# Managing Capital Flows in Frontier Market Economies

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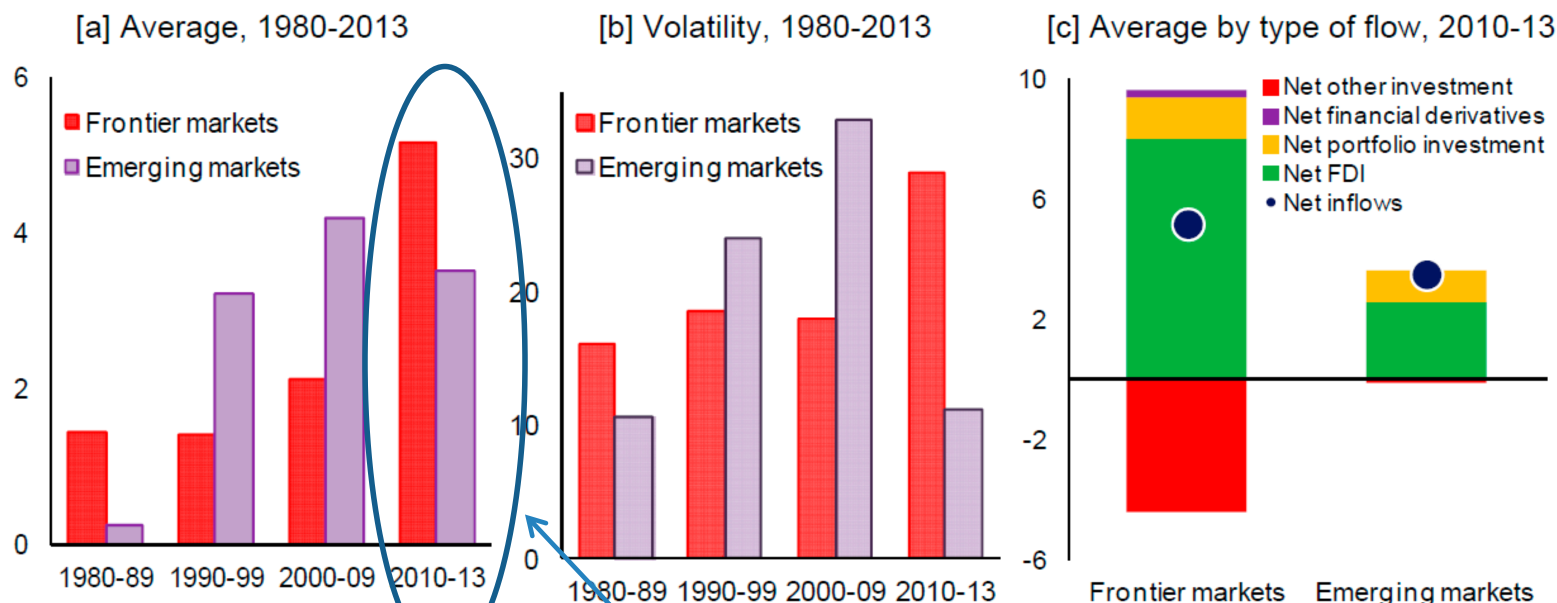
# Outline: the quandaries of capital flows

- first-best vs. second-best frames
- saving- vs. investment-constrained economies
- best-practice vs. experimental policies

# A Rorschach test




Cause for joy or concern?

Source: IMF (2014)

# The pros and cons of free capital flows

- capital moves from low to high return countries, enhancing growth
- open capital accounts enable diversification and cons'n smoothing
- global financial markets impose financial and macro discipline

- capital moves in reverse direction, and growth effects are indiscernible
- volatility in EMs have increased, and financial crises are frequent
- global financial markets weaken budget constraints by increasing elasticity of fund supply

# The pros and cons of free capital flows

- On discipline

  "The general lesson from these historical episodes is that liberalized financial systems weaken financing constraints, thereby providing more room for the build-up of financial imbalances" (Bordo and James 2015)

# If the case for financial openness is deeply ambiguous, what's the best argument for it?

- Stanley Fischer in 1997:
  - "What I would like to do is to persuade those of you who remain skeptical about capital account liberalization of [these] things:
    - that the benefits of liberalizing the capital account outweigh the potential costs;
    - that countries need to prepare well for capital account liberalization: *economic policies and institutions, particularly the financial system, need to be adapted to operate in a world of liberalized capital markets….*" (emphasis added)

- Benefiting from financial globalization requires a host of complementary reforms in institutions, regulation, and macroeconomic management
- So the case for financial openness, packaged with these other reforms, remains strong…

# Two questions

1. How do you know that you have all the complementary reforms in place, and what do you do if you do not?
   - second-best mindset may be more appropriate and practical
2. Is the saving-constrained model, under which capital inflows are the most beneficial, the right model?
   - an investment (demand)-constrained model may be more relevant

# 1. First-best vs. second-best frames

- The theory of second-best

  "… in an economy with some unavoidable market failure in one sector, there can actually be a decrease in efficiency due to a move toward greater market perfection in another sector…. Thus, it may be optimal for the government to intervene in a way that is contrary to laissez faire policy. This suggests that economists need to study the details of the situation before jumping to the theory-based conclusion that an improvement in market perfection in one area implies a global improvement in efficiency."

  -- Wikipedia

- "The world is second-best, at best"

  -- Avinash Dixit

# The long, demanding, and ever-expanding list of prerequisites

- property rights, contract enforcement, low corruption, transparency and quality of financial information, corporate governance, monetary, fiscal, and debt stability/sustainability, market-determined exchange rate, financial regulation and prudential supervision, …
- the illogic of presuming first-world institutions as <u>prerequisite</u> to reforms that are supposed to enable convergence
- lesson of the financial crisis of 2008-2009: free finance a problem even for advanced countries with "sophisticated" regulatory systems
- plus, what about the imperfections in *international* financial markets?

# First-best mindset still reflected in IMF recommendations

- "Therefore, the following recommendations are provided for sub-Saharan frontier markets economies:
  - *Improve data.* The first step in being able to manage capital flows is to be able to monitor them effectively with data that are timely and of good quality. Article IV reports for most sub-Saharan African frontier markets have already highlighted the need to strengthen balance-of-payments data, including the coverage of cross-border private capital flows and stocks.
  - *Enhance macroeconomic and financial policies.* Managing capital flows is more likely to be successful if it is supported by sound fiscal, monetary, and exchange rate policies and adequate fiscal and international reserve buffers.
  - *Improve capacity to effectively use macroprudential policies.* In sub-Saharan African frontier markets, supervisory resources, including qualified staff, the availability of high-frequency data, and analytical tools to assess systemic risks are limited and will need to be strengthened to ensure the effectiveness of macroprudential policies.
  - *Exercise caution in the use of capital flow management measures.* The imposition of new CFMs could jeopardize further financial sector deepening and thus should be considered as a temporary measure in the context of managing a crisis or near crisis situation…." (Alleyne and Mecagni 2014)
- Managing capital flows (directly) presented as a last-resort, at best temporary measure, and largely in negative light ("exercise caution…")

# A bias towards first-best is common in economics

- Larry Summers (discussing a paper on China's banking problems):

  ''Like experts in many fields who give policy advice, the authors show a preference for first-best, textbook approaches to the problems in their field, while leaving other messy objectives acknowledged but assigned to others. In this way, they are much like those public finance economists who oppose tax expenditures on principle, because they prefer direct expenditure programs, but do not really analyze the various difficulties with such programs; or like trade economists who know that the losers from trade surges need to be protected but regard this as not a problem for trade policy.'' (Summers, 2006)

- Or, indeed, like financial liberalization advocates who assume that the risks associated with liberalized financial flows can (and therefore should) be minimized through changes in other parts of the system

# The costly implementation fallacy

- Capital controls are hard to implement, so don’t even try, except under duress…
- But policy implementation is difficult across the board in developing countries
  - for example, tax reform is hardly piece of cake; doesn’t stop us from recommending it right and left
- And not at all clear that the alternatives (strengthened financial supervision, macro-prudential measures, etc.) are any easier to implement

