



# CENTRAL BANK OF THE REPUBLIC OF TURKEY

Durmuş YILMAZ  
Governor

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# Presentation Plan

- I. International Developments
- II. Effects on Developing Countries and the Turkish Economy
- III. Financial Stability
- IV. Monetary Policy and Price Stability
- V. Inflation Developments
- VI. Interest Rates, Exchange Rates and Markets
- VII. Economic Outlook



# International Developments

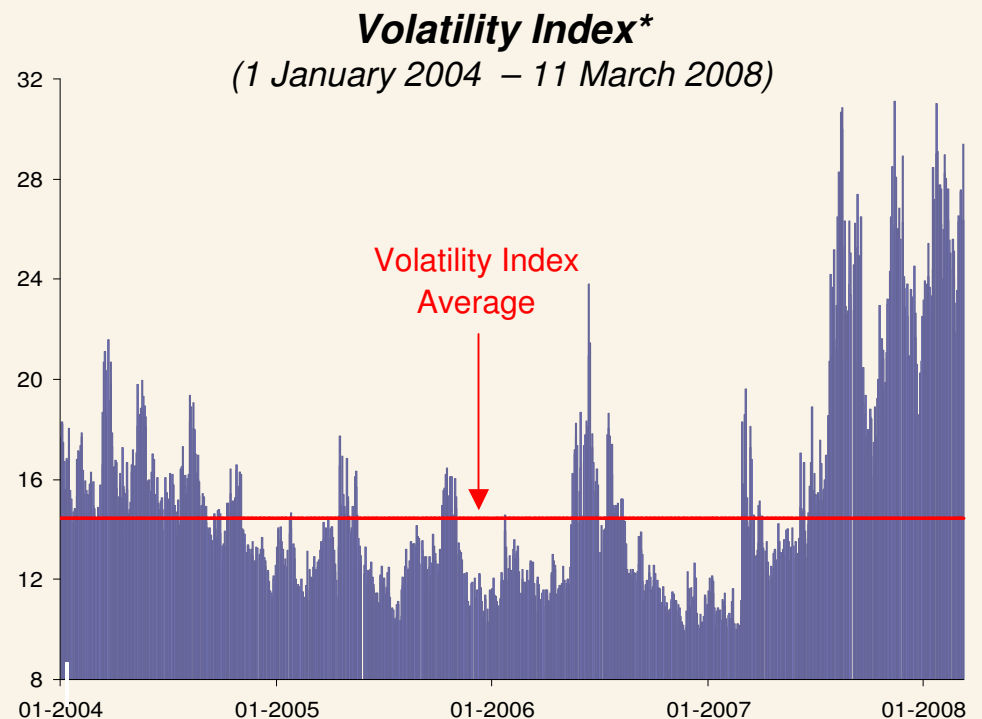


# International Developments

✓ The global financial turbulence, which started in mid-2007, has not subsided yet.

✓ The magnitude of the turbulence is larger than that of the turbulence in 2006.

✓ In the face of rising uncertainties, international banks have focused more on the default risk and become reluctant to lend, which in turn has led to liquidity squeeze in the financial markets.



\* VIX measures the volatility of the options prices of the S&P 500 stock index by using the interpolation method.

Source: Bloomberg



# International Developments

## How Did It Happen?



### 1st VIEW :

#### **NON-TRANSPARENT OPERATIONS**

- ✓ Complex instruments due to increased financial engineering
- ✓ Business model based on originate-and-distribute
- ✓ Lack of regulations and supervision
- ✓ Arbitrage opportunities arising out of this deficiency

### 2nd VIEW:

#### **GLOBAL LIQUIDITY CONDITIONS**

- ✓ Abundant credit facilities supported by accommodative monetary policies
- ✓ Surge in leveraged transactions
- ✓ Excessive risk appetite and search for high yields

- ✓ These views should not be perceived as alternatives of each other.
- ✓ They are in fact complementary and explain different aspects of the turbulence.



# International Developments

- ✓ The recent data on the United States and European economies have signaled that the turmoil in financial markets have started to spread to the real sector.
- ✓ The current financial turbulence is projected to decrease economic growth worldwide.

**Growth Expectations Worldwide** (percent)

Regions	2007 (Forecast)	2008 (7/2007 forecasts)	2008 (10/2007 forecasts)	2008 (1/2008 forecasts)
World	4.9	4.8	4.4 ↓	4.1 ↓
USA	2.2	2.8	1.9 ↓	1.5 ↓
EU	2.6	2.5	2.1 ↓	1.6 ↓
Russia-Central Asia	8.2	7.1	7.0 ↓	7.0 →
Central and Eastern Europe	5.5	5.4	4.9 ↓	4.6 ↓
Middle East	6.0	5.5	6.0 ↑	5.9 ↓

Source: IMF



# **Effects on Developing Countries and the Turkish Economy**



# Effects on Developing Countries

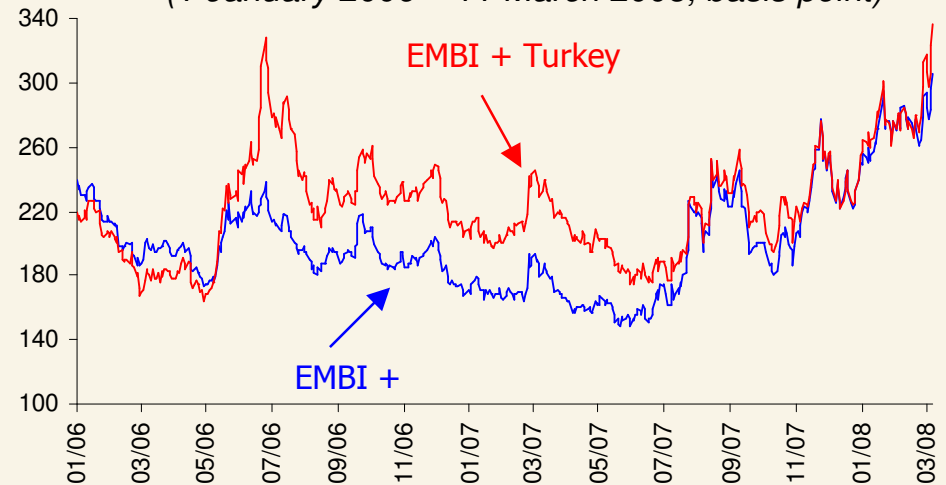
✓ Financial institutions incurring big losses coupled with concerns over recession in the US economy has led to significant deterioration in risk perceptions and increased the risk premium of developing countries.

✓ Turkey's risk premium has increased parallel to those of other developing countries.

✓ Compared to 2006, Turkey's risk premium has followed a stable trend so far.

## Risk Indicators

(1 January 2006 – 11 March 2008, basis point)



Source: JP Morgan

## Risk Indicators

(1 January 2006 – 11 March 2008, basis point)



Source: JP Morgan





# Effects on the Turkish Economy

- ✓ The effects of the financial turbulences on the Turkish economy are expected to be observed via the trade channel (external demand) and the capital inflows (portfolio and credits).
- ✓ The main export markets of Turkey are European countries. This is likely to alleviate the first-round effects of a US-origin economic recession. However, the secondary effects of such a recession on European economies shall be monitored closely.
- ✓ Taking into account the difficulty in pricing of risks in financial markets, it is projected that there might be a decline in the domestic banks' and real sector's credit utilization from foreign markets and this in return can restrict domestic demand.

## 1. Slowdown in the global economy



will strain growth in external demand.

## 2. Problems in the credit markets



will raise the cost of credits obtained by domestic banks from foreign markets and thus curb domestic demand.



# Effects on the Turkish Economy

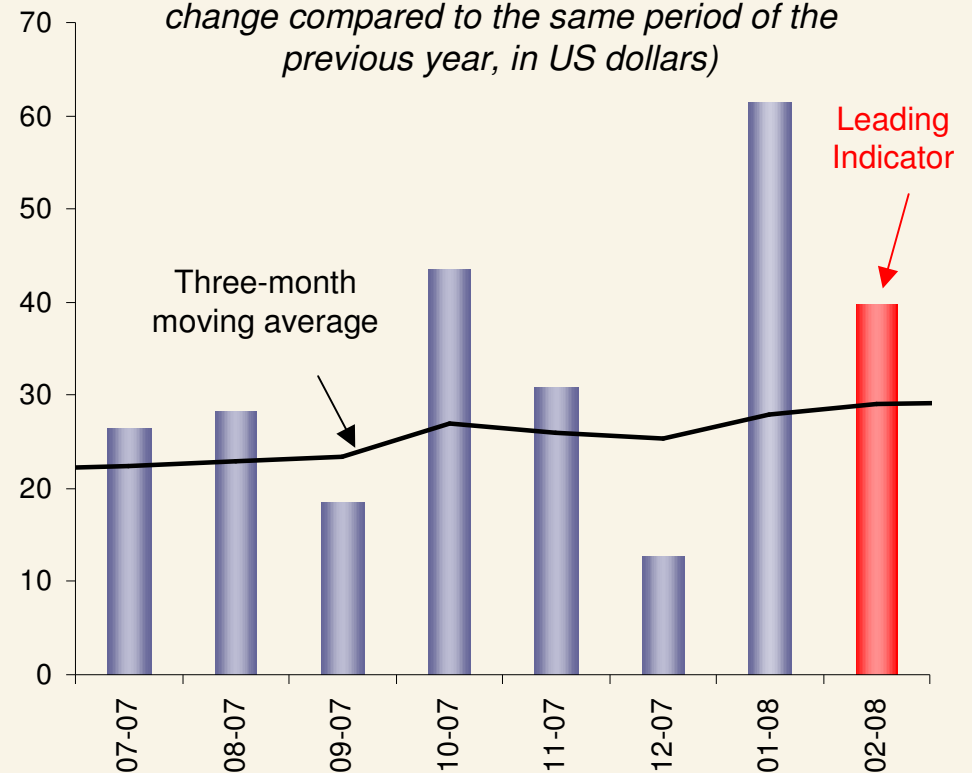
## Leading Indicators of Exports

- ✓ The economic data for 2008 Q1 suggest that the financial fluctuations have not yet had a significant decelerating effect on external demand.
- ✓ Data for January and leading indicators for February suggest that the high growth rate of exports continues.



### Exports

(January 2007 – February 2008, percentage change compared to the same period of the previous year, in US dollars)



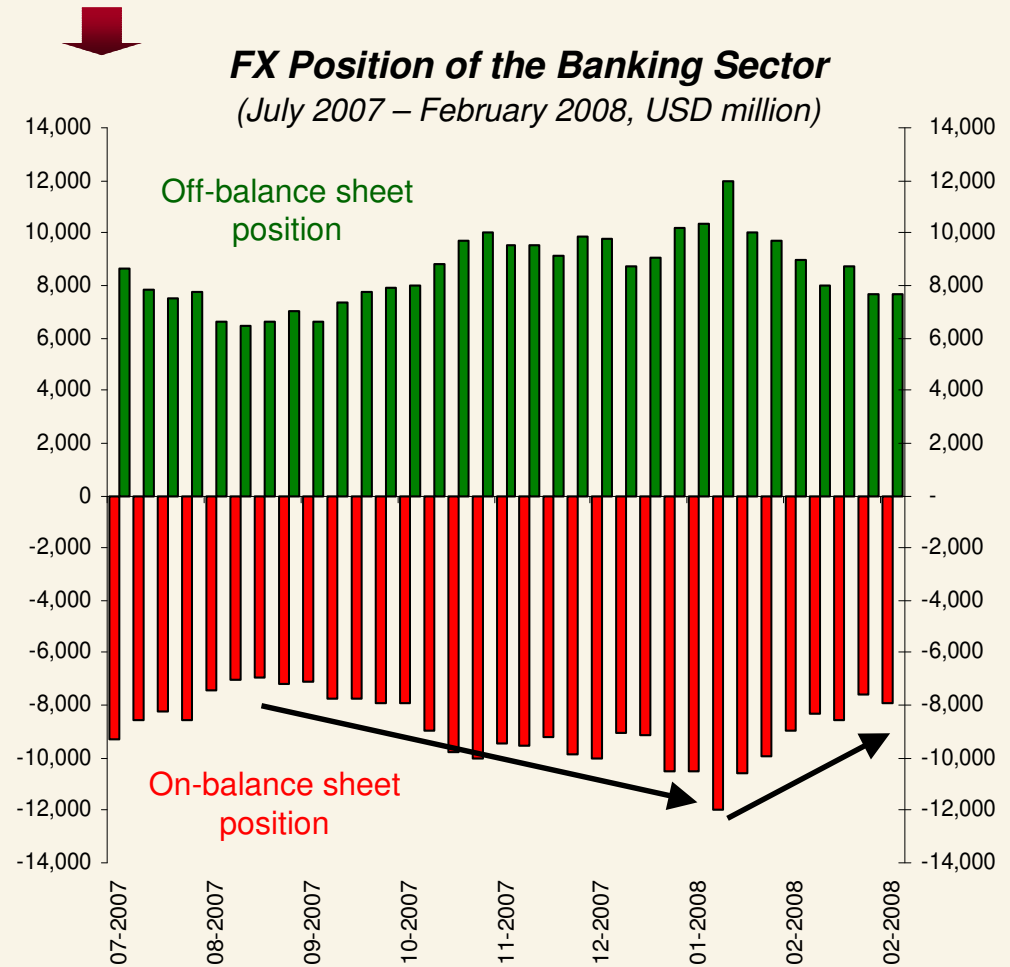
Source: TURKSTAT, UFT, TEA (TIM)



# Effects on the Turkish Economy

## Leading Indicators of Domestic Credits

✓ The recent deterioration in risk perceptions seems to curb domestic demand by decreasing Turkish banks' tendency to borrow from abroad and lend domestically in YTL.



Source: CBRT



# Effects on the Turkish Economy

**Inflation shows an upward trend over the world.**



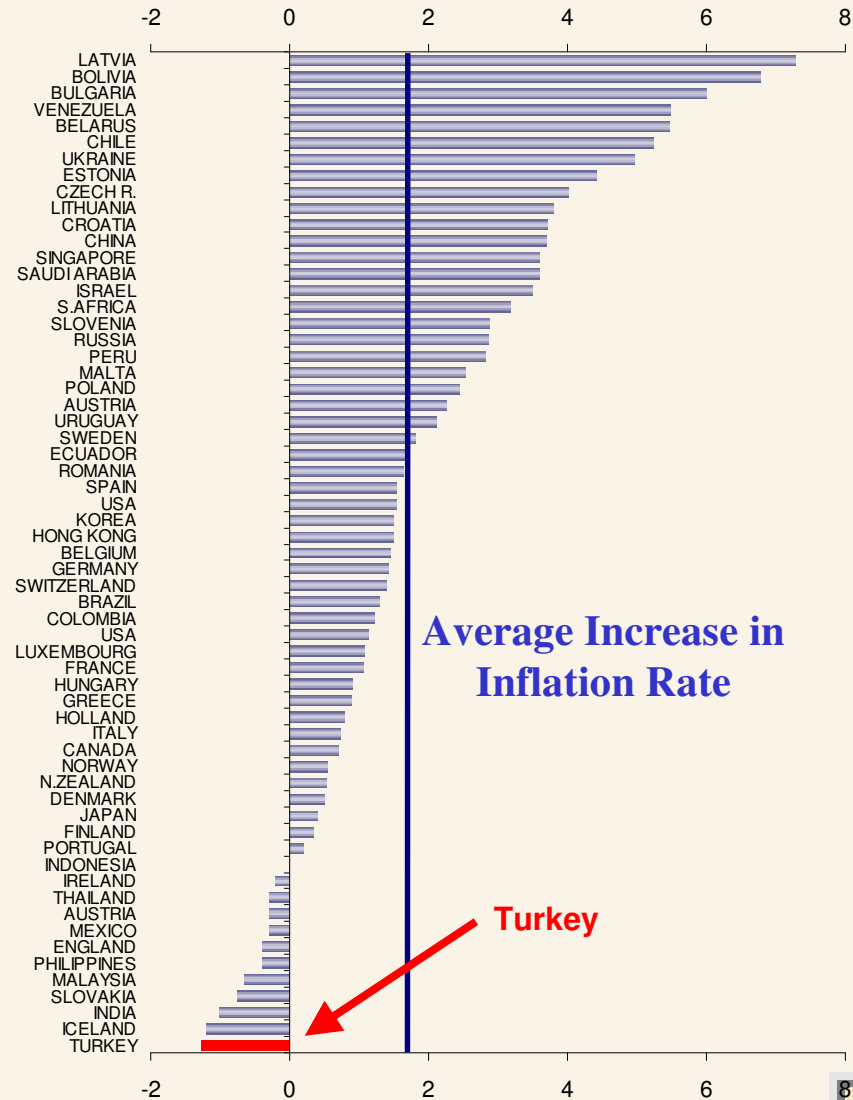
✓ Since the first quarter of 2007, inflation has accelerated significantly in most countries.

