

IFC Workshop on the use of financial accounts, co-organised with the Central Bank of the Republic of Turkey  
18-20 March 2019, Istanbul, Turkey

## Use of Financial Accounts at the Central Bank of the Republic of Turkey<sup>1</sup>

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Central Bank of the Republic of Turkey

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<sup>1</sup> This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

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# Use of Financial Accounts at CBRT

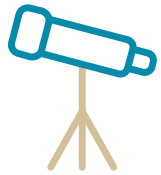
Cansu Gokce Zeybek

MARCH,18 2019 | ISTANBUL,TURKEY

# Outline



Use of Financial Accounts in Turkey

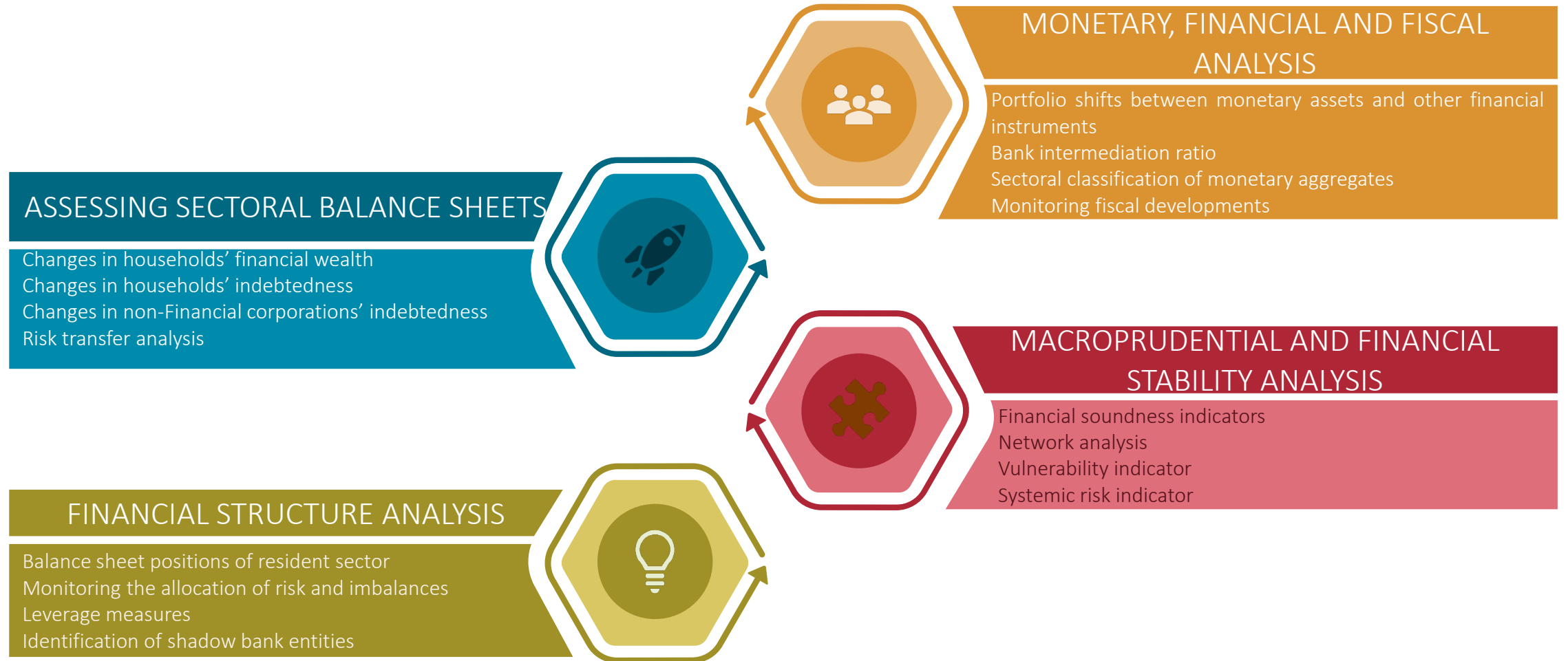


Future Work

# Use of Financial Accounts in Turkey

An abstract graphic in the top right corner consisting of a dense, overlapping grid of thin blue lines. The lines are arranged in a way that creates a sense of depth and movement, resembling a wireframe model of a complex object or a stylized architectural structure. The lines are more concentrated in some areas, creating darker shades of blue, while other areas are more sparse, showing the white background.

# Use of Financial Accounts



# FA in Reports

## 01 FINANCIAL ACCOUNTS

Financial balance sheets of sectors indicate that total Financial assets of the Turkish economy were TRY 12,798 billion, while its liabilities reached TRY 14,805 billion in 2018Q3. Net liabilities to the rest of the world increased by TRY 197 billion quarter-on-quarter to TRY 2,007 billion.

Financial flows between the second and third quarter of 2018 reveal that net transactions amounted to TRY 125 billion while a net valuation decrease worth TRY 322 billion was observed due to the change in exchange rates and market prices.

A cross-country comparison in terms of indebtedness ratios of households and non-financial corporations suggests that Turkey maintained its place among countries with low indebtedness levels in the third quarter.

## 02 FINANCIAL STABILITY REPORT

Against this background, Turkey's household debt to GDP ratio reached 16.6 percent in March 2018 (Chart III.1.16). Accordingly, Turkey ranks below selected EMEs that have a household indebtedness of 29.2 percent on average. Moreover, the spreads of the last two years reveal that Turkey's household indebtedness decreased at a faster rate than the average for selected EMEs.

