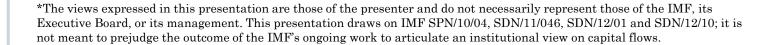
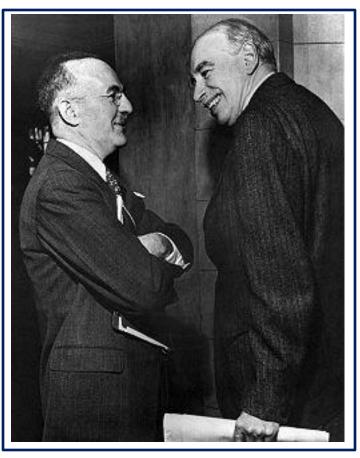
MANAGING RISKS ASSOCIATED WITH VOLATILE CAPITAL INFLOWS

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CAPITAL CONTROLS: A VERY OLD ISSUE



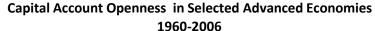
The advocacy of a control of capital movements must not be taken to mean that the era of international investment should be brought to an end. On the contrary, the system contemplated should greatly facilitate the restoration of international loans and credits for legitimate purposes.

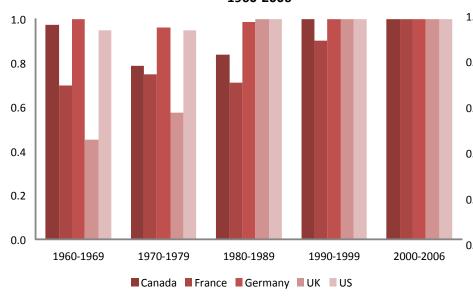
John Maynard Keynes

There is a tendency to regard foreign exchange controls, or any interference with the free movement of funds as, ipso facto, bad ... [but] there are times when it is in the best economic interest of a country to impose restrictions on movements of capital...[and] there are periods when failure to impose controls...have led to serious economic disruption.

The task before us is not to prohibit instruments of control but to develop those measures of control, those policies of administering such control, as will be the most effective in obtaining the objectives of world-wide sustained prosperity

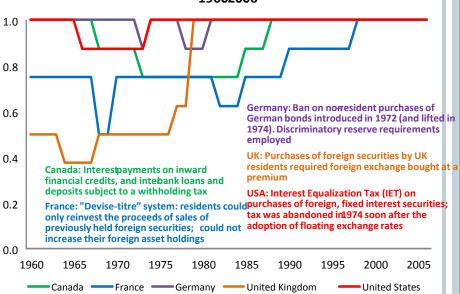
THAT KEEPS CROPPING UP





Note: Capital account openness index (0=highly restrictive; 1=fully liberalized). Source: Quinn and Toyoda (2008).

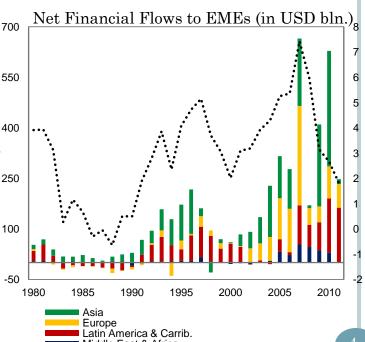
Capital Account Openness in Advanced Economies: Some Examples 19602006



Note: Capital account openness index (0=highly restrictive; 1=fully liberalized). Source: Quinn and Toyoda (2008), and OECD (1982).

