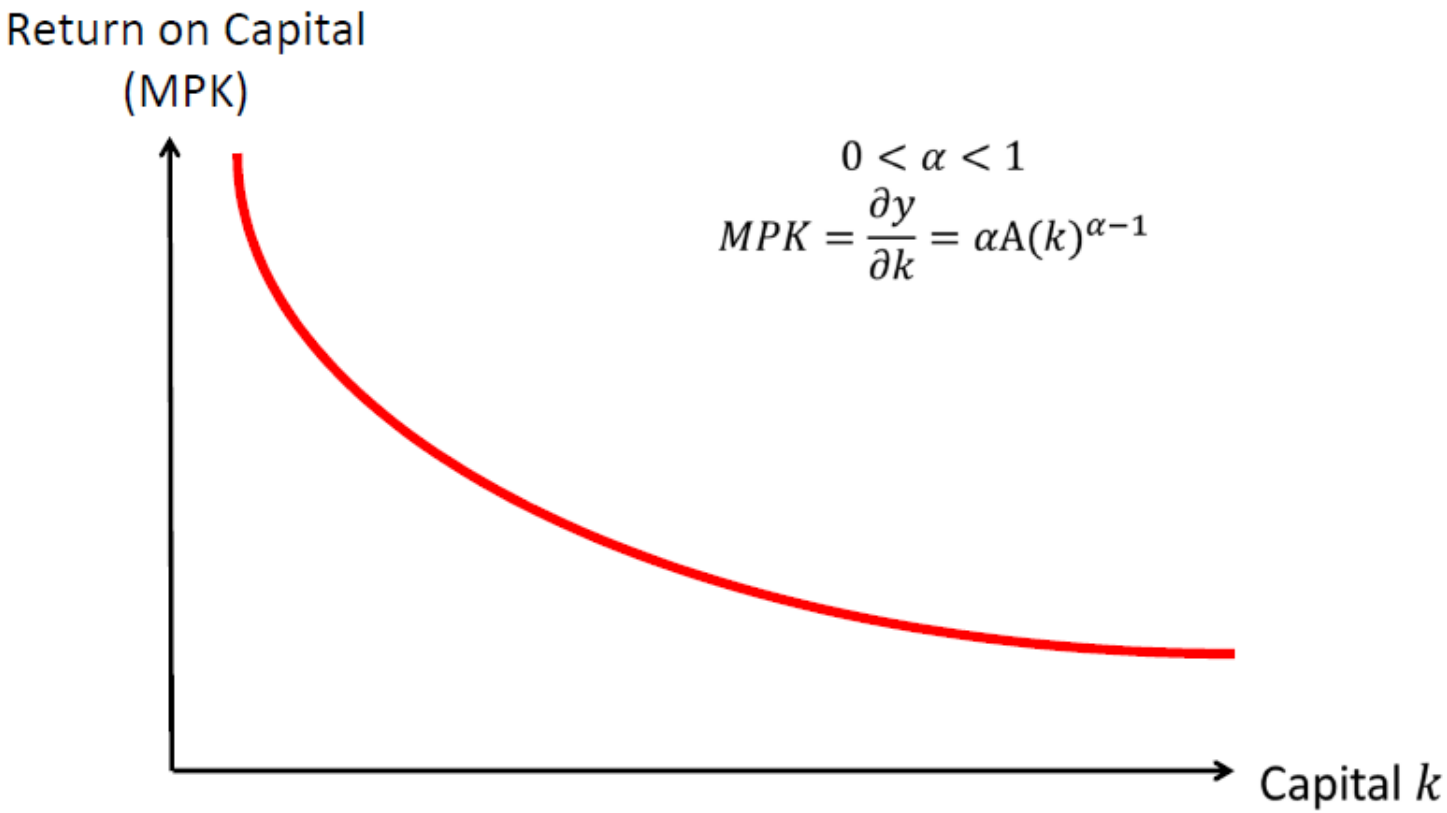
The neoclassical production function



The neoclassical production function

THE RETURN ON CAPITAL

Diminishing Marginal Product of Capital



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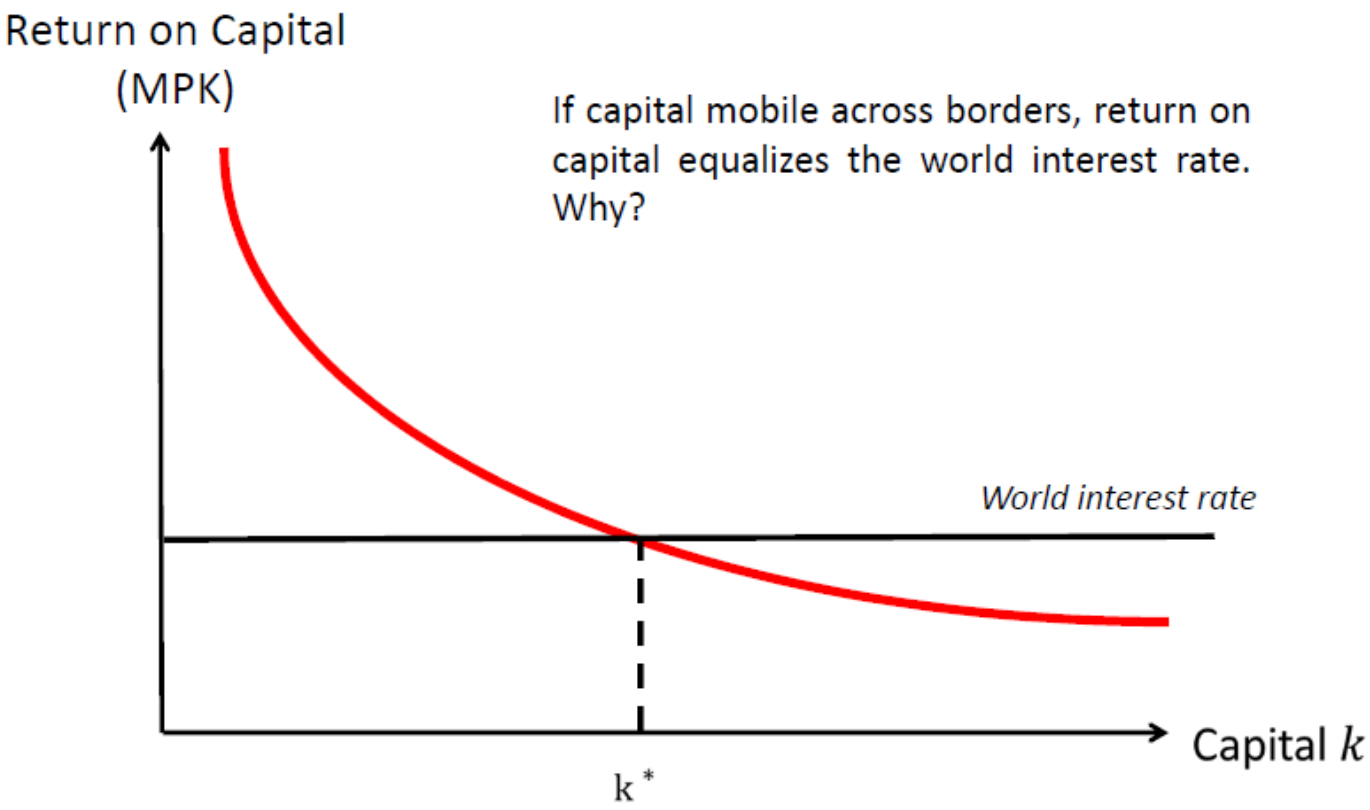
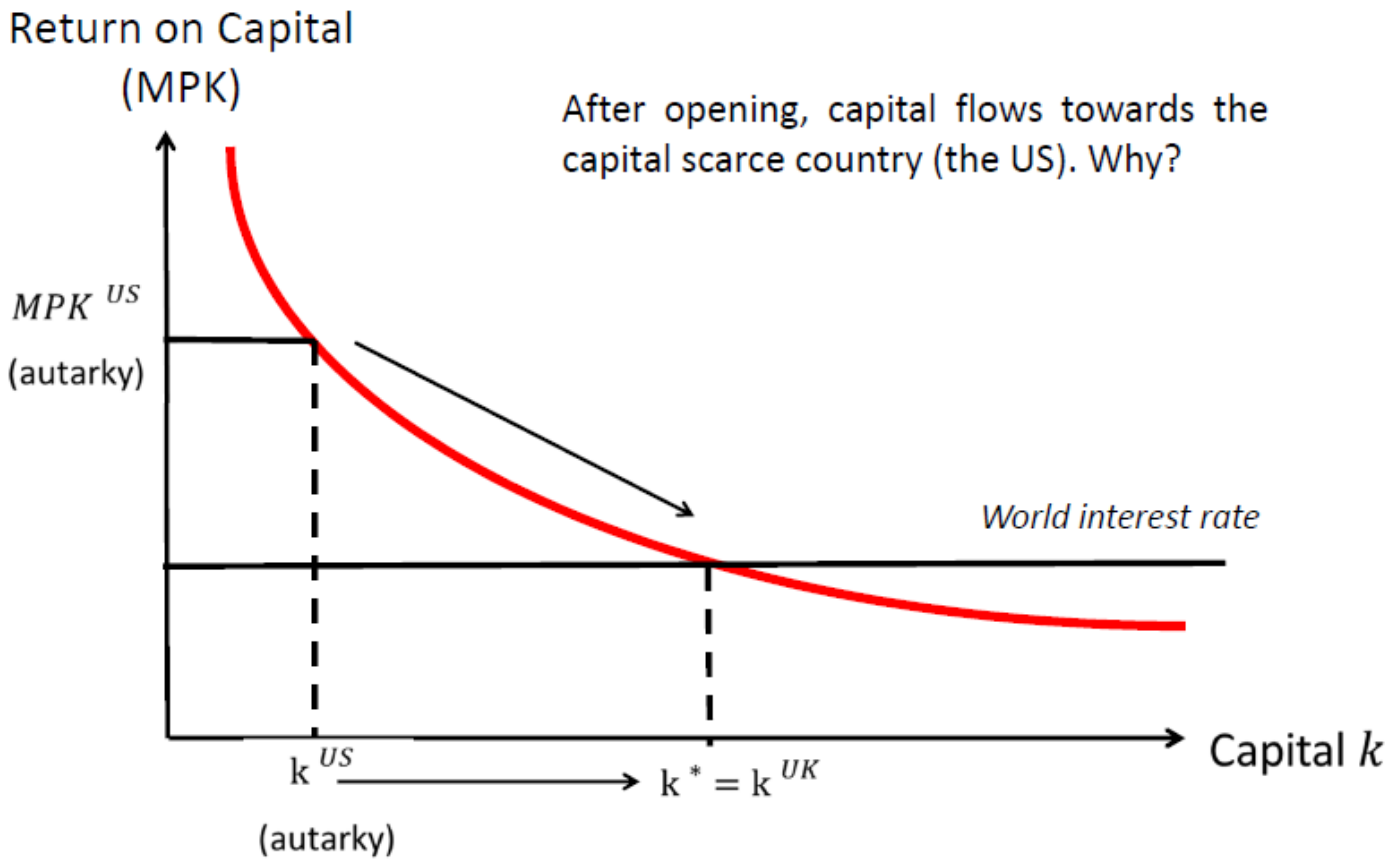


The neoclassical production function

Capital flows after financial opening



Roadmap

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The case for Financial Globalisation?

- Washington Consensus: collection of loosely articulated ideas in the beginning of the 1990s aimed at modernizing, reforming, deregulating and opening economies

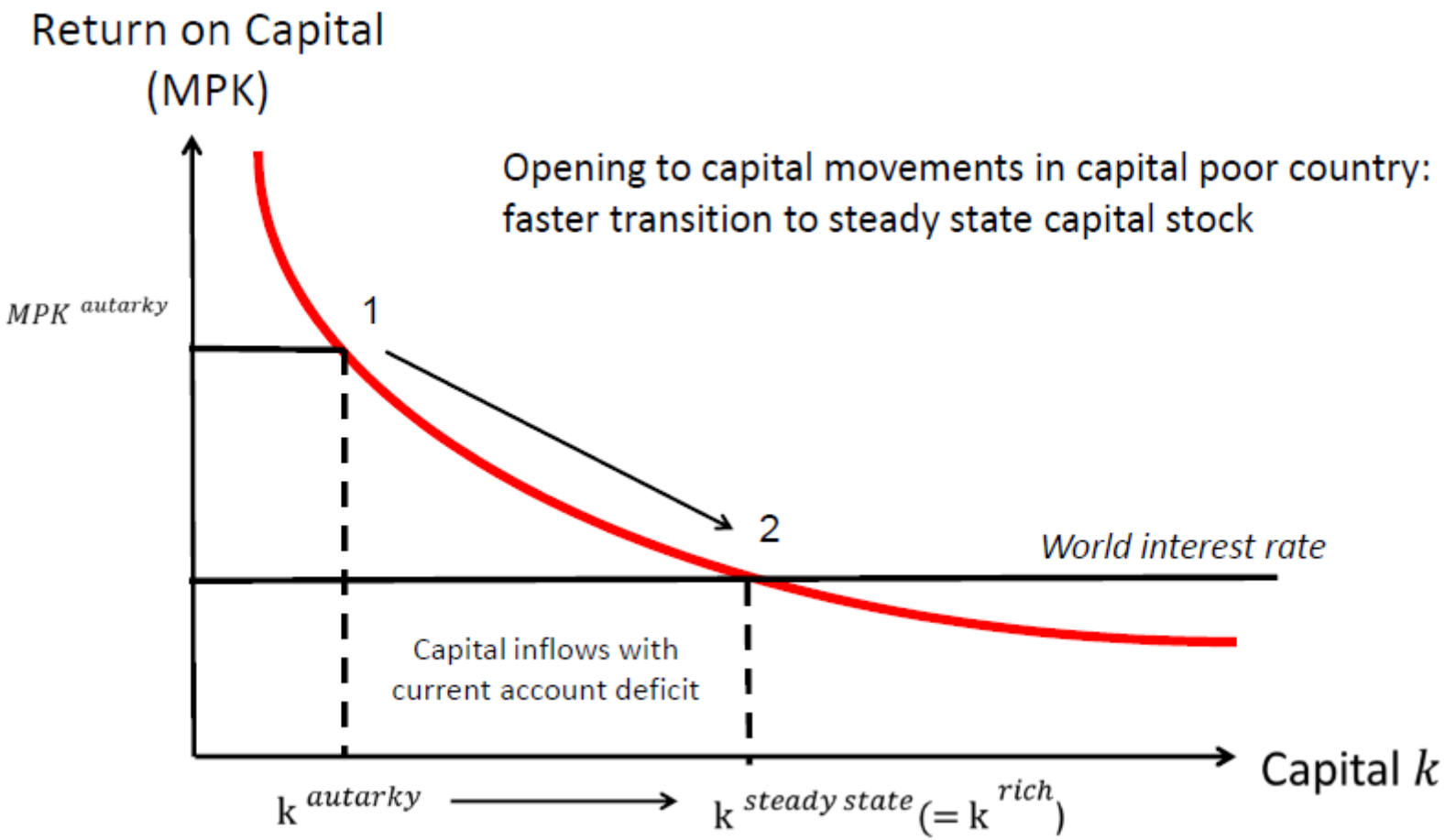
- Mostly came from Latin American governments (IMF, WB, US Treasury came later)

