CENTRAL BANK OF THE REPUBLIC OF TURKEY

Durmuş YILMAZ

Governor

February, 2011

Presentation Outline

I. Policy Challenges

II. Monetary Policy Response

III. Financial Stability Outcomes So Far

IV. Baseline Scenario and Risks

I. Policy Challenges

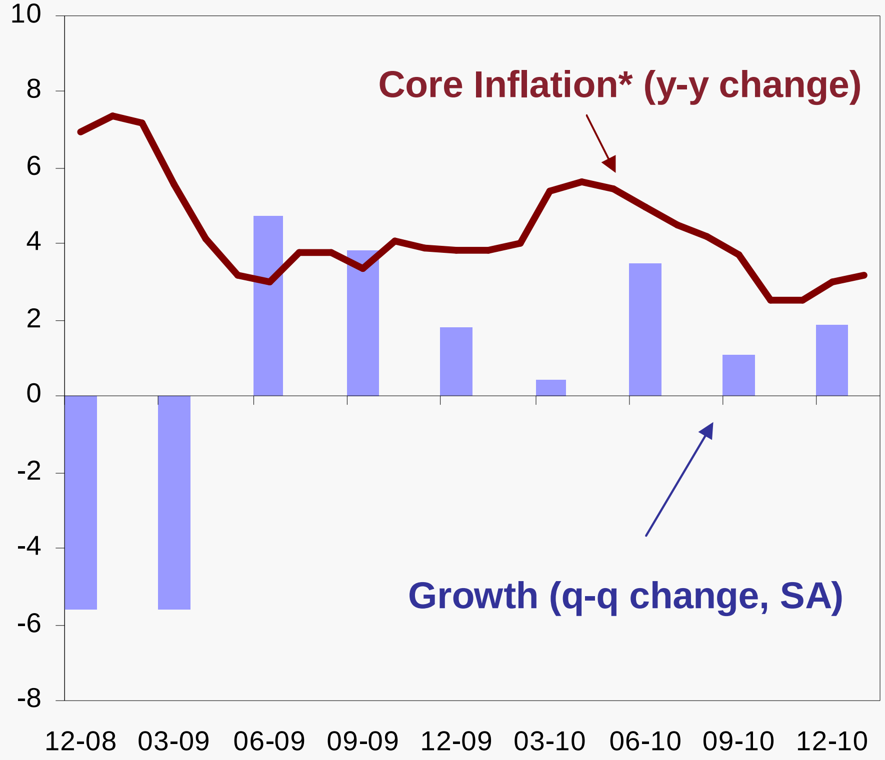
Quantitative Easing vs. Quantitative Tightening

- Quantitative easing in major economies has continued in response to weakness in economic activity and heightened sovereign risks, resulting in dramatic increases in central banks’ balance sheets.
- Facing huge influx of capital, some developing countries have resorted to quantitative macroprudential tightening, even capital controls.
- Turkey has also initiated quantitative tightening, starting from April 2010.

Rapid Recovery …

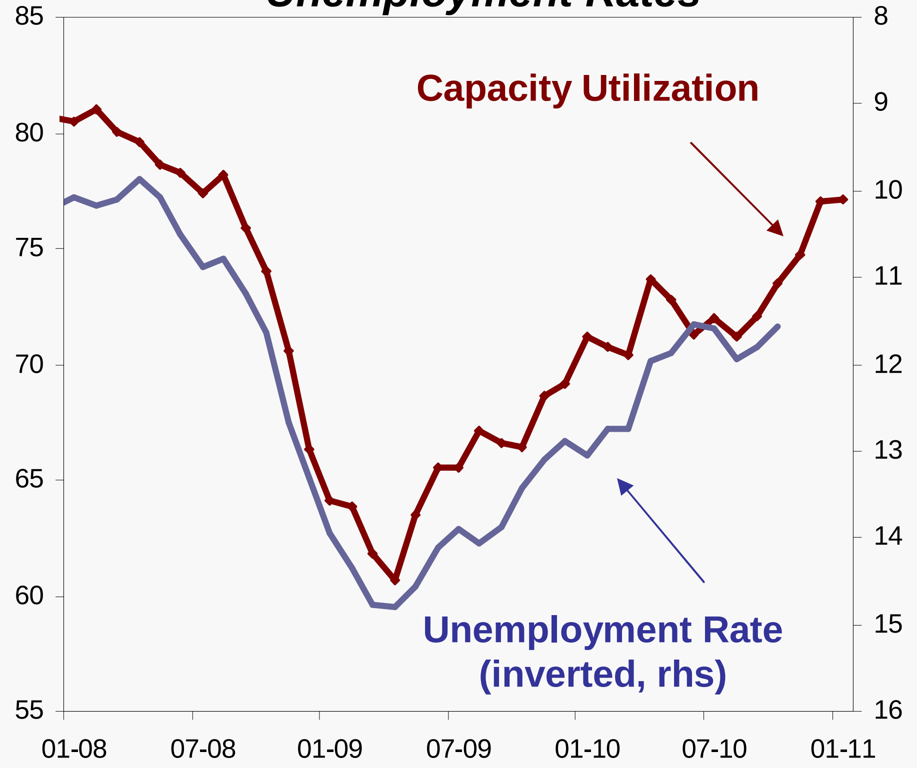
Since mid-2009, the Turkish economy has experienced a rapid recovery, although core inflation remains in line with medium targets.

Growth and Inflation



* I index
Source:: TURKSTAT, CBRT

Capacity Utilization and Unemployment Rates



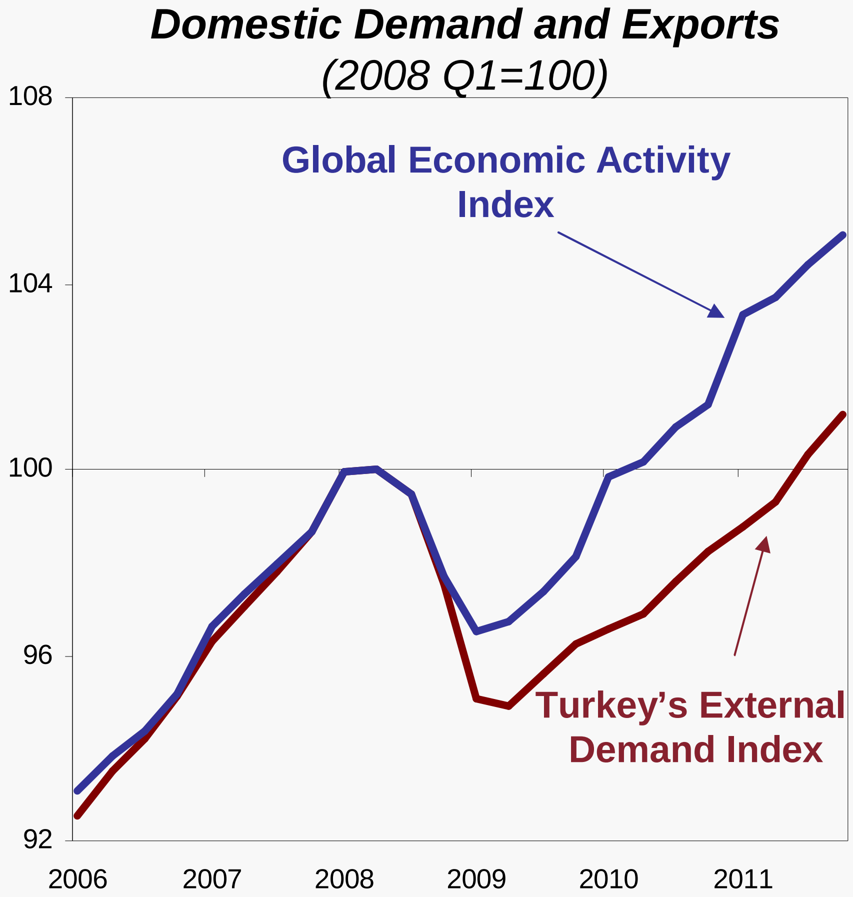
Source:: TURKSTAT, CBRT

… but unbalanced

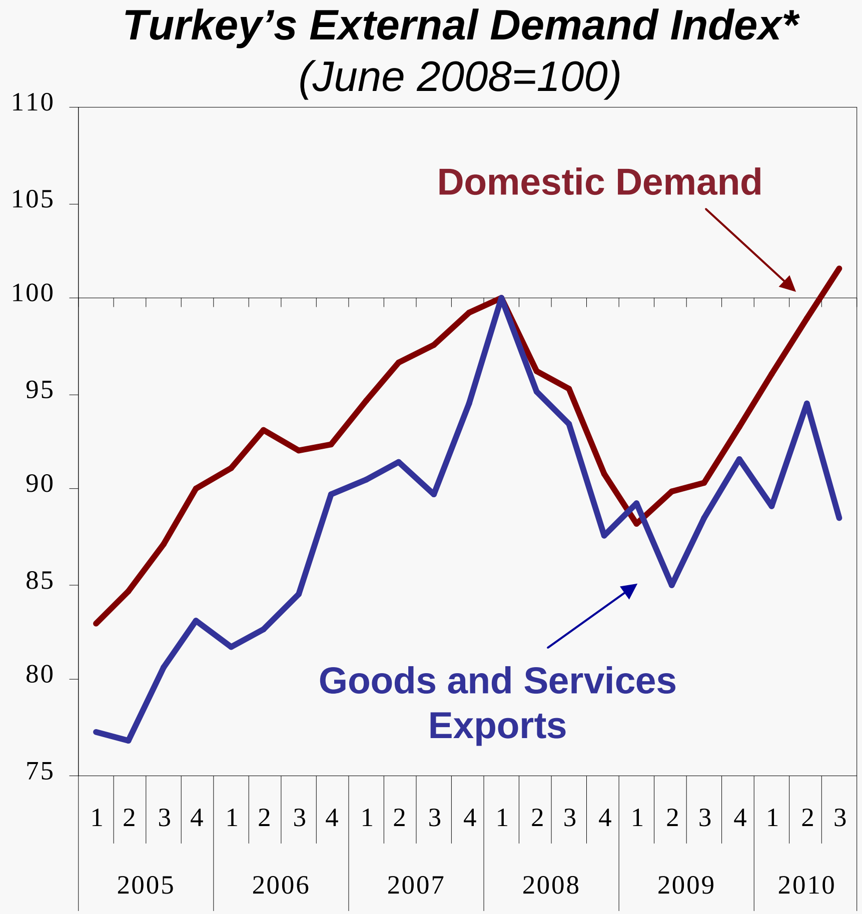
Policy Challenges

- *Composition of growth is not balanced - strong domestic demand versus sluggish external demand*
- *Capital flows are strengthening, but its composition is tilted towards short term investments*
- *Credit expansion gaining pace and current account deficit widening rapidly, raising concerns for financial stability*
- *Need for a different, yet prudent approach in monetary policy.*

Domestic vs External Demand



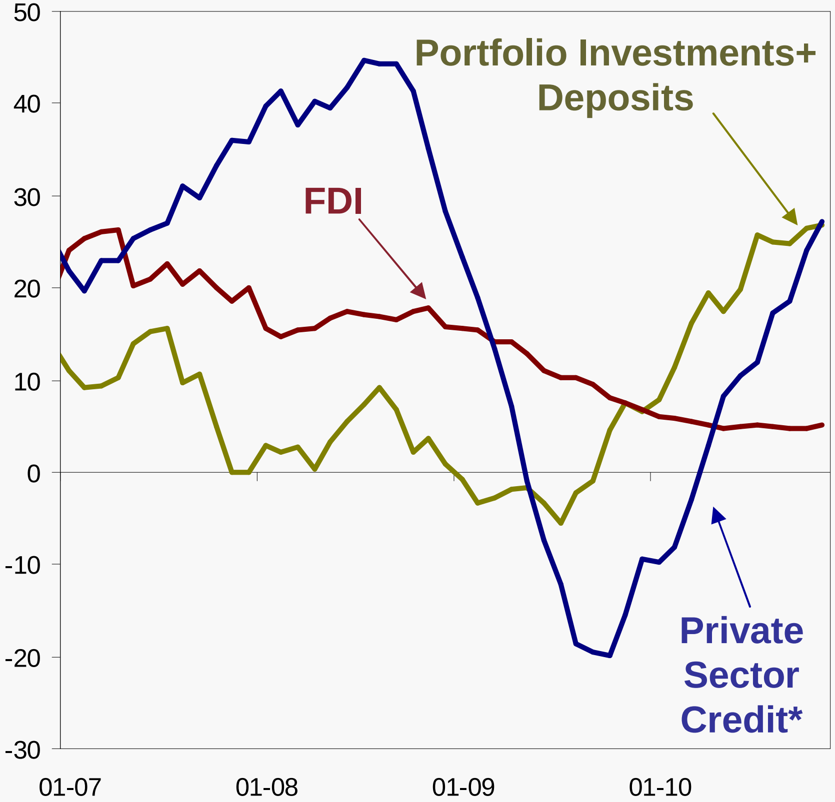
Source: TURKSTAT, CBRT



* The shares of countries within the exports of Turkey and weighted GDP data are employed in the calculation of the external demand index of Turkey.
Source: Bloomberg, Consensus Forecasts, IMF WEO, TURKSTAT, CBRT

