MANAGING CAPITAL INFLOWS: TOWARD A NEW CONSENSUS?

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*The views expressed in this presentation are those of the presenter and do not necessarily represent those of the IMF or IMF policy. This presentation draws on joint work with Atish Ghosh, Karl Habermeier, Luc Laeven, Marcos Chamon, Mahvash Qureshi, and Annamaria Kokenyne.

The Current IMS Has Merits…

- Supported decades of growth in output, trade, and global financial system
- Showed resilience through crisis
- Allows pursuit of domestic policy agendas
- And discretion in choosing exchange rate regimes and reserve accumulation policies

…But is Not Without its Flaws

Persistent Imbalances	Dominance of the U.S. Dollar
Exchange Rate Volatility	Large and Volatile Capital Flows

Multifaceted IMS Reform Agenda in Train

Global Coordination and Monitoring

- G20 MAP (Accountability and Sustainability Reports)
- EWE, Spillover Reports
- Consolidated Multilateral Surveillance Reports

Global Financial Safety Net

- Reviewing effectiveness of FCL/PCL
- Is quantum of Fund resources adequate?
- New lending facilities?

Diversification of Reserve Currency System

- Review of the SDR basket
- A greater role for SDR?

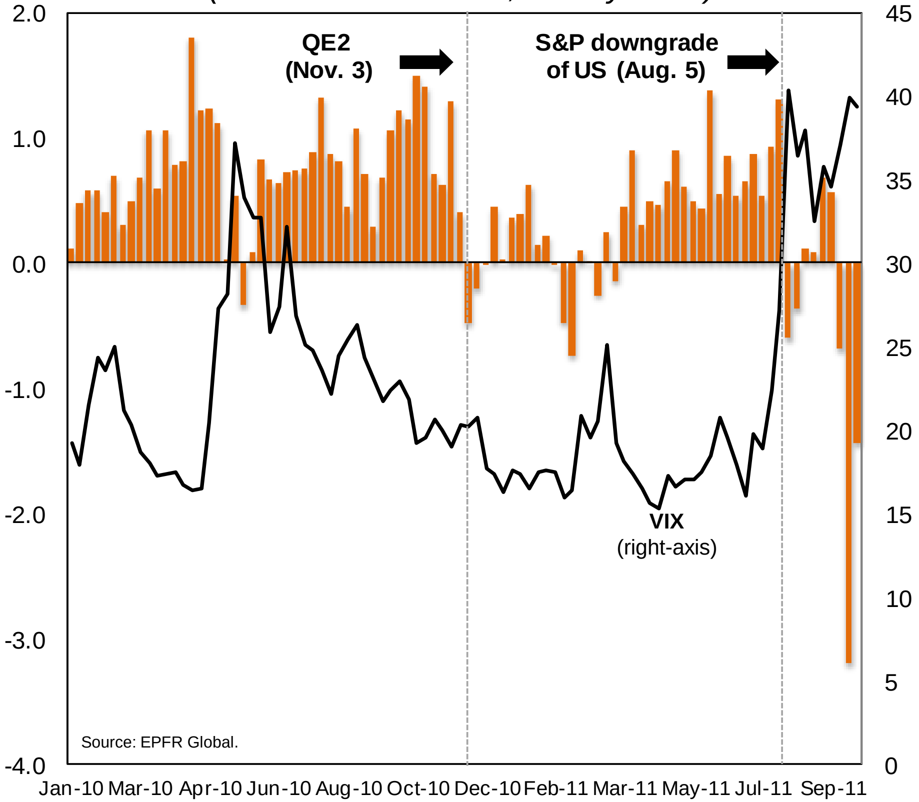
Managing Capital Flows

- Framework to manage capital inflows
- Assess multilateral consequences of source and recipient country policies
- Managing outflows and capital account liberalization

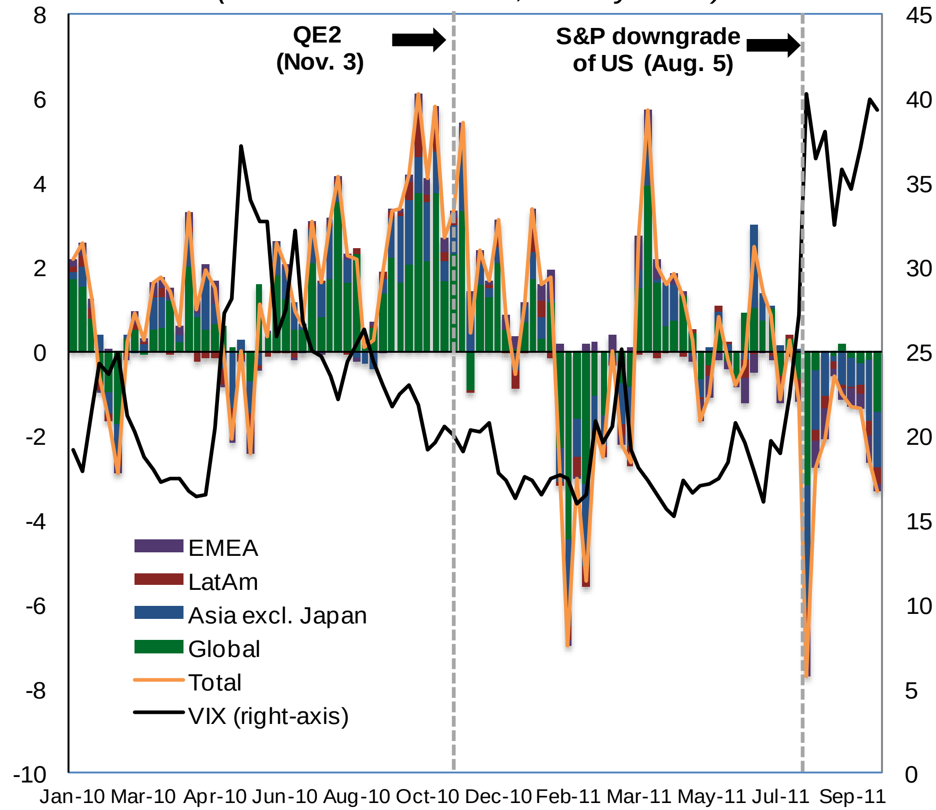
Context

Is it Inflows?…Or Outflows?

Bond Funds
(billions of US dollars; weekly flows)



Equity Funds
(billions of US dollars; weekly flows)

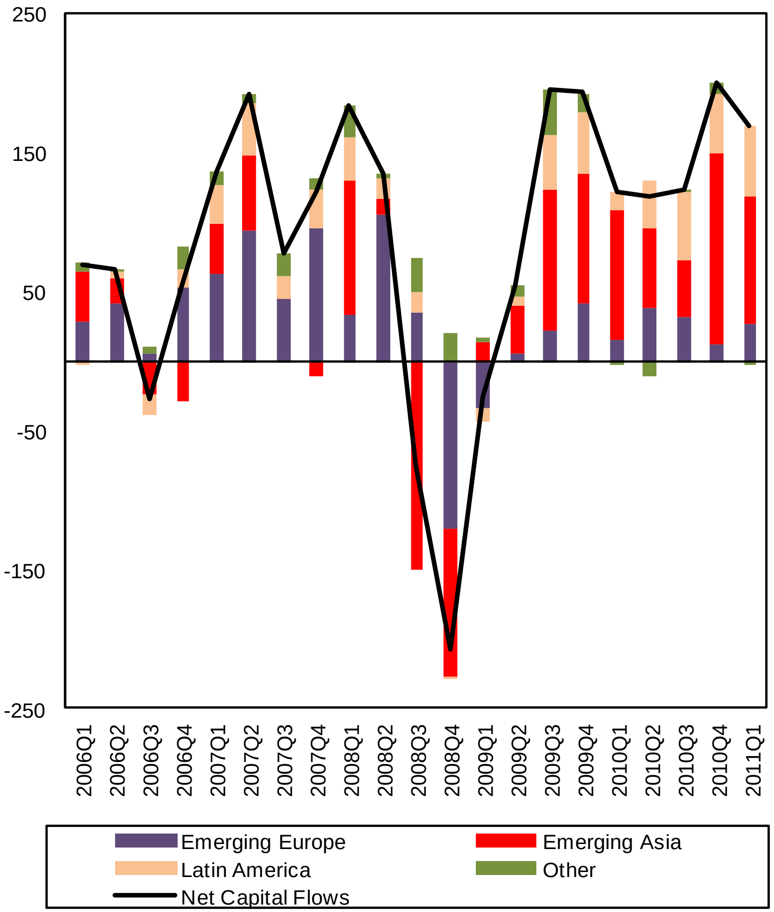


Cumulative exchange rate change against USD (in %)

