

# CENTRAL BANK OF THE REPUBLIC OF TURKEY

Turkish Exporters Assembly

**Durmuş YILMAZ**  
Governor

17 September 2010

# Mandates of the Central Bank

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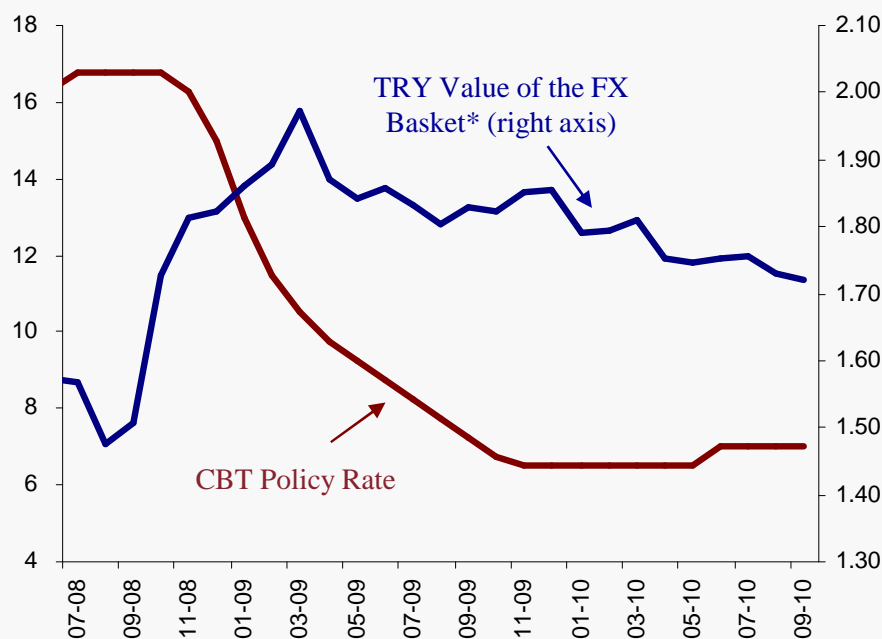
**Primary mandates of the Central Bank are;**

- 1. To achieve price stability;**
- 2. To take measures to enhance stability in the financial system;**
- 3. To support the growth and employment policies of the government provided that it shall not be in conflict with the objective of ensuring price stability.**

# Mandates of the Central Bank

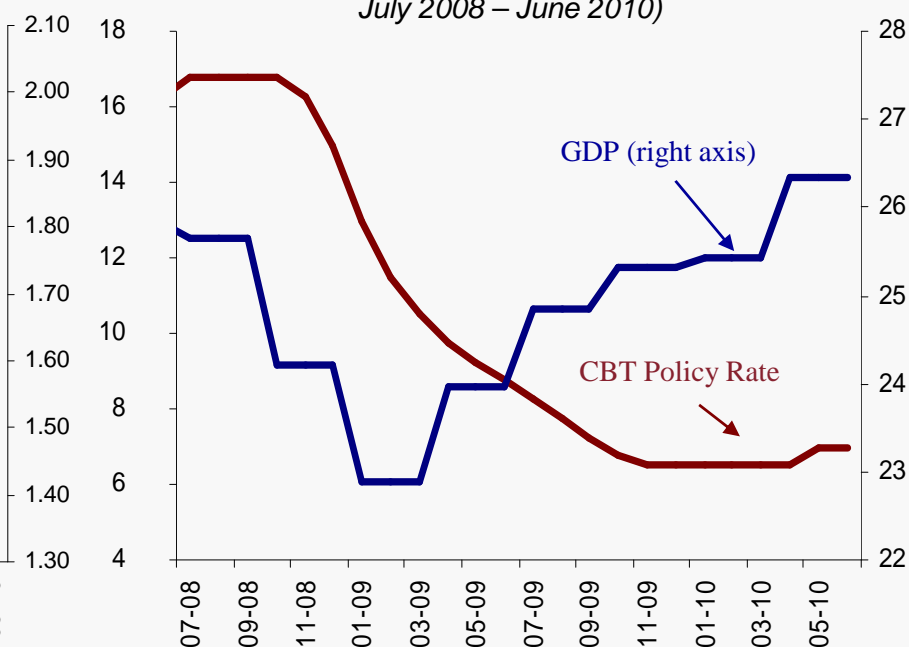
Inflation targeting entails not only the price stability but also economic variables such as financial stability, employment and growth. The monetary policy adopted during the crisis sets example to the fact that the Central Bank also considers economic developments along with price stability.

**Policy Rate (percent) and Exchange Rate**  
(Aug 2008 – Sept 2010)



\*Exchange rate basket is calculated as USD 0.5 and Euro 0.5.  
Source: CBT

**Policy Rate (percent) and GDP**  
(seasonally-adjusted, constant prices,  
July 2008 – June 2010)



Source: TurkStat, CBT

# Recent Export Developments

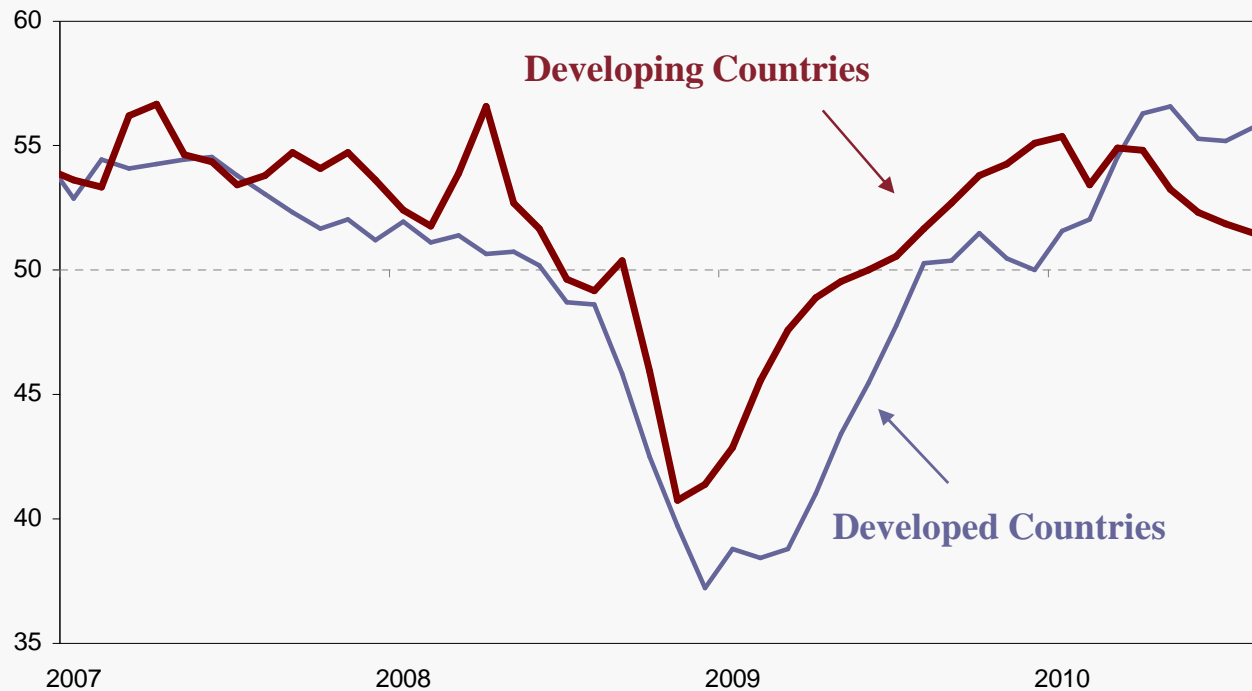
# Importance of the Exports Sector

- **Exports is a sector closely-monitored by the Central Bank due to its effect on economic activity and aggregate demand as well as its contribution to financing the current account deficit.**
- **Although the share of exports within total GDP in Turkey is fairly limited compared to many developing countries, it has a significant influence on economic activity owing to its weight in the manufacturing industry and its indirect effect on the economy as a whole.**

# Exit from the Global Crisis

The rebound in the global economy, which became pronounced in the second half of 2009, continued through the first half of 2010. However, recently there have been signals of a recurring global slowdown.