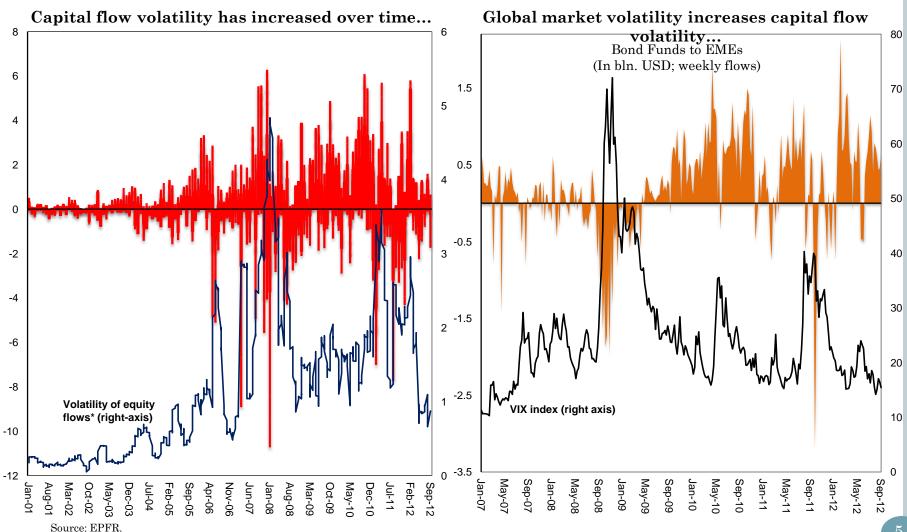
ALONGSIDE BOOM-BUST CYCLES IN FLOWS

- Debates on how to manage flows resurface time and again
 - Latin America prior to the 1980s debt crisis
 - Asia in the runup to the 1997-98 East Asian crisis
 - Emerging Europe in the runup to the 2008 crisis
- Surges seem to be increasing in frequency and magnitude
- Regions that experience the largest surges 400 are also those that generally experience the largest drop in net flows, heightening the challenge of managing volatility on the upand downsides



Average net financial flows (in % GDP)--right axis

Capital Flows are Becoming Larger and More Volatile



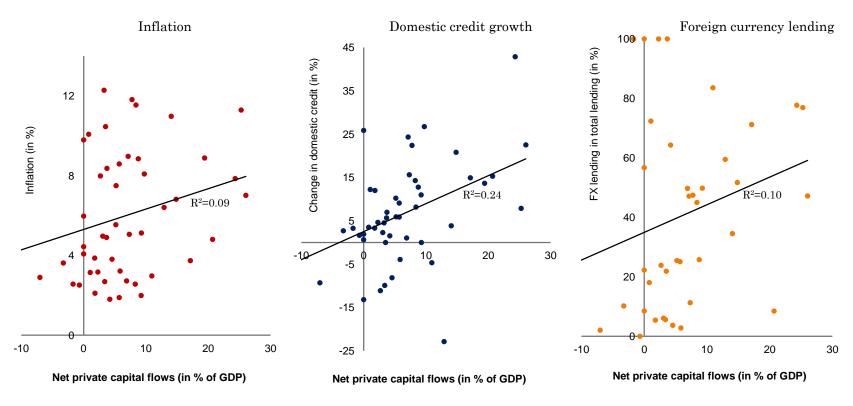
^{*}Rolling standard deviation of equity flows over the previous quarter.

SHOULD WE CARE?

- Capital flows are generally beneficial: financing for productive investment; consumption-smoothing; risk diversification, etc.
- But sudden and excessive inflows can raise
 - Macroeconomic concerns—exchange rate appreciation; general overheating
 - Financial-stability risks (banks, corporate, households)— excessive, unhedged foreign currency borrowing; fragile external liability structure; asset price bubbles

MACRO AND FINANCIAL-STABILITY CONCERNS OFTEN OVERLAP

Pre-crisis capital flows to EMEs and...



Source: IMF's VEE database.

Notes: All variables are averaged over 2005-07. Domestic credit growth is cumulative growth over last 3 years (in percent).

ROADMAP

- Three principles for policies
- What is in the policy toolkit for macro concerns and financialstability risks associated with capital inflows?
- How to choose between prudential measures and capital controls for financial-stability risks
- Spillovers and multilateral considerations

THREE PRINCIPLES FOR POLICIES

- Neither capital controls nor other policies should be used to avoid <u>warranted</u> external adjustment—nor should capital controls substitute for <u>available</u> macroeconomic tools.
- Both residency-based capital controls and non-residency based prudential measures may be necessary to safeguard financial stability depending upon circumstances.
- Policies should take account of multilateral considerations.

Neither capital controls nor other policies should be used to avoid warranted external adjustment—nor should capital controls substitute for available macroeconomic tools.

So, what is in the toolkit?

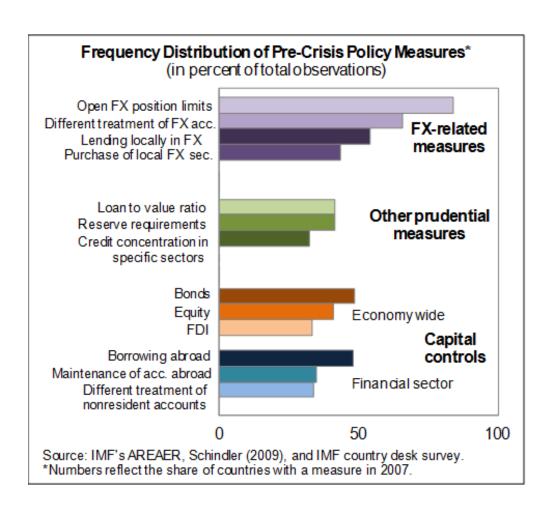
WHAT'S IN THE POLICY TOOLKIT?

