



TÜRKİYE CUMHURİYET
MERKEZ BANKASI

USE OF FINANCIAL ACCOUNTS FOR ANALYTICAL PURPOSES

Central Bank of The Republic of Türkiye

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Brussel



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- Characteristics
- Why is it important to use?

▪ **Use of Financial Accounts**

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- Macroprudential and Financial Stability Analysis
- Financial Structure Analysis

▪ **Challenges and Further Work**

Financial Accounts

CHARACTERISTICS

- Secondary statistics
- Most comprehensive and consistent macro-financial data set
- Information about sectoral Financial flows and balance sheets
- Closed system
 - allows to analyze counterparty risk, and shock spread at different instrument and sector levels.
- Flow of funds : whom to whom matrix
- Common methodology: comparability

Financial Accounts

CHARACTERISTICS

Financial Balance Sheet

<u>Assets</u>	<u>Liabilities</u>
Instrument 1	Instrument 1
Instrument 2	Instrument 2
....



Financial Accounts

Instrument	Financial corporations		Non-financial corporations		Households		Government		Rest of world	
	A	L	A	L	A	L	A	L	A	L
Monetary gold and SDR										
Currency and deposits										
Debt securities										
Loans										
Equity and investment shares										
Insurance pensions										
Financial derivatives										
Other instruments										

- Financial Accounts is the financial balance sheet of the total economy
- Provides a systematic overview by economic sectors
- Data on foreign exposures are recorded in the ROW accounts
- Assets and liabilities are broken down into financial instruments

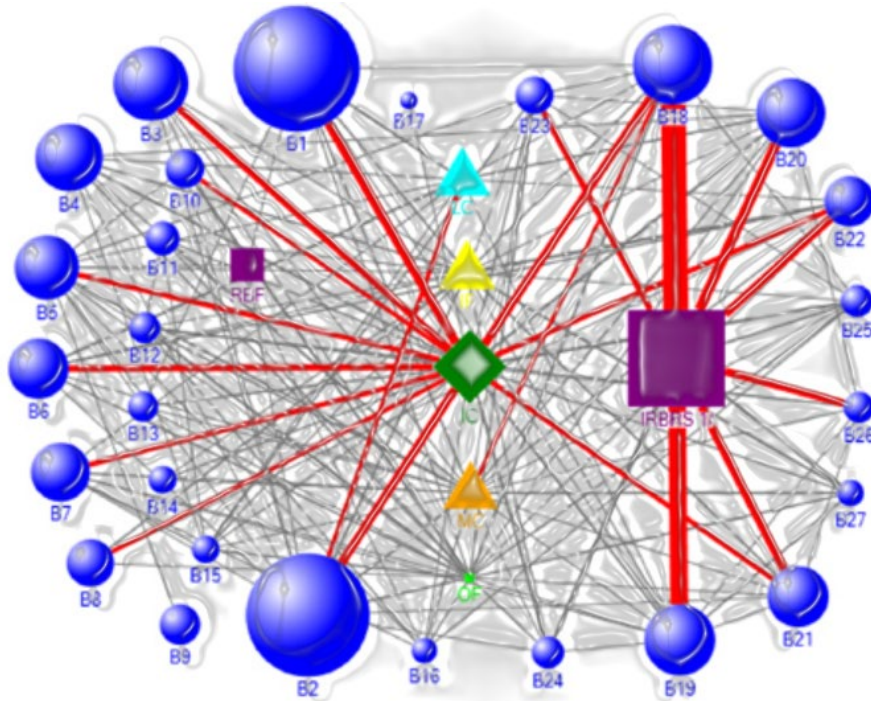


- Why they change? : savings, revaluations
- How they change?: transactions, other flows
- How are they interlinked?: whom-to-whom

Financial Accounts

WHY IS IT IMPORTANT TO USE?

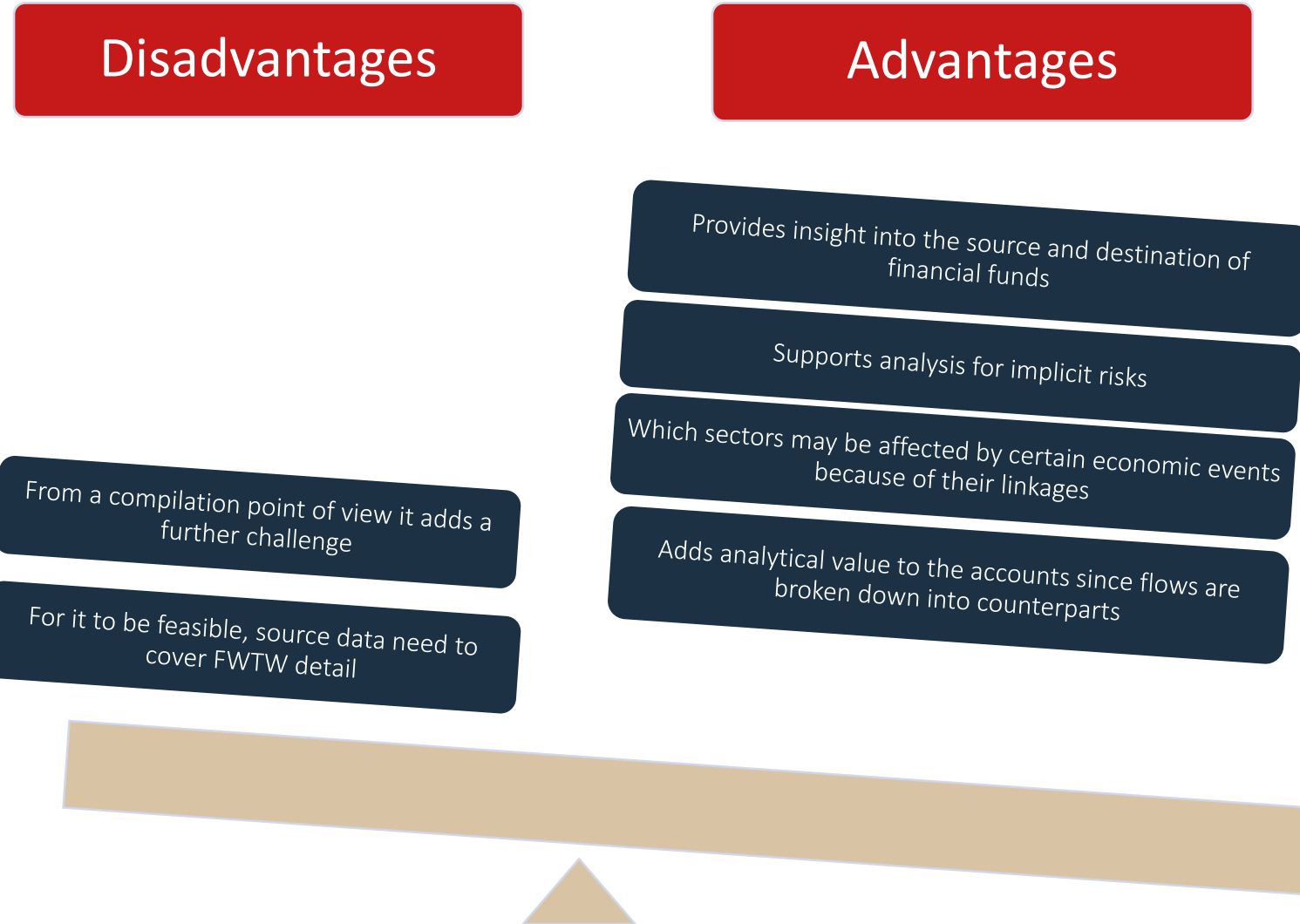
- Financial system should be considered as a whole
- More attention to linked areas of the system
- Common risks arising from non financial sectors and the financial sector, and its contagion.





Use of Financial Accounts

WHY IS IT IMPORTANT TO USE?