*Purchasing Managers Index (PMI) Realizations in  
Developed and Developing Countries  
(Jan 2007 – Aug 2010)*

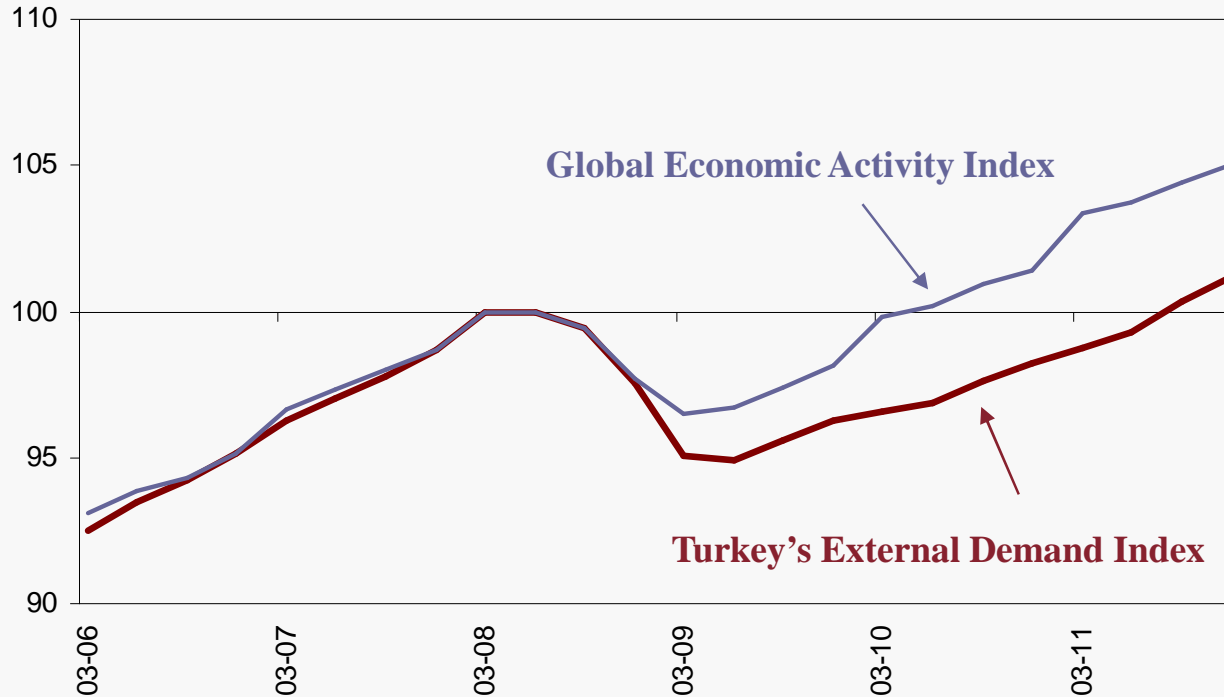


Source: Bloomberg, CBT

# External Demand Developments

Since the eruption of the global financial crisis, the low level of growth expectations for the European Union, which is Turkey's largest exports market, weakens external demand.

**Turkey's External Demand Index\***  
(March 2006 – Dec 2011, June 2008=100)



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

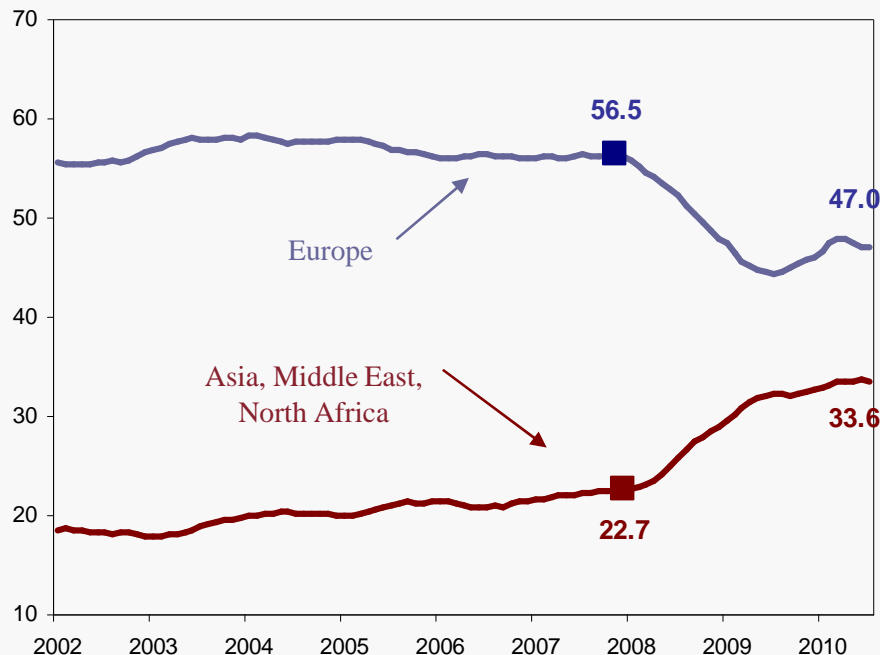


# Export Markets

Turkey's recent diversification in the export markets contained the reflections of problems in European economies on our exports. For example, in the first half of 2010 exports to China increased by 2.5 folds on last year's figures for the same period.

**Turkey's Export Markets**

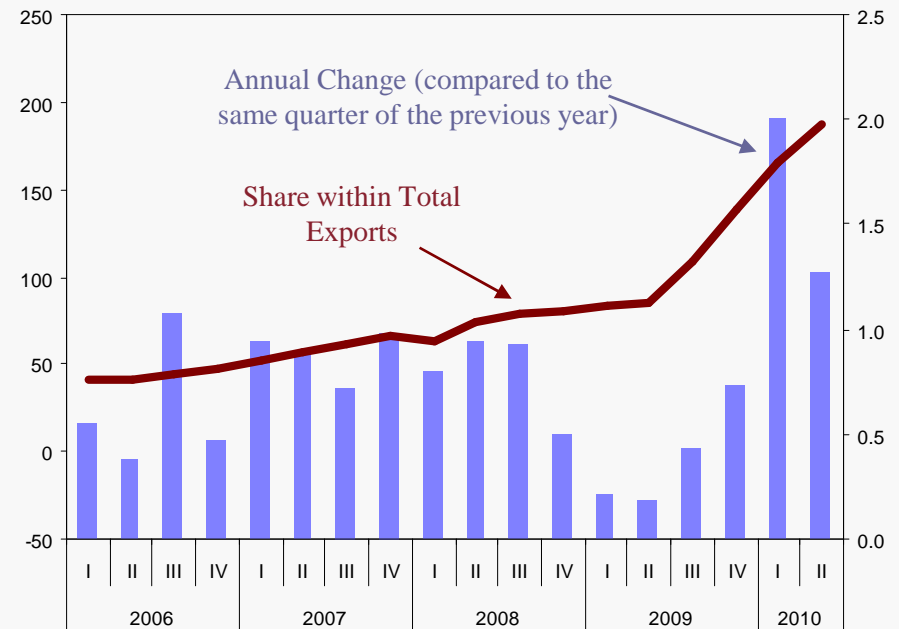
(Jan 2002 – July 2010, percentage of total exports)



Source: TurkStat, CBT

**Example: Exports to China**

(2006 Q1 – 2010 Q2, percentage of total exports)

