

# Hot Money Flows, Cycles in Primary Commodity Prices, and Financial Control In Developing Countries

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May 27, 2014

# The US Dollar's Facilitating Role as International Money (1945 to 2014)

	<i>Private</i>	<i>Official</i>
<i>Medium of Exchange</i>	Vehicle	Intervention
<i>Store of Value</i>	Banking	Reserves
<i>Unit of Account</i>	Invoice	Peg
<i>Standard of Deferred Payment</i>	Private Bonds	Sovereign Bonds

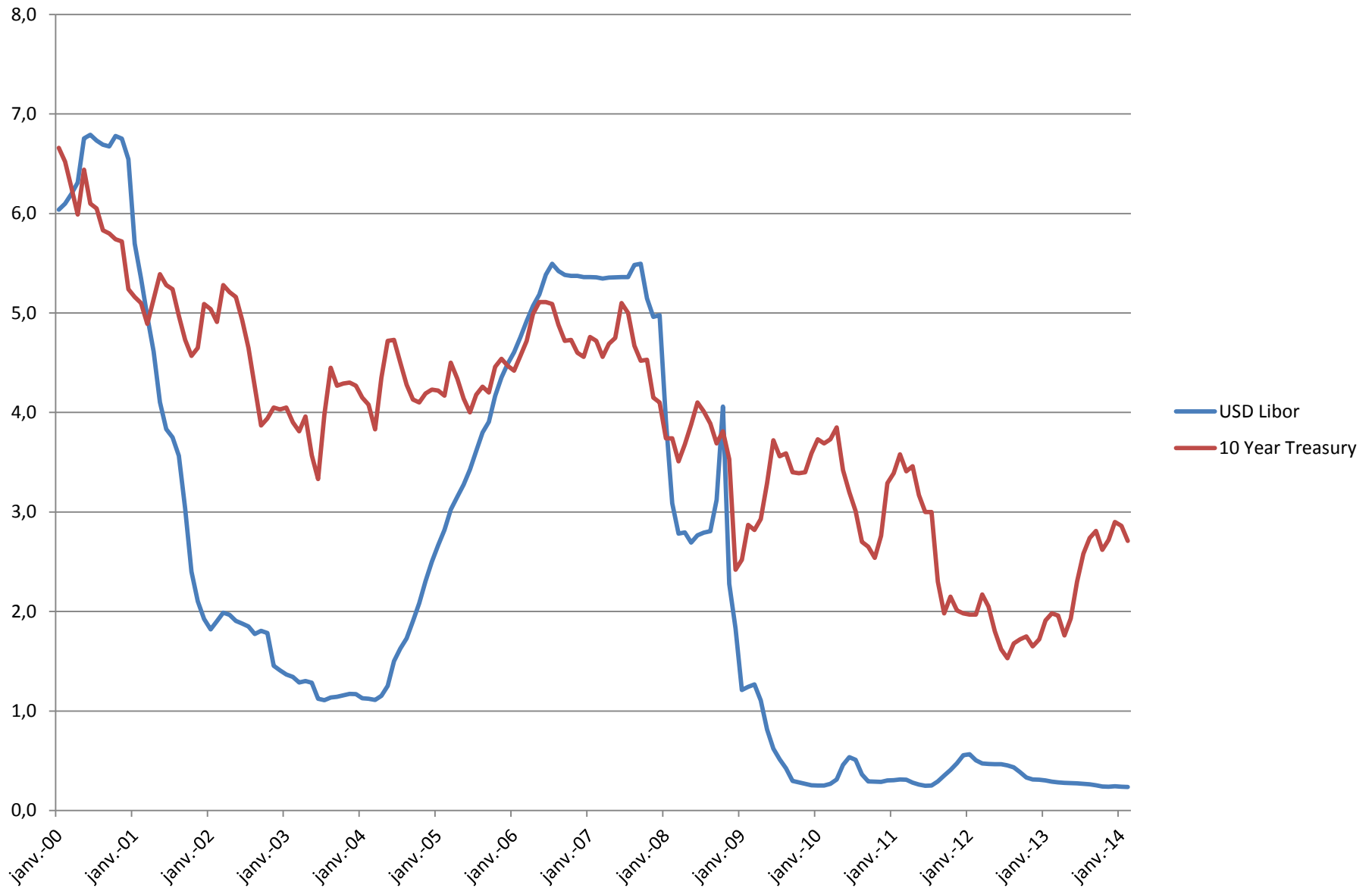
# The Unloved World Dollar Standard 1945—2014

- In major crises, IMF is lender of first resort but the Federal Reserve is the lender of last resort: Europe 2008 and 2011 Interbank dollar swaps.
- However, in setting US monetary policy, the Fed is inward looking and ignores the rest of the world.
- Episodes of US easy money, and /or talking the dollar down, provoke hot money outflows
- From the Nixon Shock of 1971 to Greenspan-Bernanke near-zero interest rates and quantitative easing in the new millennium