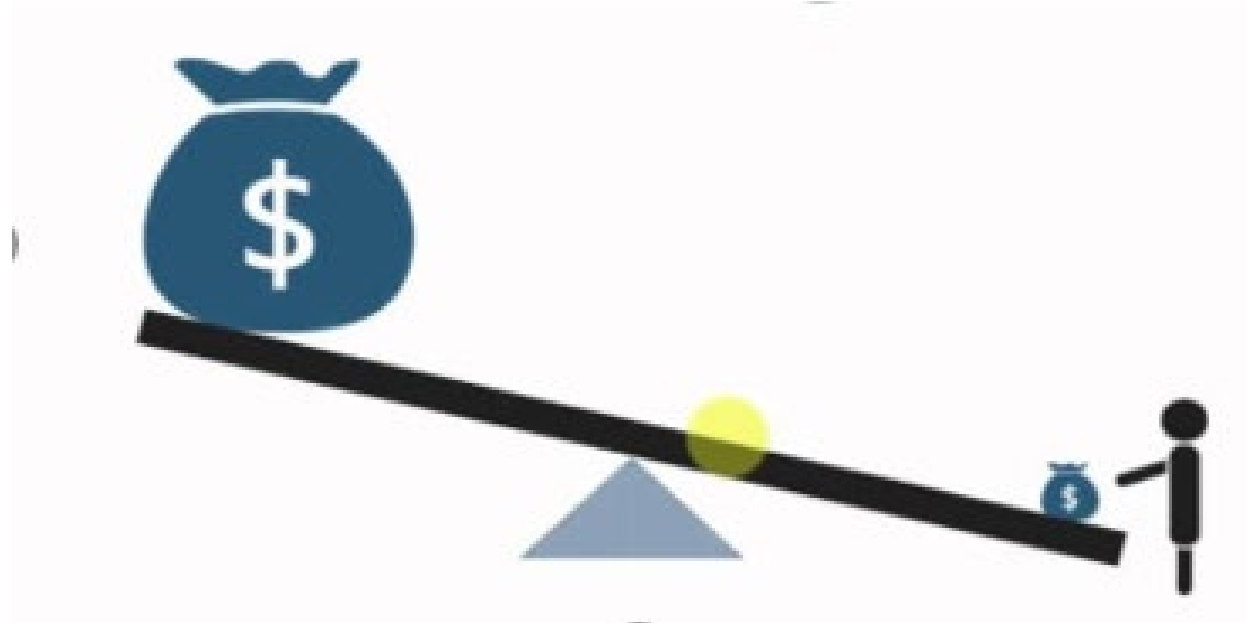




Use of Financial Accounts

WHY IS IT IMPORTANT TO USE?

- Balance sheet information provided by sectoral financial accounts
- Defining and monitoring shadow banking
- Monitoring liquidity conditions cross-border and inter sectoral financial flows.



Use of Financial Accounts

FINANCIAL ACCOUNTS REPORT

DATA GOVERNANCE AND
STATISTICS DEPARTMENT
2024-I



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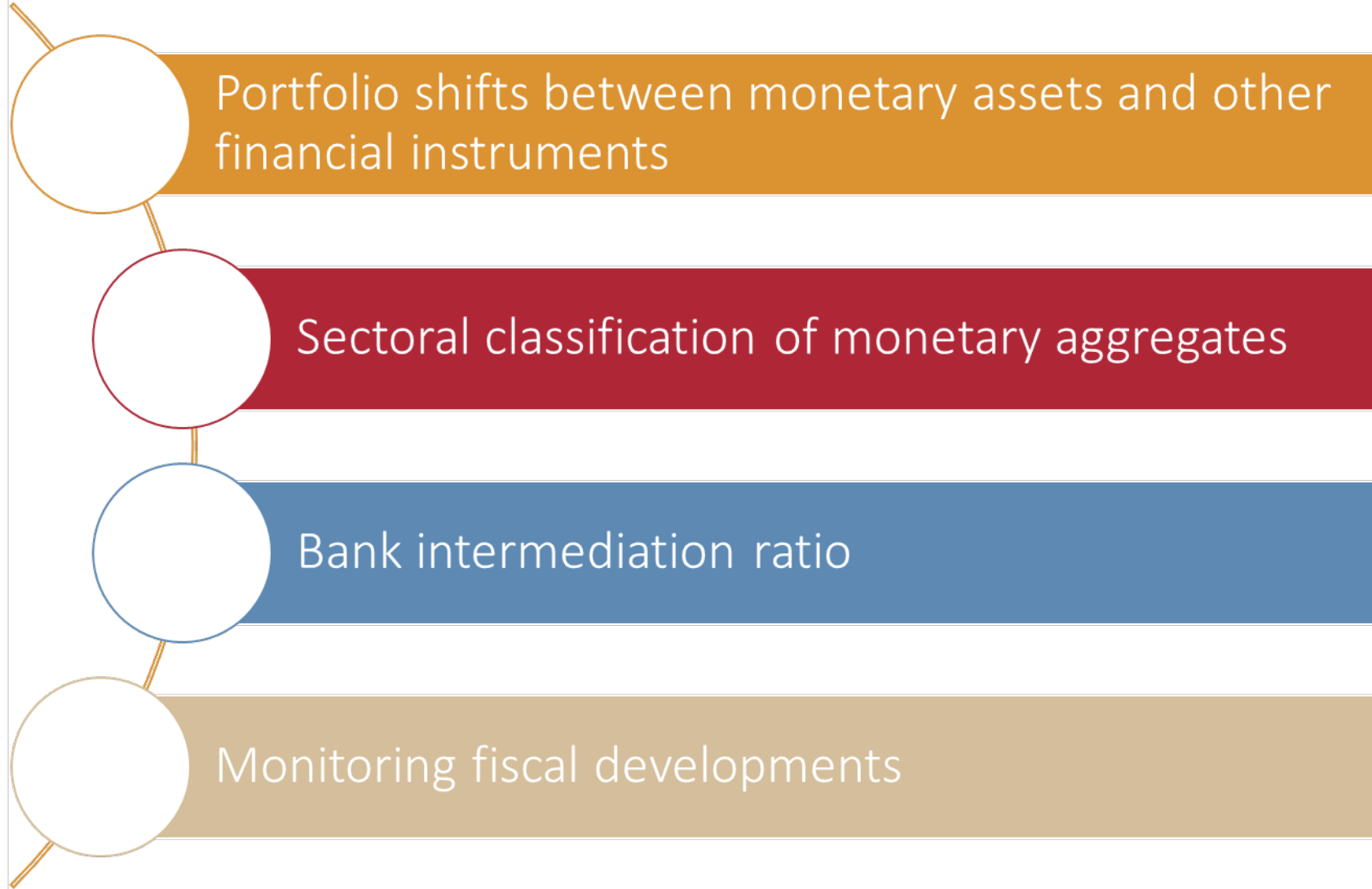
<https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN>

Research and Publications > Reports > Financial Accounts Report

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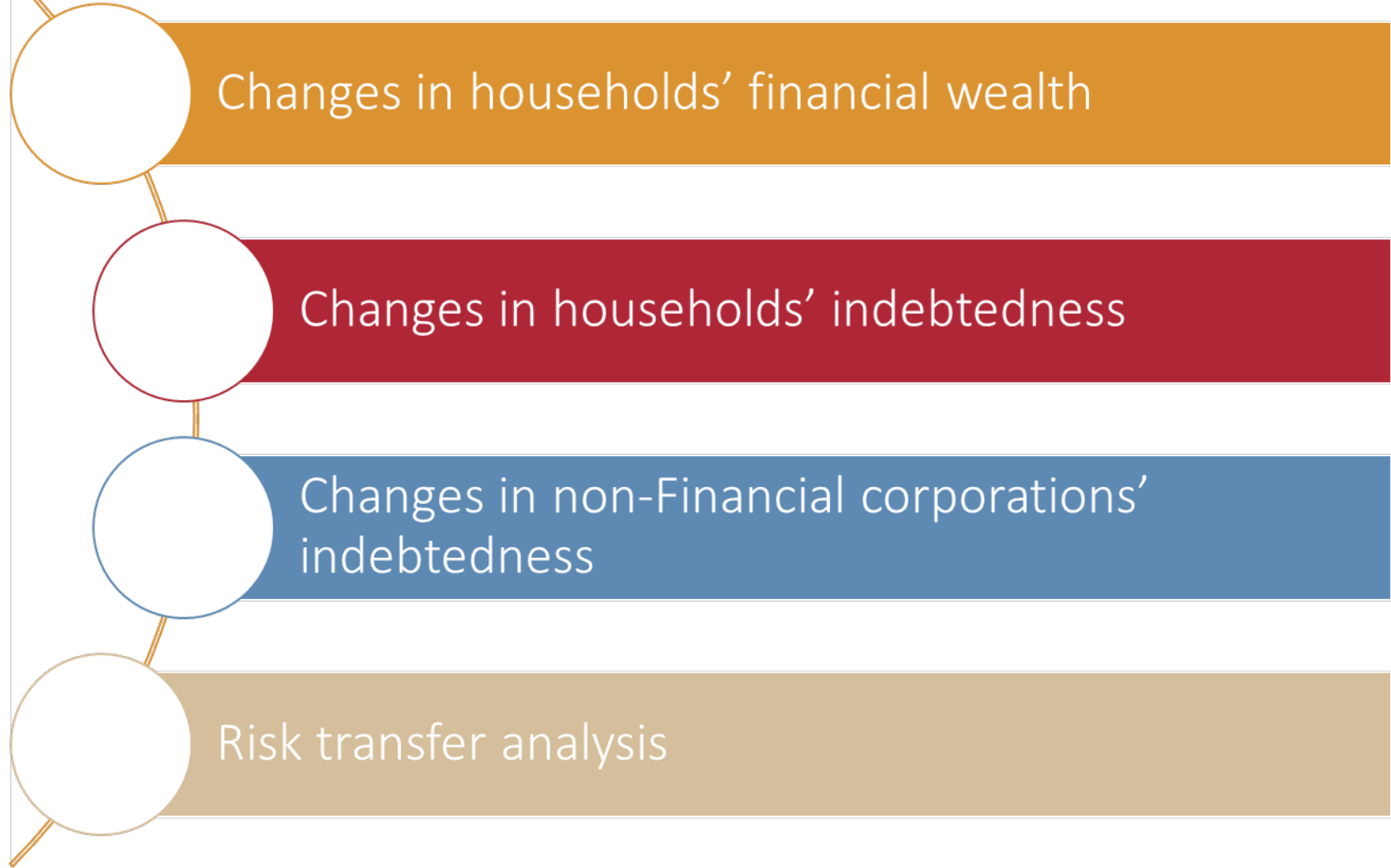
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Monetary, Financial and Fiscal Analysis