✓ Turkey is among few countries that reduced inflation rate in 2007.

✓ In 2007, inflation increased approximately by 2 percentage points in 60 major developed and developing countries, while the said rate decreased by 1.3 percentage points in Turkey.

## ***Inflation Developments in Turkey and the World***

*(Change in year-end inflation rate between 2006 end 2007)*



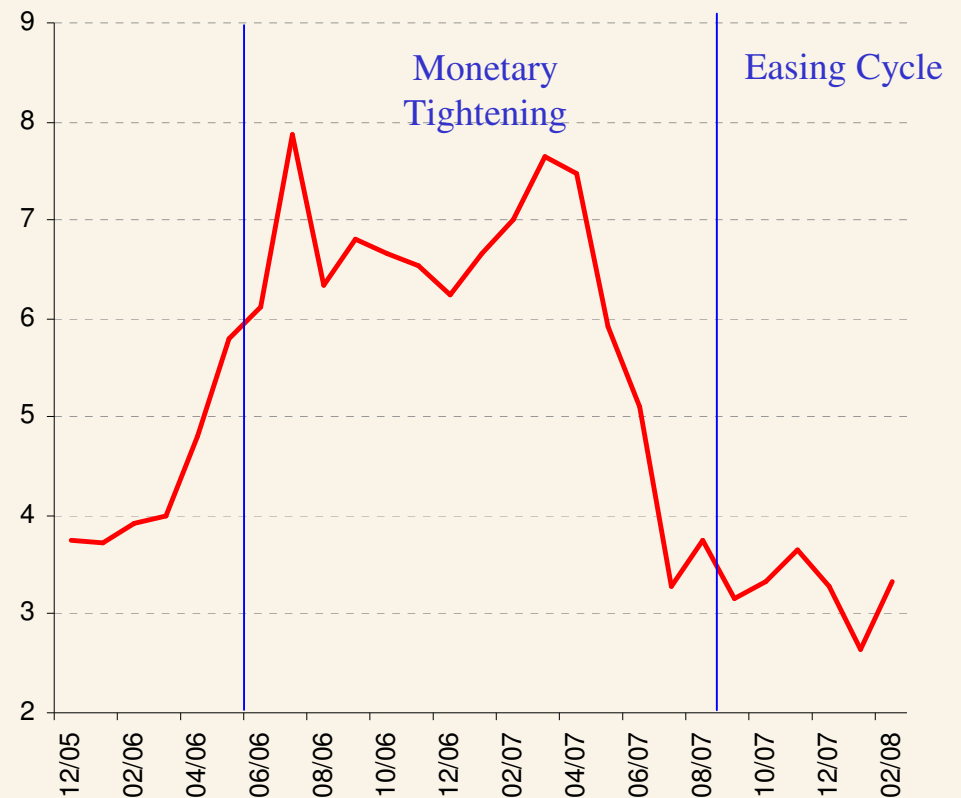
Source: IMF, TURKSTAT, CBRT



# Effects on the Turkish Economy

- ✓ In the third quarter of 2006, the inflation in Turkey was 8 percentage points higher than the inflation rates of other developing countries that follow inflation targeting.
- ✓ The said difference began to narrow thanks to the monetary tightening and decreased to 3 percentage points by early-2008.

***Inflation Differential Between the Economies Implementing Inflation Targeting\* and Turkey***  
(December 2005 – February 2008, annual percentage change)



\* **Countries Implementing Inflation Targeting Regime:** Brazil, Czech Rep., Colombia, Philippines, South Africa, Israel, Hungary, Mexico, Peru, Poland, Romania, Chile, Slovakia, Thailand

Source: Central Banks, TURKSTAT, CBRT



# Effects on the Turkish Economy

✓ Broadly speaking, decision makers take into account three fundamental issues while setting economic policies :

- Price stability
- Economic growth
- Financial stability

✓ Although these three main targets may seem to contradict with each other from time to time, they are not alternatives to each other in the long term.

✓ On the contrary, they stand out as the three “sine qua non” of a sound economy.



# Financial Stability

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



# Banking Sector

## General Outlook of the Banking Sector

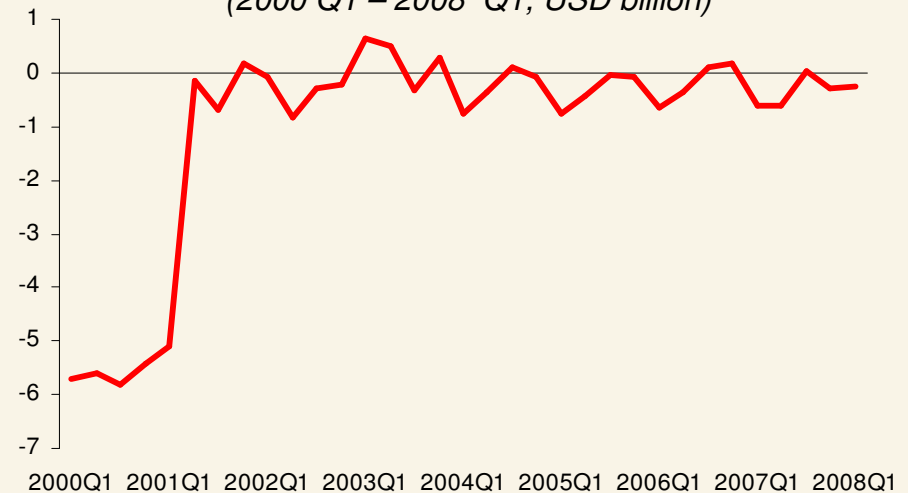


✓ The sector does not hold a noteworthy FX short position. Net FX positions of the banks are at a low level compared to their equity capital.

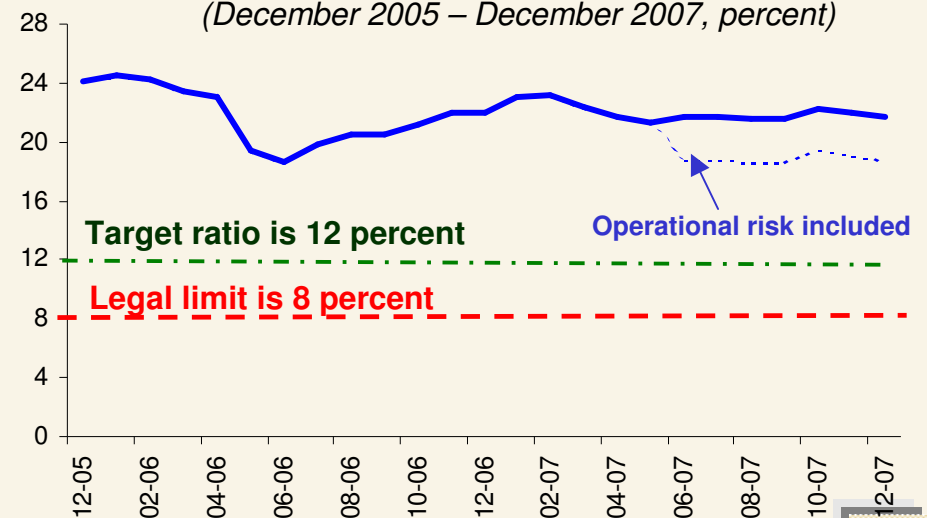
✓ The capital adequacy ratio is well above the legal limit and the EU average of 12.1%.

✓ Still, it should be kept in mind that the FX short position of the real sector poses an indirect credit risk on the banking sector.

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



**Capital Adequacy Ratio**  
(December 2005 – December 2007, percent)



Source: CBRT- BRSA

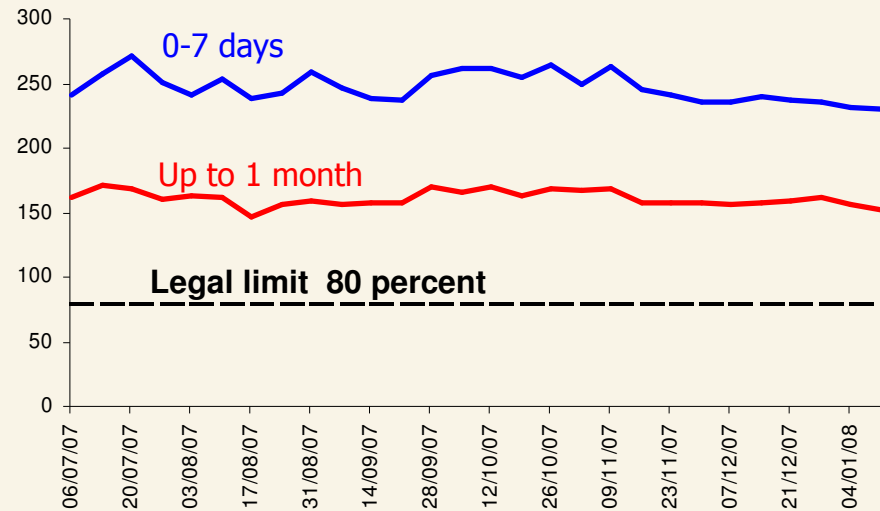




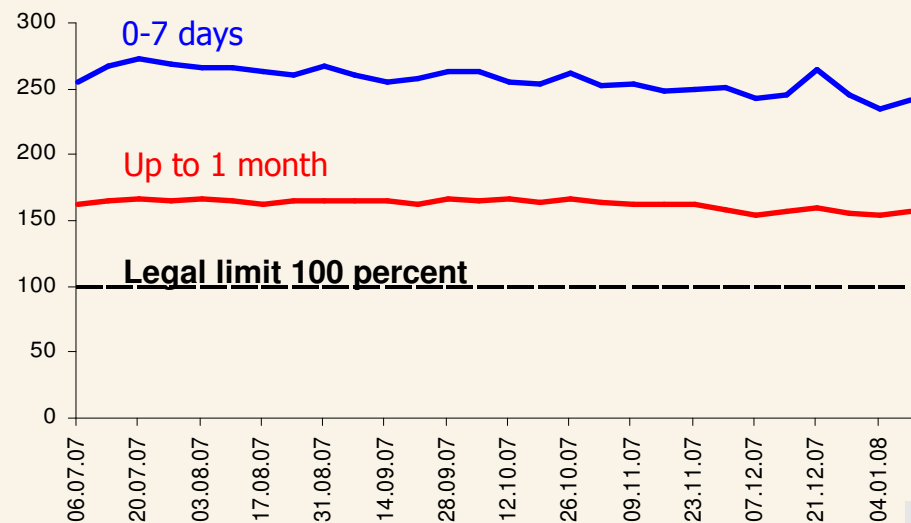
# Banking Sector

- ✓ Banks' short-term FX liquidity adequacy ratios are well above the legal limit of 80%.
- ✓ Total short-term liquidity adequacy ratios stay at high levels, as well.
- ✓ Recent fluctuations in global financial markets once again highlighted the importance of liquidity risk management. In this juncture, it is important for banks to be cautious in liquidity management.

**Short Term FX Liquidity Adequacy Ratio (percent)**



**Total Short Term Liquidity Adequacy Ratio (percent)**



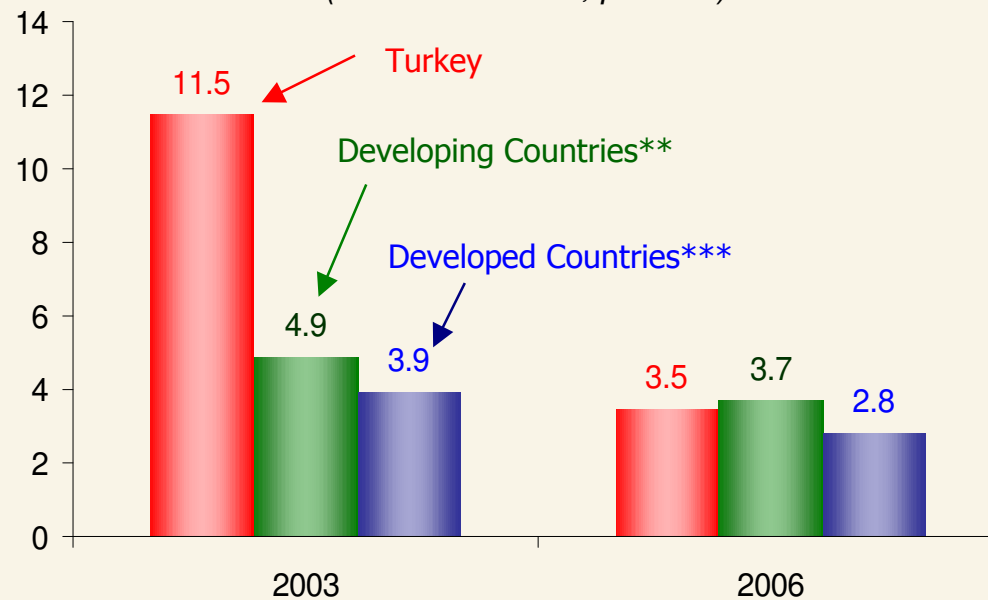
Source: CBRT-BRSA



# Banking Sector

- ✓ Ratio of non-performing loans to total loans dropped by 8 points to 3.5% in the 2003-2007 period.
- ✓ The current level of the ratio is below the average of other developing countries.

**Ratio of Non-Performing Loans to Total Loans**  
(2003 and 2006\*, percent)



\* 2007 data for Turkey

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

\*\*\* Developed Countries: France, Germany, Italy, England, the USA

Source: IMF



# Real Sector

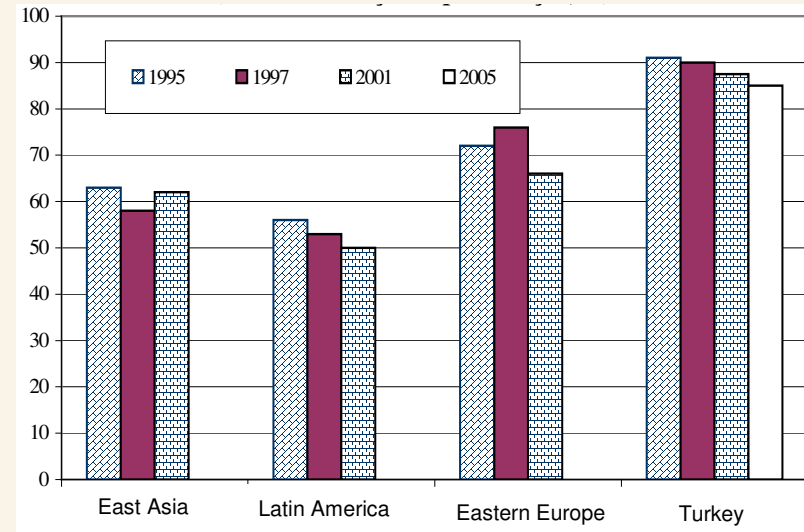
## Real sector's resistance to exogenous shocks



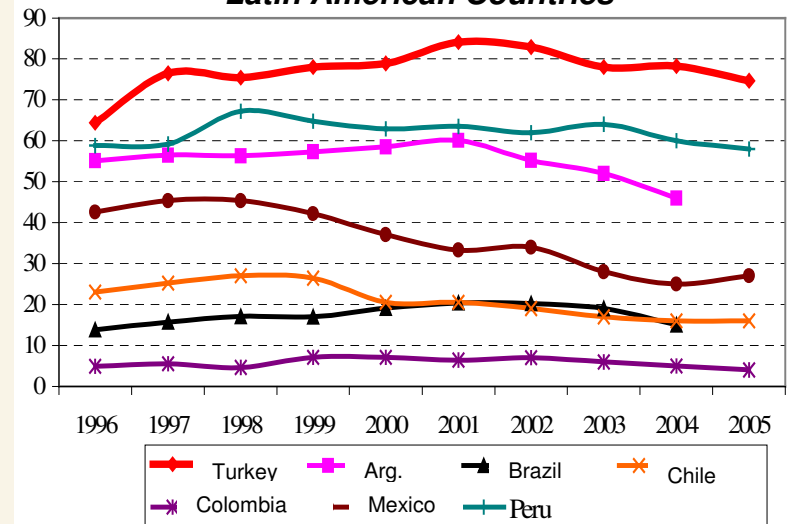
✓ In Turkey, the short-term debt of the real sector is higher than that of other developing countries. Yet, the borrowing maturity has improved moderately in recent years.