## 03 INFLATION REPORT

Total debt of sectors/GDP,%

Total debt of sectors/GDP, Country Comparison

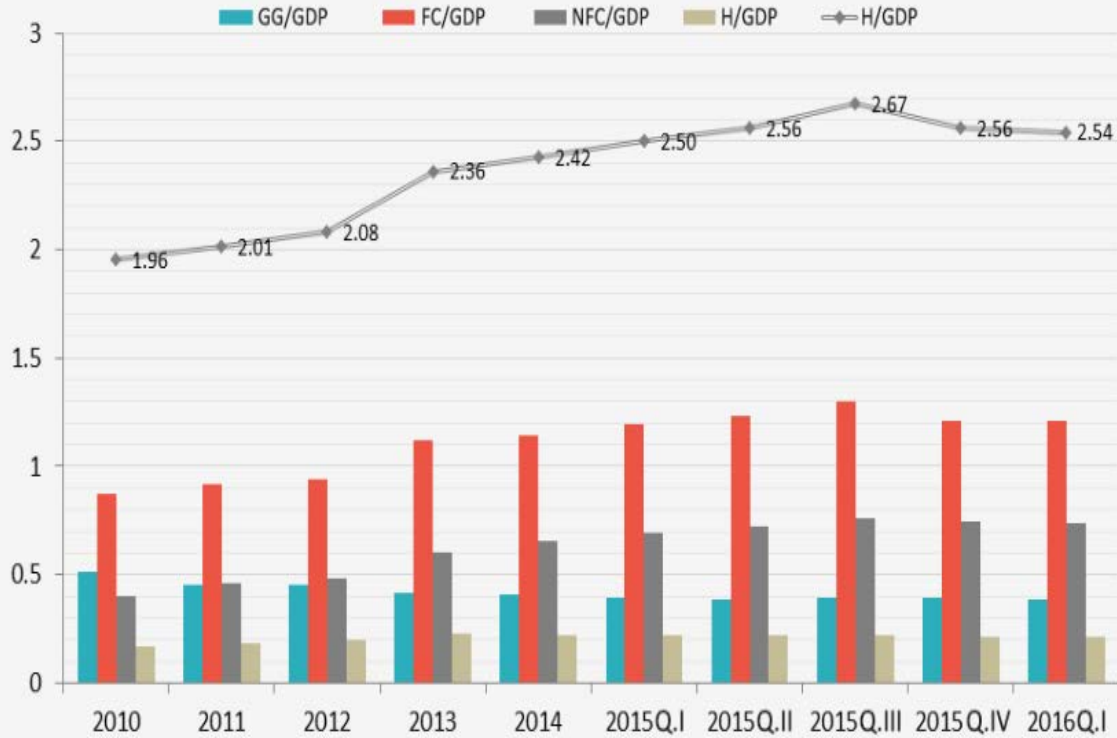
for Inflation Report Presentation.

# Cakmak and Dursun (2016)



Chart 1. Total Debts\* By Sectors/GDP (2010-2016 Q1)

CBRT Blog



\*Debts are composed of currency and deposits, debt securities and loans.

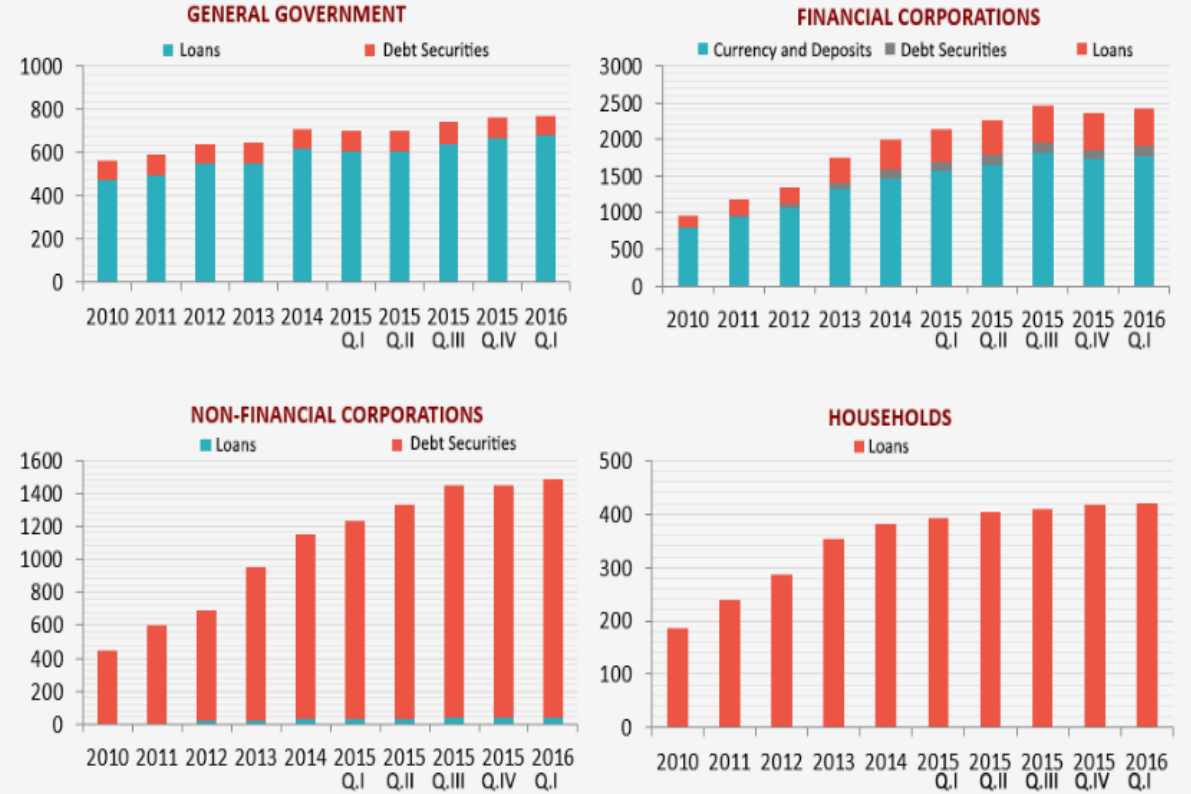
GG: General Government, FC: Financial Corporations, NFC: Non-Financial Corporations, H: Households, GDP: Gross Domestic Product

