



REPUBLIC OF TURKEY
PRIME MINISTRY
UNDERSECRETARIAT OF TREASURY

PUBLIC DEBT MANAGEMENT REPORT

2009

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INTRODUCTION



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FOREWORD BY THE MINISTER



Economic crises and short-term oriented policies in the past created persistent problems in the Turkish economy and in this period, public debt burden increased significantly. In that regard, the main aim of the medium-long term policies that have been put into practice since 2002 was to mitigate this high debt burden. As a result of tight fiscal policies and stable growth trend, considerable improvements have been achieved. The Public Net Debt Stock / GDP ratio was reduced to 28.6 percent by the end of 2008, with an approximate decrease of 33 points compared to 61.4 percent by the end of 2002.

In addition to the rapid reduction of the public debt, the legal and organizational framework was enhanced to provide for a medium-long term perspective in the execution of debt management strategies. Through this new strategy; the maturity, interest rate and currency composition of the debt stock improved significantly. The public debt stock is now more resilient against external shocks and this is reflected in the borrowing costs which declined to a level of 12 percent as of April, 2009 from around 60 percent in 2002.

Thanks to the consistent and coherent policies that have been followed since the 2002, most of the persistent problems in the economy including heavy debt burden and high inflation have been resolved. Today, public debt, in terms of both level and structure, is no longer a subject of debate, and in the global crisis environment, these improvements provide flexibility for public finances. As a result of the solid foundations laid, Turkish economy faces the on-going crisis with a resistant structure.

In today's circumstances, the functions and the importance of the Treasury, an institution that endorses the principles of accountability, transparency and predictability, have increased substantially. In this regard, the second issue of the Annual Public Debt Management Report reflects the strong institutional capacity and qualified human resources of the Turkish Treasury and marks the implementation of these principles. I believe that the efforts made so far in the area of public debt management will continue with the same dedication and determination.

Ali BABACAN
Minister of State and Deputy Prime Minister



FOREWORD BY THE UNDERSECRETARY

The objective of the Annual Debt Management Report, which was first published in 2008, is to inform the public within the framework of transparency and accountability principles. In this issue of the report, developments in the area of public debt and receivables management during 2008 are assessed and prospective targets are stated. The report also contains analyses and evaluations regarding various issues on debt and risk management which are explored in a broad perspective.

Thanks to structural reforms put into practice and sound policies implemented by Turkey since 2002, fiscal discipline has been achieved and concerns regarding debt sustainability have disappeared. Borrowing strategies, which are set by taking into consideration the cost and risk targets predicated on strategic benchmarks, contributed substantially to alleviate the debt burden and improve the resiliency of debt stock to external shocks. Sound management of public debt in line with the cost and risk targets continued to be the main pillar of public finance in year 2008. The amendments made to Law No. 4749 Regulating Public Finance and Debt Management and to the other legislations over the last year, strengthened the legal infrastructure of public debt management and improved efficiency.

For public debt managers around the world, 2008 was an extraordinary year. Unfavorable macroeconomic indicators and expectations regarding the global economies have negatively affected borrowing markets. Especially in countries where expansionary fiscal policies were widely used, debt managers were faced with the problem of meeting increasing financing needs within a short period of time, thus public debt stocks have been running up in those countries.

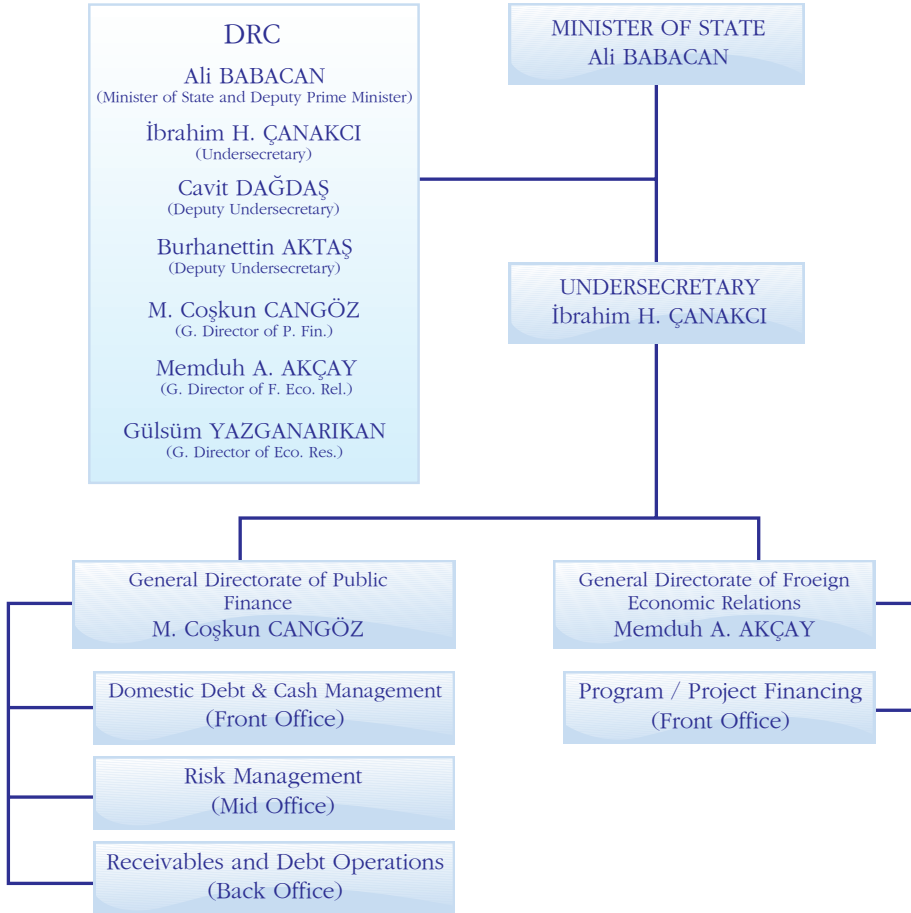
In this regard, the impacts of the global crisis on our debt dynamics have been comparatively limited. In this period, market developments have been closely monitored and debt management policies have been adapted to changing conditions along the lines of the strategic benchmarks. On the other hand, as a cushion against the demand side volatility in the market, the Treasury has continued to follow a strong cash reserve policy, and owing to that, adverse effects of short-term market volatilities on borrowing cost have been minimized.

Public debt stock to GDP ratio which has continuously decreased in recent years followed a steady trend in 2008. The EU defined debt stock to GDP ratio stands at 39.5 per cent, and with this level Turkey stands behind many developed European countries in indebtedness ranking. In order to preserve achievements in debt dynamics in recent years, Treasury will continue to follow sustainable, transparent and accountable borrowing policies that are coherent with monetary and fiscal policies.

As a final word, I hope this report serves as reference for parties interested in economics, academics, investors, public institutions and the public in general. I also would like to express my gratitude to all of the Treasury staff that put effort in drawing up this report.

İbrahim H. ÇANAKCI
Treasury Undersecretary

ORGANIZATION STRUCTURE OF DEBT MANAGEMENT



Debt and Risk Management Committee (DRC)

The Debt and Risk Management Committee (DRC) is the highest decision making authority for designing the fundamental borrowing policies and providing coordination among the units responsible for public debt management. The responsibility of the Committee are set in law 4749 and in the "Legislation on the Principles and Procedures of Coordination and Execution of Debt and Risk Management" dated September 1, 2002 and No. 24863. Minister of State responsible for Treasury chairs DRC which comprises the Undersecretary of Treasury, Deputy Undersecretaries, General Director of Public Finance, General Director of Foreign Economic Relations and General Director of Economic Research. The meetings related with monitoring the debt management operations or activities are chaired by the Undersecretary.

MAIN PRINCIPLES OF PUBLIC DEBT MANAGEMENT AND STRATEGIES

MAIN PRINCIPLES

By the regulation dated September 1, 2002 with No 24863 on the Principles and Procedures for the Coordination and Administration of Debt and Risk Management, the main principles of debt management are defined as follows:

- The maintenance of a sustainable, transparent and accountable borrowing policy in consistency with monetary and fiscal policies taking account of macroeconomic balances
- The fulfilment of financing requirements at the lowest possible cost in the medium and long term in accordance with the levels of risk determined in consideration of domestic and external market conditions and cost factors.

STRATEGIES

- Borrowing strategies are set up within the framework of medium and long term programs.
- Annual and monthly Public Debt Management Reports are published and presented to the public.
- Medium and long term market risks are managed through the strategic benchmarks.

• **Liquidity risk** – To keep a strong level of cash reserves and achieve a smooth repayment profile.

• **Interest rate risk** – To borrow mainly in fixed rate instruments in order to reduce interest rate sensitivity.

• **Exchange rate risk** – To borrow mainly in TL and to set the composition of FX denominated debt stock.

- Risk and cost indicators of debt dynamics are monitored closely.
- In order to address operational risks, technical analyses are conducted and results are reported.
- In order to control credit risks, risk account, guarantee fee, partial guarantee and guarantee limit are applied.
- Primary and secondary markets are being strengthened by adopting the Primary Dealers system.
- Liquidity of the securities is enhanced through the benchmark security issuance policy.

DEVELOPMENTS
AND
PROSPECTS



MACROECONOMIC AND FINANCIAL FRAMEWORK

Financial strains that started in summer 2007 stemming from problems related to the U.S. subprime mortgage market expanded in 2008. Falling prices of subprime mortgage related instruments led to massive losses in financial institutions of developed economies. Problems started in the housing sector, spread across the financial sector and began to undermine the real sector. Trade and financial linkages carried these problems across the globe and as a result, the world economy entered a major downturn.

After the collapse of Lehman Brothers in the U.S. in September 2008, the financial crisis entered a new phase. A widespread confidence crisis started, money and credit markets ceased functioning and liquidity strains emerged.

Faced with a global financial crisis, central banks and governments have announced comprehensive measures. In this context, major central banks of developed countries have followed coherent policies such as easing policy rates and supplying liquidity to the financial sector in order to overcome liquidity constraints. However, since the turmoil in financial markets weakened the monetary transmission mechanism, those policy actions had limited impact on financial conditions. As a result, central banks implemented unconventional measures such as supporting secondary markets of mortgage, consumer and commercial credits and purchasing corporate and government bonds. While most emerging economies have also eased their monetary policies, some of them were not able to take similar actions due to exchange rate pressures and intensified funding needs.

Along with monetary policy measures, multiple financial sector policies have been implemented in order to restore stability in the financial sector and to rebuild market trust. Recapitalization of financial institutions, establishing guarantee schemes for interbank lending and nationalization of some financial institutions are among major financial sector policies implemented. In addition to that, the removal of troubled assets from financial sector balance sheets is an integral part of current policy strategies.

Governments have also announced fiscal stimulus packages to boost aggregate demand. Within this framework, cuts in personal income taxes and indirect taxes; increases in spending for infrastructure, health, education, research and development; increases in transfers to states or local governments; regulations related to increasing employment; credit and guarantee supports for housing sector, exporters and small and medium sized enterprises were main policy actions put into practice in developed and developing countries.

Although announced fiscal and monetary policies have eased tension, financial market strains continue to exist. Continuing worries about the viability of banks in developed economies prevents the full restoration of confidence in the markets. Credit conditions continue to be severely impaired.

The prolonged financial crisis weakened global economic activity beyond estimations and contracted global trade volume by a significant margin. As a result of these developments,



expectations on global economic outlook have sharply deteriorated. International organizations project that policy actions will support the global economy, but will not be able to prevent a contraction of global economic activity in 2009. On the other hand, a gradual recovery is expected in 2010.

The impact of negative developments in international financial markets and the global economic slowdown started to show effect on the Turkish economy in 2008. The Turkish economy is highly integrated with the world economy and financial markets through trade and financing channel, making it vulnerable to the negative effects of the recent international turmoil. Production, export and unemployment indicators of Turkey have started to deteriorate due to declining external and domestic demand. Turkish economy grew by 1.1 percent in 2008. The main reason behind the deceleration of growth in 2008 was the contraction of the economy by 6.2 percent in the last quarter of 2008 reflecting the loss of consumer confidence, domestic uncertainties and deterioration in risk perceptions. Industrial production exhibited a downward trend in the last quarter of 2008 led by weakening domestic demand and declining exports. This trend continued into 2009 and industrial production decreased by 22 percent in the first three months of 2009. Turkey's exports have been declining since October 2008 due to the significant slowdown in our major trading partners. As a result of continued weakness in external demand conditions in the first months of 2009, exports declined by 26 percent in the first quarter of 2009. Unemployment rate started to increase, especially in the exporting sectors and reached a level of 15.5 percent in January 2009.

Effects of the global financial crisis on the Turkish economy were limited thanks to a healthy banking sector that had strong capital structure, low credit, exchange rate and liquidity risks. The capital adequacy ratio stands at 18 percent as of February 2009. Ratio of non-performing loans to total loans went up slightly from 3.7 percent at the end of 2008 to 4.2 percent in February 2009. FX net general position was at a surplus of USD 882 million as of April 2009.

Inflation in 2008 was mainly determined by developments in the global economy. The surges in food and energy prices pushed inflation upwards in the first ten months of 2008. In November and December decreases in food, energy and other commodity prices and deteriorating domestic demand conditions due to deepening problems in global financial markets led to a deceleration in inflation. Yet, the cumulative impact of the past increases in commodity prices has kept annual inflation from falling remarkably. Accordingly, in 2008 headline inflation was at 10.1 percent, which is above the uncertainty band set around the target for 2008. Disinflation continued in 2009, with yearly inflation falling further to 6.1 percent in April.

Although the failure in achieving the inflation targets stemmed from factors beyond the scope of monetary policy, the overshooting of inflation targets between 2006 and 2008 has undermined the role of inflation targets as an anchor for inflation expectations. Therefore, in order to re-establish the reputation of the implemented regime, inflation targets for 2009 and 2010 were revised to 7.5 and 6.5 percent, respectively and the target for the year 2011 was set at 5.5 percent.

Declining inflation expectation provided monetary policy space, allowing the Central bank of Turkey to cut policy interest rates by 700 basis points in the November 2008 - April 2009 period. This made a positive effect on the borrowing cost of Treasury, and between January and April 2009, the interest rate of TL government bonds decreased around 4.3 points compared to year 2008 on average.

On the other hand, public sector budget balance was negatively affected from falling tax revenues because of economic contraction and additional costs stemming from measures taken against the economic crisis. In this context, forecasts on macroeconomic indicators and budget figures have been revised at Pre-accession Economic Program published on April 13, 2009.

Several measures have been taken to reduce the negative impacts of the crisis on the Turkish economy. Besides lowering short term interest rates, CBRT resumed its intermediary role in the Foreign Exchange (FX) Deposit Market, extended the maturity of FX deposit borrowed by the banks from the Foreign Exchange and Banknotes Markets-Foreign Exchange Deposit Market and reduced the lending rate. Furthermore, the FX required reserves ratio was lowered and daily foreign exchange selling auctions were carried out.

Various regulations were introduced to cushion the negative impacts of the global crisis on the Turkish economy. Accordingly, credit subsidies were provided to the real sector with special focus on small and medium enterprises and exporters; guarantee and credit limits of EXIMBANK (Export Credit bank of Turkey) were increased; value added tax and special consumption tax on many products such as automobile, furniture, home appliances and residential estates were reduced temporarily; the "Asset Peace Law" was enacted in order to bring in the assets from abroad to the economy; withholding tax on stocks for local investors was removed; an opportunity to pay overdue taxes by installments was provided; social security contribution paid by the employer was lowered in order to decrease the burden on employment; non financial burdens on employers were decreased; the amount of short-term working allowance was increased and its duration was lengthened; unemployment insurance payments were amplified; infrastructure expenditures to the Southeastern Anatolia Project were increased; transfer payments to local governments were expanded; incentives on income tax, energy supports and social security premiums were extended for one year; council of Ministers was authorised for reducing corporate tax, in order to support investments taking sectoral and regional priorities into consideration.

The measures taken in order to cushion negative impacts of global crises to the national economy are projected to be effective between 2009-2010 and the Turkish economy is expected to improve with the recovery of the world economy. .



Jewelled Golden Ceremonial Flask Ottoman, Second of the 16 century
Topkapı Palace Museum, Treasury Section

BUDGET IMPLEMENTATION

Program defined total public sector primary surplus as a share of GDP realized at 1.8 percent in 2008. The central government budget has the biggest share in total public sector and its contribution to total primary surplus is 1.9 percent. The program defined central government primary surplus in 2008 was 17.7 billion TL, decreasing by 18 percent compared to 2007. The main culprit behind the decrease in central government program defined primary surplus is the decrease of tax revenues vis-à-vis the targets and the increase in capital expenditures which is mainly due to the South East Anatolian Project. In 2008, capital expenditures and revenue shares of local administrations increased respectively by 29.3 percent and 7.9 percent in reel terms.

Program Defined Total Public Sector

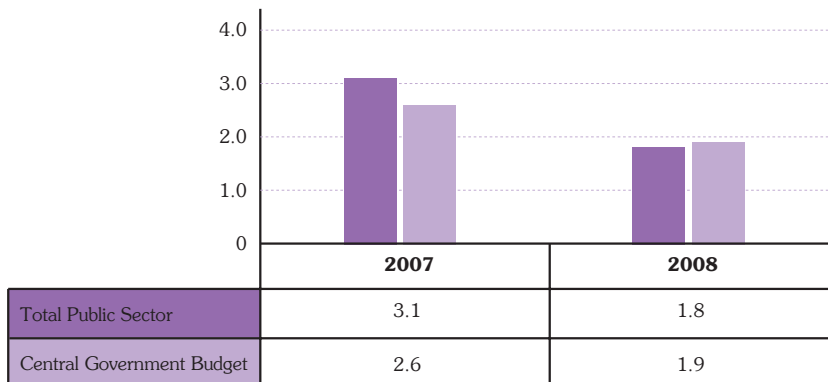
Total public sector is composed of the institutions in central government budget, SEEs, extra-budgetary funds, Social Security Institution, Unemployment Insurance Fund, local administrations and revolving funds.

Program defined total public sector primary surplus comprises program defined primary surplus of central government budget and the primary surplus of other public sector. Program defined central government budget primary surplus does not include profit transfers of Central Bank of the Republic of Turkey (CBT), net special revenues of Turkish Mint, proceeds from the sale of assets (privatization proceeds or transfers thereof) and dividend payments from Ziraat Bank. On the expenditure side, transfers to the Risk Account from budget are excluded from primary expenditures. Moreover, cash transfers to the Social Security Institutions are being taken into account and net lending to Consolidated Government Sector (CGS) is being eliminated from either revenues or expenditures.

