WHERE DO WE STAND IN FINANCIAL STABILITY ANALYSIS?

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THE ROLE OF THE CBRT & FINANCIAL STABILITY REPORT

PRICE STABILITY

Improving Risk Culture

Efficient Regulation and Supervision

Deepening of Financial Markets

Efficient Functioning of Payments System

↓

Strong FINANCIAL SYSTEM AND INSTITUTIONS

↓

FINANCIAL STABILITY

Power and Duties of the CBRT

Regarding Financial Stability

Monitoring financial markets

Focusing on *overall* health of financial system

Presenting its opinions and observations to the Government and related authorities

Oversight payments system

PRICE STABILITY

FINANCIAL STABILITY

Lender of last resort

-Providing daily or end-of-day cedit facilities by open market operations

-Extending credits to the banks under extreaordinary conditions

Power and Duties of the CBRT Regarding Financial Stability

By issuing the Financial Stability Report, the CBRT shares information with public in order to apply transparency and credibility rules both national and international arena.

The Financial Stability Report:

-published **semiannually**

-evaluates financial system on an **"balance-sheet"** approach

-focuses mainly on **banking sector**

-uses **macro and financial soundness indicators**

assesses **credit, market and liquidity risks** of the financial system

-tests resileince of banking sector by stress tests and scenario analysis

DEVELOPMENTS IN THE TURKISH FINANCIAL SYSTEM

Past vulnerabilities of Turkish economy heading towards 2000-2001 crises.

i. Delays some structural reforms

ii. Problems of the banking system deeper than expected

iii. The over-appreciation of Turkish lira and distress in balance of payments

iv. High risk appetite of the banking sector

v. Unfavorable developments in emerging markets and increased oil prices

led to sharp capital outflow and ended up with November 2000 and February 2001 crises.

After the twin crises, a new economic program was put into effect to restructure the banking sector and to restore the confidence in the markets and to ensure financial stability.

4 pillars of the banking sector restructuring process:

1. Financial and operational restructuring of the state banks
2. Resolutions of the banks under the management of the SDIF
3. Strengthening of the private banks
4. Further improvement in the regulatory and supervisory framework

- ✓ Improvement in macroeconomic conditions
- ✓ The more market discipline and transparency is achieved,
- ✓ Efficient supervision is enhanced,
- ✓ Risk control mechanisms are strengthened by new regulations to better identify weaknesses,
- ✓ State banks no longer distort the markets,
- ✓ SDIF banks are resolved through M&A and liquidation.

FINANCIAL STABILITY ANALYSIS OF THE CBRT

MACRO INDICATORS

Macroeconomic Indicators

- Early detection of crises as an exclusive goal for policymakers.
- Signaling imbalances that affect financial systems, macroeconomic variables are leading indicators.

Economic growth

- Aggregate growth rates
- Sectoral slumps

Balance of Payments

- Current account deficit
- Forex reserve adequacy
- External debt
- Terms of trade
- Composition and maturity of capital flows

Inflation

- Volatility in inflation

Interest and exchange rates

- Volatility in interest and exchange rates
- Level of domestic real interest rates
- Exchange rate sustainability
- Exchange rate guarantees

Lending and asset price booms

- Lending booms
- Asset price booms

Contagion effects

- Trade spillovers
- Financial market correlation

Other Factors

- Directed Lending
- Government recourse to the banking system
- Arrears in the economy

Source: IMF, Macroprudential Indicators of Financial System Soundness, 2000

Macroeconomic Indicators

1 GDP growth and CPI

2 a. Total public net debt/GDP, Short-term foreign debt, International reserves
b. Interest expenses/Tax revenues

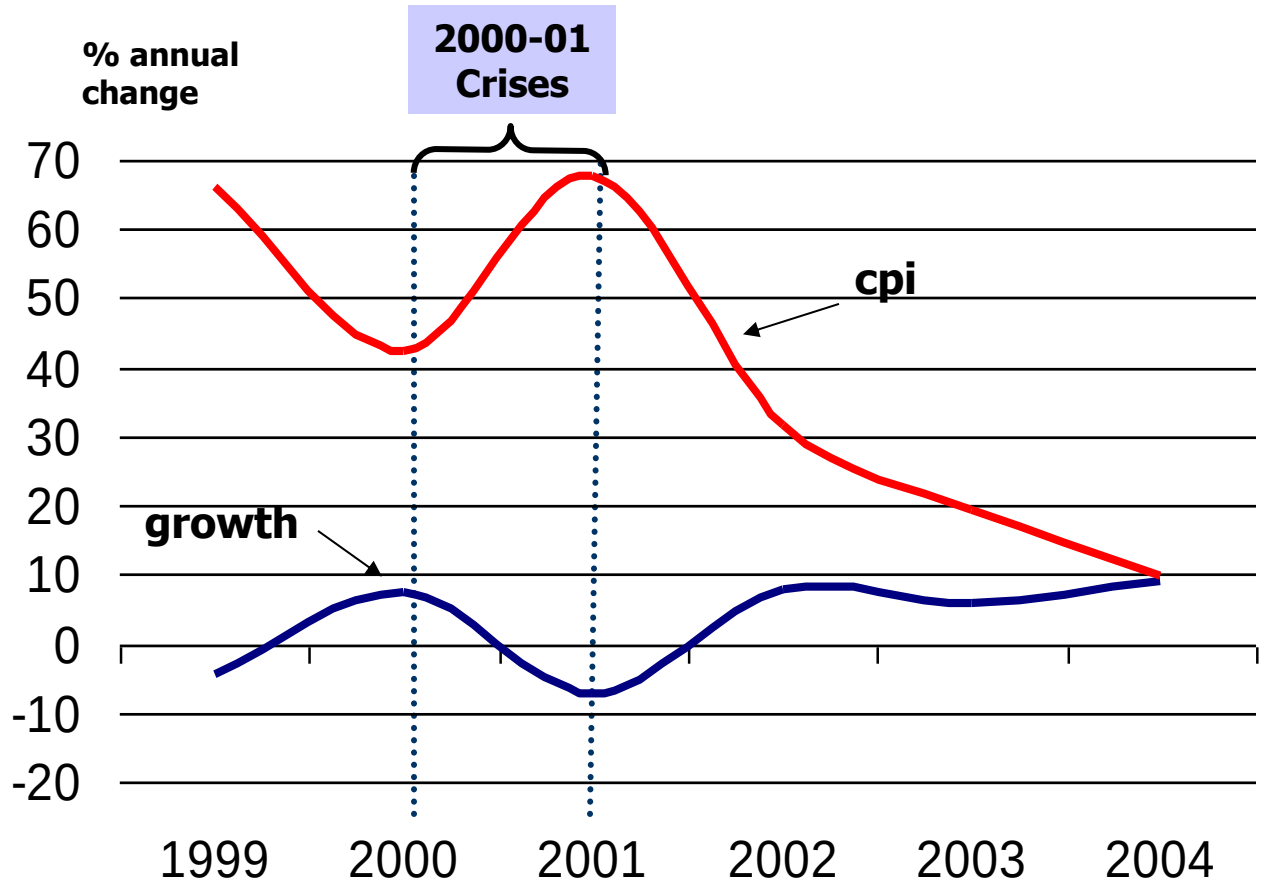
3 Exports/Imports
Current account deficit/GDP

