



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

**Antalya Chamber of Commerce and  
Industry**

**Durmuş YILMAZ  
Governor**

**2 April 2009**



# Presentation Outline

- I. International Developments
- II. Effects of the Global Financial Crisis on the Turkish Economy
- III. Financial Stability in Turkey
- IV. Inflation Outlook
- V. Monetary Policy Stance



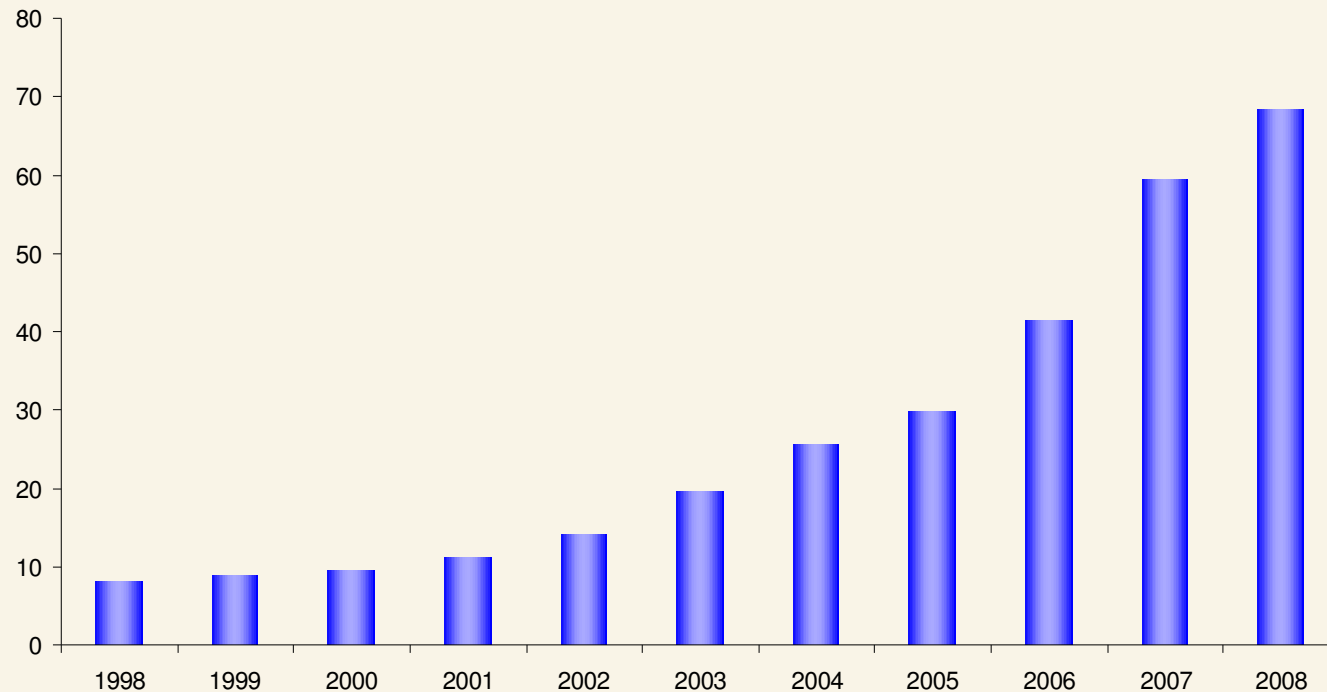
# I. International Developments



# Global Financial Crisis

**What distinguishes this crisis from previous banking crises is that the current crisis covers complex and large-volume derivative products.**

***Market Value of Derivative Products***  
*(1998 - 2008, trillion USD)*



Source: BIS, CBT

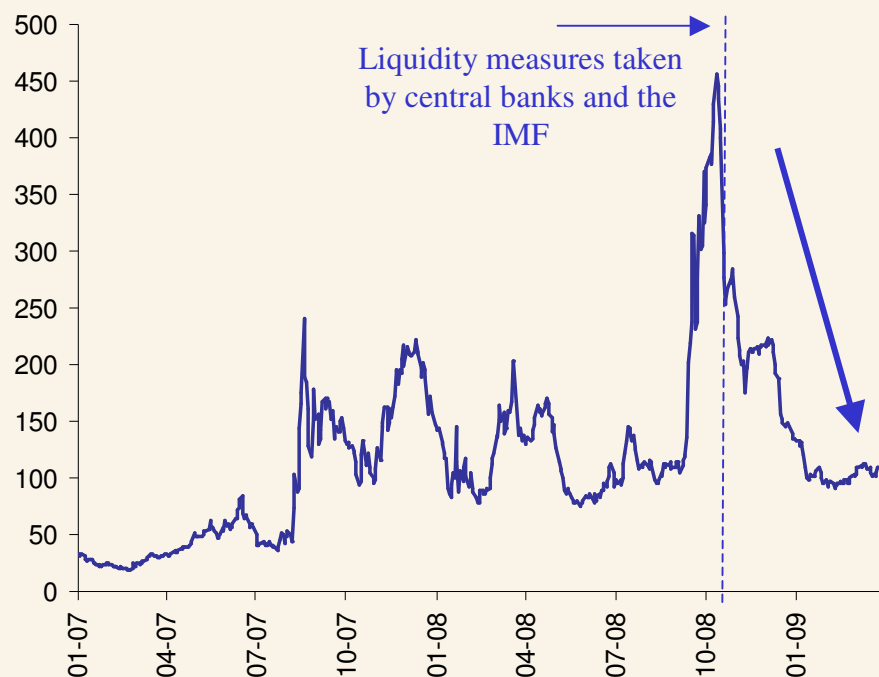


# Global Financial Crisis

The liquidity crunch arising from the deterioration in risk perceptions and loss of confidence has been widely eliminated thanks to measures taken by the monetary authorities.

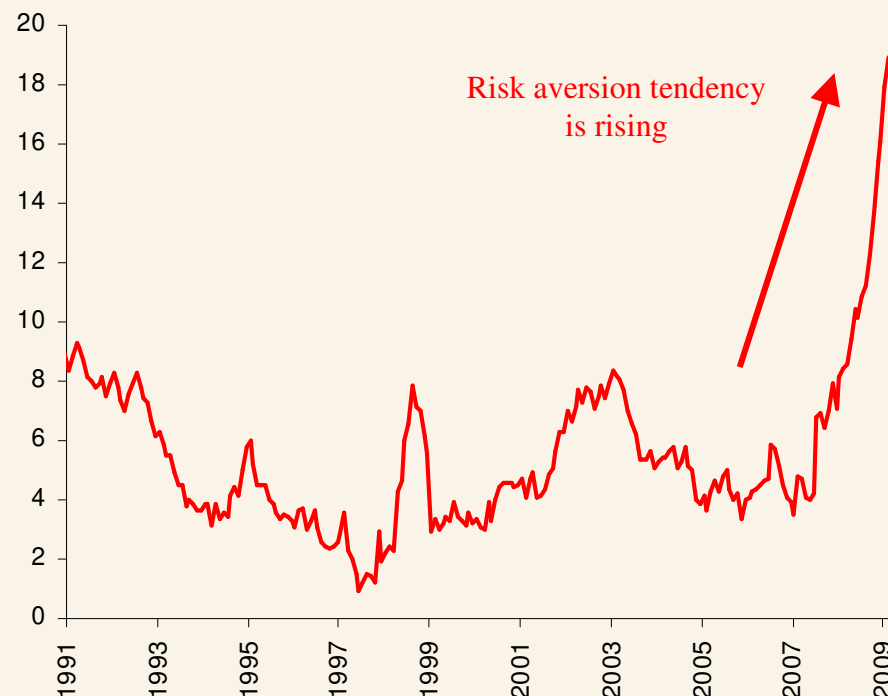
**Difference Between 3-month LIBOR Rate and 3-month US Treasury Bills (*TED Spread*)**

(January 2007 – March 2009, basis points)



Source: Bloomberg, CBT

***Risk Aversion Index***  
(January 1991 - February 2009)



Source: Goldman Sachs, CBT



# Confidence Indices and Leading Indicators

The downward trend in leading indicators and confidence indices led by the dysfunctioning of the credit mechanism became more pronounced in the last quarter of 2008.

**Global Purchasing Managers' Index  
And Leading Indicators**  
(October 2003 – February 2009)



Source: Bloomberg, Goldman Sachs, CBT

**Baltic Dry Cargo Index**  
(January 2002 – March 2009)



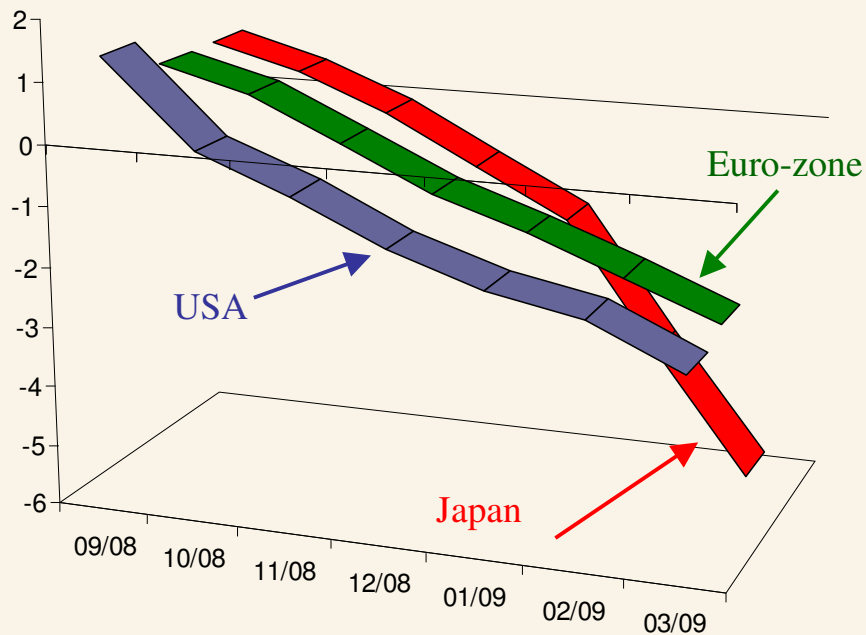
Source: Bloomberg, CBT



# Effects on the Global Economy

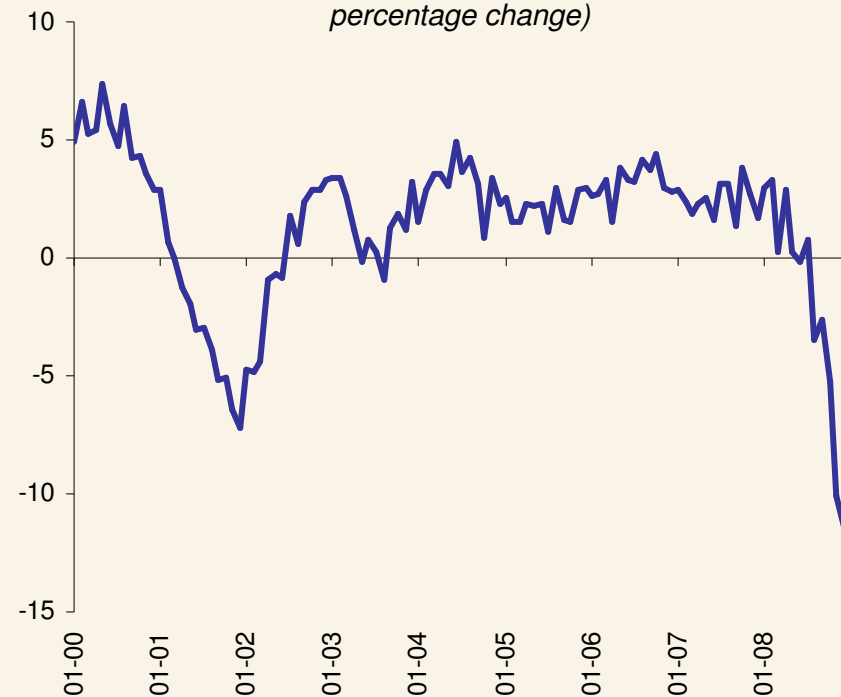
The effect of the global financial crisis on world economies emerged in an abrupt and devastating way since the last quarter of 2008.

**2009 GDP Growth Expectations**  
(annual percentage change)



Source: Consensus Forecasts, CBT

**Industrial Production of Developed Economies**  
(January 2000 – December 2008, year-on-year percentage change)



Source: IMF, CBT



## **II. Effects of the Global Financial Crisis on the Turkish Economy**



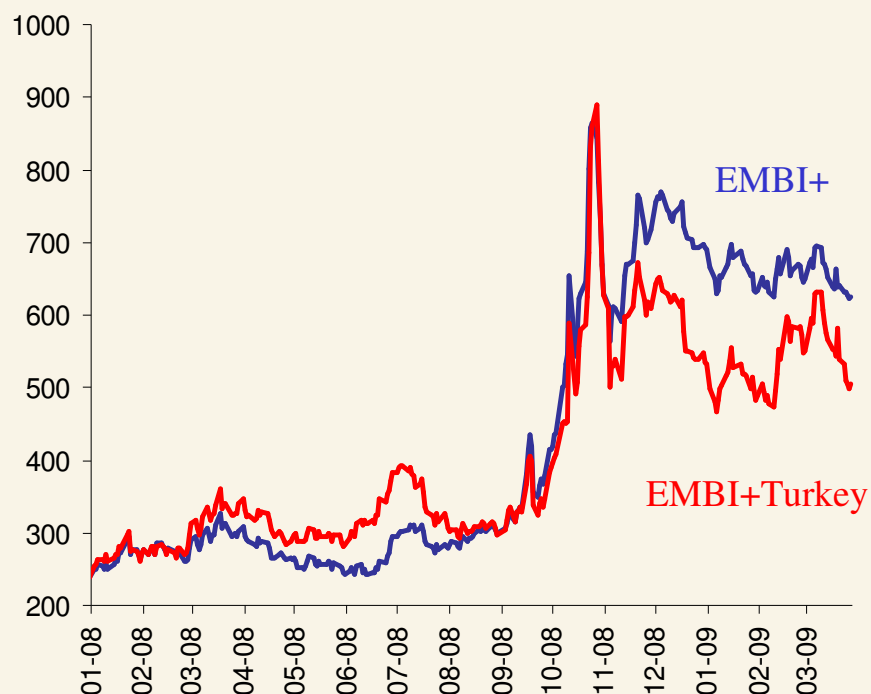


# Financial Developments in Turkey

The recent rebound in global risk perceptions has affected the country's risk premium and domestic market interest rates.

## Risk Indicators

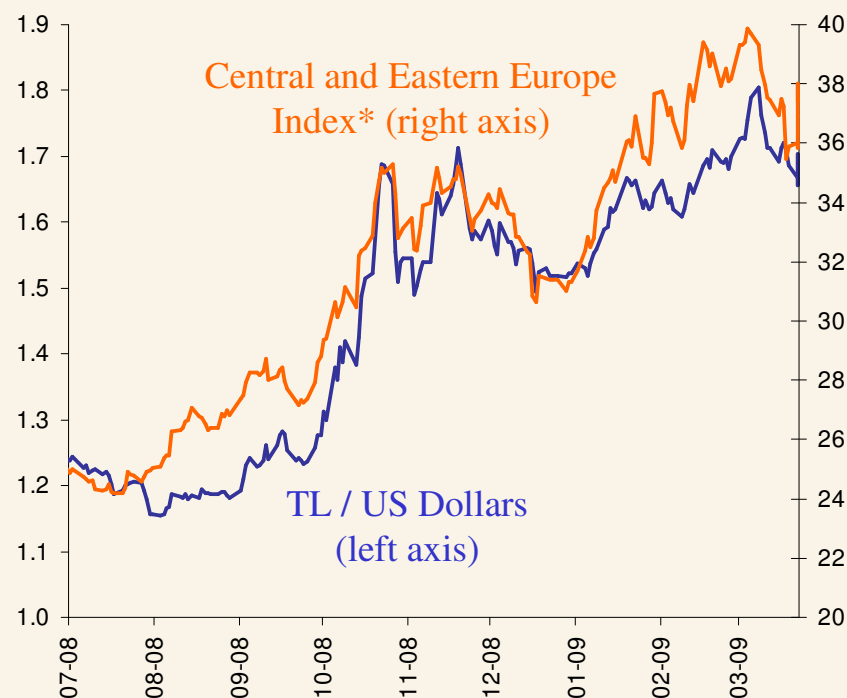
(1 January 2008 - 27 March 2009, basis points)



Source: Bloomberg, CBT

## Exchange Rates

(1 July 2008 – 31 March 2009)



\* Middle and Eastern European Currency: Simple average of the currencies of the Czech Republic, Croatia, Hungary, Lithuania, Poland, Romania, Slovakia and Ukraine.

Source: Bloomberg, CBT

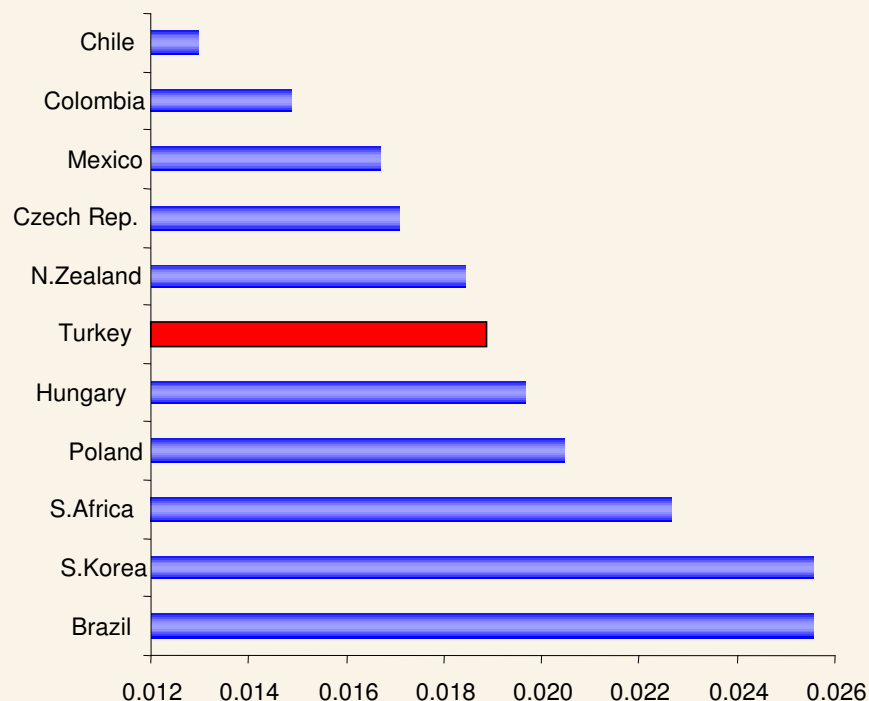


# Market Developments

The reactions of exchange and stock markets to deepening financial turbulence have varied in line with the macroeconomic foundations of the countries as of October 2008.

