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Recent trends in measures to manage capital flows in emerging economies

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* The views expressed in the presentation are those of the author. No responsibility for them should be attributed to the Bank of Canada.

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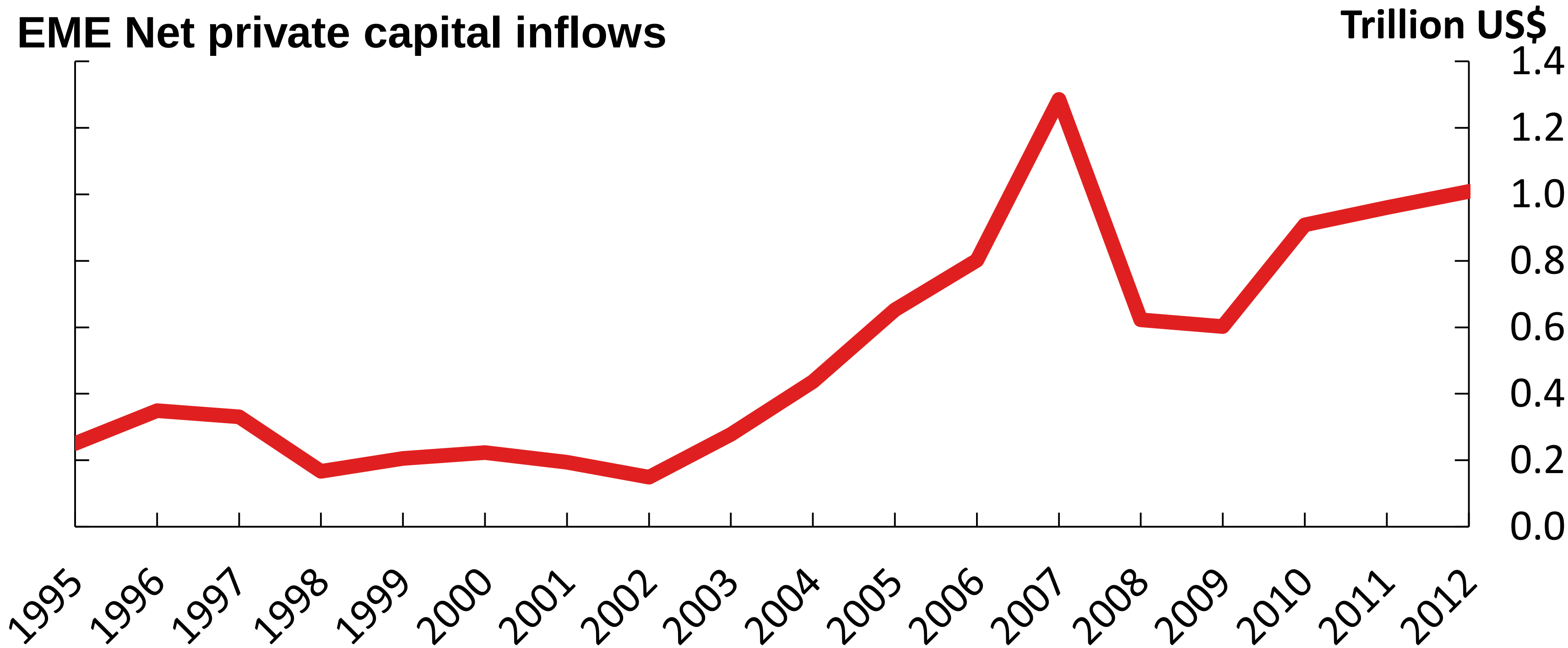
After a brief reversal during the crisis, net capital inflows to EMEs rebounded.



Source: IIF

Note: Estimates used for 2010 data, Forecasts for 2011 and 2012

Background

- Capital flows to EMEs rebounded in 2010
- Major EMEs tightened inflow controls
- Capital Flow Measures (CFMs) can have global implications:
  - Distort allocation of capital
  - Distort currency valuations
- Therefore, IMF has proposed a framework for "need to impose CFMs"

3 Questions

1. Are we seeing a rise in Capital Flow Measures (CFMs) since the crisis?

2. Are CFMs being used as last resort?

3. Are CFMs being used for prudential reasons?

Presentation Plan

- Concepts:
  - What are CFMs?
  - What kind of data do we have on CFMs?
  - How can we classify CFMs for economic analysis?
- 3 Questions

What are Capital Flow Measures (CFMs)?

- Regulations on the capital account
- Examples:
  - Tax on non-resident investments in Brazil (Capital Control)
  - Differential reserve requirements on foreign currency deposits (Currency Based Measure)
- We count the number of new measures

Data

- 21 MSCI EMEs + Argentina (G-20)
- 2004 - 2010
- Data source: IMF's AREAER + central bank websites + news sources
- Data point: Each change in a capital account regulation: "Policy changes/announcements"

Data

- "Small changes"
  - Major policy announcements are broken up into categories of transactions that they affect (in AREAER) and each is counted separately.

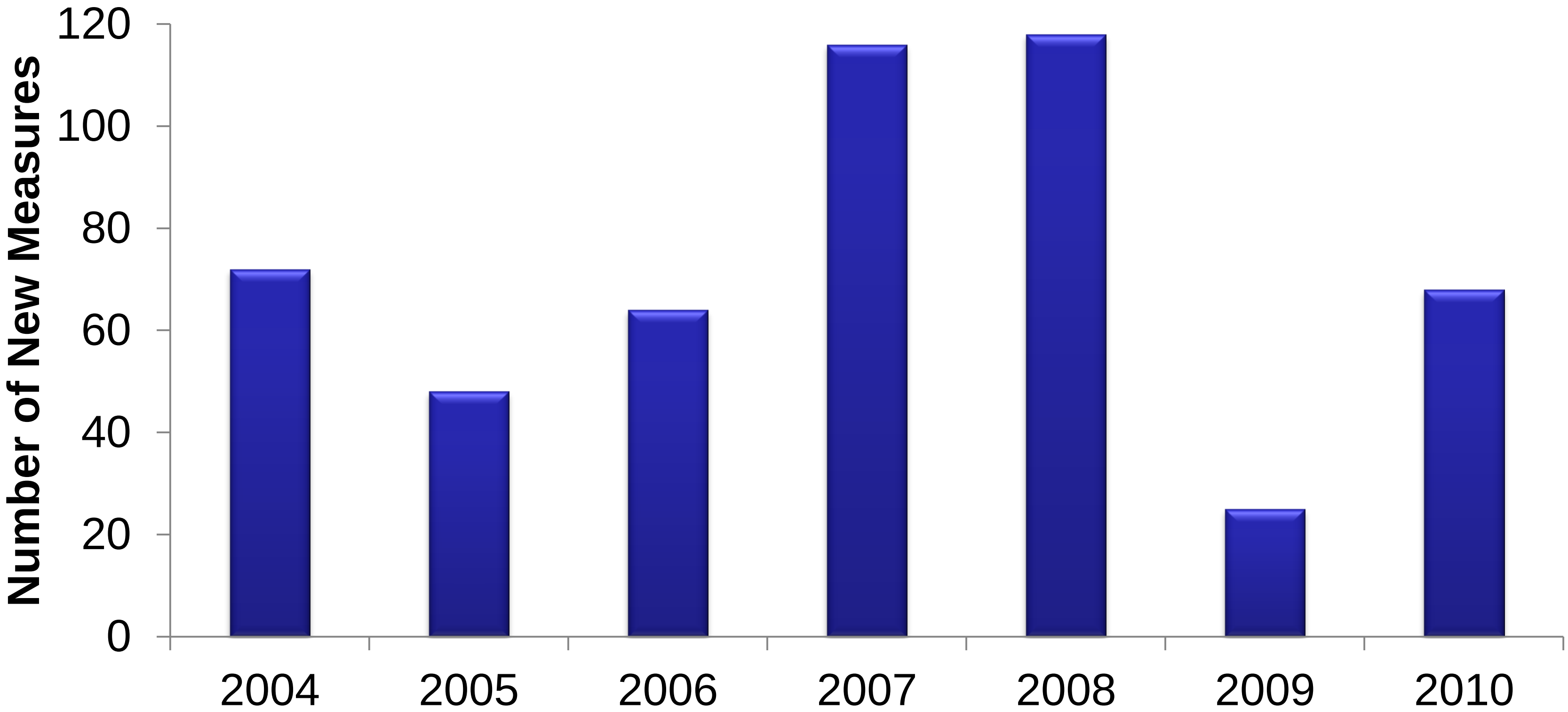
Data

- "Small changes"
- Example: 14 March 2005, Brazil
  - **Controls on capital and money market instruments** : an elimination of the limit on investment in shares of the main company by employees of firms belonging to foreign groups;
  - **Controls on direct investment**: an elimination of the limit on remittances for outward FDI by non-financial private enterprises;
  - **Controls on credit operations** : a removal of the authorization requirement for guarantees by non-financial judicial persons in credit operations for their foreign subsidiaries.

Data: Relation to existing literature

- De-jure indices of capital controls (Chinn and Ito, 2008; Quinn, 1997; Edwards, 2004).
- Use information on existence of each type of regulation.
- This paper: change in each type of regulation.

All new capital account measures



Economic classification of CFMs

1. Impact on Net Capital Inflows (NKI) ✓

2. Impact on capital account openness
   (Easings vs. Tightenings)

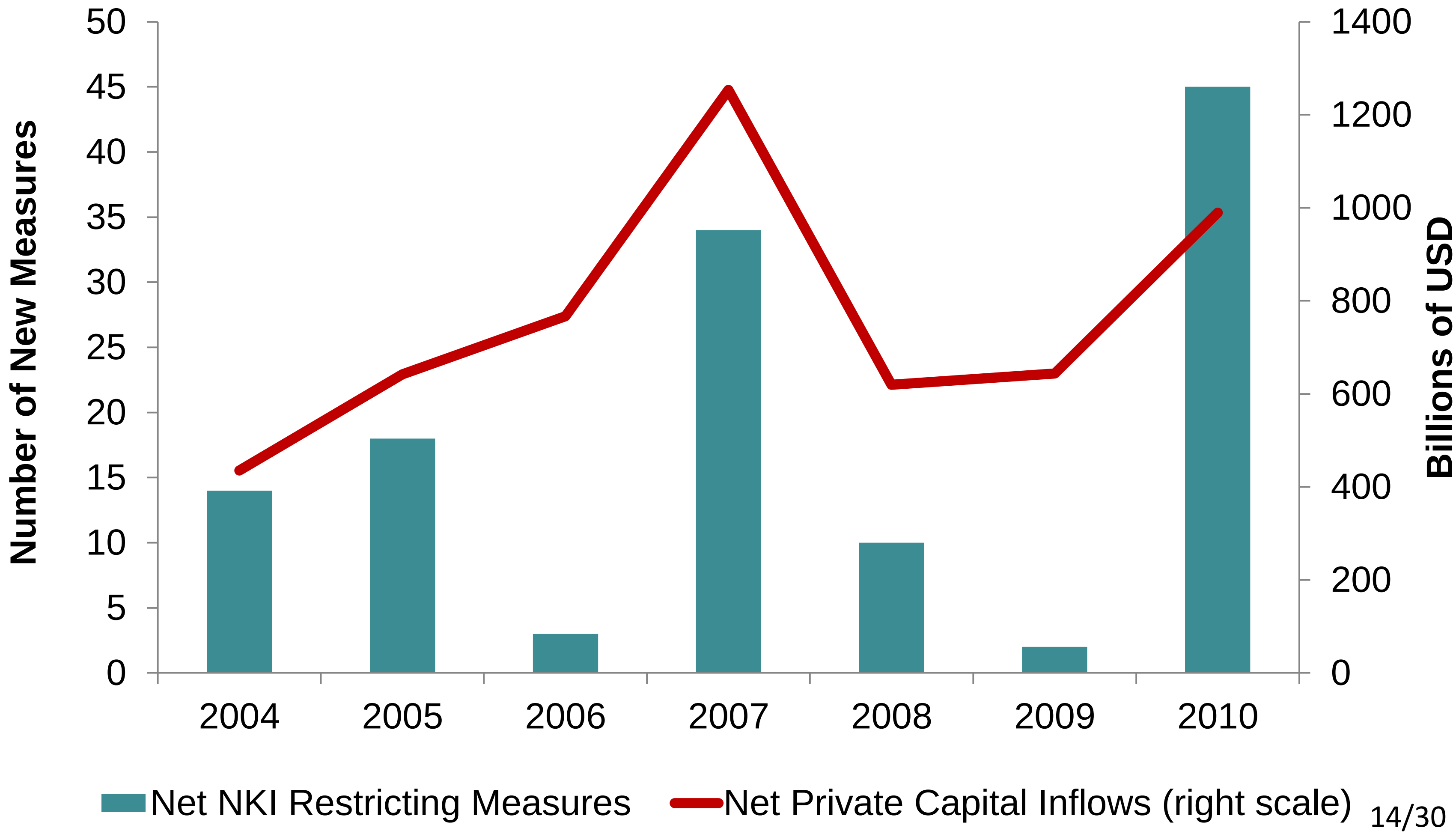
Classification of CFMs based on impact on NKI