Source: CBRT



Chart 2. Debt Structure By Sectors (Billion TL)

CBRT Blog



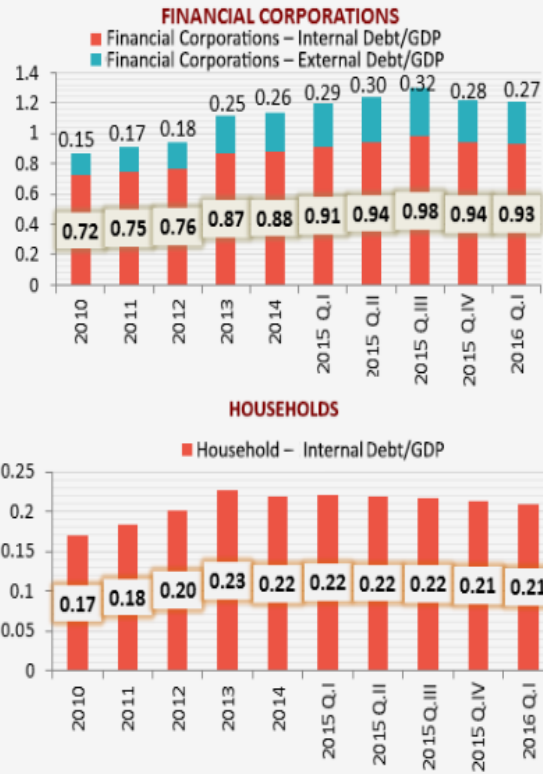
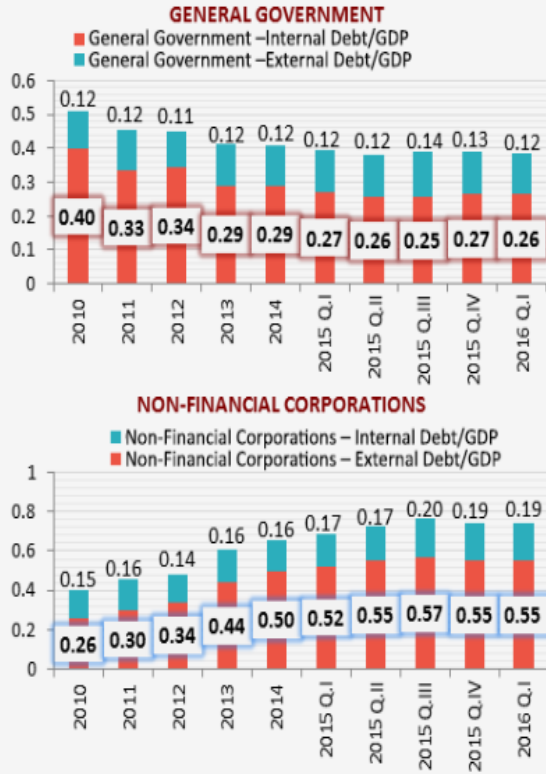
Source: CBRT

# Cakmak and Dursun (2016)



**Chart 3. Debt Structure By Sectors (Billion TL)**

CBRT Blog

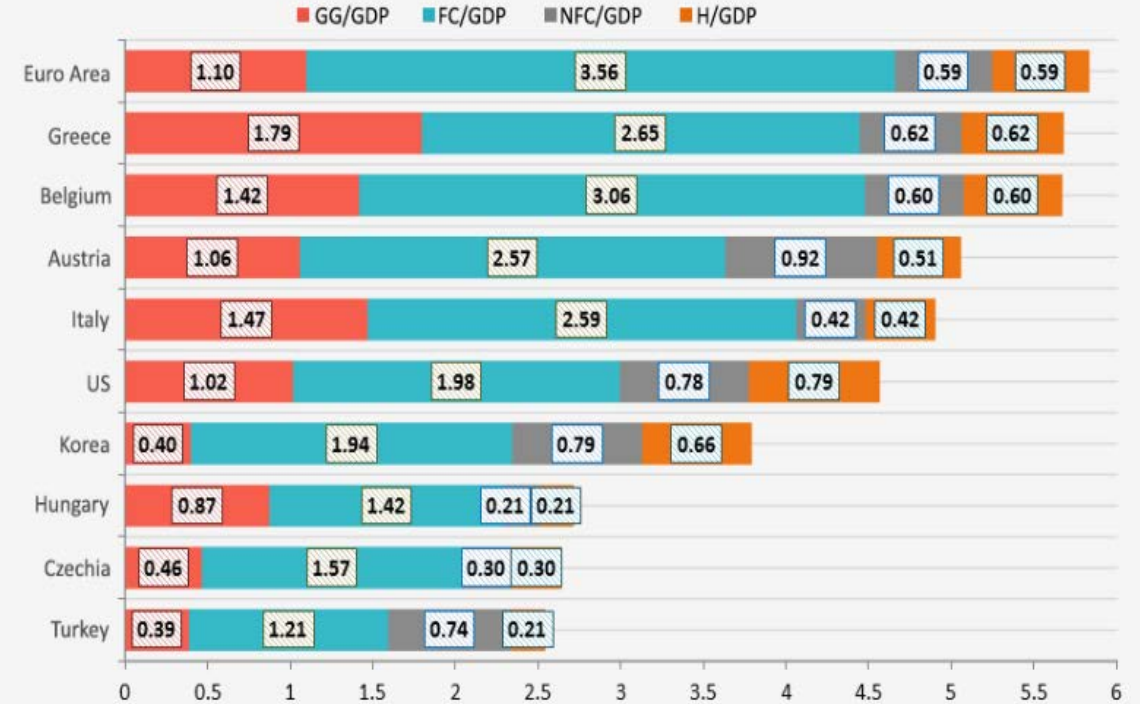


Source: CBRT,  
Undersecretariat of  
Treasury



**Chart 4. Country Comparison – Total Debts By Sectors\*/GSYH (2016 Q1)**

CBRT Blog



\*Debts are composed of currency and deposits, debt securities and loans.

