



# CENTRAL BANK OF THE REPUBLIC OF TURKEY

Mehmet Yörükođlu  
Deputy Governor

July 2008



# Presentation Plan

- I. International Developments and Their Effects on the Turkish Economy
- II. Financial Stability in Turkey
- III. Inflation Developments, Forecasts and Risks
- IV. Monetary Policy Stance
- V. Economic Outlook



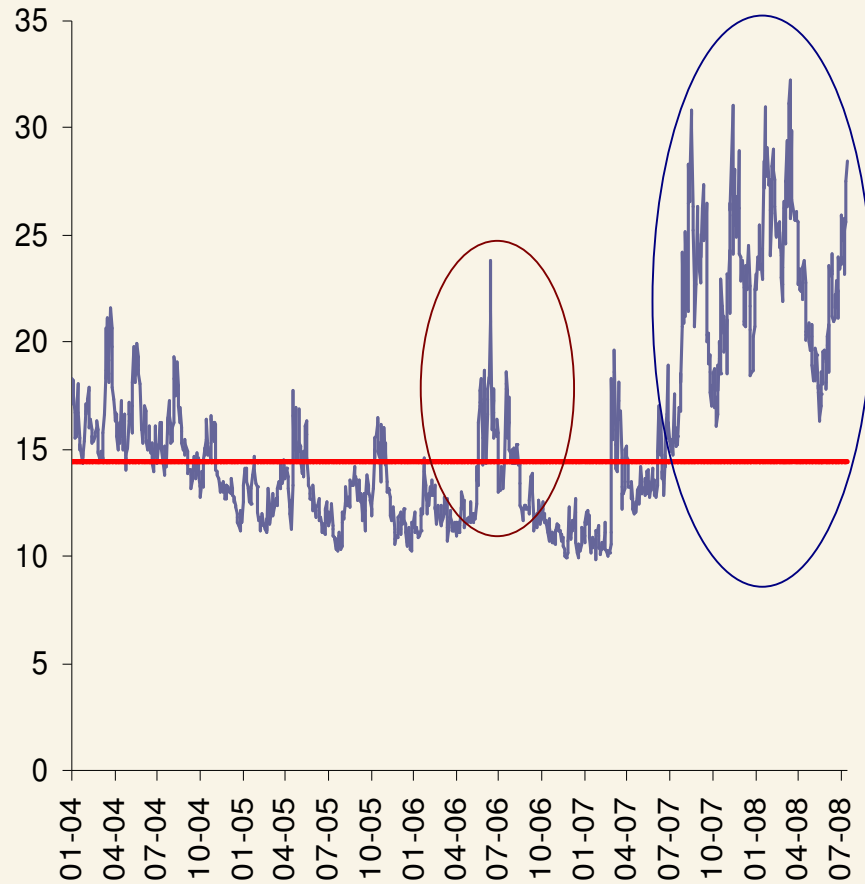
# **I. International Developments and Their Effects on the Turkish Economy**



# International Developments

## Volatility Index

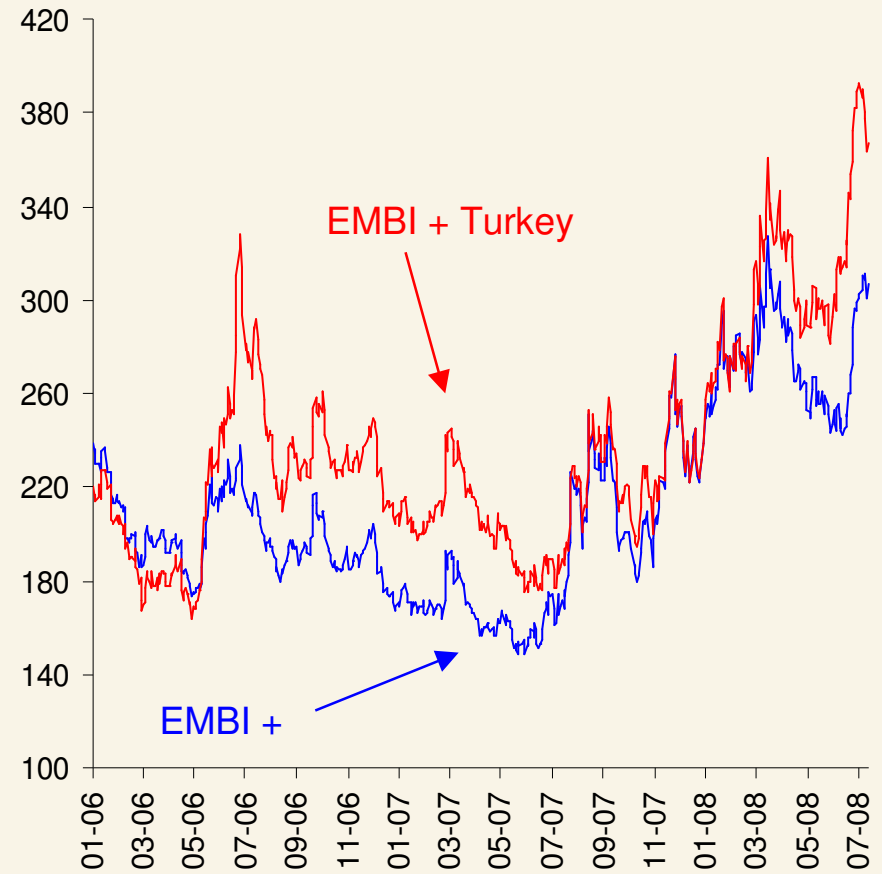
(1 January 2004 – 14 July 2008)



Source: Chicago Board of Exchange

## Risk Indicators

(1 January 2006 – 14 July 2008, basis point)



Source: JP Morgan



# Effects on the Turkish Economy

**Slowdown in the global economy**



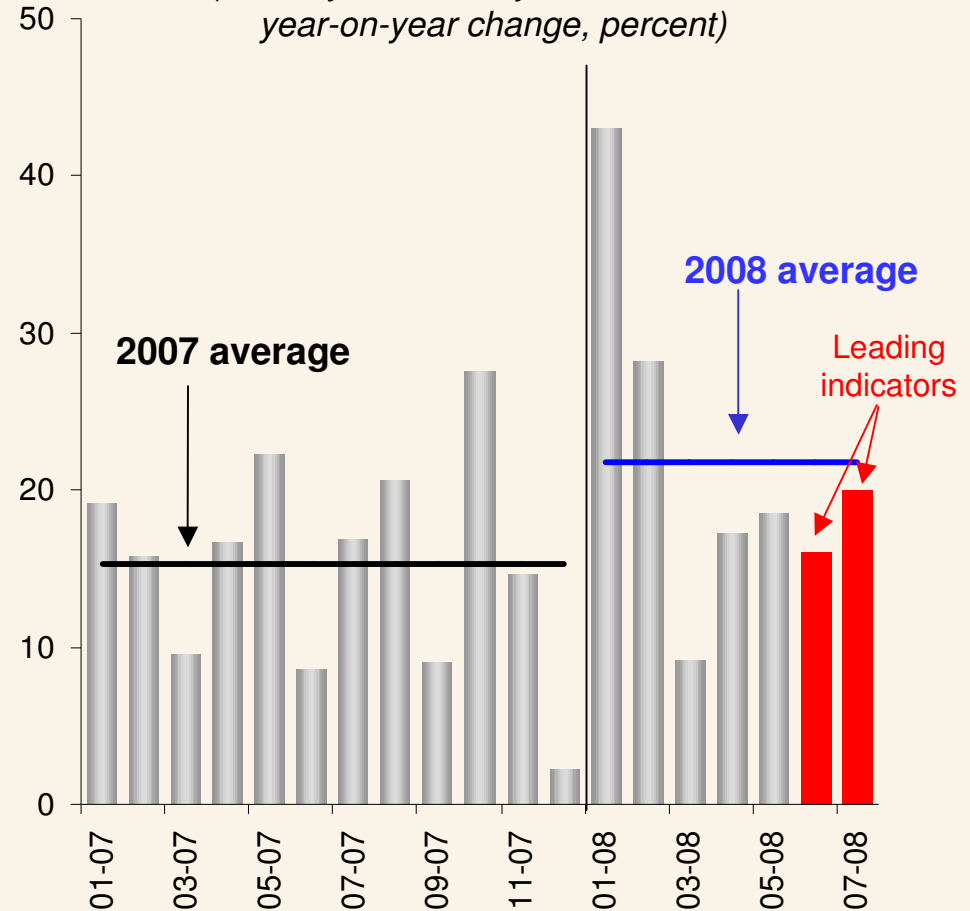
**Has the potential to restrain growth in external demand**



**Not happened (so far)**

## Export Growth

(January 2007 – July 2008, in Euros, year-on-year change, percent)

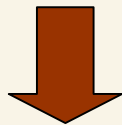


Source: TURKSTAT, TEA, CBT



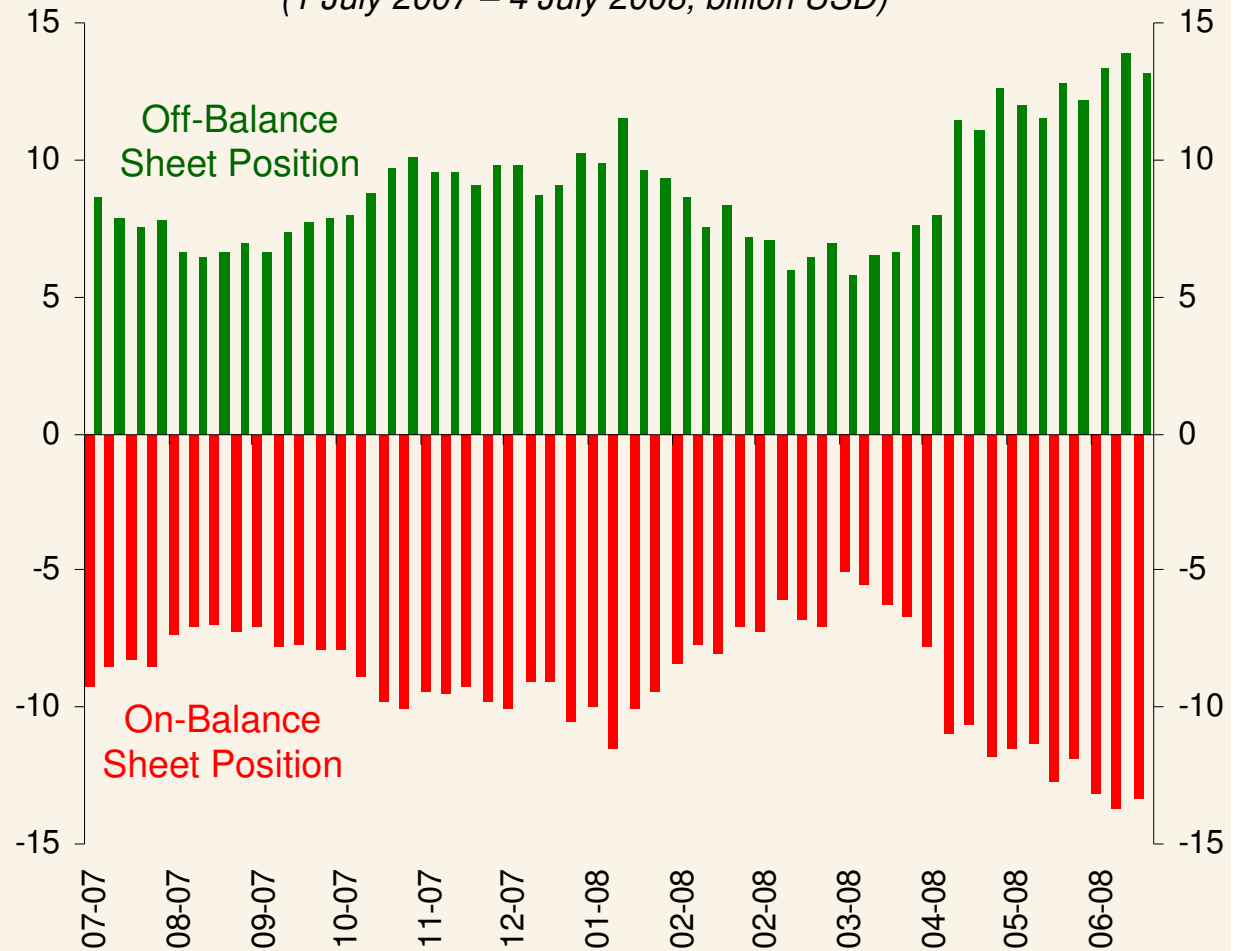
# Effects on the Turkish Economy

**Problems in external credit markets**



**Has the potential to limit domestic demand by increasing the cost of external credits of domestic banks**

**FX Position of the Banking Sector**  
(1 July 2007 – 4 July 2008, billion USD)



Source: BRSA, CBT



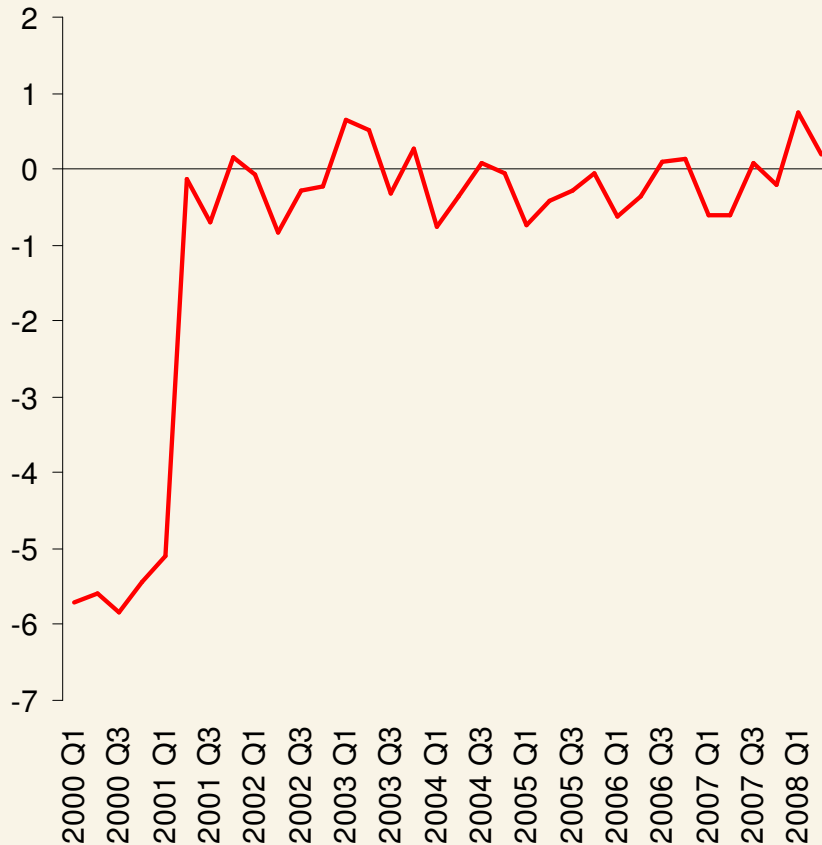
## II. Financial Stability in Turkey

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



# Banking Sector

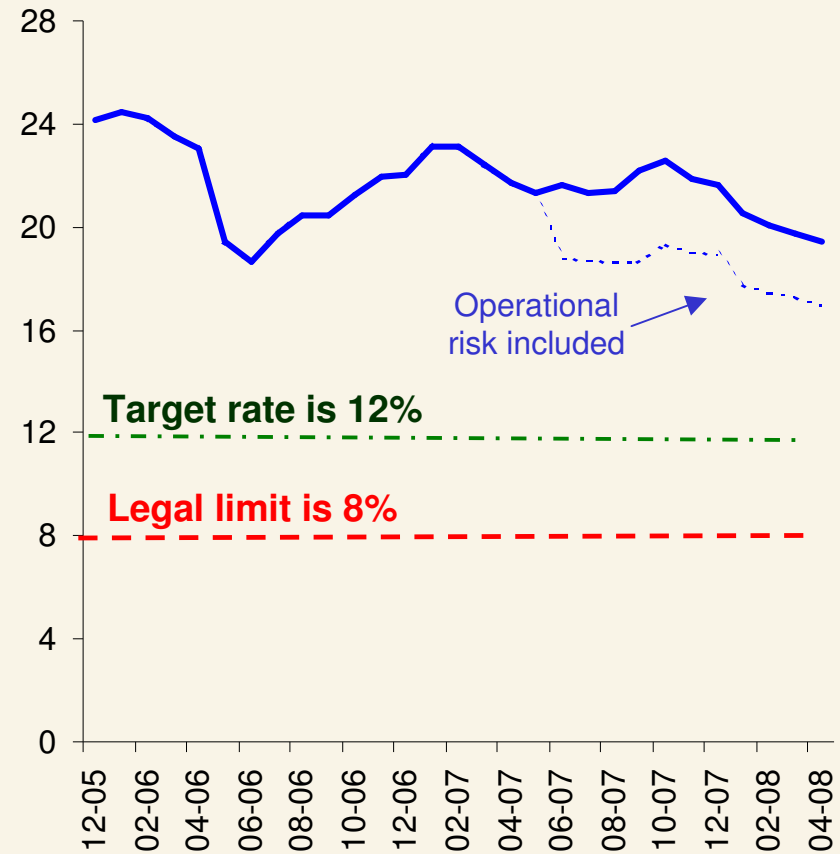
**Net FX Position of the Banking Sector**  
(2000 Q1 – 2008 Q2\*, billion USD)