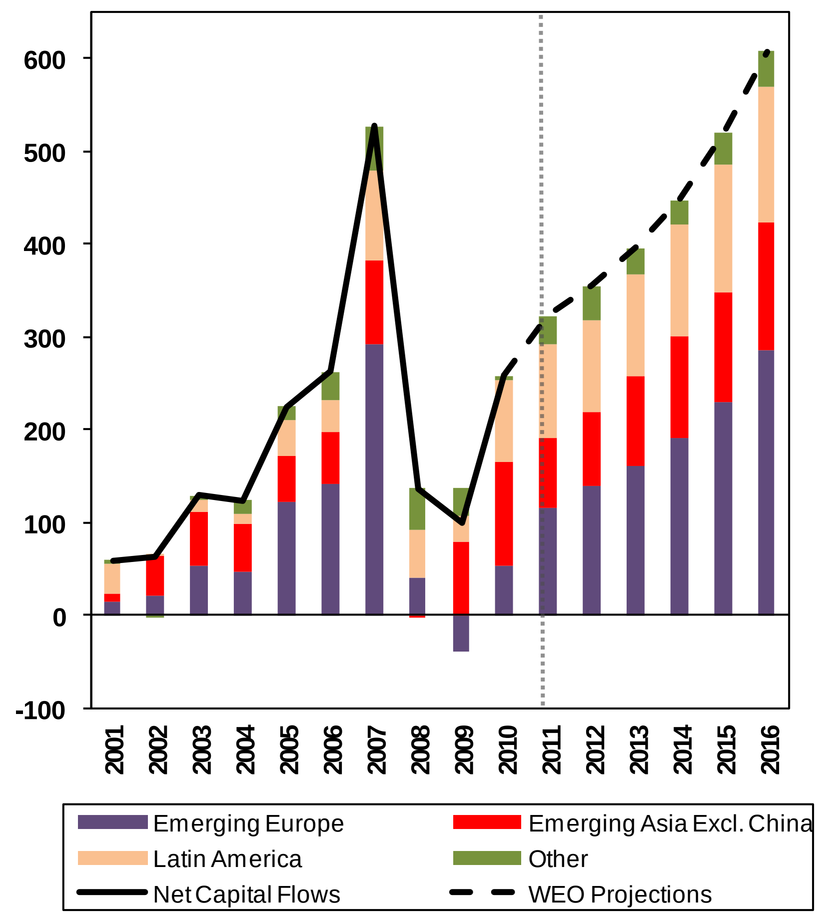
(01/01/10-07/29/11)	(08/01/11-10/07/11)
Brazil: 11.5	Brazil: -10.9
Korea: 6.7	Korea: -10.5
Mexico: 8.2	Mexico: -10.9
Russia: 7.9	Russia: -13.0

Capital Inflows Seem Likely to Persist…

Net Quarterly Capital Flows into EMEs, 2006Q1-11Q1 *(billions of US dollars)*

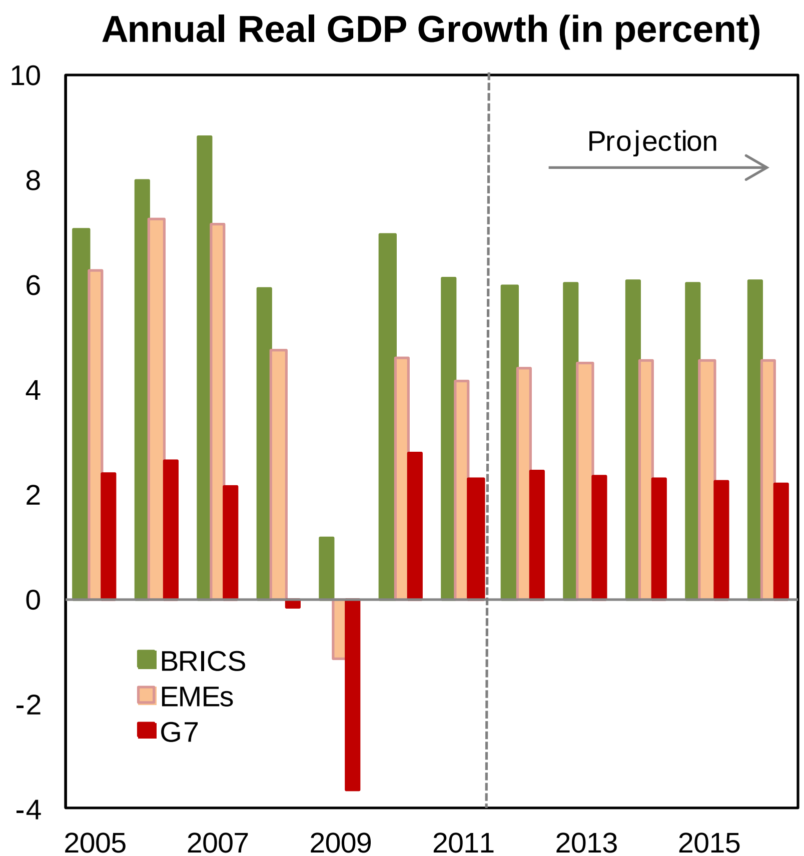


Net Annual Capital Flows into EMEs, 2001-2016 *(billions of US dollars)*



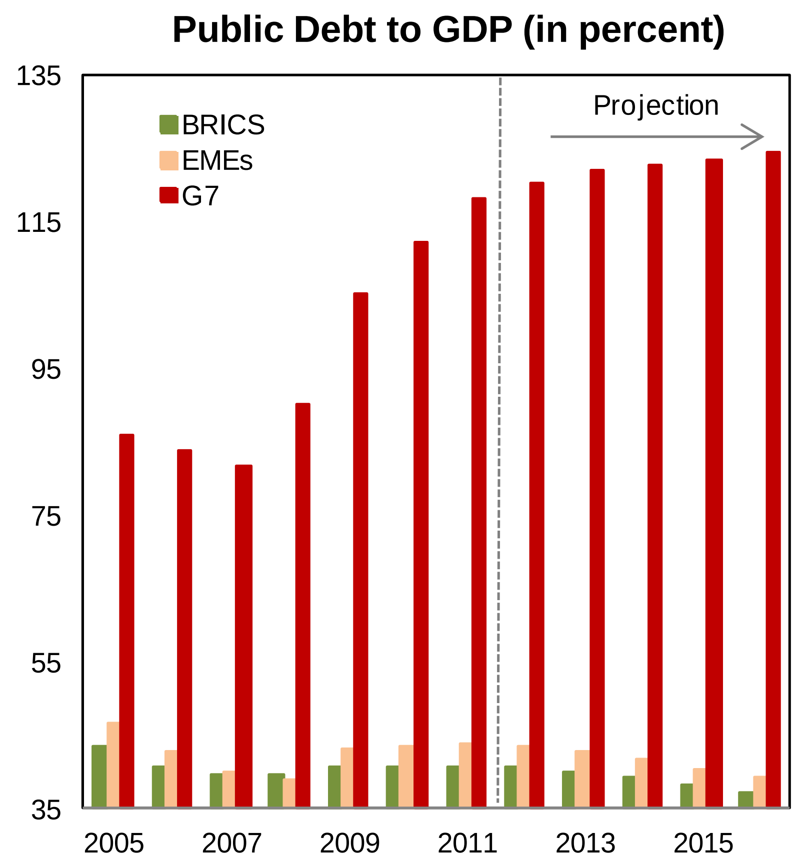
Source: International Financial Statistics.

Driven by Strong Fundamentals in EMEs



Source: IMF's WEO database.

Note: Average year-on-year growth (in percent).