GG: General Government, FC: Financial Corporations, NFC: Non-Financial Corporations,  
H: Households, GDP: Gross Domestic Product

Source: CBRT,  
OECD Statistics  
Portal

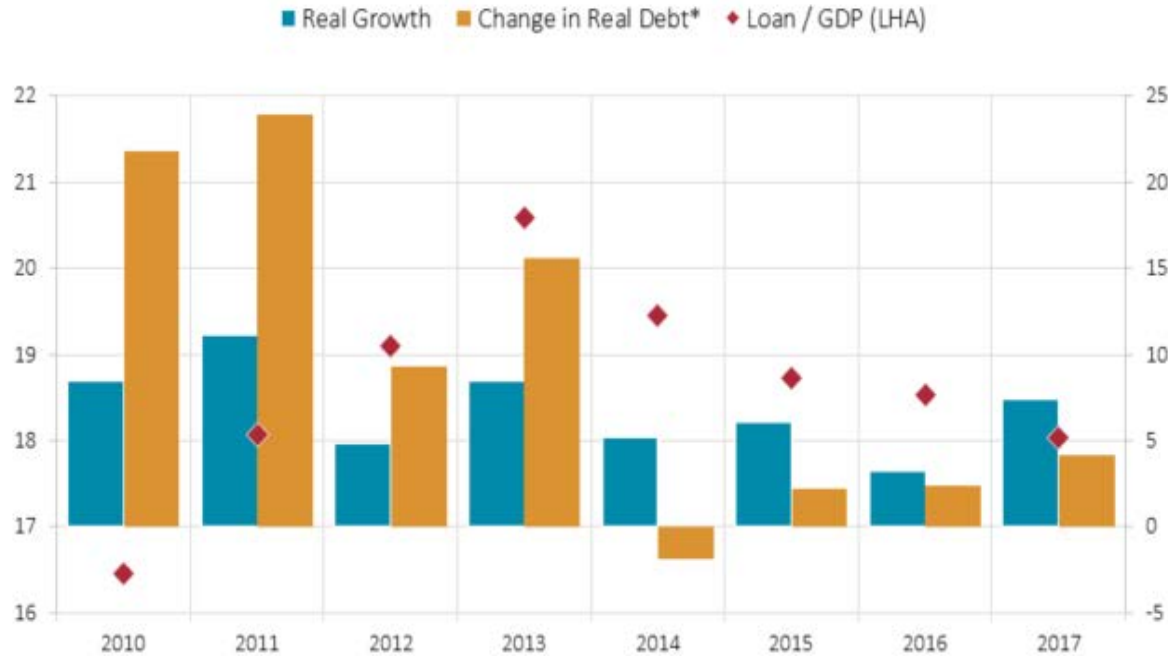




# Kilic and Egemen (2018)



**Chart 1. Change in Household Indebtedness in Turkey (%)**



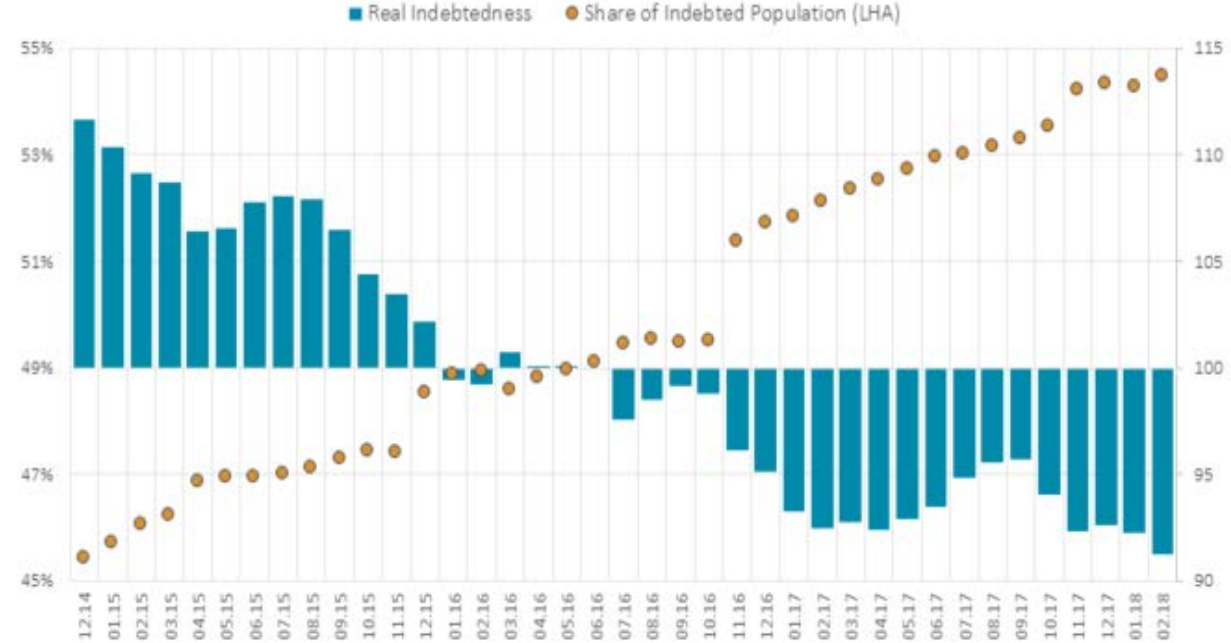
\* Household debt stock has been deflated by the CPI.

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

CBRT Blog



**Chart 2. Retail Loan Debt and Share of Indebted Population**



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.