\* As of June 20, 2008

Source: BRSA, CBT

**Capital Adequacy Ratio**  
(December 2005 – April 2008, percent)



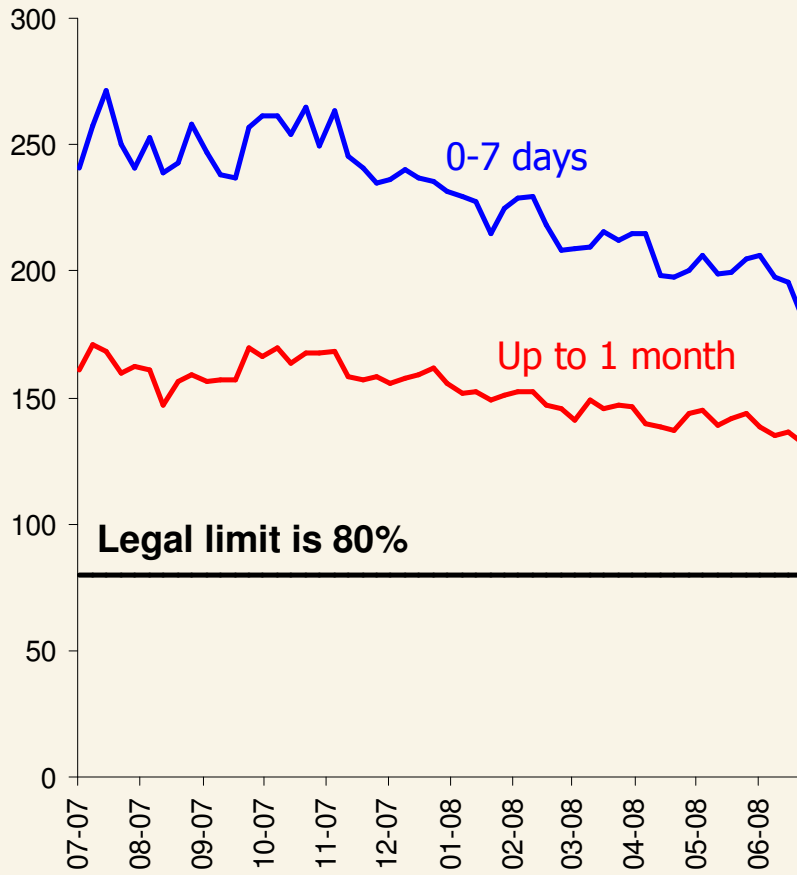
Source: BRSA, CBT





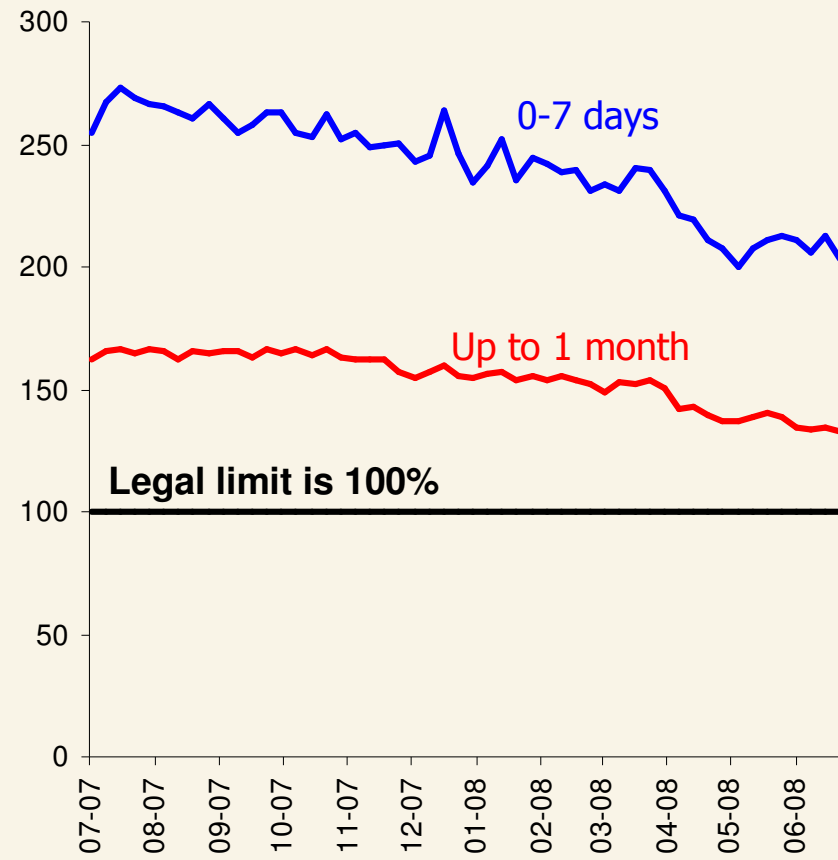
# Banking Sector

**Short-Term FX Liquidity Ratio**  
(6 July 2007 – 27 June 2008, percent)



Source: BRSA, CBT

**Total Short-Term Liquidity Ratio**  
(6 July 2007 – 27 June 2008, percent)

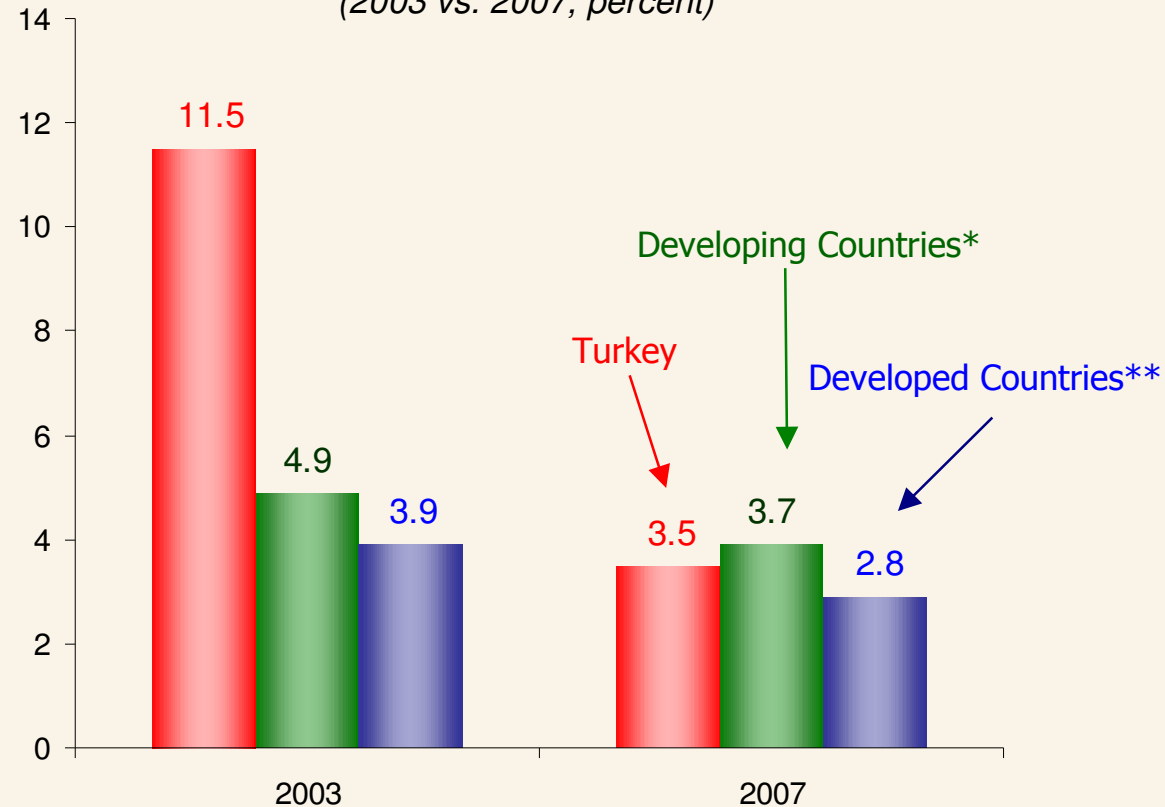


Chile, : BRSA, CBT



# Banking Sector

**Ratio of Non-Performing Loans to Total Loans**  
(2003 vs. 2007, percent)



\* **Developing countries:** Argentina, Brazil, Bulgaria, Czech Republic, Croatia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Ukraine

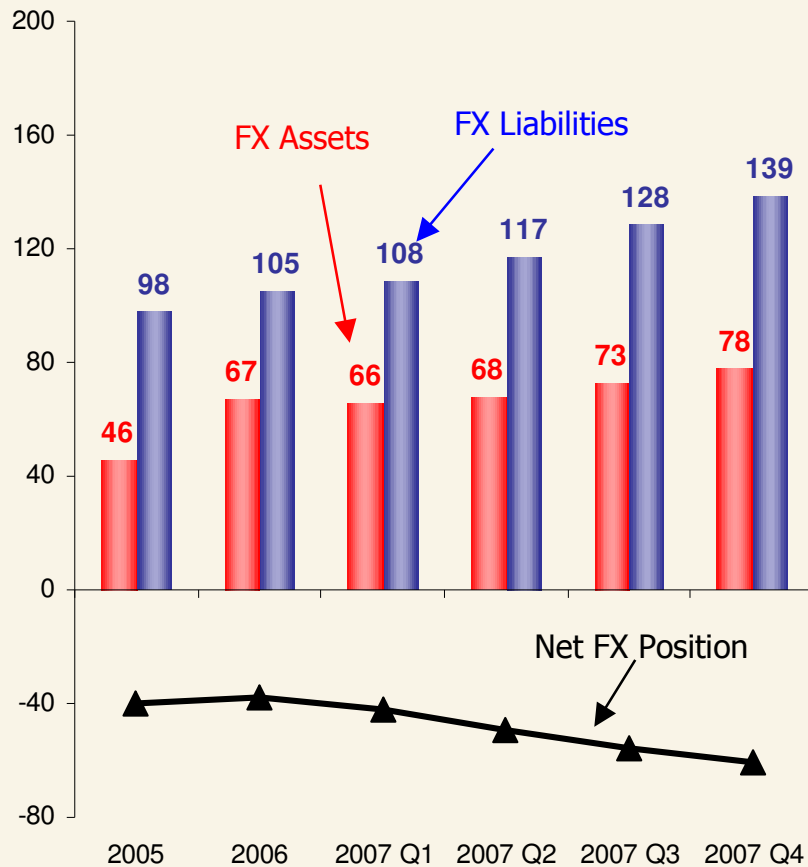
\*\* **Developed countries:** France, Germany, Italy, United Kingdom, USA

Source: IMF, CBT



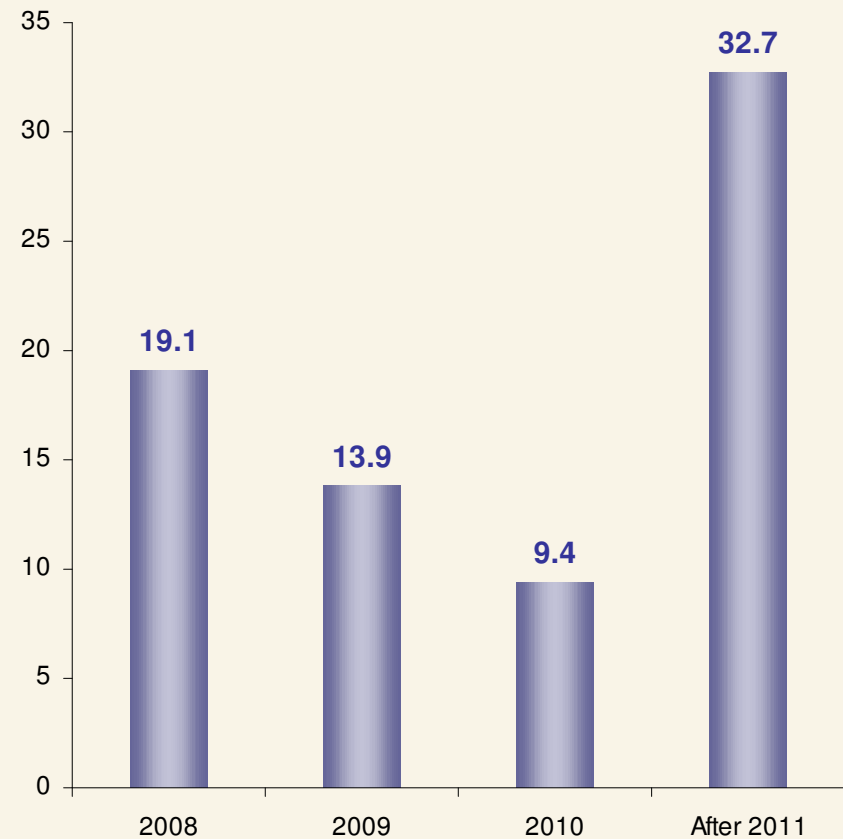
# Corporate Sector

### FX Position of the Corporate Sector (2005 – 2007 Q4, billion USD)



Source: CBT

### Maturity Composition of the Long-term External Debt of the Corporate Sector (2007 Q4, billion USD)



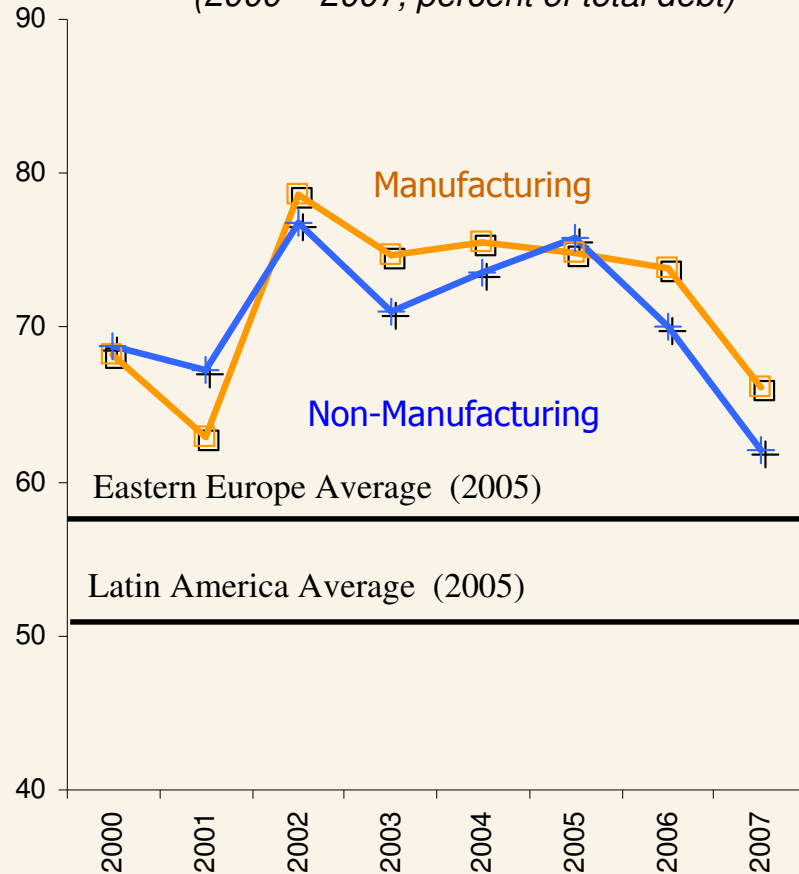
\* Days to maturity

Source: CBT



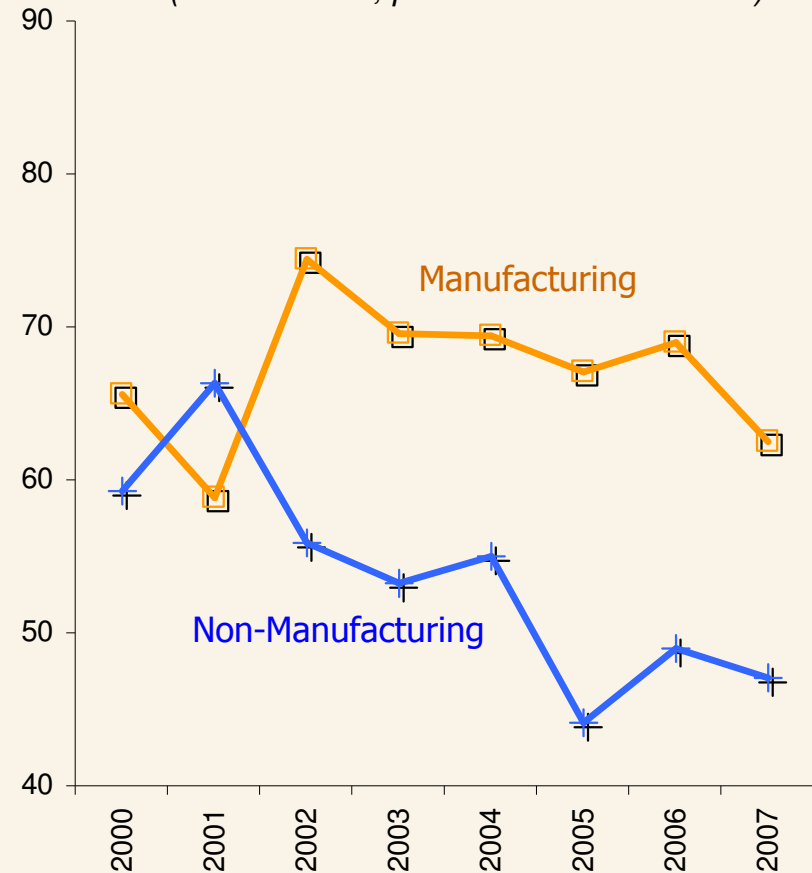
# Corporate Sector

**Short-Term Debt of the Corporate Sector\***  
(2000 – 2007, percent of total debt)



\* Days to maturity  
Source: CBT

**Short-Term FX Debt of the Corporate Sector \***  
(2000 – 2007, percent of total FX debt)



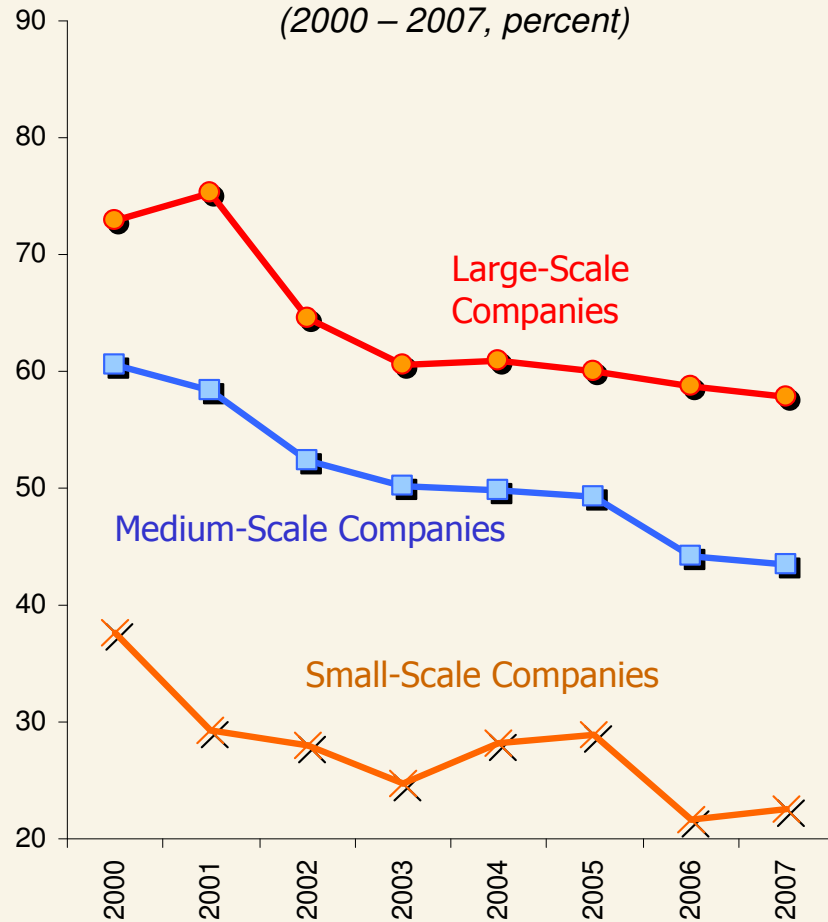
\* Days to maturity  
Source: CBT



# Corporate Sector

## Debt Dollarization of the Manufacturing Sector

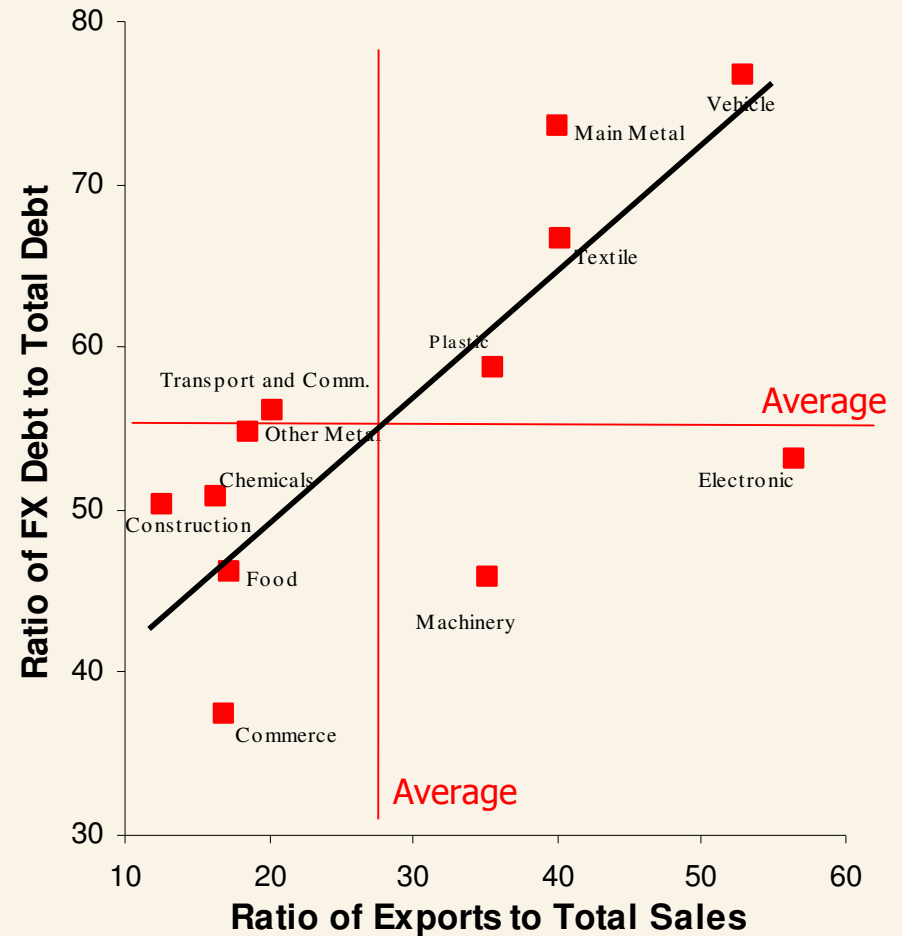
(2000 – 2007, percent)



Source: CBT

## Exports and FX Debt

(2006, percent)