NKI = Inflows – Outflows

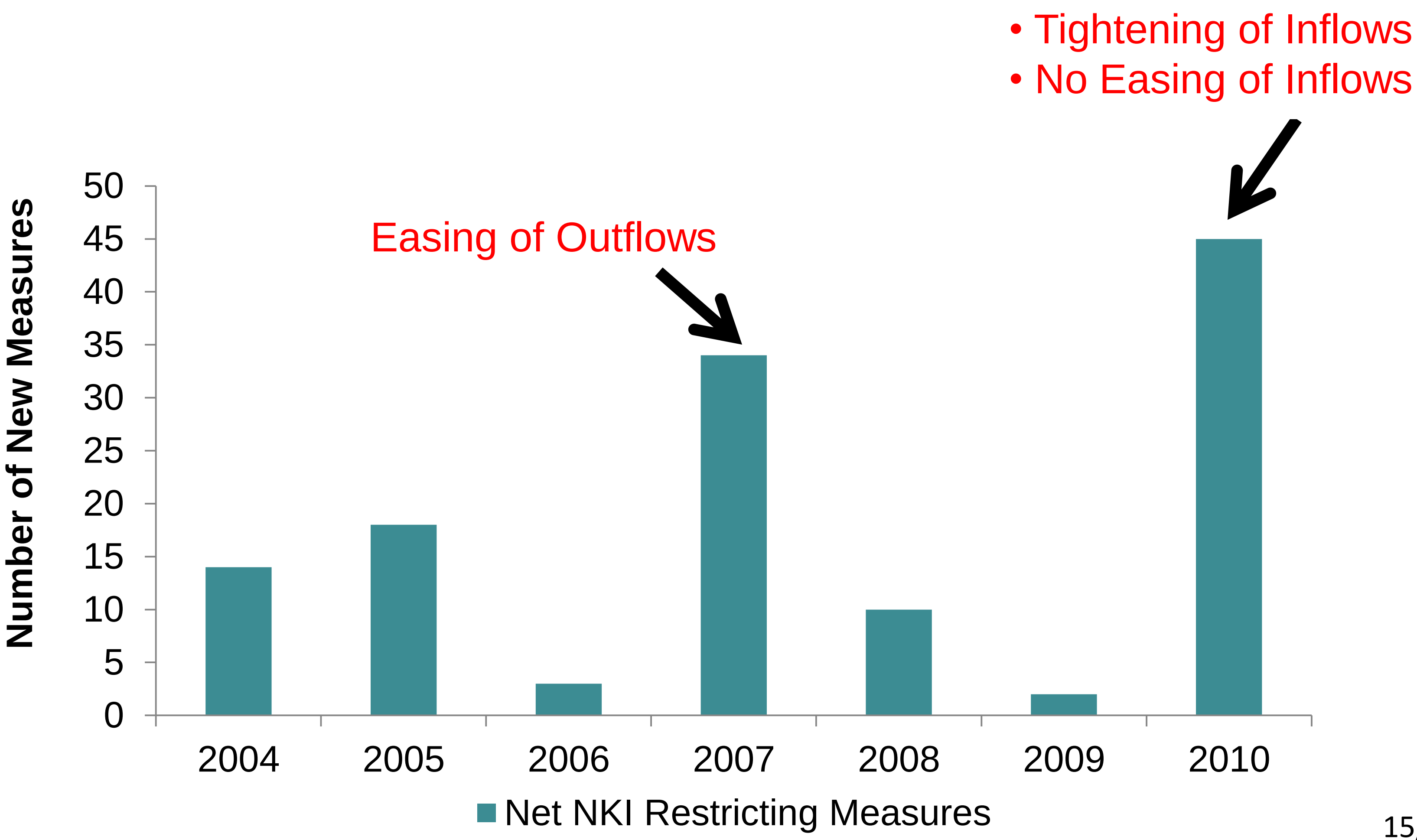
	Inflow Controls	**Outflow Controls**
1. NKI Reducing Measures	Tighten	Ease
2. NKI Increasing Measures	Ease	Tighten

=> Net NKI Restricting Measures = NKI Reducing Measures
- NKI Increasing Measures

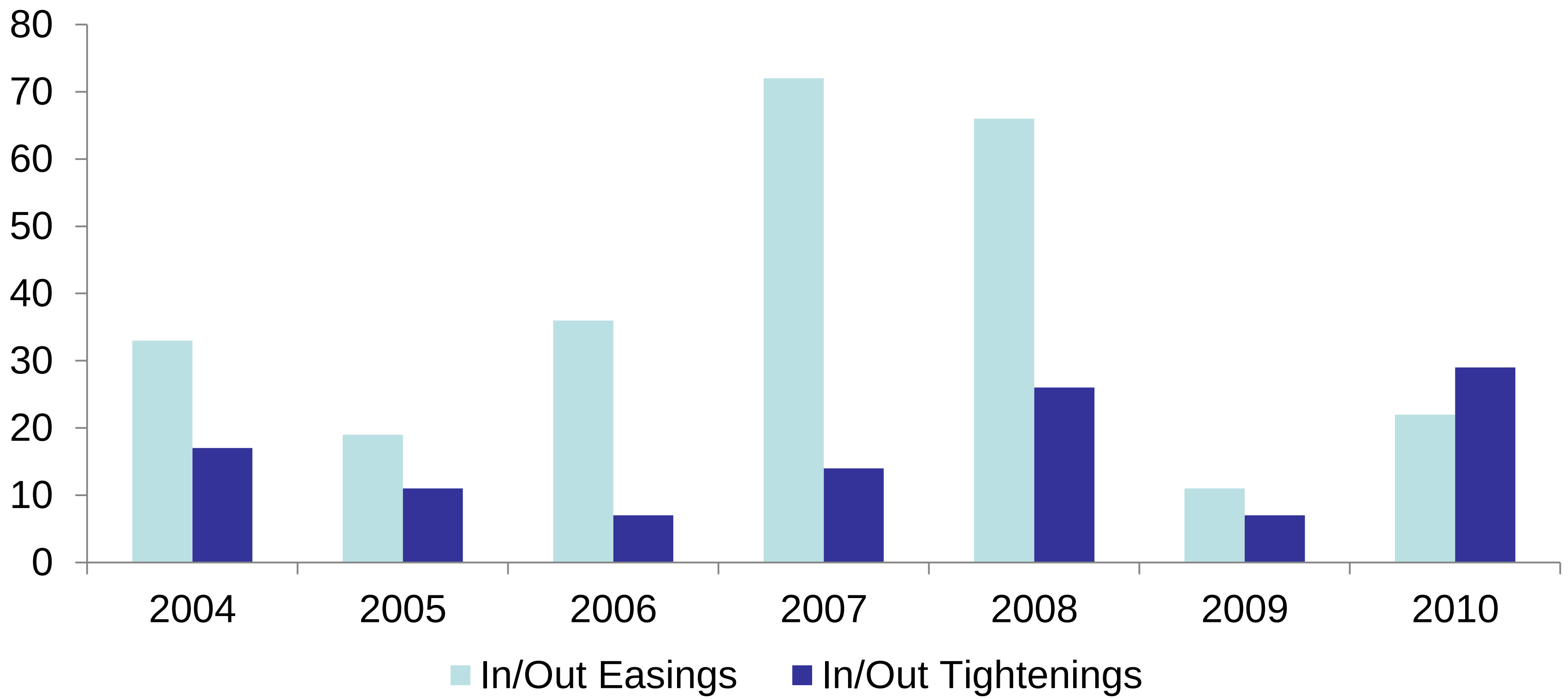
Net NKI Restricting Measures spiked in 2010



Compositional differences between 2007 and 2010 spikes in Net NKI Restricting Measures



Trend towards capital account liberalization stalled post crisis.



Robustness checks

1. Are we seeing a rise in CFMs?

- Yes, but a similar rise took place in 2007

- Key difference in post-crisis period:
  - Stall in capital account liberalizations
- Implications for:
  - Global resource allocation
  - Resolution of global imbalances

3 Questions

1. Are we seeing a rise in Capital Flow Measures (CFMs)?

2. Are CFMs being used as last resort?

3. Are CFMs being used for prudential reasons?

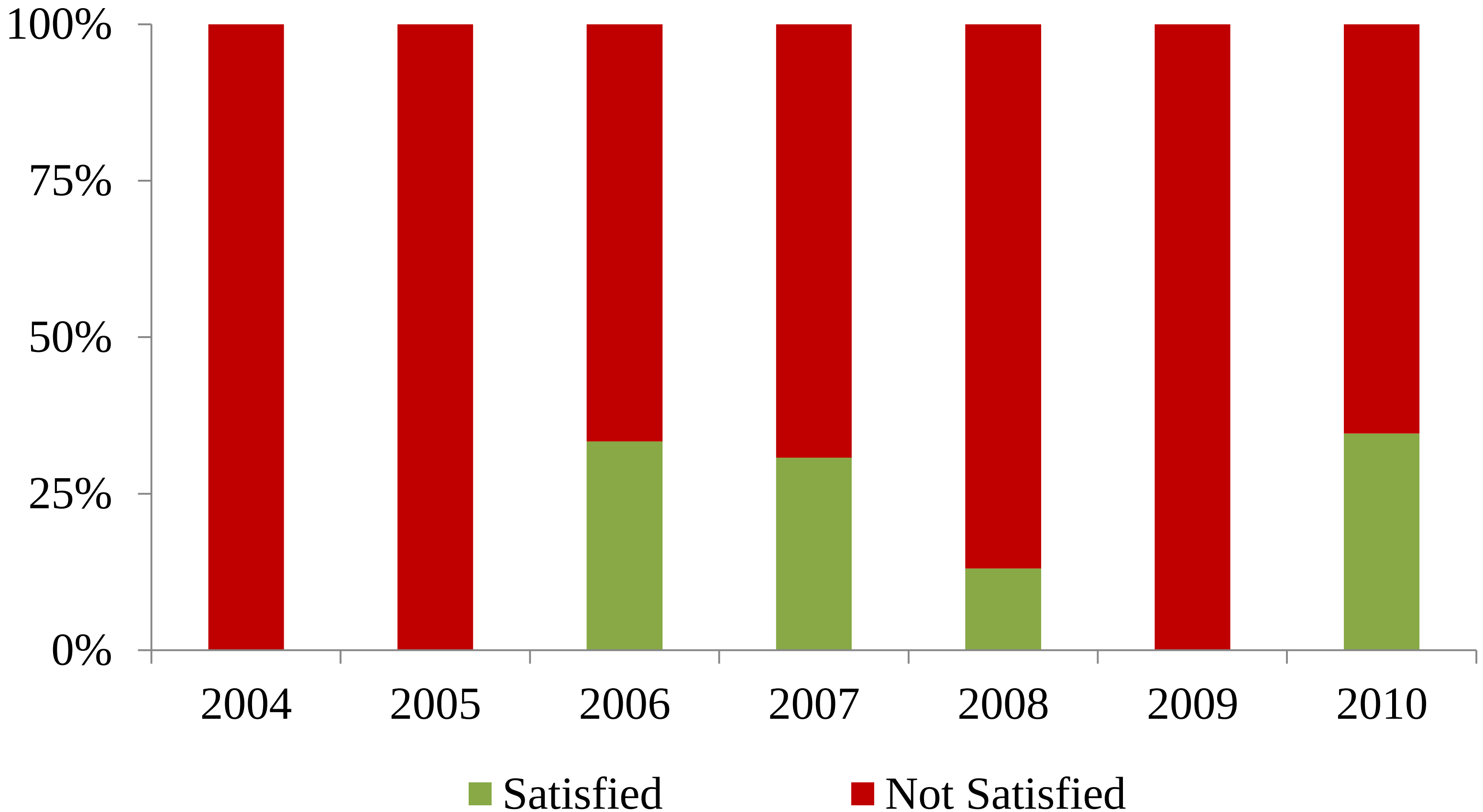
2. Are CFMs being used as last resort?

- IMF criteria for "need to impose CFMs":
  1. Economy overheating (and no scope for fiscal consolidation)
  2. Exchange rate not undervalued
  3. Reserves adequate

Example: Brazil, 2007 or 2010

Numerical Criteria		**Policy Options**	
1. Economy overheating	→	Reduce rates	✘
2. Exchange rate not undervalued	→	Allow appreciation	✘
3. Reserves adequate	→	Accumulate reserves	✘
		Impose CFMs	✓

Percentage of inflow tightening measures being used as last resort is low.



2. Are CFMs being used as last resort?

Usually not.

3 Questions

1. Are we seeing a rise in Capital Flow Measures (CFMs)?

2. Are CFMs being used as last resort?

3. Are CFMs being used for prudential reasons?

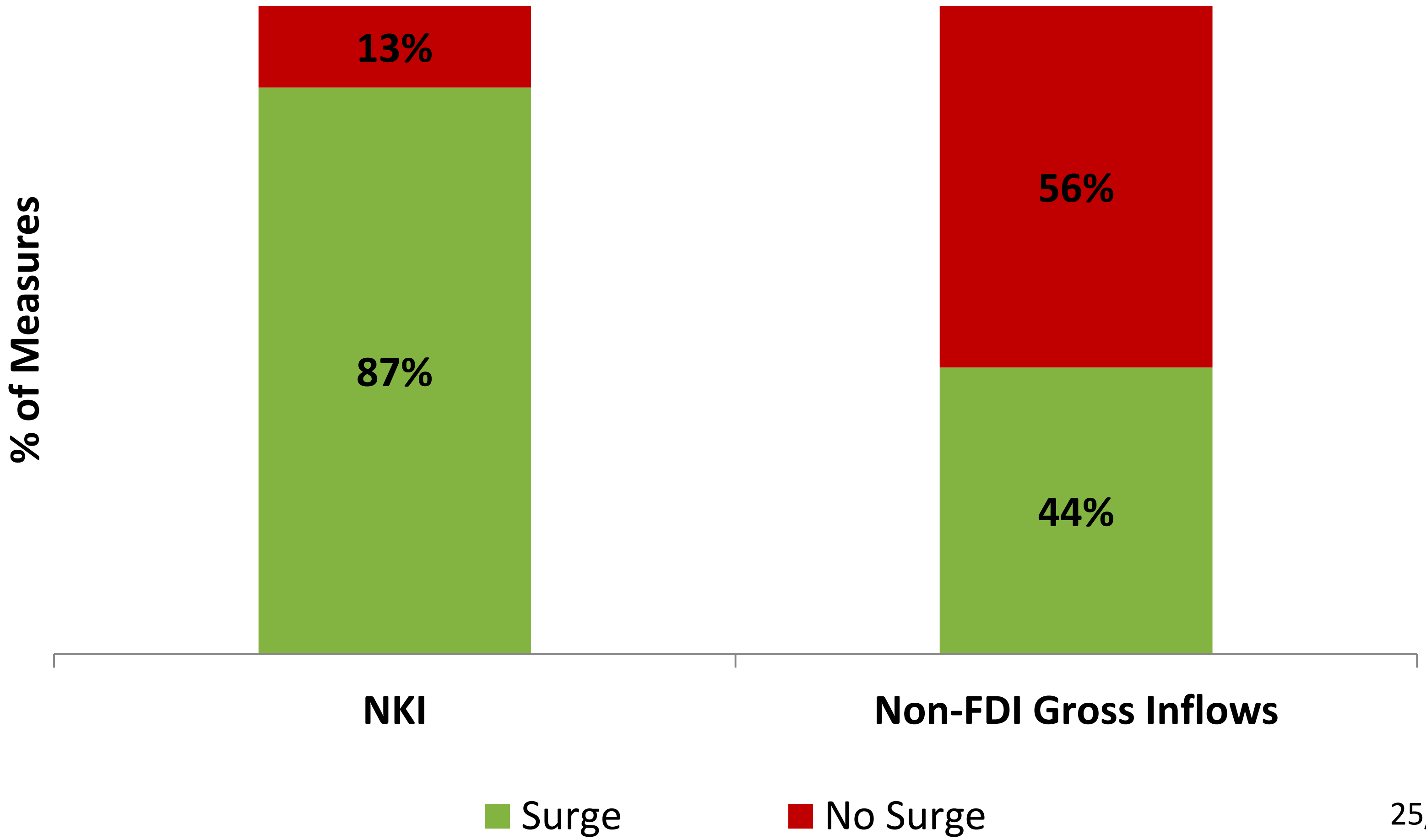
3. Are CFMs being used for prudential reasons?