4 M2X /International reserves

5 Dollarization

6 Domestic real interest rate

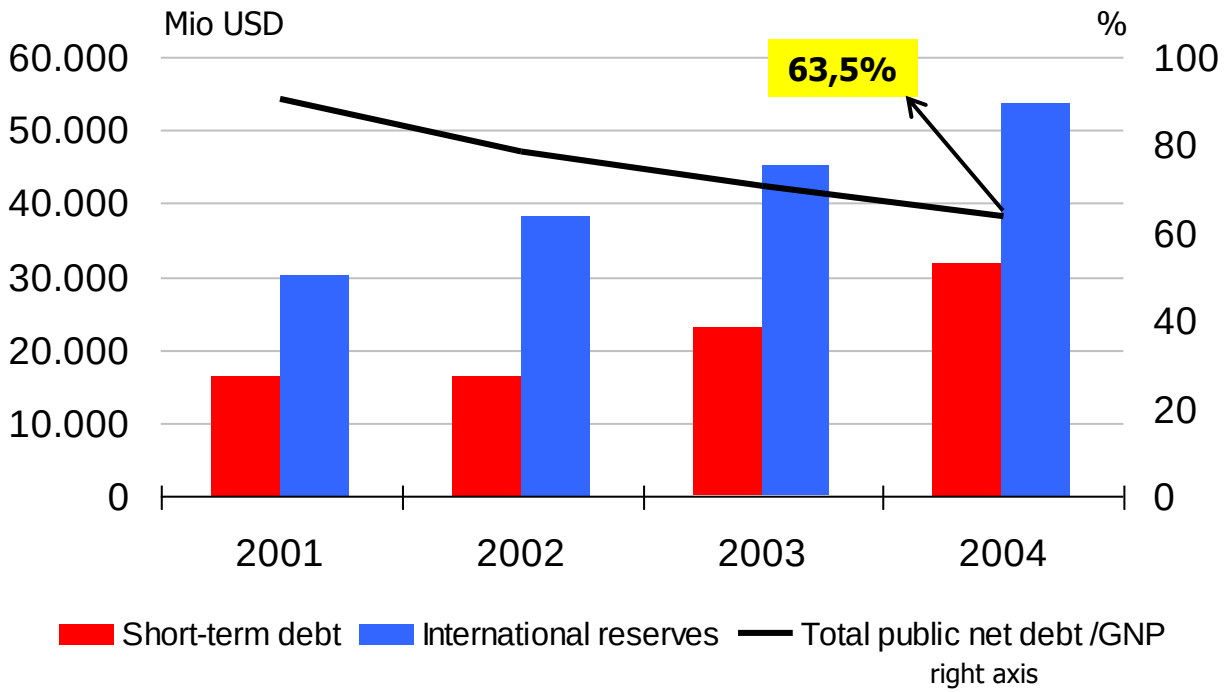
Macroeconomic dynamics working towards sustainable growth



-Inflation decreasing. 2005 target is 8%.

-Instead of fluctuating growth rates, positive and sustainable rates.

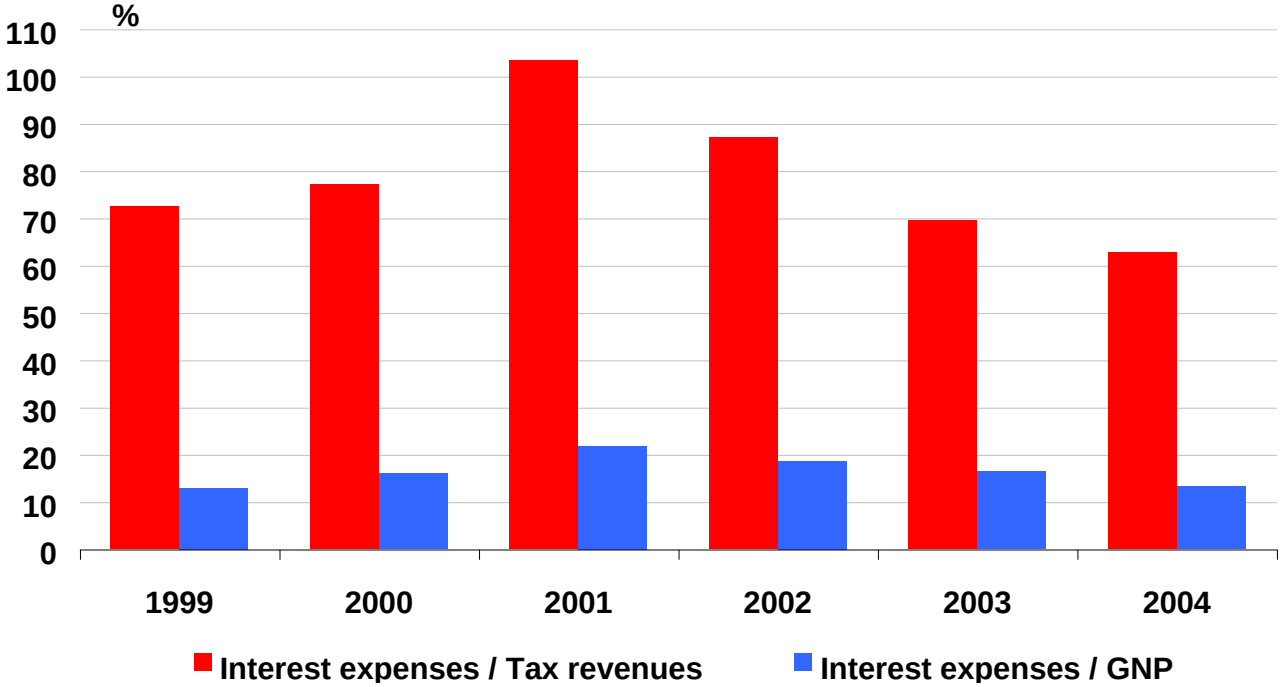
1



2-a

-International reserves are sufficient enough relative to short-term foreign debt.

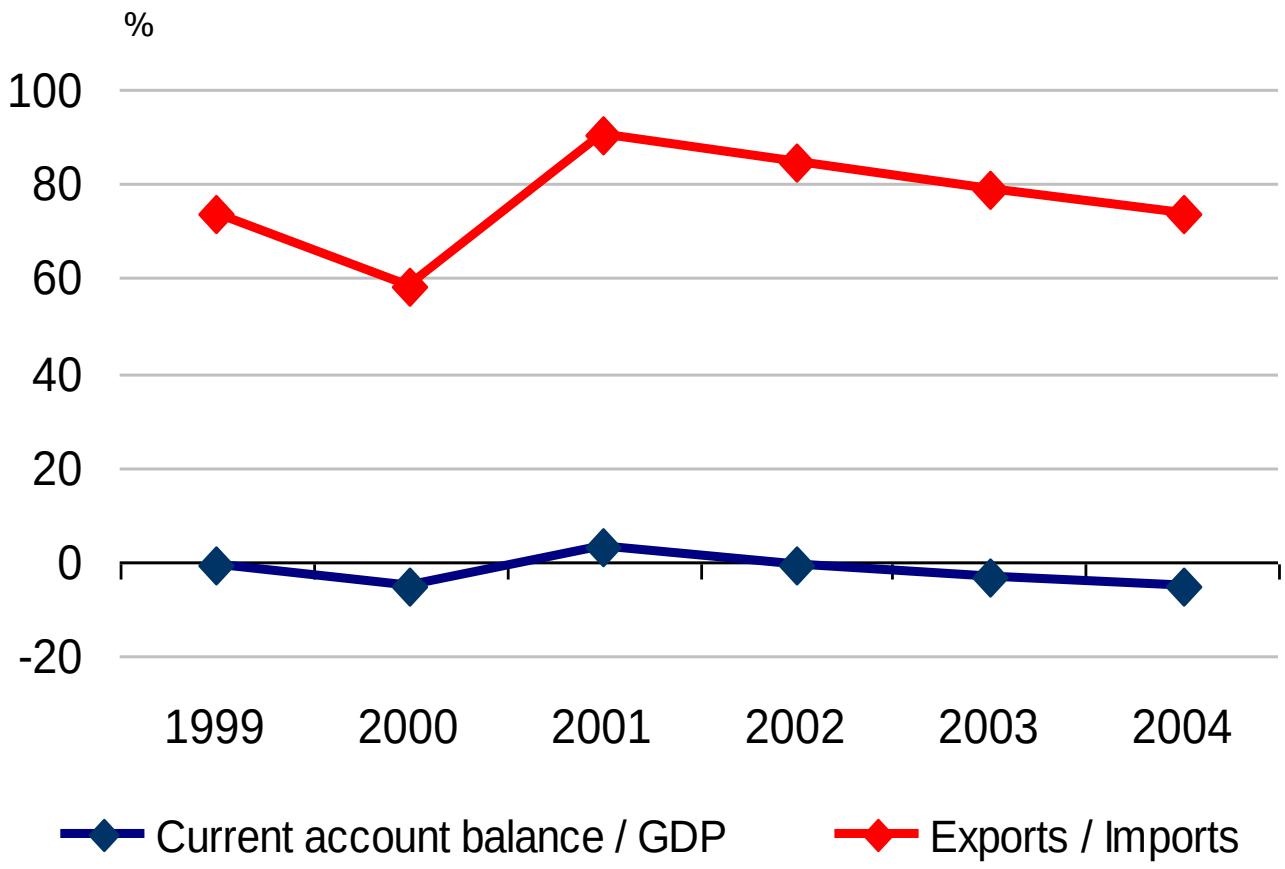
-Total public net debt relative to GNP gradually decreasing.