✓ Similarly, although the dollarization of the real sector's debt is relatively high in Turkey, it has followed a downward trend in the recent period.

*Ratio of Short Term Debt of the Real Sector to Total Debt*



*Debt Dollarization of the Real Sector in Turkey and Latin American Countries*



Source: CBRT

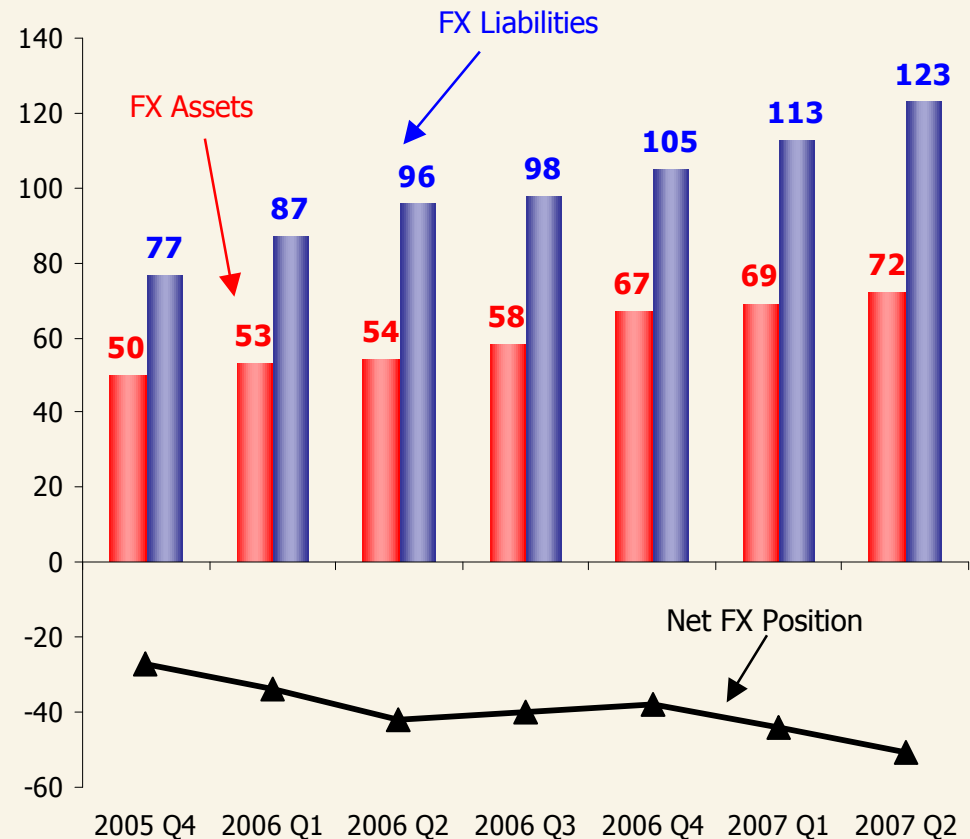


# Real Sector

✓ The FX short position of the non-banking sector was USD 51 billion as of the second quarter of 2007.

- ✓ Exchange rate risk exists in both directions.
- ✓ It is crucial that companies hedge themselves against exchange rate risk.

**FX Position of the Non-Banking Sector**  
(2005 Q1 – 2007 Q2, billion US dollars)

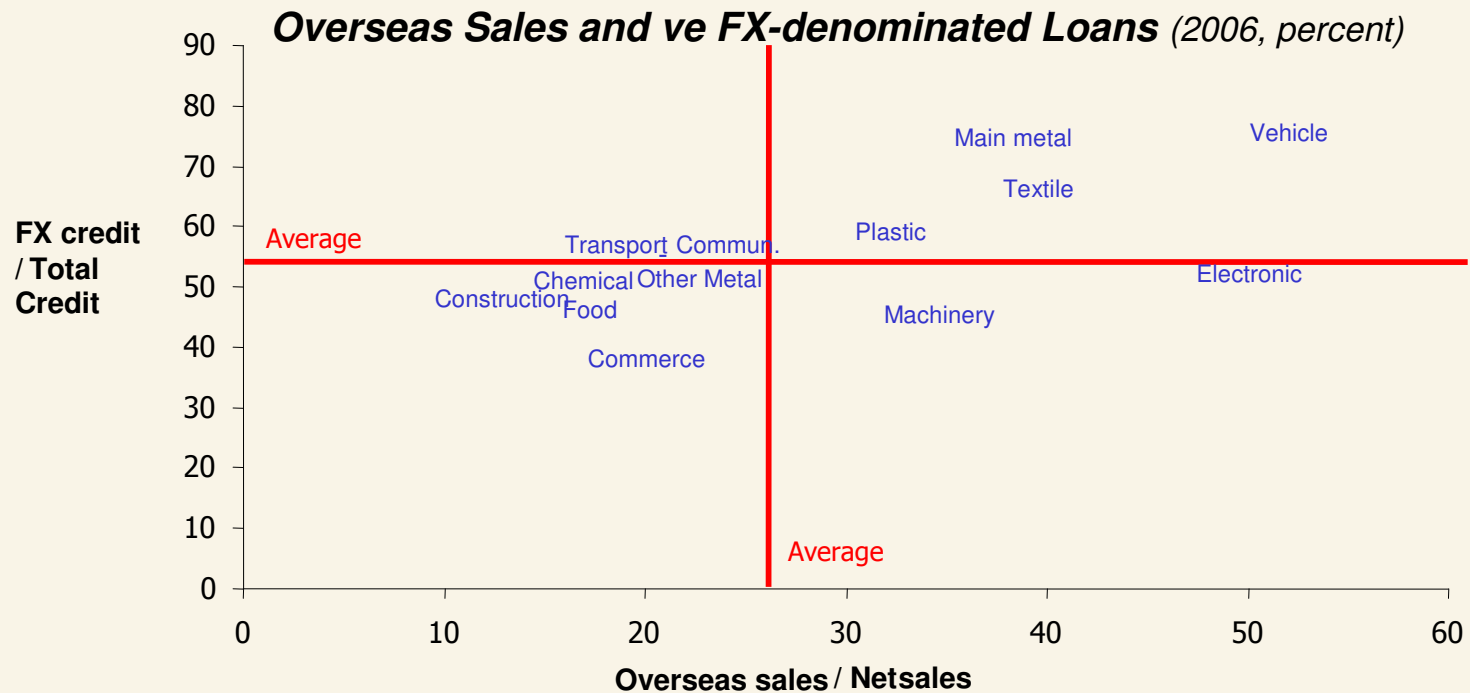


Source: CBRT.



# Real Sector

- ✓ Companies with FX-denominated revenues (exports, tourism, etc.) have a natural hedge against the exchange rate risk. Sectoral analysis points to such a natural hedging tendency. Exchange rate risk can also be contained via forward and derivative transactions.
- ✓ The companies with YTL-denominated revenue should manage exchange rate risk very carefully.
- ✓ Export oriented sectors tend to have high FX loan utilization, whereas FX loan utilization is below the average in sectors that are mainly focused on the domestic market.



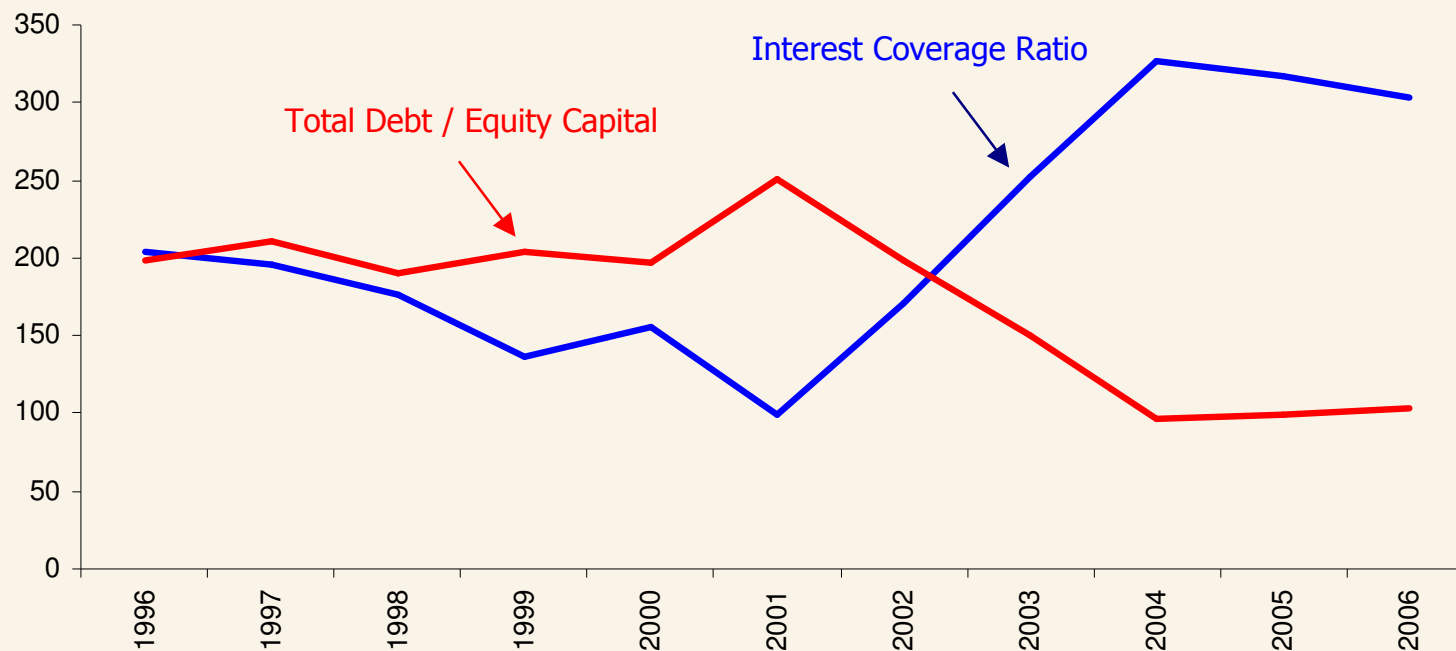
Source: CBRT Company Accounts



# Real Sector

✓ **The financial structure ratios of the companies** show that the ratio of total debt to equity capital declined in the 1996-2006 period. There was a recovery in the interest coverage ratio. The improvement in both accounts may be regarded as a factor that gives a considerable degree of safety to creditors.

**Ratio of Companies' Total Debt to Equity Capital and Interest Coverage Ratio (Operating Profit / Interest Payments) (1996 - 2006, percent)**





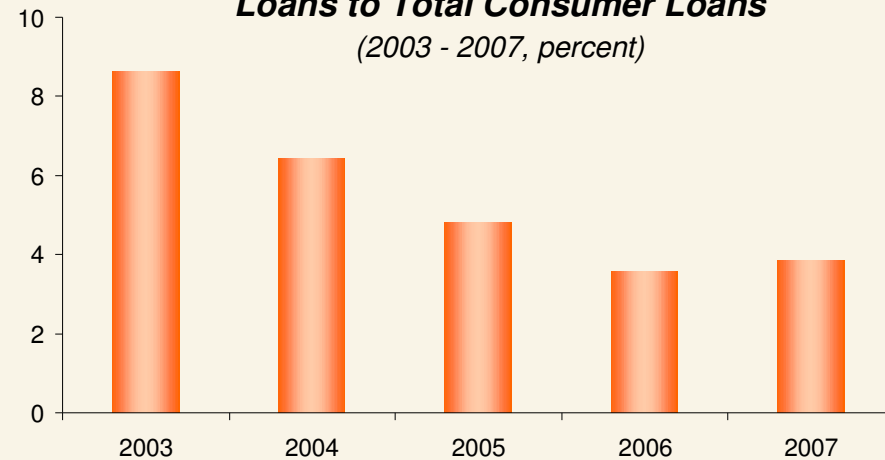
# Households

## Exchange Rate and Interest Rate Risks of Households



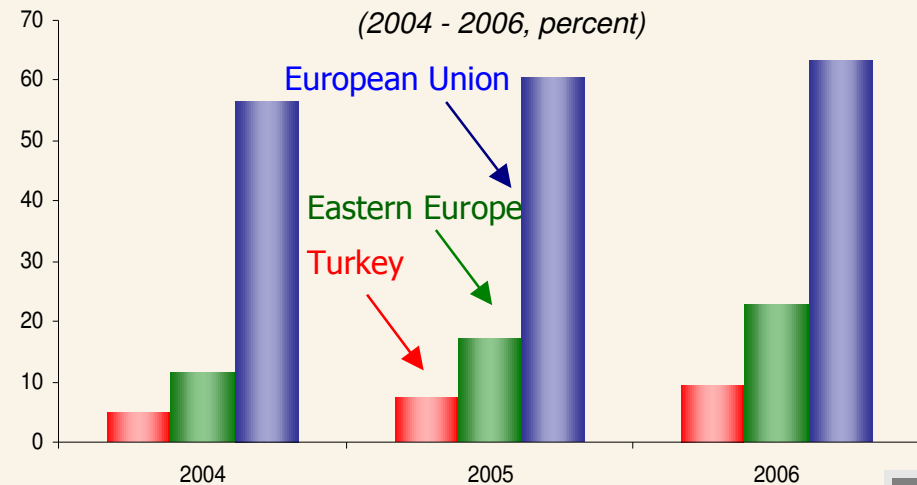
- ✓ In Turkey, the practice of variable rate consumer loans is rather limited.
- ✓ Entities with no FX income are not allowed to use FX denominated loans.
- ✓ FX-indexed consumer loans make up only 3.9% of total consumer loans.
- ✓ Non-performing loan ratio for consumer loans is 1.2%.
- ✓ Household indebtedness is at a low level compared to European Union and Eastern Europe.

