

ASEAN Business Cycle, Global Rebalancing, and fickle capital flows

Bhanupong
Lecture 21

***What are adjustment mechanisms for external disequilibrium?
Are capital flows remain fickle?***

The ASEAN business cycle and China's slowdown

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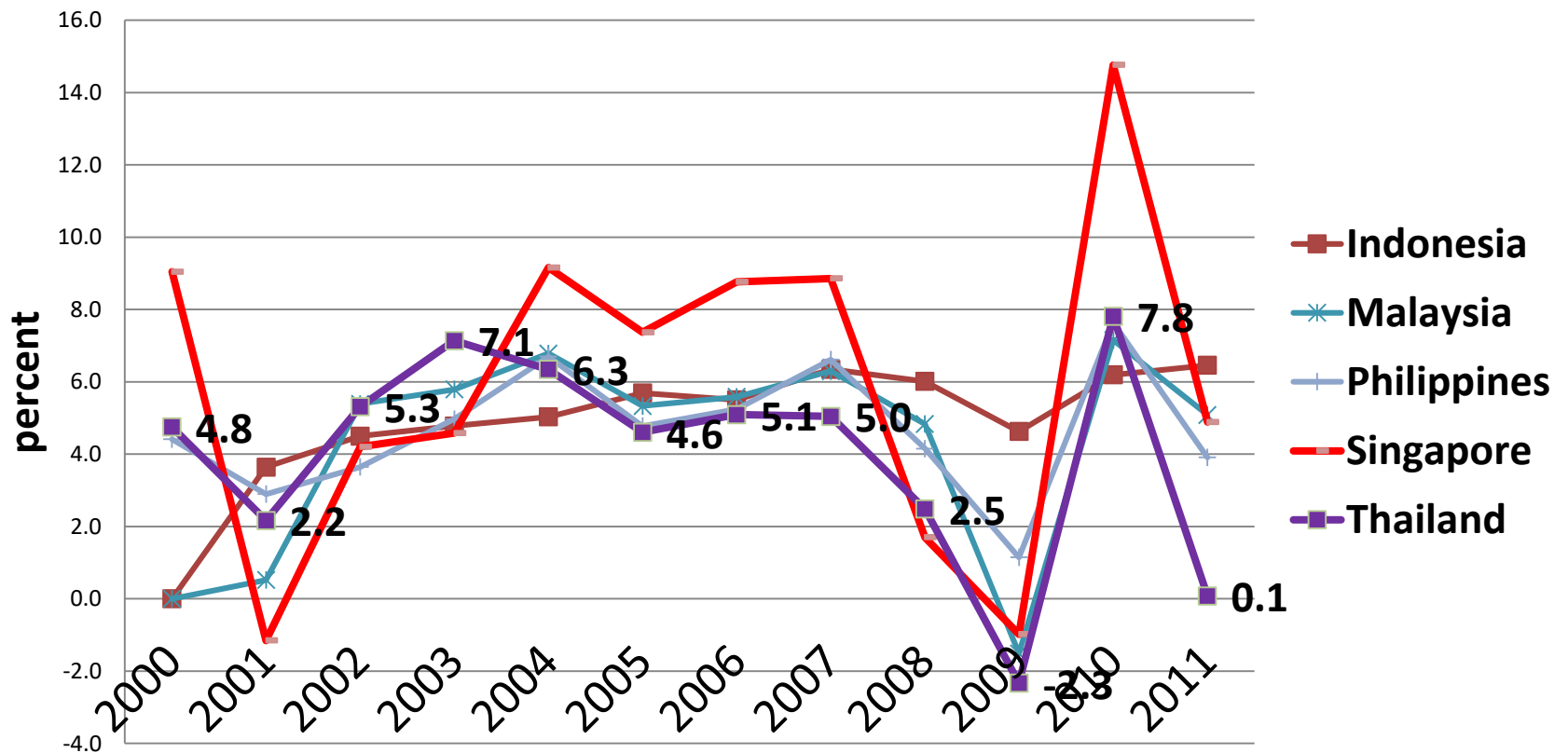
The economies in the Association of Southeast Asian Nations (ASEAN) have been integrated through increasing trade relations intensified by tariff reductions and increasing openness to foreign direct investment. Rising volume of networks trade has deepened interconnectedness between ASEAN and China, a recent growth locomotive in the world. ASEAN business cycle is shaped by volatile China's trade volume. As China's expansion slows down, adverse consequences on ASEAN economies have become more pronounced. The extent of the damage depends on each member of ASEAN's trade exposure and China dependency. This paper identifies the most vulnerable ASEAN economies to China's business cycle. The slowing down of the Chinese economy would undoubtedly result in a decline in long-term growth of some ASEAN economies, unless appropriate policy responses can be implemented.

Main themes

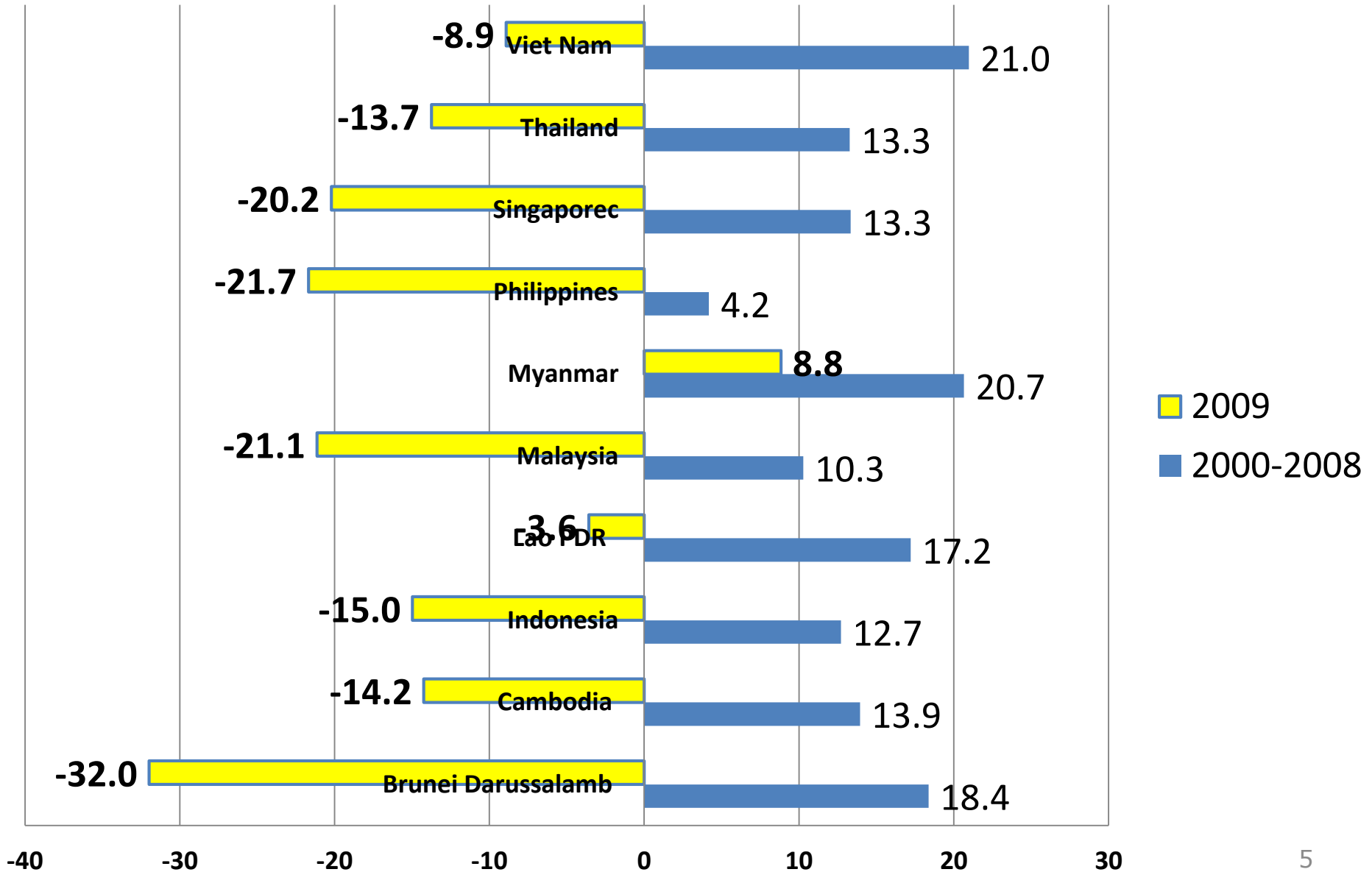
- Impact of GDF
- Growth Synchronization
- Interest rate gap and capital inflows
- Current account disequilibrium
- Determinants of investment-saving gap
- Exchange rate adjustments and NX
- Policy responses to current account disequilibrium
- Are capital flows fickle?

