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FINANCIAL INTEGRATION AND CRISES
2021

Lecture 2 – Appendix

Financial Integration and Growth

Does Financial Integration lead to higher growth?

Start from the simple neoclassical model:

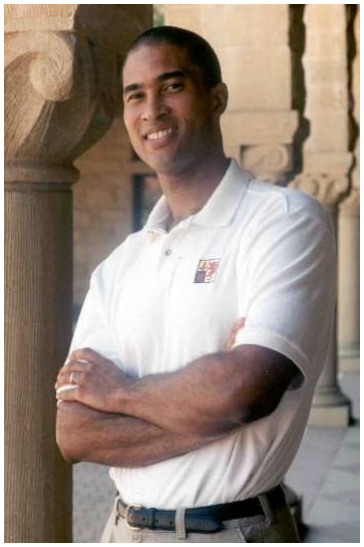
- Advanced economies have higher capital stock, a lower return to capital and interest rate
- Opening the financial account should lead capital to flow from advanced to developing countries with better investment opportunities
- In developing countries, **investment and growth should increase**

There could be other effects

- FDI also allows for transfers of technology and managerial organization.
- Improvement of the domestic financial system.

The IMF View

Kose, Prasad, Rogoff, Wei (KPRW), IMF Staff Papers 2009



Effects on growth

- KPRW survey 25 studies that look at the relationship between Financial Openness and growth. **Most studies find "no effect"**
  - The literature is inconclusive; While results vary across studies, **there is no systematic relationship between Financial Integration and growth** (next slide, first panel).
    - This must have been difficult to write for IMF economists, since until late 1990s, the IMF wanted to change its Articles of Agreement to promote Capital Account Liberalization.
  - KPRW argue that sometimes the relationship between the **change** in financial integration and growth is positive but, once the other factors are controlled for, the relationship disappears (right bottom panel).
- Even FDI has no robust causal effect on growth despite presumptions.

Figure 5A. Level of Financial Openness and GDP Growth, 1985–2004

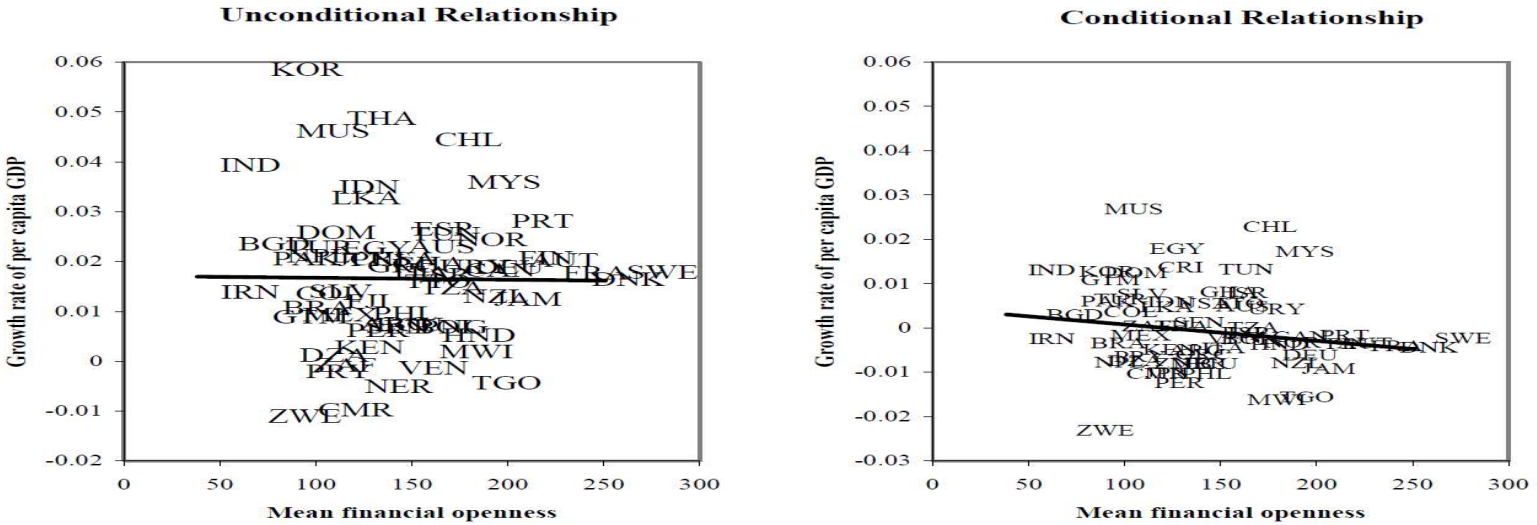
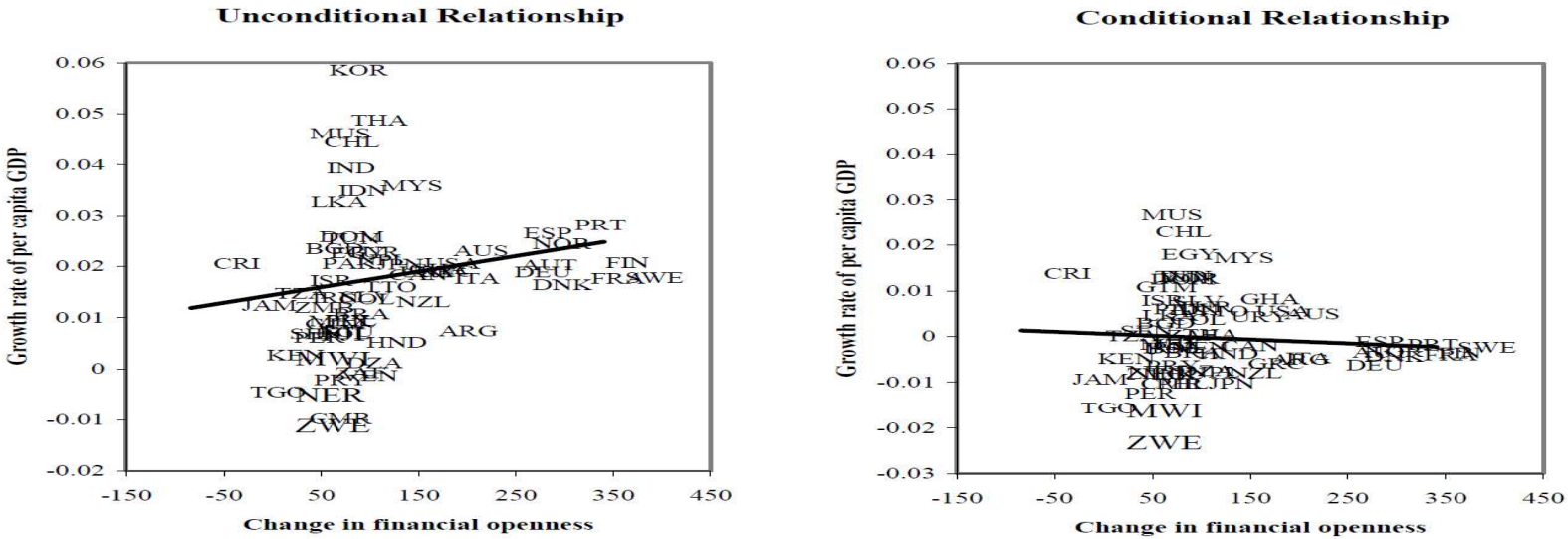