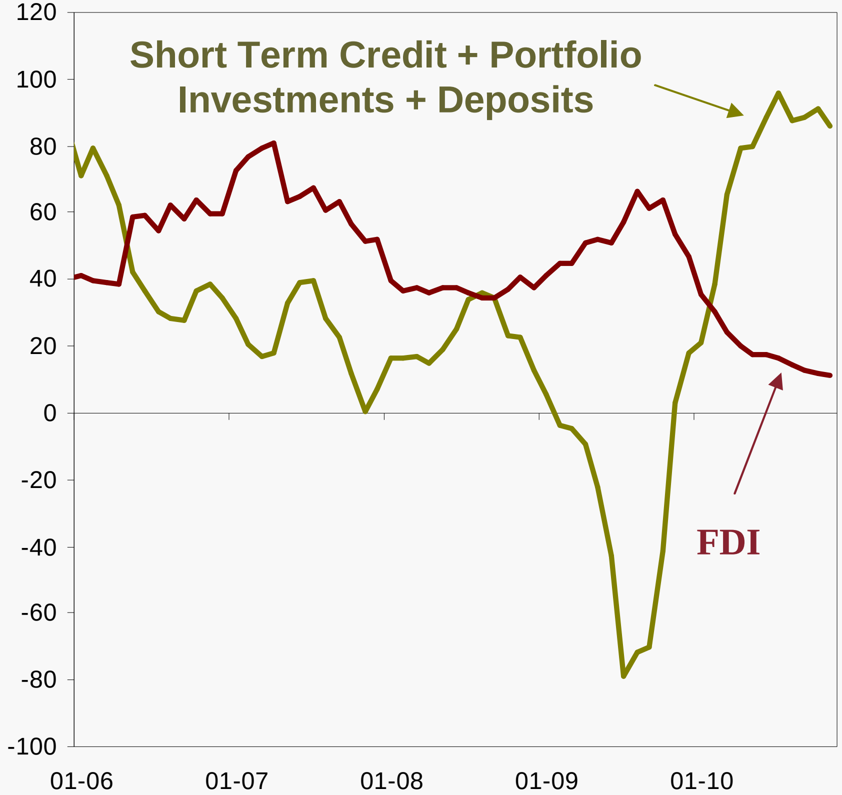
Composition of Capital Flows

Composition of Capital Flows
(12-month rolling sum, billion USD)



* After controlling for the effect of change in Decree No. 32
Source: TURKSTAT, CBRT

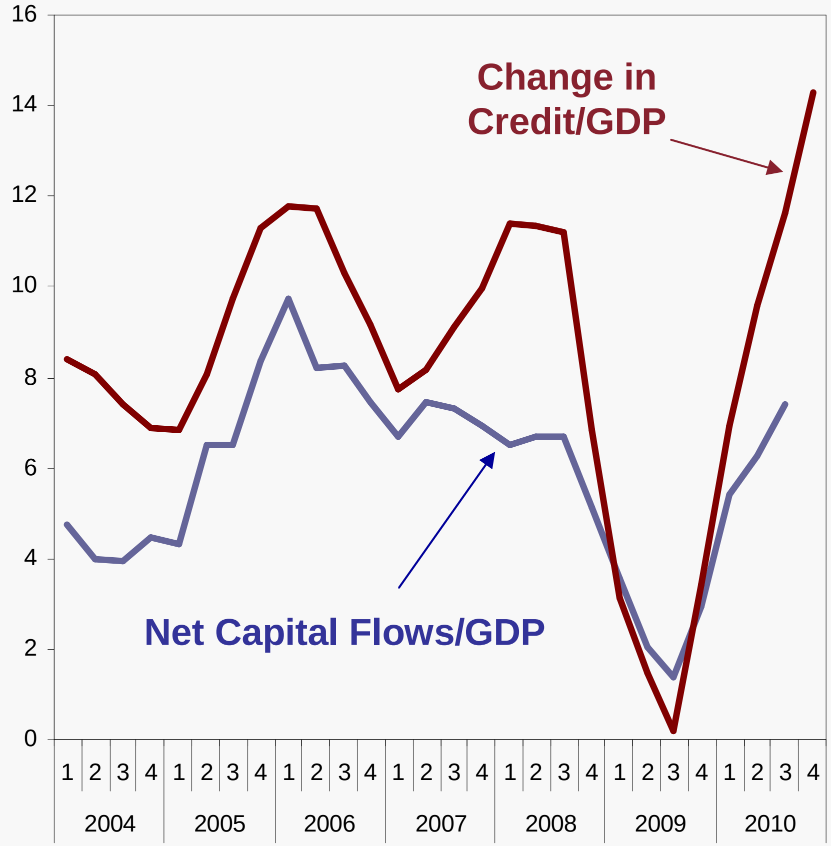
Finance of Current Account Deficit
(percentage of CAD)



Source: TURKSTAT, CBRT

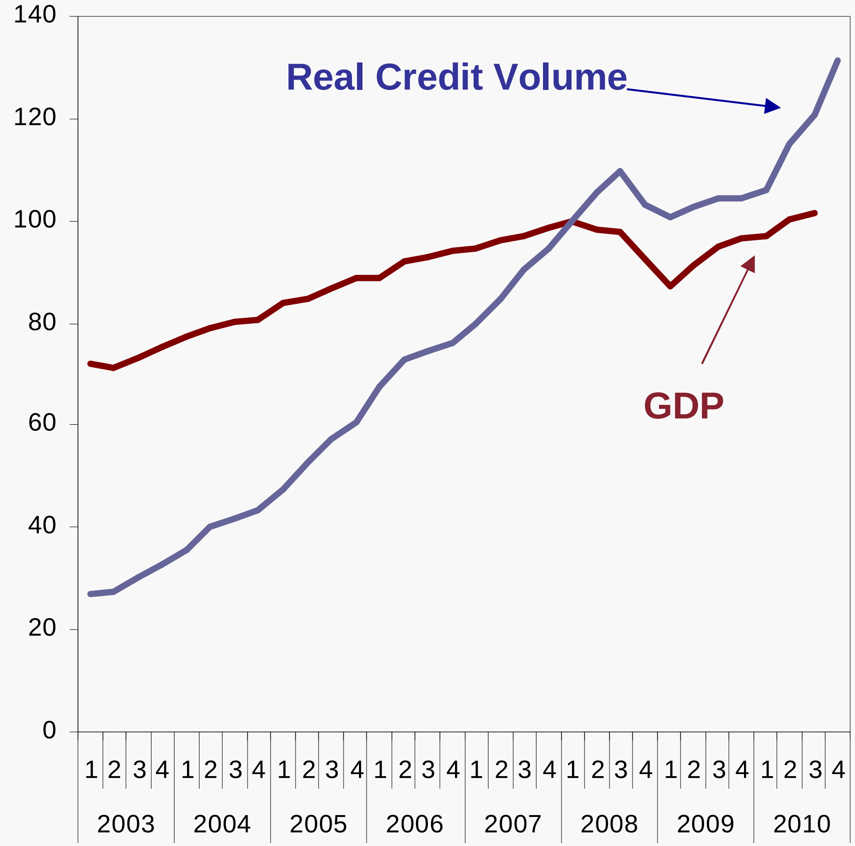
Credit Growth

Capital Flows and Credit Growth
(percent)



Source:TurkStat, CBRT

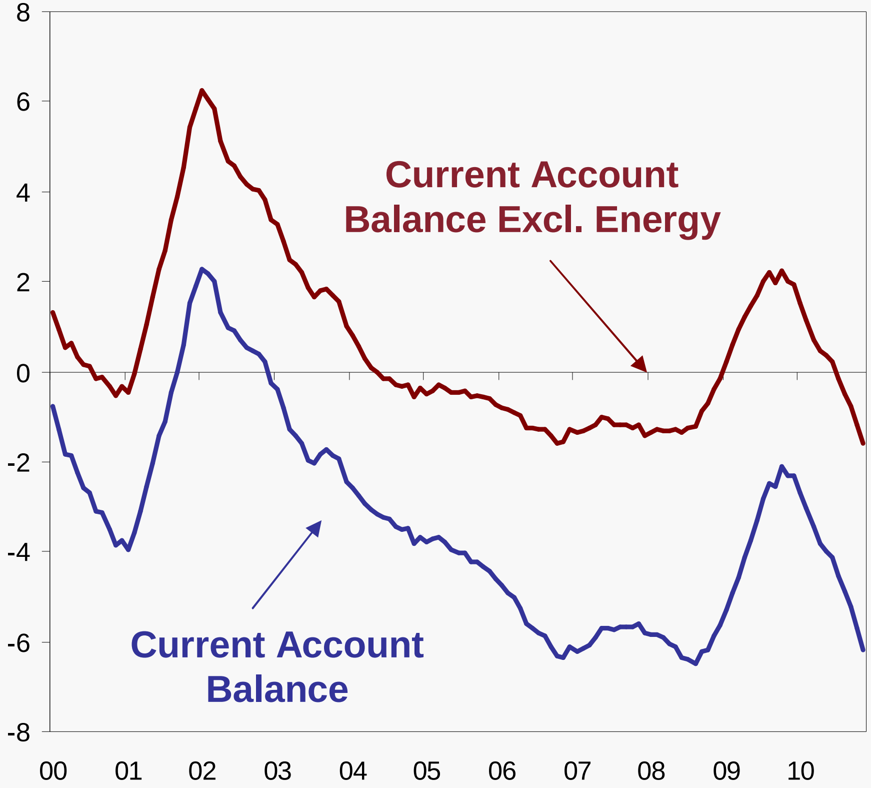
Real GDP and Credit Volume
(2008 Q1=100)



Source: BRSA, TurkStat, CBRT

Current Account Deficit

Current Account Deficit
(ratio to GDP, percent)



Source: TurkStat, CBRT

Ratio to GDP	*2007*	*2008*	*2009*	*2010**
CAD	5.8	5.7	2.3	**6.2**
CAD Excl. Energy	1.4	0.1	-1.9	**1.6**

* As of November 2010, last 12 months
Source: TurkStat, CBRT

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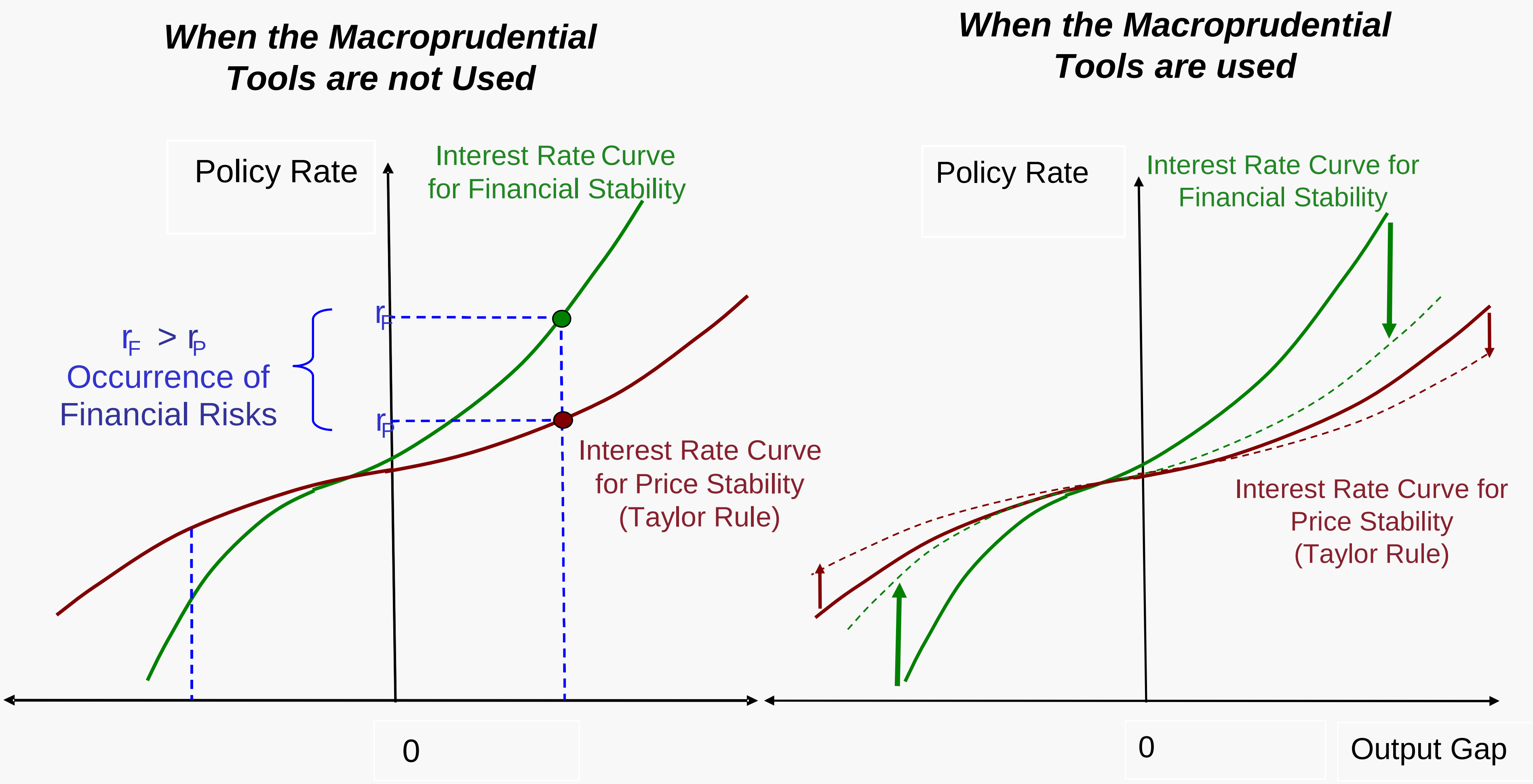
II. Monetary Policy Response

Price Stability and Financial Stability

- Interest rate levels required for price stability and financial stability are not always consistent with each other.
- During booms, an interest rate policy that contains inflation could fall short of preventing the emergence of financial risks.
- During a severe recession, in contrast, a much lower level of interest rate may be required to restore financial stability.