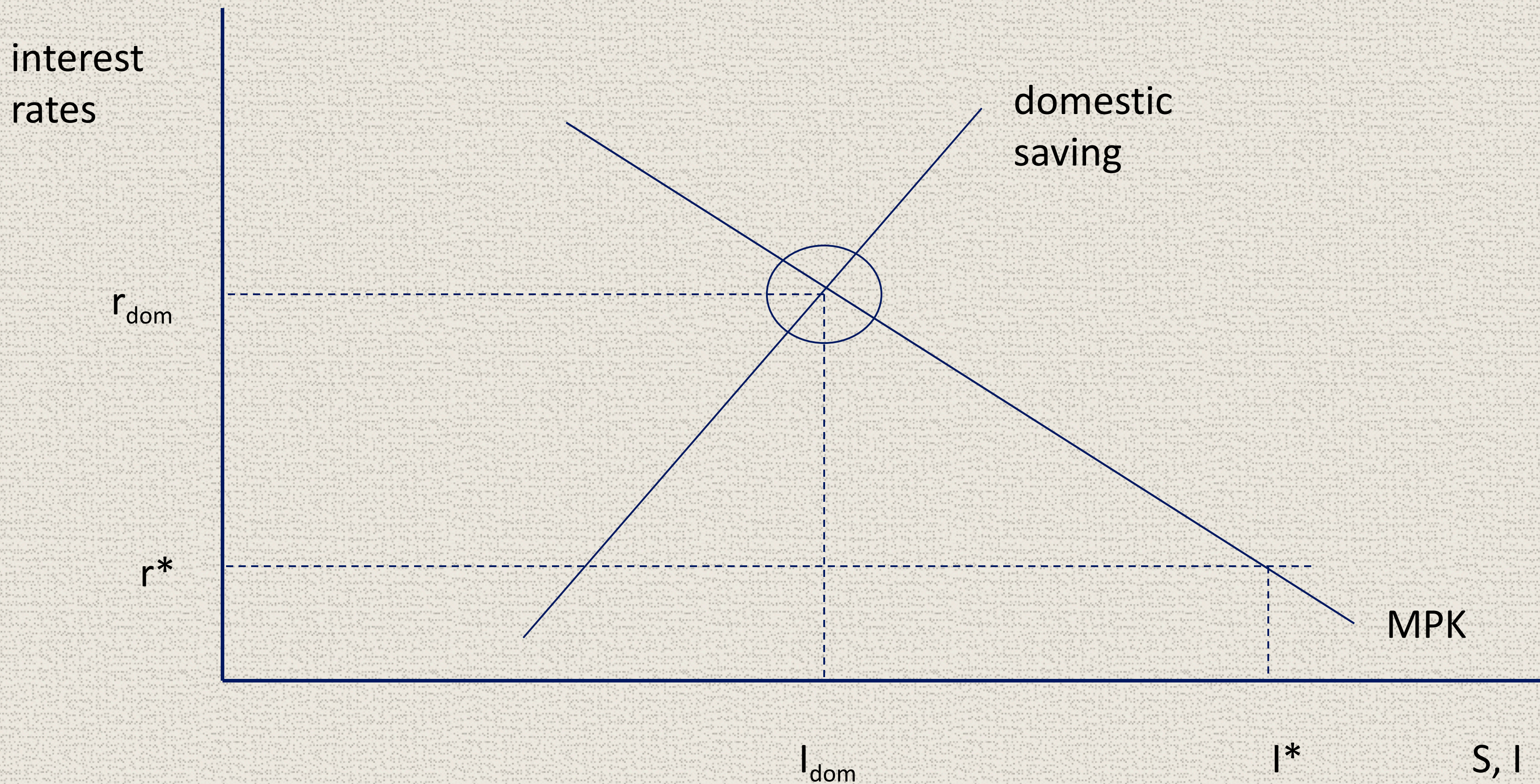
# Questions each group should ask:

- Second-best economists
  - might there be instances when the remedy—capital-account management—is worse than the disease?
- First-best economists
  - how prudent is it to assume that we can undertake the complementary reforms, when those comprise a long list of prerequisites that even advanced countries do not satisfy?

# 2. Saving vs. investment constrained economies

- Economies sharply differ in their response to capital flows
  - depending on whether growth is constrained by low private expected returns or high cost of investible resources
    - investment- vs
    - saving-constrained economies

# Saving constrained economy: closed capital account



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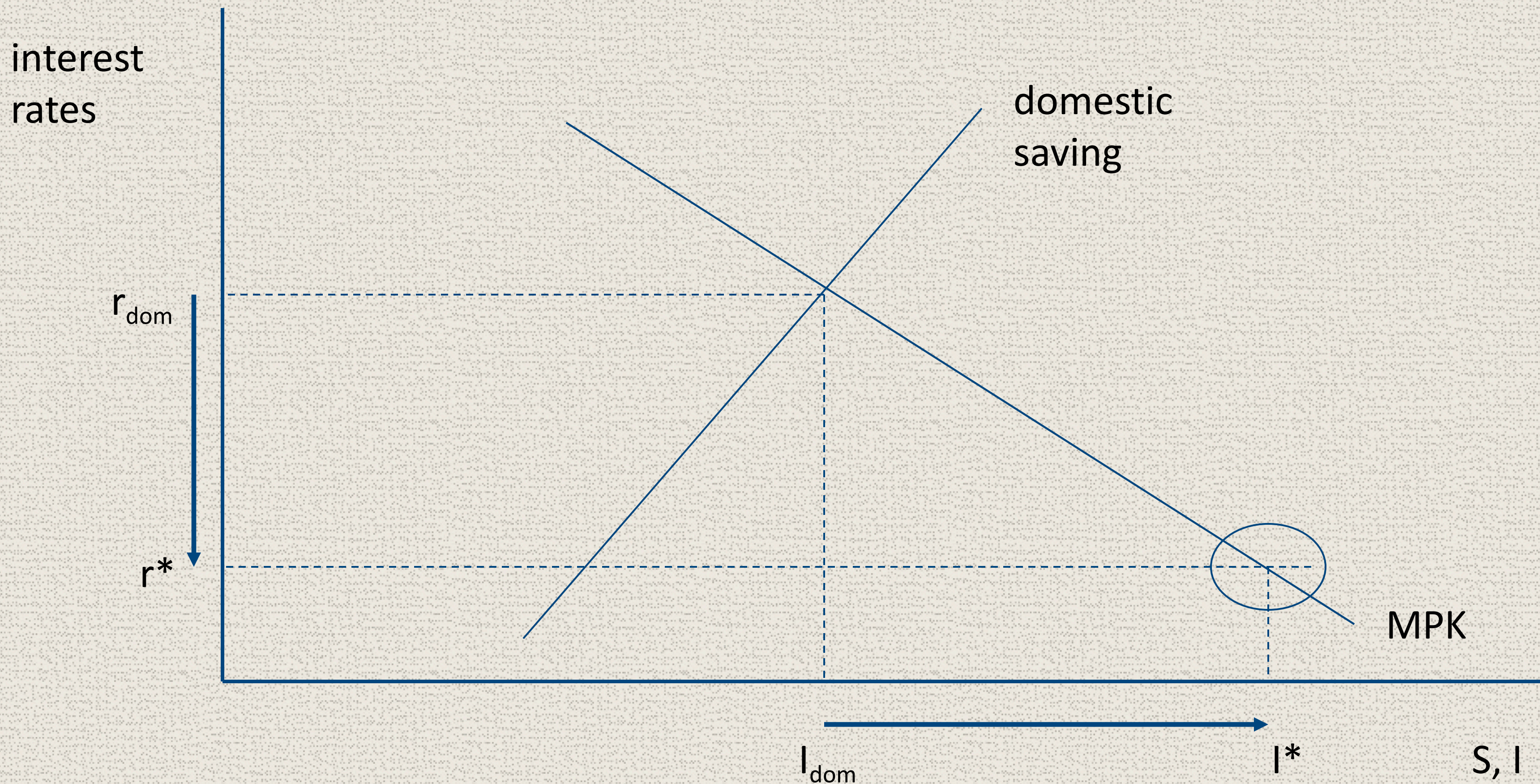