-Debt service ratios declining, strong debt sustainability.

2-b

External balance: causing no fear but more growth



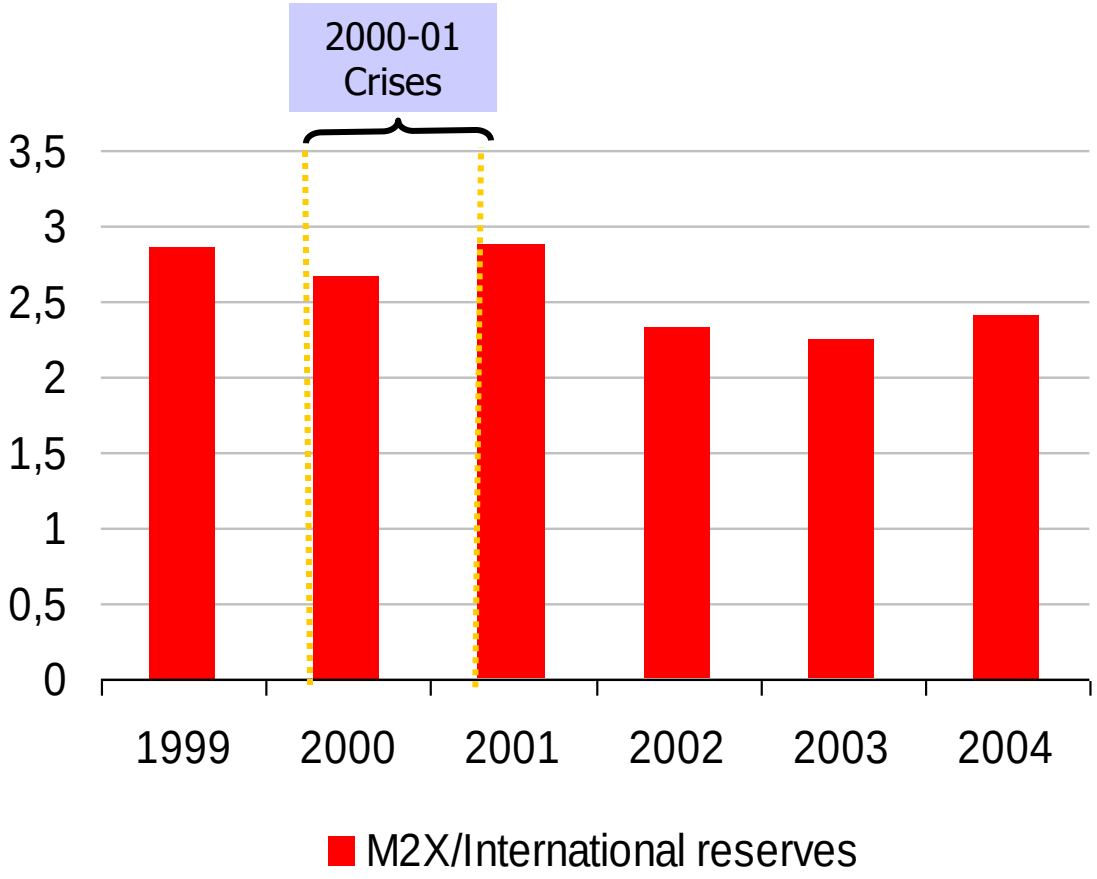
-Increased by strong economic growth, imports growing.

-However, exports are strong.

-Flexible exchange rate regime and the level of international reserves keeping current account deficit in a sustainable path.

3

External balance: causing no fear but more growth (contd.)



-The steps taken towards stability enhancing confidence on Turkish economy. This reflects on external balance as:

i-more capital inflow, especially FDI.

ii-appreciation of Turkish Lira and de-dollarization. .

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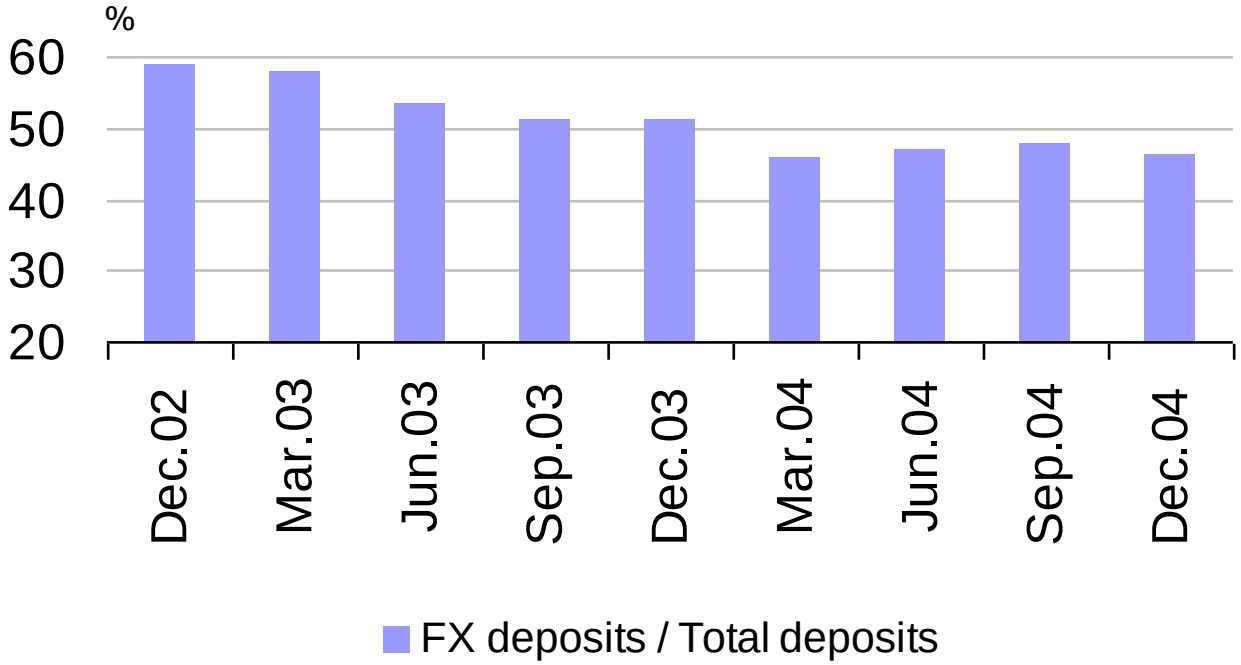
Enhanced price stability showing its impact on dollarization



-The share of FX deposits (opened in banks) in total deposits falling.

-FX demand deposits compared to time deposits are in low levels. Thus, FX demand is mainly arisen from savings motive (not because of *transaction purposes*).

-Therefore, enhanced price stability is expected to give pace to the de-dollarization process.