The Need for Macroprudential Tools



Macroprudential Tools

- Under the current economic conditions, it may not be possible to simultaneously ensure price stability and financial stability by means of policy rates alone.
- **Solution:** Using macroprudential tools in coordination with all the relevant public authorities.
- **Macroprudential tools:**
    1. *Reserve requirements*
    2. *Liquidity management*
    3. *Capital adequacy ratios*
    4. *Liquidity adequacy ratios*
    5. *Taxes*
    6. *Primary expenditures of government*

Two Targets, Two Instruments

Accelerating Inflation

Policy Response

Policy Rate ↑
Macroprudential tools ↓

Policy Response

Policy Rate ↑
Macroprudential tools ↑

Price Stability

TARGET

Decelerating Inflation

Policy Response

Policy Rate ↓
Macroprudential tools ↓

Policy Response

Policy Rate ↓
Macroprudential tools ↑

Decelerating Credit Growth **Financial Stability** Accelerating Credit Growth

Phases in Monetary Policy

- **Phase-1:** Full liquidity support (after the collapse of Lehman Brothers, September 2008)

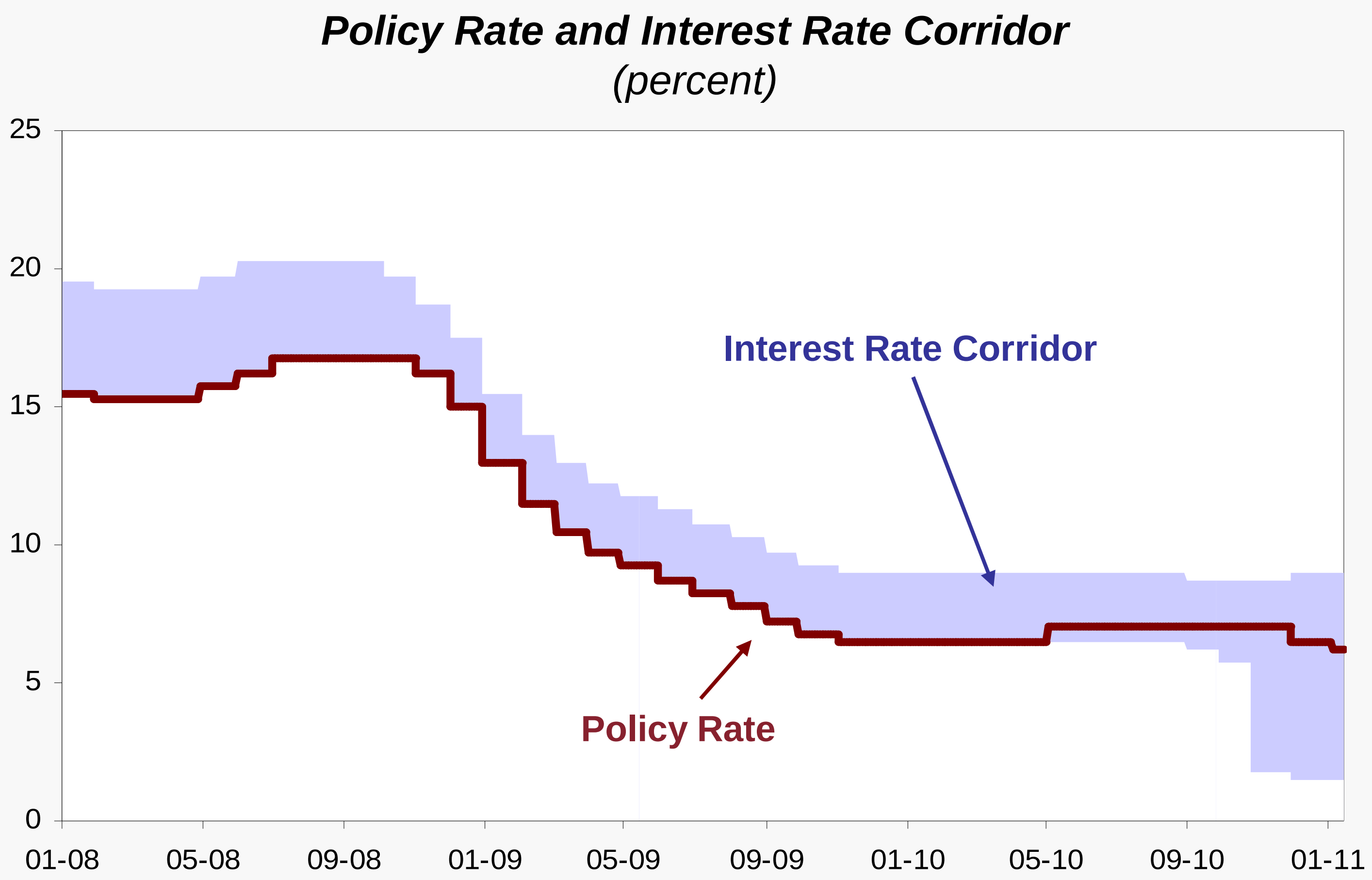
- **Phase-2:** Exit Strategy (April 2010)

- **Phase-3:** New Policy Mix (starting from November 2010)

Financial Stability: Objectives

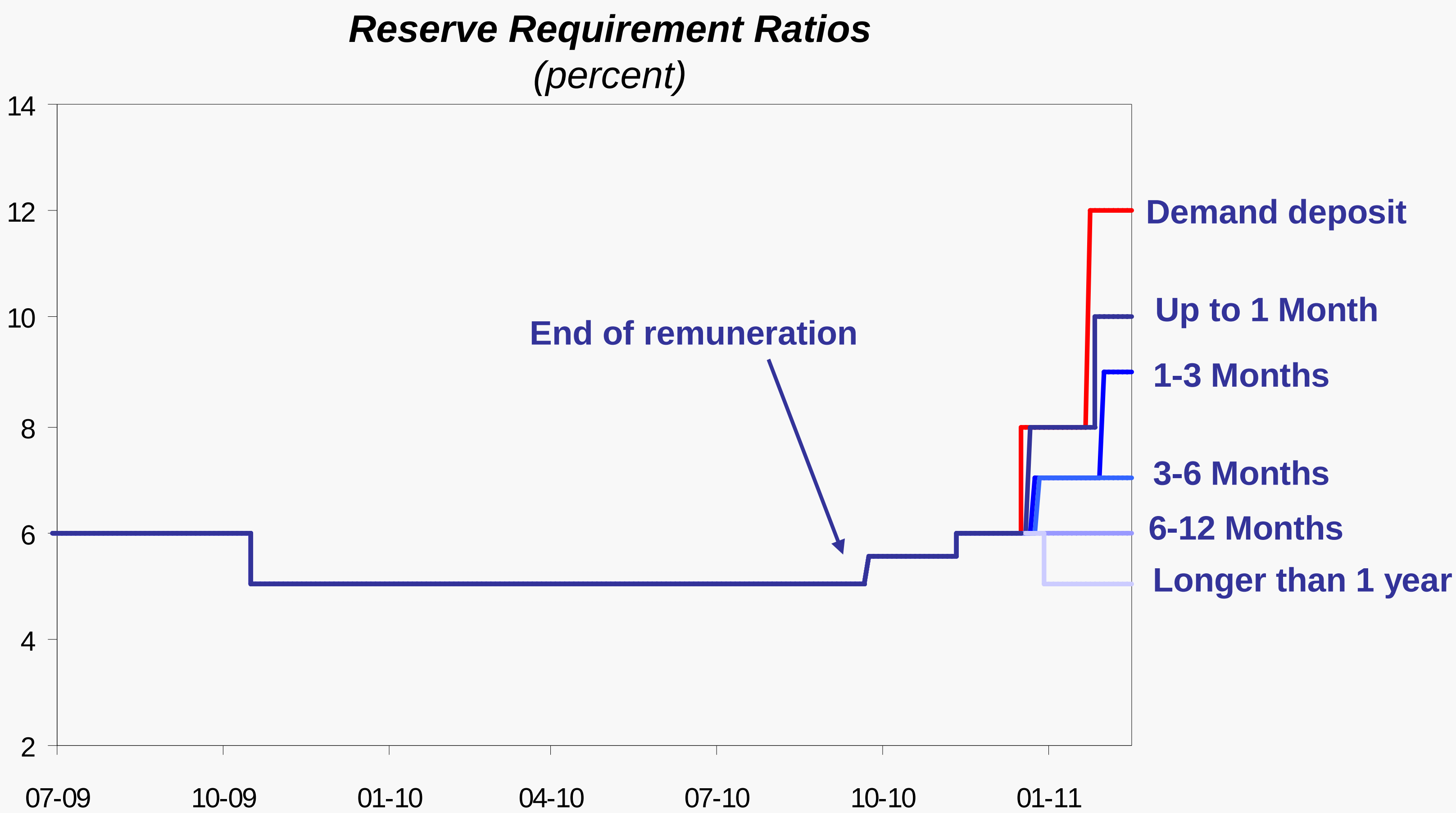
1. **<u>Debt Ratios:</u>** Use of more equity, more prudent borrowing
2. **<u>Debt Maturities:</u>** Extending maturities of domestic and foreign borrowing and deposits
3. **<u>FX Positions:</u>** Strengthening FX positions of public and private sectors
4. **<u>Risk management:</u>** More effective management of exchange rate risk via instruments such as the Turkish Derivatives Exchange