## Exchange Rate Volatility

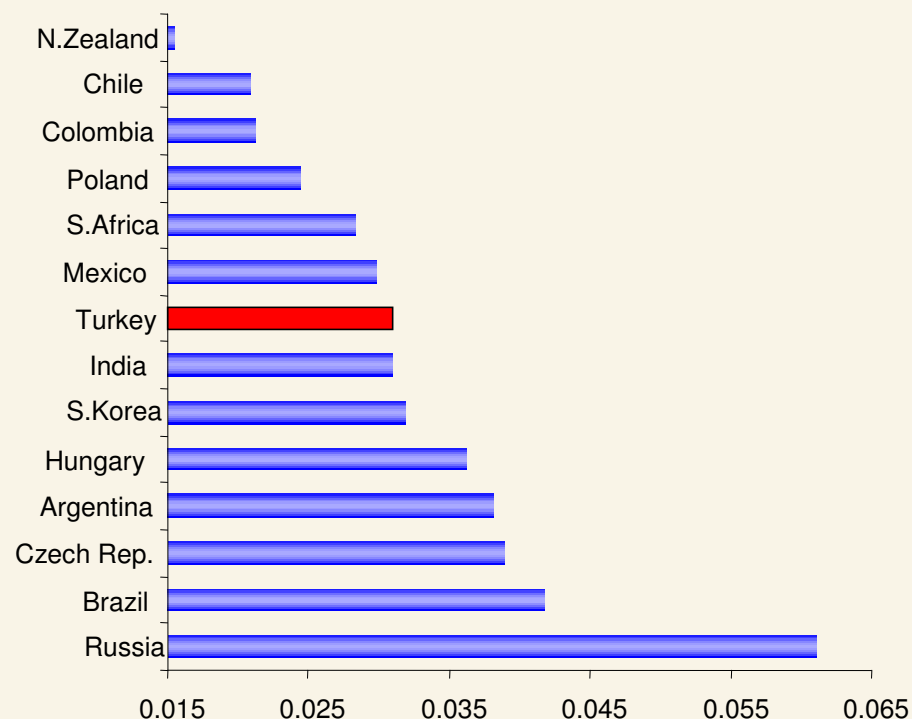
(September 2008 - March 2009, standard deviation of exchange rates)



Source: CBT

## Stock Market Volatility

(September 2008 - March 2009, standard deviation of indices)



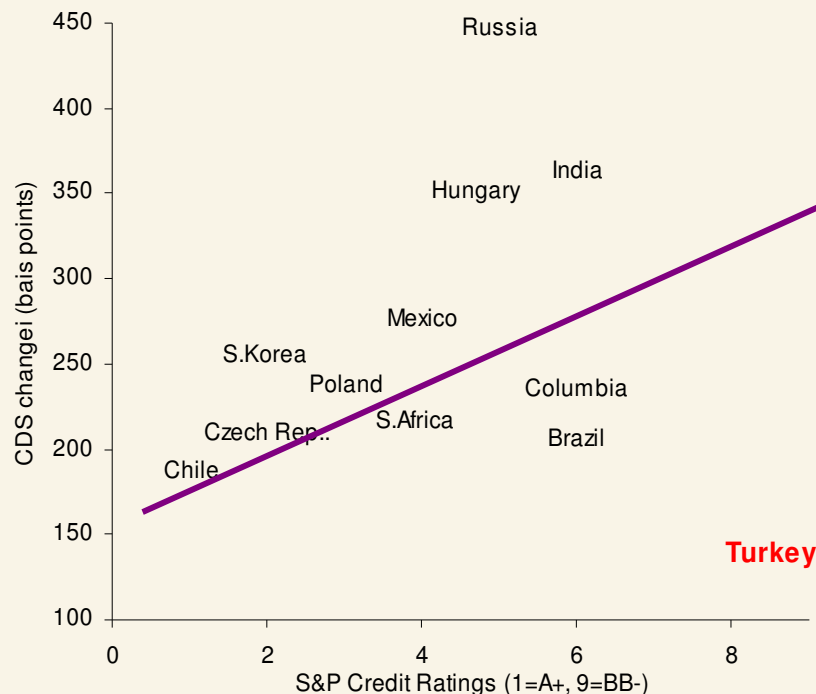
Source: CBT



# Market Developments

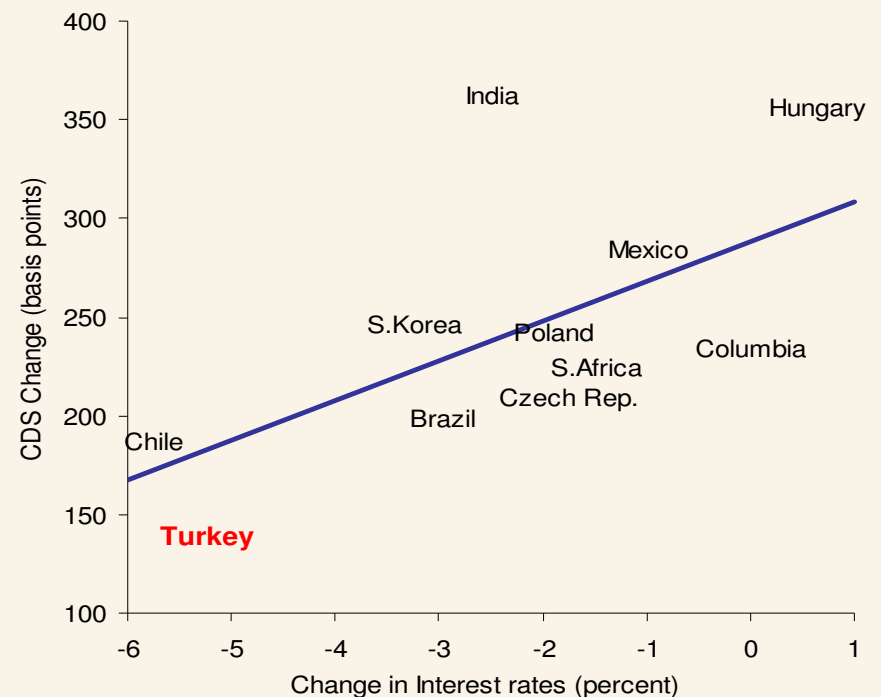
Turkey's risk premium has resisted the deterioration in global risk perceptions much more than is implied by its credit rating. Monetary authorities in countries like Turkey, where relatively low increases have been observed in risk premia, could opt for policy rate cuts of large amounts.

**Changes in Countries' Credit Ratings and Risk Premia** (between 12 September 2008 and 16 March 2009)



Source: Bloomberg, CBT

**Changes in Policy Rates and Countries' Risk Premia** (between 12 September 2008 and 16 March 2009)



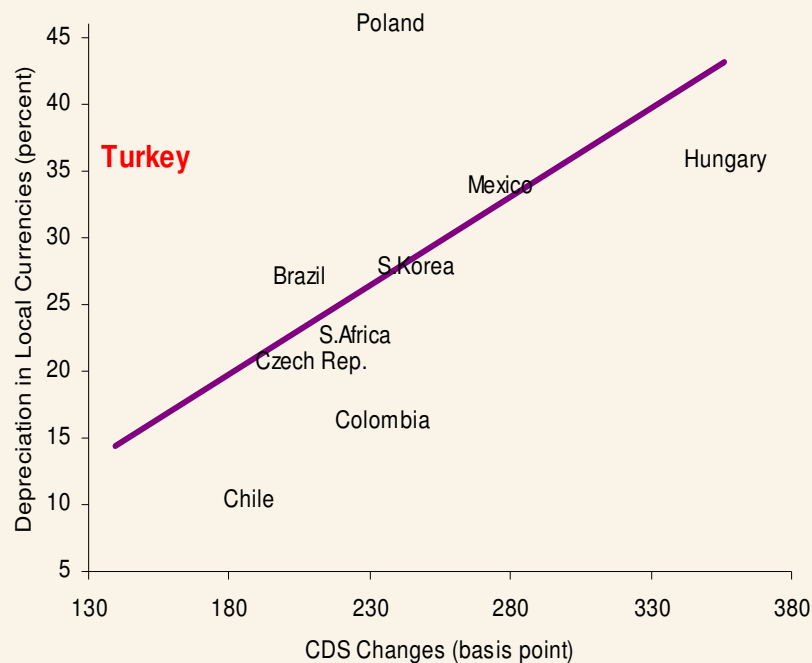
Source: Bloomberg, CBT



# Market Developments

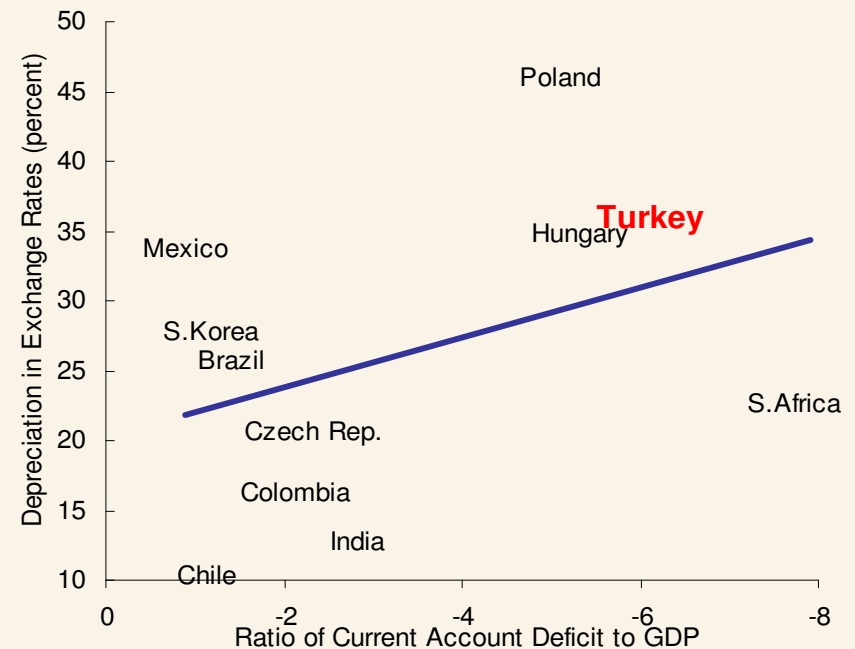
As of September 2008, depreciation in the currencies of the countries with rather high risk premia turned out to be relatively higher. Additionally, exchange rates of the countries with high current account deficits or low growth rates in the pre-crisis period posted comparatively higher depreciations.

**Change in the Countries' Risk Premia and Depreciation in Local Currencies** (between 12 September 2008 and 16 March 2009)



Source: Bloomberg, CBT

**Current Account Deficit (2008 Q3) and Depreciation in Local Currencies** (between 12 September 2008 and 16 March 2009, percent)



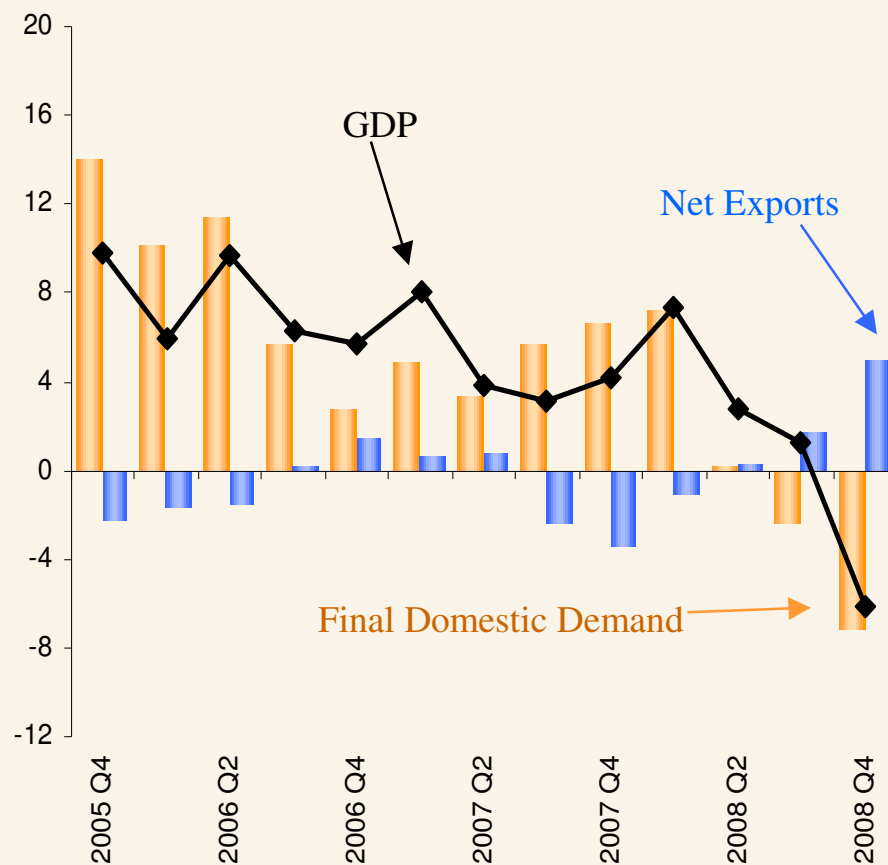
Source: Bloomberg, CBT



# The Turkish Economy

## Growth Components

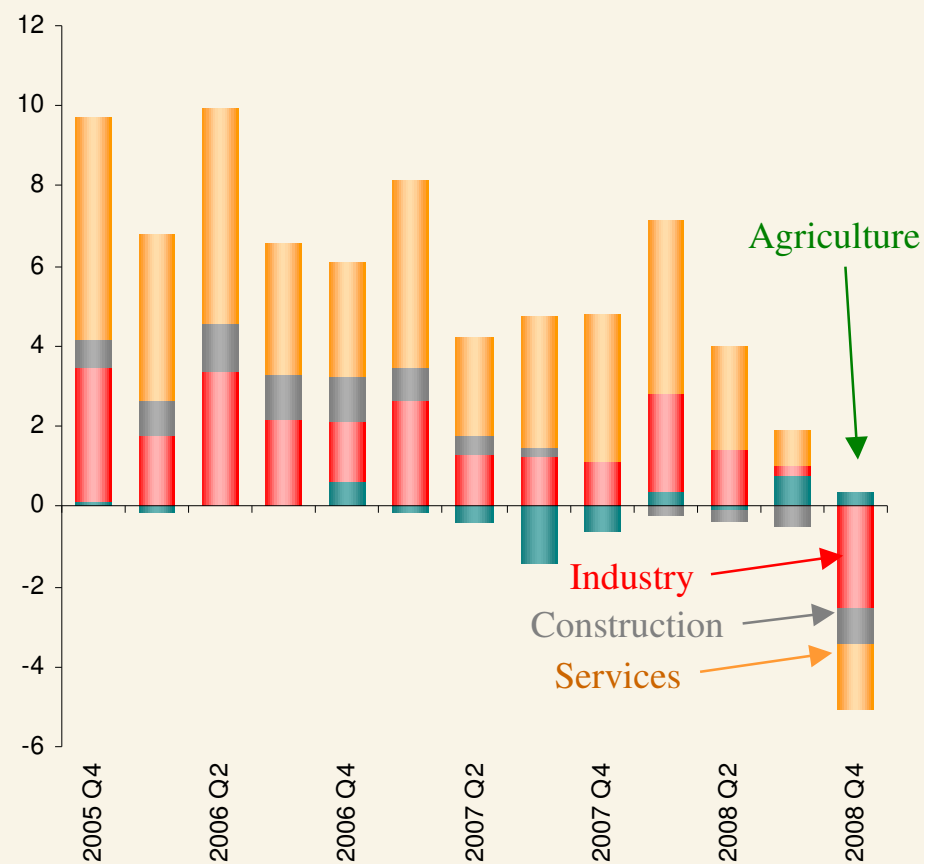
(2005 Q4 – 2008 Q4, year-on-year contribution, percent)



Source: TURKSTAT, CBT

## Growth Components

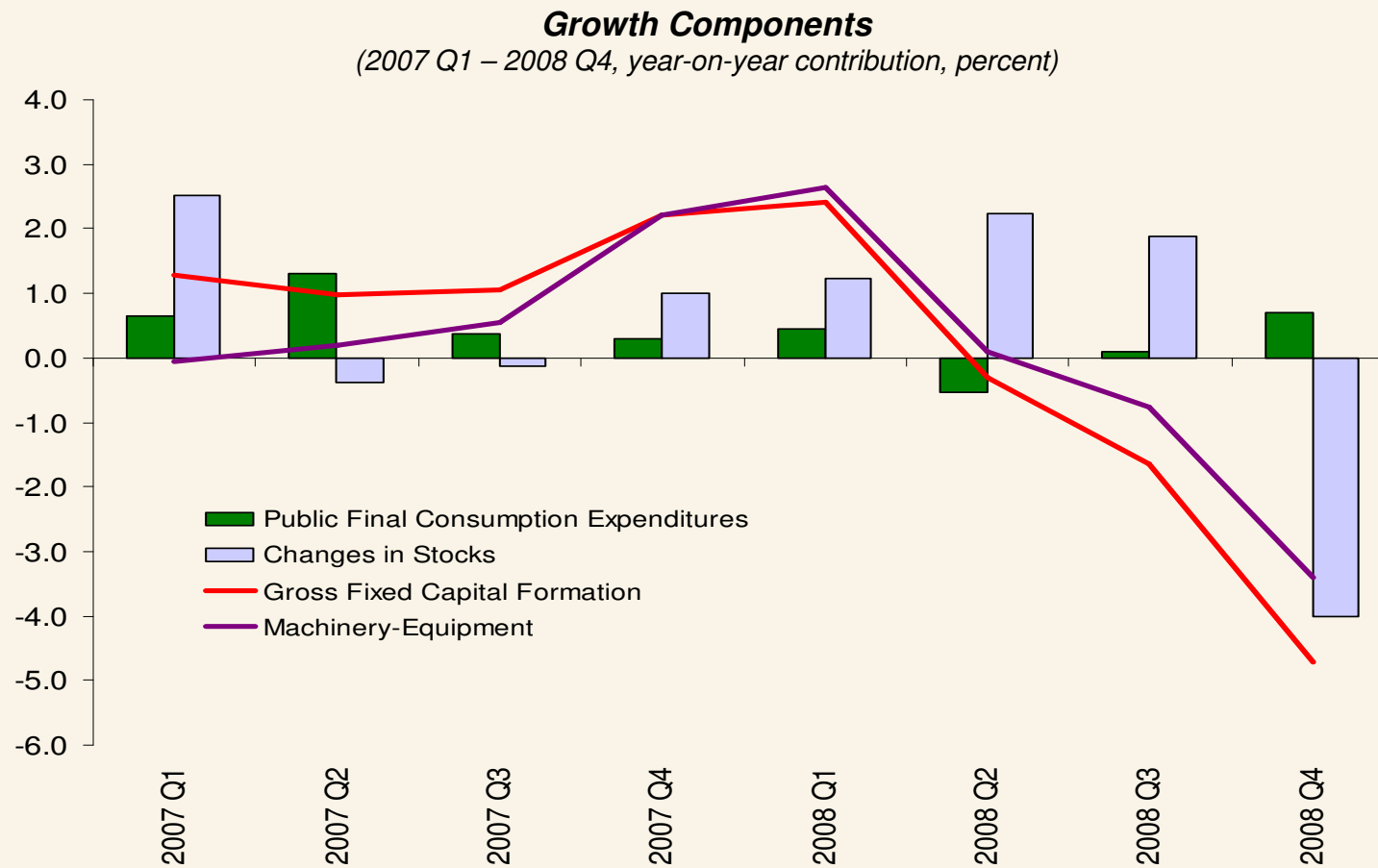
(2005 Q4 – 2008 Q4, year-on-year contribution, percent)



