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Turkish Treasury

Annual Financing Program

(Billion YTL)	2006 Prog
I. Total Debt Service	168,4
Principal	126,2
Interest	42,2
Domestic Debt Service	144,5
Principal	108,8
Interest	35,7
External Debt Service	23,8
Principal	17,4
Interest	6,4
II. Financing Items	168,4
Non-Debt Resources	40,2
Primary Surplus	30,2
Privatization	7,0
Collections from On-lent Loans	3,1
Change in Bank Account	0,0
Total Borrowing	128,1
External Borrowing	16,7
Domestic Borrowing	111,4
Memo Item:	
Roll-over ratio for Domestic Borrowing	77,1%

Principles and Constraints

Regulation on the Principles and Procedures of Coordination and Execution of Debt and Risk Management

(Published in the Official Gazette dated September 1, 2002 and no. 24863)

Principles

Article 4- The execution of public debt and risk management shall be based on the following principles:

- a) To follow a sustainable, transparent and accountable debt management policy that conforms to monetary and fiscal policies, in line with macroeconomic equilibriums,
- b) To address financing requirements with the lowest possible cost in the medium and long term, taking into account the risk level determined according to domestic and international market conditions.

Annual Financing Program

(Billion YTL)

I. Total Debt Service

Principal

Interest

{ Lowest Possible Cost

II. Financing Items

Non-Debt Resources

Primary Surplus

Privatization

Collections from On-lent Loans

Change in Bank Account

{ Fiscal Policy
{ Macroeconomic and political performance
{ Debt Management Policy
{ Monetary policy

Total Borrowing

External Borrowing

Domestic Borrowing

{ Accountability & Transparency
{ Prudent Risk Level

Memo Item:

Roll-over ratio for Domestic
Borrowing

{ Market sentiment

} Sustainability

Policy Objectives

Monetary Policy

-Price Stability

- Financial Stability Reports
 - Analysis of macroeconomic and fiscal policies
 - Monitoring financial markets
- Caring the Payment System
 - Credit facility by open market operations
 - Credit facility for extraordinary situations

Debt Management Policy

- Meeting the Financing Requirement

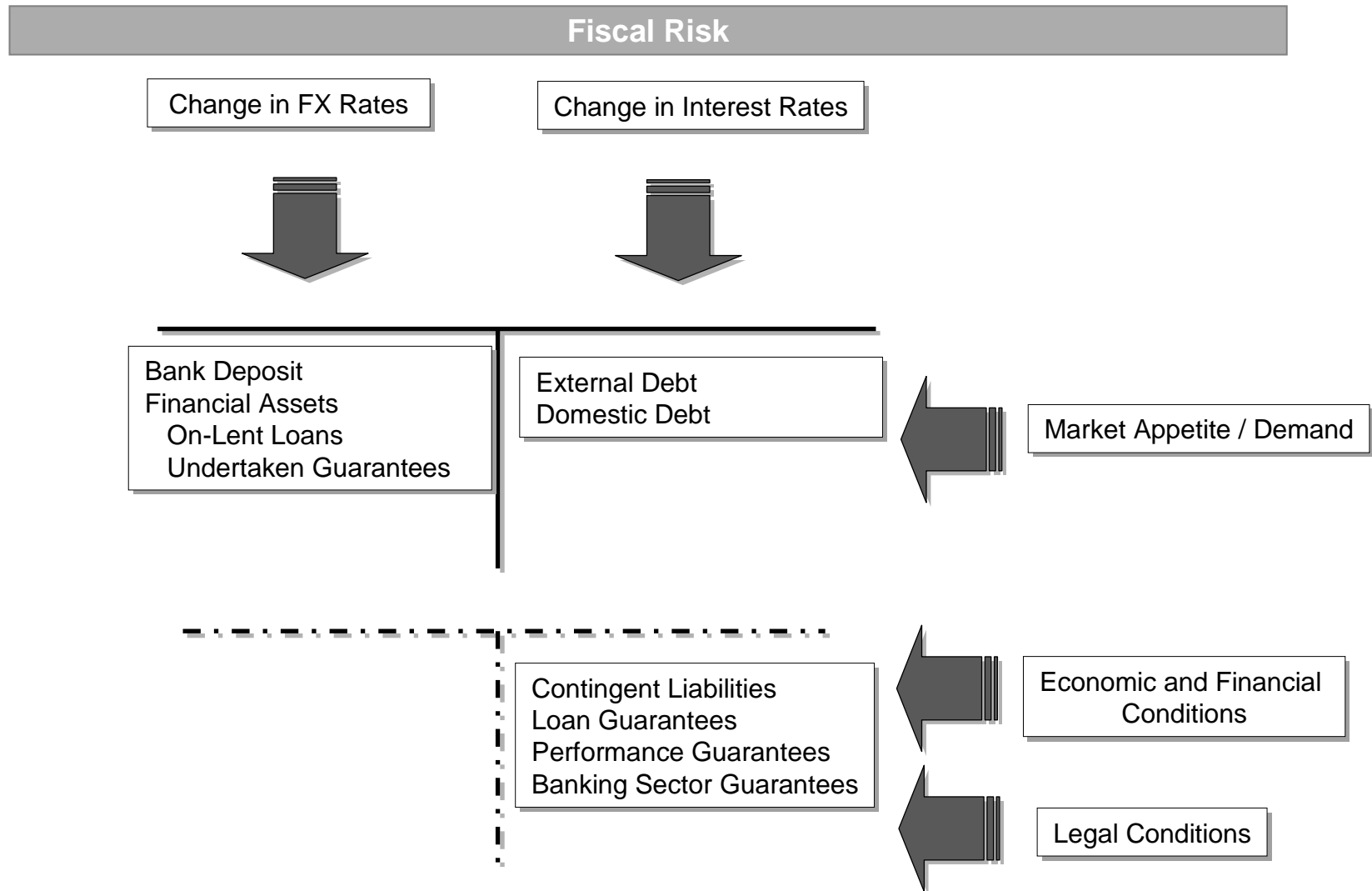
- Minimum cost with a prudent level of risk
 - Deepening the market
 - Widening the investor base
- Setting a medium & long term financial horizon
 - Benchmark securities

Fiscal Policy

- Efficient use of public funds for the provision of social goods and services

- Budget Document
 - Tax and transfer policies
 - Deficit financing
- Setting the major macroeconomic targets

Strategy Formulation



Strategy Formulation... (cont.)

Cost at Risk – C@R

- Aims to identify probable limits within which the costs of debt may fluctuate (the degree of market risk) for a given strategy.
- Serves as a tool for comparison of alternative borrowing strategies in terms of expected costs and risks.

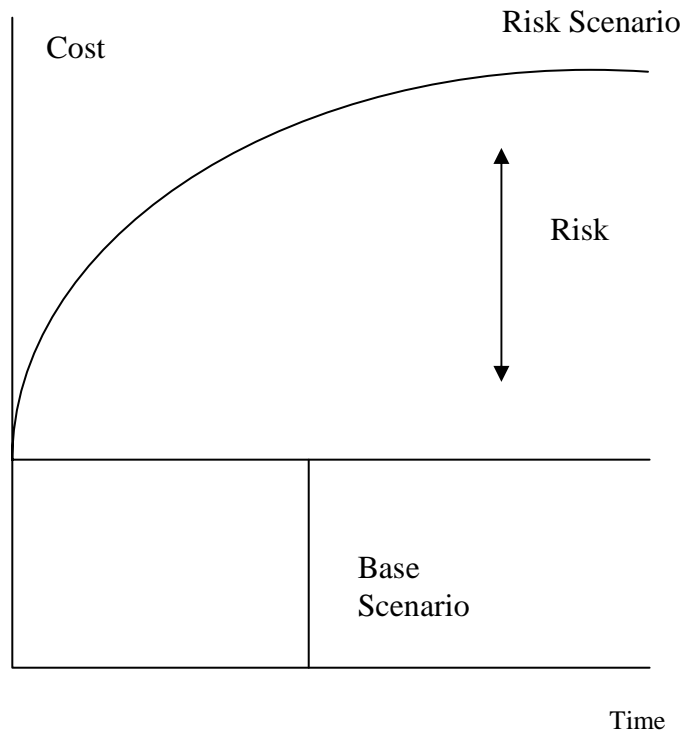
Strategy Formulation... (cont.)