The Policy Rate and Interest Rate Corridor



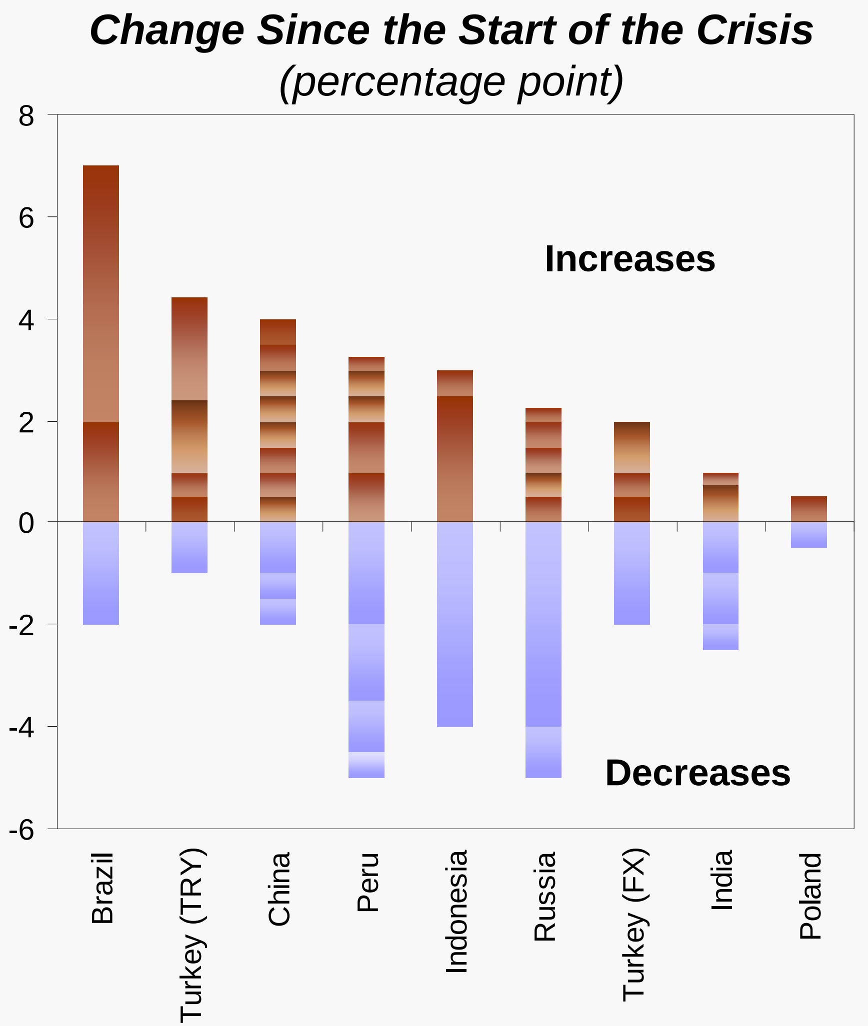
Source: CBRT

Reserve Requirements as a Macroprudential Tool

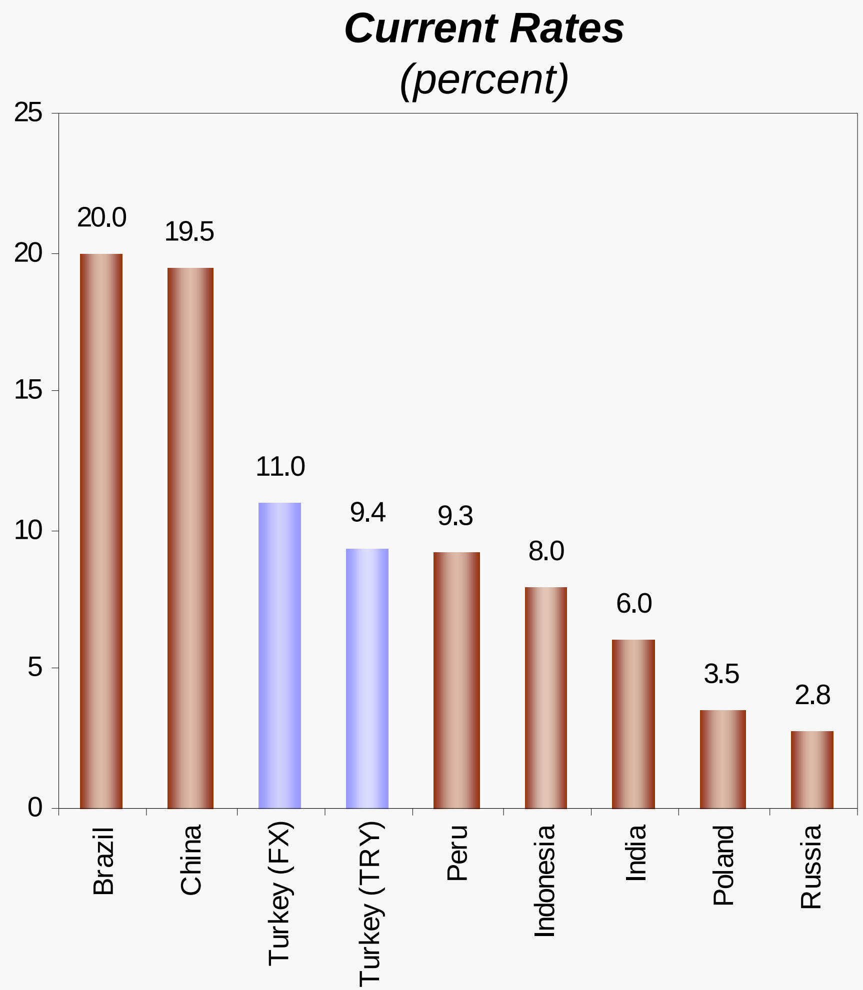


Source: CBRT

Reserve Requirements as a Macroprudential Tool



Source: Central Banks, CBRT



Source: Central Banks, CBRT

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Measures by Other Authorities

1. Fiscal discipline
2. No FX loans to households
3. Domestic currency bond market
4. Loan/value restrictions
5. Tax hikes on certain consumer loans
6. Restrictions on credit card borrowing

The New Policy Mix

A lower policy rate, a wider interest rate corridor and higher reserve requirements

- The framework we adopt in spirit is not significantly different from the conventional inflation targeting framework.
- The only difference is that, previously our policy instrument was the one week repo rate, but now our instrument is a “policy mix”
- We seek to use these instruments in the right combination in order to cope with both inflation and macro-financial risks.
- The monetary policy stance in this framework is not only determined by the path of policy rates, but as a combination of all the policy instruments.

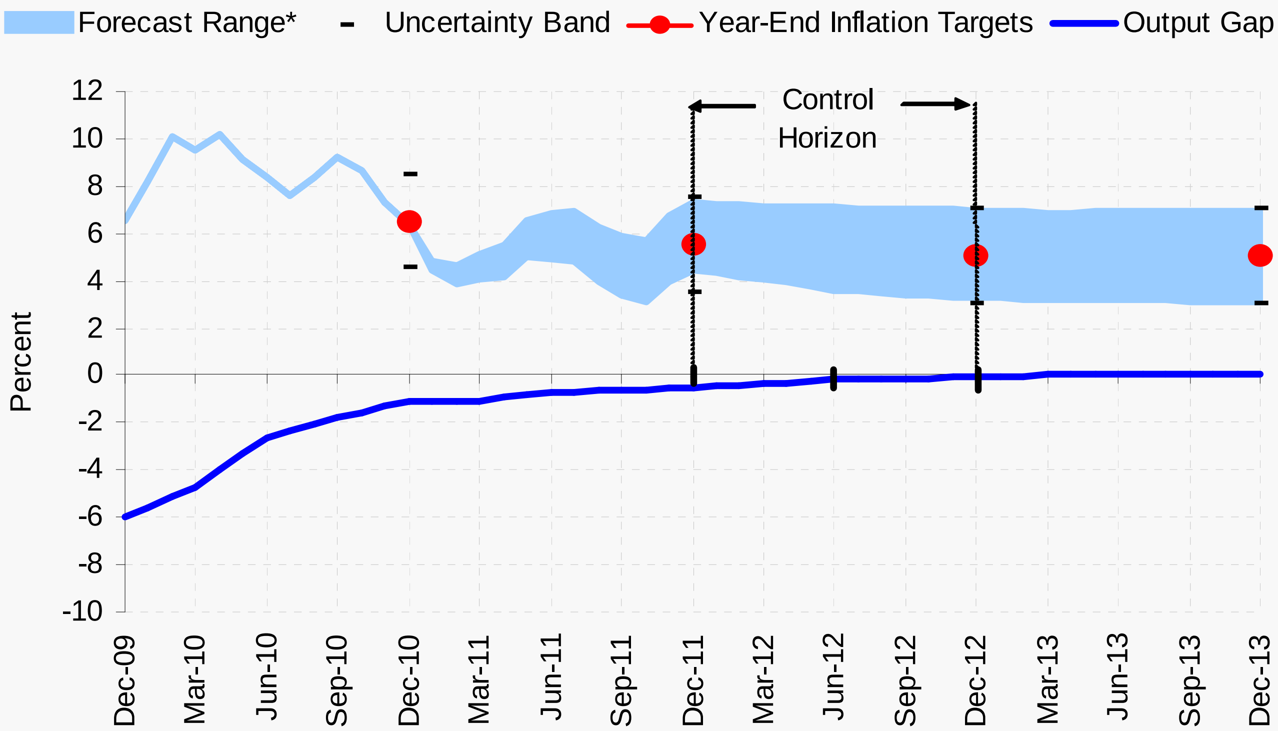
Price Stability

- The net impact of the macroprudential policy package implemented—and to be implemented—both by the CBRT and other institutions is on the tightening side.

Price Stability

The Baseline Scenario envisages a gradual tightening by changing the mix of the policy rate and reserve requirement ratios. Such a tightening should not only aim at slowing down credit growth and domestic demand, but also reduce macroprudential concerns.

Inflation and Output Gap Forecasts



Source: CBRT

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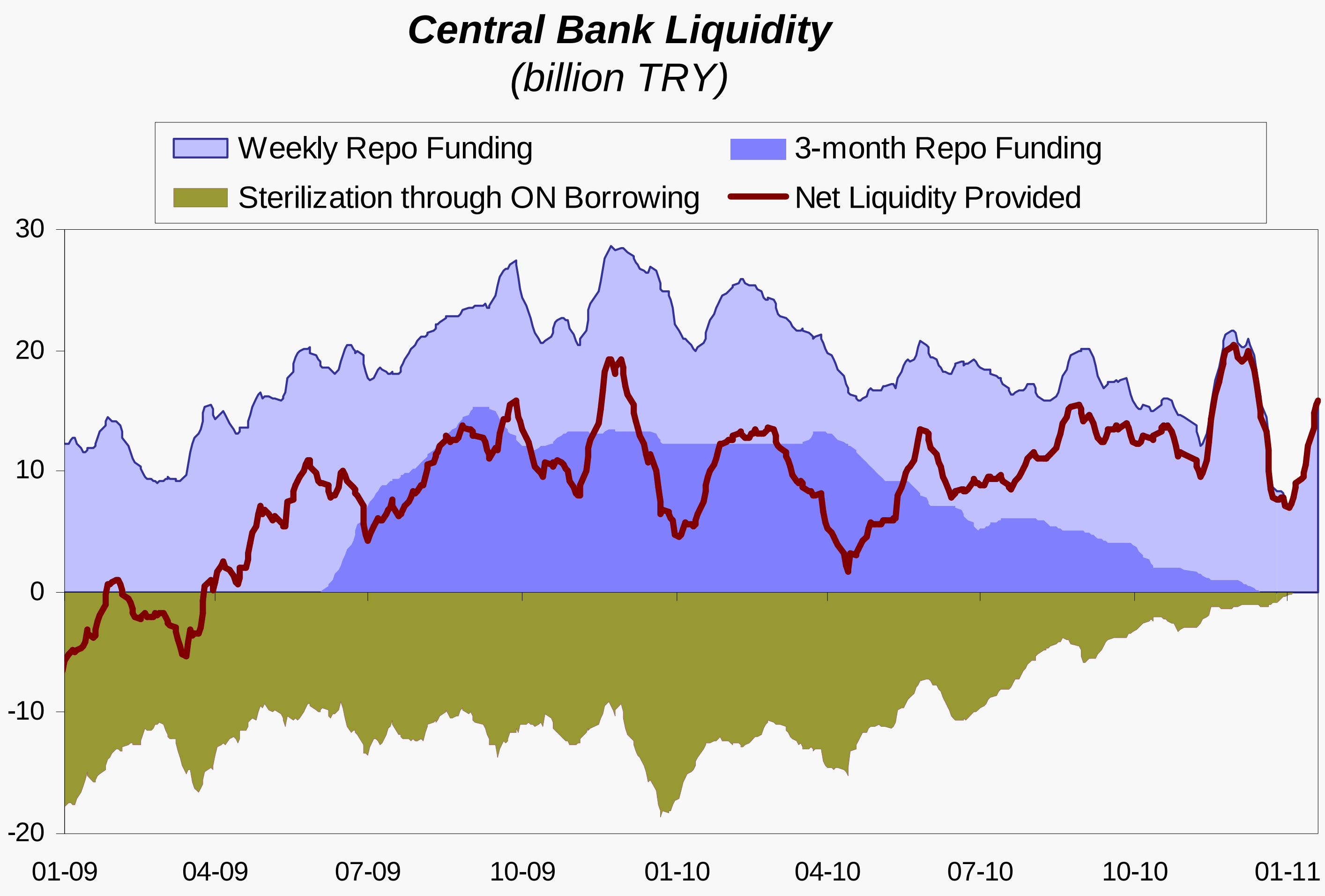
III. Financial Stability Outcomes So Far