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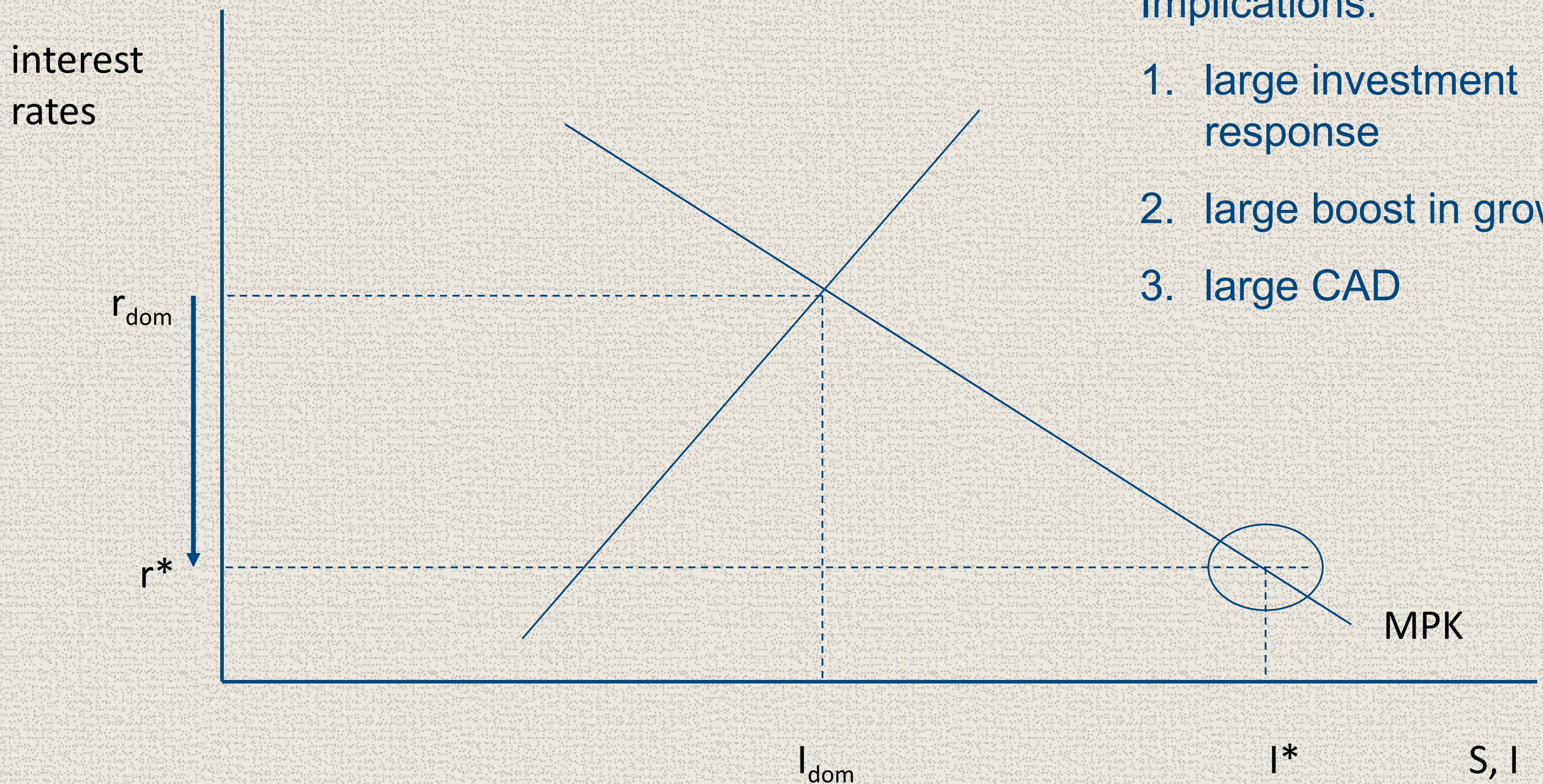
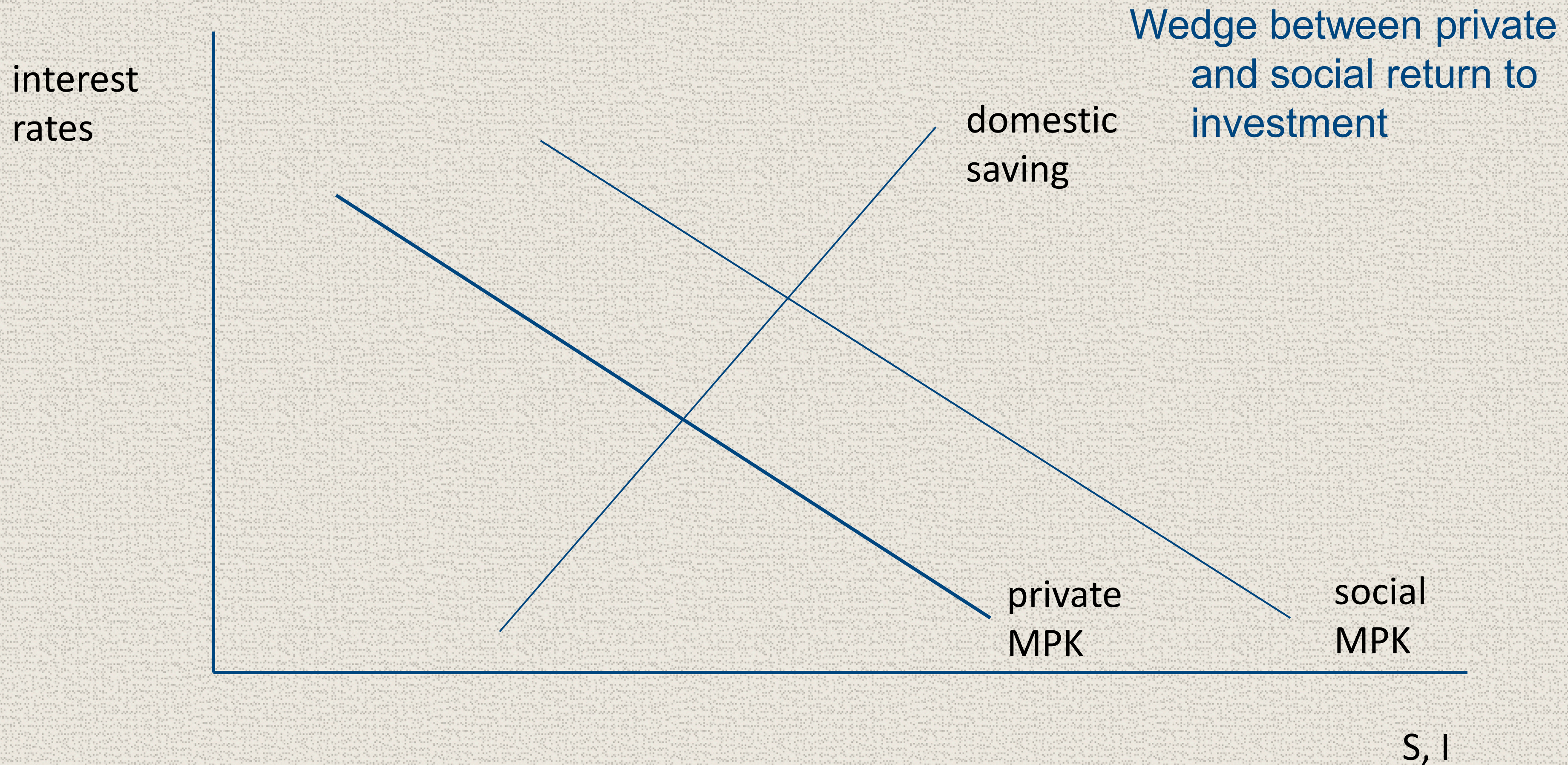



Implications:

1. large investment response
2. large boost in growth
3. large CAD

# Investment constrained economy:



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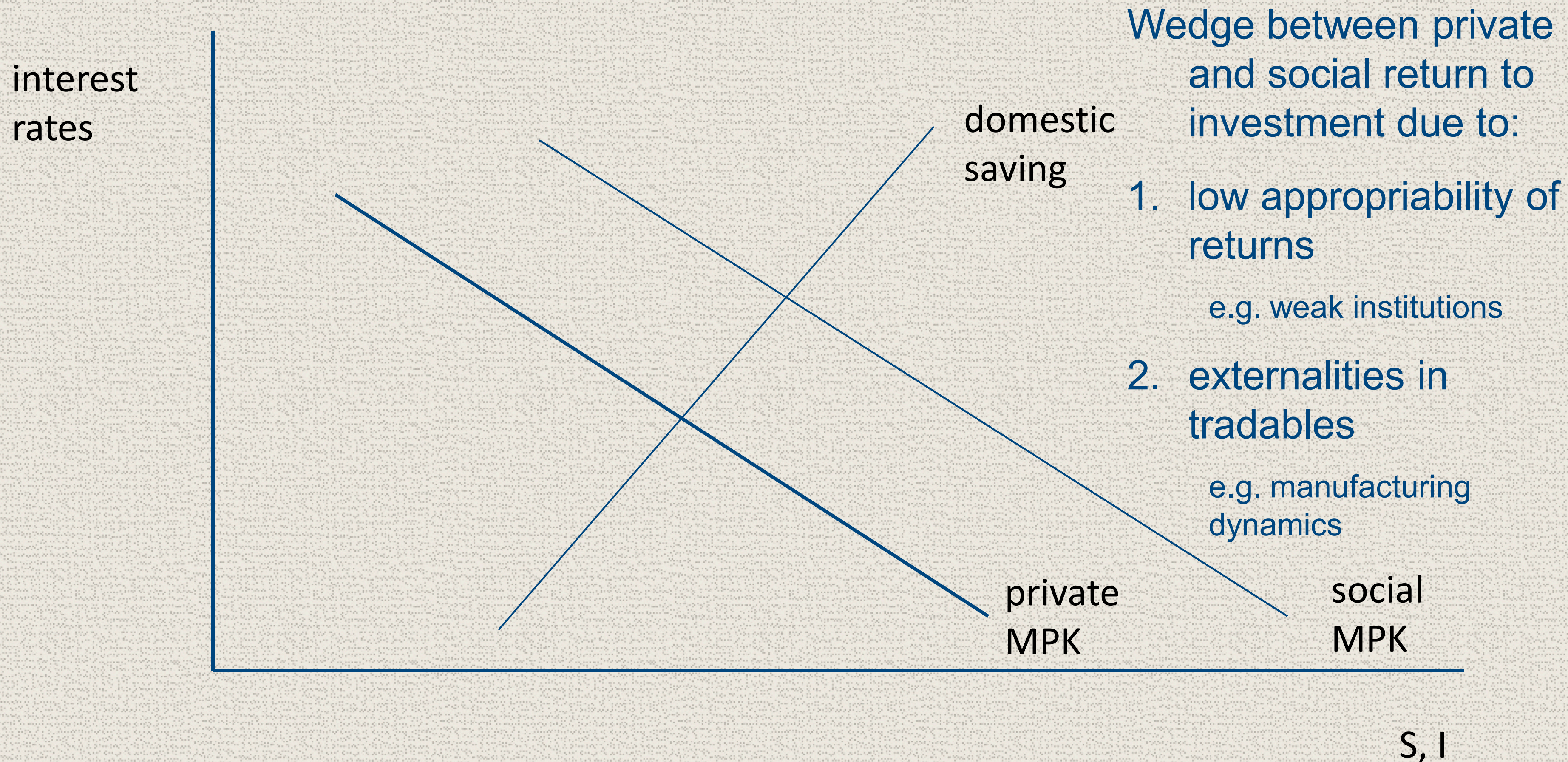

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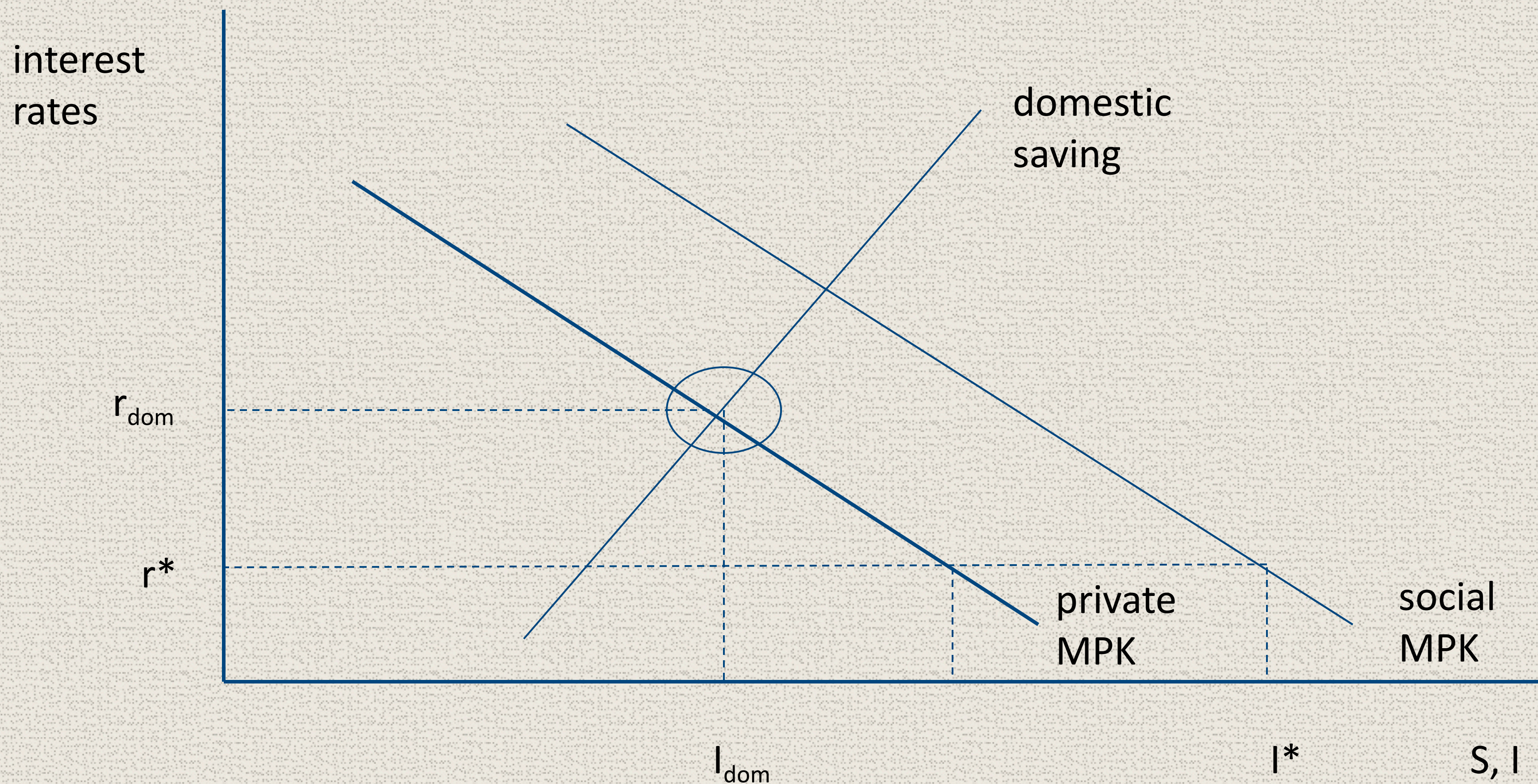