Figure 5B. Change in Financial Openness and GDP Growth, 1985–2004



Notes: Growth refers to the average real per capita GDP growth. Financial openness is defined as the ratio of gross stocks of foreign assets and liabilities to GDP and is based on a dataset constructed by Lane and Milesi-Ferretti (2006). The second panel uses residuals from a cross-section regression of growth on initial income, population growth, human capital and the investment rate. See Appendix II for abbreviated country names.

Effects on Consumption Volatility

- There is evidence that Financial Globalization has increased the relative volatility of consumption contrary to theoretical predictions.
- There seem to be a threshold effect: at some point the relative volatility of consumption starts decreasing.
  - The problem is that all Emerging Markets are below that threshold and all Advanced Economies are above.
- Countries with capital controls are more subject to crises.
  - But KPRW acknowledge that this may be endogenous.

Note: the problem of reverse causality is pervasive with the growth-financial nexus

Main Message of KPRW

- The main benefits of financial integration are "**Collateral Benefits**"
- Financial integration has important indirect and catalytic effects.

Improvements in the domestic financial sector

In particular, foreign banks are supposed to:

- Strengthen domestic banks through increased competition;
- Help improving domestic regulatory and supervisory framework;
- Bring new instruments and new management technology;
- Be a more stable source of funds in case of financial crises.

  The latter benefit is questionable

Main Message of KPRW

Better institutions - Governance

- Foreign investors may improve corporate governance
  - Better skills to monitor managers and more independence with respect to important domestic interest groups
  - The link with public governance is not so clear (incentive for reforms to attract foreign capital?)

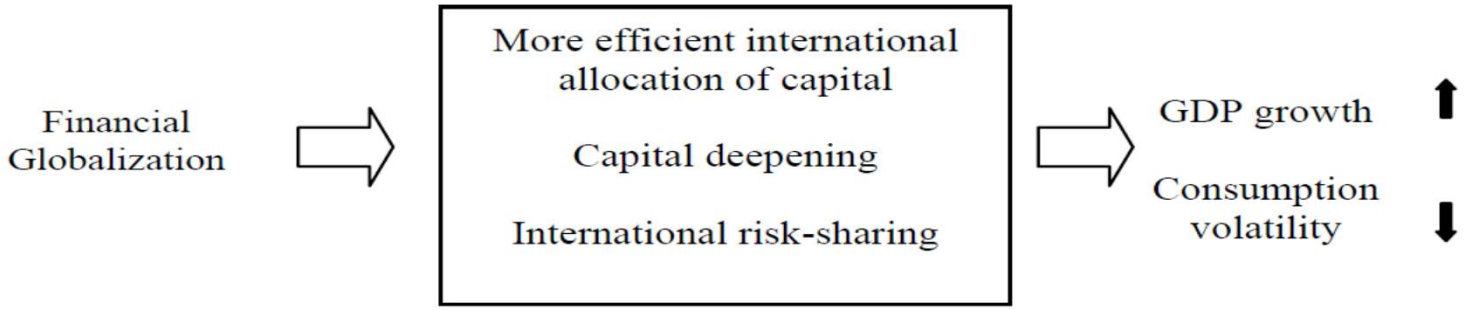
Better macroeconomic policies

- Globalization increases the cost of bad macro policies;
- Macroeconomic discipline should increase stability.
  - However globalization makes policies more complicated