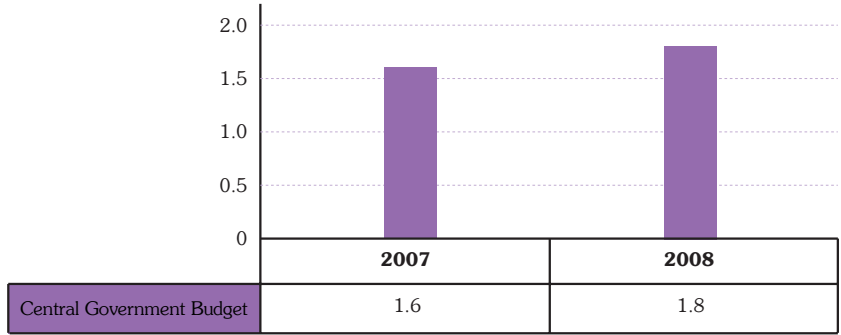
The other public sector, apart from in the central government budget, produced a deficit of 0.1 percent as a share of GDP. The contributions of Unemployment Insurance Fund and revolving funds have been 0.4 percent and 0.1 percent respectively and the contribution of local administrations has been -0.6 percent as a share of GDP.

The primary surpluses of total public sector and central government budget together with the deficit of central government budget as a share of GDP can be seen in the diagrams below:

Total Public Sector Primary Surplus (Program Defined, GDP %)



Central Government Budget Deficit (GDP %)



DEBT MANAGEMENT

DOMESTIC BORROWING

Despite the credit crisis which had serious effects on the global market, there hasn't been a significant deviation from the predictions in the 2008 financial program; and borrowing policies were continued to be implemented within the strategic benchmark framework in order to maintain the minimum cost and reasonable risk level.

Within the frame of applied strategies, re-openings of the zero coupon securities which are accepted as "benchmark" securities led the market to have fewer, more liquid securities with high depth. For the year 2008, to the extent market conditions permit, fixed-couponed securities and inflation indexed securities are aimed to be issued regularly. However, due to the reduction in risk appetite caused by the global credit crisis, foreign investors' demand to the domestic borrowing securities decreased. Consequently, after the second quarter of 2008, there hasn't been a fixed-couponed security issuance. On the other hand, the inflation indexed bonds which were issued in February 2007 for the first time and contributed to the targets of increasing the borrowing maturity and widening investor base, have been issued in every three month as announced in the 2008 financial program; except for in November when the crisis deepened. Under these conditions, issuances of the floating rate notes exceeded the amounts that are projected at the beginning of the year.

Furthermore, in the framework of active debt management strategy, buy-back and switching auctions are conducted to the extent market conditions permit. In 2008, as a consequence of four buy-back auctions and four switching auctions domestic debt redemption was decreased by TL 6.2 billion in 2008; so that, the liquidity risk in high redemption periods were decreased.

TREASURY FINANCING PROGRAM ⁽¹⁾				
(Billion TL)	2008 (Program)	2008 (Realization)	2009 (Program)	2009 Jan -Apr. (Realization)
I. TOTAL DEBT SERVICE	149.7	146.5	153.9	49.1
Domestic Debt Service	130.8	129.6	135.1	43.3
Principal	87.7	86.0	85.4	25.3
Interest	43.1	43.6	49.7	18.0
External Debt Service	18.9	16.9	18.7	5.8
Principal	11.8	11.0	11.6	2.7
Interest	7.1	5.9	7.2	3.1
II. FINANCING	149.7	146.5	153.9	49.1
Financing Other Than Borrowing	44.7	33.9	36.5	2.4
Primary Surplus	35.0	24.0	28.5	-1.4
Receipts From On Lending & Guar. Debt	0.5	0.6	0.5	0.3
Other	9.2	9.3	7.5	3.5
Total Borrowing	106.9	107.2	117.4	48.6
External Borrowing	15.3	10.9	12.2	2.4
Domestic Borrowing	91.6	96.3	105.1	46.2
Use of Cash Account	-1.9	1.7	0	-2.5
Currency Valuation of FX Deposit ⁽²⁾	0	3.6	0	0.7
TOTAL ROLL-OVER RATIO (%)	70.0	74.3	77.8	106.6
Memo (Billion TL)				
NET BORROWING (Borrowing - Principal Payments)	7.3	10.2	20.4	20.6
Net Domestic Borrowing	3.9	10.3	19.7	20.9
Net External Borrowing	3.4	-0.1	0.7	-0.3

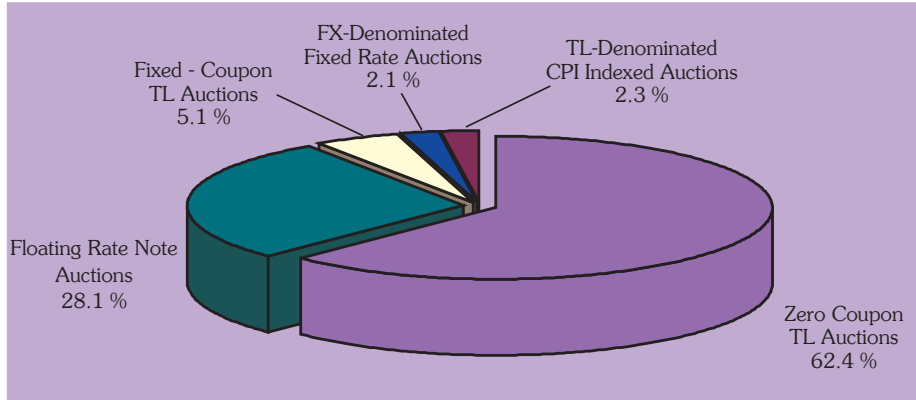
(1) Cash Based.

(2) Figures reflect the changes of FX deposits due to exchange rate. Positive sign indicates an increase whereas negative sign shows a decrease of FX reserves in TL terms.



In 2008, TL 33.9 billion of the total debt service was financed by sources other than borrowing, TL 107.2 billion was financed by domestic and external borrowing and TL 1.7 billion was financed by Treasury cash reserve. While the domestic debt service amounted to TL 129.6, the domestic borrowing totalled TL 96.3 billion. As a result, the total domestic debt roll-over ratio stood at 74.3 percent in 2008.

Domestic Borrowing by Instrument in 2008⁽¹⁾



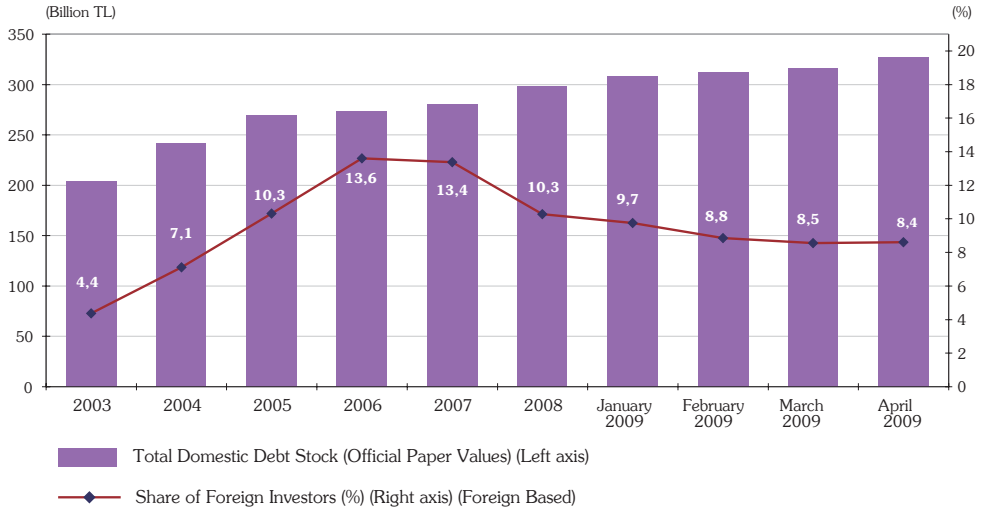
(1) Including switching operations and switching auctions.

In 2008, TL denominated zero coupon securities comprised 62.4 percent, floated rate notes comprised 28.1 percent and fixed couponed securities comprised 5.1 percent of the total cash based domestic borrowing. In the same period, the shares of FX denominated and inflation indexed borrowings were 2.1 percent and 2.3 percent respectively.

In 2008, 96.2 percent of the domestic borrowing was realized through auctions and 3.8 percent through direct sales. Through the year, 42 auctions were conducted and the amounts of bids were almost twice the total sales. In 2008, total bid to the total market redemption ratio was 106 percent (including the sales through non-competitive offers to the Primary Dealers). The average maturity of total borrowing decreased from 34 months to 32 months in 2008.

The crisis that started in the US housing market in August 2007 affected global financial markets in 2008. In September 2008, the crisis deepened and its negative effects on real sector started to appear. With the decrease in the foreign investors' interest in the emerging markets and the increase in the foreign capital outflows, maturities of the bonds that foreign investors demanded shortened. Foreign investors' shares in the domestic borrowings decreased to 8.4 percent in April 2009 from 10.3 percent of the previous year and are shown in the following graphic.

Shares of Foreign Investors ⁽¹⁾



(1) Non Residents: Foreign Branches of Banks and Foreign Investors

Along with the increase in the foreign capital outflows, secondary market yields started to increase in September and reached up to 25 percent at the end of October. Fluctuations in the yields caused a limited increase; the costs of TL denominated zero coupon bonds increased to 19.2 percent in 2008 from 18.4 percent in 2007.

The Central Bank lowered the policy rates to limit the effects of the crisis and to raise the weak demand. This led to a decreasing trend in the secondary market interest rates and this sharp decrease also impacted Treasury auctions. The average cost of TL denominated zero coupon bonds was 14.9 percent as of April 2009. In the same period, demand was high and the total bid to total market redemption ratio was 154 percent. In the first quarter of 2009, the roll over ratio was realized as 106.6 percent with TL 43.3 billion domestic debt service and TL 46.2 billions domestic borrowing.

In January 2009, with the aim of diversifying borrowing instruments and broadening the investor base, Revenue Indexed Bonds were issued. This issuance offered investors a new instrument, the return of which is associated with Government revenues. As a result of TL and US Dollar denominated issuances, 1,238.1 million TL of resource was provided. Information with regard to the Revenue Indexed Bonds can be found in the "Information for Investors" chapter.

The aim in 2009 is to make the majority of borrowings in TL as part of efforts to maintain the decreasing trend of the share of foreign currency denominated debt stock in the Central Government Debt Stock. To the extent that market conditions permit fixed rate TL instruments will be used as the major source of domestic cash borrowing and the share of debt which has an interest rate fixing period less than 12 months will be decreased. It is also aimed to



increase the average maturity of domestic cash borrowing taking into account market conditions and decrease the share of debt maturing within 12 months in order to reduce the liquidity risk.

Trough the aim of sustaining transparency in debt management, financing programs and debt data will be continued to be announced on a regular basis in 2009 and after. Regarding the domestic borrowings which constitute the main part of annual borrowing requirement, buy-back and switching auctions are planned to be continued within the framework of active debt management and strategic benchmark policy, with the aim of smoothing out the redemption profile.

EXTERNAL BORROWING

Program Finance

Program Financing from IMF

The last review of the latest Stand-By arrangement was completed on May 2008. In this regard, SDR 2,248 million (approximately USD 3,463 million, with end-2008 exchange rate) was purchased in 2008. Total principal and interest payments to the IMF in 2008 were SDR 1,244 million and SDR 258 million respectively.

During the January – April 2009 period, repayments of SDR 500 million were made to the IMF (of which SDR 458 million was the principal and SDR 42 million was the interest).

Net Financing From International monetary Fund ^{(1) (2)}

(Million SDR)	2001	2002	2003	2004	2005	2006	2007	2008	2009 Jan. - Apr.	TOTAL
I. Disbursement	8,895	9,929	1,191	794	1,666	1,999	749	2,248	0	30,093
II. Debt Service	1,207	5,544	1,863	3,805	5,910	5,635	3,741	1,502	500	29,813
Principal	868	4,916	1,224	3,158	5,267	5,092	3,373	1,244	458	25,666
Interest	339	628	639	647	644	543	368	258	42	4,147
III. Net Financing (I-II)	7,688	4,385	-672	-3,011	-4,245	-3,637	-2,992	746	-500	281
IV. Net Financing Excluding Interest	8,028	5,013	-33	-2,364	-3,601	-3,094	-2,624	1,004	-458	4,427
V. IMF Debt Stock (end of period)	11,233	16,246	16,213	13,848	10,247	7,154	4,530	5,534	5,076	..

(1) The Undersecretariat of Treasury and the Central Bank combined. The Central Bank made its last disbursement in 2001 and completed its repayment obligations in 2005.

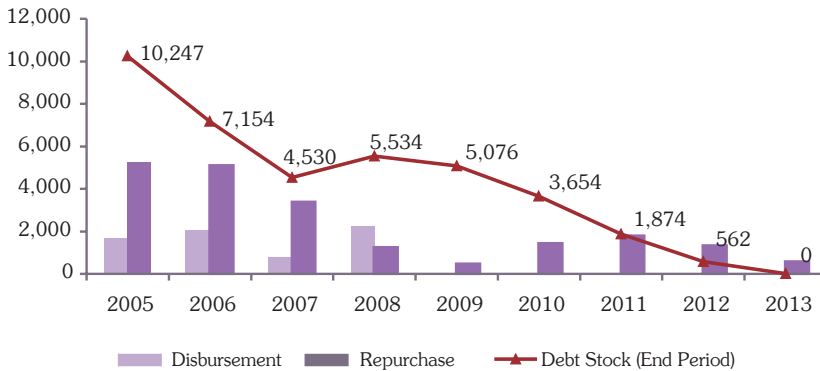
(2) End-April 2009 \$/SDR exchange rate is 1.497830.

The Executive Board of the International Monetary Fund (IMF) approved the amendment of repurchase policies for the IMF resources financed through the General Resources Account, including the Stand-By Arrangements, on March 24, 2009.

According to the decision, the policy of making repurchases on the "Expectation Basis" (repayment in 4 years with 8 installments with a grace period of 2 years and 3 months) was abolished as of April 1, 2009. Since then, IMF resources have to be repaid according to "Obligation Basis" (repayment in 5 years with 8 installments with a grace period of 3 years and 3 months). Change in the repurchase policy will apply to all member countries and have a positive effect on Turkey's repurchase schedule. The amendment will lower Turkey's external debt amortizations by SDR 1.4 billion (approximately USD 2.1 billion) in 2009. The new repayment schedule of Turkey to the IMF is stated below.



Financial Transactions with IMF Disbursements - Repurchases - Debt Stock (Million SDR)



Year	2009 (April - December)	2010	2011	2012	2013	Total
New Repurchase Schedule	0	1,423	1,780	1,311	562	5,076

Program Financing from World Bank

In order to support the reform agenda in the areas of (i) social security and social aid system (ii) budget and public financial management and (iii) public administration, the Agreement for the Second Programmatic Public Sector Development Policy Loan (PPDPL II) in the amount of EUR 255.4 million (approximately USD 400 million) was signed on June 20, 2008 and the proceeds of the loan was fully disbursed on July 29, 2008.

In order to support the reforms to enhance competitiveness and employment, the Agreement for the Second Competitiveness and Employment Development Policy Loan (CEDPL II) in the amount of EUR 342.8 million (approximately USD 500 million) was signed on December 17, 2008 and the proceeds of the loan was fully disbursed on February 4, 2009.

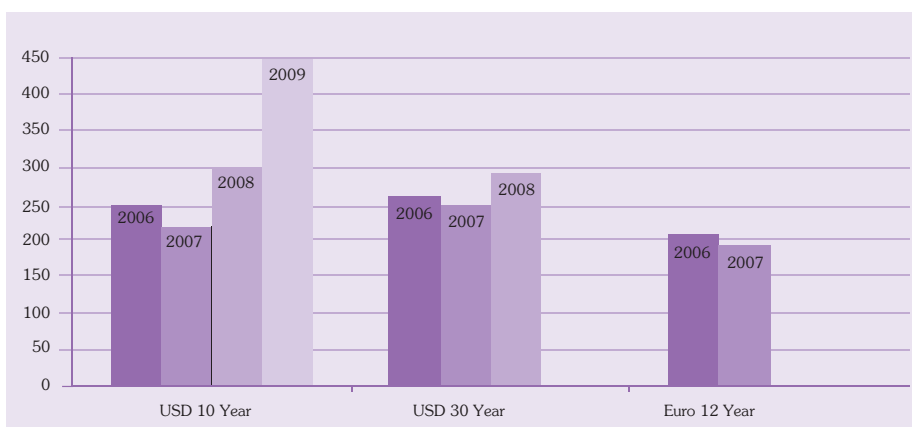
Financing from International Capital Markets

In the 2008 financing program, it was anticipated that approximately USD 5.5 billion equivalent of funds would be raised through Eurobond issuances from international capital markets. However, due to the adjustments in the financing program during the year and the deterioration in the financial markets arising from the market turbulence throughout the last quarter of the year, a total of USD 4 billion of funds was raised through Eurobond issuances in 2008.

In September 2008, the transaction launched by the Turkish Treasury at an amount of USD 1.5 billion was awarded as the "Best EMEA Sovereign Deal of the Year 2008" among the European, Middle East and African deals by Euroweek.

In the 2009 financing program, it is anticipated that approximately USD 3.5 billion equivalent of funds would be raised through Eurobond issuances from international capital markets. Since the beginning of 2009, a total of USD 2.5 billion of funds have been raised through bond issuances in the international capital markets.

Risk Premiums for International Bond Issuances ⁽¹⁾



(1) The values are the weighted averages of the spreads and the nominal amounts of the bonds issued during the year corresponding to the given maturity. As of May 1, 2009

Eurobond Issuances in 2008 - 2009

Issue Date	Maturity Date	Currency	Amount	Coupon (%)	Yield - To - Investor	
					(%)	Spread (bp)
15.01.2008	03.04.2018	USD	1,000,000,000	6.750	6.300	UST + 246 bp
05.03.2008	05.03.2038	USD	1,000,000,000	7.250	7.550	UST + 290 bp
24.06.2008	15.03.2015	USD	500,000,000	7.250	7.342	UST + 348 bp
11.09.2008	11.03.2019	USD	1,500,000,000	7.000	7.050	UST + 334 bp
14.01.2009	14.07.2017	USD	1,000,000,000	7.500	7.500	UST + 501 bp
07.05.2009	07.11.2019	USD	1,500,000,000	7.500	7.600	UST + 448 bp

Project Finance

Project Financing from Governments, Commercial Banks, Export Agencies and International Institutions

As of the end of 2008, 35 loan agreements amounting to USD 4,136 million were signed for the financing of 28 public projects including the ones financed by World Bank. The sectoral distribution of these loans is as follows: 24 percent for SMEs, 23 percent for energy, 22 percent for transportation, 13 percent for defense, 12 percent for social sectors and 6 percent for the other public sector projects. In 2008, 49 percent of the loans were sovereign debt, 48 percent were under Treasury guarantee and 3 percent were on-lent debts.

During the last 5 years the longest weighted average maturity was 21.6 years which was realized in 2005. The year 2008, with weighted average maturity of 20.4 years, is ranked as second in terms of length of maturity. In 2008, weighted average of the grace period was 5.5 years and average maturity/duration was 12.9 years.