Source: TURKSTAT, CBT



# The Turkish Economy



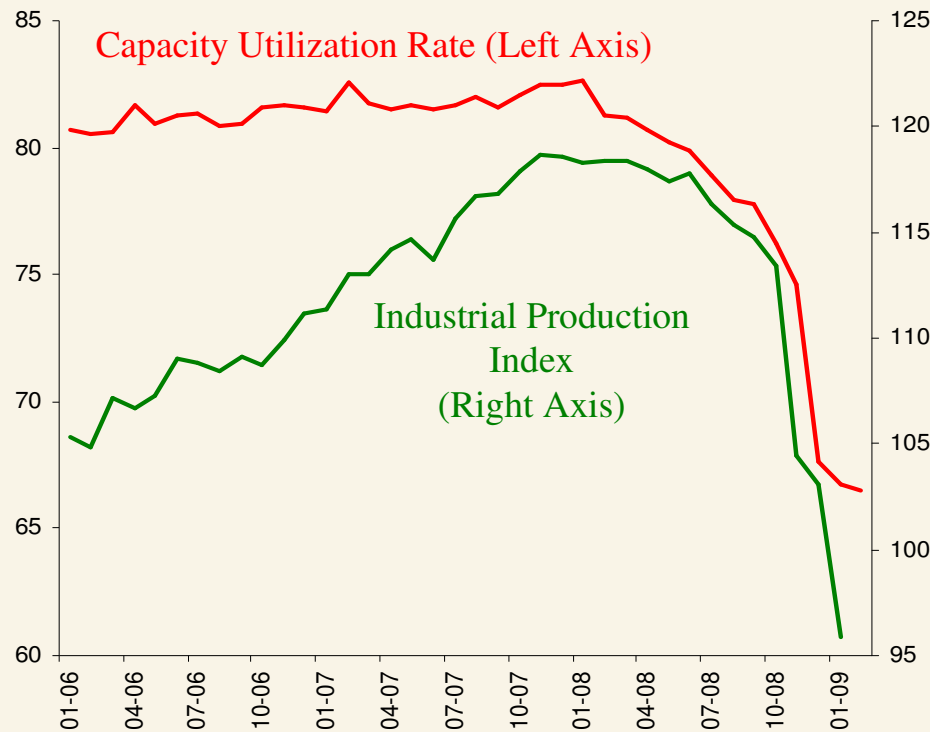
Source: TURKSTAT, CBT



# Production Developments

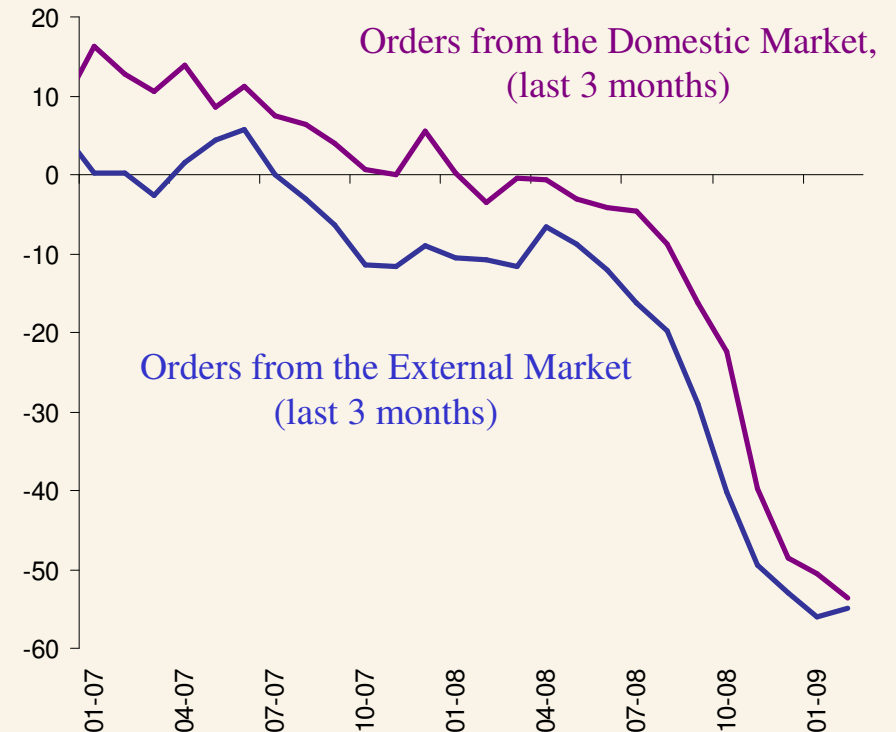
The slowdown in economic activity still persists due to increased risk perceptions and adverse effects of the global crisis on the financing facilities of banks.

**Industrial Production Index\*** (January 2006 – January 2009)  
**and Capacity Utilization Rate\***  
(January 2006 – February 2009)



\* Seasonally adjusted  
Source: TURKSTAT, CBT

**Domestic and External Demand Indicators\***  
(January 2007 – February 2009)



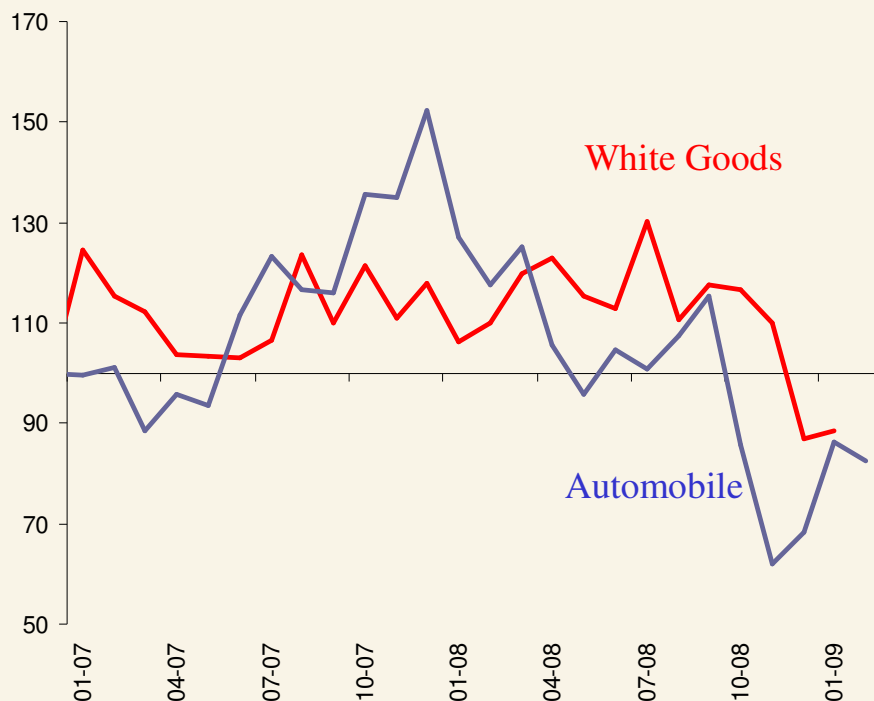
\* Business Tendency Survey, seasonally adjusted  
Source: CBT



# Domestic Demand Developments

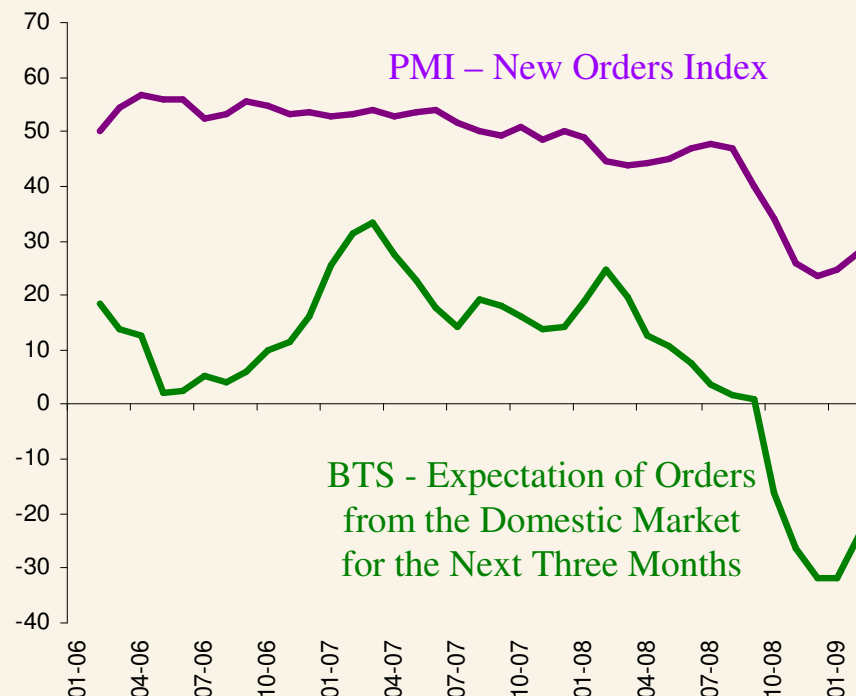
**Domestic demand indicators maintain a weak course despite limited improvement compared to the previous quarter.**

**Domestic Sales of White Goods and Automobiles\***  
(January 2007 – February 2009, December 2006=100)



\* Seasonally-adjusted.  
Source: BESD, OSD, CBT

**Domestic and External Demand Indicators\***  
(January 2006 – February 2009)



\* Business Tendency Survey, Seasonally-adjusted  
Source: CBT



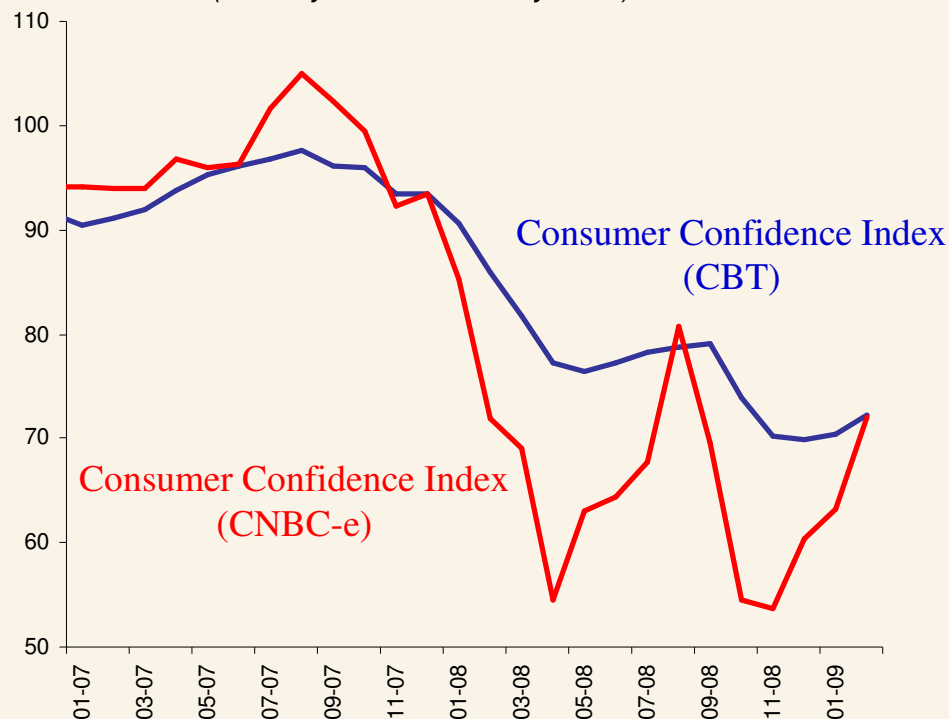


# Consumer Confidence Index and Expectations

The Consumer Confidence Indices, which were following a downward trend due to the global financial turmoil, started to pick up recently.

## Consumer Confidence Index

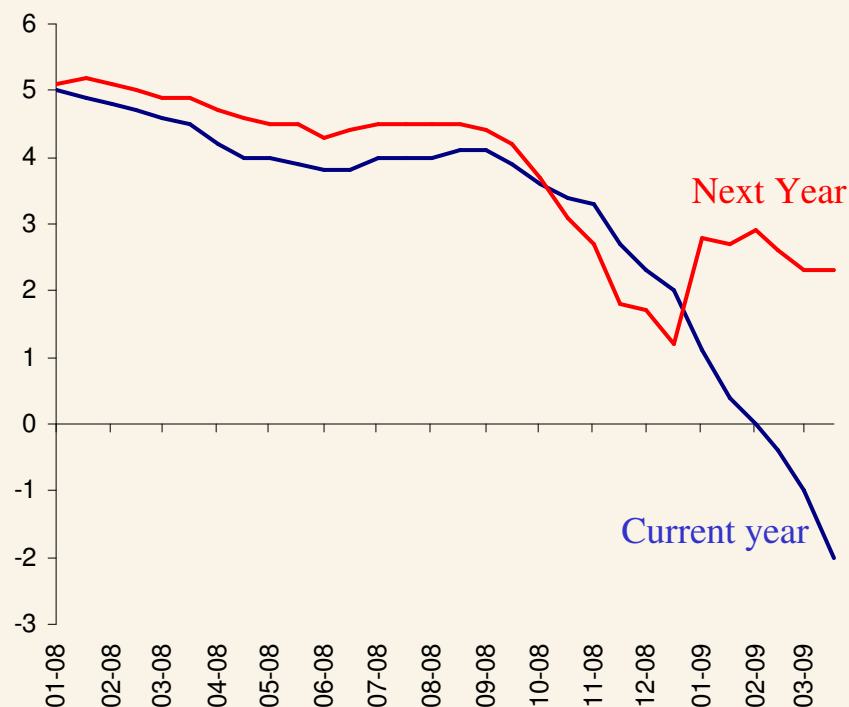
(January 2007 – February 2009)



Source: CBT, CNBC-e

## Growth Expectations\*

(January 2008 – March 2009, percent)



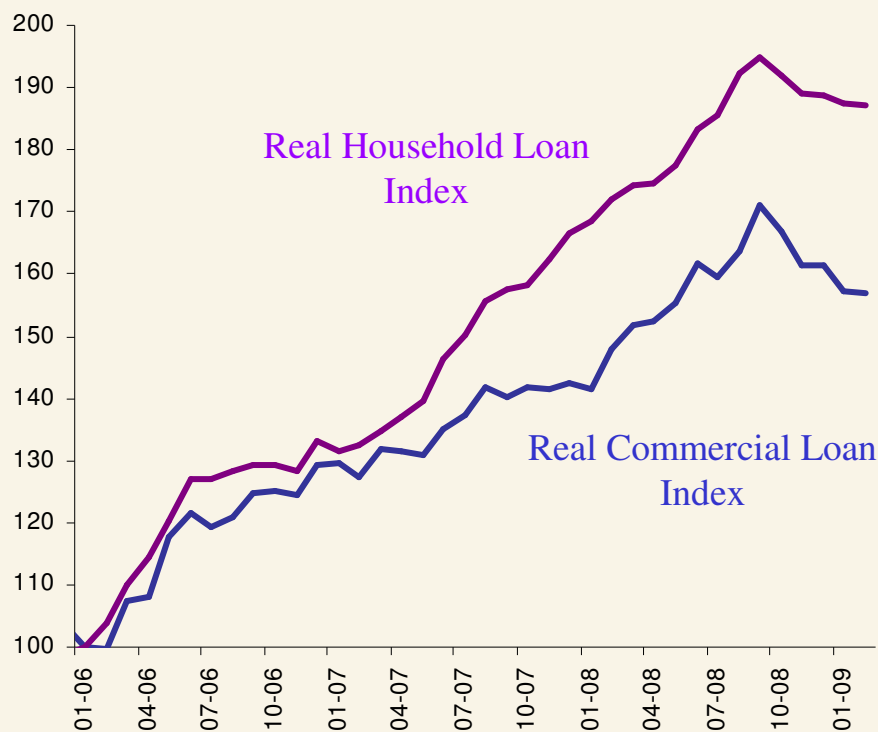
\* CBT Survey of Expectations  
Source: CBT



# Credit Developments

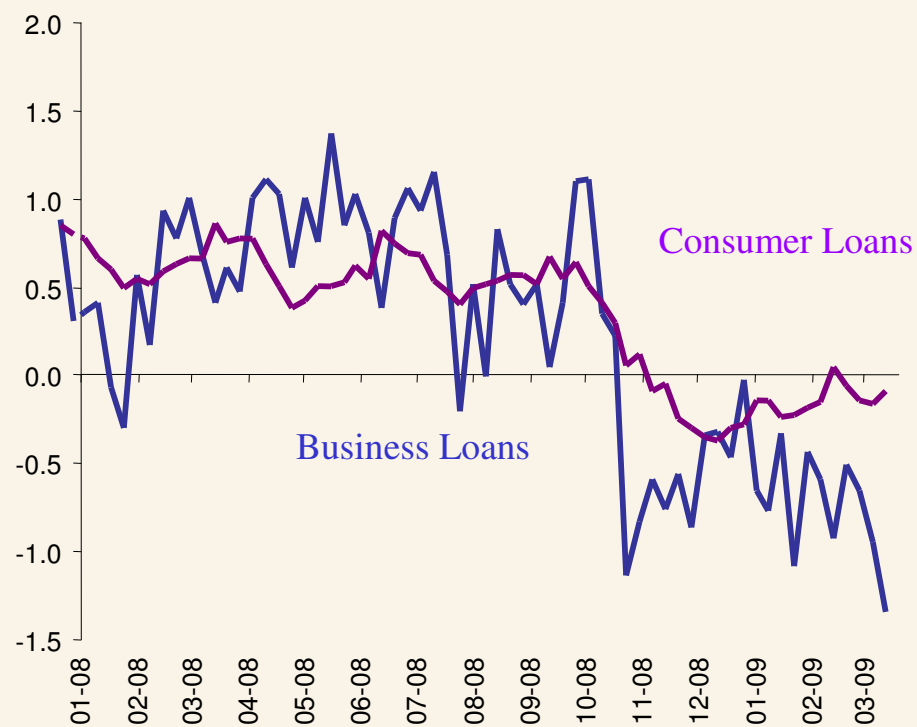
The downward trend observed in bank loans as of the third quarter of 2008 continued in February as well.

**Credit Volume**  
(January 2006 – February 2009)



Source: CBT

**Weekly Change in Business and Consumer Loans**  
(January 2008 – March 2009, 4-week moving average, percent)



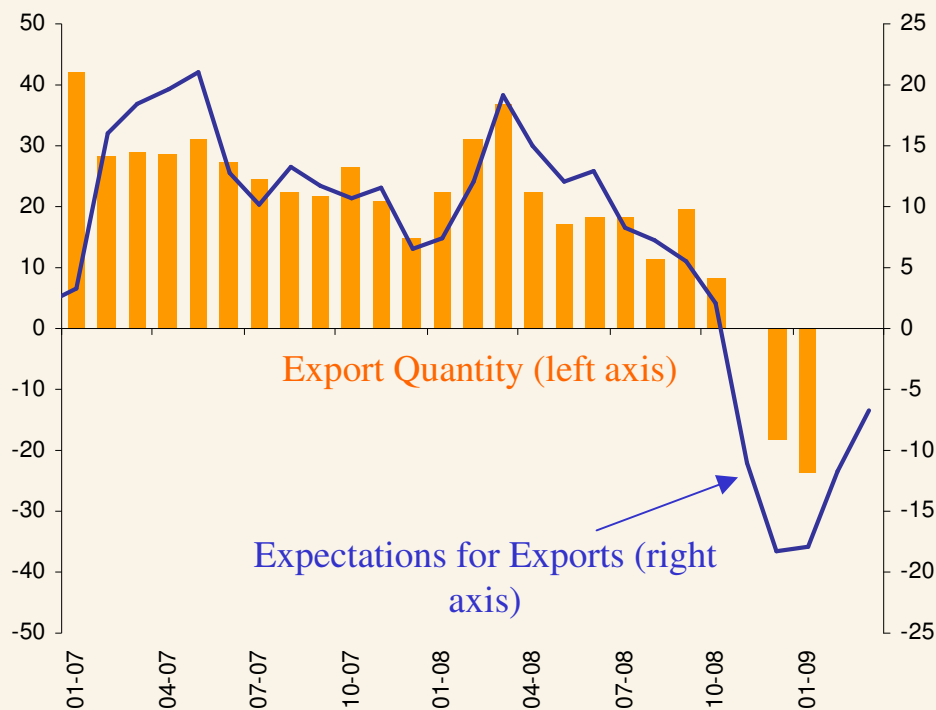
Source: BRSA, CBT



# Foreign Trade Developments

The deterioration in the export performance of Turkey, which started in October 2008 due to the negative impact of global economic turmoil, continued in January 2009 as well.