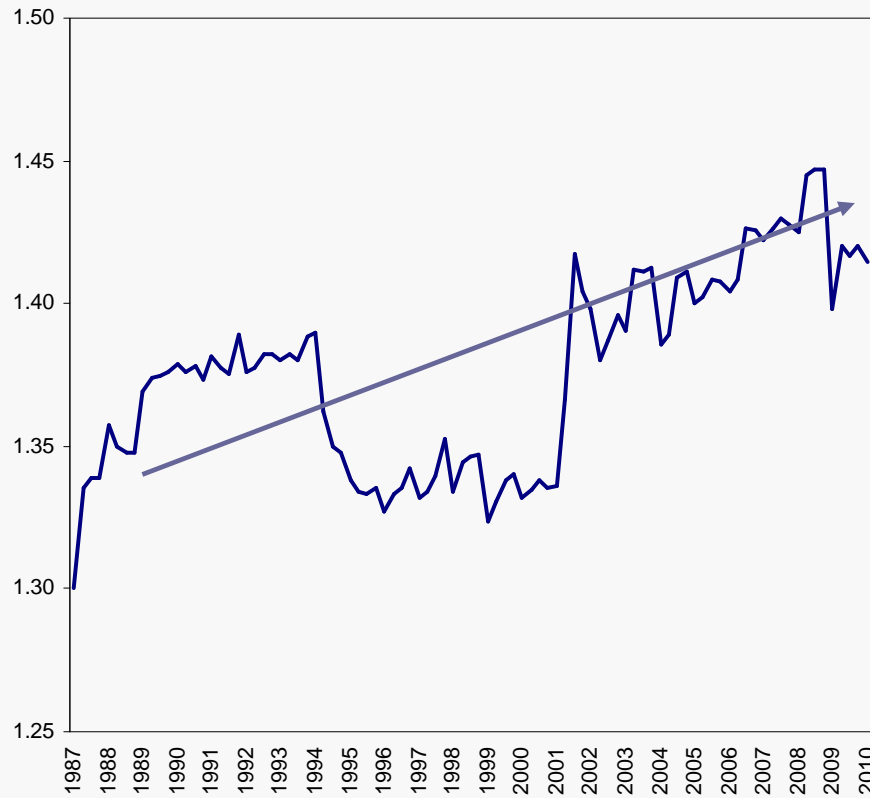


Source: TurkStat, CBT

# Supply and Demand Elasticity in Exports

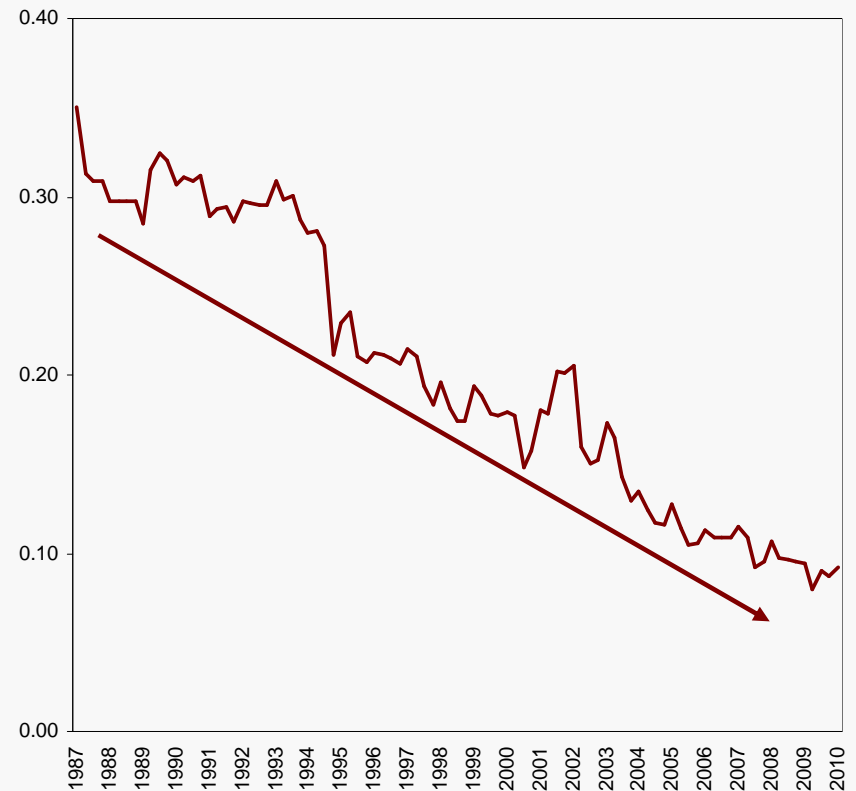
In the last 20 years, along with Turkey's integration into the world economy, the supply and demand elasticity of exports have changed in time. The sensitivity of exports against foreign income has increased while that against the exchange rate has dropped.

*Foreign Income Elasticity of Exports*  
(1987 Q1 – 2010 Q1)



Source: Turkstat, CBT

*Exchange Rate Elasticity of Exports (CPI-based)*  
(absolute value, 1987 Q1 – 2010 Q1)

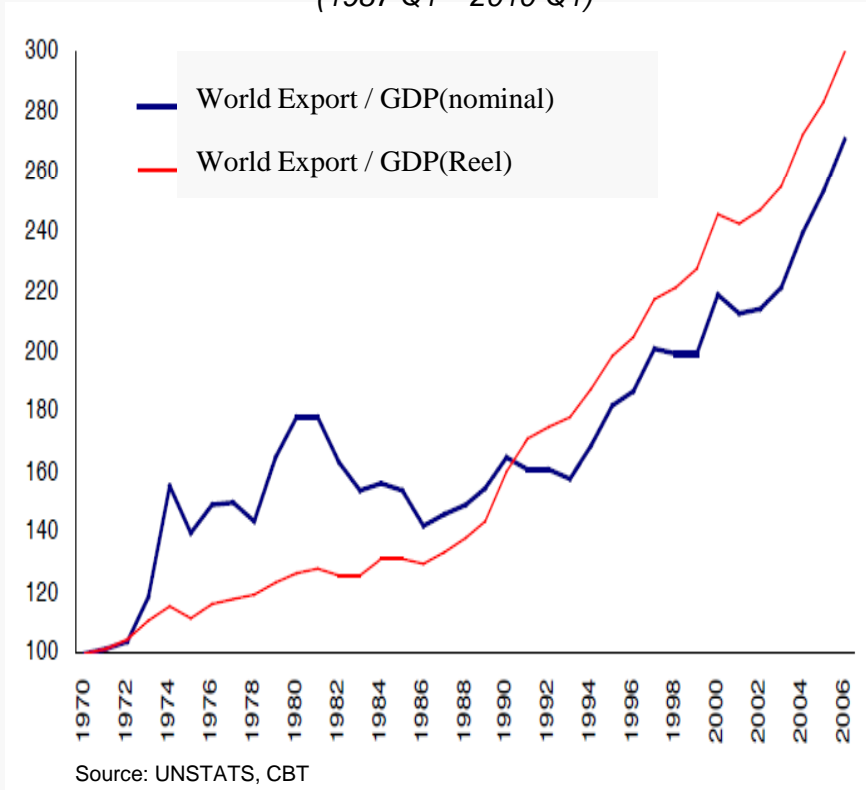


Source: TurkStat, CBT

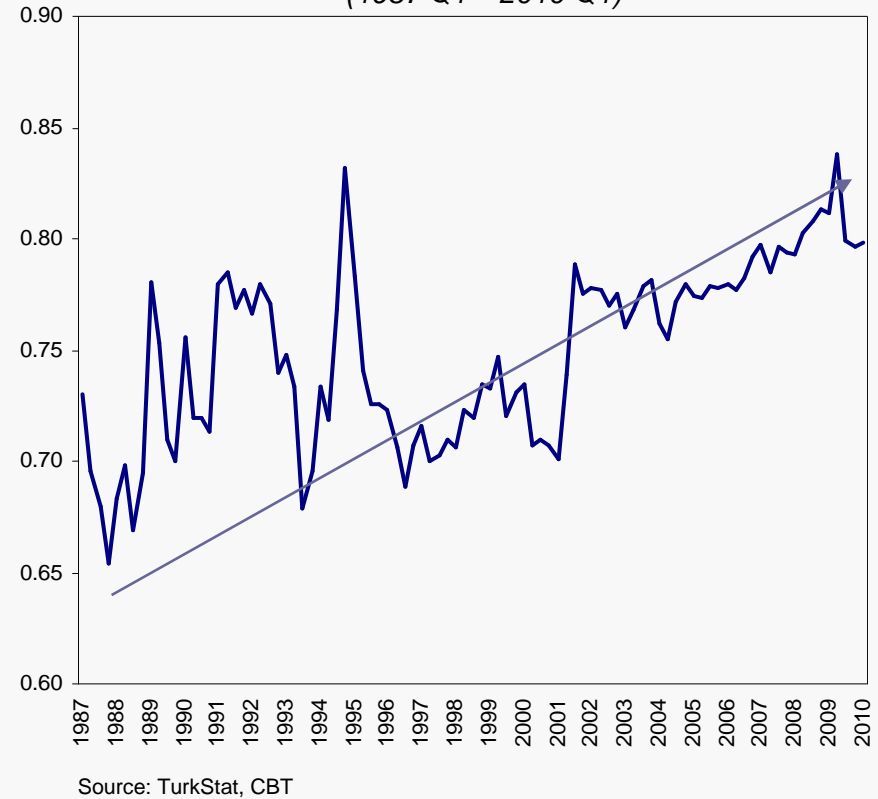
# Supply and Demand Elasticity in Exports

In line with technological improvements, escalated international competition, the abolition of customs tariffs and increase in intra-industry trade, the share of imports in exports increased globally. A similar development was also experienced in Turkey.

