



# Managing International Capital Flows II: Experiences

**Course on Monetary and Exchange Rate Policy**  
**Bangkok, Thailand**  
**November 24 – December 3, 2014**

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# Outline

- Introduction
- Developments on Capital Account Liberalization
- Managing Capital Flow Liberalization
- Addressing the Implications of CFM on Financial Stability
- Sequencing of Capital Flow Liberalization
- Case study of Capital Flow Liberalization
- Practical Implications for Surveillance

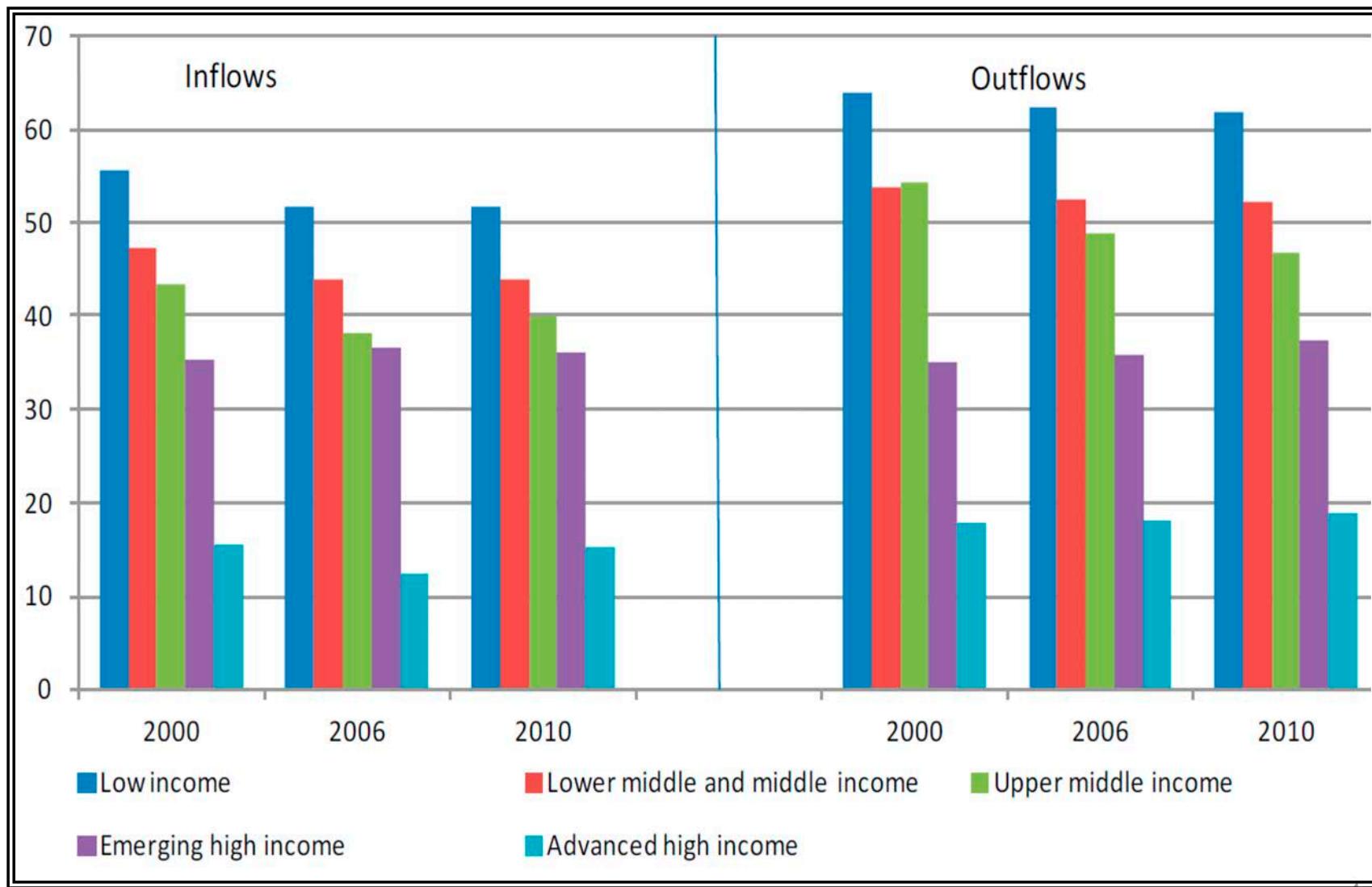
# Introduction: Financial Integration

Financial integration depends on two intricately linked issues:

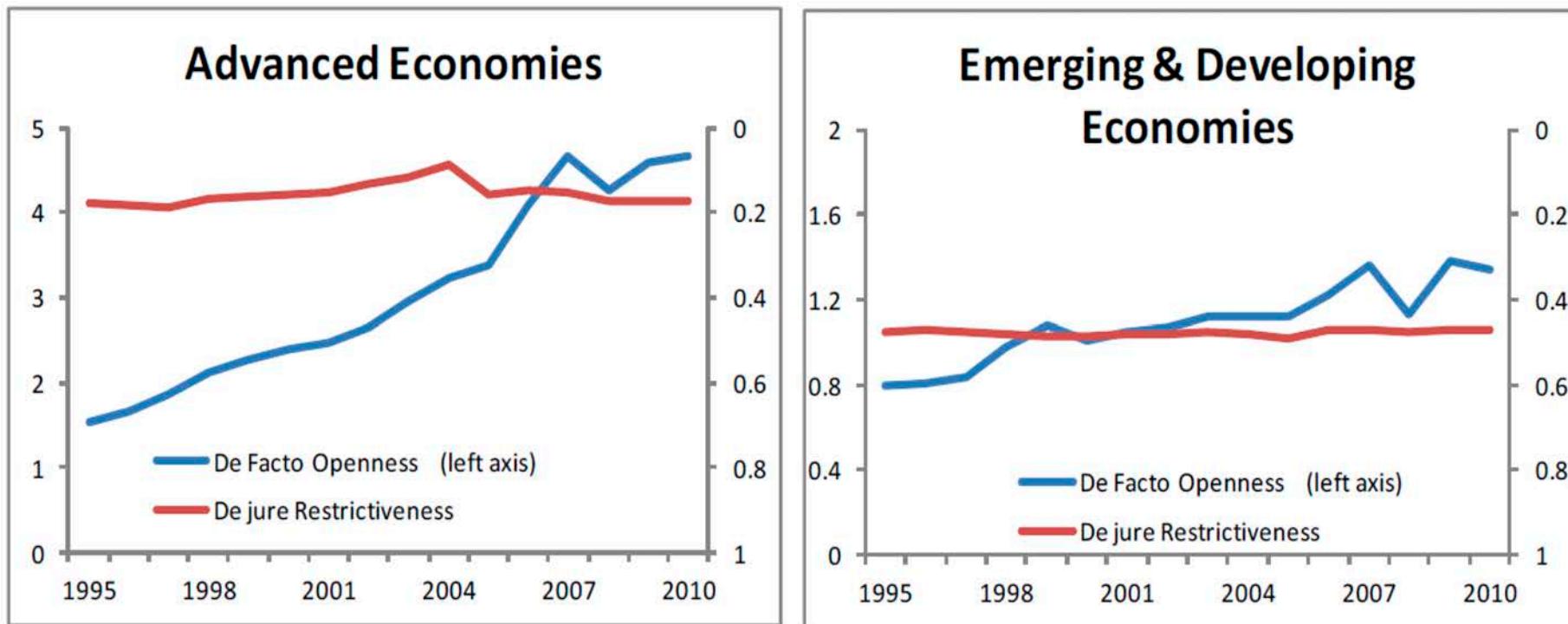
- Speed of financial sector development;
- External financial liberalization;
- Structure of the economic and financial system determines whether capital flows will have positive or negative effect on the macro economy;

# Evolution of Controls on Capital Flows

## Share of Capital Flow Transactions Subject to Controls



# Evolution of Capital Account



# Susceptibility to Crisis: Lessons from EM

- In financially open developing or emerging market economies, financial crises (debt, sudden stop, banking) are more likely under a pegged or intermediate regime than under a floating exchange rate regime;
- Among financially closed economies, there are no significant differences in crisis probabilities across regimes;
- Large imbalances are more likely under less flexible regimes;
- Large deficits are more likely to be reversed abruptly under less flexible regimes (with costs in the form of lower output growth);
- Large surpluses are more likely to be persistent under less flexible regimes;

