

# **CENTRAL BANK OF THE REPUBLIC OF TURKEY**

**The Challenges of Balancing Hot Money Inflows vs  
Conducting a Prudent Monetary Policy**

**Dr. İbrahim Turhan  
Deputy Governor**

**5 May 2011**

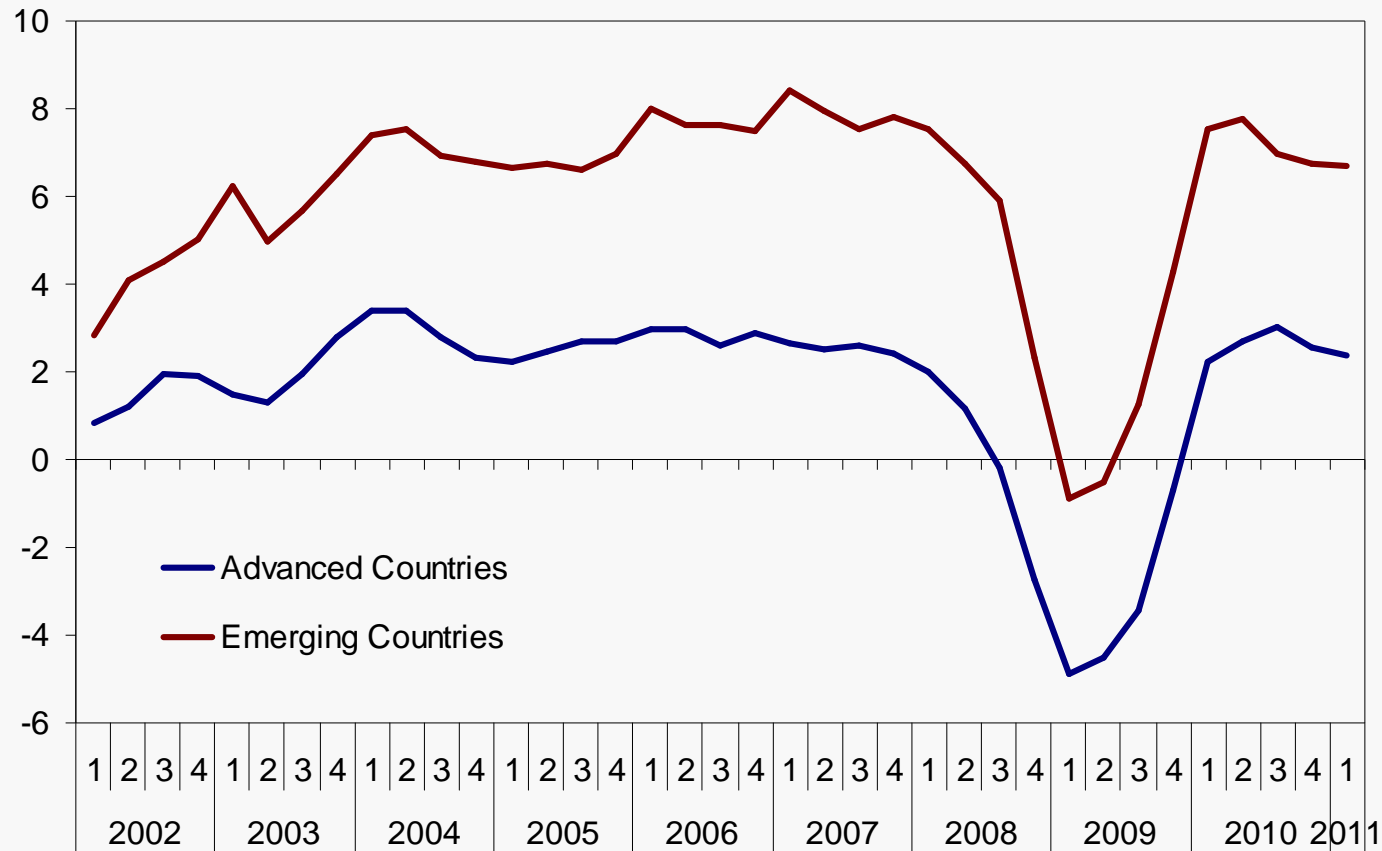
# Presentation Outline

- I. Monetary Policy in Advanced Economies vs Emerging Economies**
- II. The Turkish Economy**
- III. Monetary Policy Response: Turkey's Experience**
- IV. Financial Stability Outcomes So Far**

# I. Monetary Policy in Advanced Economies vs Emerging Economies

# Growth Differentials

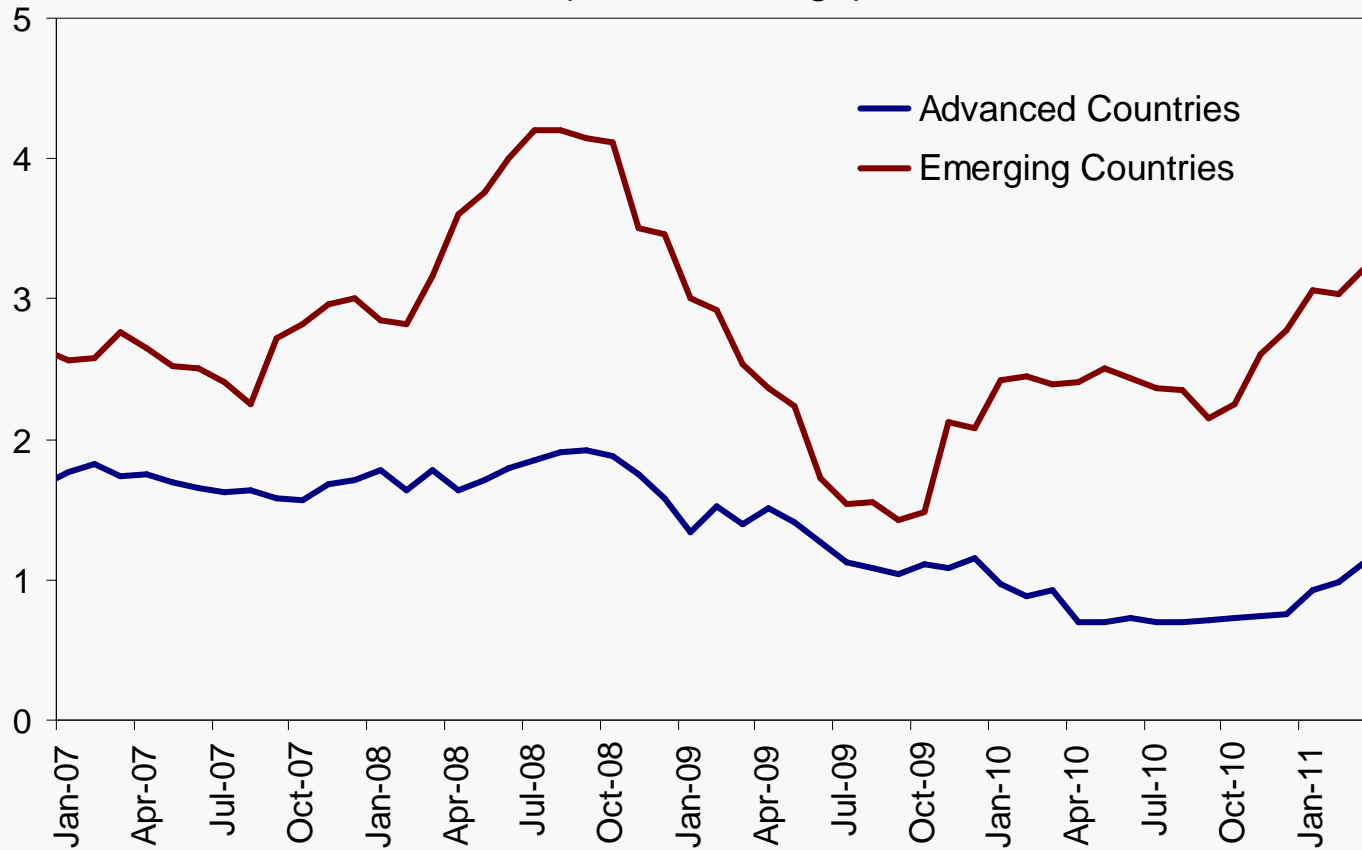
**Growth Rates**  
(annual change)



Source: Bloomberg, CBRT

# Inflation Differentials

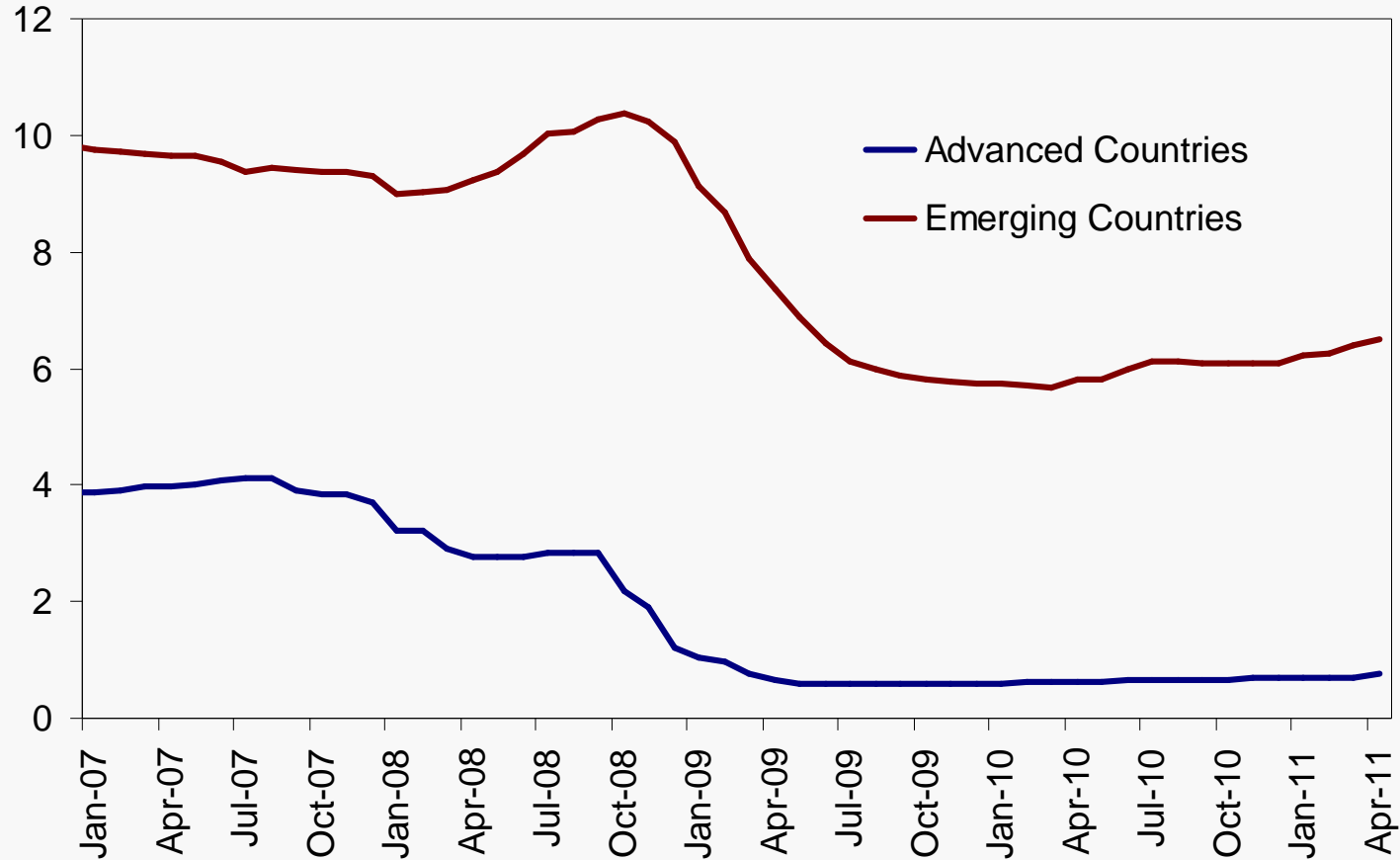
**Core Inflation**  
(annual change)



Source: Bloomberg, CBRT

# Interest Rate Differentials

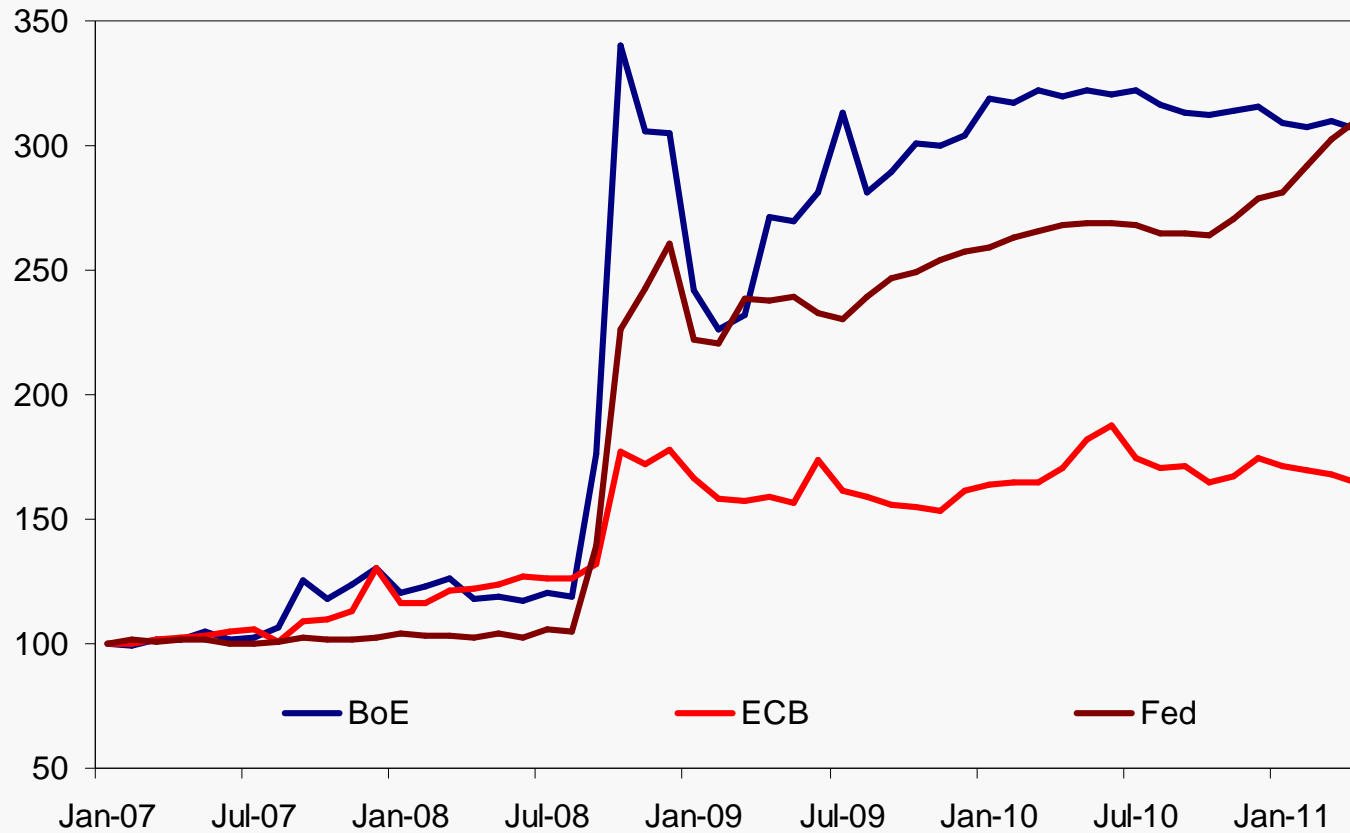
**Policy Rates**  
(percent)



Source: Central Banks, CBRT

# Quantitative Easing

## Balance Sheets of Major Central Banks



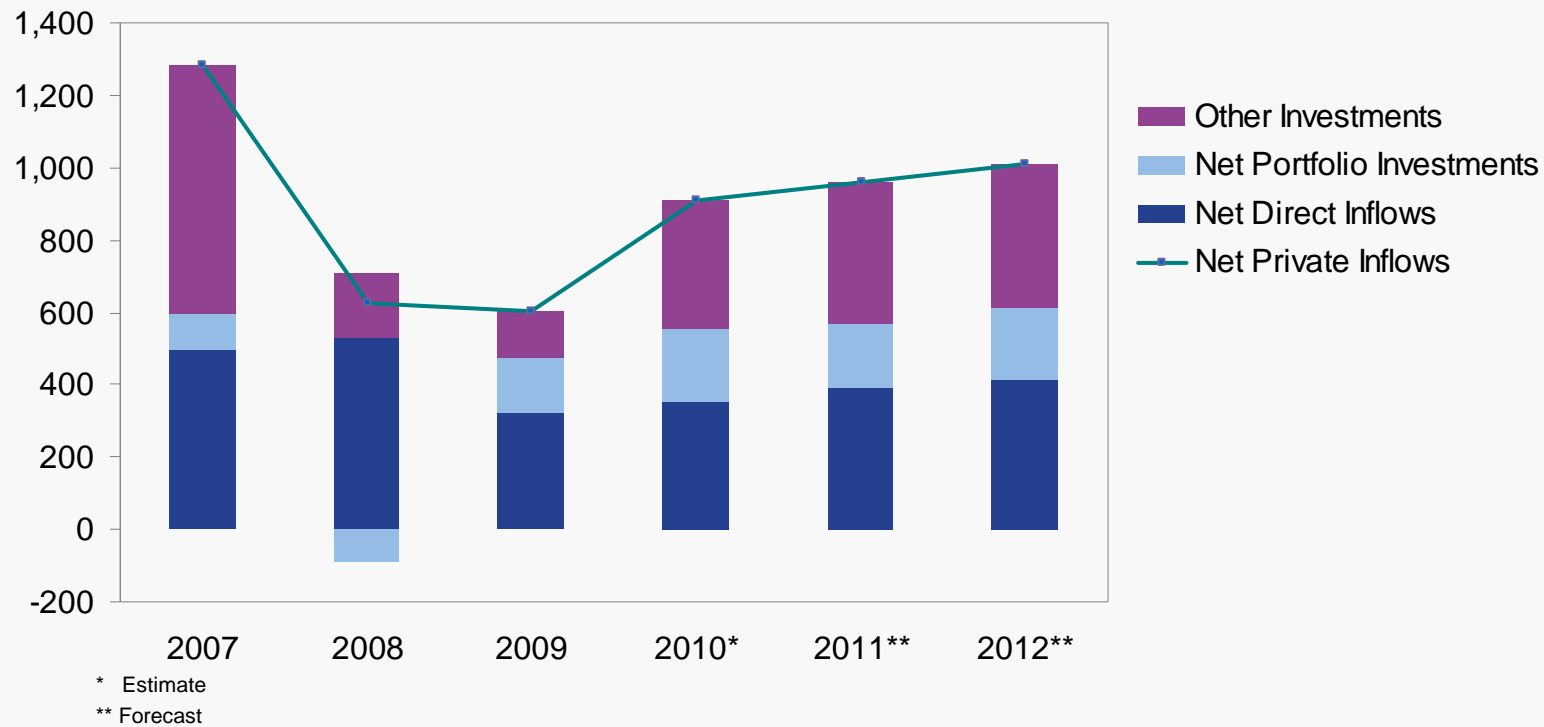
\* Index: March 2007=100

Source: Central Banks

# Result: Surge in Capital Flows

After the crisis both the magnitude and the composition of capital flows have changed: magnitude due to exceptionally loose monetary policies and QE in advanced economies; composition – due to risk averseness