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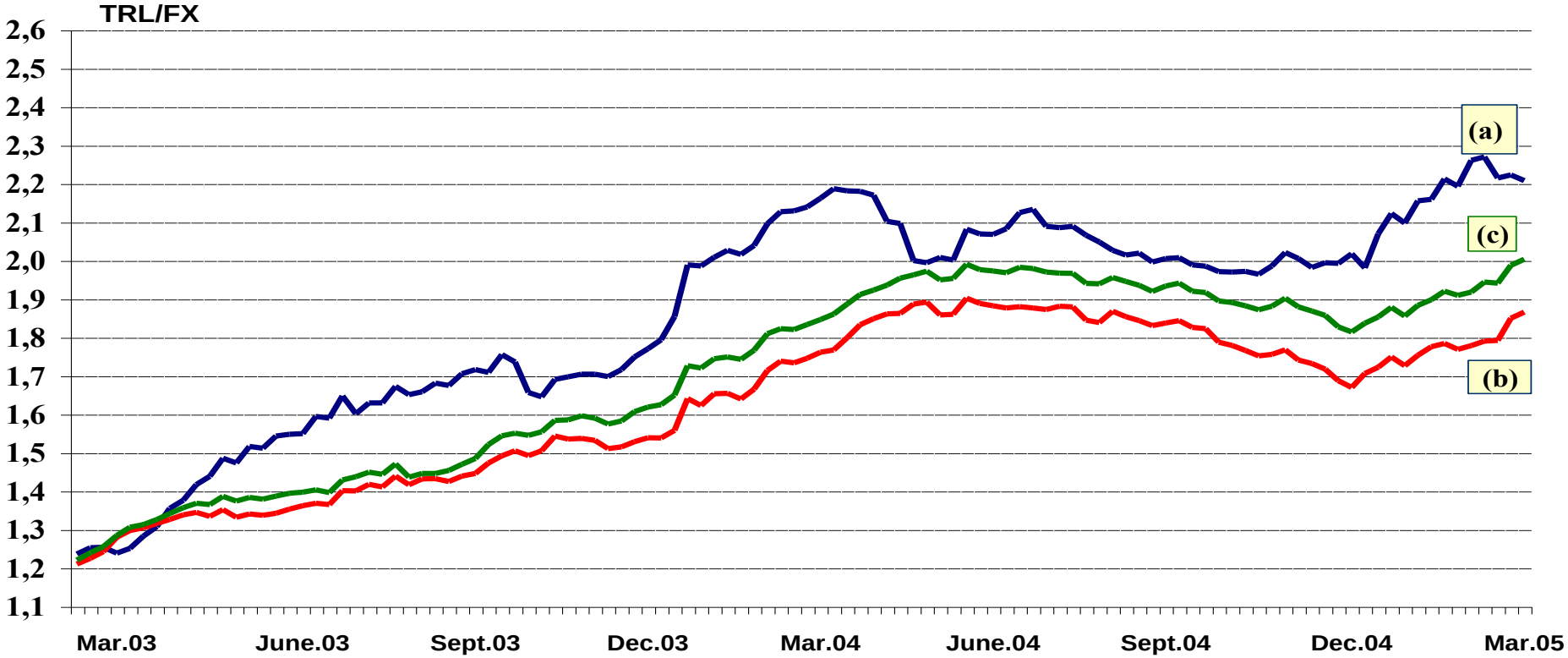
Enhanced price stability showing its impact on dollarization



Total TRL / FX Instruments (a) — Valued over current FX rate

Total TRL / FX Instruments (b) — Valued over fixed FX rate (as of end of 2002)

Total TRL / FX Instruments (c) — Valued over fixed FX rate (as of end of 2002) and no cross rate effect

- TRL instruments= Deposits + Government securities + SFH current accounts + Stocks
- FX instruments= FX Deposits + Government securities + Eurobond + SFH current accounts(FX)

5

Public borrowing costs declining

-This also evident from ex-ante interest rates that depends on expected inflation.

- **Ex-ante real interest rate** = (((1+*nominal interest rate*)/(1+ inflation rate))-1)*100

Interest rate of government securities traded in the ISE secondary market

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FINANCIAL STABILITY ANALYSIS
OF THE CBRT

FINANCIAL SOUNDNESS INDICATORS

Financial Soundness Indicators

- ✓ Indicators are calculated for the purpose of supporting macroprudential analysis. This is the assessment of the strengths and vulnerabilities of financial systems with the objective of analyzing financial stability.
- ✓ Largely focus on information about banks
- ✓ Include some key information on corporate and household counterparties
- ✓ Identified by considering international best practices and national needs. (IMF FSIs, FSRs of other countries etc.)
- ✓ In addition to indicators, stress testing is used to assess banking sector's capacity to absorb losses.

Financial Soundness Indicators

A) Banks & Nonbank Financial Inst.

B) Banks

B1) Capital

- Capital adequacy ratio
- Equity / Total asets
- Free capital / Total assets

B2) Asset Quality

-Non-performing loans (NPL)