**Ratio of Global Exports to Production**  
(1987 Q1 – 2010 Q1)



**Import Elasticity of Exports in Turkey**  
(1987 Q1 – 2010 Q1)

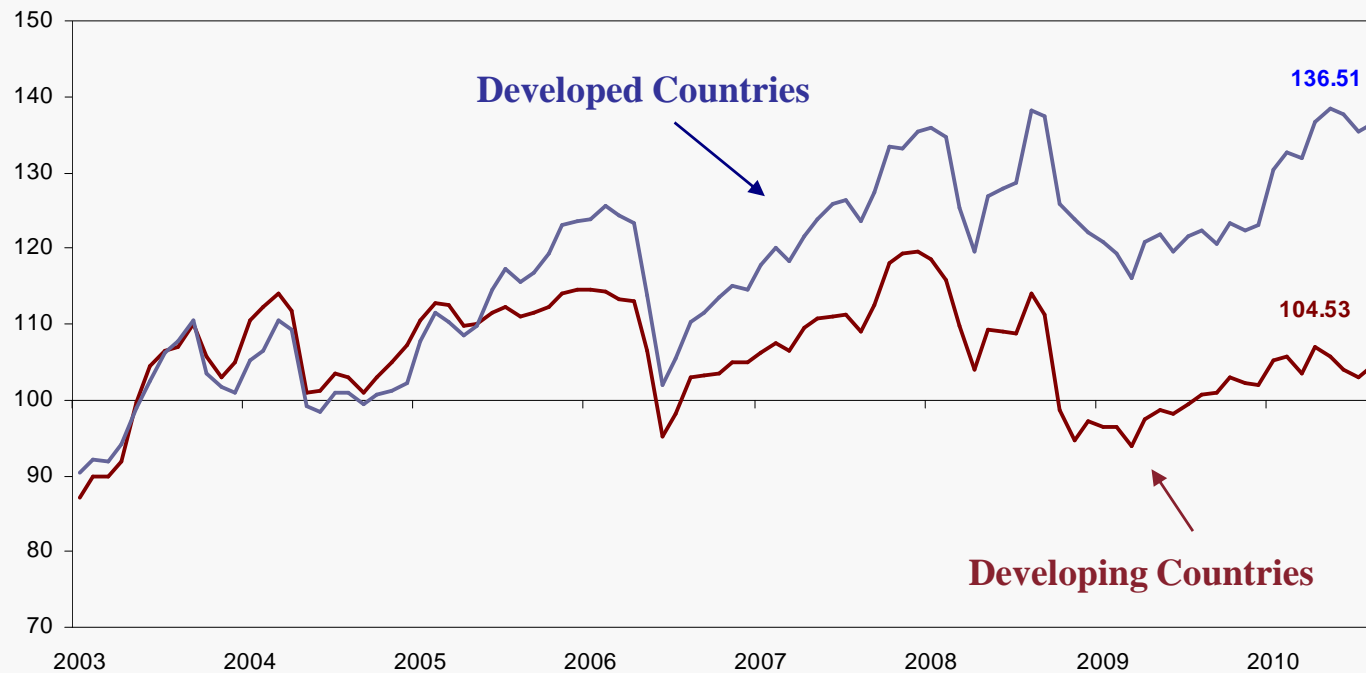


# Value of the Turkish Lira and Exchange Rate Regime

# Real Exchange Rate Index

Compared to 2003, the Turkish lira appreciated against currencies of developed countries in real terms, while no significant change occurred compared to currencies of developing countries.

**CPI Developed and Developing Countries Based Real Exchange Rate**  
(Jan 2003 – Aug 2010, 2003=100)



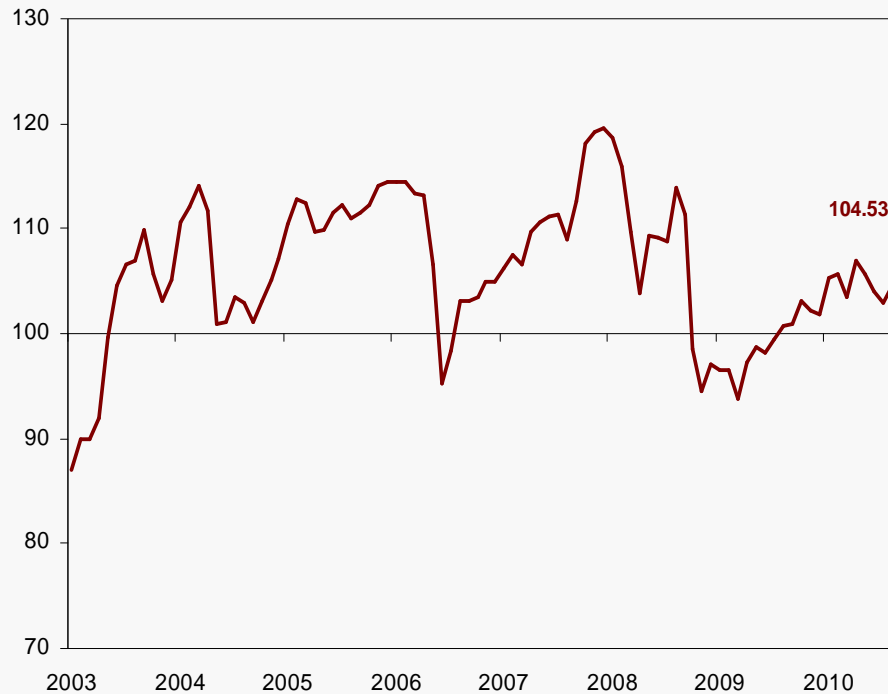
Source: CBT

# Real Exchange Rate Index

The types of goods in which Turkey and developing countries have comparative advantage are similar to each other. The relatively stable course of the real exchange rate index compared to developing countries has underpinned the maintenance of Turkey's competitiveness in foreign trade.

**Real Exchange Rate Index as per Developing Countries**

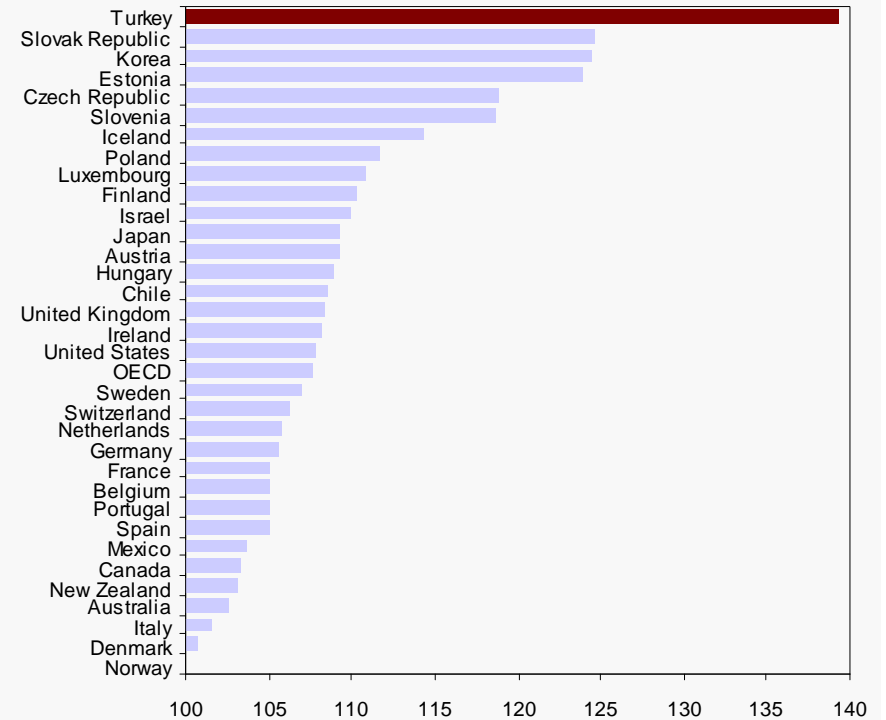
(Jan 2003 – Aug 2010, CPI Based, 2003=100)



Source: BIS, CBT

**Productivity per Employee**

(2008, 2003=100)