Growth Synchronization

GDP Growth: ASEAN 5

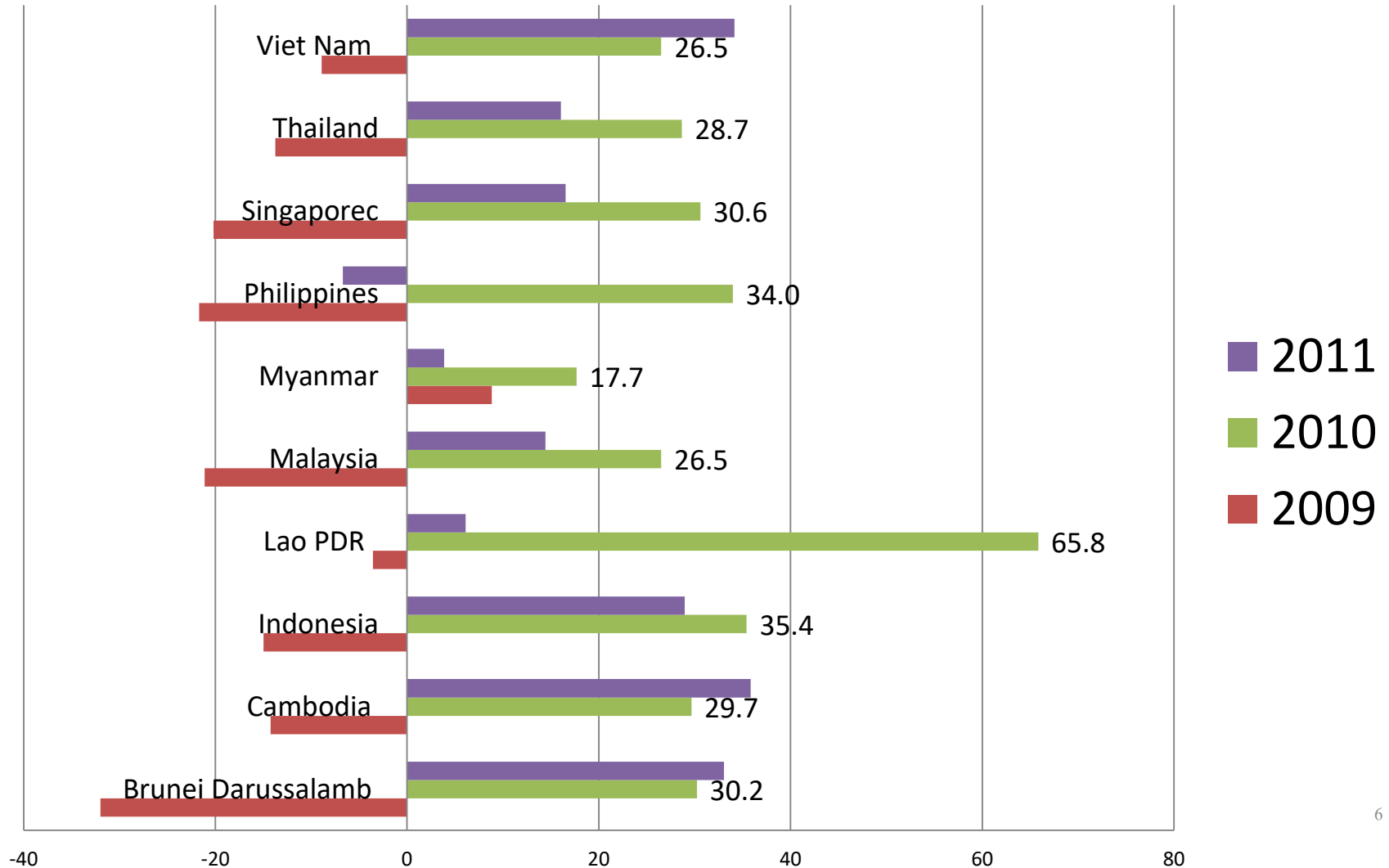


The 2009 Impact of GFC on ASEAN Exports (% change)

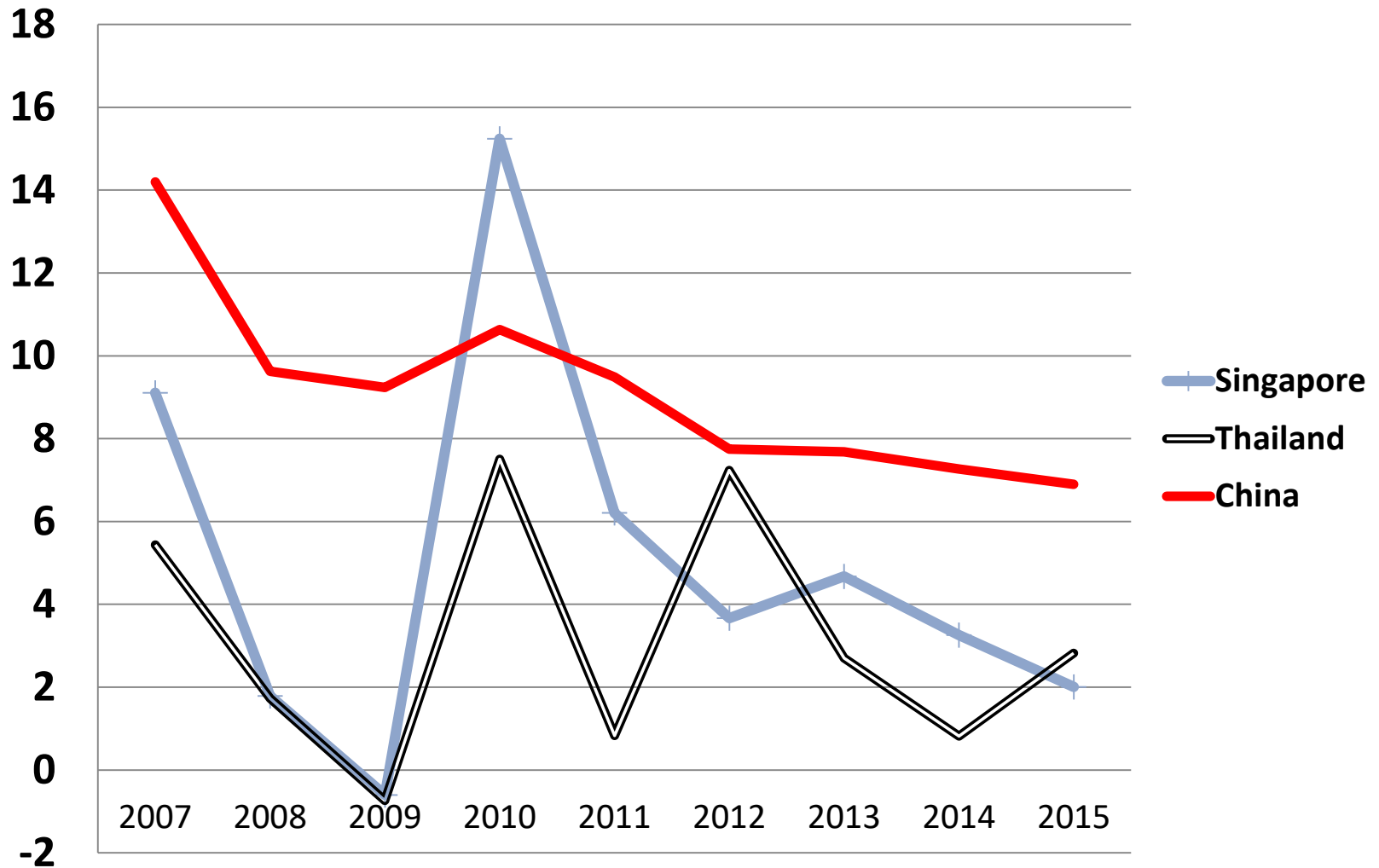


What do ASEAN Exports have in common after the GFC?