- Percentage of all measures imposed during "non-FDI gross inflow surges"

- Percentage of all measures that are "prudential type"

Details

Inflow Tightening Measures in 2 Types of Surges

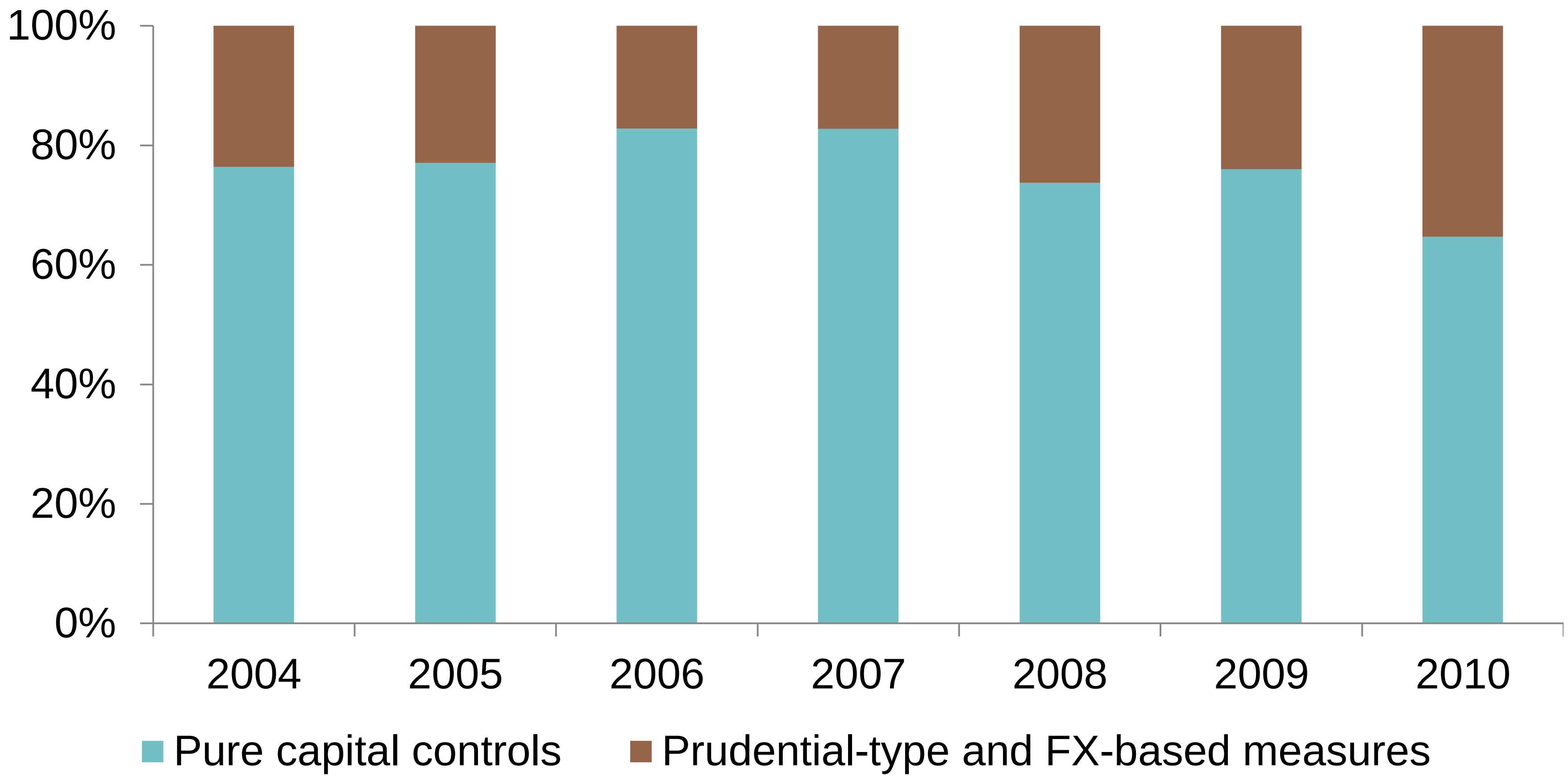


3. Are CFMs being used for prudential reasons?

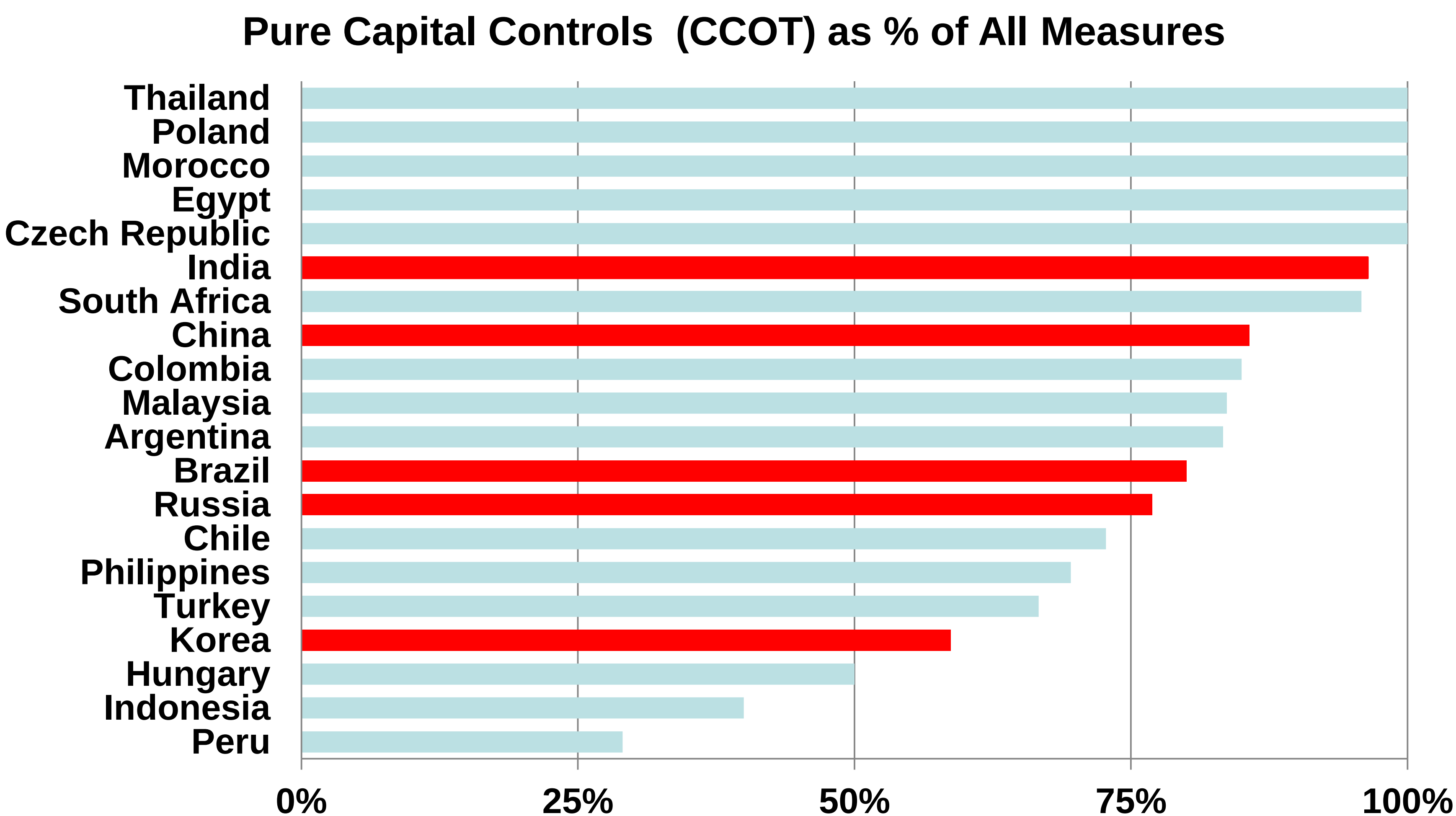
- Percentage of all measures imposed during "non-FDI gross inflow surges"
- Percentage of all measures that are "prudential type"

Details

Most measures are pure capital controls, not prudential-type measures



Countries differ in their reliance on pure capital controls



3. Are CFMs being used for prudential reasons?

- Apparently not
- Share of prudential type measures has increased - but not much.
  - Differences between countries.

Conclusions

- Rise in net NKI restricting measures in 2010:
  - Represents a halt in capital account liberalizations
  - Trend towards global financial integration has stalled
- CFMs are not being used as measures of the last resort.
- Small shift from non-prudential type measures to prudential type measures

Thank you!

Data

- 8 AREAER categories under “capital transactions”:
  - Controls on capital and money market instruments:
  - Controls on derivatives and other instruments
  - Controls on credit operations:
  - Controls on direct investment
  - Controls on liquidation of direct investment
  - Controls on real estate transactions
  - Controls on personal capital transactions
  - Provisions specific to the financial sector:

Changes during 2009

Arrangements for payments and receipts	*01/01/2009*	Participants in the ACU were allowed to settle transactions either in ACU dollars or ACU euros.
Imports and import payments	*01/01/2009*	Participants in the ACU were allowed to settle transactions either in ACU dollars or ACU euros.
Capital transactions		
Controls on capital and money market instruments	*01/02/2009*	The limit on investments by FIIs in corporate bonds was raised from \$6 billion to \$15 billion.
Controls on credit operations	*01/02/2009*	The all-in-cost ceiling on external commercial borrowing under the approval route was removed.
	04/28/2009	Banks were not allowed to grant new loans or renew existing loans in excess of Rs 10 million (previously, Rs 2 million) against nonresident external rupee (NR(E)RA) and FCNR deposits either to the depositor or third parties. Banks have also been advised not to undertake artificial slicing of the loan amount to circumvent the ceiling.
Provisions specific to the financial sector		
Provisions specific to commercial banks and other credit institutions	*01/17/2009*	The CRR for nonresident deposits, in both local and foreign currency, was reduced to 5.0% from 5.5% of net demand and time liabilities.

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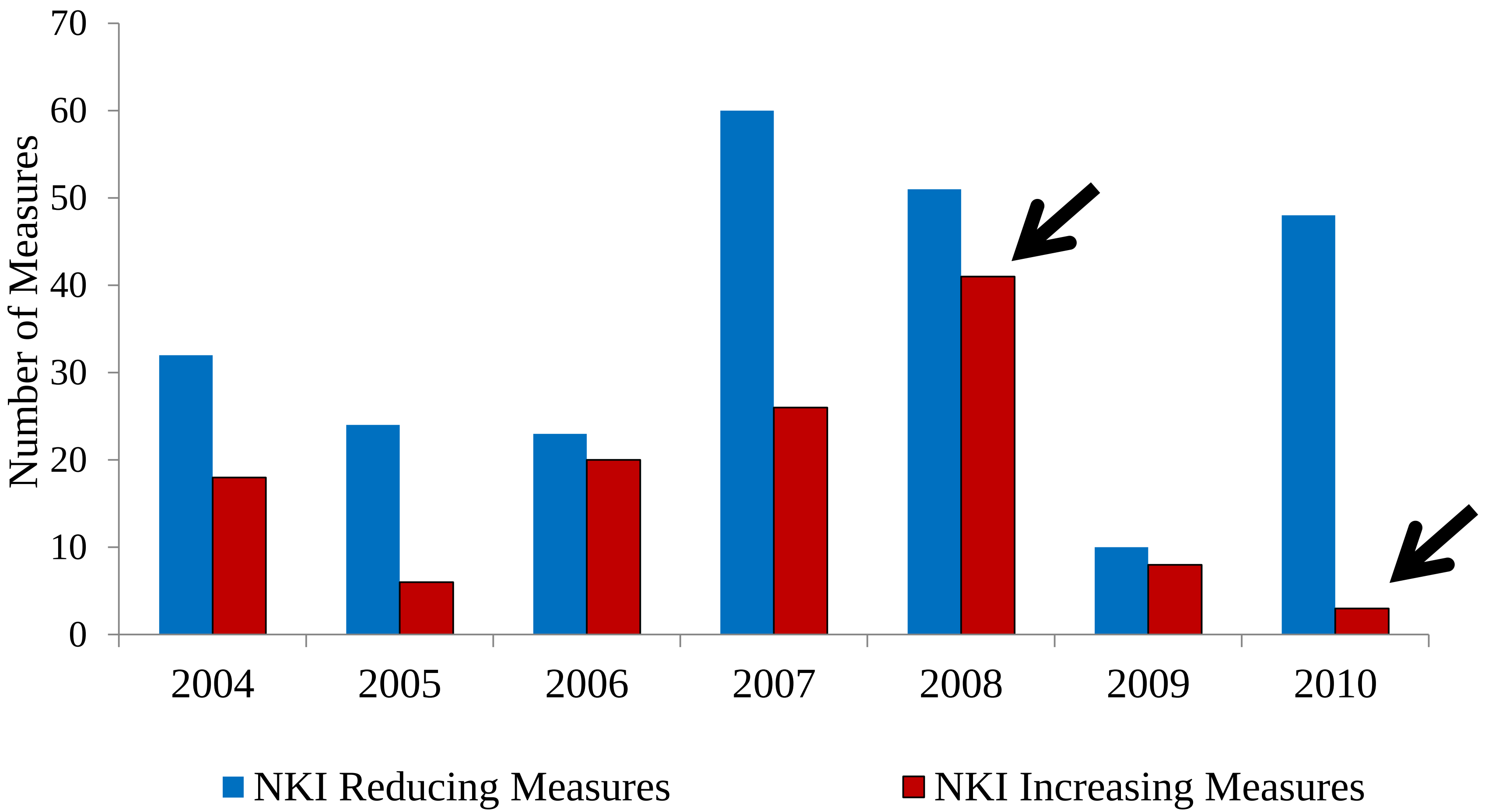
NKI Increasing Measures have dropped since the crisis.