**Ratio of the FX-Indexed Consumer Loans to Total Consumer Loans**  
(2003 - 2007, percent)



Source: CBRT

**Ratio of the Household Liabilities to GDP**  
(2004 - 2006, percent)



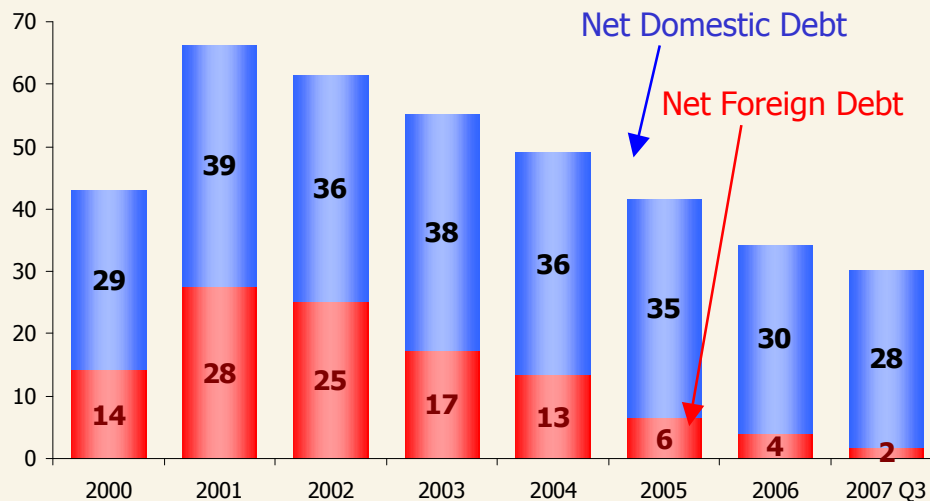
Source: ECB, CBRT



# Public Sector

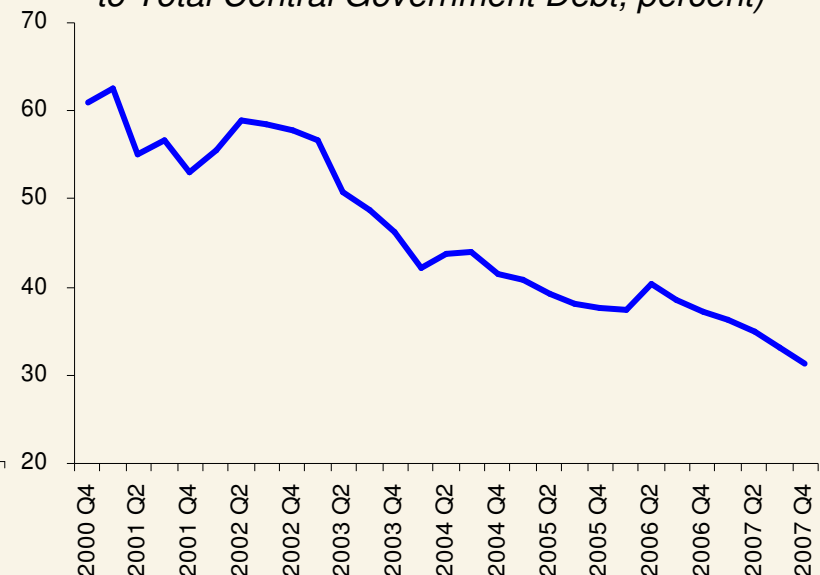
- ✓ With the support of fiscal discipline since 2001, public sector acquired a more shock-resistant nature against external shocks.
- ✓ The ratio of FX-denominated and FX-indexed debt to the total central government debt stock stood at 31%. Ratio of net foreign debt stock to GDP has declined to 2%.
- ✓ The Treasury maintains its policy of holding a high level of FX reserves to minimize any liquidity risk that might arise in cash and debt management.

**Public Sector Net Debt Stock / GDP**  
(2000-2007 Q3, percent)



Source: Treasury, CBRT

**Central Government FX-denominated and FX-indexed Debt Stock** (2000-2007 Q4, Ratio to Total Central Government Debt, percent)



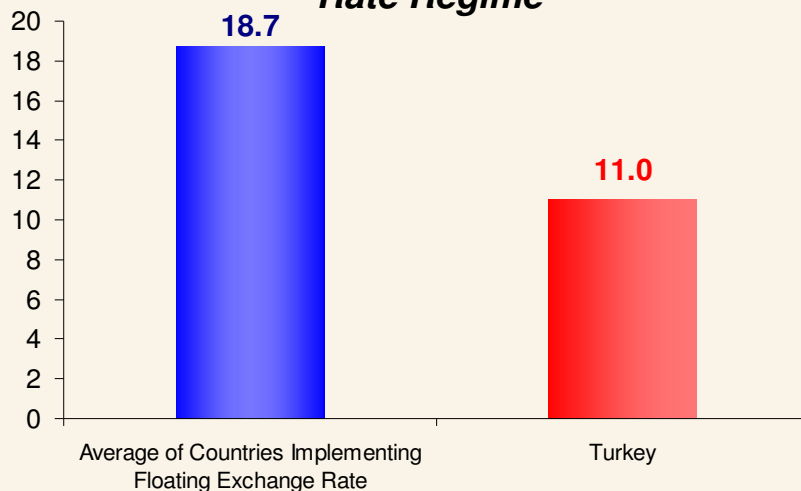




# Central Bank Foreign Exchange Reserves

- ✓ Even if floating exchange rate regime has been adopted, keeping a strong foreign exchange reserve position is very important for developing countries like Turkey in order to eliminate the adverse effects of potential shocks and to boost confidence in the country's economy.
- ✓ Foreign exchange reserves of the Central Bank amounts to USD 74.9 billion as of February 2008.

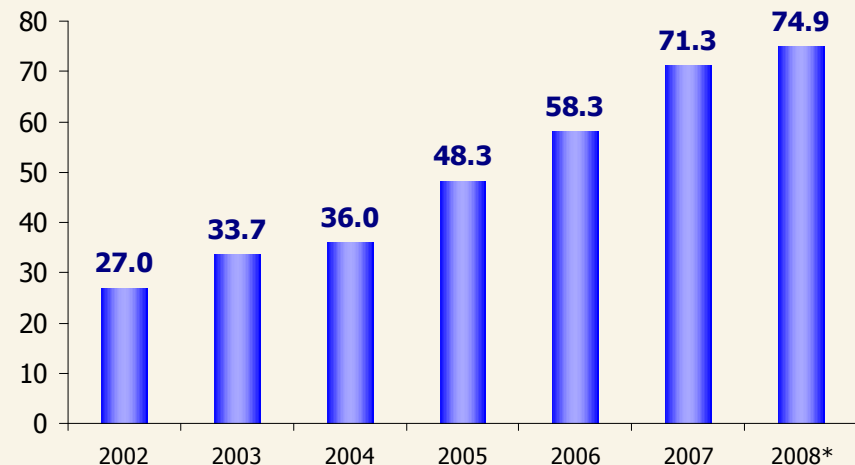
**Ratio of FX Reserves to GDP in 2007 in the Countries Implementing Floating Exchange Rate Regime\***



\* Countries used in the calculation: Argentina, Brazil, Chili, Colombia, Croatia, Czech Republic, India, Indonesia, Kazakhstan, Mexico, Paraguay, Peru, the Philippines, Poland, Romania, Russia, South Africa, South Korea, Thailand, Uruguay.

Source: IMF, CBRT

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



\* By 29 February 2008  
Source: CBRT



# Liquidity Management

- ✓ In the floating exchange rate regime, the Central Bank can implement a more flexible liquidity management policy in comparison to fixed or managed exchange rate regimes. It can respond to liquidity requirements of the banking system in a more flexible and prompt manner. In addition, as long as it is in line with the inflation target, Central Bank can prevent any excessive volatility in the money market interest rates.
- ✓ However, it should be noted that the banking sector and the real sector should continue to follow cautious risk management principles, rather than relying on this relatively more flexible and effective Turkish lira liquidity management and the foreign exchange liquidity facility of the Central Bank. Taking into account the fact that they operate in an environment where the exchange rate risk lies in the market, they should establish mechanisms that will ensure the effective risk management strategies.



# Effects on the Turkish Economy

- ✓ The effects of the recession in the US economy and the fluctuations in financial markets are felt in all countries.
- ✓ It is impossible to avoid these repercussions in today's world where trade and capital flows are free and economies are becoming more and more integrated.
- ✓ However, degree and duration of this effect will differ from country to country and will be determined by the economic policies of the countries.



# Effects on the Turkish Economy

✓ Current indicators show that the Turkish economy has become more resistant to fluctuations in global markets compared to the previous years.

✓ Having said that, the decline in fragilities in comparison to the previous periods should not be interpreted as the absence of risks.



# A Shock-Resistant Economy

- ✓ As long as the economic program is implemented decisively and no concessions are made from these policies, Turkish economy will be more resistant to shocks. Within this context, resolute implementation of the fiscal policies and keeping up with the structural reforms in an uninterrupted fashion are of crucial importance.
- ✓ Tight fiscal policy along with budget management compatible with the principles of transparency, unity, generality, and accountability has made significant contribution to the progress made since 2002 in reaching sustainable growth as well as in reducing inflation.
- ✓ It should be kept in mind that in the recent period when external risks became more pronounced, should notions indicating a possible diversion from the fiscal discipline occur, there might be a deterioration in the risk perceptions regarding the Turkish economy.
- ✓ In order to enhance the resistance of the Turkish economy against exogenous shocks, maintaining and improving the gains in public finance, as well as the reforms made in institutional infrastructure are essential.



# A Shock-Resistant Economy

- ✓ The baseline scenario of the Central Bank for medium-term inflation and monetary policy assumes a soft landing in developed economies, with no major portfolio shock on the Turkish financial markets.
- ✓ However, the probability of a sharper than expected slowdown in the global economy should not be ruled out. Realization of such an event may constitute an upside risk for the short-term inflation, through its potential impact on portfolio movements and the exchange rate.
- ✓ It also poses downside risks for the inflation and economic activity in the medium-term through a possible weakening in external demand and domestic credit.
- ✓ The potential second round impact of elevated food and energy prices on headline inflation should not be overlooked. That risk becomes more apparent in view of the fact that the medium-term inflation expectations are still above the inflation target.
- ✓ The Central Bank will tolerate the first-round effects resulting from food, energy and one-off adjustments in administered prices.



# Monetary Policy and Price Stability



# Main Framework of Monetary Policy

**The primary objective of the Central Bank is to achieve and maintain price stability, as stipulated by law.**

- ✓ In this framework, the inflation targeting regime was implemented implicitly between 2002-2005 and has been implemented explicitly since 2006.
- ✓ Inflation target is set jointly with the Government in the current monetary policy regime.
- ✓ Policy rate is the main policy instrument of the Central Bank for achieving the inflation target.





# Why is Price Stability Essential?

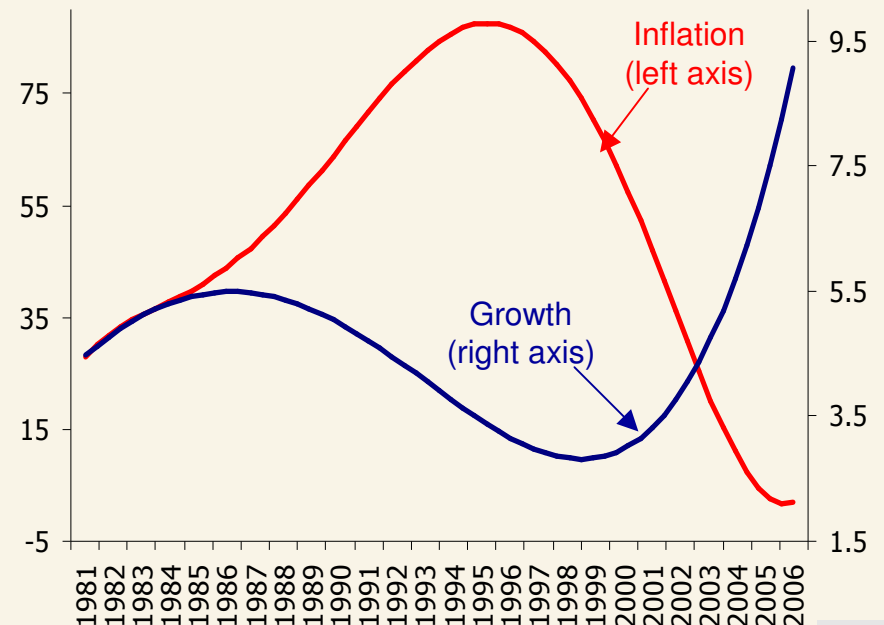
✓ **Economic growth that compromises price stability cannot be permanent.** The rise of economic prosperity solely hinges on the achievement of sustainable growth.

✓ The high growth rates attained in the 1980s along with high inflation could not be sustained and were replaced by higher inflation and economic stagnation.

✓ During the 2002-2007 period, high growth rates were accompanied by falling inflation.

	Average Inflation	Average Growth
1981-1989	43.4 %	4.8 %
1990-2001	74.0 %	3.3 %
2002-2007	13.6 %	6.8 %

***Inflation and Growth Trends in Turkey***  
(1981-2006, percent)



Source: TURKSTAT



# Why is Price Stability Essential?

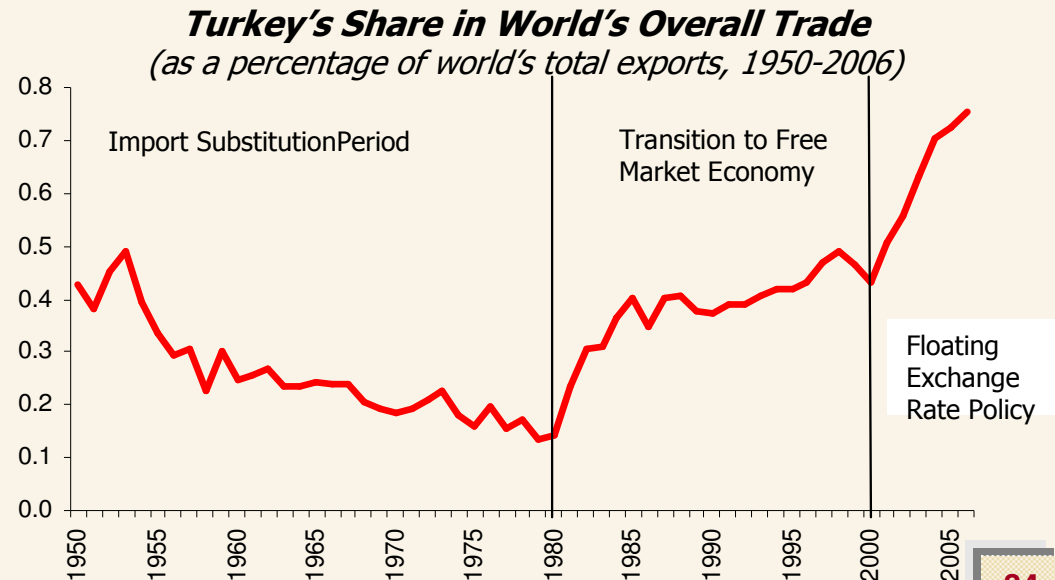
✓ The price stability target is not at the expense of growth. On the contrary, price stability is the prerequisite for sustainable growth and an increased level of prosperity.

✓ In the 2002-2007 period, falling inflation was accompanied not only by an accelerated economic growth, but also by:

- accelerated capital investments,
- increased industrial production,
- higher capacity utilization rate,
- increased non-agricultural employment,
- high growth in total exports both in value and quantity (with constant prices), and increase in Turkey's share in global exports.