Liquidity



Source: ISE, CBRT

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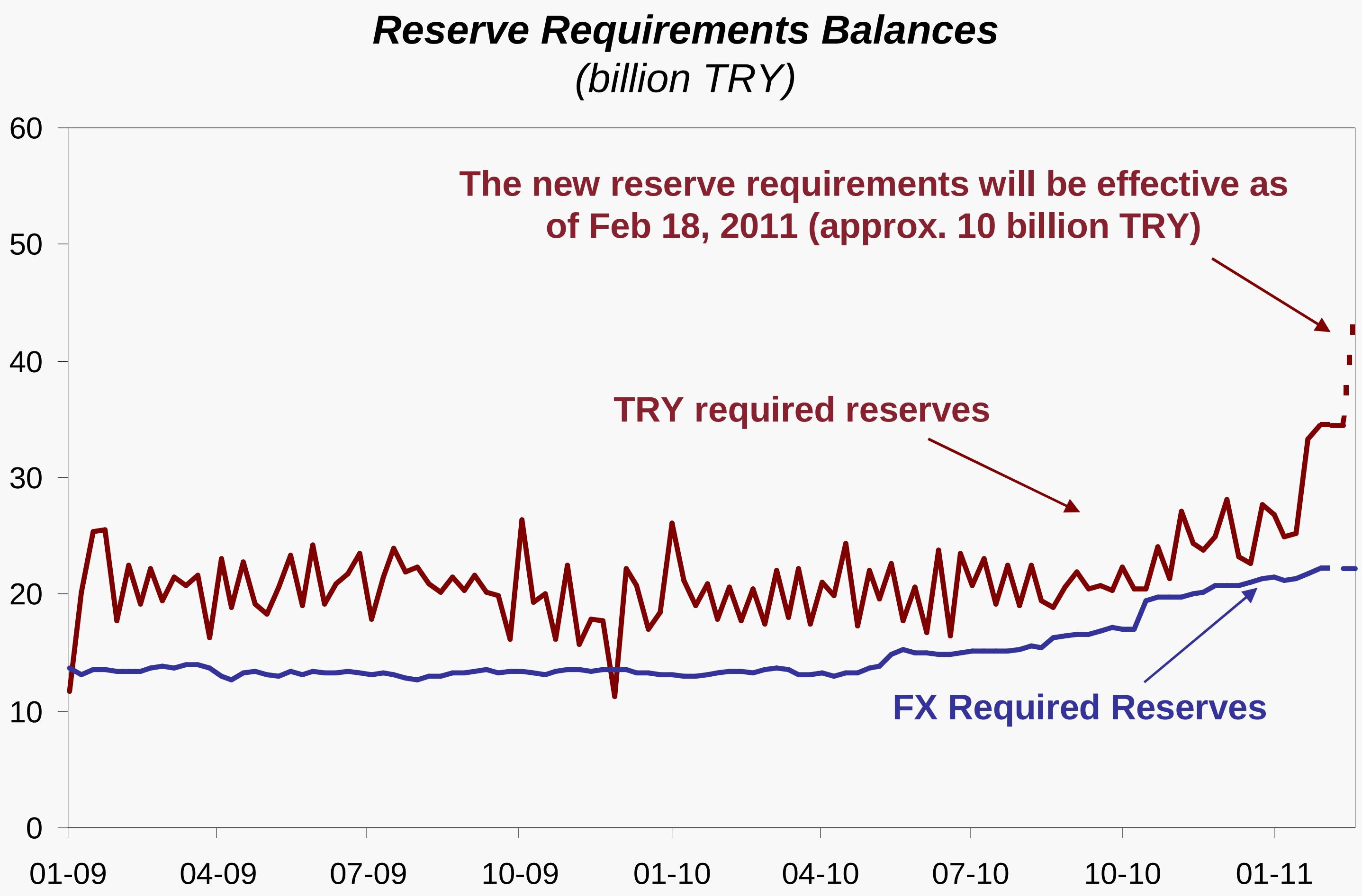
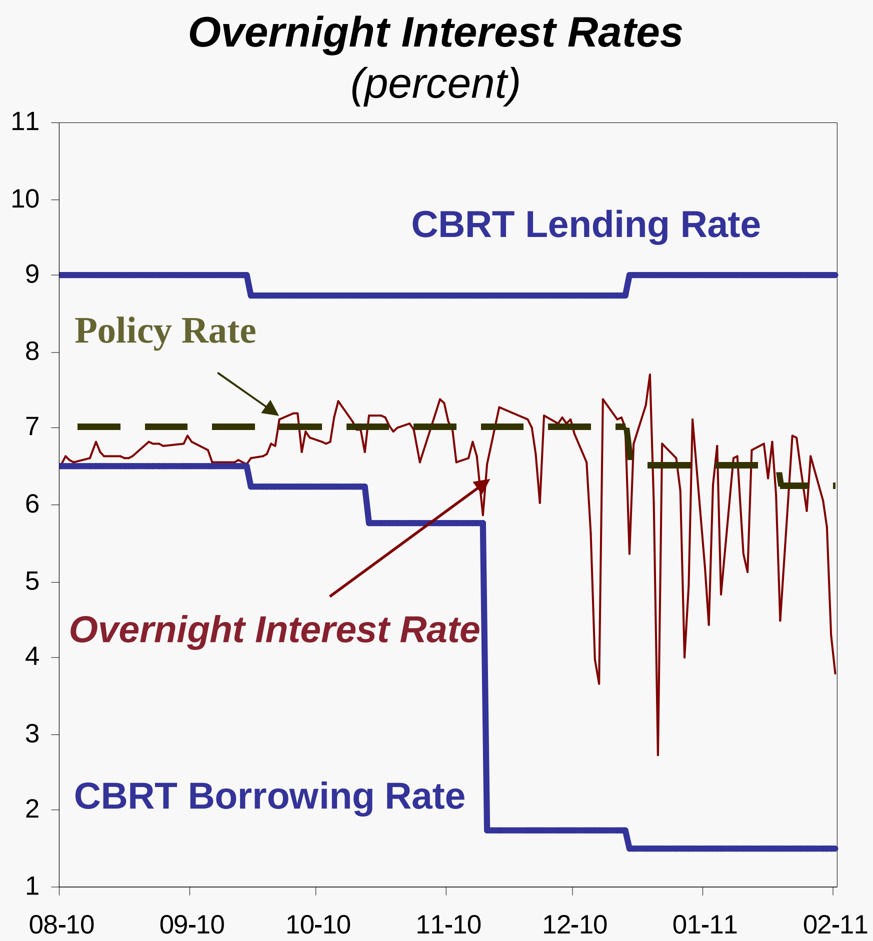
Tightening the Liquidity

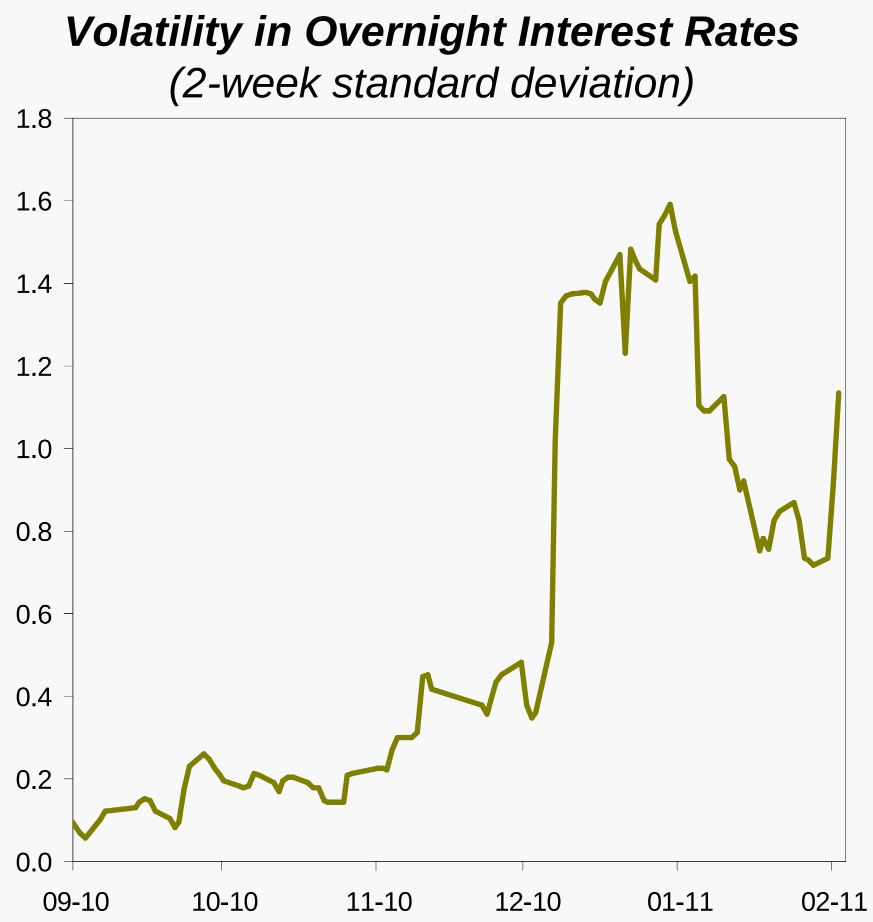


Source: CBRT

Volatility in Overnight Rates



Source: ISE, CBRT



Source: ISE, CBRT

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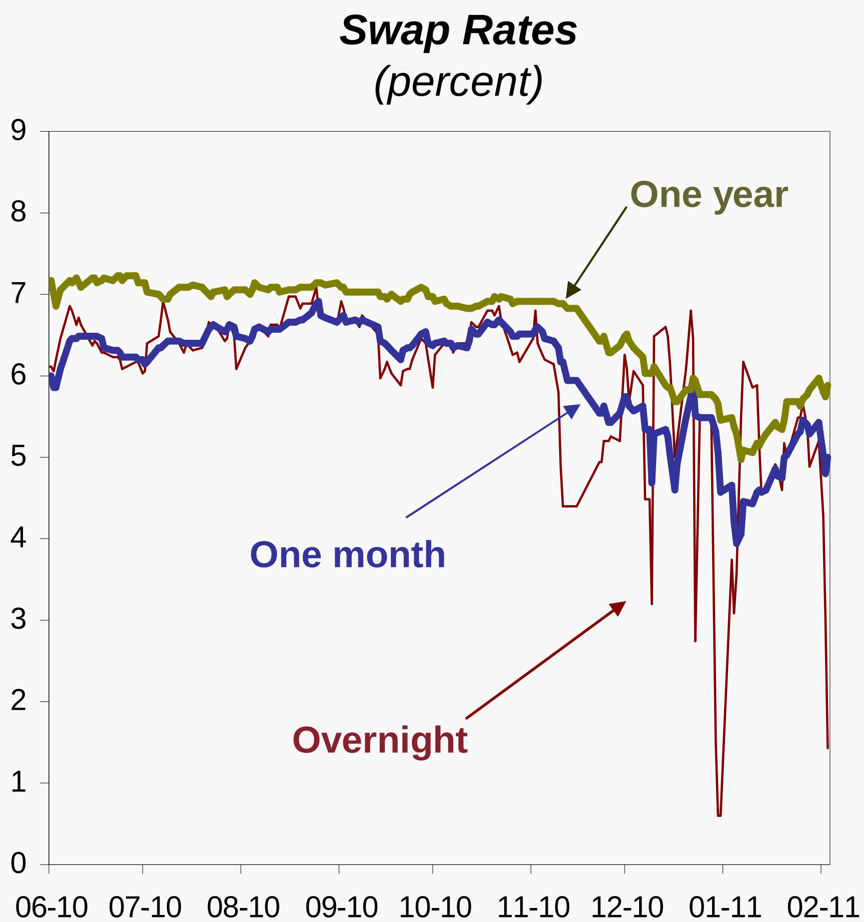
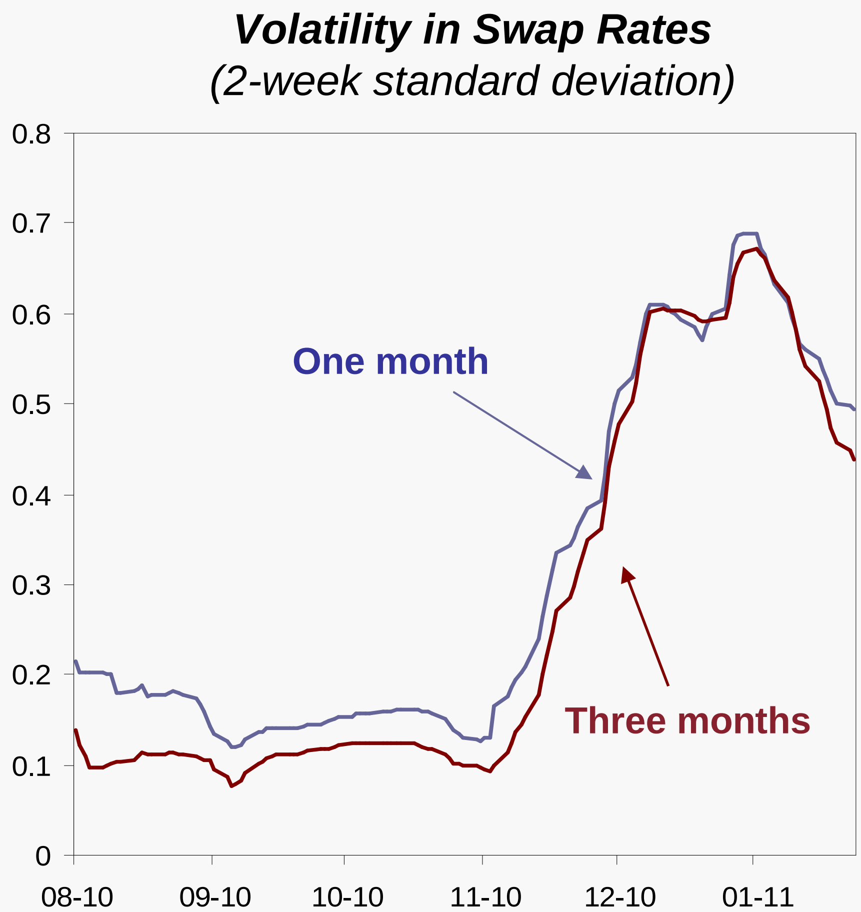
Volatility in Short Term Swap Rates