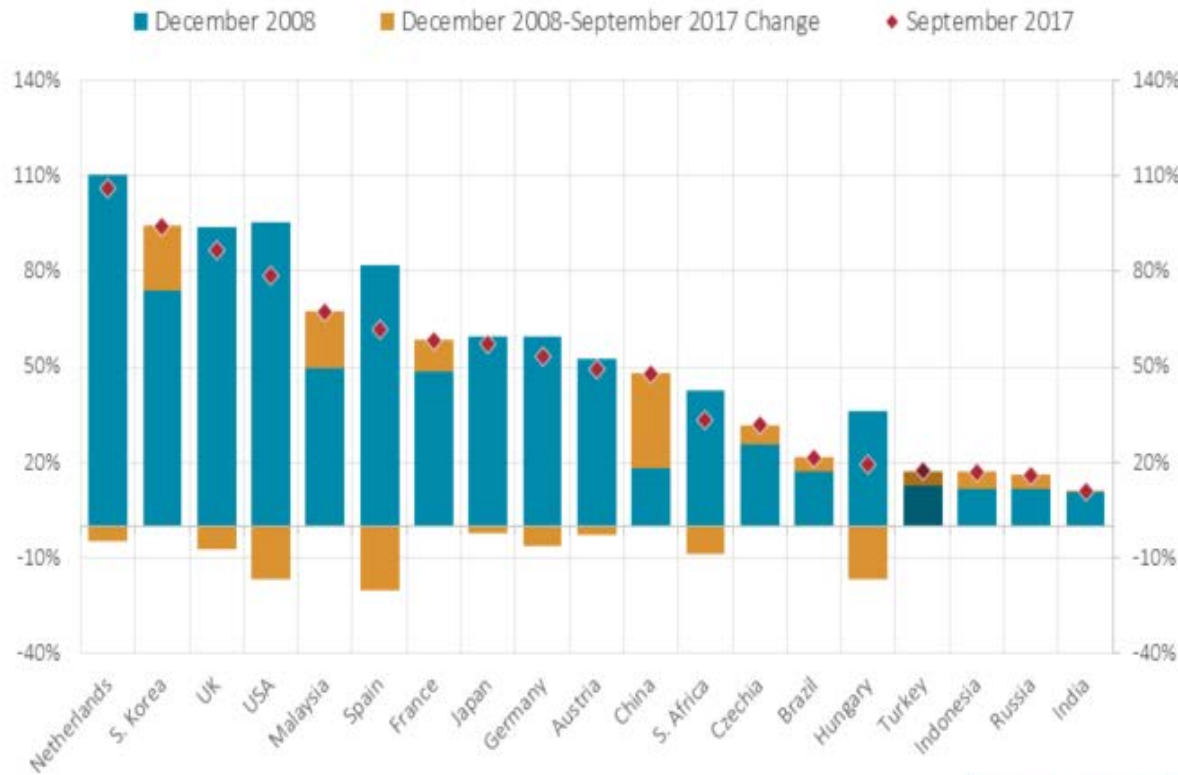
**Source:** The Banks Association of Turkey Risk Center; Turkish Statistical Institute

CBRT Blog

# Kilic and Egemen (2018)



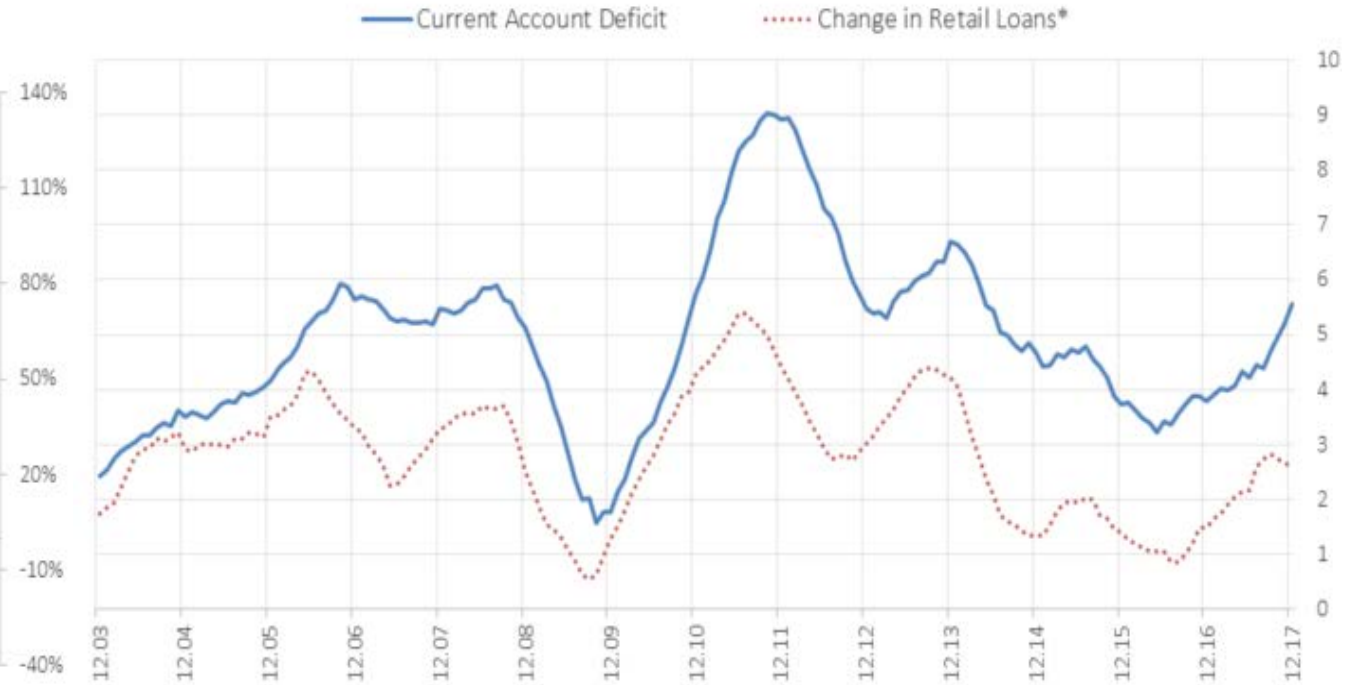
**Chart 3.** Household Indebtedness as a Percentage of GDP