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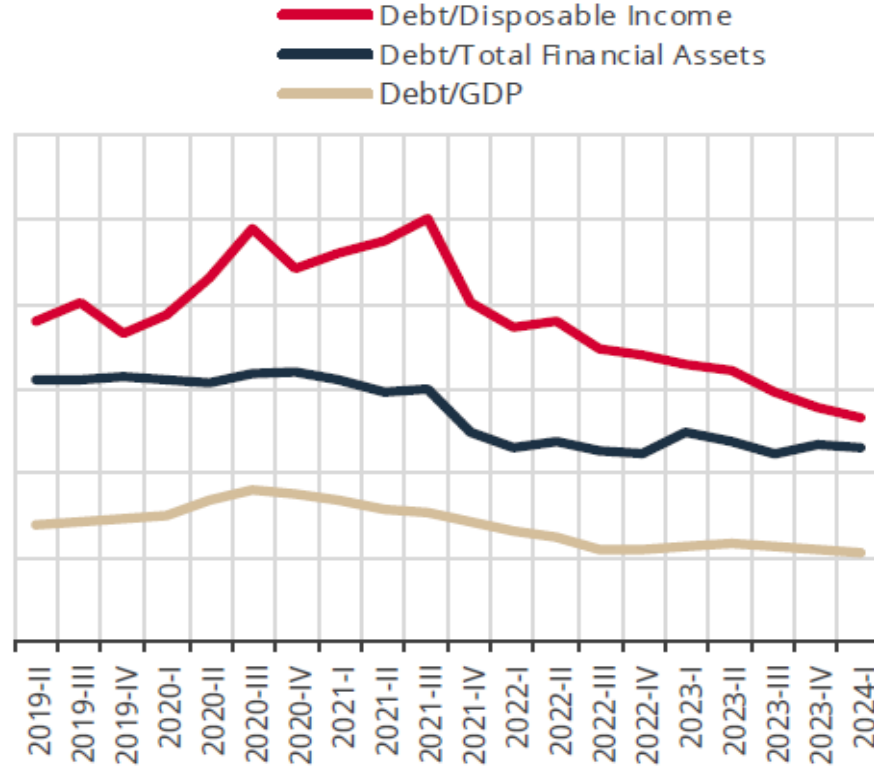
Assessing Sectoral Balance Sheets



Use of FA

Assessing Sectoral Balance Sheets

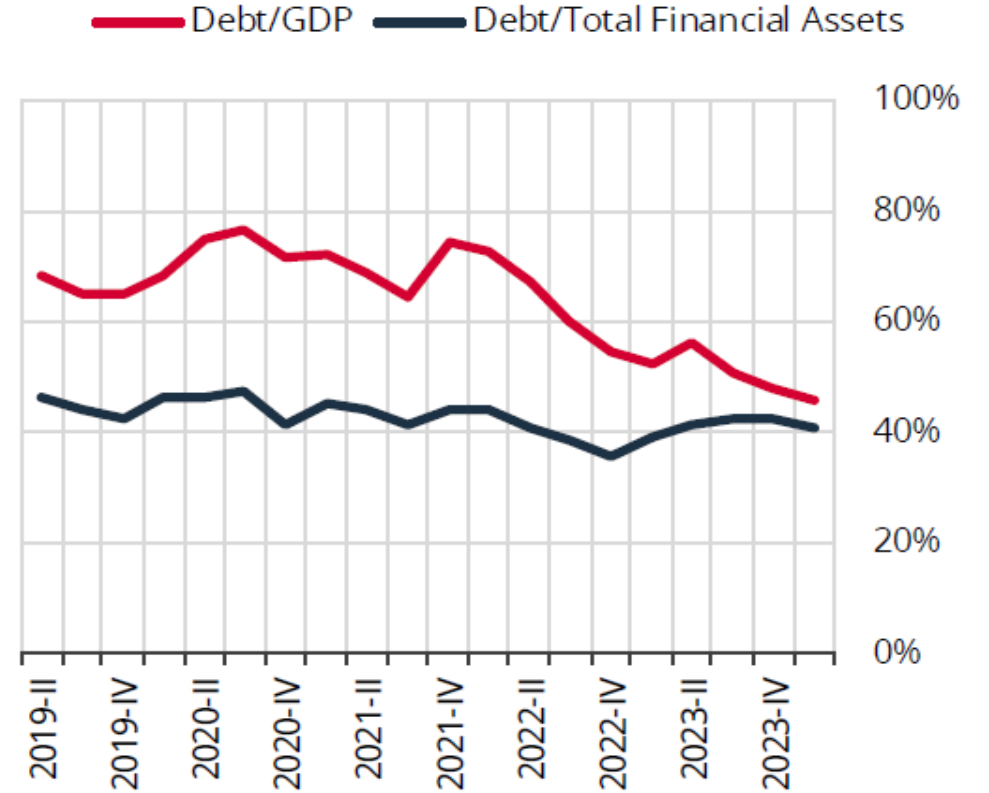
Chart 27: Household Debt (%)



Source: CBRT

Last Observation: 2024-I

Chart 23: Non-Financial Corporations' Debt* (%)



Source: CBRT, TURKSTAT.

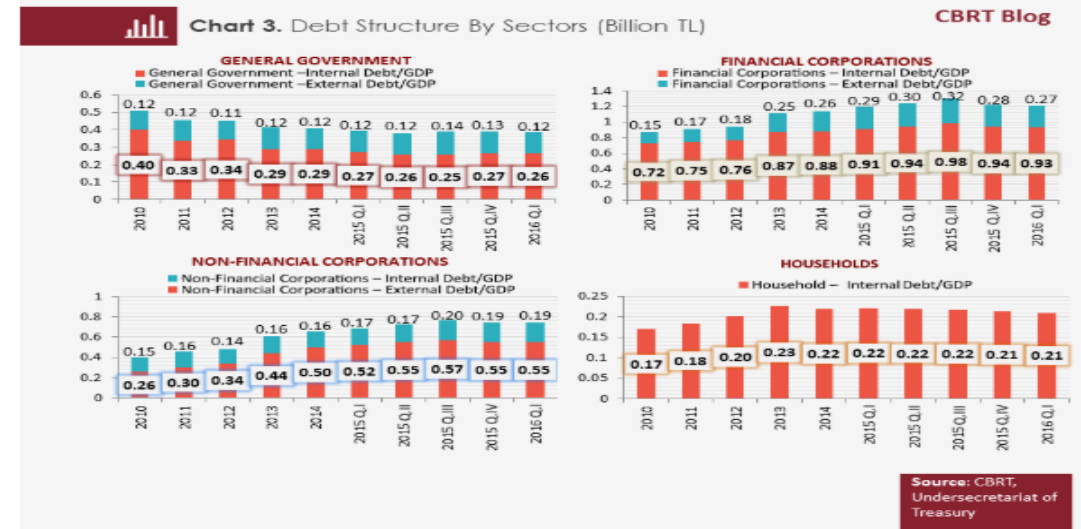
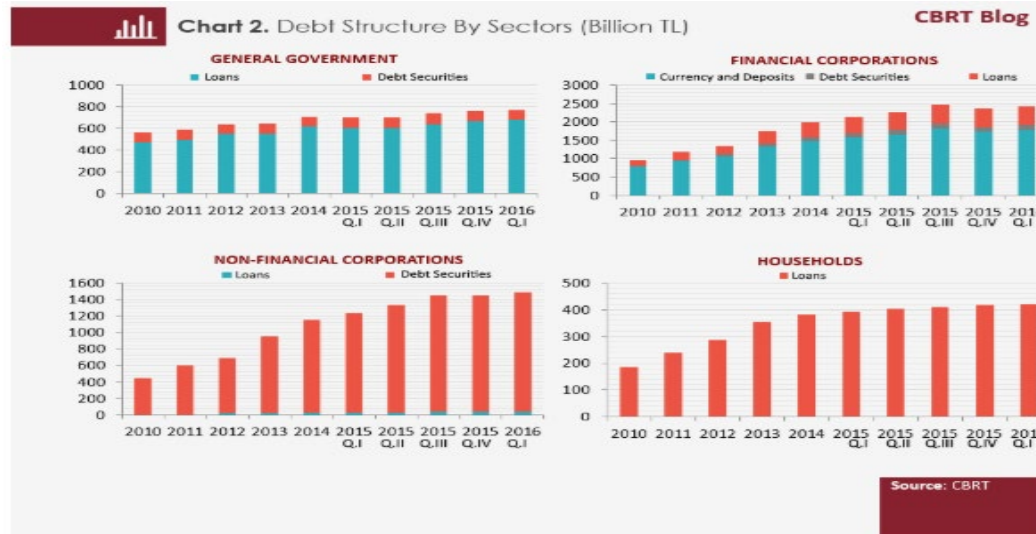
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Note: Debts are composed of loans and debt securities.