# Tri-lemma of an Open Economy in Traditional International Finance

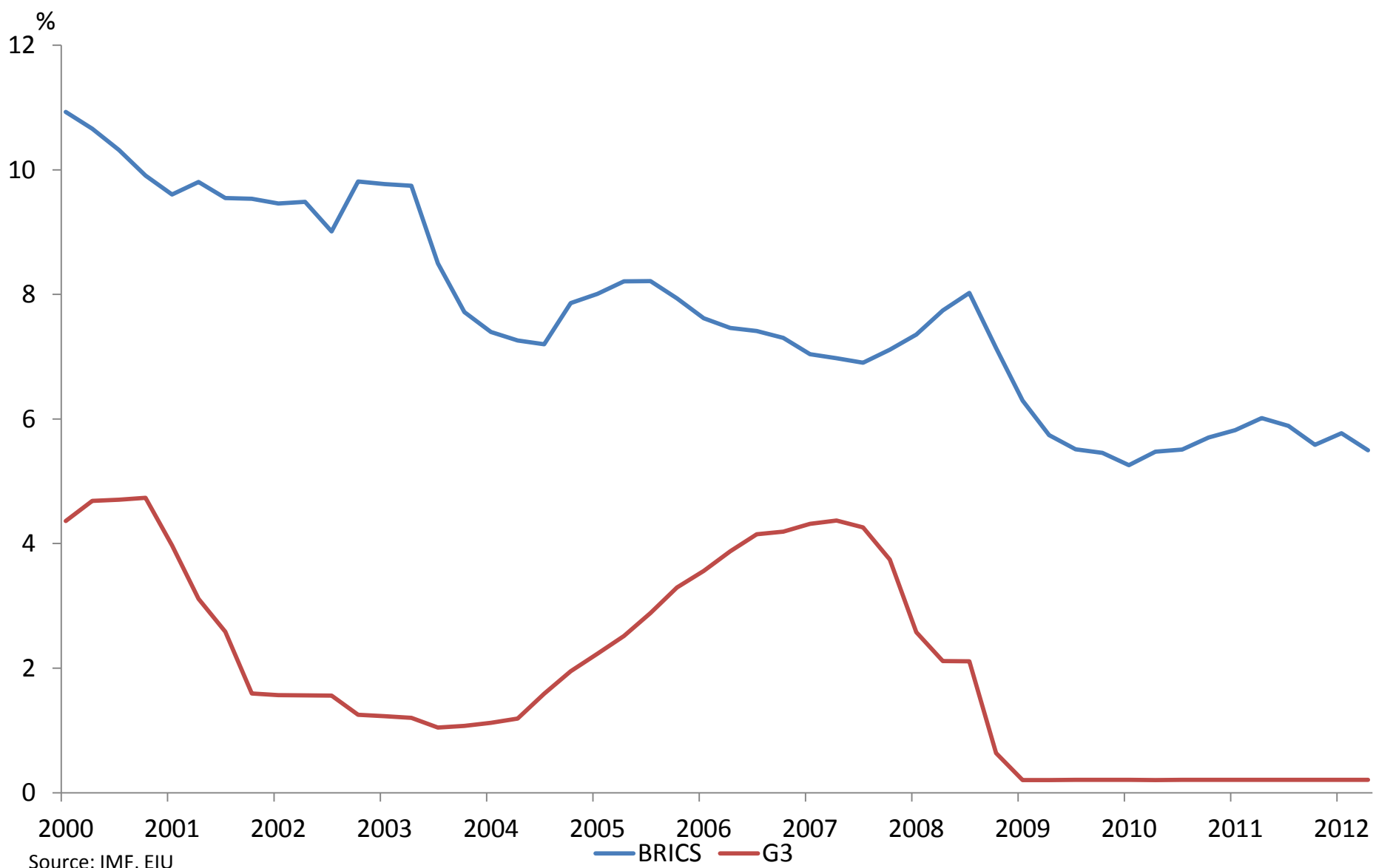
- An open economy cannot have all of
  1. An independent monetary policy
  2. A fixed exchange rate
  3. No capital controls
- Foreign exchange intervention makes the domestic money supply endogenous. So to achieve national monetary independence, the traditional remedy is to float the exchange rate.
- But floating breaks down if there are wide interest differentials between the center and periphery

# Figure 1: US Interest Rates



Source: FRED

Figure 7. GDP Weighted Discount Rate of BRICS and G3



# From Tri-lemma to Dilemma for Emerging Markets (EM)

- Wide interest differentials between the center and periphery induce hot money inflows to EM.
- Contrary to conventional wisdom, EM with convertible currencies cannot achieve independent monetary policies by floating their exchange rates
- The **dilemma** for EM central banks:
  - float and appreciate, lose export competitiveness. Dollar value of Brazilian Real doubled between 2003 and 2007.
  - or intervene to buy dollars and stabilize the exchange rate, lose monetary control, and inflate.
- Collective monetary expansion and inflation in EM spawns bubbles in world commodity prices and other assets.

Figure 2. Emerging Markets and China, Foreign Exchange Reserves (Billion USD)

