

11.00 - 13.00 SESSION TWO: RECENT EXPERIENCES IN THE REGULATION OF CROSS-BORDER FINANCE

Capital inflows experience in EMEs in general, Brazil and South Korea specifically

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UNCTAD-GEGI Workshop

Capital Account Regulations and Global Economic Governance

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UNCTAD, Geneva, Switzerland

Overview

- The post-crisis capital flows cycle
- The case of Korea
- The case of Brazil
- Design principles

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The post-crisis capital flows boom

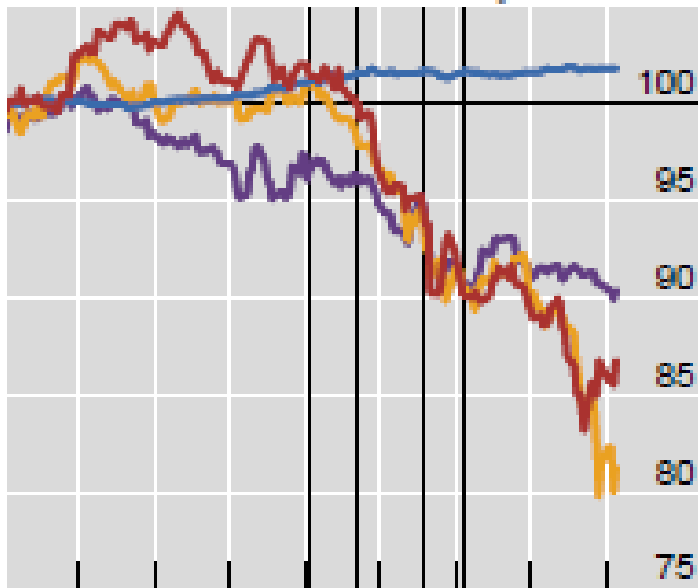
- In the 2nd quarter of 2009, a new wave of capital inflows to Emerging-Market Economies (EMEs) has come up, due to the post-global financial crisis (GFC) setting:
 - Monetary policy in advanced economies;
 - Double-speed recovery
 - From the 1st quarter of 2010 to mid-2011, the Euro crisis

The post-crisis capital flows boom

- The boom has gone through some **mini-burst phases**, such as in the second semester of 2011 (due to the Euro crisis worsening) and between May and mid-September 2013, sparked by the Fed's tapering plans, which led to **outflows from EME's and sell-off of their currencies**

Exchange rates vis-à-vis US dollar¹

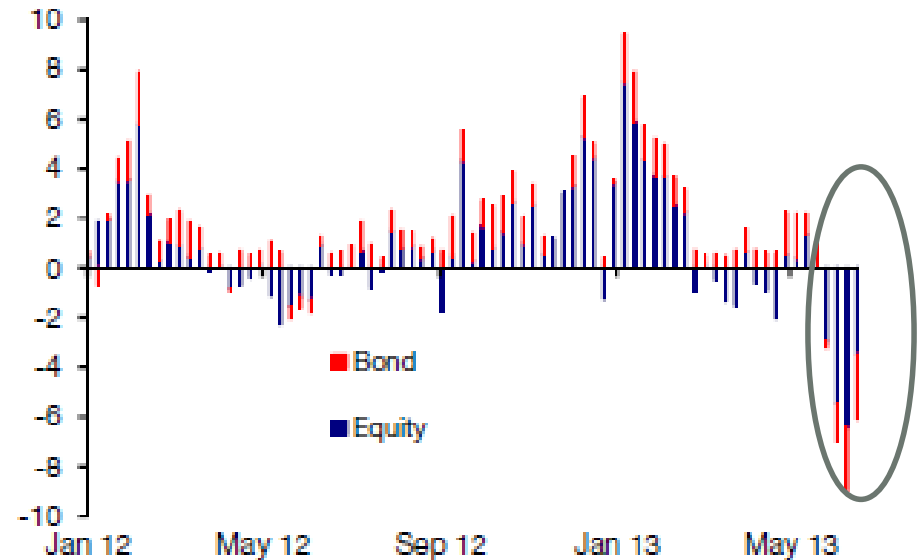
2 January 2013 = 100



Feb 13 Apr 13 Jun 13 Aug 13

— Brazil — India
— China — Russia

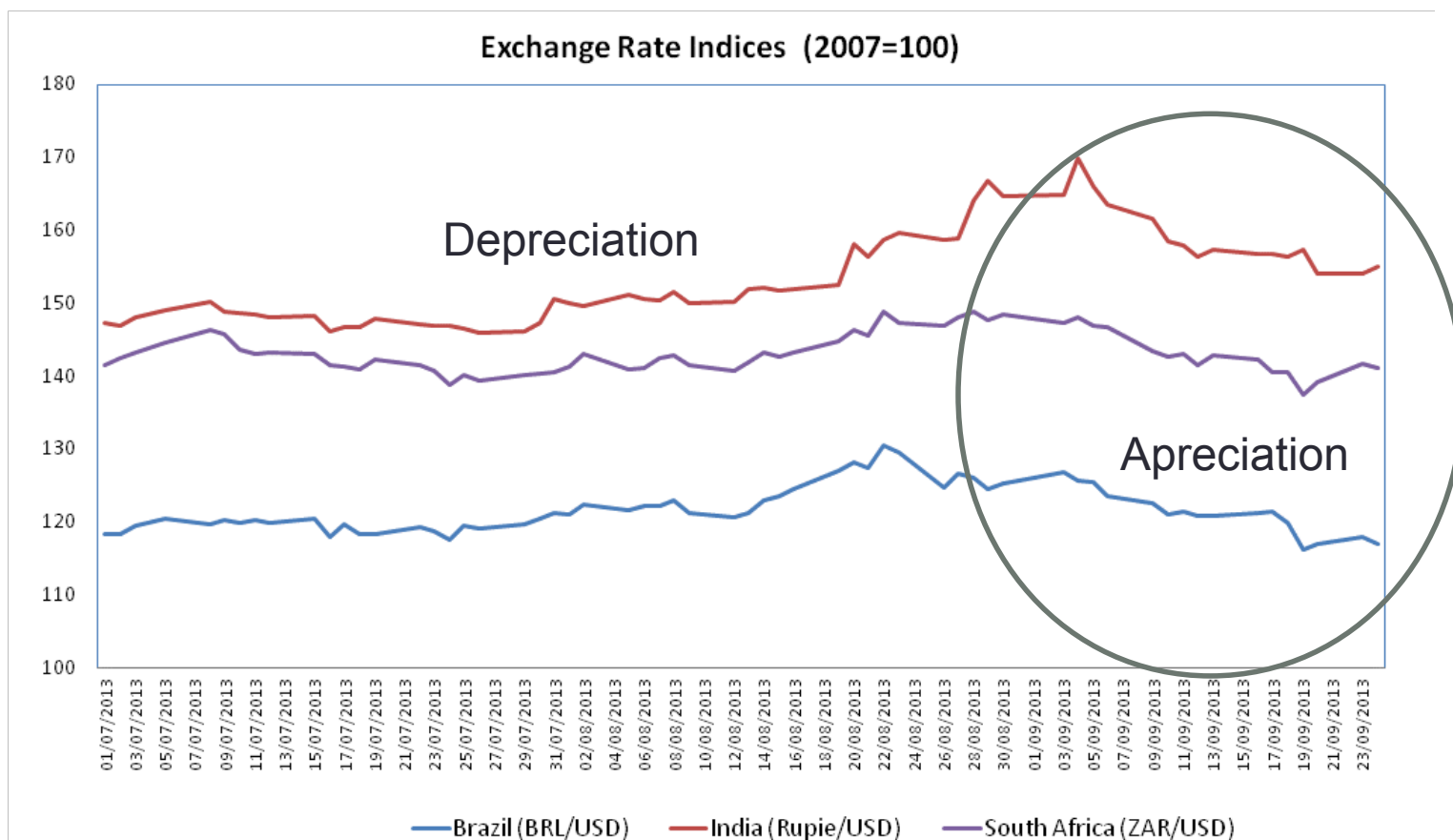
Emerging Market Equity and Bond Fund Flows
\$ billion, EPFR data