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Assessing Sectoral Balance Sheets

CBRT Blog



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Assessing Sectoral Balance Sheets

CBRT Blog

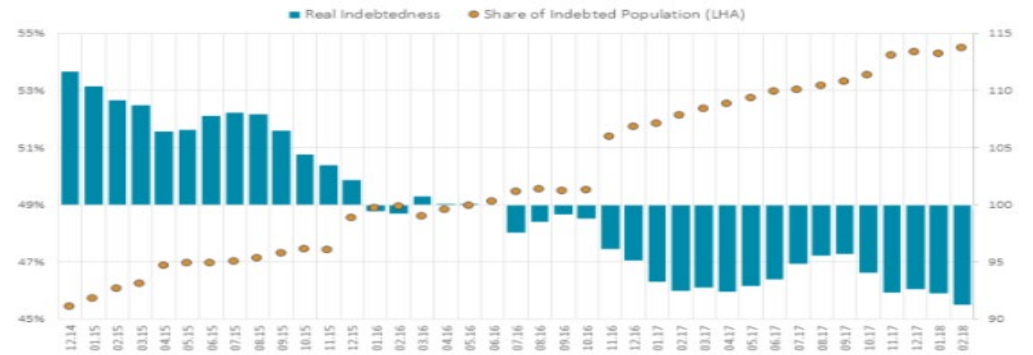
Chart 1. Change in Household Indebtedness in Turkey (%) CBRT Blog



* Household debt stock has been deflated by the CPI.

Source: Financial Accounts, Central Bank of the Republic of Turkey; Turkish Statistical Institute

Chart 2. Retail Loan Debt and Share of Indebted Population CBRT Blog



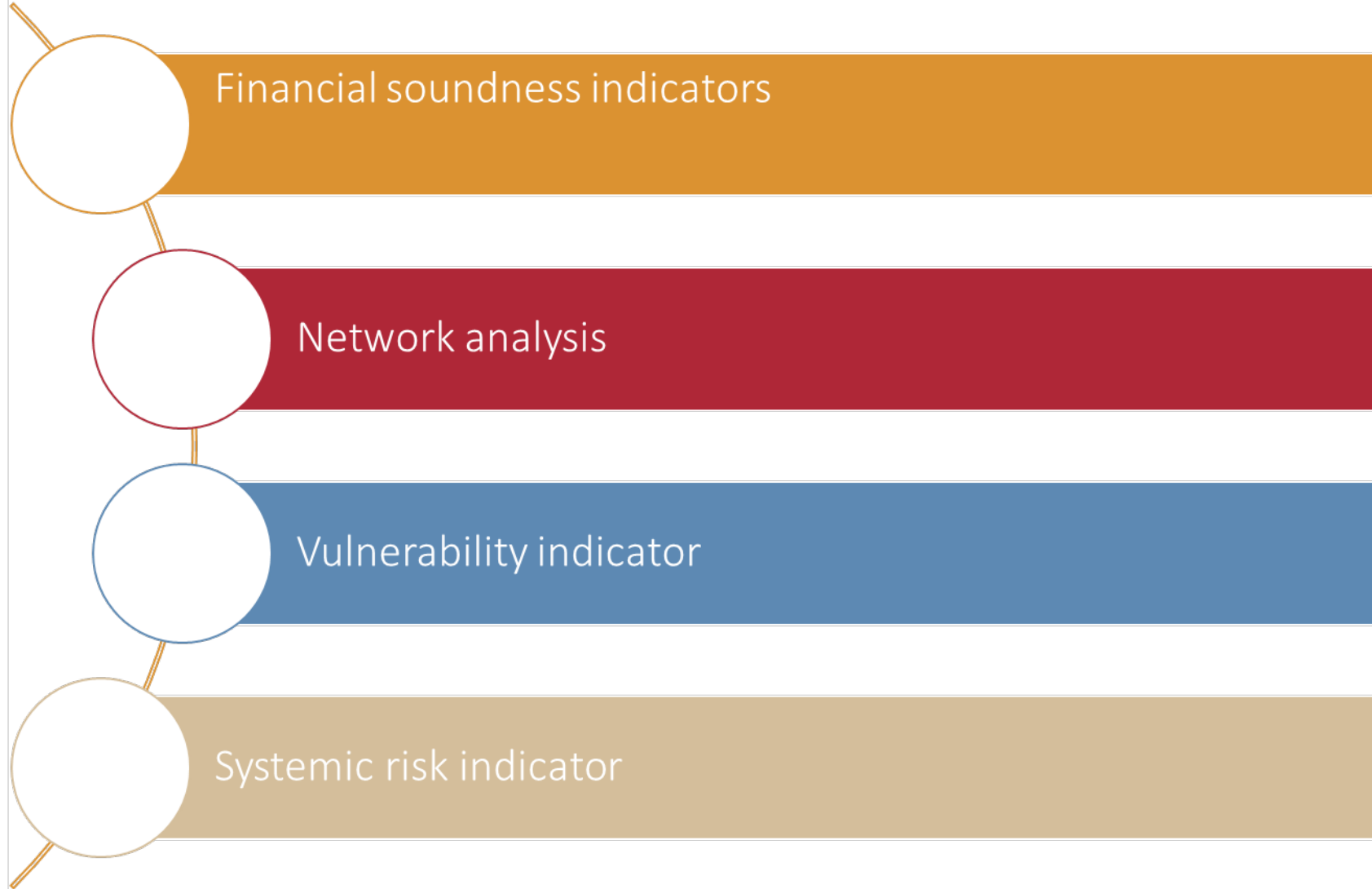
Retail loans include housing, vehicle, and general-purpose loans as well as individual credit card balances of banks and financing companies. Real indebtedness shows the inflation-adjusted indebtedness level per borrower calculated by indexing the analysis period average to 100. Share of indebted population is the ratio of the total number of borrowers to the segment of population older than 15 years of age estimated via linear interpolation.