Moreover, for commercial credits provided in 2008, the weighted average maturity was 8.9 years, weighted average of the grace period was 4.4 years and average maturity/duration was 6.7 years. Those were the longest maturities for the last 5 years.



Out of the total loans in 2008, 71 percent were extended by the international financial institutions (including the World Bank), 20 percent were commercial credits, 5 percent of them were provided under ECA guarantee schemes and 4 percent were ODA Credits/Soft Loans.

During the 2004-2008 period, the share of international financial institutions as a source of project finance was 50 percent. Commercial credits have a significant share of 32 percent, as well. Due to the strategy pursued in recent years that gives the priority to international financial institutions as source of project finance, 71 percent of the loans were extended by the international financial institutions in 2008. This strategy will be pursued in the coming years.

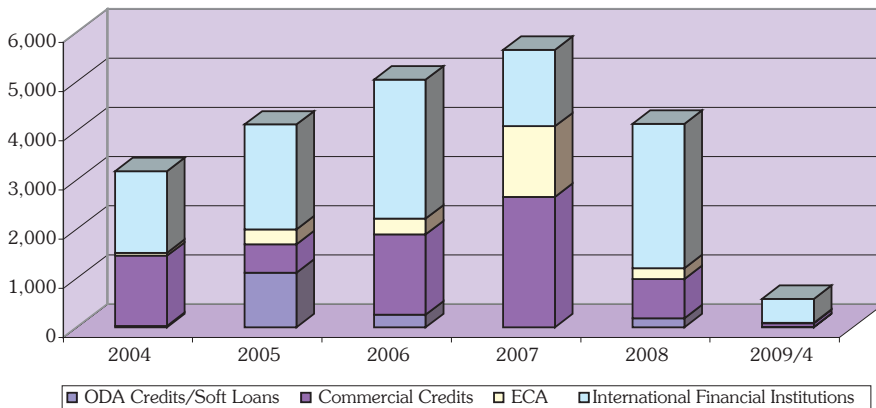
As of the end of April 2009, out of USD 576 million of project financing provided in 2009, 84 percent was extended by international financial institutions, 59 percent was under Treasury guarantee scheme, 39 percent was sovereign debt and 2 percent was under on-lending scheme. Of this amount, 61 percent will finance the urban infrastructure projects and the remaining 39 percent will finance the transportation projects.

The Classification of Financing According to Their Source Between 2004 - 2009 (April)

(Million USD)	2004	2005	2006	2007	2008	2009 April	Total
ODA Credits/Soft Loans	25	1,112	255	0	183	10.8	1,586
Commercial Credits	1,428	577	1,634	2,650	797	70.0	7,156
ECA	60	303	321	1,439	221	10.8	2,355
International Fin. Ins.	1,663	2,133	2,826	1,556	2,935	484.2	11,597
Total	3,175	4,125	5,036	5,645	4,135	575.8	22,692

(%)	2004	2005	2006	2007	2008	2009 April	Total
ODA Credits/Soft Loans	0.8	27.0	5.1	0.0	4.4	1.9	7.0
Commercial Credits	45.0	13.8	32.6	46.9	19.3	12.1	31.5
ECA	1.9	7.4	6.4	25.5	5.4	1.9	10.4
International Fin. Ins.	52.4	51.8	56.0	27.6	71.0	84.1	51.1

The Project Credits Provided Between 2004 - 2009 (April)



Developments in the International Capital Markets

Throughout 2008, the volatility in the financial markets reached its highest level following the collapse of Lehman Brothers in September 2008. Thereafter, the developed countries, particularly the US, have taken several monetary and fiscal measures to mitigate the intensifying problems in the financial sector and their contagious effects on the real sector via credit channel. In parallel with the effects of news regarding the measures announced by the government authorities and announcements by the financial institutions on investors, the Turkish Eurobonds followed a volatile trend in line with the majority of the emerging markets in general.

During September-December 2008, the yield of our benchmark bond due 2030 increased from around 7.1 percent to 7.7 percent. In addition, the JP Morgan Emerging Markets Bond Index (EMBI+), which comprises all major emerging market sovereigns and is widely used as a benchmark to gauge the performance of the market as a whole, and the EMBI+ Turkey sub-index increased by approximately 384 bps and 228 bps respectively to 690bps and 532 bps at the end of year 2008. Even though the deterioration in the investor risk appetite and high volatility resulted in an increase in the bond spreads, Turkish Eurobonds outperformed the EMBI+.

The determined and coordinated measures taken by developed countries and the international community against the crisis and positive data announcement economic have contributed to improve investors' risk appetite since mid March.

From the beginning of 2009 until May 1 at the yield of our benchmark bond due 2030 decreased by approximately 24 bps to 7.48 percent. In the same period, JP Morgan EMBI+ decreased by approximately 166 bps to 525 bps and the EMBI+ Turkey sub-index decreased by approximately 121 bps to 411 bps.



Jewelled Mirror Case, Second half of the 16th century
Topkapı Palace Museum, Treasury Section

DEBT STOCK

The central government gross debt stock to GDP ratio has decreased by years and realized as 39.6 percent and 40 percent at the end of 2007 and 2008 respectively. In the last five years, this ratio has receded approximately by 22 points.

Central Government Gross Debt Stock

Central Government Gross Debt Stock includes domestic and external debt stock of central government institutions. In this respect, central government external debt stock is the sum of unrealised nominal repayments of disbursements from external credit or external bond issuances at any given time. Central government domestic debt stock is comprised of bills and bonds issued by Treasury in domestic markets.

The central government gross debt stock was TL 380.3 billion as of the end of 2008. As of the end of December 2008, 72.3 percent of total debt stock was domestic debt while 27.7 percent was external. As a result of the borrowing strategies, the share of TL denominated debt stock in total debt has risen by years and realized as 66.2 percent at the end of 2008. The share of foreign currency indexed and foreign currency denominated debt stock has fallen by 13 points with respect to 2003 and has amounted to 33.8 percent as of the end of 2008. Throughout the same period, the share of fixed rate debt stock has risen by 8.1 points and realized as 56.9 percent. These changes in the debt stock have decreased the vulnerability of the debt stock to exchange rate and interest rate changes. The central government debt stock stood at TL 407.6 billion as of the end of March, 2009.

Public Debt Stock (Million TL, %)	2003	2004	2005	2006	2007	2008
Central Government Gross Debt Stock	282,807	316,528	331,520	345,050	333,485	380,315
Central Government Gross Debt Stock / GDP (%)	62.2	56.6	51.1	45.5	39.6	40.0
General Government Nominal Debt Stock Defined by EU Standards	306,301	331,191	339,428	349,481	332,496	375,055
General Government Nominal Debt Stock Defined by EU Standards/GDP (%)	67.4	59.2	52.3	46.1	39.4	39.5
Public Sector Net Debt Stock	250,593	274,195	270,275	258,191	248,374	271,620
Public Sector Net Debt Stock / GDP (%)	55.1	49.0	41.6	34.0	29.5	28.6

Note: Figures may vary due to revision of external debt data.

General Government Nominal Debt Stock Defined by The European Union Standards

General government nominal debt stock defined by The European Union Standards is defined within the context of European System of Accounts 95 (ESA 95) Manual and is calculated within the framework of the convergence criteria determined in the nomination process to the European Union. General government consists of the central government, other public institutions (local administrations, extra-budgetary funds, revolving funds) and social security institutions (including Unemployment Insurance Fund). Also, a consolidation is done between the sub-sectors constituting the general government and within each sub-sector.



General government nominal debt stock consistent with the EU statistical standards is calculated by adding up general government gross debt stock and the adjustment items. Adjustment items are comprised of three main components:

1. The securities held by general government institutions are deducted from the gross debt stock.
2. The interest amount of zero coupon domestic debt securities and index-related change in the value of the principal of inflation indexed bonds are added to the central government domestic debt stock.
3. The amount of coins in circulation issued by Treasury is added to the central government domestic debt stock.

General government nominal debt stock defined by the EU standards was realized as TL 375 billion at the end of 2008. Following a flat movement in 2008, the ratio of this stock to GDP was 39.5 percent at the end of the year.

Public Debt Stock Projections for 2009-2011 Period

The debt burden on the economy has been significantly reduced as a result of the implemented tight fiscal policies and the high economic growth related to increased public confidence and provided stable environment during the last five years.

The public debt stock projections that were made in the framework of Pre-accession Economic Programme of 2009-2011 are presented in the table below. It is projected that the general government gross debt stock will exhibit a limited increase in the period of 2009-2010 with the impact of the market conditions formed by the global crisis and to decrease again in 2011.

Table: Public Debt Stock Projections (Percent of GDP)

	2008	2009	2010	2011
	Realization	Forecast		
General Government Gross Debt Stock	39.5	43.1	44.1	43.4

Public Sector Net Debt Stock

In calculating public sector net debt stock, the financial assets of the public sector are taken into account as well as its financial liabilities. In this framework, public sector net debt stock is calculated by deducting Central Bank net assets, public sector deposits and holdings of domestic debt securities and net assets of the Unemployment Insurance Fund from public sector gross debt stock.

Public sector gross debt stock is composed of domestic and external debt stock of central government and that of the rest of the public sector. The rest of the public sector consists of extra-budgetary funds, local administrations and SOE's.

With the impact of the global crisis observed in foreign markets, public net debt stock reached the level of TL 271.6 billion at the end of 2008, increasing by approximately TL 23.2 billion from the level in 2007. The ratio of this stock to GDP, which was 29.5 percent at the end of 2007, fell to 28.6 percent at the end of 2008 with a decrease of 0.9 point. The 90 percent of public sector net debt stock consists of TL denominated debt, while the remaining 10 percent of the stock is FX denominated. TL 252.2 billion of public sector net debt stock consists of domestic debt and TL 19.4 billion consists of external debt.

CASH MANAGEMENT

In 2008, the amount of revenue collected totaled 194.1 billion TL, non-interest expenditure totaled 170.1 billion TL on a cash basis. Accordingly the primary surplus totaled 24 billion TL and the Treasury cash deficit was 16.3 billion TL, taking into account the interest expenditures of 49.5 billion.

In order to meet short term cash financing needs in a more efficient manner with the lowest possible cost, Undersecretariat of Treasury published a secondary regulation called "Regulation on Financing Through Money Market Cash Operations" in the official gazette on 08.11.2008 / 27048. This regulation aims to set forth the procedures and principles of financing through money market cash operations that will be performed within Treasury's cash management activities.

MONEY MARKET CASH OPERATIONS

Money market cash operations (MMCO) are one of the main tools of modern cash management activities in international practices, providing a financing opportunity with a very short term maturity (maturity of less than one month). The basic idea of using these instruments is to offset the timing mismatches of the public cash inflows and outflows within a month. For example, in Turkey, payments of the salaries are made in the first half of every month while the significant part of the taxes are generally collected at the end of the month, resulting in timing mismatches between cash inflows and outflows. MMCO provides an opportunity to borrow at the beginning of the month and it can be repaid at the end of the month with the cash generated through tax collections.

In the "Regulation on Financing through Money Market Cash Operations", three borrowing instruments are defined as Cash Transactions Bond, Reopen with the Commitment for Repurchase and Deposit Auction. Cash Transactions Bond is a kind of domestic borrowing instrument which can be issued with the maximum maturity of 30 days without physically printing. This note also can be traded in the secondary market and can be redeemed before its maturity. Reopen with the Commitment for Repurchase is a re-open transaction of an existing domestic borrowing instrument with a maximum maturity of 30 days, and a commitment of repurchase. Lastly; Deposit Auction is a short term transaction with a maximum maturity of 30 days without issuing a domestic borrowing instrument and no collateral is provided.

All these instruments are exempt from taxes, duties and charges other than the provisions of Income Tax Law No: 193/31.12.1960 and Corporation Tax Law No: 5422/13.06.2006.



In 2008, another regulation regarding the public treasurership application was published in the official gazette on August 22, 2008 to replace the one that had been in effect since 2004.

Additionally, a study has been started to change the codes of public institutions that are used by the banks for the public treasurership reporting to the Treasury.

Securities registered in the name of the Undersecretariat of Treasury are monitored by CBRT. In 2008, Treasury started a project to compile inventory records and update accounting records of those securities that do not possess shareholding rights.

Studies that started in 2007 for receiving and providing public institutions' cash requirements electronically continued through 2008. A process of transition to the Electronic Public Payment System (EPPS) (a system to make public payments from one center, more effectively and faster with a low cost) was started. Up until now, all regional accounting offices (approximately 1000 offices) and 14 central accounting offices have been integrated into the EPPS. After the Ministry of Finance releases budget allocation to the relevant accounting office, the accounting units are able to send their cash needs to the Undersecretariat of Treasury electronically via this system. Undersecretariat of Treasury will provide the required cash amount to the accounting offices through CBRT. This system will enable the Treasury to monitor cash flows at any moment which is a major difference from the former system. The studies are being conducted in coordination with the Ministry of Finance, CBRT and the Undersecretariat of Treasury and it is planned to be finished by the end of the year 2009.

PUBLIC TREASURERSHIP

Public treasurership which aims to improve the effective use of public resources and reduce the Treasury's borrowing requirement was started in 1996.

The implementation of public treasurership has undergone several changes since it was introduced in 1996. Currently the legal bases of the application are the related articles in the "Law on Regulating Public Finance and Debt Management" and the "Communiqué on Public Treasurership" (Communiqué) that was published in the Official Gazette on August 22, 2008.

In order to achieve the objectives of this application, the financial resources of public institutions as well as their liabilities within the banking sector is monitored and the gathered information is evaluated. In this context, every day the banks send the financial information of public institutions to the Central Bank of Republic of Turkey (CBRT) and the CBRT reports this information to the Treasury. The Treasury then produces periodic reports (only for official use) and the information obtained from these reports is used in cash and asset management activities.

General budget institutions, special budget institutions, revolving funds, other funds, municipalities, special provincial administrations, social security institutions, boards, state economic enterprises and the affiliated institutions of these administrations are subject to the provisions of this Communiqué.

According to the articles of the Communiqué, general budget institutions are obliged to hold their financial resources in Turkish Lira denominated demand deposits with the CBRT or its correspondent bank, currently the Ziraat Bank.

Special budget institutions, revolving funds, other funds, municipalities, special provincial administrations, social security institutions, boards, state economic enterprises and the affiliated institutions of these administrations should hold their resources with the CBRT, Ziraat Bank, Halk Bank and/or Vakıfbank. These institutions can invest in TL denominated demand and/or time deposits and Domestic Borrowing Instruments.

Institutions that are subject to the provisions of the Communiqué can hold foreign exchange denominated demand and/or time deposits only if they have payment obligation in foreign exchange arising from the goods and services they import or external borrowing.



MANAGEMENT OF TREASURY GUARANTEES AND RECEIVABLES

TREASURY GUARANTEES

The guaranteed debt stock increased to 5,603 million USD at the end of 2008, with a 16 percent increase compared to the previous year. This increase in stock was due to the rise in the disbursements of the Treasury guaranteed credits for the private sector financial institutions. By the end of 2008, with a stock of 2,726 million US dollars and 1,247 million US dollars private sector financial institutions and non-financial public institutions had the highest shares in guaranteed debt stock, respectively.

As of the first quarter of 2009, Treasury has undertaken a total of 88.1 million TL, of which 11.4 million TL is investment guarantee and 76.7 million TL is repayment guarantee. All of the repayments due to Treasury guarantees are made through the Risk Account by Central Bank of Turkey. As the revenue of this account is sufficient, no budget allocation has been used as of March 2009.

In the same period, the repayments of the institutions to the creditors amounted to 174.5 million TL. Hence, the undertaking ratio of Treasury guaranteed credits was 30.5 percent.

Repayments of Treasury Guaranteed Credits

Million TL	2008			2009 ⁽¹⁾		
	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)
Local Administrations	70	111	38.7	27	17	60.7
Funds	-	40		-	1	
Financial Institutions	-	27		-	6	
Non-Financial Institutions	110	196	35.9	50	24	67.4
Private Sector Financial Institutions	-	256		-	80	
Private Sector Non-Financial Institutions	-	152		-	46	
Total	180	782	18.7	77	175	30.5

(1) Provisional, 31.03.2009.

TREASURY RECEIVABLES

Treasury receivables are the claims arising from Treasury Guarantees that were given for financing facilities obtained from any foreign financing source or from disbursement of such facilities through onlending or from the transactions which, although remaining outside of the mentioned items, stem from relevant legislation and which arise in connection with all kinds of payments which the Treasury becomes obliged to assume and/or with the State Domestic Borrowing Notes (SDBN) issued by the Treasury for lending. The collections and restructuring of the claims are mainly pursued according to the principals and the procedures regulated by the onlending agreements and the "Regulation on Management, Pursuing and Collecting of Treasury Receivables". Those portions of the claims that have not been repaid by the user establishments to the Undersecretariat on due date are pursued and collected under the provisions of the Law on Procedures of Collection of Public Receivables No 6183.

As of December 2008, the Treasury receivables stock stood at TL 25.6 billion of which the overdue outstanding debt was TL 8.1 billion and the remaining part was composed of the projected claims. As of March 2009, the Treasury receivables stock has been TL 26.2 billion and the stock of overdue outstanding receivables has totaled TL 8.3 billion. The change in overdue outstanding receivables has sourced mainly from the change in the debt stock of the local administrations. SOE's and the other debtors' overdue outstanding receivables has remained stationary. In 2008, the stock of claims form SDIF, which was the biggest item of the total debt stock of Treasury receivables, was cancelled based on the regulations on Law No.4749.

Regulations on Treasury Receivables by Law No.5787 in 2008

In July 2008, some amendmends were made on the "Law on Regulating Public Finance and Debt Management, No.4749" with Law No. 5787. In summary;

- The cancellation of the Treasury claims sourced and/or will source from the onlent SDBNs to SDIF,
- The cancellation of the Treasury claims stemmed from the onlent foreign credits and undertaken Treasury guaranteed foreign credits, which were signed before 01.01.2006, for the debtors listed in Law No. 5018 on the Form II-A,
- The cancellation of the overdue Treasury claims of Turkish State Railways, stemmed from the onlent foreign credits and undertaken Treasury guaranteed foreign credits, by deducting its debts from its receivables from Ministry of Transport & Communication are regulated by the Law.

Under these arrangements, the debt stock of Treasury receivables from SDIF which amounted to TL 93.3 billion has been cancelled as of July 23, 2008. In addition, the Treasury claims debt stock of University of Suleyman Demirel and Istanbul University, totalling TL 43.5 million, again has been cancelled without associating the budget incomes and expenses as of July 23, 2008. The process of the cancellation of claims from Ministry of Transport & Communication is ongoing.

In addition to the regulations in Law No.4749, the issuance of the State Domestic Borrowing Notes onlent to Real Estate Dwelling Investment Partnership (REDIP) for its obligations to the housing aid beneficiaries was introduced with the temporary Article No.18 in July 2008. In this context, private placement debt securities, amounting to TL 1.3 billion, were issued and onlent to REDIP in July 2008.



