

# **Monetary Policy Challenges in Turkey**

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# **I. PROBLEMS**

# Problem I

- Before the global crisis, there was at least two decades of price stability in advanced economies (AEs) and low inflation in 2000s emerging market economies (EMEs).
- Nonetheless the global crisis occurred.
- Was focusing solely on the price stability by the central banks a mistake?

# Problem I

- If so, what should be the new monetary policy set-up?
  - Price stability and financial stability?
- Which financial stability?
  - Macro, micro?
  - What is the definition of financial stability?
- What should be the new financial architecture?
  - Different institutions or one super-power?

# Problem II

- Broadly since the collapse of Lehman Brothers up to 2010, monetary policy and fiscal policy responses were similar across the EMEs.
- Fiscal stimulus and sharp policy rate cuts were observed both in the EMEs and advanced economies.

# Problem II

- Note first that monetary and fiscal easing is politically feasible.
- Second, in that period, the G20 countries faced similar problems: output and job losses.
- So, it was in the interest of all countries that have policy place to act take countercyclical policy measures.

# Problem II

- The unconventional monetary policies of advanced economies, starting from 2010, triggered substantial problems in most of the EMEs and brought to forefront the lack of policy cooperation phase.
- An important number of the EMEs in the G20 witnessed a surge in capital inflows –mainly portfolio debt, appreciation pressures on domestic currency, rapid credit growth, and rise in asset prices.

# Problem II

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|                            | Brazil | India | Indonesia | Mexico | South Africa | Turkey |
|----------------------------|--------|-------|-----------|--------|--------------|--------|
| Net capital inflows        |        |       |           |        |              |        |
| 2004-2007                  | 1.5    | 4.6   | 0.5       | 1.9    | 8.3          | 6.0    |
| 2010-2013                  | 3.9    | 3.8   | 2.7       | 4.4    | 5.2          | 8.4    |
| Net portfolio inflows      |        |       |           |        |              |        |
| 2004-2007                  | 1.1    | 1.7   | 1.2       | -0.3   | 3.9          | 1.4    |
| 2010-2013                  | 1.5    | 1.1   | 1.1       | 4.2    | 1.5          | 3.3    |
| Portfolio debt liabilities |        |       |           |        |              |        |
| 2004-2007                  | 7.5    | 1.8   | 3.6       | 6.7    | 7.1          | 7.3    |
| 2010-2013                  | 10.2   | 3.3   | 6.0       | 12.9   | 12.0         | 10.9   |
| Current account balance    |        |       |           |        |              |        |
| 2004-2007                  | 1.2    | -1.0  | 1.7       | -1.0   | -4.7         | -5.0   |
| 2010-2013                  | -2.6   | -3.3  | -1.3      | -1.2   | -3.8         | -7.5   |