- Consequence: many emerging markets opened up their capital markets in the 90s (while most developed markets were already opened, thus since the 80s).
  - Important to note restrictions on capital mobility are still more stringent for developing countries (see previous graphs).

Expected gains from financial opening

- 1) **Intertemporal trade gains**: benchmark neoclassical growth model
- Capital should flow from capital rich (low return due to decreasing returns) country to capital poor country (high return)
- Allows increased investment in capital poor country
- Positive effect on growth: faster transition to steady state

Capital flows after financial opening



Small gains from financial integration

- Recent empirical literature in growth: inequality in GDP per capita between countries not due to inequalities in capital/output ratios but in total factor productivity (TFP).

- • Little evidence that financial globalization has long term impact on growth (≠ trade globalization, domestic financial development). Transitory gains.

- • If capital movements increase TFP then potentially large gains: FDI superior to credit flows.

The gains from financial integration: empirical evidence

- Similar event studies in Henry (2003) on a sample of emerging markets

- Tests predictions of standard neoclassical model:
  - (i) financial integration boosts growth and investment.
  - (ii) reduces the cost of capital (or increases asset prices).

- Compute ‘average’ impulse response to capital account liberalization of key variables (dividend yield, capital stock, output per worker)

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The gains from financial integration: empirical evidence

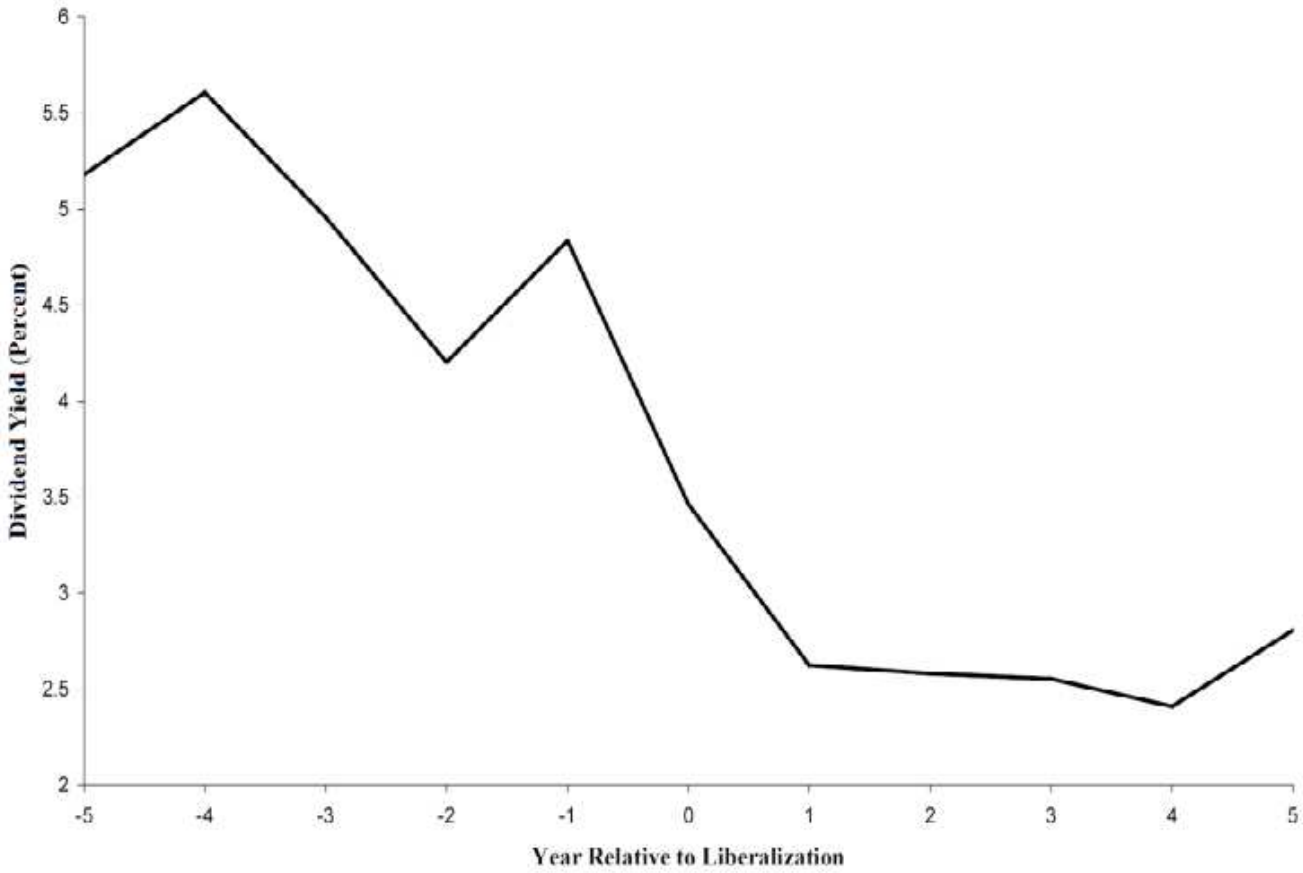


Figure 1. The Cost of Capital Capital Falls When Countries Liberalize the Capital Account.

Source: Henry (2003)

The gains from financial integration: empirical evidence

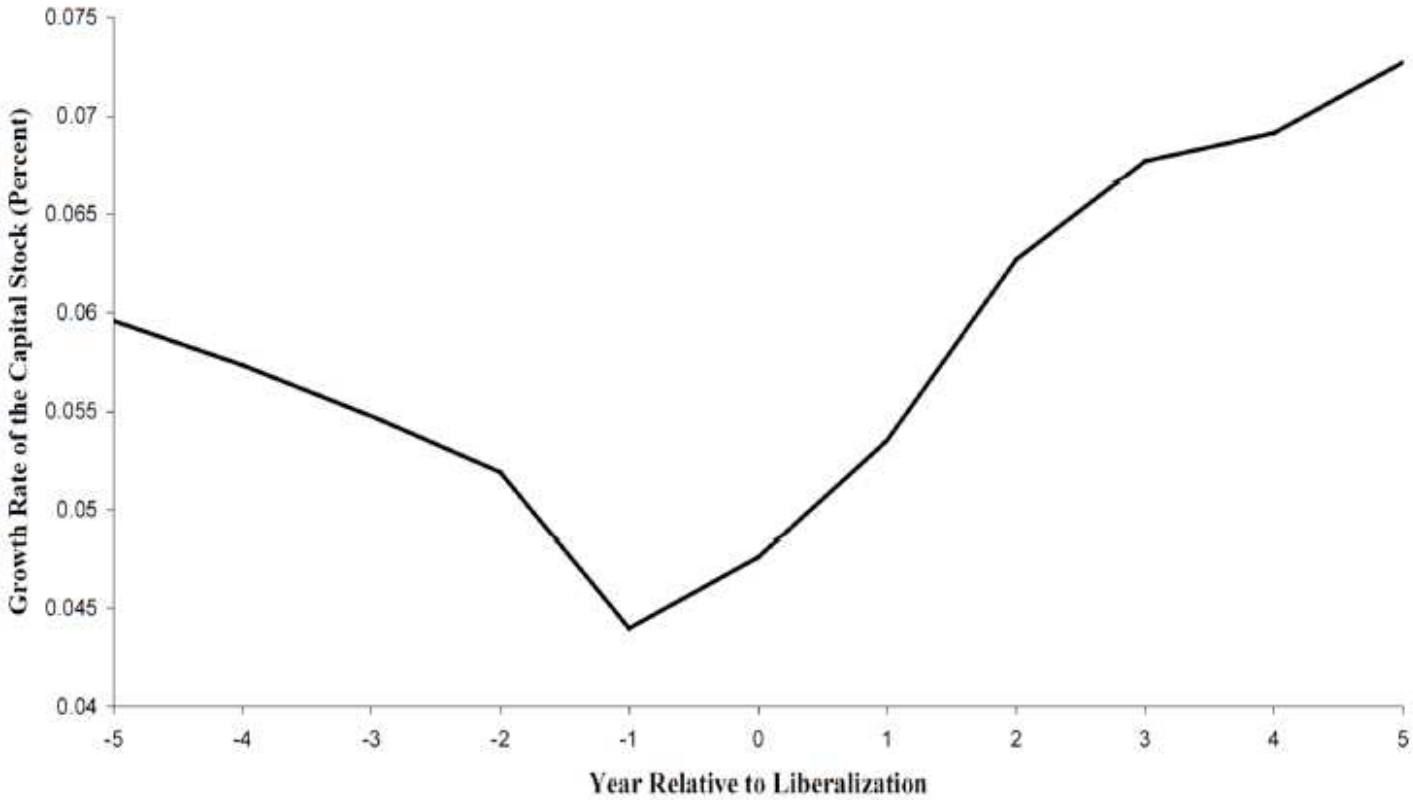


Figure 2. Investment Booms When Countries Liberalize the Capital Account .

Source: Henry (2003)

The gains from financial integration: empirical evidence

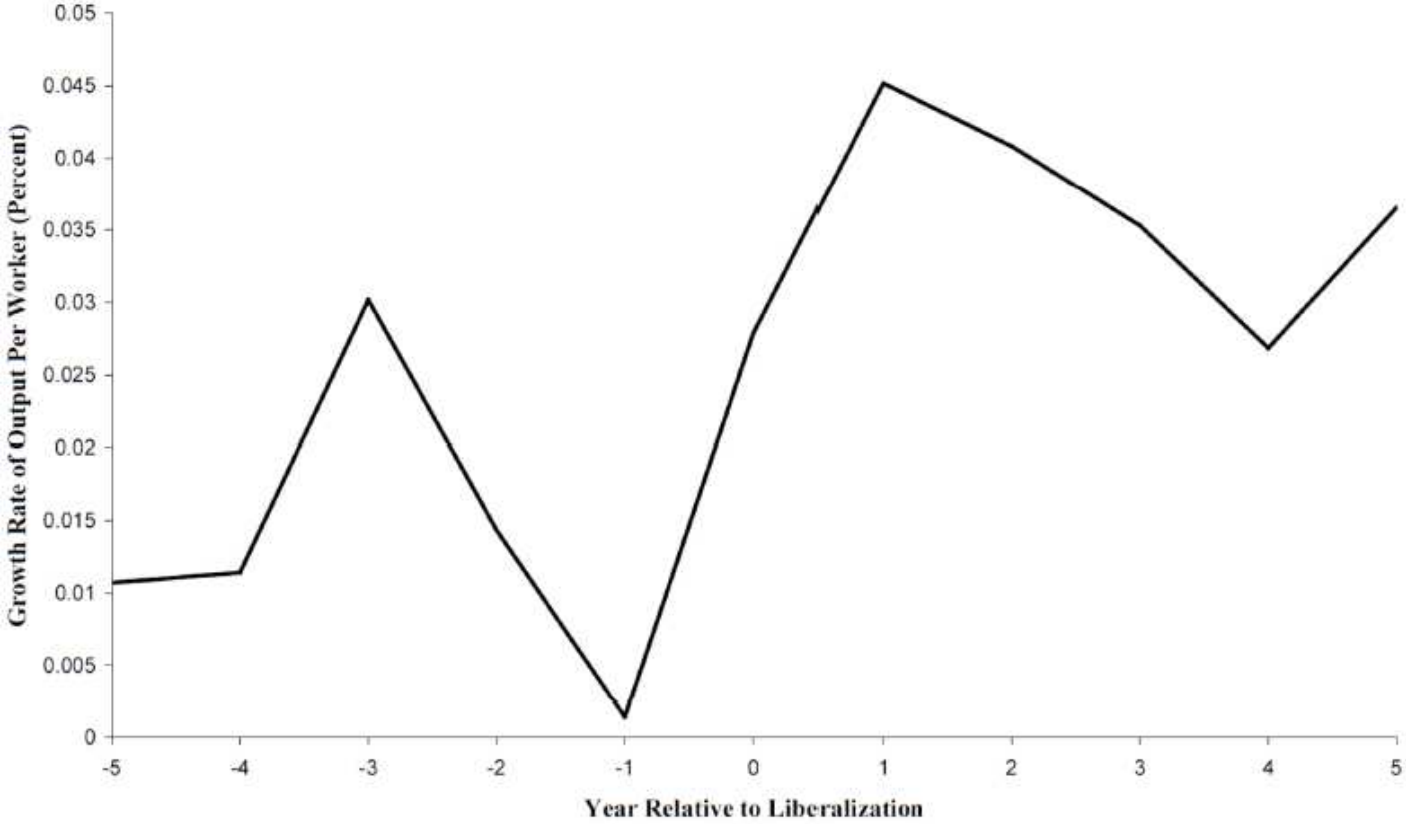


Figure 3. The Growth Rate of Output Per Worker Increases When Countries Liberalize