Source: Bank for International Settlement



**Chart 4.** Retail Loans and Current Account Balance (as a percentage of GDP)

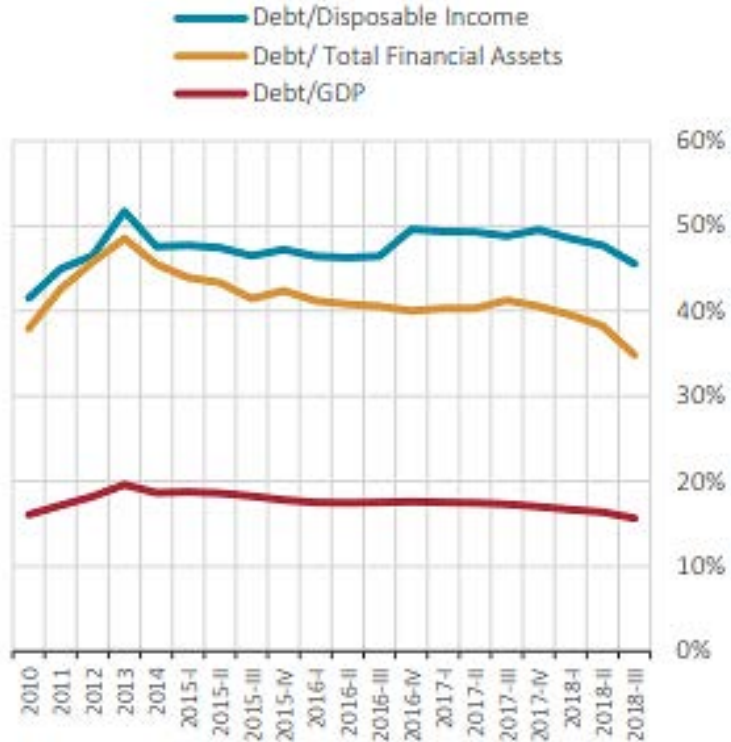


\* Calculated via dividing the retail loan balance differences by GDP levels in the same month of the previous year.

Source: BRSA, CBRT

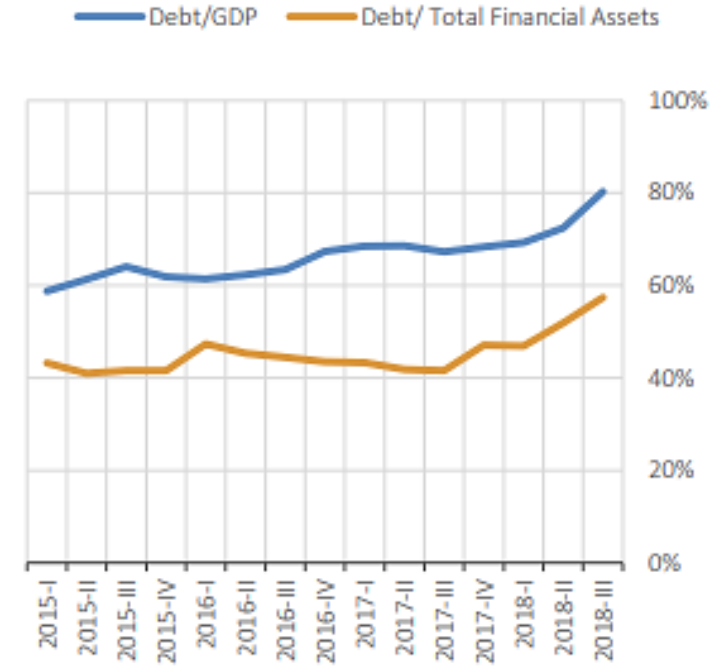
# Assessing Sectoral Balance Sheets

Chart 12: Household Debt\* (%)



Source: CBRT, TURKSTAT  
 \*Household debt is composed of loans.

Chart 19: Non-Financial Corporations' Debt \* (%)



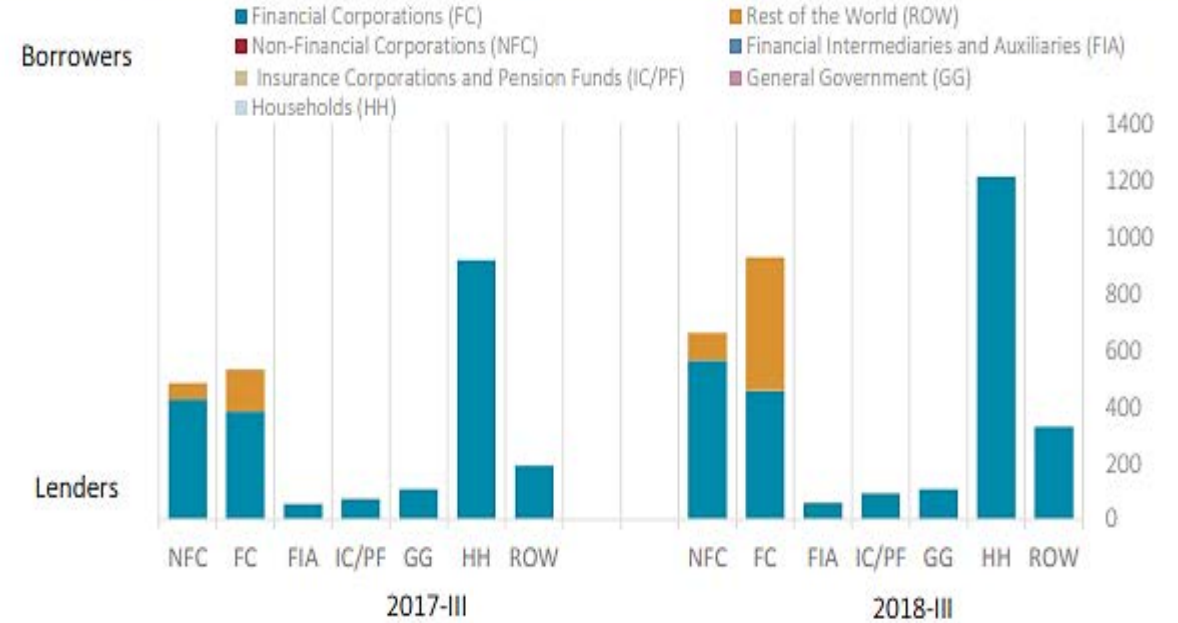
Source: CBRT, TURKSTAT.  
 (\*) Debts are composed of loans and government debt securities