# Structural Reforms in EMs

- Price liberalization, policies to promote competition, trade liberalization; currency convertibility;
- Fiscal reforms: Improved tax collection; Broaden tax bases, reform of government, social security, public enterprises...
- Improving macro institutions: Independent central banks; treasury, customs, statistics;
- Financial and corporate sector reform;
- Developing broad institutions: better governance, more transparency, judicial reforms;

# Managing Capital Flow Liberalization

- ❑ Capital flow liberalization is generally more beneficial and less risky if countries have reached certain levels or thresholds of financial and institutional development;
- ❑ In turn, liberalization can spur financial and institutional development;
- ❑ Liberalization needs to be well planned, timed and sequenced;

# Managing Capital Flow Liberalization Emerging Markets (1)

- ❑ Emerging economies have made significant progress with respect to the pre-conditions for liberalization;
- ❑ Many of these countries have increased the flexibility of exchange rates and interest rates prior to capital flow liberalization;
- ❑ Macroeconomic cushions are ample with strong growth, relatively modest inflation, and high foreign reserves;

# Managing Capital Flow Liberalization Emerging Markets (2)

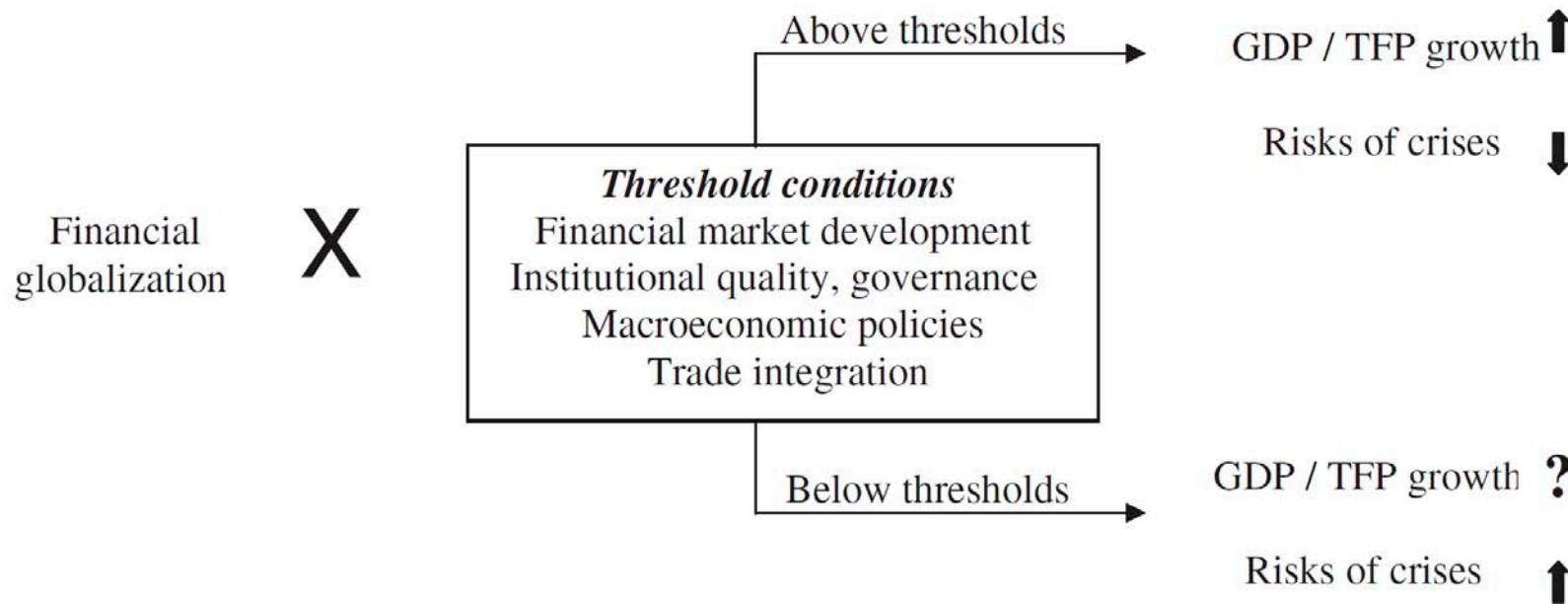
- ❑ The composition of external flows includes a relatively large share of FDI and equity flows;
- ❑ Financial development is reflected in growing financial market depth and enhanced regulation and supervision;
- ❑ Institutional quality and governance are deemed by investors to be improving;
- ❑ Trade openness has increased over time;