Treasury Receivables Stock⁽¹⁾

Million TL	2008			March 2009		
	Outstanding Overdue Receivables	Projected Receivables Stock	Total	Outstanding Overdue Receivables	Projected Receivables Stock	Total
Funds	0	0	0	0	0	0
Local Administrations	6,638	7,365	14,003	6,750	7,405	14,155
SOE's	1,405	5,238	6,644	1,462	5,440	6,902
Banks	0	1,148	1,148	21	1,203	1,224
Social Security Institution	0	2	2	0	2	2
Public Banks	1	675	677	0	733	733
Public Enterprises	55	1,389	1,444	0	1,380	1,380
Central Administrations	44	1,446	1,490	49	1,557	1,606
Organizations ⁽²⁾	0	37	37	0	35	35
Insurance Institutions	0	78	78	0	87	87
Private Institutions ⁽³⁾	0	16	16	0	17	17
Foundations ⁽⁴⁾	0	27	27	0	29	29
TOTAL	8,144	17,421	25,566	8,283	17,887	26,170

(1) Provisional. Indicates the total amount of outstanding overdue and projected receivables.

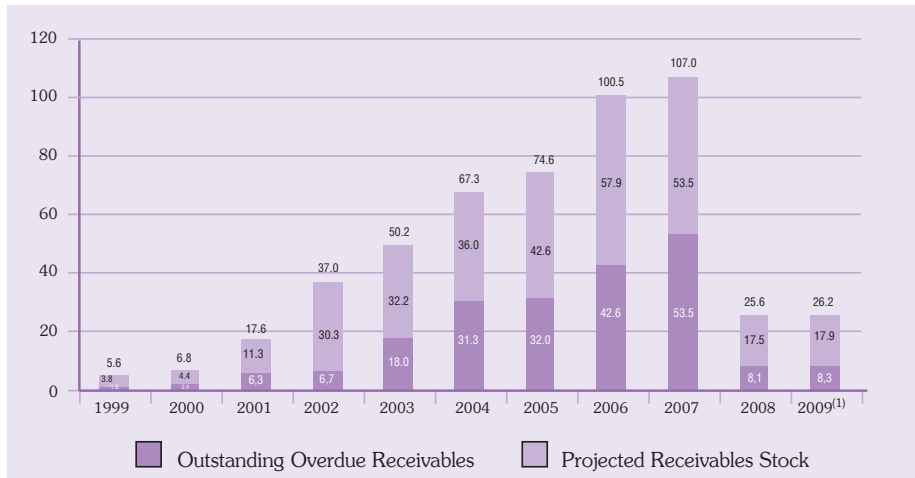
(2) Represents Industrial Zones, Trade Unions and Istanbul Olympic Games Preparation & Organizing Board.

(3) Represents privatized SOE's and corporations governed by foundations.

(4) Represents universities subordinated by foundations and Foundation of Technological Improvements in Turkey.

As it is seen from the graph below, the stock of Treasury Receivables has been continuously increasing over the years because of the increase in the claims of the SDIF. When the SDIF is excluded from the data, the stocks of receivables have been almost steady since 2003.

Treasury Receivables Stock (Billion TL)



(1) As of March 2009, Provisional

Treasury Receivables Stock, SDIF Excluded (Billion TL)



(1) As of March 2009, Provisional.

After Law No.4749 went into effect, the collection and management of the Treasury receivables was handled more effectively. However, it can be seen in the graph below that the collections are not steady through out the years. This is because of the irregular collections from the SDIF. The significant improvement in the collections in 2005 was achieved through the swap, payment on account and the deduction operations to restructure the claims from local administrations.

As of March 2009, the collections have totalled to TL 450 million, of which TL 212 million was collected from the Local Administrations, TL 142 million was collected from the SOE's and TL 63 million was collected from the Public Corporations.

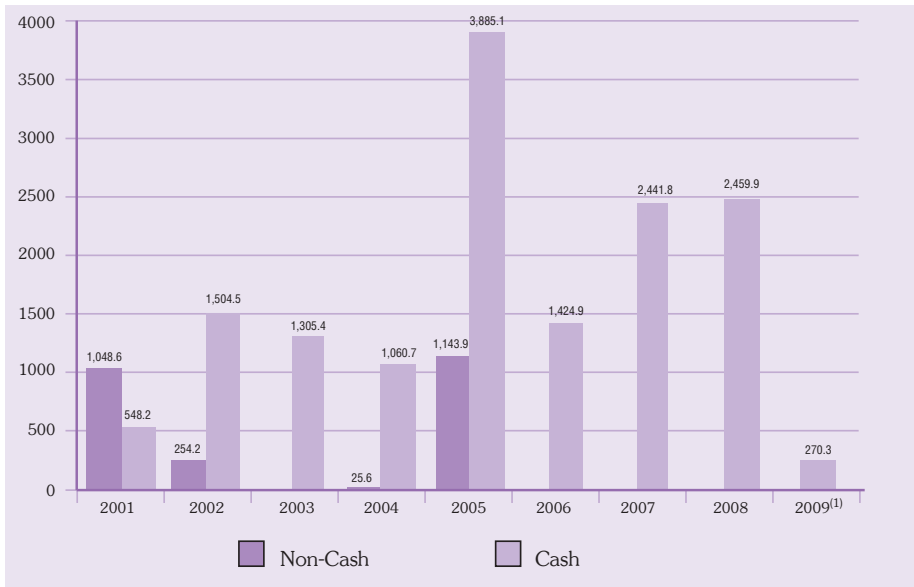
Treasury Receivables Collections ⁽¹⁾

	2008 March		2009 March	
	Million TL	(%)	Million TL	(%)
Funds	600	63.8	0	0
Local Administrations	203	21.6	212	47.2
SOE's	91	9.7	142	31.6
Banks	30	3.2	16	3.5
Public Banks	8	0.8	8	1.7
Public Enterprises	0	0	63	14.0
Central Administrations	1	0.1	2	0.3
Organizations	6	0.6	6	1.2
Insurance Institutions	0	0	0	0
Private Institutions	0	0	0	0
Foundations	1	0.1	2	0.4
TOTAL	940	100	450	100

(1) Provisional



Collections of Treasury Claims (Million US Dollars)



(1) As of March 2009, Provisional.



Jewelled Aigrette Ottoman, 18th century.
Topkapı Palace Museum, Treasury Section

RISK MANAGEMENT

The institutional framework of debt and risk management was established under Law No. 4749 on Regulating Public Finance and Debt Management and the main principles regarding the implementation and coordination were determined through the consequential legal regulations. Within this framework, the "Debt and Risk Management Committee" (DRC) is responsible for determining the general strategies concerning the management of public assets and liabilities, taking into account the risk and cost targets. The risk management unit established within the general Directorate of Public Finance monitors the risks associated with public debt and receivables and develops strategy proposals to be evaluated by the DRC. In this regard, the market, credit and operational risks are actively monitored and managed.

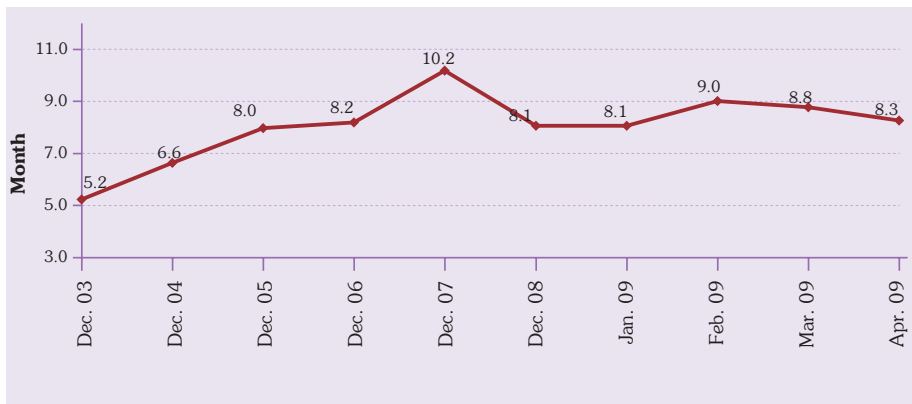
MARKET RISK MANAGEMENT

Public debt managers aim to reach a balance between the cost and risks associated with debt dynamics due to the changes in the exchange rate, interest rates and inflation. One of the key risks that the public debt managers should take into consideration is the market risk which refers to the effects of the volatility in the exchange rates, interest rates and prices on the borrowing costs. Another crucial exposure is the liquidity (financing) risk which is defined as the inability to rollover existing debt because of limited access to the necessary cash or cash equivalents when the repayments are due.

Public debt management depends on the principle of decreasing costs to the most appropriate level while taking into account the aforementioned risks. In this framework, along the lines of the strategic benchmarking policy, put into practice in year 2003, the borrowing policies are developed with a medium term perspective by which the targets of the next three years are designated.

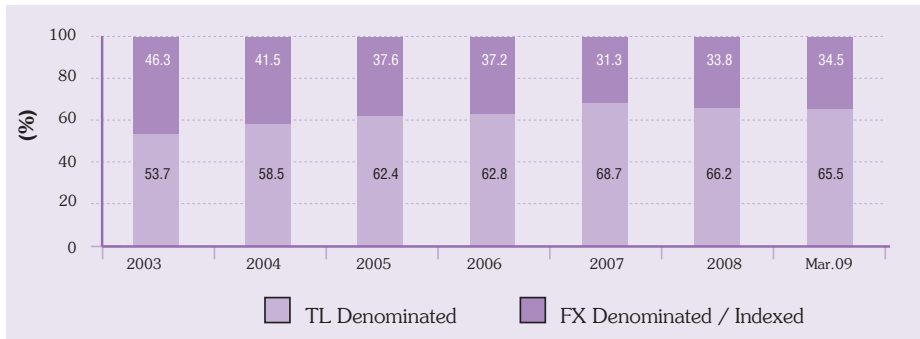
As defined in Law No. 4749 on Regulating Public Finance and Debt Management, the strategic benchmarks denote "the indicators and the criteria which state the general risk/cost targets of debt management and on which borrowing and risk management and is predicated."

Duration of TL Denominated Domestic Debt Stock (1)

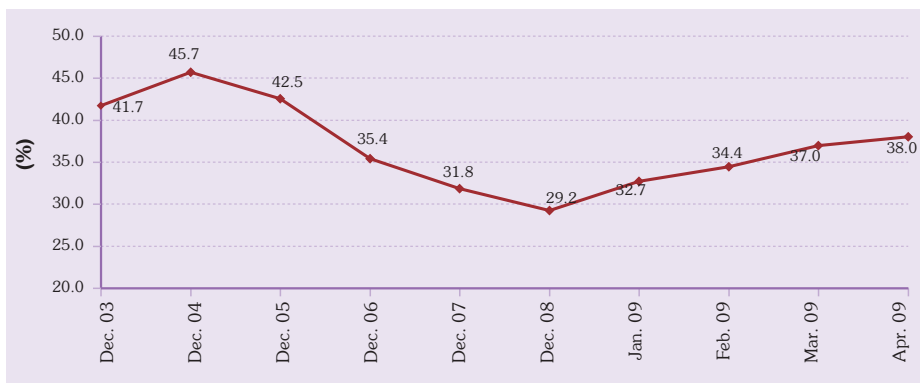


(1) Non-cash borrowing instruments and the CPI Indexed bonds are excluded.

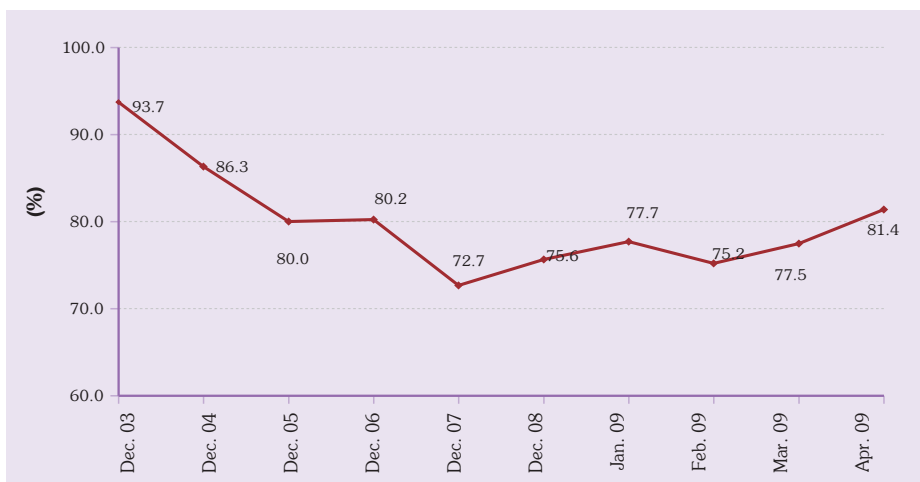
TL/FX Composition of Debt Stock



Share of Domestic Debt Maturing within 12 Months



Share of TL Debt Stock with Interest Refixing Period Less than 12 Months





Within this framework, for the period 2009-2011 the determination of the strategic benchmarks is predicated on the "Cost-at-Risk" modeling approach as in previous years. The Cost-at-risk⁽¹⁾ approach, through which the possible changes in the values of various debt indicators in a certain period are analyzed within a certain confidence interval, facilitates calculation of the expected cost and risk values of the alternative borrowing strategies under different macroeconomic scenarios.

Three basic modules are being used in the modeling stage of the strategic benchmarking policy. The first one of these modules, which is the "Debt Stock Database", consists of the detailed data set regarding the borrowing instruments in the current debt stock. "Macro Variables Simulation" module facilitates generation of the simulation paths for the macro variables such as the interest rate and exchange rate, which are influential on the debt dynamics of the Treasury, while taking into account the historical relationships between these macro variables. The "Borrowing Strategies Module" is employed to consolidate the data provided by the "Debt Stock Database" and the macroeconomic simulation paths generate in order to assess cash flows and the corresponding cost and risk values for alternative strategies. Thereby, the model provides an insight on how the system operates under different macroeconomic conditions and in the light of these analyses, the forward looking benchmark strategies are determined. In 2008, the "Cost-at-Risk" model went through a major revision process and its technical aspects were improved using state-of-the art technology to enhance the quality of the analyses.

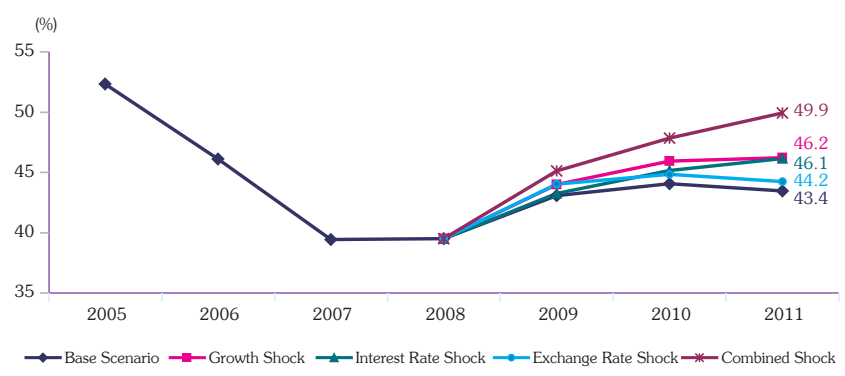
(1) In this model, "Cash Based Interest Payments" and "Nominal Value of Debt Stock" are defined as the cost indicators, whereas "Conditional Cost-at-Risk" or "The Tail Cost-at-Risk" are the risk indicators. A detailed information on this subject is in the Public debt Management Report of the year 2008.

Sensitivity Analysis

In terms of public debt sustainability, the impacts of the fluctuations in macrovariables; including real interest, growth and exchange rates, on debt dynamics is crucial. Through the sensitivity analysis, performed in the context of risk management, the possible effects of changes in these variables on debt stock / GDP ratio are analyzed.

In this framework, the results of the sensitivity analysis regarding the debt stock projections for 2009-2011 period under various adverse macroeconomic shocks are presented below. Medium term paths of EU defined Debt Stock / GDP ratios are revealed in the graph. In the scenario analyses, the scenario generated under the macro assumptions suggested in the Pre Accession Economic Program (PEP) announced in April 13, 2009 is taken as a baseline and the separate and joint impacts of the scenarios of 5 percent increase in the exchange rates, 2 percentage points decrease in the real growth rate and 500 basis point increase in the real interest rates in each year are assessed.

Figure: Sustainability Scenarios



Scenario analysis points out that the debt stock/GDP ratio in year 2011 would be 0.8 points over the baseline scenario under the exchange rate shock, and while the increase in the ratio would be 2.7 points in the case of the growth or the real interest rate shocks. In the combined shock scenario in which all three shocks are pooled together, the debt stock/GDP ratio is projected to increase by 6.5 points in year 2011 with respect to the baseline scenario.

Although the debt stock / GDP ratio is estimated to increase in years 2009 and 2010 under the analyzed shock scenarios, it is projected to start a declining trend in 2011 once again depending on the fiscal policies and debt management strategies. On the other hand, in the combined shock scenario, debt stock / GDP figure is estimated to exhibit a limited increase in the medium term.

The analysis indicates that the sensitivity of public debt stock to external shocks has declined significantly compared to previous years. While decrease in the borrowing requirement and debt stock levels as a result of tight fiscal policies implemented in recent years have limited the effects of possible shocks on debt dynamics, the decline in the share of foreign currency denominated/indexed debt in line with the strategic benchmarks has enabled to mitigate the exposure to exchange rate shocks.



The strategic benchmarks for the period 2009-2011 are designed within a comprehensive framework, taking into account direct borrowing as well as active debt management operations (buy-back, switch-off). The decision by the DRC, dated December 30, 2008 set the numerical targets for the composition of the Treasury debt stock. The main pillar of the benchmarks for the 2009-2011 period are summarized below.

 **Liquidity Risk**

- To keep a certain level of cash reserves so as to reduce the liquidity risk associated with cash and debt management.
- To increase the average maturity of domestic cash borrowing, taking market conditions into consideration and to decrease the share of instruments in the domestic debt stock with a remaining time to maturity of 12 months.

 **Interest Rate Risk**

- To use fixed rate instruments as the major source of TL borrowing and to decrease the share of instruments with an interest rate refixing period of 12 months or less in the TL debt stock.

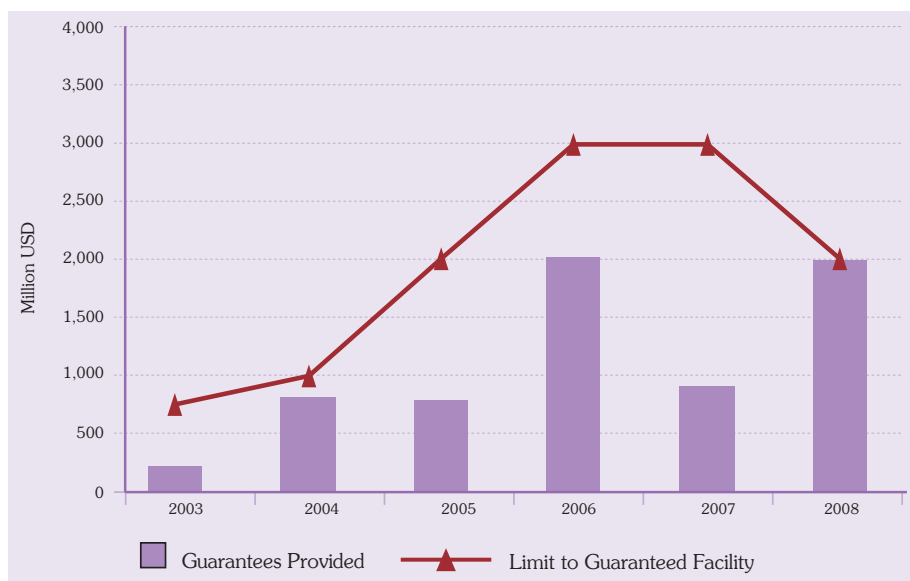
 **Exchange Rate Risk**

- To use TL instruments as the major source of domestic cash borrowing and to decrease the share of FX denominated /indexed instruments in domestic borrowing.