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# Problem II

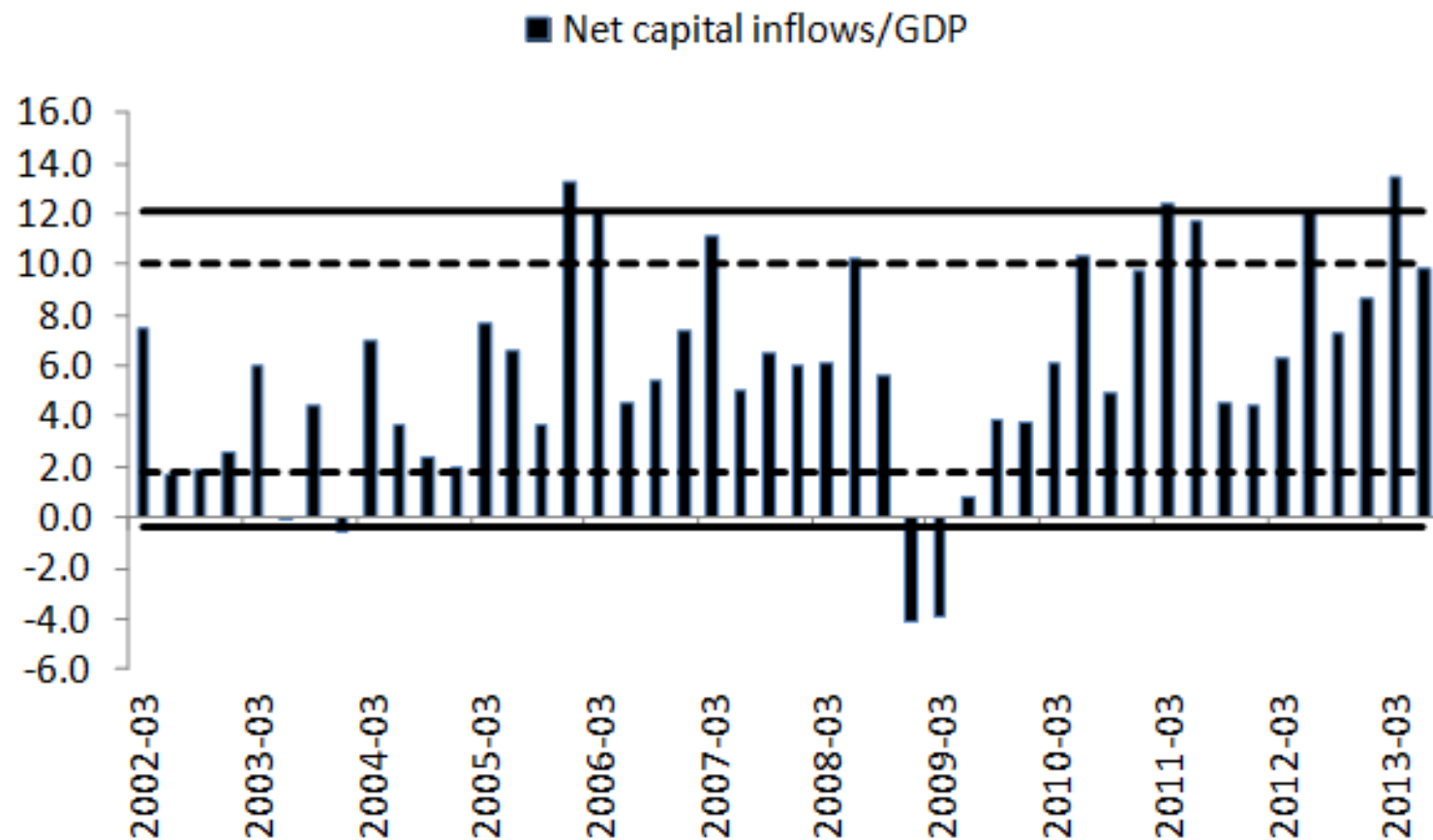


Figure 1. Ratio of net capital Inflows to GDP ratio: 2002Q1-2013Q2 (percent).

# Problem II

Table 3. Fluctuations in Capital Flows and Asset Prices

|                            |                     | Sovereign spread (EMBI) <sup>a</sup> |                                       | Basket exchange rate <sup>b</sup> |                               | Benchmark rate-policy rate <sup>c</sup> |
|----------------------------|---------------------|--------------------------------------|---------------------------------------|-----------------------------------|-------------------------------|---|
|                            |                     | Average                              | Change <sup>d</sup> (bp) <sup>e</sup> | Average                           | Change (percent) <sup>e</sup> | Average (pp) <sup>f</sup>               |
| Surge-in-capital-flows     |                     |                                      |                                       |                                   |                               |   |
| 2005M9-2006M2 <sup>g</sup> | Before <sup>h</sup> | 292.3                                | -65.3                                 | 1.52                              | -2.6                          | 0.9                                     |
|                            | During              | 227.0                                |                                       | 1.48                              |                               | -0.5                                    |
|                            | After <sup>i</sup>  | 221.0                                | 6.0                                   | 1.64                              | -9.8                          | 0.7                                     |
| 2010M3-2011M4              | Before              | 246.7                                | -32.7                                 | 1.82                              | -2.2                          | 1.8                                     |
|                            | During              | 214.0                                |                                       | 1.78                              |                               | 1.5                                     |
|                            | After               | 266.1                                | -52.1                                 | 2.05                              | -13.2                         | 2.4                                     |
| 2012M4-2013M4              | Before              | 350.9                                | -112.3                                | 2.11                              | -2.8                          | 2.3                                     |
|                            | During              | 238.6                                |                                       | 2.05                              |                               | 0.5                                     |
|                            | After               | 250.3                                | -11.7                                 | 2.25                              | -8.9                          | 2.1                                     |
| Sudden stops               |                     |                                      |                                       |                                   |                               |   |
| 2008M10-2009M4             | Before              | 322.7                                | 223.9                                 | 1.56                              | 18.6                          | -2.3                                    |
|                            | During              | 546.6                                |                                       | 1.85                              |                               | 2.4                                     |
|                            | After               | 310.5                                | 236.1                                 | 1.83                              | 1.1                           | 2.0                                     |