# Macroprudential and Financial Stability Analysis

Chart 5: Loans, From-Whom-to-Whom (2018Q3, TRY Billion)<sup>2</sup>



Chart 6: Deposits, From-Whom-to-Whom (2018Q3, TRY Billion)<sup>2</sup>

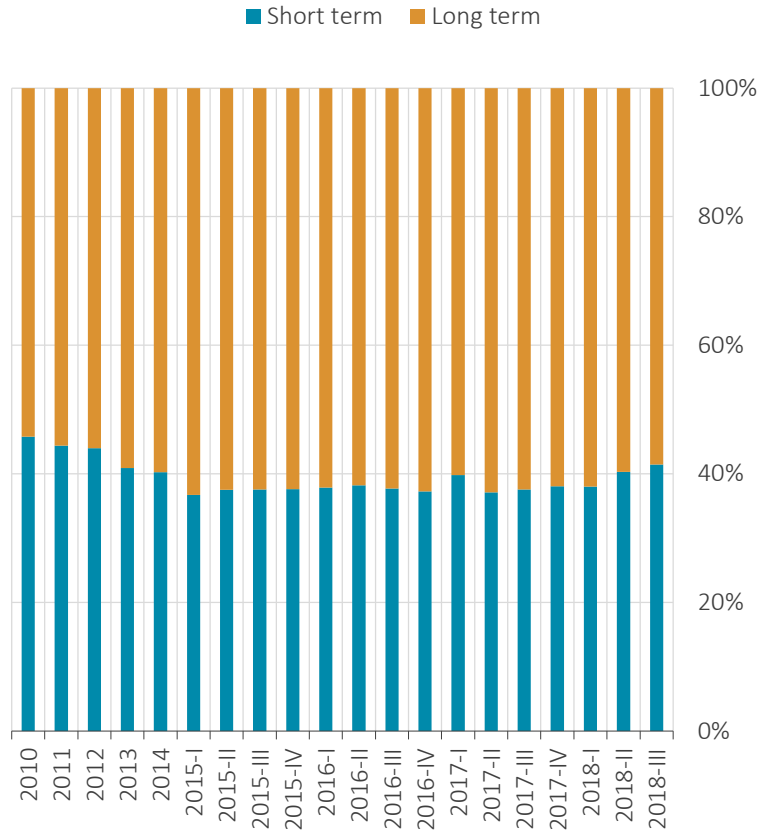


## Financial Balance Sheet Risk Indicators (2018Q3)

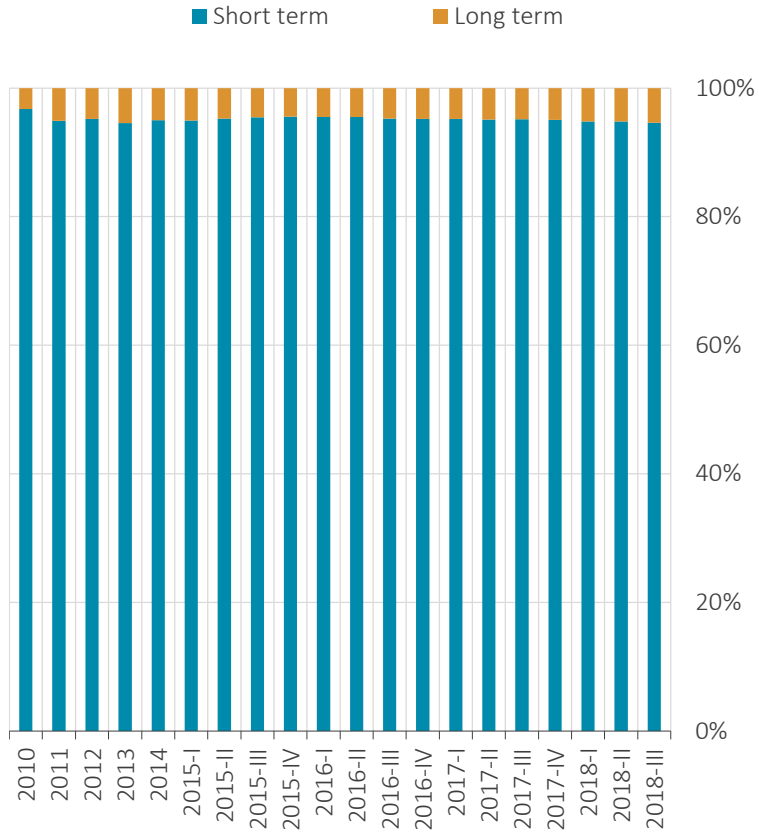
		MFI	OFC	NFC	HH
Solvency Risk	Net Financial Worth (Billion TRY)	212	24	-2,585	1,023
	Liabilities/ GDP	1.32	0.13	2.12	0.17
	Liabilities/ Financial Assets	0.96	0.95	1.52	0.38
Capital Structure Mismatch	Debt/GDP	0.66	0.04	<b>0.8</b>	<b>0.16</b>
	Debt/ Equity	5.03	1.11	<b>1.54</b>	-
External Risk	Net External Financial	-353	-60	-1,175	-
	External Liabilities/ GDP	0.35	0.02	0.45	-
	External Liabilities/ Liabilities	0.26	0.14	0.21	-