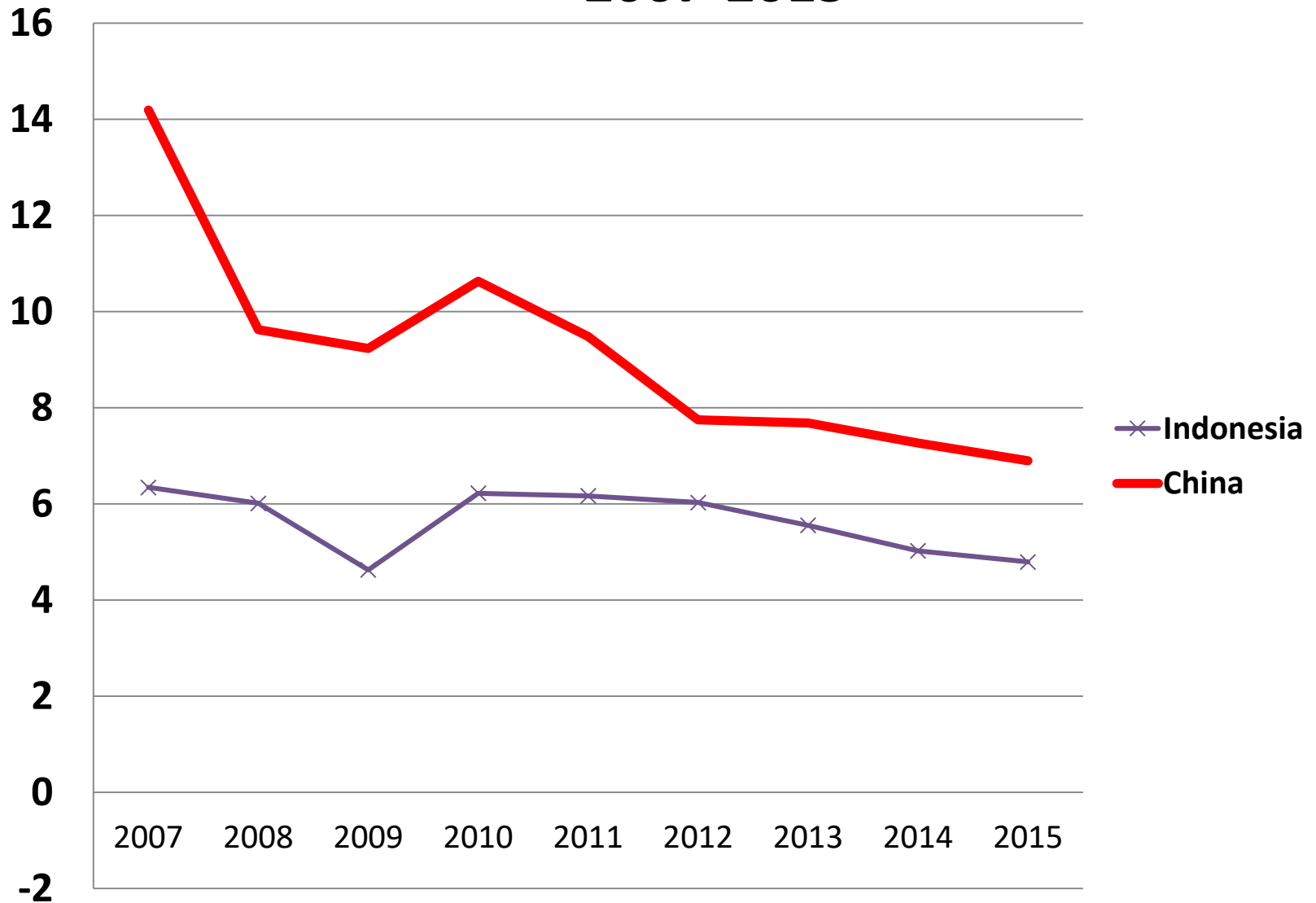
Impact of GFC on Exports (% growth)



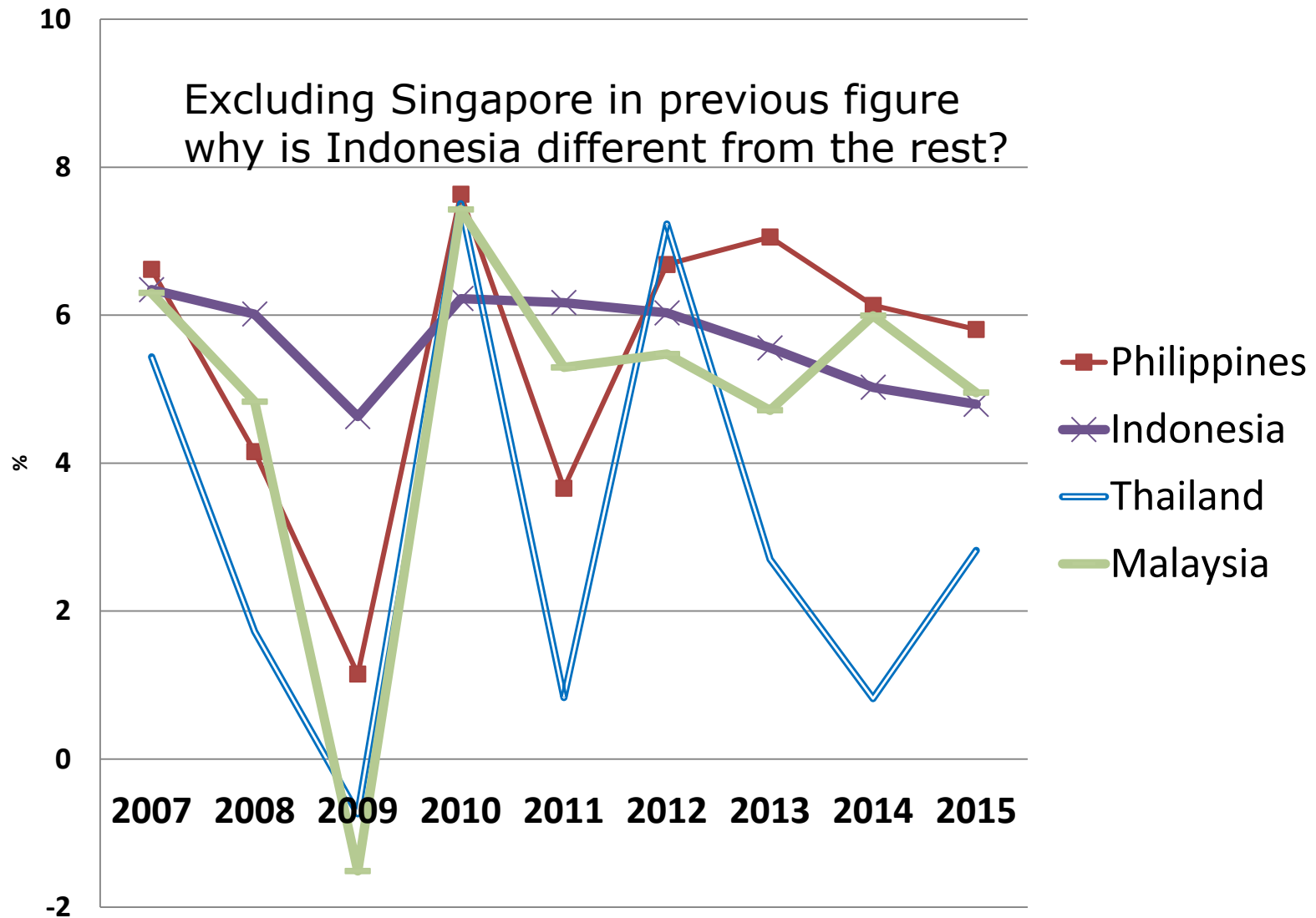
China, Singapore, and Thailand: GDP Growth Rates 2007-2015



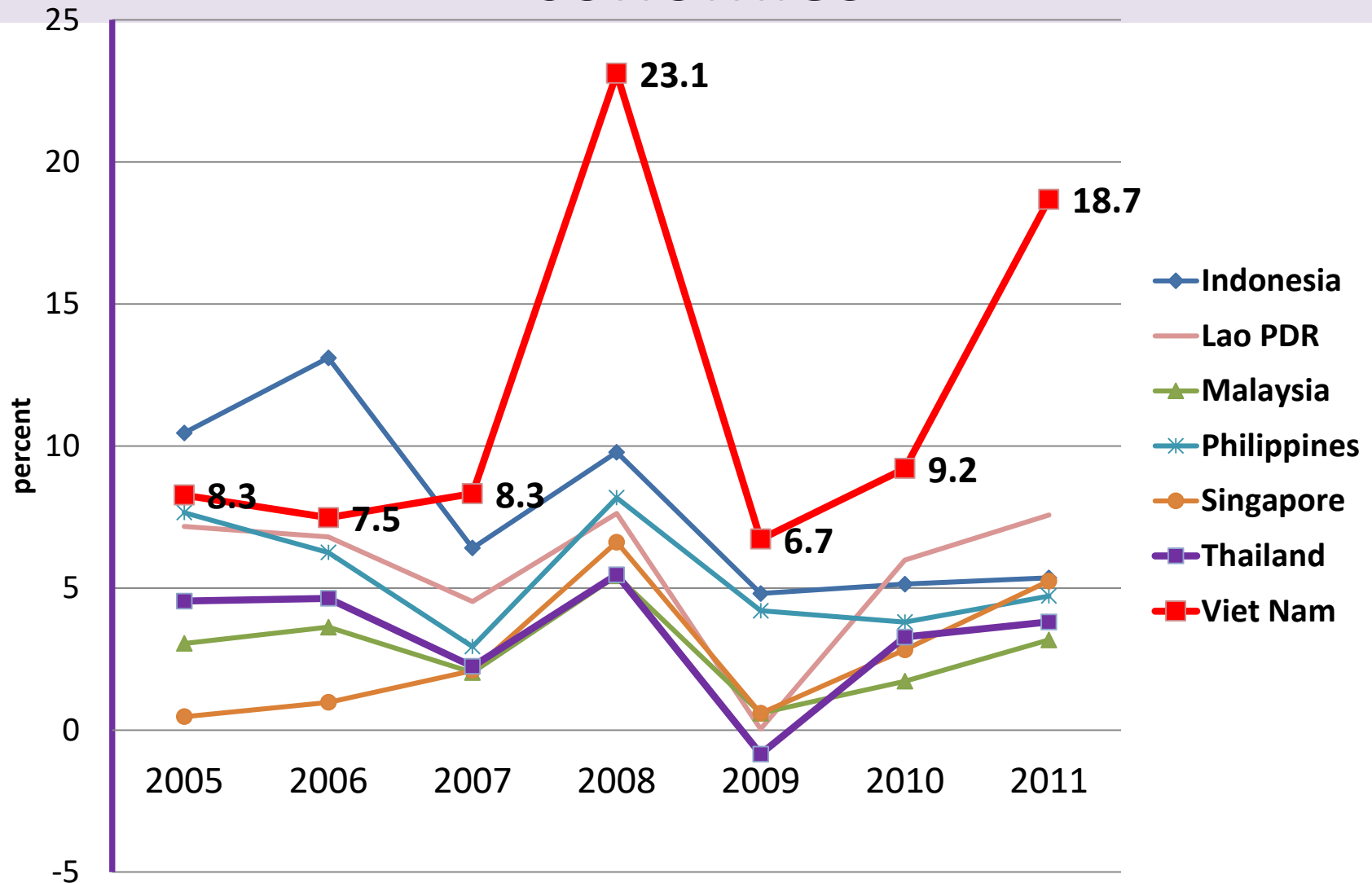
China and Indonesia: GDP Growth Rates 2007-2015