Extracted from BIS Quarterly Review, September 2013.

The post-crisis capital flows boom

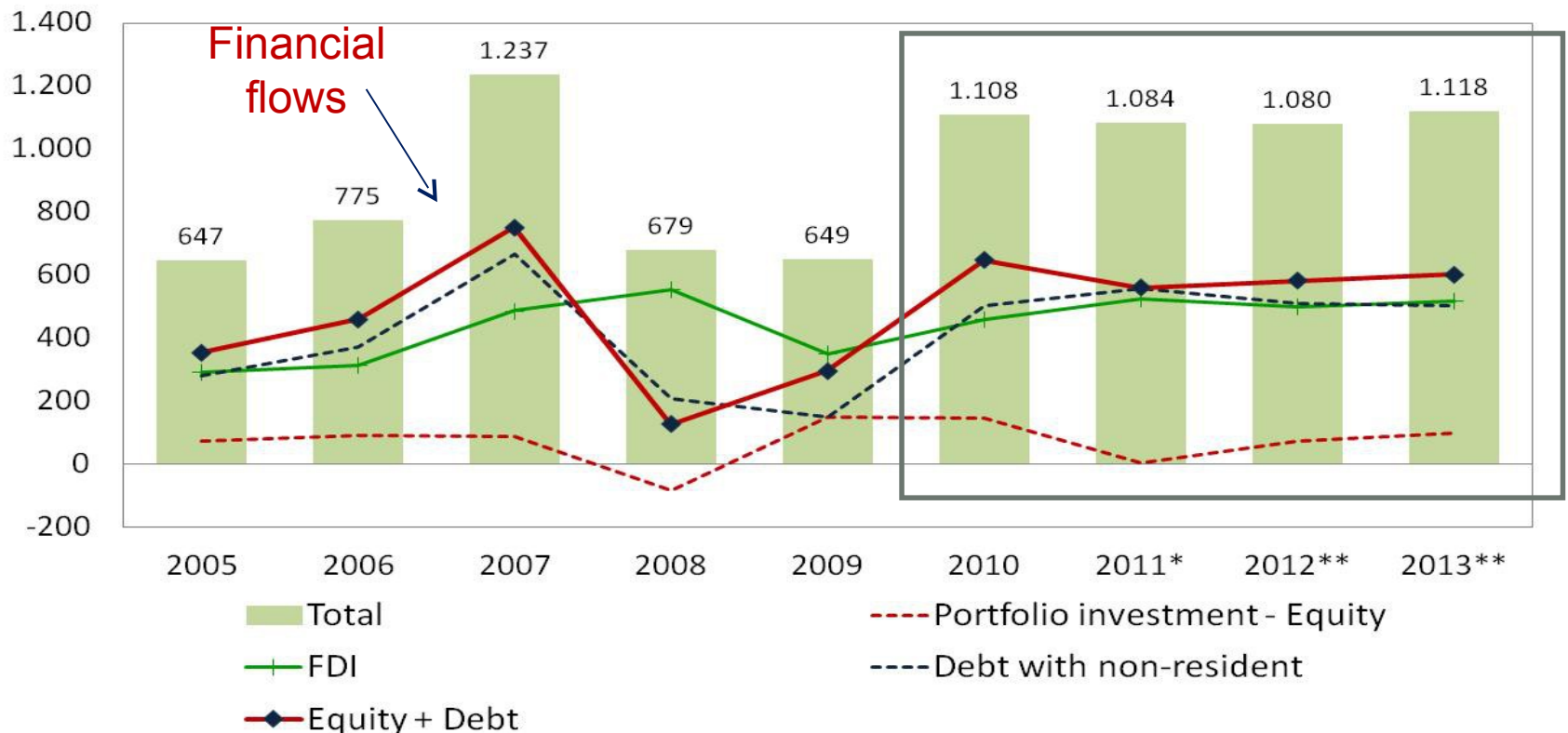
- However, apparently, the boom phase is not over yet. Revealing the key-role of US monetary policy in the post-crisis boom, in face of the Fed's surprise decision on 17 September to sustain its stimulus programme, international capital markets have reopened to EME's issuers and EME's currencies have rallied again, with the biggest gains seen in those that had been hardest hit.



The post-crisis capital flows boom

- Higher annual values in comparison with the pre-crisis boom
- Predominance of financial inflows, among which carry trade operations stood out, searching for « interest rate differentials »

Net foreign capital inflows to Emerging Economies - USD billions



Source: IIF.

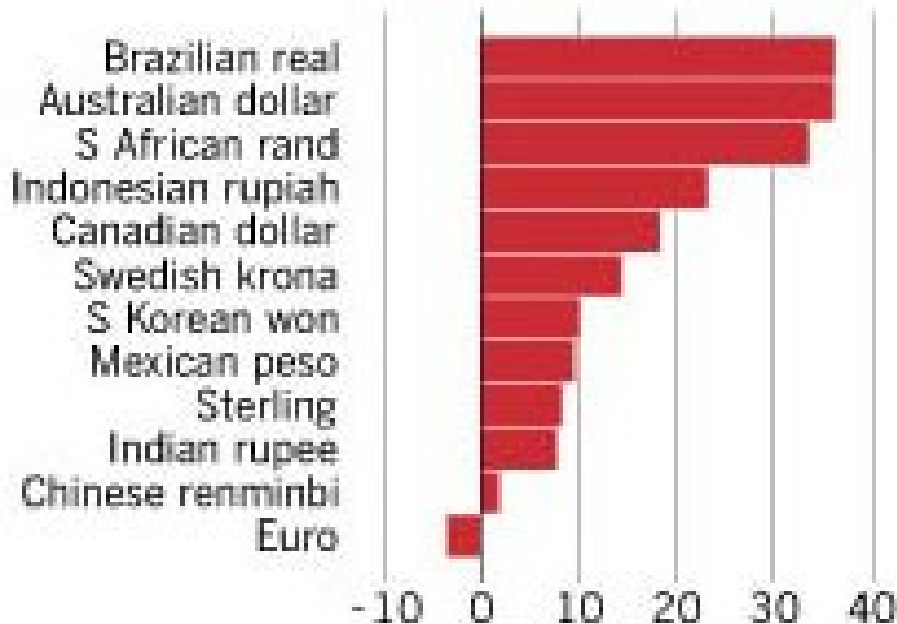
Note: (1) External debt and fixed income portfolio investments in domestic's markets