# Problem II

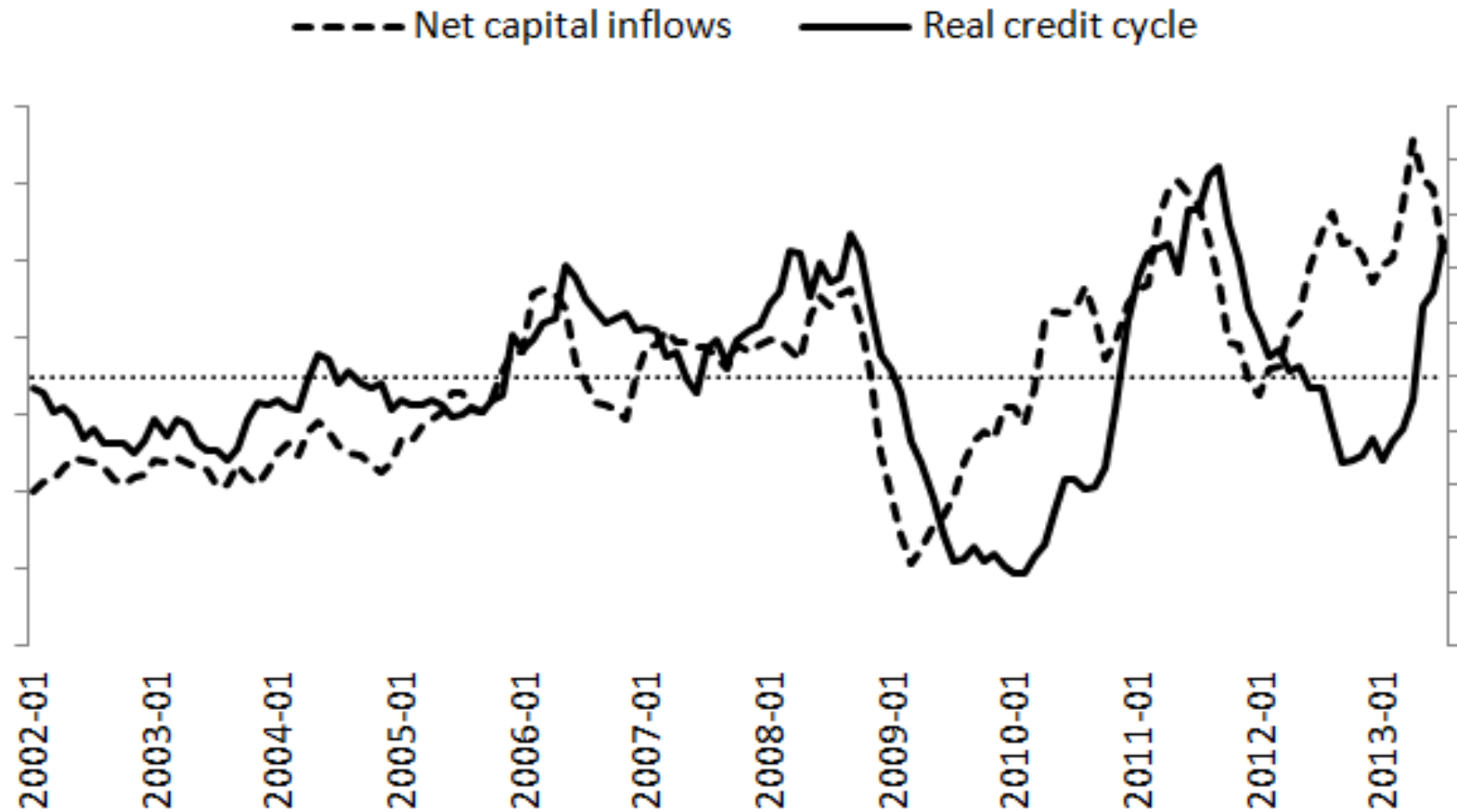


Figure 2. Net capital inflows (six-month moving average) and the cyclical component of the real credit stock: January 2002-July 2013.