CREDIT RISK MANAGEMENT

Credit risk is one of the major risk factors in Treasury cash management and in the determination of the borrowing needs. In this respect, Treasury guaranteed facility is one of the elements to generate credit risk. Starting from 2002, various measures were initiated to manage the risks arising from Treasury guarantees. One of these measures is the limit set on Treasury guarantees. This measure allows improving fiscal discipline through limitation of Treasury guarantees and gives the responsibility of deciding on the extent of guarantees to the Parliament. As a result of the limit application, especially in recent years Treasury guarantees were mainly provided for low risk bearing public and development banks.

Guarantee Limit and Guarantees Provided



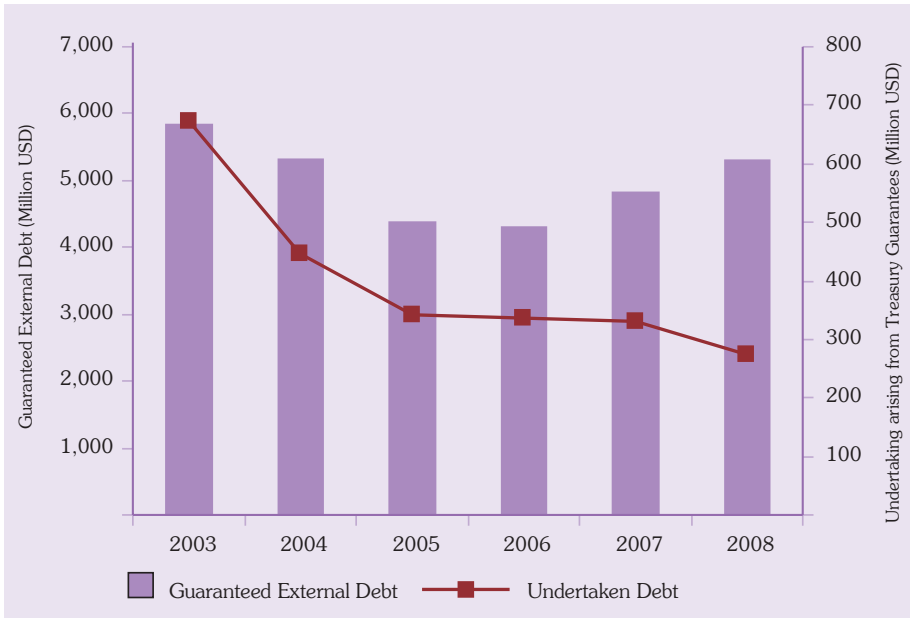
Another measure within the scope of managing the credit risk due to the Treasury guarantees is the guarantee fee. In order to collect part of the losses from the beneficiary, a guarantee fee of up to 1% is charged.

Other measures in this respect are the partial guarantee and the risk account. Partial guarantee, which enables risk sharing between Treasury and the creditor, diminishes the additional cost which may fall upon the Treasury on the one hand, and prevents the moral hazard on the other hand.

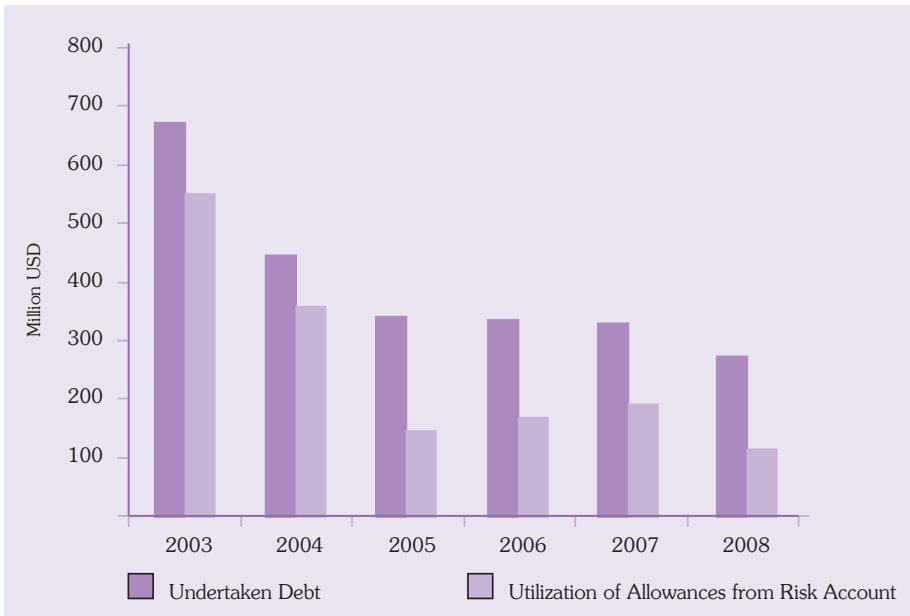
Risk account, which enables to incorporate the fiscal costs due to assumed contingent liabilities within the budget, allows reporting and budgeting in an accountable and transparent way. Moreover, funds collected in the risk account as a result of the proceeds from the recovery of undertaken debt and the interest earned from the balance of the risk account are used in undertaking new losses from contingent liabilities and eliminate any additional burden that may come upon the budget.



Stock of Treasury Guaranteed External Debt & Undertaken Debt



Undertaken Debt & Utilization of Allowances from Risk Account



Positive effects of ongoing measures implemented in 2008 can be seen in the graphs above. In contrast to the increase in the Treasury guaranteed debt stock, a significant fall is observed in the undertaken debt due to the Treasury guarantees. Likewise, when the undertaken debt arising from the Treasury guarantees and the utilized risk account appropriation are analysed, the downward trend in the utilization of allowances is noteworthy. This situation shows the positive effect of the increase in undertaken debt recovery and results in a decline of the total loss.

Additionally in 2008, two main regulations were introduced on external financing via on-lending which is another instrument that causes credit risk. Public institutions outside the central government are financed by on-lent credits as well as by the credits provided under the Treasury guarantee. However, the default risk of the financed entities leads to a similar credit risk for both instruments. Within this framework, by means of the aforesaid regulations credit risk due to, on-lent external loans is to be actively managed as in the one generated by the Treasury guarantees.

In this context, with amendment to the Law no. 4749 on Regulating Public Finance and Debt Management enacted in July 2008, the scope of Treasury guarantees facility limit was extended in order to cover the external financing via on-lending as well. The primary objective of the mentioned regulation is to limit the on-lending of external debt together with the guarantees.

In addition, the on-lending fee which was collected at a flat rate of 5 per thousand of the provided external loan until 2009 is now collected similar to the guarantee fee which is up to 1 percent, depending on the payment performance and financial standing of the beneficiary institution.



Dagger With Emeralds Ottoman, mid. 18th century
Topkapı Palace Museum, Treasury Section

OPERATIONAL RISK MANAGEMENT

The scope of the pilot project, which started in December 2006, to measure potential operational risks and minimize errors within the General Directorate of Public Finance (DG), has been broadened to cover all units in DG in 2008. The consulting service from SIGMA (Support for Improvement in Governance and Management, a joint initiative of EU and OECD) has continued to support the project within the context of "Peer Collaboration Mechanisms" in order to ensure international standards.

Operational Risk Management studies were carried by committees set up on different levels under a new organizational structure.

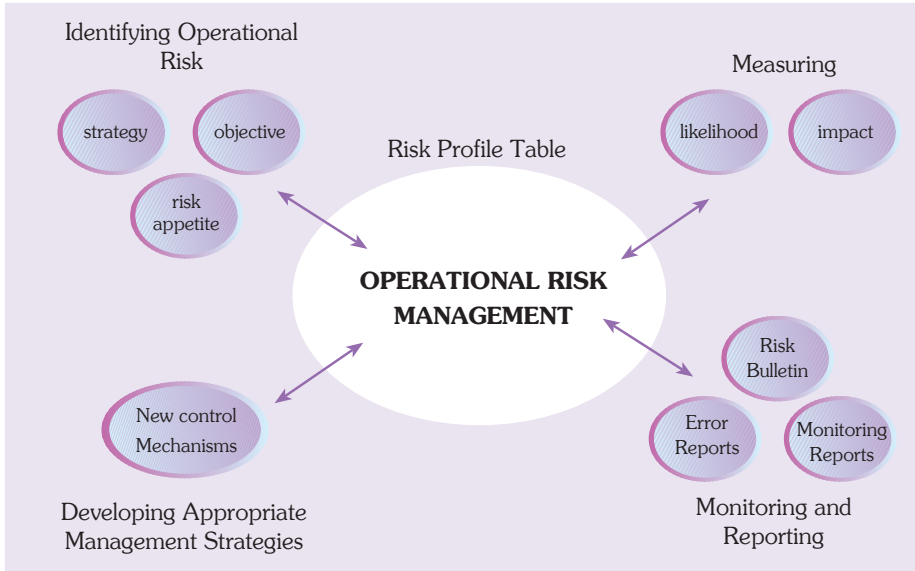
Committees in Operational Risk Management



In order to ensure the measurement of operational risks, all risks in the DG's business processes are defined in the "Risk Profile Table" and the "Likelihood" and "Impact" levels of these risks are determined. Additionally, "Error Reports", where errors in business processes defined, are generated to monitor and control identified risks. These reports are evaluated by the Head of each department quarterly and the results are presented to senior management in "Monitoring Reports". The following graph shows the processes in Operational Risk Management.



Operational Risk Management Processes



After defining risks and determining the "Likelihood" and "Impact" of these risks despite current controls, new management strategies are recommended to reduce the "Likelihood" of risks. In this context, some determined strategies are: Information Technology, Training Requirements, Personnel Policy, Effective Communication, Check Lists Defining Business Processes and User Guides.

A workshop on Operational Risk Management studies was held in Ankara within the framework of a project with TAIEX (Technical Assistance Information Exchange Instrument, an organization of EU) on January 29-30, 2009. In this workshop titled "Internal Control Mechanisms applied in Debt Management Offices", the experiences of UK, Spain, Portugal and Italy were discussed and studies in Turkey were shared with the participants. The workshop was organized to include Internal Control and Internal Audit studies in our Undersecretary and to contribute to the stakeholder units.

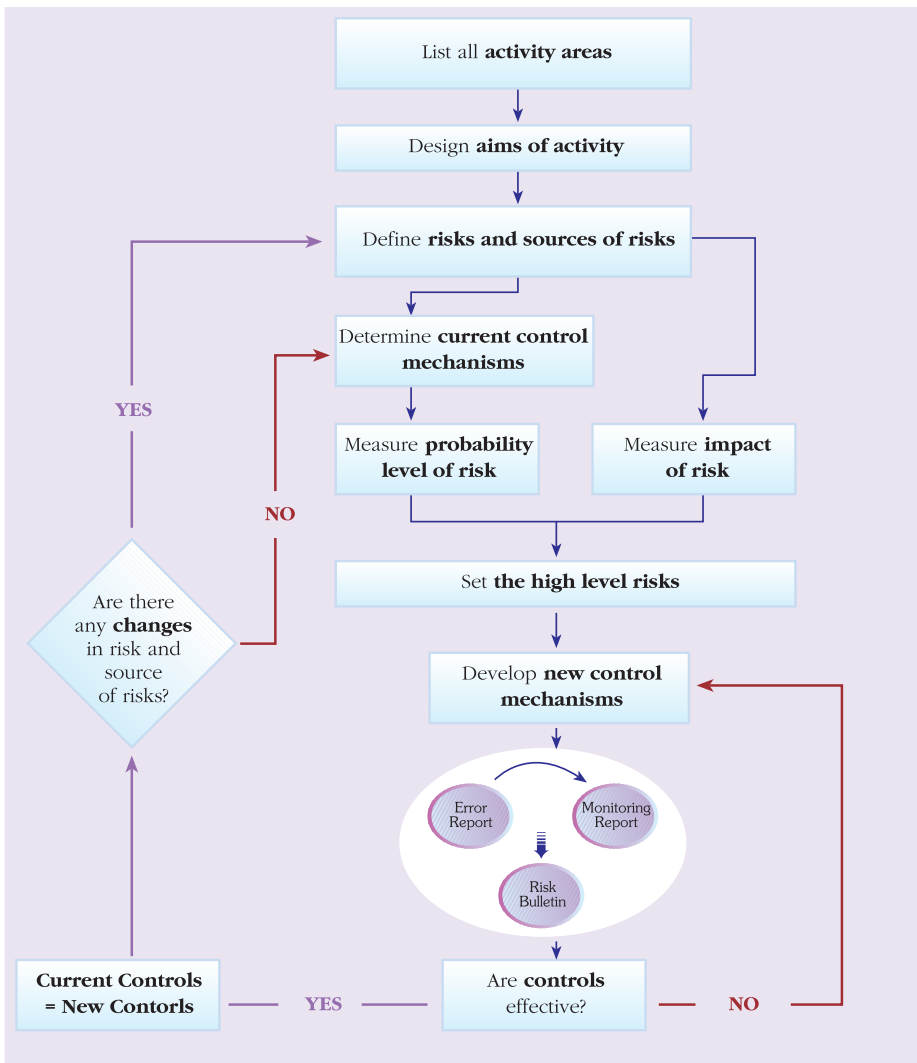
What is Operational Risk and How is It Managed?

- Generally, Operational Risk is defined as the risk of loss (financial or nonfinancial) resulting from inadequate or failed internal processes, people and systems, or from external events that affects an institution's ability to operate its ongoing business processes.
- The Operational Risk in debt management is the potential loss that may occur from business processes, coordination and communication, external factors, management of sources, technical infrastructure or information systems in all debt management activities.

Operational Risk Management process contains the activities of generating a risk profile which includes compiling the observed risks according to the defined objectives and reviewing by the top management, measuring risks (determination of "Likelihood" and "Impact" levels), developing appropriate management strategies and lastly reporting regularly and monitoring continuously.

- Likelihood is a consistent approach to estimate the probabilities for all the viable operational risks during the realization of an activity.
- Impact is the estimation of financial, politic or reputational lose from unsuccessful operational events.

The business flowchart including the general Operational Risk Management processes is shown in the diagram below.





INTERNATIONAL DEBT MANAGEMENT ACTIVITIES

In the area of public debt management, the vision of the Undersecretariat of Treasury is to apply the best international practices and to become an influential, dynamic and credible institution that is seen as a model on international platforms.

In that framework, various meetings and training programs were organized for international debt managers to share our experiences and knowledge on the subjects of debt management structure, cash and risk management. In 2008 and 2009, delegates from Kazakhstan, Uzbekistan, Mongolia, Zimbabwe, India and Palestine visited the Treasury and were informed about our debt and risk management practices. In addition, Treasury's modeling framework for the formulation of borrowing strategies was presented in the workshop titled "Risk-Cost Modeling of Public Debt Portfolio" organized by the World Bank in Washington.

As part of activities regarding investor relations, investors were informed about the Turkish economy via roadshows that took place in major financial centers in U.S., Europe and Asia last year.

Furthermore, the Forum on Fiscal Management of Local Administrations, that is planned to be held each year with a different subject so as to strengthen the fiscal capacity of local administrations, was supported by international participants in May 2008 with the subject title of "Borrowing of Local Administrations". A total of 151 representatives from local authorities and domestic and international institutions participated in the Forum and the presentations made during the Forum were publicized on the Treasury's web-site. The achievements regarding debt and risk management have been shared by explaining Turkey's experience in a range of international events organized by various multinational institutions such as the World Bank, the IMF and the OECD.

Representing the Treasury, Director General of Public Finance M.Coşkun Cangöz was elected as a vice-chair of the "Steering Committee" in the OECD's annual meeting of "Working Party on Debt Management" in October 2008. The Working Party has been a unique policy forum designed for debt managers to exchange their experiences and to build up knowledge in the field of public debt management and government securities markets. This membership selection is seen as the result of the technical capacity built within the Treasury and Turkey's efficient communication with the international community on debt management in recent years.

On December 1- 2 2008 together with the Ministry of Finance, State Planning Organization and the IMF the "Fiscal Rules Workshop" was organized to enable experts to share their views on the role of fiscal rules in the implementation of public finance policies with senior executives of public institutions. During the workshop, various presentations on fiscal rules were made by academicians and experts of international institutions and country experiences (Sweden, UK, France, Germany and Brazil) were conveyed by country officials.

In June 2009, Turkey will host the IMF Debt Managers Forum in Istanbul which is organized jointly with the IMF.



Jewelled Rock Crystal Jug Ottoman, second half of the 16th century
Topkapı Palace Museum, Treasury Section

RESEARCH
AND
ANALYSIS



CREDIT RISK MANAGEMENT IN MANAGING PUBLIC LIABILITIES

WHAT IS CREDIT RISK?

Credit risk⁽³⁾ is defined as the probability that the indebted person or institution is not able to or does not fulfill its obligations in accordance with the terms of the agreements made. Credit risk is thus one of the fundamental factors that must be managed in securing efficient public debt management. In the event that the mentioned risk manifests, an unexpected amount of public sector deficit may occur in an unexpected time; this situation restricts the possibility to borrow from the market with appropriate conditions and instruments. In this context, debt management offices work and take precautions in order to detect, evaluate and manage these risks.

Credit risk management, which has an important place in the financing of public services, aims at minimizing the costs of financing at an acceptable risk level. This requires efficient management process of the credit risk.

Country debt offices are faced with credit risk as a result of the use of derivatives which have a key role in the active management of public debt, either in the scope of the provided guaranteed facilities or on-lent credits or as a result of cash management. For transactions within the context of cash management, the transacting party's failure to fulfill its obligations is one of the sources of credit risk. However, the review of country practices in general shows that credit risk caused by derivatives arising from guarantee/on-lent loans is monitored and managed more intensively. Hence, in this report, only practices on the management of the credit risk arising from the use of derivatives and guarantee/on-lent loans will be discussed. Also the term "counter party risk" will be used in the sections on derivatives.

Practices on Credit Risk (Counter Party Risk) Management According to its Sources

1. Counter Party Risk arising from the use of Derivatives

In the financial markets, instruments which are used to avoid risk or to increase yields by taking a certain level of risk are known as "derivatives". The main aim behind the use of derivatives is to actively manage the market risk to which the public debt portfolio is exposed. However, in addition to their advantages, these instruments also carry their own risks. In this respect, in order to obtain the desired efficiency with these instruments, certain measures to minimize the risks must be taken before using the derivatives.