Evidence of these improvements is however scant

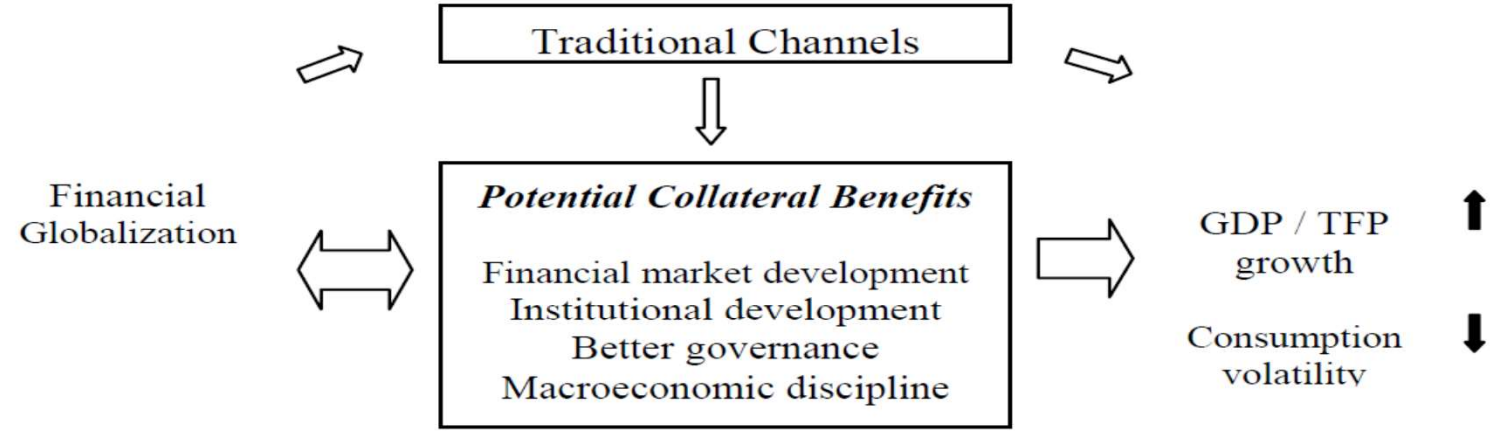
Box 1. Two Views of Impact of Financial Globalization on Developing Countries

The Traditional View



The traditional view focuses on the importance of channels through which capital flows could directly increase GDP growth and reduce consumption volatility.

A Different Perspective



Our perspective acknowledges the relevance of the traditional channels, but argues that the role of financial globalization as a catalyst for certain collateral benefits may be more important in increasing GDP/total factor productivity (TFP) growth and reducing consumption volatility.

Second message: Threshold effects

There are **threshold effects**

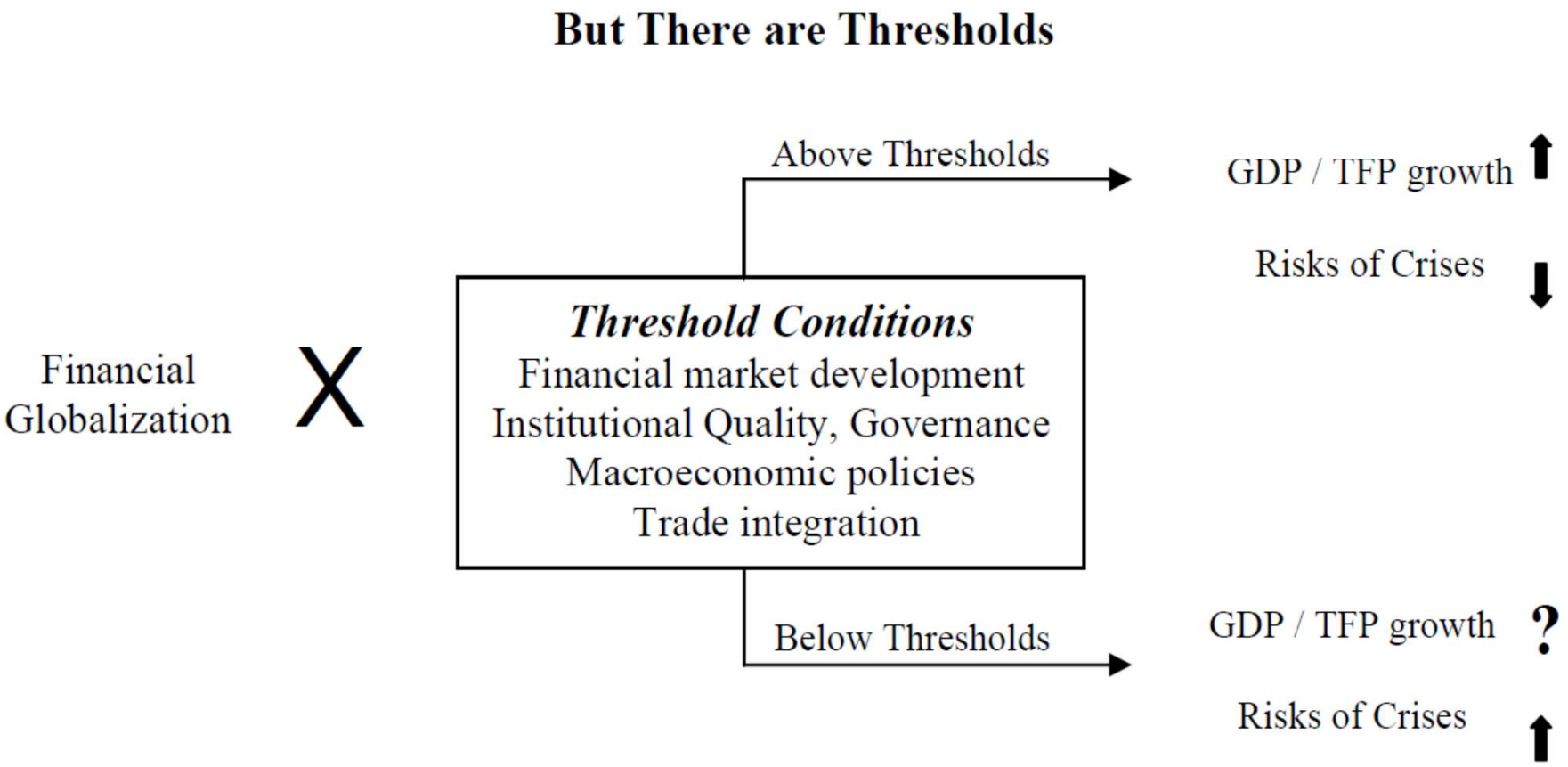
- Need sufficiently developed/efficient financial markets.
- Premature opening is harmful: **complementary reforms in the financial sector are needed** before we can free capital movements.