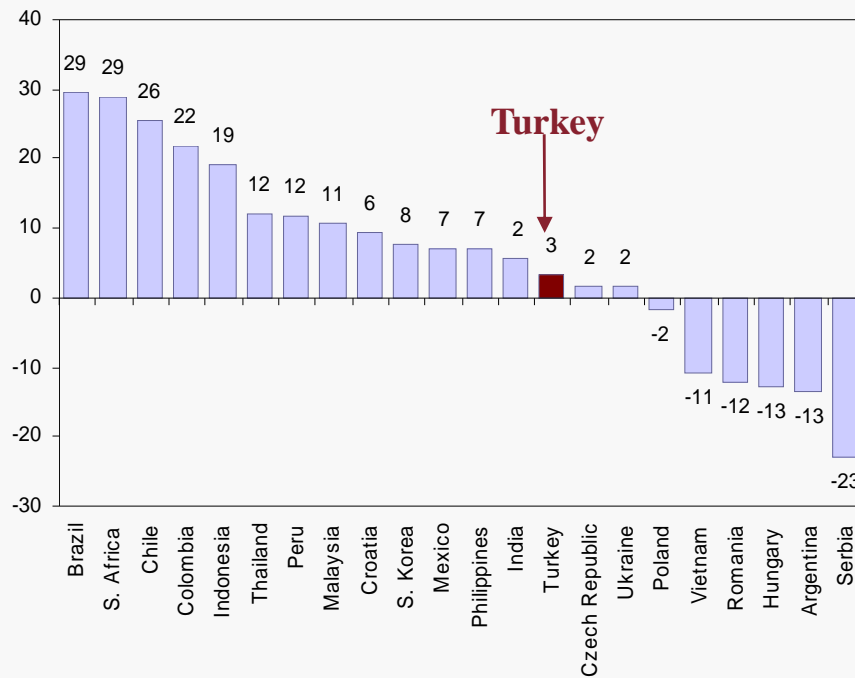


Source: OECD, TurkStat, CBT

# Exchange Rate Developments

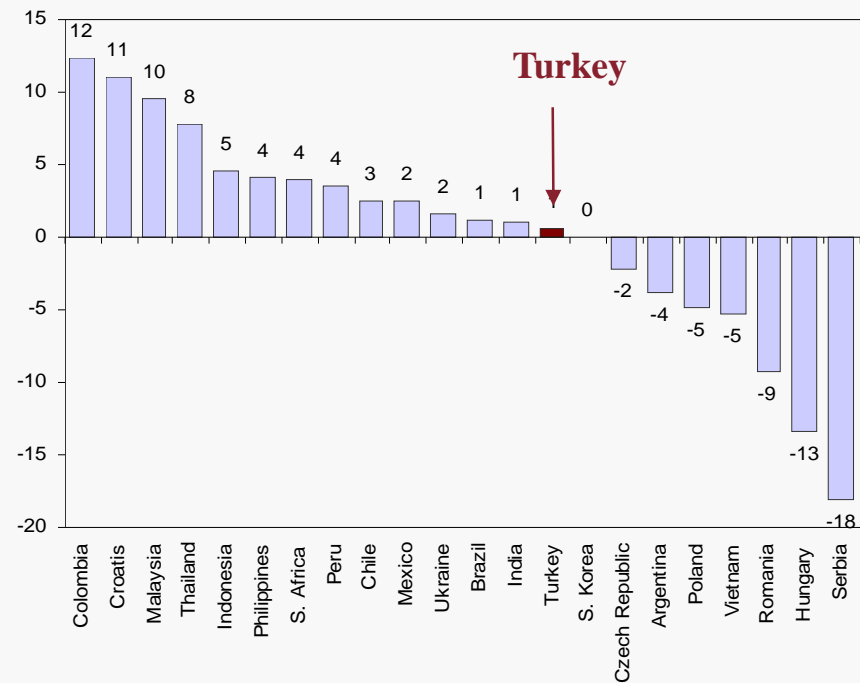
Compared to currencies of other developing countries, no significant change is observed in the value of the Turkish lira.

**Change in Local Currencies Against US Dollar**  
(Since Jan 2009, percentage change)



Source: Bloomberg, CBT

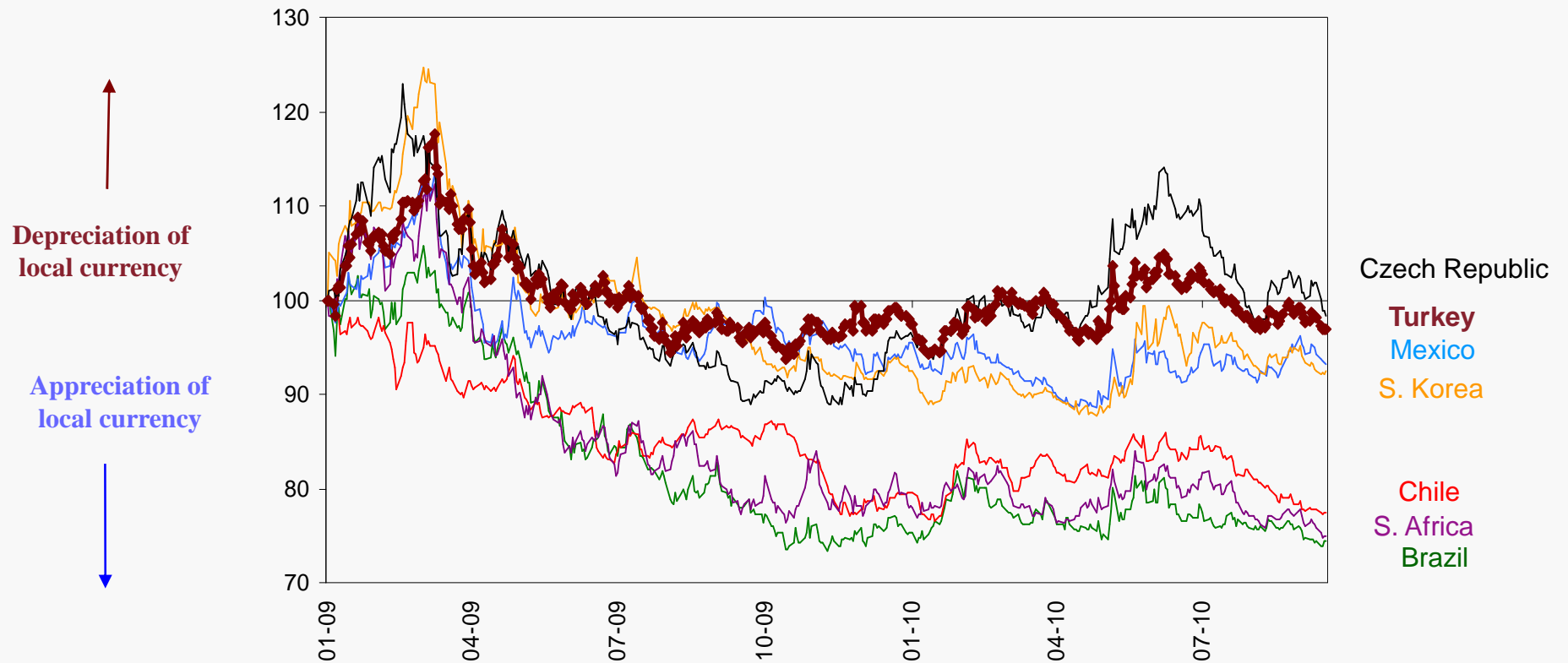
**Change in Local Currencies Against US Dollar**  
(Since Jan 2010, percentage change)



Source: Bloomberg, CBT

# Exchange Rate Developments

**Exchange Rate Developments in Selected Countries**  
(Jan 2009 – Sep 2010, local currency equivalent of 1 USD, Jan 2009=100)



Source: Bloomberg, CBT



# Floating Exchange Rate Regime

Turkey's share in global exports has been on the rise since 1980 following the transition to a free market economy. This trend continued with accelerating pace after the adoption of the floating exchange rate regime in February 2001.

*Turkey's Share in Total World Trade*  
(Percentage of total global exports, 1950-2009)

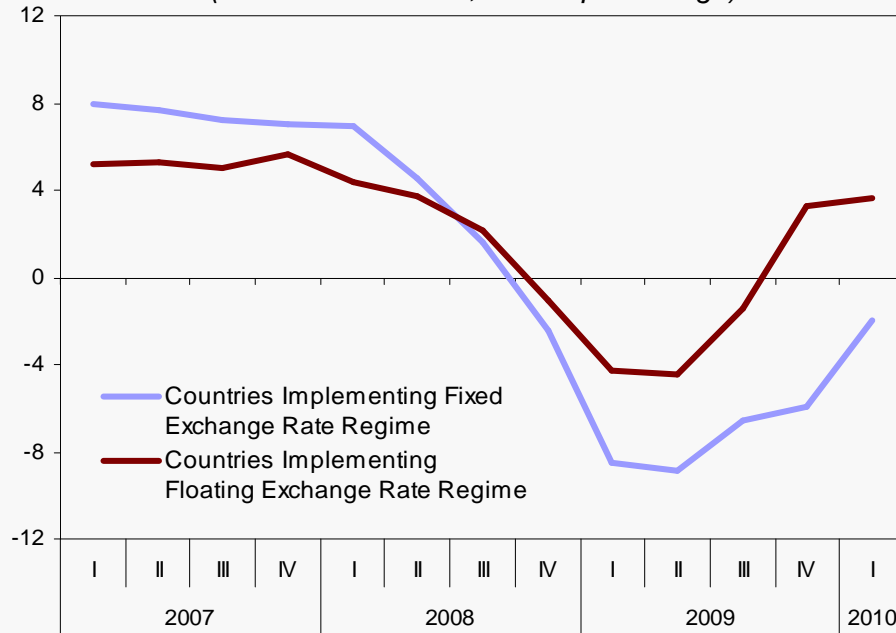


Source: WTO, TurkStat, CBT

# Global Crisis and the Exchange Rate Regime

The floating exchange rate regime acts as a safety mechanism, which prevents over-reaction of an economy at times of excessive volatility in global capital flows. As a matter of fact, countries with floating exchange rate regime enjoyed more stable growth and inflation rates before and during the crisis.