Source: The Banks Association of Turkey Risk Center, Turkish Statistical Institute

Eroglu, E., Kılıç, Y., 2018. "Household Indebtedness Level From a Comparative Perspective", CBRT Blog, Available at www.tcmbblog.org

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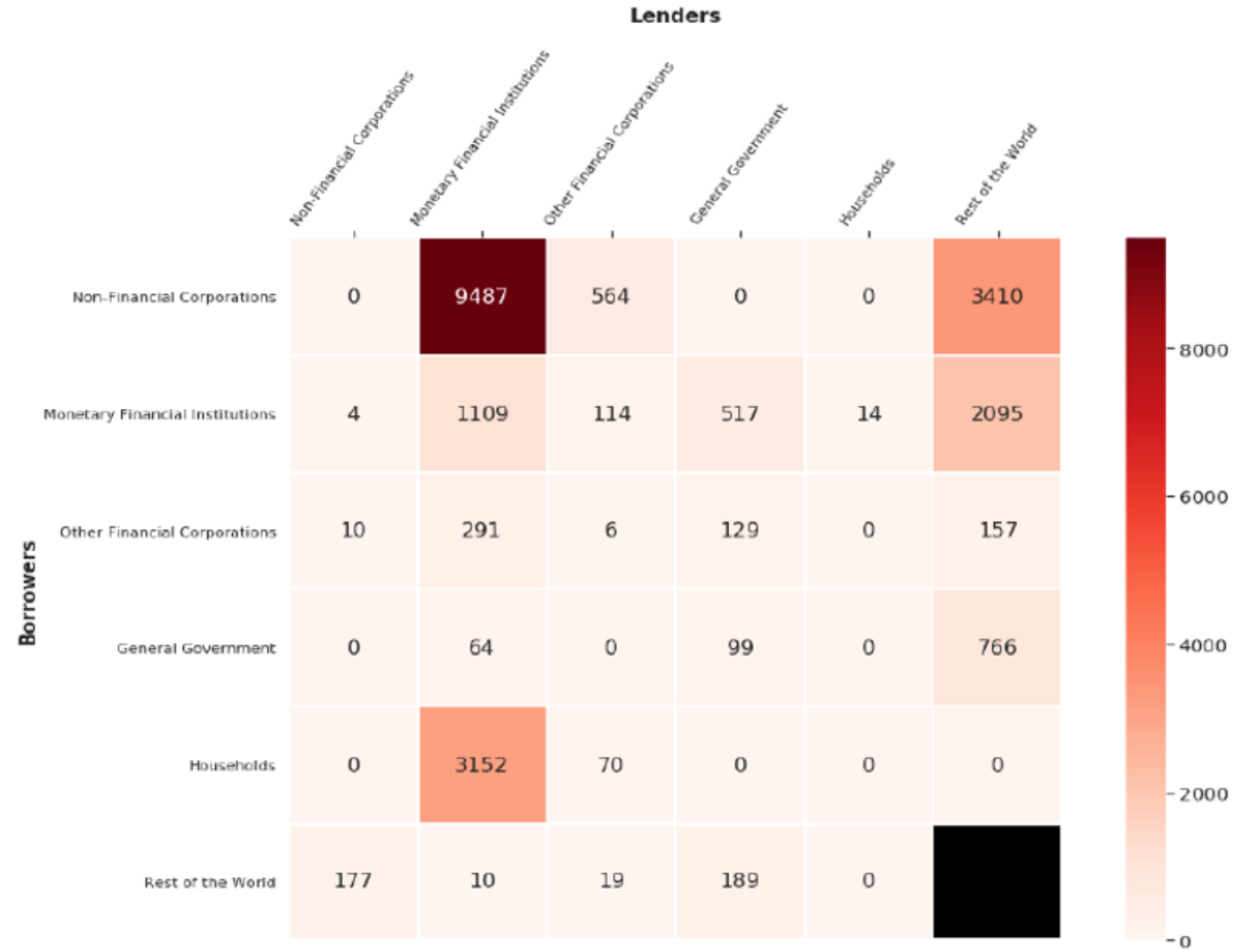
Macroprudential and Financial Stability Analysis



Use of FA

Network Analysis

Chart 28: Loans, From-Whom-to-Whom (Stock, TRY Billion)



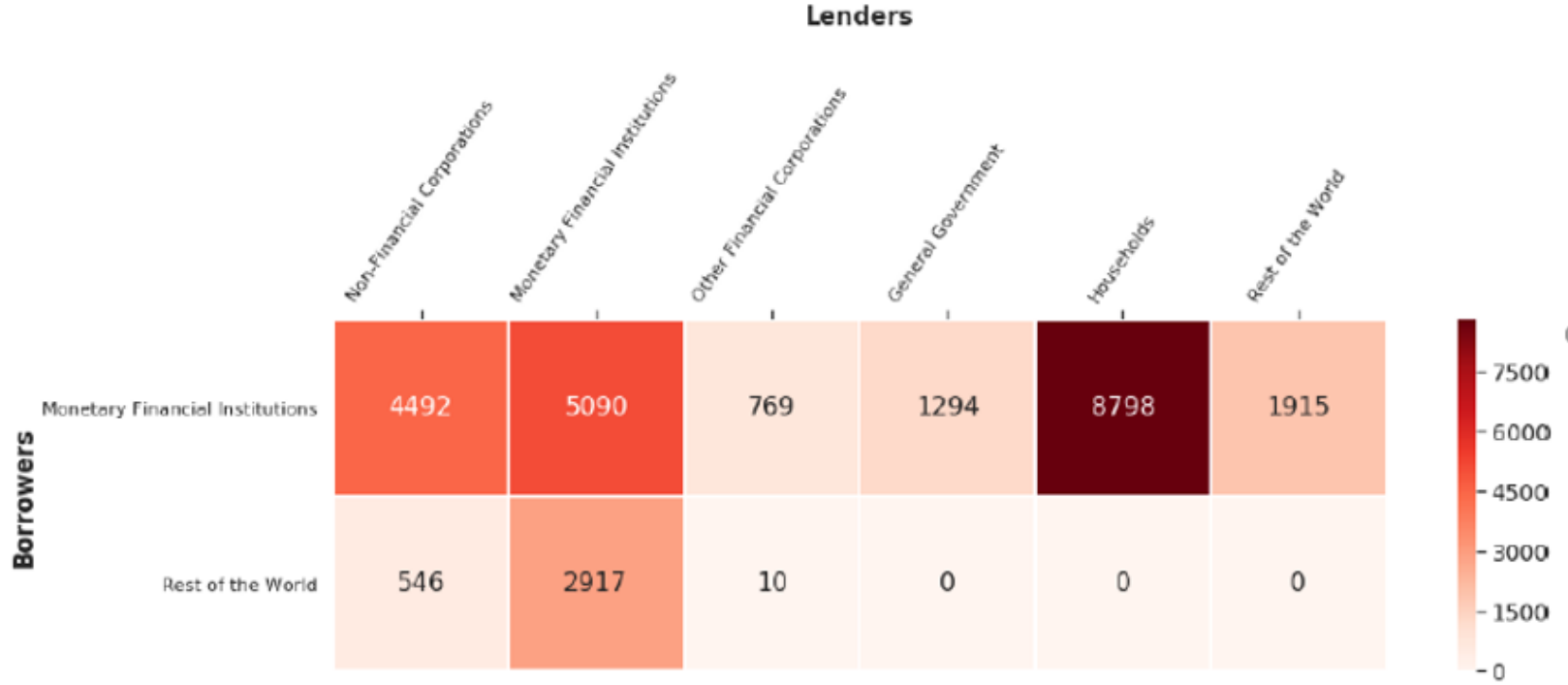
Sources: CBRT.

Last Observation: 2024-I

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Network Analysis

Chart 29: Deposits, From-Whom-to-Whom (Stock, TRY Billion)