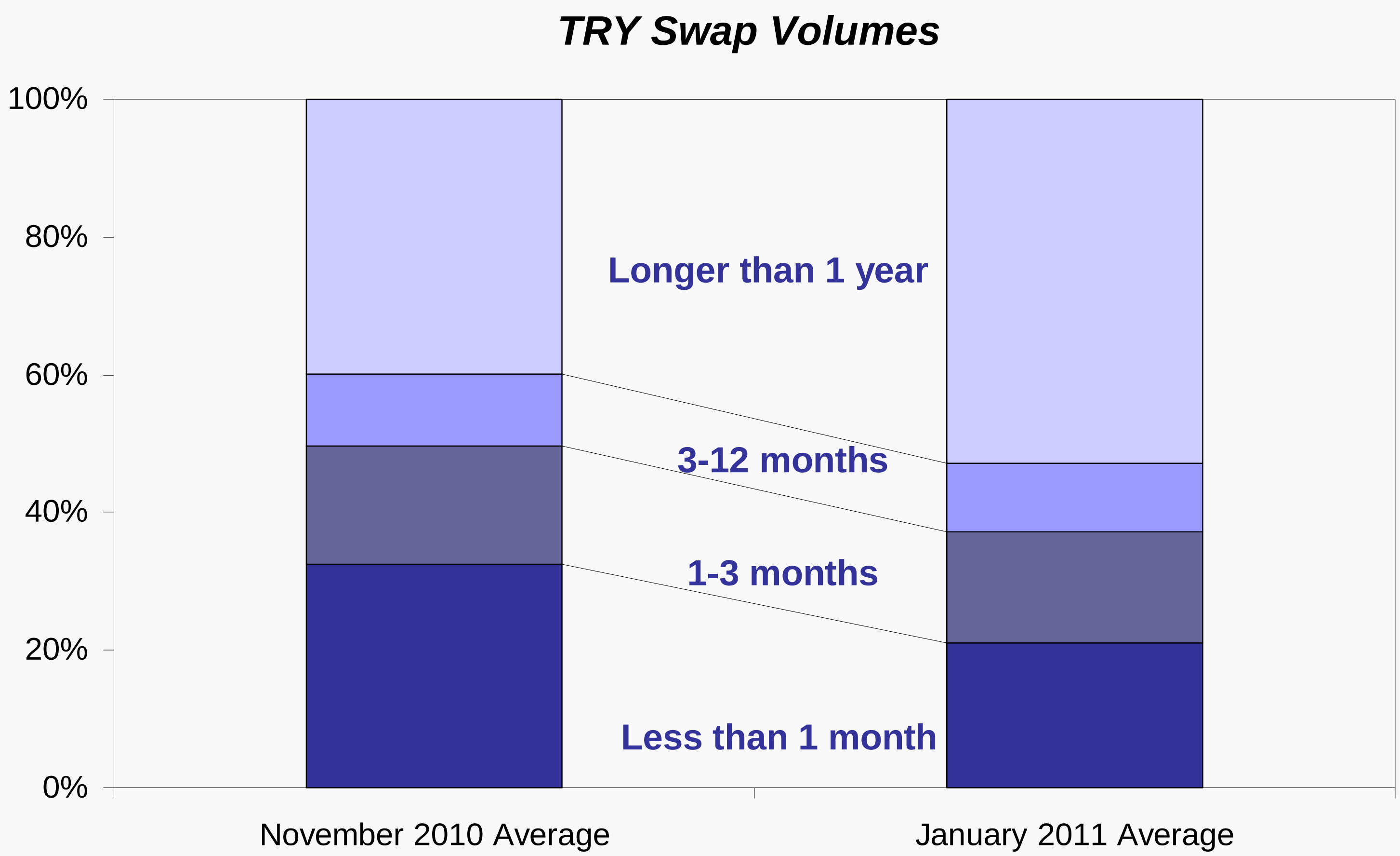


Source: Reuters, CBRT



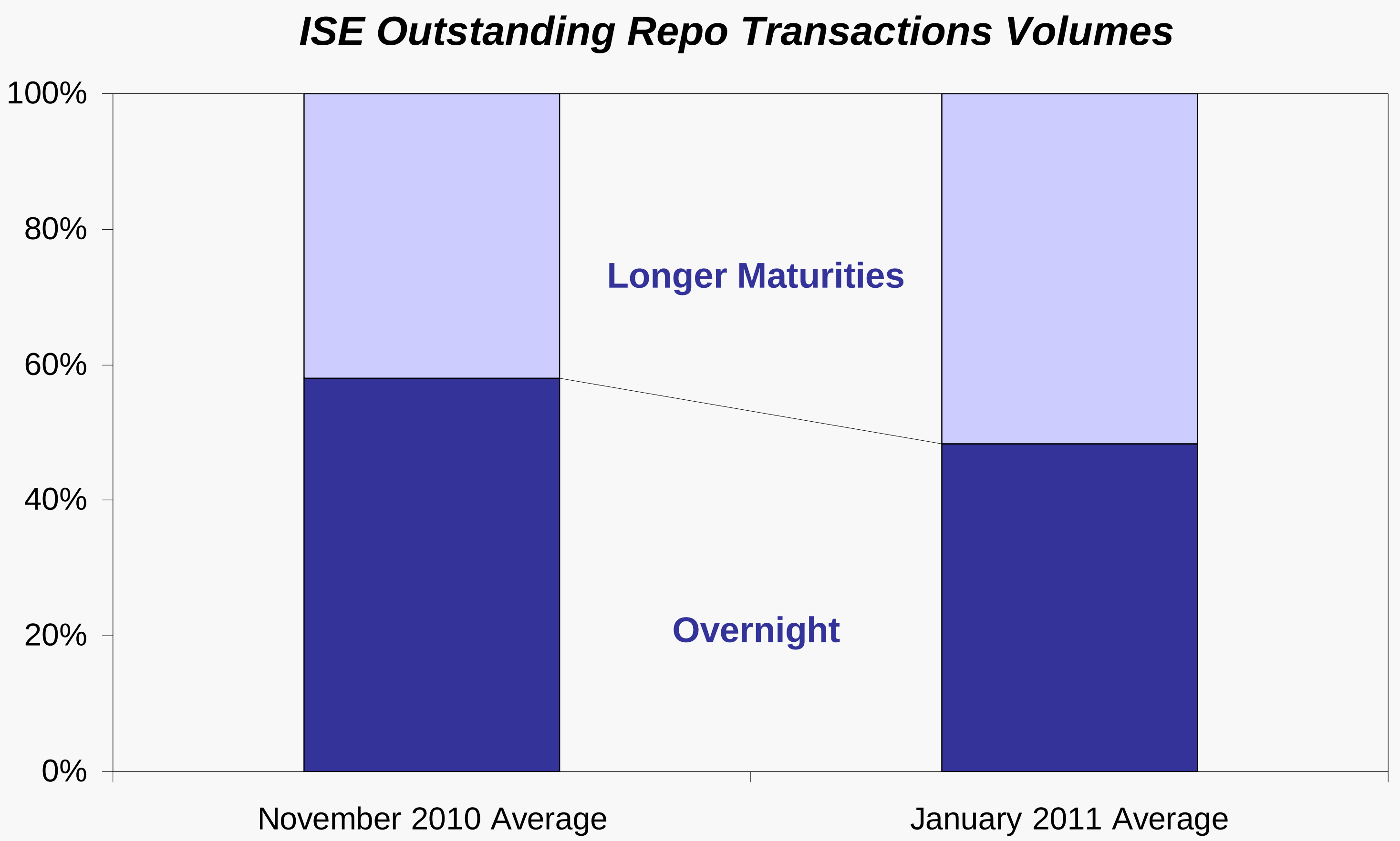
Source: Reuters, CBRT

Maturity Extension in Swap Markets



Source: Reuters, ISE, CBRT

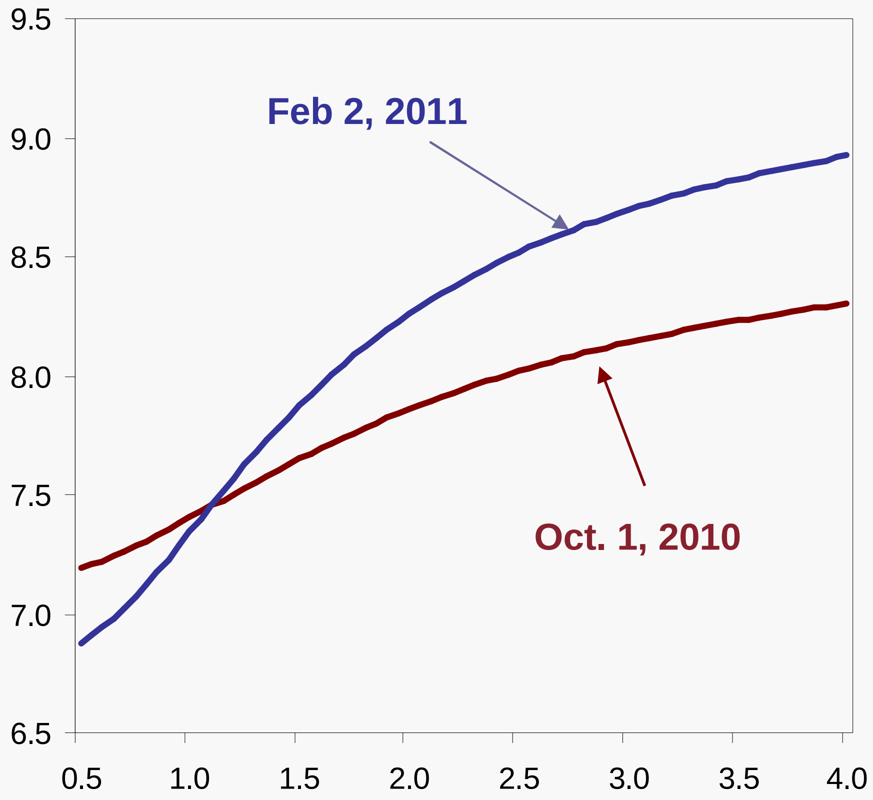
Maturity Extension in Money Markets



Source: ISE, CBRT

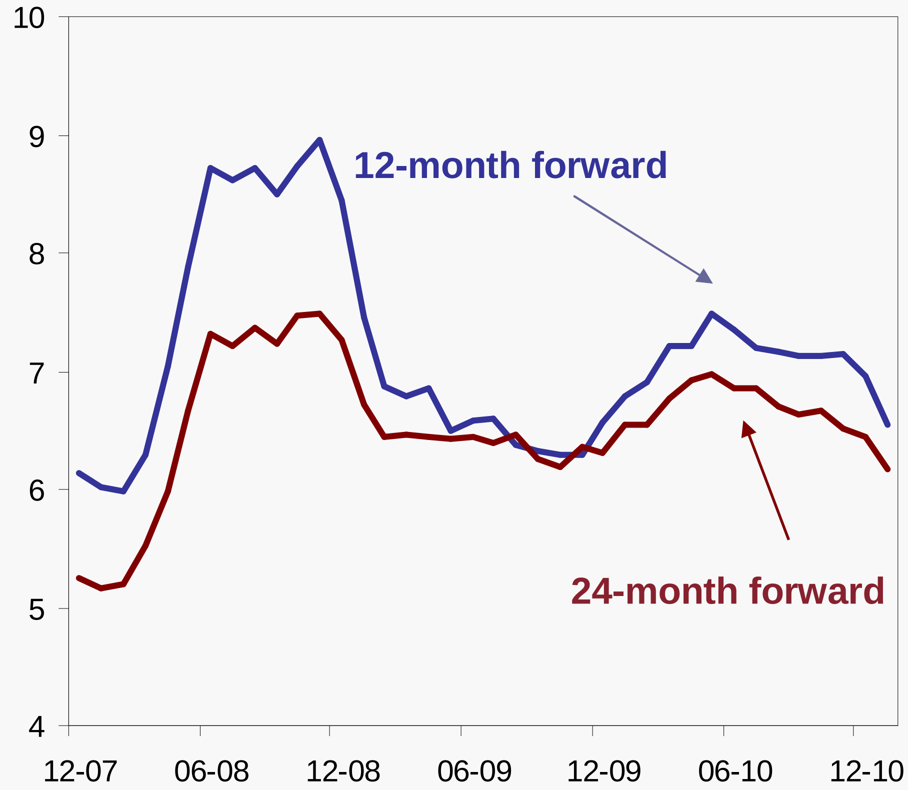
Yield Curve and Inflation Expectations

Yield Curve*
(percent)



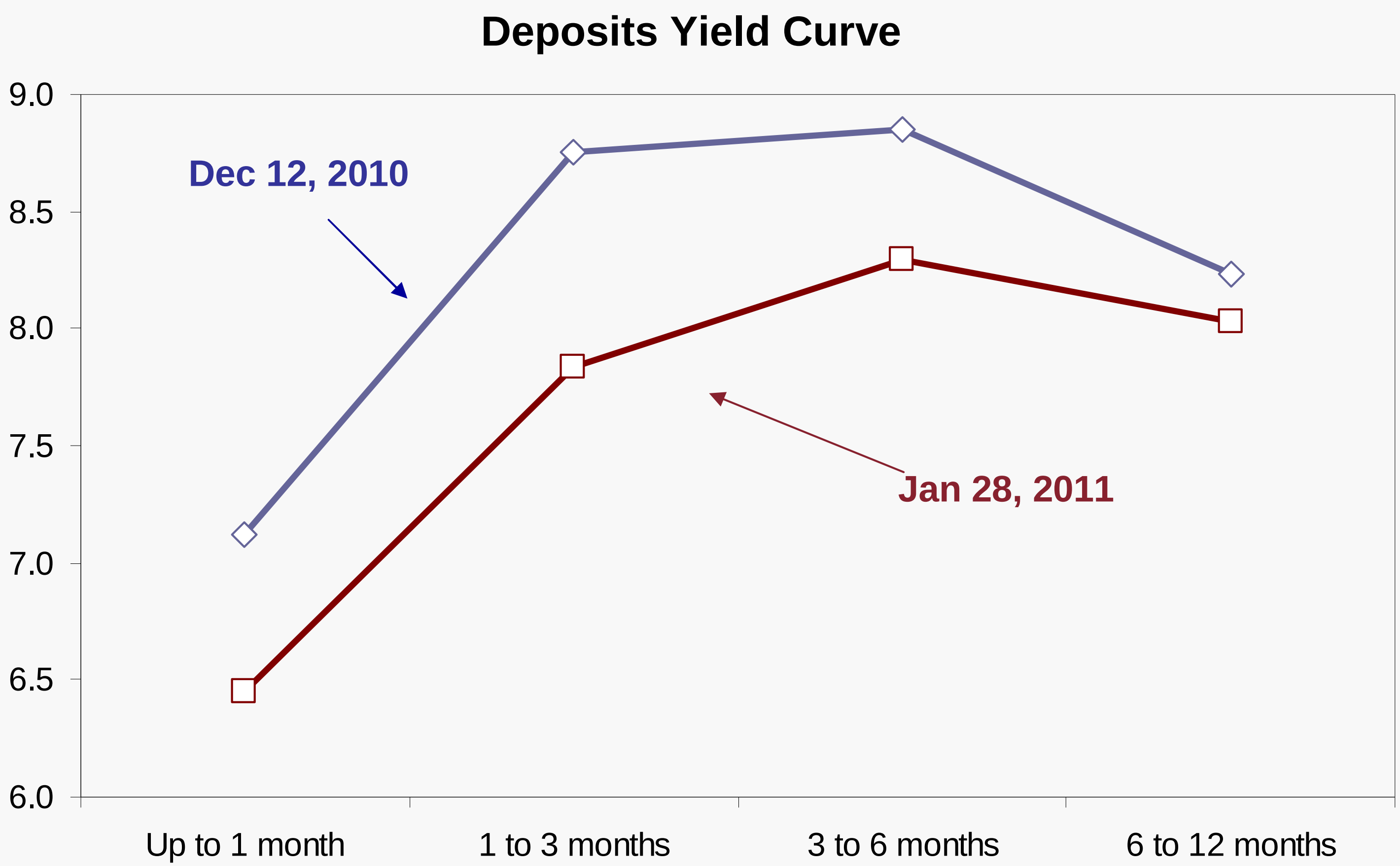
* Calculated from the compounded returns on bonds quoted in ISE Bills and Bonds Market by using ENS method.
Source: ISE, CBRT