	1990-2001	2002-2007
<b>Inflation (CPI)</b>	<b>74.0 %</b>	<b>13.6 %</b> ↓
<b>GDP Growth*</b>	<b>3.3 %</b>	<b>6.8 %</b> ↑
<b>Increase in Capital Investment *</b>	<b>3.1 %</b>	<b>14.2 %</b> ↑
<b>Growth in Industrial Production</b>	<b>3.6 %</b>	<b>7.4 %</b> ↑
<b>Capacity Utilization Rate</b>	<b>75.8 %</b>	<b>80.0 %</b> ↑
<b>Increase in Non-Agricultural Employment*</b>	<b>2.6 %</b>	<b>3.8 %</b> ↑
<b>Exports (USD)</b>	<b>9.5 %</b>	<b>22.0 %</b> ↑
<b>Exports (Quantity Index)</b>	<b>9.2 %</b>	<b>14.0 %</b> ↑

\* As of the third quarter of 2007.  
Source: TURKSTAT, CBRT



Source: World Trade Organization, TURKSTAT



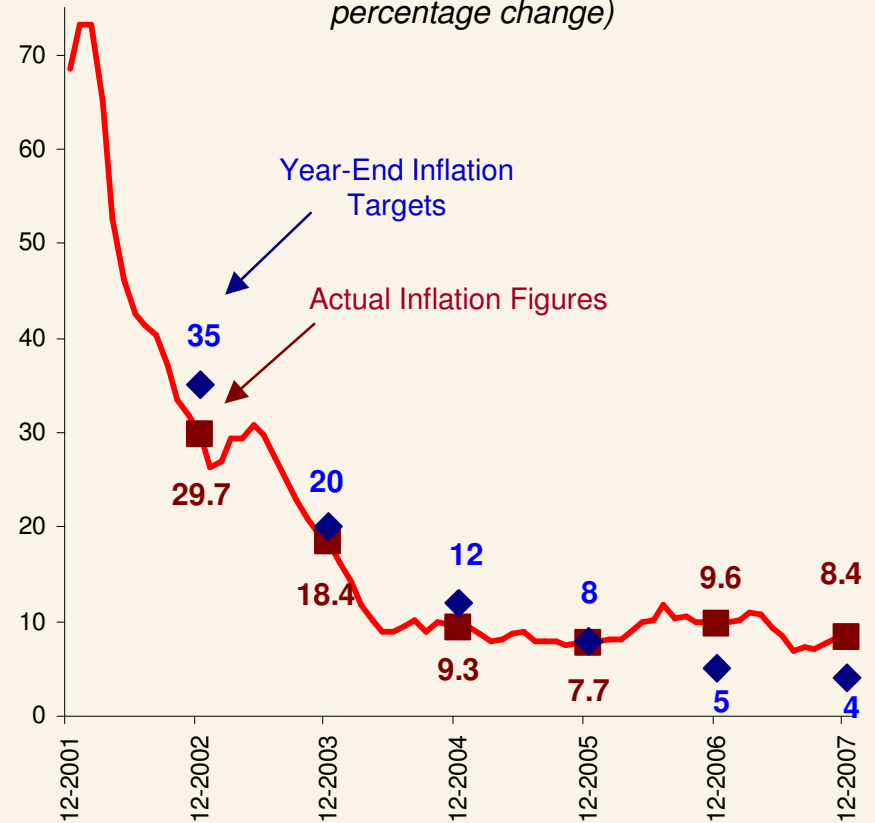
# Progress Made Towards Price Stability

## Have we achieved price stability?

- ✓ It is not possible to give an affirmative reply to this question yet.
- ✓ Inflation has fallen significantly since 2001. Annual rate of inflation has been brought down to a single-digit level for the first time since the 1970s.
- ✓ Nevertheless, price stability remains to be achieved.
- ✓ Although inflation remained below the targets during the 2002-2005 period, it exceeded the targets in the last two years.
- ✓ Hence, disinflation process is an ongoing process.
- ✓ In the upcoming period, the Central Bank will continue to decisively implement monetary policies required for an inflation consistent with the target.

## Actual Inflation Figures and Year-End Inflation Targets

(January 2002 – December 2007, annual percentage change)



Source: TURKSTAT, CBRT



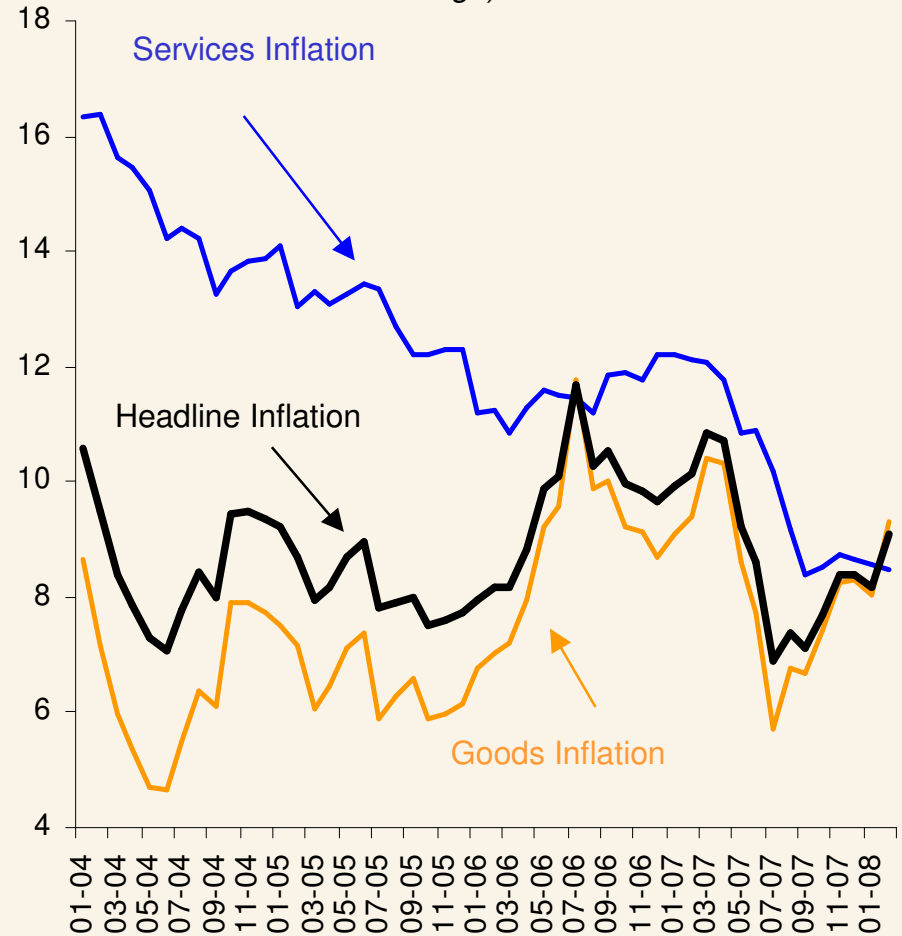
# Inflation Developments



# Inflation Developments

- ✓ In the first three quarters of 2007, inflation fell gradually in line with the Central Bank's projections and was 7.1 % in September.
- ✓ In the last quarter of the year, supply-side shocks such as drought and hikes in energy prices as well as adjustments in administered prices led to pause in the downward trend of inflation.
- ✓ As of February 2008, year-on-year inflation stood at 9.1 %.
- ✓ The downward trend observed in services inflation is particularly encouraging, since it points to a gradual break of long-term inflation rigidity in this group.
- ✓ Goods inflation has followed a more volatile course due to external and supply-side factors.

**Headline, Services and Goods Inflation**  
(January 2004 – February 2008, annual percentage change)



Source: TURKSTAT, CBRT



# Inflation Developments

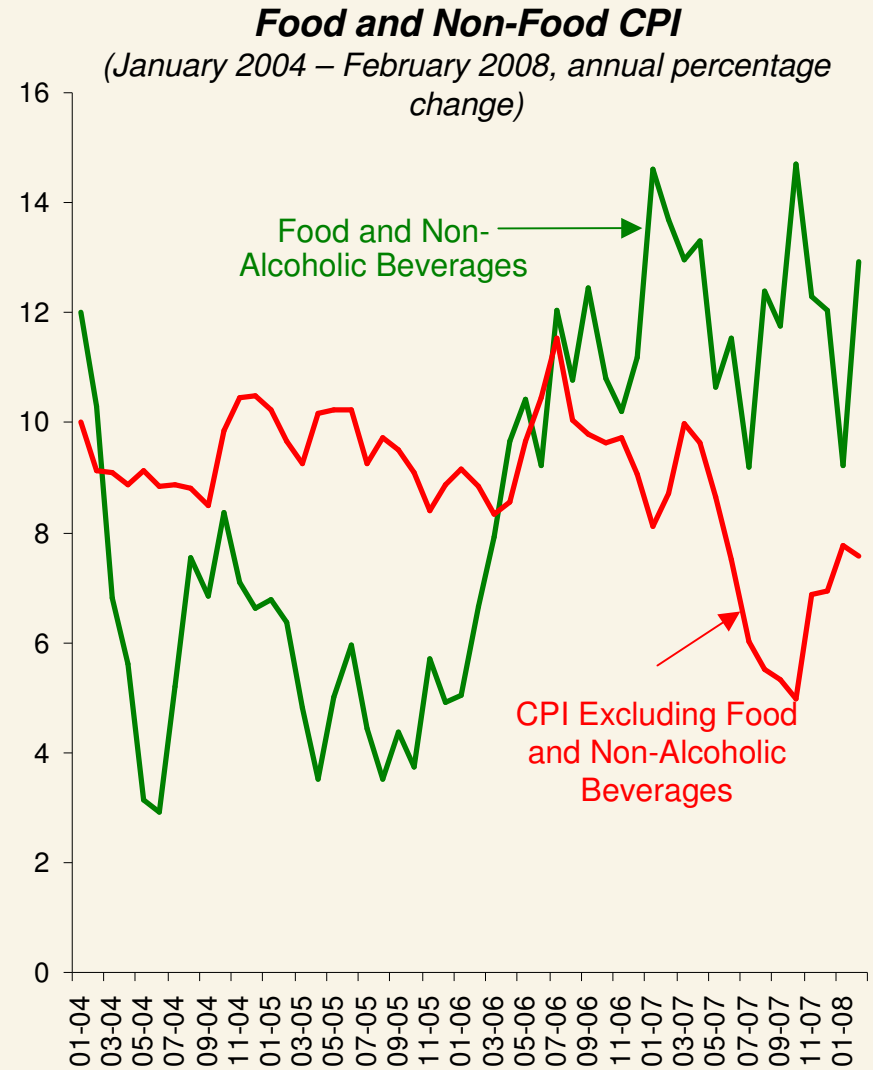
✓ Food prices stand as one of the main factors that have impeded the disinflation process in 2007.

- As of February 2008, food group has added 3.7 percentage points to annual inflation.

✓ Non-food inflation showed a significant deceleration in 2007 compared to 2006.

- Non-food inflation, which was 9.1% in December 2006, declined to 4.98% in October 2007.

- Adjustments to administered prices in November and January halted the deceleration in non-food inflation. As of February 2008, the year-on-year increase in non-food inflation was 7.6%.



Source: TURKSTAT, CBRT



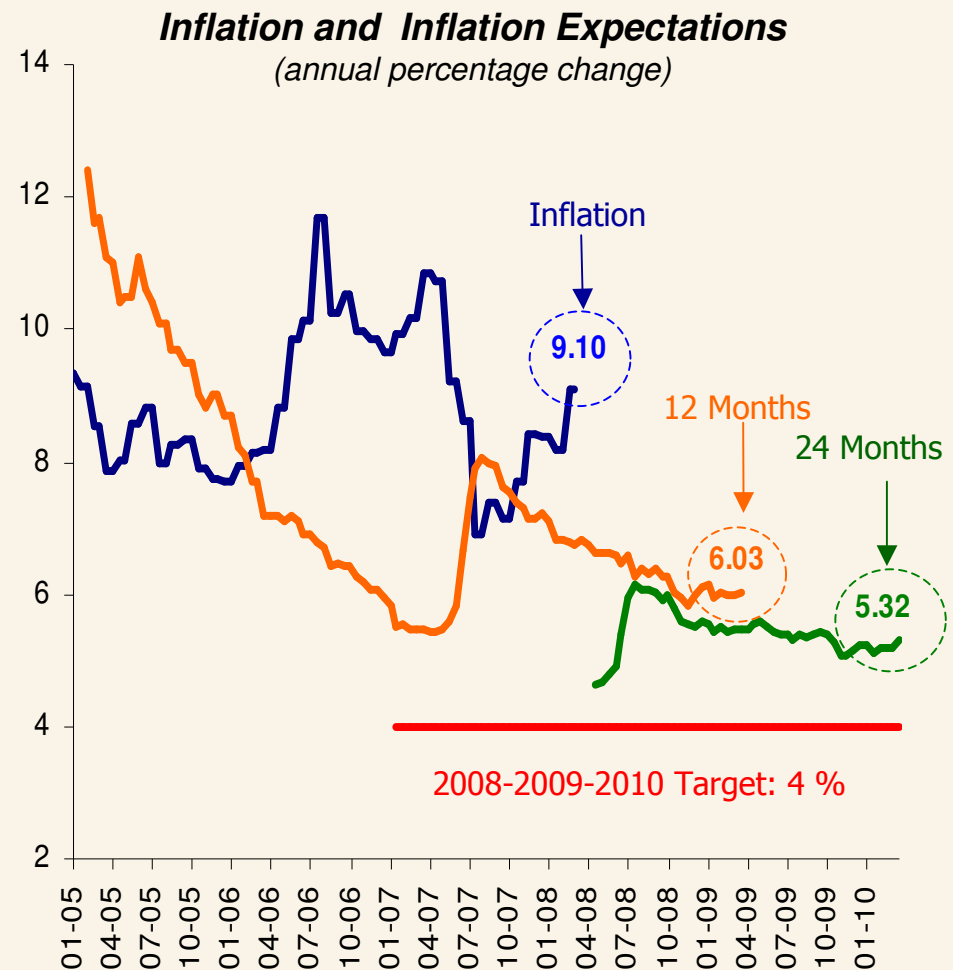
# Inflation – Expectations

✓ **Inflation expectations** have stayed above the target despite recent improvements.

✓ By March 2008, 12-month and 24-month forward inflation expectations are 6.03% and 5.32%, respectively.

✓ Both 12-month and 24-month forward inflation expectations suggest that the downward trend in inflation will continue and that inflation will converge the target in the medium term – broadly in line with the Central Bank's forecasts.

✓ The difference lies in the duration of the convergence process. While the Central Bank foresees that this process will be accomplished in 2009, markets expect that it will take longer time.



Source: CBRT, TSI



# Interest Rates, Exchange Rates and Markets





# Interest Rates, Exchange Rates and Markets

## Monetary Policy Decisions

✓ The Monetary Policy Committee sets short term interest rates with the aim of achieving inflation targets.

✓ The Committee started easing cycle on September 13, 2007 by decreasing the policy rates by 25 basis points.

✓ The moderate rate cuts continued at five successive meetings and policy rates were reduced by 225 basis points in total compared to August 2007.

## Monetary Policy Committee Interest Rate Decisions (May 2006 – February 2008)

Meeting Date	Policy Rates	Change
25 May 2006	13.25	0
<b>07 June 2006</b>	<b>15.00</b>	<b>+ 1.75</b>
20 June 2006	15.00	0
<b>25 June 2006</b>	<b>17.25</b>	<b>+ 2.25</b>
<b>20 July 2006</b>	<b>17.50</b>	<b>+ 0.25</b>
24 August 2006	17.50	0
26 September 2006	17.50	0
19 October 2006	17.50	0
23 November 2006	17.50	0
21 December 2006	17.50	0
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>

Source: CBRT



## Interest Rates, Exchange Rates and Markets

- ✓ Monetary policy stance is determined in view of inflation targets, available data, future expectations and medium-term inflation expectations.
- ✓ Any new data related to the medium-term inflation outlook would lead to revision of future stance of monetary policy.