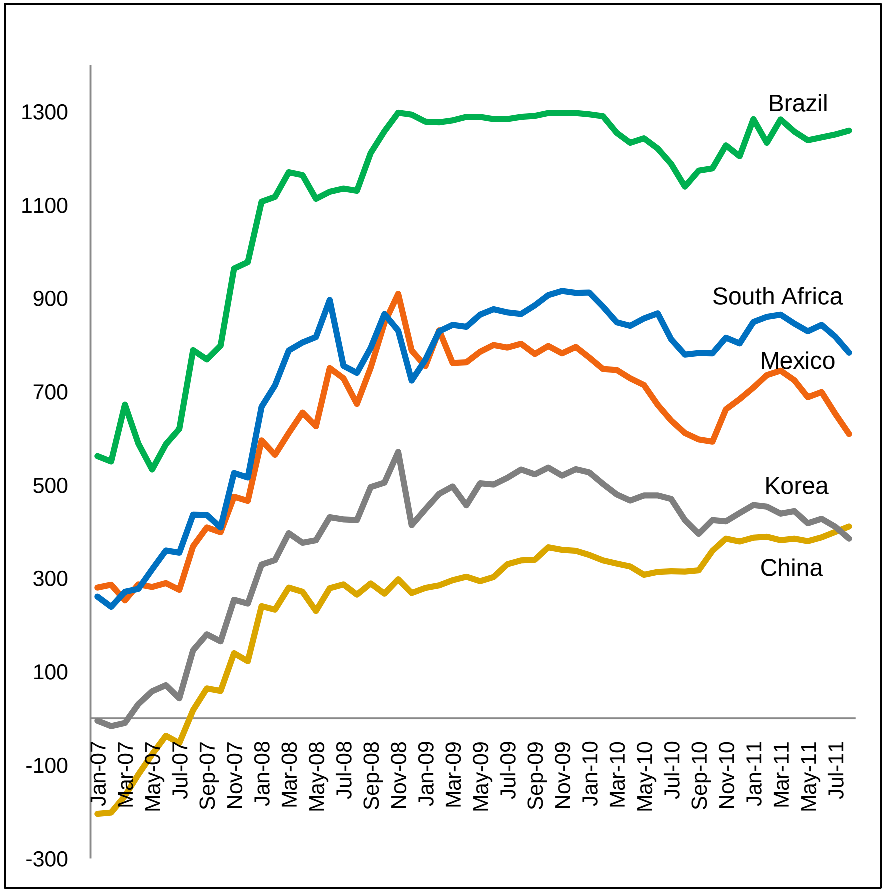


Source: IMF's WEO database.

Note: Average gross general government debt to GDP ratio (in percent).

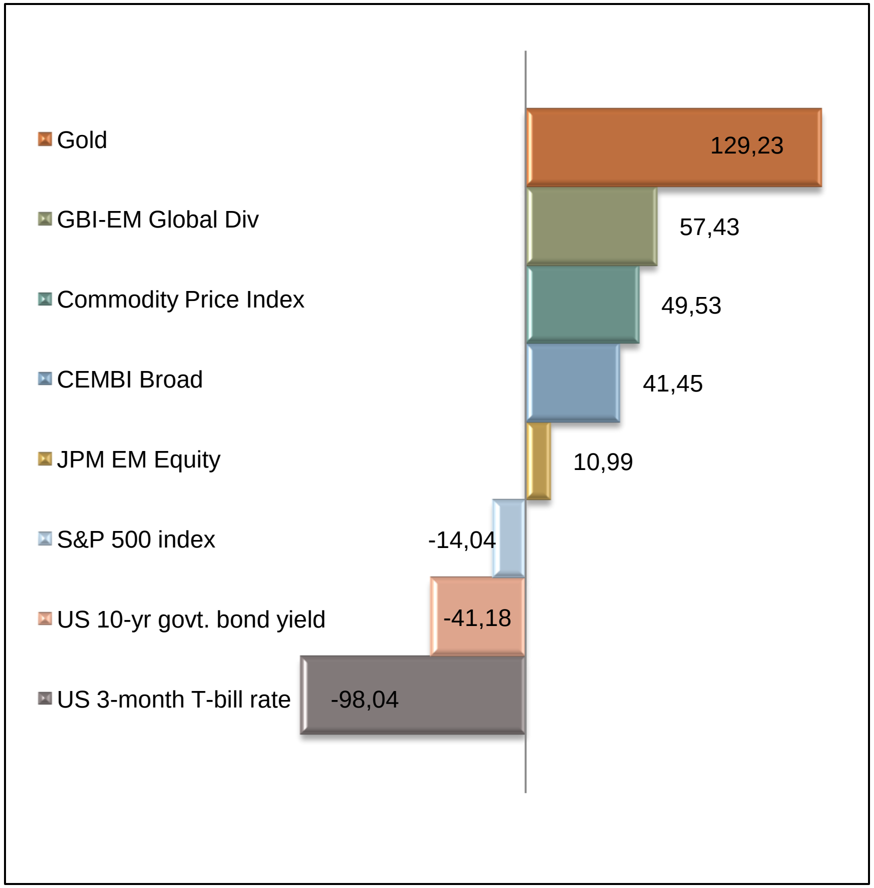
The Search for Yield…

Interest Rate Differential (in basis points)



Source: Bloomberg.
Note: 10-year government bond yield minus 3-month US T-bill rate in basis points.

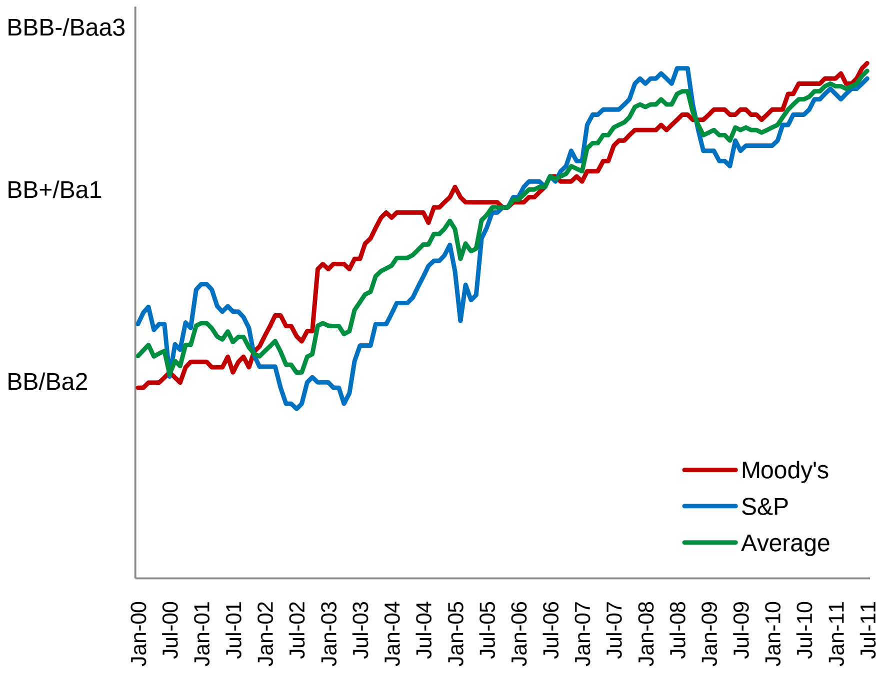
Returns on Assets (in percent)



Source: Bloomberg and IMF's WEO database.
Note: Returns as of June 29, 2007 to July 29, 2011 (in percent).

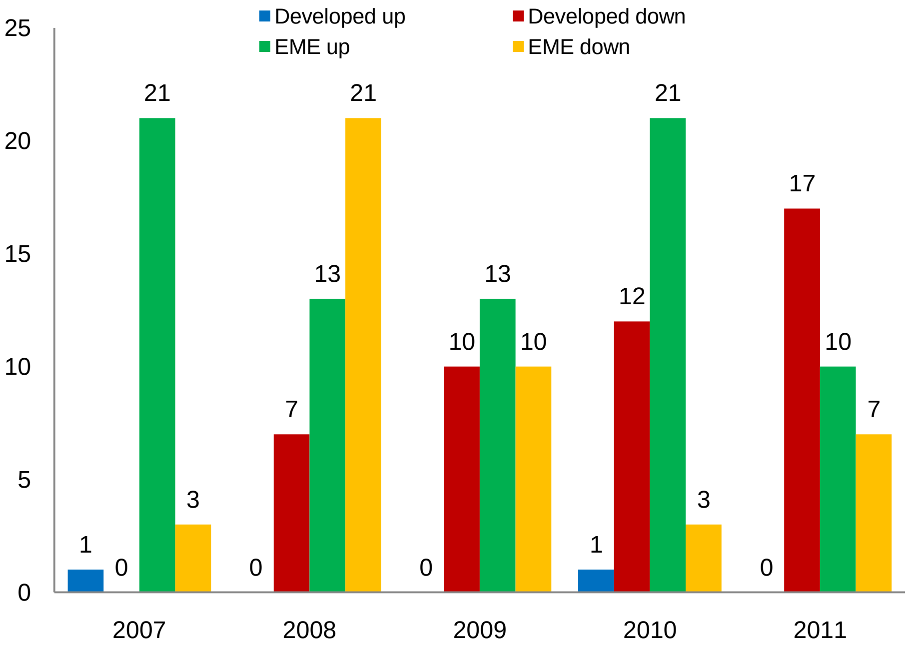
And Relative Sovereign Ratings

EME Average Sovereign Rating



Source: Moody's and S&P.
Note: EMEs include countries in the EMBIG and MSCI for which ratings are available.

Sovereign Rating Upgrades & Downgrades



Source: Moody's and S&P.
Note: The total number of upgrades and downgrades includes both S&P and Moody's actions from January 2007 to July 2011. The developed market sovereign rating upgrade in 2010 reflects that of Greece by S&P that was by year-end downgraded. EMEs include countries in the EMBIG and MSCI for which ratings are available.