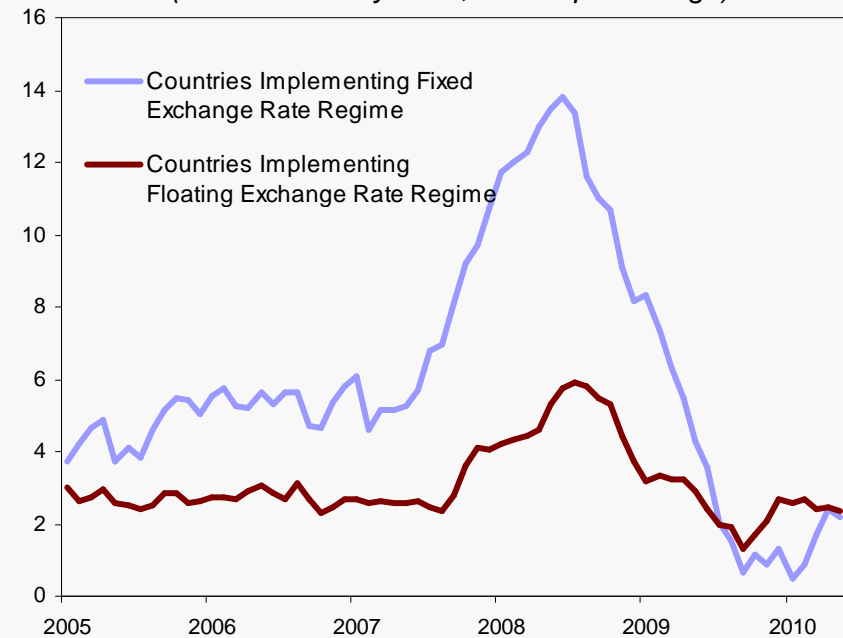
**Country Groups as per Exchange Rate Regimes and Growth Rates\***  
(2007 Q1 - 2010 Q1, annual percentage)



\* Median

Source: Bloomberg, IMF, TurkStat, CBT

**Country Groups as per Exchange Rate Regimes and Inflation Rates**  
(Jan 2005 – May 2010, annual percentage)



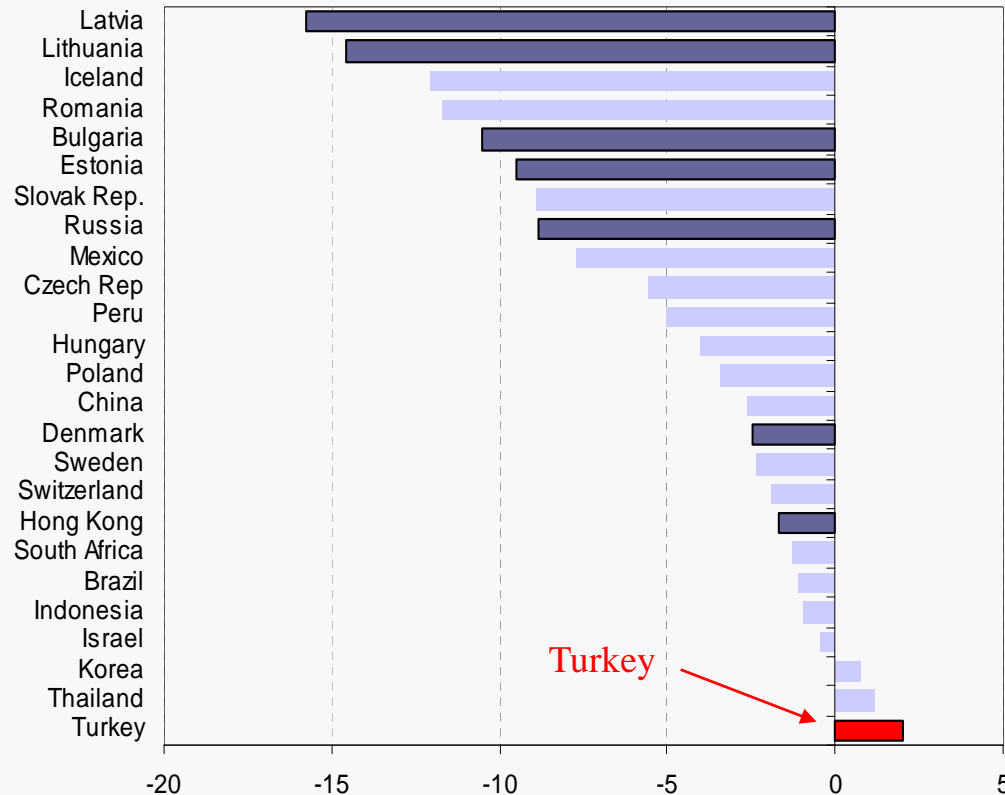
Source: Bloomberg, IMF, TurkStat, CBT

# Global Crisis and the Exchange Rate Regime

During the current global crisis, countries with fixed exchange rate regime experienced a deeper economic contraction compared to those with floating exchange rate regime.

## Exchange Rate Regime and Changes in Growth Rates

*(Difference between the annual growth rate as of 2010 Q2 and the annual growth rate in 2007-2008 period, percentage points)*



Countries with fixed exchange rate regime are shown in a dark color.

Countries with floating exchange rate regime are shown in a light color.

Source: IMF, TurkStat, CBT

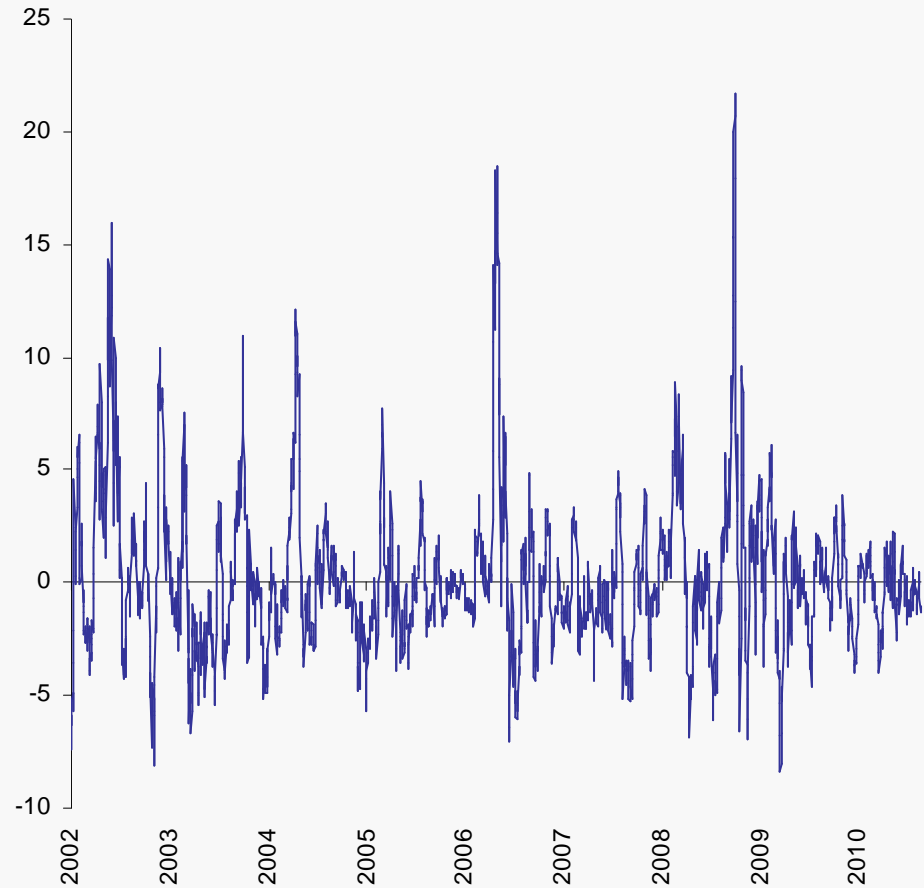
# Exchange Rate Developments in Turkey

## High Volatility in Exchange Rates (Turkish Lira /US Dollar, 2002-2010)

Beginning date	Duration (day)	Value at the beginning	Peak value	% change
03-03-03	22	1.59	1.75	9.9
24-09-03	47	1.35	1.50	11.1
05-04-04	49	1.30	1.55	19.2
20-07-04	63	1.42	1.53	7.7
08-03-05	22	1.26	1.39	10.3
04-05-06	53	1.31	1.70	29.2
26-02-07	9	1.38	1.45	5.4
25-07-07	26	1.24	1.39	12.3
02-10-08	49	1.23	1.70	37.6
07-01-09	61	1.51	1.80	18.8