# Problem II

| Table 5. Granger Causality Between Net Capital Inflows and Real Credit Cycles<br>(2002M1-2013M7) |                             |                        |                                  |
|--|-----------------------------|------------------------|----------------------------------|
| Null hypothesis  | Number of lags <sup>a</sup> | p-values               |                                  |
|  |                             | HP filter <sup>b</sup> | Deterministic Trend <sup>c</sup> |
| Bivariate information set  |                             |                        |                                  |
| NCI <sup>d</sup> does not cause RC <sup>e</sup>  | 1                           | 0.000                  | 0.000                            |
|  | 3                           | 0.000                  | 0.000                            |
|  | 6                           | 0.003                  | 0.001                            |
|  | 12                          | 0.009                  | 0.004                            |
| RC does not cause NCI  | 1                           | 0.349                  | 0.998                            |
|  | 3                           | 0.391                  | 0.472                            |
|  | 6                           | 0.173                  | 0.620                            |
|  | 12                          | 0.848                  | 0.870                            |
| Enlarged information set <sup>f</sup>  |                             |                        |                                  |
| NCI does not cause RC  | 1                           | 0.000                  | 0.000                            |
|  | 3                           | 0.001                  | 0.003                            |
| RC does not cause NCI  | 1                           | 0.382                  | 0.975                            |
|  | 3                           | 0.426                  | 0.600                            |

# Problem II

Table 6. The Determinants of Real GDP Cycles: 2002Q1-2013Q2 (OLS results)

|                              | Coefficient | t-ratio | Coefficient | t-ratio |
|------------------------------|-------------|---------|-------------|---------|
| Constant                     | -25.25      | 0.39    | -28.37      | 0.45    |
| Real GDP (-1)                | 0.43        | 2.98*** | 0.68        | 8.17*** |
| Real credit                  | 2.31        | 2.73*** |             |         |
| Real government expenditures | 0.17        | 0.49    | 0.60        | 1.72*   |
| Business confidence          | 28.61       | 4.31*** | 28.84       | 4.33*** |
| Real exchange rate           | 10.10       | 1.18    | 6.80        | 0.81    |
| Real interest rate (-1)      | -28.09      | 1.75*   | -42.83      | 2.69*** |
| Growth rate of the EU-28     | 44.74       | 1.01    | 23.89       | 0.57    |
| Net capital inflows (-4)     |             |         | 0.02        | 2.46**  |
| Adjusted R <sup>2</sup>      | 0.87        |         | 0.87        |         |
|                              | p-values    |         | p-values    |         |
| AR(1)                        | 0.99        |         | 0.52        |         |
| ARCH(1)                      | 0.59        |         | 0.15        |         |

# Problem II

- So, surge in capital inflows was a great headache for the central banks.
- *“...the consequences of these sustained unconventional policies pile up in the financial markets, where risk taking increases... And they spill over into foreign markets as capital flows lead to greater leverage and stronger exchange rates in recipient countries...”* Rajan (2014, p.1)

# Problem II

- *“The monetary easing policies implemented by the central banks of advanced economies to mitigate the effects of the global financial crisis had notable effects on Turkey as they did on many emerging market economies. Availability of ample and low-cost short-term external financing led to a rapid credit growth and gradual appreciation of the Turkish lira in this period, paving the way for the accumulation of macro-financial risks and external imbalances as of the second half of 2010.”* Central Bank of Turkey (2011c, pp. 2-3)

# Problem II

- *“... the Fed’s announcement of the Quantitative Easing II, in an already abundant liquidity scenario, have raised concerns about possible excessive depreciation of the dollar and the formation of bubbles in asset markets, hastening the adoption of capital control measures in many emerging economies.”*  
Central Bank of Brazil (2010, p. 166)



# Problem II

- *“In the monetary area, policy management was confronted with the challenges of ... huge capital inflows...”* Bank Indonesia (2010, p.32)
- *“Over the past two years many emerging-market currencies appreciated substantially on account of sizeable capital inflows, resulting in significant changes in international competitiveness. ... As a result ... a number of other emerging-market economies introduced capital controls and other prudential measures aimed at capital inflows in an attempt to neutralize upward pressure on exchange rates. Quantitative easing in advanced economies, a surge in commodity prices, the stronger growth performance, higher interest rates and more favorable fiscal conditions in emerging-market economies resulted in sizeable capital inflows to these countries.”* Reserve Bank of South Africa (2011, p. 22).

## **II. MONETARY POLICY OF THE CBRT**

# CBRT

- Since the introduction of the new framework, in its various reports, speeches, and articles the CBT has explicitly stated that it has two objectives: price stability and financial stability.
- It pointed to sharp swings in capital flows as the main threat to financial stability. According to the CBT this is realized through two channels: fluctuations in the exchange rate and credit growth.
- The policy implication then is that the bank has to curb excessive credit movements and deviations of the real exchange rate from its fundamental level.