ASEAN-4 GDP Growth Rates: High Volatility with synchronization



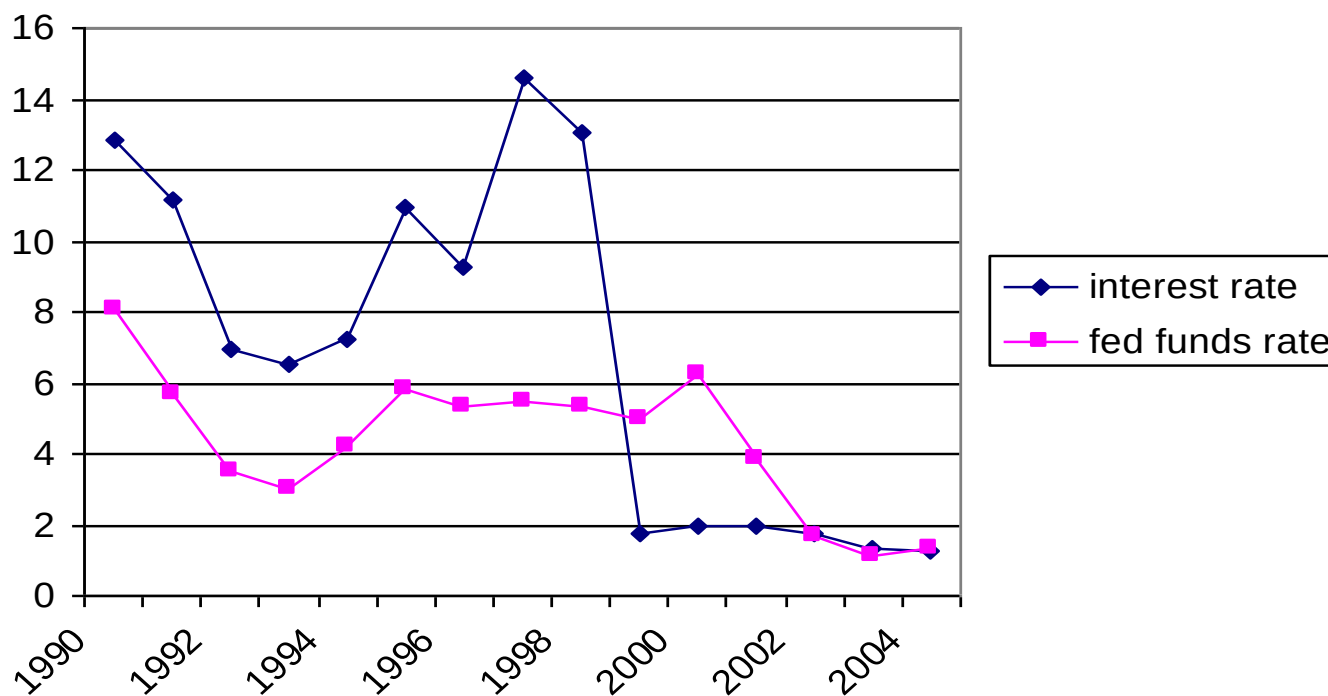
Inflation synchronization in SEA Economies



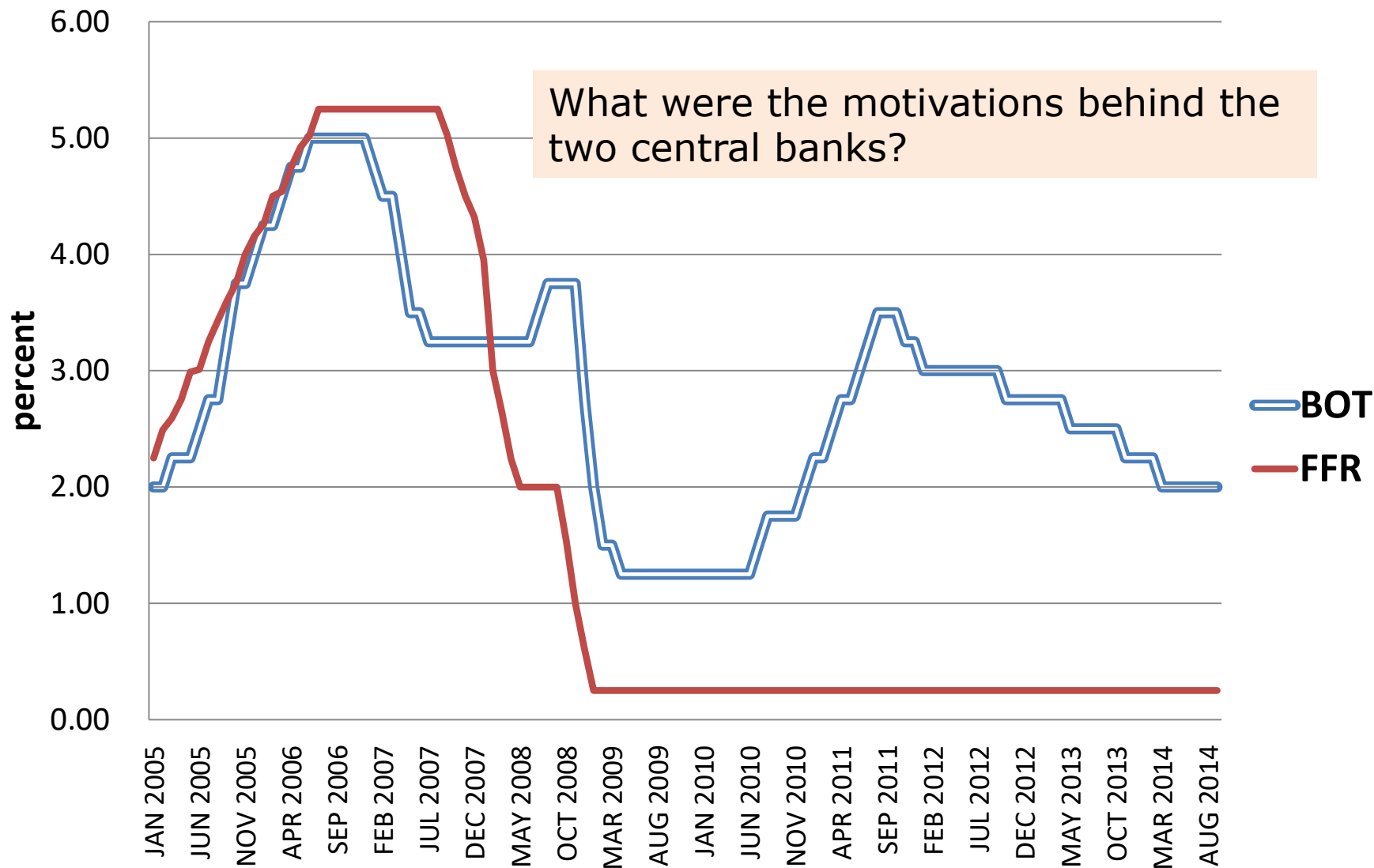
Widening and narrowing the interest gap (1990-2005)