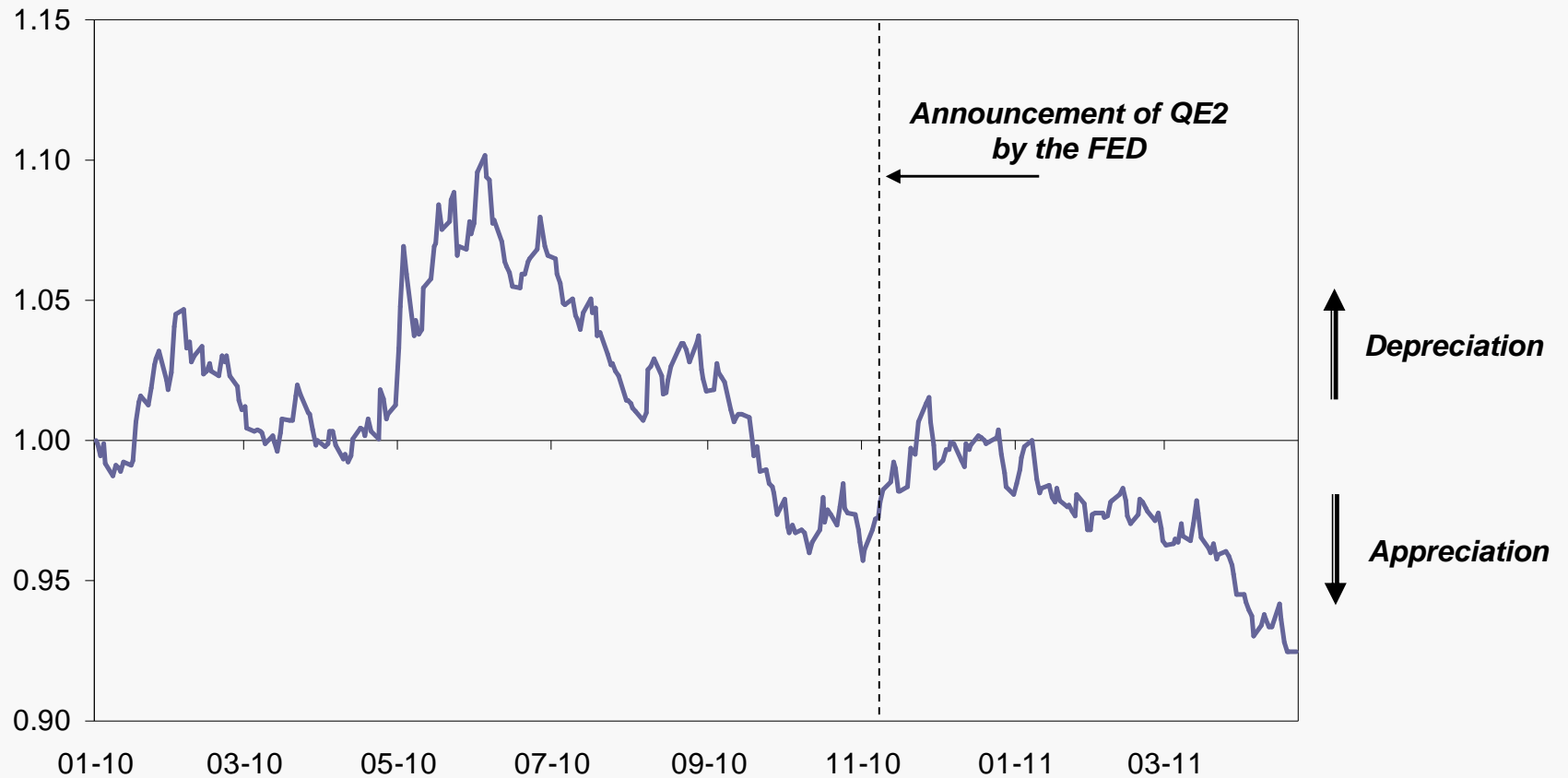
*Net Capital Flow to Emerging Countries*





# Result: Appreciation Pressure

**USD against EM currencies \***  
(4 Jan 2010=1)

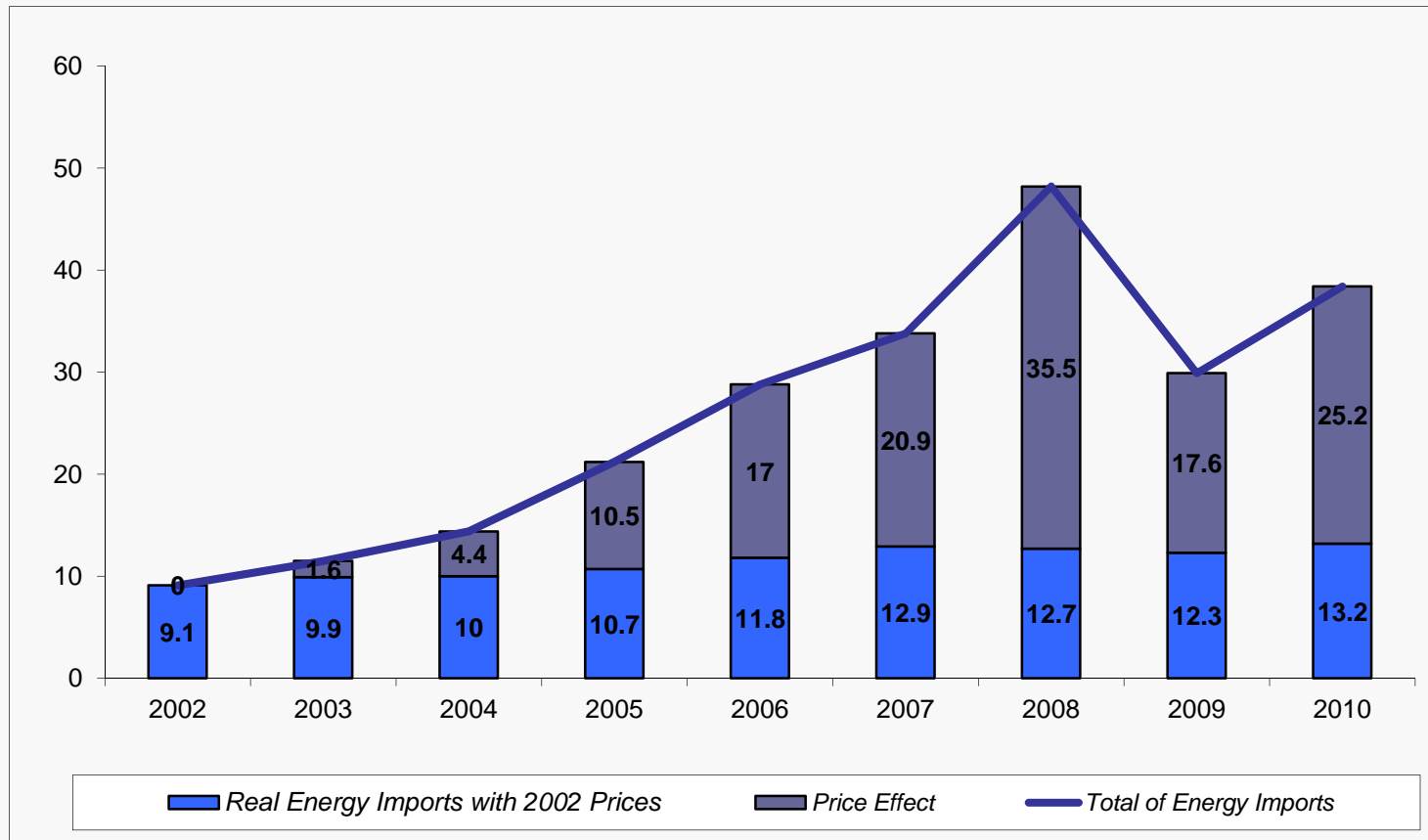


\* Average of emerging market currencies including Brazil, Chile, Colombia, Czech Republic, Indonesia, Hungary, Mexico, Poland, Republic of Korea and South Africa.  
Source: Bloomberg, CBRT