And **we need macro policy reforms**:

- Openness to trade reduces the cost of financial crises.
  - The idea is that the adjustment of the real exchange rate necessary to absorb a given financial shock is smaller the more open the economy is.
- Flexible exchange rates also reduce the costs of crises.

But, these complementary reforms are costly!

Box 2. But There Are Thresholds



Financial globalization leads to better macroeconomic outcomes when certain threshold conditions are met. This generates a deep tension as many of the threshold conditions are also on the list of collateral benefits.

Summing up

KPRW view:

- Developing countries need foreign capital, but it is risky without complementary reforms of the financial sector, etc.
- Countries must implement these complementary reforms and then open.

Comment:

- But, if we reform the financial sector and improve institutions, why should we need the collateral benefits of financial integration?

Against globalization

Rodrik and Subramanian IMF Staff Papers 2009

Why did financial globalization disappoint?

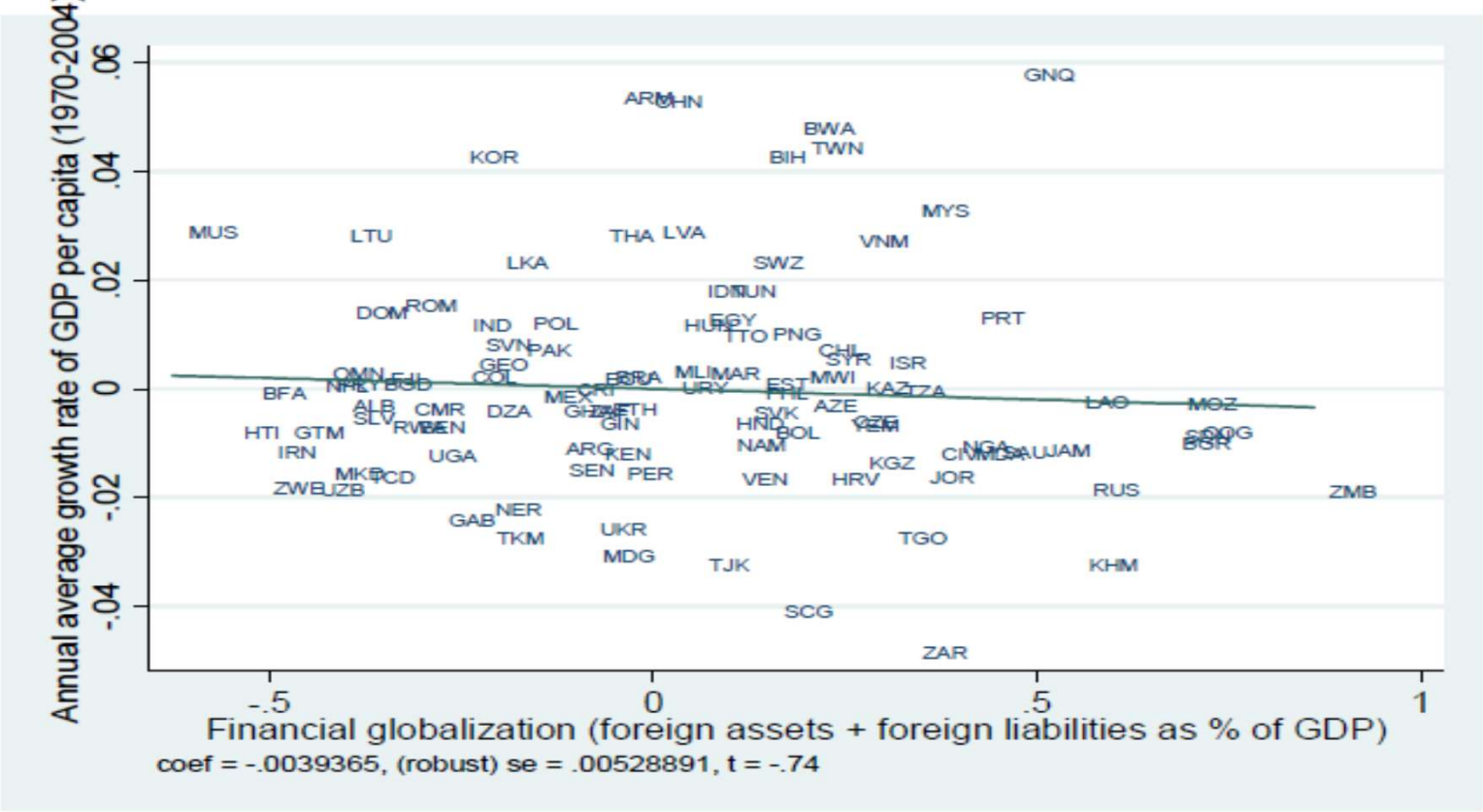
No evidence of a positive effect on growth

The benefits of financial globalization are hard to find.