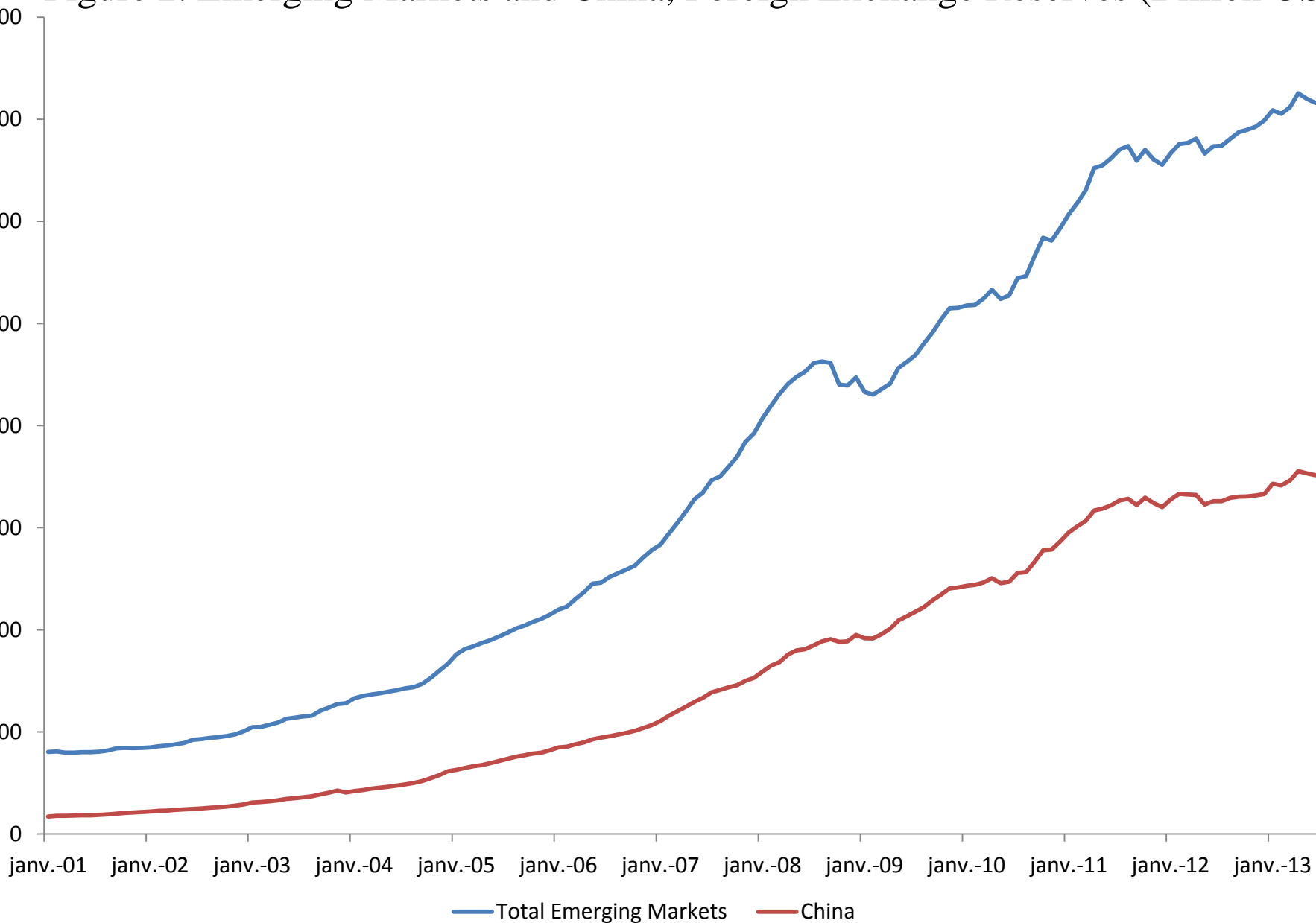




Figure 3 Headline CPI: EM and US



Source: EIU, Author's Calculation

Emerging Market include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand

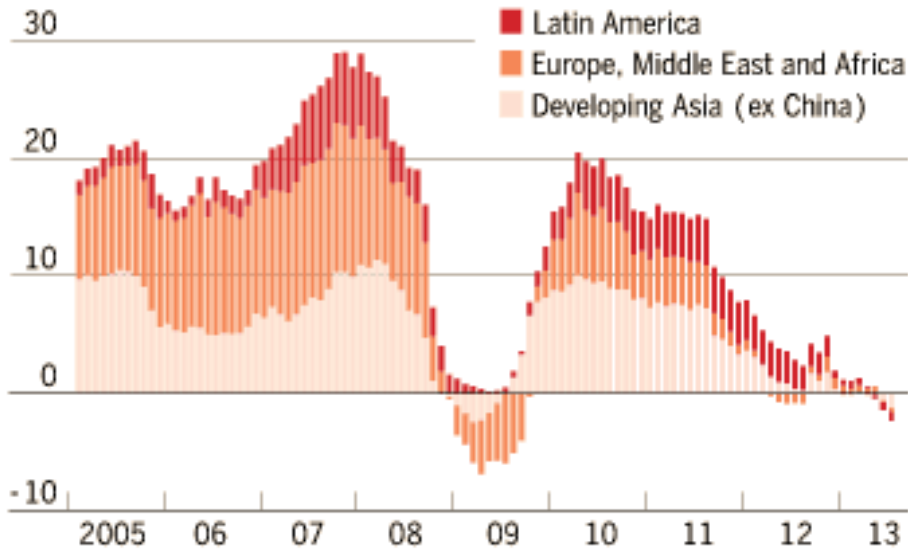
# Carry Trades and Banking Crises

- Carry Traders exploit the interest differential by borrowing at low interest rates in “source” currencies to invest in high-interest “investment” currencies in EM. (Dollar depreciates 2002-07.)
- They are unhedged risk takers who borrow at short term in source currencies from banks.