## II. The Turkish Economy

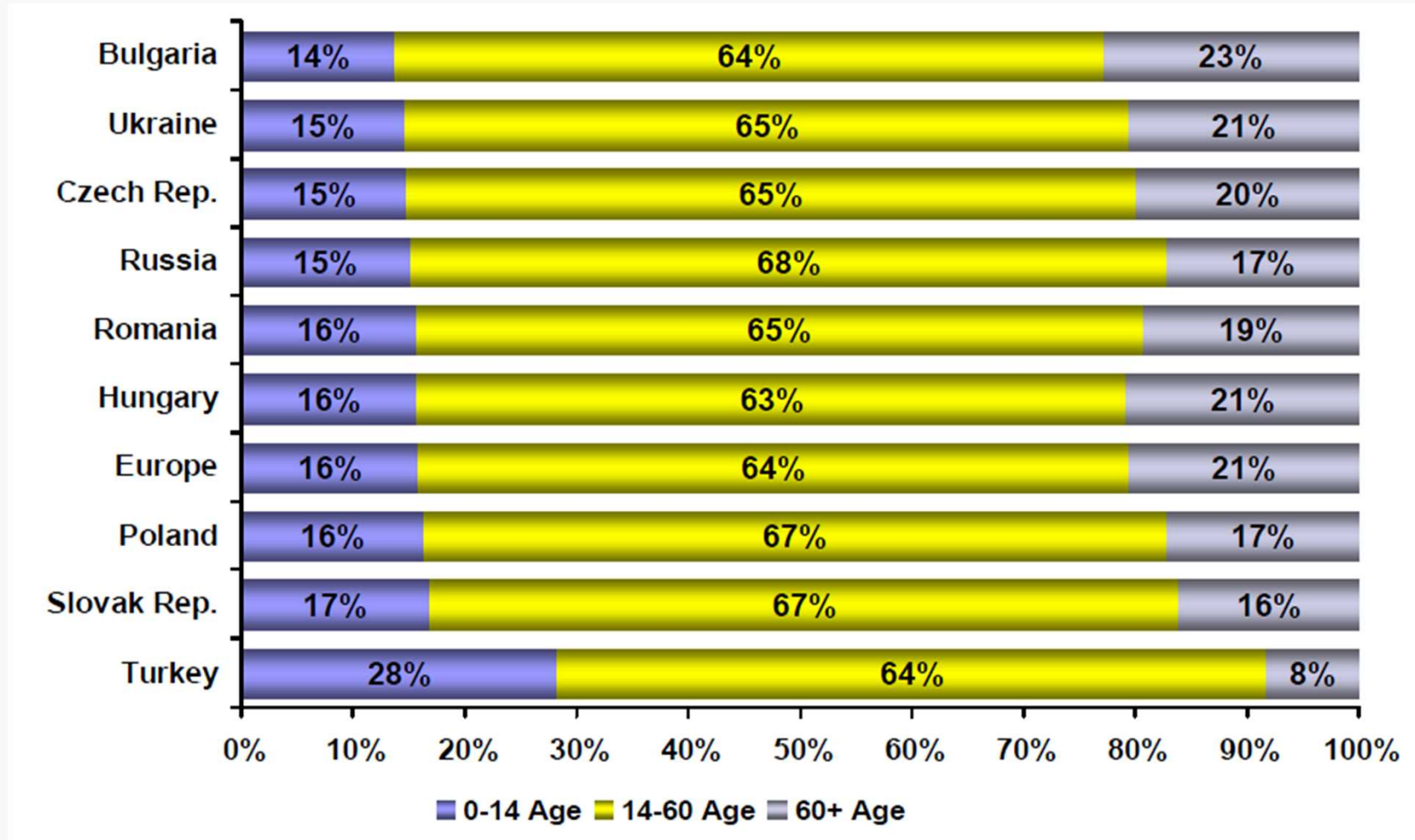
# Turkey: (1) Commodity Importer

## Impact of Energy Prices



Source: Treasury

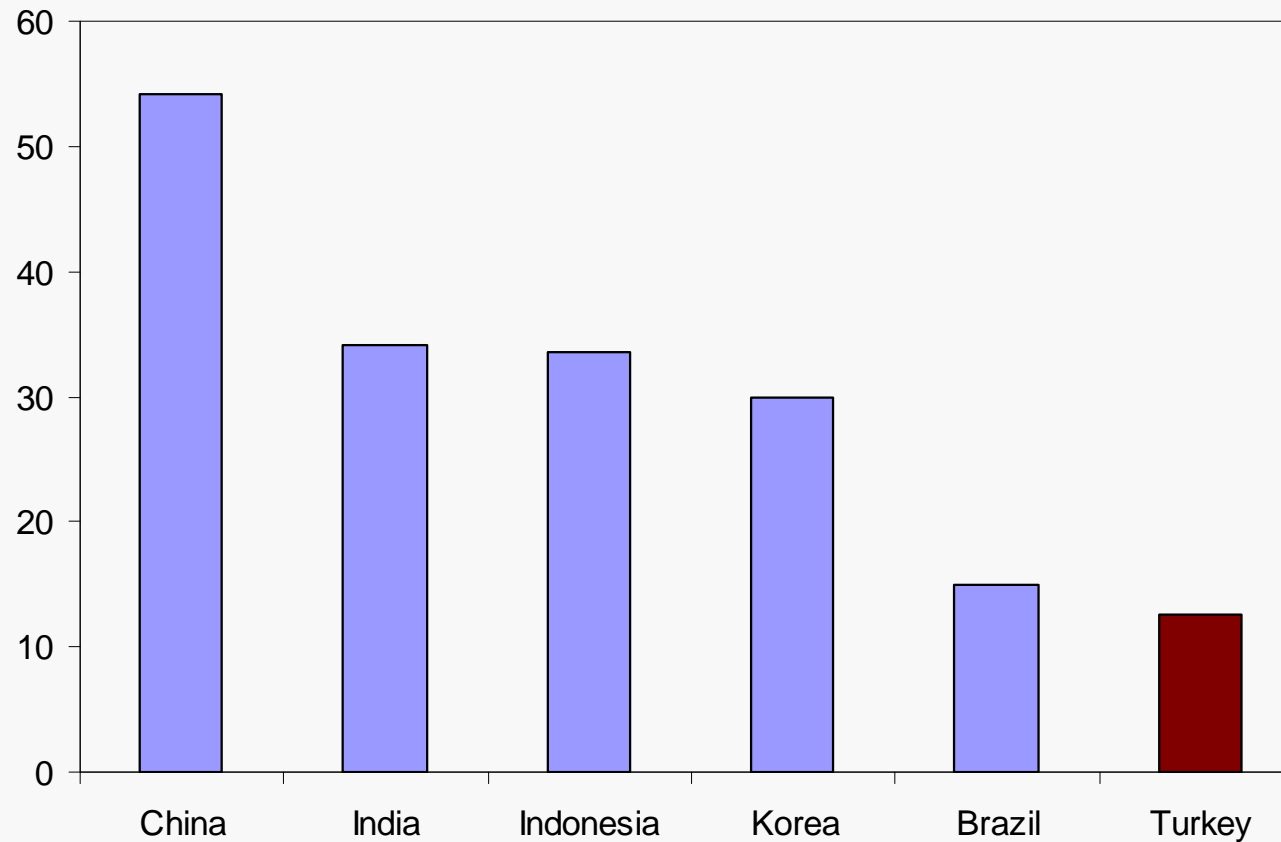
# Turkey: (2) Young Population



Source: UN

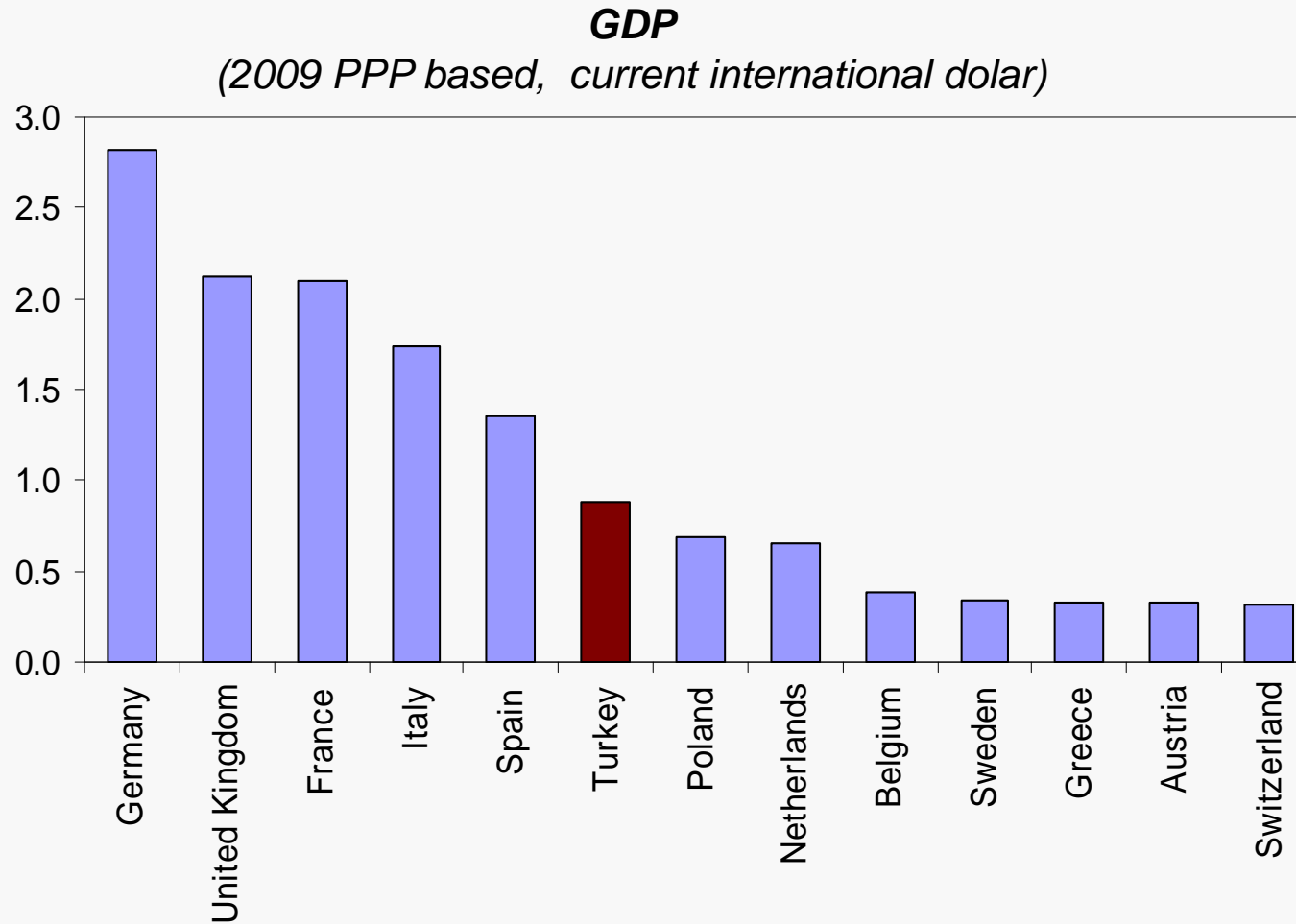
## Turkey: (3) Low Savings Rate

**Gross national savings**  
(Percent of GDP, 2009)



Source: IMF WEO

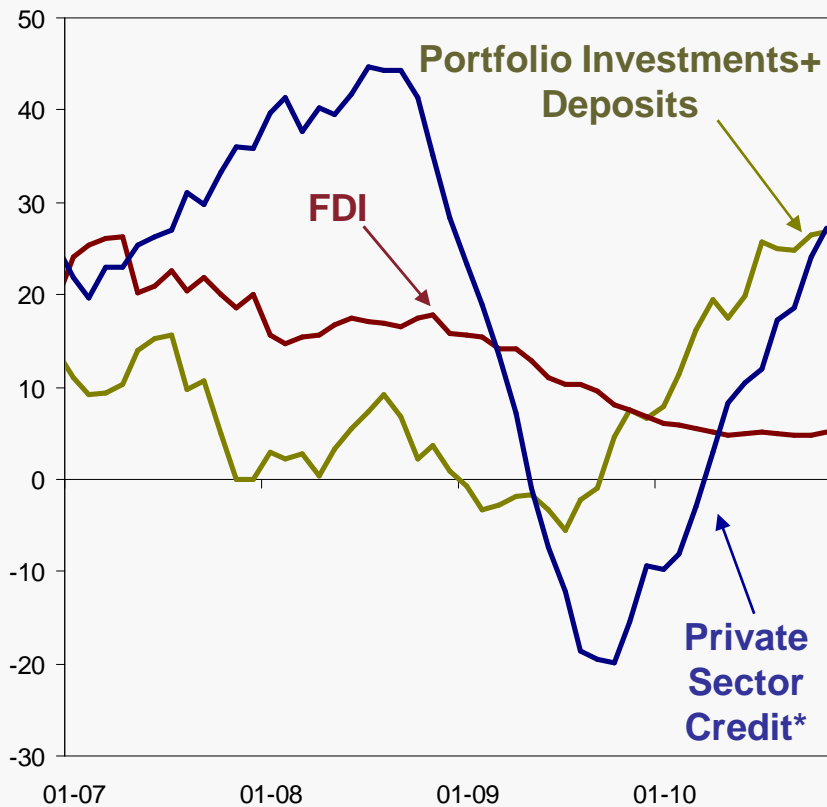
# Turkey: (4) Convergence to the EU



Source: IMF WEO

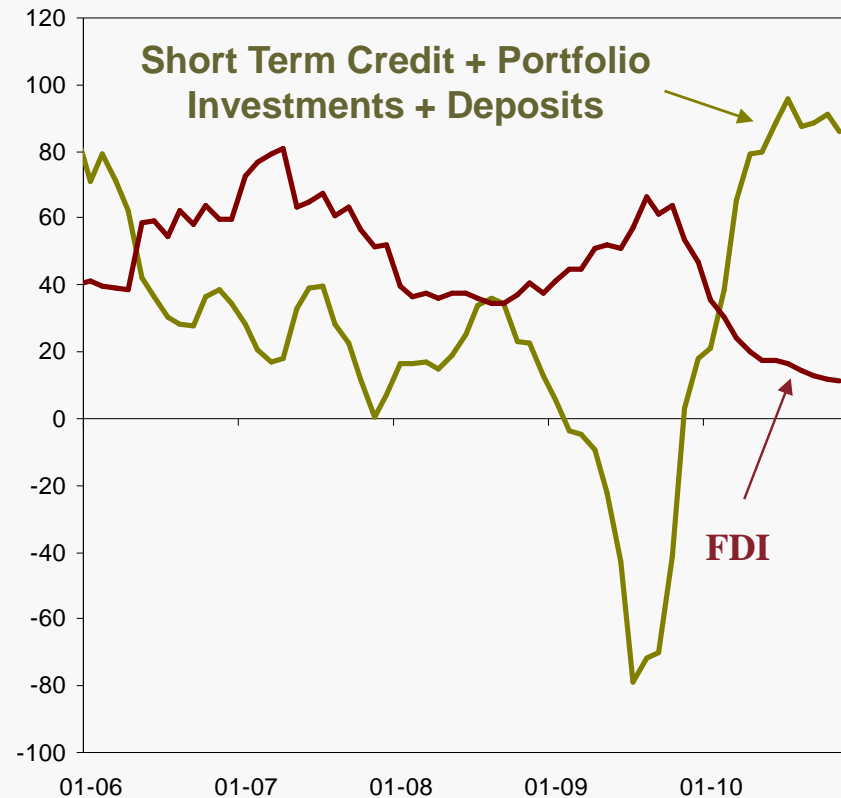
# Challenges: (1) Surge in Capital Flows

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



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

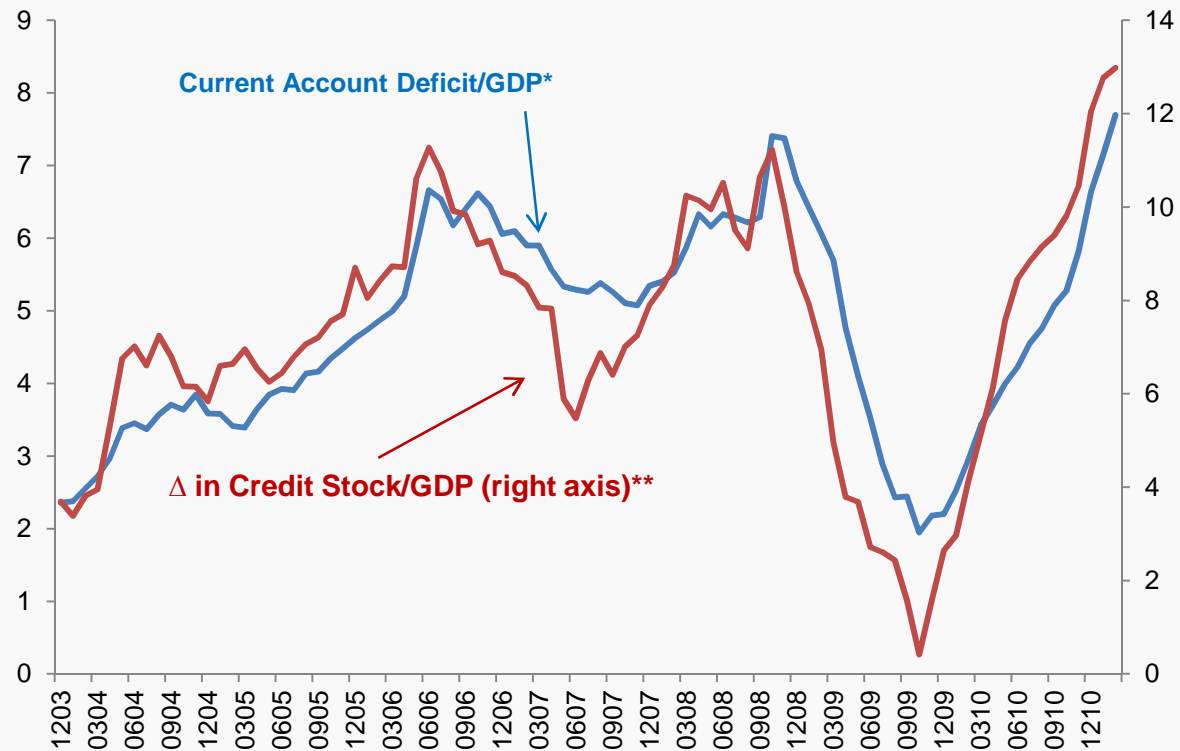
**Finance of Current Account Deficit**  
(percentage of CAD)



Source: TURKSTAT, CBRT

# Challenges: (2) Rapid Credit Growth

## Credit Use and Current Account Deficit



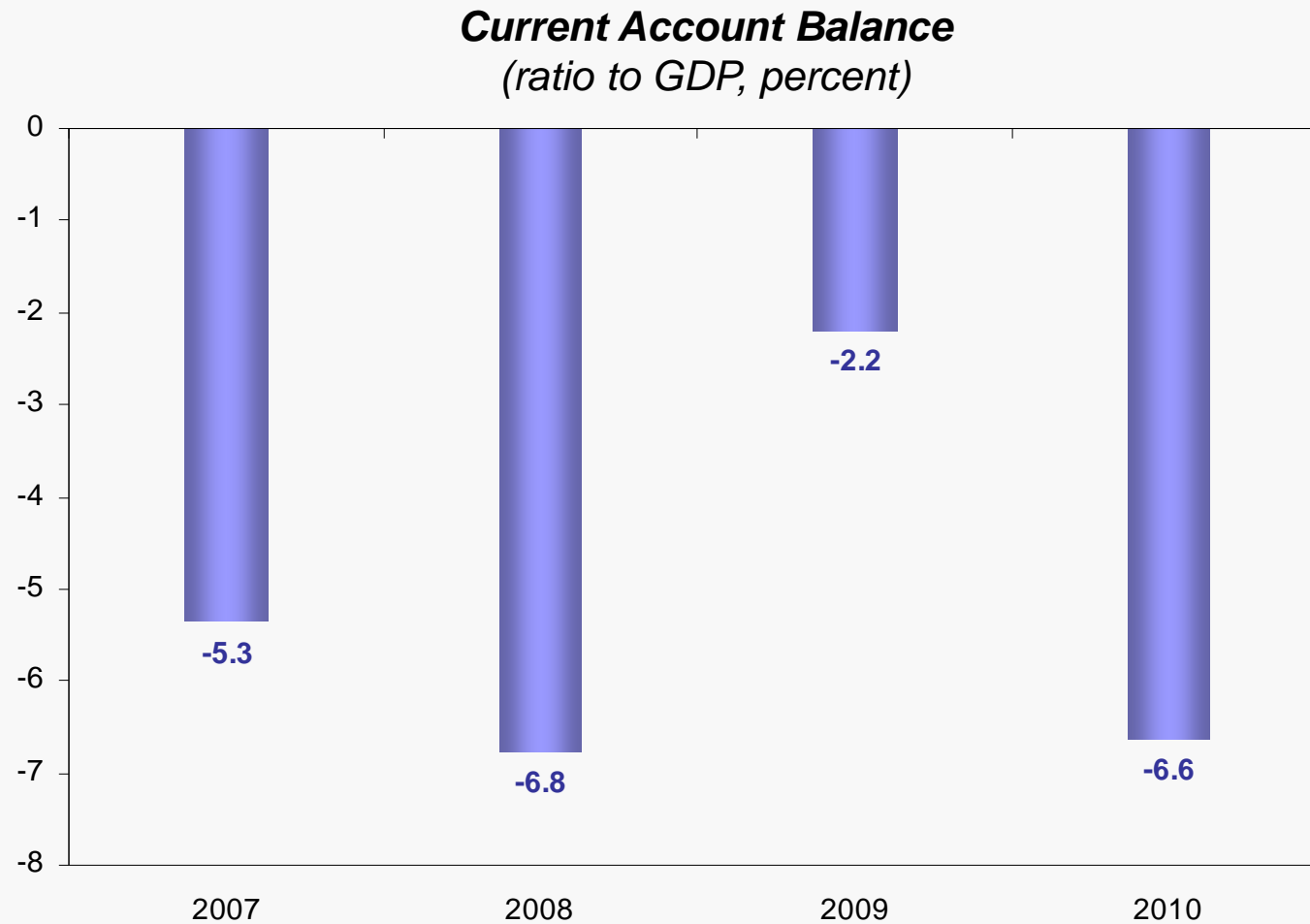
\*12-months cumulative current account deficit / GDP

\*\* Rate of annual change in credit stock / GDP

Source: BRSA, CBRT.



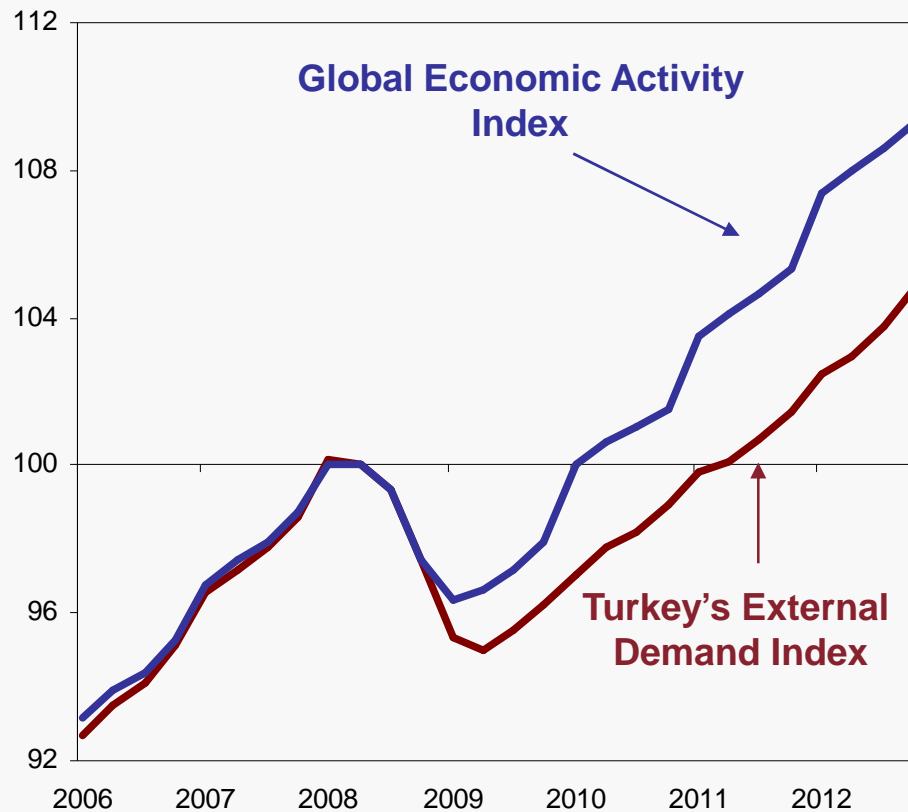
## Challenges: (3) Current Account Deficit