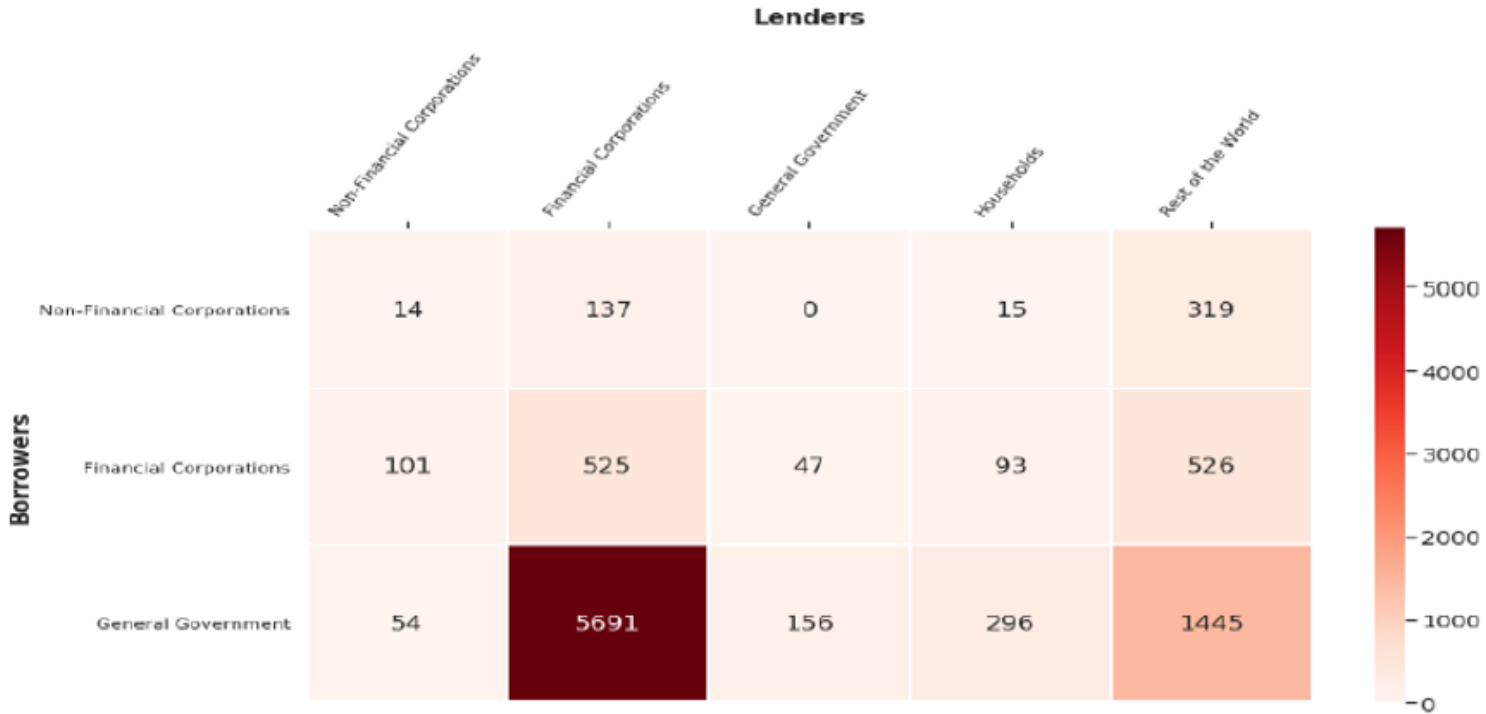
Sources: CBRT.

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Network Analysis

Chart 30: Debt Securities, From-Whom-to-Whom (Stock, TRY Billion)⁴



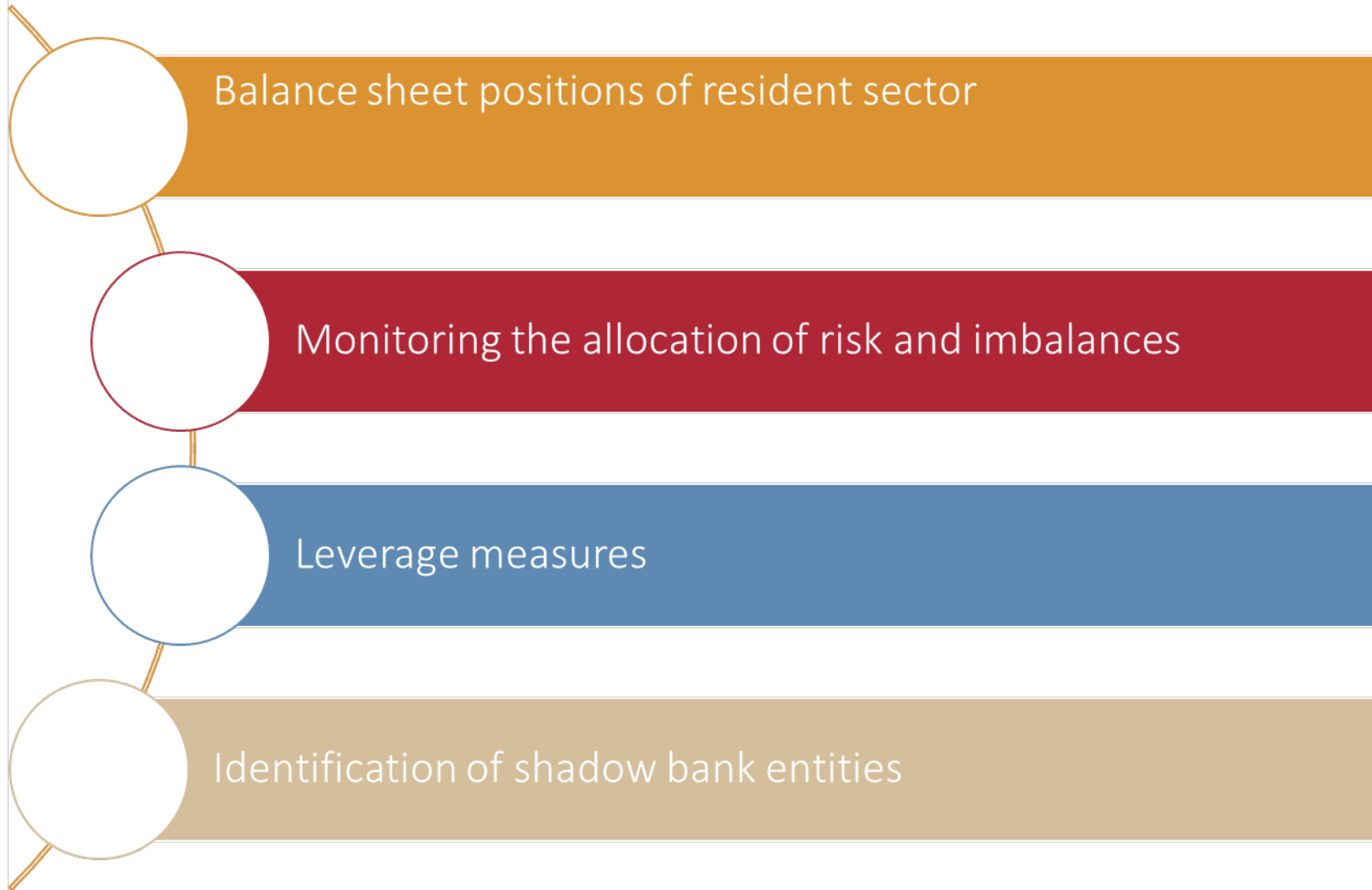
⁴ Whom-to-whom table for debt securities is compiled from the securities database.

Sources: CBRT.

Last Observation: 2024-I

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Financial Structure Analysis



Use of FA

Risk Indicators

Financial Balance Sheet Risk Indicators (2024Q1)					
		MFI	OFC	NFC	HH
Debt Paying Ability	Net Financial Worth (Billion TRY)	575	45	-13,910	10,658
	Liabilites/ GDP	1.05	0.16	1.58	0.12
	Liabilities/ Financial Assets	0.98	0.99	1.41	0.26
Capital Structure Mismatch	Debt/GDP	0.08	0.02	0.46	0.11
	Debt/ Equity	0.89	0.26	1.43	
External Risk	Net External Financial Worth (Billion TRY)	-329	-40	-1,645	
	External Liabilites/ GDP	0.04	0.00	0.08	
	External Liabilites/ Liabilities	0.04	0.01	0.05	