Policy Challenges

Surges are Large, and Generating Macro Risks

	Magnitude of Net Inflows[1]	Maximum Net Inflow[2]	Composition of Gross Inflows[3]	Inflation[4]	Real Credit Growth[5]
	(In percent of GDP) (2009Q1-2011Q1)	(In percent of GDP) (2009Q1-2011Q1)	Red=Portfolio Yellow=Other Investment Green=FDI	(In percent; y/y) (2009M1-2011M4)	(In percent; y/y) (2009M1-2011M2)
Brazil	8.16	14.61 (2010Q4)		5.14	10.35
Indonesia	5.95	12.18 (2009Q3)		5.25	8.78
Korea	7.69	15.06 (2009Q3)		3.08	1.86
Peru	7.28	12.50 (2009Q4)		2.30	10.78
South Africa	6.02	13.02 (2010Q3)		5.46	-0.68
Thailand	9.06	19.00 (2010Q4)		1.53	4.84
Turkey	3.28	11.35 (2010Q4)		6.74	13.39

Source: IMF's IFS, INS, and WEO databases.

1/ Average net financial flow to GDP (in percent). For Peru and Thailand, data end in 2010Q2 and 2010Q4, respectively.

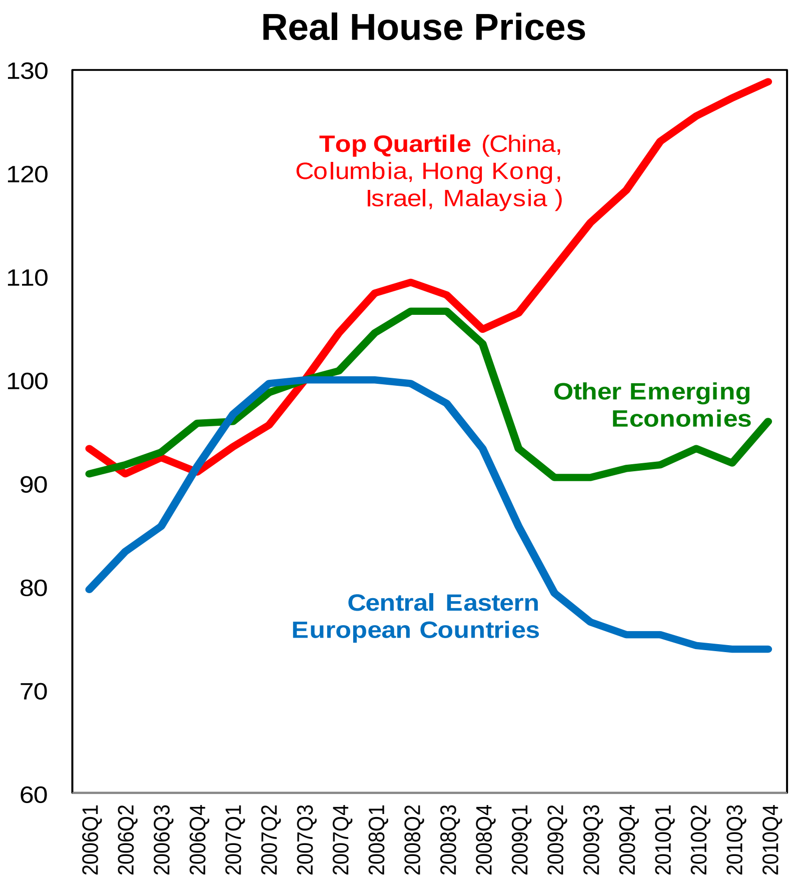
2/ Maximum net financial flow to GDP (in percent) in 2009Q1 and 2011Q1. For Peru and Thailand, data end in 2010Q2 and 2010Q4, respectively. Quarters in parentheses refer to the quarter in which net capital inflow was the largest.

3/ Composition of gross inflows in 2010.

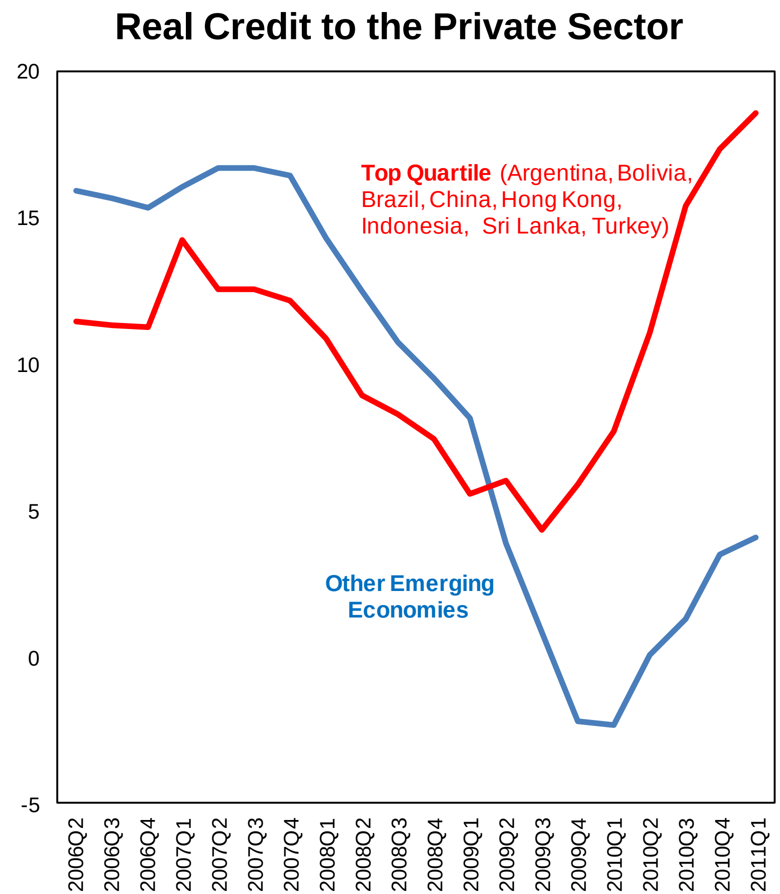
4/ Average year-on-year inflation over 2009M1 to 2011M4.

5/ Average year-on-year real credit growth over 2009M1 to 2011M2.

Amplifying Risks of Asset Price Bubbles…



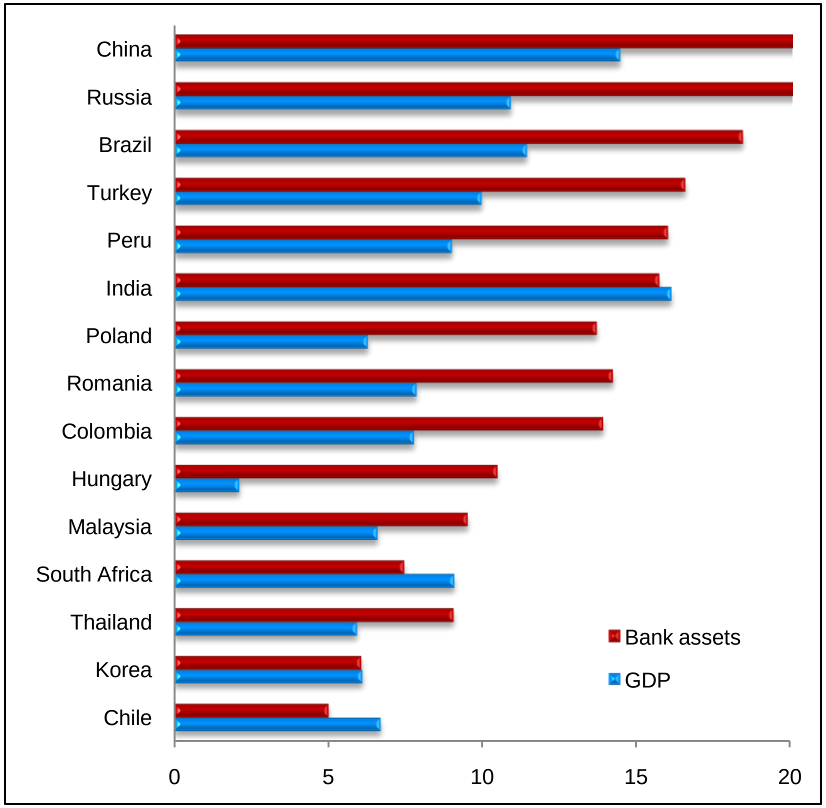
Note: Non-weighted averages of the real house price index. 2007Q3 is set to equal 100. Source: OECD, Global Property Data, Haver Analytics and national sources.



Note: Non-weighted averages of the annual growth of real private credit. (in percent). The group of "other emerging economies" lies below the 75th percentile of the distribution of the 2010Q1-2010Q4 average of the annual growth of real domestic credit to the private sector.
Source: IMF IFS.