**Export Quantity Index\* and Expectations for Exports\*\***  
(January 2007 – February 2009)

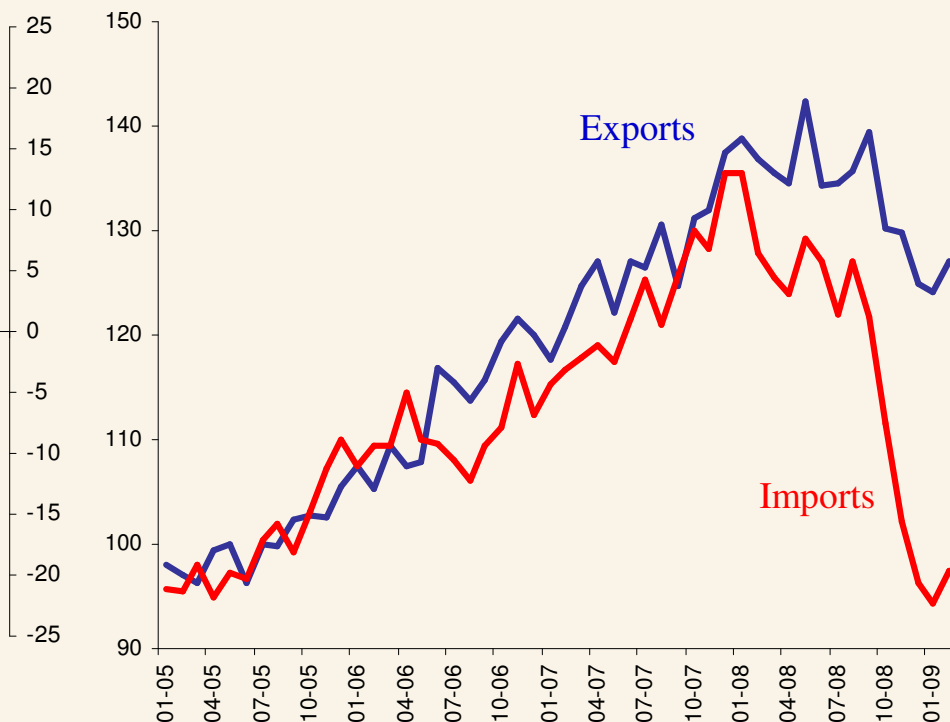


\* Quarterly cumulative percentage change

\*\* Difference between increase and decrease in expectations for exports in the Business Tendency Survey (moved one month)

Source: TURKSTAT, CBT

**Real Exports and Imports\***  
(January 2005 – February 2009, 2005=100)



\* Data for exports and imports have been seasonally adjusted for working days after being deflated by the price index.

Source: TURKSTAT, CBT

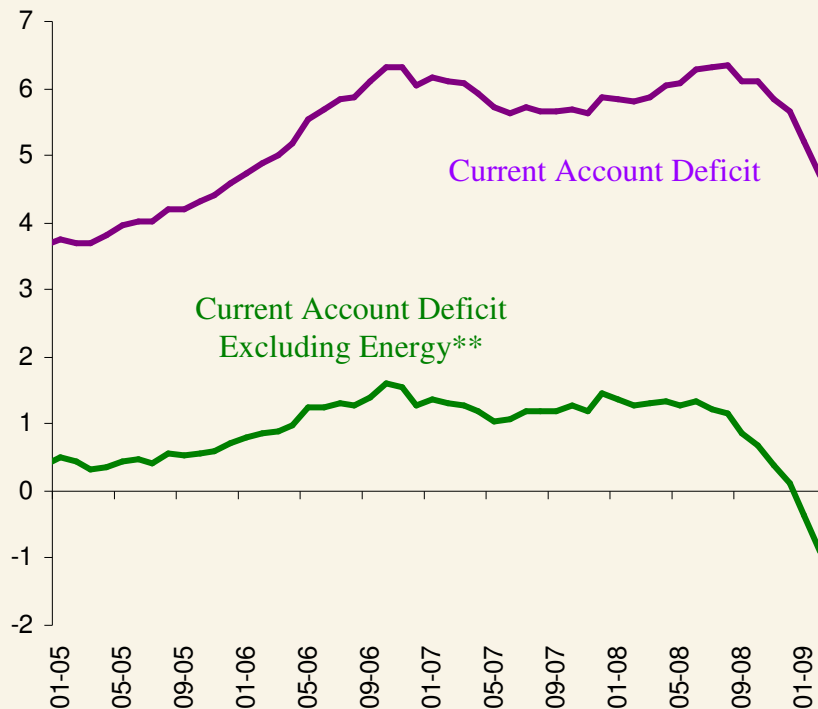


# Balance of Payments Developments

Current account deficit has been narrowing since the third quarter of 2008. The financing requirement decreases rapidly owing to the improvement in the current account balance.

## Current Account Balance

(January 2005 – February 2009\*, CAB to GDP ratio, percent)



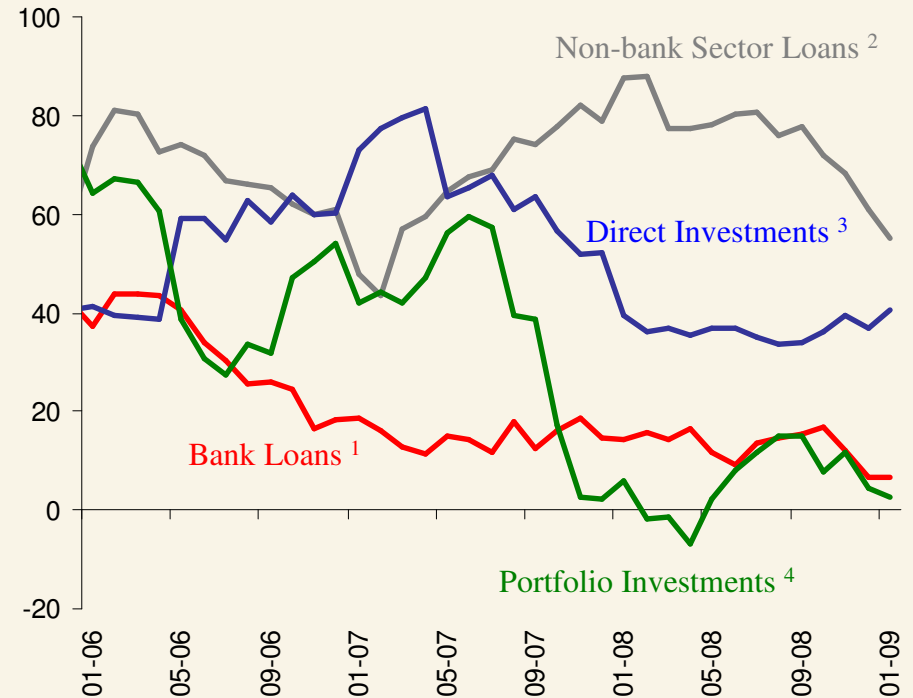
\* Forecast

\*\* Excluding mineral fuels

Source: TURKSTAT, CBT

## Ratio of Main Financing Items of CAD to CAD

(January 2006 – January 2009, 12-month moving average, percent)



<sup>1</sup> **Bank loans:** Net short-term and long-term loans borrowed by the banking sector from abroad.

<sup>2</sup> **Non-bank sector loans :** Net short-term and long-term loans borrowed by the non-bank sector from abroad.

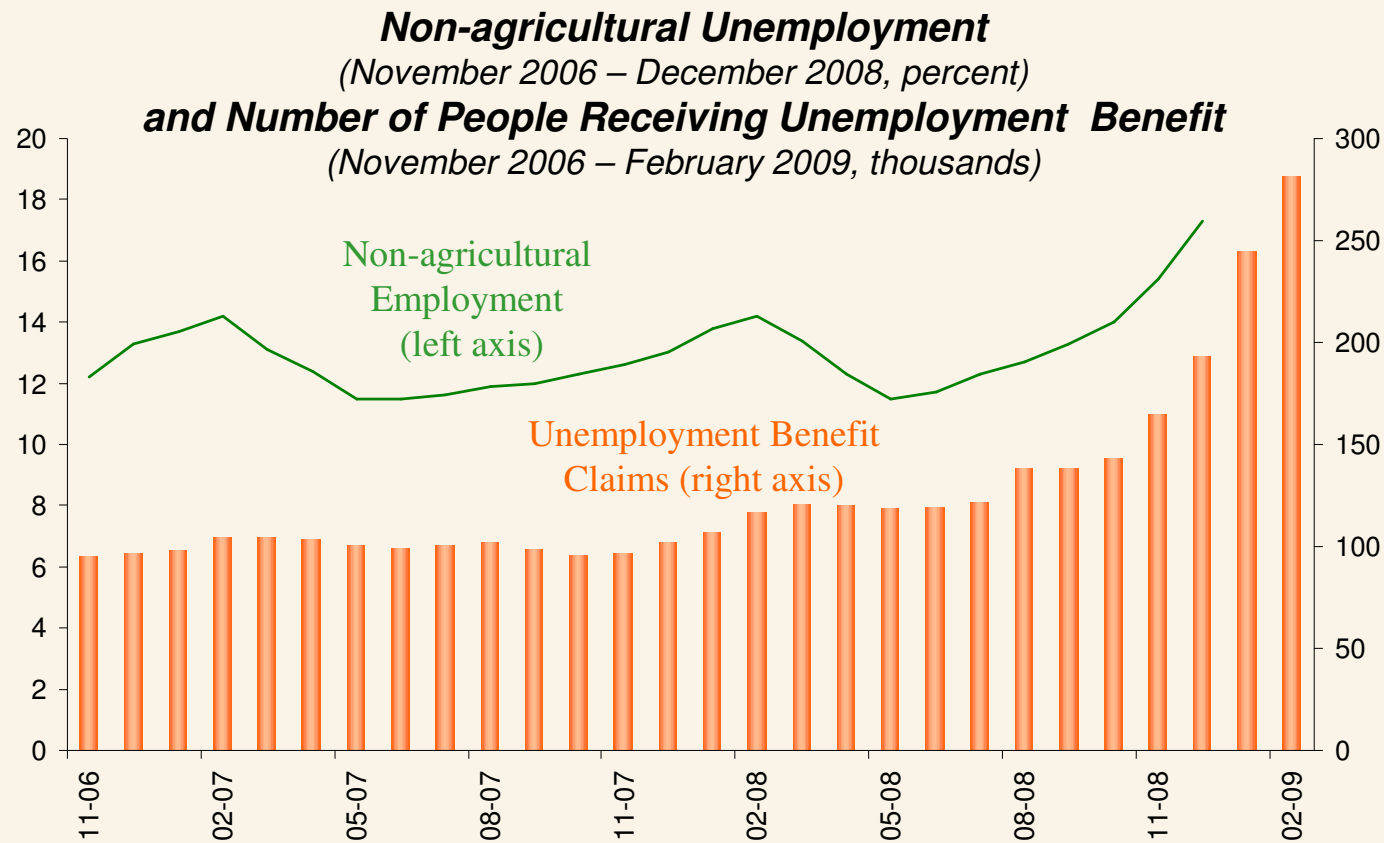
<sup>3</sup> **Foreign Direct Investments:** Foreign direct investment inflows

<sup>4</sup> **Portfolio investments:** Government bonds, Treasury bills and stock purchases of non-residents.



# Employment

Data pertaining to the labor market confirm the rapid slowdown in economic activity.



Source: TURKSTAT, Turkish Labor Institution, CBT



### III. Financial Stability in Turkey

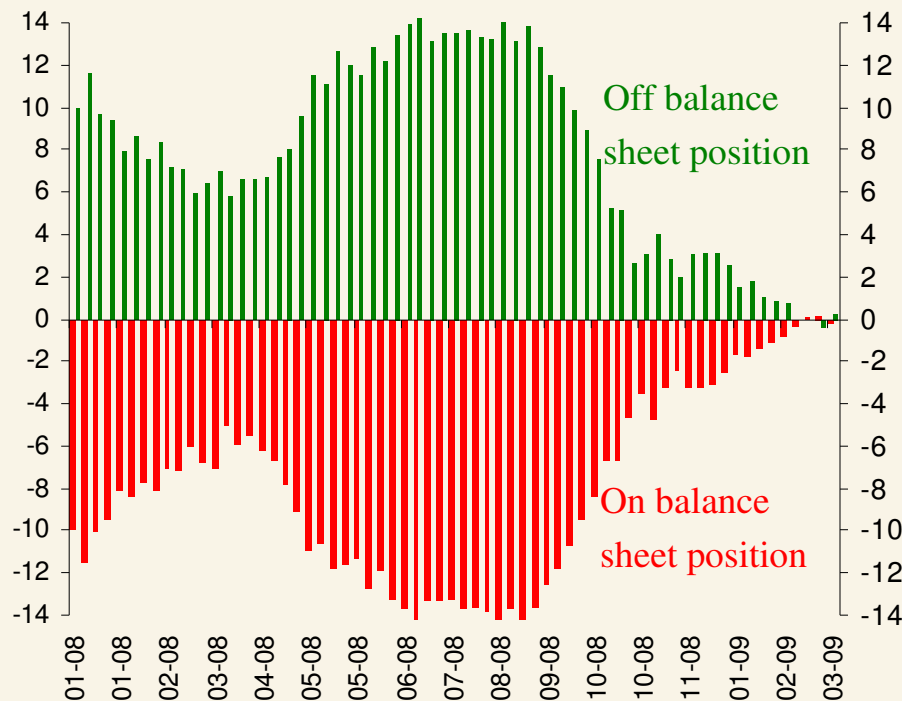
<b>Banking Sector</b>	<b>Corporate Sector</b>
<b>Household</b>	<b>Public Sector</b>



# Banking Sector

The banking system in Turkey entered the global crisis with a relatively strong position.

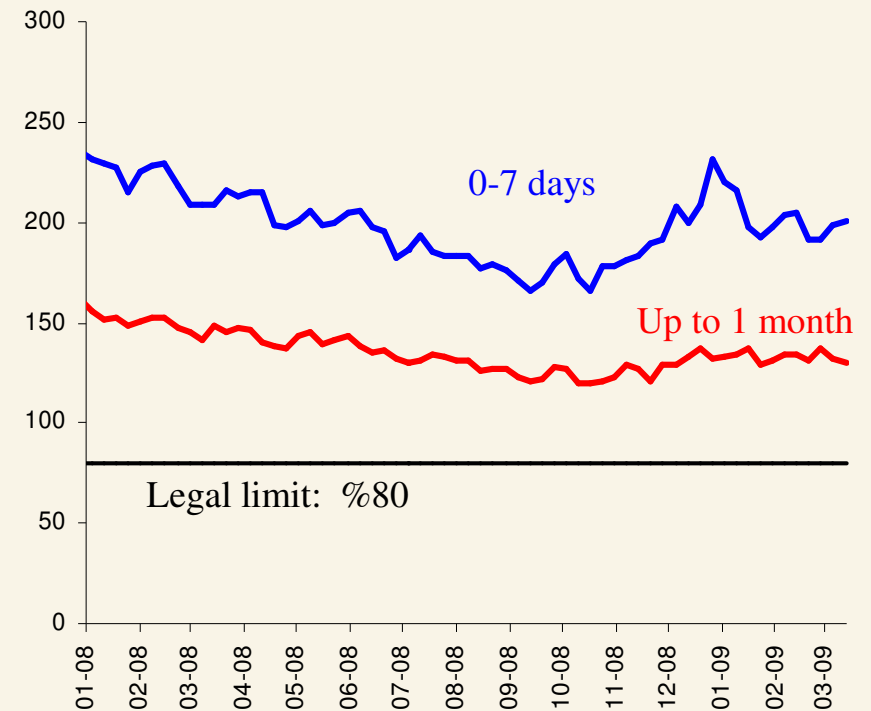
**FX Position** (January 2008 – Mart 2009, billion USD)



Source: BRSA, CBT

**Short-term FX Liquidity Adequacy Ratios**

(1 January 2008 – 13 March 2008, percent)



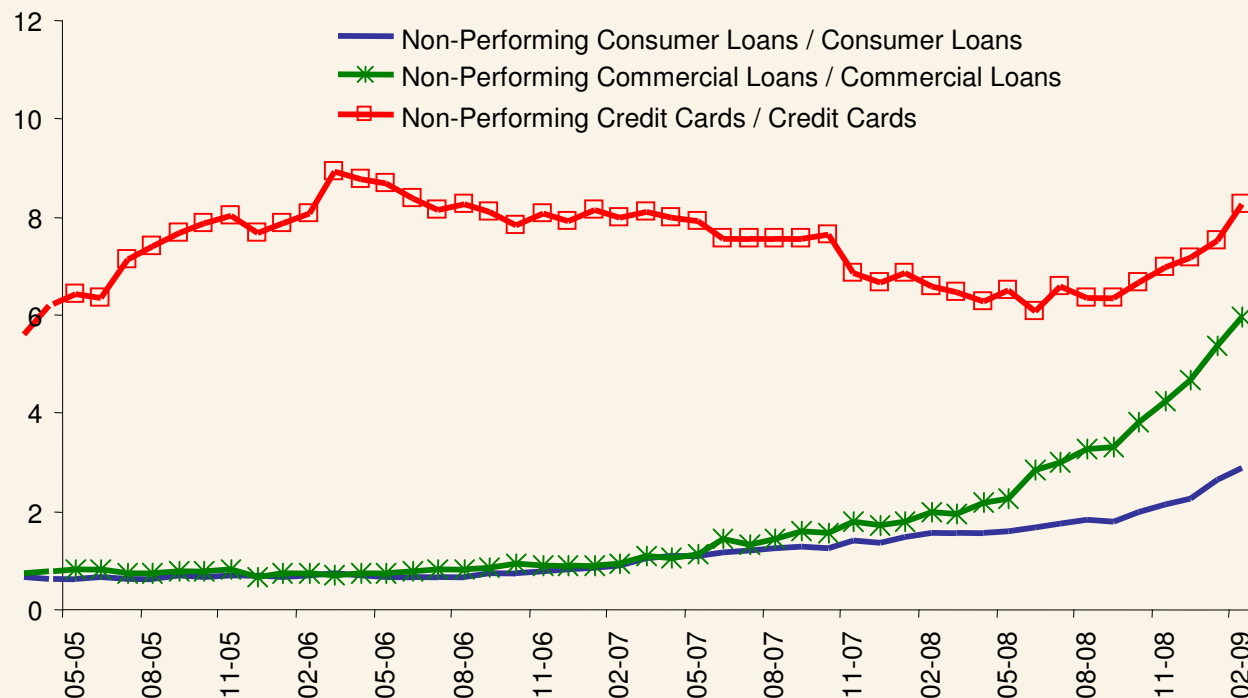
Source: BRSA, CBT



# Credit Developments

The ratio of non-performing loans to total loans has been increasing since September 2008.

**Non-Performing Loans**  
(May 2005 – February 2009, percent)



Source: BRSA, CBT

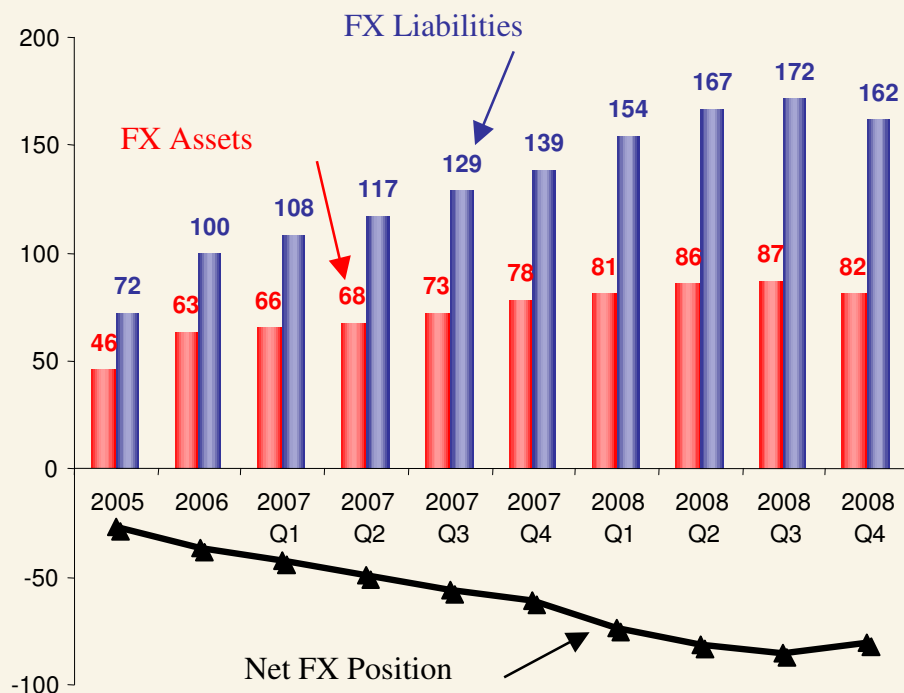




# Corporate Sector

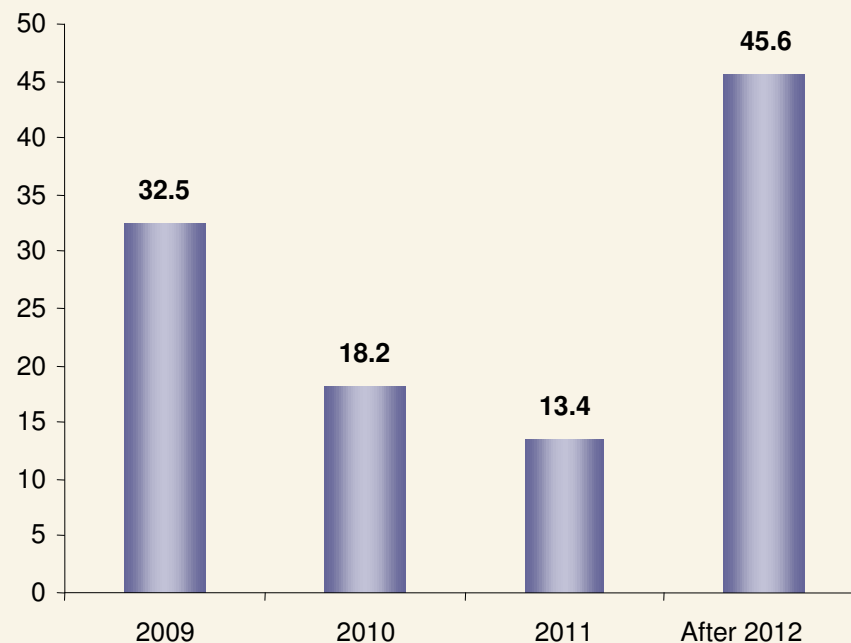
The FX short position of the non-banking sector reached USD 7.3 billion in the last quarter of 2008.