# Managing Capital Flow Liberalization

## Emerging Markets (3)

- ❑ It's easier to liberalize when capital is flowing in than when it's flowing out;
- ❑ Financial liberalization measures are highly interdependent;
- ❑ Liberalization doesn't just mean moving to a general hands-off approach;
- ❑ Rather, regulations and controls on capital flows (and in other areas) need to be replaced by effective prudential supervision;
- ❑ Capital flows are not the only driver of the credit cycle but can be a significant one, particularly in cases where the capital account is partly liberalized or the system is in transition;

# Pre-requisites for Financial Reform



# Addressing the Implications of CFM on Financial Stability (1)

- ❑ The benefits of capital flow liberalization are largest when countries have achieved certain levels of financial and institutional development;
- ❑ In order to strengthen countries' capacity to absorb and manage inflows and outflows, their financial systems need to be able to mediate flows safely;

# Addressing the Implications of CFM on Financial Stability (2)

- ❑ Country experiences suggest that capital flow liberalization is more likely to be successful if it is supported by sound fiscal, monetary, and exchange rate policies;
- ❑ Exchange rate flexibility can help cushion the real economy against the effects of capital flow volatility;
- ❑ Greater trade openness can support capital flow liberalization by raising countries' ability to attract foreign capital and by supplementing domestic demand with external demand;

# **Addressing the Implications of CFM on Financial Stability (3)**

- ❑ Capital flow liberalization carries risks (heightened macro volatility and vulnerability to crisis);
- ❑ In the absence of adequate financial regulation and supervision, financial openness can create incentives for financial institutions to take excessive risks, leading to more volatile flows that are prone to sudden reversal;

## **Addressing the Implications of CFM on Financial Stability (4)**

- Historically, capital flow liberalization has often been followed by financial crises, and, during the recent crisis, financially open economies experienced larger output losses;
- Factors such as macroeconomic stability and financial development, institutional quality, and trade openness serve as preconditions for successful capital flow liberalization;