Counter party risk arising from derivatives is defined as the risk that an indebted person or institution will fail to satisfy terms of the agreement when the derivative agreement has positive value. In this case, the party which meets its payment obligations loses the amount unpaid by its derivative partner and at the same time has to borrow the uncollected amount.

(3) In the literature, credit risk is also known as "counter party risk".



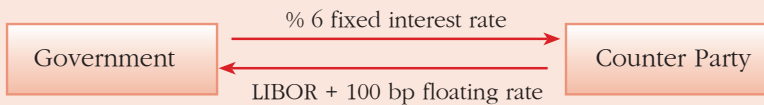
Counter Party Risk in the Use of Derivatives

Basic concepts about derivatives are as follows:

- **Notional amount:** signifies the initial value of a derivative transaction
- **Mark-to-Market value:** is the difference between the asset leg and liability leg of a derivative transaction.
- **Market value:** denotes the value obtained from mark-to market assessment. Market value is zero on the first day of the derivative transaction.
- **Current Exposure:** is defined as the amount at risk should the derivative partner fail to meet its obligations. It appears when the market value is positive.
- **Potential Exposure:** is defined as the exposure which emerges as a result of the changes in the interest and exchange rates during the life span of the derivative transaction.

Example of a Swap Transaction:

In an interest rate swap where the notional amount is 1 billion USD, interest transfers will be as follows for every payment date until the maturity.

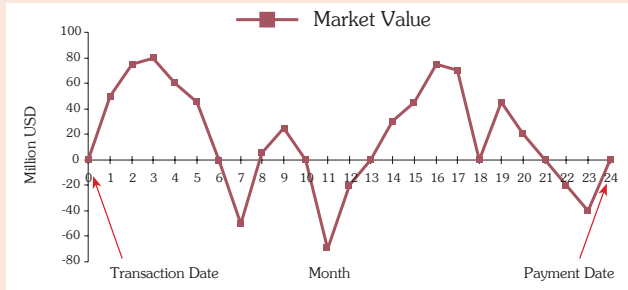


In currency swaps, apart from interest transfers for every payment date, an exchange of principal is done on the date of maturity. In this context, from the government's perspective, every time the derivative transaction has positive value, some counter party risk is generated.

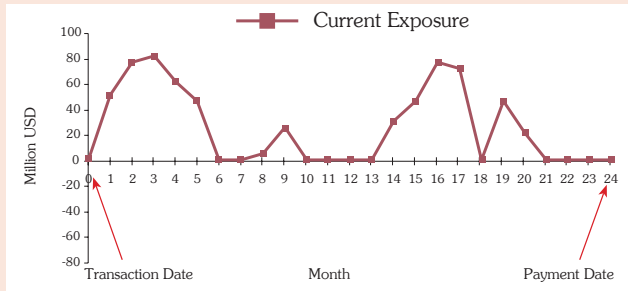
Value at Risk

When we look at the market values of a currency swap, although the market value can be negative sometimes, current exposure appears only at the point where the market value is positive.

Graph-1:
Market Value of a
Currency Swap

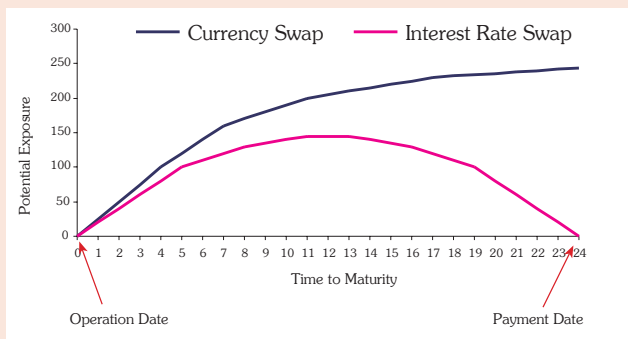


Graph-2:
Current Exposure



Potential exposure related to an interest rate swap would look as shown on Graph 3. On the other hand, for a currency swap because there will be principal exchange at the maturity, distribution of potential exposure will increase as the time to maturity extends.

Graph-3:
Distribution of
Potential Exposure



Total exposure can be expressed as the sum of current and potential exposure.



The following measures are taken to manage the counter party risk arising from the use of derivatives:

1.1. Selection of Eligible Derivative Instrument

Structures of derivative instruments used in the financial sector may vary from simple to very complex. The complexity of the structure of the derivative instrument will in turn increase the counter party risk arising from the derivative transaction. In this context, most of the countries limit the eligible derivative instruments to plain-vanilla interest-rate swaps and plain-vanilla currency swaps. Derivative instruments like options and structured derivatives are usually not preferred. In terms of counter party risk, currency swaps and interest rate swaps have different potential exposures (See Information Box 2).

1.2. Legal Documents

The most common and basic measure to minimize the counter party risk arising from the use of derivative instruments is through legal documents. ISDA (International Swaps and Derivatives Association) Master Agreement which embodies the general framework for minimizing counter party risk related with derivative instruments and the Credit Support Annex (CSA), a collateral rule-setting agreement that is an annex of ISDA, are the most common legal documents used by the debt management offices. Those agreements contain provisions on default and bankruptcy of counter party, netting⁽⁴⁾ and cancellation of agreement. In addition to that, signing the ISDA Master Agreement is one of the criteria for the selection of a derivative partner. According to a survey conducted by OECD in 2007, in almost all countries' swaps are only transacted with counterparties with whom an ISDA Master Agreement is established.

1.3. Counter party Selection Criteria

In order to limit the counter party risk on derivative partners, swaps are only transacted with financial institutions which have high credit standing. In the selection process of a partner, the related parties choose their counter party by using internal rating systems, econometric models and ratings assigned by the credit rating agencies. In general the ratings assigned by credit rating agencies are used by the debt management offices. Most countries use at least two agencies' ratings in the selection process. For instance in Denmark a counter party must be rated minimum Aa3/AA- by at least two rating agencies in order to become a derivative partner. However in Hungary a counter party must be rated a minimum A-

1.4 Limits of Derivatives

Setting a limit on the use of derivative products is a generally accepted practice worldwide. Countries minimize their counter party risk by assigning limits for the derivative partners on the basis of total portfolio and/or credit rating.

Debt management offices may use the following methods to set derivative limits:

- For each level of credit rating, a separate percentage of notional amount is determined,
- Transaction amount for the partners at every level of credit rating is defined according to the ratio of their equity,

(4) Netting of gains and losses on transacted swaps and collateralization

- Limit is defined as the maximum risk exposure,
- Limit is determined as the ratio of a given macro-economic indicator,
- The transaction amounts that give the same expected loss for each level of credit rating become the limit and
- Separate limits are set on the basis of the type of derivatives.

According to the survey conducted by the OECD, the most common method used is the limit on the basis of derivative partners. In addition, the limit on the notional amount of derivatives and type of derivatives are widely used.

1.5. Collateral and Collateral Management

Another method to minimize the counter party risk is collateralization which is a practice that is becoming more and more operational internationally. The purpose of collateralization is to minimize the counter party risk and to perform derivative transactions with better conditions. In this context, countries usually transact derivatives only when the collateral is rendered or the collateralization agreement is signed by the relevant organization. These agreements are basically structured as to call collateral when the market value of the swap agreement falls below a preset level. However, certain regulations in the CSA, like the type of collateral, the time of providing collateral to the derivative partner or collateral transfer may differ due to diverse implementation of collateralizations internationally.

In the context of collateral management, countries first determine the assets acceptable as collateral. While cash is the only acceptable collateral type in some countries, in others, securities can be accepted as collateral if they have high credit ratings and a haircut is charged. These extra measures for the securities are taken against the risk of a decline in the value of securities due to the market changes and according to their maturity. At this point, Denmark can be an example of a country which accepts both cash and securities as collateral.

Another tool used by countries in the management of collateral is the threshold. A threshold, shows the level at which derivative transactions can be made without collateral. Thresholds are generally set in terms of current exposure (See information box 3).

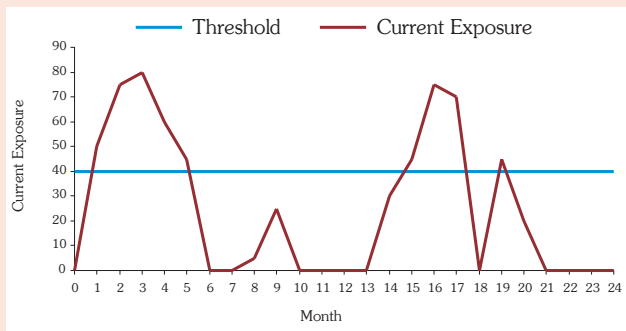


Threshold

While collateralization is used to minimize counter party risk derived from derivatives, it causes operational difficulties and can generate risks like liquidity risk and market risk. In this context, country debt management offices prefer to implement thresholds which enable uncollateralized transactions up to a certain level. A threshold which is individually determined for counterparties is an important component of the CSA.

Graph 4 shows a swap transaction with two year maturity and at a threshold level of 40 million USD.

Graph-4:
Relationship between
Threshold and
Current Exposure



As it can be seen from the graph, collateral can be claimed only if the level of current exposure exceeds the threshold so as to minimize counter party risks. The current exposure is tolerated up to 40 million USD in this swap transaction, and beyond that point there is a need for collateralization.

On the other hand, the issues like one-way or two-way collateralization, collateral valuation frequency and minimum transfer amount are also handled under collateral management. The above mentioned OECD Survey shows that most of the countries employ collateralization in their derivative transactions. Cash and security are equally favored as collateral. Generally daily valuation of collateral is preferred; however, there are weekly or monthly valuation examples too.

2. Management of Credit Risk Arising from State Guarantees and On-lent Loans

National treasuries provide guarantees to public institutions and organizations, to maintain the continuity of economic growth, to lower the investment and financing costs and to provide resources to expensive but necessary projects for the public good, by rendering its credibility in the international financial markets. State guarantees fall within the scope of contingent liabilities since they create an obligation upon the events that are out of government control in terms of timing and amount. On-lending is defined most commonly as the government's transfer of funds of its own sources, or provided from domestic or foreign resources to the public institutions and organizations.

Although the definition and application of guarantees and on-lending vary from country to country, it is noted that such facilities are used only for the public sector in some countries and for both public and private sector institutions in others.

In the event that the beneficiary institution fails to meet its payment commitment to the creditor due to financial distress, the state makes the relevant repayment to the creditor and beneficiaries are indebted to the state. Similarly, in the case of on-lending, the beneficiary institution is indebted to the state and the reimbursement is deemed to be the contingent asset of the state.

The risk of the beneficiary's failure or inability to perform its obligations to the creditor or state is called counter party risk. In the case of guarantees, this risk may result in the state taking over obligations under the guarantee which in turn becomes stock receivable which the beneficiary may also fail to pay. In the case of on-lending, risk arises when the state is unable to recover its receivables. The resulting cost becomes a burden for the state. For risks that may arise in this way, taking some measures are necessary before or after providing new guarantees or on-lending.

These measures are:

- Minimizing the counter party risk by choosing the beneficiaries from a low risk group or a specific risk group, and by diversifying the portfolio,
- Setting a limit to the guarantees and on-lending, providing partial guarantees and charging fees or asking securities in return for the guarantees,
- Valuation of liabilities that may arise from the guarantees or on lending (See Information Box 4),
- Setting up an allocation (risk account) to ensure the follow-up of contingent liabilities arising from guarantees in the budget,
- Regular monitoring of the risk from the contingent assets and liabilities that may arise due to the default with respect to the guaranteed debt stock and on-lent loans.



The Methods Applied for the Valuation of the Guarantees and On-lending

There are four primary methods used for the valuation of the guarantees some of which are applicable to on-lending:

- Present Value of Expected Cash Flow:** This method may be used in the valuation of the guarantees and on-lending, where value of the on-lending instrument is calculated by netting the expected cash flows according to the guarantee and on-lending agreement. While the payments made by the guarantor under the guarantee or on-lending agreements constitute cash outflow, revenues related to these payments, fees paid in the context of guarantees provided and securities given by the institution are considered as cash inflows.
- Option Pricing:** Used in the valuation of the guarantees, this method resembles the valuation of put options since the guarantee agreement makes the risky debt riskless for the creditor and gives the indebted institution the right to sell the relevant asset in the amount of debt repayment. In this respect, value of the guarantee is considered as equal to the value of put option and the appraisal is made by the option pricing techniques.
- Simulation Models:** Another method used in the valuation of the guarantees and on-lending is the simulation model. The simulation model's objective is to create probability distributions for the expected losses and to calculate the value of the guarantee with this distribution. In this framework, by simulating the factors affecting the value of the assets subject to the guarantee, a probability distribution is generated and size of the expected losses is found with this distribution. This method is used actively in the valuation of guarantees.
- Relative Prices:** This method is a simple one used in the calculation of the value of guarantee amounts. The value of the guarantee is the difference between the market value of the guarantor's bonds and the market value of its non-guaranteed bonds. When credit risk of the institution increases, the price of non-guaranteed bonds falls and value of the guarantee rises. If the guaranteed institution does not have an issued non-guaranteed bond, non-guaranteed and in trade bonds of the institutions with similar features can be used.

The international practice shows that beneficiary institutions or organizations are assigned a credit rating before the guarantee or on-lending transaction, in order to select the beneficiaries from a low-risk group. On the other hand, credit risk is contained in the beginning by the limits to the guarantees or on-lending to be provided in the relevant year. Canada, Poland and Spain utilize such limits. Moreover, the Netherlands, Sweden, Austria and Turkey offer partial guarantees instead of full guarantees in order to share the credit risk with the creditors. Furthermore, the fees for the guarantees and on-lending provided should be charged at the same amount as the calculated credit risk. In this way, possible losses that will emerge because of credit risks may be covered. Similarly, taking the size of credit risk into account,

a certain percentage of the guaranteed amount is requested for security, as a way of reducing the cost of beneficiaries' default. In addition to these, establishing a financial resource to meet unpredictable payments improves the effectiveness of cash and debt management and including the contingent liabilities arising from the guarantees to budget contributes to the transparency.

Examining country examples shows that there is no common method for valuation. For example, Sweden values the guarantees using the present value of the expected cash flow and determines the guarantee fee with option pricing, simulation models or relative pricing method. The United States utilizes the option pricing and present value of expected cash flow methods for valuation. The first country that carried out a comprehensive analysis of the contingent liabilities was Colombia. Colombia made this analysis using the simulation models. Poland has developed a scoring system that introduces the quantitative and qualitative valuation. A wide range of criteria are used in this method, from the position of the guaranteed institutions or organizations in the sector, to the relationship with the Ministry of Finance.

The last stage in the management of credit risk from the guarantees or on-lending provided is the regular follow-up of these risks reporting on a regular basis of the risks that government is exposed to and updating the valuations is an essential part of this follow-up process. The previously mentioned survey conducted by the OECD in 2007 revealed that credit risk assessment of guarantees and on-lending is usually done on an annual or monthly basis.

3. Credit Risk Management Practices in Turkey

Since the credit risk management has great significance in terms of the effectiveness of the cash and debt management, these practices are closely monitored by the countries exposed to such risks. The global financial crisis on-going in the last few years stemmed from the parties' non fulfillment of obligations. The turmoil in financial markets initiated by credit risk has deepened and turned into a global financial crisis.

Credit risk management has great importance as mentioned above and in Turkey a number of regulations in line with international practices have been implemented in this field. In this context, measures for the transparent management of Treasury guarantees were taken with the legal regulations introduced particularly in 2002. These measures brought criteria on the provision of Treasury guarantees. In this framework, the financial structure and debt payment performance of the relevant institutions are assessed. On the other hand, the annual amount of foreign financing to be guaranteed or on-lent by Treasury is limited within the annual budget law. Moreover, a guarantee or on-lending fee is charged to the institutions against losses that may emerge due to guarantees or on-lent loans. Also, a partial guarantee practice is initiated to share the credit risk by the creditors. Furthermore, in case of assumptions from Treasury guaranteed loans, the necessary amounts are met from the Risk Account. of the funding required for this account is identified each year and risks from the guarantees are included to the budget.



On the other hand, the counter party risk from the use of derivatives is more controllable than the market risk of these products; however, its effect may be at least as the effect of the market risk. In this context, those countries that use derivatives take necessary measures to manage the counter party risk. As of today, derivatives are not in active use for the public debt management in Turkey; however, the fundamental work necessary to avert counter party risk from the use of these products is at its final stage in line with the international practices.

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MEASURING LIQUIDITY IN BOND MARKETS

The developments in financial markets along with diversification of investment instruments over the last two decades have led to capital mobility across national boundaries in the global financial world. The direction and volume of the mobile capital are determined according to the return and risk level in the markets, as well as the liquidity condition of the markets.

In this respect, this paper provides an overview of indicators that can be used to analyze the liquidity level of the debt market and also provides implications of methods to increase liquidity in bonds and bills market in Turkey.




The performance of securities markets, developing with an increasing pace in recent years, is directly related to the liquidity level of the instruments. The importance of liquidity in the markets has received particular attention because it is a fact that fragility of financial markets increases during economic turmoils and illiquid markets are affected seriously during these periods.

In this respect, adequate liquidity of markets is of great significance from the point of view of both market participants and debt managers. Market participants prefer to invest in liquid markets and this investment decision positively affects liquidity premium of instruments and borrowing cost of the Treasury. Also, liquidity is important for Central Banks, which carry out open market operations.

A liquid market can be defined as:

"A liquid market is a market where a large volume of trades can be immediately or rapidly executed with minimum effect on prices" (BIS, 1999)

Although a variety of measures are employed to evaluate market's liquidity in the literature, commonly used three indicators are:

-  Tightness
-  Depth
-  Resiliency

Tightness:

Tightness of the market refers to the transaction cost of trading. Its characteristic indicator is the bid-ask spread (Flemming 2003). Its name (tightness) refers to the fact that the narrower the difference, the more liquid the market (Csavas – Szlizard, 2005). Market tightness indicates the general costs incurred in a transaction irrespective of market price, and is measured by the average bid-ask spread – the difference between prices at which



market participants are willing to buy (bid) and sell (ask) assets (IMF, 2004). Bid-ask spreads may reflect:

- The cost of processing orders,
- Costs arising from asymmetric information among potential transactors,
- Oligopolistic market structure

Bid – ask spreads can be measured in several possible ways, however, and each measured spread has a slightly different economic meaning. The quoted spread is the gap between quoted bid and ask prices, and is observed before an actual transactions takes place. The realised spread is the gap between weighted averages of the bid and ask prices for executed trades over a period of time, using the transaction volumes at each price as the weights. The effective spread is based on the actual transaction price, rather than the quoted price; because it incorporates the change in the price between when it is quoted and when it is executed, the effective spread incorporates the direction of price movements (BIS, 1999).