Impact on Thailand's capital inflows

Money market interest and fed funds rates

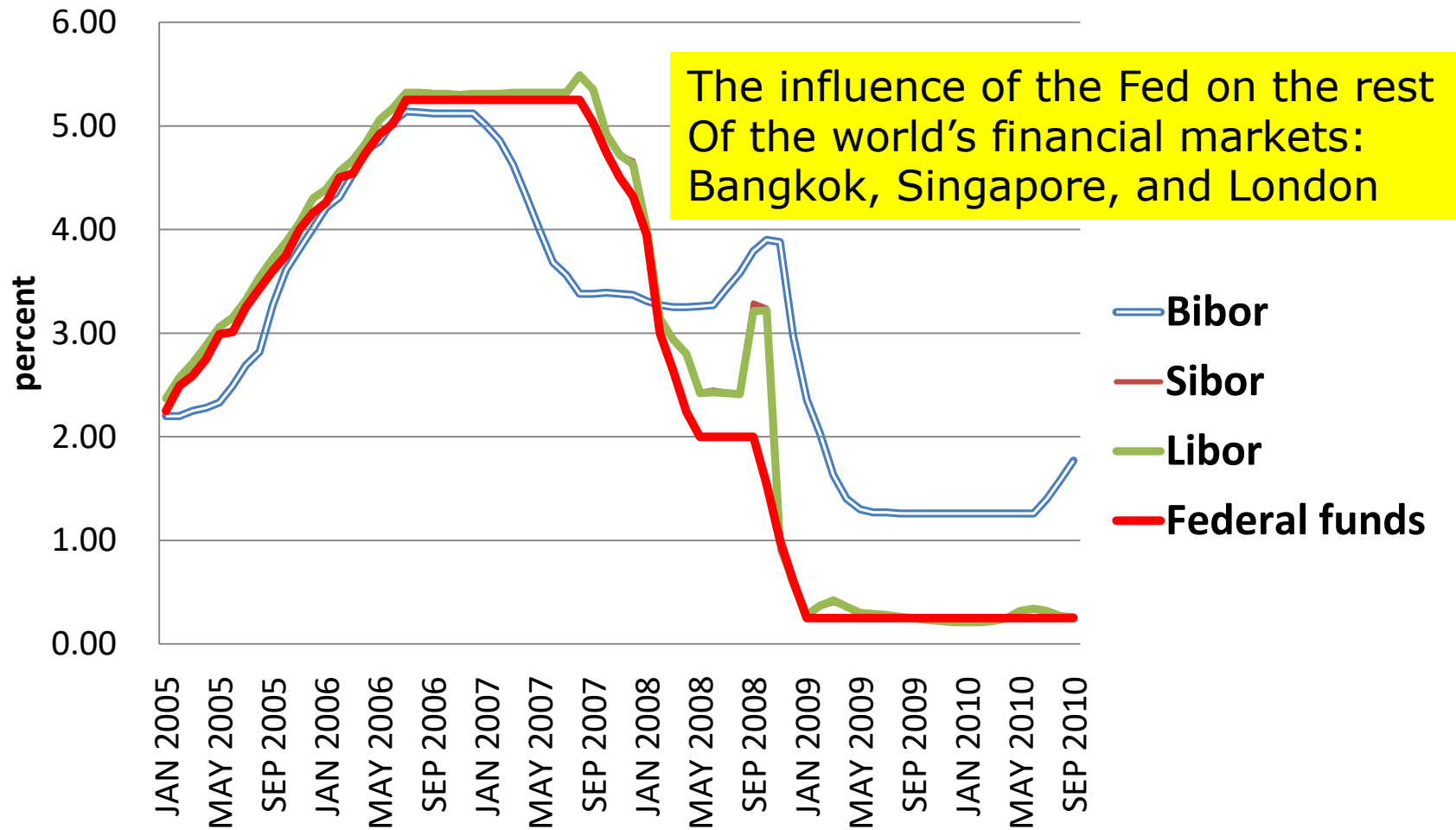


BOT policy rate and Federal funds rate: Widening gap after the GFC



Interbank offered rates (IBOR):

Jan 2005-Sep 2010
(Maturity: one week)



Financial globalization

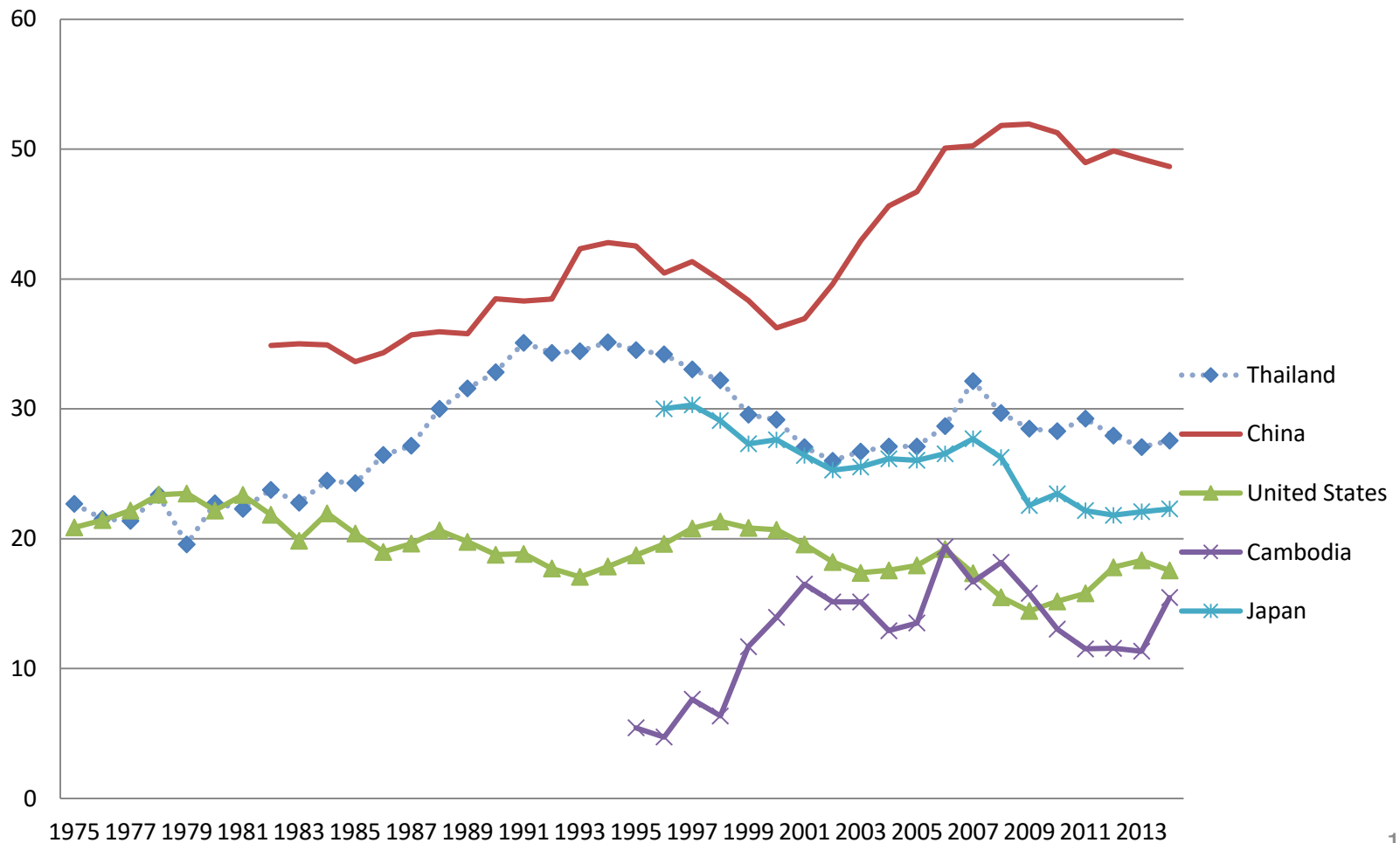
- Short term interest rates are closely related, reflecting free capital movements, dictated by the law of one price.
- Singapore's money market is more closely related to London, when compared to Bangkok's.
- Short-term money markets are less volatile in Bangkok, indicating higher degree of intervention by the BOT through adjusting its key policy rate.

Saving and Output growth

- $S_t = \alpha + \beta Y_t$
(implied by Keynes' absolute income theory of consumption)
- $(S/Y)_t = \alpha/Y_t + \beta$
- $s = \alpha/[(1+g)Y_{t-1}] + \beta$
- s = saving rate, g = growth rate
- Since $\alpha < 0$, $\partial s / \partial g > 0$
- There is a positive impact of growth on saving rate.

Gross savings are calculated as gross national income less total consumption, plus net transfers

Gross National Savings % GDP



$$I/Y = \alpha + \beta(S/Y) + \varepsilon$$

- Martin Feldstein and Charles Horioka (EJ 1980)
 “With perfect world capital mobility, there should be ***no relation between domestic saving and domestic investment***: saving in each country responds to the worldwide opportunities for investment while investment in that country is financed by the worldwide pool of capital.”
- In their cross-section study of various countries:
- **The maintained hypothesis Ho: Capital mobility is perfect,**
 The estimated coefficient $\beta=0$
- The empirical test shows that $\beta \neq 0$.
- Thus domestic saving matters for domestic investment.
- The saving-investment relationship reflects the current account balance.

Current account deficit: Absorption (A) approach

- $M-X = (I - S) + (G - T)$

The twin deficits

- $M-X$ can be thought of as foreign savings (capital inflows) used to finance investment gap and budget deficit
- $Y = C + I + G + (X-M) = A + (X - M)$
- $(X - M) = Y - A$
- $M-X = A - Y$

Current account deficit: Absorption (A) approach

- To reduce trade deficit, domestic absorption (**A**) must be curtailed, if Y cannot be raised.
- However, the absorption approach ignores the price effect (i.e., exchange rate)
- Define net exports as: $NX = X - M$
- $NX = 0$ at the trade balance equilibrium ($X = M$).

Net Exports (NX) determinants

$$NX = X(Y_f, \frac{eP_f}{P}) - M(\frac{eP_f}{P}, Y)$$

$$\text{Real exchange rate} = \frac{eP_f}{P}$$

$$e = \text{Baht} / \$$$

$$P_f = \text{Foreign price}$$

$$Y_f = \text{Foreign income}$$

Balance of Payments: current account and capital (financial) account (CF)

$$BP = NX\left(Y, \frac{eP_f}{P}\right) + CF\left(i - i_f - \frac{\Delta e}{e}\right)$$

$\frac{\Delta e}{e}$ = expected depreciation

What are other determinants of CF?