- To address macroeconomic challenges
 - Allow external balance to move toward medium-term multilaterally consistent equilibrium value
 - Floaters—allow nominal exchange rate to appreciate
 - Peggers—do not engage in sterilized intervention
 - Deploy macro policy tools as available
 - Accumulate reserves if not already more than adequate for country insurance
 - Lower interest rates if no inflationary/overheating concerns
 - Fiscal tightening if justified by cyclical position and debt sustainability considerations
 - Capital controls (or prudential measures that act as capital controls, e.g., currency-based measures)

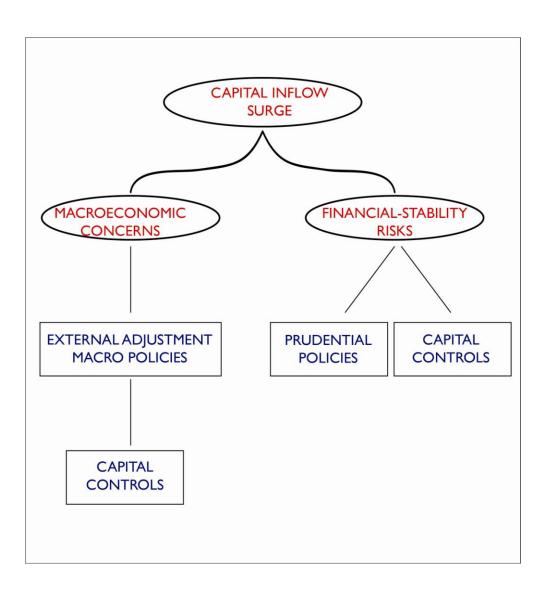
WHAT'S IN THE POLICY TOOLKIT?

- To address financial-stability risks
 - Macroeconomic policy may have some traction...
 - But prudential measures and capital controls that target specific risks likely to play a more dominant role
 - FX-related prudential measures: Discriminate according to the currency, not the residency, of the flow
 - Other prudential measures: Reduce systemic risk without discriminating based on residency/currency
 - Capital controls: Discriminate between residents and non-residents (could be economy-wide or sector specific; broad-based, or target specific types of flows)

How Common are These Measures?