-Reserve coverage ratio

-Net NPLs / Equity

B3) Profitability

-ROE, ROA

- Net interest margin
- Cost / Income

B4) Liqudity

-Core liquid assets / Total assets

-Short term assets / Short term liabilities

-Weighted average maturity of deposits

B5) Sensitivity to Market Risk

-Net FX open position

-Trading securities / Total assets

C) Firms & Households

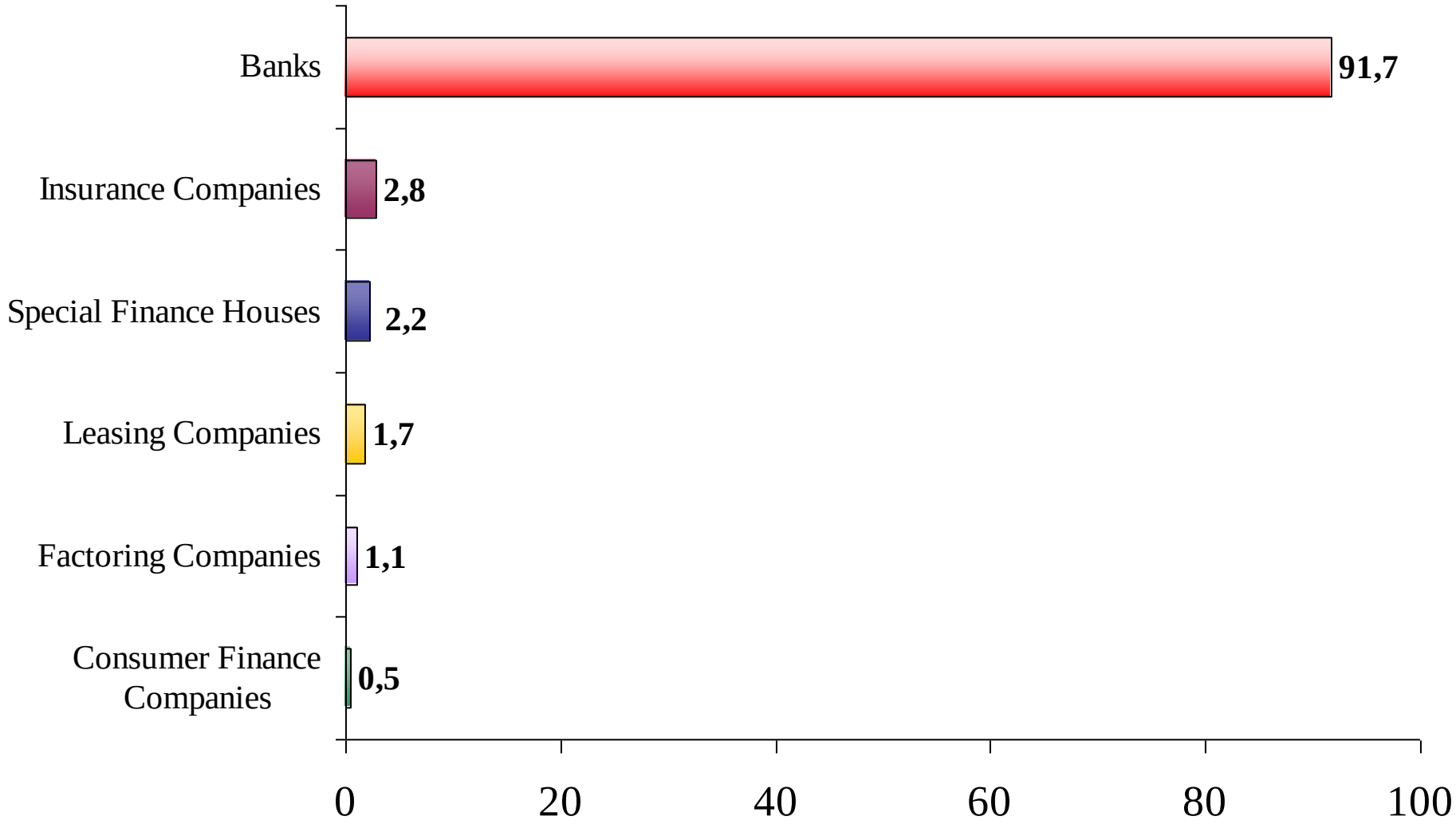
-Total Debt / Equity

-ROE

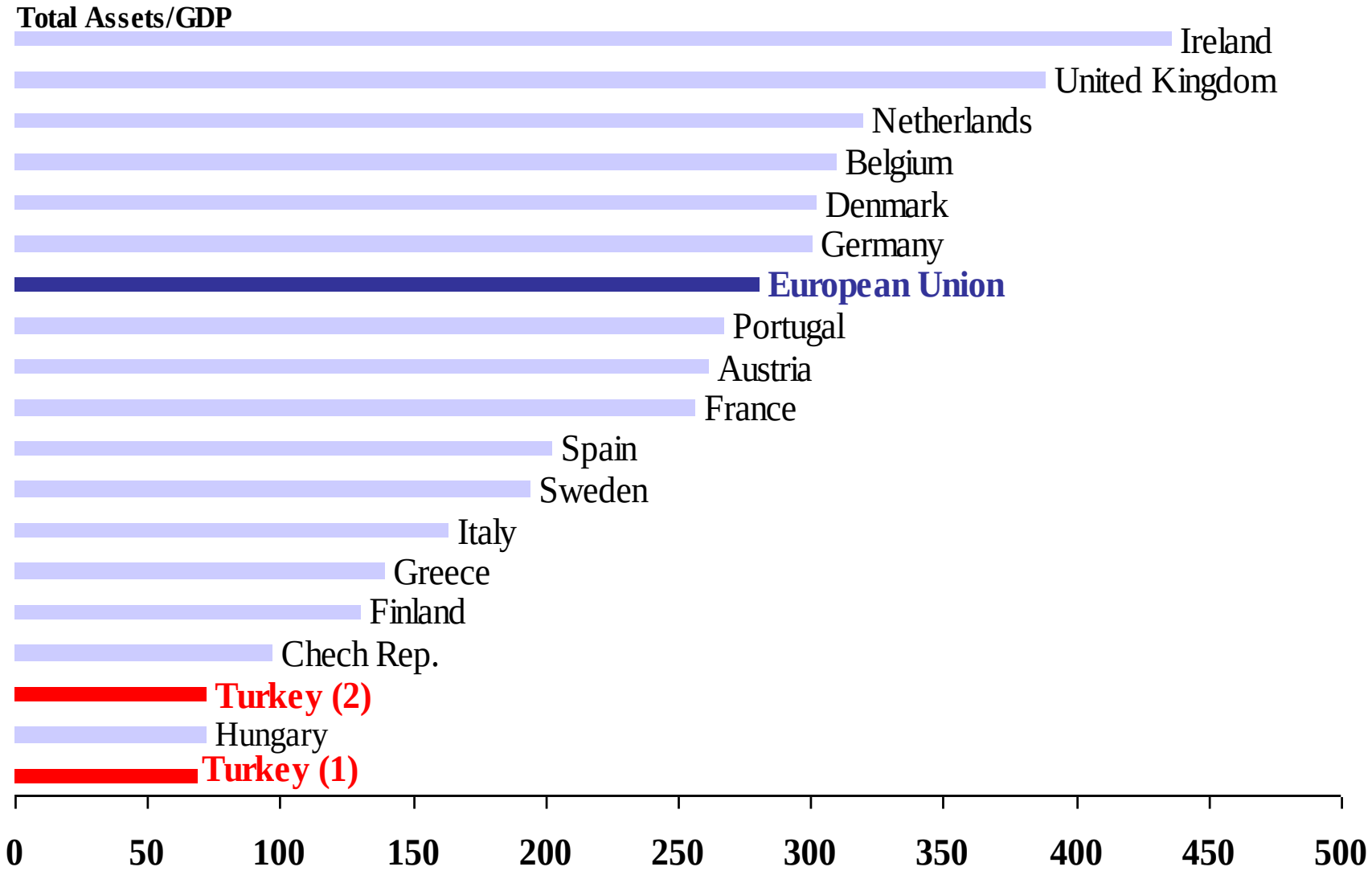
-EBIT / Interest Expenses

- Consumer Loans / GDP

(A) Banking sector is the core part for the analysis of financial sector (As of 2004)

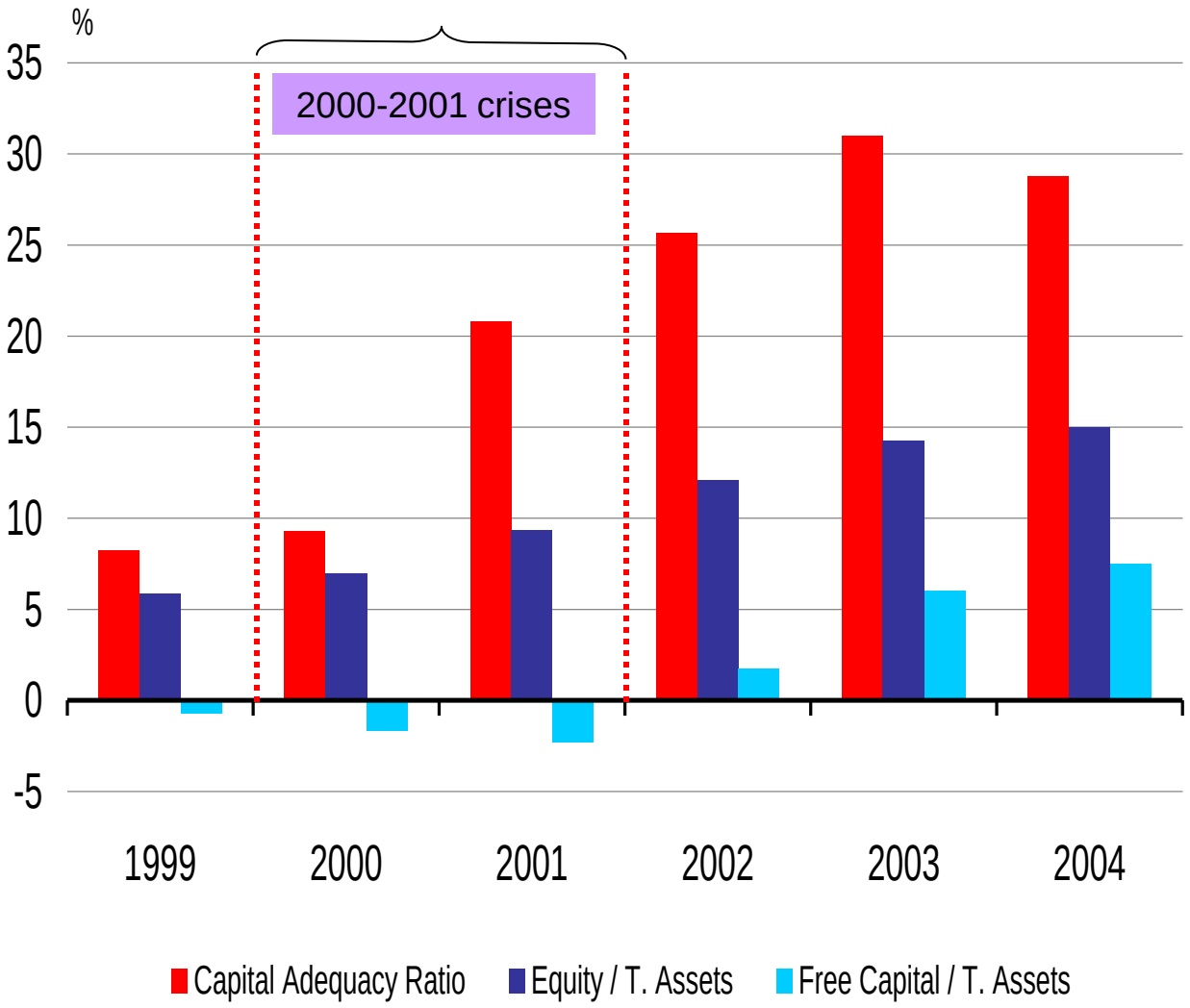


Compared to the size of the economy, banking sector is still relatively small (Total Assets / GDP)



- Data for EU countries and Turkey (1), 2003 and Turkey (2), 2004.