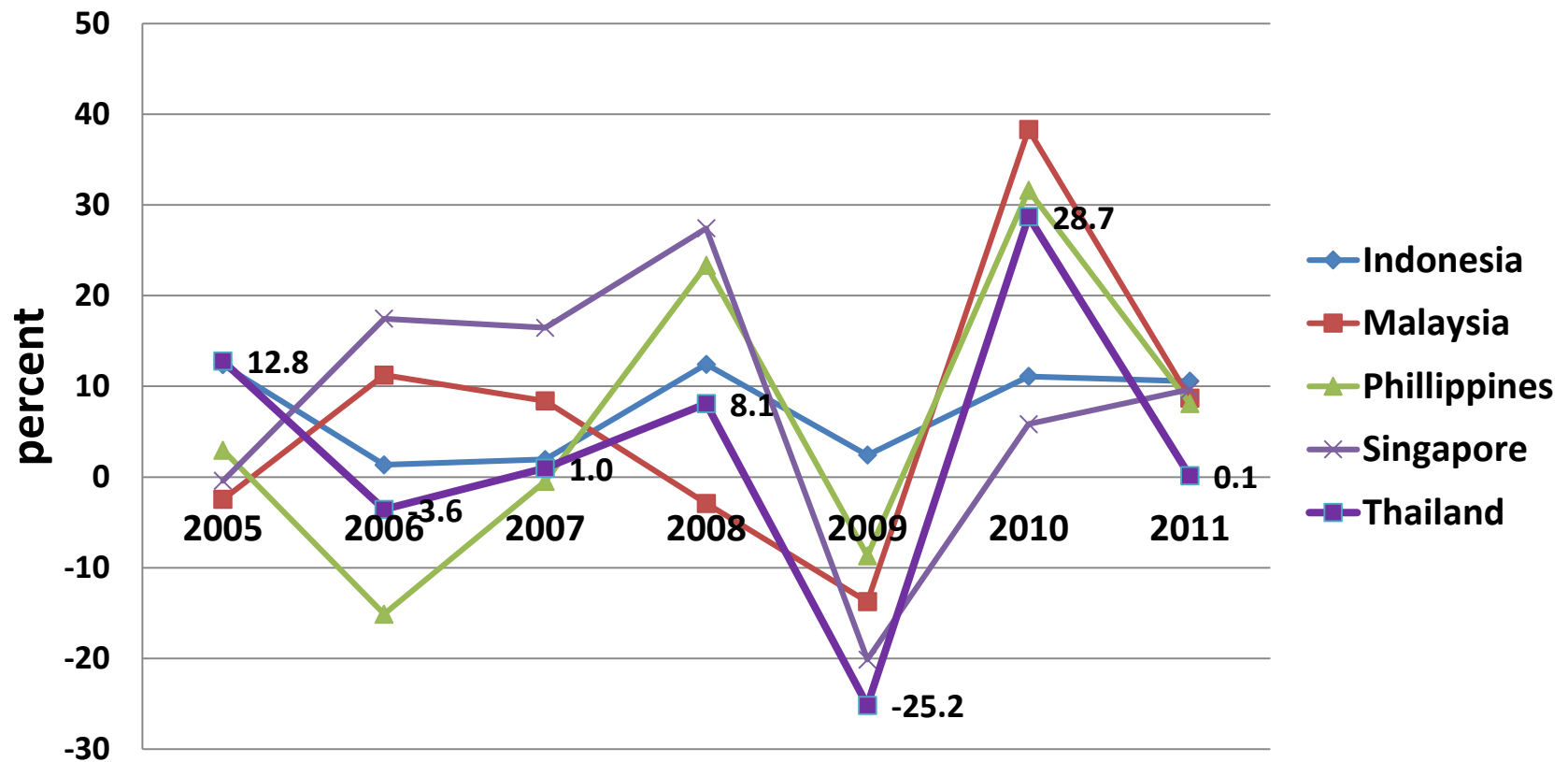
Output growth, capital account openness, financial sector depth
Business environment (IRCG rating on investment risk) VIX,

Interest rate differentials BOT Policy rate and FFR



ASEAN Investment synchronization

Gross Domestic Investment



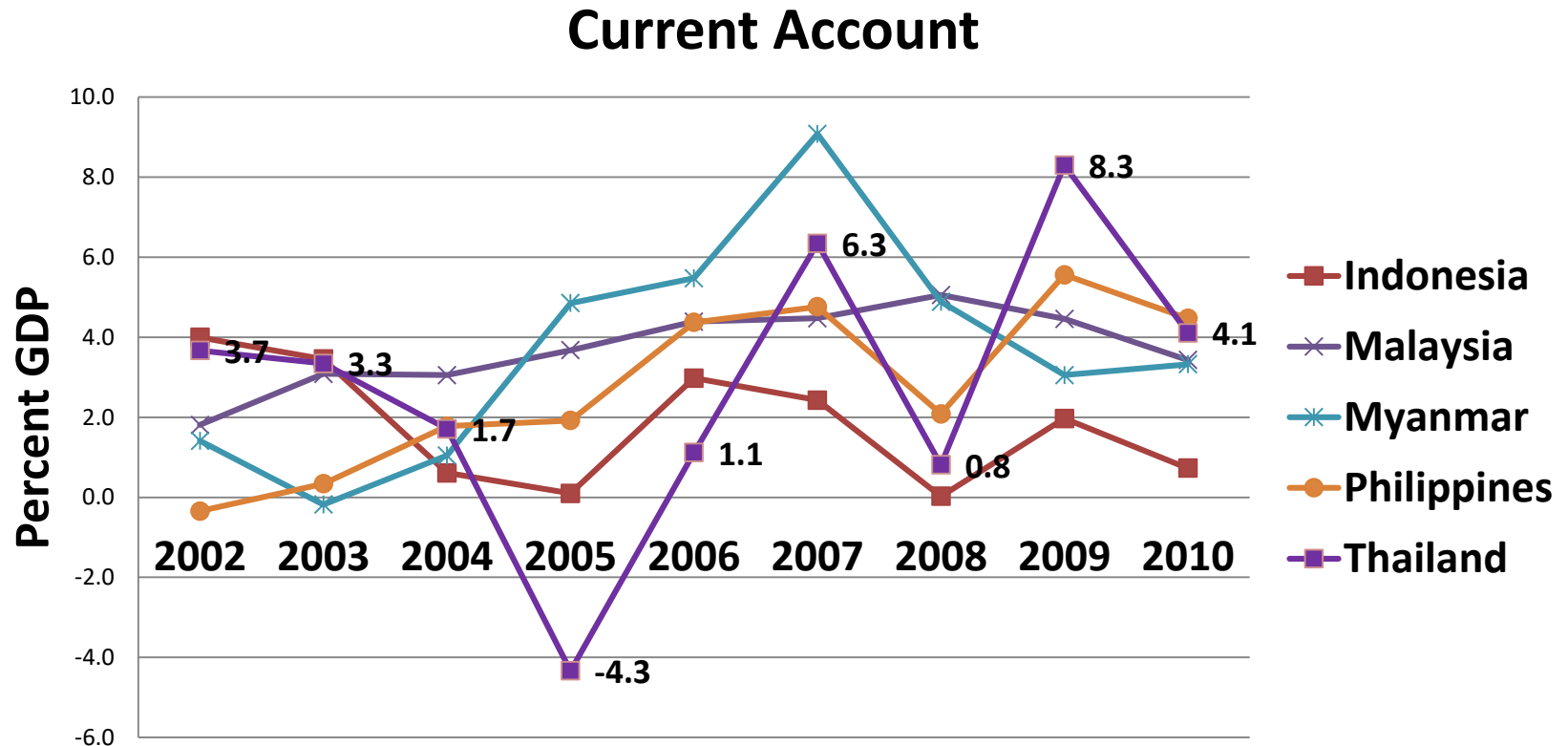
Investment and growth

- $\Phi = K/Y =$ capital-output ratio
- $\Delta K = \Phi \Delta Y$
- $I/Y = \Phi \Delta Y/Y$
- $I/Y = f(g); f' > 0$
- Accelerator effect of output growth on investment
- There are other factors determining investment rate: credit availability and the interest rate.
- A common factor which dictates the ASEAN investment synchronization

Determinants of current account balances

- Growth
- Real interest rates
- Capital inflows (what determine capital inflows?)
- Inflation
- Exchange rates
- Fiscal imbalance
- *These determinants are intricately related.*

What do ASEAN countries have in common?



Growth, financial resource, and current account deficit

- Higher expected growth generates demand for credit requires by investors to expand their plants.
- Higher growth increases permanent income and raises saving deposits.
- If loan growth outpaces deposit growth, interest rates tend to rise.

Why does strong growth lead to current account deficit?

- Output growth leads to strong demand for imports of raw materials and capital goods.
- If growth is not export-driven, growth can lead to problem with current account.

As domestic interest rate rises

- Bank credit expands (supply of loan)
- Bank deposit grows
- Bank can borrow from abroad if domestic savings are insufficient.
- Demand for credit should fall, other things being equal.
- With higher expected growth, interest rate rises could lead to widening investment-saving gap.