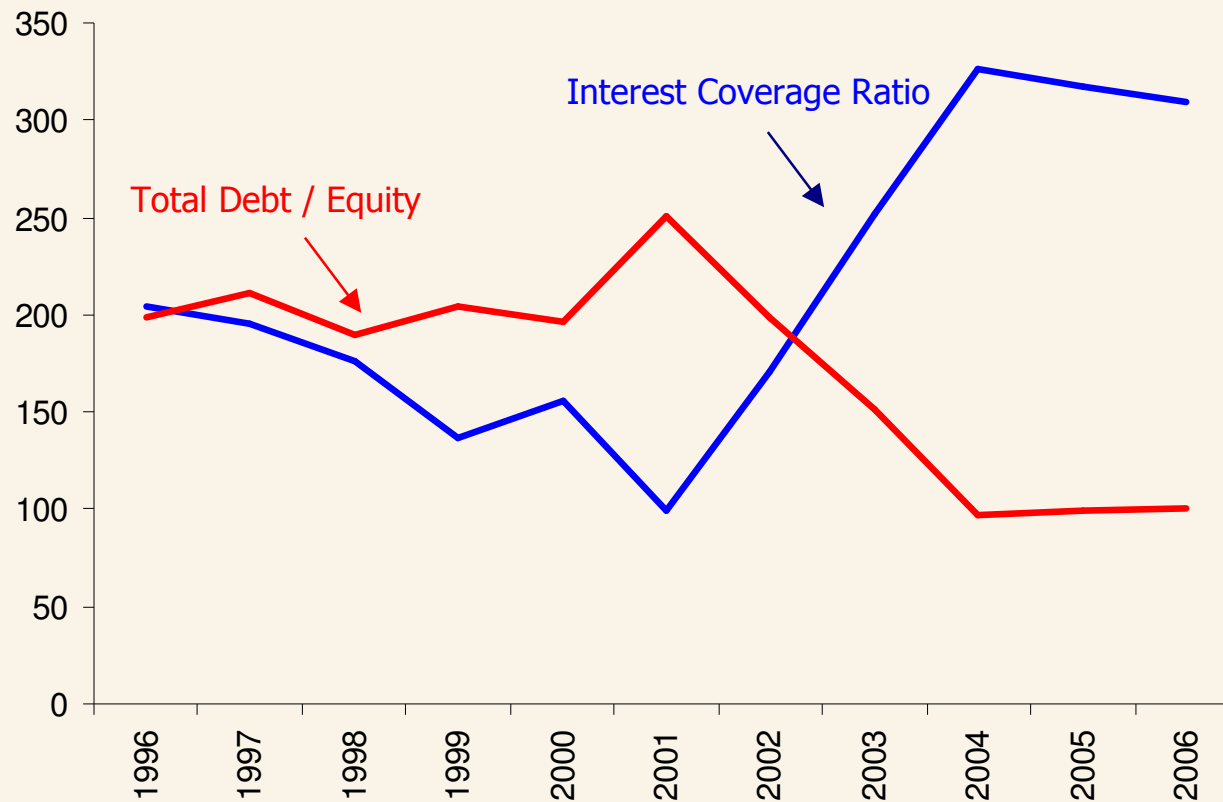


Source: CBT



# Corporate Sector

**Total Debt to Equity Ratio and Interest Coverage Ratio\***  
(1996 – 2006, percent)



\* Ratio of operating profit to interest payments

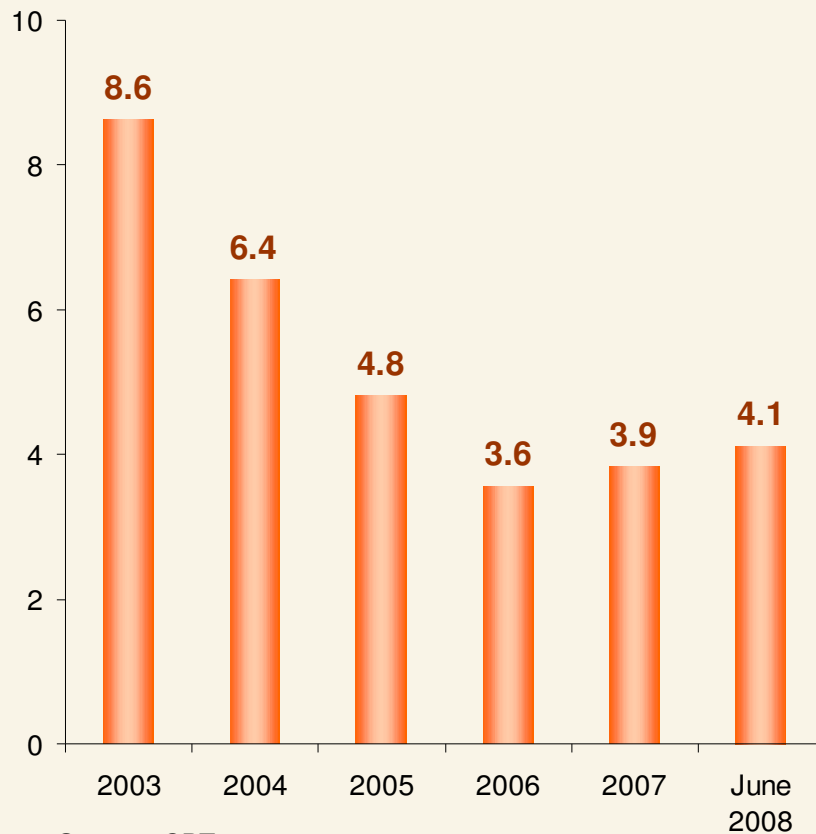
Source: CBT



# Households

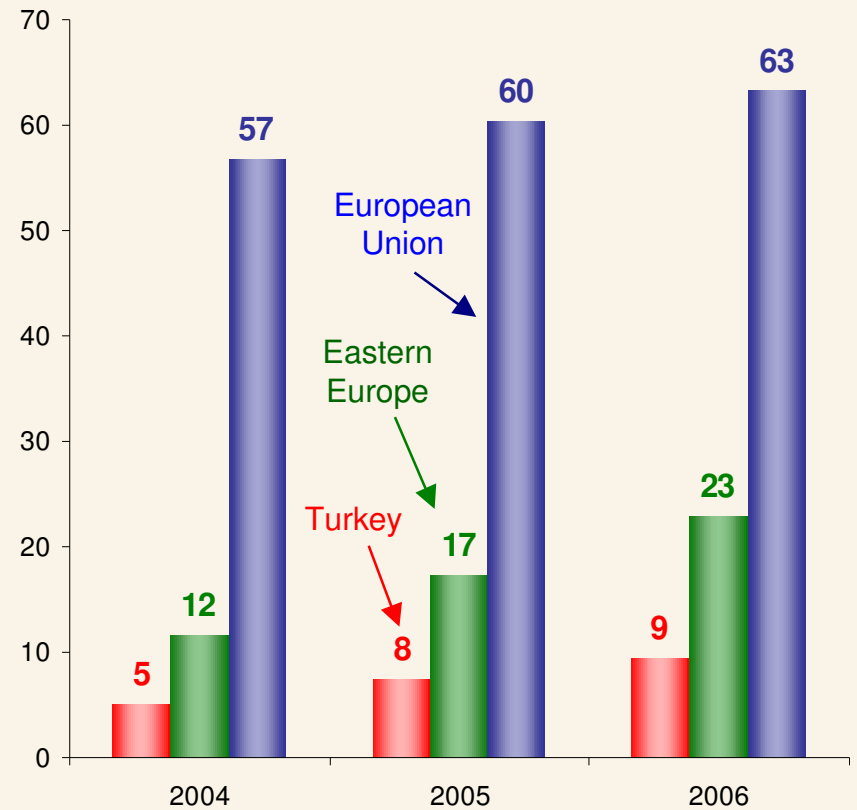
## FX Debt of Households

(2003 – June 2008, percent of total consumer loans)



## Total Household Liabilities

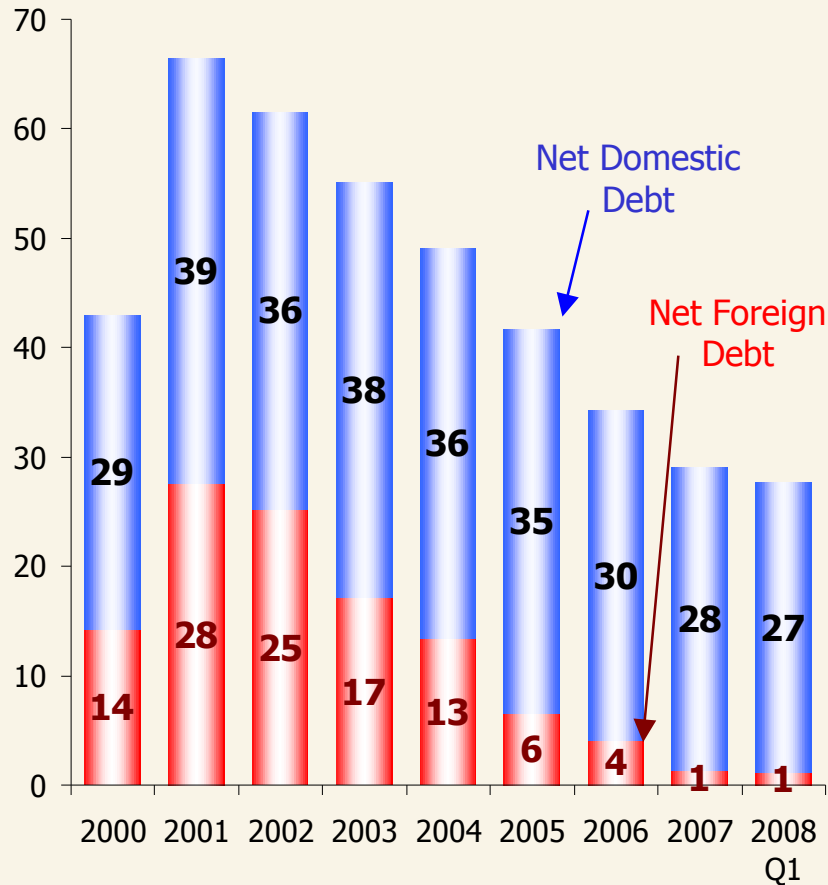
(2004 – 2006, percent of GDP)





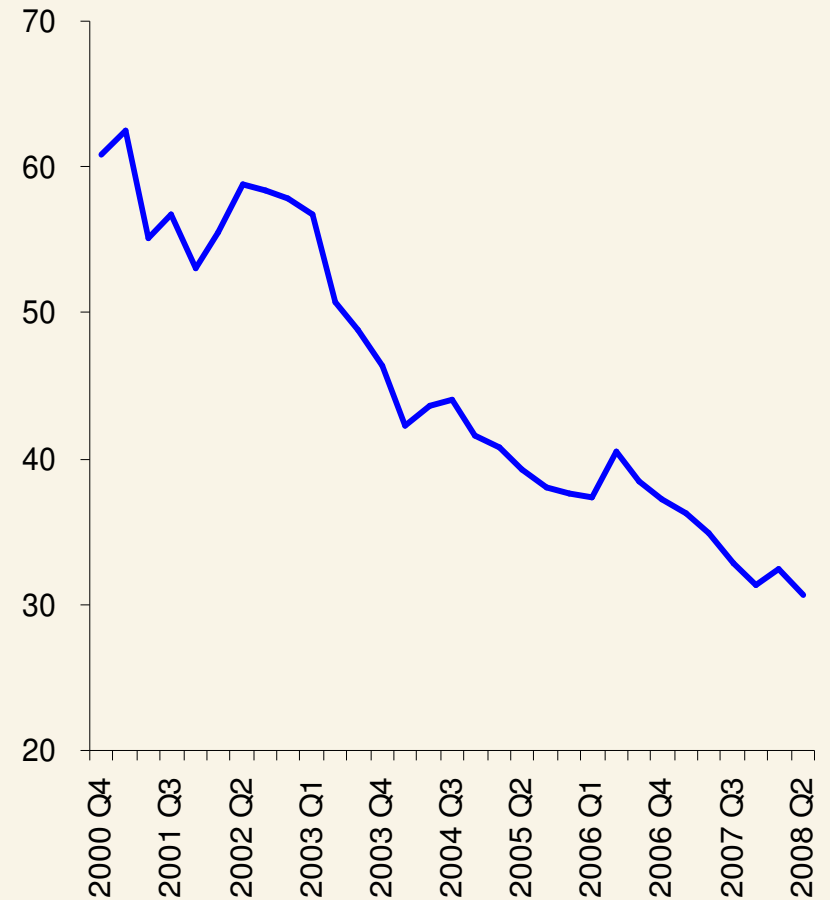
# Public Sector

**Public Sector Net Debt Stock**  
(2000 – 2008 Q1, percent of GDP)



Source: Treasury, CBT

**FX Debt of Central Government\***  
(2004 Q4 – 2008 Q2, percent of total central government debt)



\* FX-denominated and FX-indexed debt

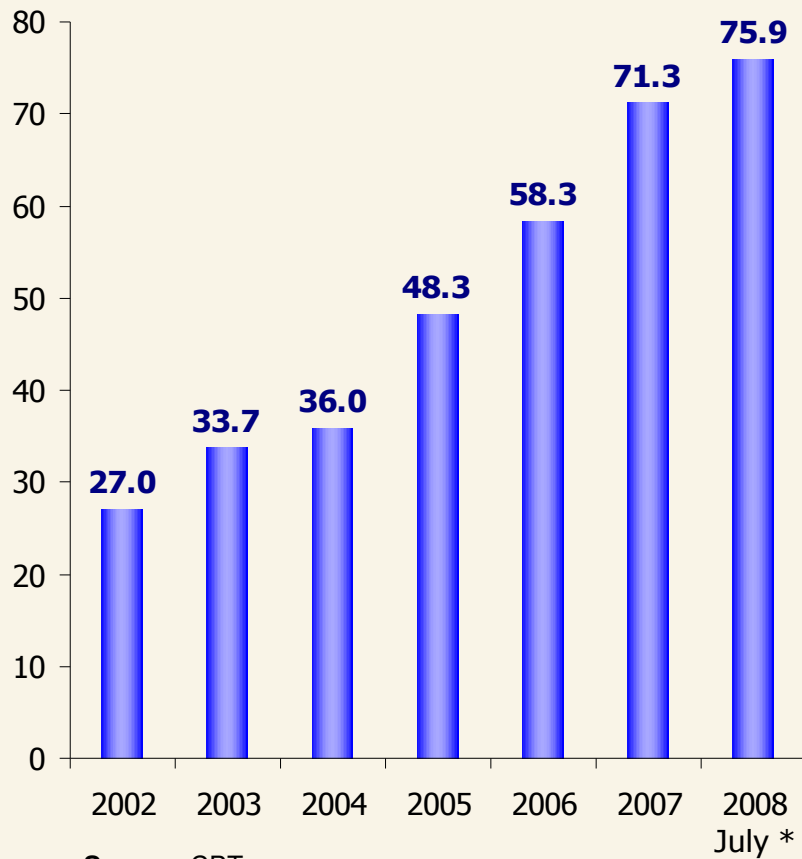
Source: Treasury, CBT





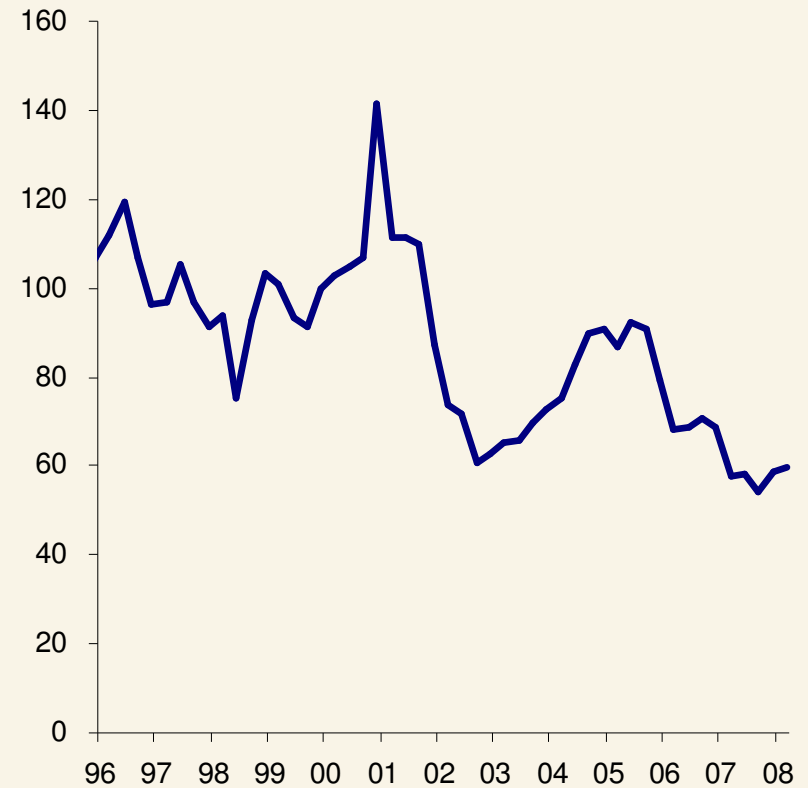
# Central Bank Foreign Exchange Reserves

**Central Bank FX Reserves**  
(2002 – July 2008, billion USD)



Source: CBT  
\* July 4, 2008

**Ratio of Short Term Debt to Central Bank FX Reserves**  
(1996 – 2008 Q1, percent)



Source: CBT

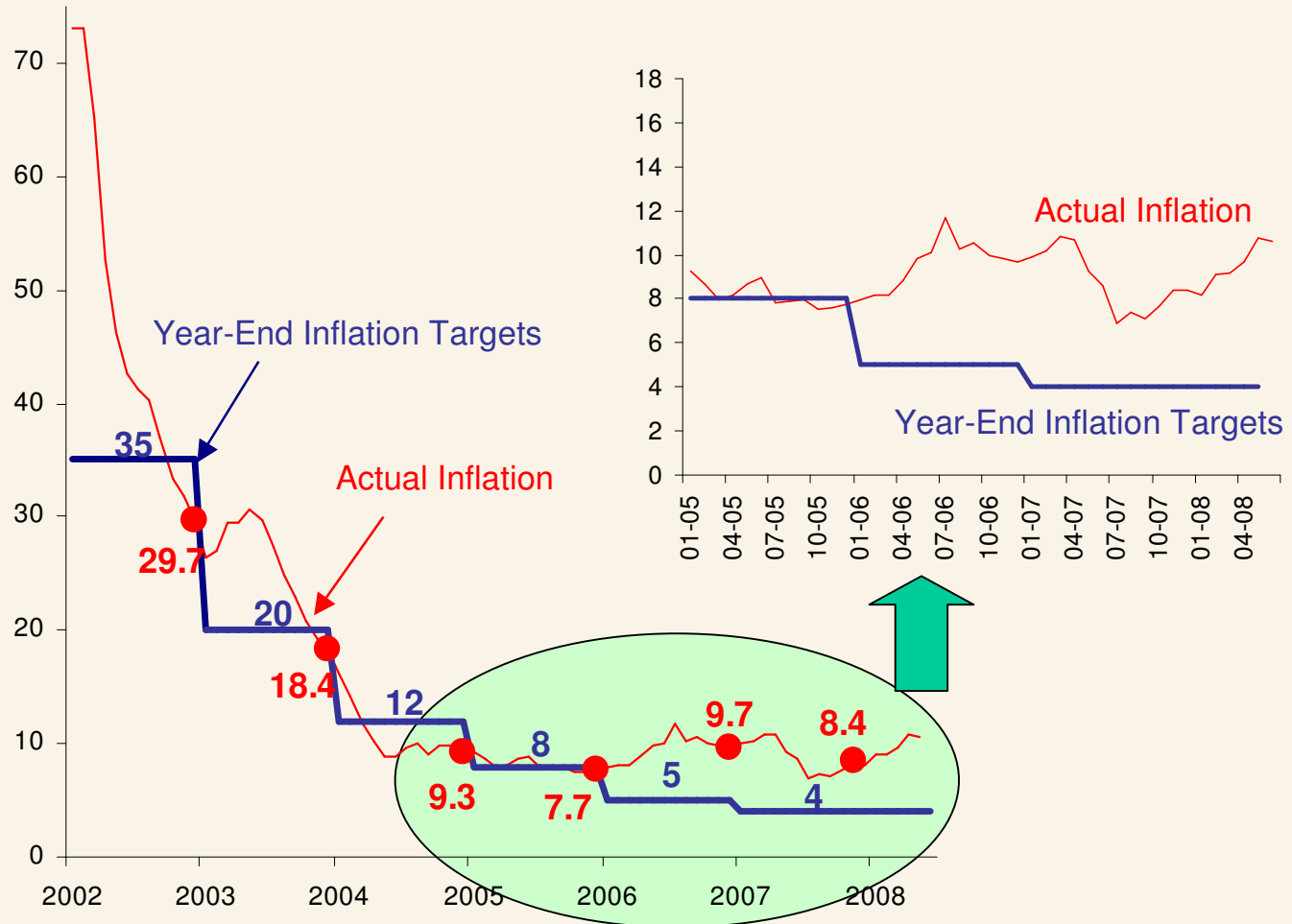


## **III. Inflation Developments, Outlook and Risks**



# Inflation – Recent Developments

**Actual Inflation Figures and Year-End Inflation Targets**  
(January 2002 – June 2008, year-on-year change, percent)



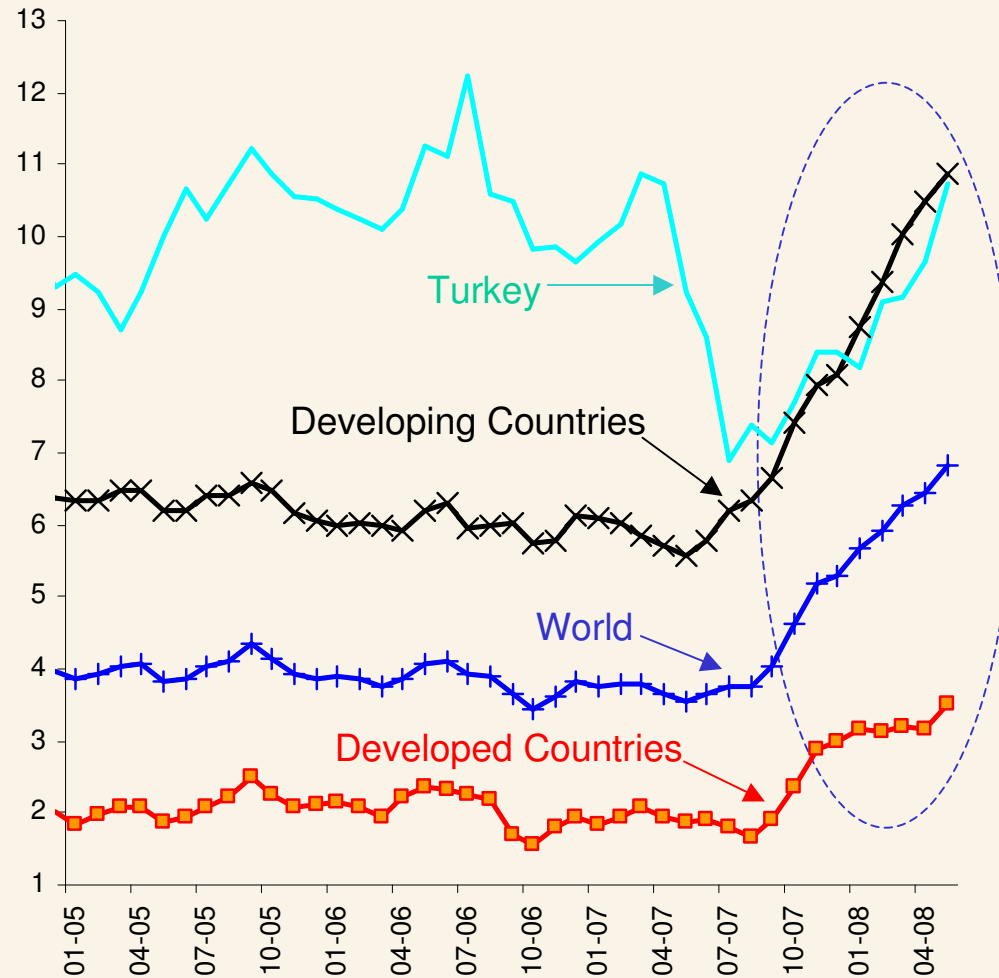
Source: TURKSTAT, CBT



# Global Inflation Developments

## Global Inflation Developments

(January 2005 – May 2008, Consumer prices, year-on-year change, percent)