- ❑ Simplicity (clear communication of the medium/long-term objectives of debt management)
- ❑ Applicability (should fit the market environment)
- ❑ Robustness (should not rely on too strict assumptions)
- ❑ Credibility (should have a good track record of performance)

Strategy Formulation... (cont.)

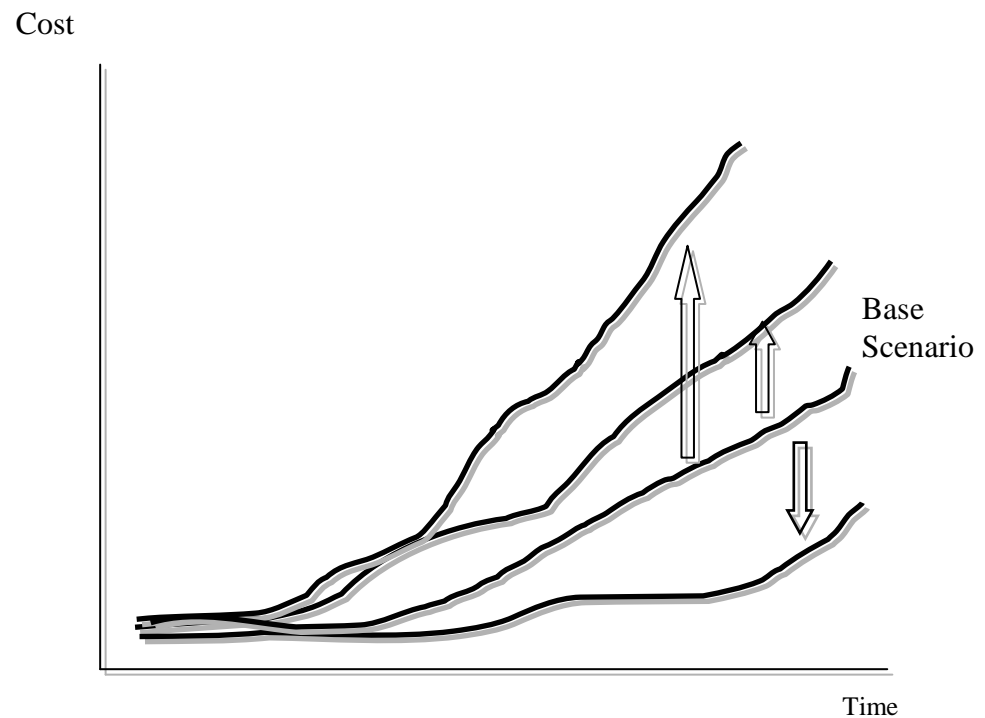
Deterministic Simulation Model

Cost of any borrowing strategies under the base scenario



Borrowing Strategies Module

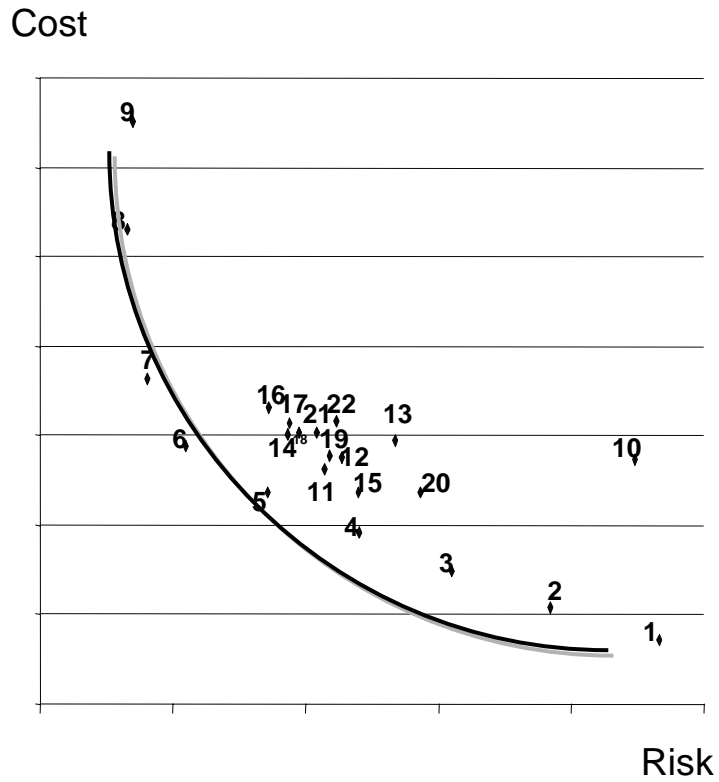
Measurement of the costs of borrowing strategies under alternative scenarios including the base scenario.



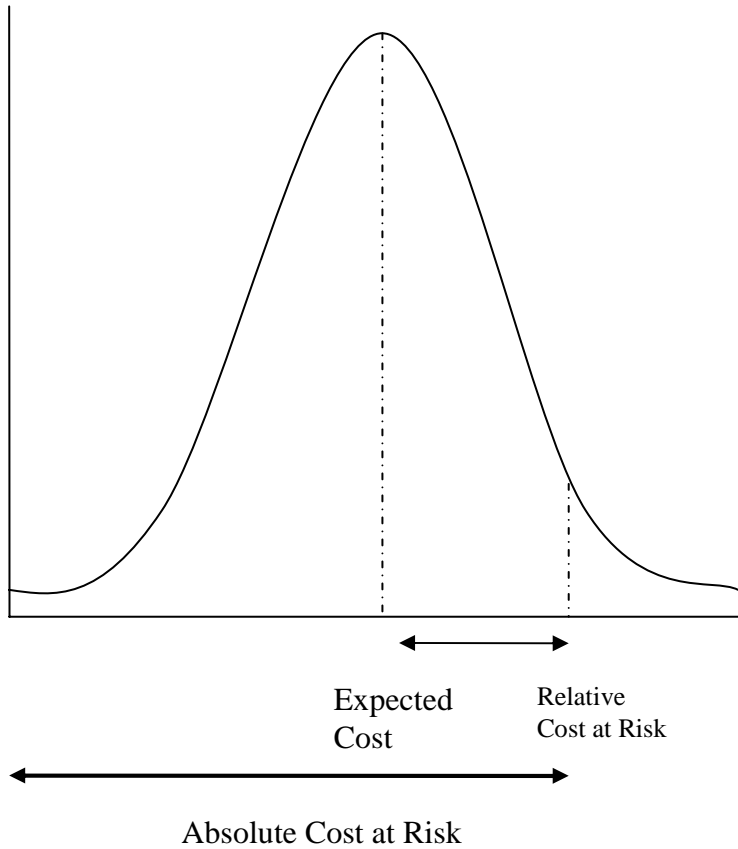
Risk: Cost differences between the alternative scenarios and the base scenario

Strategy Formulation... (cont.)