Source: TURKSTAT, CBRT

# Challenges: (4) Weakness in External Demand

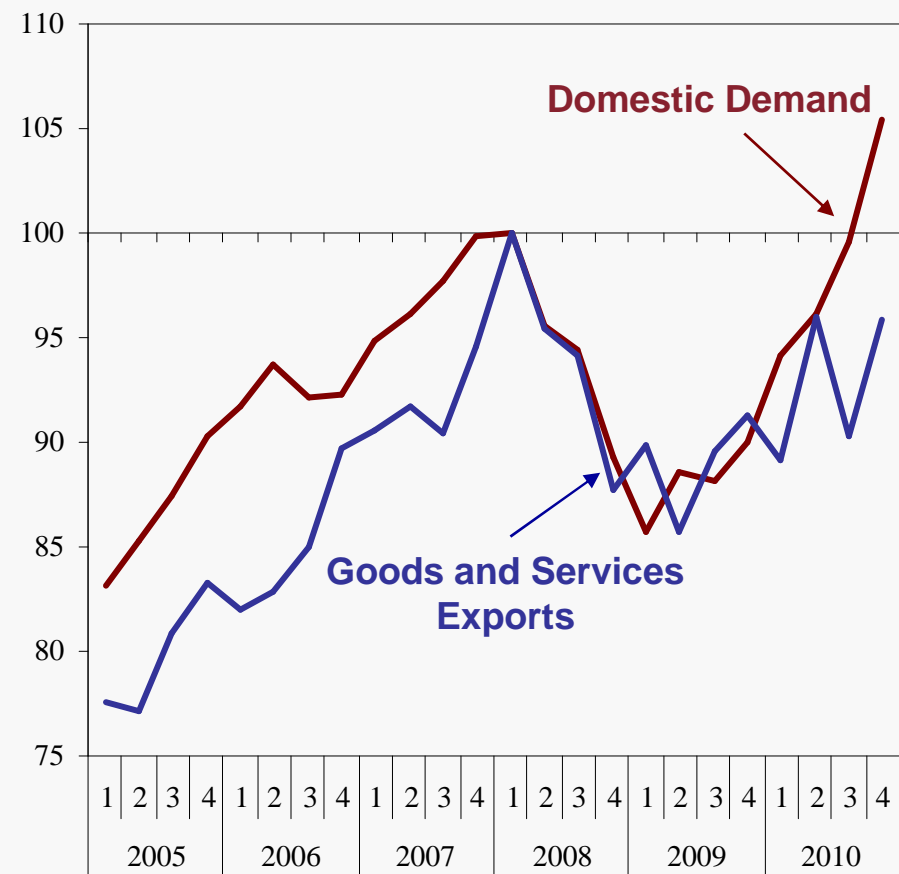
**Turkey's External Demand Index\***  
(June 2008=100)



\* 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

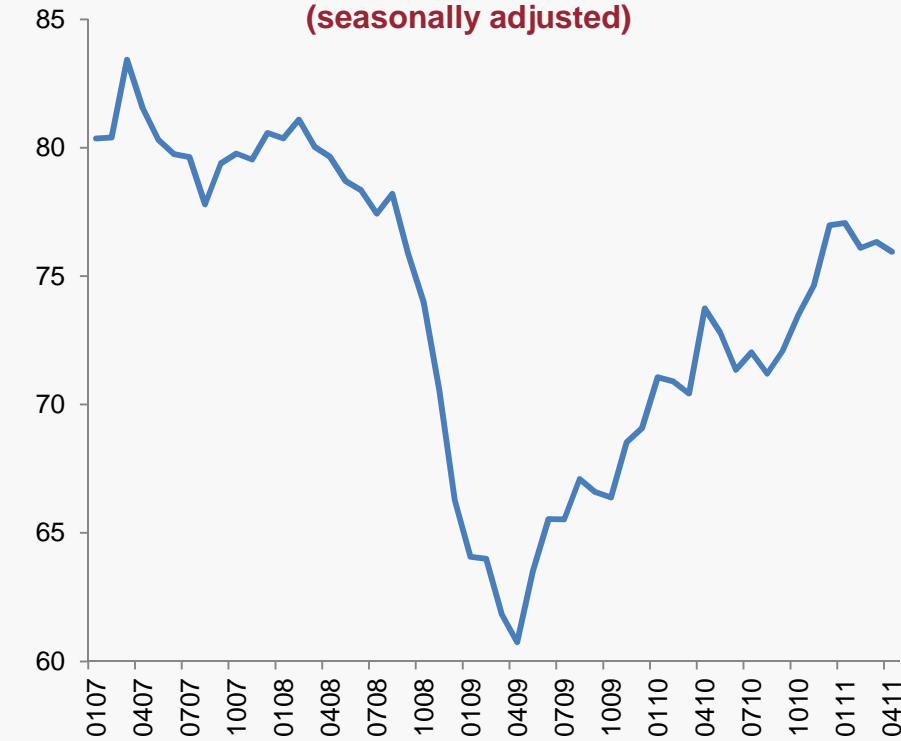
**Domestic Demand and Exports**  
(2008 Q1=100)



Source: TURKSTAT, CBRT

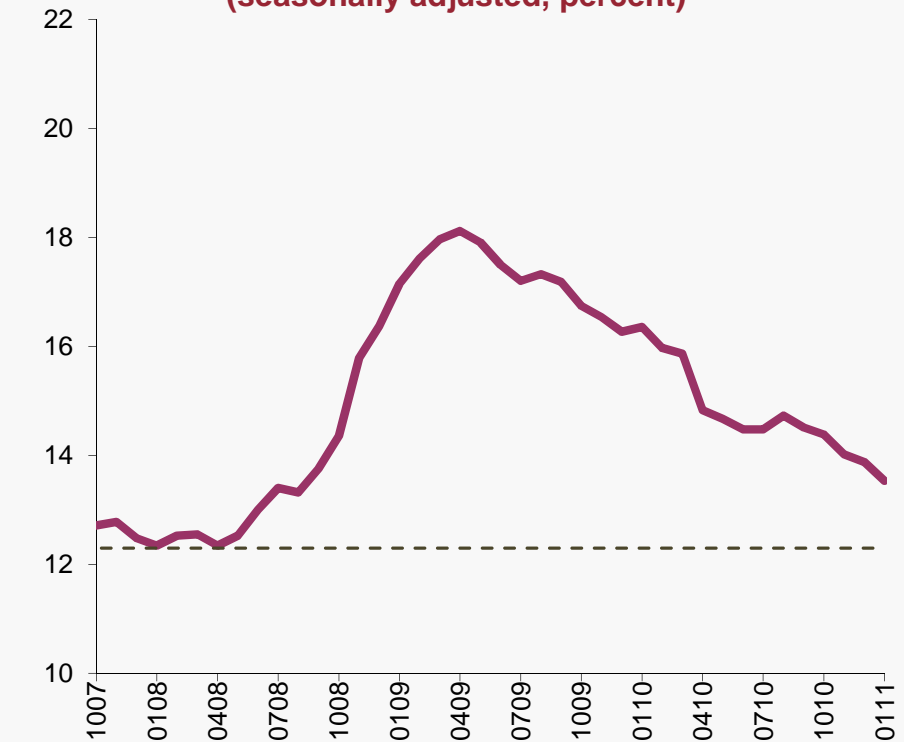
# Challenges: (5) Output Gap

### Capacity Utilization Rate (seasonally adjusted)



Source: CBRT.

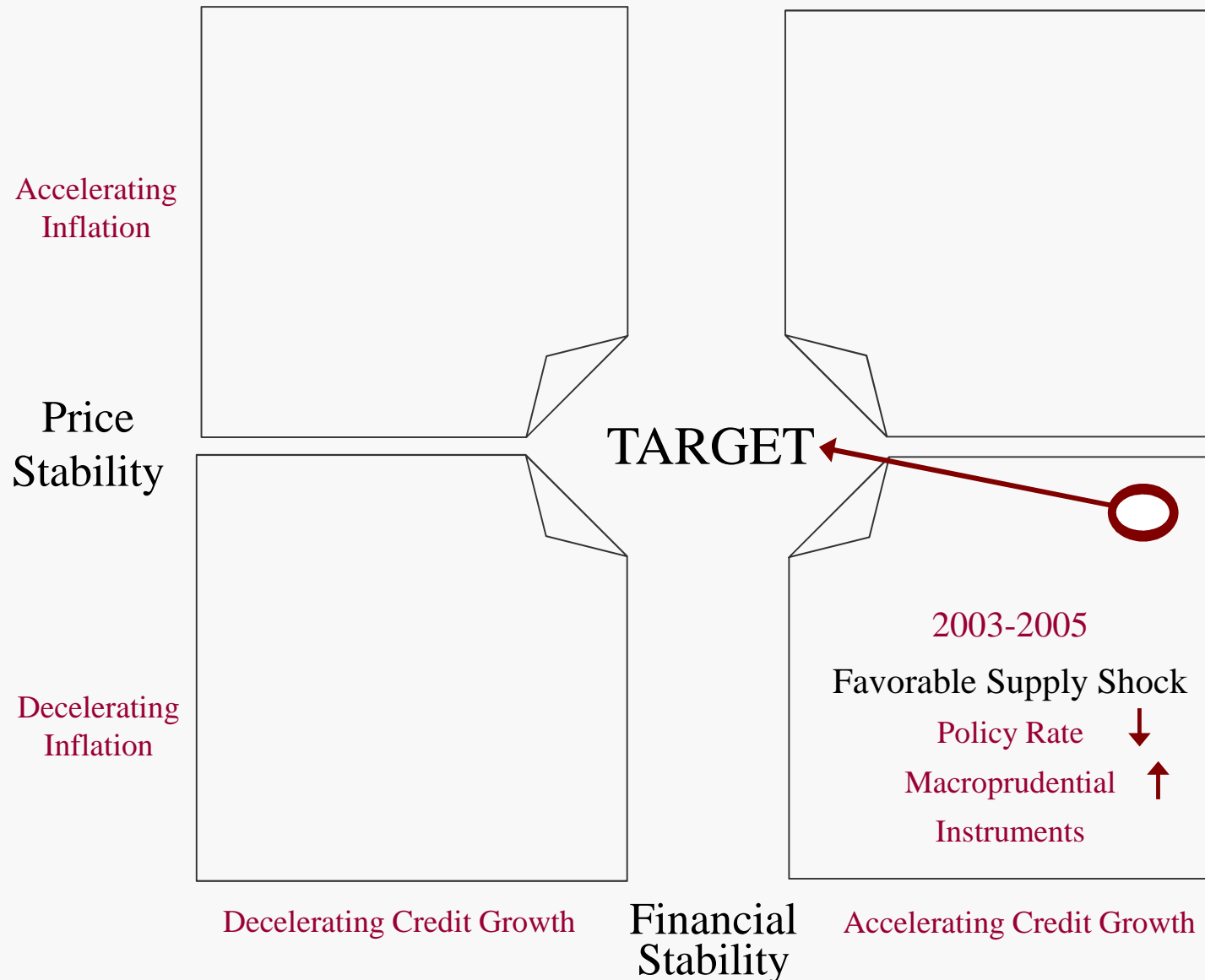
### Non-Farm Unemployment Rate (seasonally adjusted, percent)



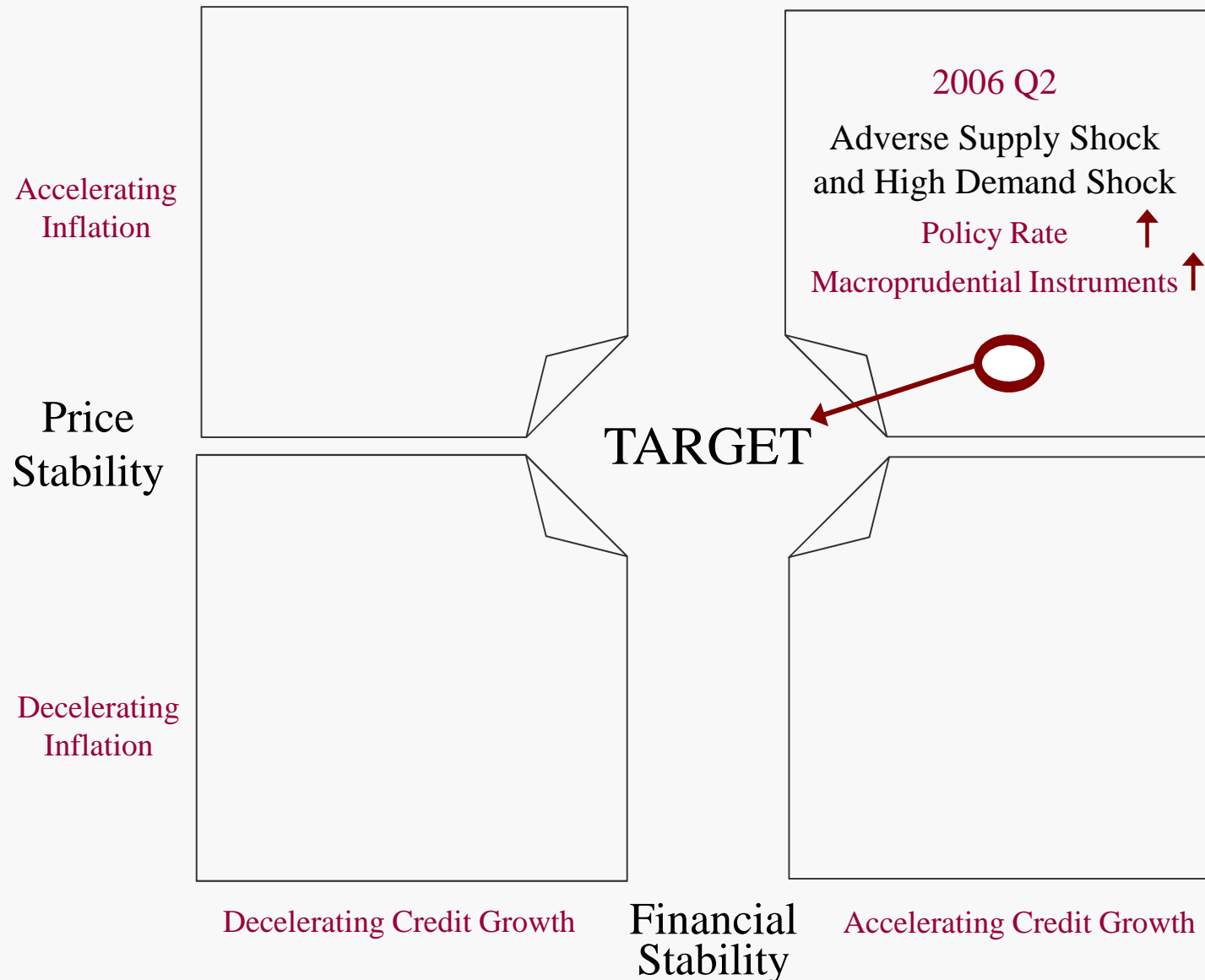
Source: TURKSTAT, CBRT.