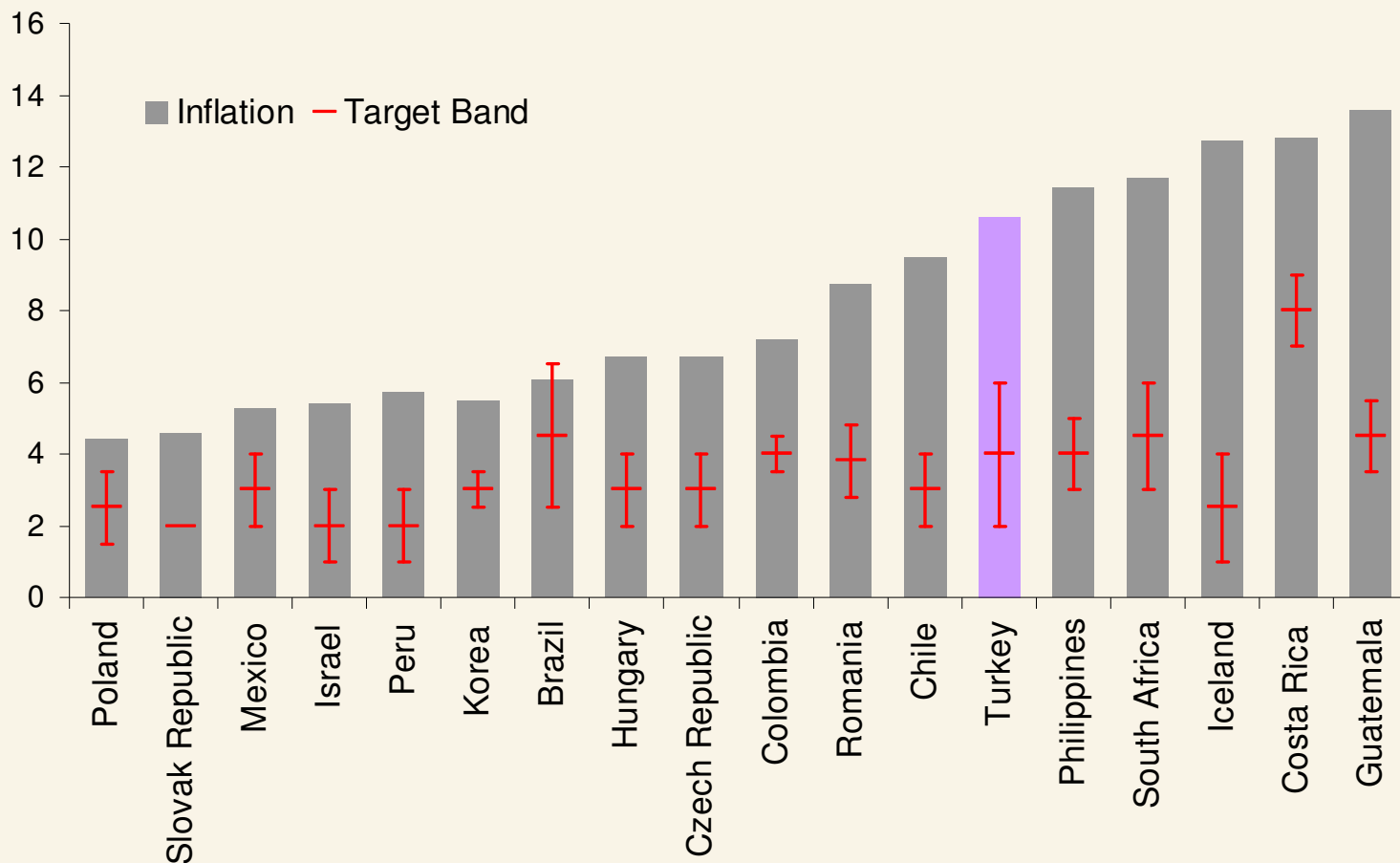


Source: IFS, Central Banks, CBT



# Comparative Inflation Developments

**Latest Inflation Figures in Inflation Targeting Countries\* as of June 2008**  
(year-on-year change, percent)

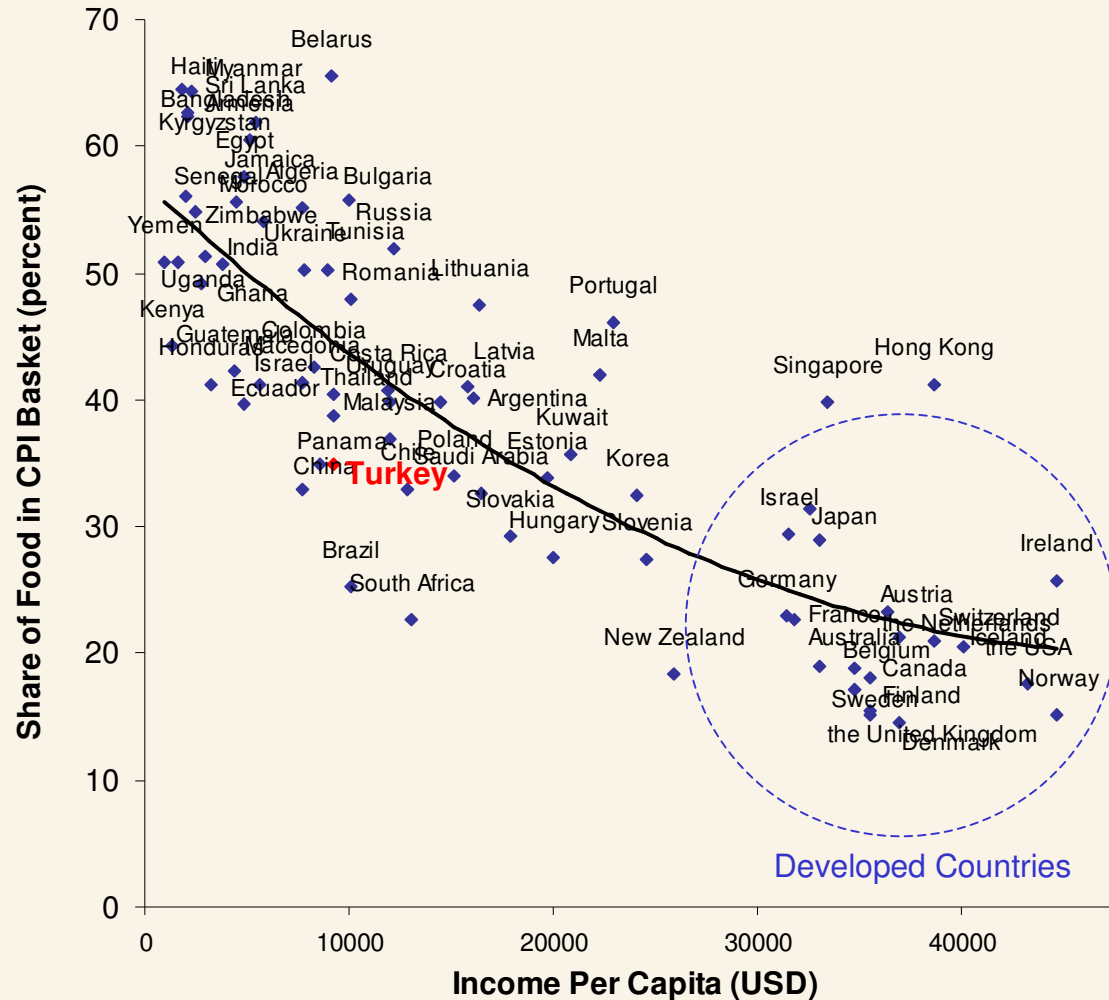


\* Among developing countries  
Source: Central Banks, CBT



# Inflationary Dynamics Among Country Groups

**Share of the Food in CPI Basket (2006, percent)  
and Income Per Capita (Purchasing Power Parity, 2006, USD)**

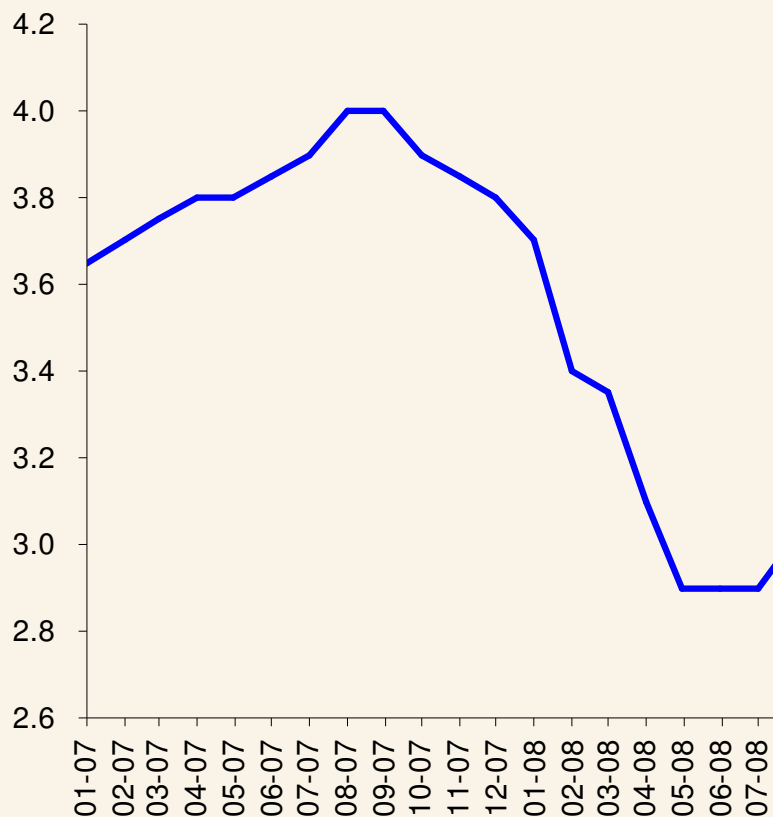


Source: ILO, CBT



# Differences in Monetary Policies

**Policy Rates in Developed Countries\***  
(January 2007 – July\*\* 2008, percent)

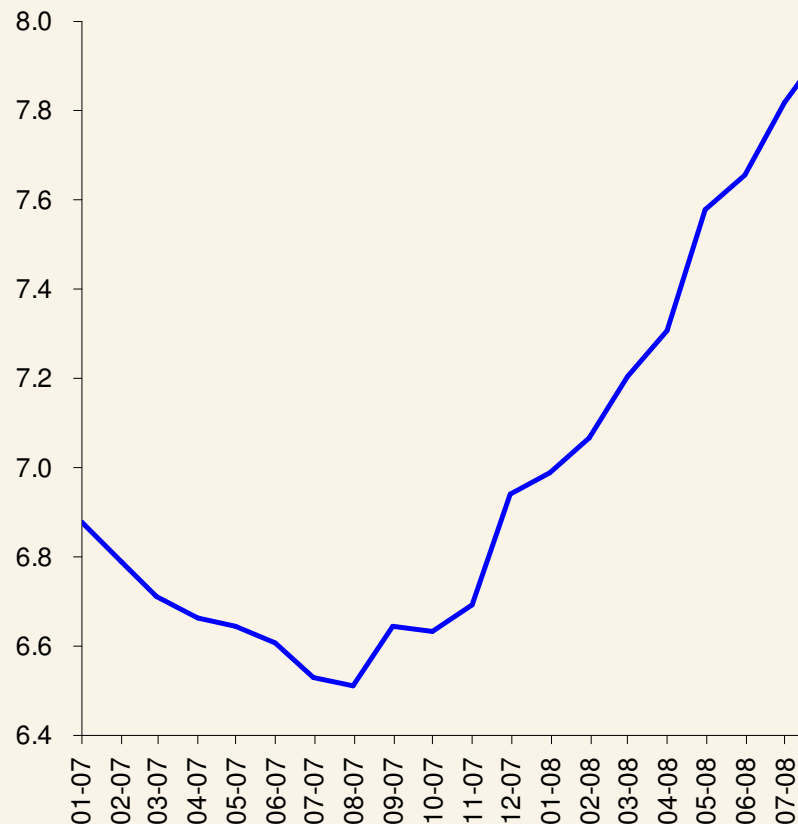


\* USA, Eurozone, UK, Japan, Canada

\*\* July 14, 2008

Source: Central banks

**Policy Rates in Developing Countries\***  
(January 2007 – July\*\* 2008, percent)



\* Brazil, Czech Republic, Chile, Hungary, Mexico, Poland, Romania, Russia, South Africa, S. Korea, Thailand, Taiwan, Ukraine

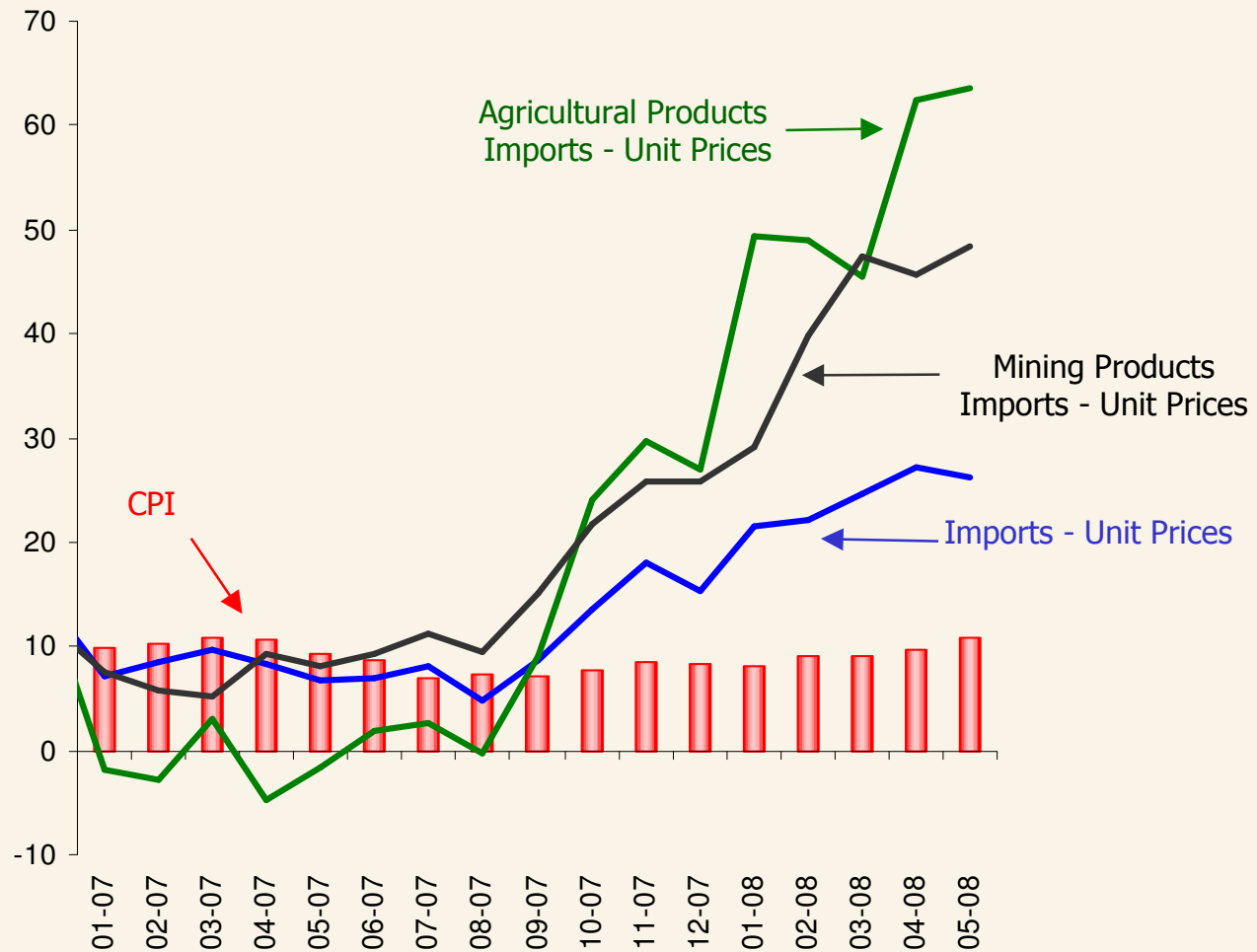
\*\* July 14, 2008

Source: Central Banks



# Effects on the Turkish Economy

**Inflation and Import Unit Prices in Turkey\***  
(January 2007 – May 2008, year-on-year change, percent)



\* In US dollars

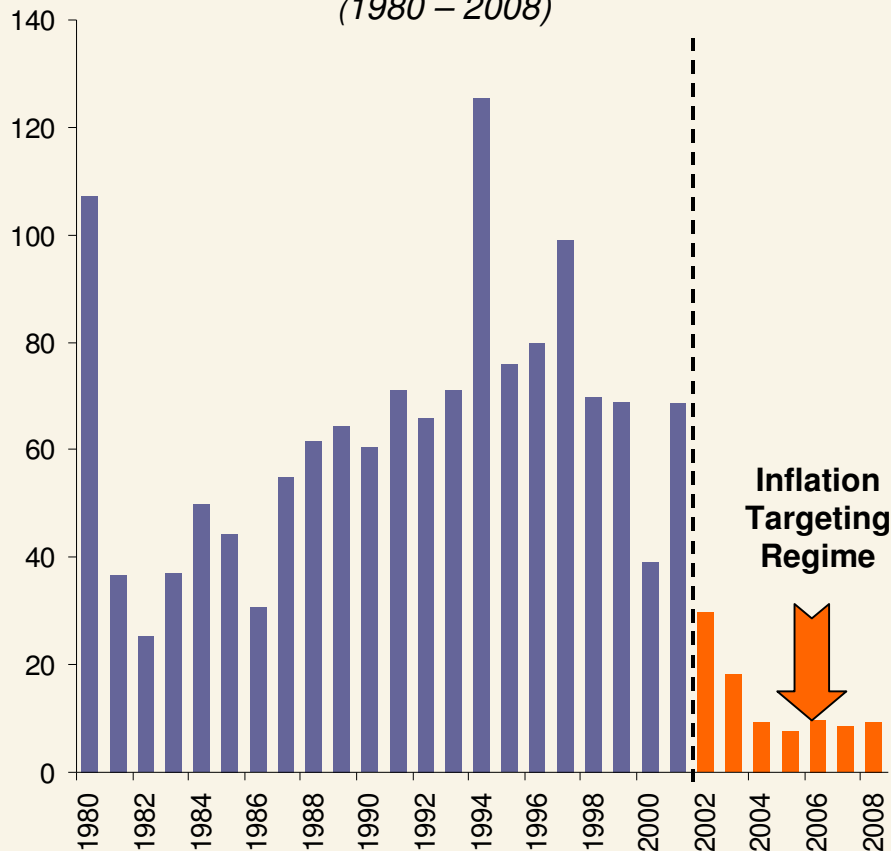
Source: TURKSTAT, CBT





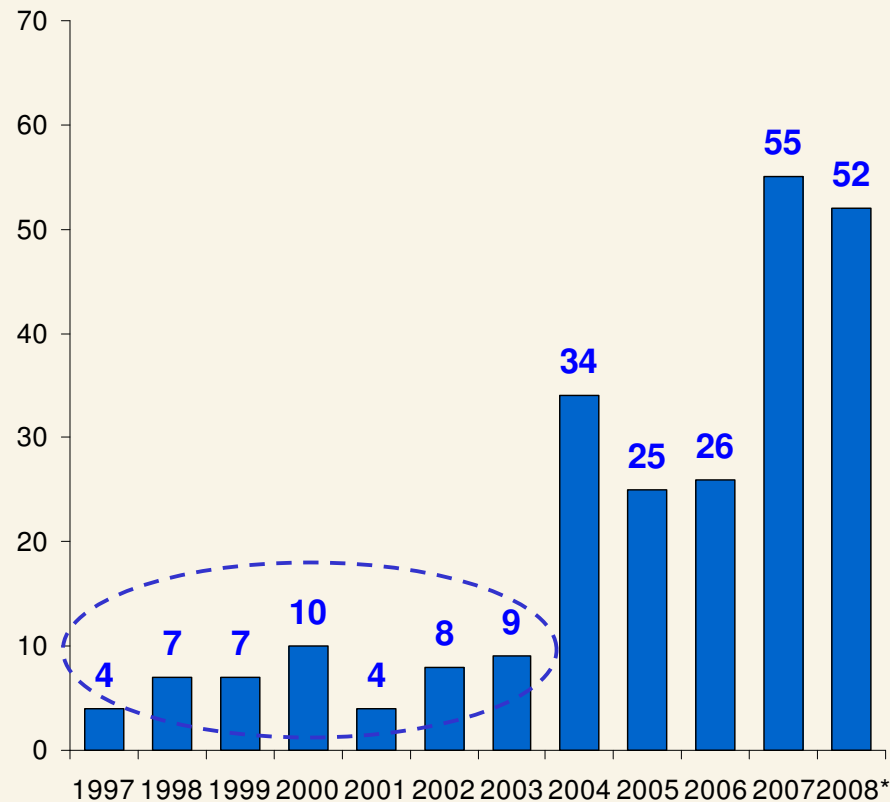
# Comparative Inflation Developments

### Inflation in Turkey (1980 – 2008)



\* 2008 forecast of the Central Bank of Turkey  
Source: TURKSTAT, CBT

### Turkey in the Global Inflation Ranking (1997 – 2008)

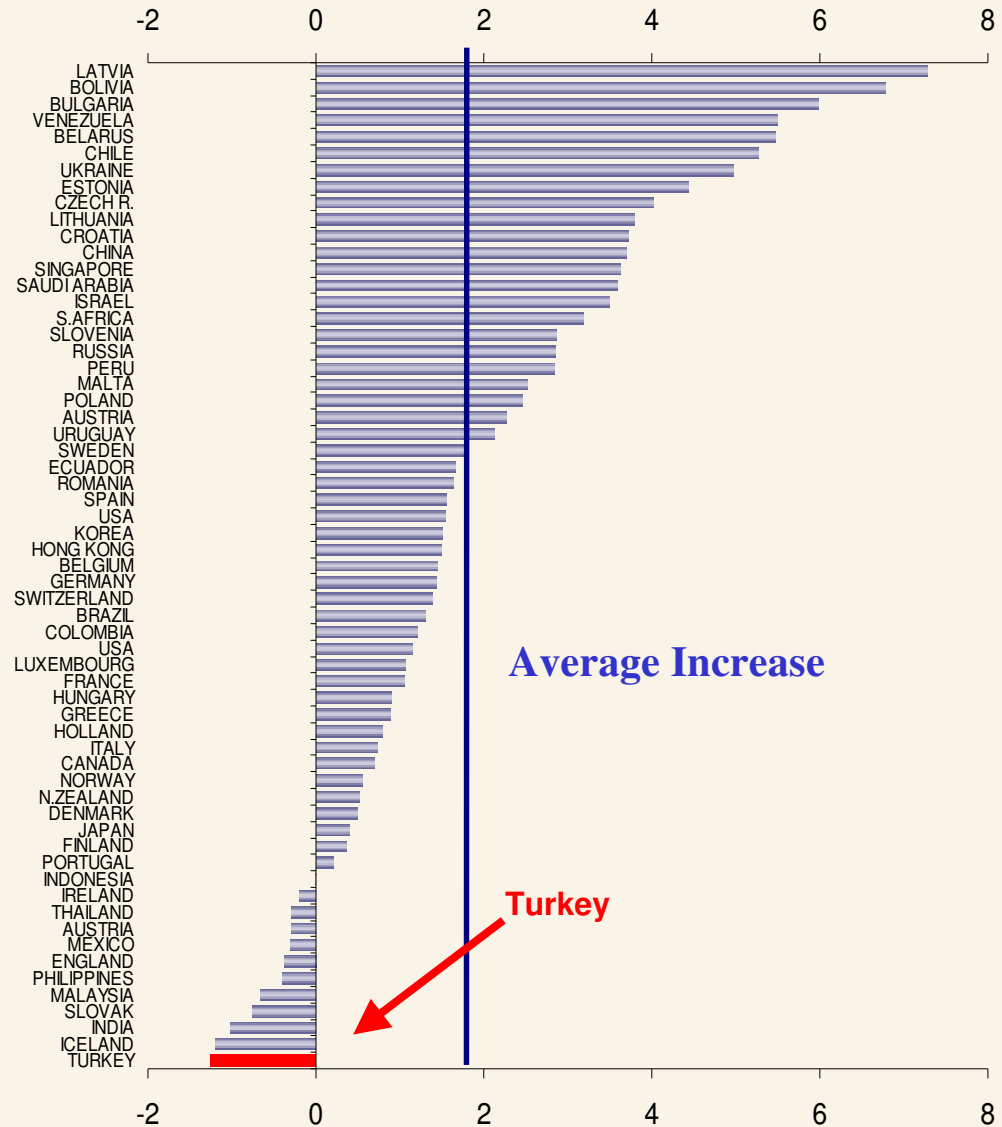


\* Most recent data as of June 2008  
The total number of countries is 155. The ranking is in descending order.  
**Source:** IMF, TURKSTAT, CBT