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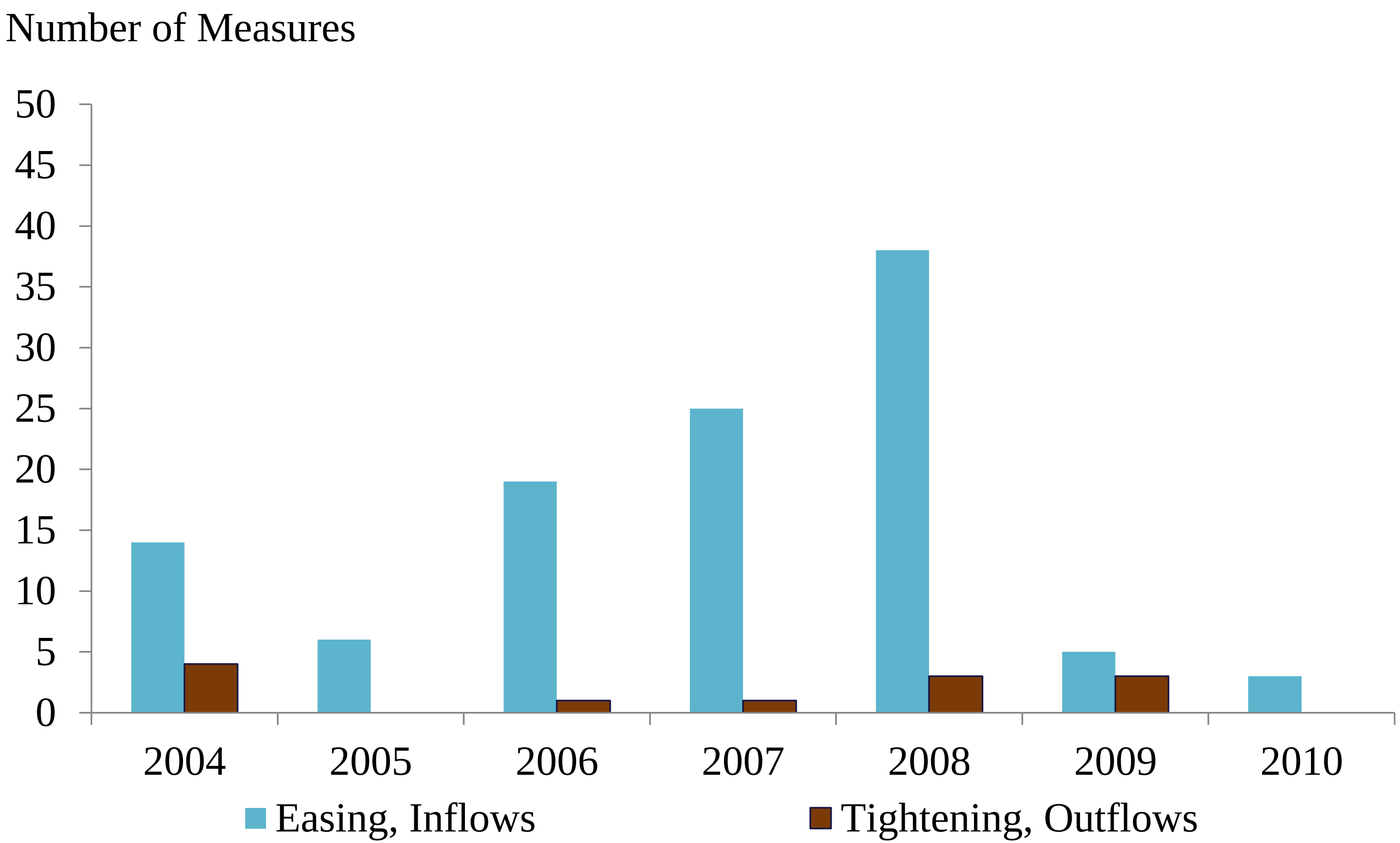
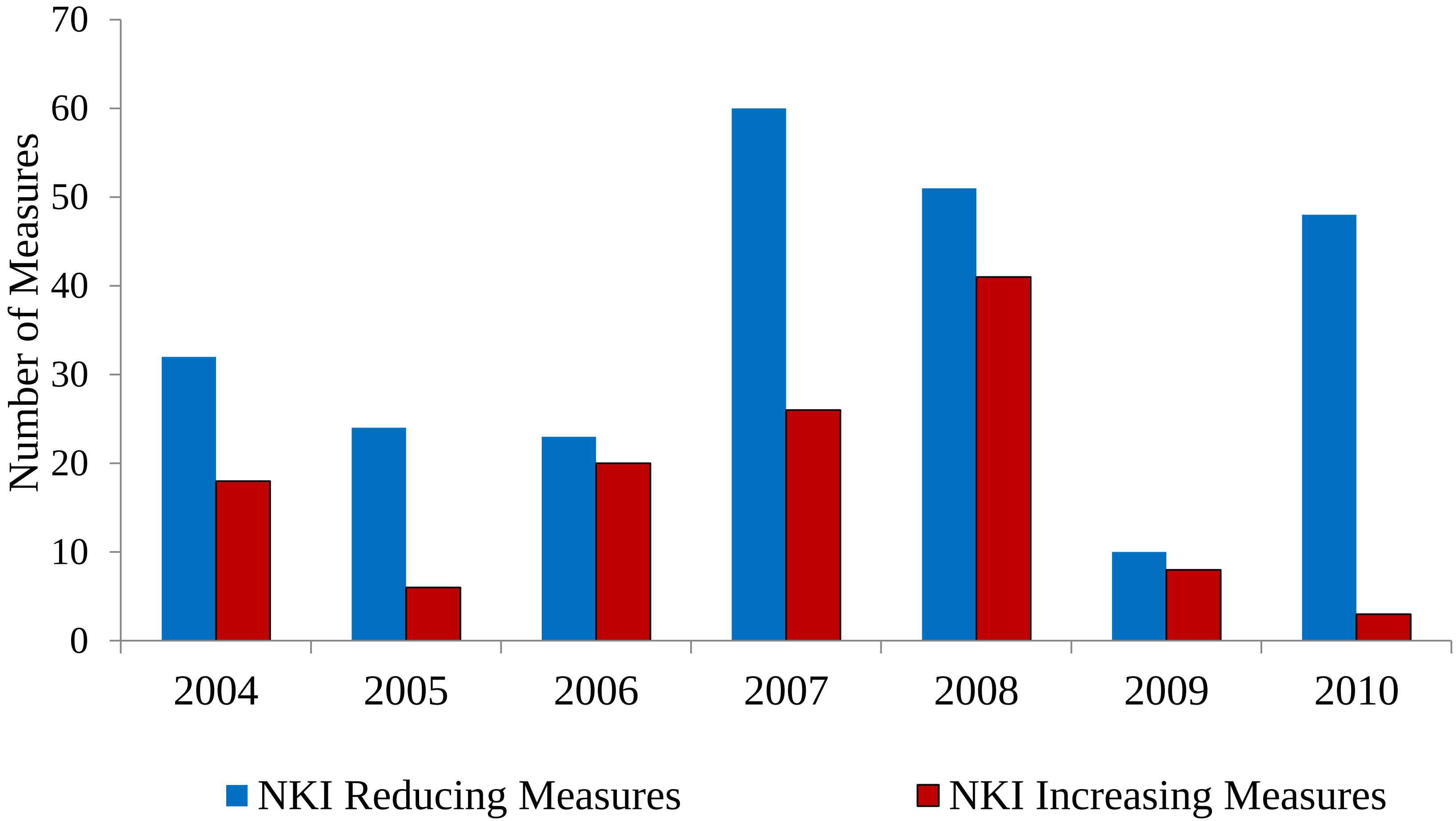
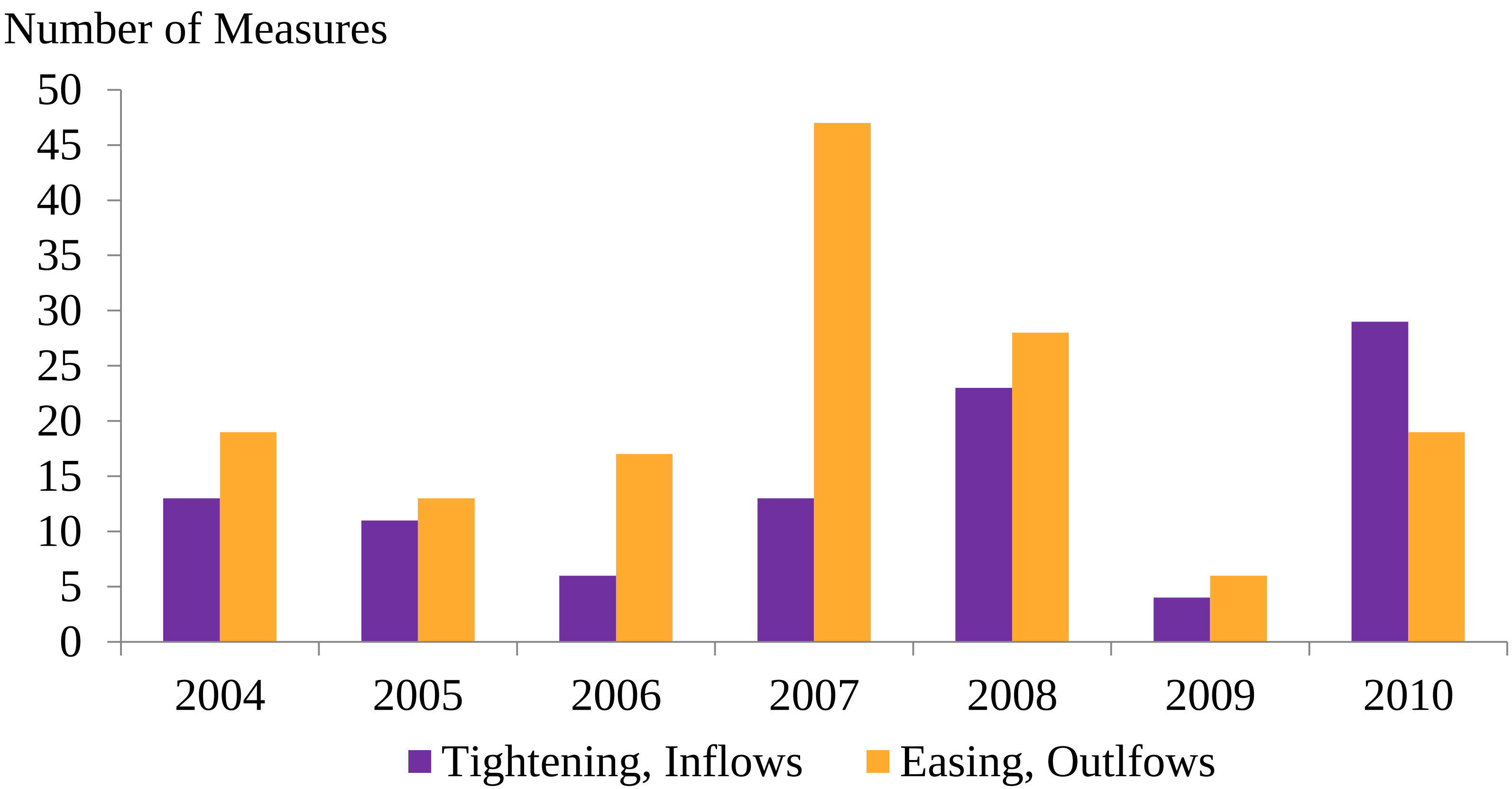
In particular, inflow liberalizations have stopped.



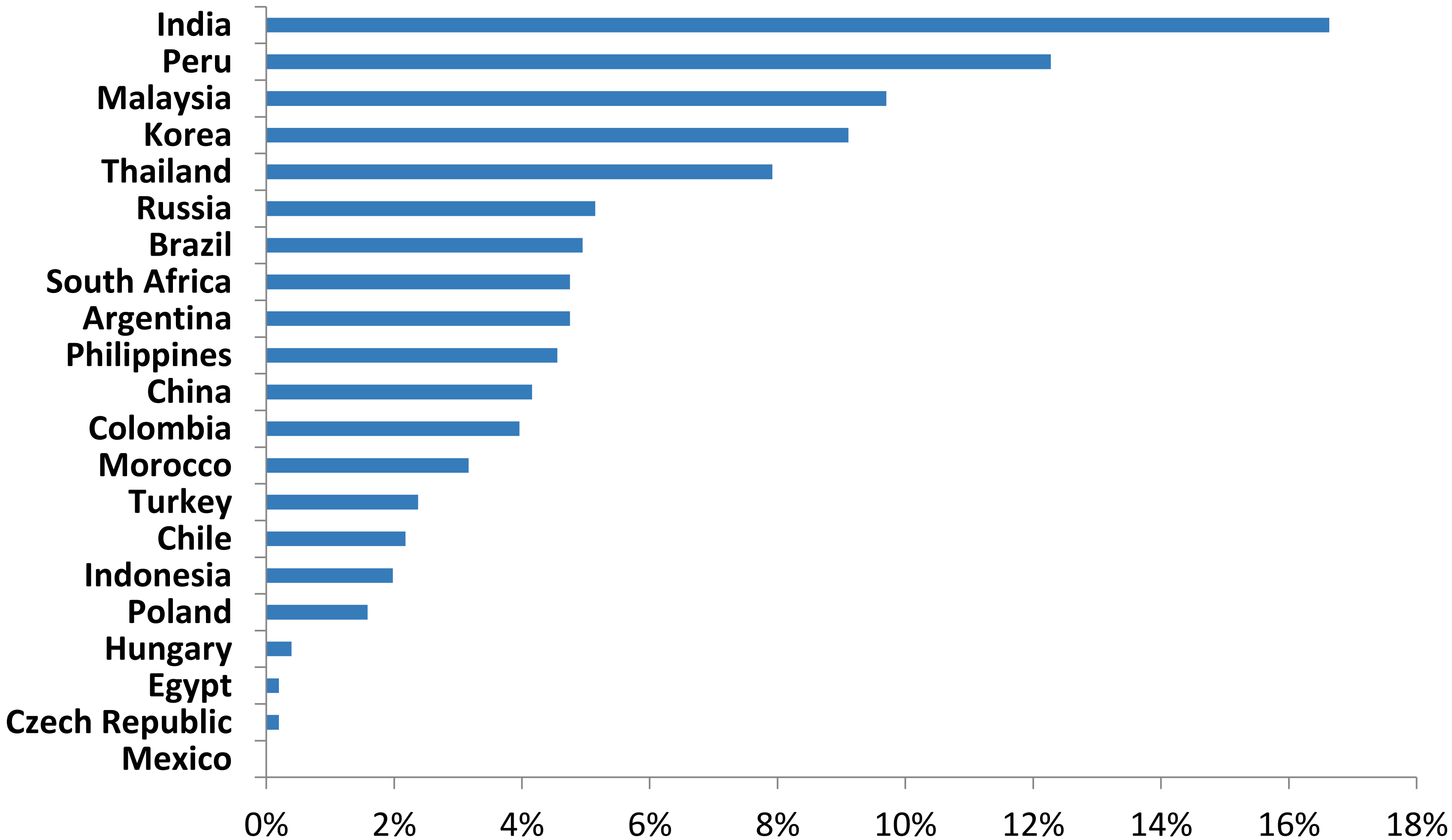
Composition of NKI Reducing Measures has changed since the crisis.