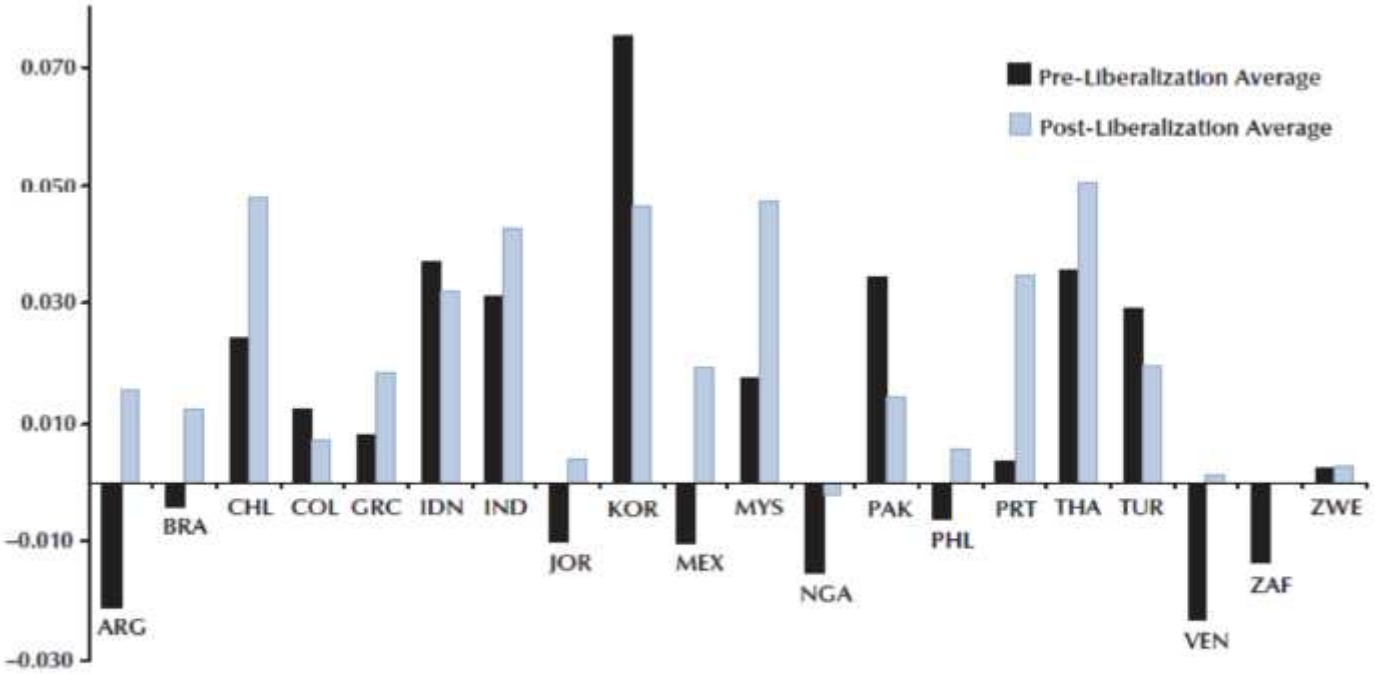
Source: Henry (2003)

The gains from financial integration: empirical evidence

- Simlarly, Bekaert et al. (2003) investigates the opening of stock markets to foreign investors in a sample of 95 emerging markets.
- Pick up equity market liberaliza<on dates (≠ capital account liberalization where effects are found to be smaller/less robust)
- Find roughly 1% increase in real GDP growth after stock market liberalization. Goes through capital accumulation but also TFP growth.
- Limits:
  - Temporary effect?
  - Is the date random? Is it financial integration of stock markets or just financial development?
  - Upper bound of the effect?

Financial integration and real GDP growth

Real GDP Growth Before and After Financial Liberalization



NOTE: For country abbreviations, see Table 1.
SOURCE: Liberalization dates: Bekaert and Harvey (2000).

Source: Bekaert et al. (2003)

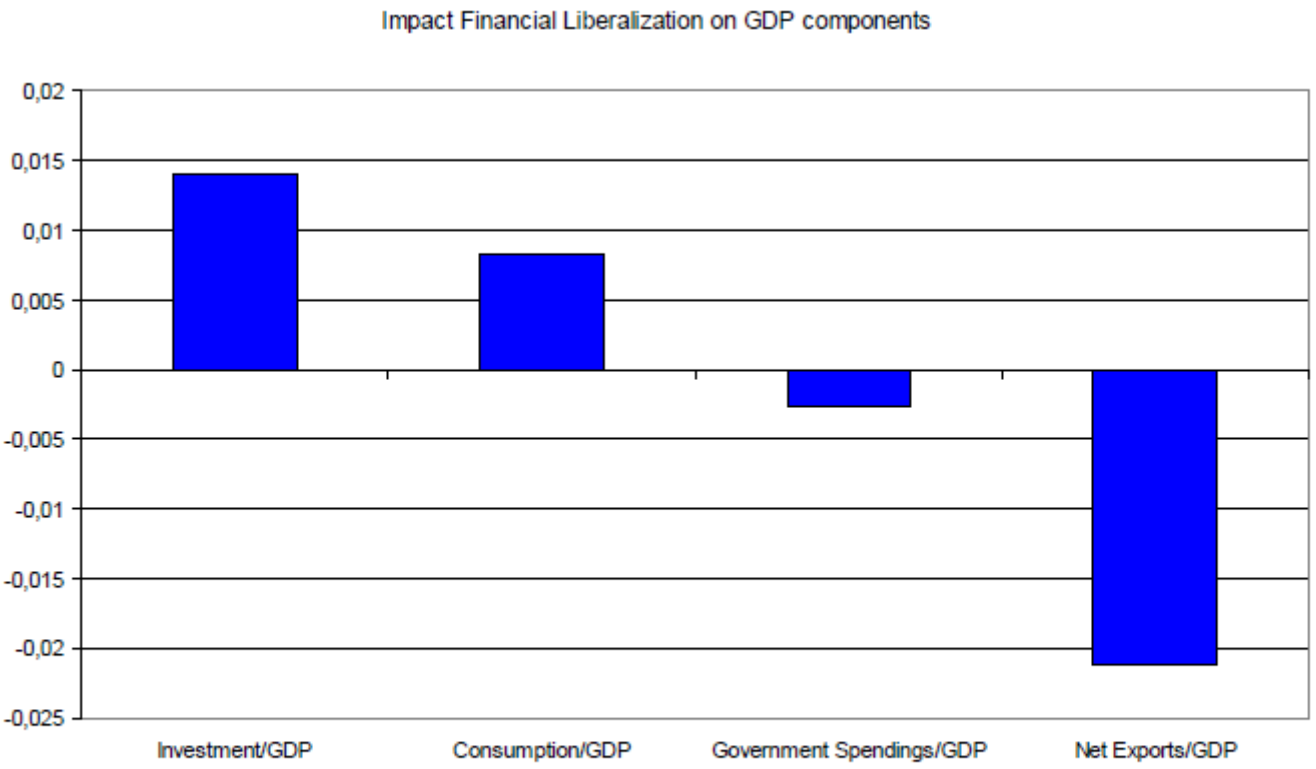
Classic Growth Regression and the Impact of Liberalization

Classic Growth Regression and the Impact of Liberalization

	Sample I	II	III	IV
Constant	-0.2281	-0.2374	-0.1493	-0.2018
Std. error	*0.0179*	*0.0214*	*0.0286*	*0.0658*
Log(GDP)	-0.0094	-0.0088	-0.0115	-0.0158
Std. error	*0.0007*	*0.0007*	*0.0008*	*0.0011*
Govt/GDP	-0.0039	-0.0178	-0.0187	-0.0301
Std. error	*0.0087*	*0.0098*	*0.0105*	*0.0165*
Enrollment	0.0305	0.0112	0.0243	0.0566
Std. error	*0.0077*	*0.0097*	*0.0116*	*0.0171*
Population Growth	-0.5594	-0.5731	-0.8159	-1.1013
Std. error	*0.0621*	*0.0691*	*0.0835*	*0.1151*
Log(Life Expectancy)	0.0755	0.0781	0.0627	0.0838
Std. error	*0.0049*	*0.0056*	*0.0076*	*0.0167*
Official Liberalization Indicator	**0.0095**	**0.0083**	**0.0113**	**0.0130**
Std. error	***0.0016***	***0.0017***	***0.0020***	***0.0036***

Source: Bekaert et al. (2003)

Financial integration boosts investment

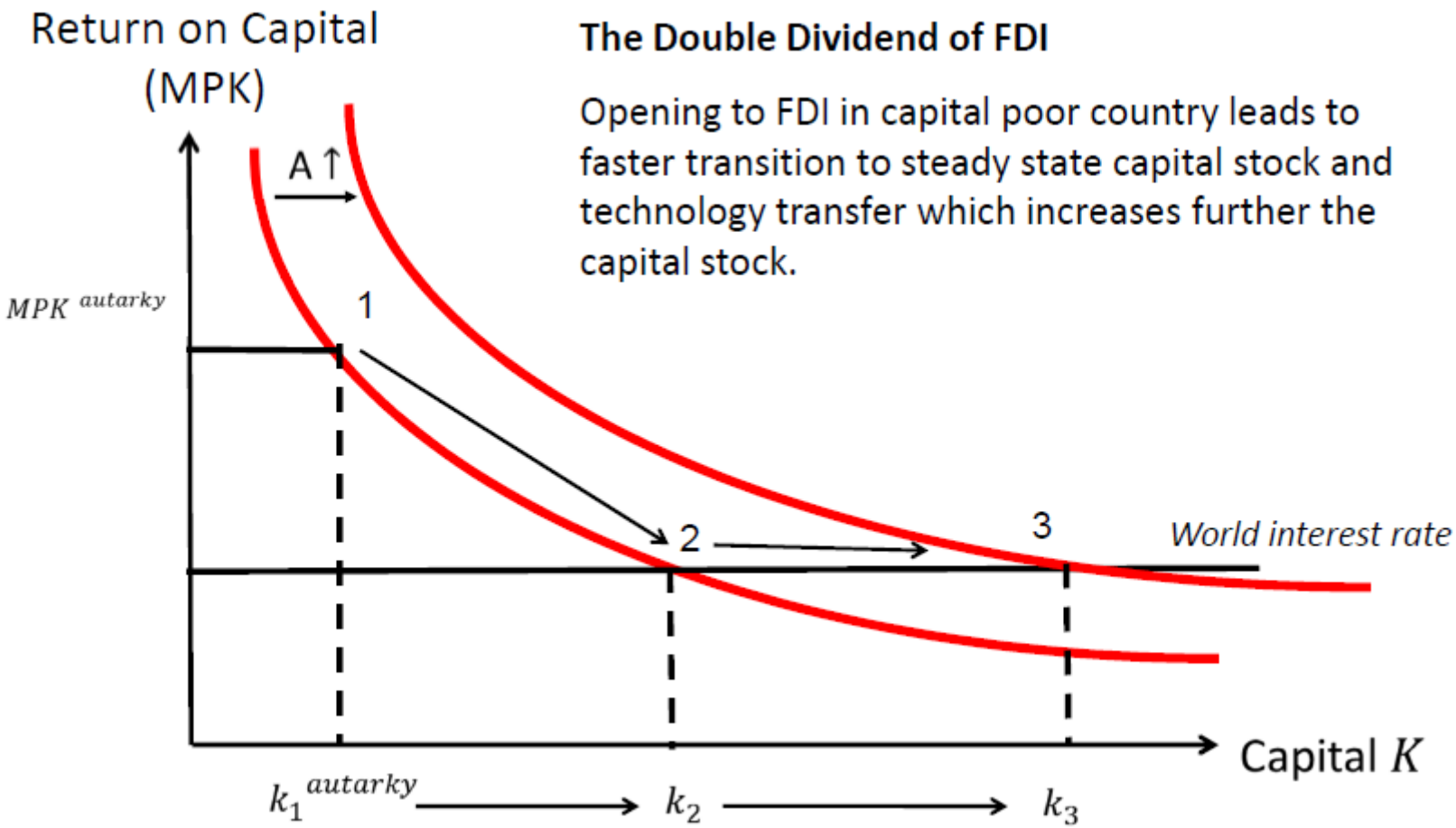


Source: Bekaert et al. (2003)