- Financial globalization has not generated more investment or higher growth in emerging markets.
- The argument for collateral benefits is largely speculative, but if it were true, we should find that financial integration has a positive effect on growth **unconditional on other characteristics**.
  - Rodrik and Subramanian (2009) stress that **there is no positive relation** between growth and $(A + L)/Y$ or its change, both in the 1970-2004 period and in the 1984-2004 period.

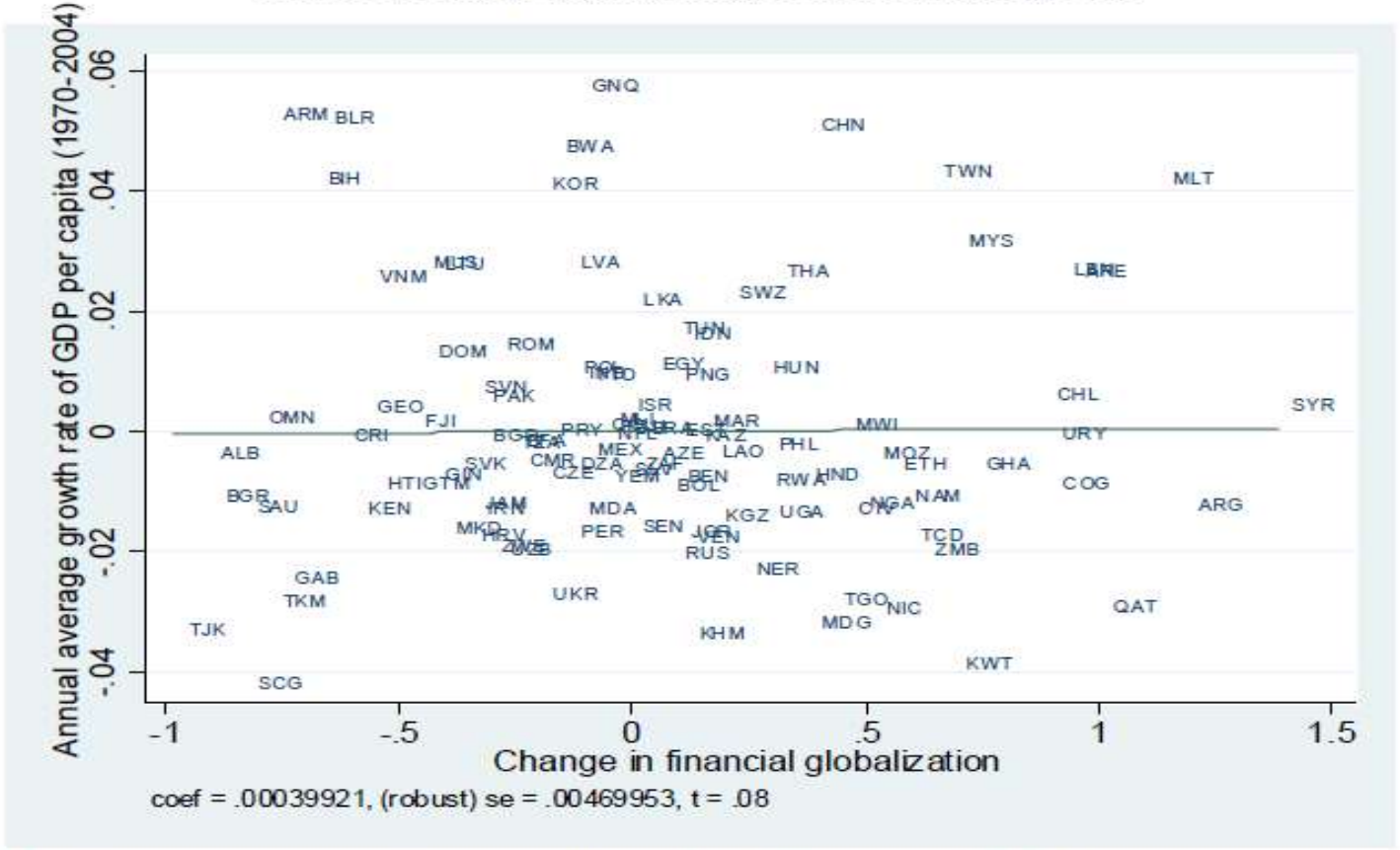
Figure 1: Financial globalization and growth (1970-2004)

Panel A: Level of financial globalization and growth



The relationship shown above is conditioned on size (measured as the log of population). The sample of 105 countries excludes OECD countries and, for presentational reasons, 14 developing countries that have very high levels of financial globalization. Including these countries, and not conditioning on size, does not affect the relationship shown above. Growth rate is from the Penn World Tables, v 6.2 and the financial globalization measure is due to Lane and Milessi-Ferreti (2006).