# Comparative Inflation Developments

**Inflation Developments in Turkey and the World**  
(Difference Between the Inflation Rates of 2006 and 2007, percent)

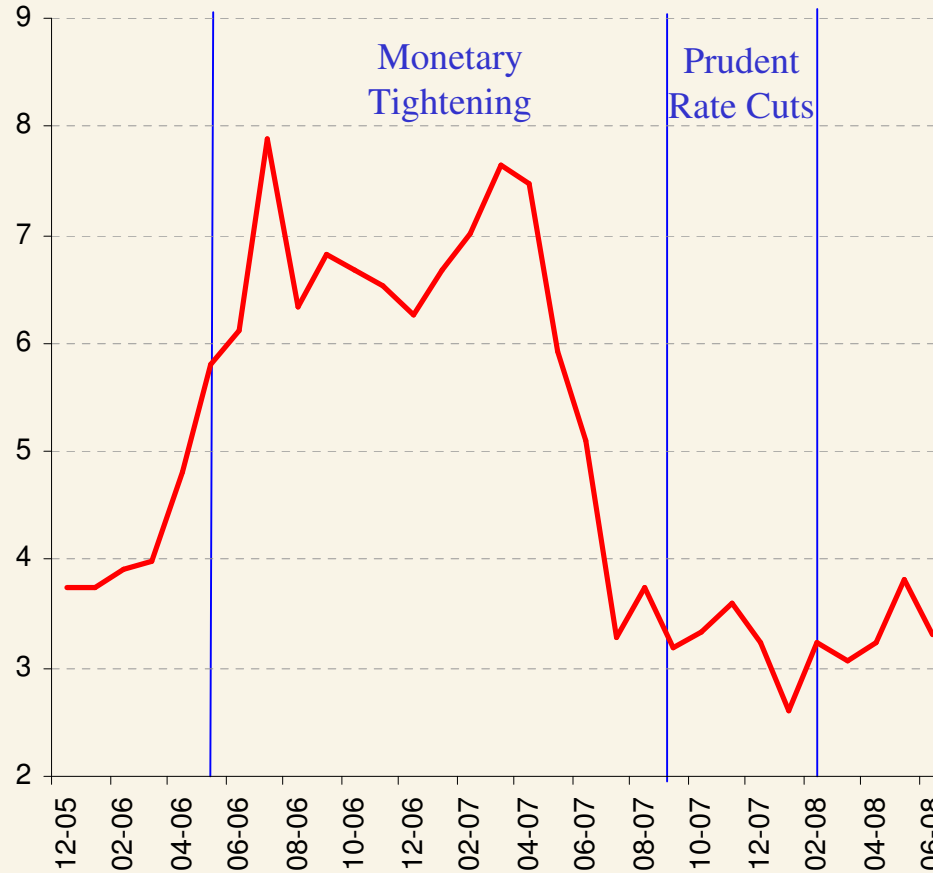


Source: IMF, TURKSTAT, CBT



# Comparative Inflation Developments

***Inflation Difference Between the Countries  
Implementing Inflation Targeting\* and Turkey***  
(December 2005 – June 2008\*\*, year-on-year change, percent)



\* Brazil, Chile, Colombia, Czech Rep., South Africa, Israel, Hungary, Mexico, Peru, Philippines Poland, Romania, Slovakia, Thailand

\*\* Latest figures as of June 2008

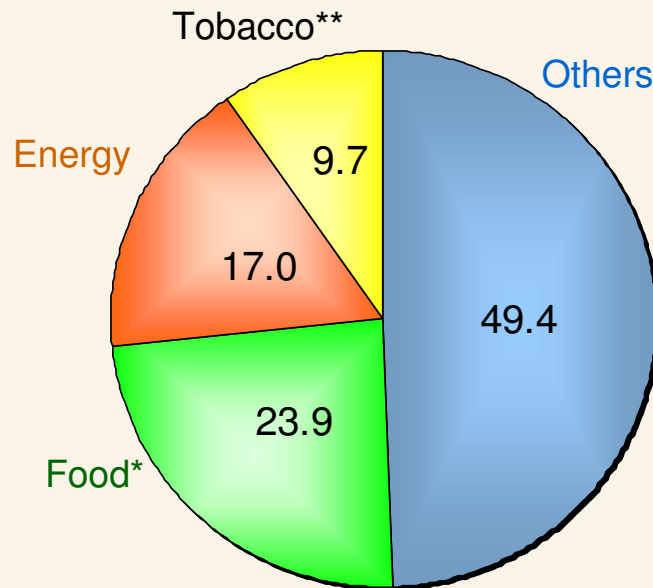
Source: Central Banks, TURKSTAT, CBT



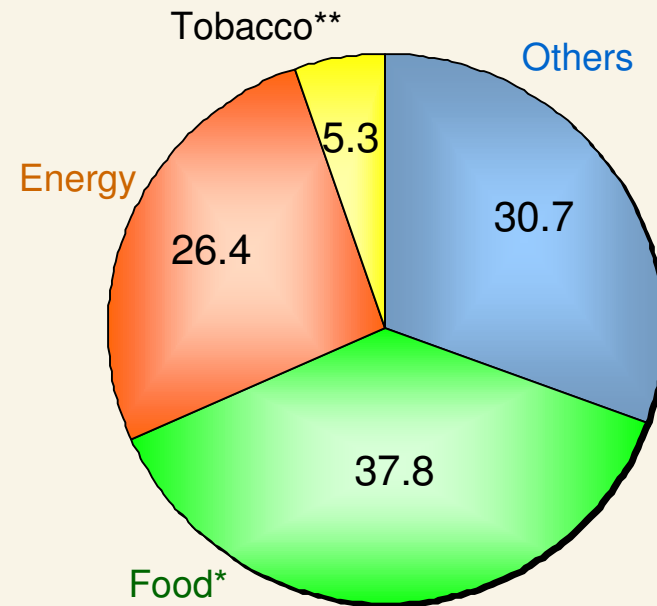
# Inflation Developments in Turkey

## Components of Year-on-Year Inflation (percentage share)

Average of 2004 – 2006



June 2008



\* Food: Food and non-alcoholic beverages

\*\* Tobacco: Tobacco products and alcoholic beverages

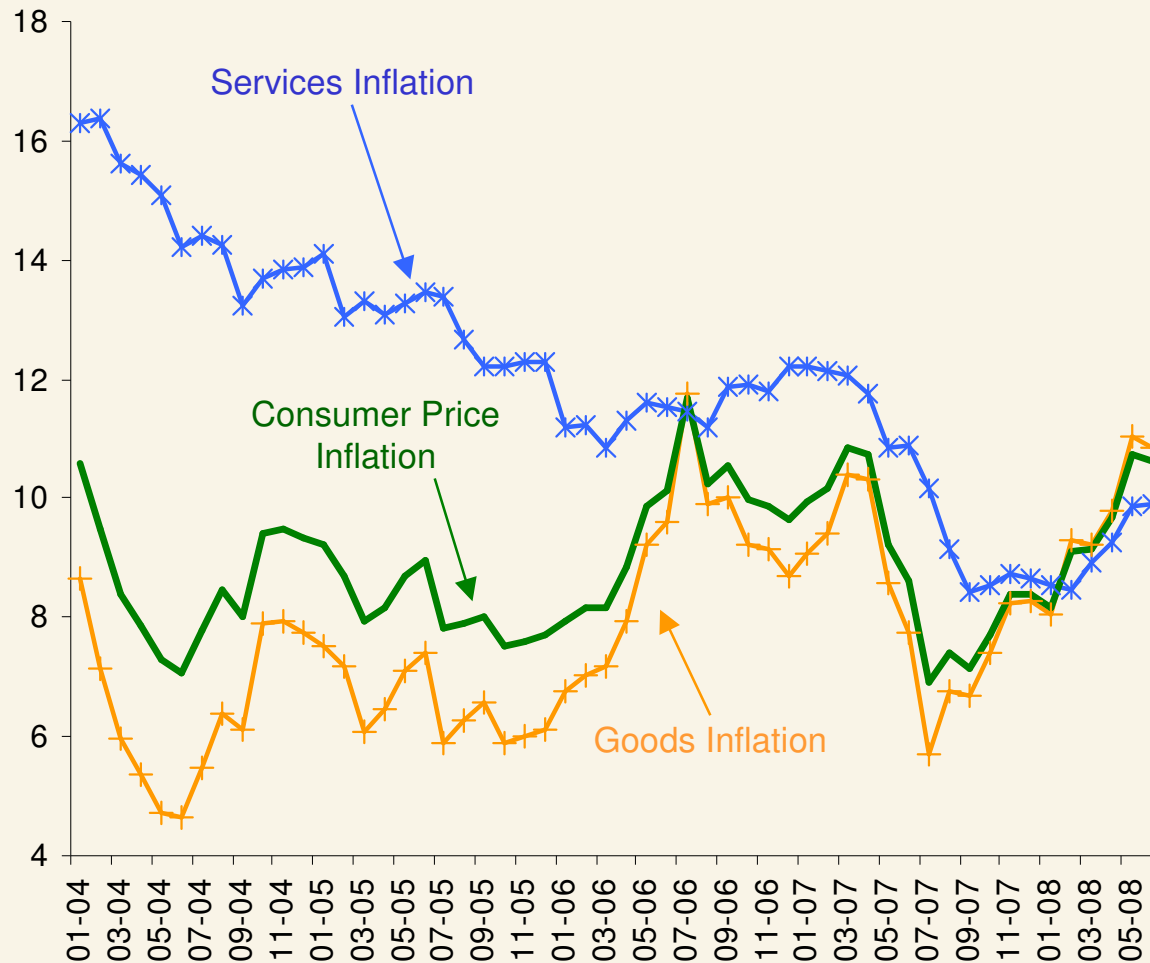
Source: TURKSTAT, CBT



# Inflation Developments in Turkey

## Services and Goods Inflation

(January 2004 – June 2008, year-on-year change, percent)

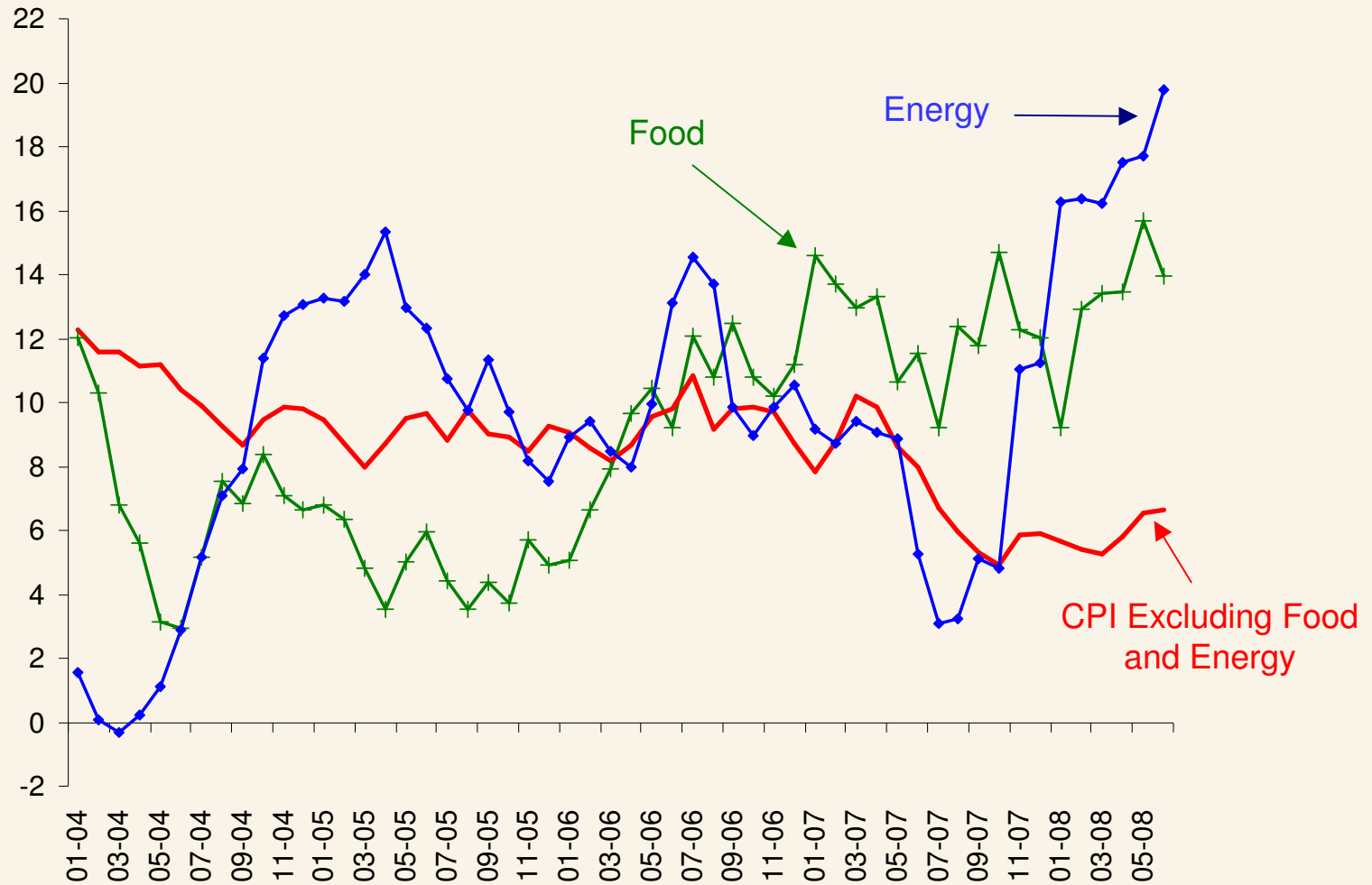


Source: TURKSTAT, CBT



# Inflation Developments in Turkey

**Food, Energy and Core Inflation**  
(January 2004 – June 2008, year-on-year change, percent)



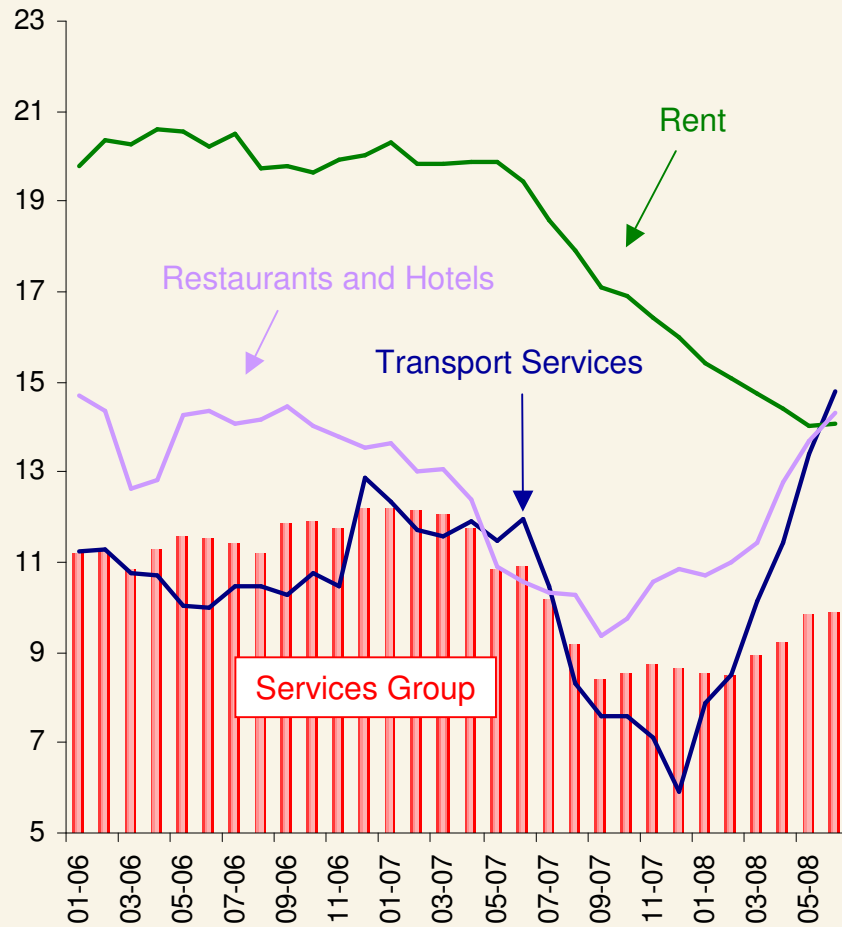
Source: TURKSTAT, CBT



# Inflation Developments in Turkey

## Services Inflation and Selected Sub-items

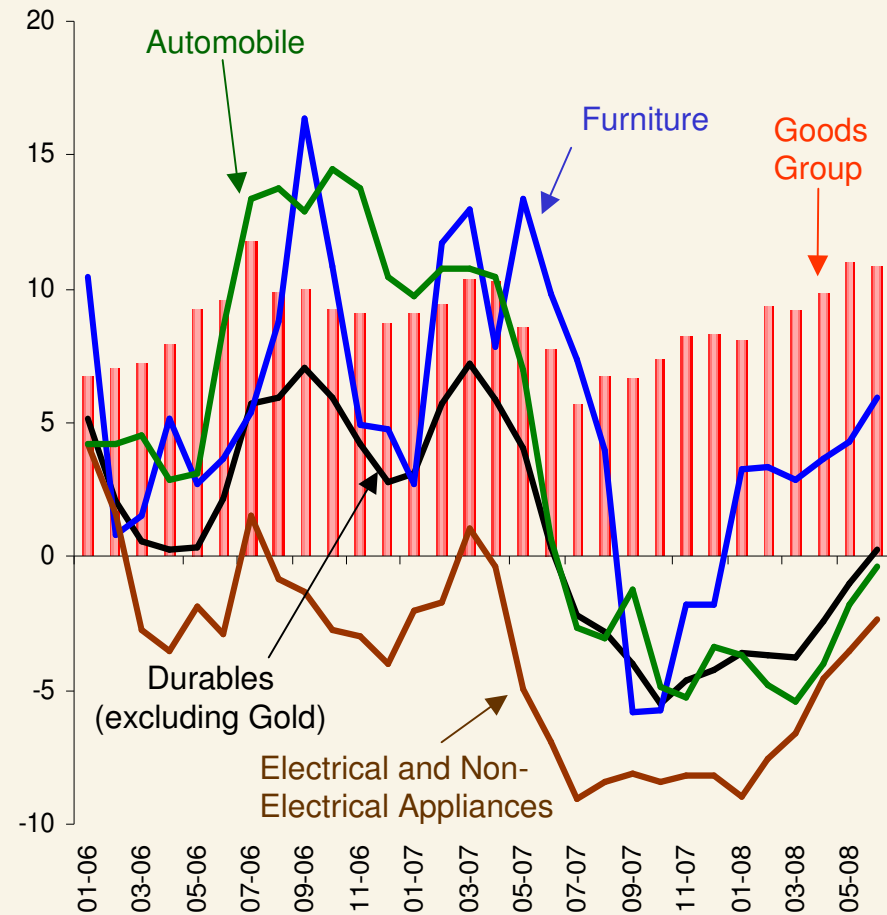
(January 2006 – June 2008, year-on-year change, percent)



Source: TURKSTAT, CBT

## Goods Group Inflation and Selected Sub-items

(January 2006 – June 2008, year-on-year change, percent)



Source: TURKSTAT, CBT



# Inflation – Expectations

**Inflation** (January 2005 – June 2008, year-on-year change, percent)  
**and Inflation Expectations** (January 2005 – July 2008, year-on-year change, percent)