**Firm's FX Assets and Liabilities**  
(2005 – 2008 Q4, billion USD)



Source: CBT

**Maturity Composition of Firms' Long Term FX-denominated Foreign Debt \***  
(January 2008, billion USD)



\* Number of days to maturity  
Source: CBT

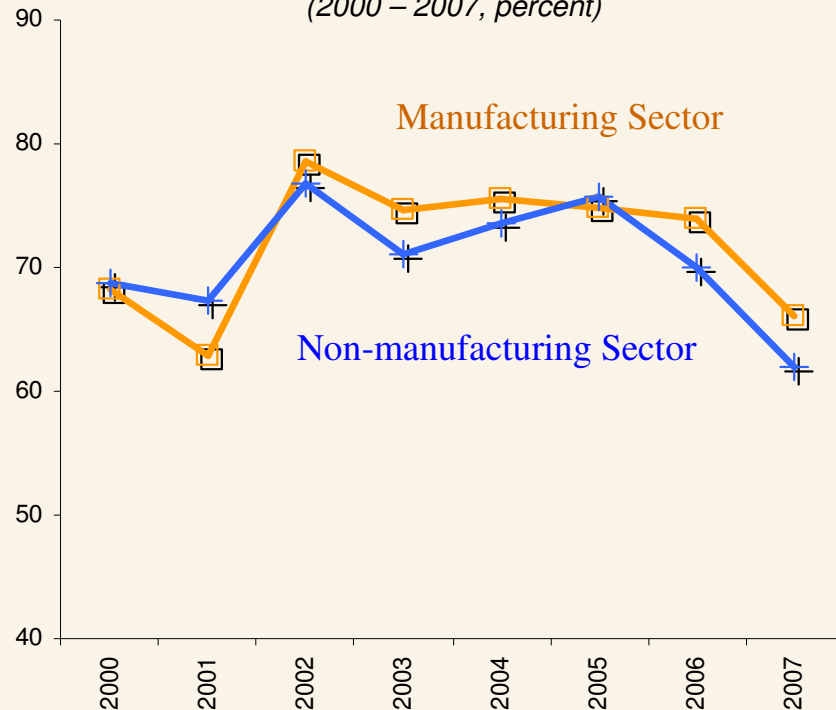


# Corporate Sector

In recent years a substantial amount of real sector debts displayed a trend towards Turkish lira and its maturity extended.

**Ratio of Short-term Debt of the Real Sector to Total Debt\***

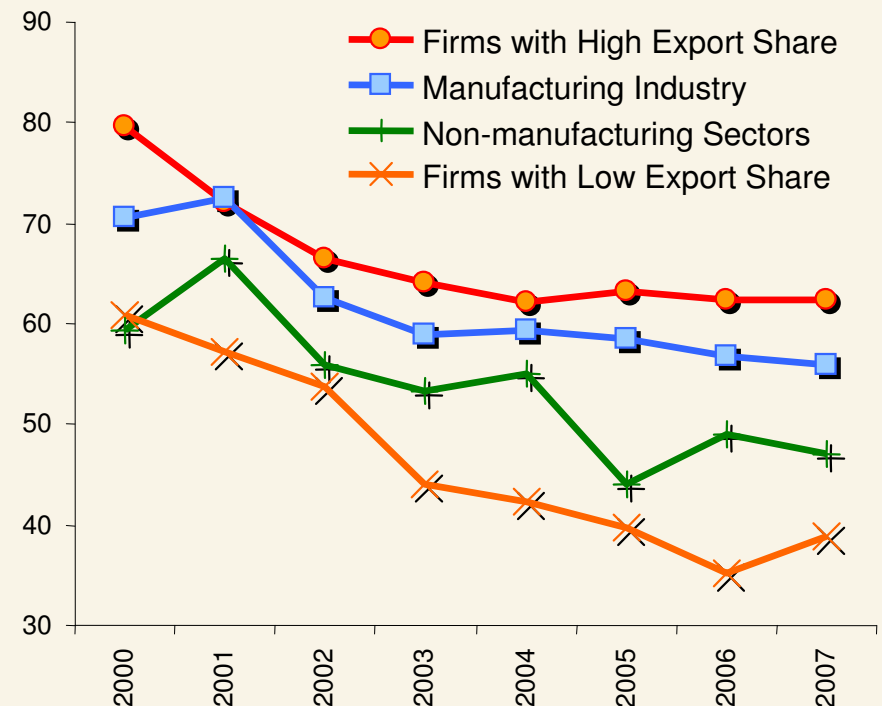
(2000 – 2007, percent)



\* According to days to maturity  
Source: CBT

**Debt Dollarization of Real Sector**

(2000 – 2007, percent)



Source: CBT



# Households

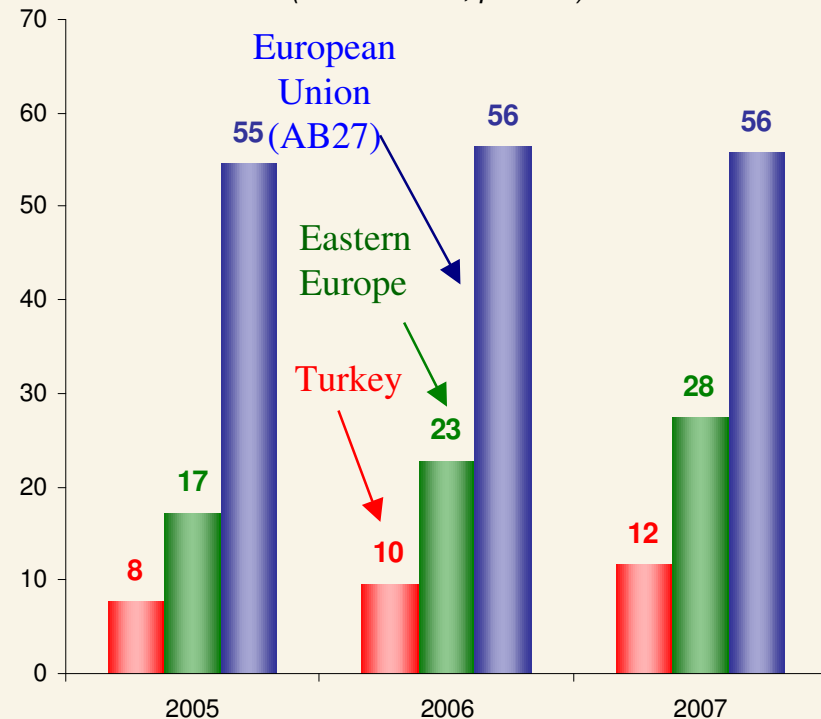
The ratio of household indebtedness is relatively low compared to European Union and Eastern Union countries.

**Ratio of FX-indexed Consumer Loans to Total Consumer Loans**  
(2003 – 2009, percent)



Source: CBT

**Ratio of Household Liabilities to GDP**  
(2005 – 2007, percent)



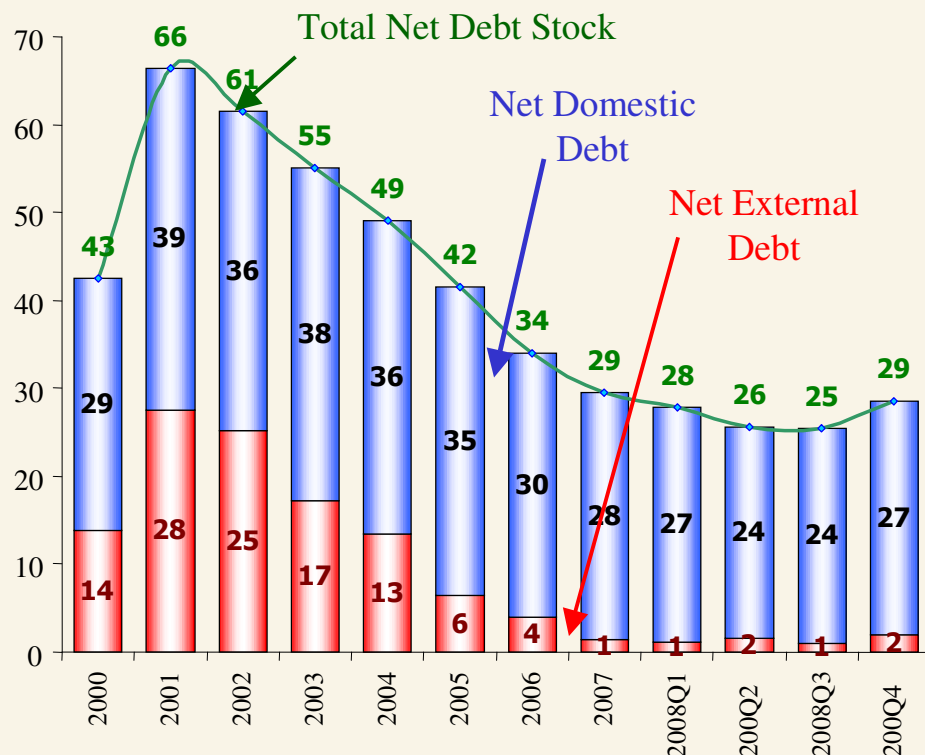
Source: European Central Bank, CBT



# Public Sector

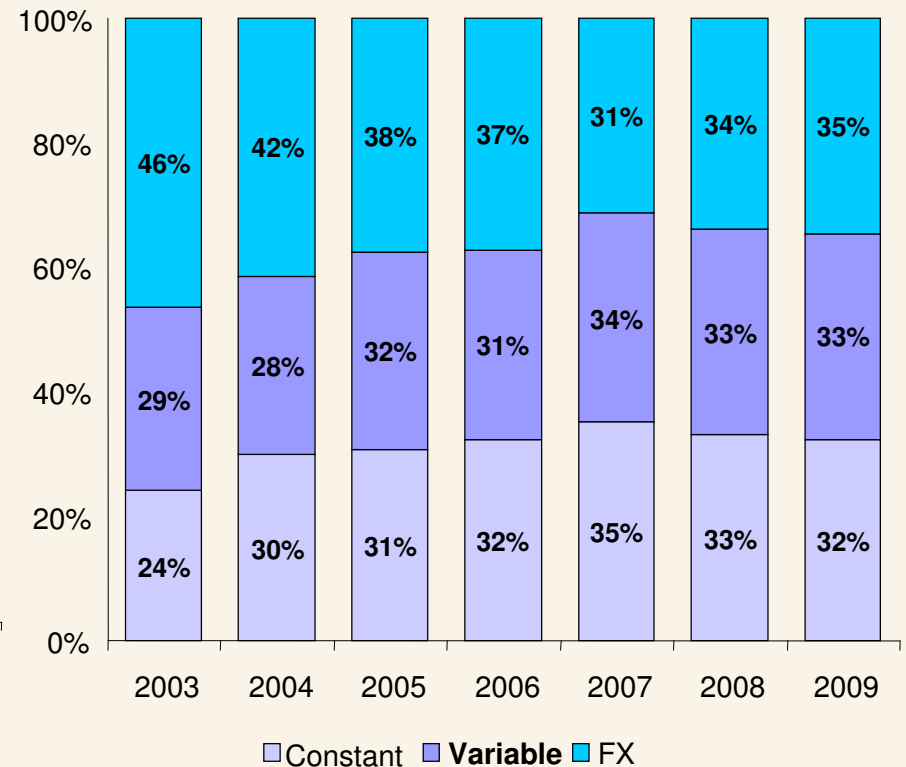
The public sector has become more resilient to external shocks compared to the past.

**Public Sector Net Debt Stock**  
(2000 – Q4 2008, Ratio to GDP, percent)



Source: Treasury

**Composition of Central Government Gross Debt Stock**  
(2000 – 2009\*)



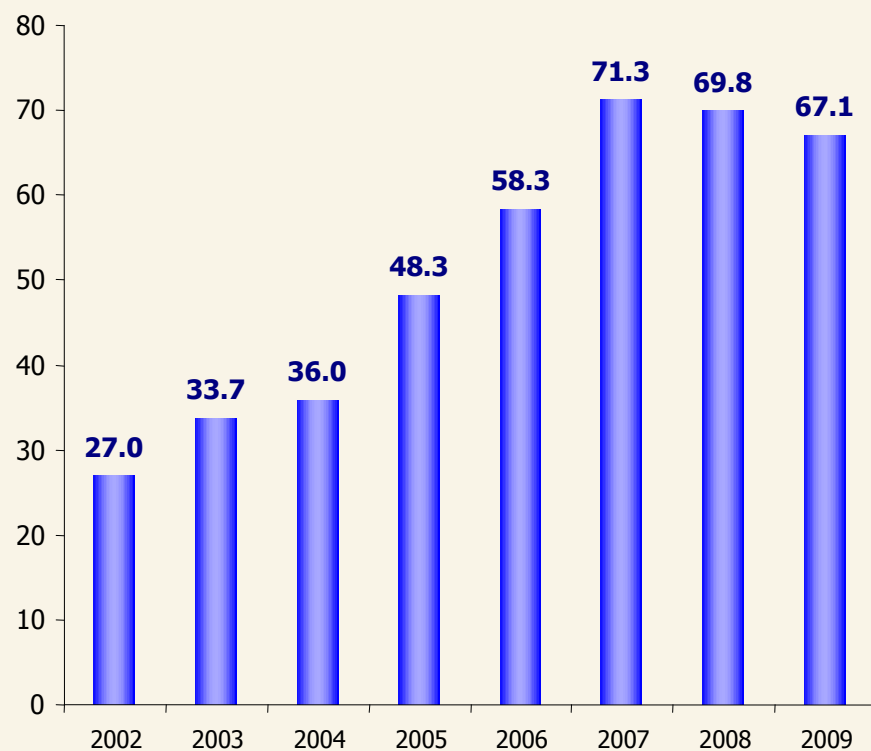
\* As of February 2009  
Source: Treasury



# Central Bank Foreign Exchange Reserves

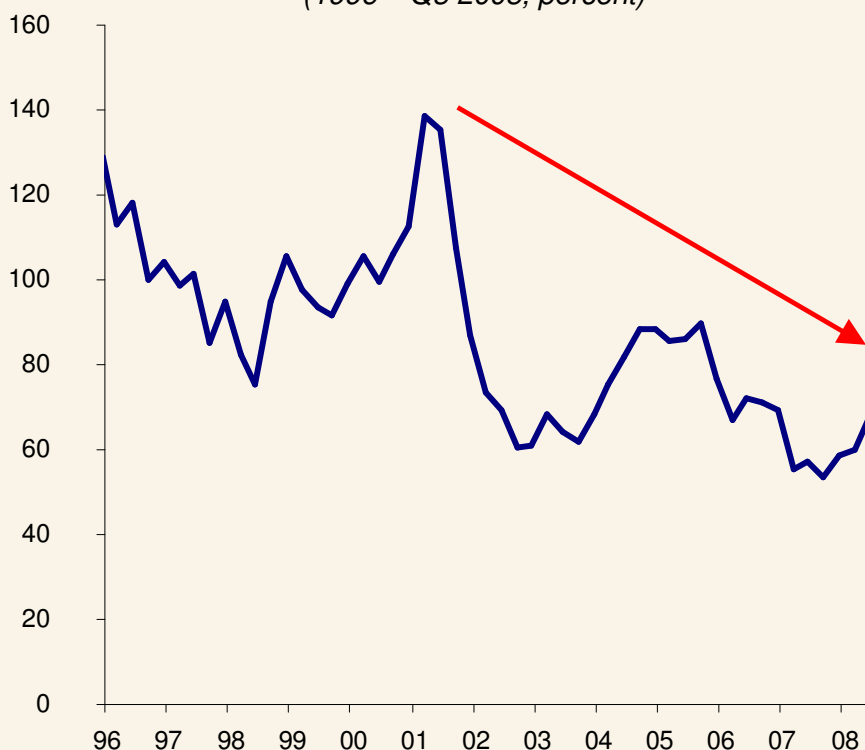
The strong foreign exchange reserve position helps eliminate the unfavorable effects of potential shocks and contributes towards boosting confidence in the economy.

**Central Bank FX Reserves**  
(2002 – March 2009, billion USD)



Source: CBT

**Ratio of Short-term Foreign Debt to Central Bank FX Reserves**  
(1996 – Q3 2008, percent)



Source: Treasury, CBT



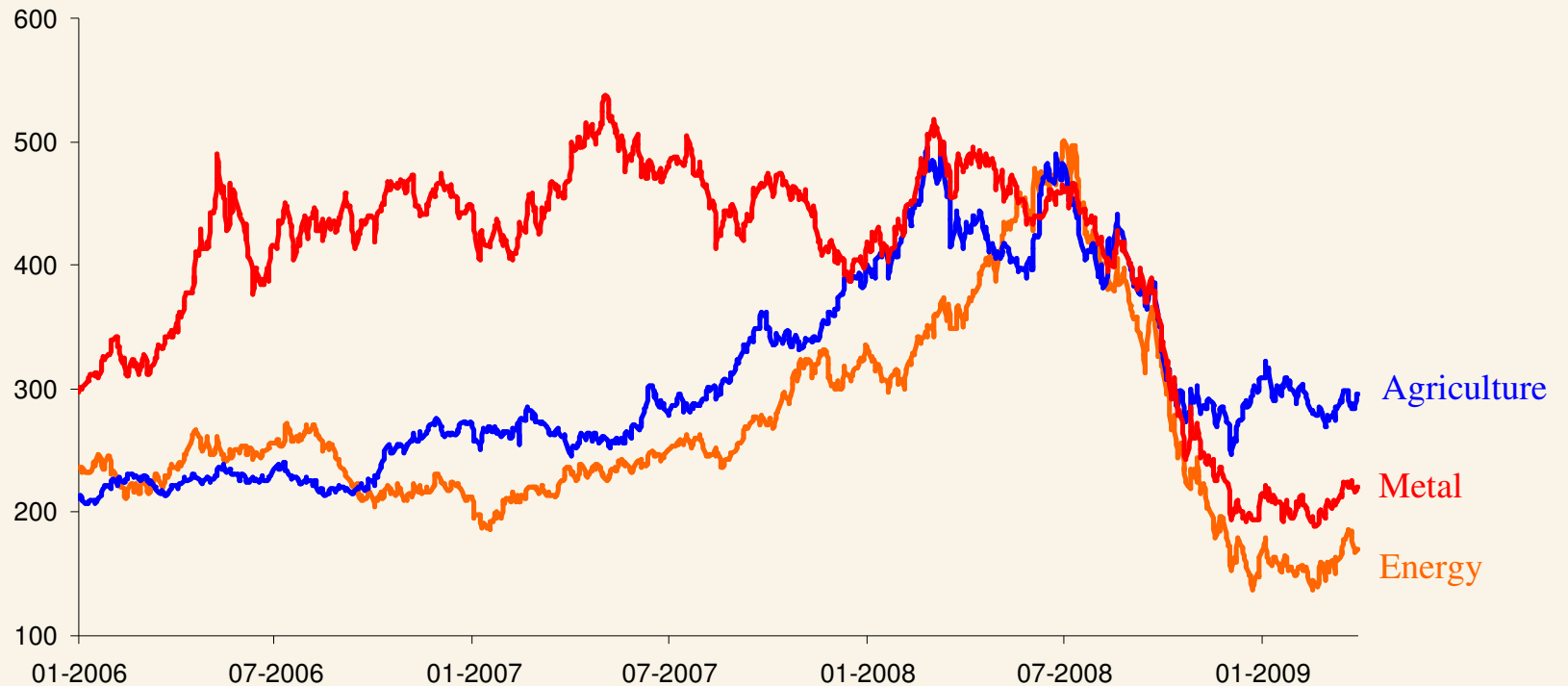
## IV. Inflation Outlook



# Global Commodity Prices

Commodity prices remain low parallel to the slowdown in global growth.