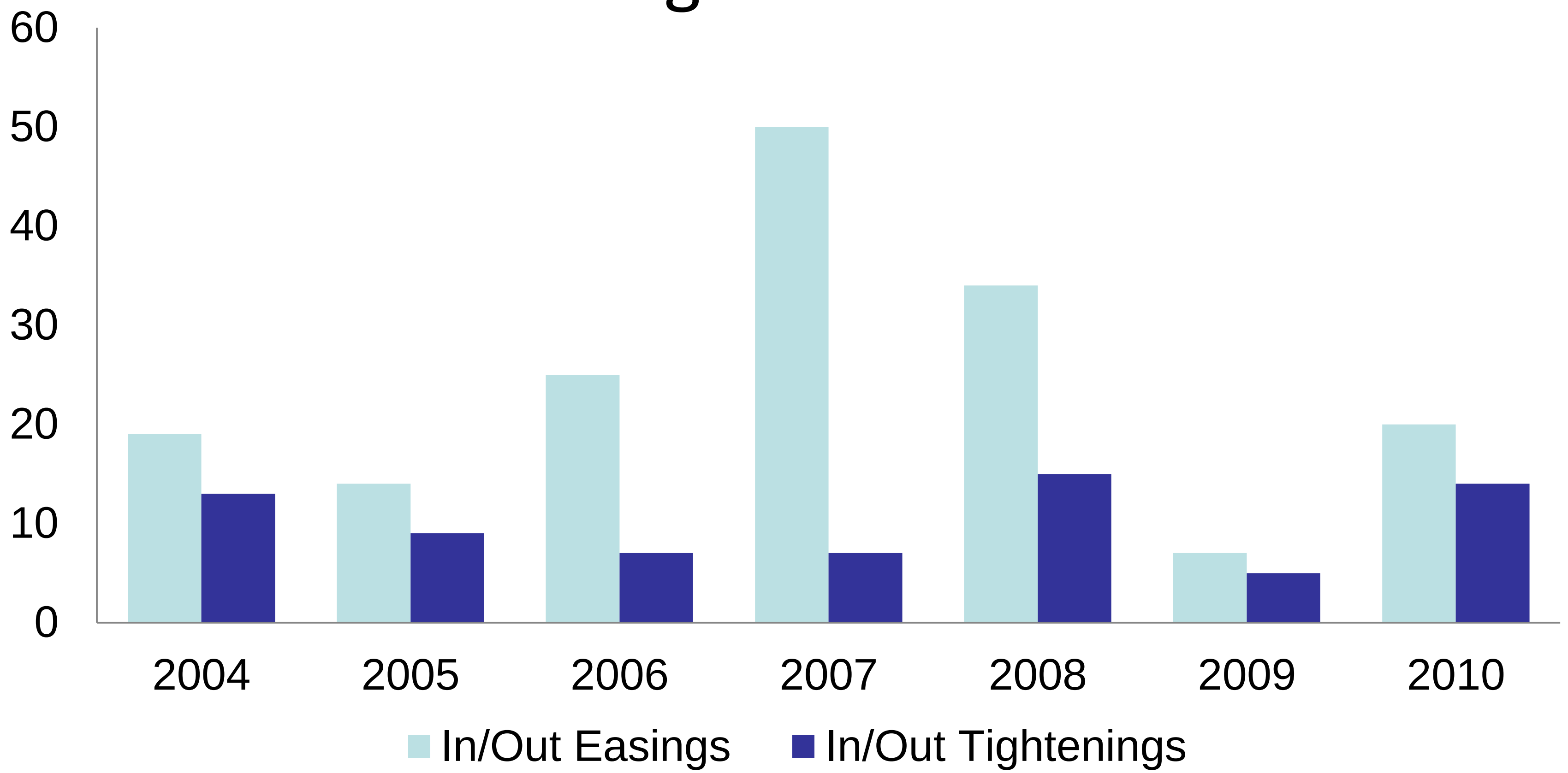
The main instrument for reducing NKI is no longer outflow liberalization.



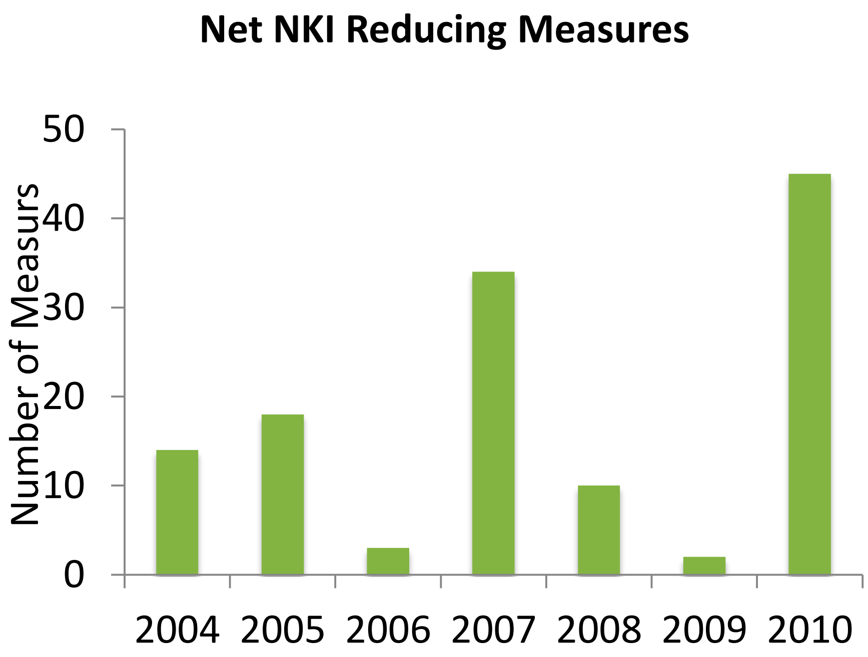
Percentage of total measures, by country