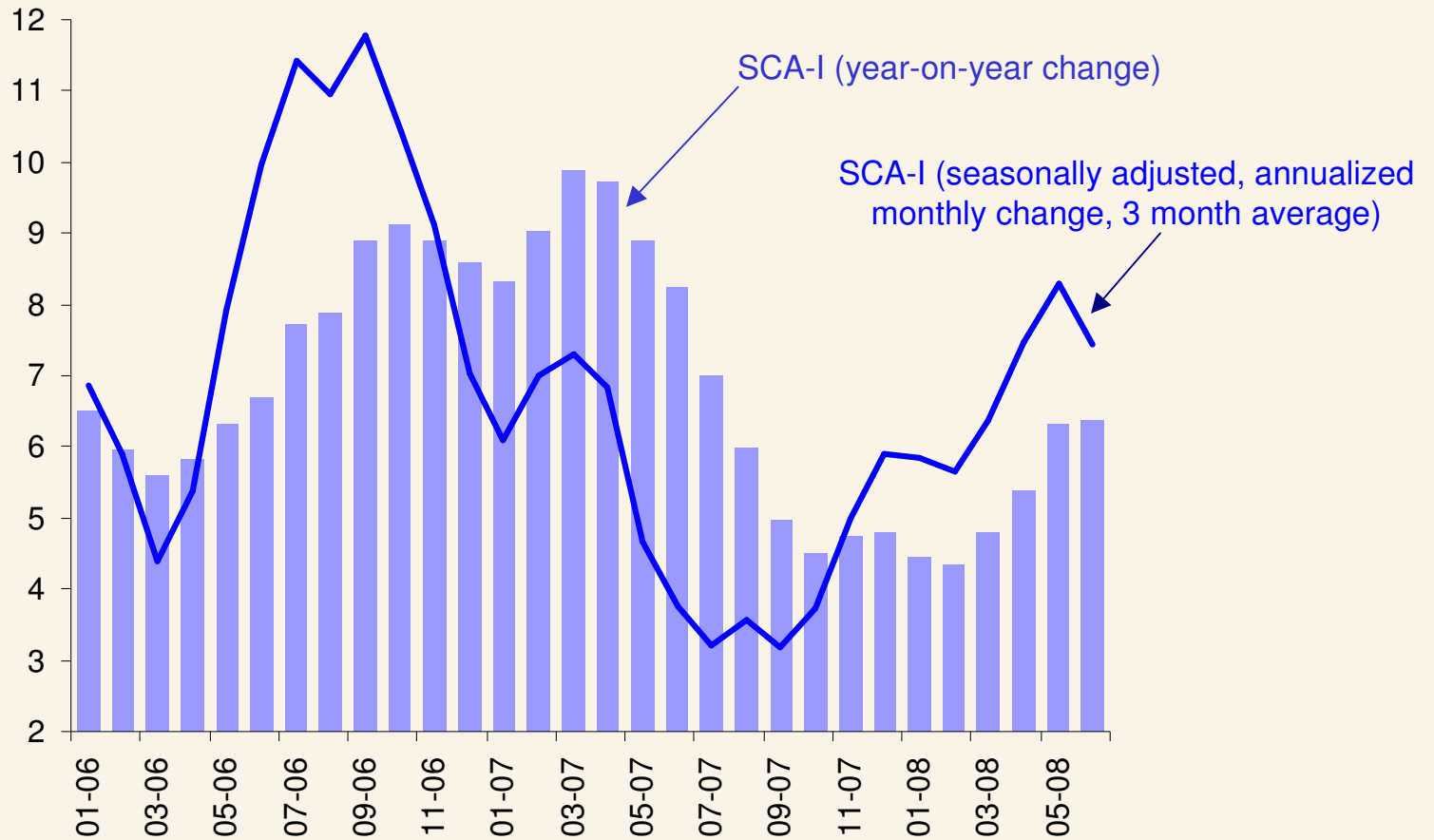
Source: TURKSTAT, CBT





# Inflation – Trend

**Inflation Trend**  
(January 2006 – June 2008, percent)



Source: TURKSTAT, CBT



# Revision of Inflation Targets

## *Revised Inflation Targets*

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>New Targets</b>	7.5	6.5	5.5
<b>Previous Targets</b>	4.0	4.0	-

Source: CBT



# Inflation – Forecasts

## Baseline scenario assumptions:

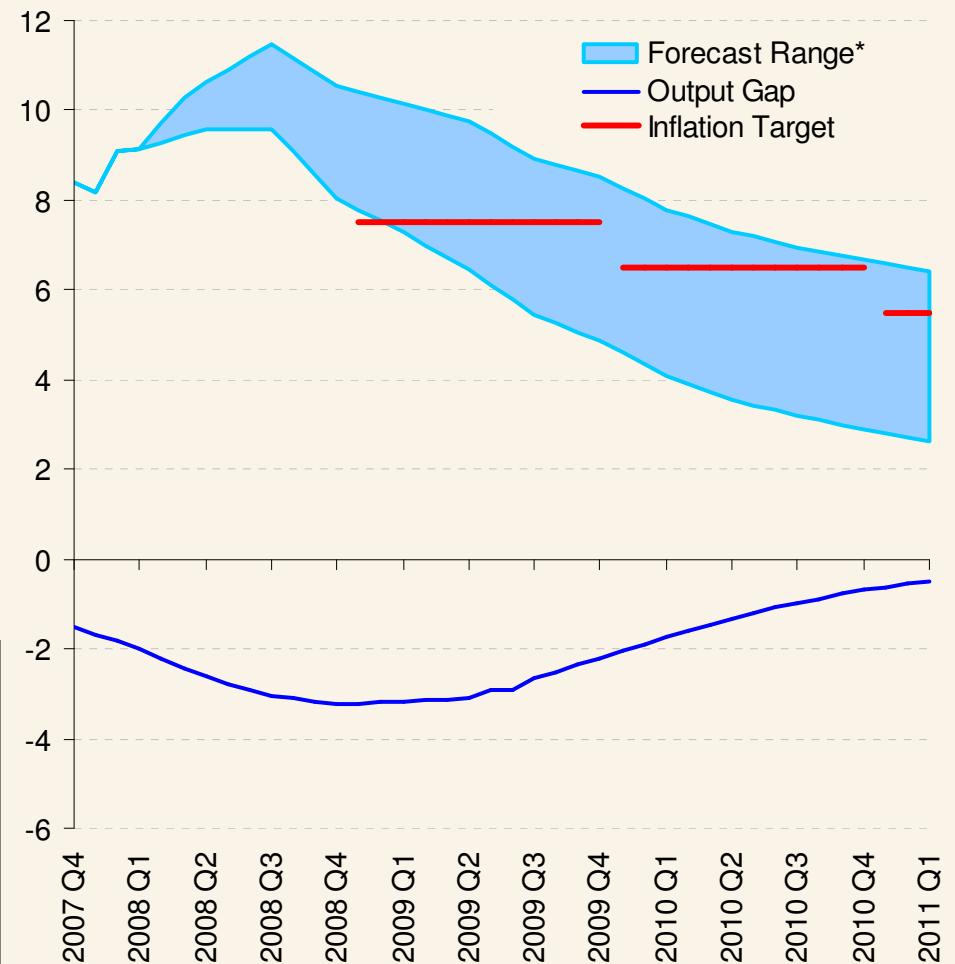
	2008	2009	2010
Oil Prices (average)	<b>\$ 105</b>	<b>\$ 105</b>	<b>\$ 105</b>
Food Prices (y-y)	<b>13%</b>	<b>8%</b>	<b>7%</b>

✓ Under the assumption that policy rates are increased gradually and cautiously until mid-2008 and then kept flat for the rest of the year...

## Inflation Forecasts:

2008	<b>9.3 %</b>
2009	<b>6.7 %</b>
2010	<b>4.9 %</b>
mid-2011	<b>4.0 %</b>

## Forecasts for Inflation and Output Gap



\*The shaded region indicates the 70 percent confidence interval for forecast.  
Source: CBT



# Inflation – Risks

## Pessimistic scenario:

	2008	2009	2010
Oil Prices (average)	<b>\$ 125</b>	<b>\$ 150</b>	<b>\$ 150</b>
Food Prices (y-y)	<b>17%</b>	<b>11%</b>	<b>10%</b>

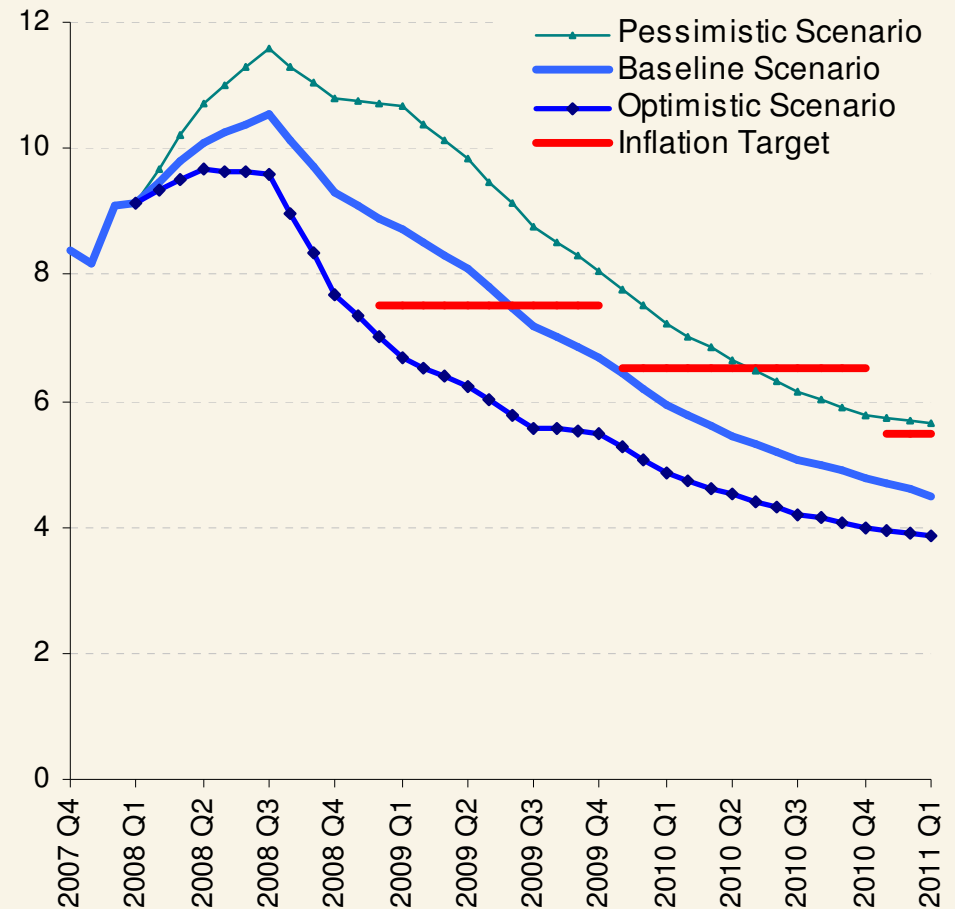
✓ Increasing the policy rates gradually until end-2008.

## Optimistic scenario:

	2008	2009	2010
Oil Prices (average)	<b>\$ 95</b>	<b>\$ 85</b>	<b>\$ 85</b>
Food Prices (y-y)	<b>9%</b>	<b>5%</b>	<b>4%</b>

✓ Increasing the policy rates cautiously in the upcoming months, then keeping constant, followed by gradual cuts in the last quarter of 2008.

**Inflation Forecast**  
(2007 Q4 – 2011 Q1, percent)



Source: CBT



## **IV. Monetary Policy Stance**



# Monetary Policy Decisions

## *Interest Rate Decisions of the Monetary Policy Committee (January 2007 – June 2008)*

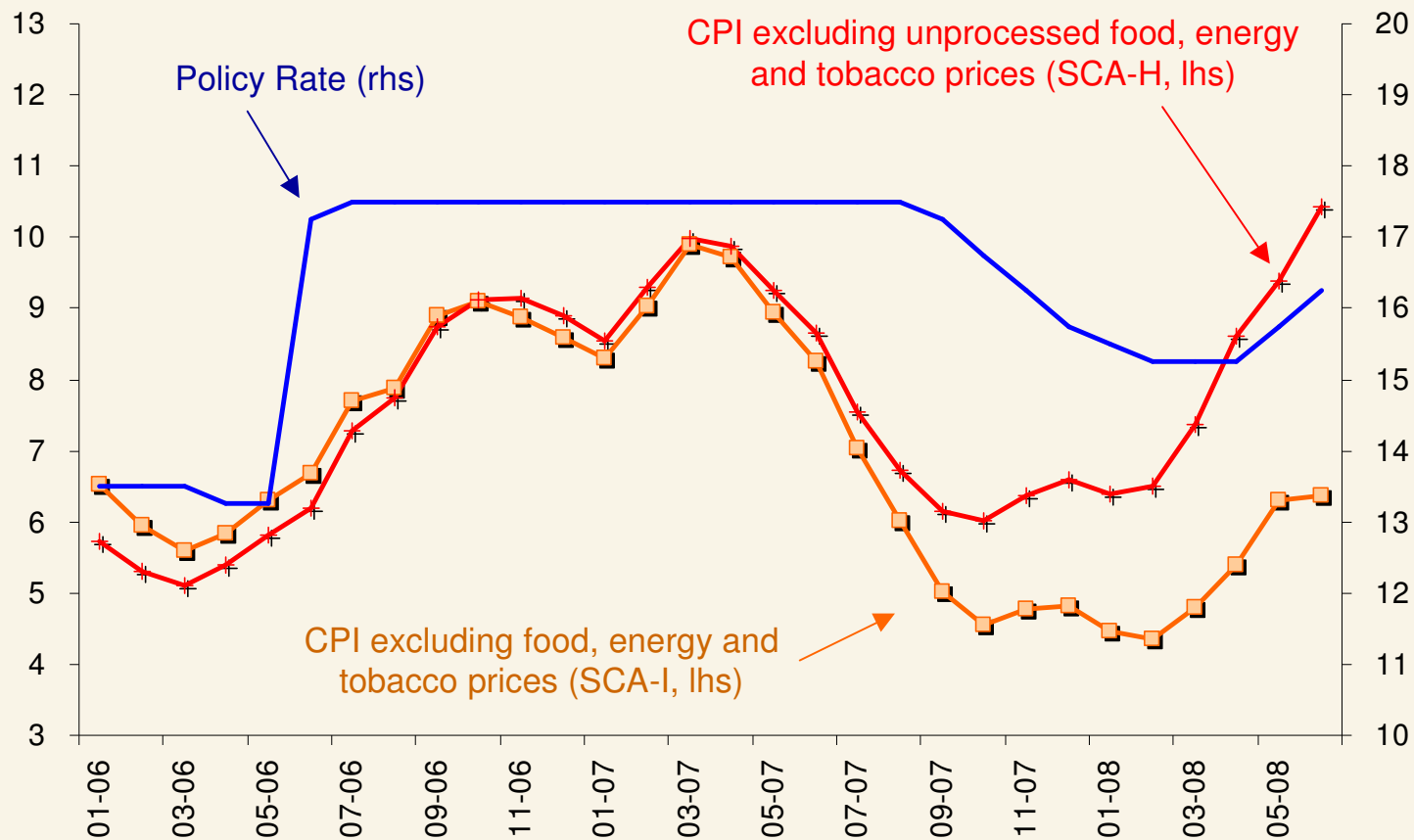
<b>Meeting Date</b>	<b>Policy Rates</b>	<b>Change</b>
16 January 2007	17.50	0
15 February 2007	17.50	0
15 March 2007	17.50	0
18 April 2007	17.50	0
14 May 2007	17.50	0
14 June 2007	17.50	0
12 July 2007	17.50	0
14 August 2007	17.50	0
<b>13 September 2007</b>	<b>17.25</b>	<b>- 0.25</b>
<b>16 October 2007</b>	<b>16.75</b>	<b>- 0.50</b>
<b>14 November 2007</b>	<b>16.25</b>	<b>- 0.50</b>
<b>13 December 2007</b>	<b>15.75</b>	<b>- 0.50</b>
<b>17 January 2008</b>	<b>15.50</b>	<b>- 0.25</b>
<b>14 February 2008</b>	<b>15.25</b>	<b>- 0.25</b>
19 March 2008	15.25	0
17 April 2008	15.25	0
<b>15 May 2008</b>	<b>15.75</b>	<b>+0.50</b>
<b>17 June 2008</b>	<b>16.25</b>	<b>+0.50</b>

Source:CBT



# Monetary Policy Decisions

**Policy Rates (simple interest) and Core Inflation Indicators**  
(January 2006 – June 2008, year-on-year change, percent)