- But if banks face an unexpected crisis, they stop lending to risky borrowers and refuse to roll over old credits
- Hot money then suddenly returns to the center—particularly to the US, which is seen as a safe haven under the dollar standard
- Dollar appreciates, EM currencies slump

# Figure 2A Change of Reserves in Selected Emerging Countries

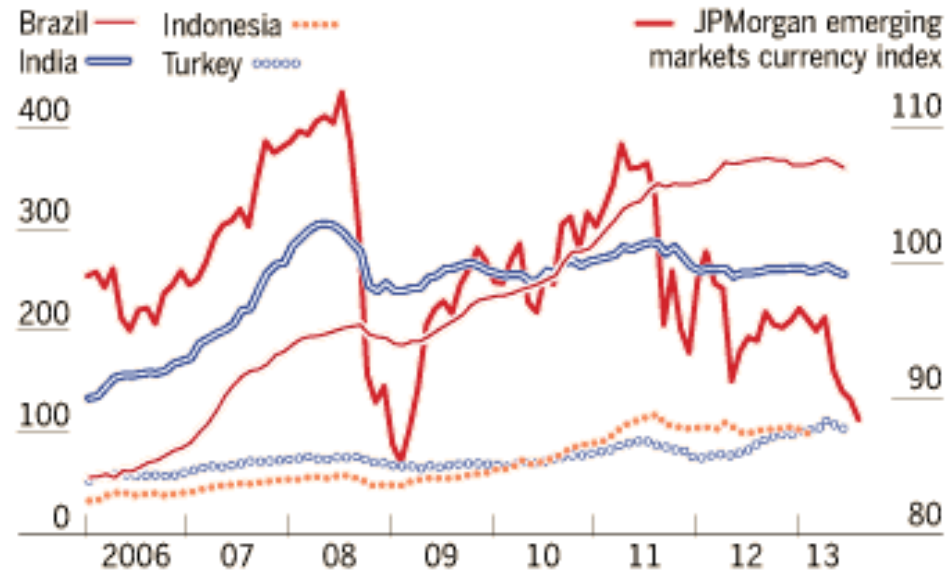
## Emerging markets defence

Central bank reserves by region\* (annual % change)



\* Constant exchange rates, assuming COFER weights

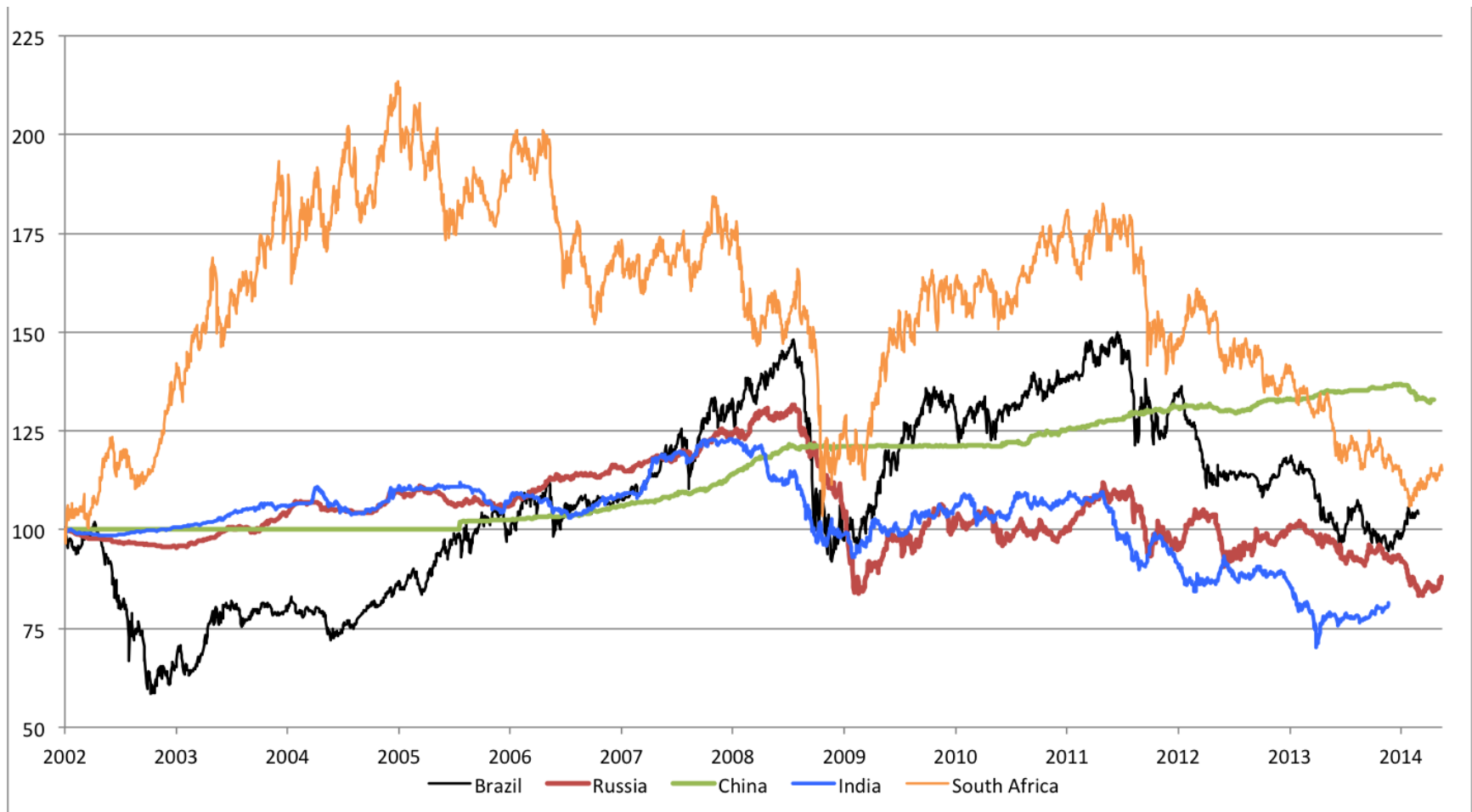
Central bank reserves by country (\$bn)