(B1)Banks have strengthened their capital

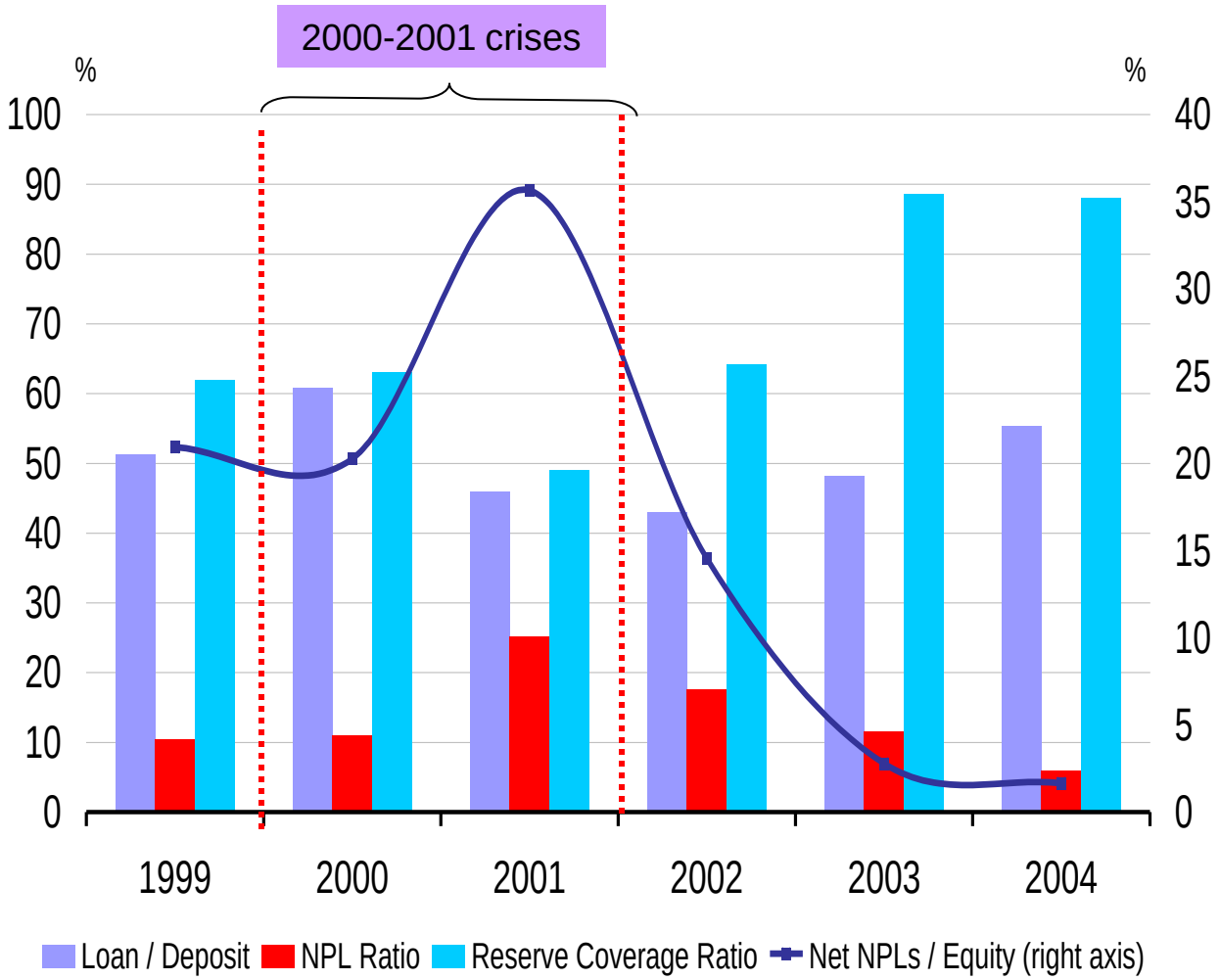


Source: BRSA

- CAR and equity to capital ratio improved. Strengthened capital base have made banks better prepared to deal with potential future shocks.

-Improved free capital will have a positive effect on future profitability.

(B2) Overall improvement in credit quality



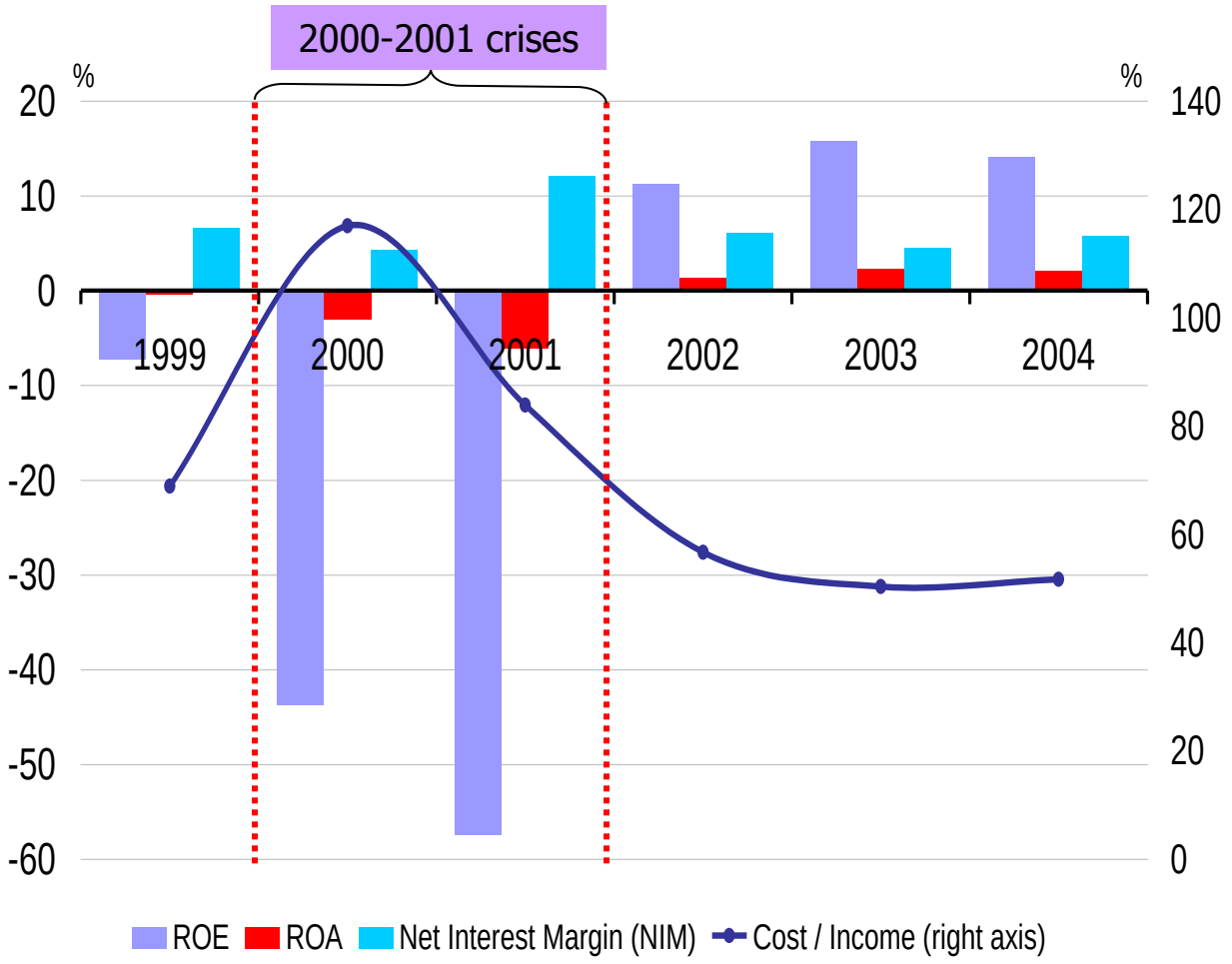
Source: BRSA

-Loan growth accelerated measurably. Increase in loan to total deposit ratio.

-NPL ratios decreased because of decline in NPLs and growth of loan portfolios.

-The potential impact of net NPLs on equity has decreased.