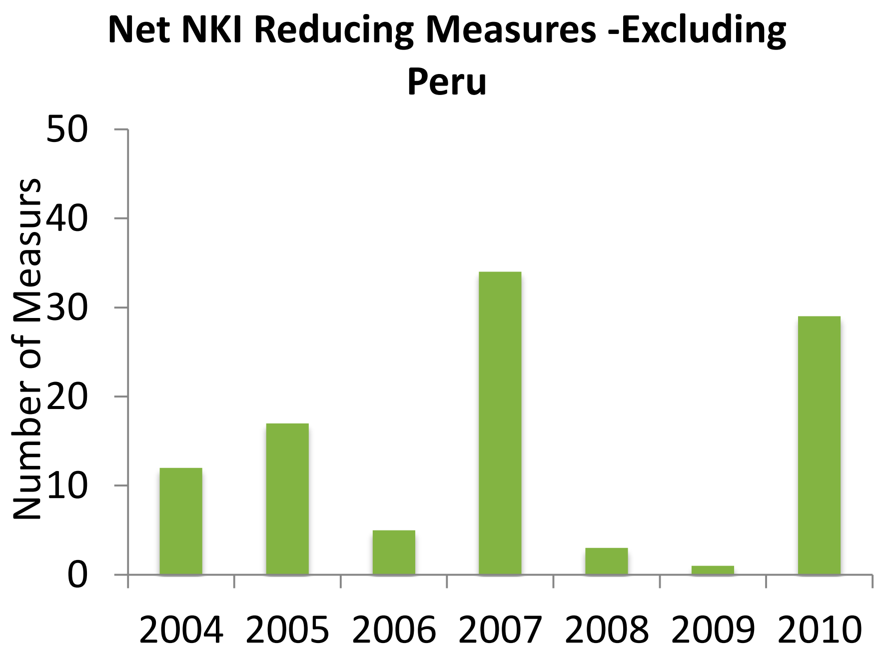


Easings and Tightenings: excluding India and Peru

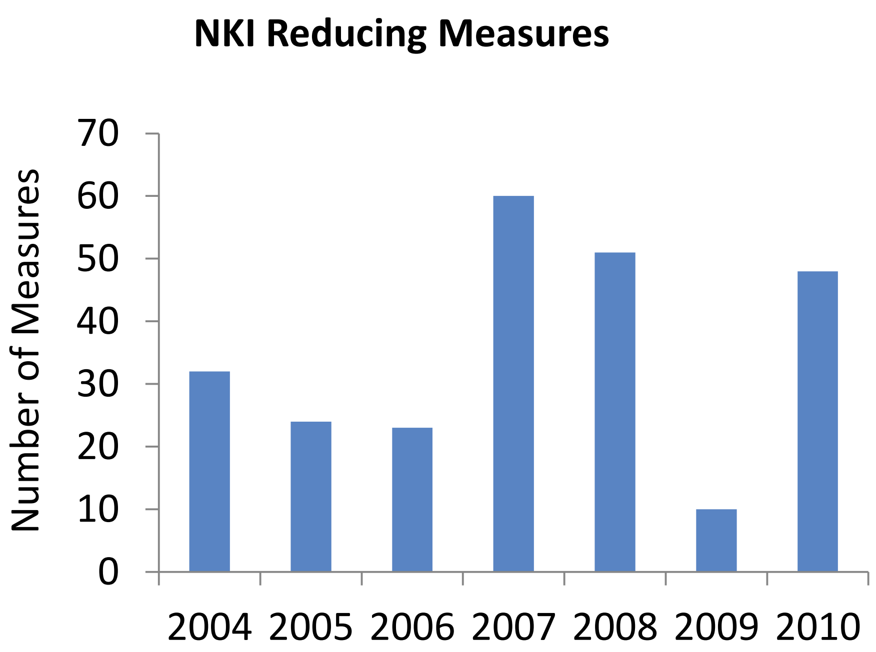


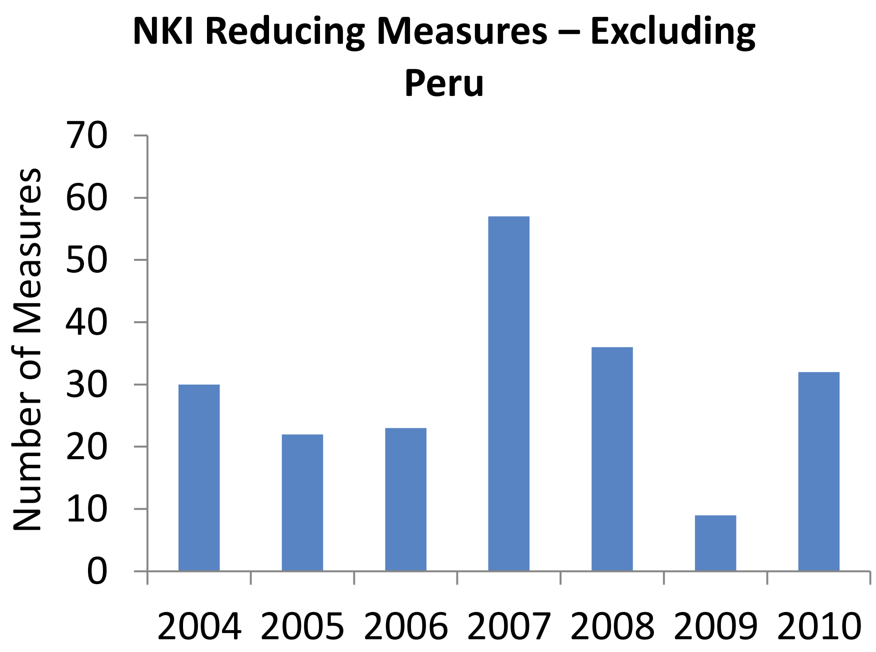
Robustness Check- Exclude Peru



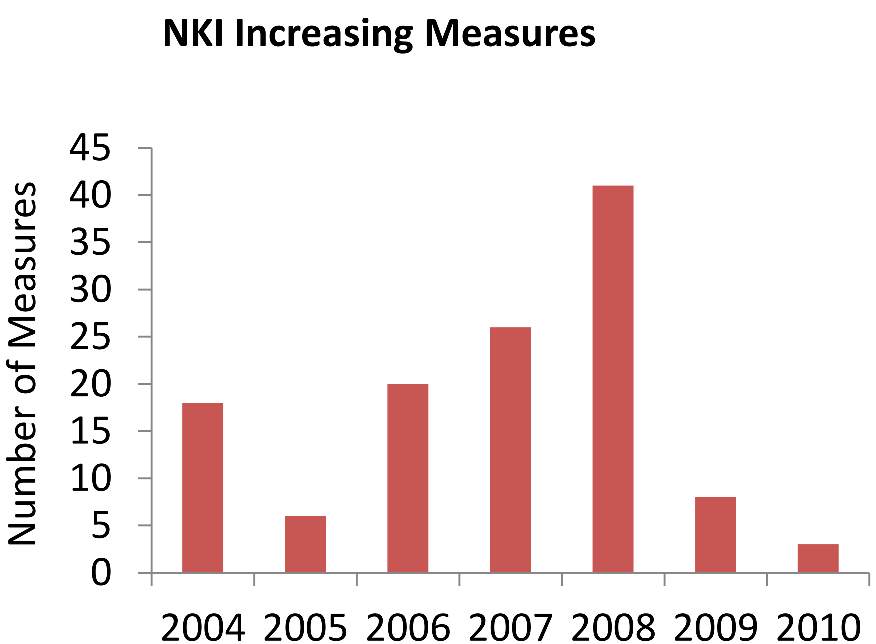


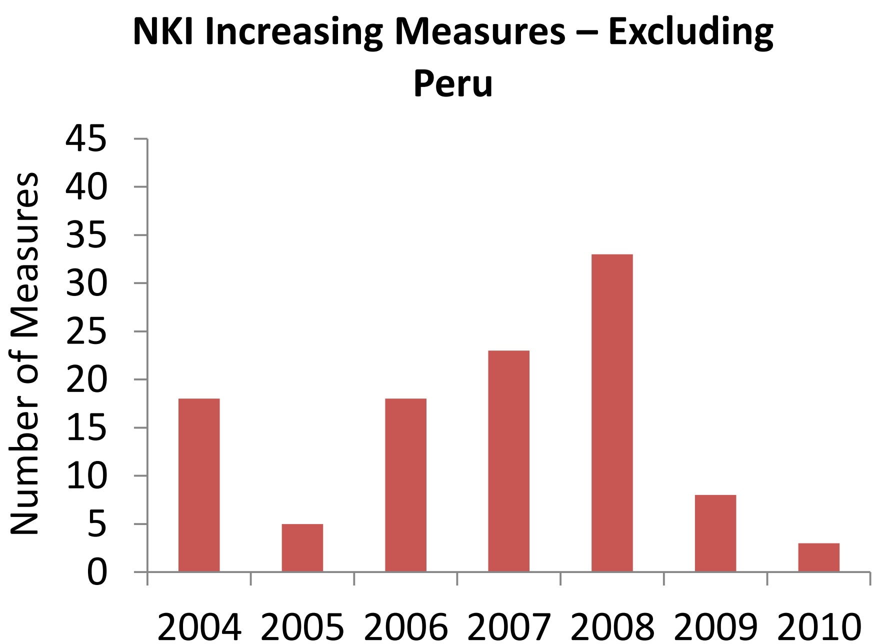
Robustness Check – exclude Peru





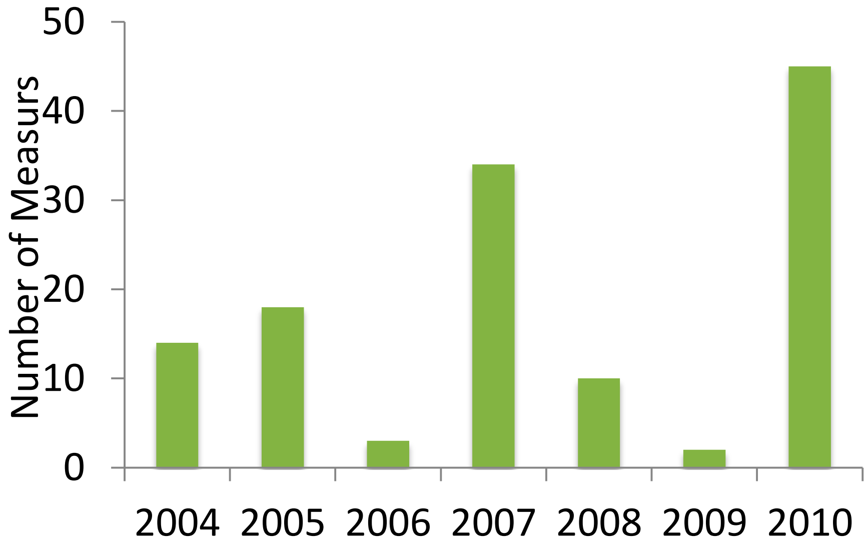
Robustness Check – Exclude Peru



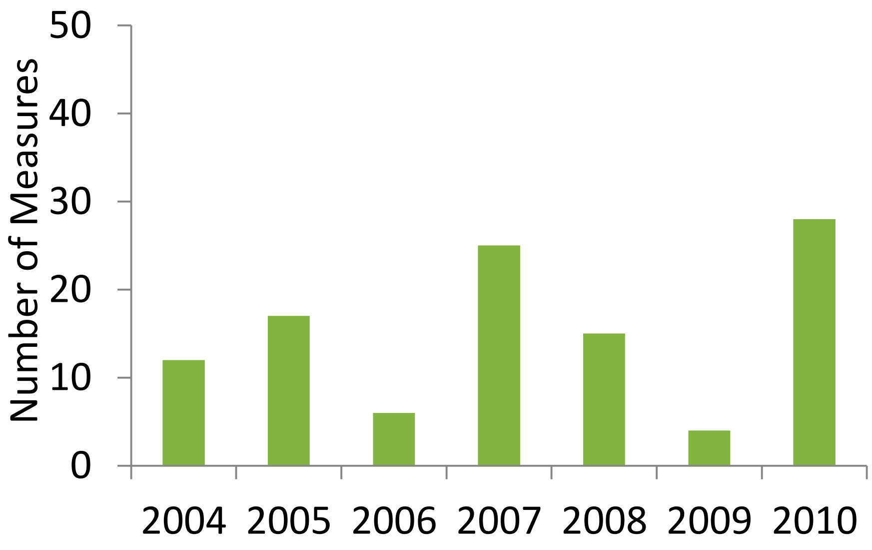


Robustness Check – Exclude India & Peru

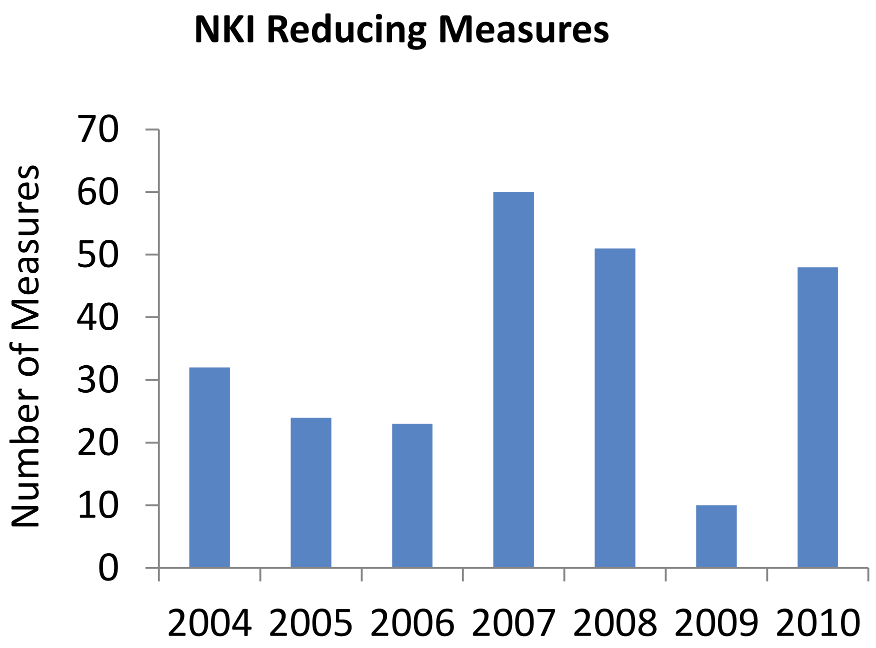
Net NKI Reducing Measures

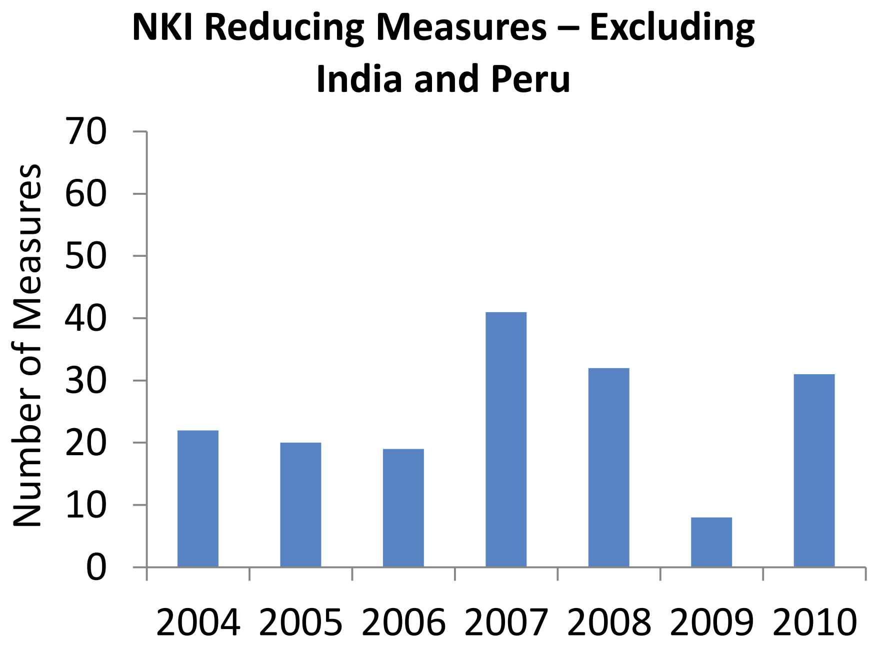


Net NKI Reducing Measures – Excluding India and Peru

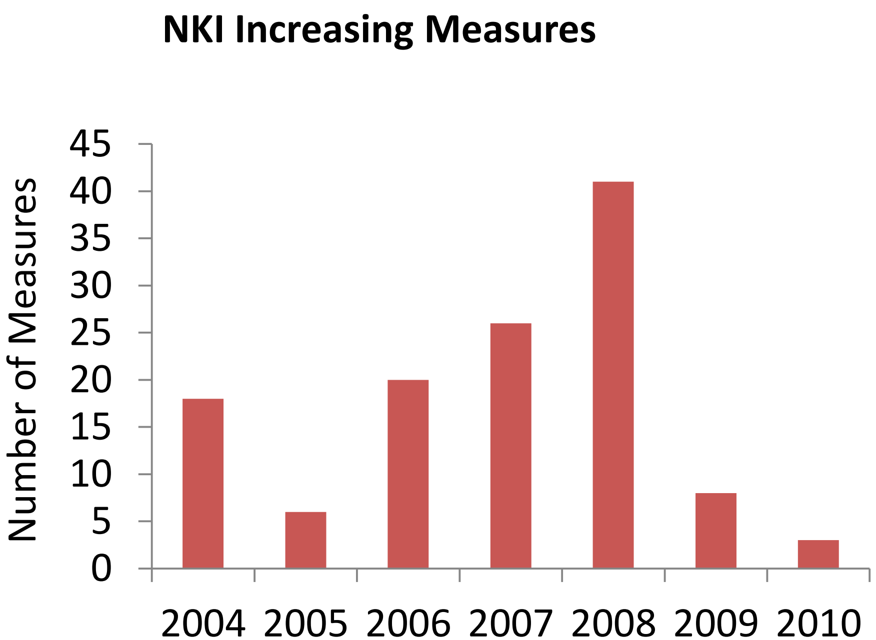