Source: CBT

## Monthly Percentage Change in Foreign Exchange Basket (Equally weighted Euro and US Dollar, Jan 2002- Sep 2010)



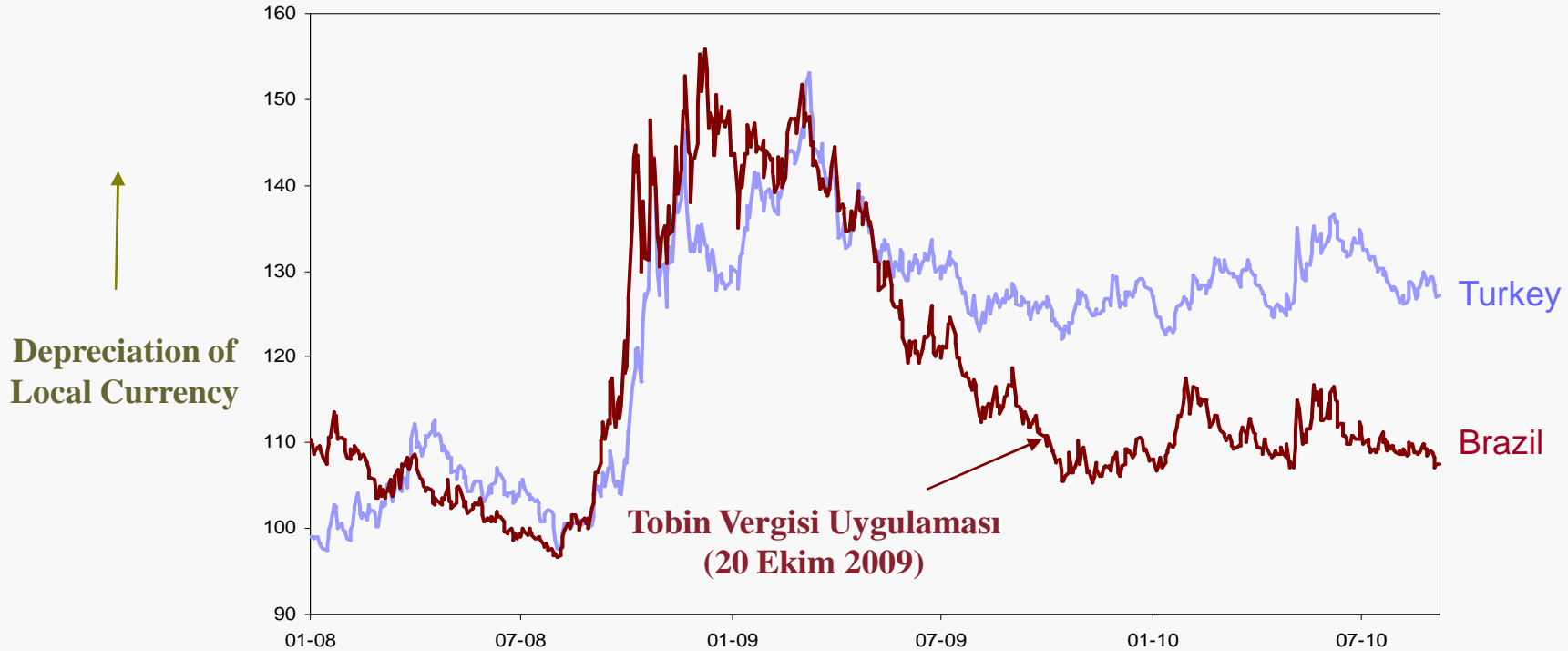
Source: CBT

# Tobin Tax: The Brazilian Case

Despite the Tobin tax implemented in Brazil since 20 October 2009, the Brazilian currency is more valuable than the Turkish currency (compared to the pre-crisis period).

## Exchange Rate Developments in Brazil and Turkey\*

(Value of the US dollar versus local currencies Jan 2008 – Sep 2010, Aug 2008 = 100)

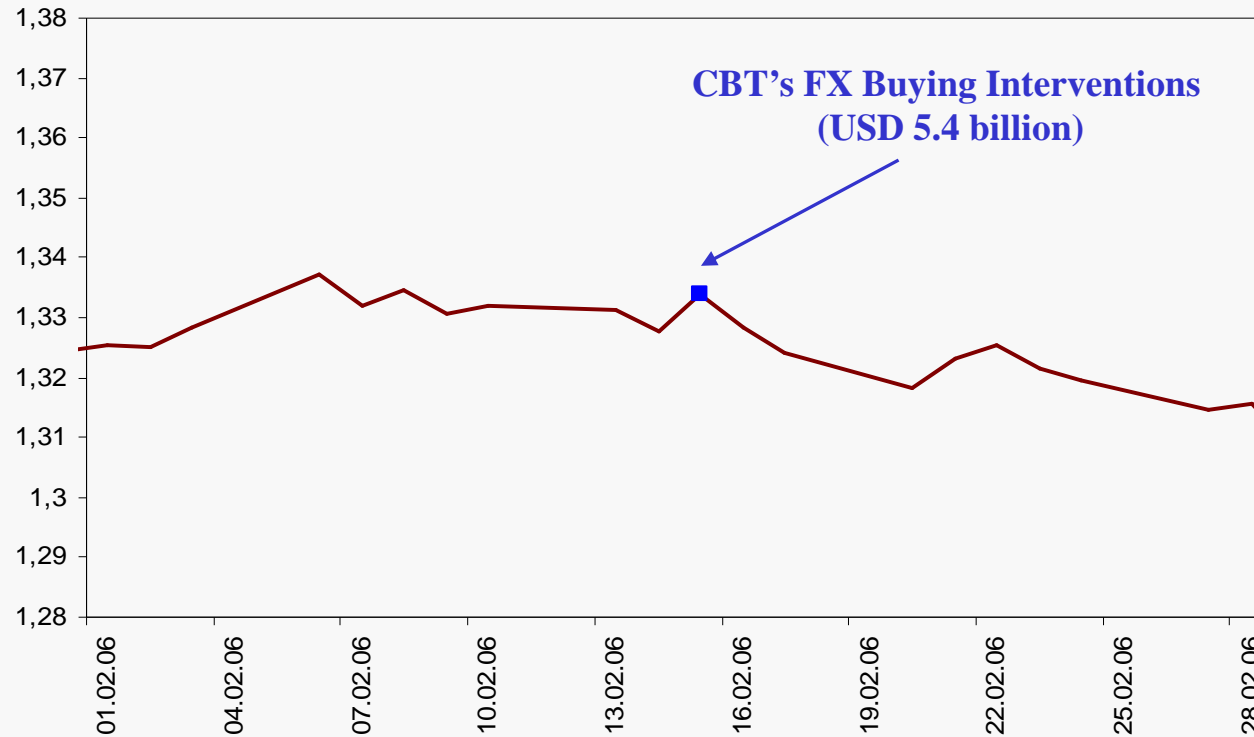


\*Average Exchange Rate for August 2008 taken as 100.  
Source: Bloomberg, CBT

# FX Buying Interventions: Turkish Case

The intensive foreign exchange interventions of the 2005-2006 period had slight impact on exchange rates.

**Foreign Exchange Buying Intervention on February 15, 2006  
and Exchange Rate Developments**  
(Feb 2006)



Source: CBT

# FX Buying Interventions – Country Cases

Similar cases were experienced in South Korea, Japan and Switzerland.

## South Korea

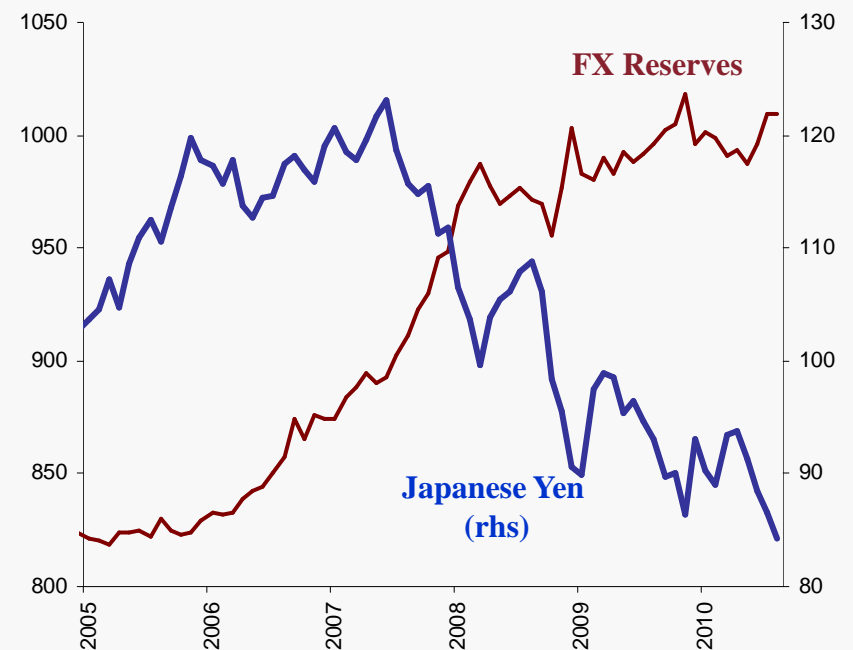
(local currency equivalent of 1 US dollar,  
Jan 2002 – Sep 2010)



Source: Bloomberg, CBT

## Japan

(local currency equivalent of 1 US dollar,  
Jan 2005 – Sep 2010)