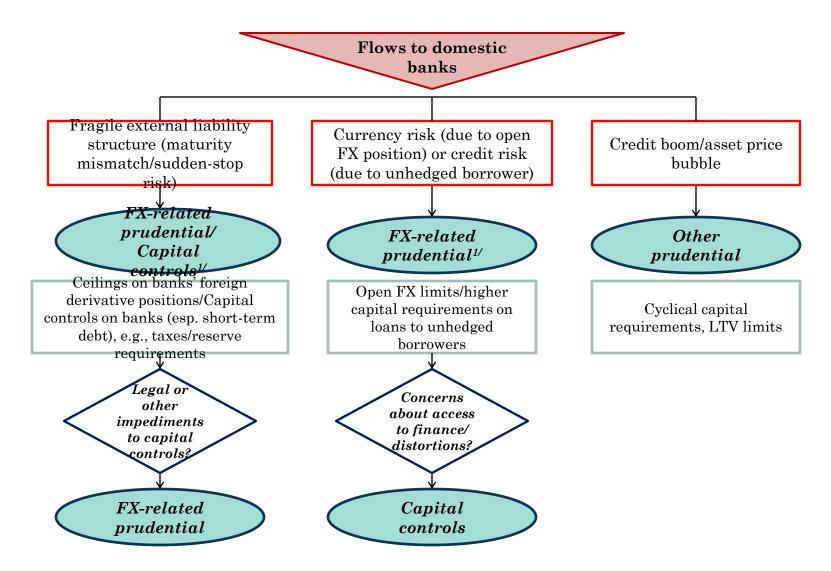
SUMMARY OF POLICY ADVICE



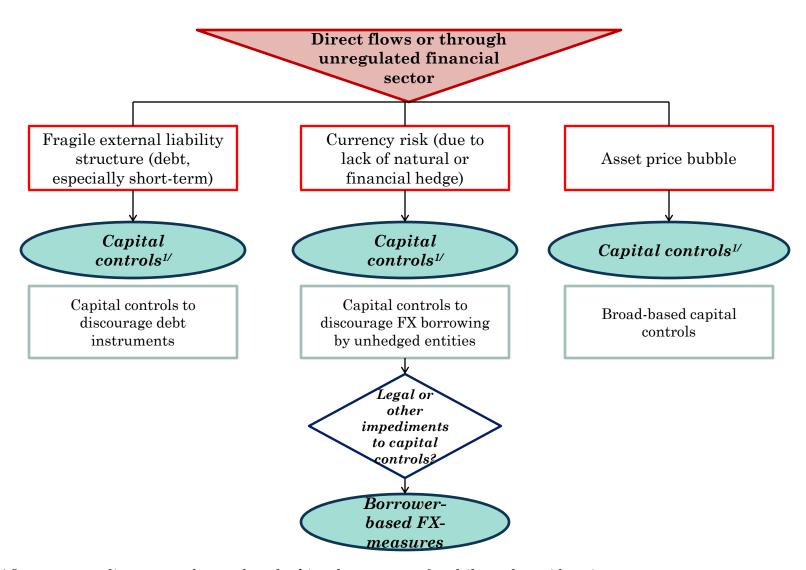
Both residency-based capital controls and non-residency based prudential measures may be necessary to safeguard financial stability depending upon circumstances.

So, how to choose between them?

CHOICE OF INSTRUMENTS: FLOWS INTERMEDIATED THROUGH THE FINANCIAL SECTOR



CHOICE OF INSTRUMENTS: FLOWS NOT INTERMEDIATED THROUGH THE FINANCIAL SECTOR



OTHER CONSIDERATIONS

- Playing field for access to credit of large firms vs. SMEs
- Prudential regulations may cause flows to be intermediated through the unregulated financial sector (e.g., Croatia)
- International obligations may prohibit or constrain the use of capital controls (e.g., the EU treaty, the OECD code, or BITs)
- All else equal (effectiveness, efficiency), prefer measures that do not discriminate by residency or nationality

Designing Capital Controls and Prudential Measures

Broad principles

- Effective: achieve intended aim; not easily circumvented
- Efficient: minimize distortions and scope for non-transparent/arbitrary enforcement
- But a number of questions...
 - Permanent or temporary inflow?
 - Macroeconomic concerns: Controls for temporary, not permanent inflows
 - Financial stability: Controls could be imposed for persistent flows
 - Broad-based or targeted controls?
 - Macroeconomic concerns: Broad based possibly with limited exemptions
 - Financial stability: Targeted but taking account of circumvention possibilities
 - Price or quantity-based controls?
 - Macroeconomic concerns: Price-based are easier to adjust, and simpler to administer
 - Financial stability: Quantitative measures more appropriate when authorities face information asymmetries/uncertainty about private sector's response
 - Other considerations: Administrative and institutional capacity

Policies should take account of multilateral considerations.

So, what are these spillovers and how do they modify policy advice?

POTENTIAL SPILLOVERS OF POLICIES

- Capital-receiving countries
 - If controls are ineffective, no spillovers
 - If controls are effective, then possible deflection to other recipient countries (and back to source countries)
 - Weak and contradictory evidence: need to base on logic
 - Benign? Pecuniary externality? Depends on whether capital is welcome and controls are costly.
- Capital-sending countries
 - Controversy over effect of QE, but generally strong evidence of push factors
 - Pecuniary externality? Convex costs

Multilateral Considerations

- Policy measures to limit capital flows should not be deployed to
 - Avoid necessary external adjustment
 - Exploit market power and manipulate terms of trade
- Capital controls and prudential measures (that act as capital controls) imposed for genuine domestic externalities are a legitimate part of the toolkit, but may require coordination among:
 - Recipient countries: to impose lower controls when there are generalized surges of capital
 - Source-recipient countries: such that source countries take into account the impact of their policies. May benefit them through terms of trade gain and by reducing crisis likelihood in borrowing countries
- ISD shines spotlight on spillovers, including those that are not explicitly manifested through the BOP

KEY TAKEAWAYS

- Policies should not try to avoid warranted, orderly external adjustment
- Macro challenges—macro policies (as available) and capital controls (prudential measures); broad-based; temporary (not longer than duration of surge); likely price-based
- Financial-stability—prudential policies and capital controls; targeted; not necessarily temporary; not necessarily price-based.
 - Prudential measures main instrument when flows are intermediated through the banking sector
 - Capital controls main instrument when flows by-pass the banking sector
- Multilateral effects of policy measures that limit capital flows are complex
 - May require recipient countries to take account of policy responses of other recipient countries
 - And source countries to take account of impact of their policies (especially monetary, regulatory) on recipient countries
 - Return to Keynes'-White's idea that capital flow management would be more effective if movements "could be controlled at both ends"?

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