The post-crisis boom: **currency war**

- EMEs faced concerns over the undesirable implications of high and volatile capital flows, among which the “currency war”, in a context of high growth rates and inflationary pressures

Exchange rate appreciations

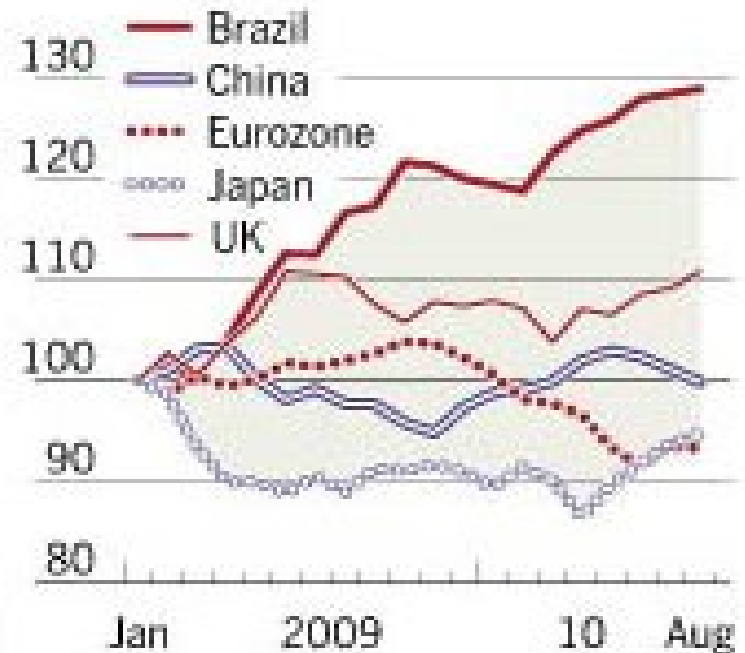
Currencies' change against the US dollar since the end of 2008 (%)



Source: Thomson Reuters Datastream

Real exchange rates

JPMorgan real broad indices (rebased)



Source: Thomson Reuters Datastream

The post-crisis boom: **policy dilemmas**

- The adoption of a restrictive monetary policy would help to contain growth and inflationary pressures, but it would



- encourage further capital inflows, which, in turn, would



- foster asset price booms and exchange rate misalignments



- aggravating the risk of future sudden stops and subsequent financial crises.

The post-crisis boom: **policy dilemmas**

- In order to deal with these policy dilemmas, some EMEs have resorted to Capital Account Regulations - CAR (capital controls and prudential financial regulations) to halt the trend of currency appreciation and to reduce the risks of speculative bubbles in asset prices.
- Thus, unlike the pre-crisis context, many EMEs are now unwilling to adopt a hands-off approach to capital inflows

The post-crisis boom: some examples of CARs

País	Capital controls	Prudential regulation
Brazil	Financial tax on portfolio investment (equity and fixed income) in the domestic market and external lending	Non-interest reserve requirement on bank's short dollar positions in the FX spot market
Peru	Financial tax on portfolio investment (equity and fixed income)	Limits on bank's FX short dollar positions in the FX spot market and reserve requirements on FX deposits
Korea	Withholding tax on nonresidents' purchases of treasury and monetary stabilization bonds	Many restrictions on banks' FX derivatives positions and FX assets and liabilities
Indonesia	One month holding period on central bank bills (SBIs)	Reserve requirements on FX deposits
Thailand	Incentives to capital outflows and financial tax on nonresidents' purchases of public bonds	

The post-crisis boom: **FX derivatives**

- Besides the management of capital inflows, Brazil and South Korea have also faced policy dilemmas related with non-resident and resident operations with FX derivatives, which is part of “cross-border finance”
 - searching for yield agents could obtain huge profits from the interest rate differentials through the so-called derivatives carry trade
 - a bet which results in a short position in the funding currency (with lower interest rate) and a long position in the target currency (with higher interest rate)

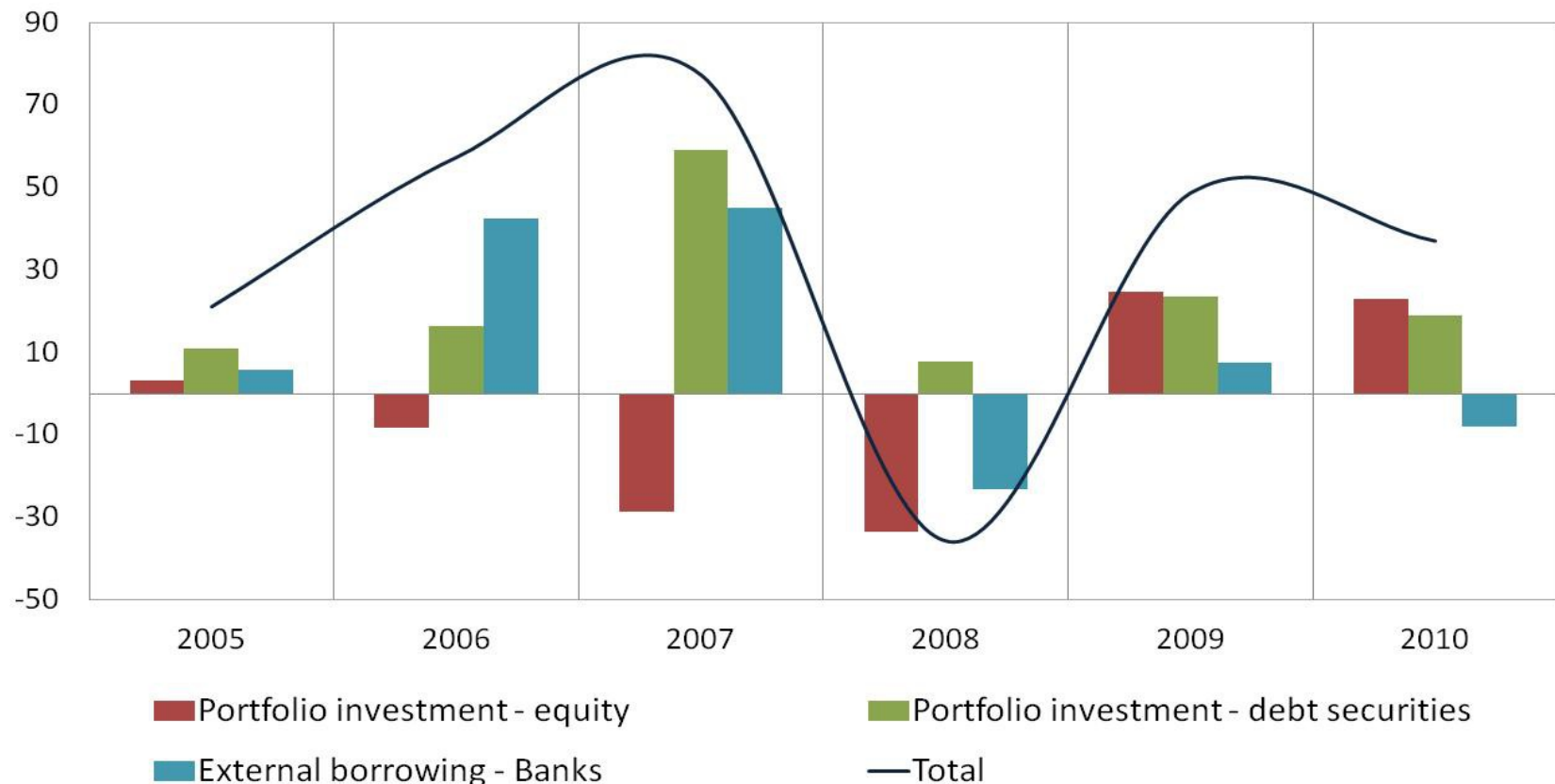
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The case of South Korea