# CBRT

- The CBT started to change reserve requirements frequently to constrain credit growth, and to vary actively the width of the interest rate corridor in response to excessive real exchange rate fluctuations.
- For most of this period the CBT either kept its “policy rate” constant or changed it rather mildly. However, it allowed the overnight interest rate determined in the interbank market to fluctuate widely in the corridor.

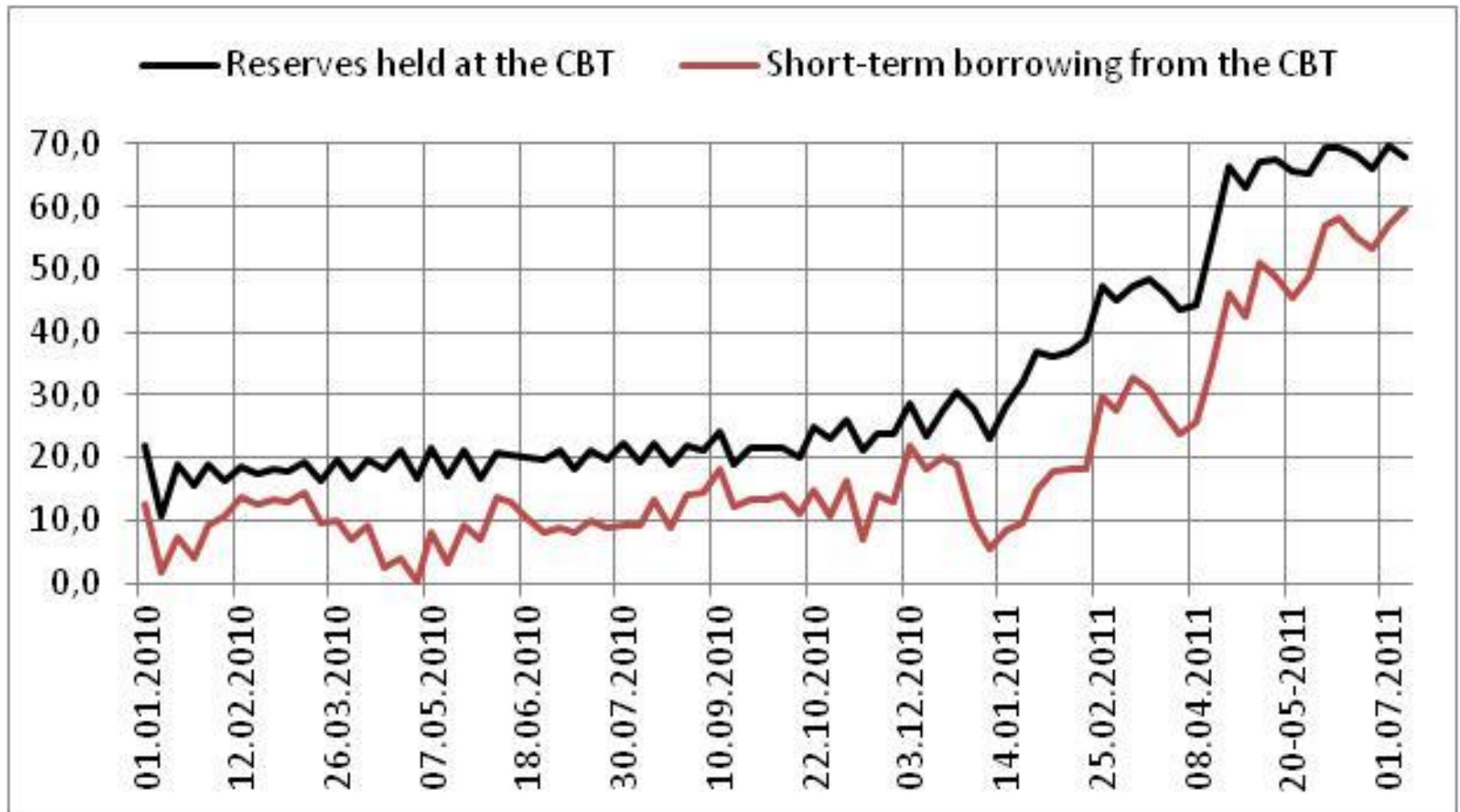
# CBRT

- In response to a surge in capital inflows it generally widened the corridor downward by reducing its overnight borrowing rate.
- According to the CBT, in an environment where risk aversion changes sharply (as has happened since 2010), such a policy allows it to respond immediately without waiting for the next monetary policy committee meeting or calling for an extraordinary meeting.