The simplest measure of the bid - ask spread is the difference between the best (highest) bid and the best (lowest) ask price in the market (IMF, 2004). To facilitate comparison of bid-ask spreads across assets of differing value, it is recommended that bid-ask spreads be expressed as a percentage mid-point of the buy and sell price of the asset.

$$S = [(AP - BP) / ((AP + BP) / 2)] * 100$$

where AP is the ask price and BP is the bid price. For traded debt securities (bonds and bills) the bid and offer quotes can be in terms of yield rather than in terms of prices (IMF, 2004).

Depth:

Market Depth relates to the ability of a market to absorb large trade volumes without a significant impact on market prices (IMF, 2004).

Depth, in general sense, is the order volume of the the best prices. The reason for this is that deals can be performed at the best quoted price. Also, a market is deep if there is a large volume of market bids on the bid as well as the ask side, above and below the market price. Average contract size describes depth fairly well if trading is always performed at the current best prices (Csavas – Szlizard, 2005).

Depth can be proxied by the average daily turnover. A higher turnover ratio typically indicates a more liquid market. Also, average number of contracts can be used as an indicator of the market depth.

Resiliency:

Resilience is the speed with which price fluctuations arising from trades are dissipated or

the speed with which imbalances in orders (such as more buy than sell orders, or vice versa) are reversed with new orders (IMF, 2004). While there is still no consensus on the appropriate measure for resiliency, one approach is to examine the speed of the restoration of normal market conditions (such as the bid-ask spread and order volume) after trades (BIS, 1999).

In most definitions resiliency is deemed to describe how quickly prices converge to their new equilibrium value after they have been moved by large transactions. If one of two markets is more resilient, then according to the definition, prices return to equilibrium faster than the other, in other words, in a unit of time an identical transactions affects prices less, and so market is more liquid (Csavas – Szlizard,2005). It is assumed that the speed of restoration of equilibrium prices would increase as the price fluctuations decrease.

Finally, "market efficiency coefficient (MEC)" is proposed to distinguish short term from long term price changes and can be used to measure the resiliency. The MEC underscores that price movements are more continuous in liquid markets, even if new information affects equilibrium prices. Thus for a given permanent price change, the transitory changes to that price should be minimal in resilient markets.

$$\text{MEC} = \text{Var} (R_t) / (T * \text{Var} (r_t))$$

Var (Rt) = variance of the logarithm of long period returns,

Var (rt) = variance of the logarithm of short period returns,

T = number of short periods in each longer period.

The ratio tends to be closer but slightly below one in more resilient markets, since a minimum of short term volatility should be expected (Sarr and Lybek, 2002).

Other Measures:

There are some other liquidity measures used for the markets, such as immediacy, breadth, number of participants, and the ratio of most active participants' trade volume to total volume.

It is expected that liquid markets provide the opportunity for the immediate processing of transactions, i.e. at any time whenever market participants wish. If investors have to wait for the execution of transactions, market liquidity is lower, as waiting involves the risk of prices turning more unfavourable in the meantime. The number of executed transactions may be a good measure for the examination of the continuity in market liquidity. (Csavas – Szlizard, 2005).

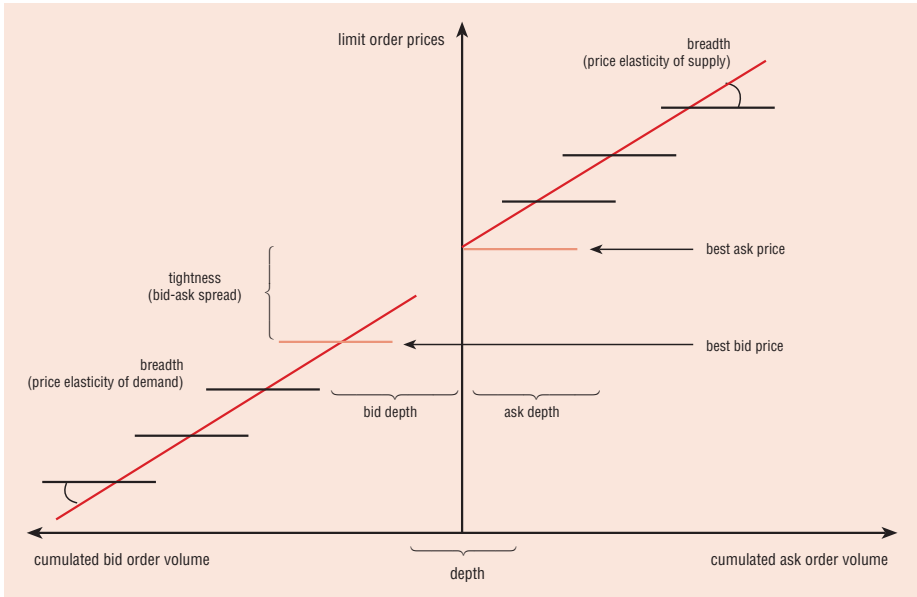
Numerous authors do not differentiate between breadth and depth, as they are closely interconnected dimensions. Breadth can be considered as a wider interpretation of depth: in addition to orders related to the best price, in a broader sense, market depth may also be affected by the volumes of other orders. Thus the market feature that the number of potential buyers and sellers assigned to all other prices is high as well, can be called market breadth (Csavas – Szlizard,2005).



An obvious feature of breadth is the slope of lines determined by the orders included in the order book: a flatter line means a larger market breadth, and consequently higher liquidity. The order book can be considered as the potential excess elasticity in demand and supply, with higher elasticity reflecting higher liquidity. Relationship with the definition is established by the fact that the higher the price elasticity, the smaller the impact transactions have on market prices (Wyss, 2004).

The related measures are shown in the chart below:

Graph-1: Liquidity Measures



Source: Csavas – Szlizard, 2005

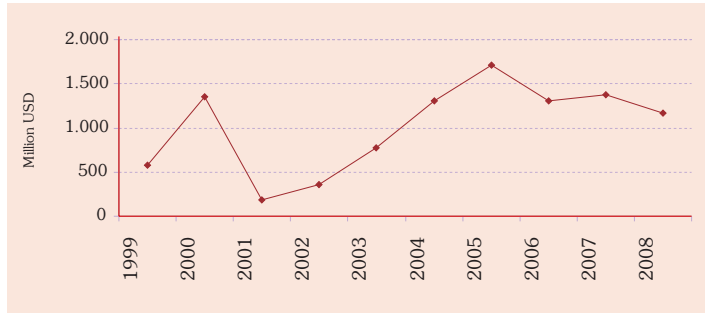
The difference between bid and ask price is the measure of tightness; the horizontal dimension is the depth. Although there are different tools for liquidity measures, it is difficult to say that all measures always give the same result. Tightness and depth (trade volume) are two important measures that are commonly used to measure liquidity.

Istanbul Stock Exchange Bonds and Bills Market Indicators

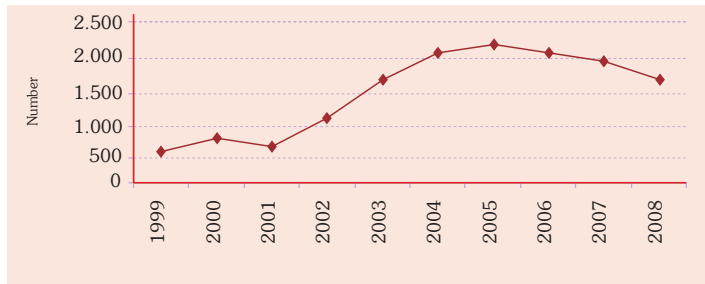
Bonds and Bills Market at Istanbul Stock Exchange (ISE) was established on June, 17, 1991 in order to increase efficiency and liquidity of secondary market operations of fixed income securities in a transparent, liquid and competitive trading platform.

Although daily average nominal value of trades in the ISE decreased in the period of November 2000 and February 2001, daily average nominal trade volume started to increase after this period. Average daily nominal trade volume increased to 1.7 billion US Dollar in 2005 from 190 million US Dollar in 2001 and market preserved its trade volume. In this period, the average daily number of contracts increased and the daily average volume per contract reached 1.5 million USD in 2008.

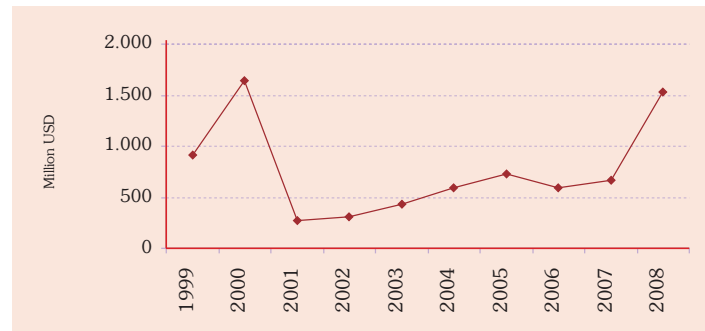
Graph-2:
Daily Average
Nominal Trade
Volume In Outright
Purchases and
Sales Market



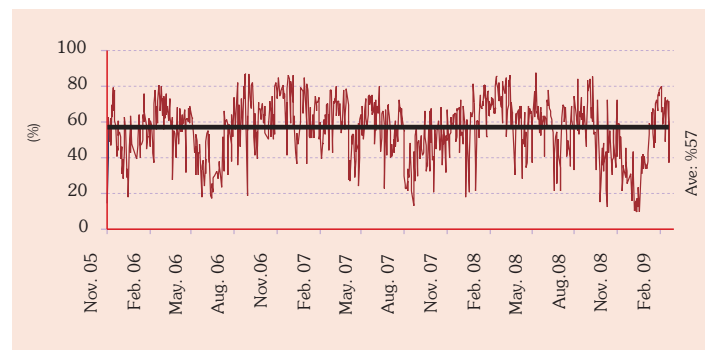
Graph-3:
Daily Average
Number of
Contracts



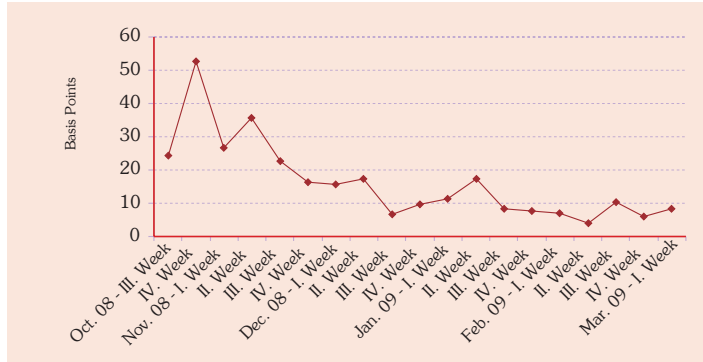
Graph-4:
Average Nominal
Volume per
Contract



Graph-5:
Ratio of Trade
Volume of the
Most Active Bond
to Market Volume

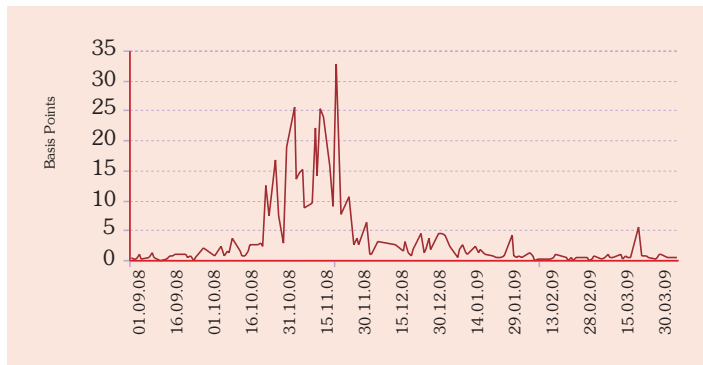


Graph-6:
Weekly Volatility of
Two-Year
Benchmark
Security⁽¹⁾



(1) Close rates of securities with thirty minute yield changes.

Graph-7:
Daily Volatility of
Spread of Two Year
Benchmark
Security⁽¹⁾



(1) Thirty minute spread data of the securities

Although trade volume increased in this period, it is difficult to classify ISE as a liquid market. In the period of November 2005- March 2009, average daily trade volume of the most active bond in the total market volume was 57 percent and the ratio increased up to 80 percent. Half of the trade volume of the market concentrated in one benchmark bond reveals facts about the liquidity level of ISE.

On the other hand, as a liquidity indicator of the market, volatility of bid ask spreads increases during turmoil periods in the secondary bond market at Istanbul Stock Exchange.

Improving Liquidity In Government Bond Market:

AsianBondsOnline conducted a survey on bond market liquidity in September 2006. Forty-five market makers from emerging East Asian bond markets responded to questions in relation to the markets where they are active. The table below summarizes the survey results based on a scoring system that ranges from 4 ("very important") to 0 ("don't know / not applicable"). A score approaching 4 suggests that most market-makers feel significant attention is needed in a particular category in order to foster improvements in overall liquidity (ADB, November 2006)

Table. Asian BondsOnline Survey Results, 2006.

	Average	China	Hong Kong	Indonesia	Japan	Korea	Malaysia	Philippines	Singapore	Thailand	Viet Nam
Increasing investor diversity	3.58	3.6	3.75	3.6	3.0	3.0	3.75	3.4	3.88	3.75	3.67
Increasing availability of hedging products	3.20	3.80	2.25	3.60	3.00	3.00	3.25	3.20	3.38	3.25	2.67
Improving repurchase markets	3.16	3.40	2.25	3.60	3.00	3.00	3.00	3.20	3.25	3.00	3.67
Mandatory bid/ask spreads by Market Makers	2.82	3.20	2.50	3.00	2.00	2.50	2.75	3.00	3.00	2.75	3.00
Increasing intraday price transparency	2.80	3.20	2.25	3.40	2.00	2.50	2.50	2.80	3.25	2.00	3.33
Increasing tax incentives	2.69	2.60	1.00	3.00	3.00	2.25	1.75	4.00	3.13	2.50	3.00
Improving clearing and settlement	2.60	3.60	1.25	3.20	2.67	1.25	2.00	3.00	2.63	3.00	3.00

Reference: AsianBondsOnline.

Encouraging greater diversity of investors scored highest in the survey, highlighting concerns about a narrow investor base in the markets. Increasing investor diversity relative to buy-to-hold investors is a significant factor to improve market liquidity in the bond markets. Many respondents expressed the view that foreign participation in their markets would enhance liquidity as overseas investors based their investment decisions on different investment parameters to those of local investors.

Developing robust derivatives and repurchase markets was also seen by survey respondents as an important factor for increasing liquidity in bond market (ADB, 2006). The ability of investors to protect themselves from movements in interest rates via derivatives allows them to increase transaction volumes in the spot market. In emerging markets, the development of futures market can be an important step in promoting foreign investors' interest in the local currency bond market (BIS, 2007).

Also, "improving repurchase markets", "mandatory bid-ask spreads by market makers", "increasing intraday price transparency", "increasing tax incentives" and "improving clearing and settlement" are ranked as the other important factors that affect liquidity of markets positively.

Policy Options to Improve Bond Market Liquidity in Turkey:

1) "Re-opening" of the Securities:

The reopening of securities in regular periods positively affects the liquidity level of the market. In this respect, the increasing volume of securities with different maturities meets customer demand by creating a homogeneous market. The reopening of benchmark securities becomes widespread in most of the emerging markets.

The reopening strategy increases supply of securities in such a way that investors other than buy-to-hold investors can easily obtain the securities to trade in the market. Turkey successfully implements the reopening strategy as a benchmark policy and reissues given securities in regular periods.



2) "Buy-Back" and "Switching" Operations:

Buy back and switching operations are used in many countries for effective cash management to decrease the liquidity risk at maturity. Mainly used for risk management, buy back and switching operations are also used for the establishment of benchmark policy and for liquidity management in the periods of low financing requirement.

Buy back operations, which are used more common than switching operations by debt managers, can be classified into three groups according to frequency of the operations depending on the markets and debt management structures of the countries. In the first group, buy back operations are continuously performed during the day by being in close contact with market. In the second group, buy back operations are performed according to a predetermined agenda. In the third group, frequency of operations changes according to the market conditions.

Most of the participants of the 2006 OECD survey indicated that they have used reverse auctions in the market; Belgium and Greece have used buy back window, as well (OECD, 2006). According to the survey, other types of buy back operations (open market, on-tap, daily) are executed in Germany, Denmark, Ireland and Mexico.

Turkey has been implementing buy-back and switching operations to be able to relieve the redemption amount and to decrease the liquidity premium in the market.

3) Improving Interest Rate Derivative Markets:

Interest rate derivatives have become important instruments for many market participants to manage the risks related to debt management operations as well as for improving the profile of the debt. Their use by market participants adds to the liquidity in secondary government securities markets (OECD, 2004). Derivative markets (such as those for interest rate swaps and futures) can be used to protect a portfolio of bonds against losses from interest rate volatility. Derivatives offer market participants instruments with which to manage financial risks and permit them to hold larger inventories. This ability of investors to protect themselves from movements in interest rates allows them to increase transaction volumes in the spot market (BIS, June 2007).

Although interest rate derivatives have the highest trade volume in international derivative markets, interest rate future contracts are not traded in the Turkish Derivatives Exchange. To be able to increase interest rate derivative operations in the market, the taxation regime of derivative instruments should be renewed and security lending facility should be developed in Turkish markets.

4) Primary Dealership System:

Primary dealership system established for the development of primary and secondary bond markets includes obligations, privileges and supporting arrangements and has been increasingly adopted by many countries since 1950s.

To increase liquidity of secondary bond market in Turkey, the primary dealers face an obligation of quoting bid-ask prices for the benchmark securities at the Istanbul Stock Exchange Bonds and Bills Market.

The Undersecretariat designates six benchmark securities, for which the Primary Dealer has to quote prices, by taking into account the total issue size, the maturity and the trading volume in the secondary market. Price quotations have to be given for four benchmark securities determined by the Primary Dealer for at least a three month period. Minimum quotation size is 5 million TL. Bid and offers are quoted in terms of prices for coupon-securities and the maximum spread between bid and offer quotations is 0.5 TL. For zero coupon securities, the quotations are given in terms of simple-annual interest yield, meeting the spread requirements depicted in the table below:

Interest Rate Interval For Bid Quotations	Maximum Spread Between Bid and Offer Rates (bases point)
- % 9.99	13
% 10.00 - % 19.99	25
% 20.00 ve üzeri	50

Although Primary Dealers have the obligation of quoting prices in secondary bond market, they are not obliged to have a minimum market share of the secondary market transaction, as in the Czech Republic, France, Sweden, and Greece. However, price quotations by Primary Dealers constitute a trading base for other investors in secondary market so that it has a positive effect on liquidity.



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Jewelled Jade Tankard Ottoman, second half of the century
Topkapı Palace Museum, Treasury Section



INFORMATION
FOR
INVESTORS



General information on securities issued by the Treasury, their issuance process, secondary market, and their taxation were given in the 2008 Public Debt Management Report. The 2009 Report provides information on how to purchase Government securities issued in local market, Revenue Indexed Bonds and Inflation Indexed Bonds, and a list of Primary Dealer Banks.

HOW TO PURCHASE GOVERNMENT DOMESTIC BORROWING SECURITIES?