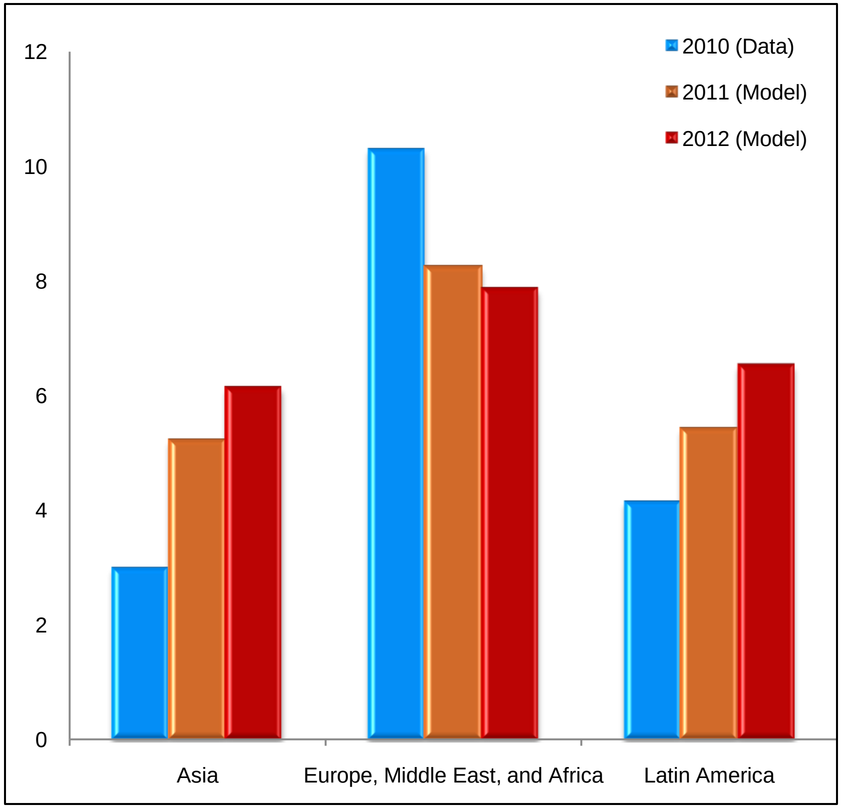
…And Credit Booms

Average Growth Rate, 2008-10
(in percent)



Source: IMF's WEO database and national sources.
Note: Average year-on-year growth in nominal GDP, and total assets of commercial banks.

Model Prediction for NPL Ratios
(in percent)



Source: GFSR October 2011.
Note: Chart shows forecasts based on a panel VAR with private credit to GDP, NPL ratio, net capital flows to GDP, and growth rates of terms of trade and real GDP.
NPL = Nonperforming loan.

Not Surprisingly, EM Policies are Being Adjusted

	Currency Appreciation[1]	Reserve Increase[2]	Policy Rate[3]	Fiscal Tightening[4]	Prudential Policies/ Capital Controls
	(In percent) (2009Q1-2011Q1)	(In percentage points) (2008Q4-2010Q4)		(Structural Balance)	
Brazil	29.91	2.10	**Raised**	**No**	**Yes**
Indonesia	16.41	3.58	**Raised**	**Yes**	**Yes**
Korea	15.84	7.90	**Raised**	**Yes**	**Yes**
Peru	4.06	4.40	**Raised**	**No**	**Yes**
South Africa	30.30	-0.05	**Lowered**	**Yes**	**No***
Thailand	3.06	12.44	**Raised**	**No**	**Yes**
Turkey	-2.32	1.64	**Lowered**	**No**	**Yes**

Source: IMF's INS and WEO databases, and national sources.

[1]/ Cumulative percentage change in NEER from 2009Q1 to 2011Q1.

[2]/ Change in reserves to GDP ratio over end-2008 to end-2010.

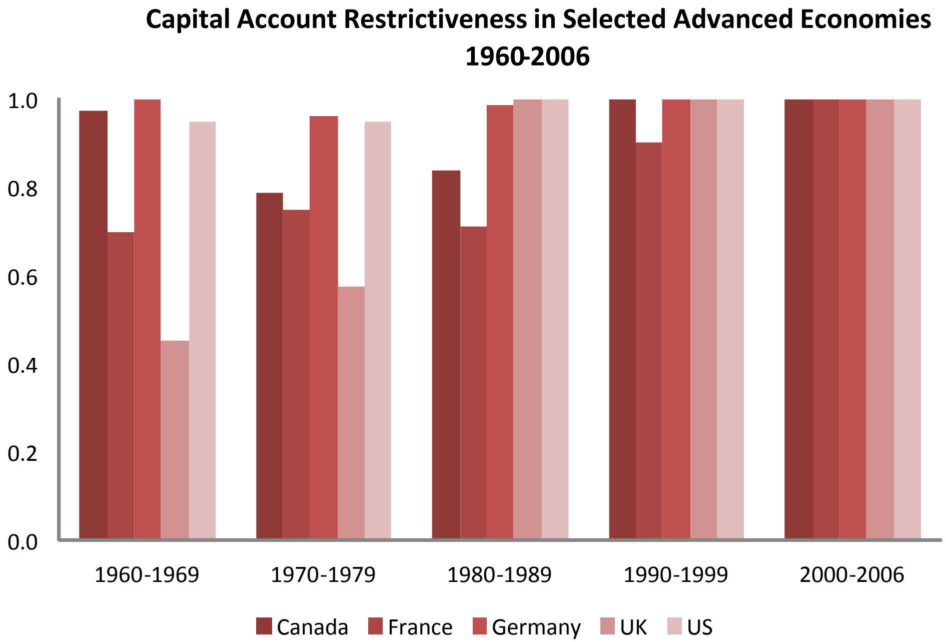
[3]/ Monetary policy is the change in policy rates over 2009Q3 to 2011Q1.

[4]/ Fiscal policy is the change in cyclically adjusted fiscal stance between 2009 and 2010.

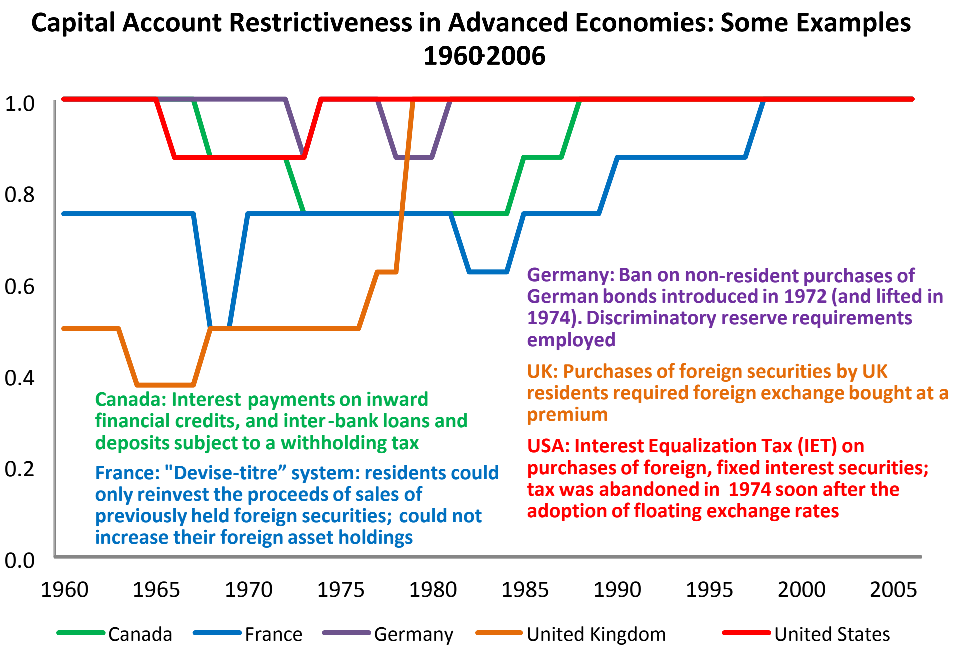
*South Africa has liberalized capital controls on outflows in response to the surge in capital inflows.