The Double Dividend of FDI

- Poor countries can “import” TFP through FDI. FDI favors convergence in the following two ways:
  - i) Increases capital stock in recipient economy and
  - ii) Usually involves transfer of technology.
- Like any capital flows, FDI increasing in importance - FDI risen from 0.3% World GDP in 1975, 0.5% in 1985 to 1.1% in 1995 and 2% in 2005.
  - related to the growth of multinationals

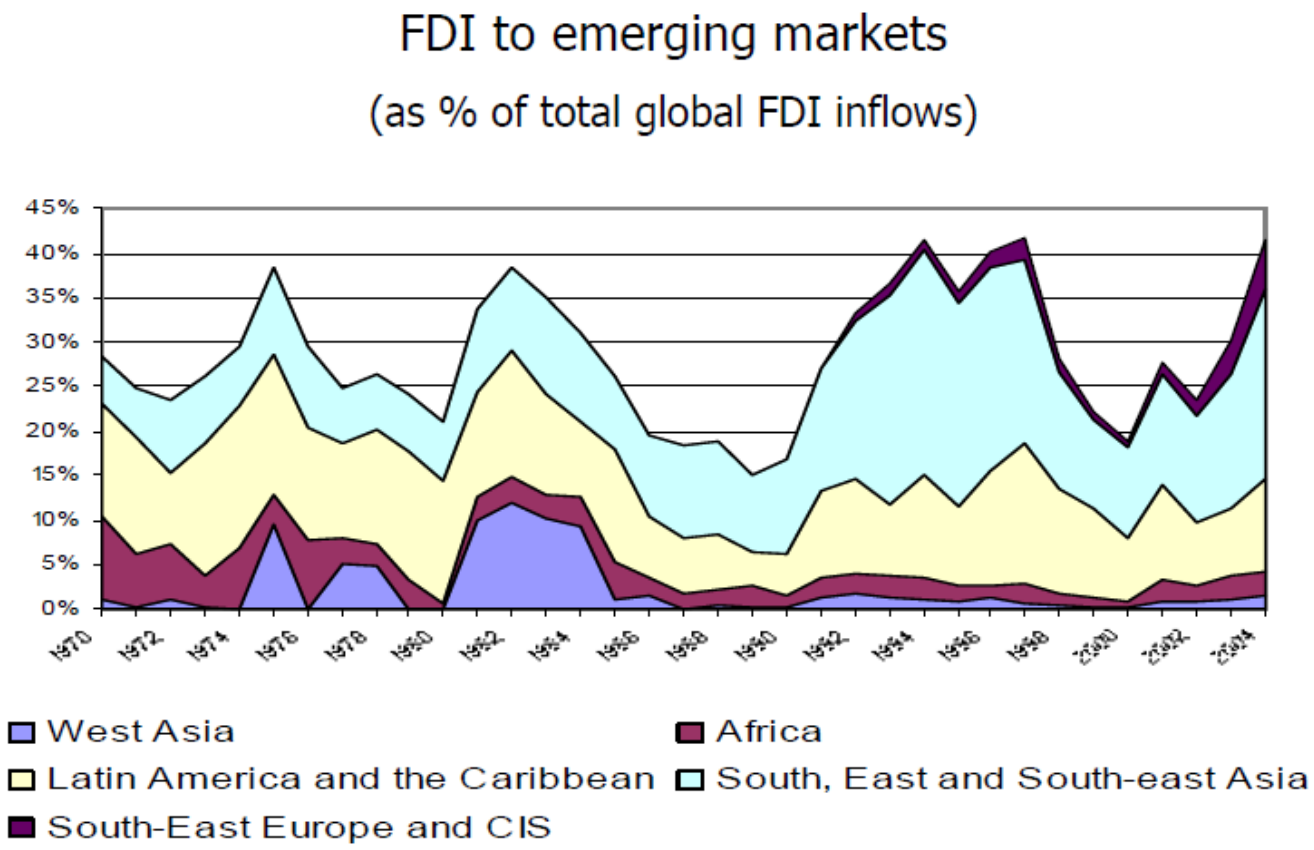
Capital flows and technology transfer



The Double Dividend of FDI

Opening to FDI in capital poor country leads to faster transition to steady state capital stock and technology transfer which increases further the capital stock.

FDI to emerging markets



Source: UNCTAD 2006

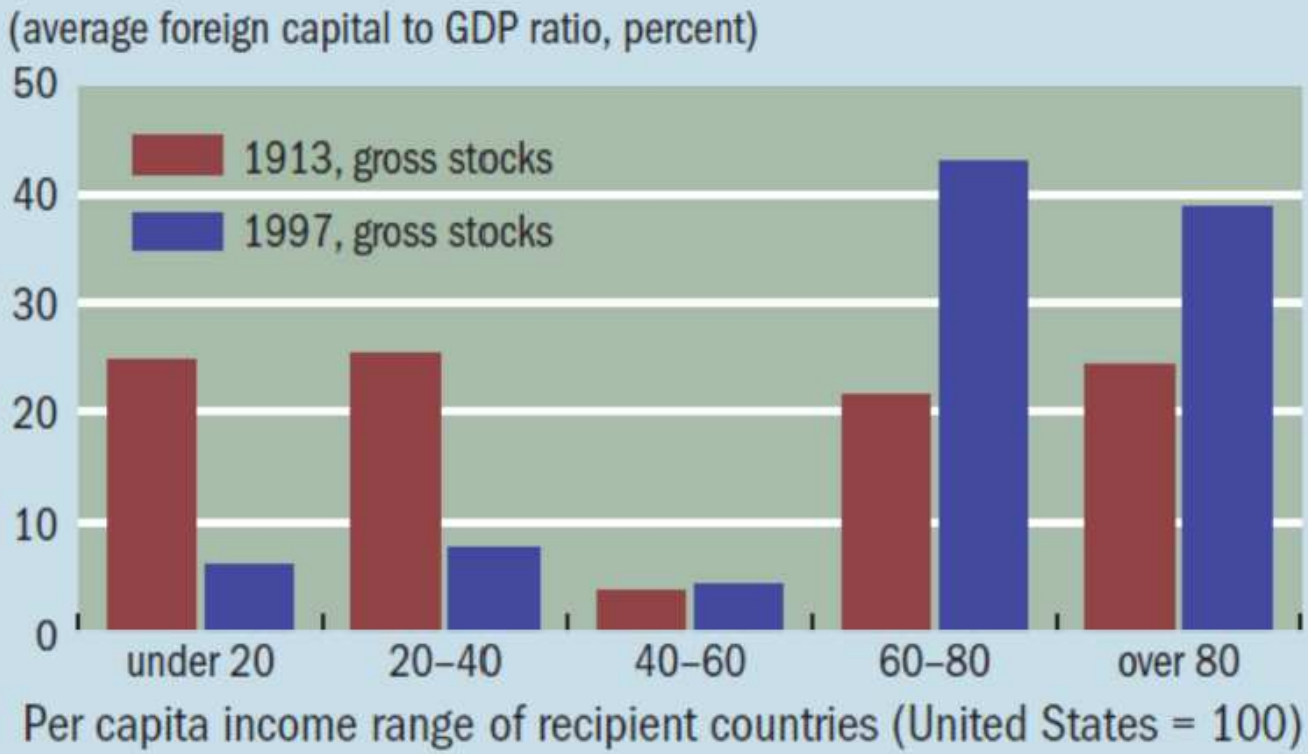
The Lucas puzzle

- Despite low capital/output ratios, capital flows to developing countries are low and often in the wrong direction.
  - Many emerging markets are lending to rich countries

- Three main explanations:
  - Differences in TFP
  - Institutional quality (Peru's institutional quality to Australia's level implies a quadrupling of foreign investment, Alfaro et al., 2008).
  - capital market imperfections: sovereign risk, asymmetric information…

Lucas Paradox

Foreign capital used to flow to poor and rich countries, but now flows mostly to rich countries (The Lucas Puzzle)



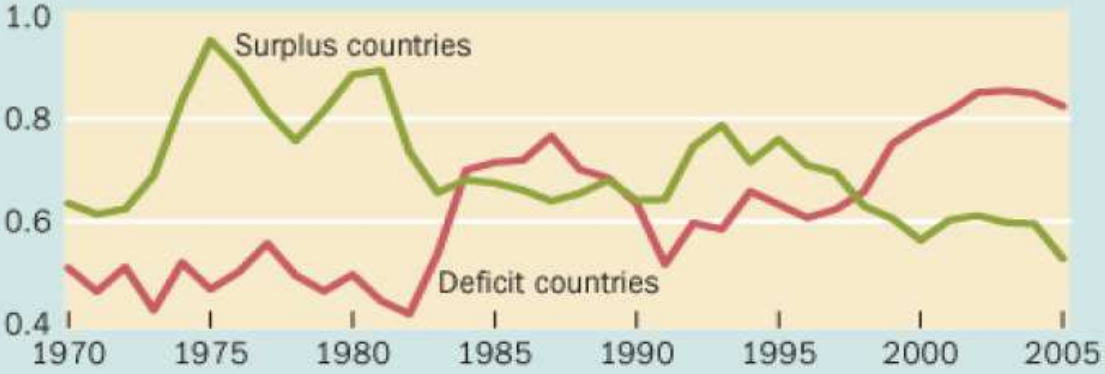
Source: Obstfeld and Taylor, 2004.

Chart 1

Downhill or uphill?

The relative income of capital-exporting countries has fallen when compared with the United States.

(relative per capita GDP weighted by current accounts)

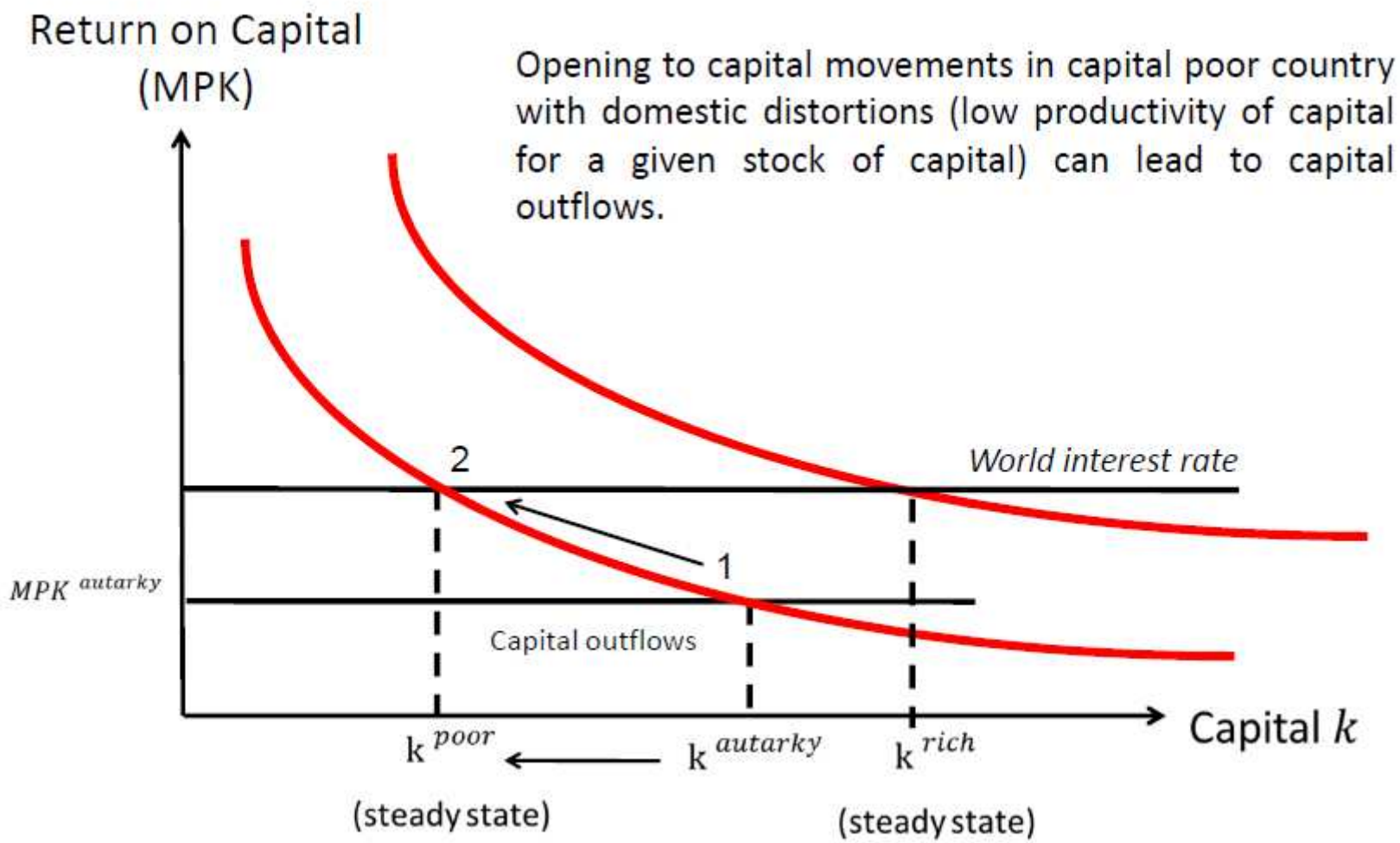


Source: Authors' calculations.