# CBRT

- Most of the important macroprudential tools are at the disposal of the prudential authority, whereas the CBT has policy rates and reserve requirements (along with foreign exchange operations) as its main policy tools.
- Increases in required reserve ratios between late 2010 and mid-2011 did not succeed in curbing rapid credit growth.
- As a response to this policy, the banking sector increased its borrowing from the CBT.
- Consequently, required reserves held at the CBT, and short-term borrowing from the CBT moved upward in tandem.

# CBRT



# CBRT

- Issue 1: Co-ordination of authorities responsible for financial stability and price stability.
- Issue 2: Who should be responsible for macro-prudential policy?



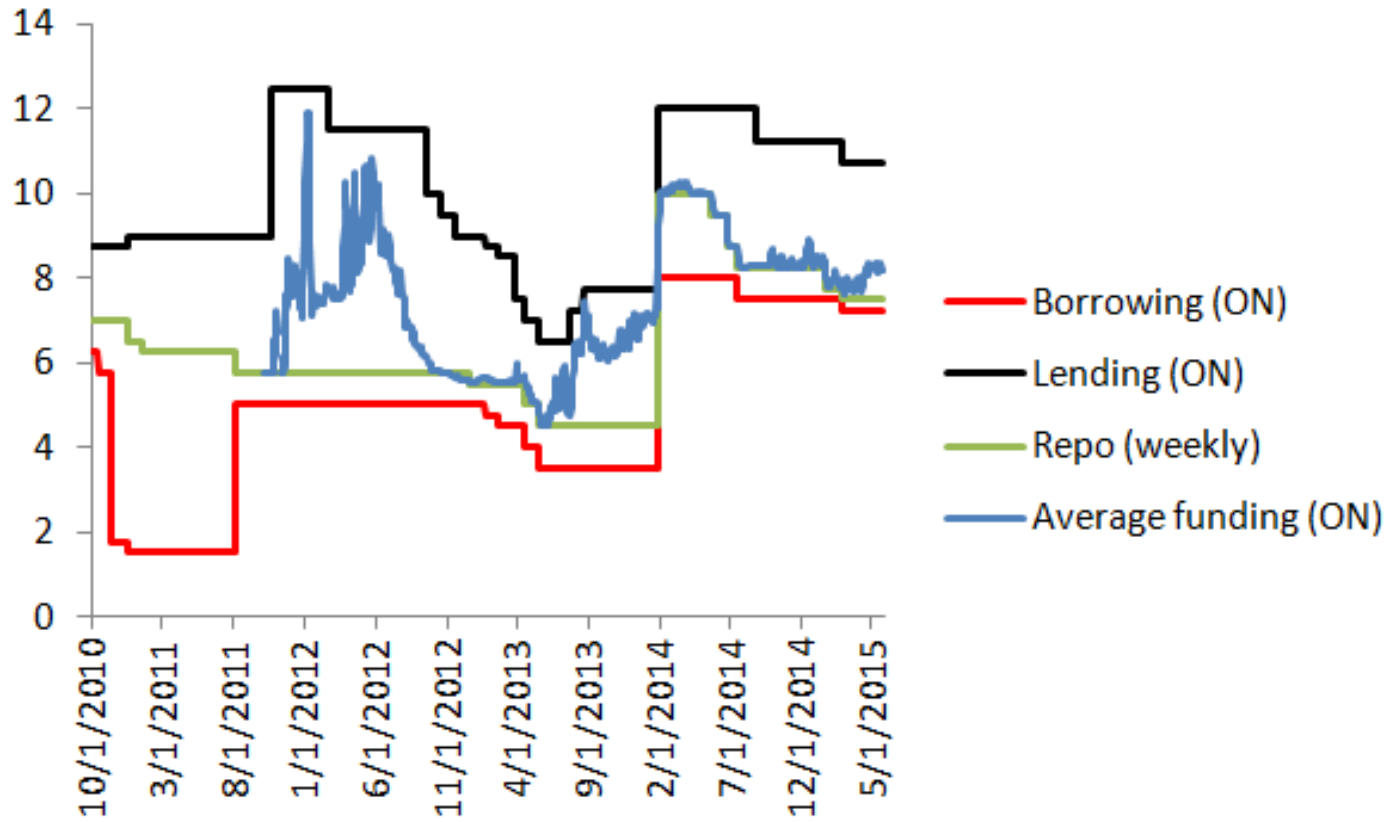
# CBRT

- One of the most important factors that led the CBRT to allow sharp volatility in the interbank market rate was the absence of moves by the prudential authority at the proper time.
- The CBRT at that time responded to increasing uncertainty in the money market by increasing volatility to curb heavy short-term capital inflows—the root cause of rapid credit growth.