(B3)Banks have improved their profitability



Source: BRSA

- A strong recovery since 2001. Improved ROA and ROE.

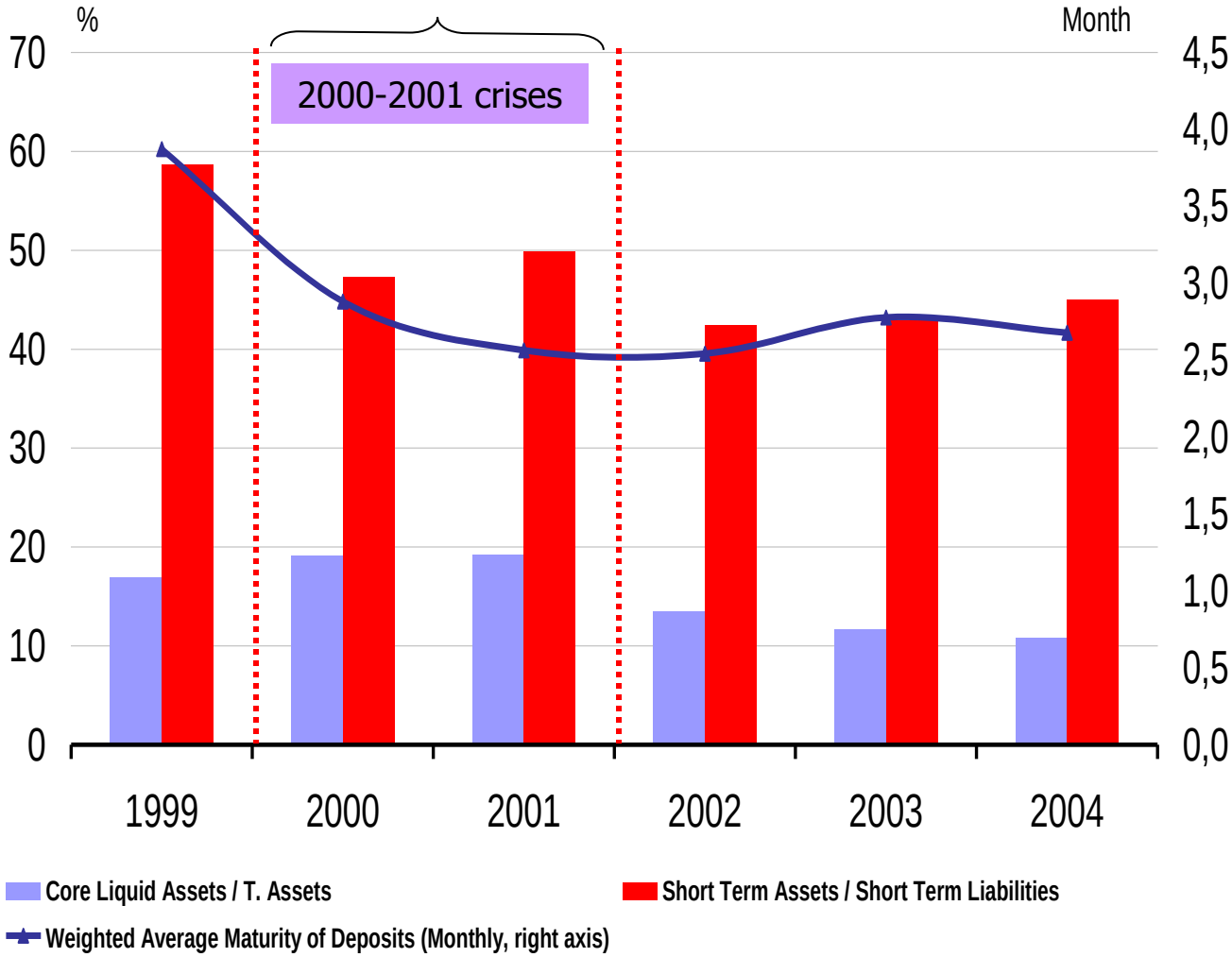
-Exceeds Europe average.

–High net interest margin

-About half of the interest income is still founded on government securities.

-Declining cost / income ratio.

(B4) Banks' liquid assets declined



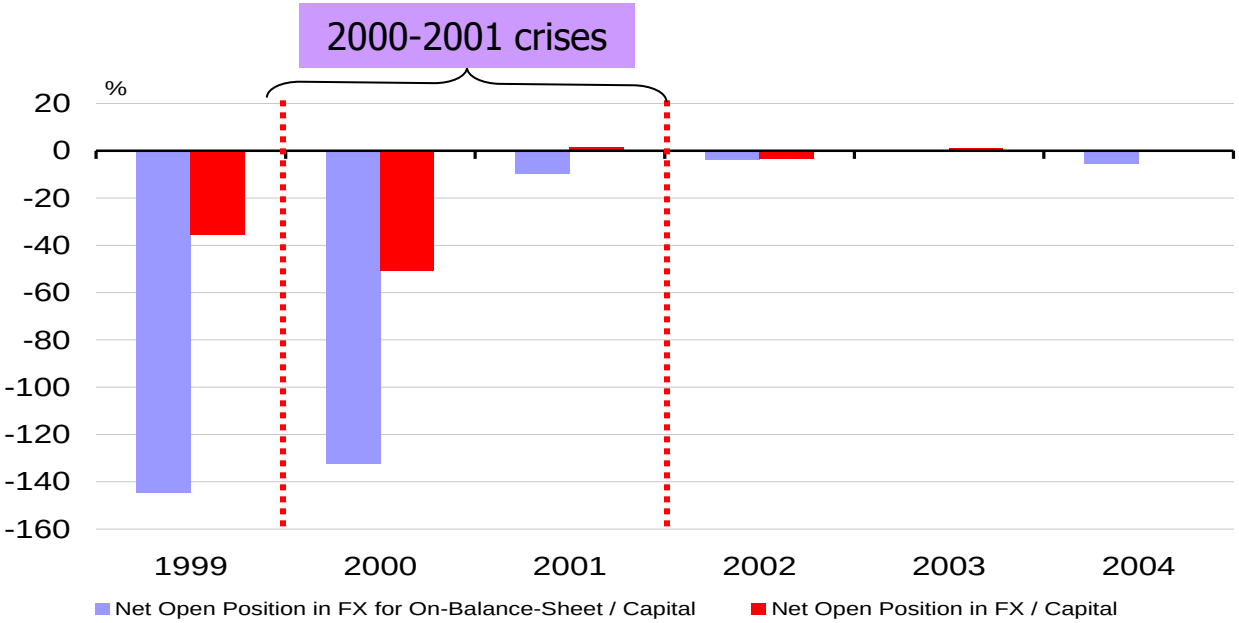
Source: BRSA

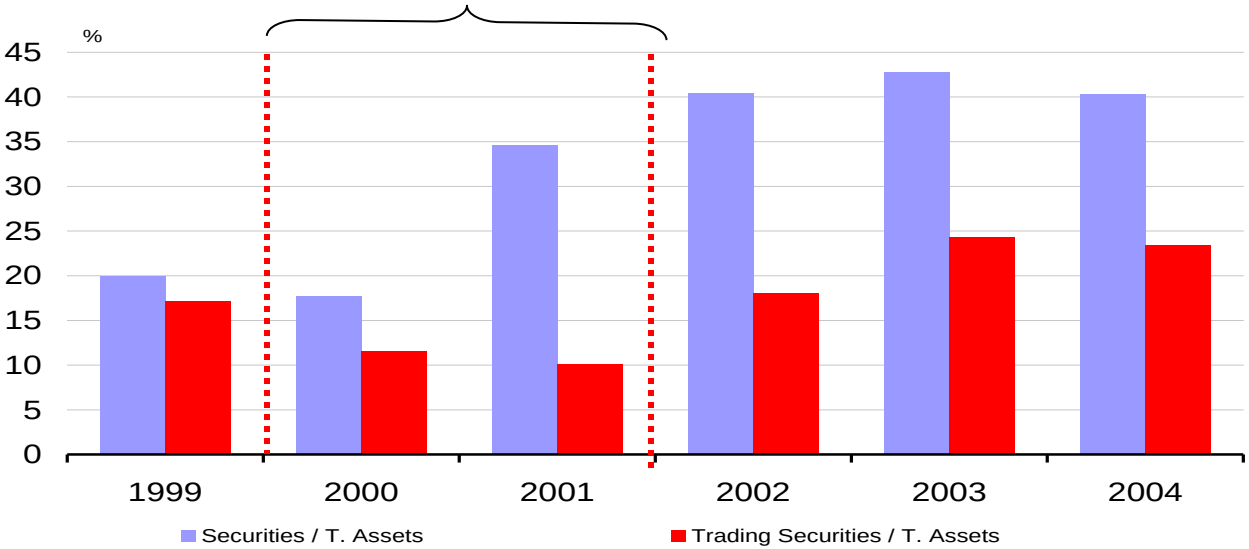
-Banks' liquid assets declined as volatility reduced in the financial market.