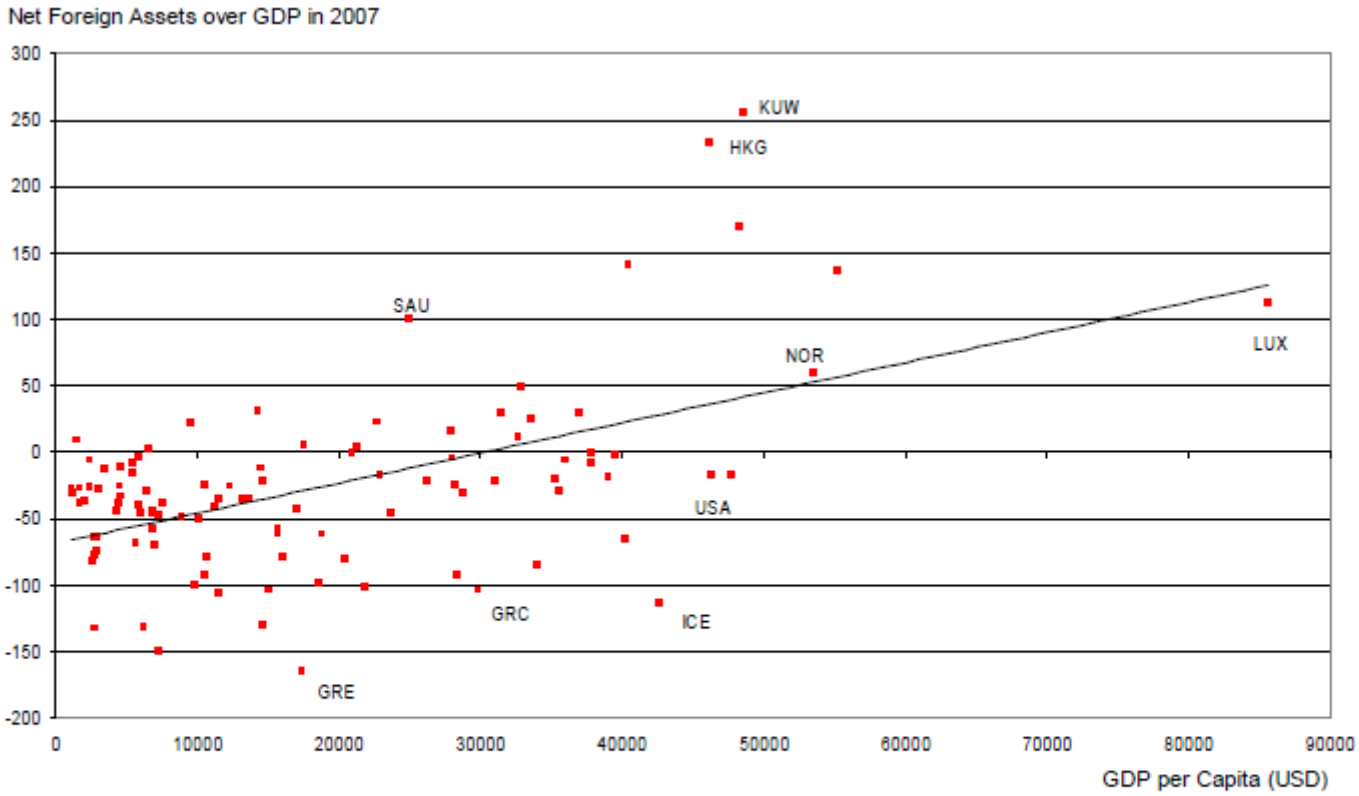
Notes: For each year, we separate our sample of countries into two groups—those with current account surpluses and those with deficits in that year. For the first group, we then take each country's share of the total current account surplus accounted for by all countries in that group. We then multiply that share by the relative purchasing power parity-adjusted per capita income of that country (measured relative to the per capita income of the richest country in the sample in that year). This gives us a current account–weighted measure of the relative incomes of surplus countries. We do the same for current account deficit countries. This enables us to compare the relative incomes of surplus versus deficit countries in each year.

Source: IMF 2007

Uphill capital flows after financial opening



The Lucas Puzzle (all countries)

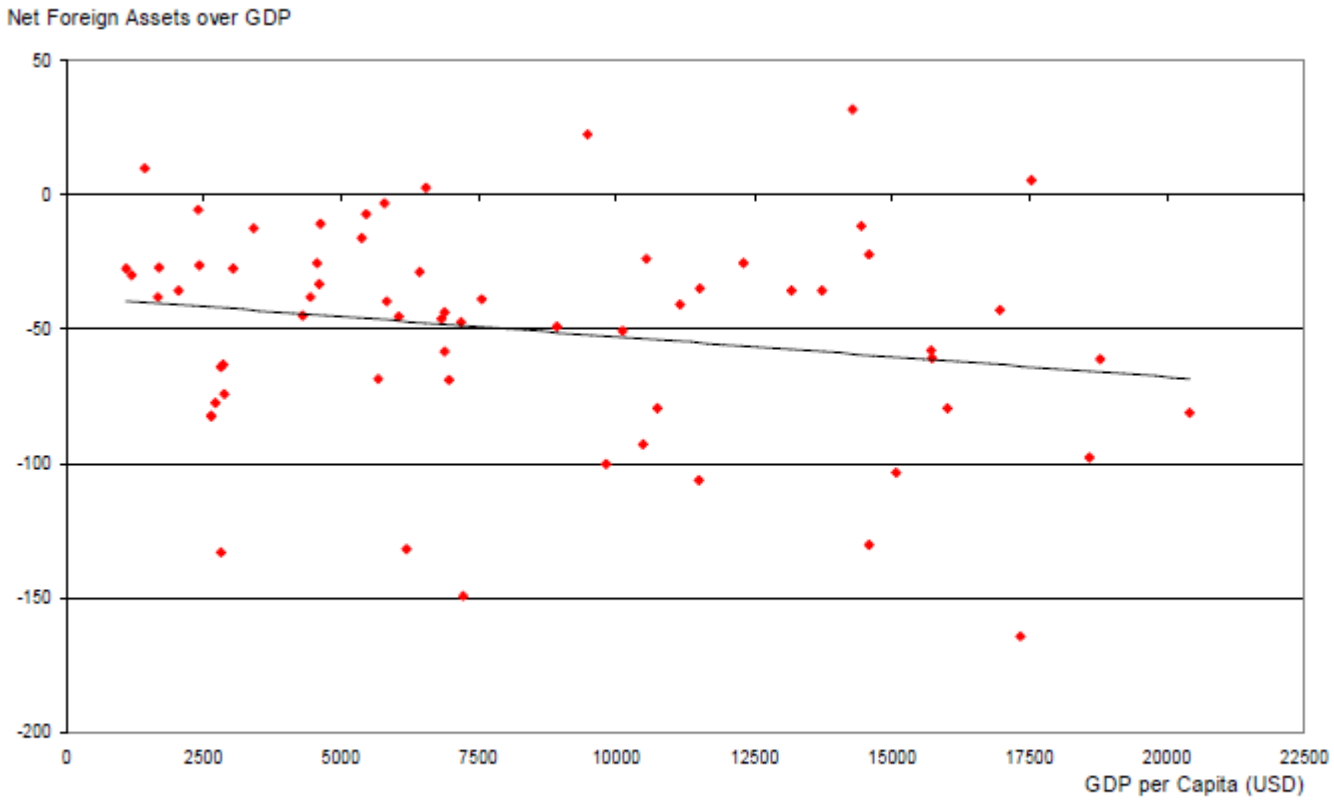


Using 2007 data, weak relationship between income and net foreign asset positions.

Source: Lane and Milesi Feretti (2008)

The Lucas Puzzle (emerging countries)

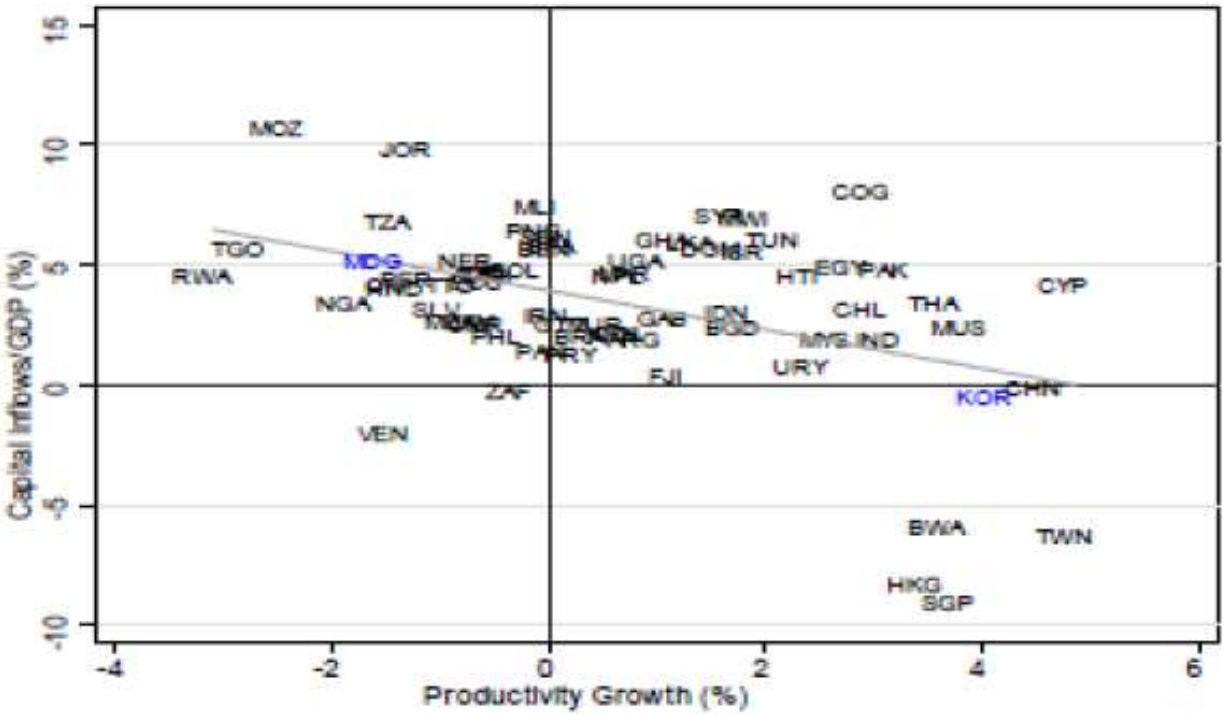
Only countries with GDP per capita below Estonia (20400 USD) are plotted



Using 2007 data: No relationship between income and net foreign asset positions, or even negative!

Source: Lane and Milesi Feretti (2008)

The allocation puzzle



Average ratios of capital inflows to GDP and TFP growth rates, 1980-2000.

Source: Gourinchas and Jeanne (2008)

The Allocation Puzzle in Asia

Country	Growth-Current Account Correlation	GDP Growth Average, %	Investment/GDP Average
China	0.44	10.8	0.43
India	0.69	8.5	0.35
Korea	0.42	4.2	0.30
Philippines	0.47	5.5	0.15
Taiwan	0.09	4.6	0.22
Thailand	0.25	4.7	0.28
GDP-weighted		8.5	0.37
Simple average	0.40	6.4	0.29
Pooled correlation	0.31		

Source: World Bank and National Statistics Taiwan

Source: Benhima and Bachetta (2010)

Expected types of gains from financial opening

- 2) **International risk sharing (risk diversification)**
  - If consumers are risk averse, diversification of country-specific risk through diversified portfolio: strong incentive to diversify aboard
  - From portfolio theory, better diversification opportunities allow investors to reduce the risk of their portfolio (for the same expected returns) or increase returns for the same level of risk.
  - But empirical evidence that financial globalization has decreased volatility of consumption is scarce.
  - One of the strongest statistical predictors of financial crisis: opening to capital movements (≠ trade openness)

The gains from diversification

- The two securities case

  Think of asset A being the local stock and asset B being a foreign stock

  – Portfolio weights: Percentage of value invested in each asset

  $$x_A + x_B = 1$$

  – Portfolio return: Weighted arithmetic average of individual asset returns

  $$\tilde{R}_p = x_A \tilde{R}_A + x_B \tilde{R}_B$$

  – Expected average portfolio return: Weighted average of expected asset returns

  $$E(\tilde{R}_p) = x_A E(\tilde{R}_A) + x_B E(\tilde{R}_B)$$

The gains from diversification

- Portfolio risk: Typically associated with the standard deviation of the portfolio return

$$\sigma_p = \sqrt{E\left\{\left[\tilde{R}_p - E(\tilde{R}_p)\right]^2\right\}}$$

- Portfolio risk for two securities: It depends on the covariance between the two returns

$$\sigma_P = \sqrt{x_A^2\sigma_A^2 + (1-x_A)^2\sigma_B^2 + 2x_A(1-x_A)\operatorname{cov}(\tilde{R}_A, \tilde{R}_B)}$$

- Recall:

$$\operatorname{cov}(\tilde{R}_A, \tilde{R}_B) = E\left\{\left[\tilde{R}_A - E(\tilde{R}_A)\right]\left[\tilde{R}_B - E(\tilde{R}_B)\right]\right\}$$

$$\text{correlation} = \rho_{AB} = \frac{\operatorname{cov}(\tilde{R}_A, \tilde{R}_B)}{\sigma_A\sigma_B}$$