Policies to Manage Capital Inflows

Capital Controls: Not a New Issue

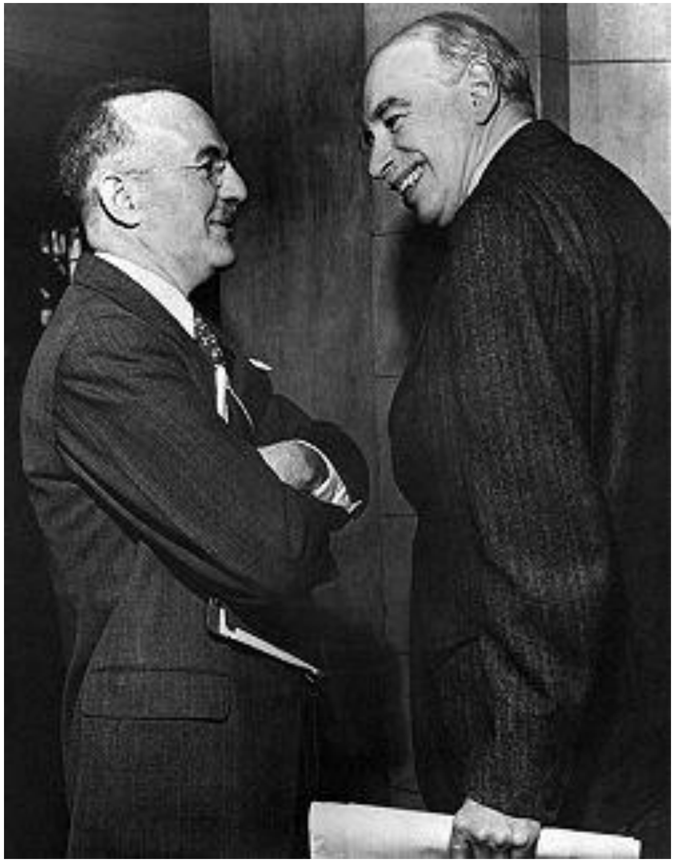


Note: Capital account restrictiveness index (0=highly restrictive; 1=fully liberalized).
Source: Quinn and Toyoda (2008).



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

Actually a Very Old One!



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.

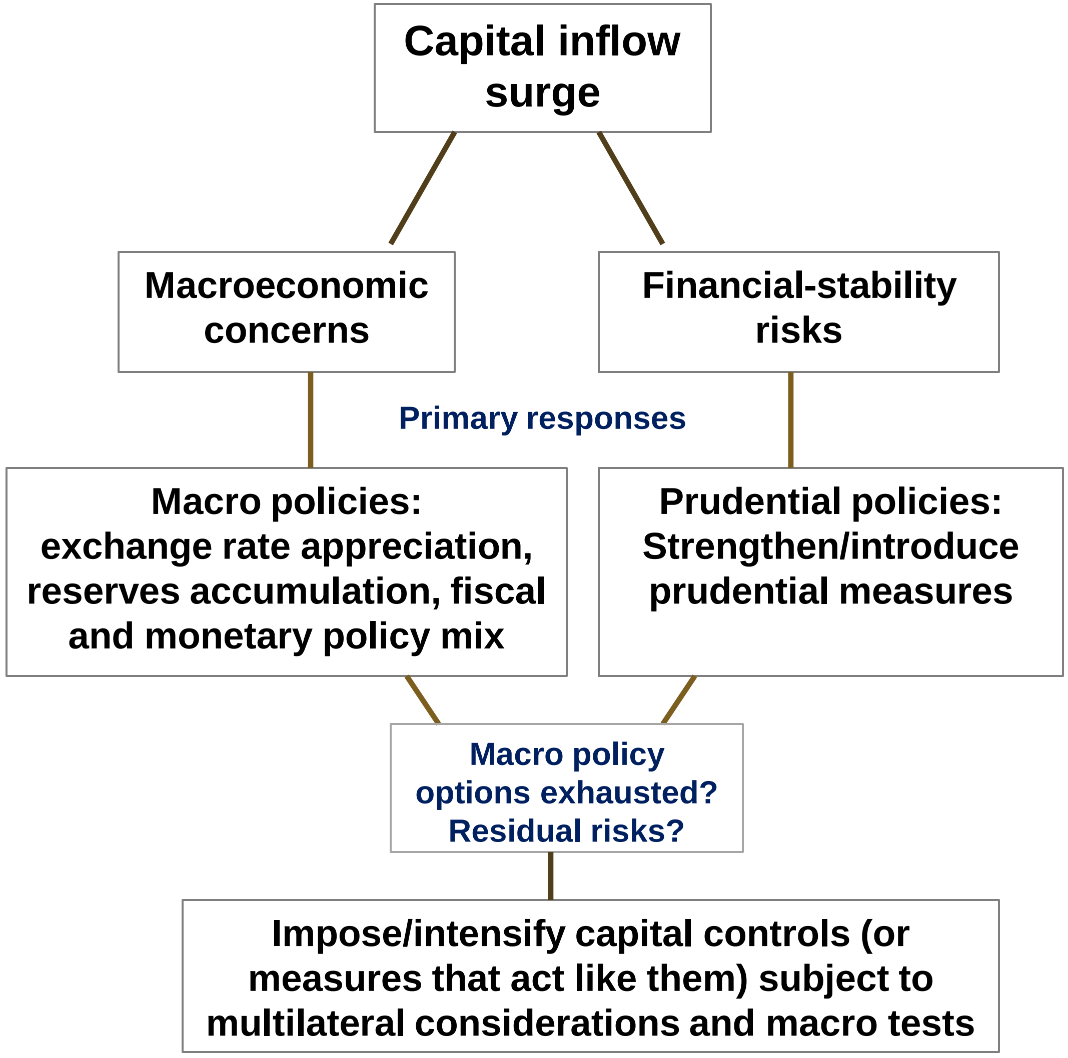
The task before us is not to prohibit instruments of control but to develop those measures of control, those policies of administering such control, as will be the most effective in obtaining the objectives of world-wide sustained prosperity

HARRY DEXTER WHITE

When are Capital Controls Appropriate?

- Ostry et al. (Feb., 2010) argued that capital controls appropriate for inclusion in the policy toolkit to address macroeconomic risks, when
  - Currency overvalued
  - Further reserve accumulation undesirable
  - Inflation/overheating concerns
  - Limited scope for fiscal tightening
- Ostry et al. (April, 2011) consider financial-stability risks for capital controls in greater detail, and examine design issues around capital controls

How do Macro and Prudential Concerns Fit Together?

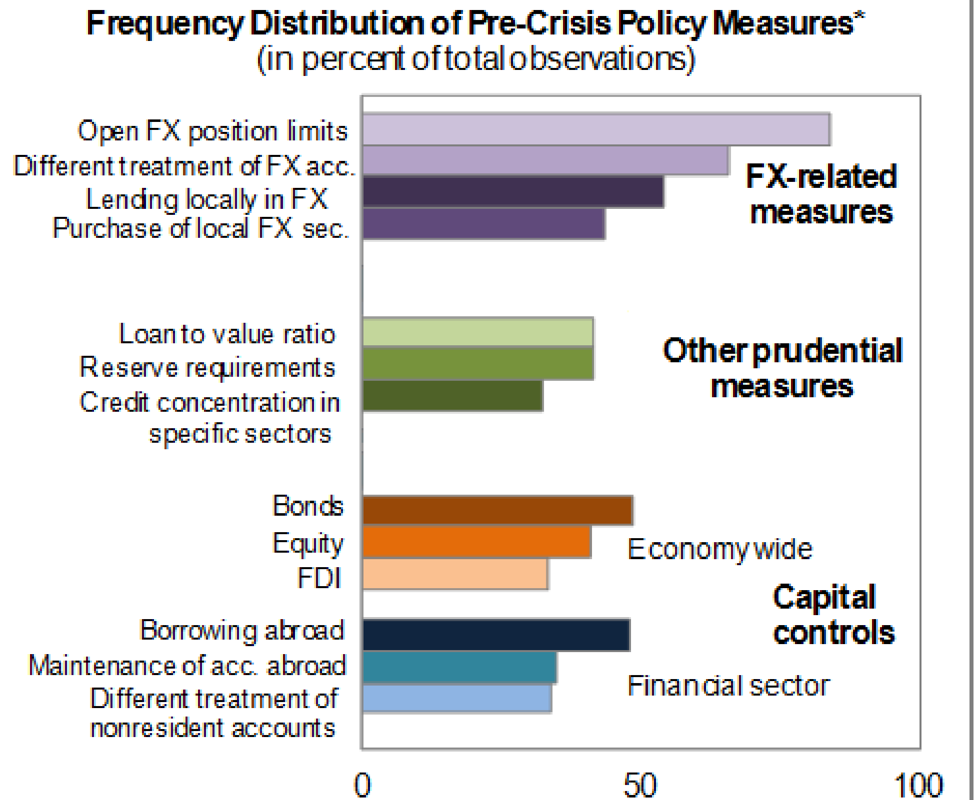


The Macro-prudential Policy Toolkit

What's in the Toolbox?