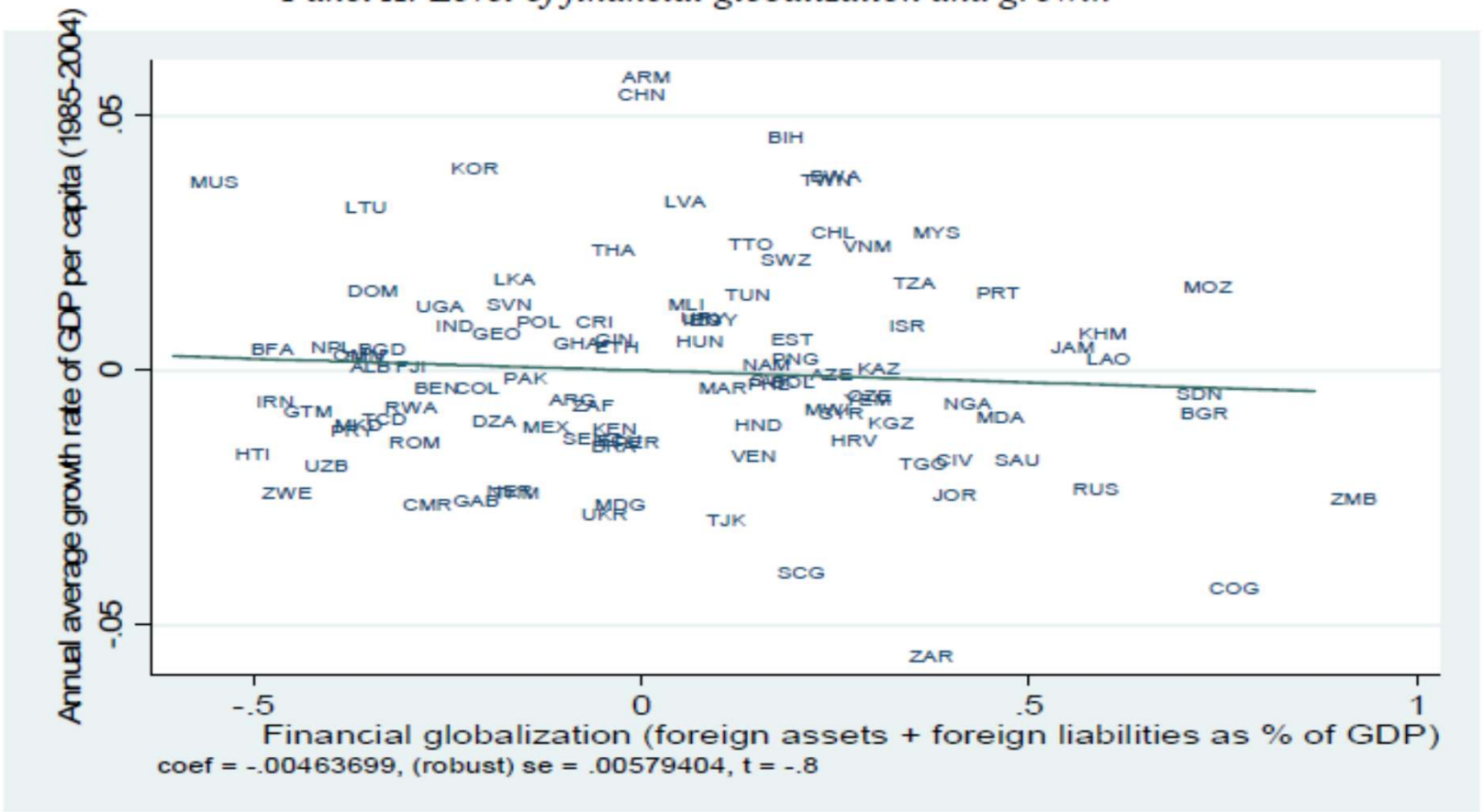
Panel B: Change in financial globalization and growth



The relationship shown above is conditioned on size (measured as the log of population). Change in financial globalization is measured as the difference between the average level of financial globalization for 2000-2004 (or for the 5 years closest to these dates) and the average level of financial globalization for 1970-1974 (or for the 5 years closest to these dates). The sample of 110 countries excludes OECD countries and, for presentational reasons, 9 developing countries that have very high changes in the levels of financial globalization. Including these countries, and not conditioning on size, does not affect the relationship shown above. Growth rate is from the Penn World Tables, v 6.2 and the financial globalization measure is due to Lane and Milessi-Ferreti (2006).

Figure 2: Financial globalization and growth (1985-2004)