Sources: Morgan Stanley; Thomson Reuters Datastream

Source: Financial Times

Figure 4 BRICS Currencies, USD/LCU (local currency unit), Jan-2002=100



# Exchange Rate Behavior on the Periphery: China versus Brazil

- Two Great Waves of hot money flows into the periphery: 2002 – 2007, mid 2009 to mid 2011
- China keeps yuan/dollar rate fairly stable with slow RMB appreciation after mid 2005. Every morning, PBC sets Y/\$ central rate at level of the close of previous trading day. Daily variation of  $\pm 1$  percent (increased to  $\pm 2$  percent in March 2014) is then permitted. Sustains high growth.
- Brazil much closer to a free float. Dollar value of the real doubled between 2003 and 2007, and knocked Brazil off its high growth path.
- Other BRICS more like Brazil than China; heavy interveners but not very successful in smoothing their dollar exchange rates.

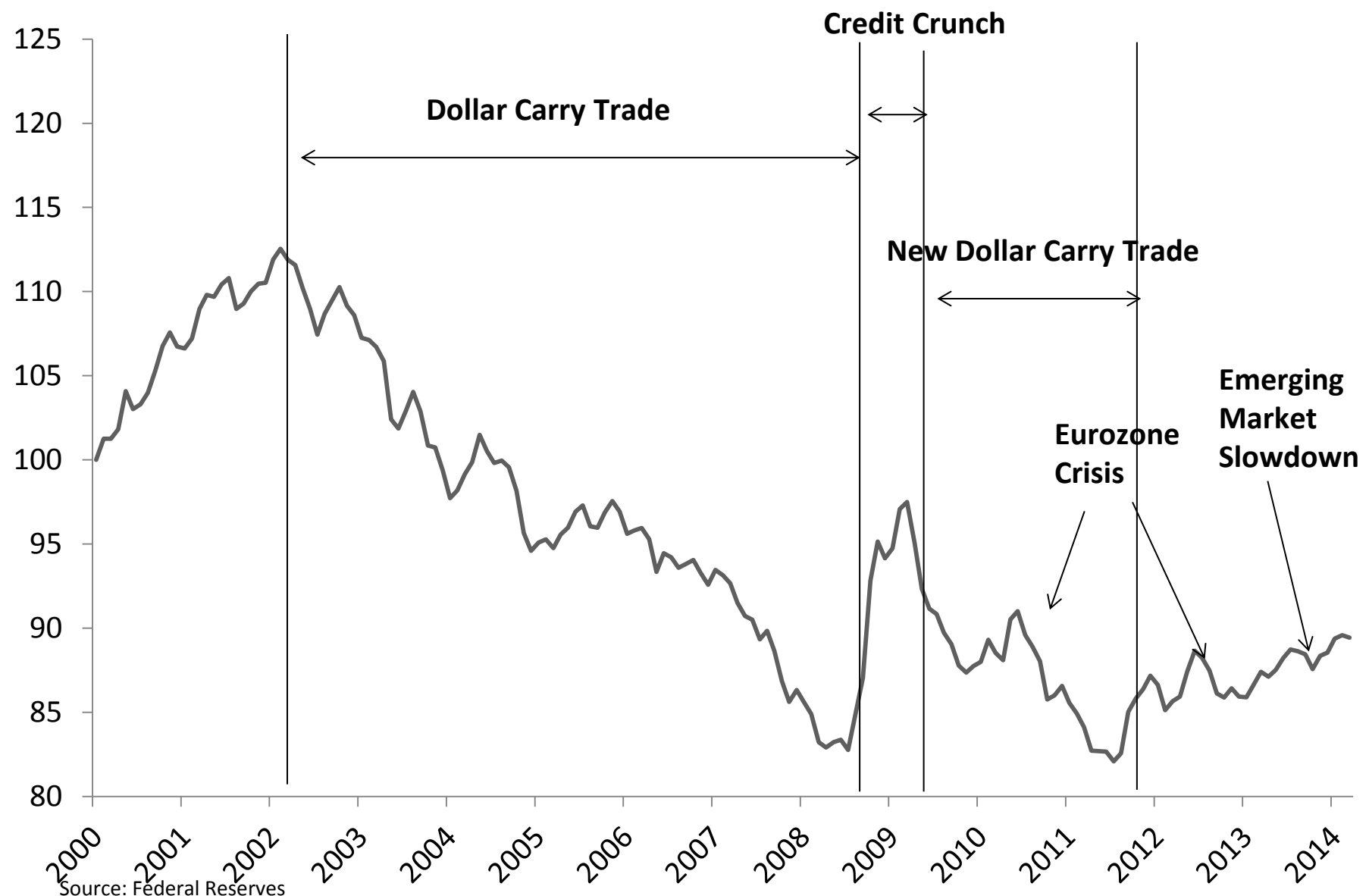
# Daily Exchange Rate

## USD/TUR (lira) & USD/IND (rupee) – 2002 to present



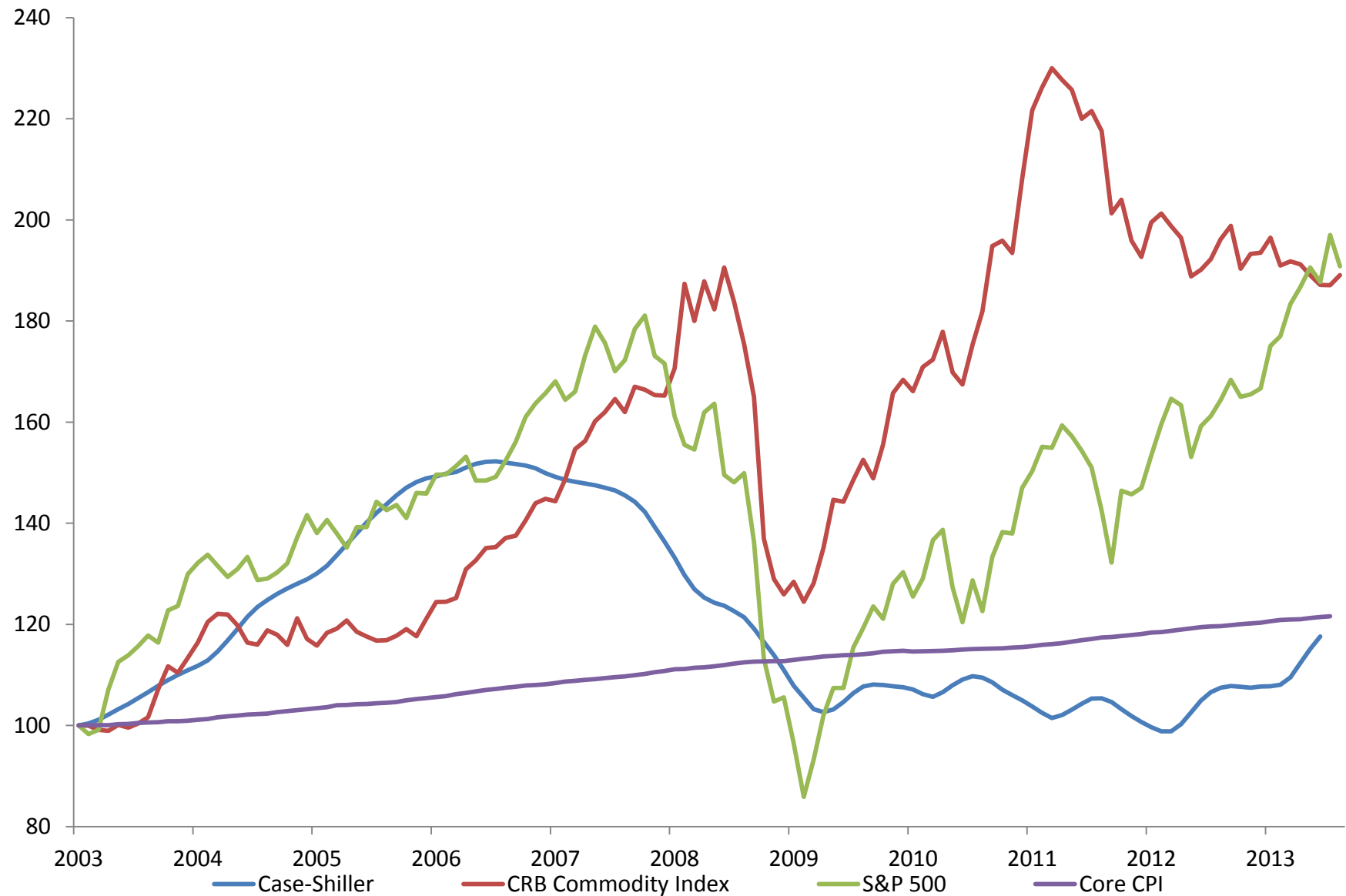
Source: Bloomberg  
Index base date – January 7<sup>th</sup>, 2002

Figure 5. US Real Effective Exchange Rate, Jan-2000=100



Source: Federal Reserves

Figure 6: The Greenspan-Bernanke Bubbles in U.S. Economy 2002 to 2013 (2005 = 100)



Source: Bloomberg



# Collective Bubbles in Prices of Primary Commodities in the World Economy

- Ultra low interest rates at the center attracts carry traders willing to move hot money to the EM periphery
- Involuntary monetary expansions in EM collectively bids up primary commodity prices. EM are important producers and consumers of primary commodities.
- A banking crisis at the center then cuts off carry traders from their funding. Hot money then returns to the U.S.
- EM currencies depreciate (except for China's) and prices of primary commodities collapse.
- The common monetary mechanism (waves of hot money flows) ensures high price correlations across very diverse commodities—see World Bank figures.