Source: TURKSTAT, CBT



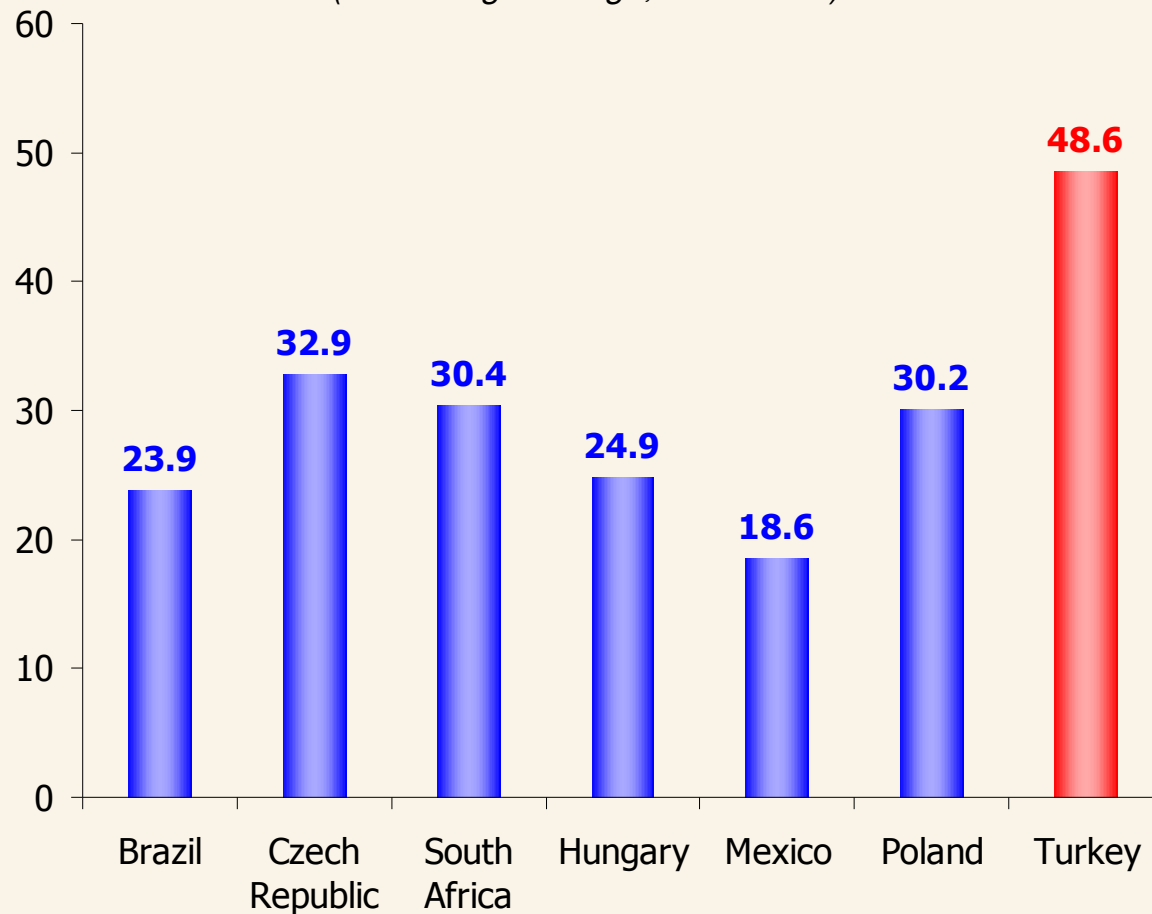
# V. Economic Outlook





# Economic Growth

**Cumulative GDP Growth**  
(Percentage change, 2001-2007)

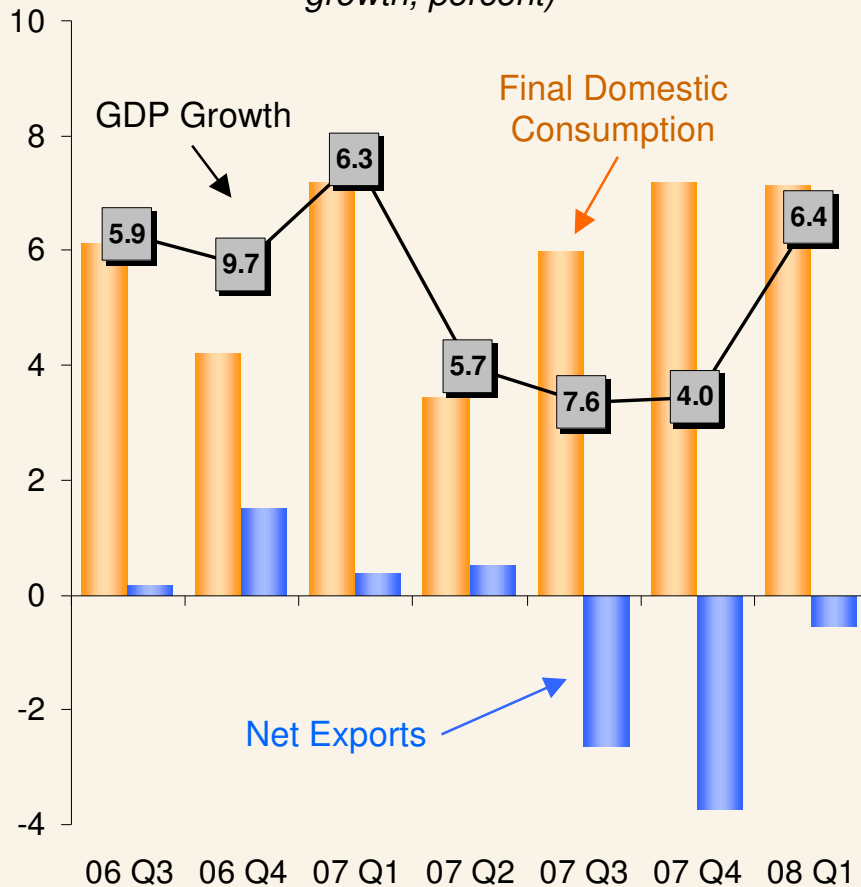


Source: TURKSTAT, IMF World Economic Outlook



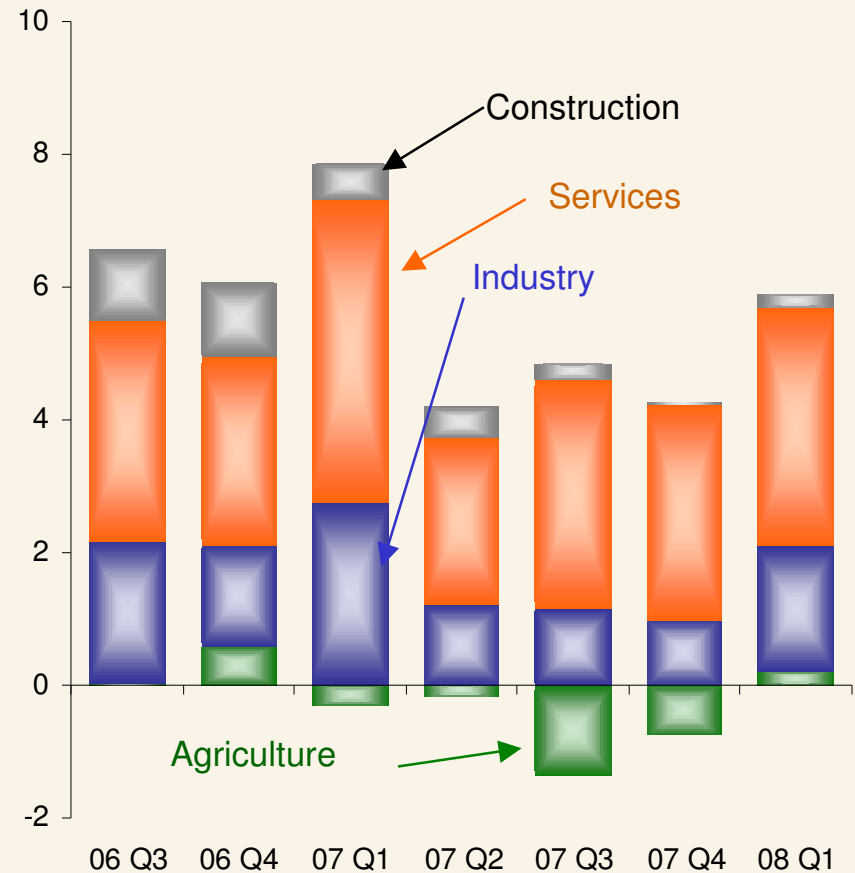
# Economic Growth

**Growth Components (Consumption Side)**  
(2006 Q3 – 2008 Q1, contribution to year-on-year growth, percent)



Source: TURKSTAT, CBT

**Growth Components (Production Side)**  
(2006 Q3 – 2008 Q1, contribution to year-on-year growth, percent)

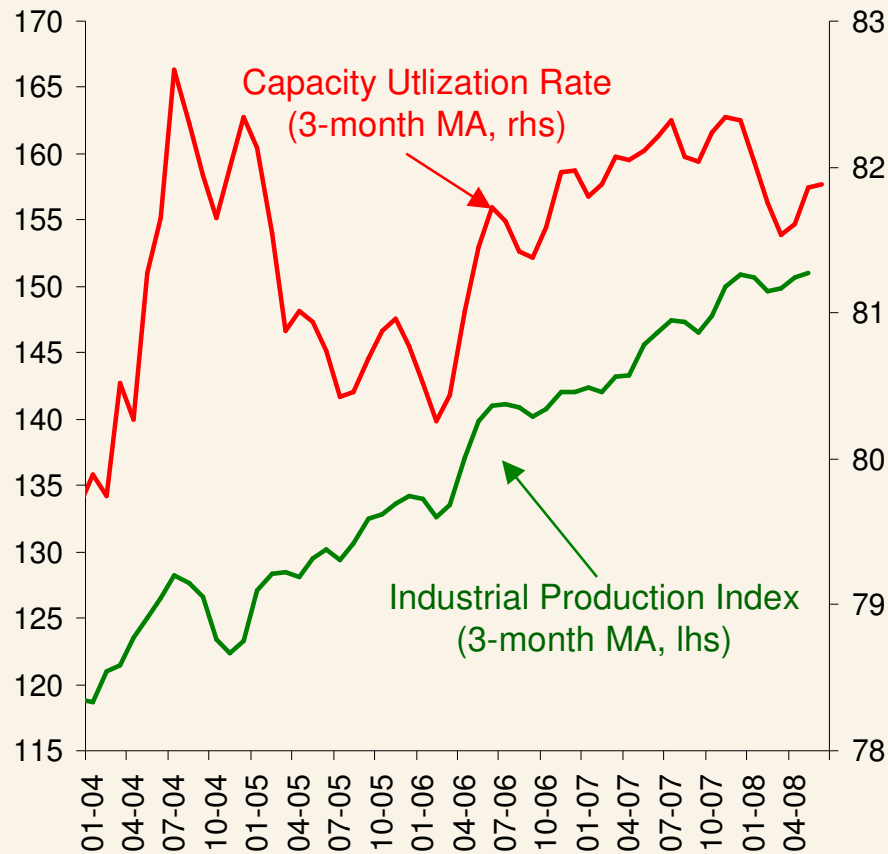


Source: TURKSTAT, CBT



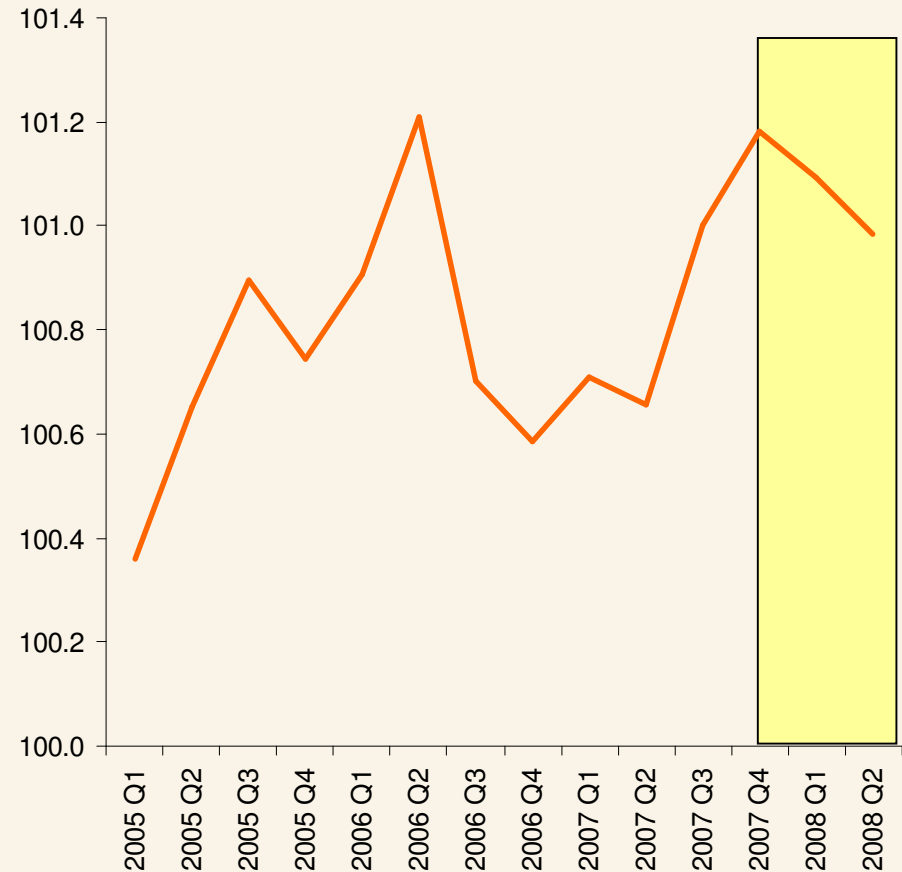
# Production and Consumption

**Industrial Production and Capacity Utilization Rate**  
(January 2004 – June 2008, seasonally adjusted)



Source: TURKSTAT, CBT

**Private Consumption Index\***  
(2005 Q1 – 2008 Q2)



Private Consumption Index is composed of imports of consumption goods, real domestic taxes on goods and services, total domestic sales of white goods, domestic sales of automobiles (all seasonally adjusted)

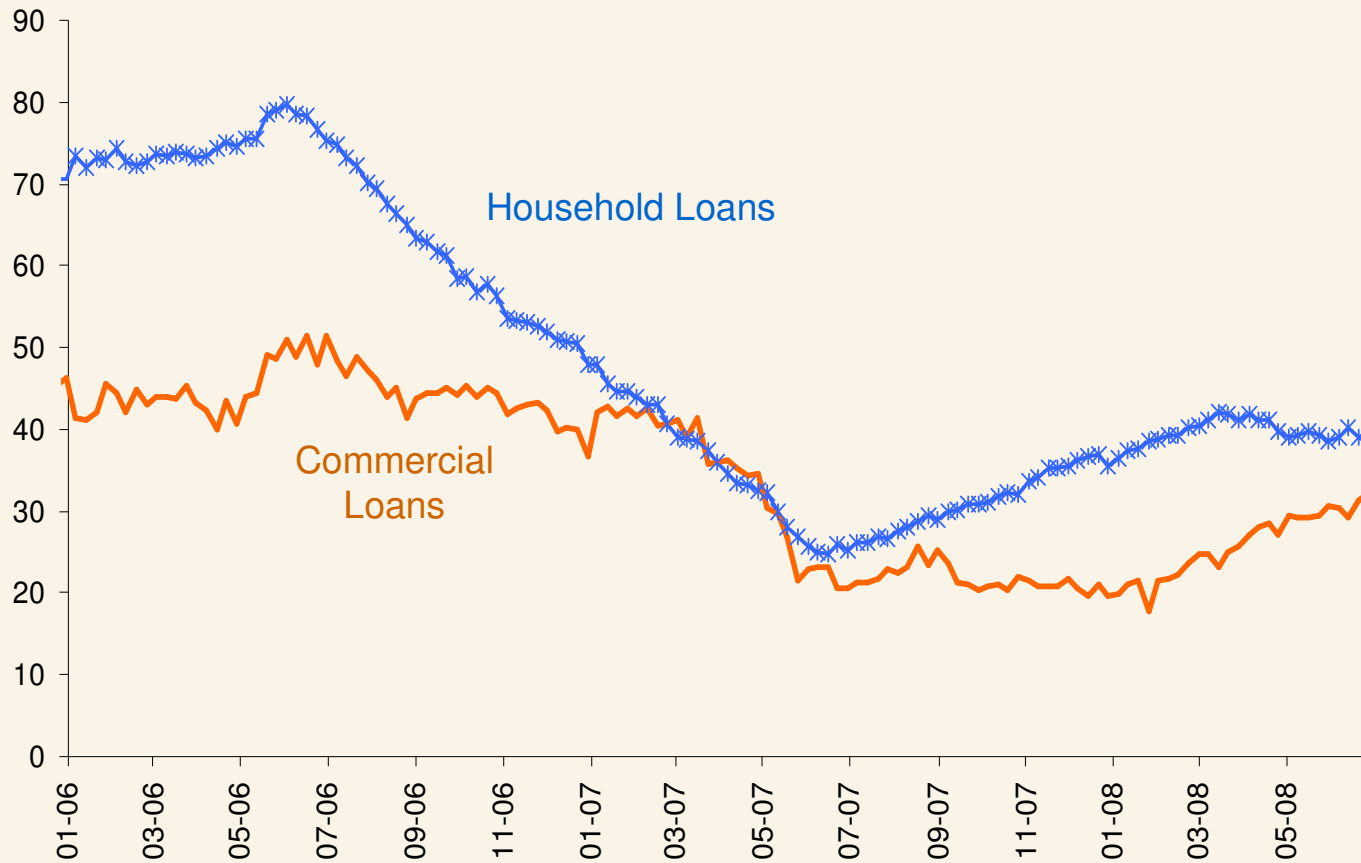
Source: TURKSTAT, CBT



# Bank Credits

## Commercial Loans and Household Loans

(1 January 2006 – 27 June 2008, year-on-year change, percent)

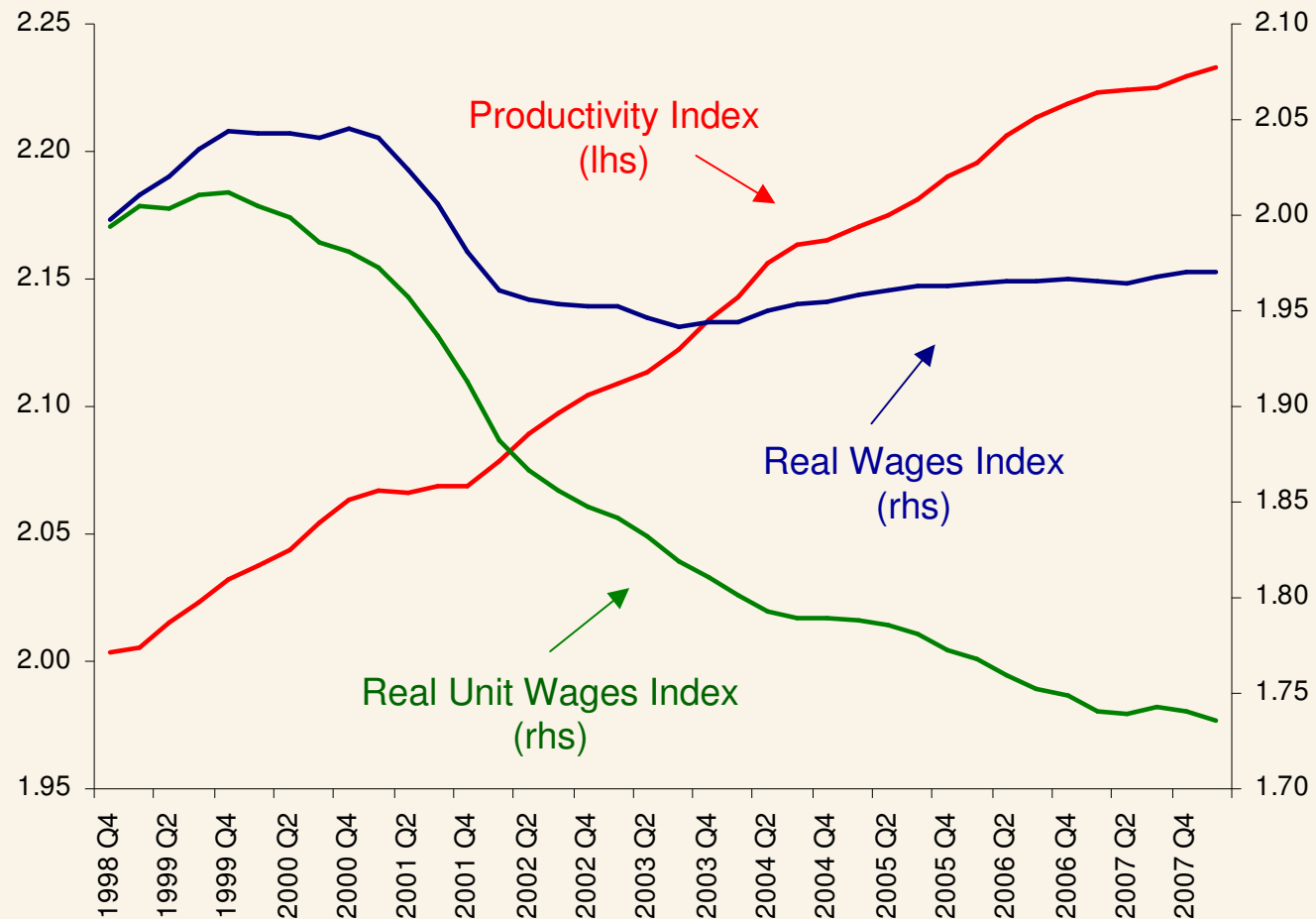


Source: CBT



# Productivity and Wages

**Productivity, Real Wages and Real Unit Wages in the Manufacturing Industry**  
(1998 Q4 – 2008 Q1, per hour worked, 4-quarter moving average, logarithmic scale)



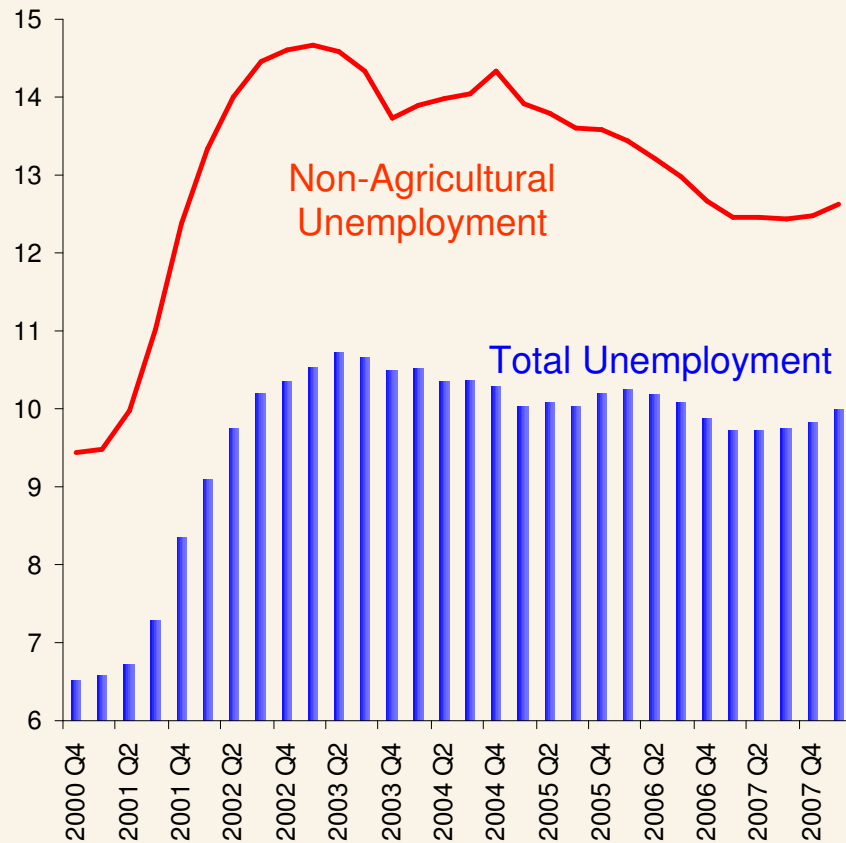
Source: TURKSTAT, CBT



# Employment

## Unemployment and Non-Agricultural Unemployment

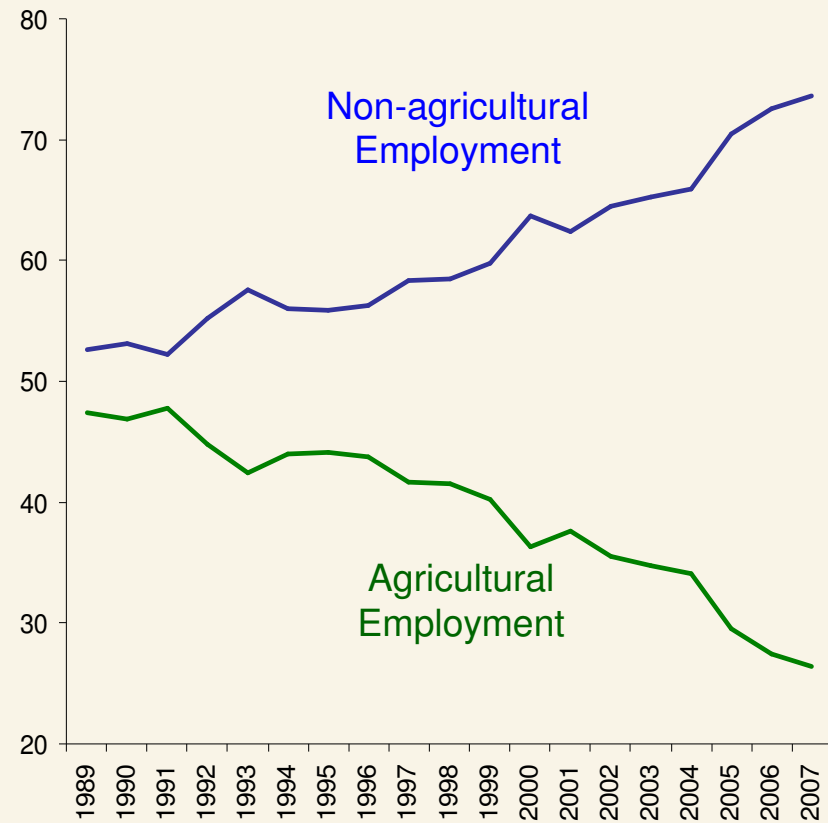
(2000 Q4 – 2008 Q1, 4-quarter moving average, percent)



Source: TURKSTAT, CBT

## Composition of Employment

(1989 – 2007, percent)