**Commodity Prices Index**  
(1 January 2006 – 1 April 2009)



Source: Bloomberg

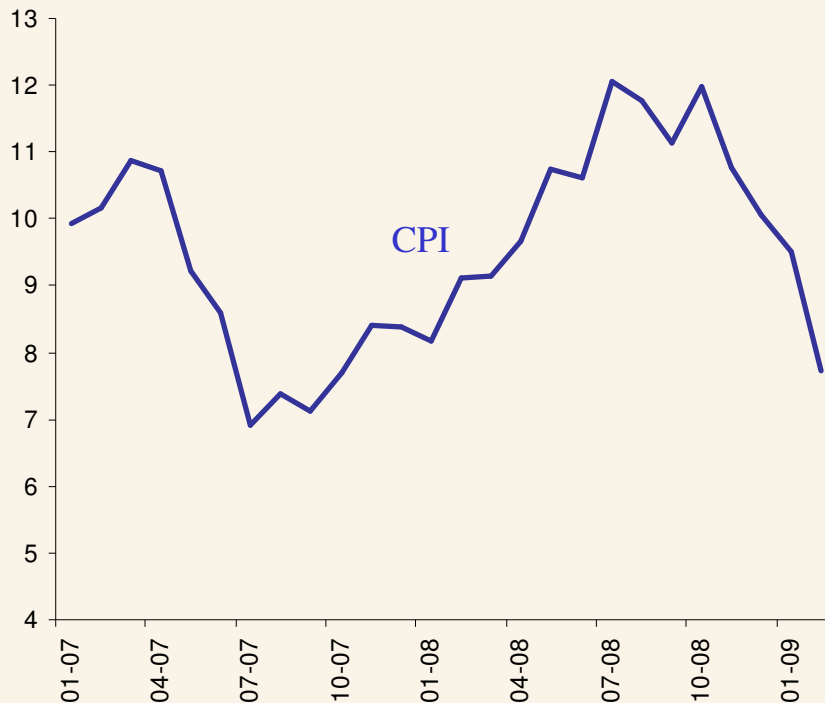


# Inflation Developments in Turkey

In February, inflation came to its lowest-ever level since October 2007.

## Consumer Inflation

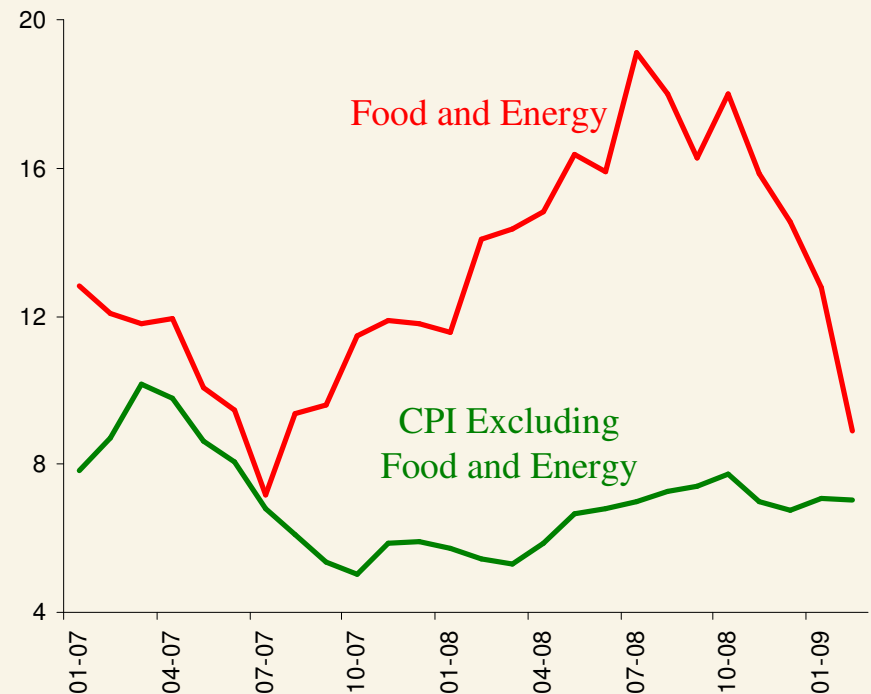
(January 2007 – February 2009, year-on-year percentage change)



Source: TURKSTAT, CBT

## Food and Energy Inflation

(January 2007 – February 2009, year-on-year percentage change)



Source: TURKSTAT, CBT



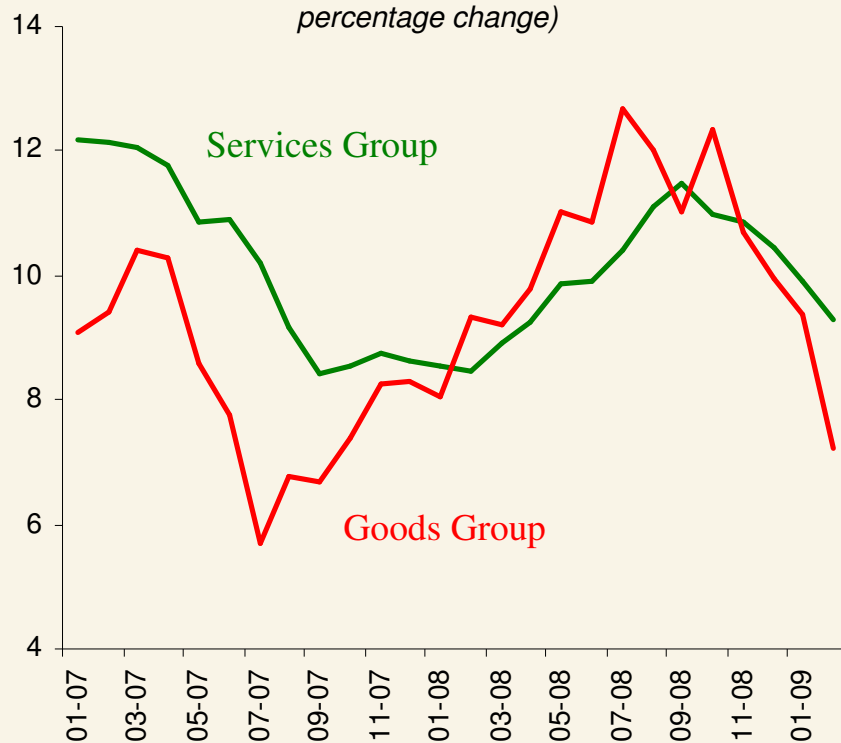


# Inflation Developments in Turkey

The deceleration in annual services inflation, which has become more evident, indicates that the main trend in inflation is downward.

## Goods and Services Prices

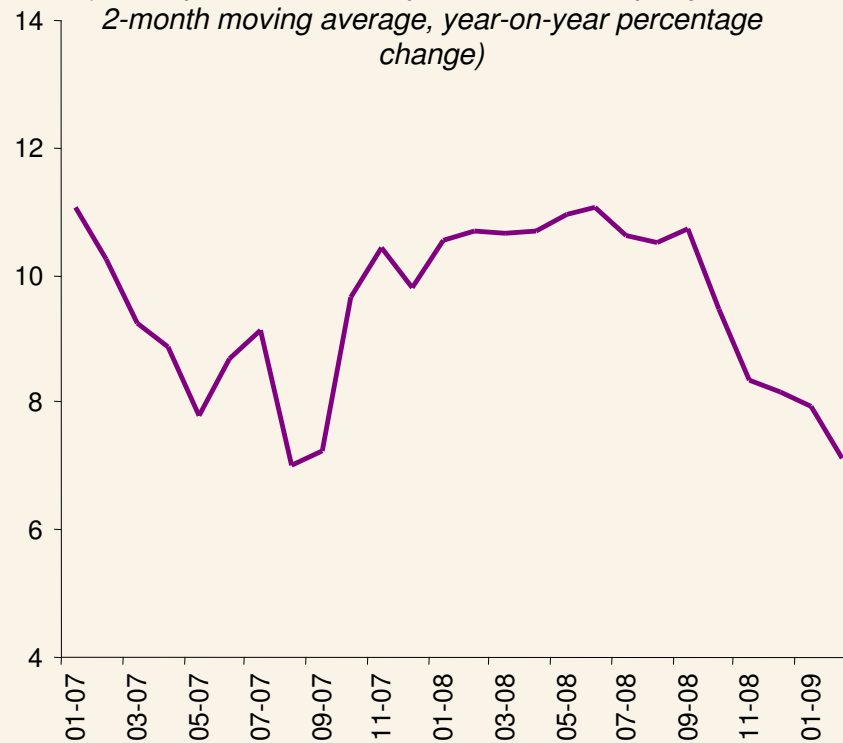
(January 2007 – February 2009, year-on-year percentage change)



Source: TURKSTAT, CBT

## Services Prices

(January 2007 – February 2009, seasonally adjusted, 2-month moving average, year-on-year percentage change)



Source: TURKSTAT, CBT

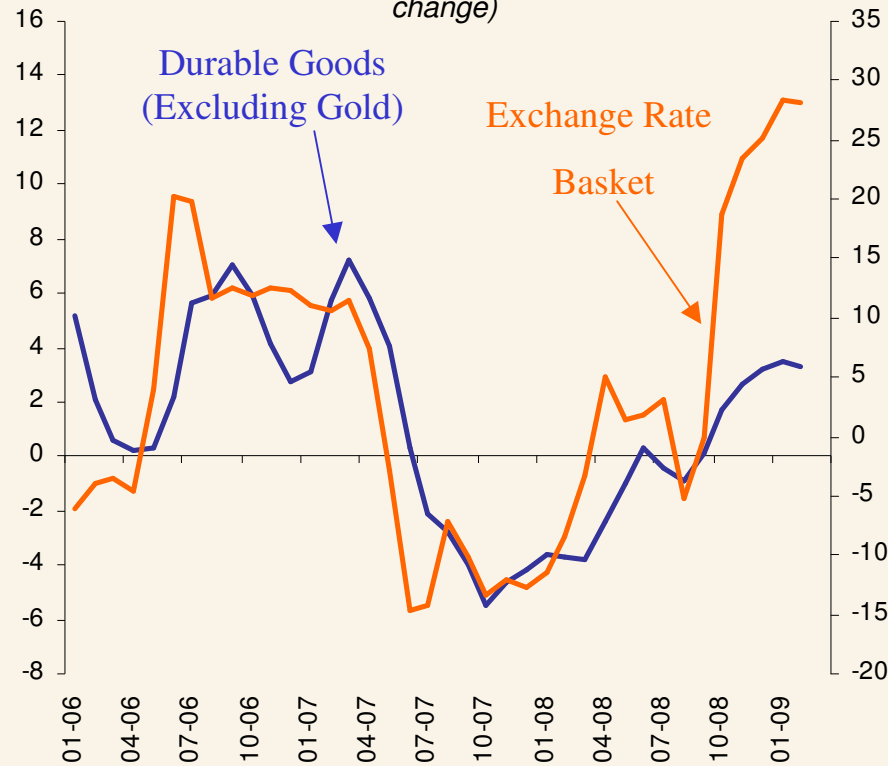


# Goods Prices

The ongoing weakening in economic activity continued to mitigate the exchange rate pass-through on prices of durable goods.

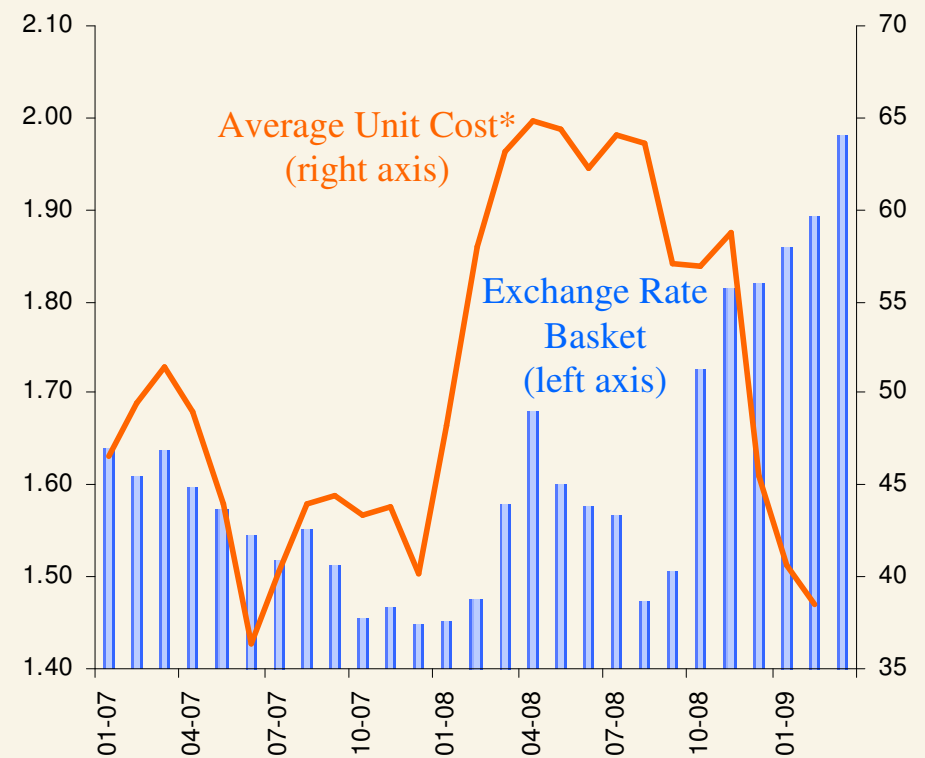
## Durable Goods Prices and Exchange Rate\* Developments

(January 2006 – February 2009, year-on-year percentage change)



\* Equally weighted US Dollar and Euro basket  
Source: TURKSTAT, CBT

## Average Unit Cost\* and Exchange Rate Basket (January 2007 – February 2009)

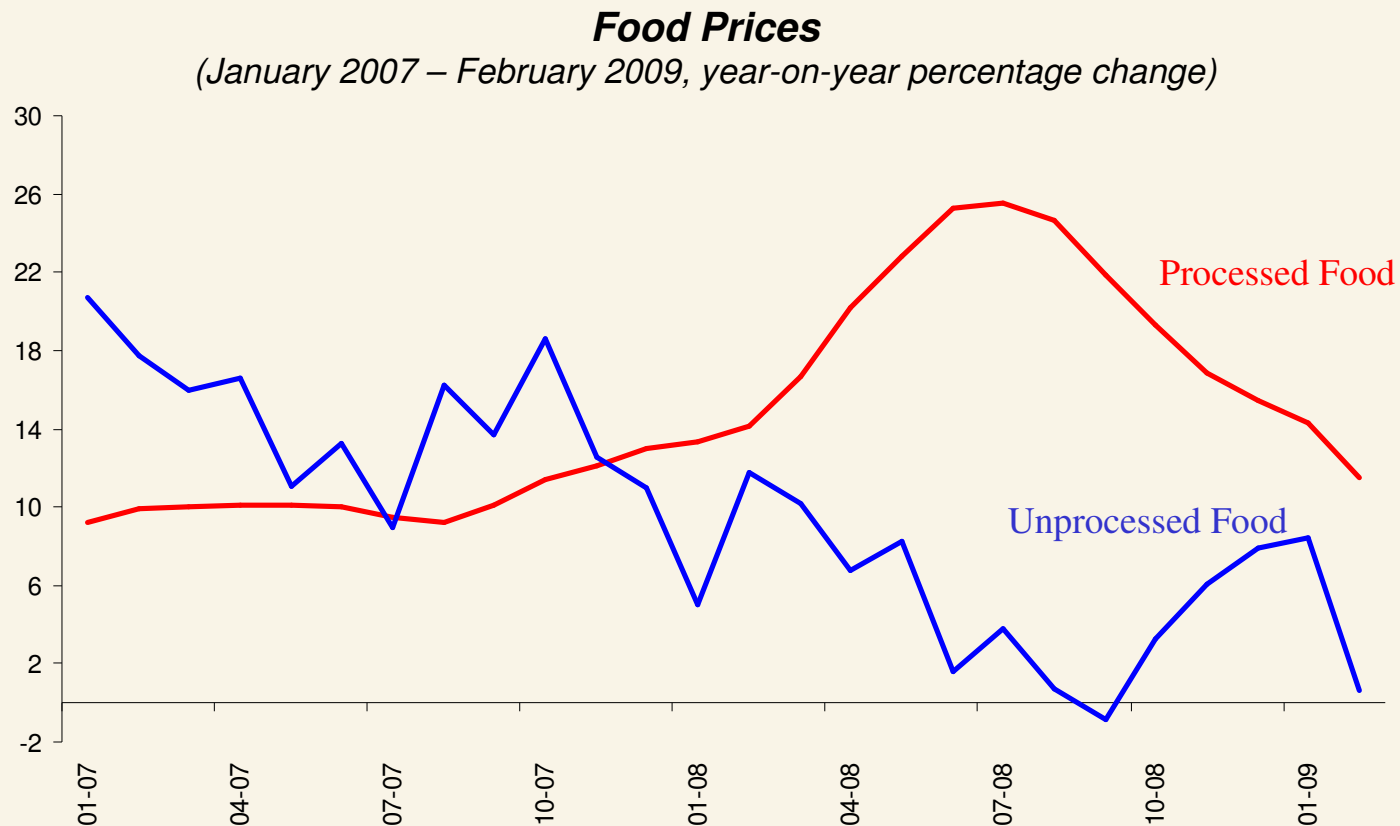


\* Business tendency survey  
Source: CBT



# Food Prices

**Annual inflation is expected to rise temporarily in March owing to soaring unprocessed food prices, but then to continue its downward trend.**



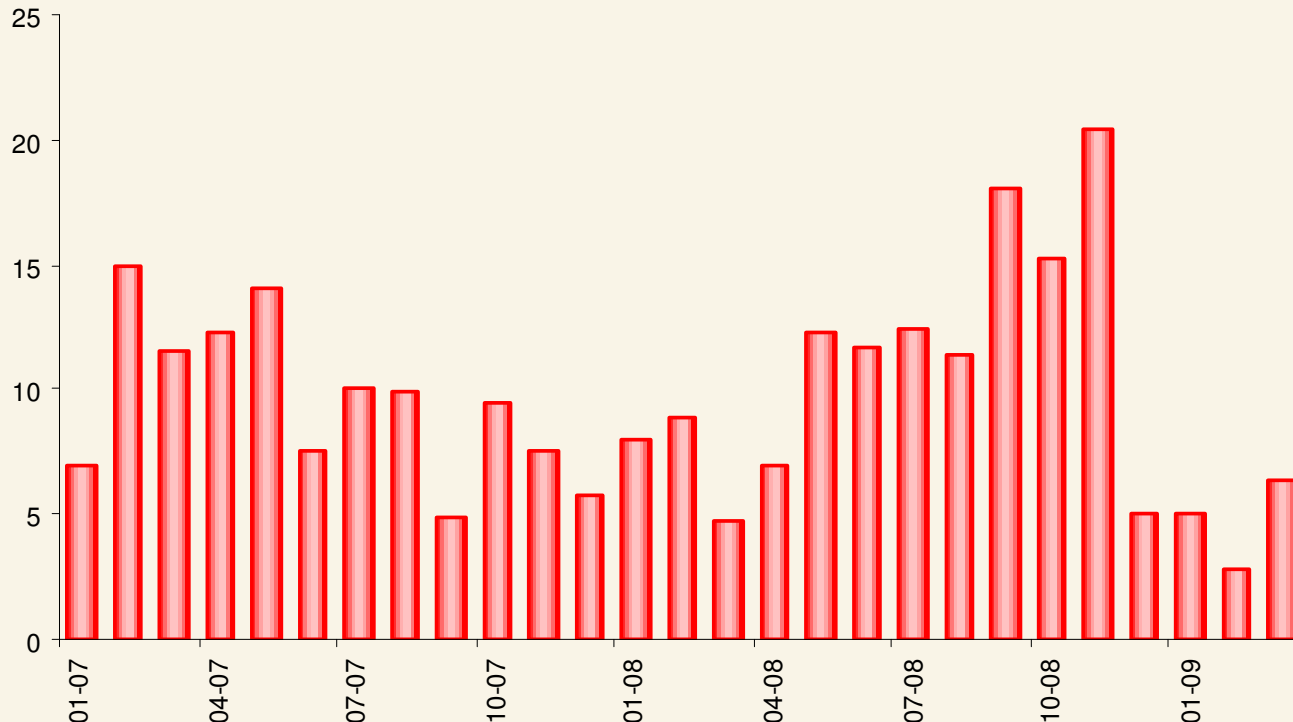
Source: TURKSTAT, CBT



# Inventory and Cost Developments

It is envisaged that there will be an acceleration in the depletion of inventories of firms, which in turn, would partially add to the exchange rate pass-through on the prices of durable goods.