# III. Monetary Policy Reponse: Turkey's Experience

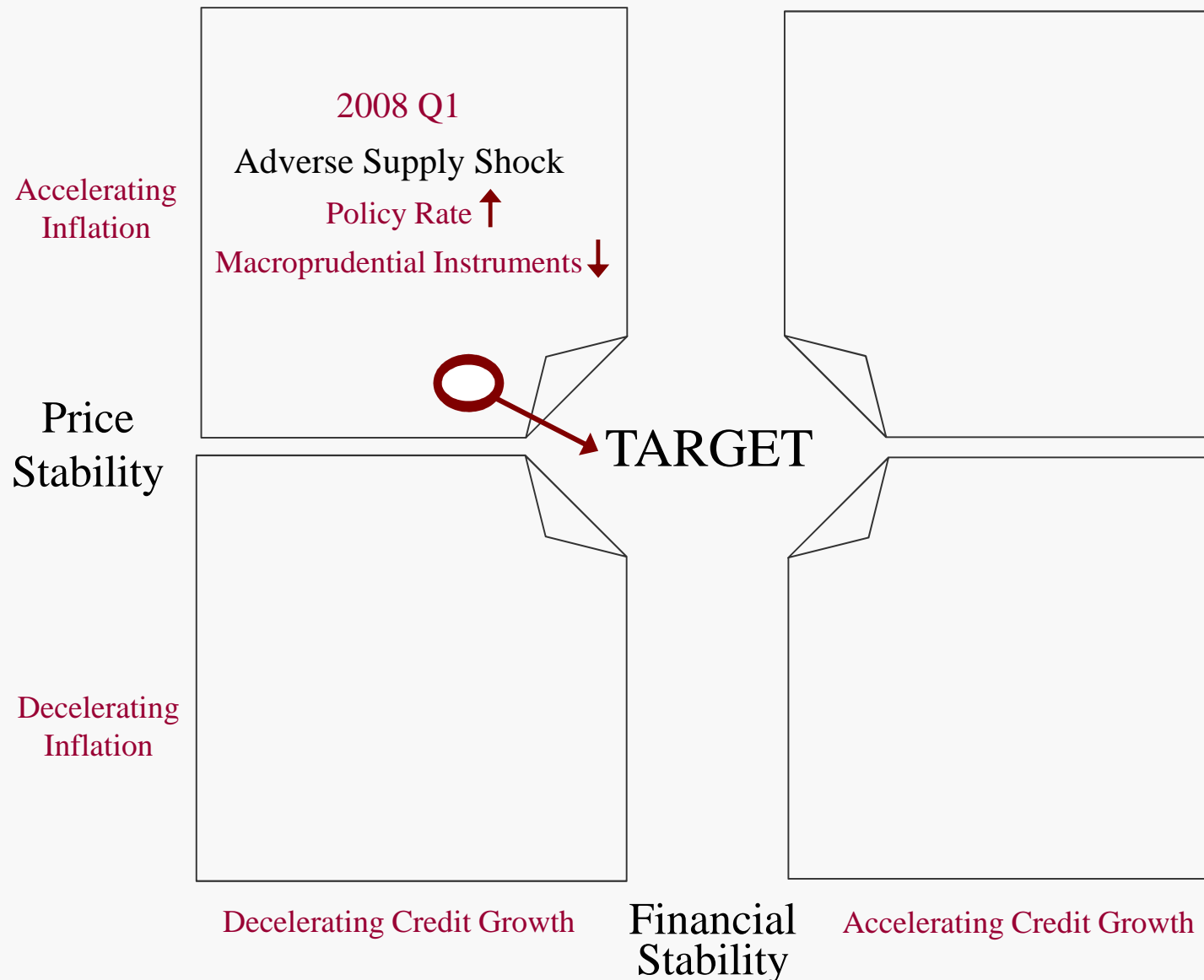
# Monetary Policy Since 2003



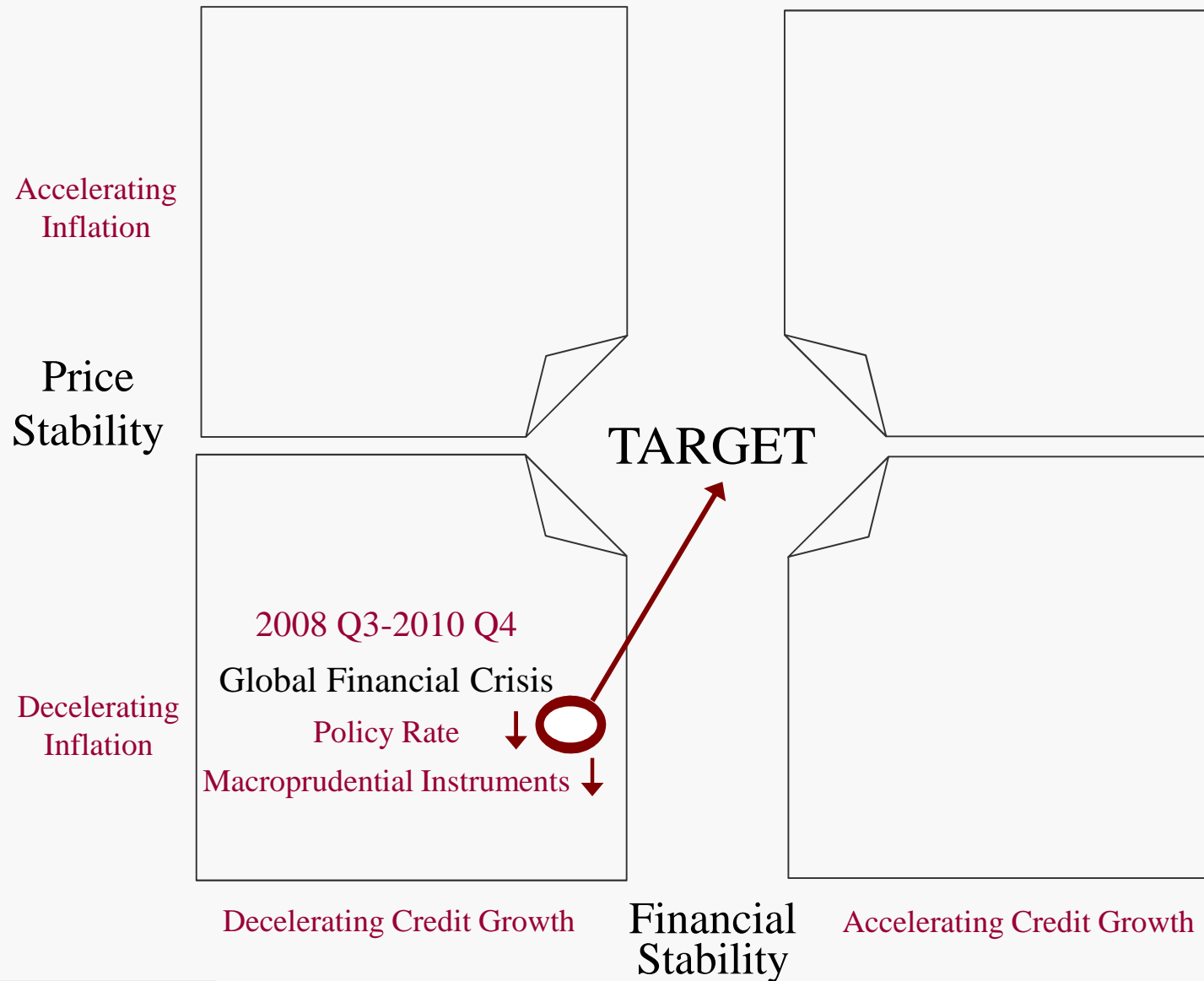
# Monetary Policy Since 2003



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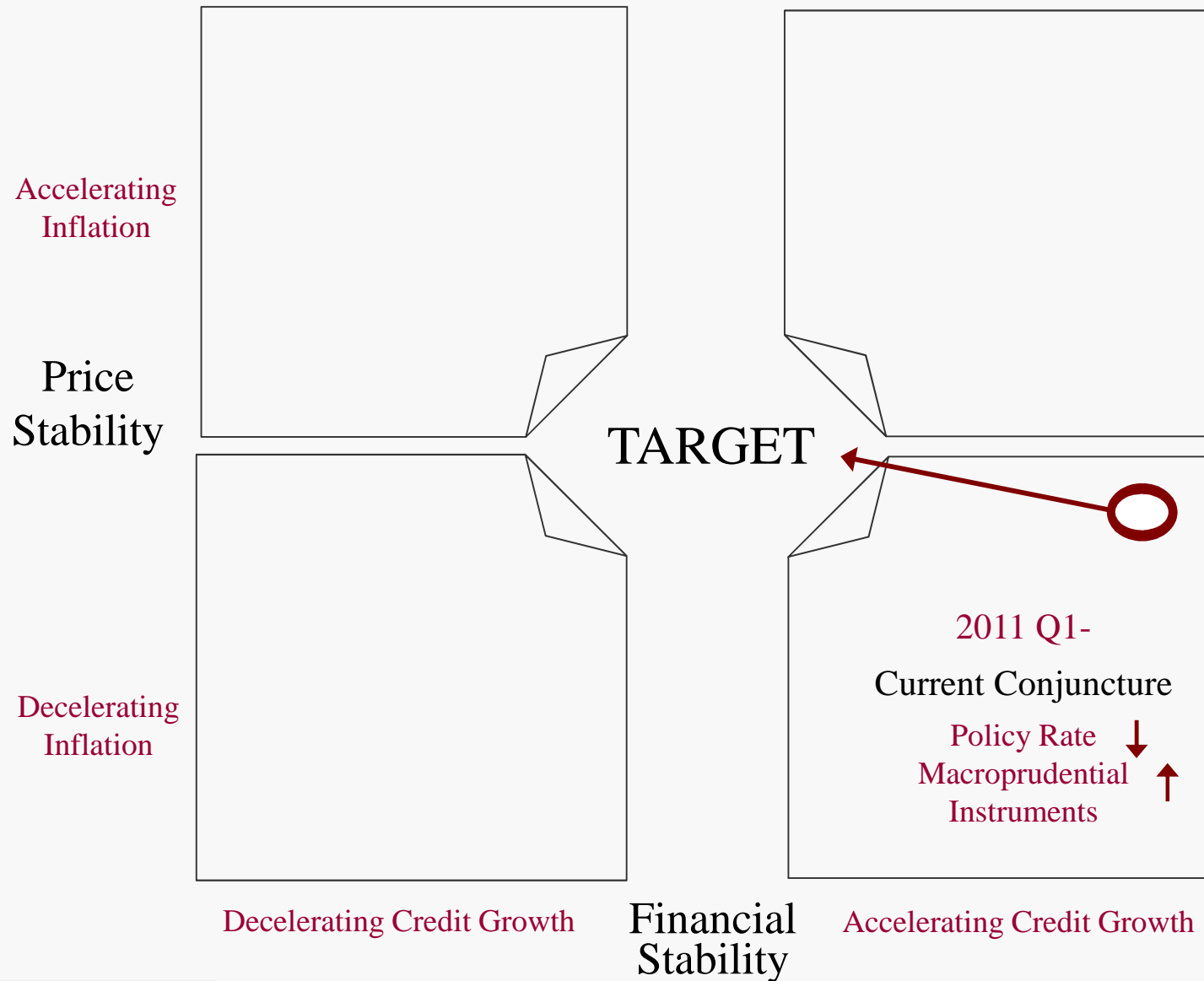


# Monetary Policy Since 2003





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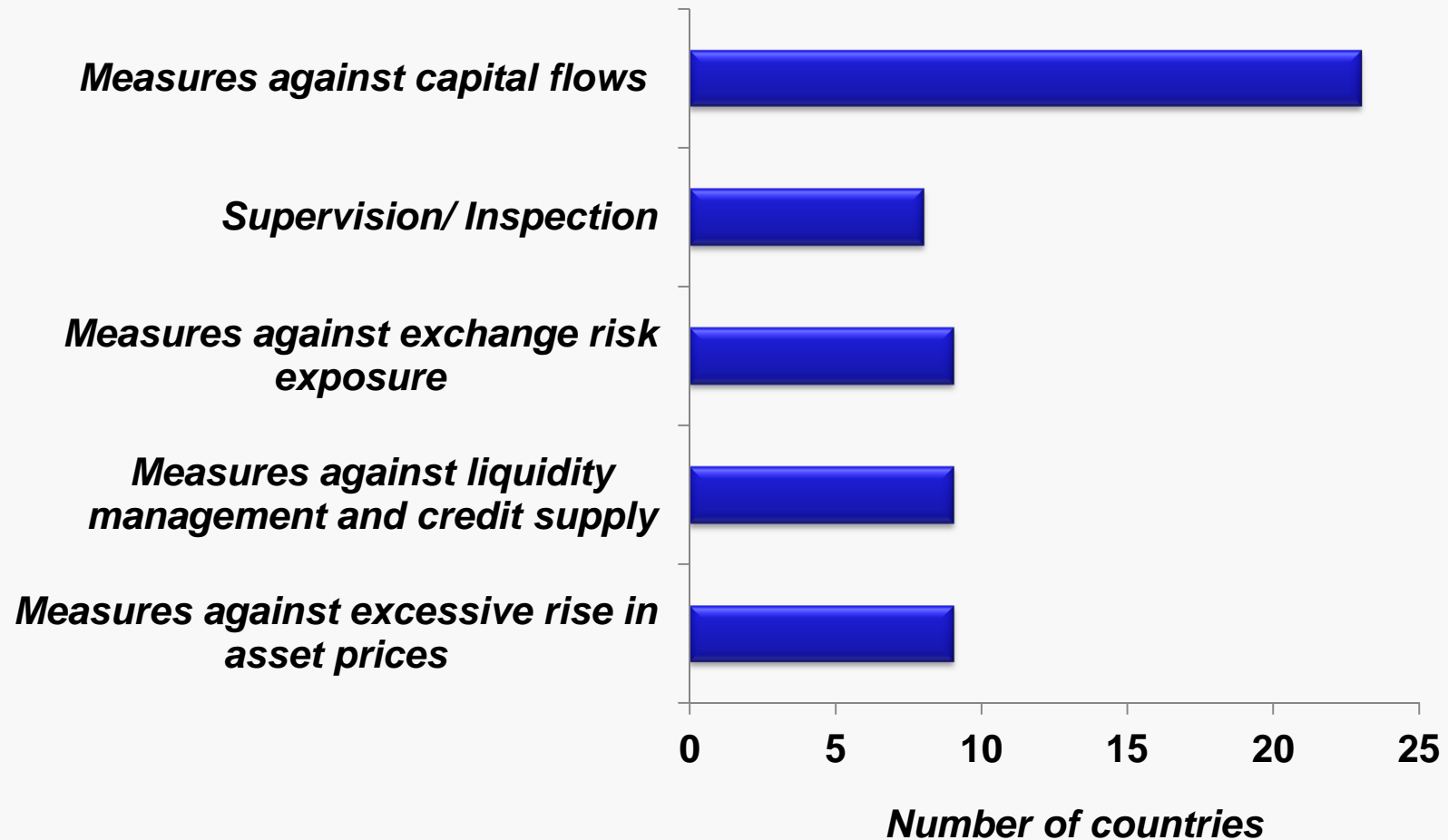
# Quantitative Easing vs. Quantitative Tightening

- Quantitative easing in major economies has continued in response to weakness in economic activity and heightened sovereign risks, resulting in unprecedented increases in central banks' balance sheets.
- Facing a significant degree of capital inflows, some emerging economies have resorted to quantitative macroprudential tightening, even capital flow measures.
- Turkey has also initiated quantitative tightening via its exit strategy in April-November 2010 (QT1) and reserve requirement hikes after November 2010 (QT2).

# Two Different Approaches

- **Approach 1:** Use capital flow measures to restrict inflows while tightening via interest rates (Brazil, Republic of Korea)
- **Approach 2:** Use macroprudential measures to restrict domestic credit and domestic demand while keeping the short term interest rate differentials as low as possible (Turkey)

# Macprudential Measures

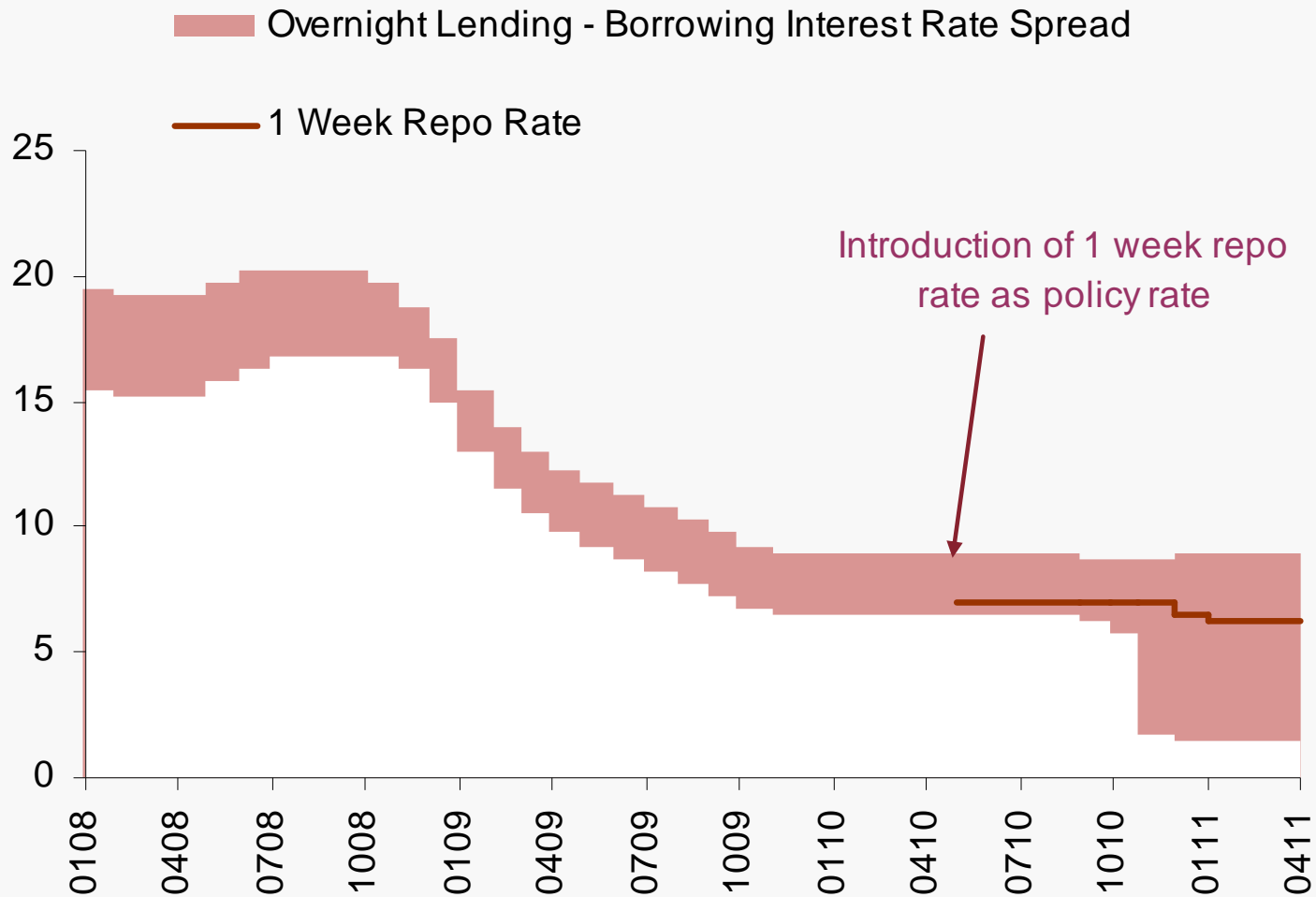


# The New Policy Mix: Turkey

## **A lower policy rate, higher reserve requirement ratios and a wider interest rate corridor**

- The framework we adopt 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 currently 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 determined not by policy rates alone, but as a combination of all the policy instruments.