- The resumption of inflows following the GFC was led by portfolio inflows into debt and equity markets. Short-term bank debt remained lower than in the pre-crisis period.

South Korea – Key types of financial capital inflows (billion USD)



The case of South Korea

- This composition of cross-border inflows was a consequence of the strategy launched by South Korea since Nov/2009 to deal with the new boom in **cross-border finance (capital flows + FX derivatives)**, which has been shaped by the huge contagion effect of the GFC on the country's currency and banking markets.
- This effect was the result of the institutional framework of South Korea's FX derivatives market
 - operations carried out by export corporations in the **onshore OTC market**, wherein gains or losses are liquidated in US dollars (i.e. they are **deliverable**). Then, they are linked to large short-term external debt contracted by the country's banks, which are the counterparts in these operations.

The case of South Korea: regulatory response

- Then, financial prudential regulation has been sufficient to curb FX derivatives operations and the currency appreciation: OTC market and bank's as counterparts

Won-USD Exchange Rate and CARs Measures



Source: Bloomberg. Authors' compilation.

Note: PR = Prudential Regulation; CC = Capital Control

The case of South Korea: regulatory response

- SK is the only OECD member that has adopted CARs after the GFC crisis.
 - South Korean authorities have been able to launch these measures (despite the constraints implied by this membership) insofar they adopted, predominantly, financial prudential regulations.
- Regarding capital controls, the main one was the withholding tax on foreign holdings of domestic securities, whose impact on portfolio inflows has been marginal due to the double taxation treaties (under BITs) that SK has with more than 70 countries

Overview

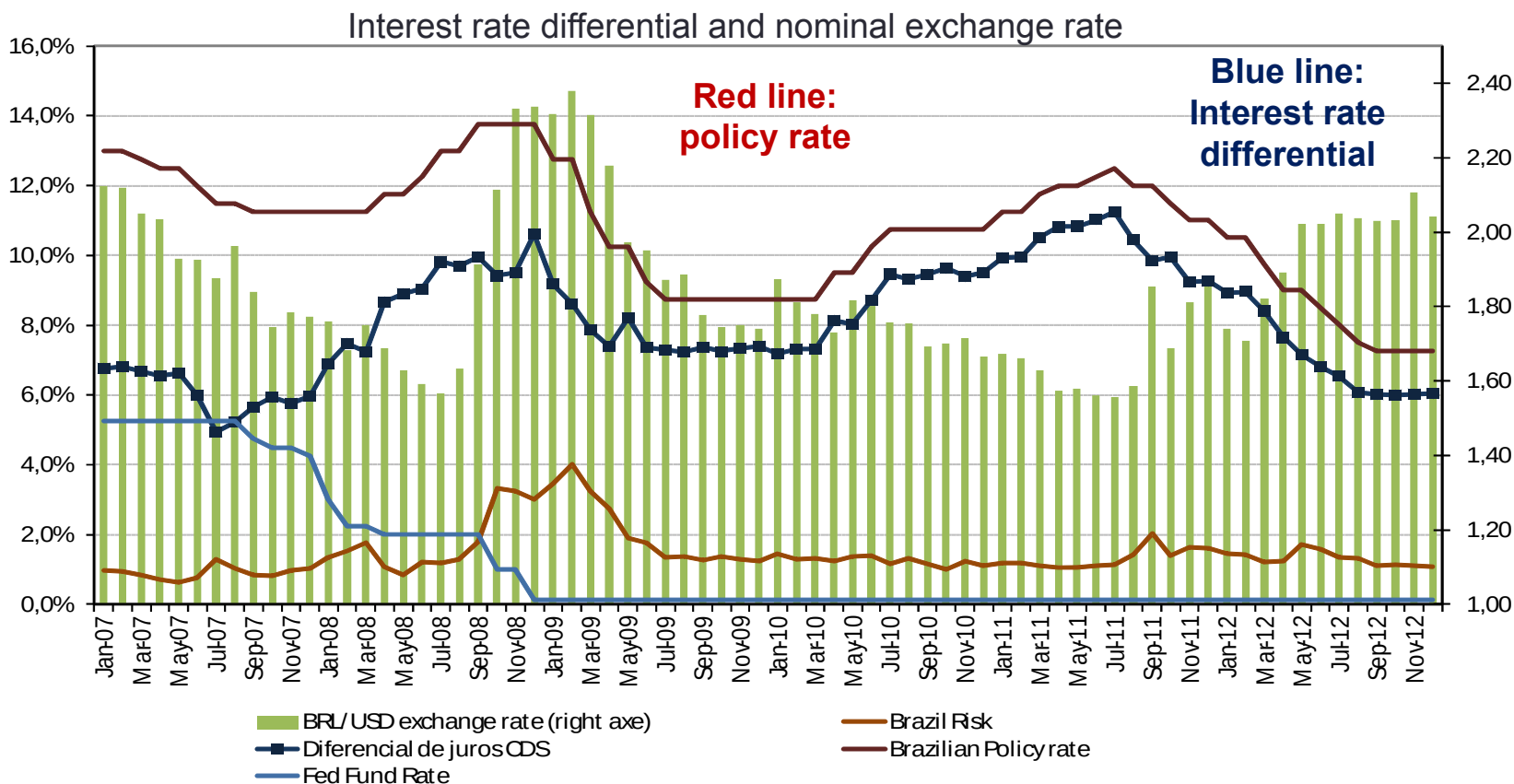
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The case of Brazil: restrictive monetary policy