Efficient Frontier



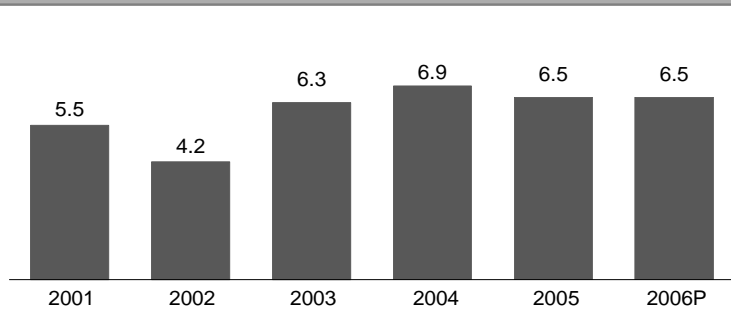
Cost at Risk



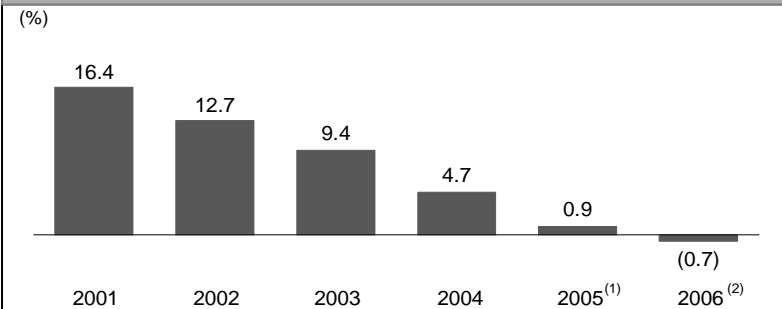
Strategy Formulation... (cont.)

Fundamentals

Public Sector Primary Balance (% of GNP)

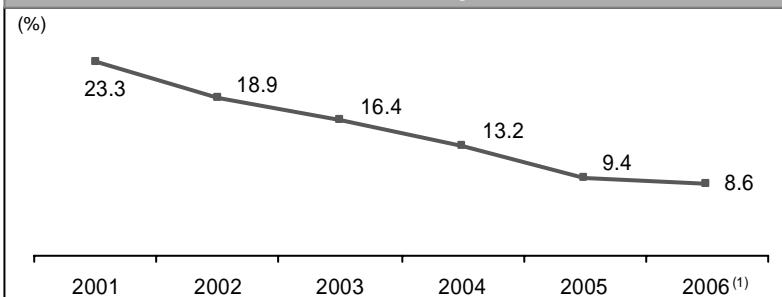


Public Sector Borrowing Requirement (% of GNP)



(1) Estimation of realization by end of year
(2) Program

Debt Service- Interest Expenditures / GNP

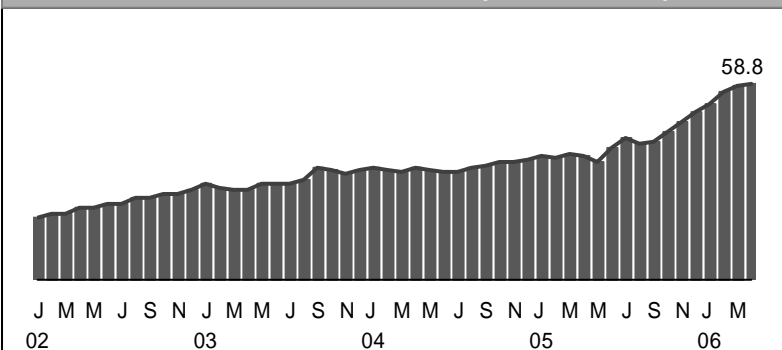


(Billion YTL)

	2001	2002	2003	2004	2005	2006 ⁽¹⁾
Interest Expenditures	41.1	51.9	58.6	56.5	45.7	46.3

(1) Program.

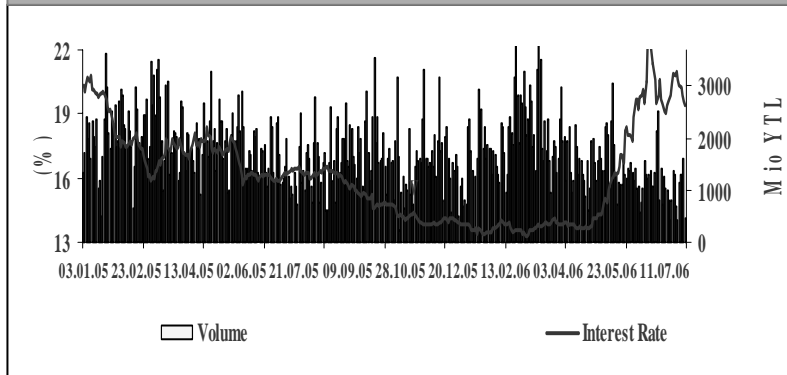
Central Bank Reserves (Billion USD)



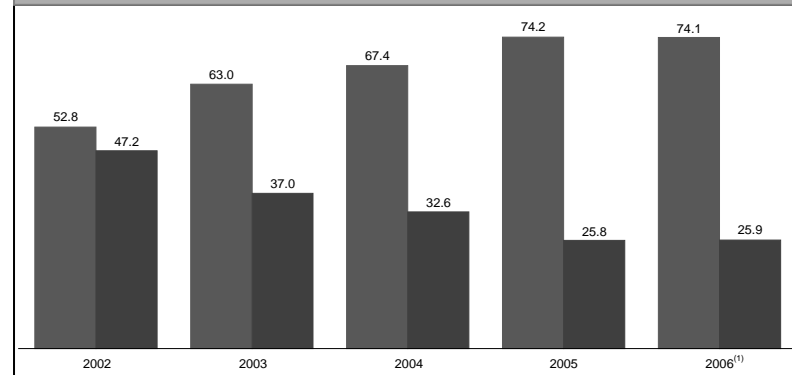
Strategy Formulation... (cont.)

Market Structure

Secondary Market

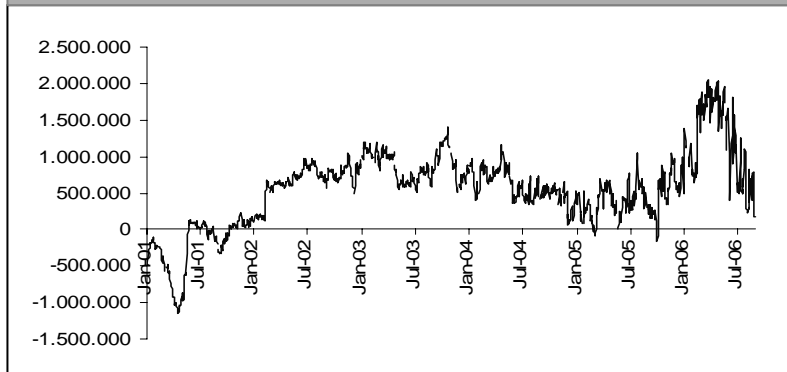


Portfolio Preference of Financial Sector

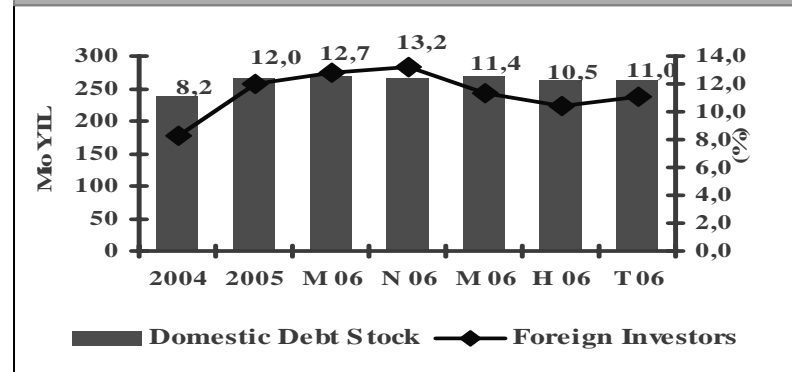


(1) As of March 31, 2006
 Portfolio refers to deposits, repos, government bonds, investment funds

Liquidity in the Market



Investor Base



Strategy Formulation... (cont.)

The fulfillment 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.