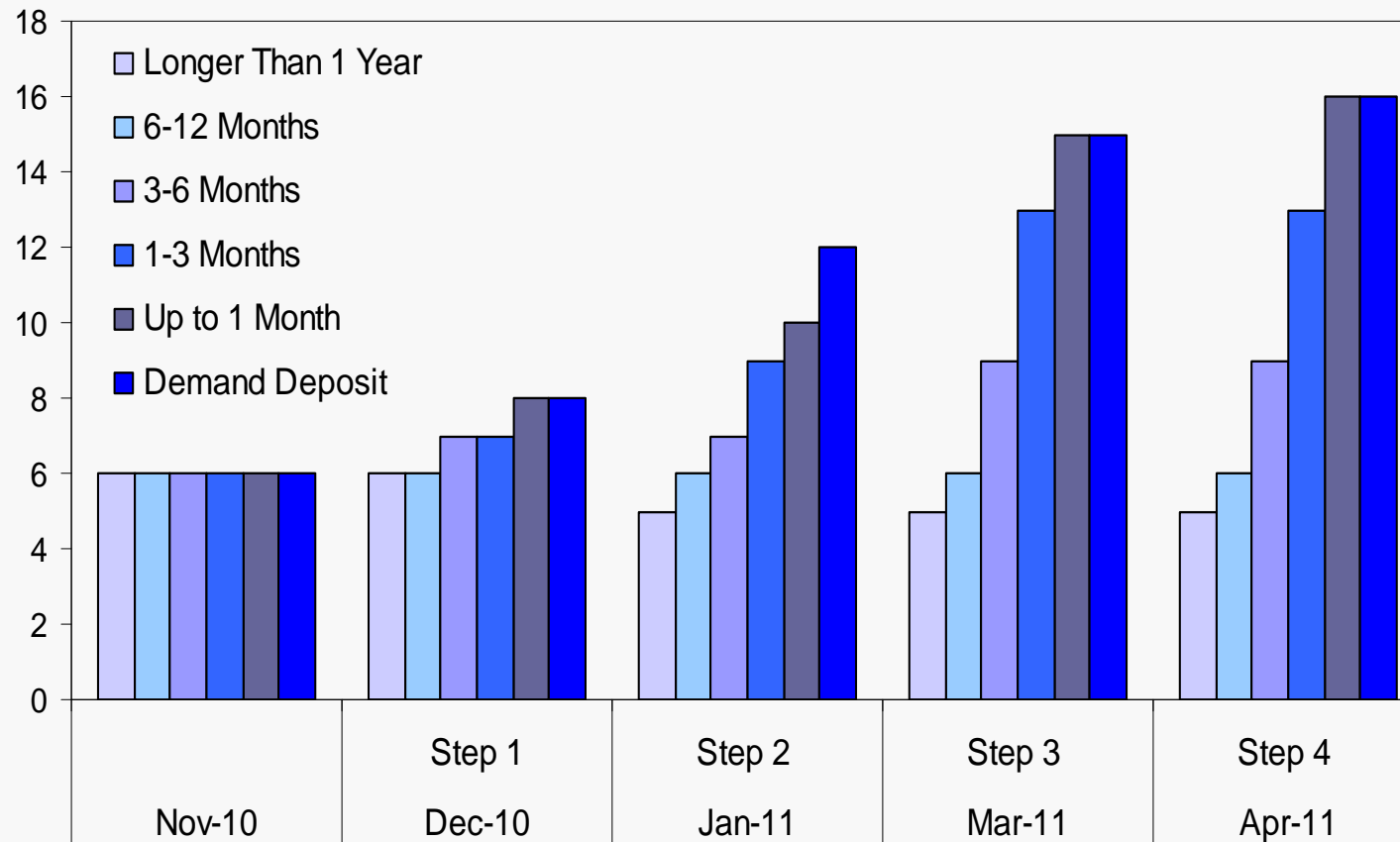
# The Policy Rate and Interest Rate Corridor



Source: CBRT

# Reserve Requirements as a Macroprudential Tool

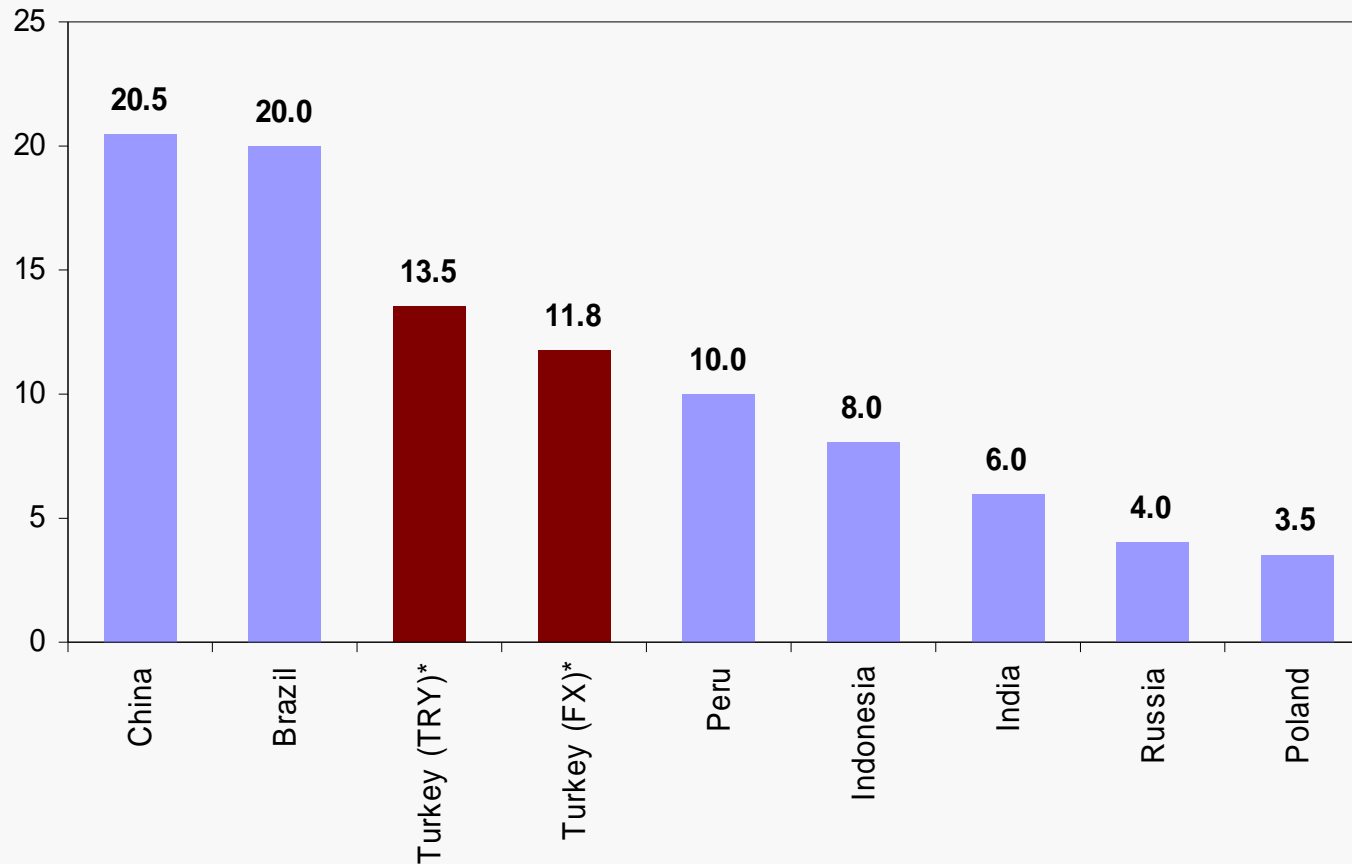
**Reserve Requirement Ratios**  
(percent)



Source: CBRT

# Reserve Requirements as a Macroprudential Tool

**Reserve Requirement Ratios**  
(percent)

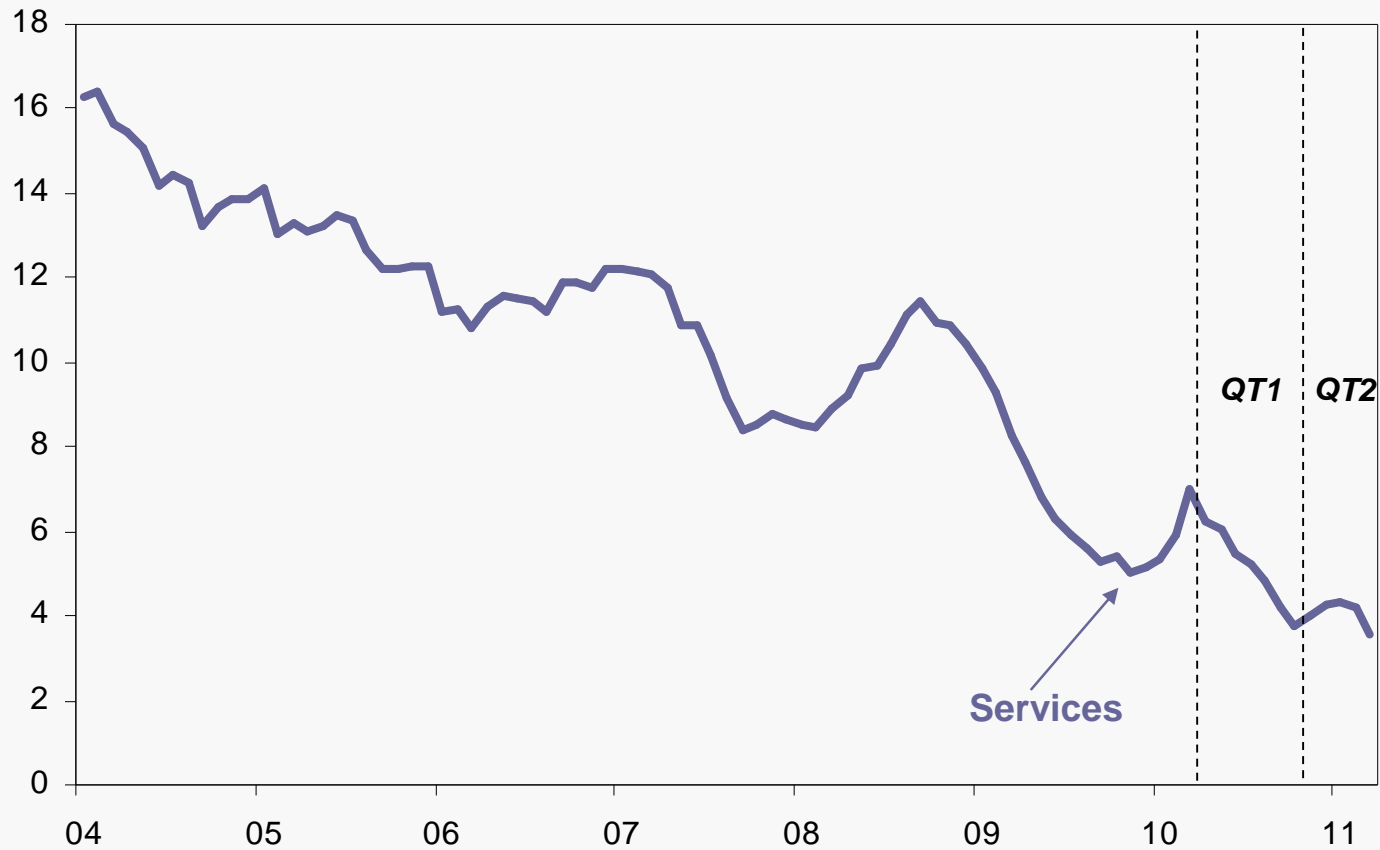


\* Weighted averages  
Source: Central Banks, CBRT



# Disinflation via Quantitative Tightening

**Services Prices**  
(year-on-year change, percent)



Source: TURKSTAT, CBRT

# Goods Prices

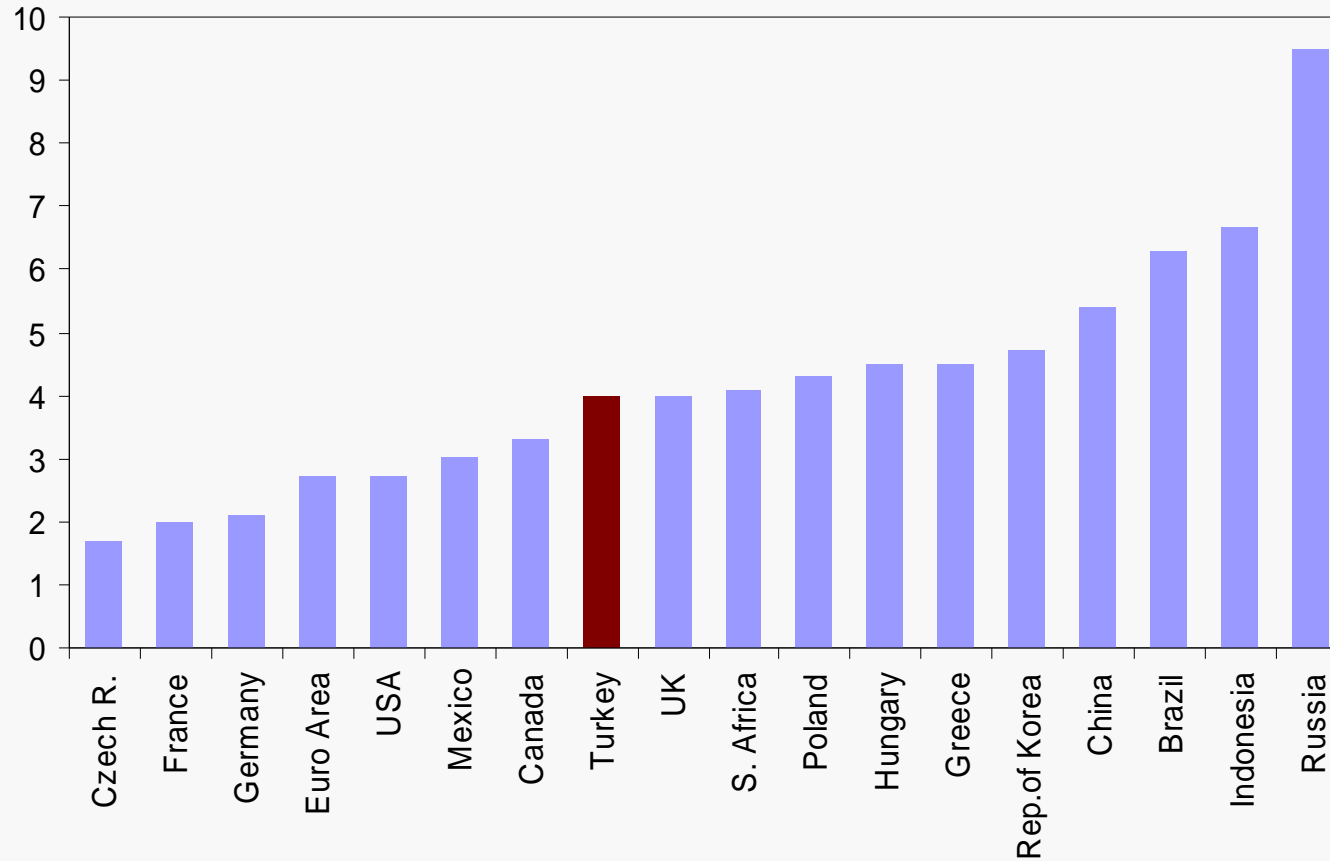
**Goods and Services Prices**  
(year-on-year change, percent)



Source: TURKSTAT, CBRT

# Comparison of Inflation Rates

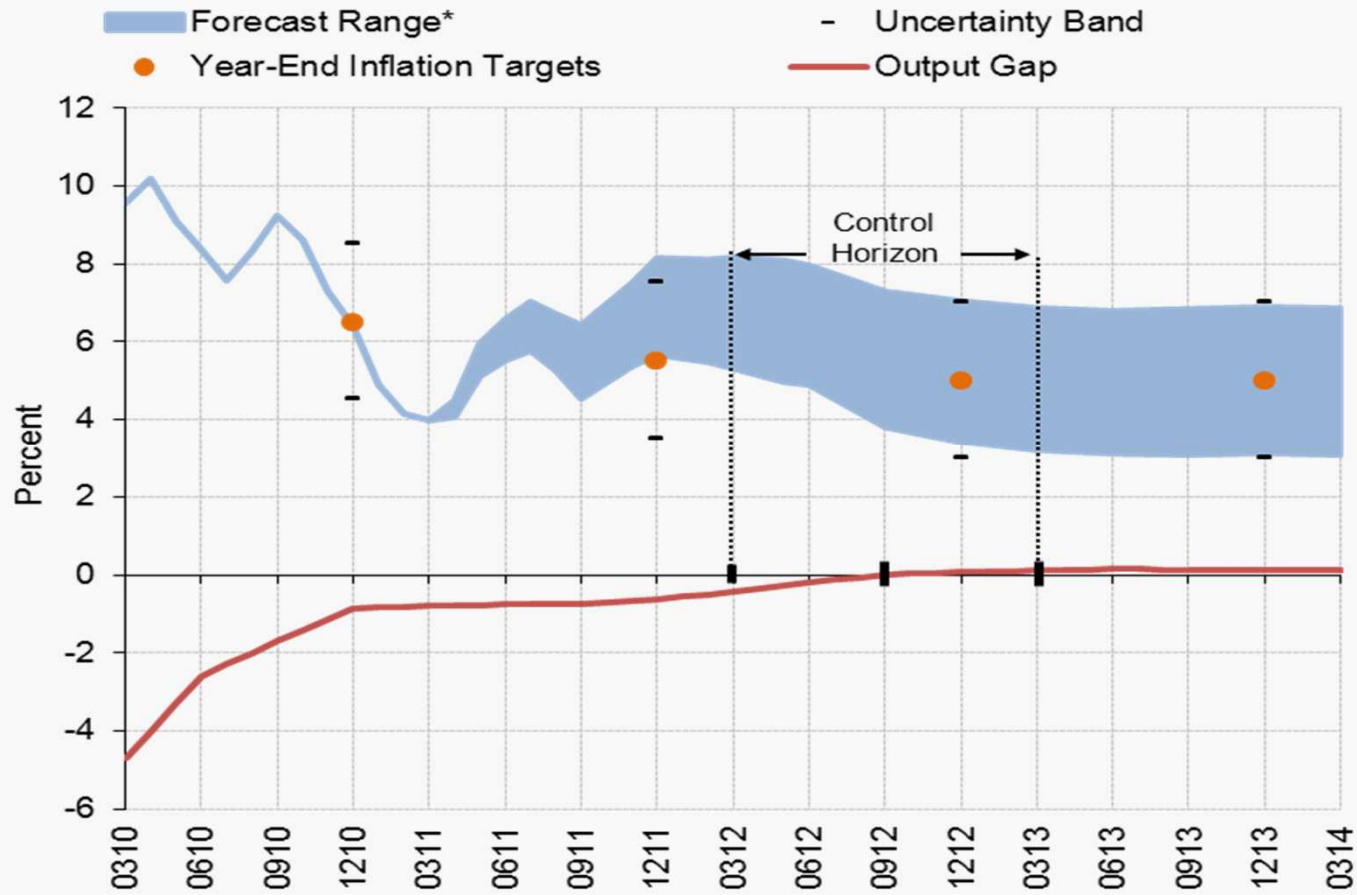
***Inflation Rates in Turkey and around the Globe***  
*(March 2011, percent)*