The gains from diversification

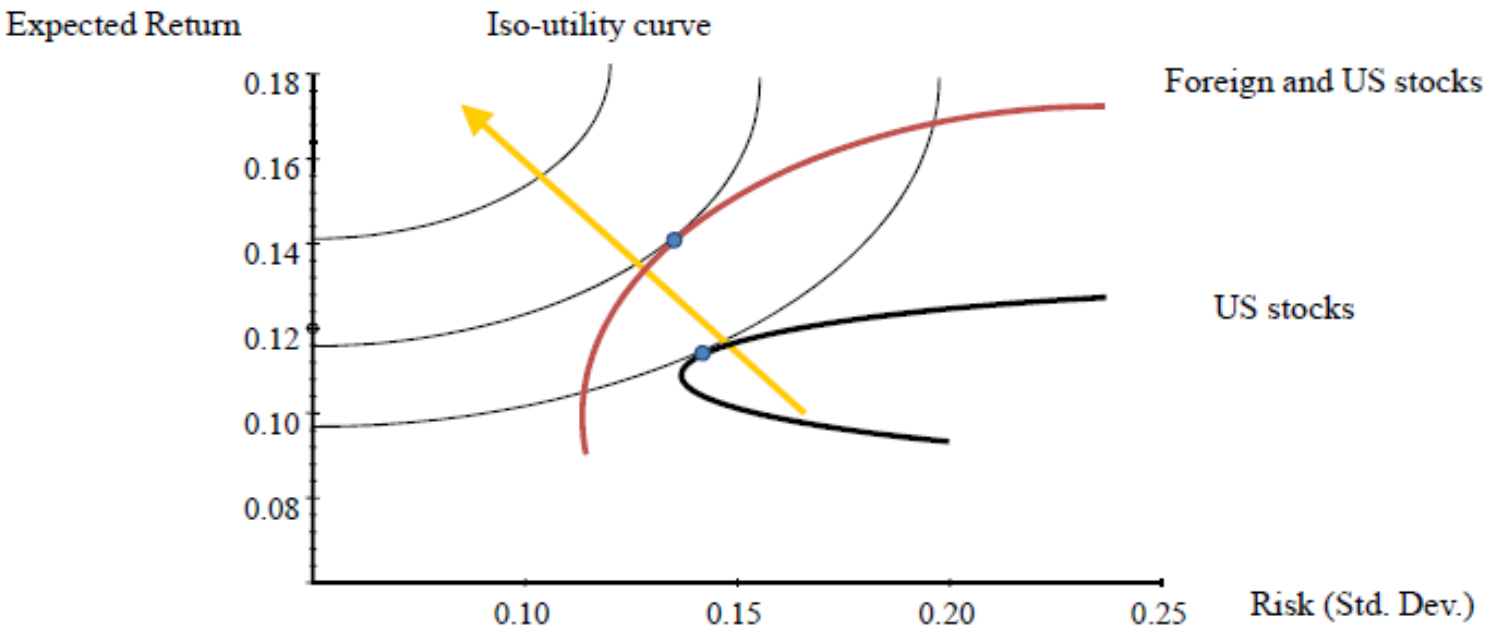
Combining two risky assets (same expected returns)

Stock A $E(R_A)$ = 10% σ_A = 24% Portfolio Weight x_A	Stock B $E(R_B)$ = 10% σ_B = 24% Portfolio Weight x_B	Expected Return of Portfolio, $E(R_p)$	Std. Dev. of Portfolio (if correlation ρ_{AB}= 0), σ_p	Std. Dev. of Portfolio (if correlation ρ_{AB}= 1), σ_p
1.00	0.00	10%	24%	24%
0.75	0.25	10%	19%	24%
0.50	0.50	10%	17%	24%
0.25	0.75	10%	19%	24%
0.00	1.00	10%	24%	24%

$$\sigma_p = \sqrt{(x_A)^2\sigma_A^{\ 2} + (x_B)^2\sigma_B^{\ 2} + 2x_A x_B \sigma_A\, \sigma_B \rho_{AB}}$$

- The risk return trade-off depends on the correlation of the two assets.
- Low return correlation between assets increases the diversification benefits.

The gains from diversification



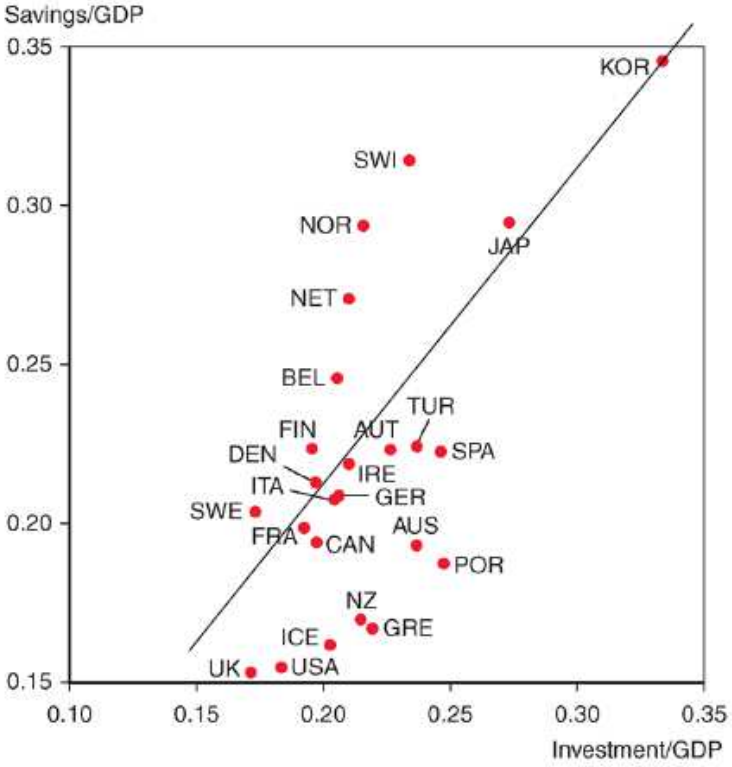
- Financial Globalization allows to reach higher returns for a given portfolio risk
- This translates into higher utility for the investors
- Diversification benefits are higher when home and foreign assets are poor substitutes (weakly correlated)

Are global financial markets truly integrated?

- If capital markets were fully integrated, there should be zero correlation between domestic saving and domestic investment (saving goes where highest return, not tied domestically)
  - Feldstein-Horioka test : correlation between national saving and national investment is high (but decreasing)

Feldstein-Horioka

Feldstein-Horioka Test
Saving and Investment Rates for 24 Countries,
1990–2005 Averages



Source: World Bank, *World Development Indicators*.

Are global financial markets truly integrated?

- International asset holdings are large and have grown substantially…
- …But ‘home equity bias’ remains large and somewhat puzzling: portfolios are not very diversified internationally
- Moreover, once we look at the internationally diversified part of their portfolio, investors tend to:
  - 1) hold a larger share of assets geographically close to their own market
  - 2) bias their portfolio investments towards assets that close substitutes of the domestic ones (highly correlated with).

Portfolio diversification: investors have not reaped the gains from international diversification….

Source Country	Domestic Market in % of World Market Capitalization (1)	Share of Portfolio in Domestic Equity in % (2)	Degree of Equity Home Bias $= EHB_i$ (3)
Australia	1.8	76	0.76
Brazil	1.6	99	0.98
China	7.8	99	0.99
Canada	2.7	80	0.80
Euro Area	13.5	57	0.50
Japan	8.9	74	0.71
South Africa	1.4	88	0.88
South Korea	1.4	89	0.88
Sweden	0.7	44	0.43
Switzerland	2.3	51	0.50
United Kingdom	5.1	54	0.52
United States	32.6	77	0.66
South Africa	32.6	88	0.88

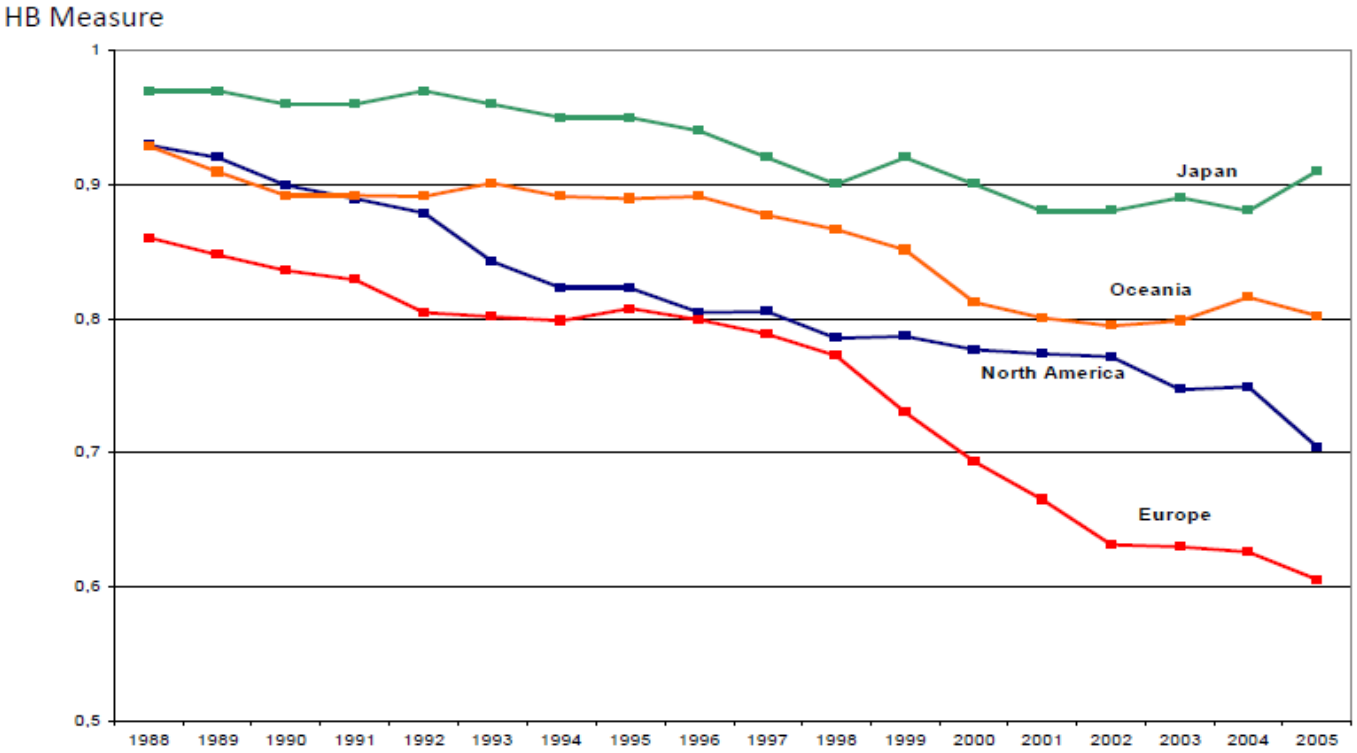
Table (1): Home Bias in Equities in 2008 for selected countries (source IMF and FIBV)

Note: For Euro Area countries, within Euro Area cross-border equity holdings are considered as Foreign Equity Holdings.

$$HB = 1 - \frac{\text{Share of Foreign of Equity Holdings}}{\text{Share of Foreign Stocks in World Market Capitalization}}.$$ Why?

Source: Coeurdacier and Rey (2010)

...thus despite the process financial globalisation



Vertical axis: measure of portfolio home bias (HB)

HB=1-Share of Foreign of Equity Holdings/Share of Foreign Stocks in World Market Capitalization

Source: Coeurdacier and Rey (2010)

Determinants of Financial Flows

'Gravity equation' for bilateral financial asset holdings (Portes and Rey (2005)):

- $\text{Log}(\text{Assets}_{ij}) = a + b \log(M_i M_j) - c \log(\text{Dist}_{ij}) + d Z_{ij}$

  Where Assets_{ij} denotes asset holdings of country i in country j (bonds, equities or banking assets), M_i is the market size of country i, Dist_{ij} the distance between the two countries and Z_{ij} a set of control (common currency, trade links, common legal system, correlation between stock returns…)

- Some key findings:

  (i) c # 0.8: Doubling distance reduces capital flows by half (although part of it is due to trade links between close countries). Information costs?

  (ii) countries with highly correlated markets trade more in asset markets.

  (iii) having a common currency increases equity flows within the zone by roughly 50% and bond flows by roughly 100% (Coeurdacier and Martin (2009)

Do investors diversify optimally?