Strategic Benchmarks

- ▶ Raise funds mainly in TRL by issuing zero coupon and couponed bonds
- ▶ Use fixed rate instruments as the major source of borrowing and limit issuance of Floating Rate Notes
- ▶ Increase the average maturity of domestic borrowing, considering the market conditions, by using 5 year-bonds
- ▶ Have a strong cash reserve in Central Bank
- ▶ Full redemption of FX indexed local government bonds
- ▶ Max. 80 % roll-over of FX denominated local government bonds

Strategy Implementation

2006 Borrowing Strategy

- ▶ Improve the predictability by announcing monthly auction calendar

- ▶ Introduction of benchmark borrowing
 - Increase the liquidity of the securities by reducing the number of issuances and re-openings

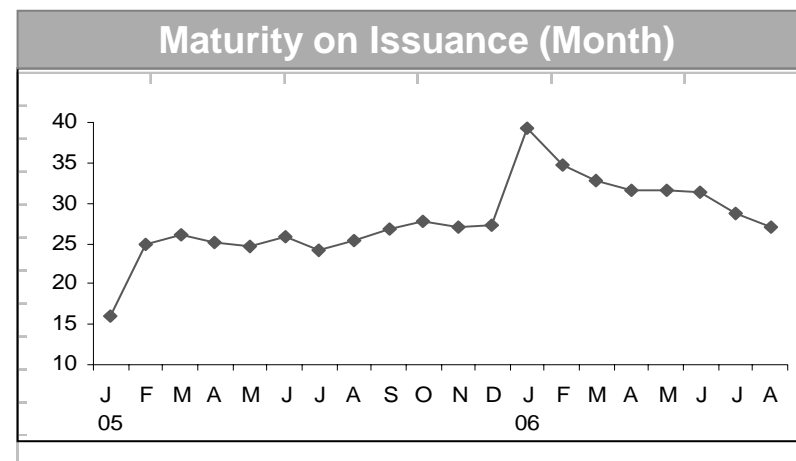
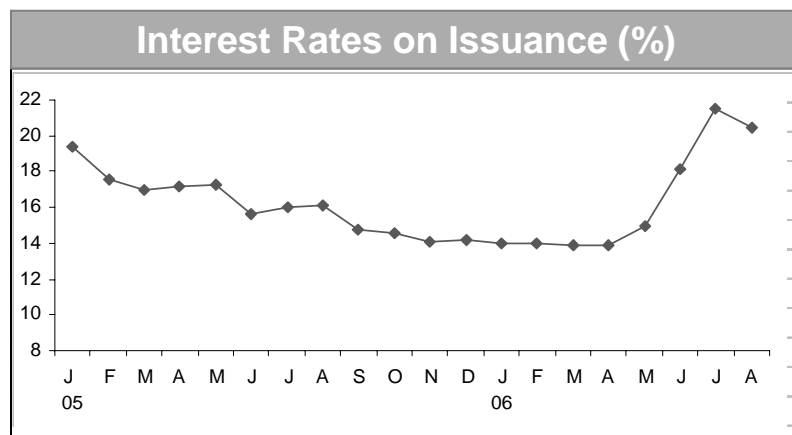
 - Monthly issuance of YTL denominated fixed and floating rate semi-annual couponed securities

- ▶ Introduce buy-back auctions

- ▶ Introduce inflation indexed bonds

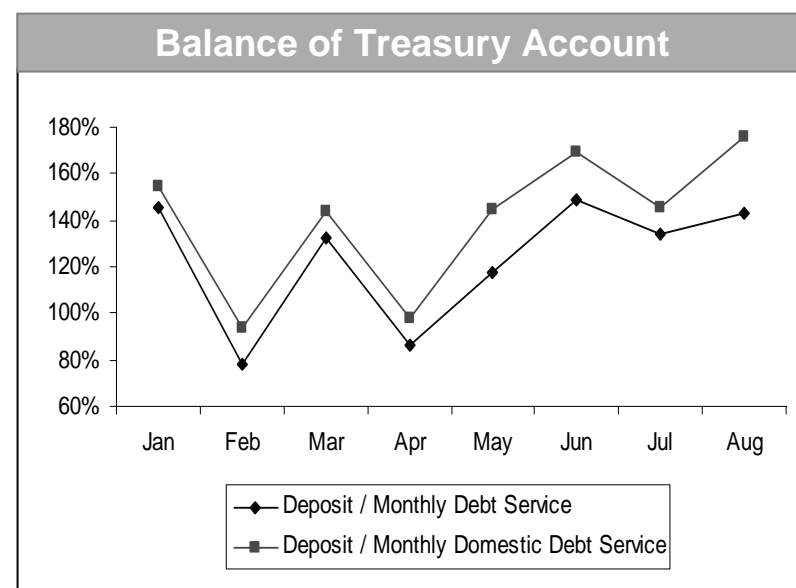
- ▶ Close coordination with market participants and primary dealers

Strategy Implementation... (cont.)



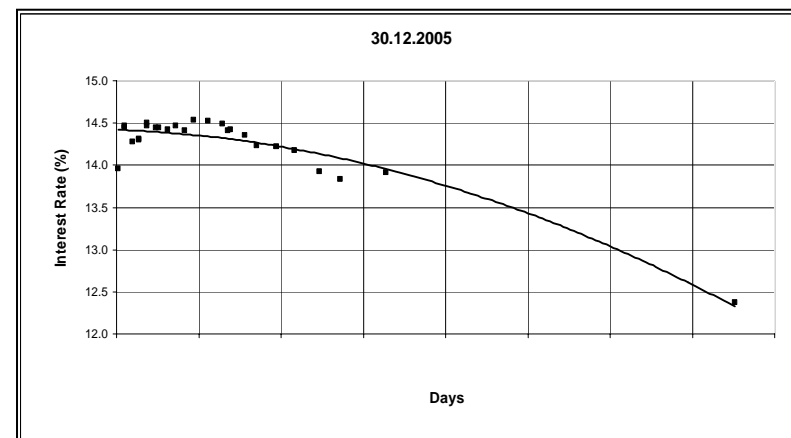
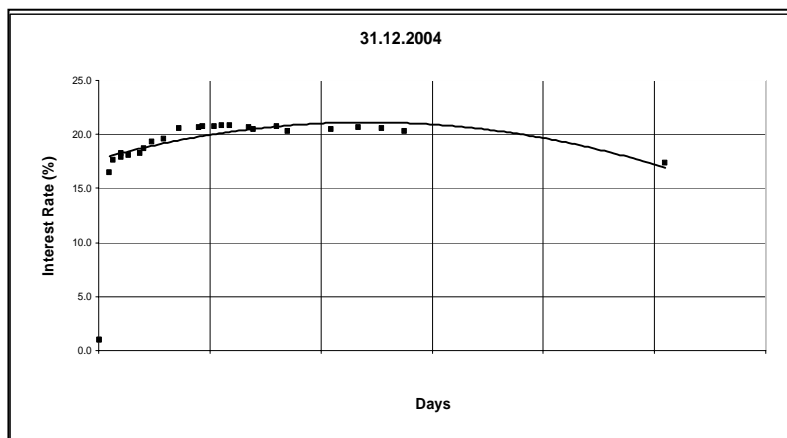
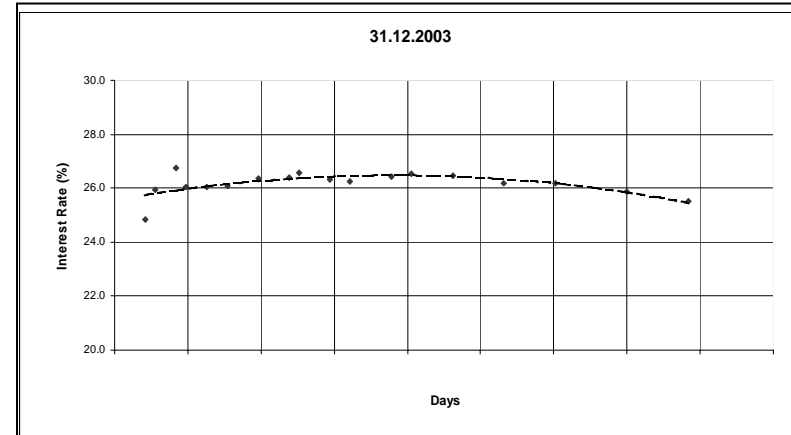
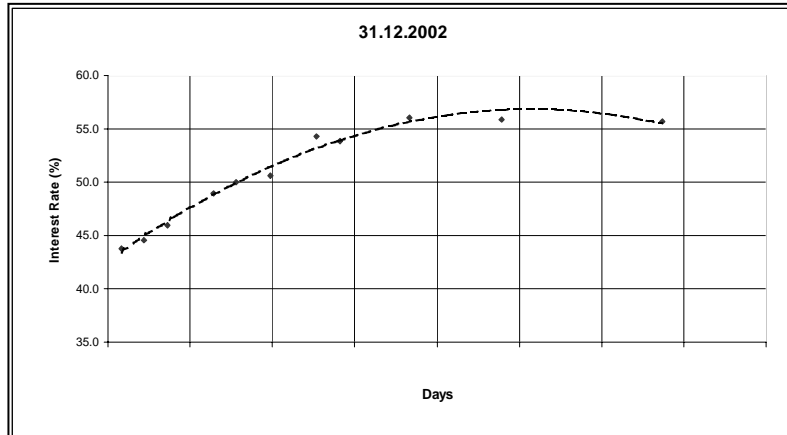
Composition of Domestic Borrowing