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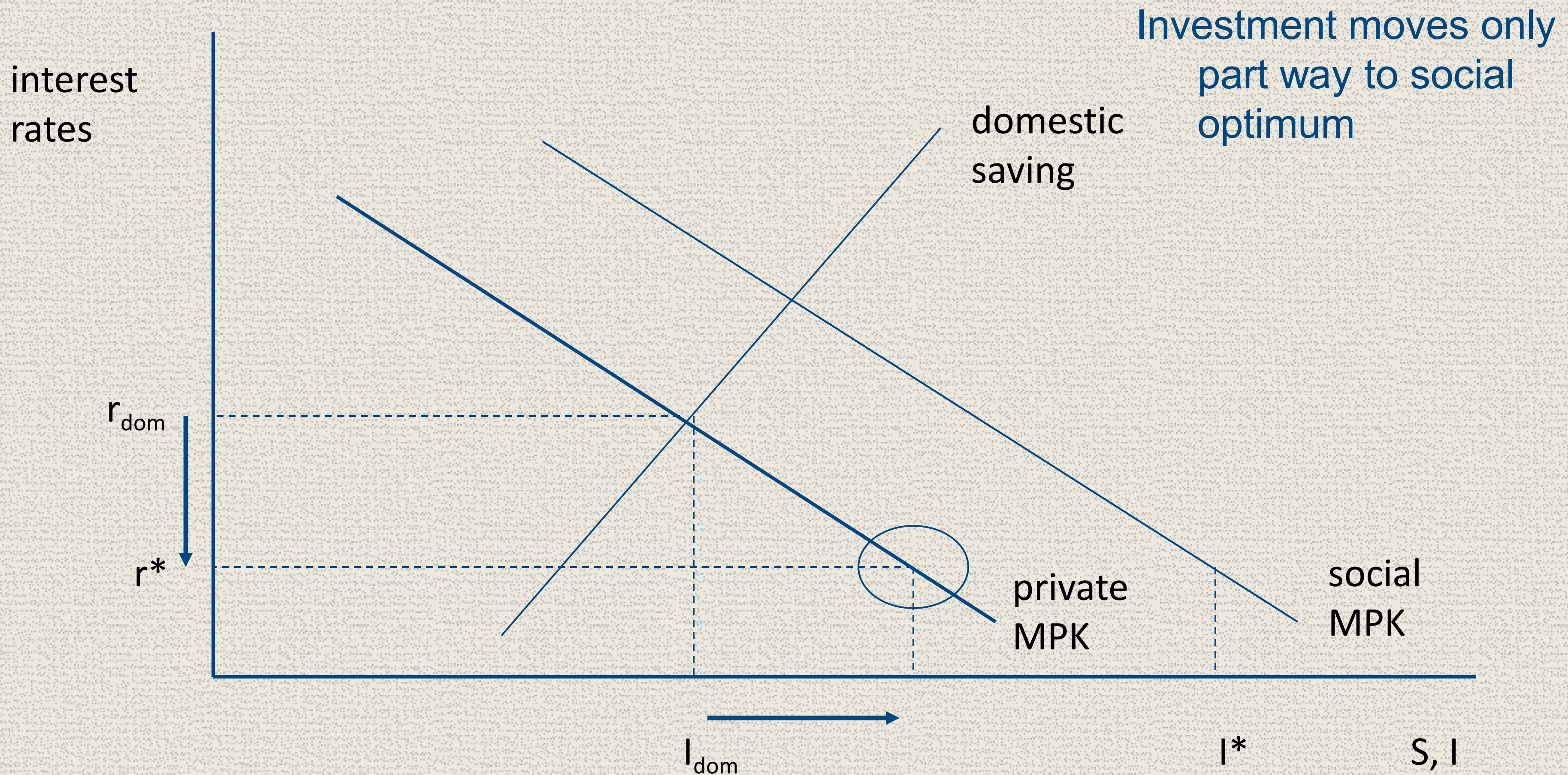
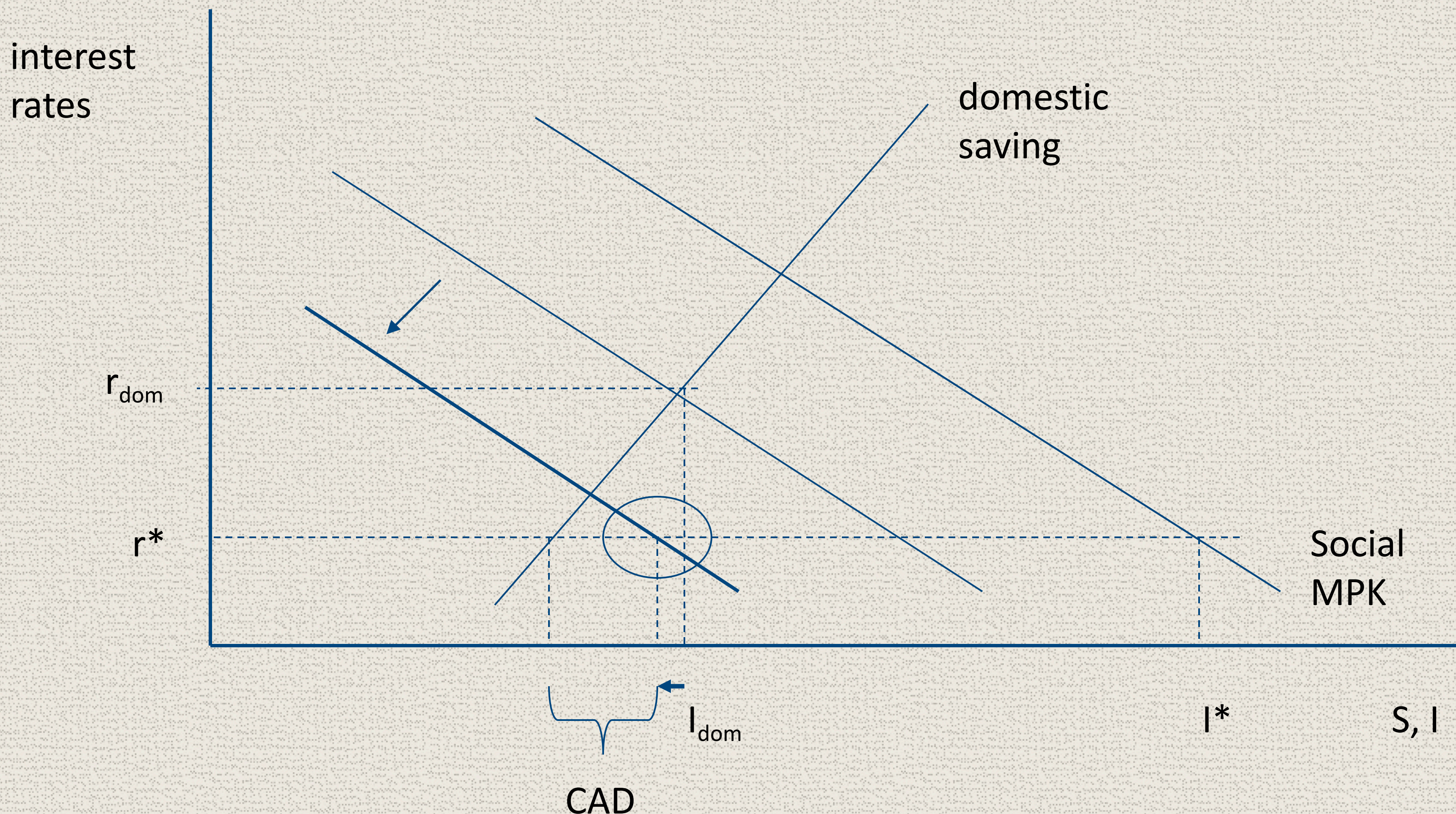