### Examples of data dependency in the event of:

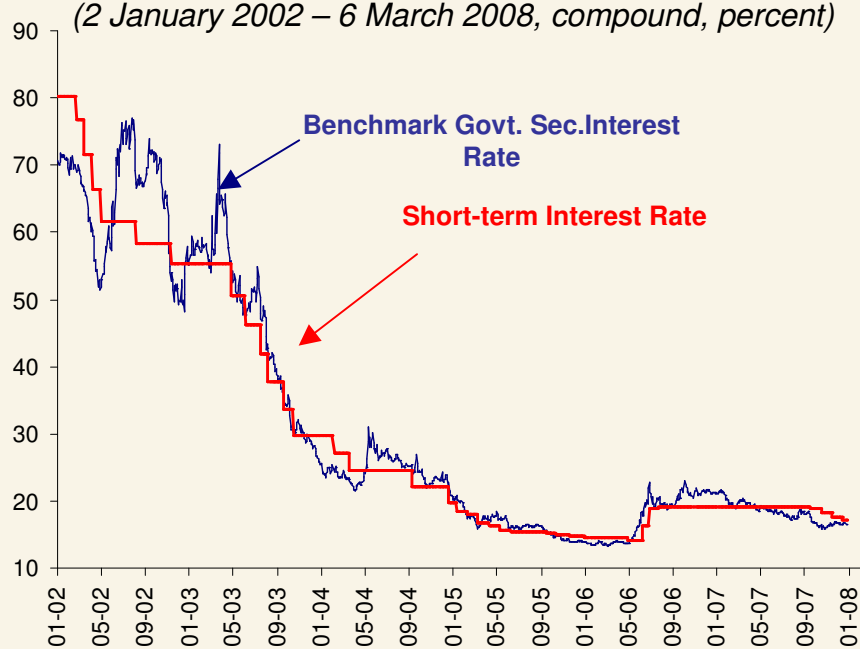
- ✓ **Deterioration of the risk perception in international credit markets:** The credit flows from abroad to domestic banks would decrease, domestic loan utilization and domestic demand would slow down, inflation expectations would drop below the target, the monetary policy would be loosened .
- ✓ **Loosening of Fiscal Policies:** Inflation forecast would surpass the inflation target, a new monetary policy (monetary tightening) would be implemented to render the inflation expectations consistent with the target.



# Interest Rates, Exchange Rates and Markets

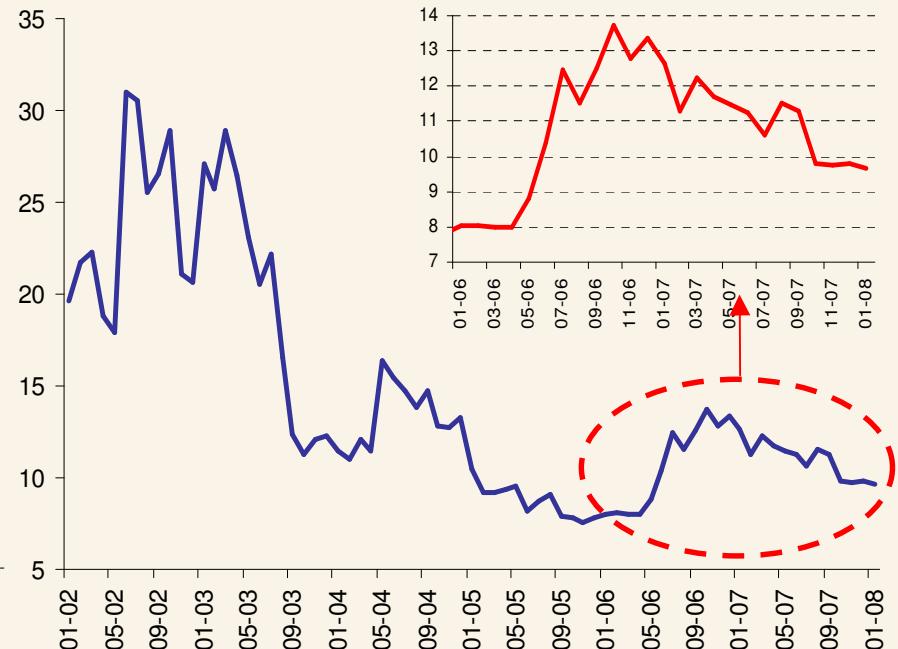
- ✓ The interest rates have decreased substantially in nominal and real terms due to the progress achieved regarding macroeconomic stability.
- ✓ While nominal interest rates fell from 70% to 16% between 2002 and 2007; real interest rates went down from a range of 20 - 30 % to single digits.
- ✓ In January 2008 real interest rates stood at 9.68%.

**CBRT Short Term Interest Rates and Benchmark Government Securities Interest Rate**  
(2 January 2002 – 6 March 2008, compound, percent)



Source: CBRT

**Real Borrowing Interest Rate**  
(January 2002 – January 2008, compound, percent)



\* Calculated by the borrowing interest rates of the government domestic borrowing auctions and the 12-month inflation forecasts of the Expectations Survey.

Source: CBRT, Undersecretariat of Treasury



# Interest Rates, Exchange Rates and Markets

## Floating Exchange Rate Regime



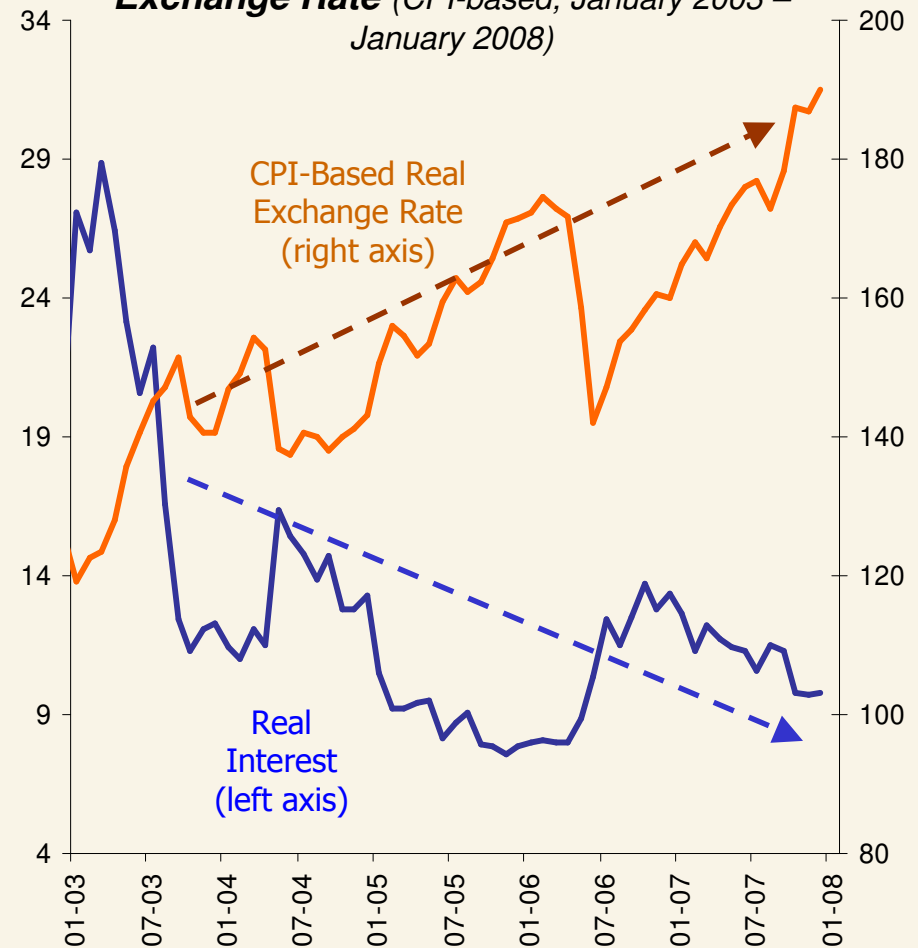
✓ The level of exchange rates is set under market conditions and reflects all economic and political policy implementations as well as expectations.

✓ The Central Bank does not follow a policy of “*high interest rate- low exchange rate*”. The value of the Turkish currency is not an objective, but a consequence.

✓ The post-2001 period shows that real interest rates and the value of the Turkish currency have moved in opposite direction.

✓ The Central Bank’s follows “*the interest rate policy needed for low inflation*”.

**Real Borrowing Interest (percent) and Real Exchange Rate (CPI-based, January 2003 – January 2008)**



Calculated by the borrowing interest rates of the government domestic borrowing auctions and the 12-month inflation forecasts of the Expectations Survey.  
Source: CBRT, Undersecretariat of Treasury



## Interest Rates, Exchange Rates and Markets

**The relationship between Central Bank policy rates and the exchange rates is complex and multidimensional.**

- ✓ Policy rate cuts would lead to two conflicting dynamics on the exchange rate:
  1. **Primary effect:** The yield of the YTL-denominated assets would decline, demand for foreign exchange would increase, Turkish currency would come under pressure for devaluation.
  2. **Expectation Channel:** A positive signal would be emitted about the general economic outlook, confidence would increase, reverse currency substitution would strengthen, appreciation pressure would mount on Turkish currency.
  
- ✓ In addition, exchange rate may move independently from economic fundamentals and policy rates due to liquidity conditions, investor sentiments and changes in expectations.
- ✓ The immediate conjuncture would determine which of these channels will prevail and to what extent.

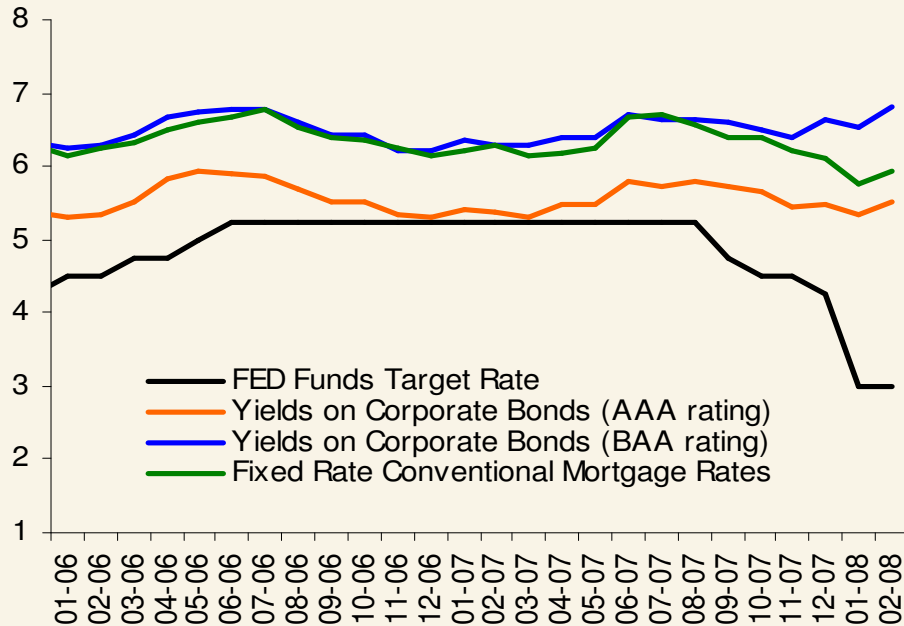


# Interest Rates, Exchange Rates and Markets

- ✓ Policy rate cuts are not sufficient to reduce the financial costs of commercial enterprises and consumers, which are set in free market environment.
- ✓ For instance, despite the monetary loosening being implemented by the Federal Reserve since September 2007, housing and commercial interest rates follow an upward trend, contrary to the decline in policy rates, chiefly owing to the deterioration in risk perceptions.

## Interest Rates in the U.S. Economy

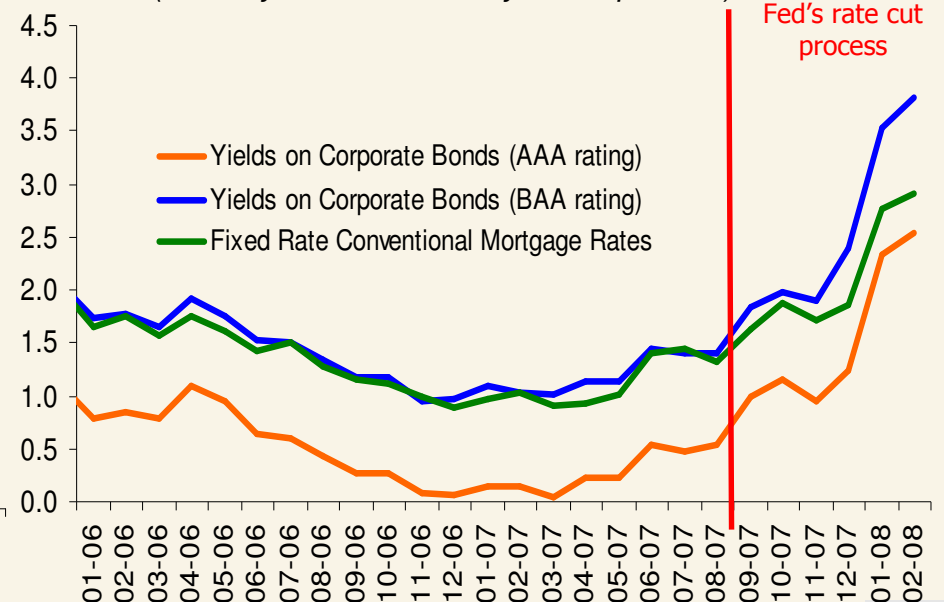
(January 2006 – February 2008, percent)



Source: FED

## Difference between the Overall Level of Interest Rates and Policy Rates in the U.S. Economy

(January 2006 – February 2008, percent)



Source: FED



# Economic Outlook

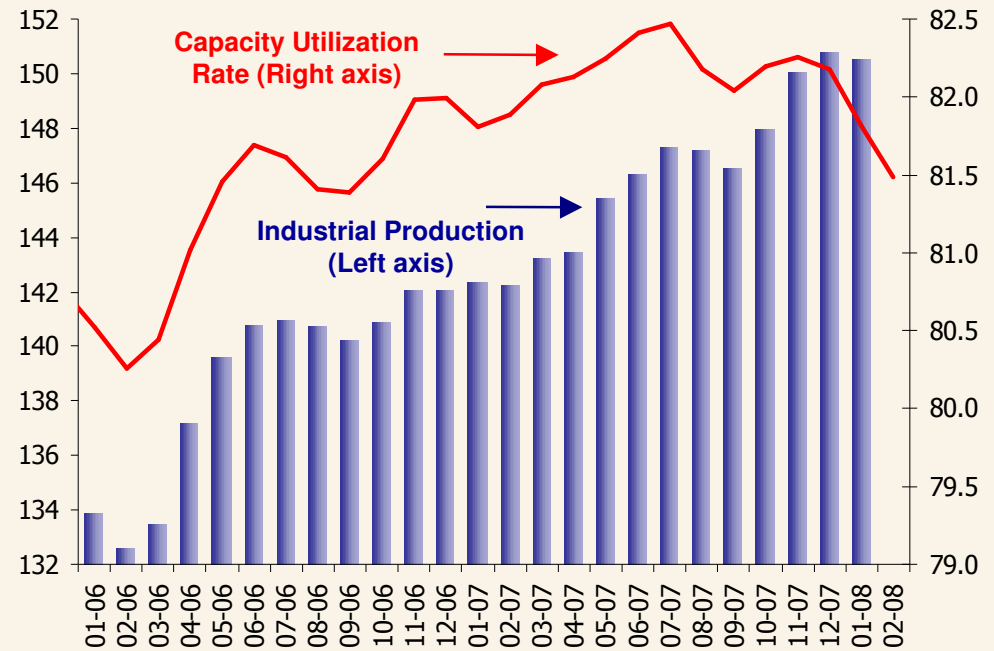


# Production and Investment

✓ Readings on recent data indicate that the economic activity has been robust compared to the previous period and that the recovery in the economic activity has continued in the last quarter of 2007 as well as in early 2008.

- ✓ Industrial production has displayed high growth rates since the last quarter of 2007.
- ✓ Seasonally adjusted figures on capacity utilization maintain their high level.
- ✓ Indicators of investment demand such as production and import of investment goods, light commercial vehicle sales point to annual and quarterly increases in machinery-equipment investments in the last quarter.