***Stock of Finished Products\**** (January 2007 – March 2009)



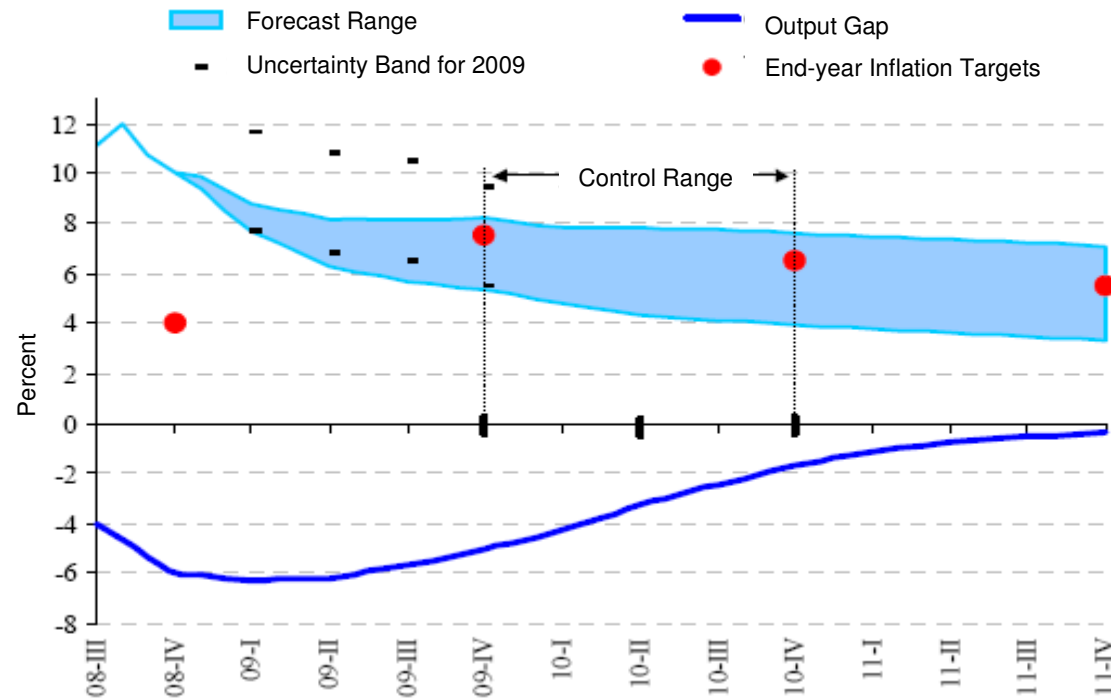
\* Difference between the stocks of finished products above and below normal levels, as indicated in the Business Tendency Survey.  
Source: CBT



# Inflation and Output Gap

The fall in energy and food prices, along with deceleration in the growth of services prices is expected to contribute to disinflation until mid-2009.

*Inflation and Output Gap Forecasts  
(2008 Q3 – 2011 Q3)*



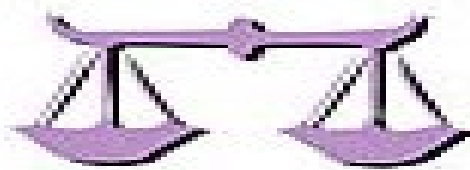


## **V. Monetary Policy Stance**



# Price Stability and Monetary Policy

## Price Stability



### Deflation Risk

- Soaring unemployment rates at global level,
- Loss of confidence in investors and consumers,
- Weakening global demand,
- Easing domestic demand in all countries,
- Further delay in expected recovery

*may lead to persistent price declines.*

### Inflation Risk

- Lowering real policy rates to a great extent,
- Over-injection of liquidity to markets by Central Banks,
- Globally expansive fiscal policies,
- Earlier-than-expected recovery,
- Failure to tighten fiscal and monetary policies in time

*may lead to an inflationist effect in the medium-term.*

## Monetary Policy Stance of Central Banks

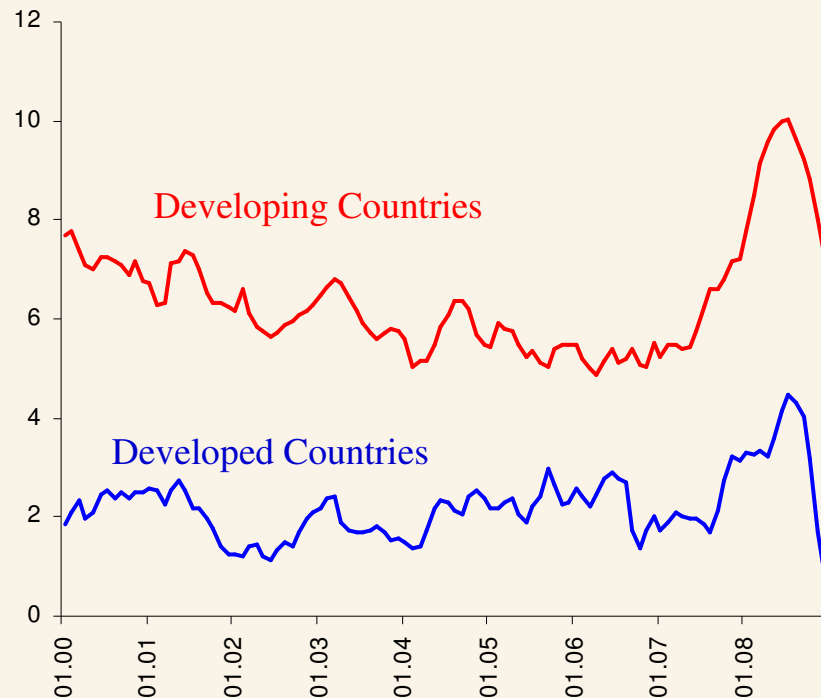


# Monetary Policy

**Coupled with worries related to a more-than-anticipated slowdown in economic activity due to the economic crisis, inflation concerns have been replaced by deflation risk.**

## ***Inflation Rate***

*(January 2000 –December 2008, year-on-year percentage change)*



Source: IMF

## ***Non-Conventional Monetary Policy Practices***

Country	Measure
USA	Purchase of USD 1.25 trillion worth of mortgage-based securities in 2009
	Purchase of USD 300 billion worth of long-term government bonds within a 6-month period.
	Purchase of toxic assets in banks' balance sheets
UK	Purchase of private sector securities along with medium and long-term government bonds in the sum of 75 billion Pound.
Switzerland	Purchase of debt instruments issued by private sector in Swiss Francs.

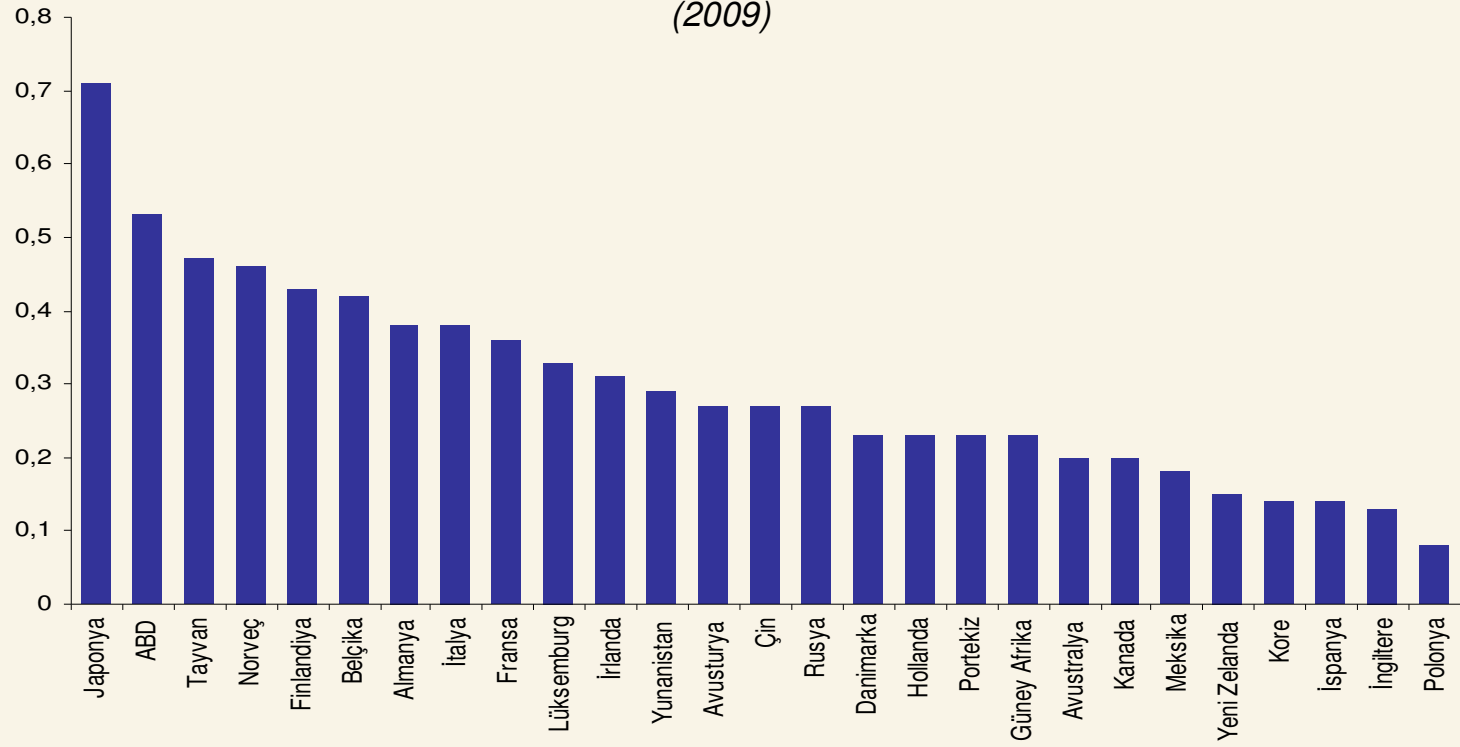




# Deflation Risk

The magnitude of deflation risk amidst the global crisis is largely contingent upon how and when the global economy will start to recover.

*Deflation Vulnerability Index  
(2009)*



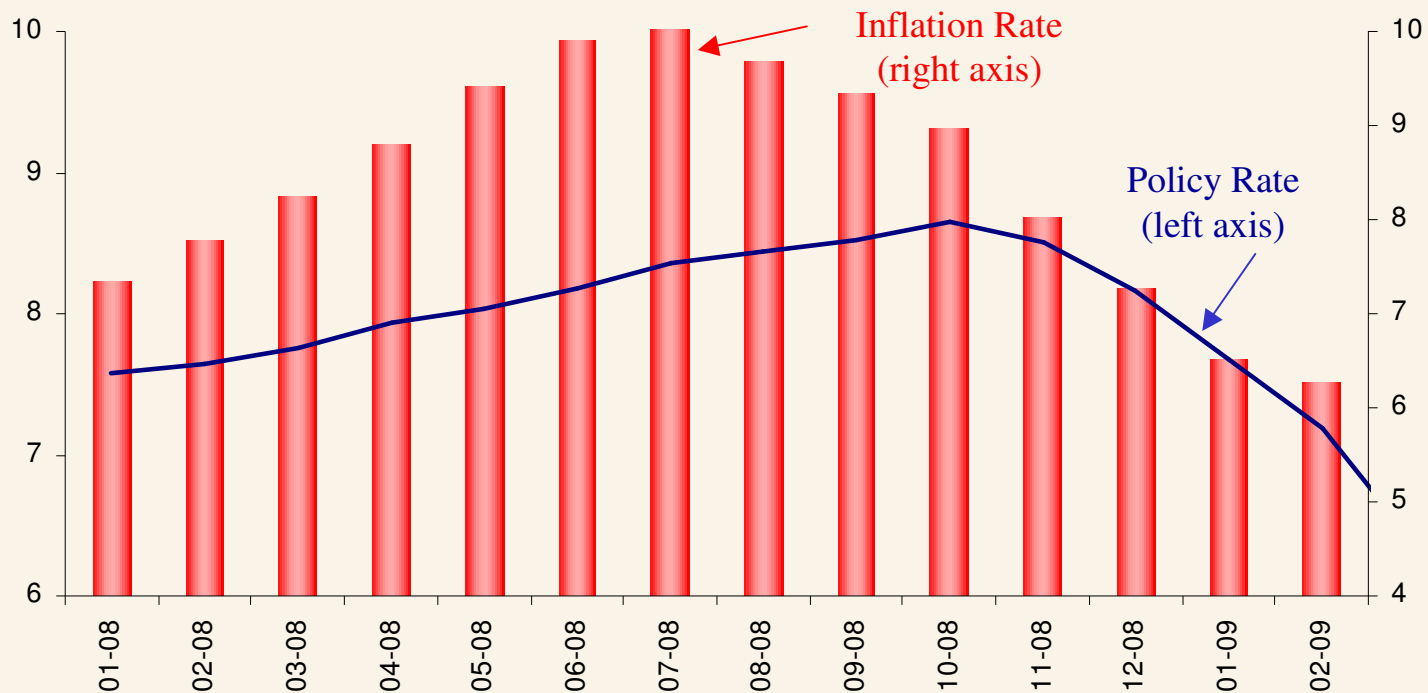
Source: IMF



# Monetary Policy

Central banks in developed countries, which initially adopted a cautious stance in view of the depreciation of exchange rates and concerns about financial stability, recently shifted their stance towards loosening their monetary policies as inflation is no longer a source of concern.

***Inflation and Monetary Policy Interest Rates in Developing Countries***  
(January 2008 – February 2009, percent)



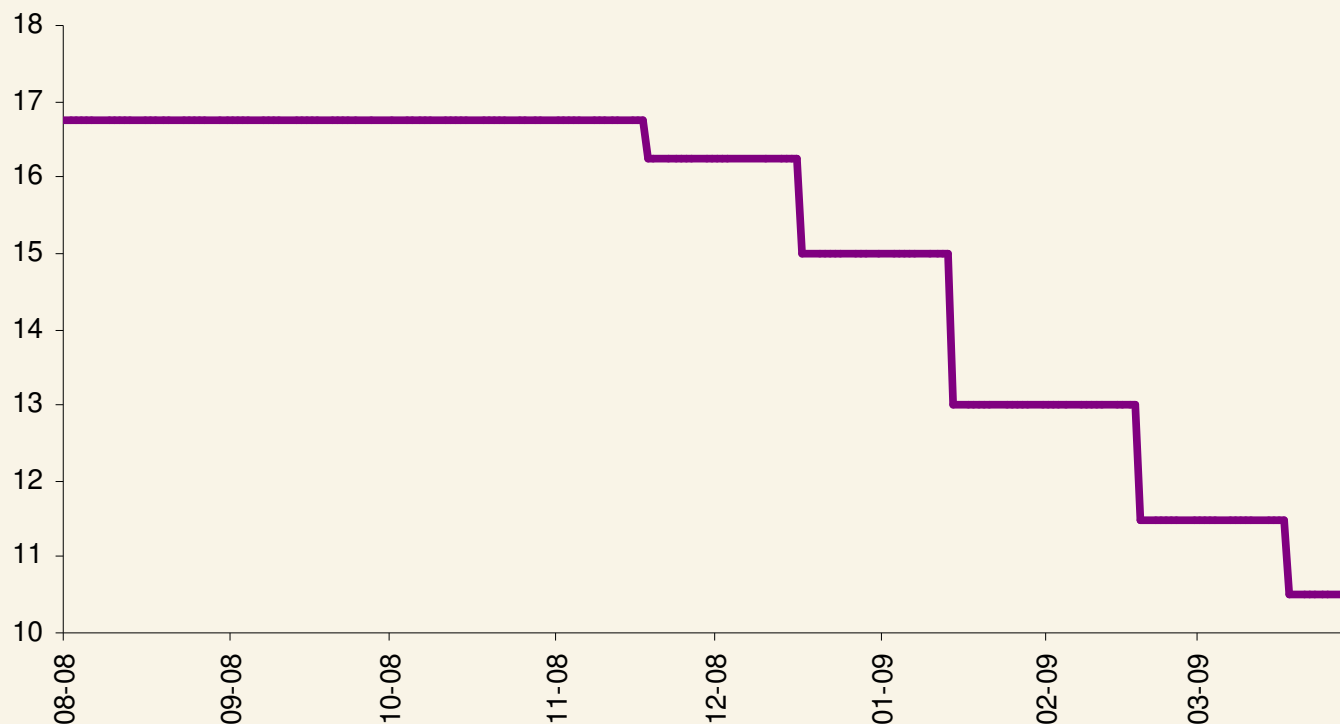
Source: CBT, Central Banks



# Monetary Policy Stance

Likewise, the Central Bank of the Republic of Turkey has lowered the policy rate by 625 basis points since November 2008 to date.