Source: Bloomberg, CBRT

# Price Stability

## Inflation and Output Gap Forecasts



Source: CBRT

# Financial Stability: Objectives

1. **Debt Ratios:** Use of more equity, more prudent borrowing
2. **Debt Maturities:** Extending maturities of domestic and foreign borrowing and deposits
3. **FX Positions:** Strengthening FX positions of public and private sectors
4. **Risk management:** More effective management of all types of risks by all agents in the economy

# Macroprudential Tools

- It may not always be possible to attain price stability and financial stability together, by means of policy rates alone.
- **Solution:** Use macroprudential tools in coordination with other 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*

# Measures Taken by Other Authorities

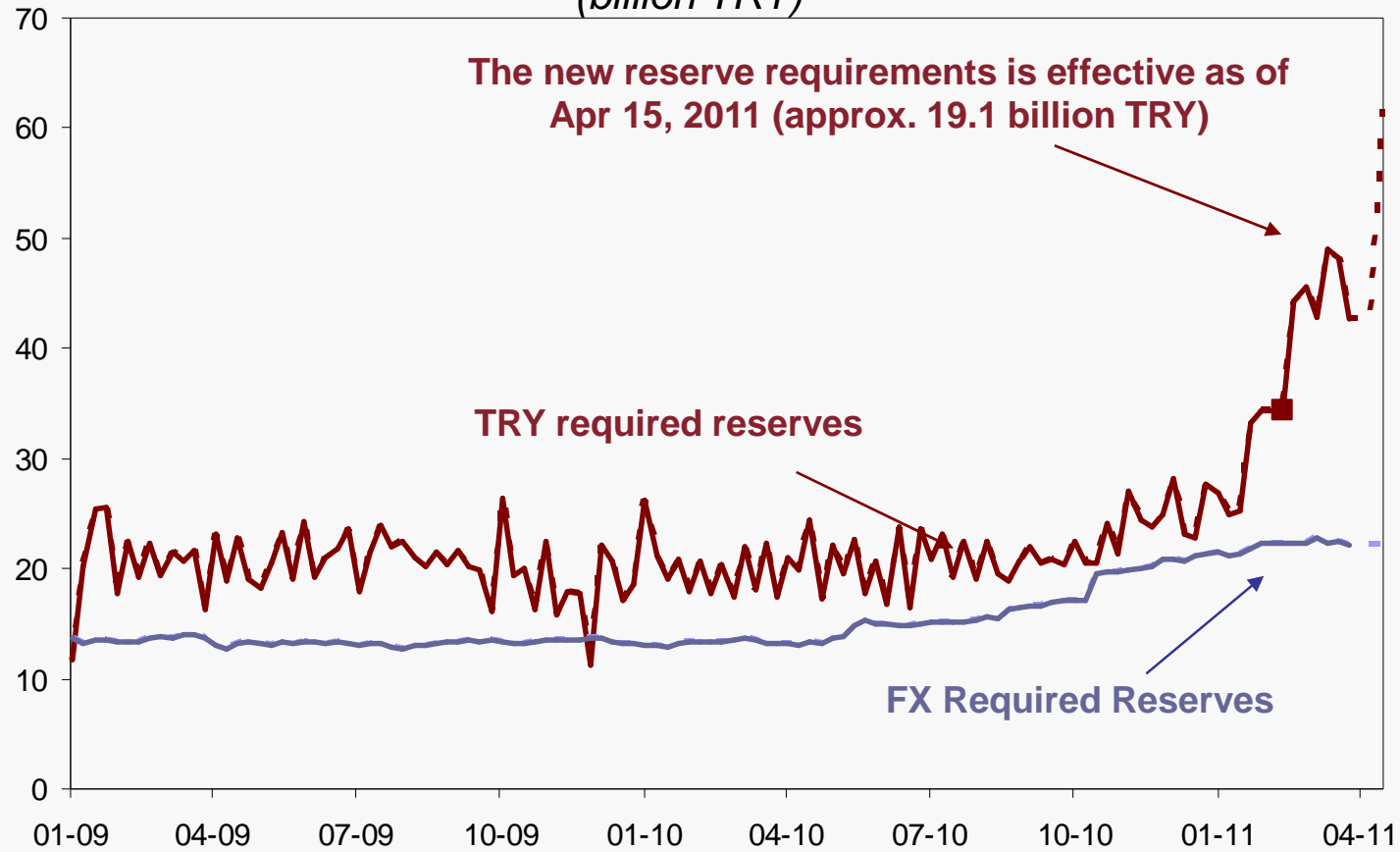
1. Fiscal discipline
2. Ban on FX loans to households
3. Domestic currency bond market
4. Loan/value restrictions
5. Tax hikes on certain consumer loans
6. Restrictions on credit card borrowing

# IV. Financial Stability Outcomes So Far



# Results: (1) Tightening the Liquidity

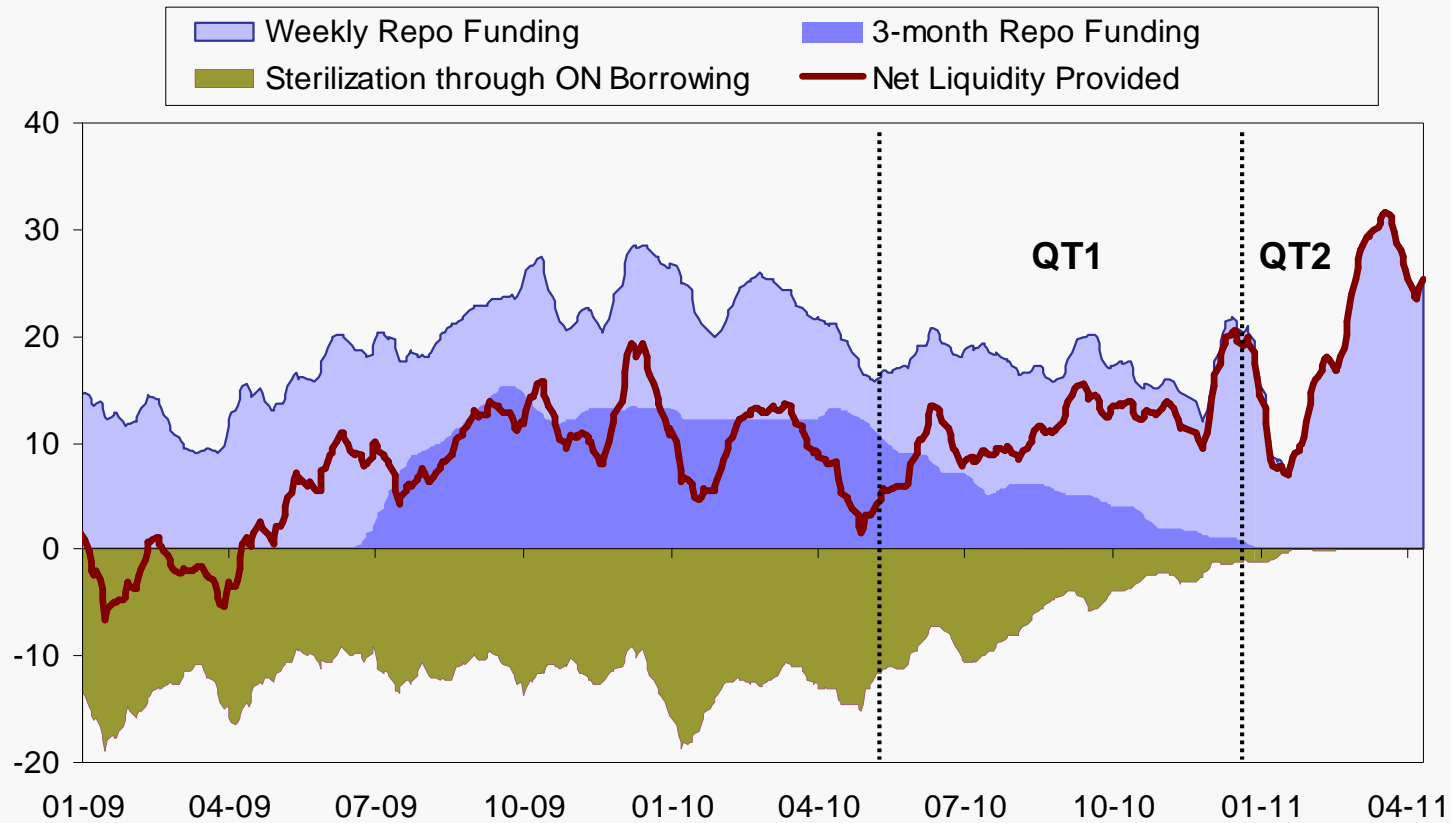
**Reserve Requirements Balances**  
(billion TRY)



Source: CBRT

## Results: (2) Funding More Dependent on CB

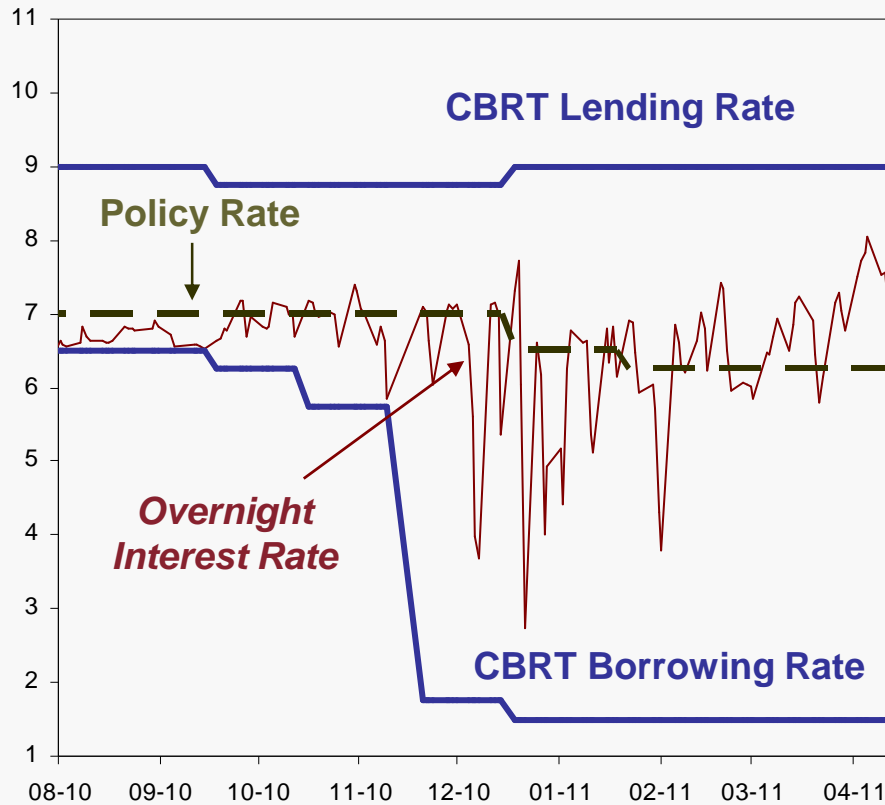
**Central Bank Liquidity**  
(billion TRY)



Source: ISE, CBRT

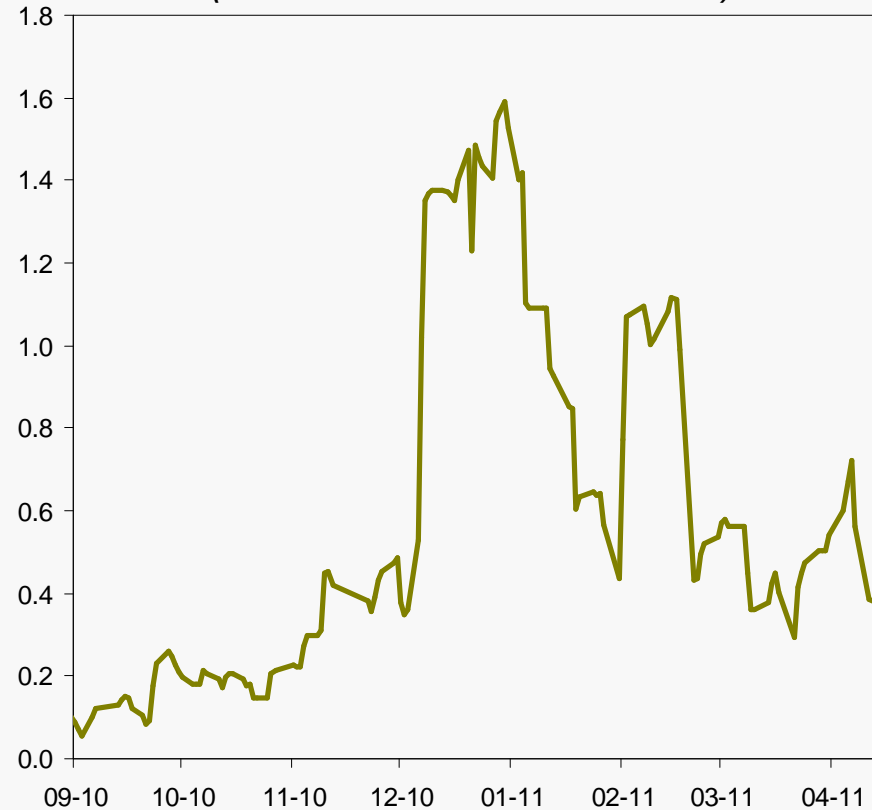
# Results: (3) Volatility in Overnight Rates

### Overnight Interest Rates (percent)



Source: ISE, CBRT

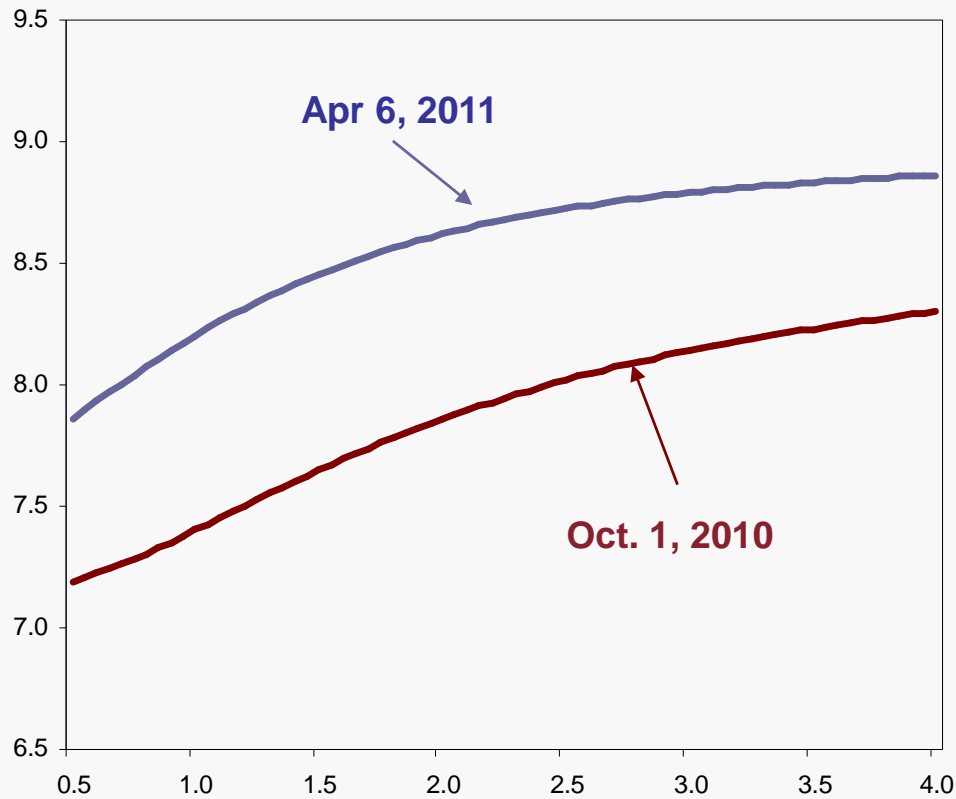
### Volatility in Overnight Interest Rates (2-week standard deviation)