# Investment constrained economy: open capital account, with RER appreciation



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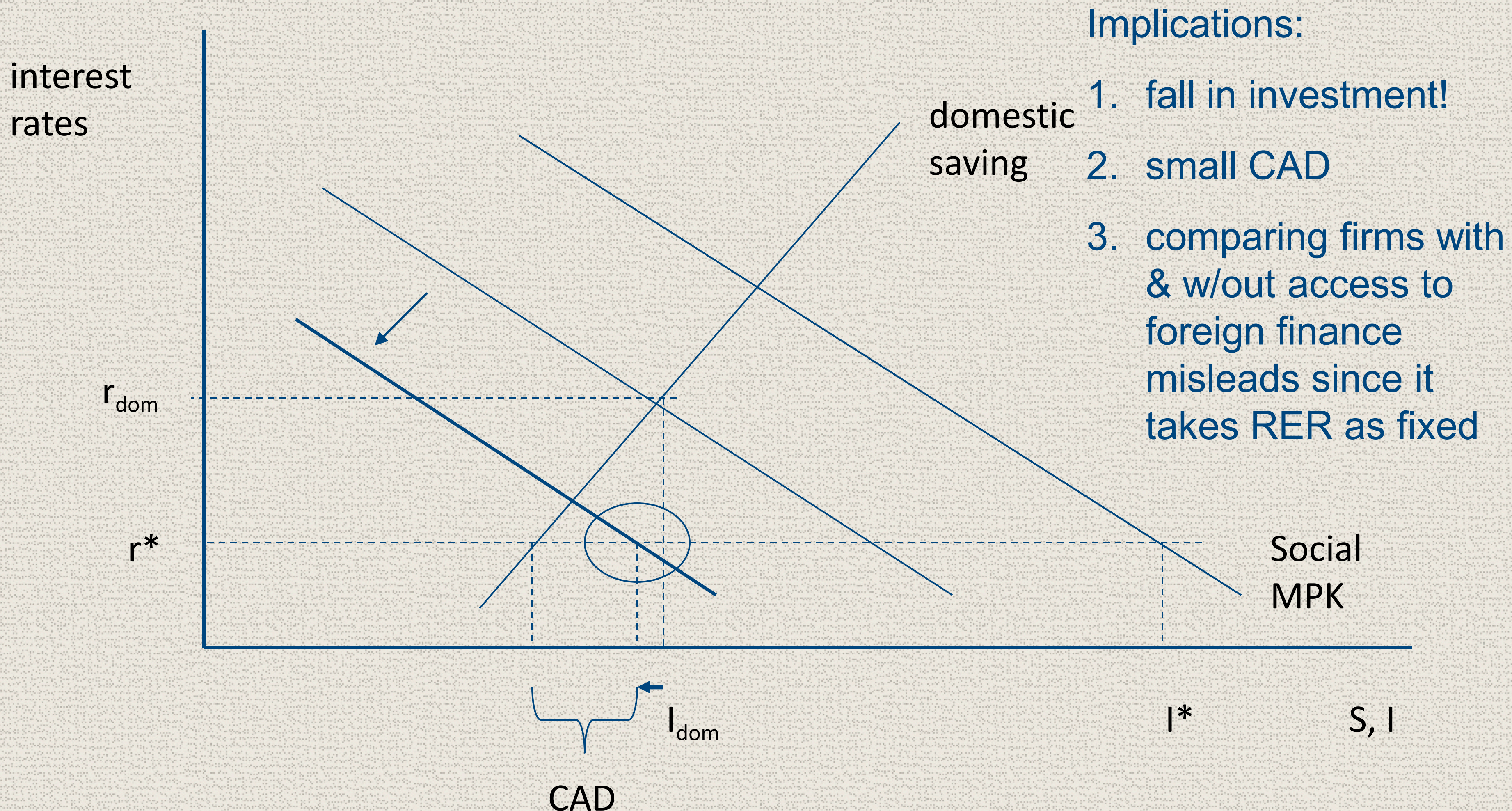
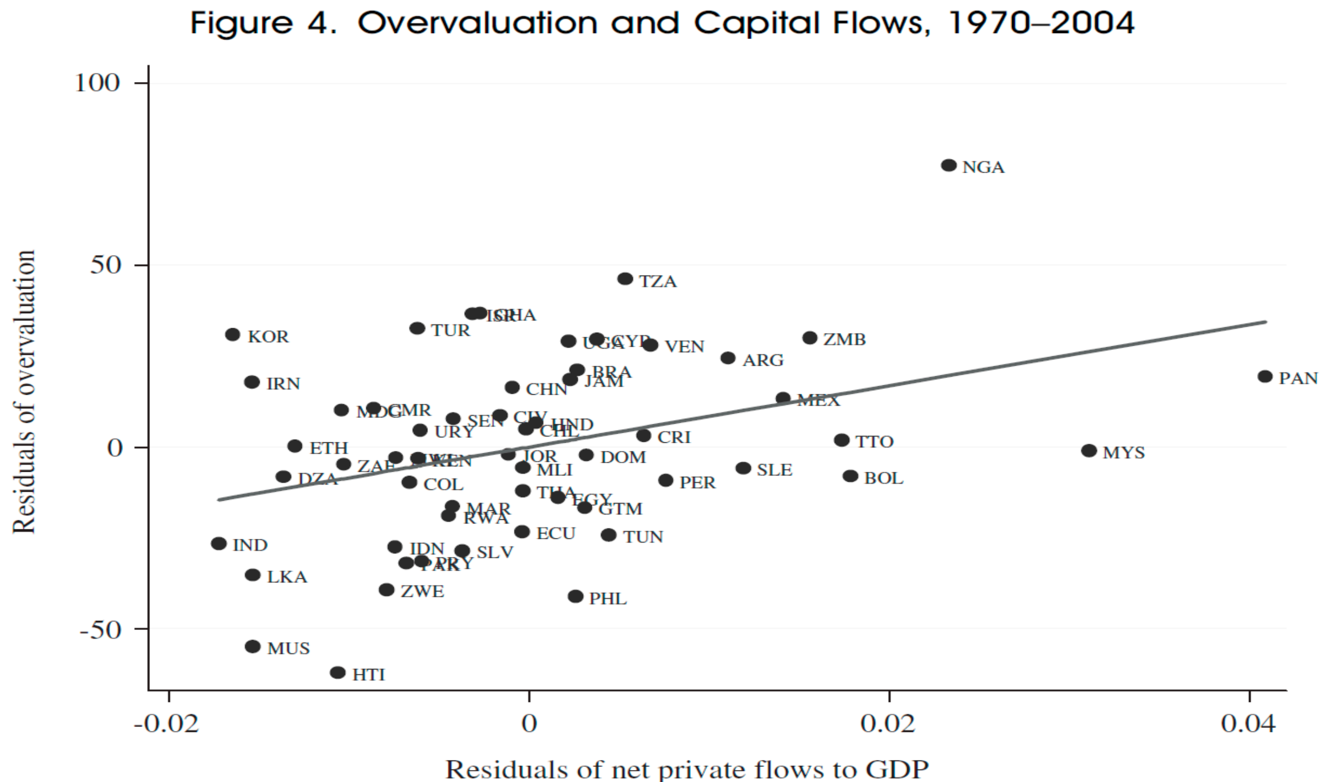


# Evidence: capital inflows lead to overvaluation

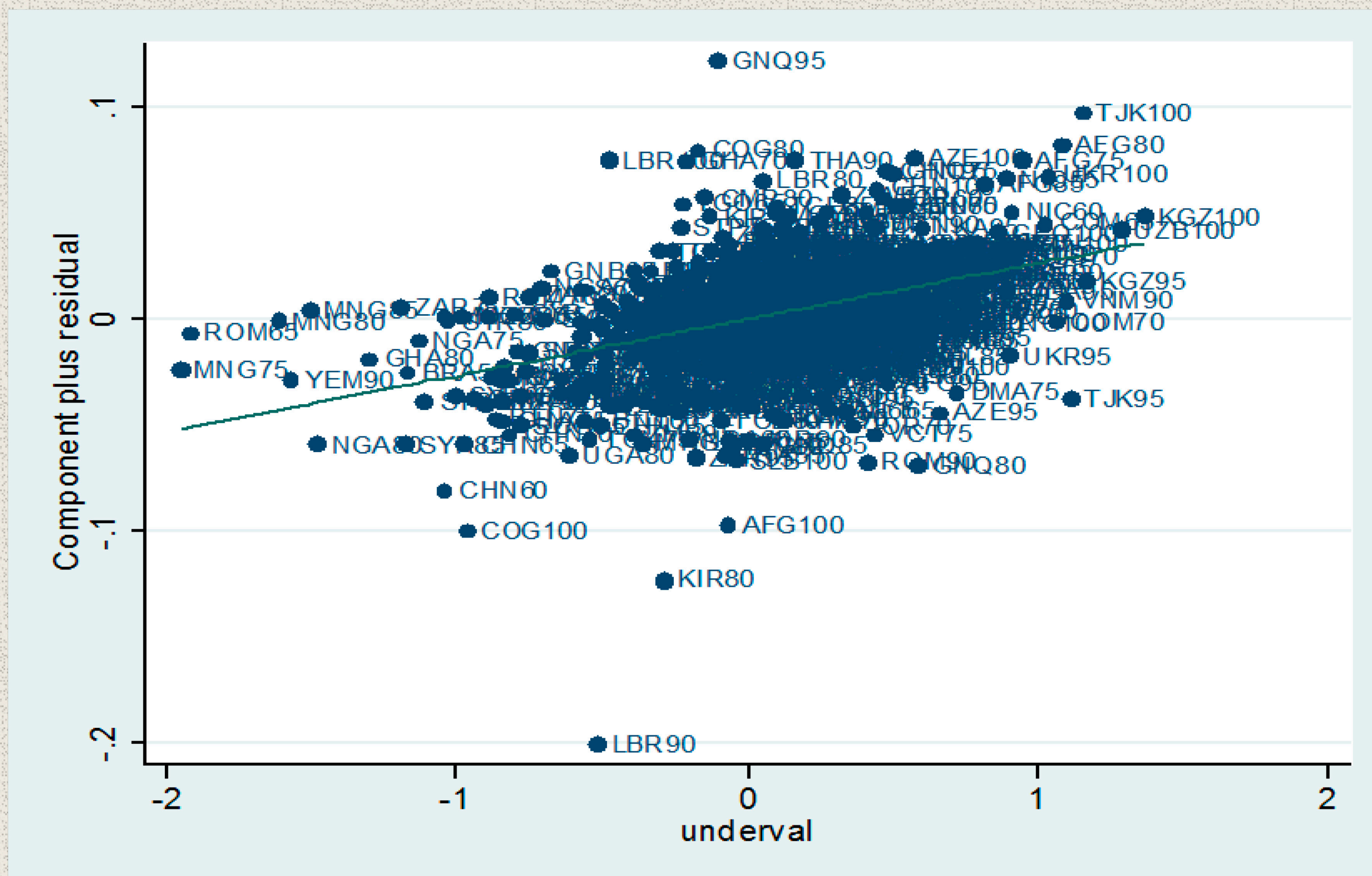



coef = 843.69269, (robust) se = 327.57615, t = 2.58

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.

# Evidence: overvaluation reduces growth…




Source: Rodrik (2008). 5-year subperiods, with country and period fixed effects.