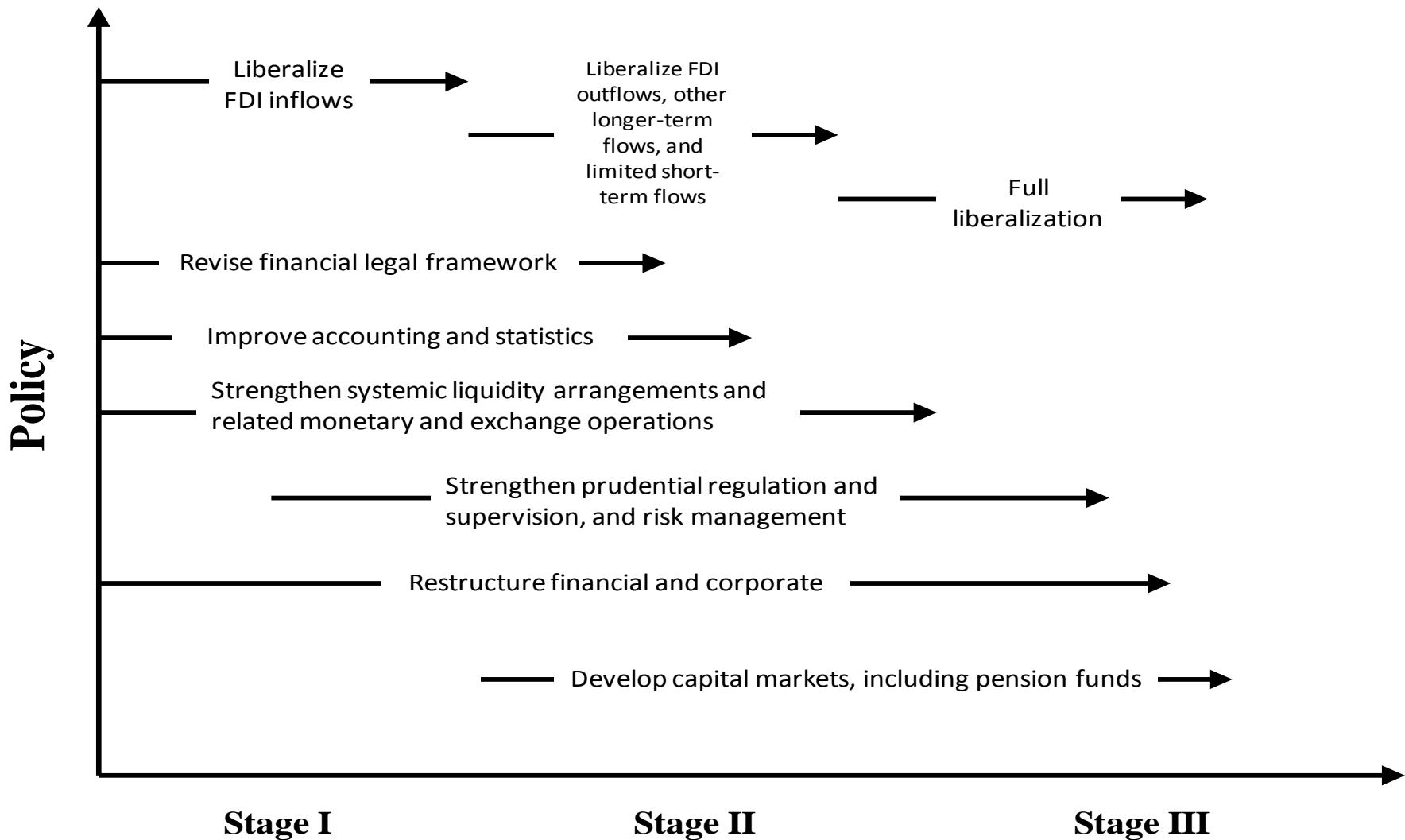
# Keys for Achieving Stability

- Appropriate macroeconomic policies, to achieve internal and external balance:
  - *Monetary policy* that delivers low inflation
  - *Supportive fiscal policy* that maintains a moderate public debt/GDP ratio
  - *Sustainable exchange rate regime* that maintains a competitive exchange rate
  - *Financial stability*
- Appropriate structural policies (trade, labor, competition, financial sector, pricing, state enterprises, governance, safety nets)

# But Reform is Multi-Faceted

- Some reforms can be implemented at earlier stages of development
- Example: FDI liberalization. Relatively stable flow, can facilitate competition and technology transfer (but not always... China vs. Caribbean)
- Versus: short-term debt flows. But recently also: long-term debt can be highly volatile

# Sequencing of Capital Flow Liberalization (1)



# Sequencing of Capital Flow Liberalization (2)

- ❑ Long-term capital flows before short-term;
- ❑ Non-debt creating (FDI and equity) capital flows before debt creating (bonds);
- ❑ Inflows before outflows;
- ❑ Lay the groundwork first before opening by introducing international accounting standards, improving national statistics, and by strengthening monetary and financial frameworks;
- ❑ At the second stage open up FDI outflows and long-term portfolio flows and some short-term flows;
- ❑ At the last stage liberalize all flows once the financial system is adequately developed and the prudential and supervisory safeguards are there;
- ❑ See India and Korea case study later; and
- ❑ Note of caution: FDI is typically stable but could be increasingly be channeled to the real estate sector;

# Sequencing of Capital Flow Liberalization (3)

- ❑ Safe fiscal margin of solvency, underpinned by well-functioning and sound fiscal institutions;
- ❑ Government borrowings that are largely long-term and in domestic currency, and strong automatic fiscal stabilizers;
- ❑ A well-functioning and regulated financial system that can properly intermediate the capital flows while keeping financial risks in check;
- ❑ A competent central bank that understands the policy transmission mechanisms and can flexibly implement monetary policy free from fiscal dominance;
- ❑ An exchange rate regime that allows for sufficient exchange rate flexibility and supported by a large stock of foreign exchange reserves;
- ❑ An institutional and policy environment (including capital account restrictions) that facilitates and encourages the relatively stable and safer capital flows, e.g., FDI and equity flows over short-term debt flows.