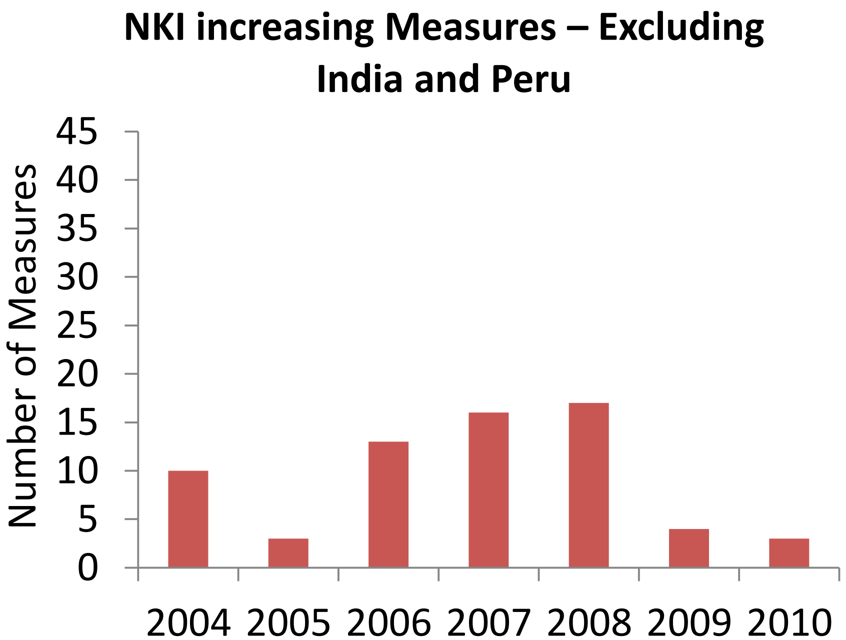
Robustness Check –Exclude India & Peru



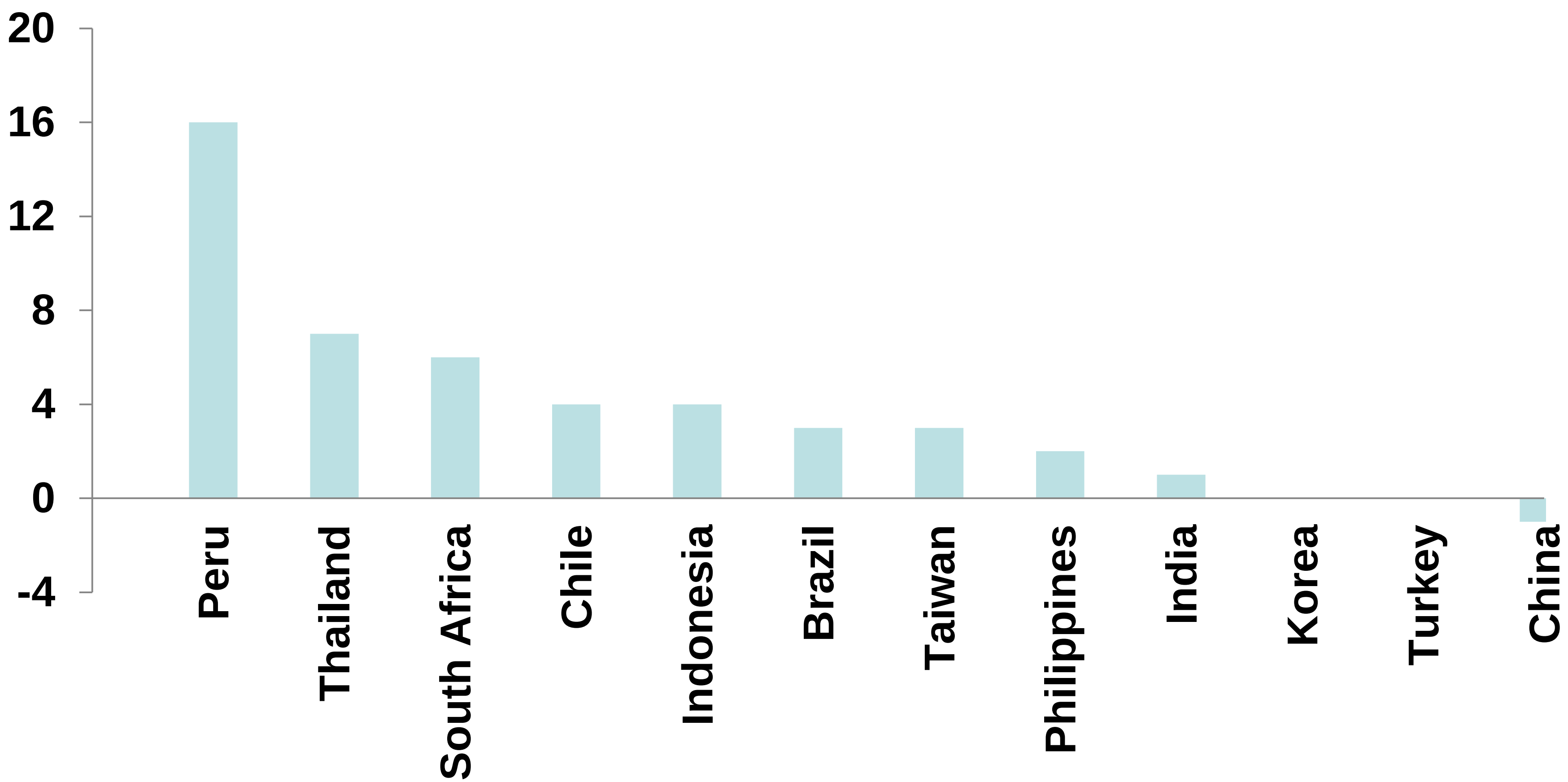


Robustness Checks – Exclude India and Peru

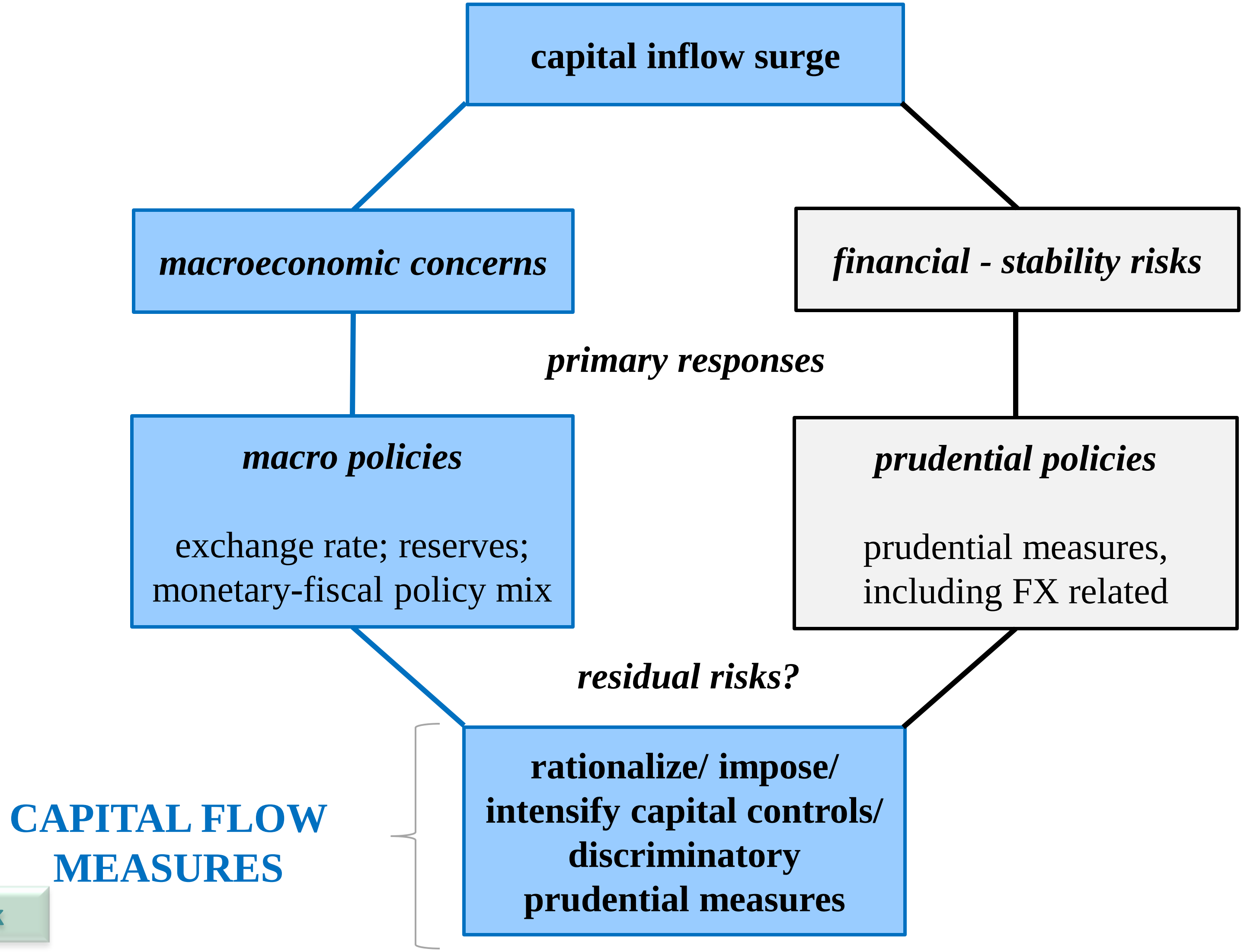




Brazil was not alone in taking net NKI restricting measures in 2010



3. Are CFMs being used for prudential reasons?



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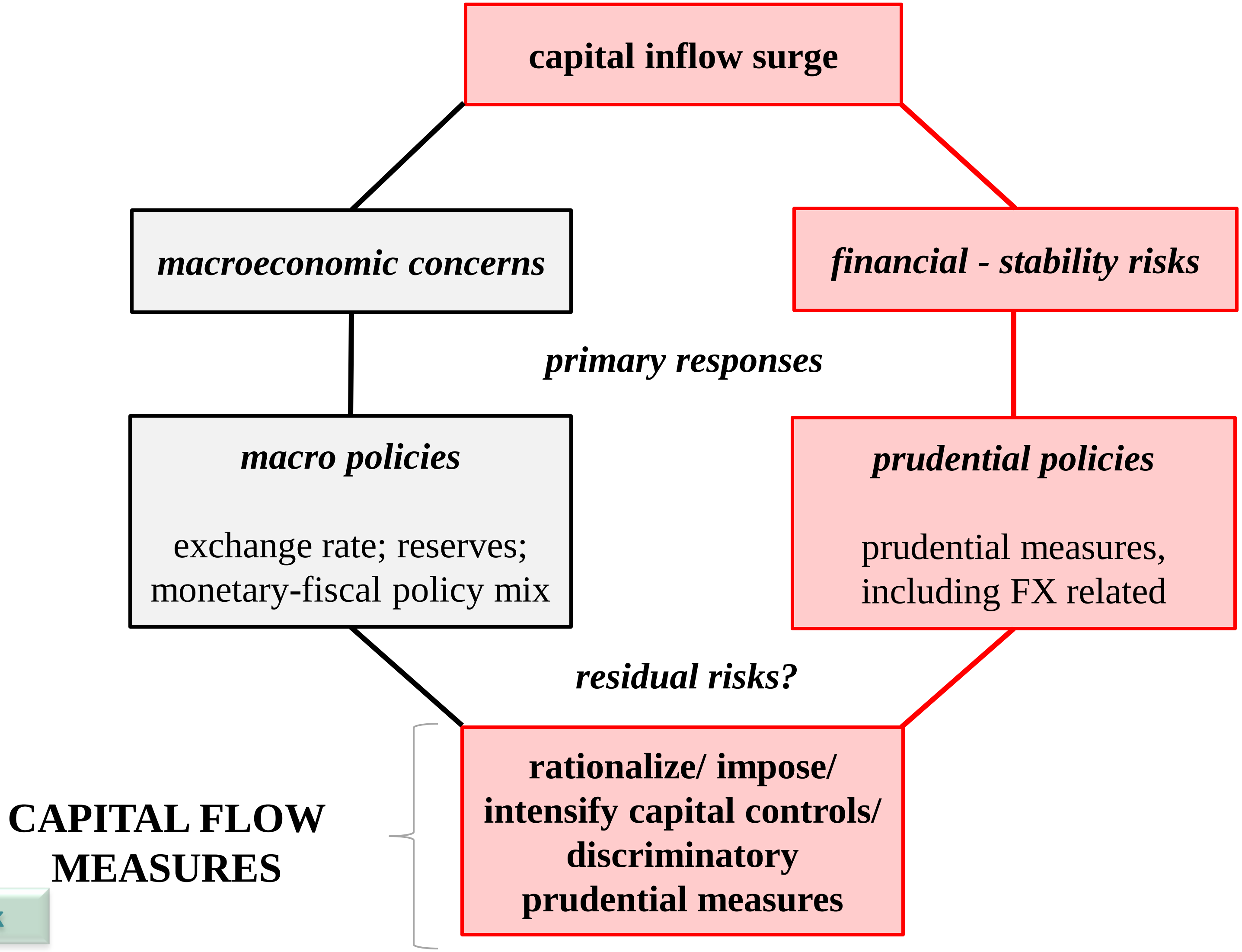
3. Are CFMs being used for prudential reasons?

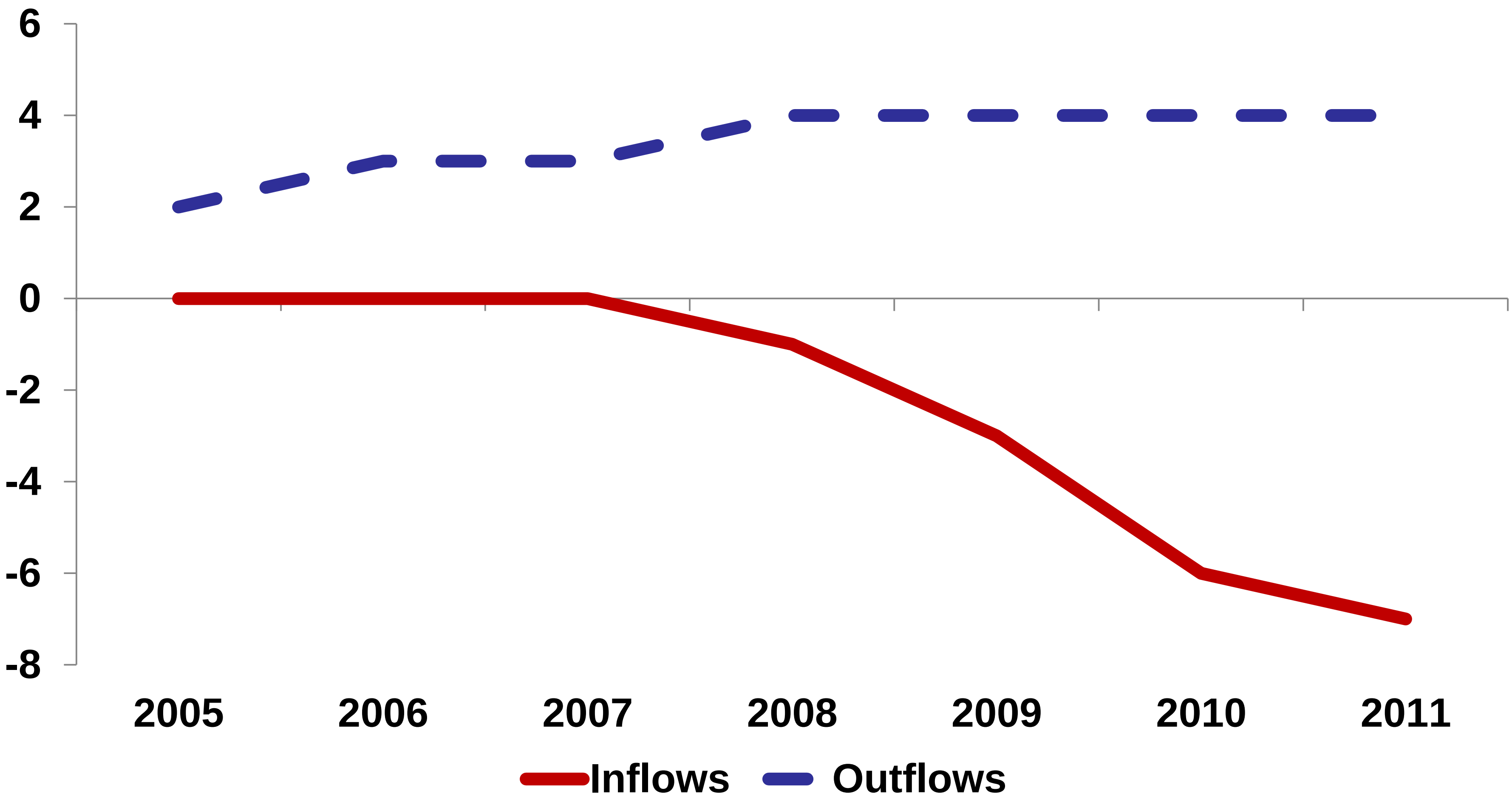


Back

Classification of CFMs

- *Currency Based Measures:*
  - *Prudential Type* (CBPT)
  - *Other Type* (CBOT)
- *Capital Controls:*
  - *Prudential Type* (CCPT)
  - *Other Type* (CCOT)