%	Jan – Jul '05	Jan – Jul '06
Total Borrowing	100	100
Fixed Rate	71,1	67,7
Floating Rate	28,9	32,3
Total Borrowing	100	100
TRL Borrowing	89,1	98,7
Fixed	70,3	67,7
Float	18,8	31,0
FX Borrowing	10,9	1,3
Fixed	0,8	0,0
Float	10,1	1,3



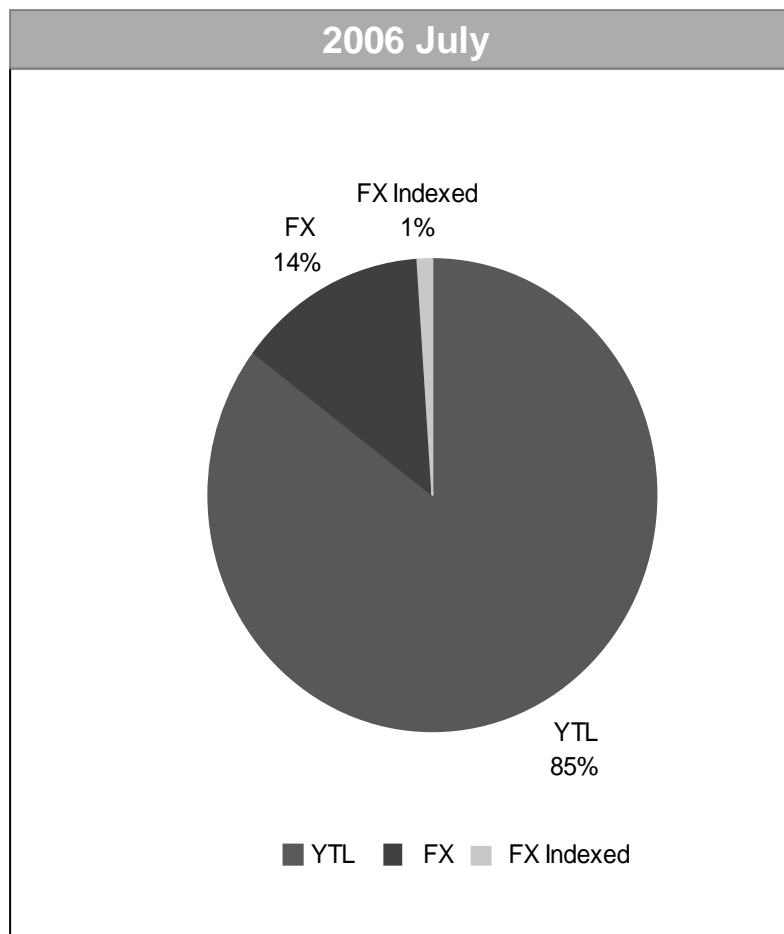
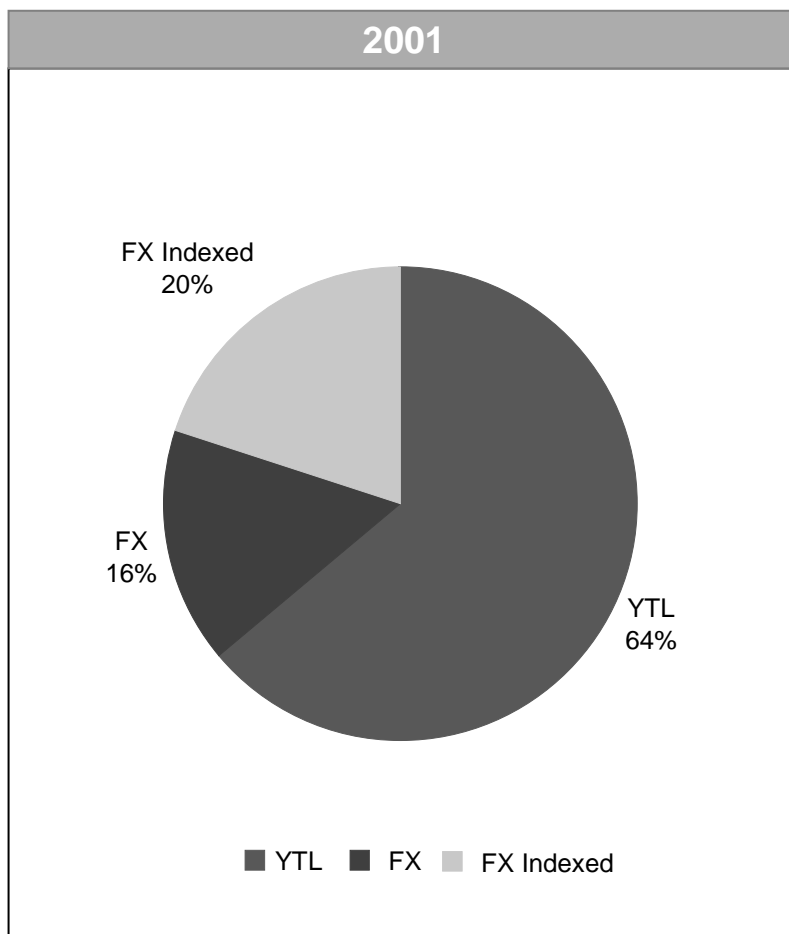
Strategy Implementation... (cont.)