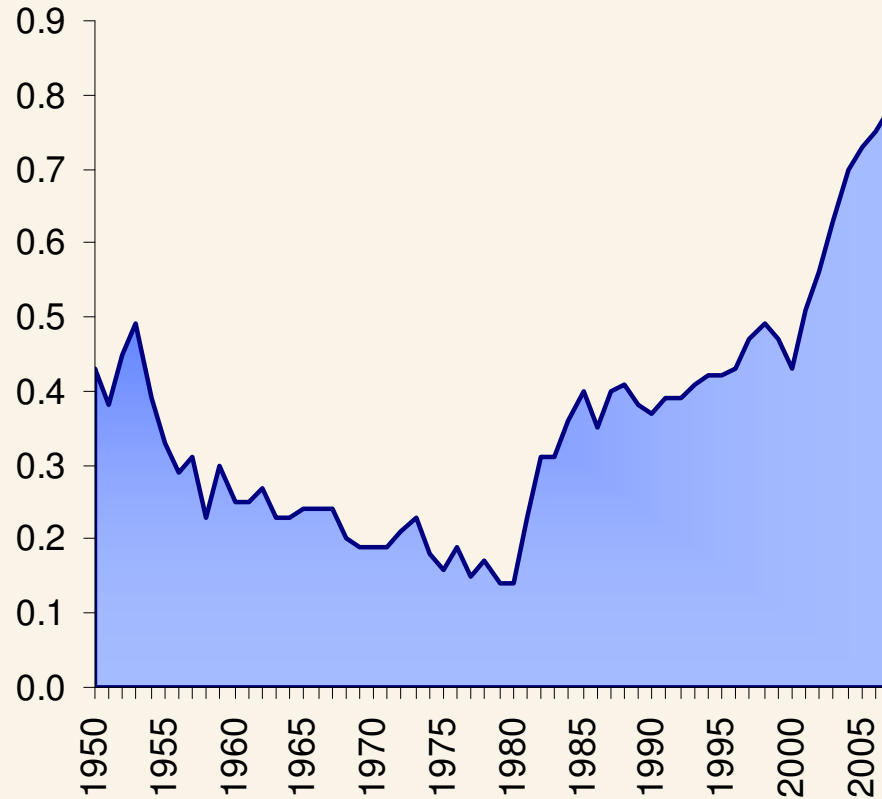


Source: TURKSTAT, CBT



# Export Performance

**Turkey's Share in World Exports**  
(1950 – 2007, percent)



Source: WTO, CBT

**Composition of Turkey's Exports**  
(percent)

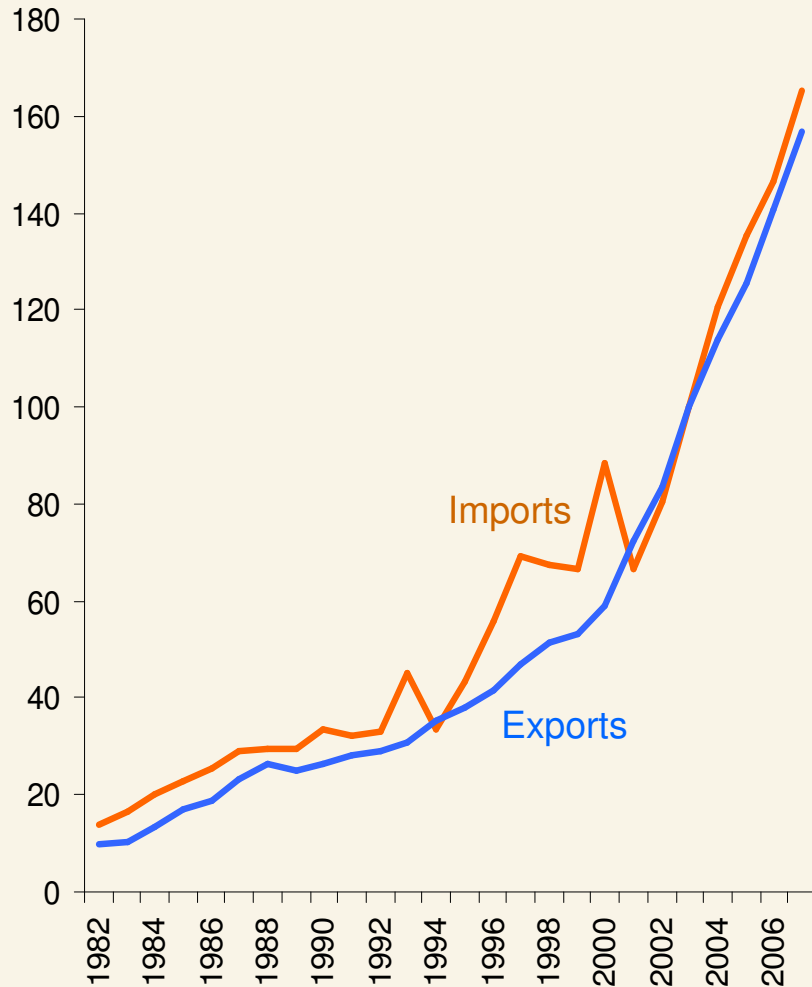
	1980-89	2001-04
<b>High-Tech Sensitive</b>	<b>6.0%</b>	<b>18.0%</b>
<b>Capital Sensitive</b>	<b>9.3%</b>	<b>16.0%</b>
<b>Labor Sensitive</b>	<b>30.6%</b>	<b>39.4%</b>
<b>Agriculture Sensitive</b>	<b>24.2%</b>	<b>8.8%</b>
<b>Raw material Sensitive</b>	<b>16.9%</b>	<b>3.9%</b>

Source: UNCTAD, CBT



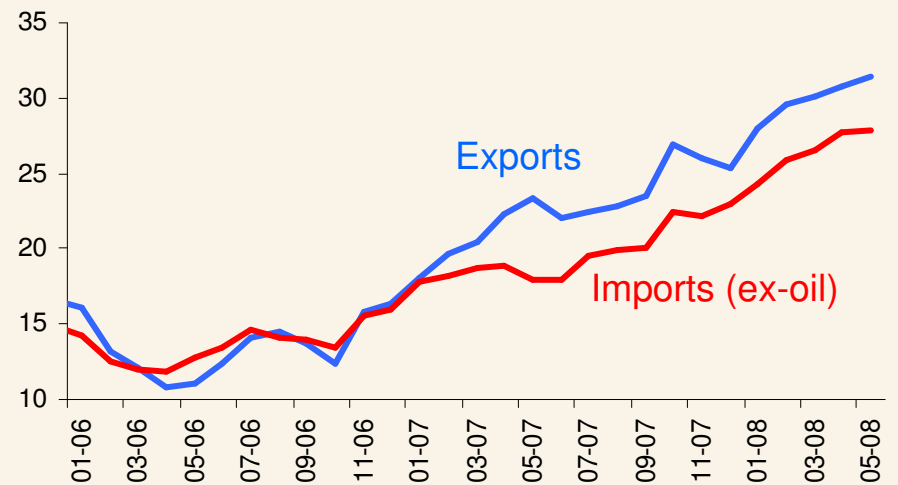
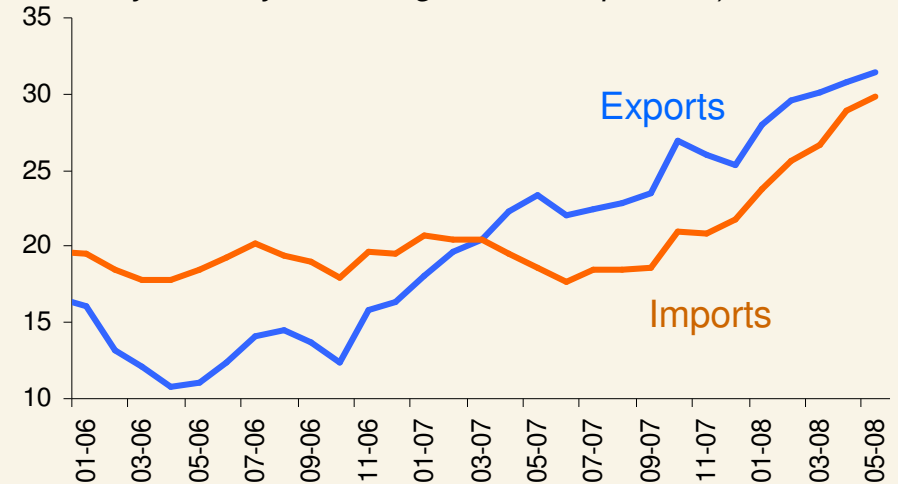
# Foreign Trade

### Real Imports and Real Exports Indices (1982 – 2007, 2003 = 100)



Source: TURKSTAT, CBT

### Imports and Exports Growth (January 2006 – May 2008, 12-month rolling year-on-year change, in USD, percent)



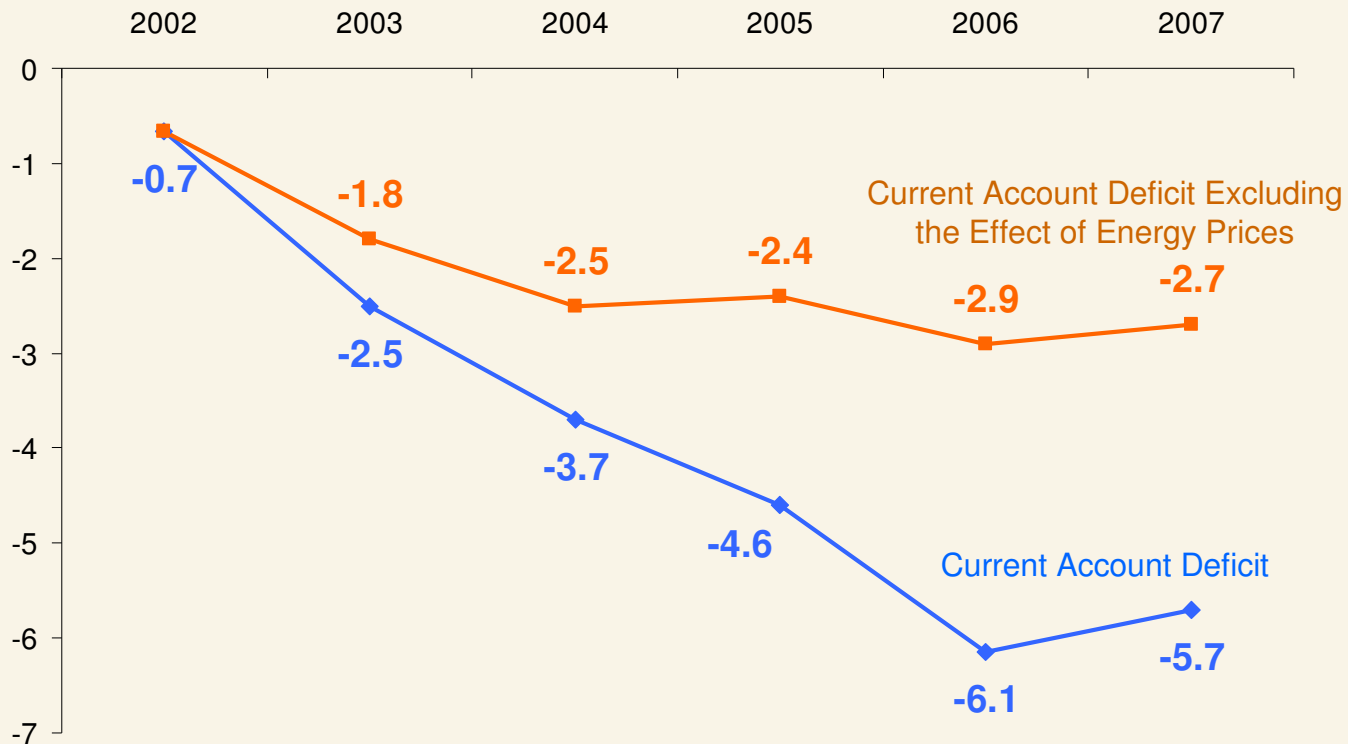
Source: TURKSTAT, CBT





# Balance of Payments – Current Account

**Current Account Balance and The Effect of Energy Prices on the Current Account Deficit\***  
(2002 – 2007, percent of GDP)



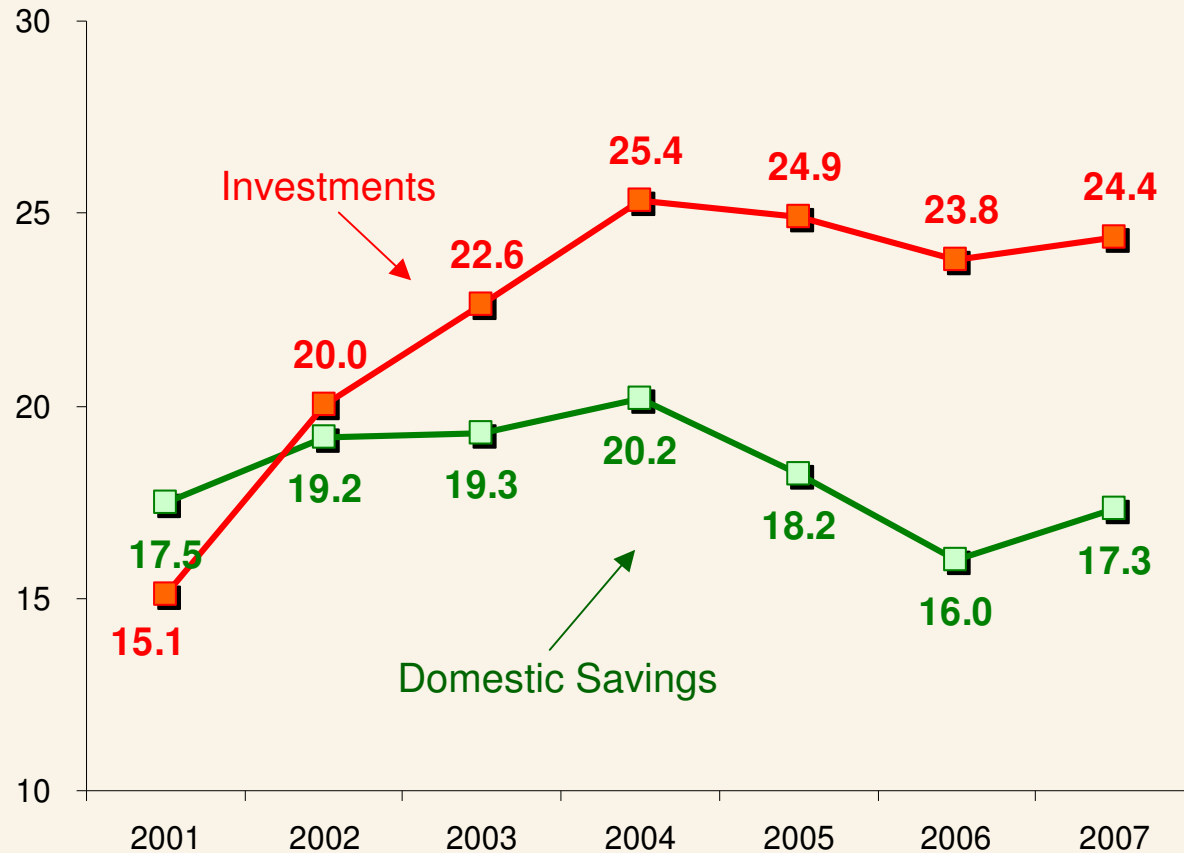
\* Keeping energy prices constant at 2002 levels.

Source: TURKSTAT, CBT



# Balance of Payments – Current Account

**Domestic Savings and Investments**  
(2001 – 2007, percent of GNP)



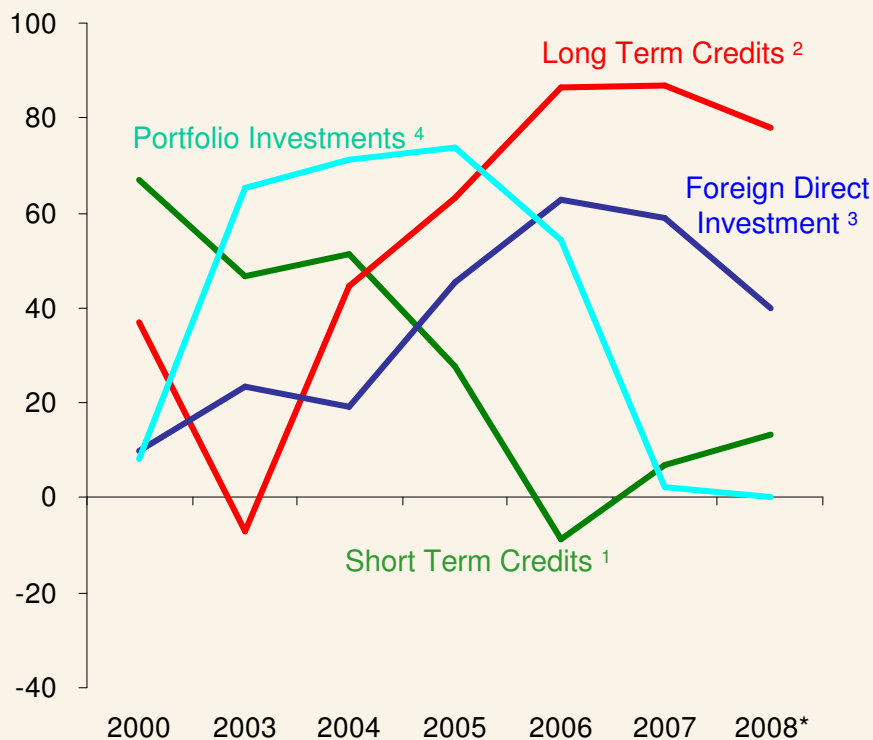
\* 1987 based series

Source: SPO Program for 2008, CBT

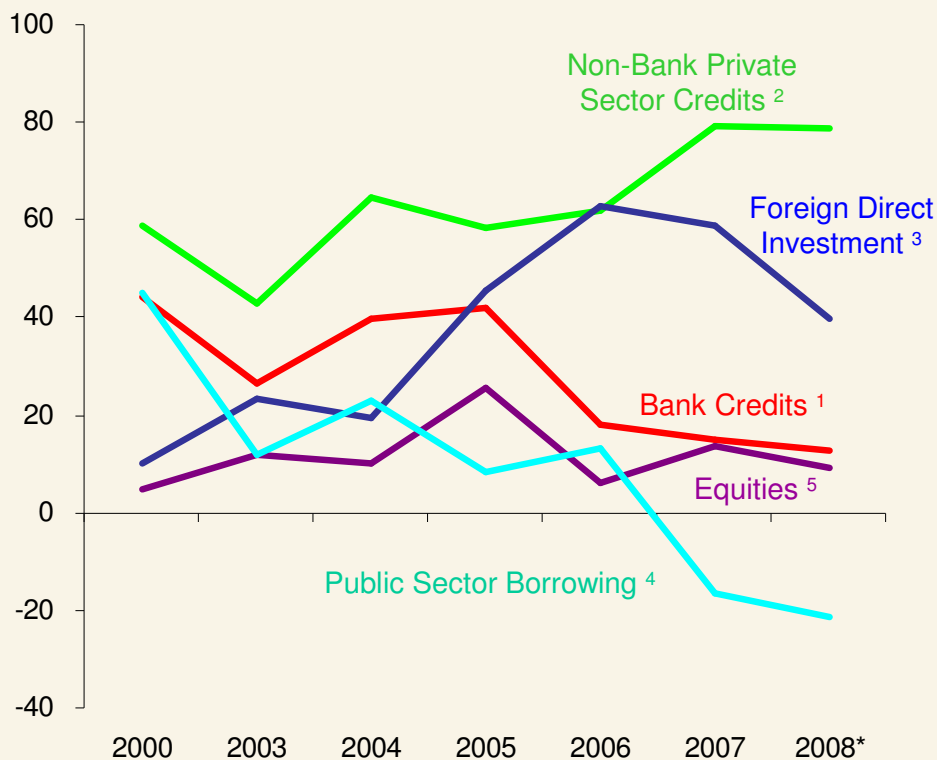


# Capital Flows

**Financing of the Current Account**  
(2000 – 2008\*, percent of current account deficit)



**Financing of the Current Account**  
(2000 – 2008\*, percent of current account deficit)



\* Last 12 months as of 2008 May

<sup>1</sup> **Short Term Credits**: Net short term loans of the banking sector, non-bank private sector and the public sector, plus trade credits

<sup>2</sup> **Long Term Credits**: Net long term loans of the banking sector, non-bank private sector and the public sector

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

<sup>4</sup> **Portfolio Investment**: Purchases of equities and securities by nonresidents and deposits of nonresidents

Source: CBT

\* Last 12 months as of 2008 May

<sup>1</sup> **Bank Credits**: Short and long-term borrowing of the banking sector

<sup>2</sup> **Non-Bank Private Sector Credits**: Short and long term borrowing of the non-bank private sector, plus trade credits

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

<sup>4</sup> **Public Sector Borrowing**: Purchases of government securities (including Eurobonds) by nonresidents, credits to central government and to the Central Bank (including IMF credits)

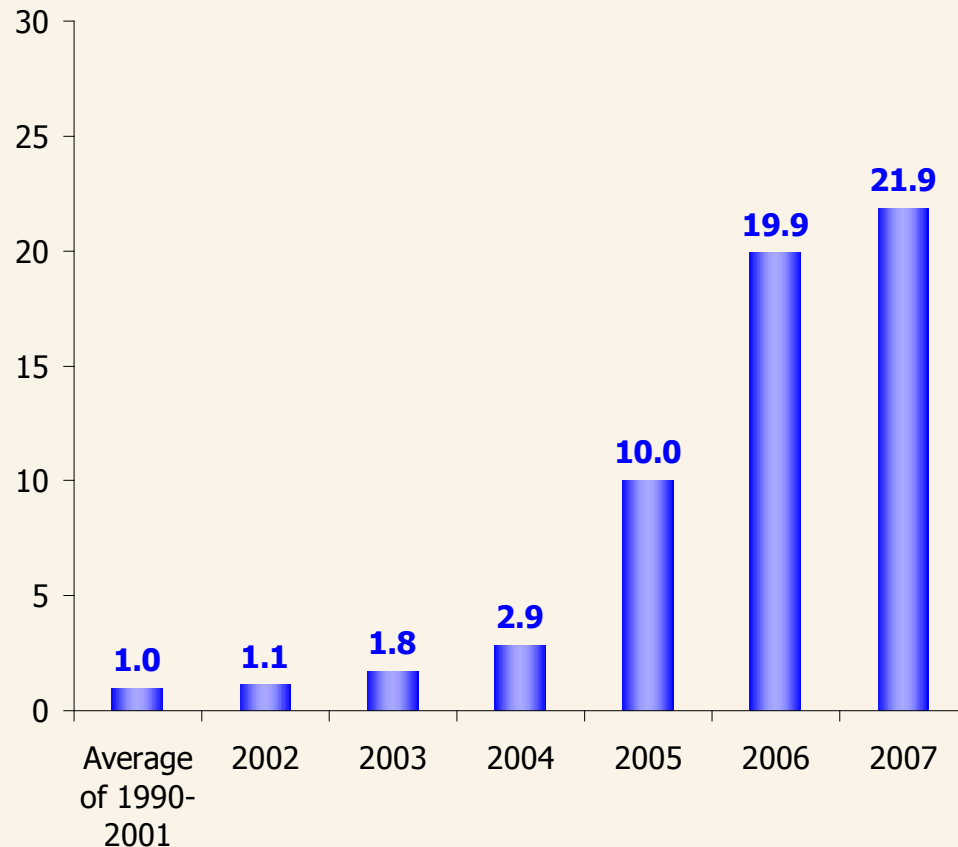
<sup>5</sup> **Equities**: Purchases of equities by nonresidents

Source: CBT



# Foreign Direct Investment

**Foreign Direct Investment**  
(Annual, billion US dollars)



Source: CBT

**Foreign Direct Investment Inflows**  
(2006, billion US dollars)

China	69.5
Hong Kong	42.9
Russia	28.7
Singapore	24.2
<b>Turkey</b>	<b>20.1</b>
Mexico	19.0
Brazil	18.8
India	16.9
Romania	11.4
Chile	7.9

Source: UNCTAD



# CENTRAL BANK OF THE REPUBLIC OF TURKEY

Mehmet Yörükođlu  
Deputy Governor

July 2008