The Geographical Bias

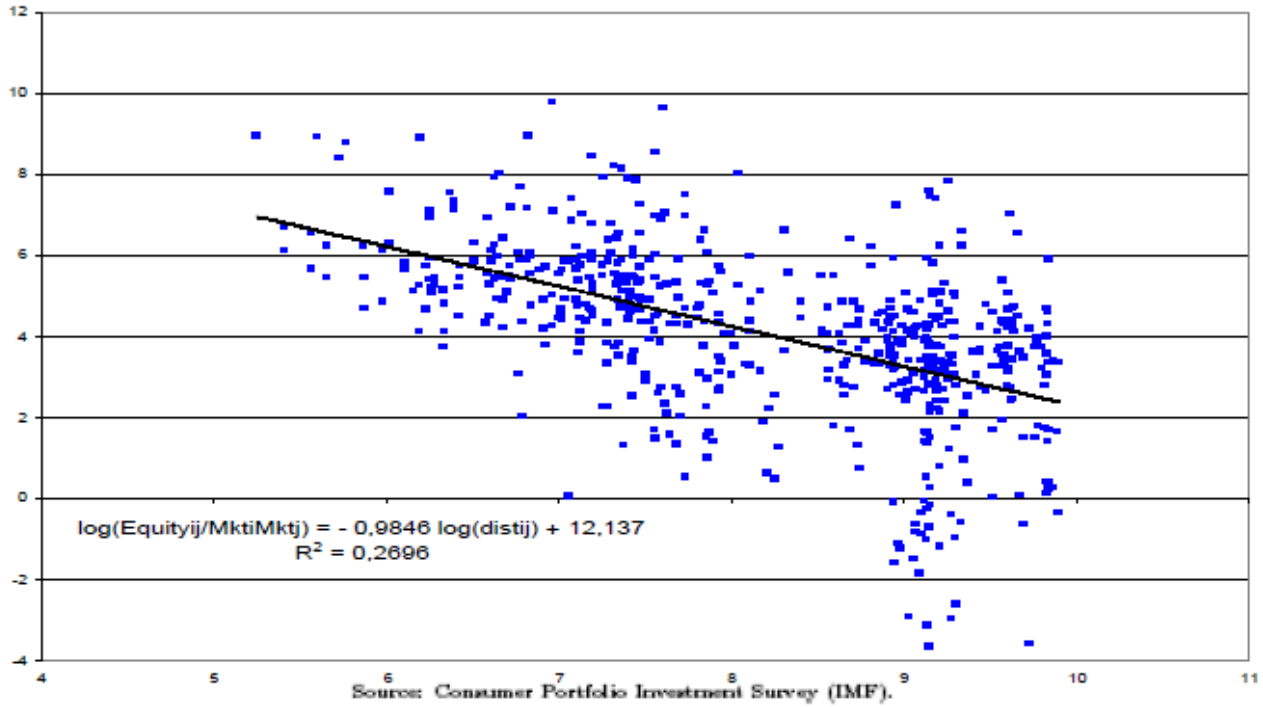


Figure 1: $\log(\frac{\text{Equity}_{ij}}{m_i m_j})$ versus dist_{ij} where Equity_{ij} are equity holdings of country (i) in country (j) in US dollars, m_i is the market capitalization of country (i) and dist_{ij} the distance between the two capitals in km.

"The Geographical Bias" in equity portfolios.

Source CPIS

Do investors diversify optimally?

Investors pick foreign assets highly correlated with their local market

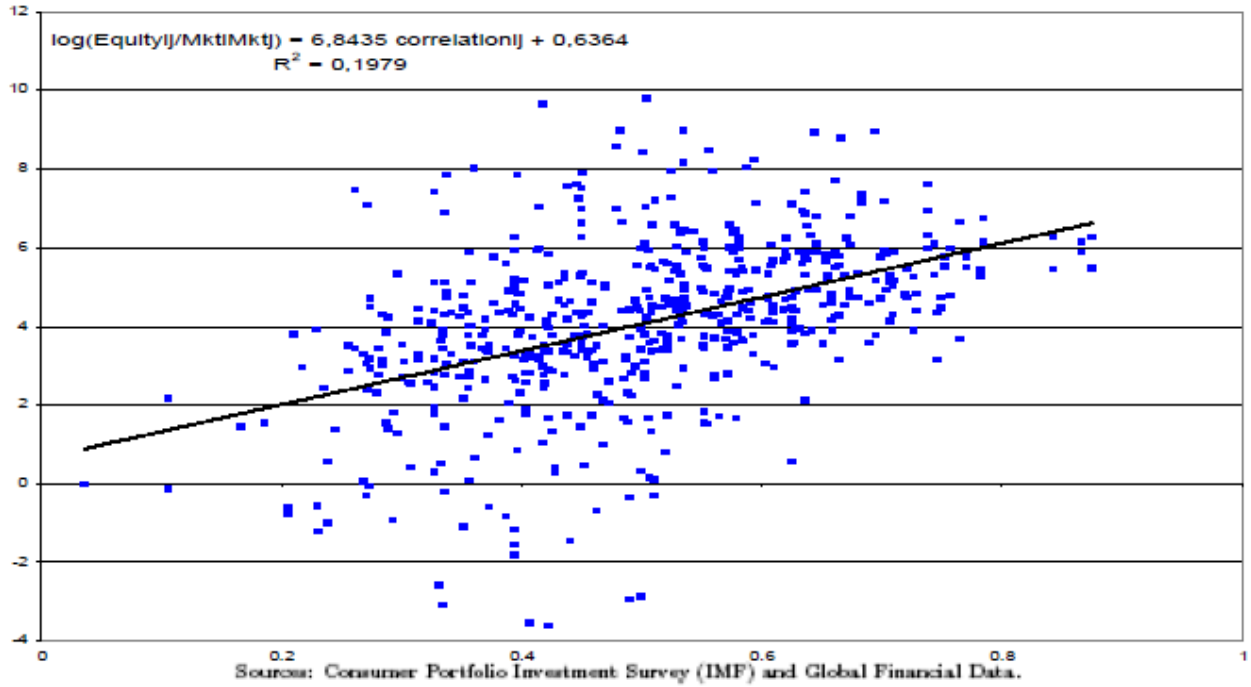


Figure 2: $\log(\frac{\text{Equity}_{ij}}{m_i m_j})$ versus Correlation_{ij} where Equity_{ij} are equity holdings of country (i) in country (j) in US dollars, m_i is the market capitalization of country (i) and Correlation_{ij} of countries stock returns

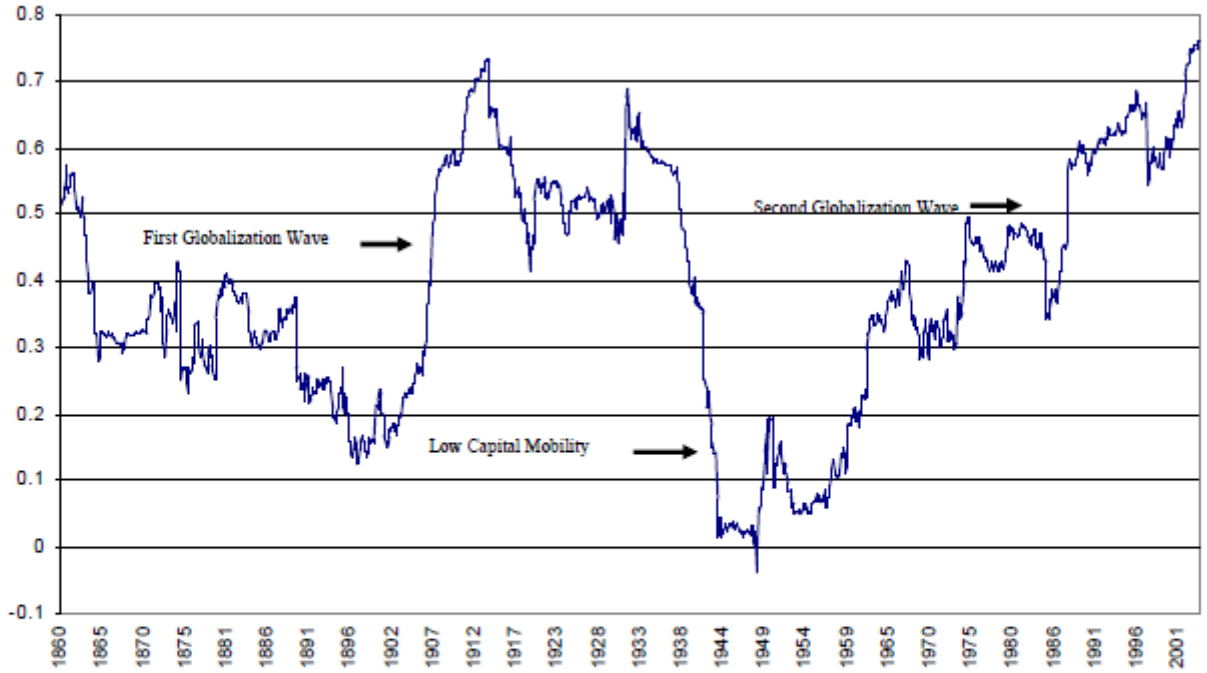
"Correlation Puzzle"

Source Coeurdacier and Guibaud, 2011

Do investors diversify optimally?

- Diversification benefits are larger if domestic and foreign returns have a low correlation but…
- International equity returns correlations are not constant over ime
  - Correlations are lower in normal times, but (unfortunately) increase in bad times (when diversification is most needed).
  - Correlations in equity returns tend to be higher between well integrated financial markets (due to portfolio rebalancing across markets)
  - With high correlation between well integrated markets, small transaction costs can reap away the gains from integration

International stock returns correlation



Correlation between UK and US stock returns over long period (source Global Financial Data)

Monthly correlations based on a 5-years window

Why is international diversification so low?

- Institutional barriers (capital account restrictions, capital controls…) but less valid nowadays since most developed and emerging markets opened up their financial markets to foreign investors
- Currency risk. Large impact of the euro on financial flows in the eurozone.
- Sovereign risk
- Transaction costs (forex, legal/accounting costs, taxation differentials ...)
- Asymmetric information
- Familiarity and cultural biases

Roadmap

1. Financial Globalization : past and present
2. The case for opening capital markets and the empirical evidence
3. **Financial globalization and the international transmission of shocks**
4. International capital flows during the recent crisis

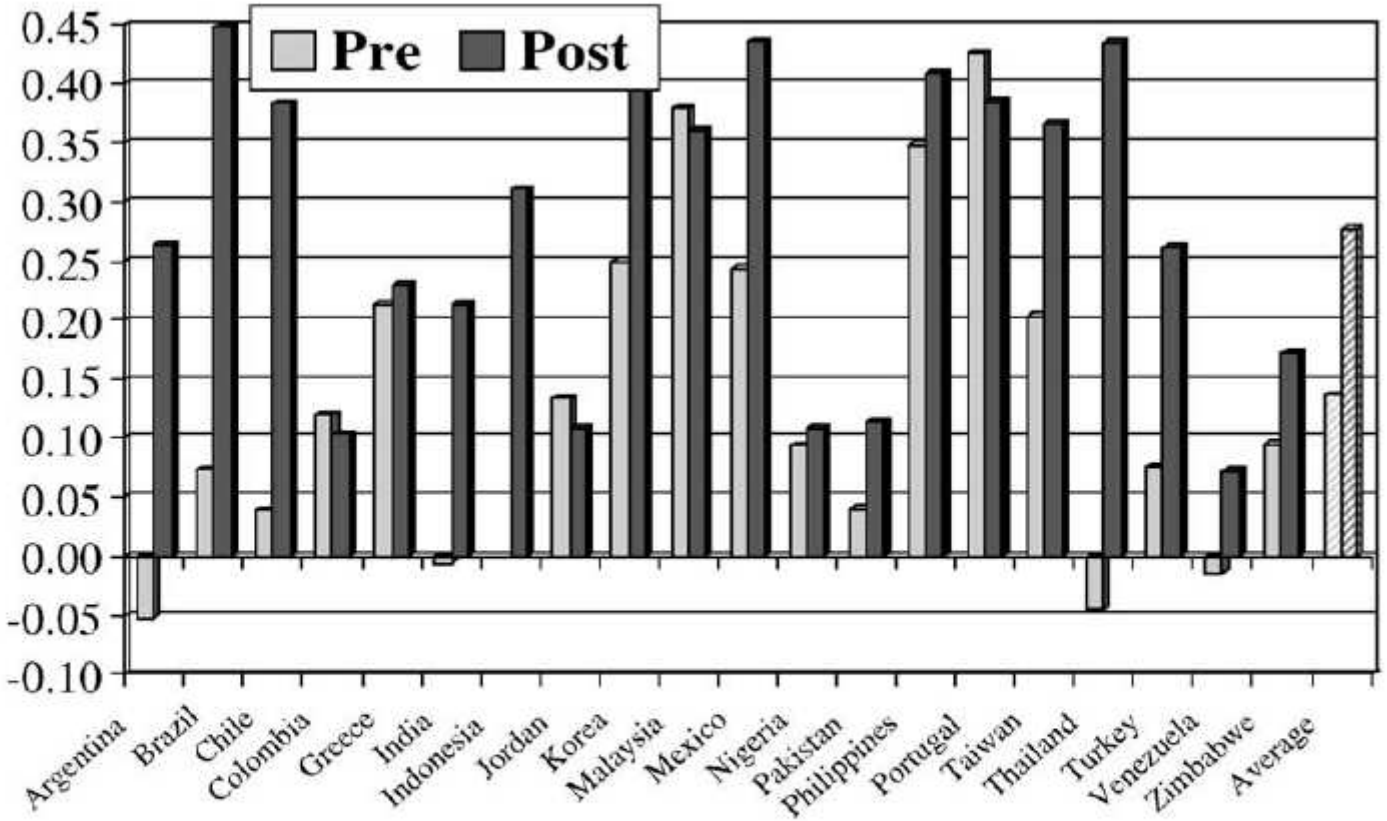
Global financial markets and the transmission of shocks

- Global financial markets should be used to decrease risk and smooth consumption
- They are also often blamed for making countries more prone to financial crisis and amplifying shocks
- • Myth or reality?

Global financial markets and the transmission of shocks

- What we know for sure is that financial openness favor the transmission of shocks from one country to another
- Countries more financially integrated exhibit more co-movements.
- Evidence quite clear when looking at financial returns. Less strong for real activity although evidence of transmission during the financial crisis.
- The banking channel seemed to have been particularly relevant.

Higher co-movements after financial integration



Data through April 2002. There are no pre-liberalization data for Indonesia.