Yield Curve Construction

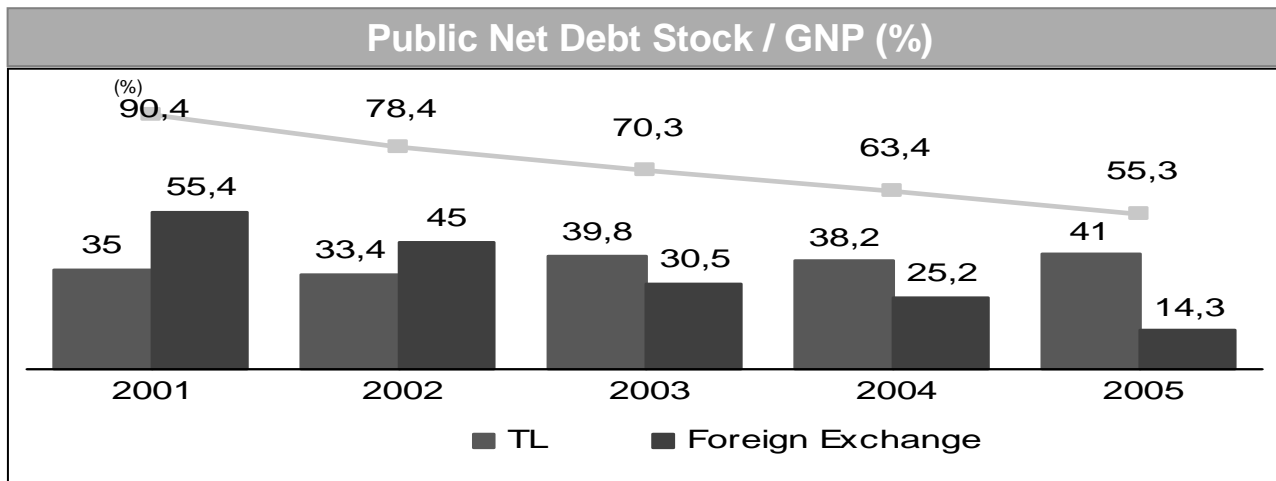
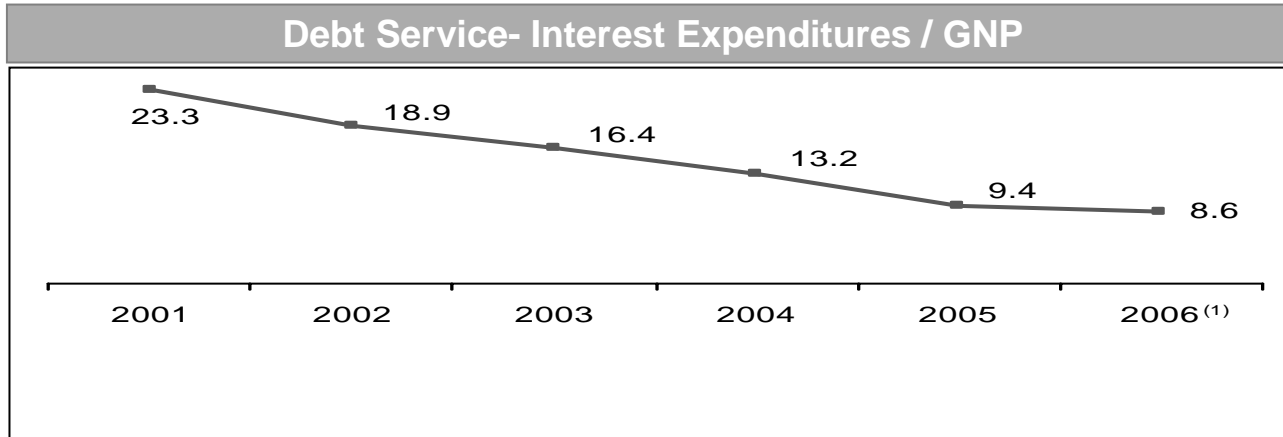


Strategy Implementation... (cont.)

Domestic Debt Stock by Instruments



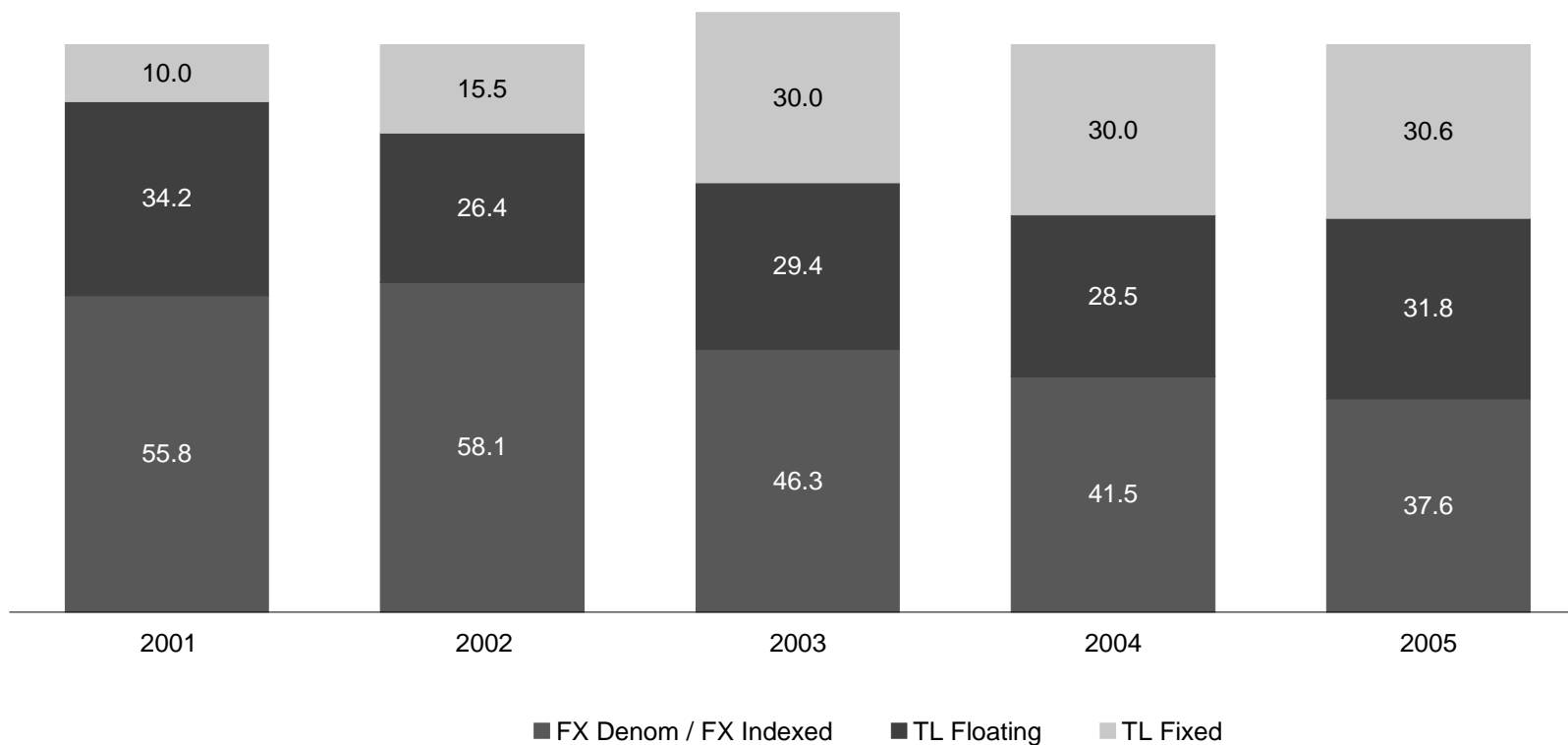
Strategy Implementation... (cont.)



Strategy Implementation... (cont.)

Increasing Endurance for Vulnerabilities

(%)

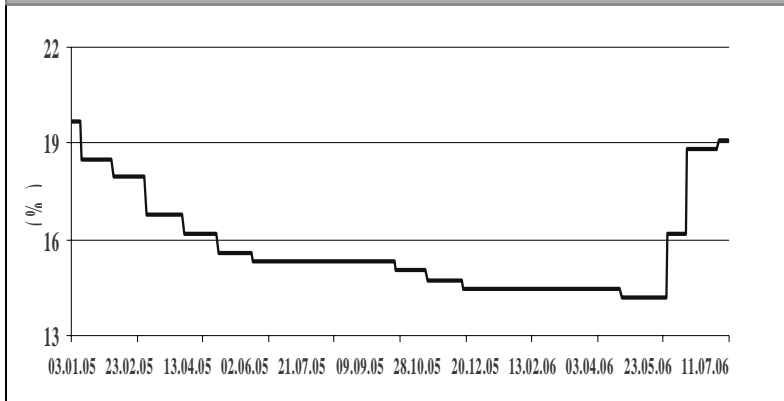


Strategy Implementation... (cont.)