Investors can purchase Government Domestic Borrowing Securities by participating in Treasury auctions or in secondary market through banks and brokers. Retail investors can participate in auctions through branches of the Central Bank of the Republic of Turkey (CBRT) and they can buy securities through banks and brokers in the secondary market. Principles on participating to auctions are given below:

- ❖ Information on the securities is publicized prior to the auction date and related details about the auctions are announced on the website of Treasury.
- ❖ Auction Date: The day on which the auction is held.
- ❖ Value Date: The day on which the interest rate calculation starts.
- ❖ Maturity Date: The day on which payment is made. If it is a weekend day or an official holiday, the payment is made on the next business day
- ❖ All operations related to the auction are conducted by CBRT as the fiscal agent of Treasury.
- ❖ Retail and corporate investors can participate in Treasury auctions through branches of Central Bank of the Republic of Turkey (CBRT), banks or through brokers.
- ❖ While banks can bid through EFT, brokers can bid through TETS and insurance companies can bid through fax. Retail investors can bid by using their citizen identification number.
- ❖ There is no restriction on the number of bids that a participant may make. Competitive and non-competitive bids are submitted to the Treasury auctions. In the current application, non-competitive bids can only be given by Public Institutions and Primary Dealers. Post auction sales and post auction switching operations are only available for Primary Dealers.
- ❖ There is no limit on the number of investors.
- ❖ Investors submit their bids in terms of price and nominal amount.
- ❖ All bids that are submitted are final bids for the investor. Investors are bounded to their bids until the end of the auction. If the price that is determined in the auction is applied to all investors, the auction type is called "single price auction"; if each investor buys the security at its bid price, then the auction type is called "multiple cost auction".



- ❖ Investors give a collateral of one percent of their nominal bid amount while submitting the auction bids.
 - In TL denominated and FX indexed auctions, the collateral is returned to the investors whose bids are rejected. Investors, whose bids are accepted are expected to pay the required amount that remains (The collateral amount is subtracted from the whole amount they are obliged to pay in the value date).
 - In FX denominated auctions, the collateral is paid in TL that is calculated by the FX rates that Central Bank announces on the auction day. If the investors' bids are accepted, the collateral is returned to the investor on the value date, and the required amount is expected to be paid in FX. If the bids are rejected, then the collateral is returned to the investor after the auction.
- ❖ A breakdown of the bids submitted and a contact phone number are given to each investor so that they can learn if their bids are accepted.
- ❖ The investors are not obliged to pay any stamp or seal payments.
- ❖ Auction results are announced to the investors by the Central Bank. Related information is also announced on the Treasury website.
- ❖ If the investor doesn't pay the required amount that remains after the collateral then the collateral is recorded as revenue by the Treasury. These investors must attend to at least 4 auctions with 20 % of collateral rate. If the investor doesn't pay the required amount that is remaining after the collateral when he attends the auction with 20 % collateral, then he must attend at least 4 auctions with 100 % of collateral rate. After attending 4 auctions with the increased collaterals, the investor may participate in the auctions with one percent collateral rate after Treasury approval.
- ❖ After the auction process is completed, investors can buy securities in the secondary market through banks or brokers. At this stage, securities are subject to operations conducted between numerous buyers and sellers. Treasury issues securities only to investors in the primary market.
- ❖ On the maturity date, payment is made through branches of CBRT or branches of T.C. Ziraat Bank Inc. which is the fiscal agent of CBRT.

REVENUE INDEXED BONDS (RIB)

With the aim of increasing domestic savings, diversifying borrowing instruments and broadening the investor base, the Undersecretariat of Turkish Treasury has launched a new financial instrument, Revenue Indexed Bonds. The coupon payments of this new instrument are indexed to non-tax revenues transferring to the budget.

In this content, firstly the securities of which coupon payments will be indexed to the transfers of State Owned Enterprises (Turkish Petroleum Corporation (TPAO), State Supply Office (DMO), State Airport Authority (DHMI) and Coastal Safety (KIYEM)) to Budget as "Revenue Shares" have been designed (RIBs). "Investor Guide" for the RIBs is available at <http://www.treasury.gov.tr/>.

With RIBs, an investment instrument whose yield will be related to the State revenues has been created. The securities have a minimum return guarantee and a maximum return limit for each coupon payment. The maximum return limit has been determined in accordance with revenue estimates of State Owned Enterprises for the budgets 2009, 2010 and 2011. Furthermore, the minimum return guarantee prevents the investors from being influenced negatively from fluctuations of revenues.

On 28 January 2009, Direct Sales of million TL 420.7 and million USD 49.1 and on 29 April 2009 Direct Sales of million TL 737.8 of Revenue Indexed Bonds were performed.

Securities indexed to different non-tax revenues may be issued in the upcoming period according to the market conditions and financing requirement.



INFLATION INDEXED GOVERNMENT BONDS

- ❖ In line with its objectives of diversifying the instruments issued, broadening the investor base and lengthening the borrowing maturities; the Undersecretariat of Treasury started to issue Inflation (Consumer Price Index-CPI) Indexed Government Bonds in February, 2007. These securities were reissued at the three months periods in 2008. Inflation Indexed Government Bonds, which are important instruments for 2009 Financing Program, are continued to be reissued in line with the market conditions.
- ❖ Inflation Indexed Government Bond is the only investment tool which provides full protection against changes in inflation.
 - Both principle and coupon payments are guaranteed against the possible loss which is caused from inflation changes.
 - Investors get real return in addition to the realized inflation rate. The annual real rate of return for Inflation Indexed Government Bonds with the maturity date 15.02.2012 is 10% and 12% for the security with the maturity date 14.08.2013.
 - If there is deflation (decrease in the prices) during the maturity of Inflation Indexed Government Bonds, there is no reduction in the principal of the bonds, in other words the bonds' principles are guaranteed against deflation.
- ❖ Inflation Indexed Government Bonds are traded in the secondary market and therefore Inflation Indexed Government Bonds can be sold at any time before the maturity date.
- ❖ In February 2007 – April 2009 period, 7.47 billion TL of nominal amount was issued with 6 auctions for the security with maturity date 15.02.2012. In the same period, the nominal issue amount for the security with maturity date 14.08.2013 was 7.19 billion TL with 3 auctions. It is anticipated that Inflation Indexed Government Bonds will continue to be reissued to generate the real yield curve in the upcoming period.
- ❖ Inflation Indexed Government Bonds Investor Guide and information related to participation principles of Treasury auctions can be reached at www.treasury.gov.tr.

WHAT IS THE PRIMARY DEALERSHIP SYSTEM?

The Primary Dealership System can be described as a system which is designed with the purpose of reducing roll-over risk, broadening investor base, constituting a transparent, competitive and more organized market and also increasing liquidity and reducing volatility in the secondary market by giving certain official rights and obligations related to primary and secondary markets of Government Borrowing Securities to a group of professional intermediaries. Within the framework of the Primary Dealership System, yearly agreements are made with the Primary Dealer Banks. Currently, the 2008-2009 period Primary Dealership System is being implemented. The period started on 1 September 2008 and is going to end on 31 August 2009. The 2008-2009 period Primary Dealership Agreement which includes the rights and obligations for Primary Dealers can be accessed under the Public Finance section on the following website www.treasury.gov.tr.

The 12 Banks that are selected as Primary Dealers for the 2008–2009 period are listed below:

Akbank
Deutsche Bank Inc.
Fortis Bank
Finansbank Inc.
HSBC Bank Inc.
ING Bank Inc.
T. Garanti Bank Inc.
T. İş Bank Inc.
T. Vakıflar Bank
T. Halk Bank Inc.
T.C. Ziraat Bank Inc.
Yapı ve Kredi Bank



SELECTED
STATISTICS 



General Government Nominal Debt Stock Defined By European Union Standards⁽¹⁾

Million TL	2005	2006	2007	2008
A- GENERAL GOVERNMENT DEBT STOCK ⁽²⁾	335,889	348,653	336,697	386,400
Central Government	331,520	345,050	333,485	380,315
Other Public Institutions	4,369	3,604	3,212	6,085
B- DOMESTIC DEBT STOCK	247,435	253,284	256,599	277,149
Central Government	244,782	251,470	255,310	274,827
Other Public Institutions	2,654	1,814	1,289	2,322
C- EXTERNAL DEBT STOCK	88,454	95,370	80,098	109,251
Central Government	86,738	93,580	78,175	105,488
Other Public Institutions	1,716	1,790	1,923	3,763
D- ADJUSTMENT ITEMS ⁽³⁾	3,539	827	-4,202	-11,345
Central Government	22,234	24,292	27,796	26,417
Other Public Institutions	-18,695	-23,465	-31,998	-37,762
ESA DEFINED GENERAL GOVERNMENT NOMINAL DEBT STOCK				
General Government Nominal Debt Stock (A+D)	339,428	349,481	332,496	375,055
GDP	648,932	758,391	843,178	950,144
General Government Nominal Debt Stock / GDP (%)	52.3	46.1	39.4	39.5

1- Consolidated nominal debt stock defined in European System of Accounts 95 (ESA 95) deficit and debt manual.

2- Unconsolidated gross debt of General Government

3- Adjustment Items:

For Central Government:

- nominal adjustment of zero coupon securities and valuation of inflation indexed bonds
- the stock of circulating coins issued by Treasury
- securities held by central government institutions

For Other Public Institutions:

- securities held by other public institutions

Public Sector Net Debt Stock

Million TL	2005	2006	2007	2008
Total Public Sector Net Debt (I-II-III-IV)	270,275	258,191	248,374	271,620
I- Total Public Sector Debt Stock (Gross)	351,289	365,835	355,426	411,839
A-Domestic Debt	259,757	268,237	273,217	299,569
Central Government	244,782	251,470	255,310	274,827
Rest of the Public Sector	14,976	16,767	17,907	24,742
B- External Debt	91,531	97,598	82,209	112,270
Central Government	86,738	93,580	78,175	105,488
Rest of the Public Sector	4,794	4,018	4,034	6,782
II- Central Bank Net Assets	30,793	45,685	41,769	60,371
Net Foreign Assets	49,480	67,136	70,977	92,835
Other Asset and Obligations (Net)	-18,687	-21,451	-29,208	-32,464
III- Public Sector Deposits	32,191	38,211	34,578	41,496
Central Government	18,701	24,745	20,712	19,621
Rest of the Public Sector	13,490	13,466	13,867	21,875
IV-Unemployment Insurance Fund Net Assets	18,029	23,748	30,705	38,353
<i>Memo</i>				
Net External Debt Stock	42,051	30,462	11,232	19,435
Net Domestic Debt Stock	228,224	227,729	237,141	252,185
Public Net Debt Stock/GDP (%)	41.6	34.0	29.5	28.6
GDP	648,932	758,391	843,178	950,144



Gross External Debt of Turkey - by Borrower

Million USD	2005	2006	2007	2008
TOTAL	169,503	207,325	248,958	276,834
SHORT TERM	38,288	42,648	43,192	50,714
PUBLIC SECTOR	2,133	1,750	2,163	3,248
GENERAL GOVERNMENT	0	0	0	0
Central Government	0	0	0	0
Local Administrations	0	0	0	0
Funds	0	0	0	0
FINANCIAL INSTITUTIONS	1,733	1,555	2,163	3,148
Banks	1,733	1,555	2,163	3,148
Non-Banking Institutions	0	0	0	0
NON-FINANCIAL INSTITUTIONS	400	195	0	100
SOE's	400	195	0	100
Other	0	0	0	0
CBRT	2,763	2,563	2,282	1,856
<i>Dresdner Bank Scheme</i>	<i>2,762</i>	<i>2,562</i>	<i>2,281</i>	<i>1,855</i>
<i>Other</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
PRIVATE SECTOR	33,392	38,335	38,747	45,610
FINANCIAL INSTITUTIONS	17,209	20,701	16,588	21,949
Banks	16,562	19,993	16,167	21,703
Non-Banking Institutions	647	708	421	246
NON-FINANCIAL INSTITUTIONS	16,183	17,634	22,159	23,661
LONG TERM	131,215	164,677	205,766	226,120
PUBLIC SECTOR	68,278	69,832	71,321	74,917
GENERAL GOVERNMENT	65,922	67,850	68,772	72,236
Central Government	64,643	66,576	67,120	69,748
Local Administrations	961	1,027	1,466	2,334
Funds	318	247	186	154
FINANCIAL INSTITUTIONS	318	487	620	590
Banks	318	487	620	590
Non-Banking Institutions	0	0	0	0
NON-FINANCIAL INSTITUTIONS	2,039	1,496	1,929	2,091
SOE's	1,894	1,390	1,812	1,897
Other	145	106	117	194
CBRT	12,662	13,115	13,519	11,664
<i>CBRT Loans</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Dresdner Bank Scheme</i>	<i>12,654</i>	<i>13,106</i>	<i>13,510</i>	<i>11,655</i>
<i>NGTA</i>	<i>8</i>	<i>9</i>	<i>9</i>	<i>9</i>
PRIVATE SECTOR	50,274	81,730	120,926	139,539
FINANCIAL INSTITUTIONS	15,877	28,320	41,707	40,859
Banks	12,142	21,880	30,740	29,917
Non-Banking Institutions	3,735	6,440	10,967	10,942
NON-FINANCIAL INSTITUTIONS	34,397	53,410	79,219	98,680

Turkey's Net External Debt Stock

Million USD	2005	2006	2007	2008
I- Gross External Debt Stock, Excluding Banking Sector (A-a-b)	123,322	147,733	183,467	207,956
A. Gross External Debt Stock	169,503	207,325	248,958	276,834
a. Central Bank of Turkey (-)	15,425	15,678	15,801	13,520
b. Banks (-)	30,755	43,915	49,690	55,358
II- Banking Sector/Monetary Sector Net Foreign Assets⁽²⁾	24,508	39,411	50,014	57,189
A. Monetary Authorities and Deposit Money Banks ⁽¹⁾	25,906	41,063	53,106	60,881
B. Investment and Development Banks & Participation Banks	-1,398	-1,652	-3,092	-3,692
III- NET EXTERNAL DEBT STOCK (I-II)	98,815	108,322	133,452	150,766
NET EXTERNAL DEBT STOCK / GDP (%)	20.5	20.6	20.6	20.3
<i>Memo:</i>				
GDP (USD)	481,497	526,429	648,754	741,792
End of Period \$/YTL Buying Rate	1,3418	1,4056	1,1647	1,5123

(1) As the Treasury's obligations to the IMF is included in the liability side of the Monetary Survey table and Gross External Debt Stock, this amount is subtracted from CBT's liabilities in order to avoid double counting.

(2) Central Bank's Banking Survey data, that is not published anymore, is used for the period before 2005. After 2005, Monetary Survey data is used as a net foreign assets of monetary sector.

Total Public Sector Primary Surplus (Program Defined)

GDP %	2005	2006	2007	2008
Total Public Primary Surplus	5.0	4.6	3.1	1.8
Central Government Budget	4.1	4.3	2.6	1.9
Rest of Public	0.9	0.4	0.5	-0.1

Repayments of Treasury Guaranteed Credits

Milyon ABD Doları	2005			2006			2007			2008			2009 (1)		
	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)
Local Administrations	194	83	71.15	138	91	60.30	85	101	45.40	54	83	39.42	16	10	60.21
Funds	-	125	-	-	85	-	-	67	-	-	32	-	-	1	-
Financial Institutions	-	119	-	-	113	-	-	43	-	-	22	-	-	3	-
Non-Financial Institutions	18	315	2.76	74	255	22.48	116	136	45.96	83	154	35.01	30	15	66.71
Private Sector Financial Institutions	-	31	-	-	56	-	-	116	-	-	204	-	-	48	-
Private Sector Non-Financial Institutions	-	392	-	-	247	-	-	150	-	-	119	-	-	28	-
Total	213	1,064	17	211	846	20	201	613	25	137	615	18	45	105	30

(1) Provisional 31.03.2009

Treasury Receivables Stock ⁽¹⁾

Million TL	2005			2006			2007			2008			March 2009		
	Outstanding Overdue Receivables	Projected Receivables Stock	Total	Outstanding Overdue Receivables	Projected Receivables Stock	Total	Outstanding Overdue Receivables	Projected Receivables Stock	Total	Outstanding Overdue Receivables	Projected Receivables Stock	Total	Outstanding Overdue Receivables	Projected Receivables Stock	Total
Funds	26,204	29,280	55,484	37,194	42,591	79,785	46,215	39,893	86,108	0	0	0	0	0	0
Local Administrations	5,107	7,333	12,440	5,250	7,684	12,935	5,978	7,004	12,983	6,638	7,365	14,003	6,750	7,405	14,155
SOE's	763	3,903	4,665	137	5,111	5,247	1,232	4,327	5,559	1,405	5,238	6,644	1,462	5,440	6,902
Banks	0	879	879	0	1,043	1,043	0	912	912	0	1,148	1,148	21	1,203	1,224
Social Security Institution	0	0	0	0	0	0	0	0	0	0	2	2	0	2	2
Public Banks	0	579	579	0	645	645	0	551	551	0	675	677	0	733	733
Public Enterprises	15	299	314	19	319	338	26	312	338	55	1,389	1,444	0	1,380	1,380
Central Administrations	18	101	119	19	260	279	20	325	345	44	1,446	1,490	49	1,557	1,606
Organizations ⁽²⁾	0	82	82	0	69	69	0	41	41	0	37	37	0	35	35
Insurance Institutions	0	50	50	0	90	90	0	68	68	0	78	78	0	87	87
Private Institutions ⁽³⁾	0	49	49	0	29	29	0	19	19	0	16	16	0	17	17
Foundations ⁽⁴⁾	0	32	32	0	32	32	0	24	24	0	27	27	0	29	29
TOTAL	32,106	42,586	74,693	42,619	57,872	100,491	53,471	53,475	106,946	8,144	17,421	25,566	8,283	17,987	26,170

(1) Provisional. Indicates the total amount of outstanding overdue and projected receivables.

(2) Represents Industrial Zones, Trade Unions and Istanbul Olympic Games Preparation & Organizing Board.

(3) Represents privatized SOE's and corporations governed by foundations.

(4) Represents universities subordinated by foundations and Foundation of Technological Improvements in Turkey.

Topkapı Palace Museum

Topkapı Palace, constructed by Fatih Sultan Mehmet (the Conqueror) in 1478, has been the official residence of the Ottoman Sultans and center of State Administration around 380 years until the construction of Dolmabahçe Palace by Sultan Abdülmecid. The palace having extended over approximately 700.000 m² during the foundation years, has currently 80.000 m² area. Topkapı Palace was evacuated when the inhabitants began to accommodate in Dolmabahçe, Yıldız and other palaces.

By the order of Atatürk, Topkapı Palace opened to public as a Museum on October 9, 1924. The treasury section of the Topkapı Palace Museum is one of the richest collection of its kind in the world with masterpieces of the Turkish art of jewelry from different centuries and exquisite creations from the Far East, India and Europe.

Source: <http://www.topkapisarayi.gov.tr/eng/indexalt.html>





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