# Managing Capital Flow Liberalization

## Case Study: India (1)

- ❑ Encouragement of private flows – equity over debt, FDI over portfolio equity, domestic debt over FX denominated debt, and Medium to Long-term debt over short-term debt;
- ❑ Shift from debt creating to non-debt creating flows;
- ❑ Shift with debt from short-term to long-term debt;
- ❑ Emphasis on monitoring of external commercial borrowing;
- ❑ Gradual liberalization of outflows;

Preconditions for liberalization:

- ❑ Low and stable inflation;
- ❑ Low fiscal deficit;
- ❑ Strong financial markets;
- ❑ Strong international financial architecture;

# Managing Capital Flow Liberalization

## Case Study: India (2)

- Why liberalize?
  - Finance the current account deficit;
  - Long-term infrastructure finance;
  - Portfolio liberalization to develop government and corporate debt markets;
  - Reduce asset liability mismatches on bank balance sheets for project finance;

# Managing Capital Flow Liberalization

## Case Study: Korea (1)

- ❑ Liberalization took place under broadly sound, sustainable, and consistent macroeconomic policies:
  - ❑ Prudent fiscal policy;
  - ❑ Introduction of a flexible exchange rate regime;
  - ❑ Effective monetary policy framework that delivered stable prices;
- ❑ Priority given to financial sector reforms:
  - ❑ Development of domestic currency funding sources (deep and active corporate bond market);
- ❑ Developed financial markets by implementing financial sector reforms:
  - ❑ Transparency of the foreign exchange market enhanced by strengthening disclosure requirements;
  - ❑ Strengthened accounting standards;

# Managing Capital Flow Liberalization

## Case Study: Korea (2)

- ❑ Financial sector regulation was strengthened:
  - ❑ Put into place strict liquidity requirements in the context of implementing Basel II rules;
- ❑ Less risky flows were liberalized before more risky ones:
  - ❑ Generally liberalized longer-term transactions such as FDI first;
  - ❑ But certain sectors were first excluded;
  - ❑ Certain portfolio investments were liberalized;

# Managing Capital Flow Liberalization

## Case Study: Internationalization of the RMB (1)

- China is already the world's largest exporter and is the second largest economy;
- International use of the currency is an important step in deepening financial markets and promote the use of RMB internationally;
- China is pursuing a gradual approach;

# Managing Capital Flow Liberalization

## Case Study: Internationalization of the RMB (2)

- ❑ First stage: cross-border use of the RMB for trade settlement;
- ❑ RMB trade receipts of firms exporting to China can deposit them in offshore RMB markets (e.g. HK, Singapore);
- ❑ Banks and firms can then invest them in mainland China;
- ❑ Bilateral currency swap lines with foreign central banks to provide them with RMB liquidity;
- ❑ Experiment with capital account liberalization: Shanghai Free Trade Zone to be open for financial transactions with the ROW;

# Managing Capital Flow Liberalization

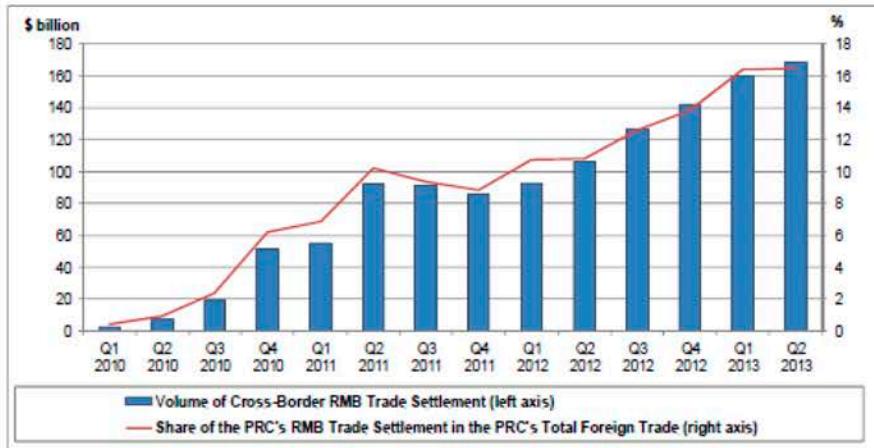
## Case Study: Internationalization of the RMB (3)