Panel A: Level of financial globalization and growth



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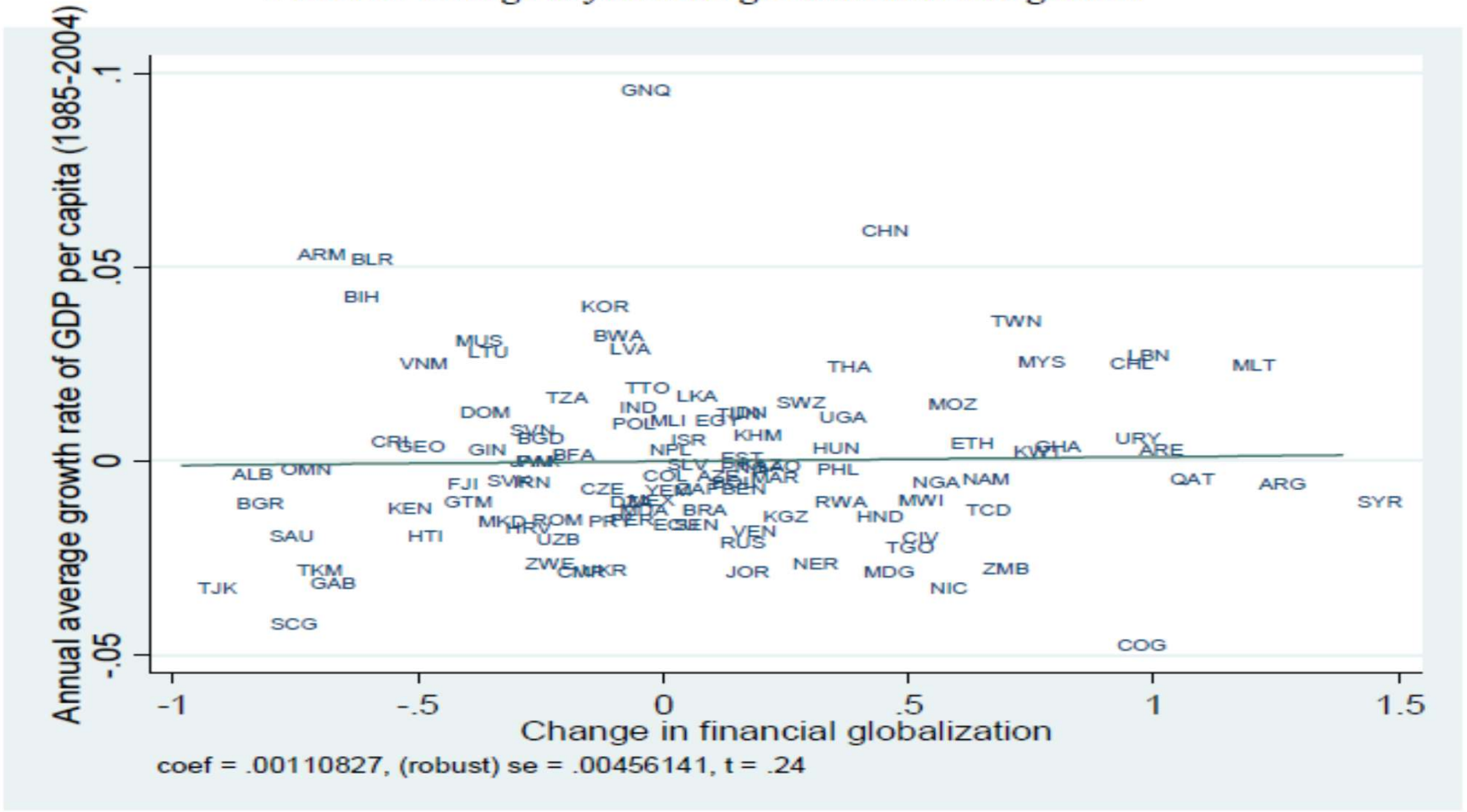

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Main Message of RS

- Why is the liberalization of capital movements the best way to improve institutions and the policy environment?
  - Aren't there better direct policies?
  - In fact, liberalization could make institutions worse;
    e.g. it allows governments to run budget deficits for a long time

- **Threshold effects** or **Prerequisites**: financial development; prudential regulation and supervision; good institutions (property rights, legal system); good corporate and public governance, …
  - Domestic institutional reforms may not be feasible;
    …government capacities are limited and financial development, prudential regulation, etc. are not priorities of developing countries

Back to basics

Consider the effect of opening the financial account for two economies:

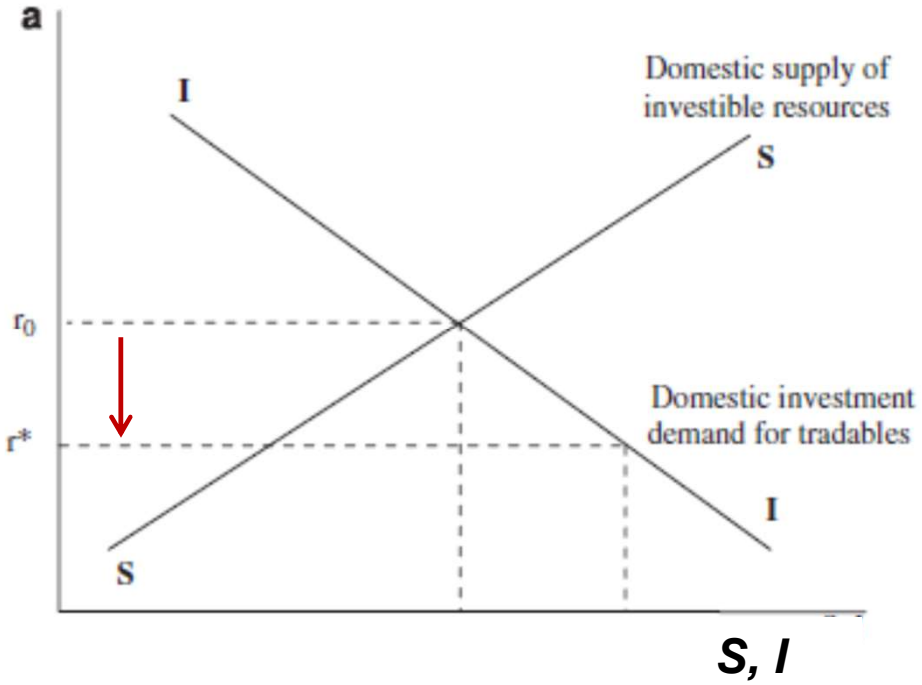
One is saving constrained; it needs funds to invest;

One is investment constrained; investment demand is low because of poor institutions that prevent investors from appropriating returns.