-Short term total deposits are main source of funding which creates a maturity mismatch. But,

-Liqudity risk is mitigated to some extent by the banks' core deposit base.

(B5) Low level of FX open position





Source: BRSA

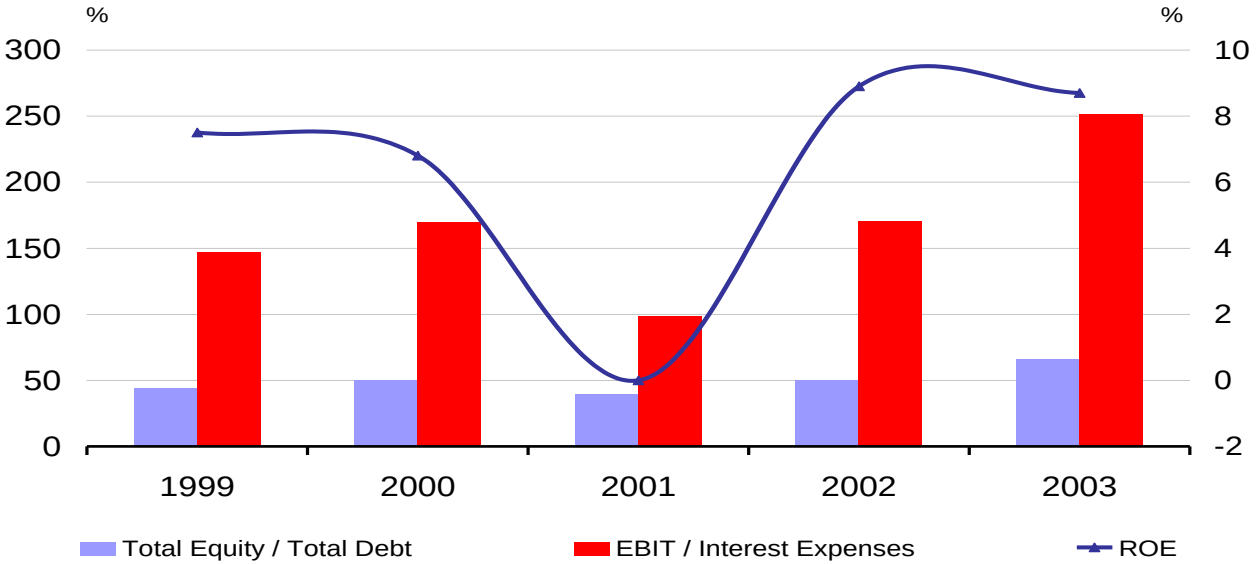
-A very low level of FX open position

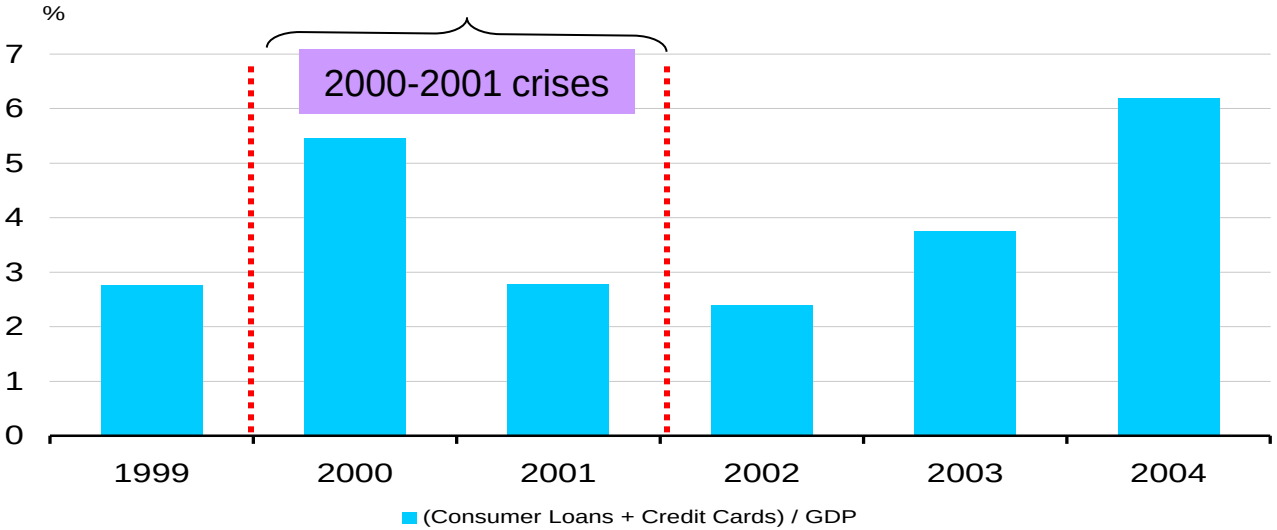
- Considering the share of loans in FX to customers, it is important for the firms to manage their foreign currency risk.

-The share of securities in total assets of state banks is higher than for private banks

-High share of government securities portfolio increases the importance of interest rate management.

(C) Indebtedness of firms and households





Source: CBRT-BRSA

-Corporate leverage decreasing.

-Firms use their equity more efficiently.

-Firms' capacity to cover their interest expenses has increased.

-Level of household indebtedness commonly related to consumer loans has increased.

-major post driver.

-performance of consumer loans is relatively good.

Signs of Distress in Banking Sector: Turkish Experience

✓ Most of the financial soundness indicators are typically backward looking indicators ie indicators show deterioration when problems emerge

✓ Some financial soundness variables indicators are found to be banking crisis signals in the light of Turkish experience

✓These early warning signals help to predict stress in the banking sector

✓To better monitor risks and vulnerabilities in the financial system, it is important that more transparency through better disclosure has been achieved.

Sign of Distress in Banking Sector: Turkish Experience

Rapid Credit Growth

✓ Loan / Deposit ↑↑

✓ Consumer Loans / GDP ↑

Nonprofitable Banking Sector

✓ ROA, ROE, NIM ↓

✓Cost / Income ↑

Shrink in Free Capital

$\frac{\text{Free Capital}}{\text{Total Assets}}$ ↓

Signals of Financial Stress

Sudden Drop in the Average Maturity of Deposits

Increase in Net FX Open Position

$\frac{\text{Net Open FX Position}}{\text{Capital}}$ ↓

CONCLUSIONS AND EXPECTATIONS

Strengths

Improving macroeconomic conditions

Better risk management and regulatory framework

Lending to private customers is becoming to be the main source of business

Improving capital positions, asset quality and earnings

Low FX mismatch

Profitability of the corporate sector

Opportunities

EU accession and IMF supported program

Increase in sovereign creditworthiness

Interest from foreign banks and FDI

With enhanced macroeconomic stability, the level of intermediation will continue to increase

Increase in risk awareness and measurement by Basel II

Financial Stability

Weaknesses

Developments in the external balance

High share of goverment securities still have negative impact on sound operation of the credit channel.

Maturity mismatch

Derivative markets are not developed enough to hedge the FX risks of debtors.

Threats

Reduction in global liquidity

Increased energy prices

Threats in managing credit growth

Challenges to continue profitability in a low interest rate & a competitive environment

MICRO- AND MACRO-PRUDENTIAL ANALYSIS:

Where do we stand in financial stability analysis?

May 18, 2005, İstanbul

THANKS

QUESTIONS & COMMENTS

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