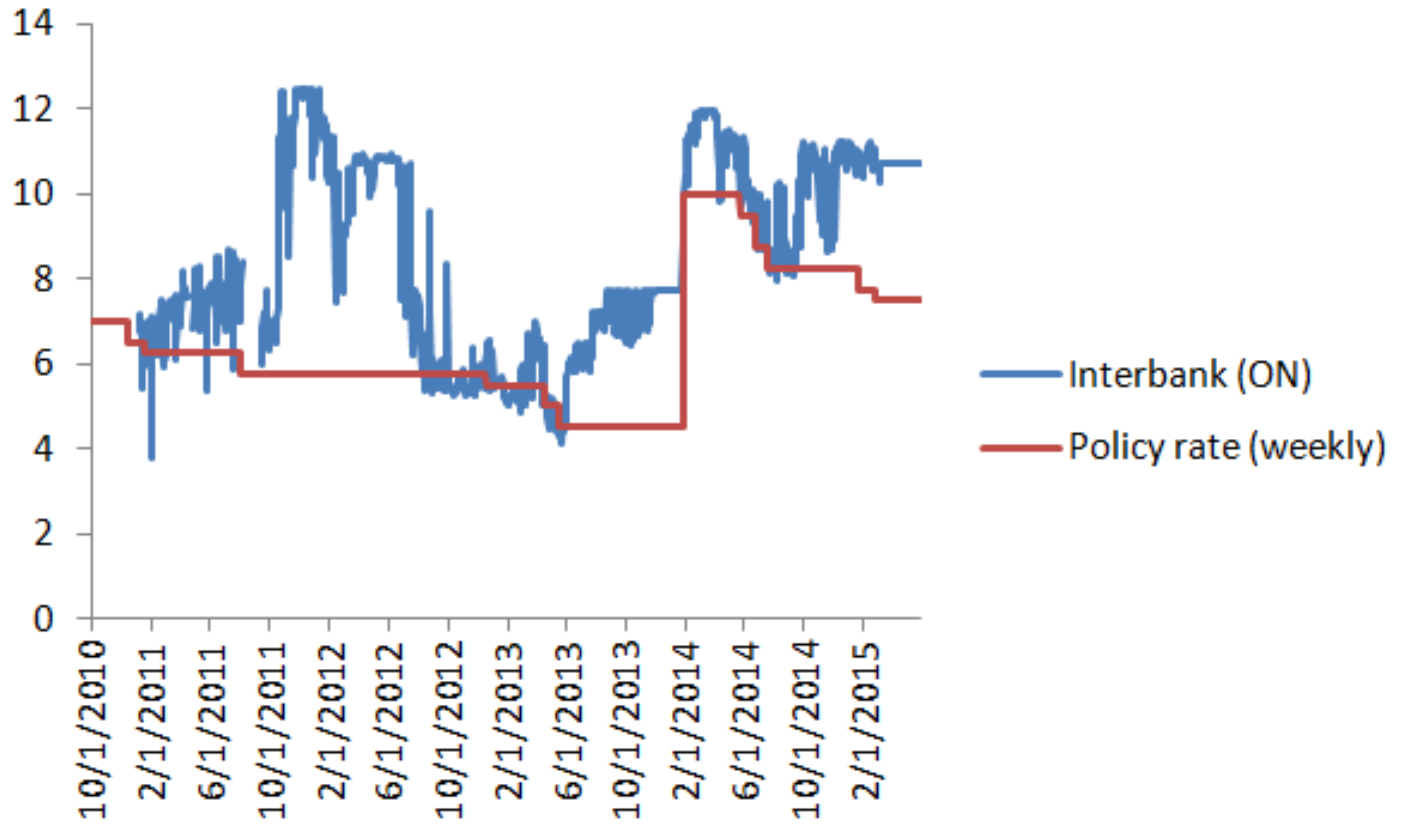
# CBRT

- However there were also periods of significant capital outflows:
- EU crisis and Bernanke (FED possible tapering)
- Fragile 5
- During times of increased risk aversion the width of the corridor has been widened by significantly increasing the overnight lending rate.