Source: ISE, CBRT

# Results: (4) Tightening of Monetary Conditions

**Yield Curve\***  
(percent)



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

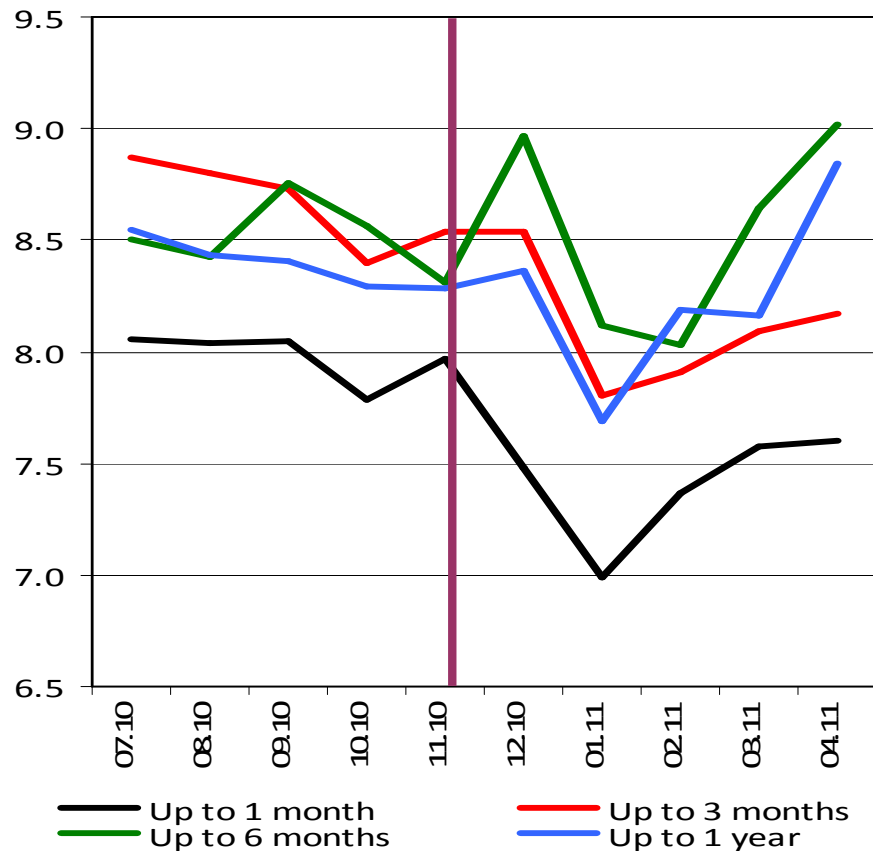
**Inflation Expectations\***  
(percent)



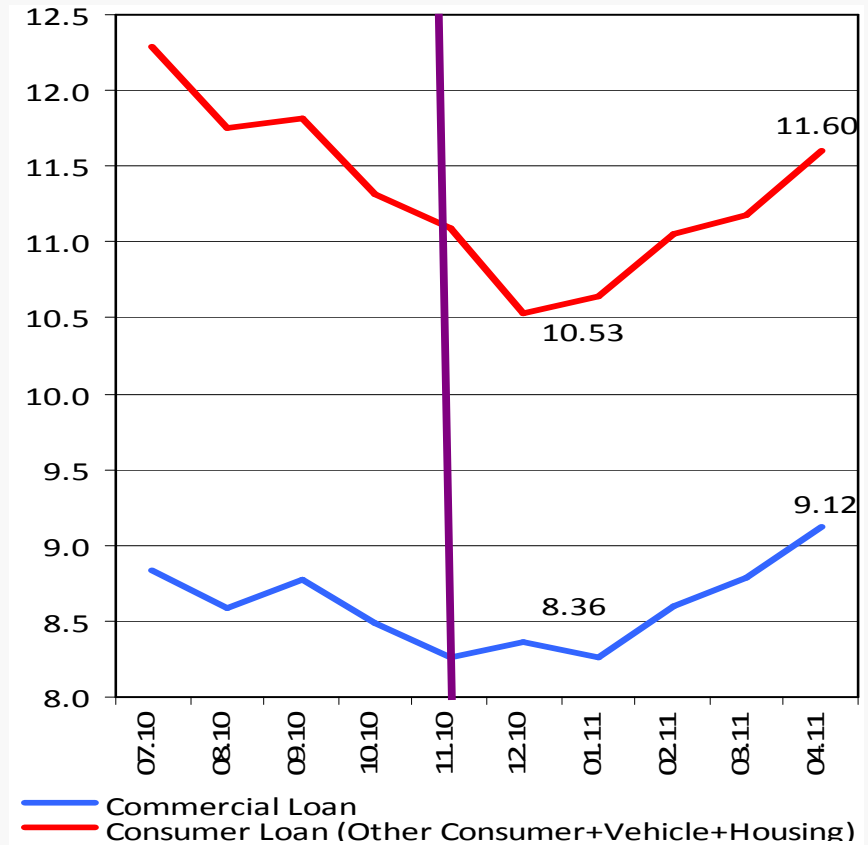
\* CBRT Expectations Survey results from the second survey period.  
Source: ISE, CBRT

# Results: (5) Creating Wedge between Interest Rates

## Interest Rates on Saving Deposits\*

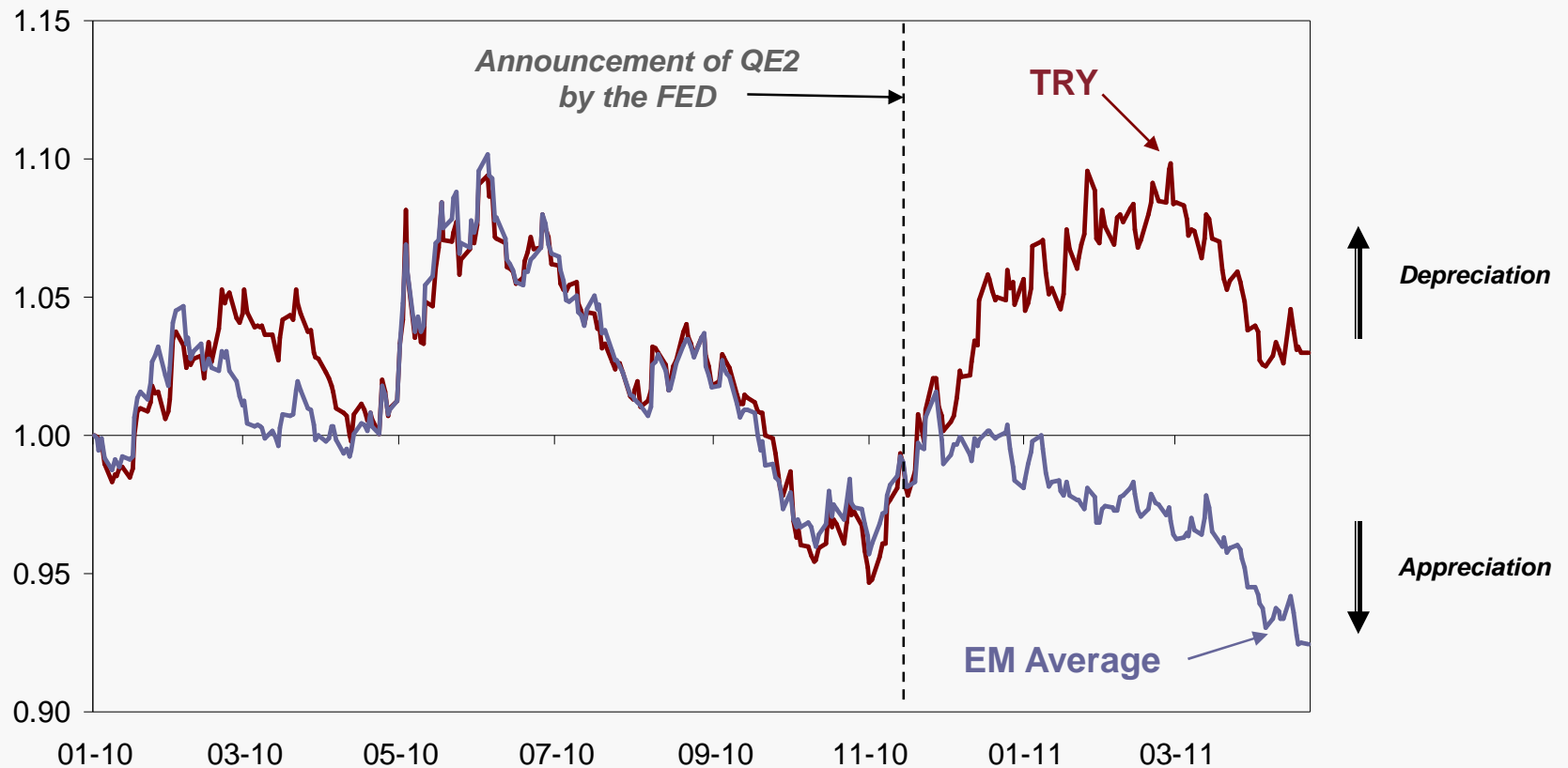


## Interest Rates on Loans\*



# Results: (6) Alleaving the Pressure on Currency

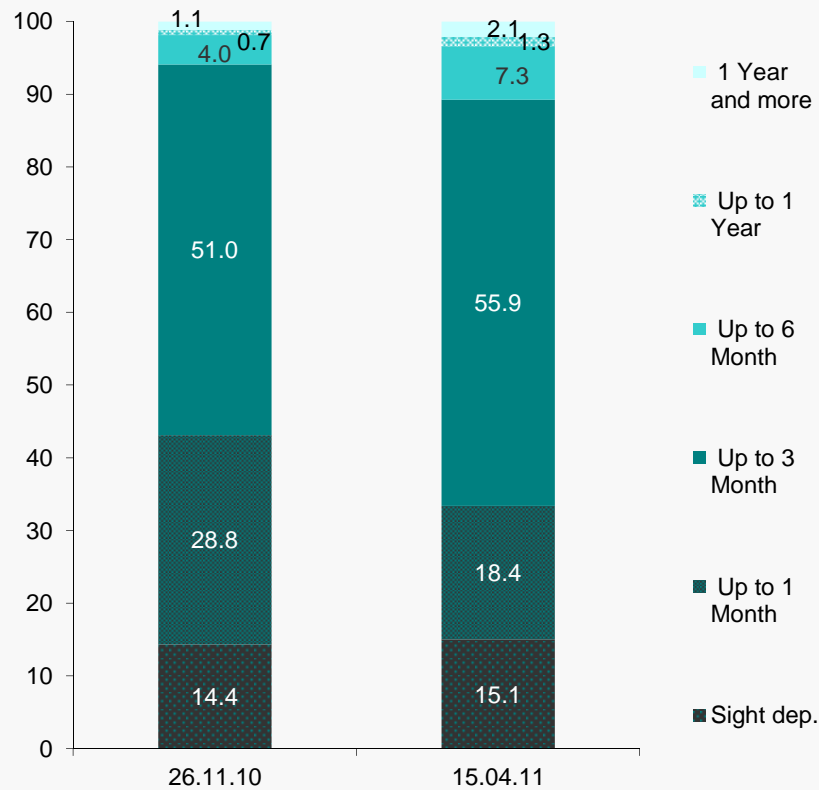
**USD against EM Currencies and TRY\***  
(4 Jan 2010=1)



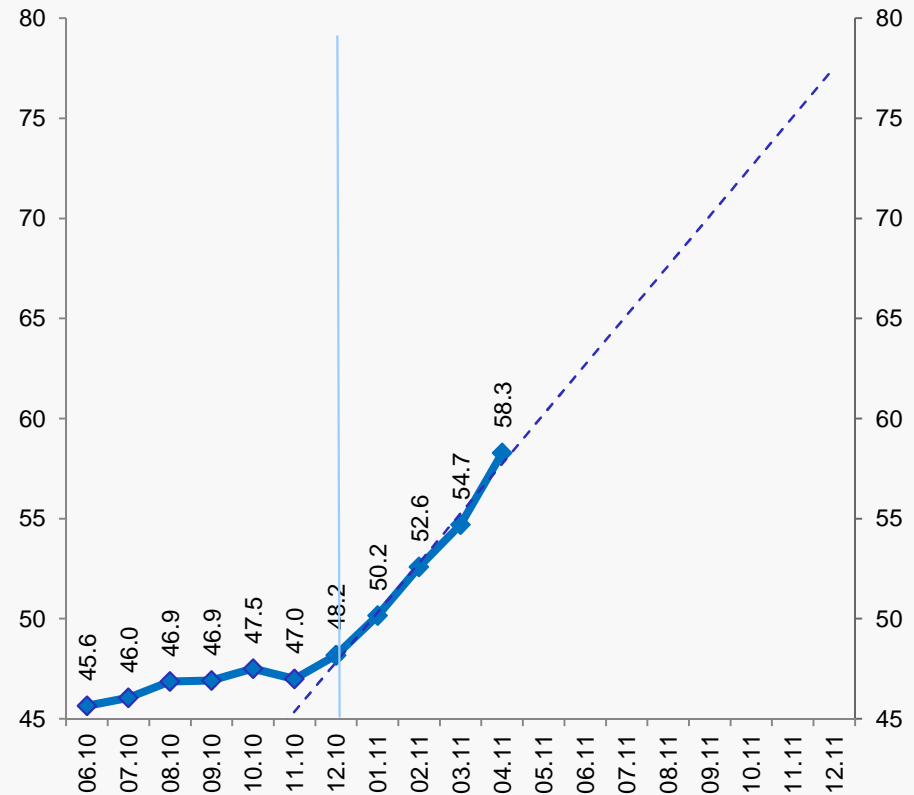
\* Average of emerging market currencies including Brazil, Chile, Colombia, Czech Republic, Indonesia, Hungary, Mexico, Poland, Republic of Korea and South Africa.  
Source: Bloomberg, CBRT

# Results: (7) Extending the Maturity of Deposits

**Breakdown of TL Deposits by Maturities (%)**

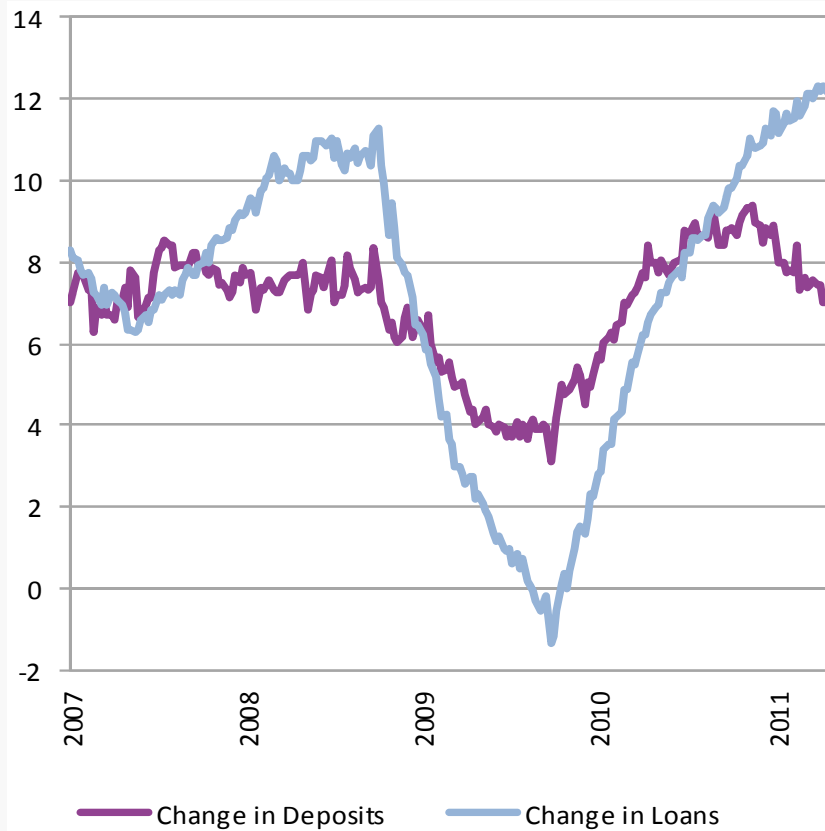


**Average Maturity of TL Deposits (Day)**

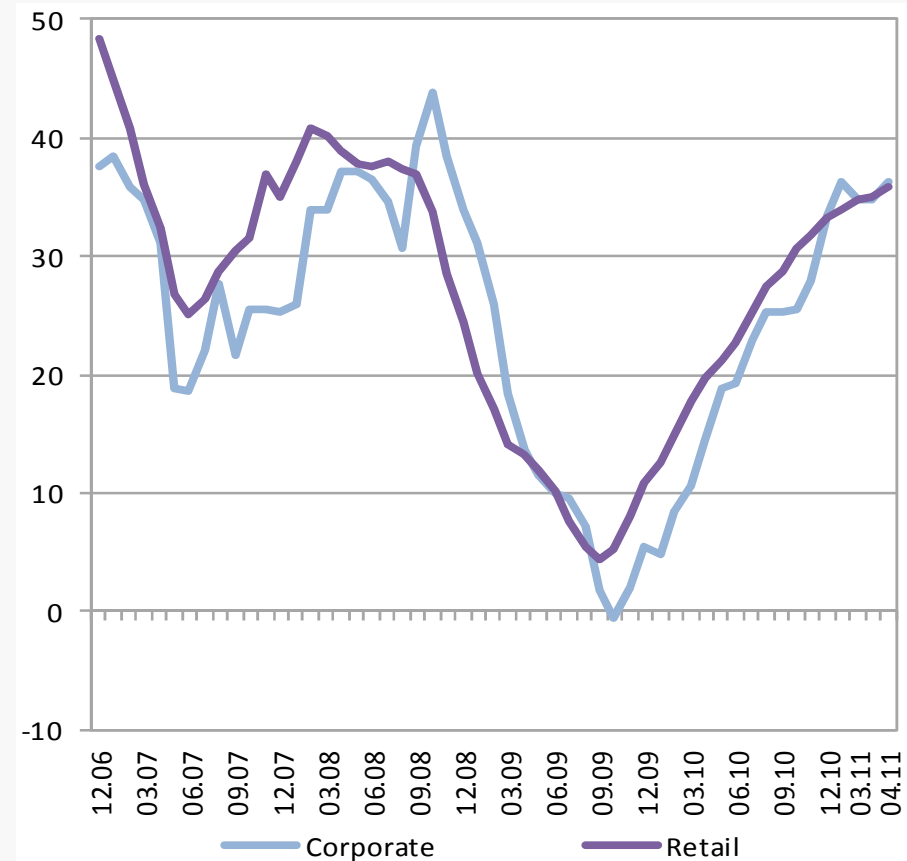


# Results: (8) Containing the Acceleration in Credit Growth

Loans\* and Deposits\*\* to GDP (%)



Annual Change in Credit Volume (%)





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