- During the post-crisis boom, Brazil has offered a very high policy rate related with its inflation-target policy

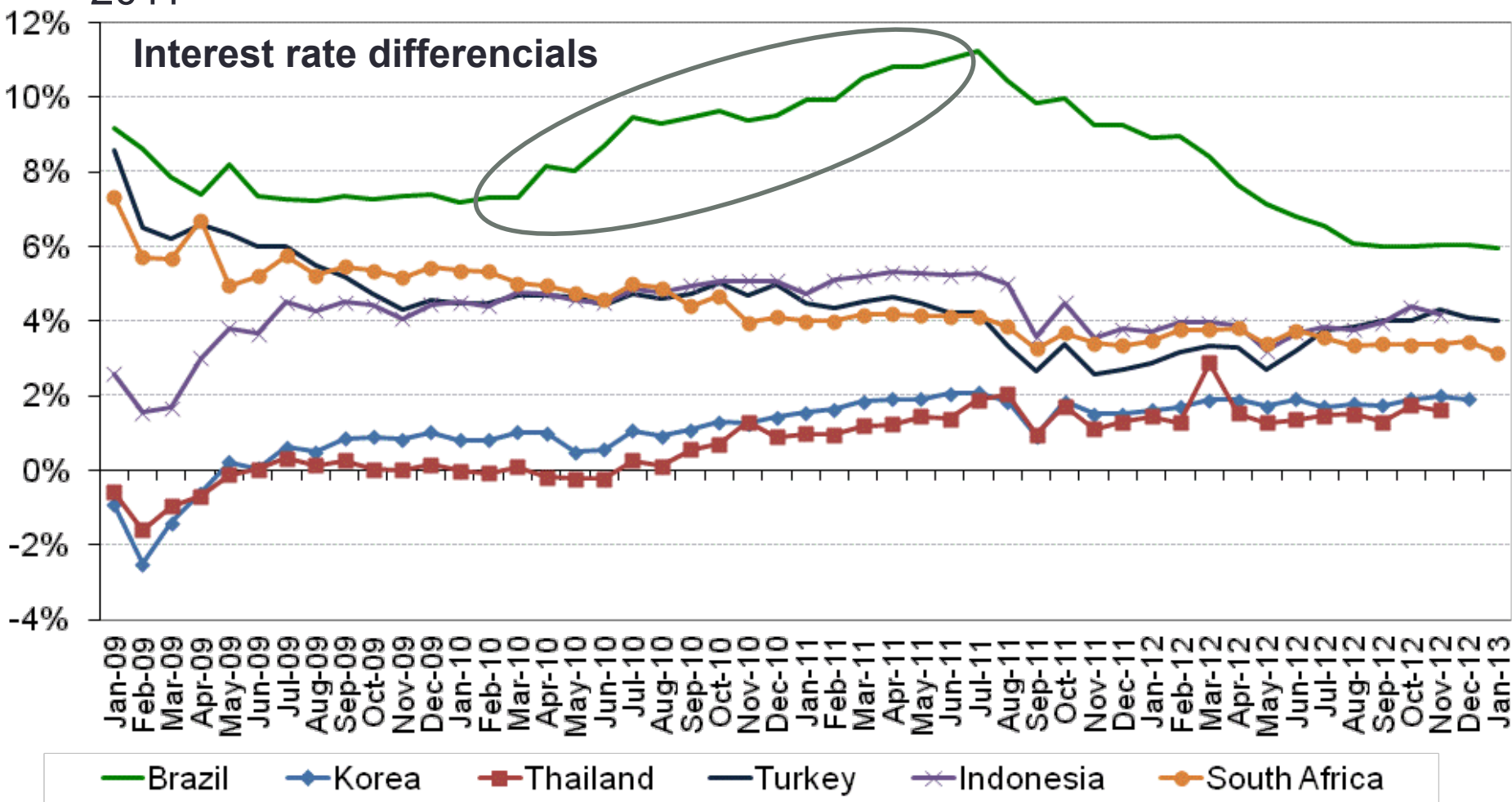


Source: Brazilian Central Bank. Author's elaboration.

Note: (1) Brazilian Policy Rate plus Brazil Risk minus Fed Fund Rate

The case of Brazil: interest rate differentials

- and, consequently, the greatest interest rate differential in comparison with other EME's, which increased even more from March 2010 to July 2011



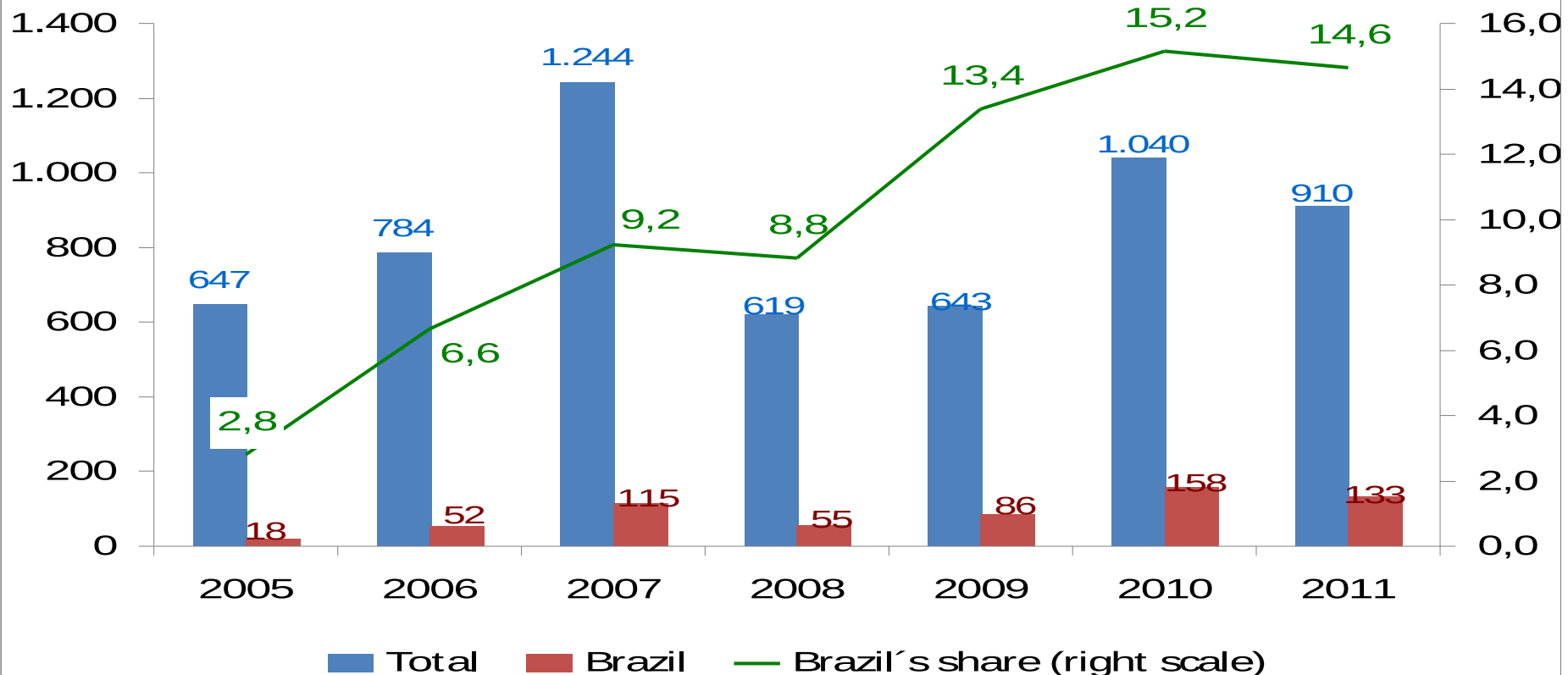
Note: Interest rate differential = country policy rate minus Fed Fund Rate plus country-risk.