**Industrial Production Index\*** (January 2006 – January 2008) **and Capacity Utilization Rate\*** (January 2006 – February 2008, percent)



\* Seasonally adjusted, quarterly moving average  
Source: TURKSTAT, CBRT



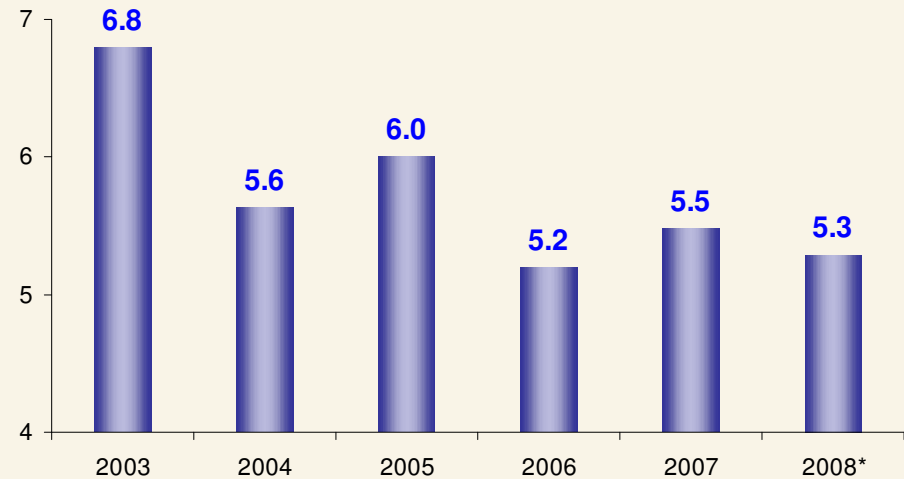


# Real Sector

- ✓ Parallel to the economic activities that gained pace between 2002 and 2007, the number of bad checks increased in line with the number of bank checks used.
- ✓ The ratio of the amount of bad checks to the total checks submitted to the clearing house, which was 6.8% in 2003, declined to 5.5% in 2007.
- ✓ This ratio was 5.3% in the first two months of 2008.

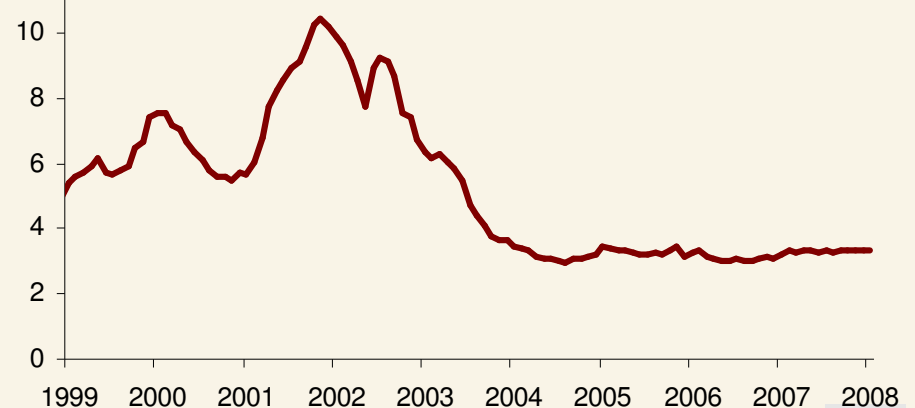
- ✓ Likewise, the ratio of protested bills to commercial loans (an indicator of commercial activities) declined to 3.4% as of January 2008 after reaching 11% in 2002,.

**Ratio of Bad Checks to the Total Amount of Checks Submitted to the Clearing House (2003-2008\*, percent)**



\* January-February average  
Source: CBRT, Interbank Clearing House

**Ratio of the Amount of Protested Bills (12-month, cumulative real) to Total Commercial Loans (January 1999 – January 2008, real, percent)**



Source: CBRT



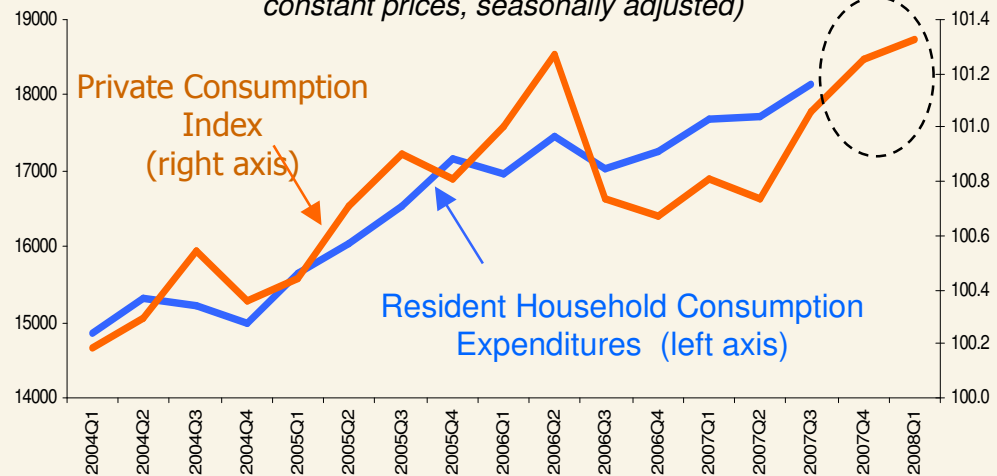
# Domestic Demand

## Economic Outlook: Private Consumption



- ✓ Leading indicators on consumption expenditures maintain the signs of recovery.
- ✓ The CBRT Private Consumption Index points to a moderate pick-up in private final consumption expenditures and domestic demand in the second half of 2007.
- ✓ Despite the increase in consumer loans, private consumption expenditures do not exhibit a noteworthy acceleration.

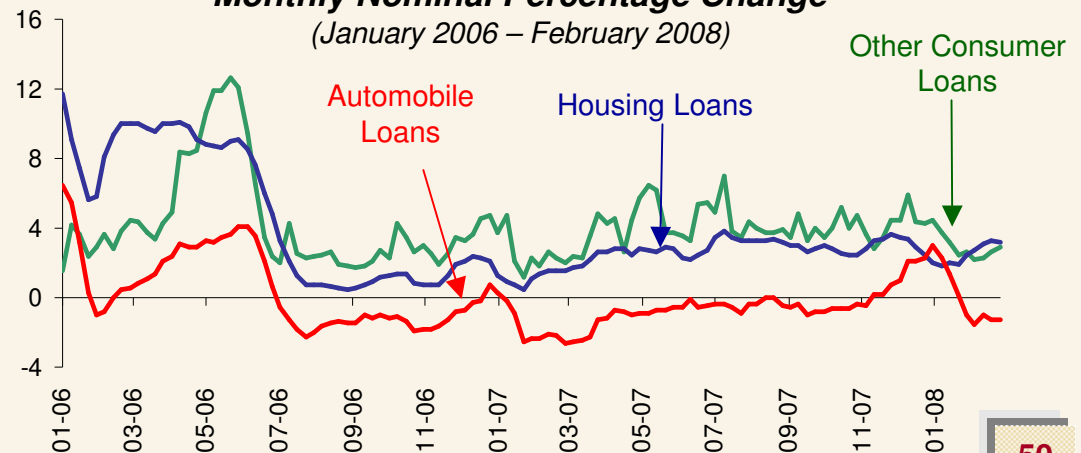
**Private Consumption Index (2004 Q1 –2008 Q2) and Resident Household Consumption Expenditures (2004 Q1– 2007 Q3, constant prices, seasonally adjusted)**



Series making up Private Consumption Index: Seasonally adjusted imports of consumption goods, seasonally adjusted real domestic taxes on goods and services, seasonally adjusted total domestic sales of white goods, seasonally adjusted domestic sales of automobiles.

Source: TURKSTAT, CBRT

**Monthly Nominal Percentage Change (January 2006 – February 2008)**



Source: CBRT



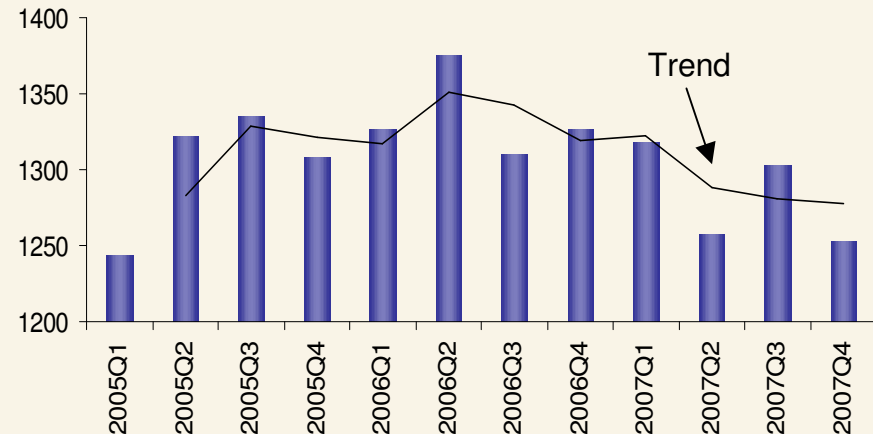
# Domestic Demand

## Domestic Sales of Automobiles and White Goods

- ✓ Sales of automobiles and white goods signal for an ongoing moderate recovery in private consumption in the last quarter of 2007 as well.
- ✓ Following a period of contraction in the third quarter of 2006, domestic demand for white goods remained flat in the second half of 2007.
- ✓ Automobile sales displayed a high growth rate as of the second half of 2007 compared to the first half of the year.

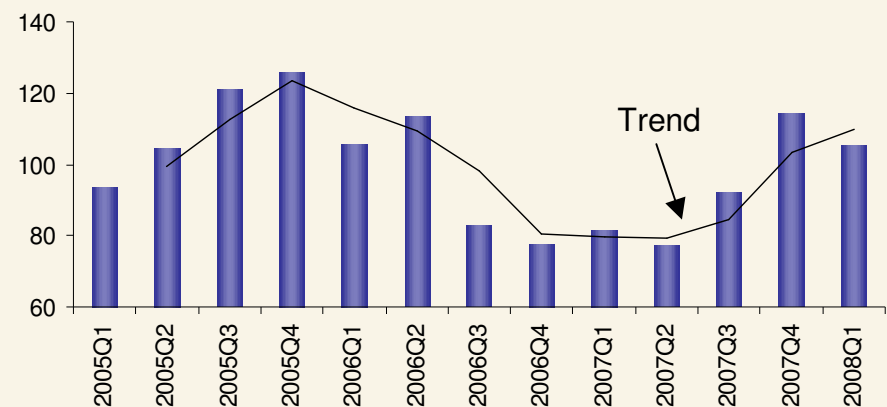
### Domestic White Good Sales

(2005 Q1 – 2007 Q4, seasonally adjusted, 3-month rolling, thousand)



### Domestic Auto Sales

(2005 Q1 – 2008 Q1, seasonally adjusted, 3-month rolling, thousand)



Source: Automotive Manufacturers Association (AMA), White Goods Manufacturers Association (WGMA), CBRT



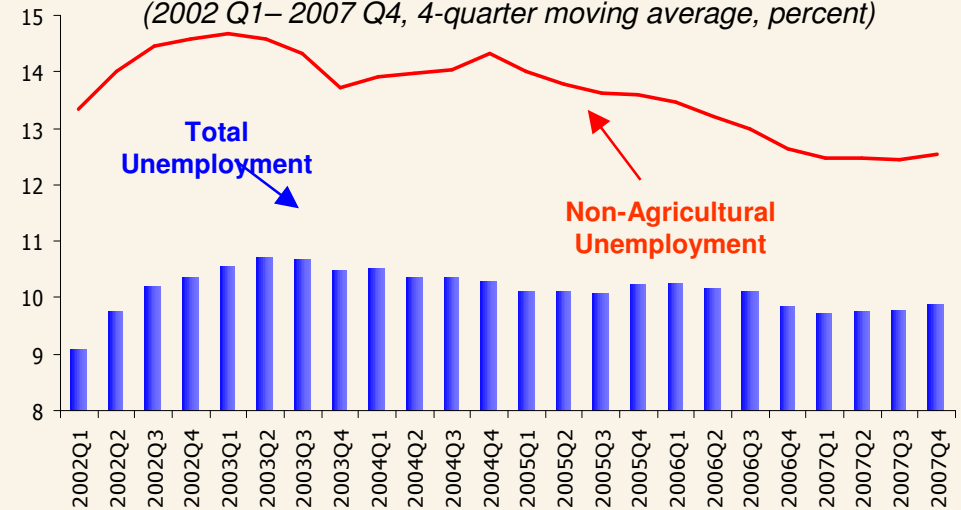
# Employment

## Labor Market

- ✓ Unemployment and non-agricultural unemployment rates in 2007 remained unchanged compared to 2006 at 9.9% and 12.6%, respectively.
- ✓ The employment in non-agricultural economic activities comprising industrial, construction and services decelerated in the second half of 2007.
- ✓ 347 thousand new jobs were created in the non-agricultural sectors in 2007.
- ✓ Labor force participation rate is still low at 47.8%.

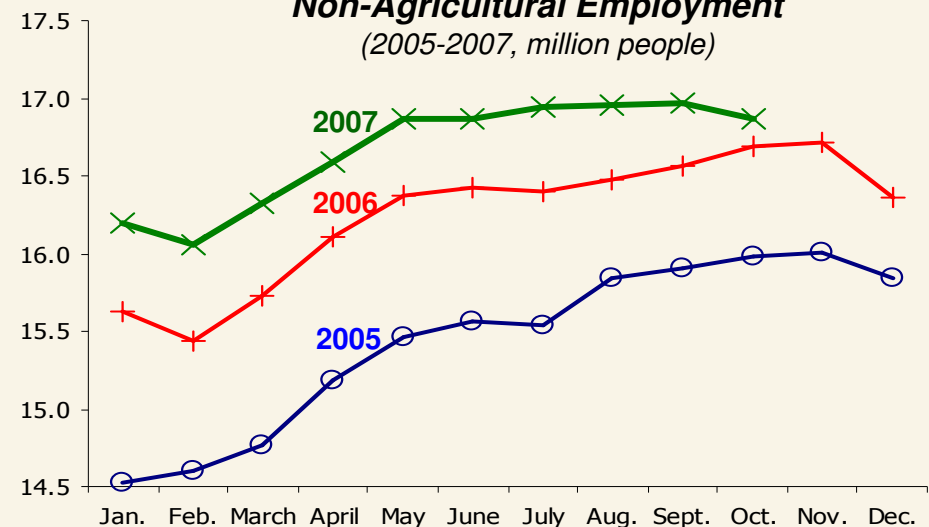
### Unemployment and Non-Agricultural Unemployment Rates

(2002 Q1–2007 Q4, 4-quarter moving average, percent)



### Non-Agricultural Employment

(2005-2007, million people)



Source: TURKSTAT, CBRT



# Foreign Trade Developments

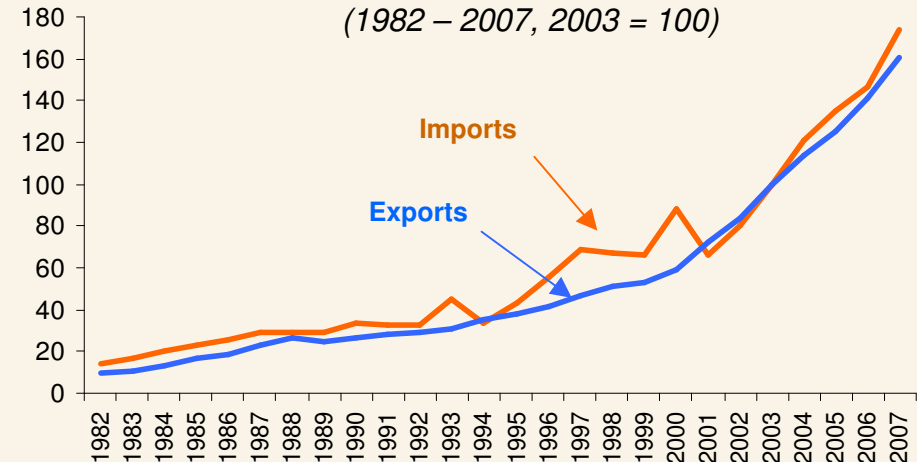
The openness of the Turkish economy has increased since 2001 and foreign trade has posted high growth rates.