- ❑ RMB deposits in HK banks have risen significantly;
- ❑ More recently, RMB deposits have been shifting to other RMB denominated assets like RMB bond;
- ❑ RMB denominated settlement for FDI has also been opened up and is increasing;
- ❑ Pre-approved institutional investors from China are allowed to invest in RMB-denominated financial instruments offshore, such as in Hong Kong, China;
- ❑ Central banks, SWFs and some foreign financial institutions are allowed to invest in the PRC's onshore interbank bond market;

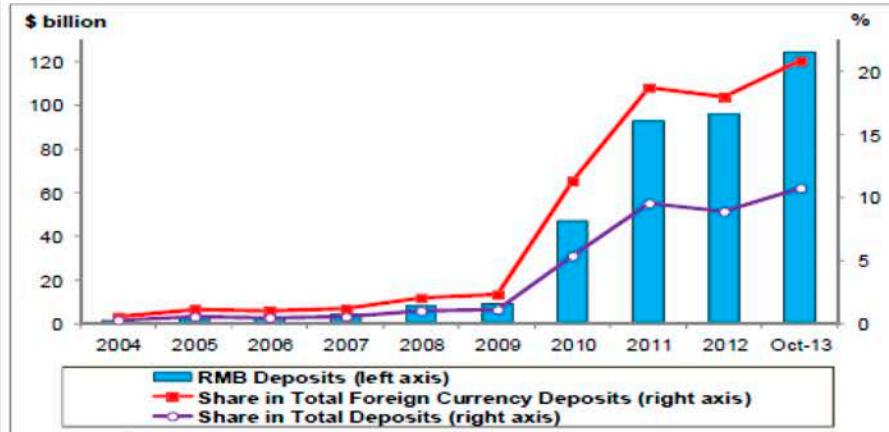
# Managing Capital Flow Liberalization

## Case Study: Internationalization of the RMB (4)

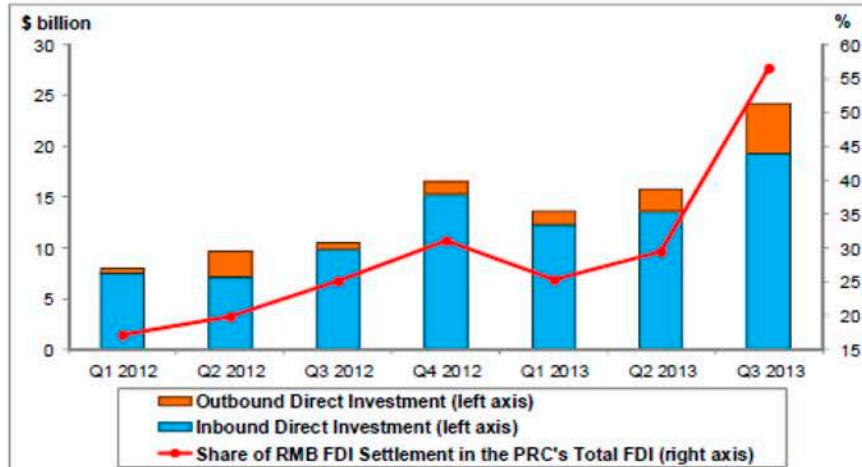
RMB trade settlement



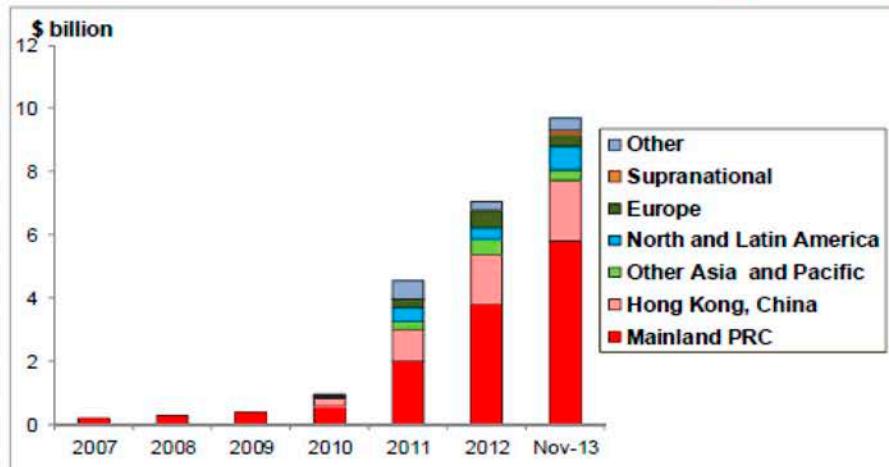
RMB deposits in Hong Kong



RMB denominated & settled FDI



RMB bond issuance in Hong Kong



# Managing Capital Flow Liberalization

## Case Study: Internationalization of the RMB (5)

- RMB Qualified Foreign Institutional Investor (RQFII): offshore financial institutions and central banks can invest, China's onshore interbank bond market and equity market
- RQFII quota raised so that onshore nonfinancial institutions can issue RMB bonds in Hong Kong, China;
- Offshore RMB-denominated (dim sum) bond market in Hong Kong, China has grown;
- Direct trading in foreign exchange with foreign counterparties has also been allowed;

# Managing Capital Flow Liberalization

## Case Study: Internationalization of the RMB (6)

- ❑ Liberalization of the capital account in China seems like the logical step, consistent with the RMB internationalization;
- ❑ The pace will be gradual with careful sequencing;
- ❑ Goal is to have a “basic” fully convertible capital account by 2015;
- ❑ An integrated approach to capital account liberalization will mean rest rate liberalization and exchange rate flexibility;
- ❑ Independence of institutions like the central bank and financial regulators;

# Practical Implications for Surveillance

# Risk factors, Exposures, Transmission Mechanisms

- How do we bring all these insights down to practical surveillance?
- No unified “framework” or model
- Best bet is to identify critical risk factors/shocks, exposures, and transmission mechanisms