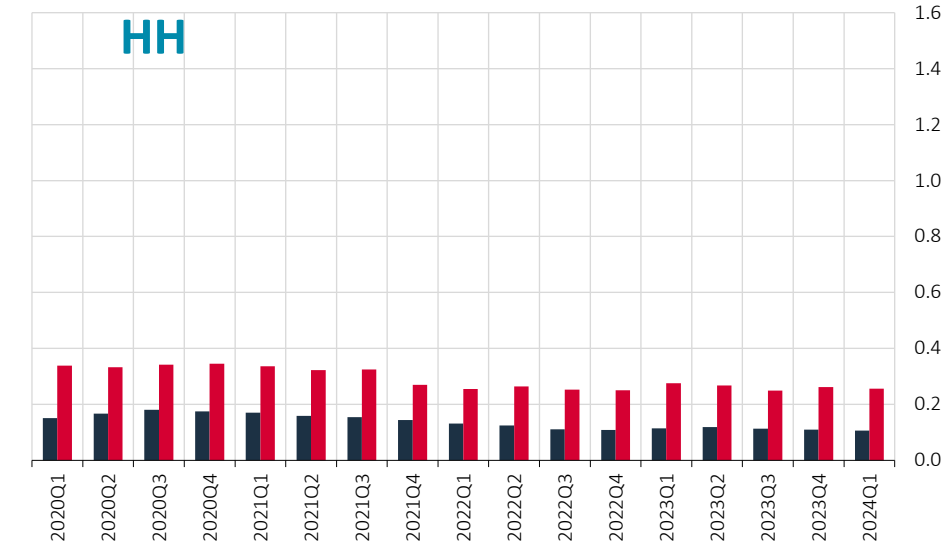
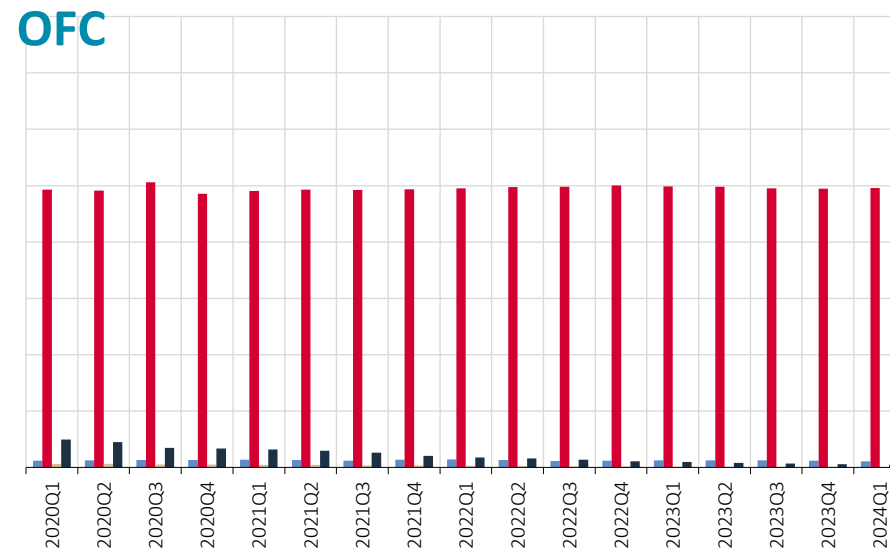
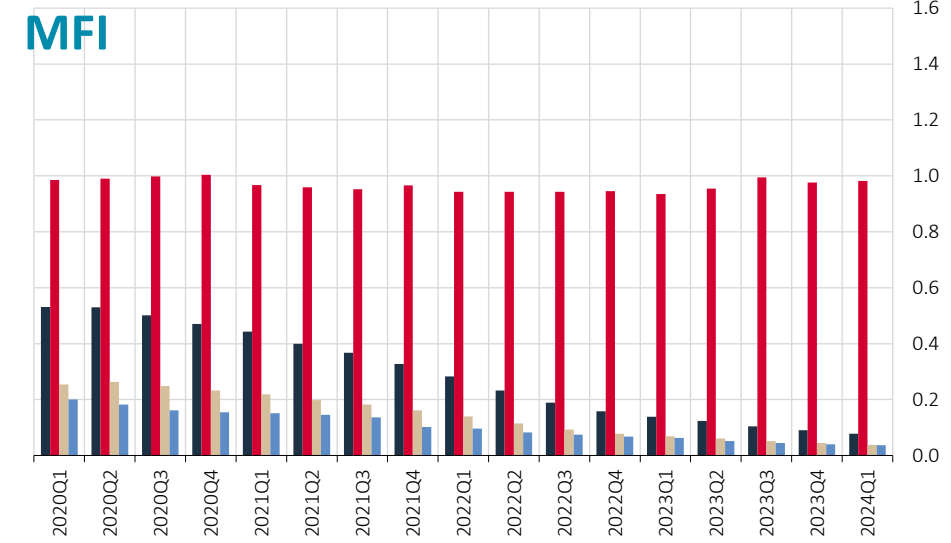
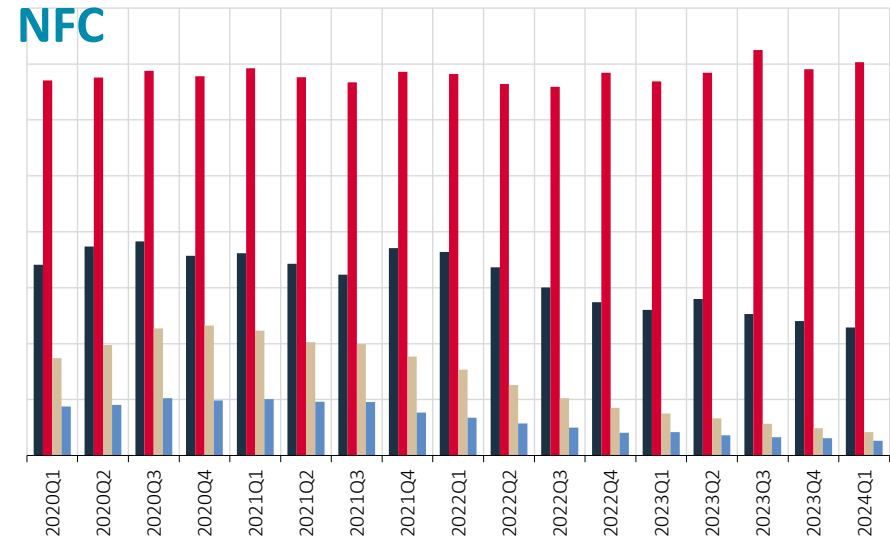
Sources: CBRT.

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Risk Indicators

■ Debt/ GDP ■ Liabilities / Financial Assets ■ Foreign Liabilities / GDP ■ Foreign Liabilities / Liabilities



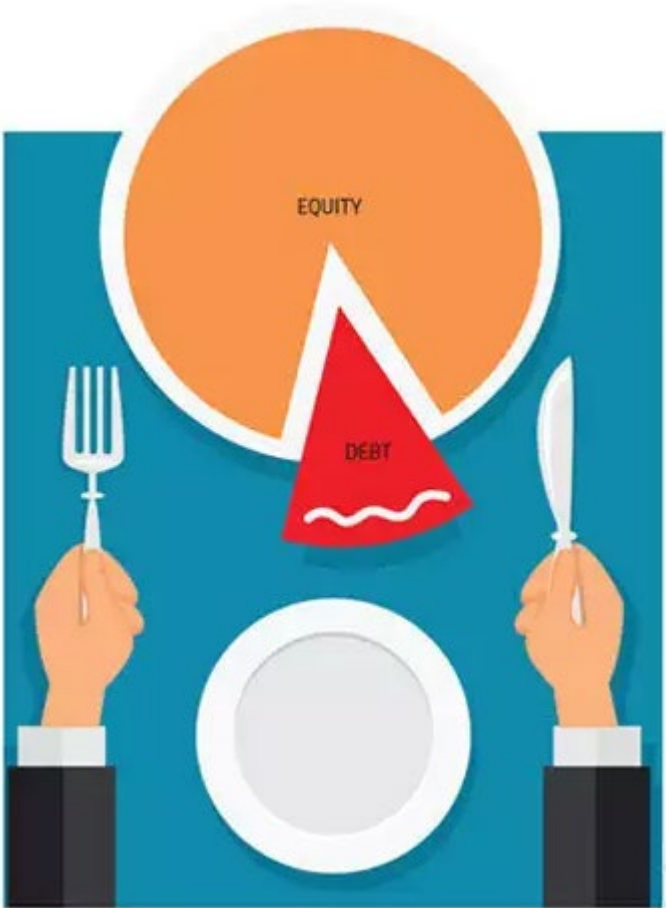
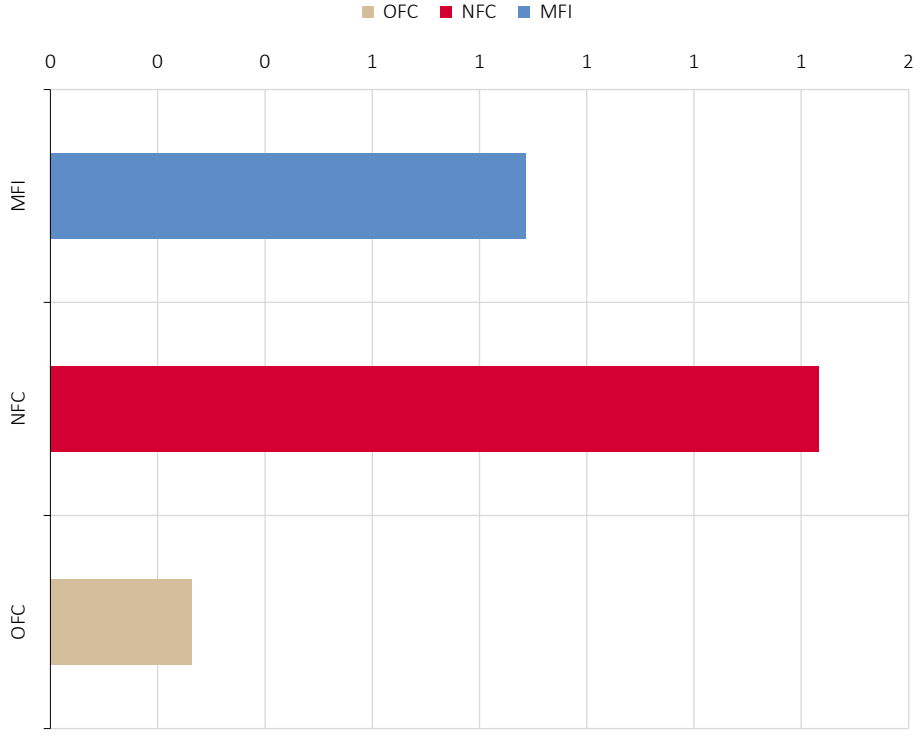
Sources: CBRT.