***CBT Short-Term Interest Rates***  
(August 2008 – March 2009, simple, percent)



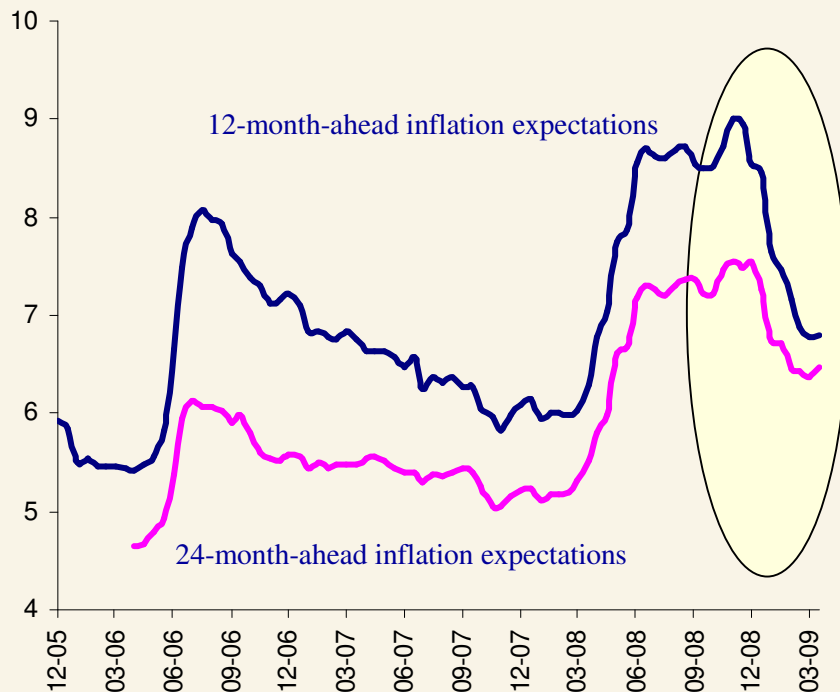
Source: CBT



# Monetary Policy Stance

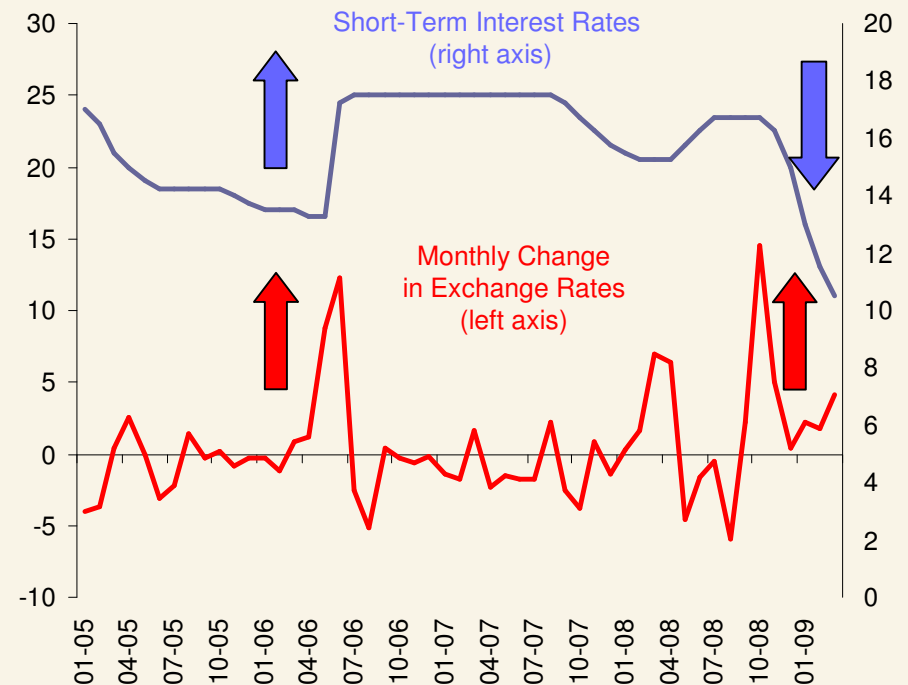
Market interest rates took a sharp downturn in view of the limited recovery in risk perceptions and the Central Bank's rate cuts backed by the announced inflation data.

**Inflation Expectations**  
(December 2005 – March 2009, percent)



Source: TURKSTAT, CBT

**CBT Short-Term Interest Rates and Exchange Rate\*  
Developments** (January 2005 – March 2009)



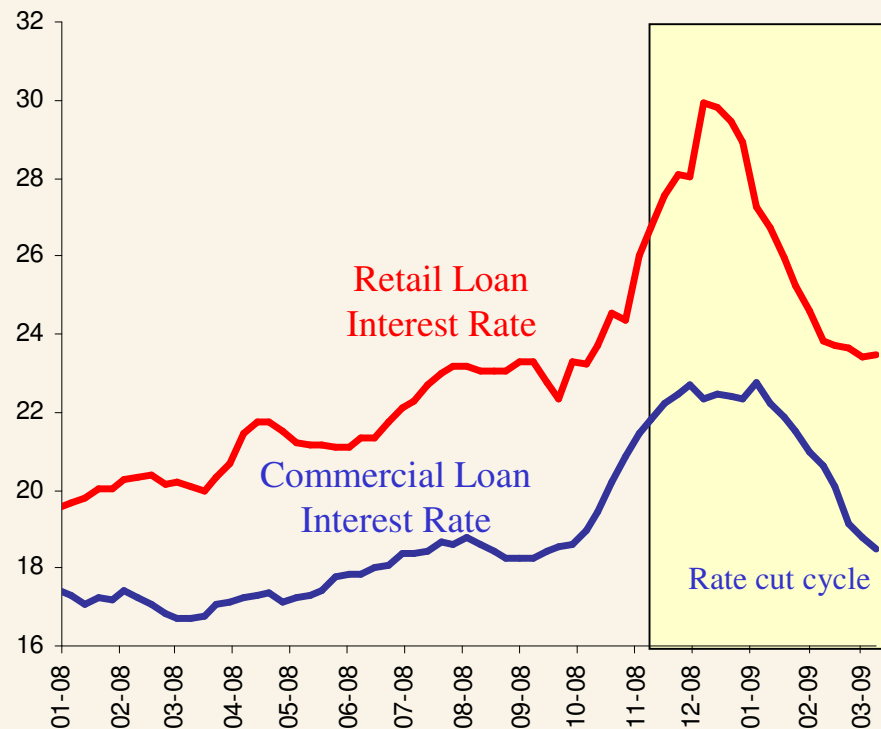
\* Equally weighted US Dollar and Euro basket  
Source: Undersecretariat of Treasury, CBT



# Monetary Policy Stance

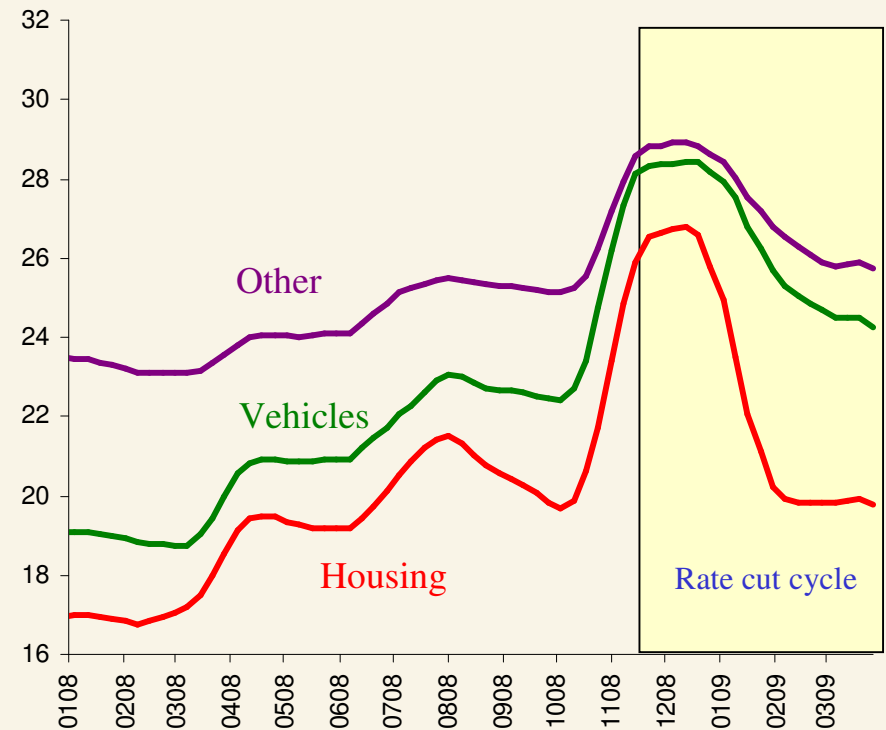
The tightness of financial conditions still persists to some degree despite recent policy rate cuts. Nevertheless, the recent decline in credit interest rates to the levels in October 2008 when the global financial crisis peaked is noteworthy.

**Retail and Commercial Loan Interest Rates**  
(January 2008 – March 2009, annual percentage)



\* 4-week moving average  
Source: BRSA, CBT

**Consumer Loans Interest Rates**  
(January 2007 – March 2009, annual percentage)



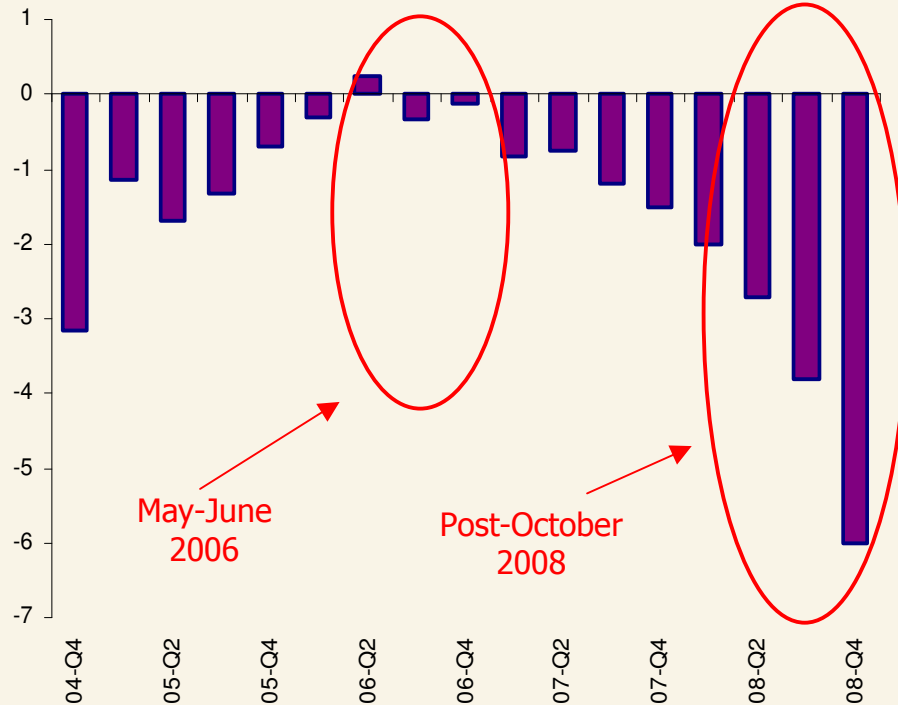
\*4-week moving average  
Source: BRSA, CBT



# Monetary Policy Stance

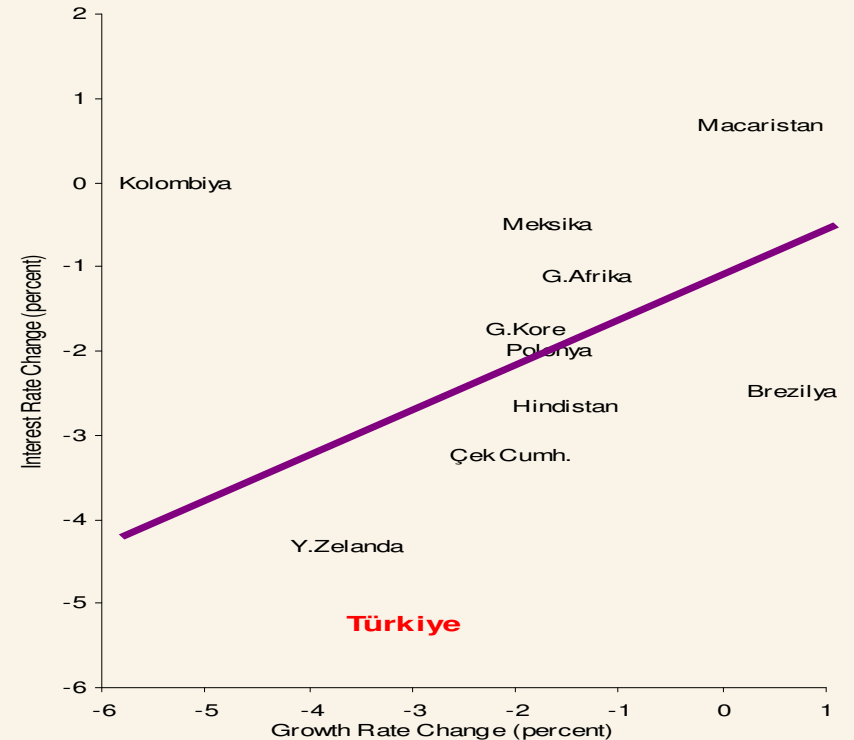
A strong relationship has been witnessed between the level of change in policy rates and the trend of economic activity since the deepening of the crisis.

**Output Gap in Turkey**  
(2004 Q4 – 2008 Q4, percent)



Source: CBT

**Growth Rate Change and Policy Rate Change  
between 2007 Q4 – 2008 Q3**



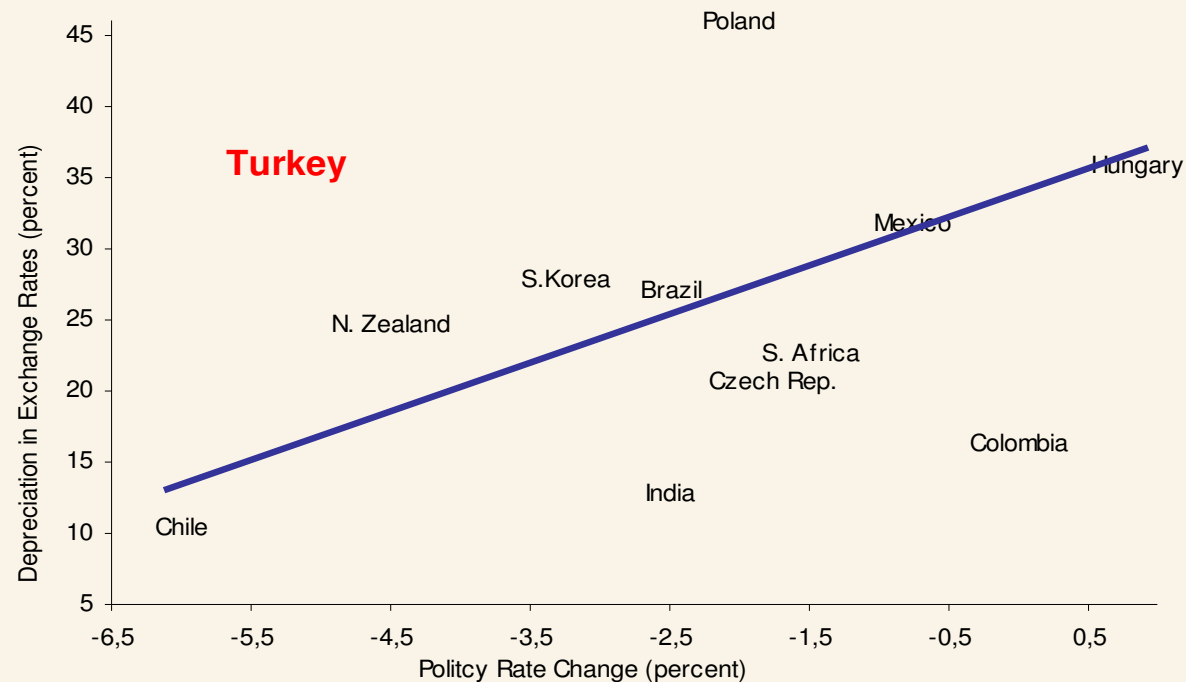
Source: Bloomberg, CBT



# Monetary Policy Stance

**Recent volatilities in exchange rates in the aftermath of interest rate decisions suggest that the policy rate flexibility of exchange rates may remain at low levels relative to the periods of stability.**

***Policy Rate Change and Depreciation of Local Currency Units***  
*(12 September 2008 - 23 March 2009, percent)*

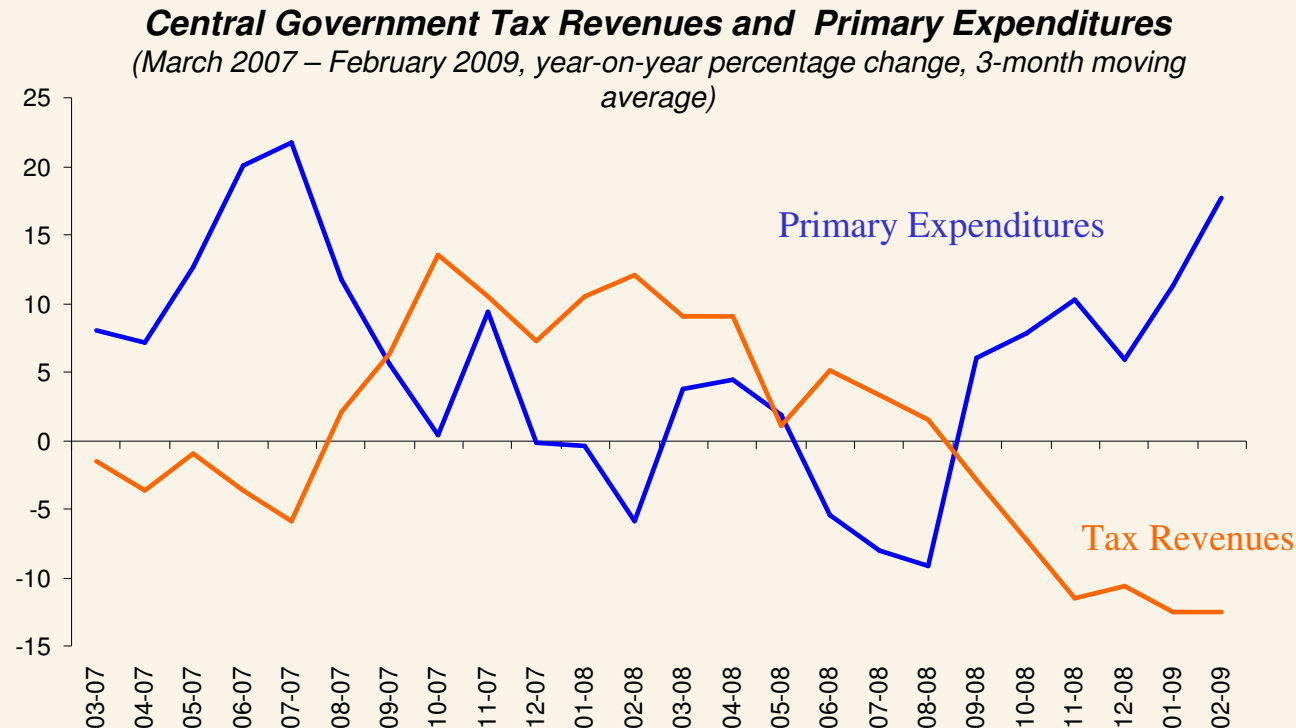


Source: Central Banks, CBT



# Monetary Policy Stance

**Rise in the public sector borrowing requirement may impair monetary policy decisions' impact on the economic activity. Short-term expansion in the fiscal policy should be supported by a fiscal framework that would ensure the medium-term sustainability of the debt dynamics.**



Source: Undersecretariat of Treasury, CBT





# New Turkish Lira Liquidity

**In case of an increase in TL liquidity squeeze in the market in the upcoming period, the Central Bank will take the following measures, provided that they do not conflict with the objective of price stability;**

1. The operational structure may be modified by bringing forward a technical interest rate cut
2. Depending on the course of the liquidity squeeze,
  - a. Extension of the maturity of repo funding,
  - b. Direct purchases of government securities from the secondary market,could be considered.
3. If the increase in liquidity squeeze becomes permanent and other measures are not sufficient, TL-denominated required reserves may be reduced to a limited extent.



# Measures on FX Liquidity

**The Central Bank, when deemed necessary, will always continue to take additional measures within its means prudently in order to ensure the smooth functioning of the FX market and to support FX liquidity.**

## **Potential Measures:**

1. *Directly intervening in the foreign exchange market under the basic principles of the floating exchange rate regime in the event of further intensifying of the financial turmoil in global markets that might have negative impacts on the Turkish economy,*
2. *Increasing transaction limits for banks in the Foreign Exchange and Banknotes Markets,*
3. *Extending borrowing maturities and reducing lending rates in the Foreign Exchange Deposit Markets,*
4. *Further reducing the FX required reserve ratio to a limited extent could be considered.*



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

**Antalya Chamber of Commerce and  
Industry**

**Durmuş YILMAZ  
Governor**

**2 April 2009**