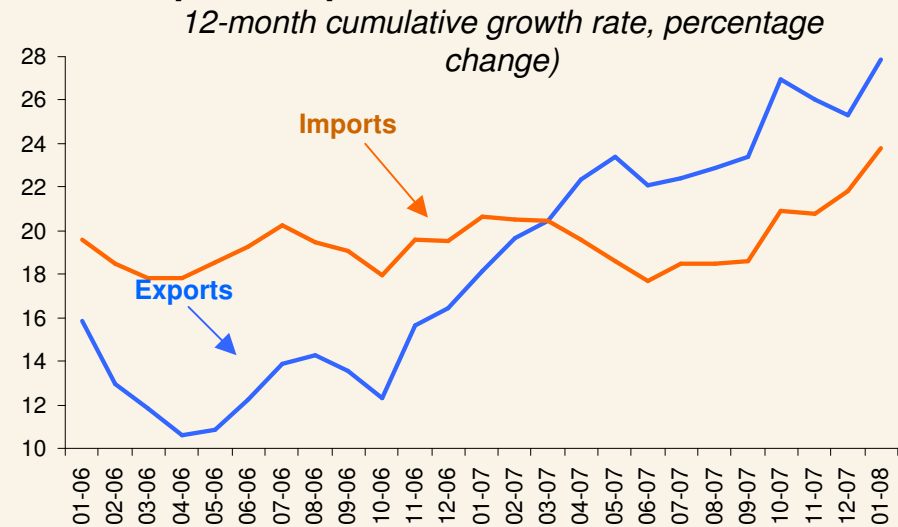
- ✓ Real exports and real imports have grown in parallel to each other since 2001, contrary to the 1995-2000 period when the real growth in imports outpaced that of exports.
- ✓ Exports posted a 27.8% increase over the last 12 months as of January 2008, while that of imports stood at 23.8%.
- ✓ The expected slowdown in developed economies poses a downside risk in export performance in the upcoming period.

**Imports and Exports Quantity Indices**

(1982 – 2007, 2003 = 100)



**Imports-Exports** (January 2006 – January 2008, 12-month cumulative growth rate, percentage change)



Source: TURKSTAT

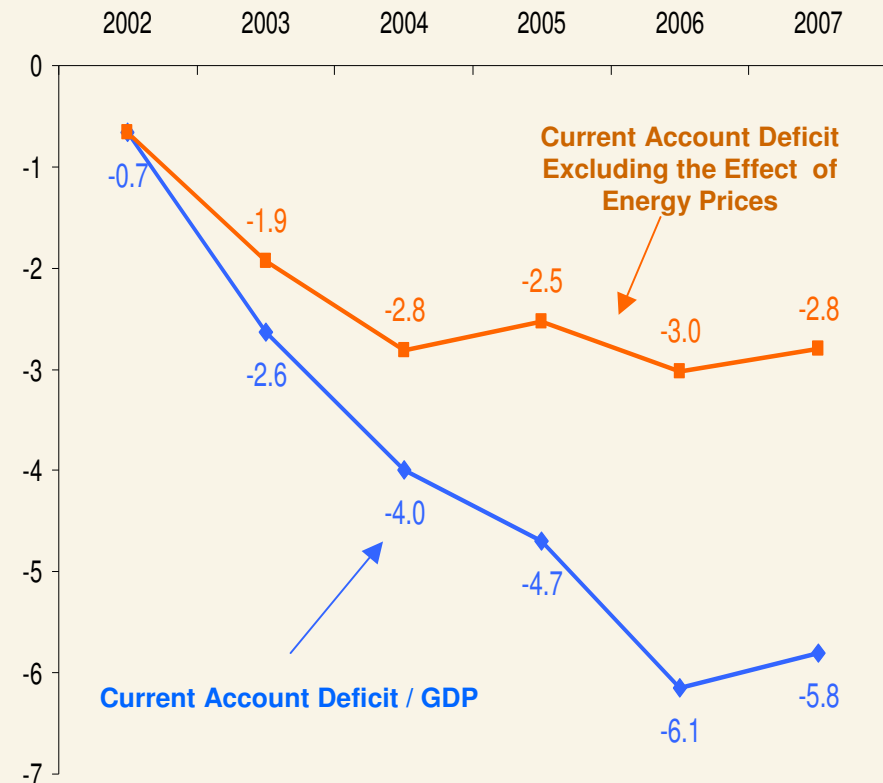


# Current Account Balance

The ratio of the current account deficit to national income remained stable in 2007.

- ✓ Current account deficit in 2007 rose by 18.0% compared to 2006 and reached USD 38 billion.
- ✓ In 2007, the ratio of current account deficit to GDP declined by 0.3 points compared to 2006 and stood at 5.8%.
- ✓ The adverse effect of high energy prices on current account deficit continues.
- ✓ High energy prices contributed around 3 percentage points to current account deficit/GDP ratio in 2007.

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



\* The effect of energy price increases on the current account in the 2003-2007 period was calculated by keeping the prices of 2002 intact. Energy Sub-items: Stone coal and lignite, crude oil and natural gas under the mining and quarrying sector, and coke coal, refined petroleum products and nuclear fuels under the manufacturing industry.

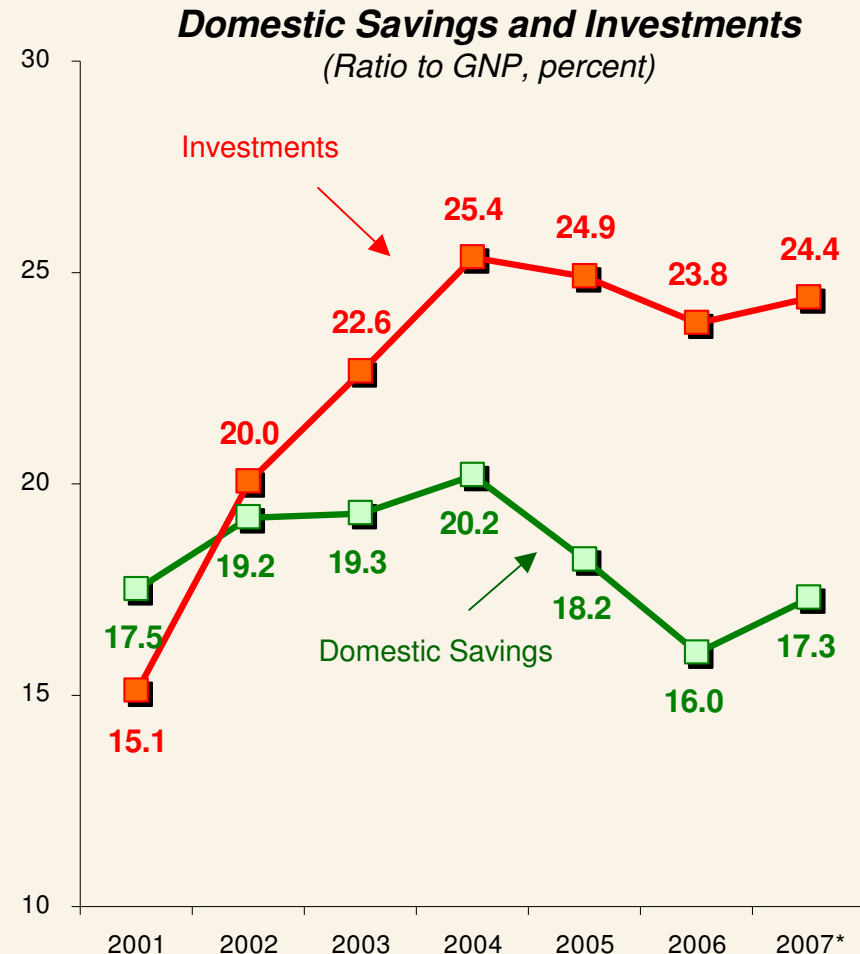
\*\* GDP forecast for 2007, State Planning Organization

Source: TURKSTAT, CBRT



# Current Account Balance

- ✓ There is a direct and strong relationship between current account deficit and economic growth rates.
- ✓ The high increase in investments is the primary reason of the deficit.
- ✓ Current account deficit is a structural problem. Macroeconomic stability and falling interest rates lead to an increase in consumption and investment demand. The structural characteristics of the economy necessitate the imports of intermediate goods in order to meet the increase in aggregate demand.
- ✓ Current account deficit should be controlled via supply-side macro and micro policies with a medium and long-term perspective.



\* Forecast

Source: State Planning Organization 2008 Annual Program (Report dated October 2007), CBRT

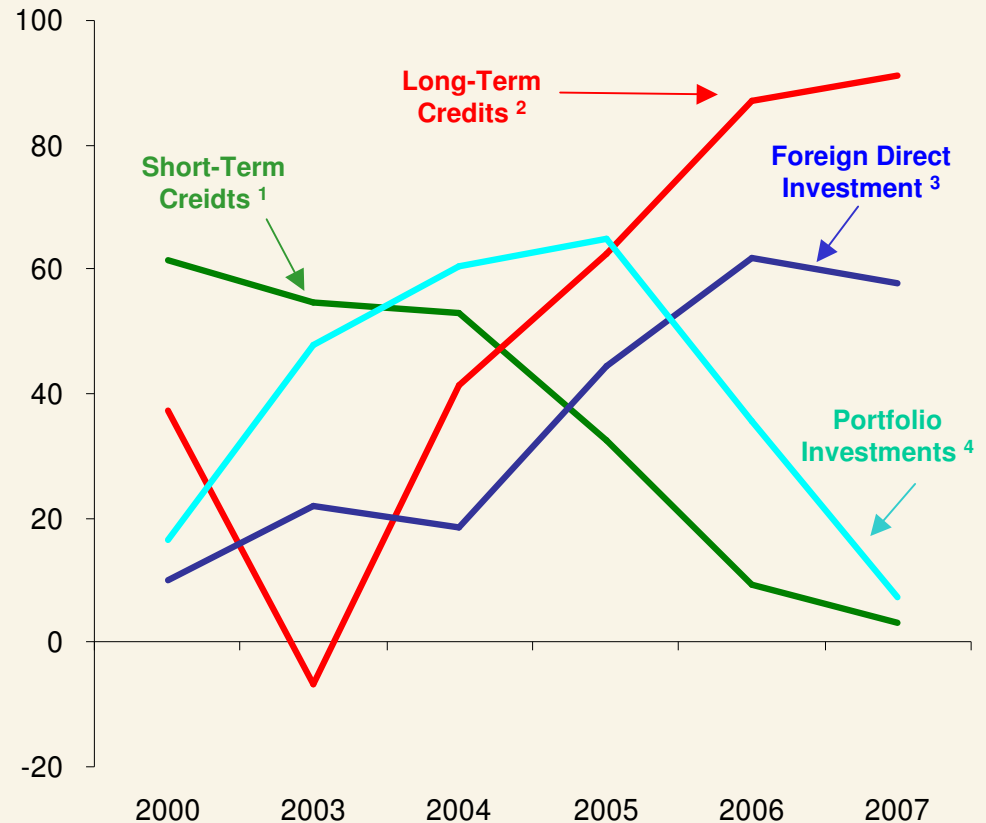


# Capital Flows

## Capital Flows

- ✓ Long-term credits, along with foreign direct investments, are crucial for the financing quality of current account deficit as well as for reducing fragility of the economy to external shocks.
- ✓ Short-term capital and portfolio inflows have substantially declined in the last 12 months.
- ✓ In this period, current account deficit has been financed via long-term credits and foreign direct investments.

**Ratio of Capital Flows to Current Account Deficit**  
(2000–2007, percent)



<sup>1</sup> **Short-term credits:** Net short-term credits used by foreign banks, real and public sectors, and deposits of non-residents

<sup>2</sup> **Long-term credits:** Net short-term credits used by foreign banks, real and public sectors.

<sup>3</sup> **Foreign direct investment:** Direct investment inflow to the country.

<sup>4</sup> **Portfolio investments:** Purchase of stocks and securities by non-residents.

Source: CBRT





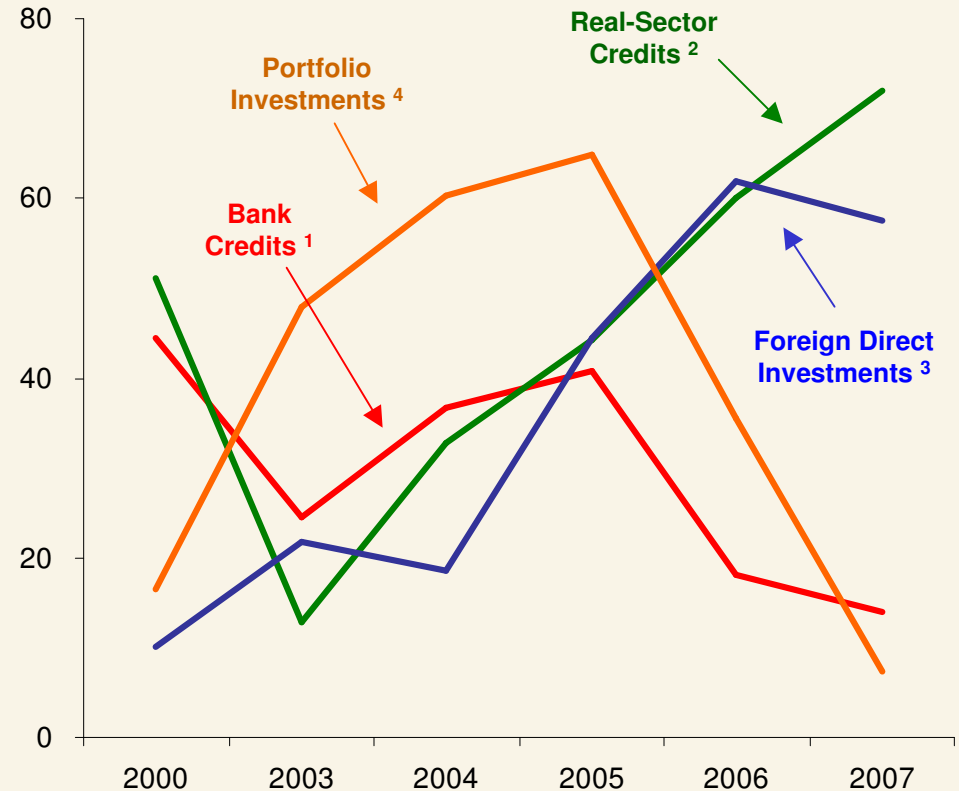
# Capital Flows

## Capital Flows

- ✓ The ratio of foreign direct investment and long-term capital to GDP\*, which was 7.5% in 2006, fell to 3.4% in 2007.
- ✓ The ratio of portfolio investments and short-term capital to GDP declined from 3.3% to 1.3%.

\* Forecast for 2008, State Planning Organization

**Ratio of Capital Flows to Current Account Deficit**  
(2000 – 2007 , percent)



<sup>1</sup> **Bank credits:** Net short and long-term credits utilized by foreign banks

<sup>2</sup> **Real-Sector credits:** Net short and long-term credits utilized by foreign non-bank sectors

<sup>3</sup> **Foreign Direct Investments:** Direct investment inflow

<sup>4</sup> **Portfolio investments:** Stocks/securities purchases by non-residents

Source: CBRT



# CENTRAL BANK OF THE REPUBLIC OF TURKEY

**Durmuş YILMAZ**  
Governor

**March 2008**