- FX-related prudential measures
  - Discriminate according to the currency, not the residency, of the flow
  - Applied to regulated financial institutions, primarily banks
  - Examples: limits on banks' open FX position (as a proportion of their capital), and limits on FX lending by domestic banks (or higher capital requirements)
- Other prudential measures
  - Reduce systemic risk without discriminating based on residency/currency
  - Examples: LTV ratios, limits on credit growth and sectoral lending, dynamic loan-loss provisions, and counter-cyclical capital requirements
- Capital controls
  - Discriminate between residents and non-residents in cross-border capital movements (OECD Code of Liberalization of Capital Movements, 2009)
  - Economy-wide or sector specific (usually the financial sector) or industry specific
  - Cover all flows, or target specific types (debt, equity, FDI; short vs. long-term)
  - Examples: taxes, URRs, licensing requirements, and outright limits or bans

How Common are the Measures?



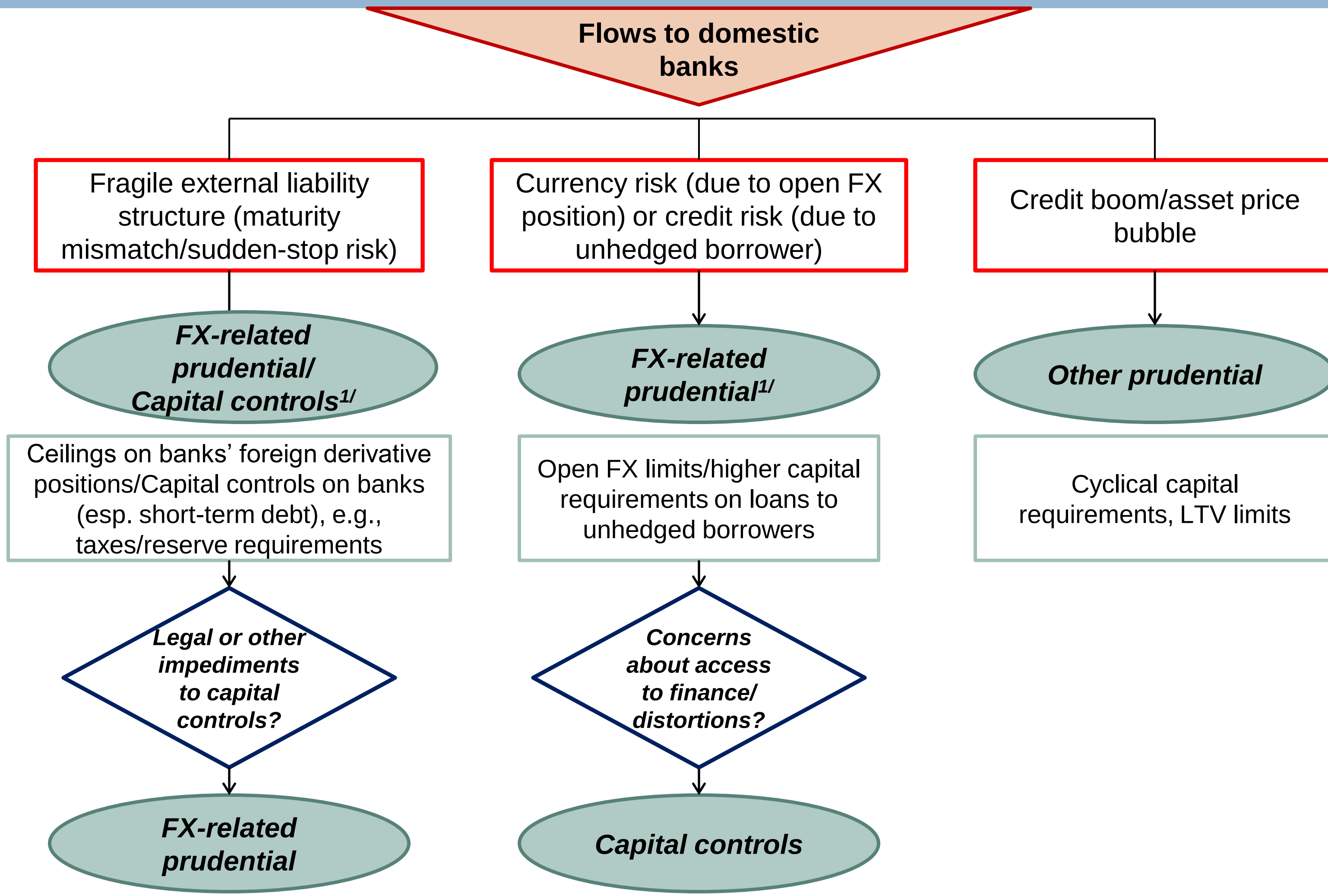
Source: IMF's AREAER, Schindler (2009), and IMF country desk survey.
*Numbers reflect the share of countries with a measure in 2007.

Issues in Classifying Instruments

- De jure prudential tools may operate like capital controls
  - A regulation differentiating based on the currency of denomination may operate like a capital control to the degree that most FX liabilities are to nonresidents
  - A measure that requires banks to pay a tax on their non-core liabilities could well in practice operate just like a capital control if most of the funding that banks receive comes from abroad
  - A regulation discouraging FX lending to unhedged borrowers may act as a capital control (reduce inflow) or prudential measure (change currency composition of foreign liabilities). Difficult to tell at implementation stage
- De jure capital controls may have primarily prudential intent (e.g. differential reserve requirements by residence of liability)
- Fine line between FX-related and other prudential measures (e.g. differential LTV ratio by currency of denomination)

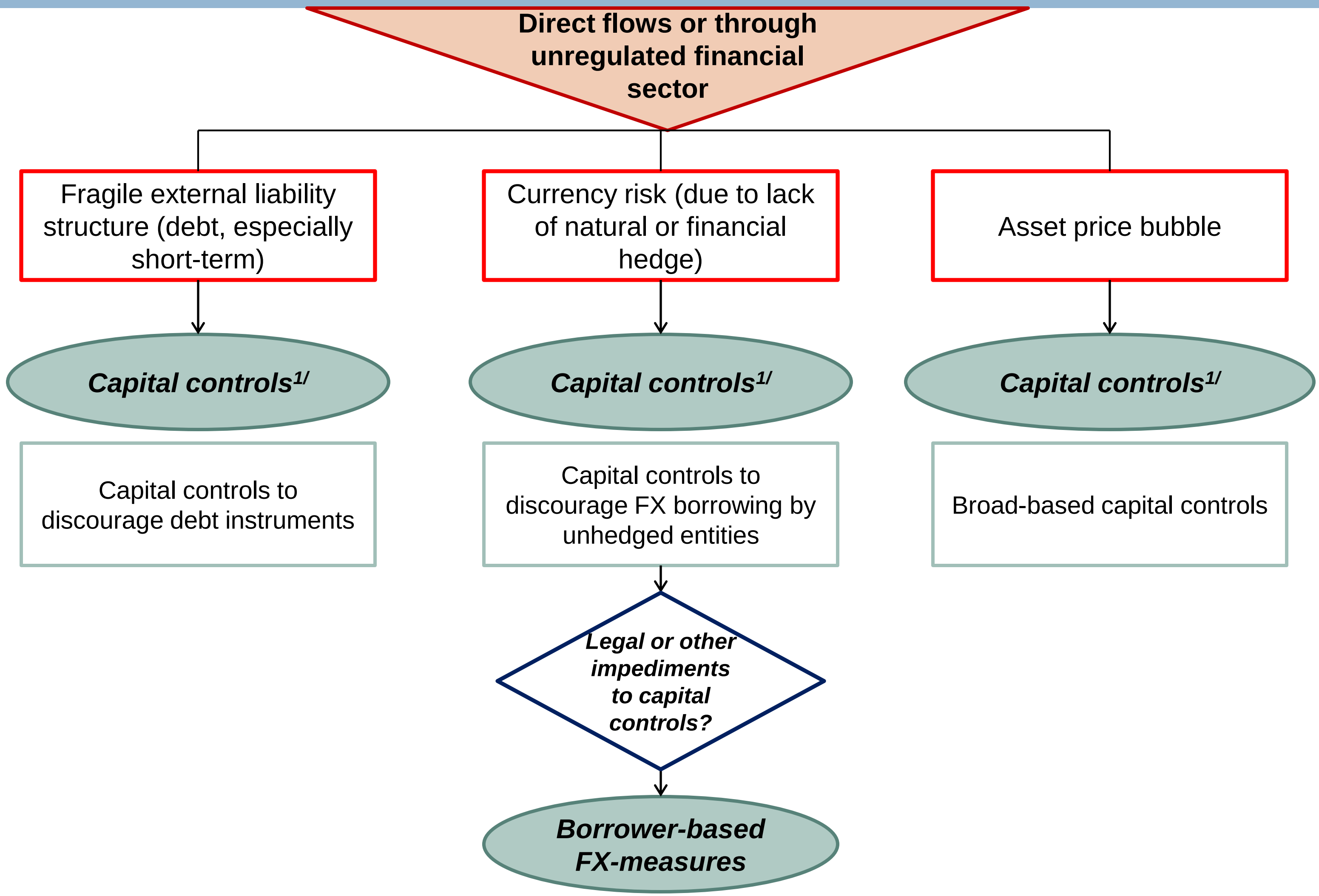
Matching Risks and Tools

Choice of Instruments: Flows Intermediated through the Financial Sector



1/ Once macro policy space exhausted, and taking due account of multilateral considerations.