Inflation Expectations*
(percent)



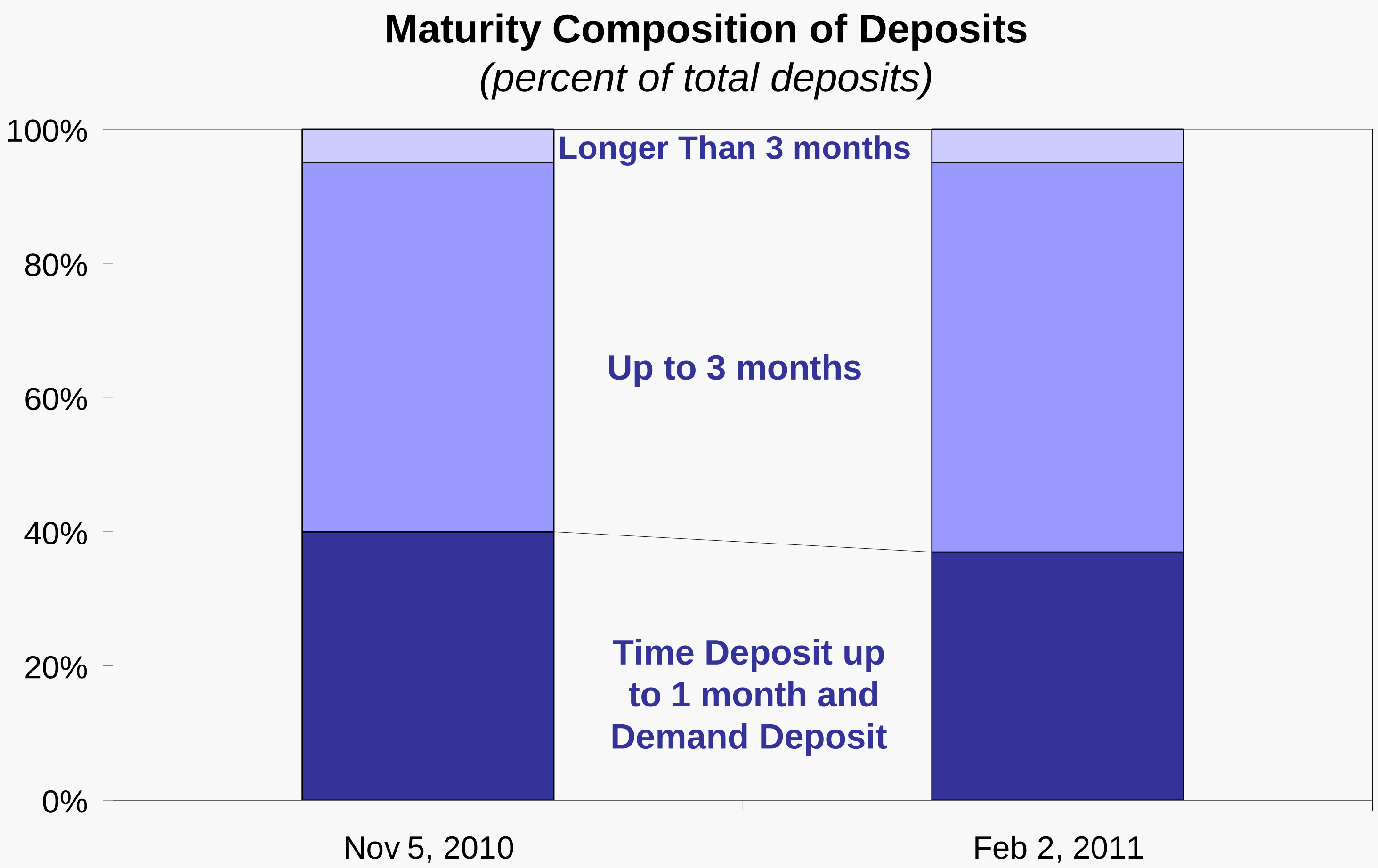
* CBRT Expectations Survey results from the second survey period.
Source: ISE, CBRT

Deposits Yield Curve



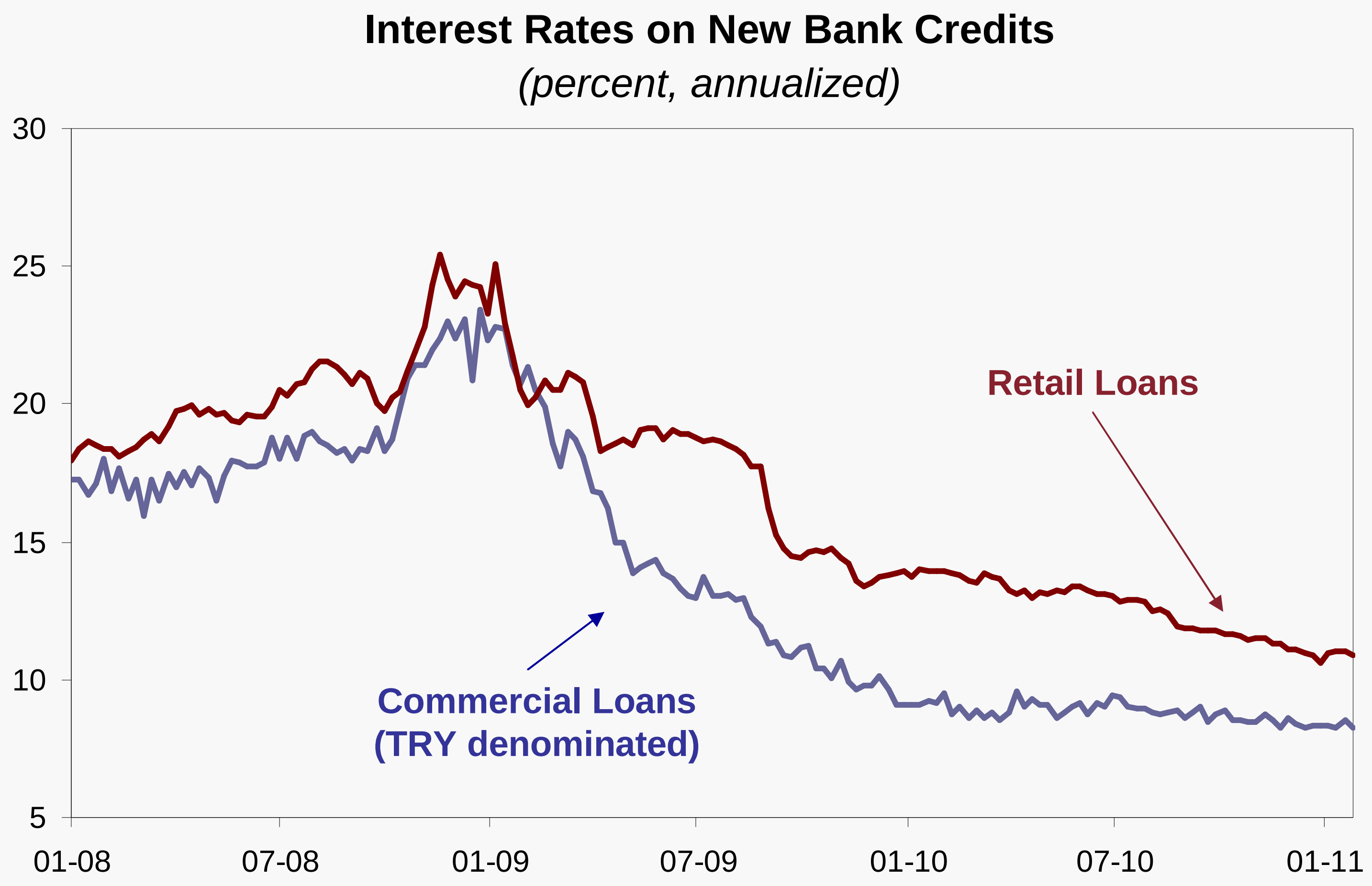
Source: CBRT

Maturity of Deposits



Source: CBRT

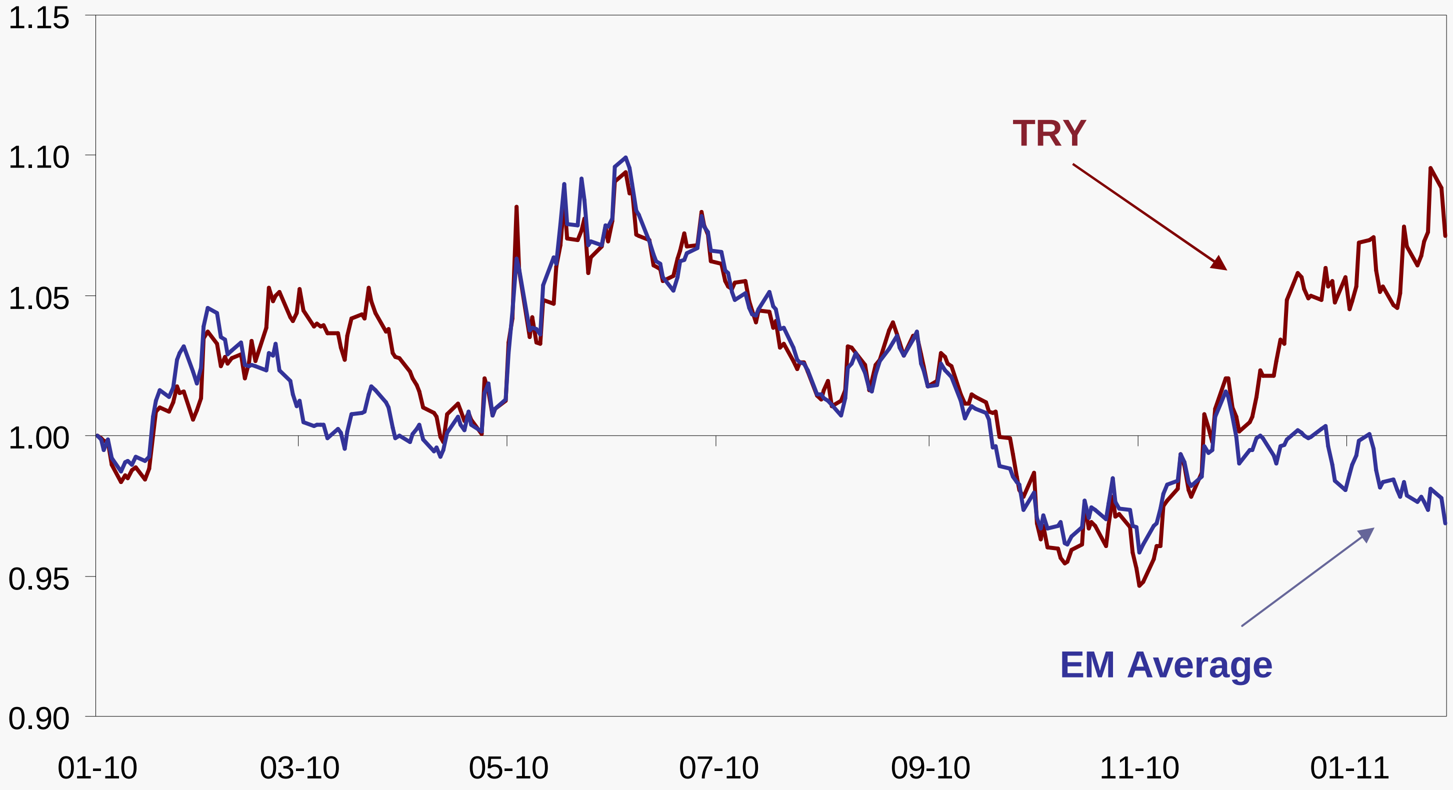
Interest Rates on Bank Credits



Source: CBRT

Initial Impact on Currency

*TRY and Other EM Currencies against USD**
(4 Jan 2010=1)