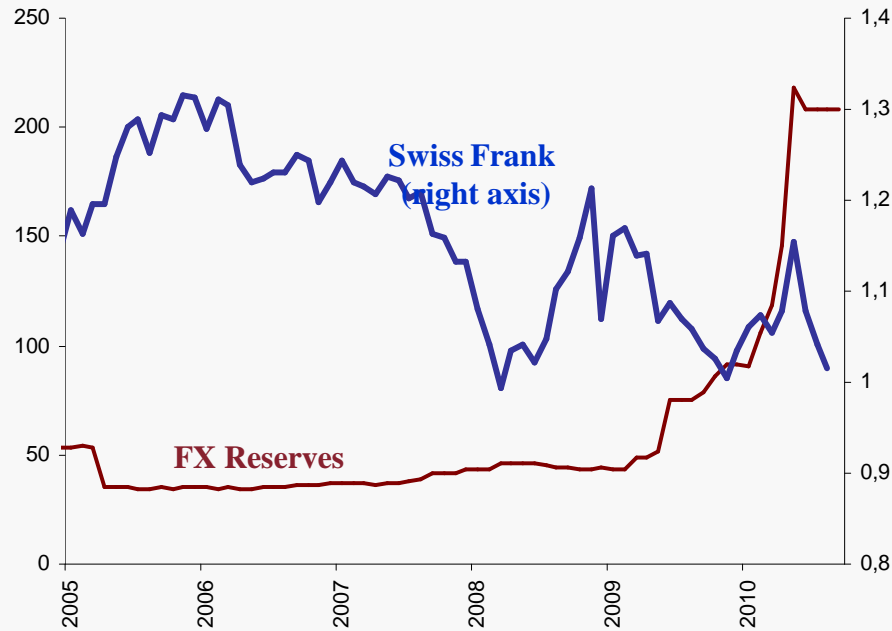


Source: Bloomberg, CBT

# FX Buying Interventions – Country Cases

## Switzerland

(Local currency equivalent of 1 US dollar,  
Jan 2006 – Sep 2010)



Source: Bloomberg, CBT

## Turkey

(local currency equivalent of 1 US dollar,  
Jan 2003 – Sep 2010)



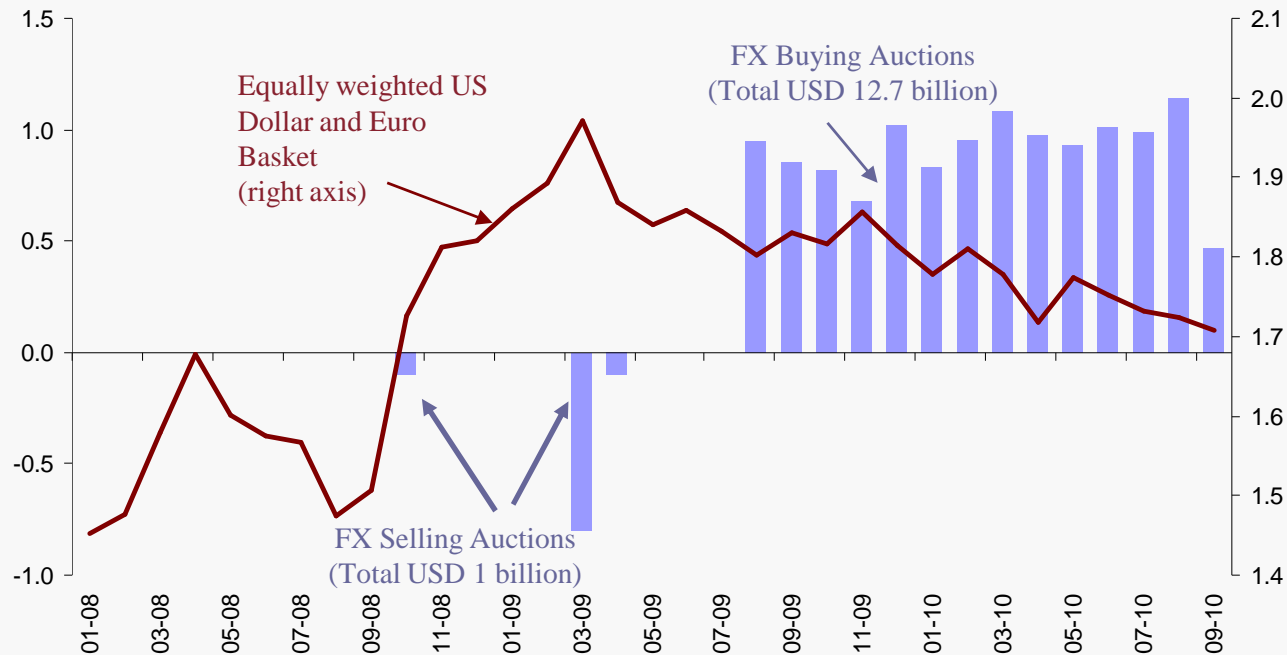
Source: Bloomberg, CBT



# FX Buying and Selling Auctions in Turkey

Parallel to its objective of maintaining financial stability, the CBT holds FX selling auctions during the period of excessive fluctuations in exchange rates and FX buying auctions during the period foreign exchange surplus. Hence, USD 0.9 billion was sold in the March-April 2009 period and USD 12.7 billion has been purchased via auctions since August 2009.

**FX Buying and Selling Auctions against TRY and FX Basket**  
(Jan 2008 – Sep 2010\*)



\*As of 15th September 2010.

Source: CBT

# Are Interest Rates High in Turkey?

Compared to developing countries, the level of real interest rates in Turkey are quite low.

*Inflation Rates and Policy Rates in Developing Countries  
(Sep 2010, percent)*

	Policy Rates	Inflation Expectations for 2010	Real Policy Rates
Thailand	1,75	3,50	-1,69
Chile	2,00	3,50	-1,45
Czech R.	0,75	1,50	-0,74
Korea	2,25	2,80	-0,54
<b>Turkey</b>	<b>7,00</b>	<b>7,50</b>	<b>-0,47</b>
Philippines	4,00	4,00	0,00
Mexico	4,50	4,30	0,19
Hungary	5,25	4,70	0,53
Malaysia	2,75	2,00	0,74
Poland	3,50	2,50	0,98
S. Africa	6,00	4,75	1,19
China	5,31	3,00	2,24
Brazil	10,25	5,10	4,90

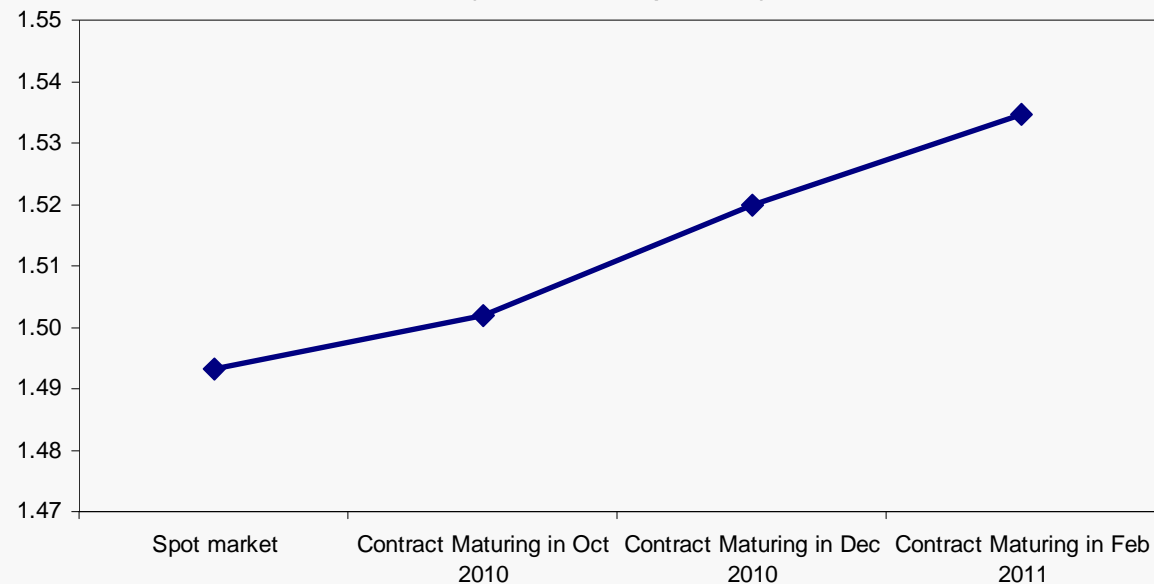
**Economies with Negative Real Policy Rates**

Source: Bloomberg, CBT

# Hedging Instruments Against Exchange Rate Exposure

While making their investment, production and employment decisions, producers should refrain from relying on one-way assumptions about the course of exchange rates in a given country and should utilize risk management instruments. It is possible to manage foreign exchange positions and risks in a more professional way by using the Turkish Derivatives Exchange (Turkdex).

**Spot and Forward Transaction Prices for Turkish Lira-US Dollar**  
(as of 15 Sep 2010)



Source: TurkDex, CBT

# Financial Stability as a Strategic Target

# Financial Stability

Factors to be considered for the sake of financial stability

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

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