**Figure 1**

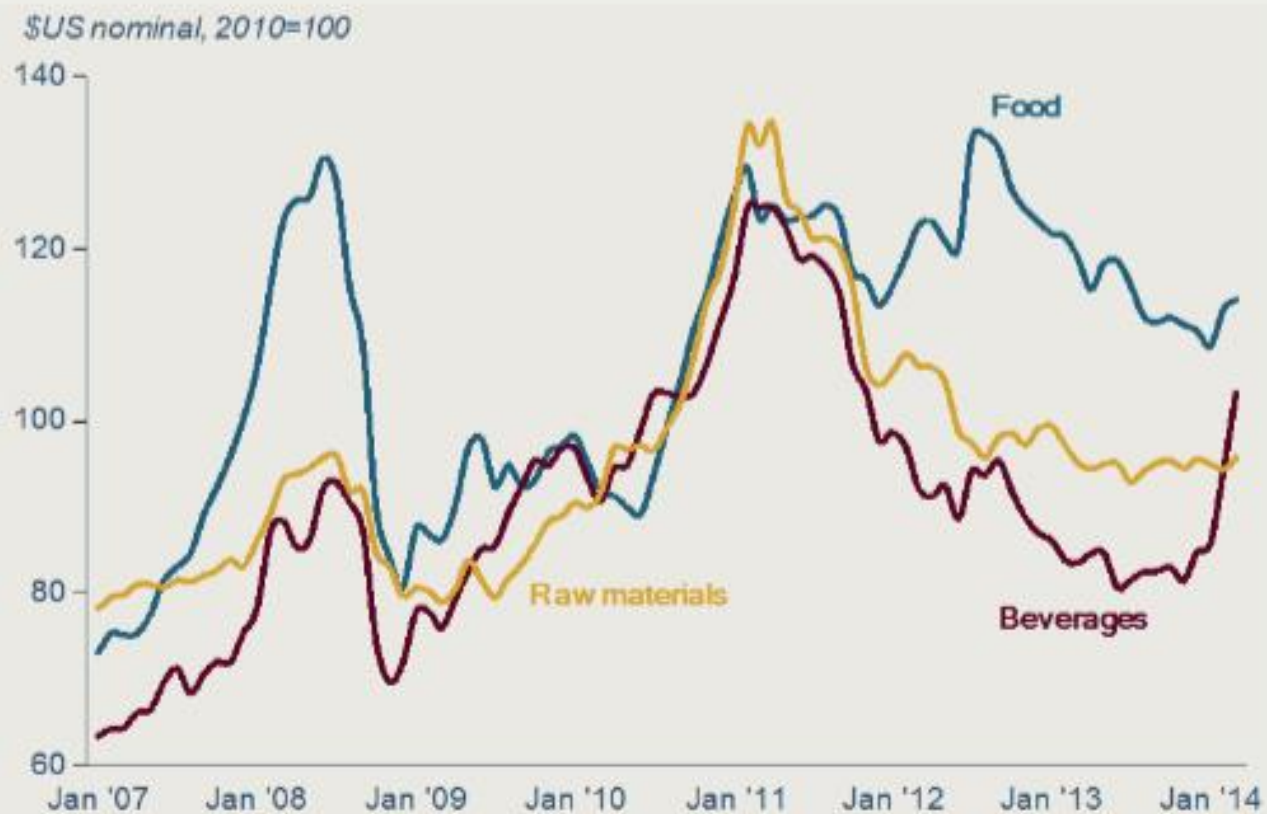
**Commodity price indices**



Source: World Bank.

**Figure 2**

**Agriculture price indices**

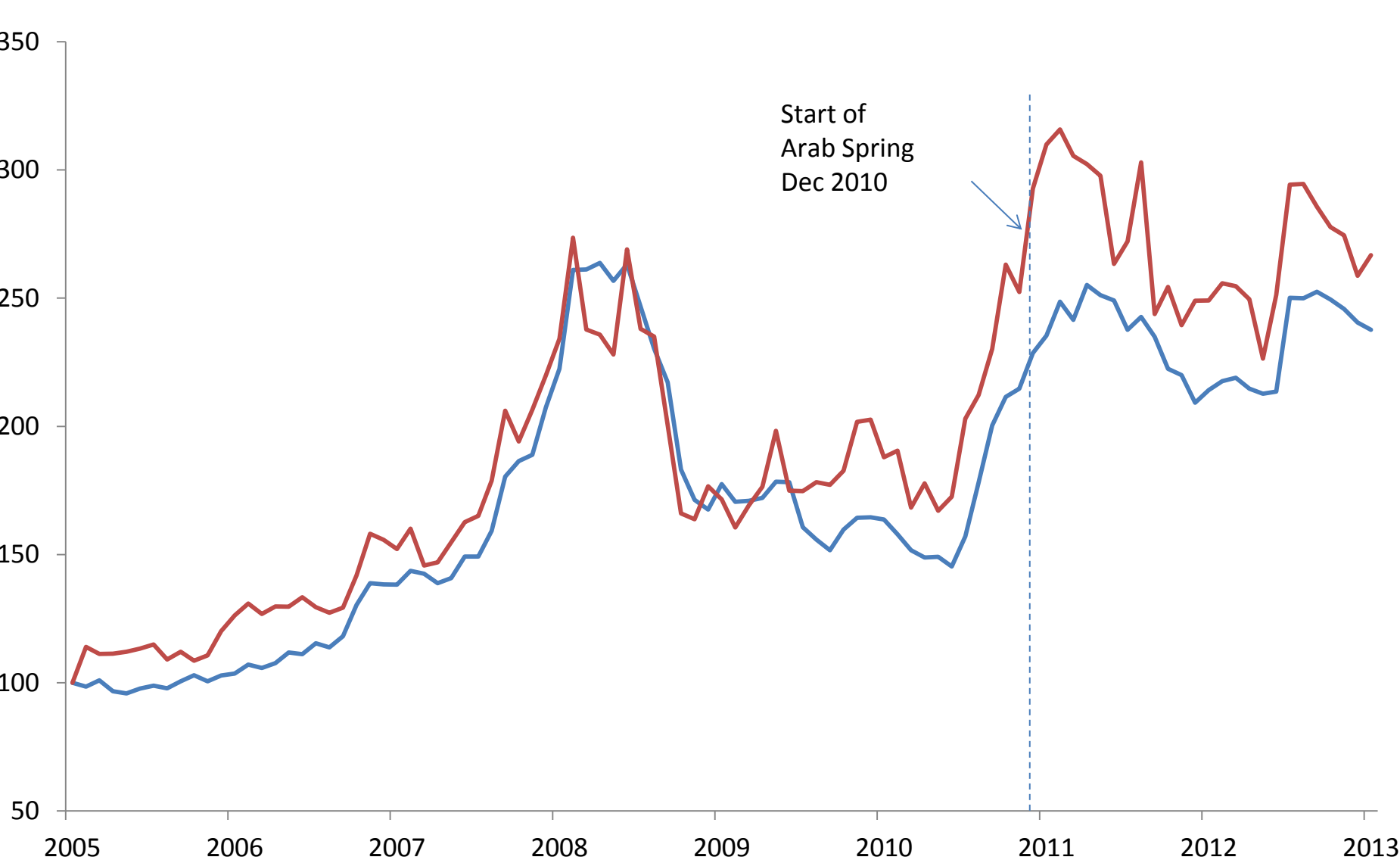


Source: World Bank.

# The Arab Spring: A Collective Food Riot?

- Sudden increases in primary commodity prices can devastate political systems in LDCs which depend on low food and fuel prices.
- Witness food riots leading to the “Arab Spring”.
- In 2010, the international prices of food grains and cereals virtually doubled. That December a Tunisian food vendor, Mohamed Bouazizi, immolated himself over frustration. Riots followed with fall in the Tunisian government.
- Then protests spread throughout North Africa. Not pure contagion because food prices everywhere remained elevated into 2012.
- Westerners misinterpret riots as legitimate protests against corrupt governments. Too much support for the rioters.