Correlation of countries stock returns with a global index before and after liberalization

Source: Bekaert et al. (2003)

Global financial markets and the transmission of shocks

- Various channels for the propagation of shocks through global financial markets. Among others:
  - Portfolio rebalancing channel: investors who suffer losses in their own market repatriate funds from abroad. Lowers asset prices abroad/increases cost of funds.
  - FDI channel: multinational taking losses in their own markets reduce investment/labor demand abroad. Lowers real activity abroad
  - Lending channel: Banks taking losses in their own markets reduce lending abroad, cut funds to their foreign affiliates. When these are global banks, dry-up of liquidity internationally especially in emerging markets. Particularly relevant in the recent crisis.

Roadmap

1. Financial Globalization : past and present
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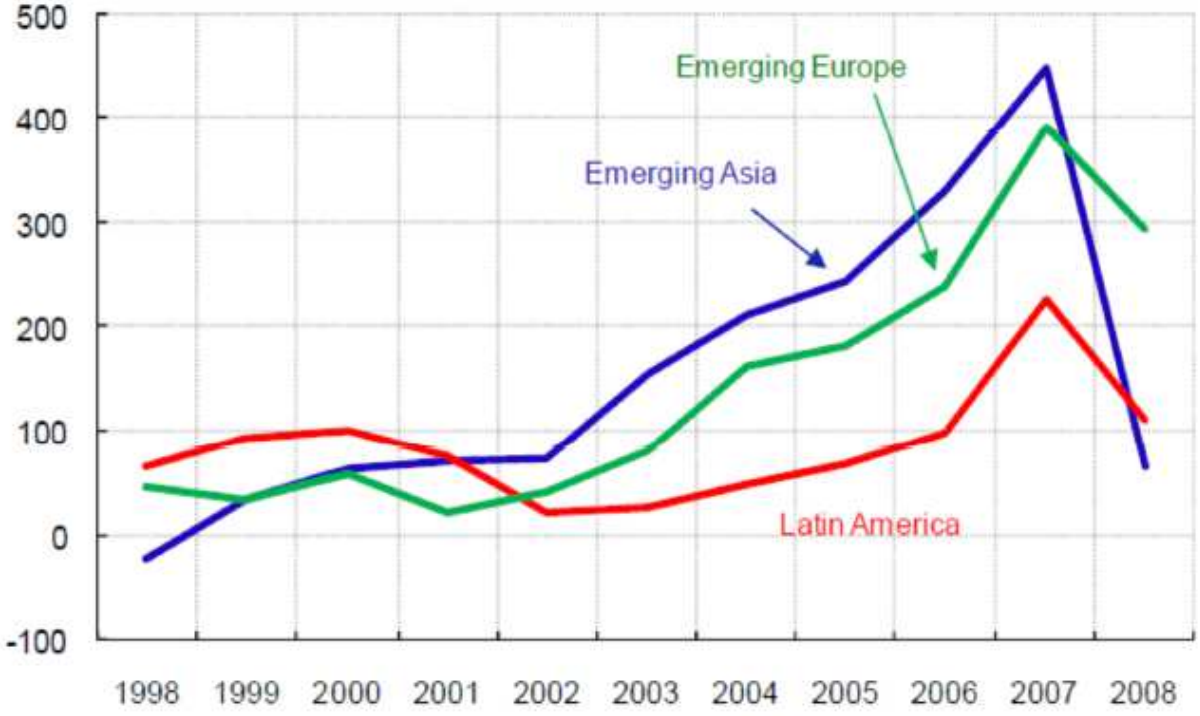
4. **International capital flows during the recent crisis**

International capital flows in 2007-2009

- Application: emerging markets lending during the 2007-2009 crisis
  - Emerging markets are prone to sudden stop in capital flows. Can be severely affected especially if weak fundamentals (low amount of reserve for instance or highly indebted) or rely heavily on developed countries to finance investment.
  - Large fall of capital inflows towards these markets during the last financial crisis.
  - True across all asset classes but especially relevant for international bank lending. See Goldberg and Cetorelli (2009)

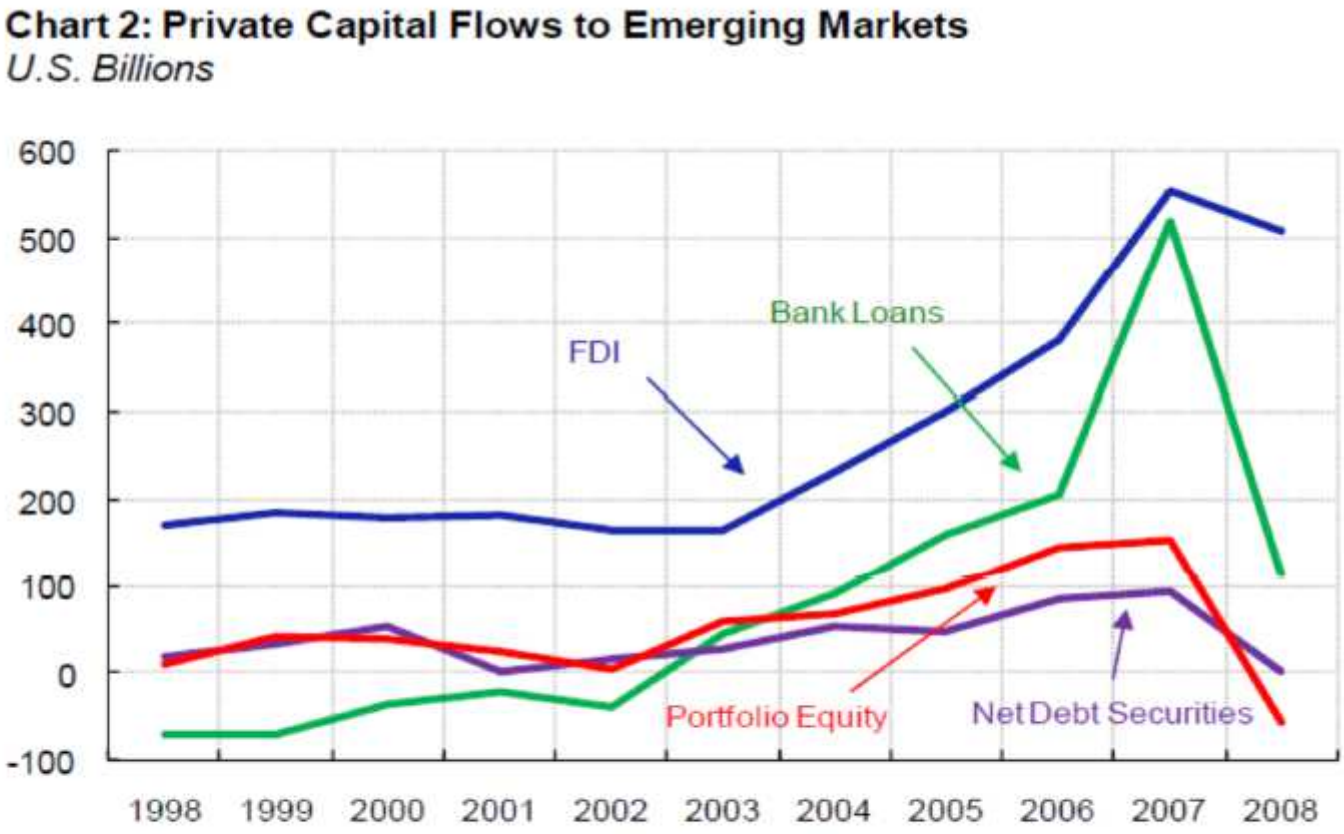
International capital flows in 2007-2009

Chart 1: Capital Flows to Emerging Markets, by Region
U.S. Billions



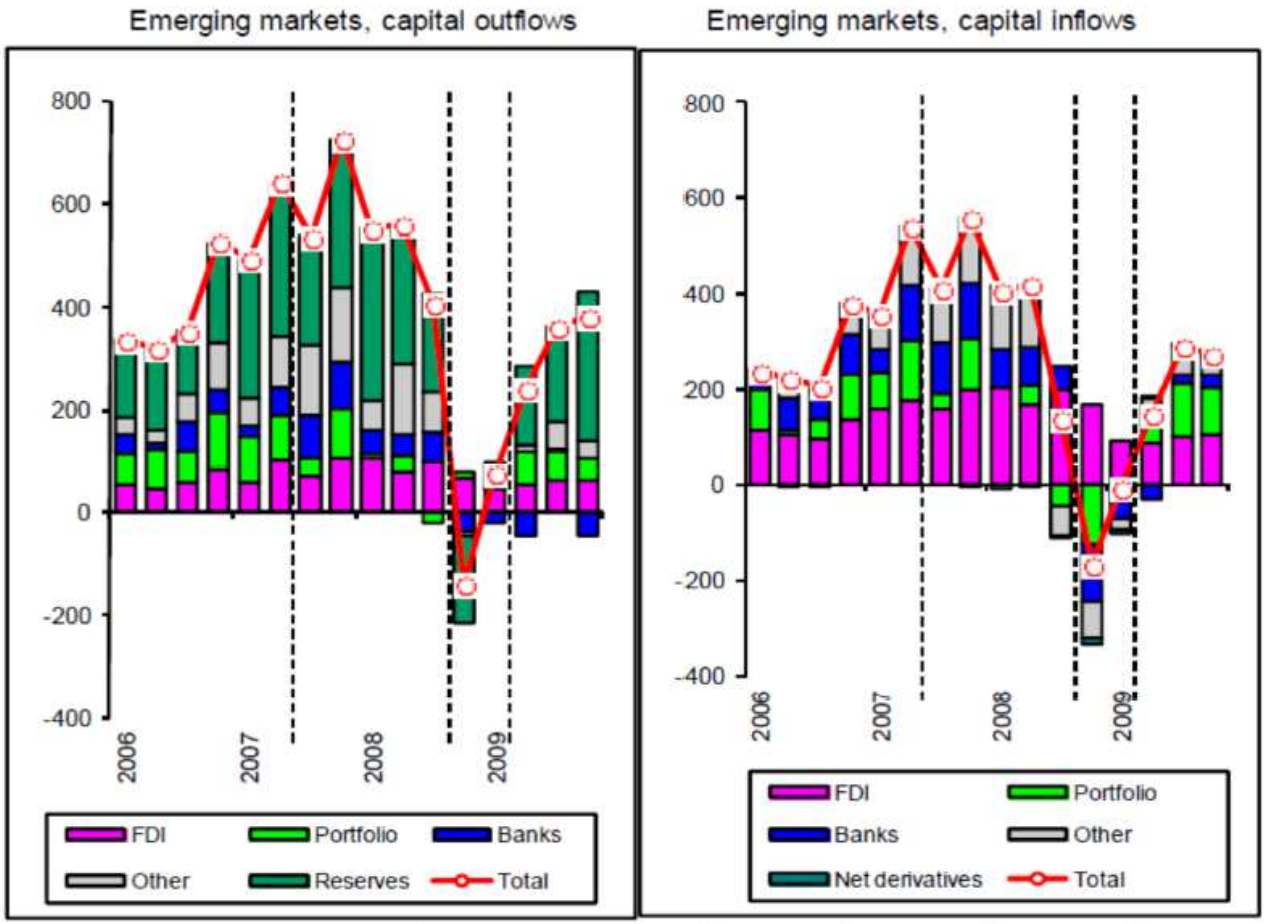
Source: Goldberg and Cetorelli (2009)

International capital flows in 2007-2009



Source: Goldberg and Cetorelli (2009)

International capital flows in 2007-2009



Source: Milesi-Ferretti and Tille

International capital flows in 2007-2009

- **Application: emerging markets lending during the 2007-2009 crisis**
  - Goldberg and Cetorelli (2009) emphasize how global banks played a significant role in the transmission of the 2007 to 2009 crisis to emerging market economies.
  - Loan supply in emerging markets was significantly reduced through three different channels
    - (i) a contraction in direct, cross-border lending by foreign banks
    - (ii) a contraction in local lending by foreign banks' affiliates in emerging markets
    - (iii) a contraction in loan supply by domestic banks resulting from the funding shock to their balance sheet induced by the decline in lending through interbank markets

    Banks relying on 'distressed' global banks for funding were more heavily hit.

International Lending Channel

Large Global Bank (in the US)

Asset	Liabilities
Liquid assets	Deposit ↓↓
↓ Foreign Loans	Internal borrowing ↑ ←
↓ Domestic Loans	

Foreign Affiliate (in Argentina)

Asset	Liabilities
Liquid assets	Deposit
↑ Internal Lending	
↓ Loans	

Small stand-alone bank (in Argentina)

Asset	Liabilities
Liquid assets	Deposit
↓ Loans	Foreign borrowing ↓

Global insurers

- But the recovery of emergings was stronger after the global financial crisis (2007-2008)
- Regarding the NFA (see next session): asymmetry in portfolios between risky/safe assets
- Some countries: global/regional insurers linked to the fligh to safety/security (some assets are safe-haven assets)
- In global crisis: some assets appreciate and lead to income transfers from the center to the periphery

Brief Summary

- Financial globalization has been increasing significantly over the last three decades, even though the recent crisis has led to a temporary collapse in international capital flows.
- Financial globalization should provide intertemporal gains by fostering the transition to steady-state of capital scarce countries and risk-sharing gains through portfolio diversification.
- These gains are either small empirically or have not been entirely reaped (portfolio home bias). The low degree of international portfolio diversification points out the presence of remaining capital markets imperfections.
- Financial linkages between countries favors the transmission of shocks across markets. Recent developments highlighted an international lending channel that spread the crisis globally.

See you next week….