Brazil, overall policy direction: inflow and outflow measures



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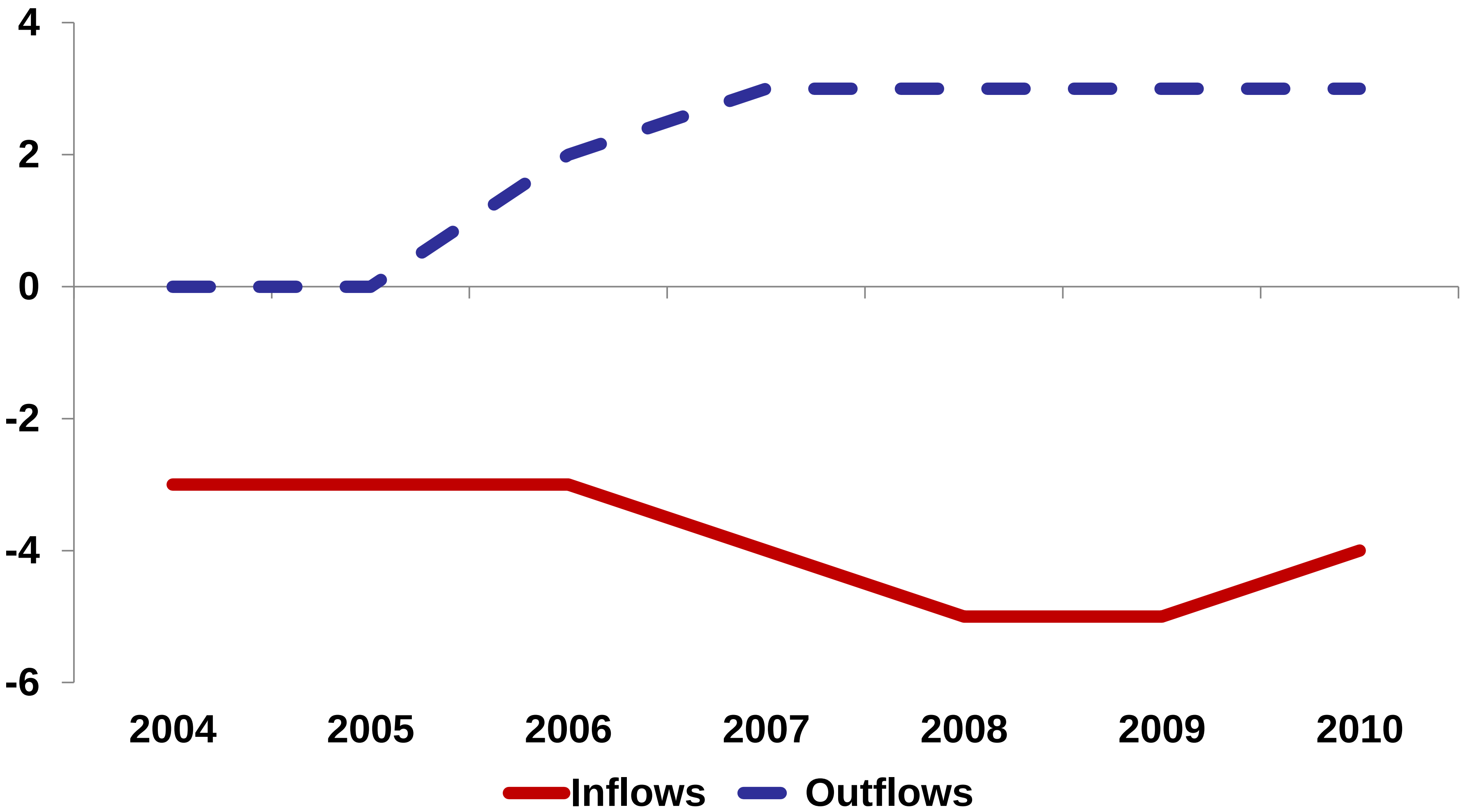
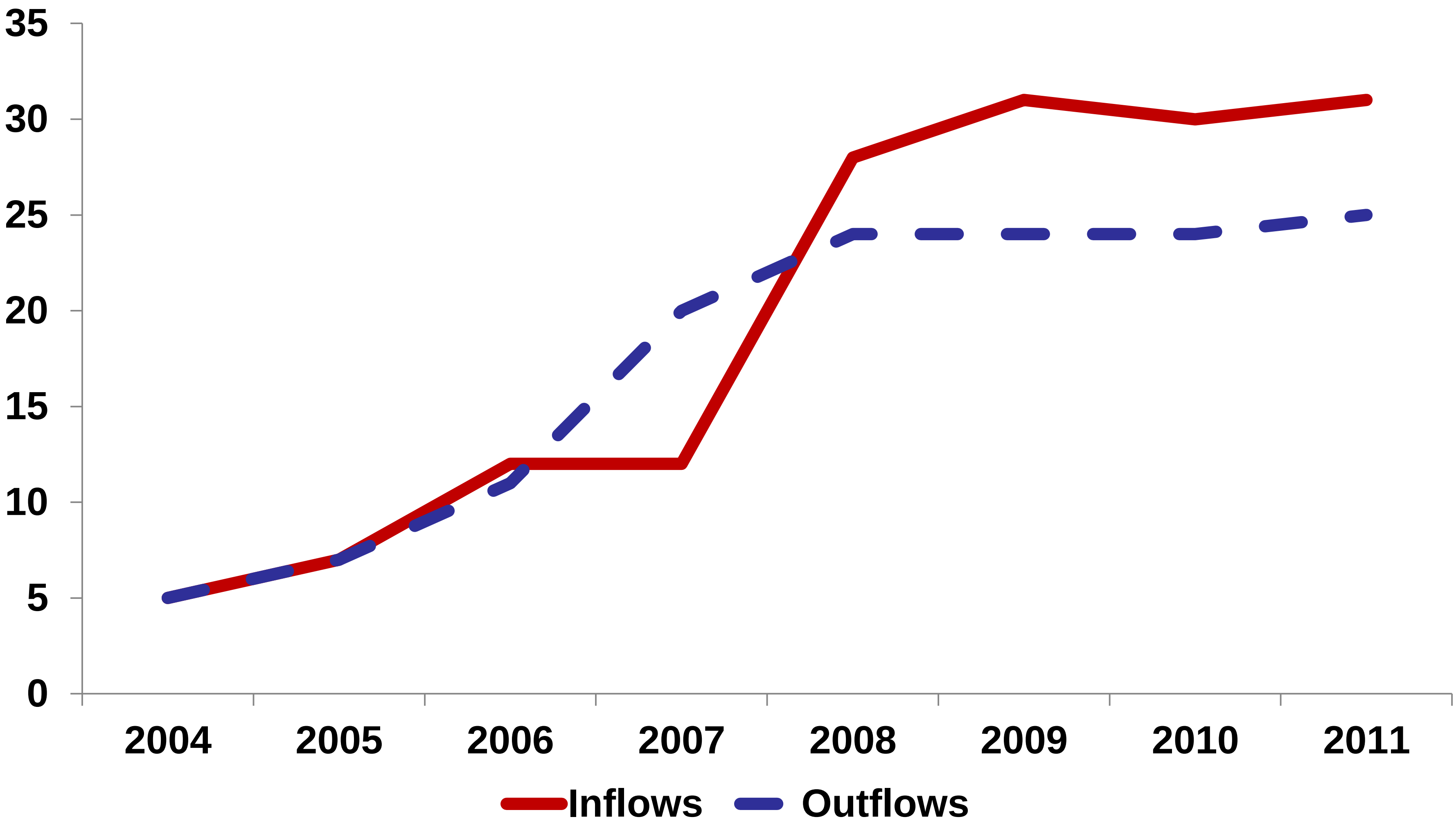
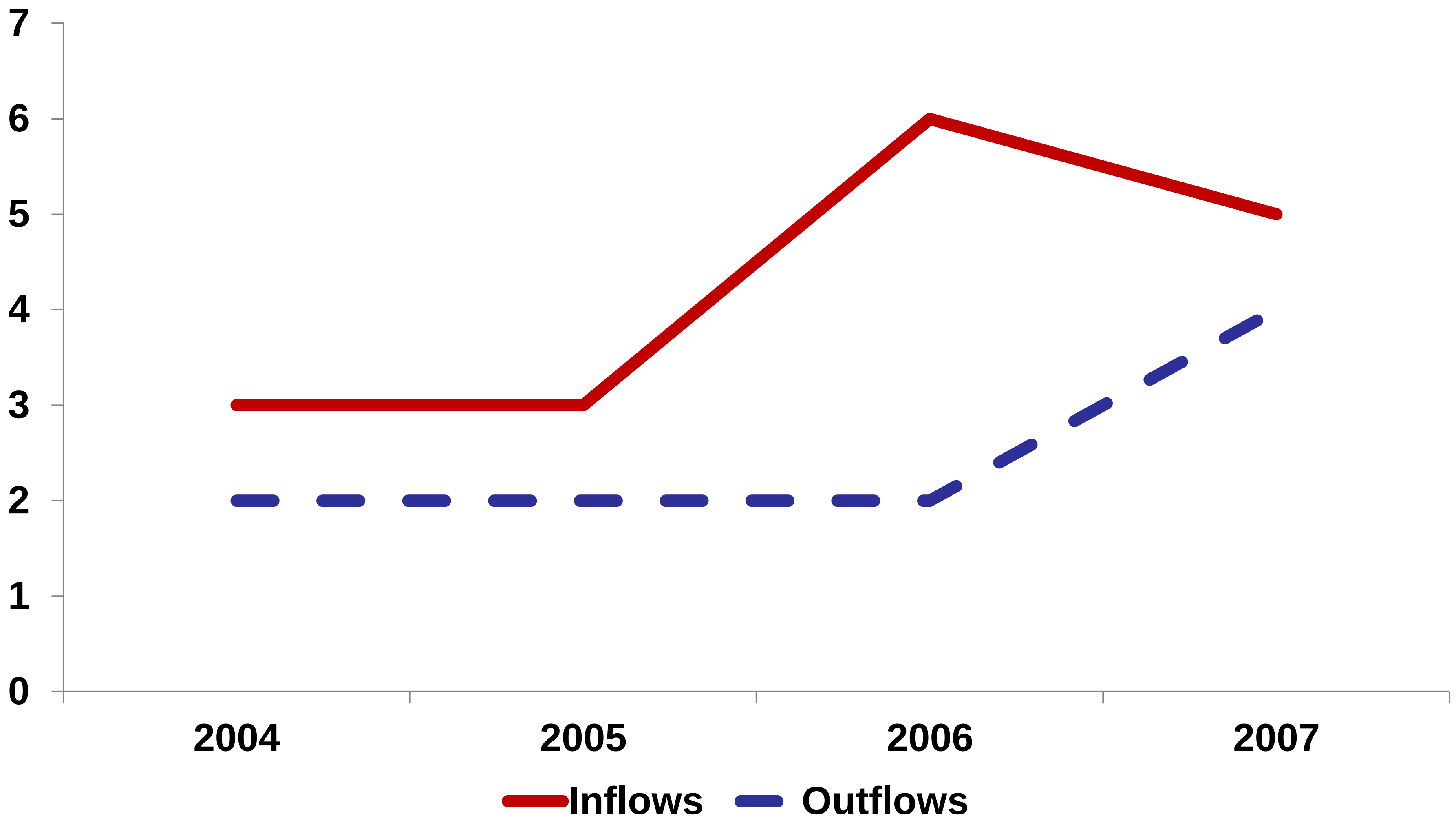
China, overall policy direction: inflow and outflow measures



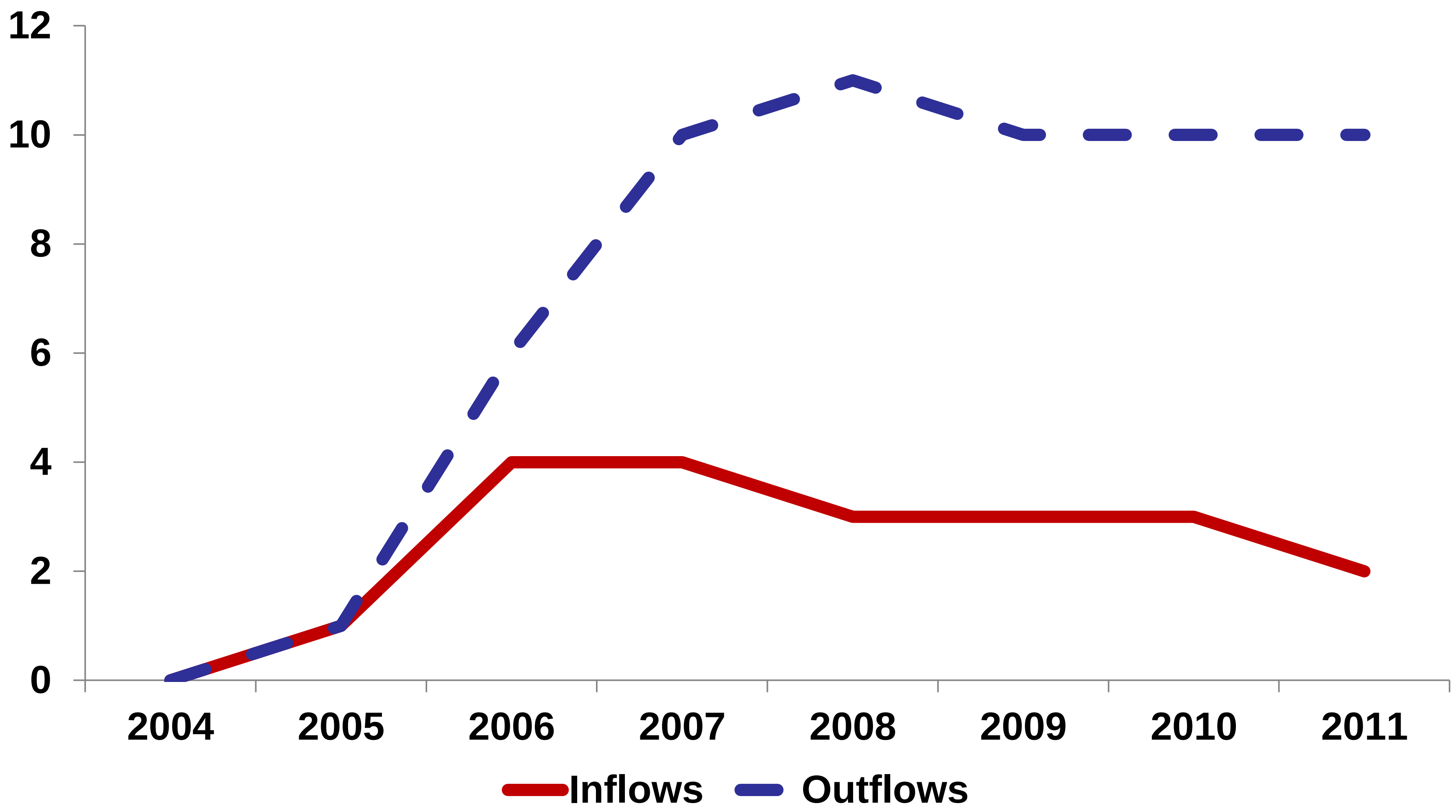
India, overall policy direction: inflow and outflow measures



Russia, overall policy direction: inflow and outflow measures



Korea, overall policy direction: inflow and outflow measures



Inflow Tightening Measures in 2 Types of Surges