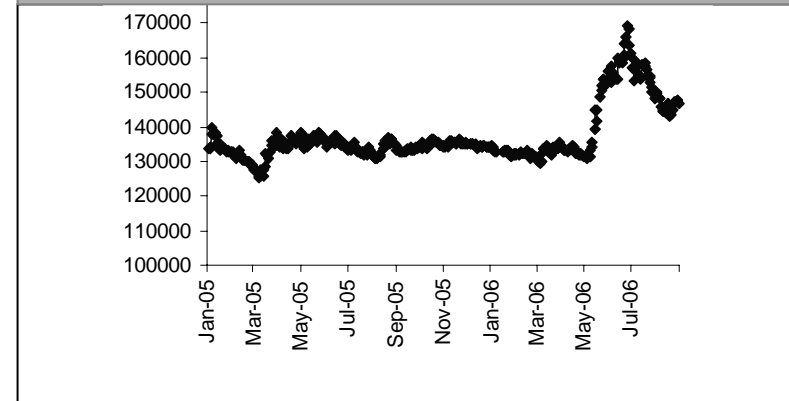
Elasticity		
	BASED ON STOCK COMPOSITION IN 2002	BASED ON STOCK COMPOSITION IN 2005
	CHANGE IN DEBT STOCK / GNP	CHANGE IN DEBT STOCK / GNP
10 % Real Depreciation/ Appreciation of TRL	+ / - 4.7 Per cent	+ / - 1.5 Per cent
300 bps Increase / Decrease in Real Interest Rates of TRL Borrowing	+ / - 1.0 Per cent	+ / - 1.2 Per cent
1 % Increase / Decrease in GNP Growth	+ / - 0,8 Per cent	+ / - 0,6 Per cent
1 % Increase / Decrease in Primary Surplus	+ / - 1.0 Per cent	+ / - 1.0 Per cent

Strategy Revision

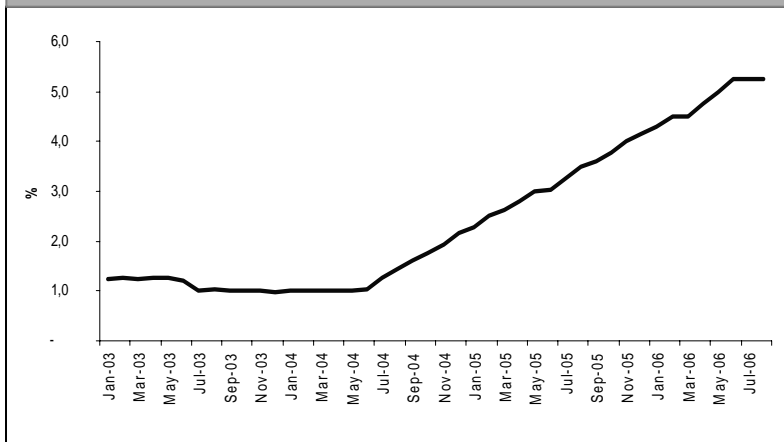
Central Bank Interest Rates (%)



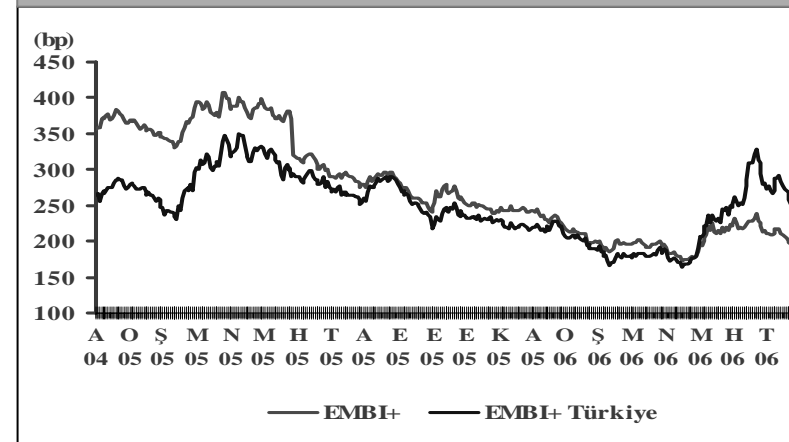
TRL/\$ Rates



FED Rates



EMBI + Index



Strategy Revision

- ▶ Continue announcement of monthly auction calendar
- ▶ Reduce maturity
 - Shorten the maturity of 5-year floating rate semi-annual coupon securities
 - Suspend monthly issuance of 5-year YTL denominated fixed semi-annual coupon securities
 - Increase the number of zero coupon bonds up to one year maturity
- ▶ Reduce roll over ratio
- ▶ Introduce domestic bond exchange auctions
- ▶ Postpone Introduction of inflation indexed bonds
- ▶ Increase coordination with market participants and primary dealers
 - Introduce PD expectations survey
- ▶ Change tax regime of government borrowing instruments

Managing Fiscal Risks

- Guarantee Limit
- Limit for On-lent loans
- Risk Account - A reserve for unexpected payments
- Guarantee Fee
- On-lent Fee
- Partial Guarantee

Managing Fiscal Risks ... (cont.)

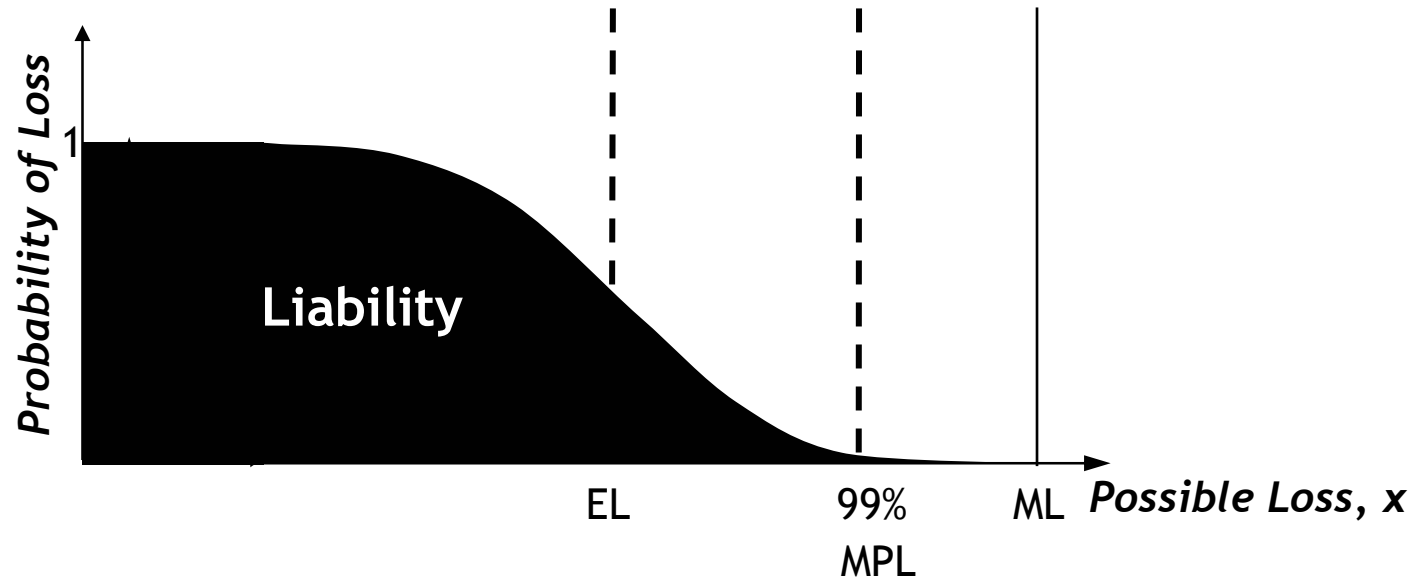
Credit Risk Model

Quantitative spreadsheet models where the behaviors of guaranteed institutions are simulated under different macroeconomic conditions

Credit Scoring Model

Model that forecasts default one period ahead through a linear weighted combination of observable explanatory variables

Managing Fiscal Risks ... (cont.)