# What To Look For – Banks

- Monetary transmission mechanism
- Importance in the financial system as a whole
- Assets: loan book versus trading book
- Liabilities: retail vs. wholesale funding
- Leverage and balance sheet mismatches
- Interconnectedness

# What To Look For – Non-Bank FIs

- Importance in the financial system as a whole (systemically important?)
- Types of institutions and roles
- Strength of linkages with banks and real sector
- Concentration of risks and exposures
- Gaps in regulation and supervision

# What To Look For – Role of Markets

- How is information conveyed?
- Who are the players? Are they sophisticated?
- OTC versus exchange trades – the former are notoriously non-transparent
- Liquidity and depth?

# What To Look For – Amplifiers

- How leveraged are various institutions?
- What are the linkages between various sectors?
- Can we assess the degree of asymmetric information?
- Do we see signs of herding when markets make large movements or when economic information is released?

# What To Look For – Contagion

- Cross-market connections
- Cross-border connections
- Lack of “fundaments”-based price movements – asymmetric information

# Where To Look?

- Where does theory tells us to look?
  - Leverage is KEY (how to measure it is less clear)
  - Asset prices bubbles and concentrated ownership leads to fire sales
  - Funding structures that are unstable, concentrated, dependent on weak collateral likely to be problematic
  - Herding behavior, and regulations that encourage, it lead to booms and busts
  - Externalities (and what causes them) may be linked to systemic risks

# Taxonomy of Risks

- Most common types of risk evaluated by individual institutions:
  - *Credit risk*: losses because of default
  - *Market risk*: losses because of changes in asset prices
  - *Liquidity risk*: losses because of mismatches, no rollover leads to fire-sale of assets, liquidation
  - *Operational Risk*: governance, control systems
- Many times they are interrelated, say from market shock, to credit losses, run on liabilities...
- Start with these and use these to develop means to detect general financial risks that threaten the economy