Source: BCB.

The case of Brazil: capital inflows

- Brazil has been one of the main destinations of the new capital inflows boom => canonical carry trade

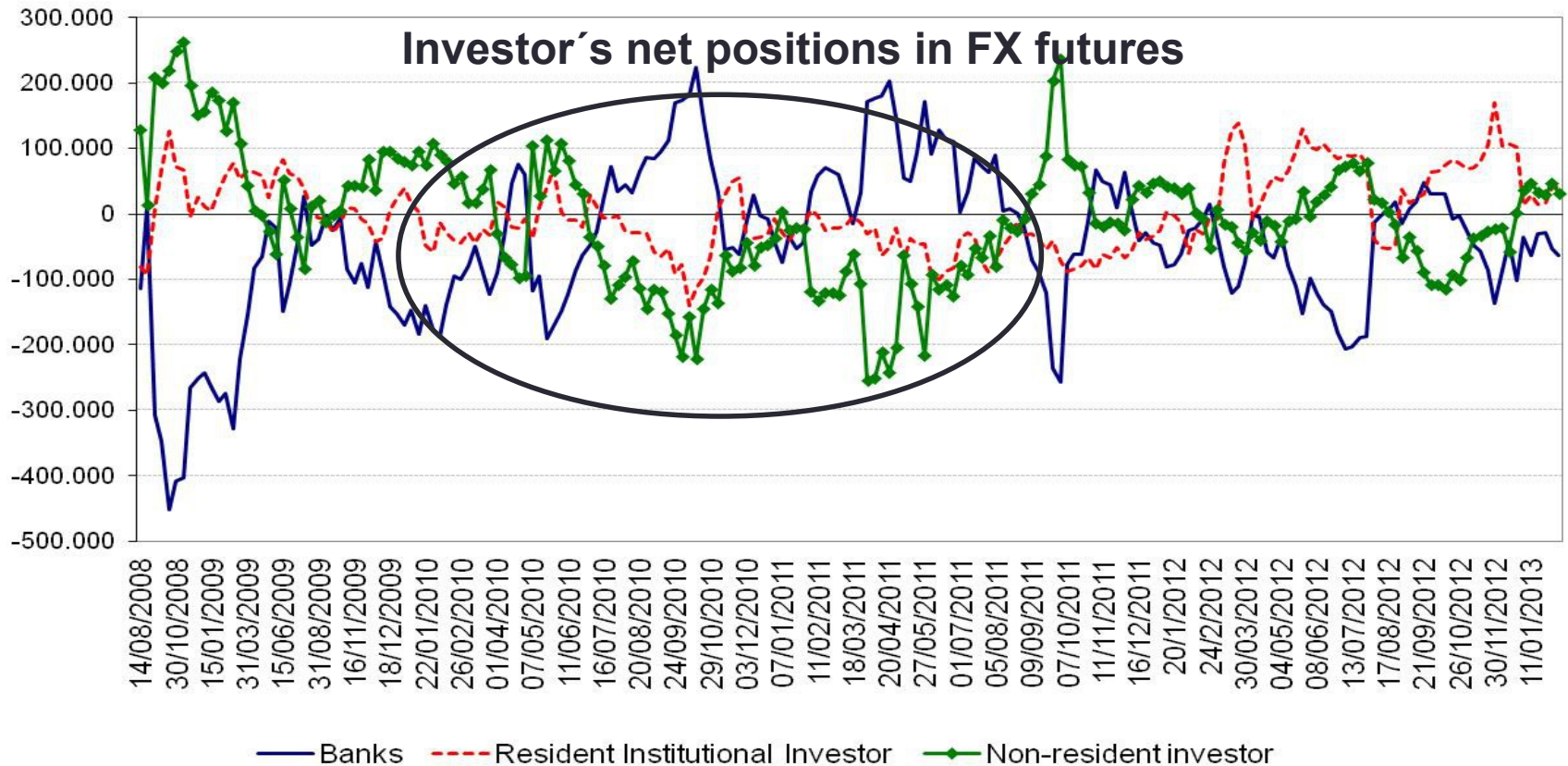
Non-resident capital flows to emerging market economies and to Brazil (USD billion)



Source: IIF and Central Bank of Brasil

The case of Brazil: derivatives carry trade

- Non-resident and resident agents engaged in the derivatives carry trade => net short positions in the FX future markets (as the FX future contract is the price of the USD)
 - Foreign institutional investors, primarily hedge funds, have been the most important investor group in the Brazilian FX future market, fostering the appreciation of the BRL through derivatives carry trade.



The case of Brazil: FX derivatives regulation

- **FX derivatives operations are concentrated on future market** and carried not only by banks, but also by non-resident investors, non-financial resident agents. Then, **CARs are insufficient to curb them:**
 - Prudential financial regulations only reaches resident financial institutions
 - Capital controls only influence cross-border transactions and, thus, do not cover FX derivatives operations in the FX future market.