Figure 8 Food/Agriculture Product Price (2005=100)



Source: Bloomberg

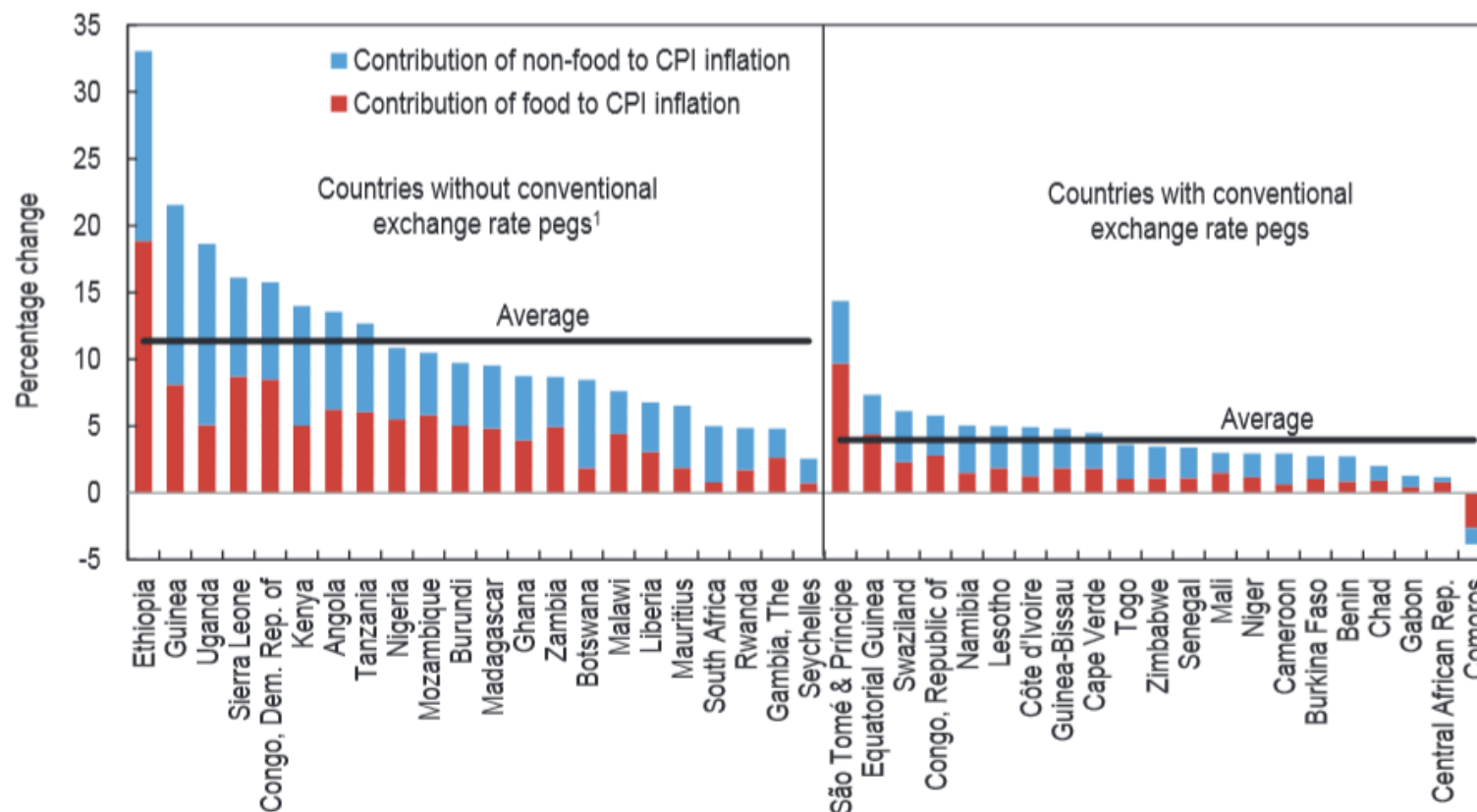
UN Food And Agriculture World Cereals Price Index

S&P GSCI Agriculture Index

# Food Price Inflation in Sub-Saharan Africa

- Poorer countries in Africa with inconvertible currencies are not much directly affected by hot money flows.
- However, they are heavily influenced by fluctuations in prices of primary commodities which dominate their export bills.
- Export diversification into other primary commodities is of limited usefulness if they mainly fluctuate together.
- On the import side, evidence suggests that a traditional exchange peg may best limit the pass through of world food-price inflation into the domestic economy.

**Figure 1.8. Sub-Saharan Africa: Consumer Price Index and Food Inflation, Average 2011**



Sources: IMF, Information Notice System; IMF International Financial Statistics; and IMF, African Department database.

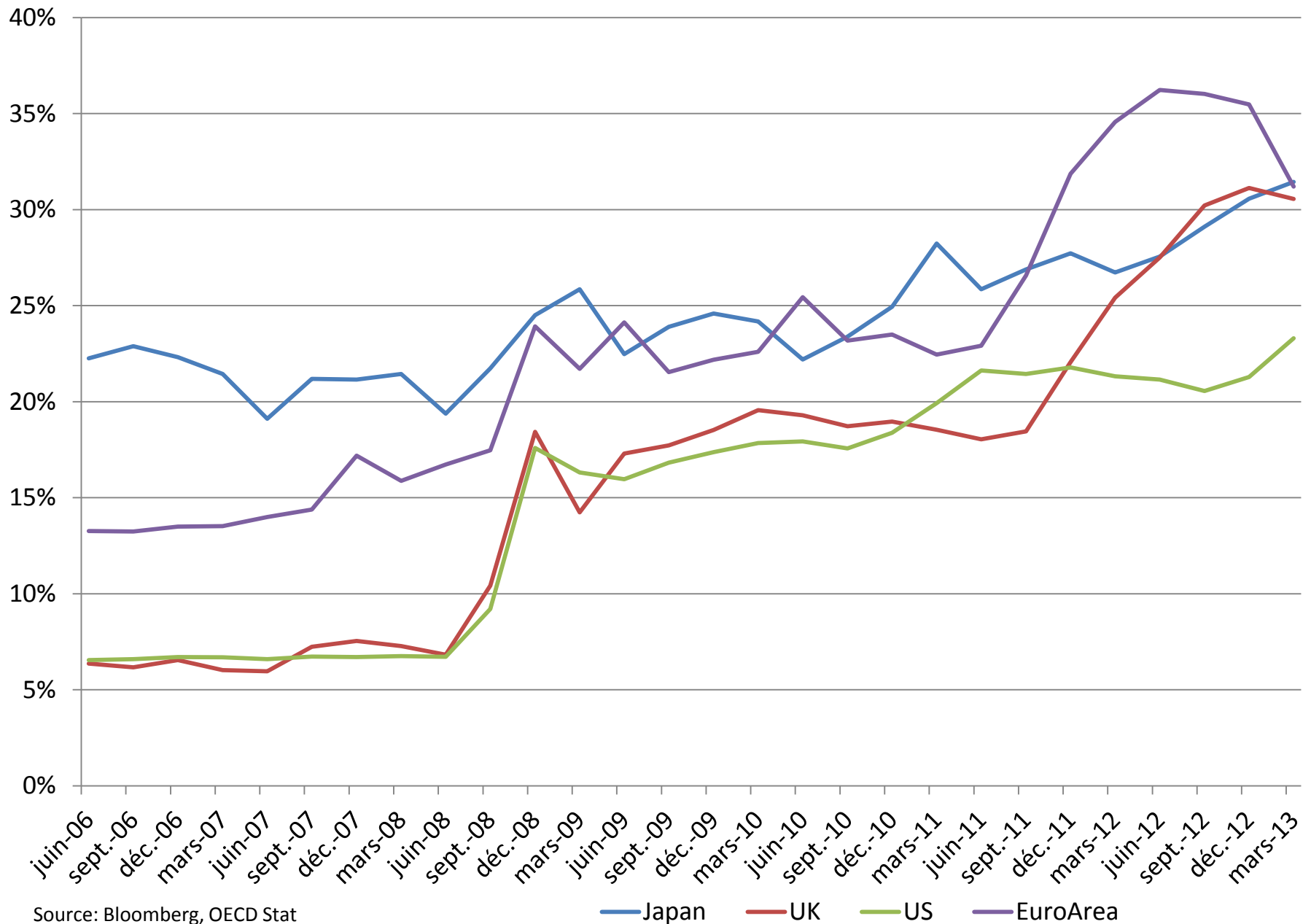
<sup>1</sup> Includes all SSA countries whose exchange rate regime is not classified as either a conventional peg or a currency board, ranging from de facto crawling pegs to fully floating regimes, according to the IMF's 2011 *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER).