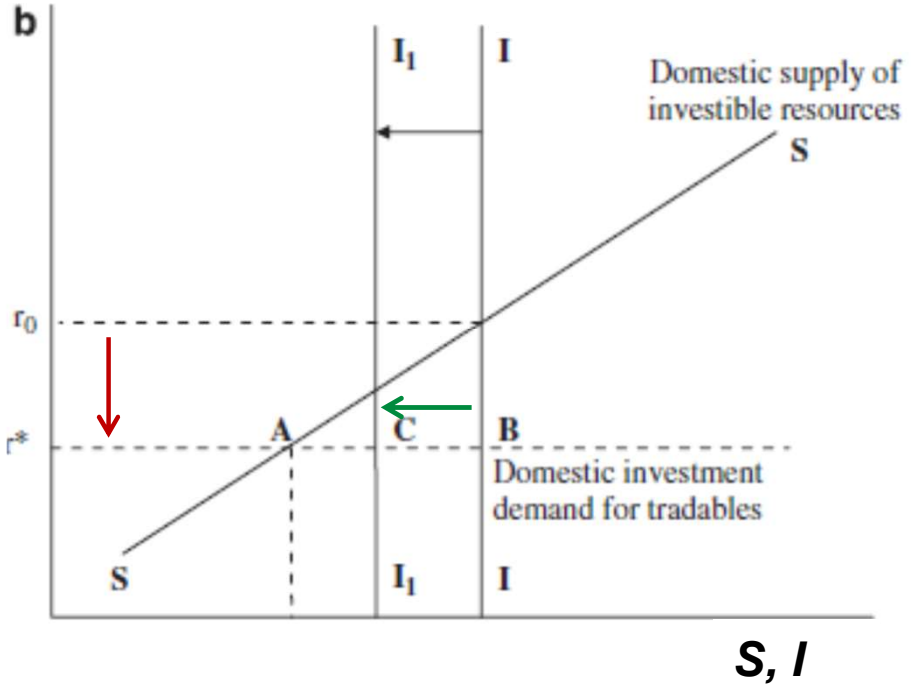
- In the saving constrained economy capital flows in, the interest rate goes down, investment increases, growth gets faster, and domestic agents consume more and save less.
- In the investment constrained economy, capital flows in, the interest rate goes down, investment doesn't change and the only thing that happens is a consumption boom.
  - If the real exchange rate is not affected, this would not be too bad (except that we would have a crisis down the road).
  - But if there is a real appreciation, competitiveness is reduced and this has a negative impact on investment and growth.

The effect of FG on investment

Saving-constrained economy



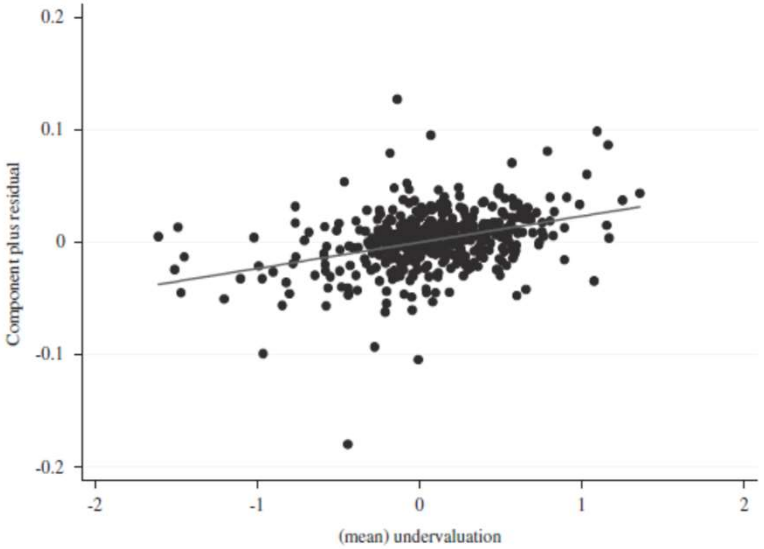
Investment constrained economy



Real exchange undervaluation and growth

Undervaluation and growth

Figure 5. Economic Growth and Undervaluation of the Real Exchange Rate

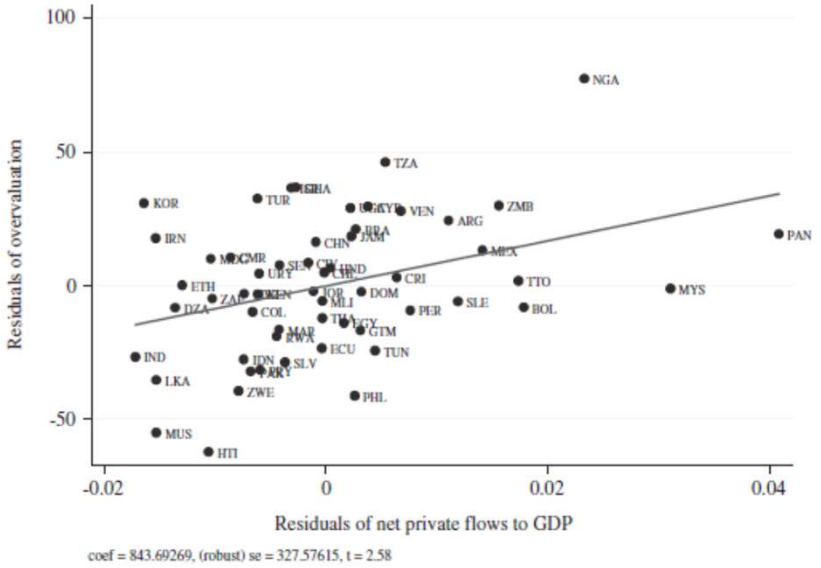


Source: Based on Rodrik (2007).

Note: Partial relationship between a measure of undervaluation of the real exchange rate and growth rate of per capita GDP (controlling for initial income and country and period fixed effects). Data are for developing countries and cover a panel of 5-year averages from 1980–84 through 2000–04.

Overvaluation and Inflows

Figure 4. Overvaluation and Capital Flows, 1970–2004



Source: Reproduced from Prasad, Rajan, and Subramanian (2007).

Note: Partial relationship between a measure of overvaluation of the real exchange rate and net private flows, comprising portfolio equity, debt, and foreign direct investment, controlling for demographics and a dummy for oil-exporting countries.