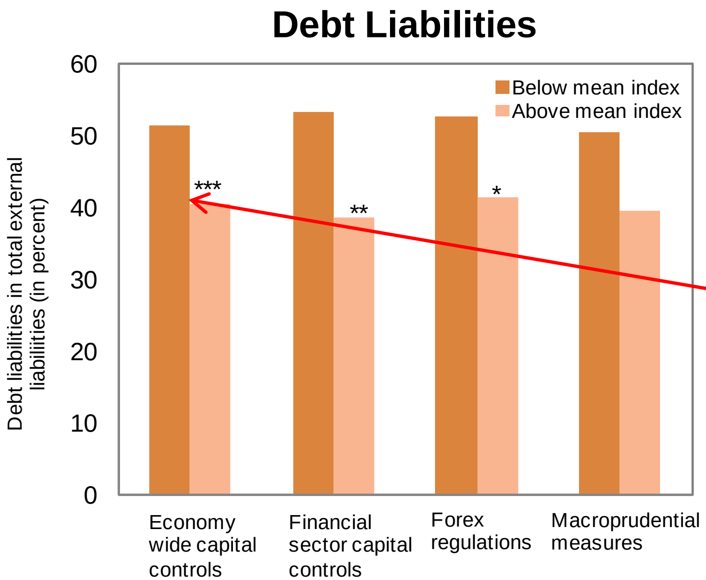
Choice of Instruments: Flows Not Intermediated through the Financial Sector



1/ Once macro policy space exhausted, and taking due account of multilateral considerations

Policy Measures and Financial Stability Risks: Some Suggestive Evidence

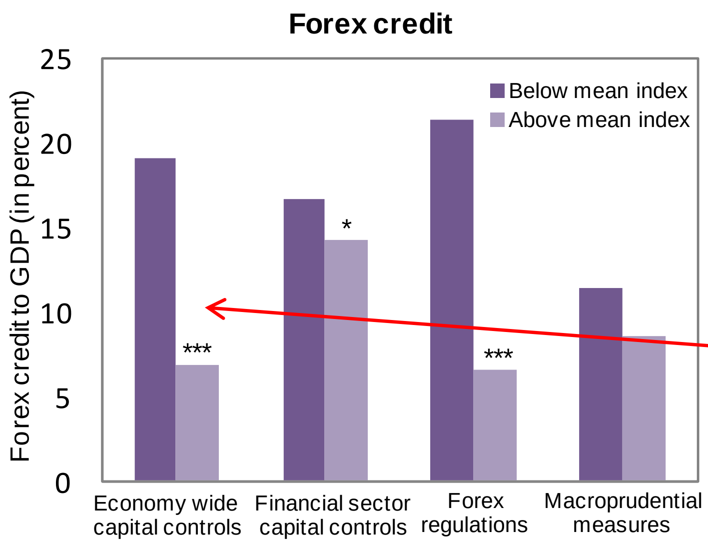
External Liability Structure: Cross-Sectional Evidence*



Source: Authors' estimates.
*Sample: 38 EMEs over 2003-07. Debt liabilities is the residual (including constant) obtained after regressing the share of debt liabilities in total external liabilities in 2007 (in percent) on a (lagged) composite external vulnerability index.

Capital controls and FX-related prudential measures associated with smaller proportion of debt in external liabilities …

FX Lending: Cross-Sectional Evidence*

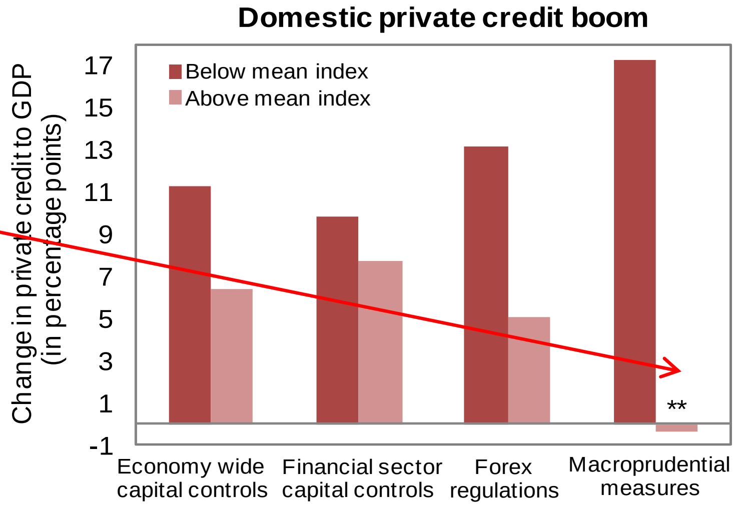


Source: Authors' estimates.
*Sample: 29 EMEs over 2003-07. Forex credit is the residual (including constant) obtained after regressing forex credit to GDP in 2007 on private credit to GDP in 2005 and a binary variable (=1) if fixed exchange rate regime in place.

Capital controls and FX-related prudential measures associated with lower foreign currency denominated lending by domestic banks

Credit Booms: Cross-Sectional Evidence*

Other prudential measures associated with lower lending booms by domestic banks

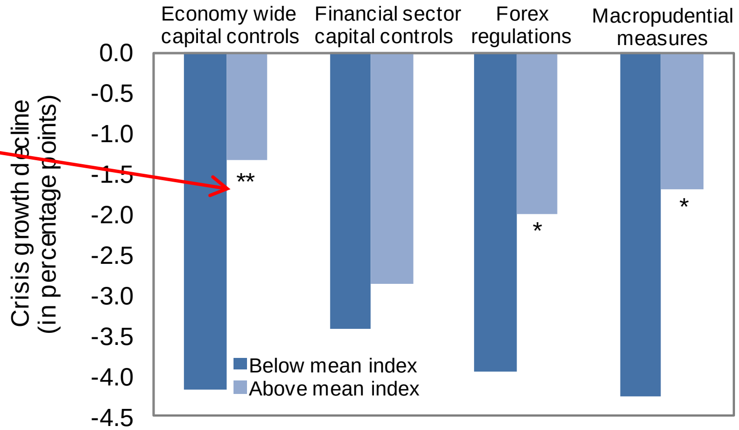


Source: Authors' estimates.
*Sample: 29 EMEs over 2003-07. Private credit boom is the residual (including constant) obtained after regressing change in private credit to GDP over 2003-07 on private credit to GDP in 2003.

Crisis Resilience: Recent Crisis*

Capital controls, FX-related and other prudential measures associated with greater crisis resilience

Crisis Resilience



Source: Authors' estimates.
*Sample: 41 EMEs over 2003-07. Crisis resilience is the residual (including constant) obtained after regressing the difference between real GDP growth rates averaged over 2008-09 and 2003-07 on trading partner growth and terms of trade change.

Designing Capital Control Instruments

Capital Controls: Need to be Effective and Efficient

- 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
    - Prudential concerns: Controls could be imposed for persistent flows
  - **Broad-based or targeted controls?**
    - Macroeconomic concerns: Broad based possibly with limited exemptions
    - Prudential concerns: Targeted but taking account of circumvention possibilities
  - **Price or quantity-based controls?**
    - Macro concerns: Price-based measures easier to adjust cyclically, and simpler to administer
    - Prudential concerns: Quantitative measures more appropriate when authorities face information asymmetries/uncertainty about private sector's response
  - **Other considerations**: Administrative and institutional capacity

Conclusions

Key Takeaways and Next Steps

- Macro and prudential policies can go a long way to deal with inflow surges
  - Use and strengthen orthodox toolkit before resorting to capital controls
- Capital controls and prudential measures should target specific risks
  - Prudential measures: when flows are intermediated through the banking sector
  - Capital controls: when flows by-pass the banking sector
- What's next on the agenda?
  - Multilateral consequences on capital flows of:
    - Large advanced economy monetary policies
    - Advanced economy regulatory and supervisory policies
    - Imposition of capital controls by EMs
  - Rules of the road—benefits of international policy coordination
    - Multiple instruments—at low levels—by both recipient and source countries may reduce distortionary costs
    - Coordination between recipient countries may reduce the likelihood of "control wars"
  - Capital account liberalization and outflow controls