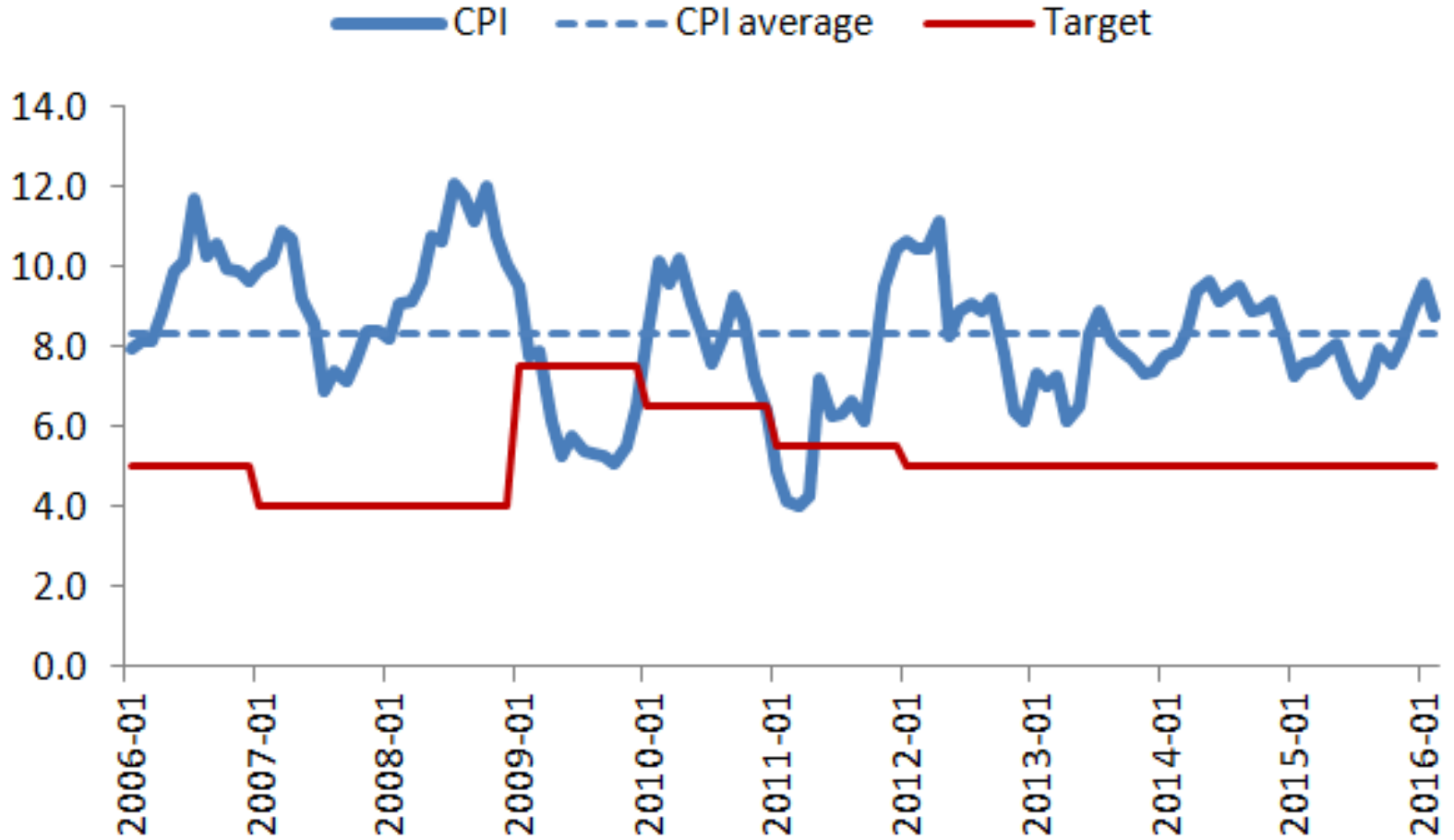
# CBRT



# CBRT



# CBRT



# CBRT

- What is the policy rate?
- More importantly: What is the policy?
  - In an environment in which core inflation rate is almost twice the target, most of the market participants expect a rate cut from the CBRT!
- Is the announced inflation target really a target?

# **III. INSTITUTIONAL DESIGN**

# Institutional Design

- It has shown that full coordination among institutions with different objective functions leads to better results.
- Full coordination: How can be achieved?



# Institutional Design

- A super CBRT?
  - Financial stability objective,
  - Price stability objective,
  - Empowered with all necessary tools
  - Would this be a threat to independence?
- Different institutions:
  - What are the mechanisms to achieve full coordination without jeopardizing independence of institutions?

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- Thank you....