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Risk Indicators

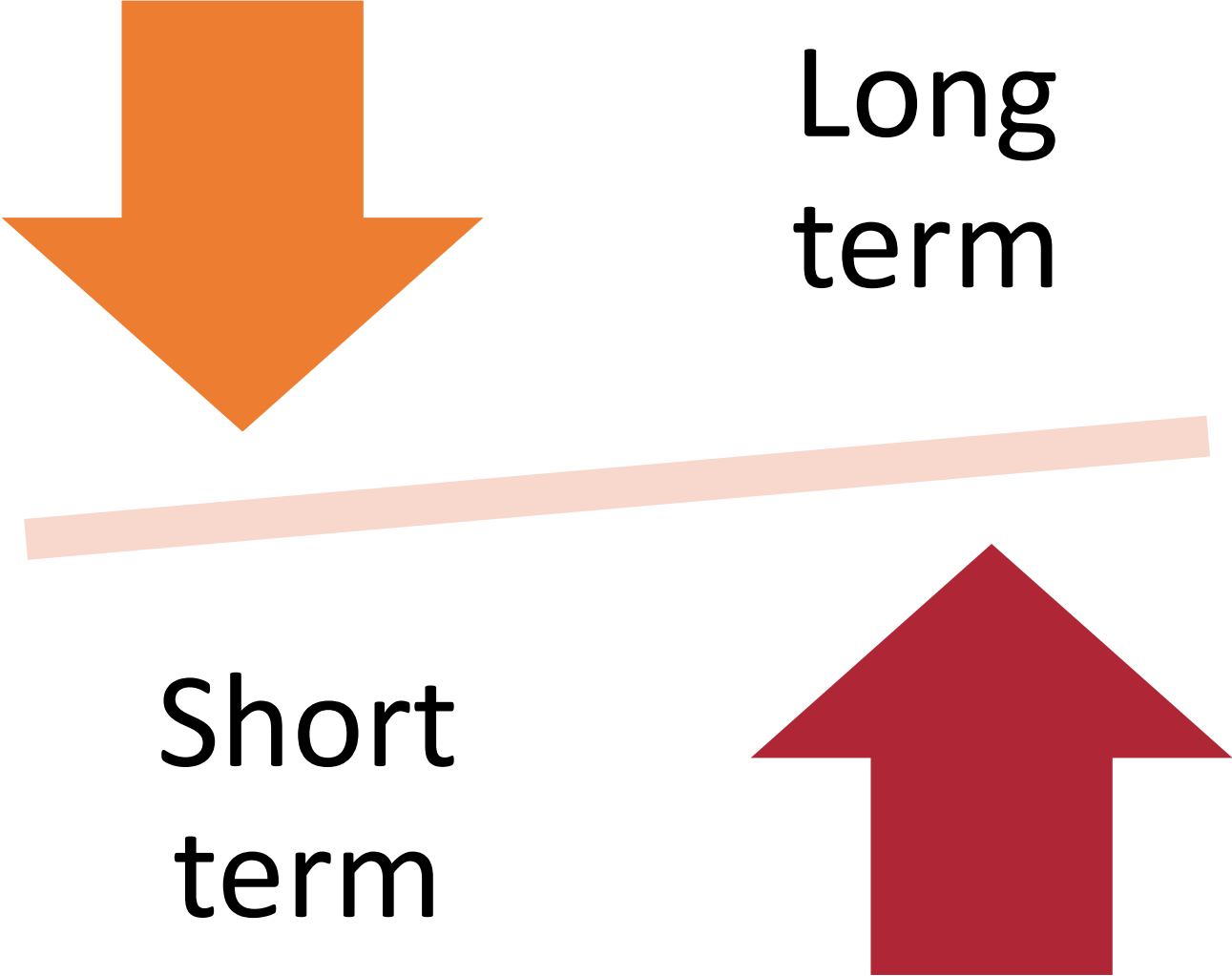
Debt/Equity Ratio



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Risk Indicators

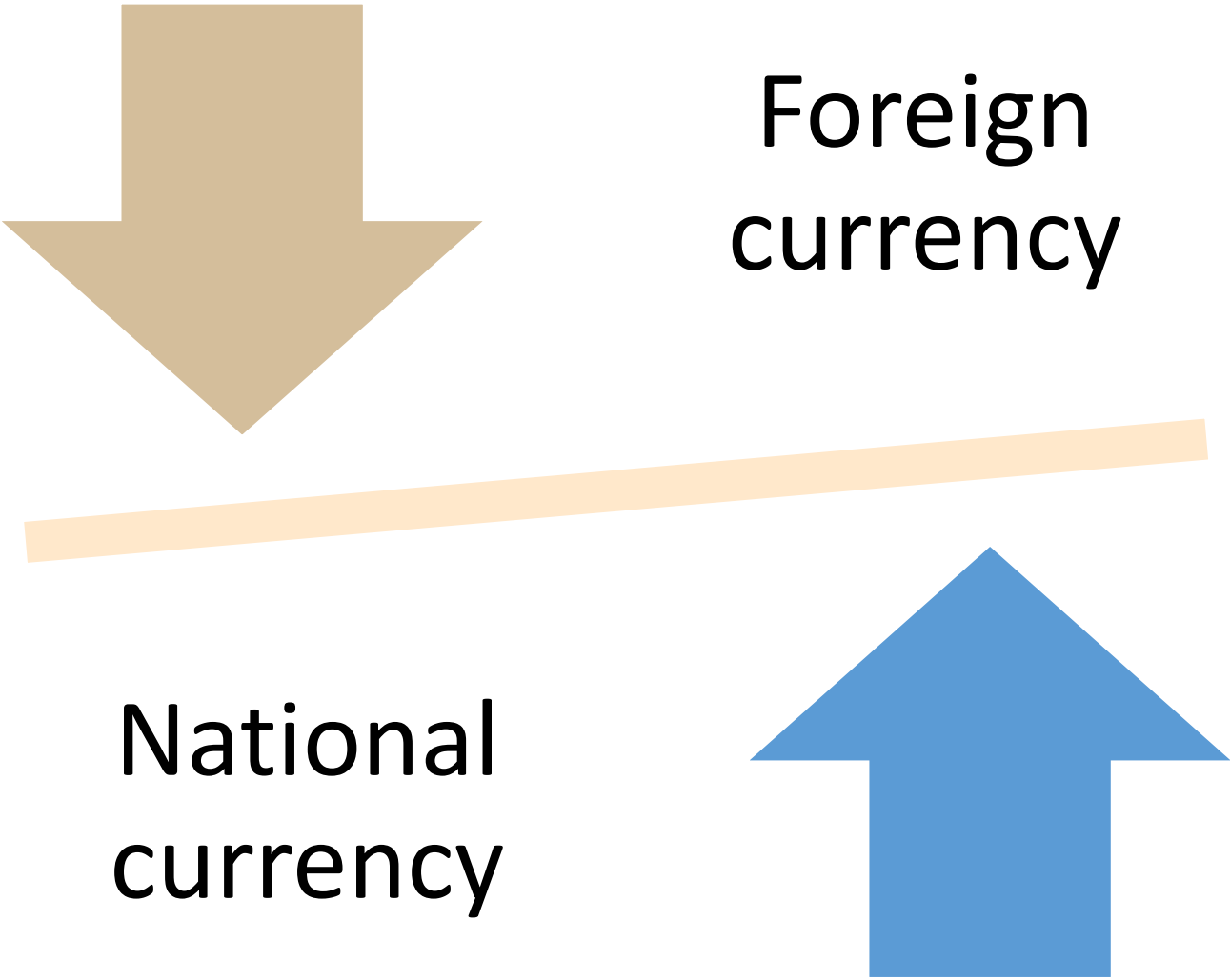
Maturity mismatch



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Risk Indicators

Currency mismatch



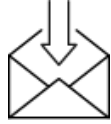
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Future Works

- Increase Data Awareness
- Completing Who-to-Whom Matrices
- Completing Integrated Accounts
- Improving Data Length
- Micro data



Thank you...



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