The case of Brazil: FX derivatives regulation

- Then, Brazilian policy makers need to adopt, along with CARs, the here called FX derivatives regulation (financial tax on excessive net short positions in the FX derivatives markets)

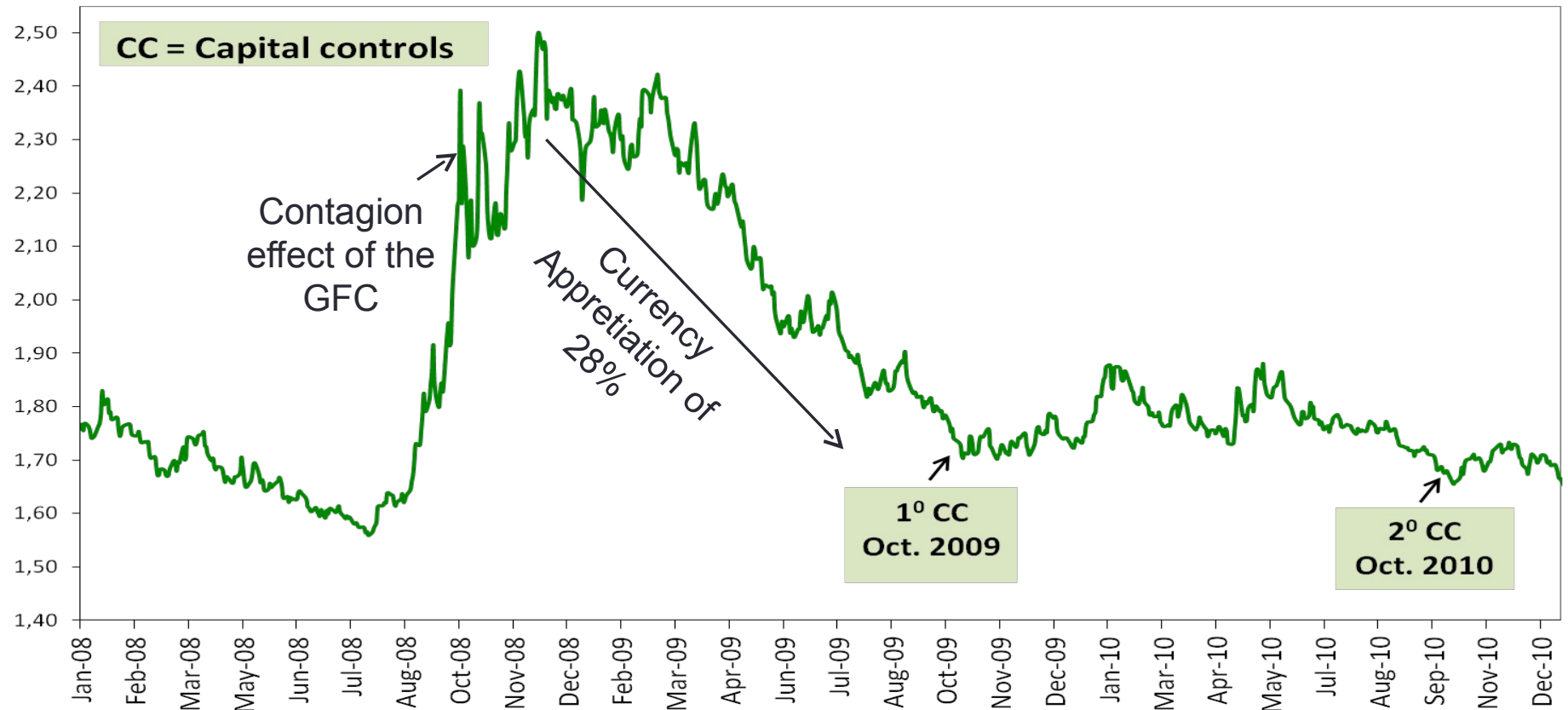
Cross-border finance regulatory framework

Regulation		Agents		Market (spot vs. derivatives)
		Financial vs. non-financial	Resident vs. Non-resident	
Prudential regulation		Financial institutions	Resident	Spot and derivatives
FX derivatives regulation		Both	Both	Derivatives (<i>onshore</i>)
Capital controls	Portfolio	Both	Non-resident	Spot
	Foreign loans	Both	Resident	Spot

The case of Brazil: regulatory response

- **Price-based Capital controls** (financial tax on portfolio investments) was **adopted too late and was insufficient** to curb the appreciation trend. Why?
 - The wider interest rate differential stimulated regulatory arbitrage through the FX derivatives market and the build up of short dollar positions by banks in the spot FX market.