Equilibrating interest rates?

- Similar to growth impacts on current account, interest rates are pro-cyclical.
- Investment-saving gap is widening when interest rate increases, causing external instability.
- With increasing integration, capital flows would mitigate the rise in the domestic interest rates.

A conventional strategy

- Growth is the first priority, in particular export growth.
- Capital inflows propel private investment.
- Exchange rate appreciation was delayed as much as possible.
- Engineer competitive (though unrealistic) exchange rates to drive exports.

Growth engines downed

- During period of growth acceleration, private consumption and investment play a leading role.
- During growth slowdown, with the absence of fiscal stimulus, net exports are the **only** growth driver.
- But during the period 2014-2016, with weak consumption and investment demand, unfavorable world trade condition, fiscal policy remain the only option to the Thai government.
- Compared to favorable external markets conditions and competitive exchange rates in 2007, net exports led the recovery in 2007.

Global rebalancing

- When the issue of global rebalancing first emerged, it was focused squarely on the trade imbalance between China and the United States.
- However, the global economic turbulence of 2009-2010, and the subsequent economic fragility and uncertainty enveloping much of the global economy today, has begun to underscore how broad this issue really is.
- China has taken steps to contribute to possible rebalancing. China's currency has appreciated by over 30 percent against the US Dollar since 2005.
- And it has experienced some decline in its trade surplus in recent years.

Global rebalancing

- Nevertheless, the consumption share of GDP in China is still low (and even declined according to recent statistics).
- Further, the US still has a current account deficit amounting to about 3.1 percent of GDP.
- In 2011, the US maintained a trade deficit with at least 91 countries, most of which are in the developing world.

China has a new role: FDI outflows

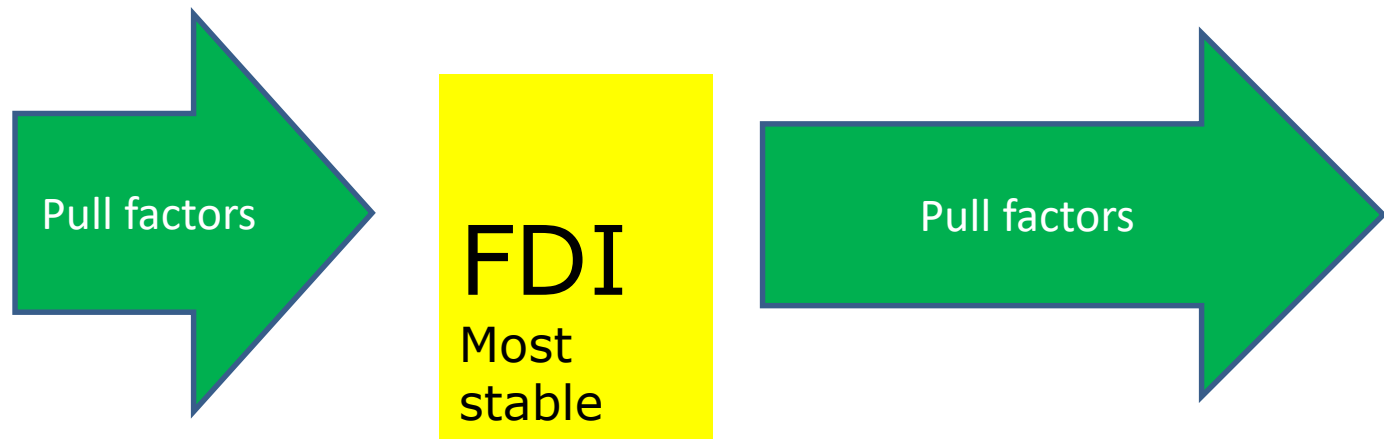
- China will not be able to make a successful transition from investment- to consumer-led growth with an overvalued currency.
- If both investment and exports tank, the surge in unemployment will make reforms difficult to implement.
- But investors are right to worry about a weaker renminbi because it is far from clear that the European Central Bank, the Bank of Japan and the Federal Reserve will quietly accept the necessary changes in relative exchange rates.
- Surges in capital flows can strengthen domestic currencies, while capital flight lead to weakening.

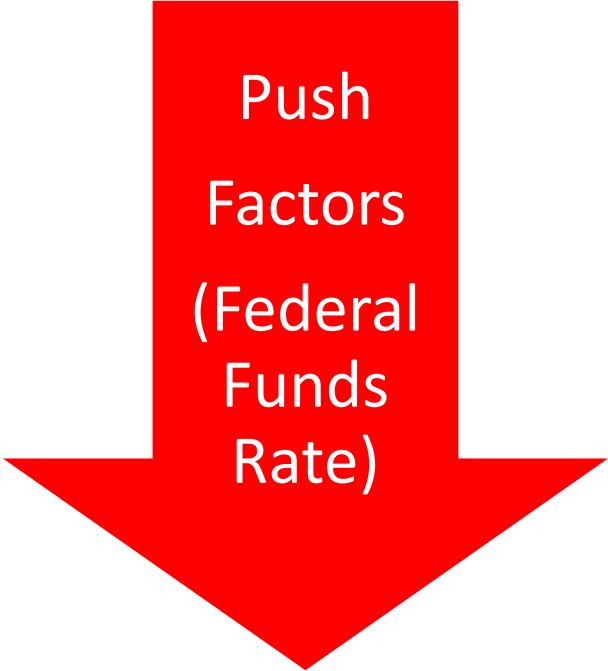
Are Capital flows Fickle?

Eichengreen's Three Research Questions

- How do magnitudes, persistence, and volatility of various capital flows compare?
- How have they evolved over time?
- What are correlates of different flows?

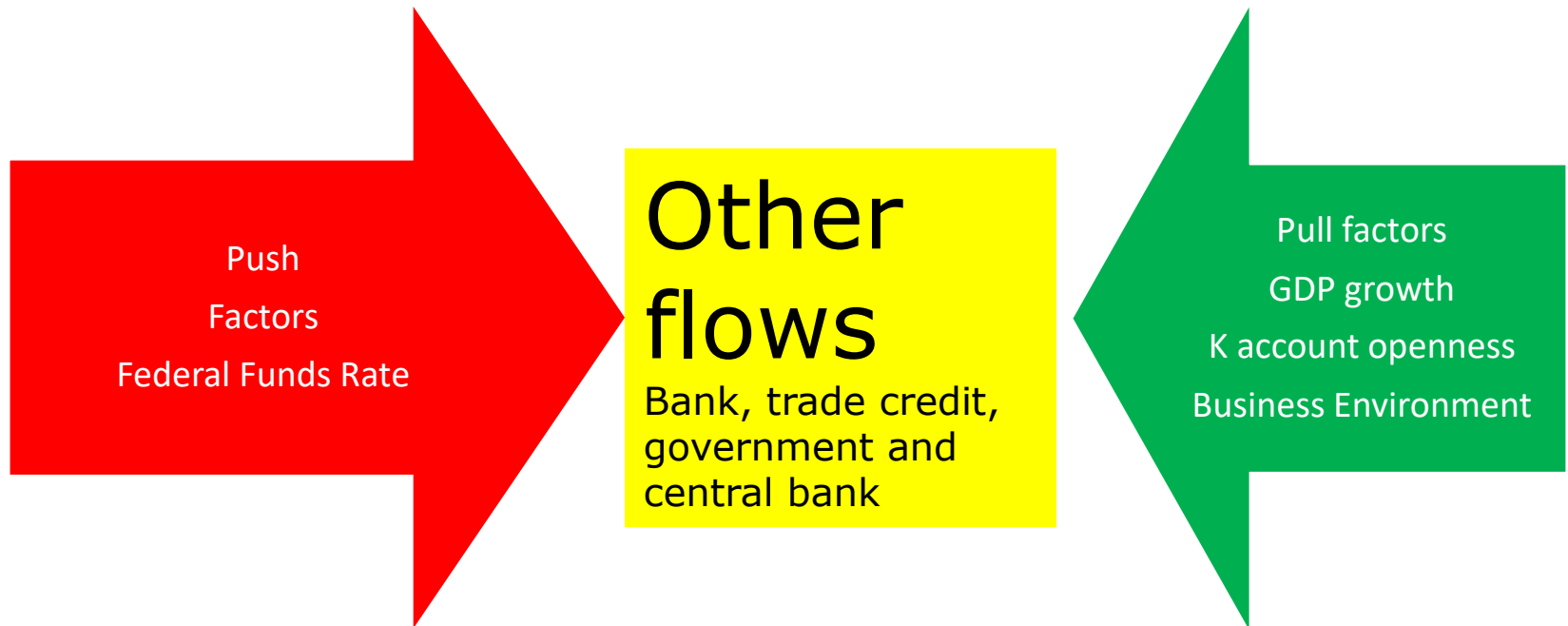
Eichengreen's research results





Push
Factors
(Federal
Funds
Rate)

Portfolio
(Debt & Equity)
Most volatile component



Less widely appreciated, FDI outflows from emerging markets rose strongly in 2011-2015 (p.7)