# … especially in developing countries

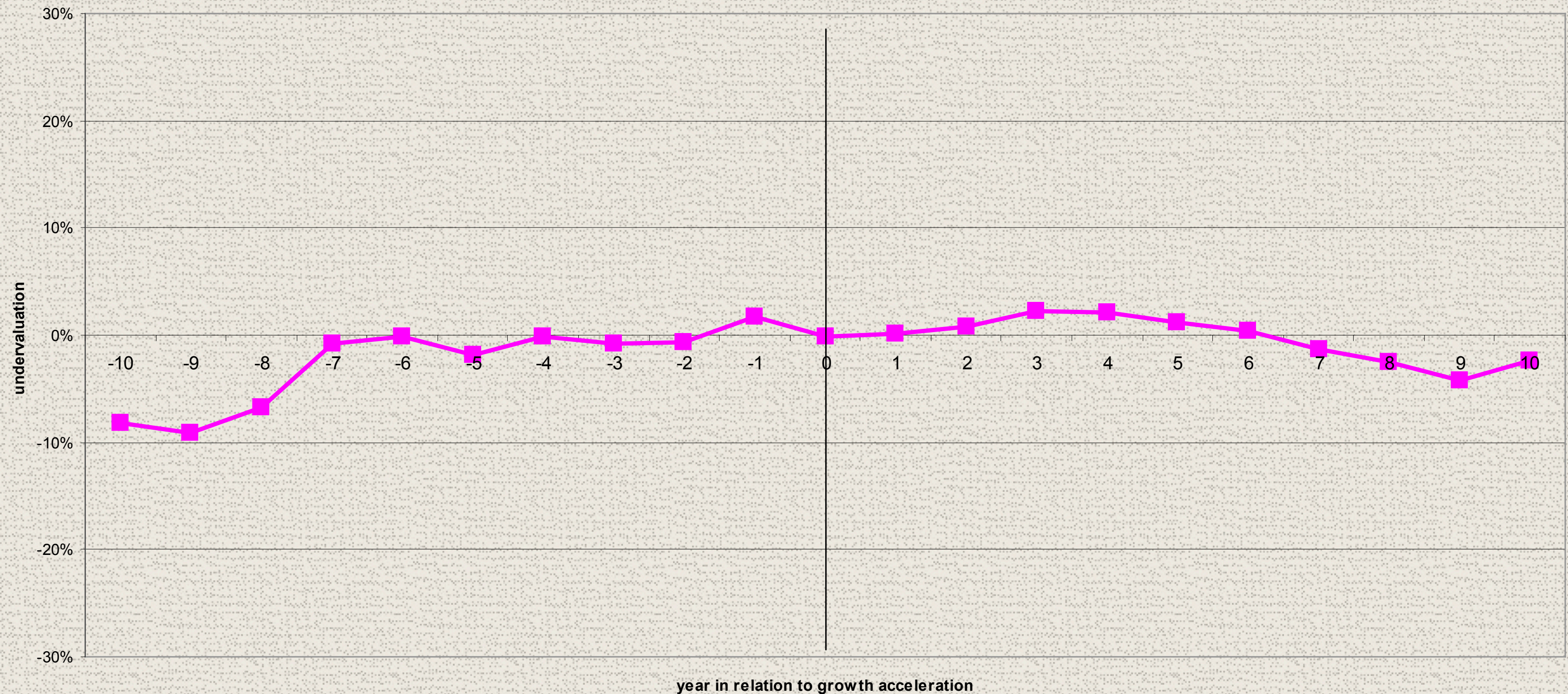
$$\text{growth}_{it} = \alpha + \beta \ln RGDPCH_{it-1} + \delta \ln UNDERVAL_{it} + f_i + f_t + u_{it}$$

| sample | $\widehat{\delta}$ | t-stat (robust) | n |
|---|---|---|---|
| All (1950-2004) | 0.017 | 5.09 | 1303 |
| Developing countries (*RGDPCH*<6000) | 0.027 | 5.73 | 790 |
| Developed countries (*RGDPCH*>6000) | 0.004 | 0.59 | 513 |

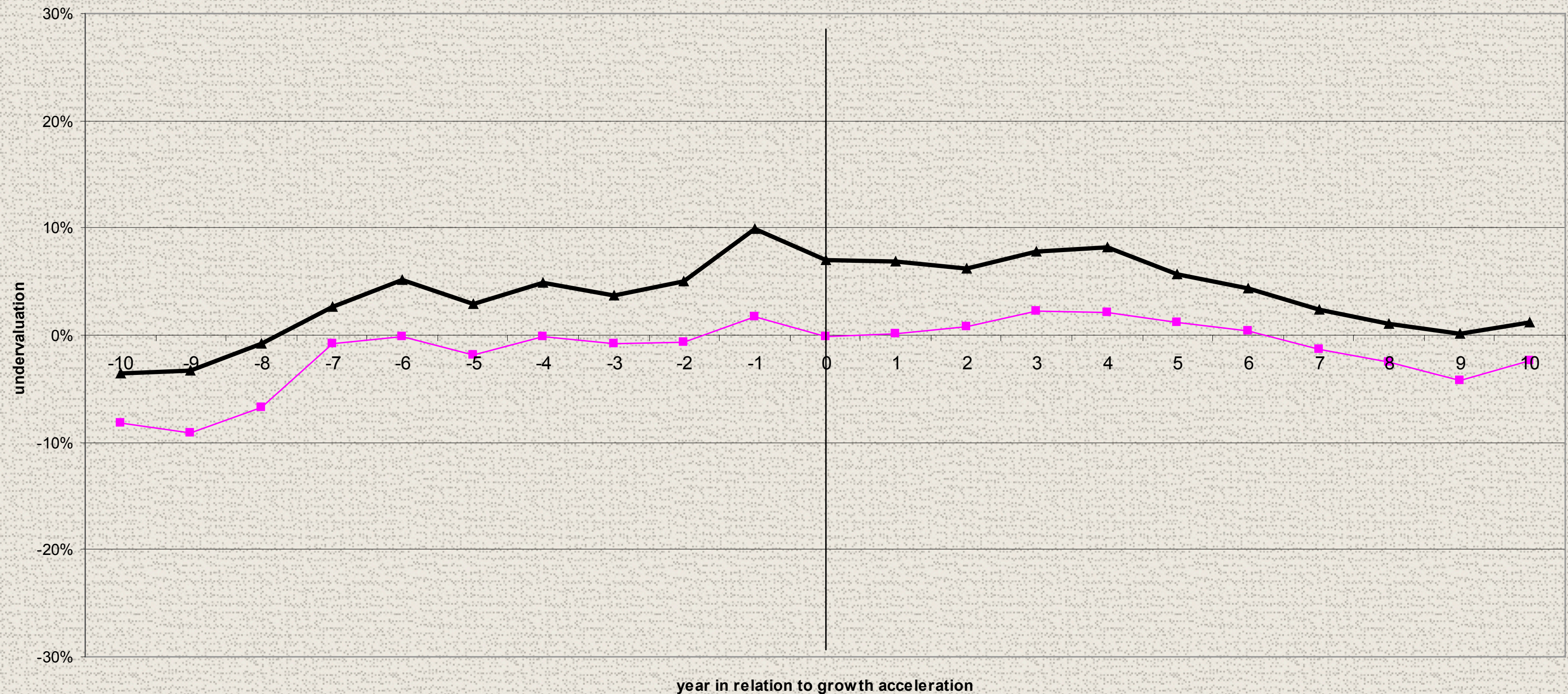
Note: These results omit three countries, Laos, Iraq, and People's Republic of Korea, with extreme values for *underval*.

# Relationship between undervaluation and growth accelerations

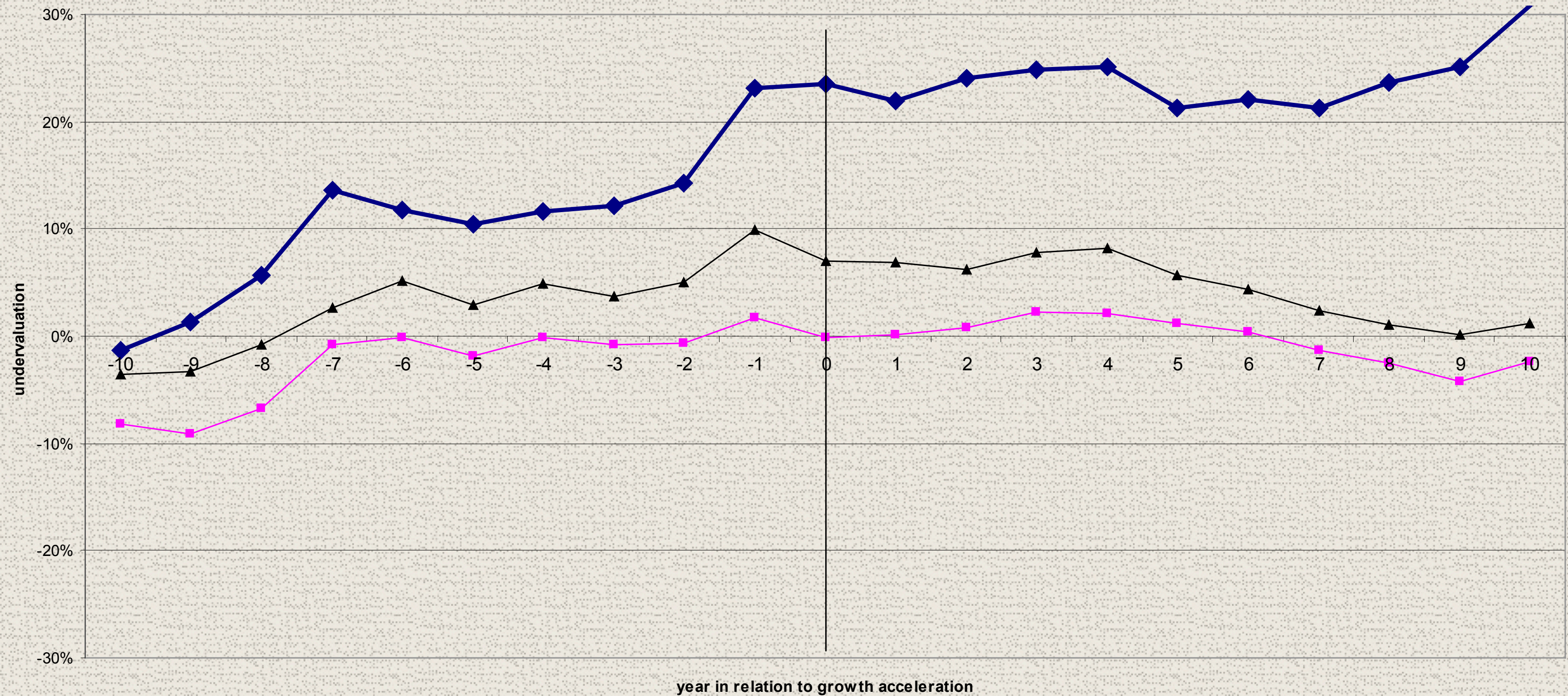
# Relationship between undervaluation and growth accelerations: full sample