# Disappointing Recovery of the United States from the 2008 Crisis

- All the industrial countries (IE) now following the same monetary policy: near zero short-term interest rates, massive QE at longer term
- Makes EM and developing economies even more vulnerable to hot money flows and cycles in primary commodity prices.
- But no great benefit to the IE themselves

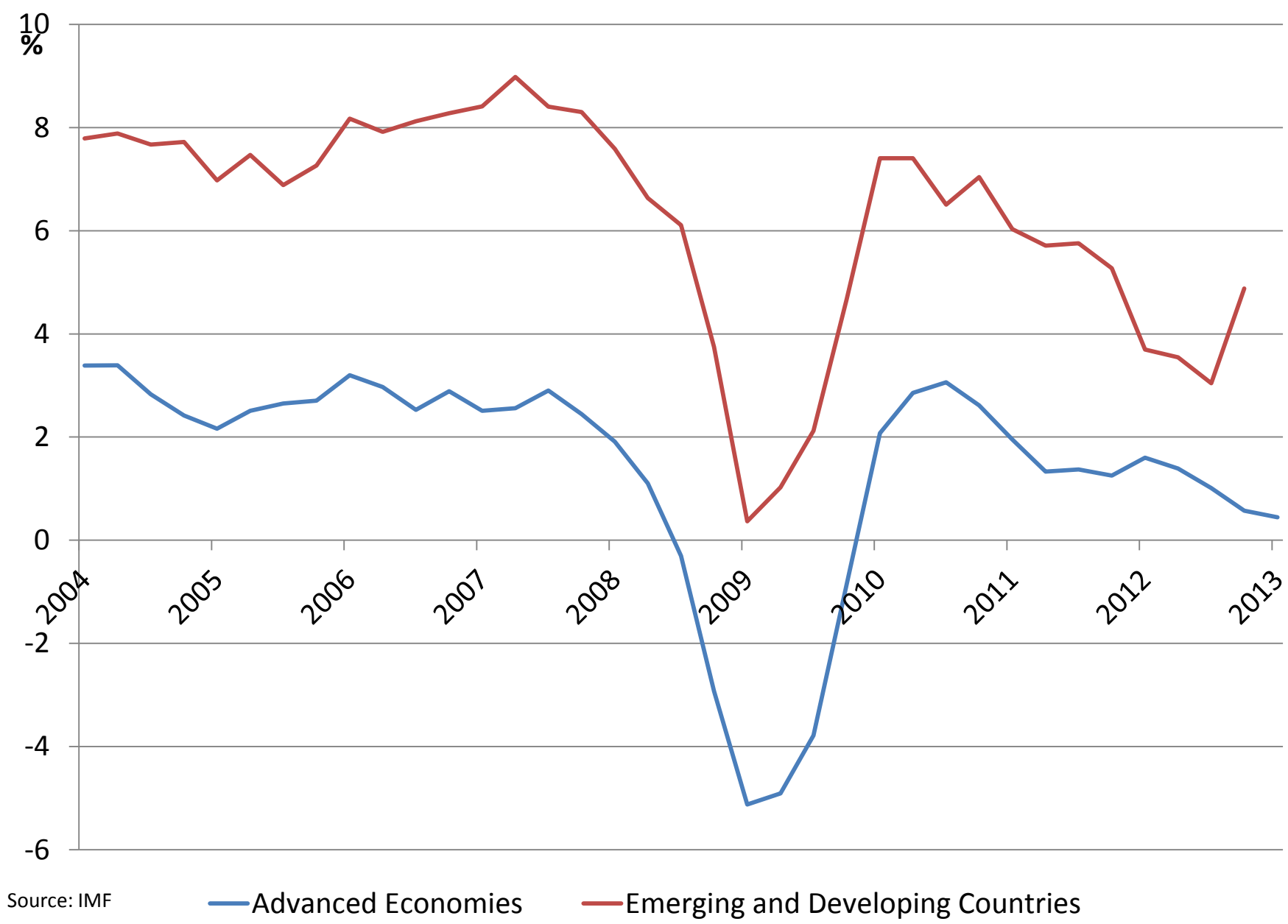


Figure 9. Size of Central Bank Balance Sheet, % of GDP



Source: Bloomberg, OECD Stat

Figure 10. GDP growth: Developed vs. Developing World



Source: IMF

# Near Zero Interest Rates and Bank Disintermediation in the United States

- Ultra low U.S. interest rates associated with a sluggish recovery from 2008 crisis
- Worsening income distribution with restraints on credit to small and medium sized industries.
- *Direct finance* is okay: bond and stock markets are thriving to serve large corporate enterprises
- But *indirect finance* through banks serving SMEs is in relative decline.
- Banks stop being intermediaries and become agents in the credit markets for corporations.

# Moral of this Unhappy Story: What Governments Should Do?

- Suppress bubble-producing carry trades by limiting interest differentials between the “center” and the “periphery”.
- U.S. Fed should abandon its zero interest policy, and phase in modestly higher rates in conjunction with the other industrial countries represented by the ECB, Bank of England, and Bank of Japan.
- EM and SSA likely will still need controls on capital flows when interest rate misalignments are extreme.
- The U.S. cannot impose such controls without undermining the world’s payments system.