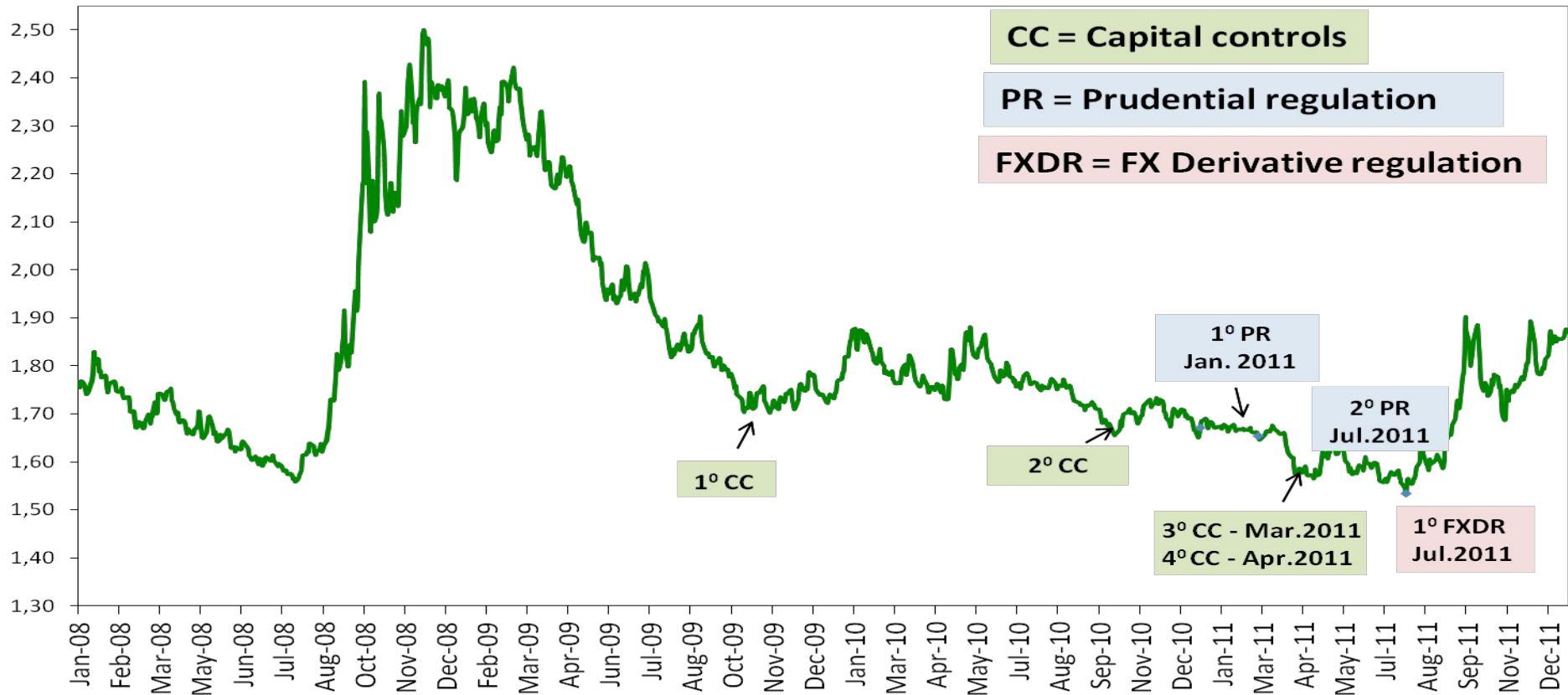
BRL/USD exchange rate and regulations



The case of Brazil: regulatory response

- **Only after Jan/2011** (Dilma's government), when **Brazilian policy markers adopted all of the three kinds of regulations** (capital controls, prudential financial regulation and FX derivatives regulation), the policy succeeded in curbing the currency appreciation trend
- Macroeconomic regime change: curbing the currency appreciation became a target of this regime as, in the post-crisis setting, the increased competition in the manufactured goods market unveiled the adverse impact of this appreciation on the Brazilian industry competitiveness

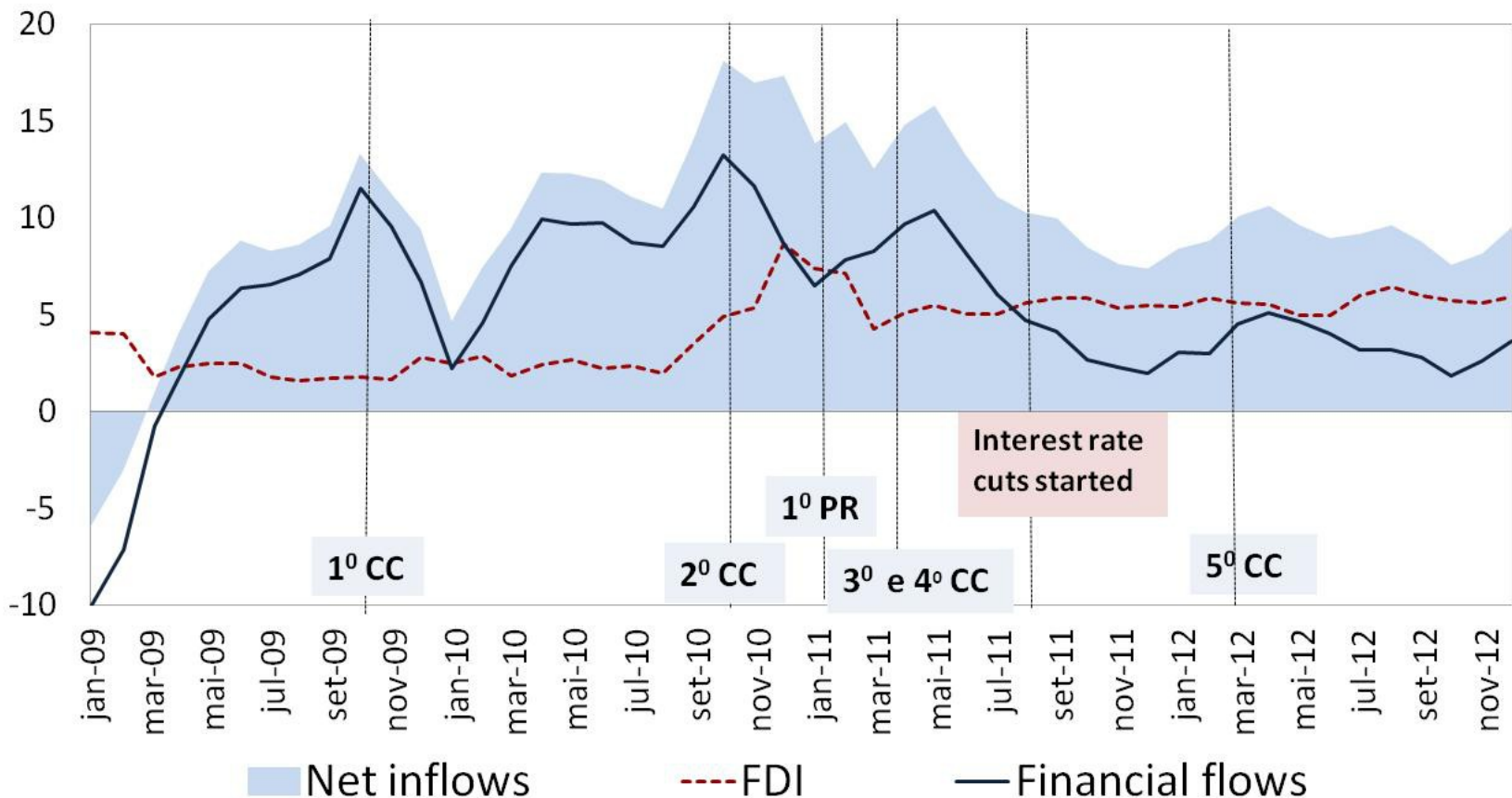
BRL/USD exchange rate and regulations applied



The case of Brazil: capital inflows

- Along with the broader regulatory framework, **policy rate cuts have also discouraged canonical carry trade**

Net inflows (3-m moving average - USD billion) and CARs



The case of Brazil: policy space

- Brazil has only been able to launch this broad regulatory toolkit because the successive **Brazilian governments did not make commitments in GATS and FTAs and BITS** that could jeopardize their policy space to carry out CARs and FXDRs

The case of Brazil: the withdrawn

- It's worth to mention that the Brazilian government has begun to withdraw some CCs in December 2012. Over June and July 2013, the FXDR, the PR and most of the remaining CCs were withdrawn in face of the mini-burst caused by investors reaction to Fed's tapering plans.
- This setting brought to light the **insufficiency of the regulations adopted during the boom to curb the currency depreciation in the burst phases**, mainly the FXDR, which only punished excessive bets in the currency appreciation, letting the other side (excessive bets in the BRL depreciation) unregulated.

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'Design principles'

- 1. Country-specific institutional aspects** (such as the FX market framework and the degree of financial openness), have to be taken into account in the designing of the tailor-made regulatory framework, namely, the specific mix of capital controls, prudential regulation and FX derivatives regulation.
- 2.** In countries with sophisticated and open financial markets, the **macroeconomic environment** has an important influence on the effectiveness of **Cross-Border Finance Regulation**. As a wider interest rate differential stimulates regulatory arbitrage, measures have to be even more dynamic, flexible and adjustable, involving a steady “fine-tuning” to close the loopholes found by private agents.
- 3.** To make **1** and **2** viable, a **country has to have permanent authority to regulate cross-border finance**, then, do not make commitments in GATS and FTAs and BITS.
- 4.** In the current setting of inexistence of a proper global economic governance structure, **the cross-border finance regulation should punish excessive bets both in the appreciation and depreciation of the domestic currency.**

Thank you!

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