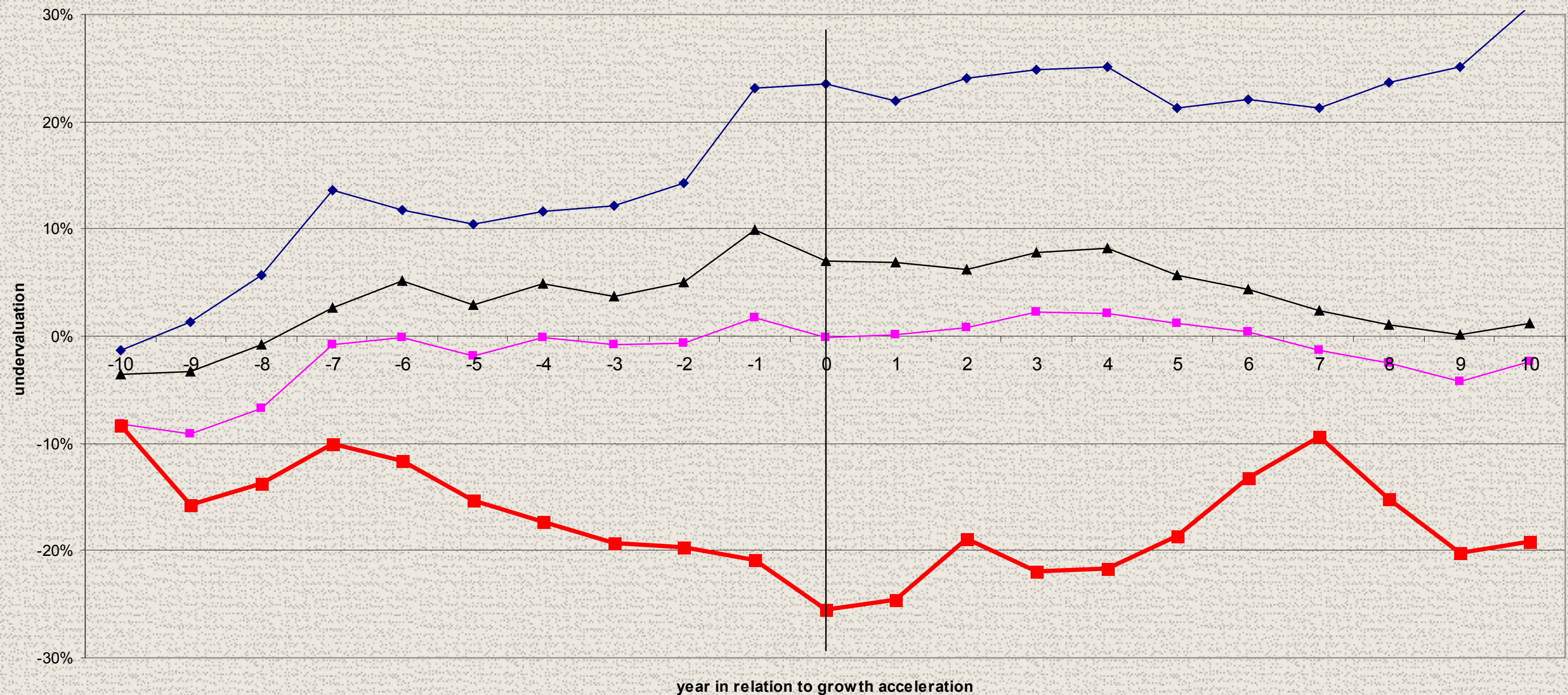
# Relationship between undervaluation and growth accelerations: post-1970s



# Relationship between undervaluation and growth accelerations: Asia



# Relationship between undervaluation and growth accelerations: Africa



# “Asian” versus “African” growth models

- One driven by high relative profitability of tradables, ongoing structural change, export-oriented industrialization, and sustained growth
- The other by commodity or aid/financial bonanzas, which appreciate the real value of the currency, reduce relative profitability of tradables, produce little or unfavorable structural change, and prove short-lived

# 3. Best-practice versus pragmatic policies

- Best practice policies have the virtue that they have been tried and tested at least somewhere
- Or have the blessing of the economics textbook
  - e.g. preference for price measures over administrative controls
- They have the disadvantage that they may not fit local context
  - administrative capacity, political economy, legal regime, independence of central bank, location of administrative competence, …
- Successful controls have varied
  - unremunerated reserve requirement (as in Chile)
  - direct taxation of capital inflows (as in Brazil)
  - close supervision of bank transactions and moral suasion (as in Taiwan)

# Current practices vary greatly

- Measures aimed at managing capital inflows:
  - *Restrictions on nonresident purchase of government securities:* Only one of the region's frontier market economy countries applies restrictions on all purchase of government securities by nonresidents (Tanzania); another restricts only purchases of government securities of less than three years (Ghana); and two others (Nigeria and Kenya) apply selective restrictions on nonresident purchases of securities.
  - *Maximum total primary issuance of bonds held by nonresidents:* Zimbabwe imposes a maximum cap of 35 percent.
  - *Maximum total share of national companies held by nonresidents:* Three countries apply these types of measures: Kenya (60 percent), Tanzania (60 percent), and Zimbabwe (35 percent at primary issuance, and approval required for participation in the secondary market).
  - *Maximum on share purchased by individual investors:* In Tanzania, individual investors may not acquire more than 1 percent of an issue and institutional investors no more than 10 percent.
  - *Minimum holding period:* In Tanzania, there is a minimum holding period of three months for all shares and securities purchased locally by nonresidents.
  - *Limits to direct or indirect foreign exchange exposure:* In Tanzania, owing to regulations of the Bank of Tanzania (October 2011), banks are no longer able to enter into swaps or forward sales with nonresidents, and even spot transactions in foreign exchange have to reflect an economic interest. In Kenya, swaps are restricted to maturities longer than one month.
  - *Approval required prior to capital transactions with nonresidents:* In Mozambique, all transactions with nonresidents require approval by the central bank. Zimbabwe requires approval from the Exchange Control to invest new inflows of funds in money market instruments.

- Measures aimed at managing capital outflows:
  - *Approval prior to transaction:* In one of the frontier market economies (Senegal), approval by the Ministry of Finance is required for virtually all capital outfl ows except for amortization of debt and repayments of short-term loans. As mentioned before, by limiting outflows, this policy may also discourage capital inflows.
  - *Request of accounting and/or tax records:* Two countries—Tanzania and Zambia—request presentation of audited accounts and/or compliance with tax obligations for the repatriation of capital and associated income.

(Alleyne and Mecagni 2014, 20)

# Pragmatism should rule

- We don't know nearly enough about effectiveness of different kinds of CFMs
- More research, case studies always helpful
- Need for an inventory of possible CFMs, rather than blueprints
  - expanding rather than narrowing space of policy designs
- In the meantime, usual rules of pragmatic policy apply
  - experiment, monitor, evaluate, revise