EL: Expected (Average) Loss
 MPL: Maximum Probable Loss
 ML: Maximum Loss

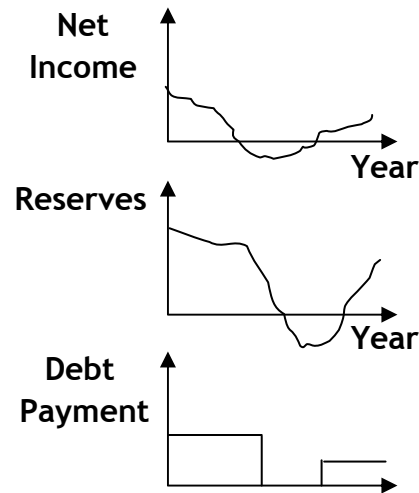
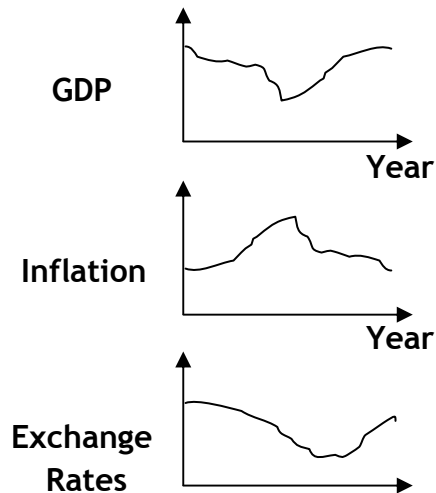
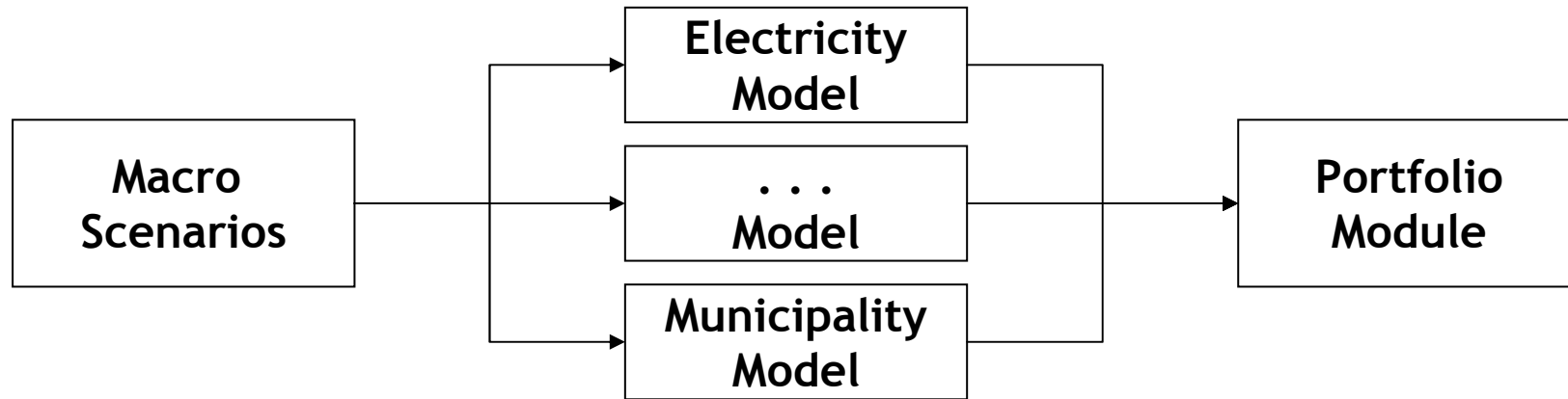
$$EL_{\text{portfolio}} = \sum EL_i$$

$$MPL_{\text{portfolio}} \neq \sum MPL_i$$

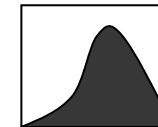
$$MPL_{Ci} \leq MPL_i$$

Managing Fiscal Risks ... (cont.)

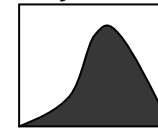
Credit Risk Model



Loss Distribution



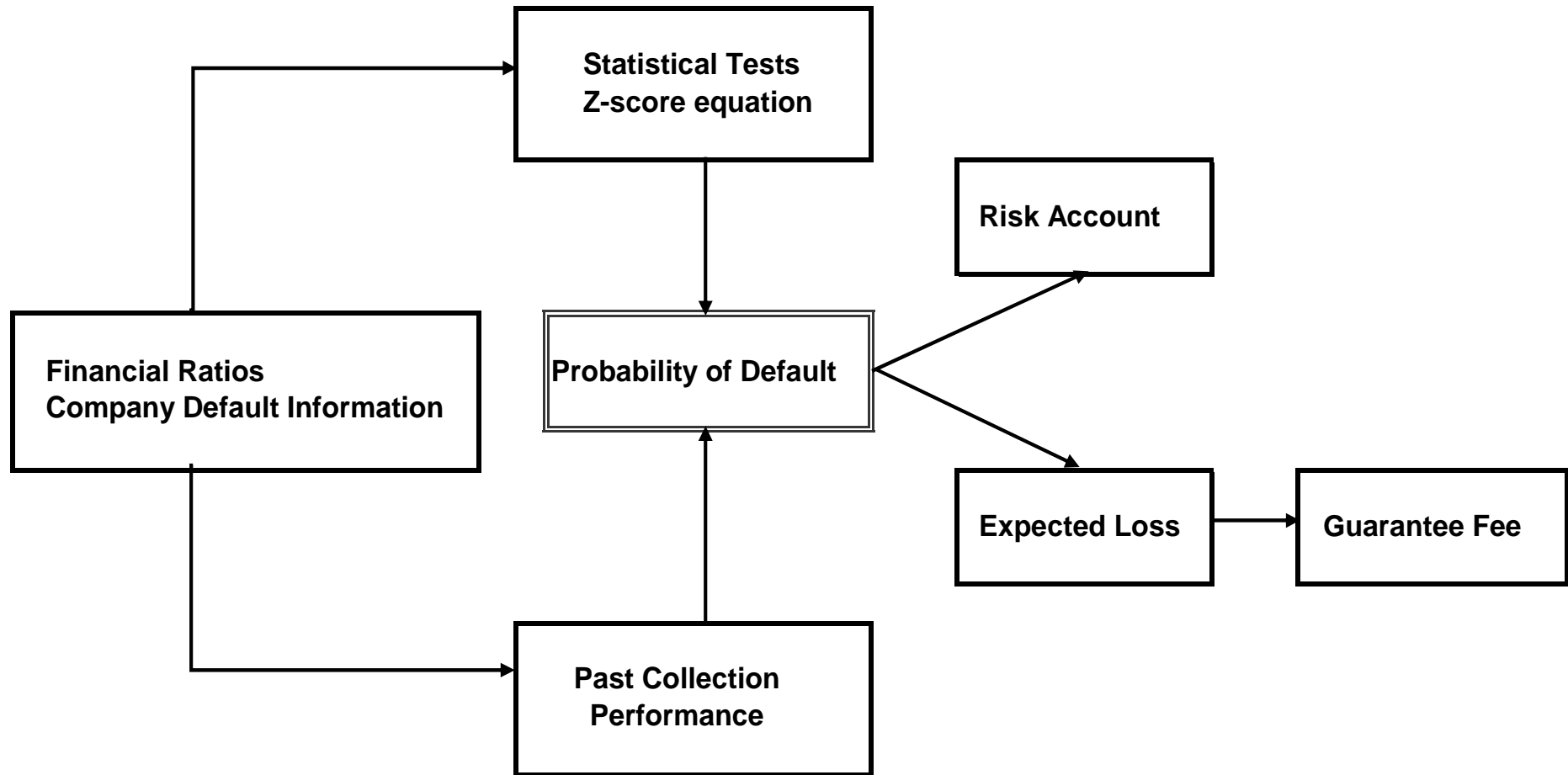
Recovery Distribution



Expected Loss	\$27
Max Probable Loss	\$156

Managing Fiscal Risks ... (cont.)

Credit Scoring model



Comprehensive Debt Management Approach