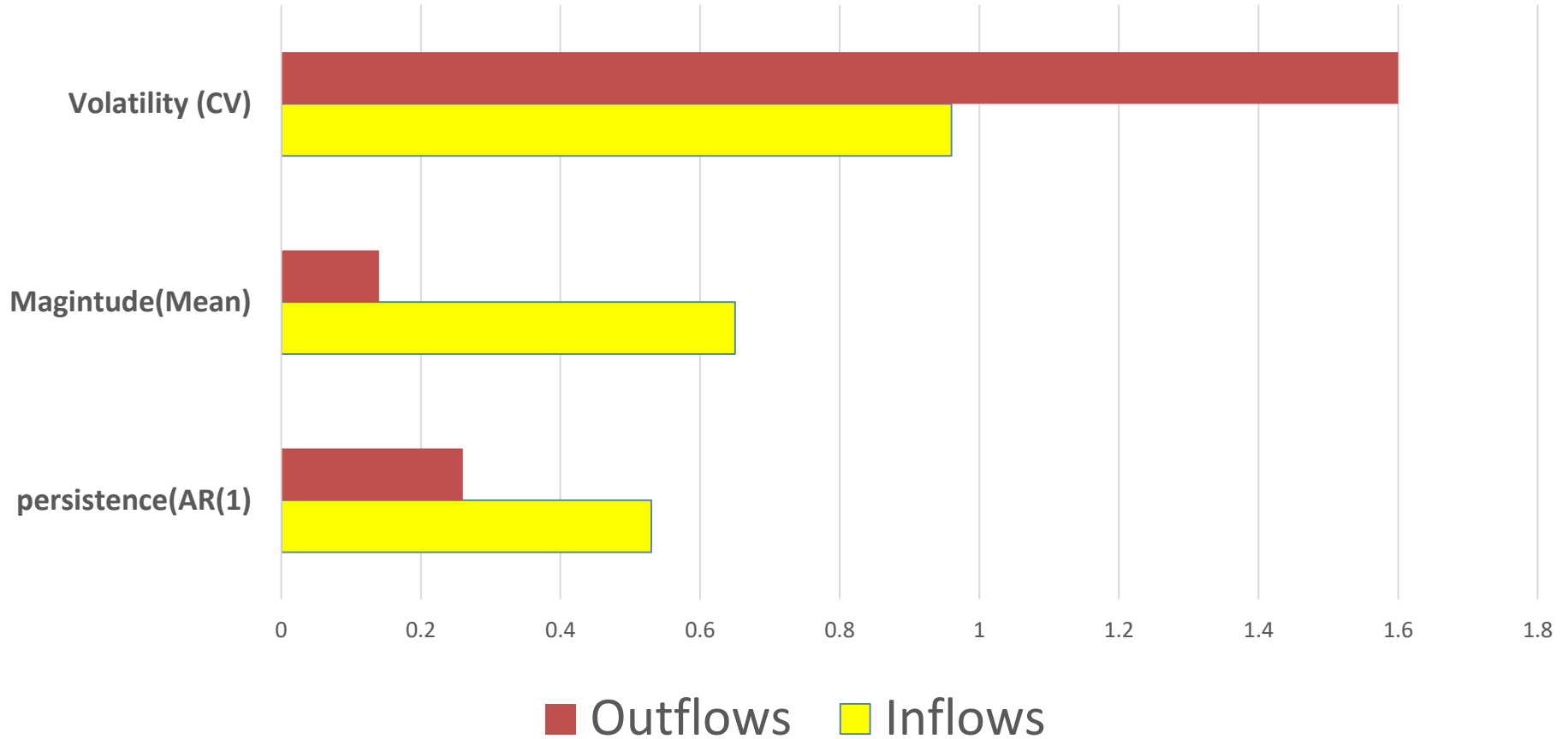
Last year, China was the third largest outward-investor globally, with big spending in Brazil, Germany, and Spain



FDI outflows from emerging economies:
Rising trend

FDI: 1990-2015

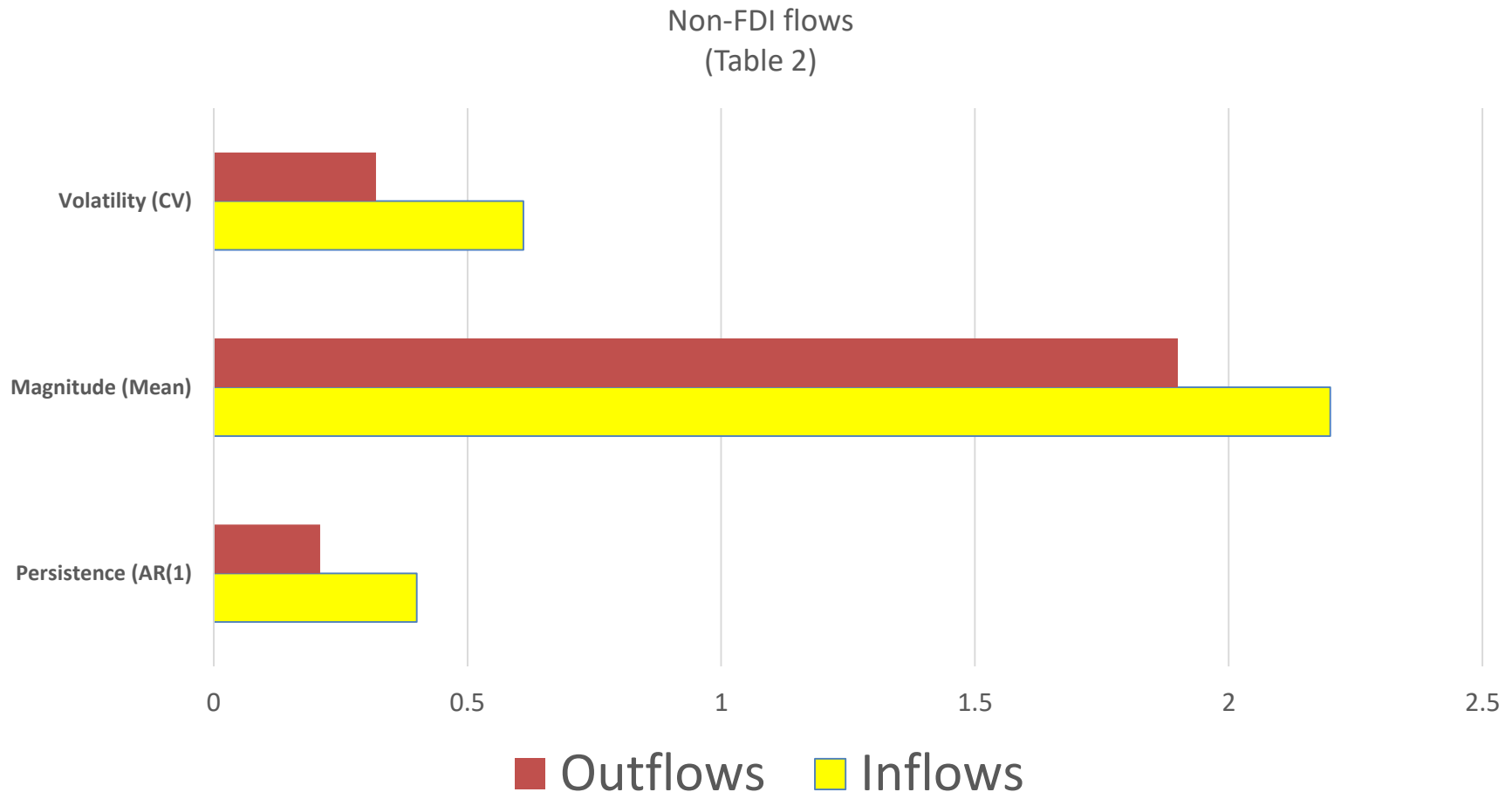
(Table 2)



Non-FDI flows: 1990-2015

Portfolio (Debt and equity)

Bank flows, trade credit



From capital surges to capital flight

- **Capital surges**
- **Sudden stops:** when the reversal in financial flows is more than 5 % of GDP
- **Global stops** are deepen and more persistent than sudden stops.
- **Retrenchments**
- **Capital flights**
- FDI outflows in emerging economies are growing source of capital account volatility.

Global stops: Global FDI dropped 13% in 2016 (UNCTAD)

- USA was the top destination with \$385 billion, an 11% rise from 2015
- UK was second with \$179 billion, up almost six-fold because of three big M&A deals.
- China third with \$139 billion.
- India and Africa FDI dropped by 5%, Latin America by 19%,
- Europe by 29%, due to low tax regimes in Switzerland, Ireland, and the Netherlands.
- China's boom in FDI outflows would slow down due to policies to reduce capital flights:
- ***Home and host countries' FDI policy matters***

Correlates of capital inflows

Alternative facts, alternative variables

- FDI depends on corporate income tax rates, which explain Ireland's success in attracting FDI.
- Expected exchange rate depreciation also drives capital outflows
- Flows reacts to the interest rate differentials (not just the level of the Fed Funds Rate, unless domestic interest rates move in line with the Fed funds rate to keep the interest rate gap constant)

Concluding remarks

- There are equilibrating mechanisms, through exchange rate channel, to bring the economy back from imbalances to external balances.
- Exchange rates should be allowed to play the equilibrating role in external balance adjustments.
- Delay the exchange rate adjustments would lead to substantial changes in output and exchange rates in the long run.