*Average of emerging market currencies, including Brazil, Chile, Czech Republic, Hungary, Mexico, Poland, South Africa, Indonesia, South Korea and Colombia.
Source: Bloomberg, CBRT

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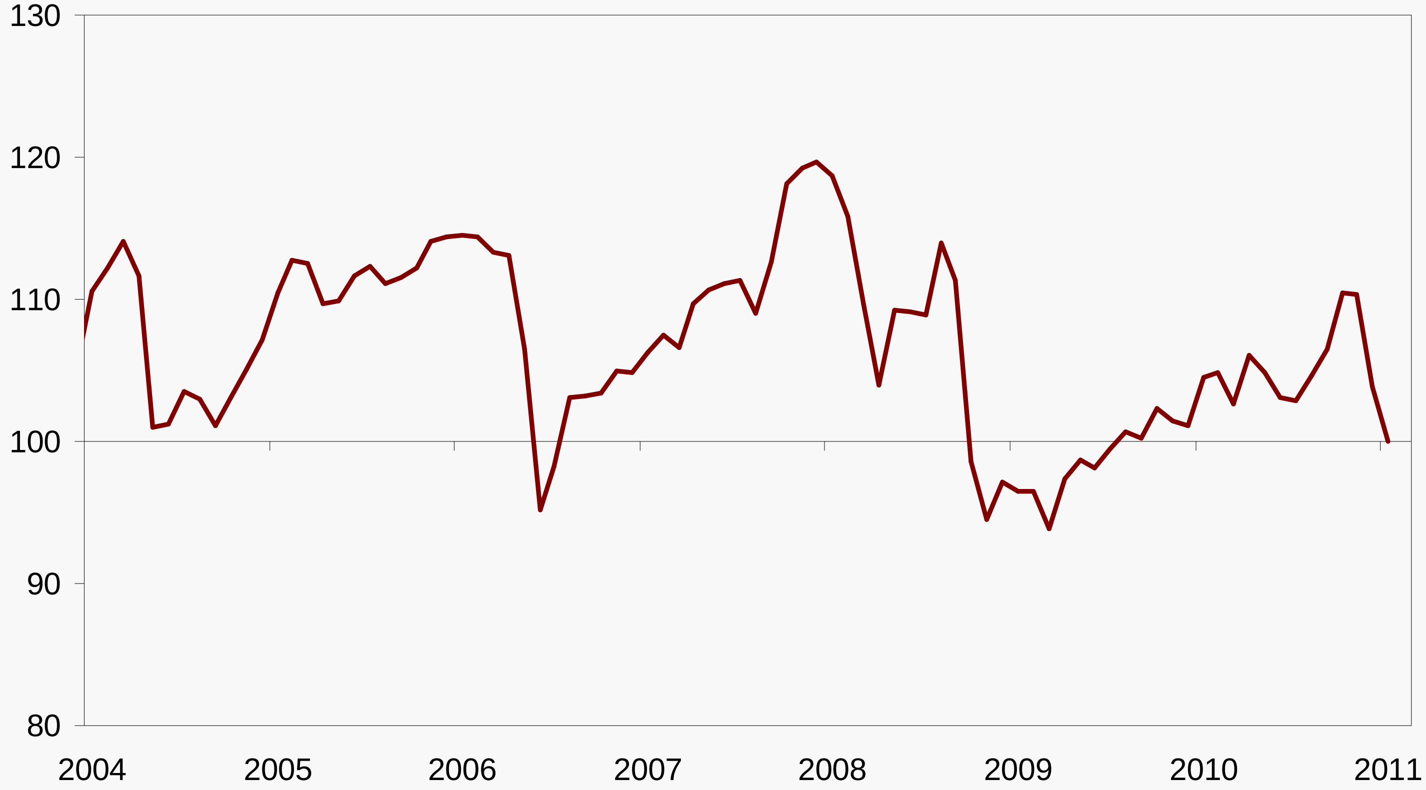
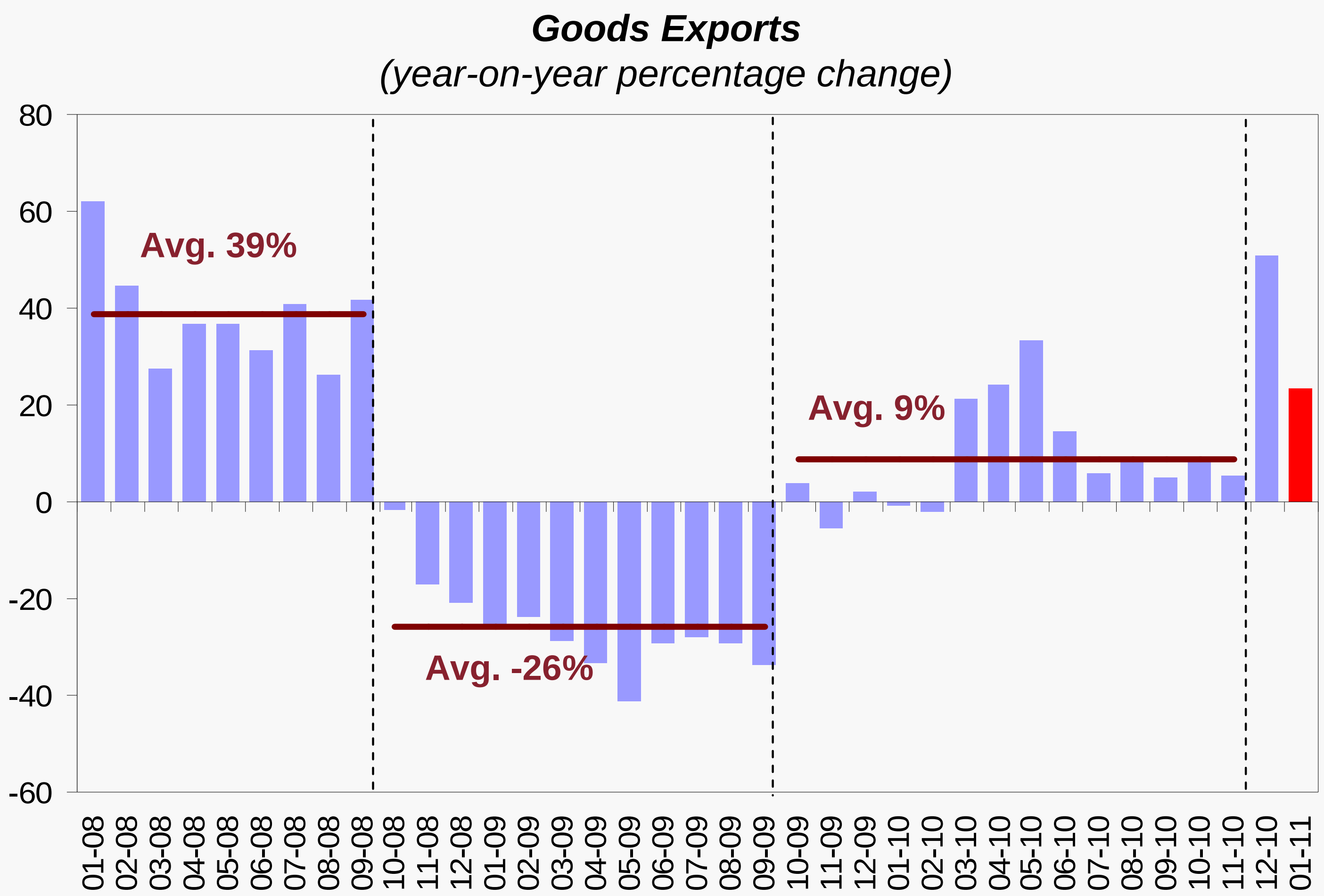
Initial Impact on Currency

Real Effective Exchange Rate
(CPI-based, against developing countries, 2003=100)



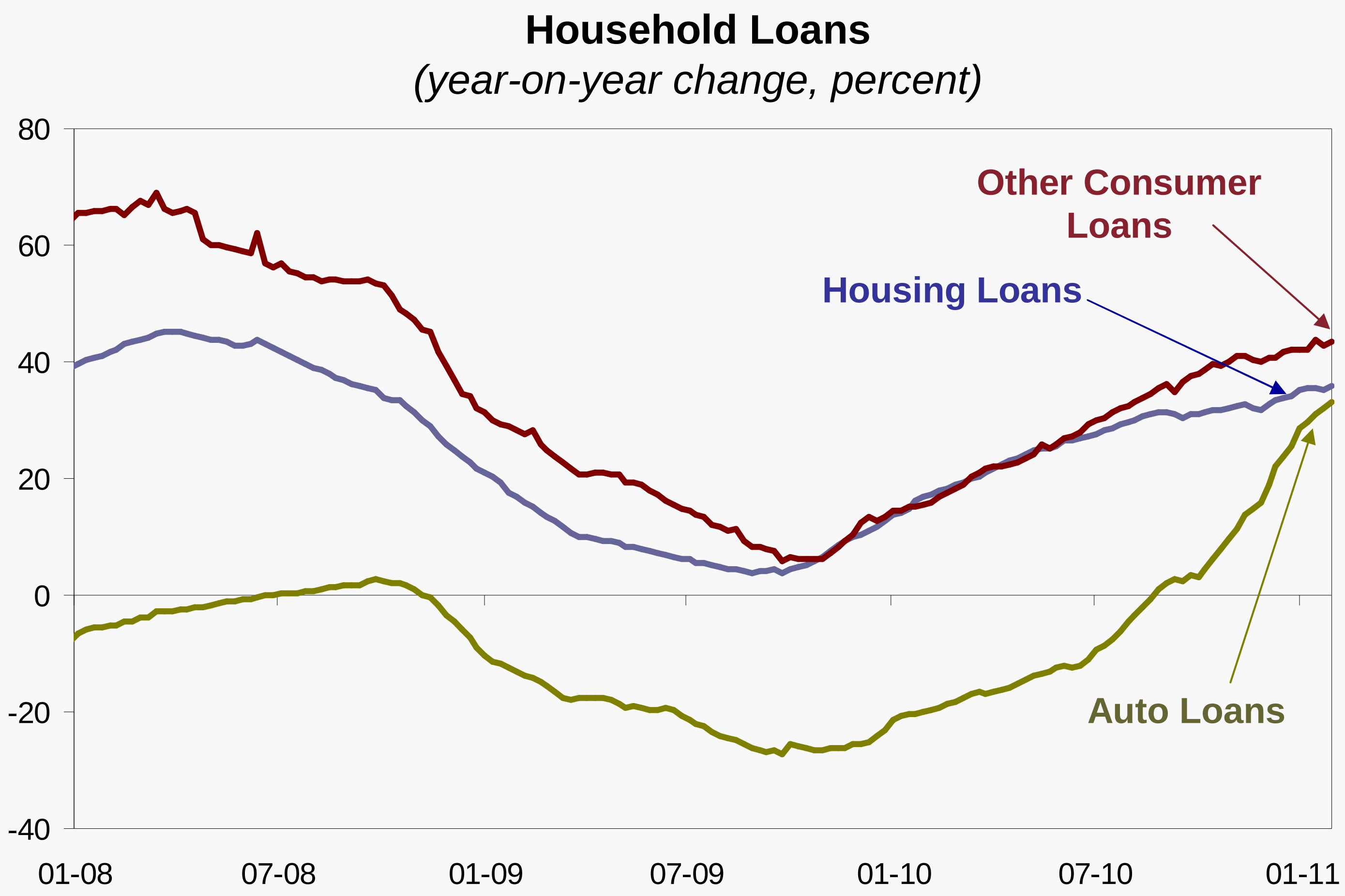
Source: CBRT

Exports



Source: TurkStat, Turkish Exporters Assembly, CBRT

Household Loans



Source: CBRT

IV. Baseline Scenario and Risks

The Baseline Scenario

- The Baseline Scenario envisages a gradual tightening by changing the mix of the policy rate and reserve requirement ratios. Such a tightening should not only aim at slowing down credit growth and domestic demand, but also reduce macroprudential concerns.

Continuation of Baseline Scenario

- The possibility of a longer-than-anticipated period of anemic global growth and a long period of quantitative easing by developed economies not only creates downside risks regarding external demand but also suggests that capital inflows may continue at a faster pace.
- Should such a scenario materialize, a policy mix of low policy rate and high reserve requirement ratios may be implemented for a long period.

Risk Scenario – I

- In case, global economic problems intensify and contribute to a contraction of domestic economic activity, an easing in all policy instruments may be required.

Risk Scenario – II

- If the global economy faces a faster-than-expected recovery, global inflation may increase and thus trigger a tightening in the monetary policies of developed economies.
- Materialization of such a scenario would mean higher global interest rates and demand-driven domestic inflation, and thus necessitate a tightening by using both policy rates and reserve requirements.

Risk Scenario – III

- The increases in commodity prices, if they persist, exert risks regarding general pricing behavior, given the strong pace of domestic demand.
- Should such a risk materialize and hamper the attainment of the medium-term inflation targets, there may be stronger tightening than envisaged in the baseline scenario.
- However, the policy mix may vary depending on the developments regarding external demand, capital flows, and the outlook for credit growth.

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