# Risk Indicators/ Maturity Mismatch

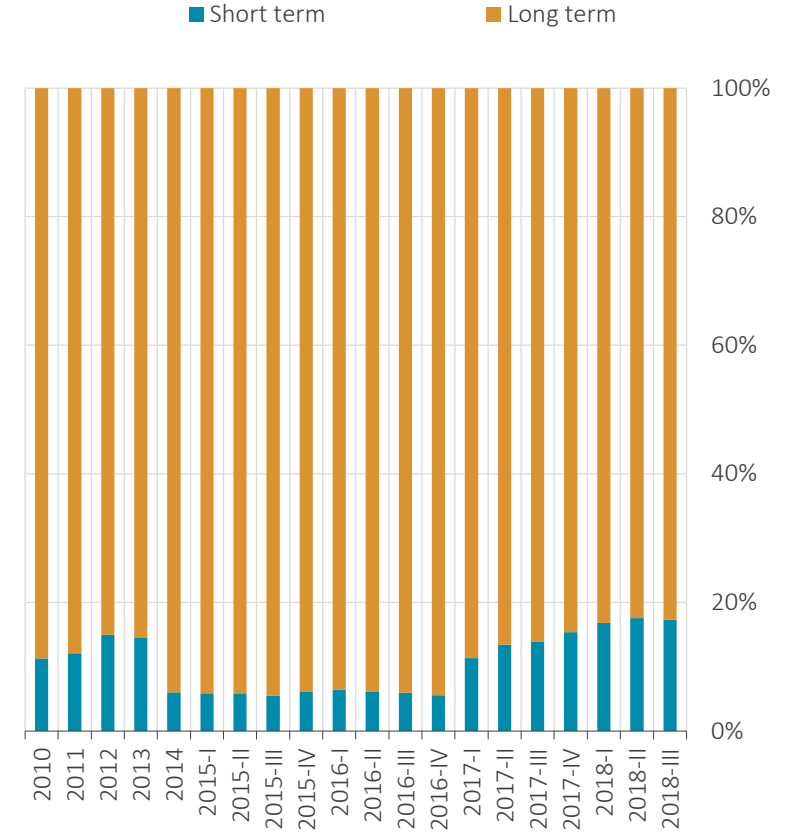
Total loans by maturity(%)



Total deposits by maturity(%)

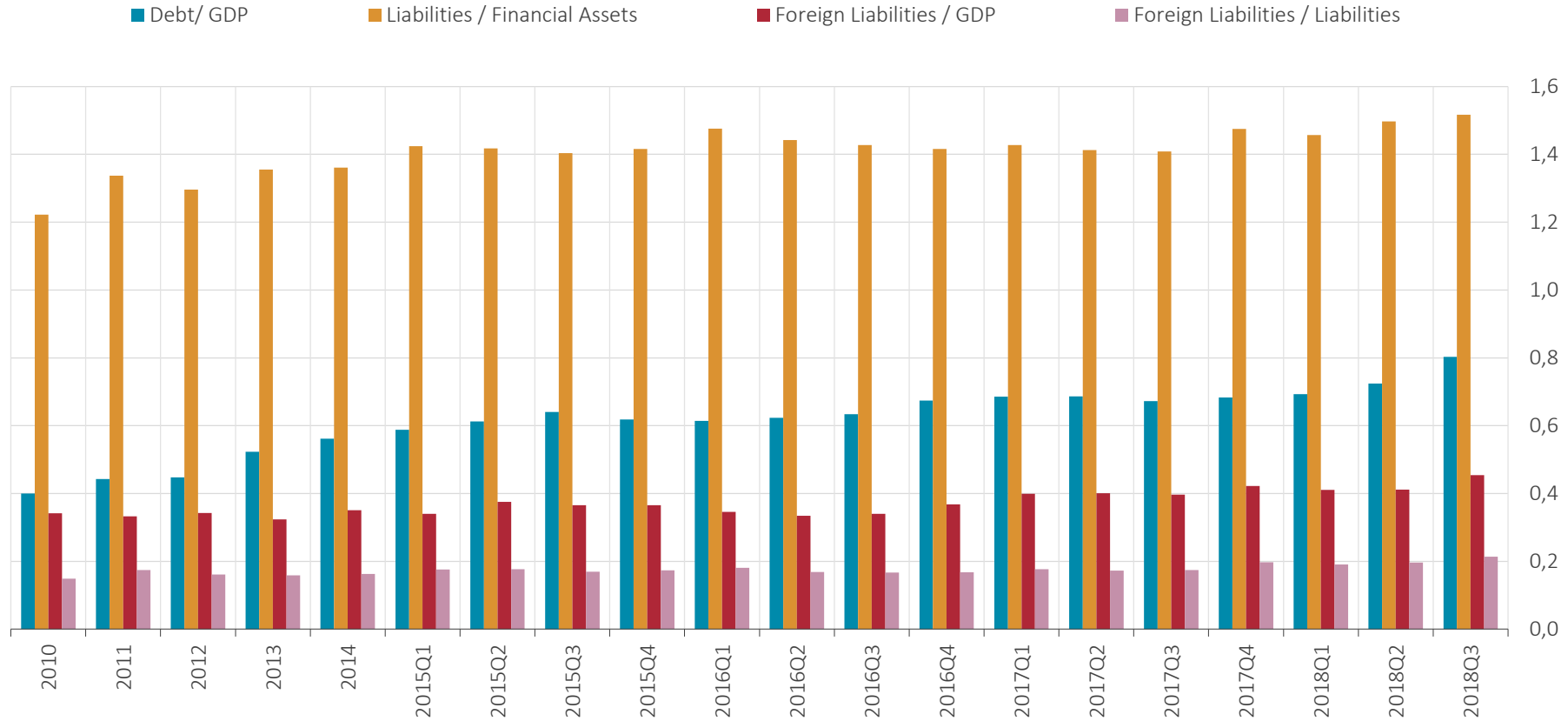


Total debt securities by maturity(%)



# Risk Indicators

## Non-Financial Corporations

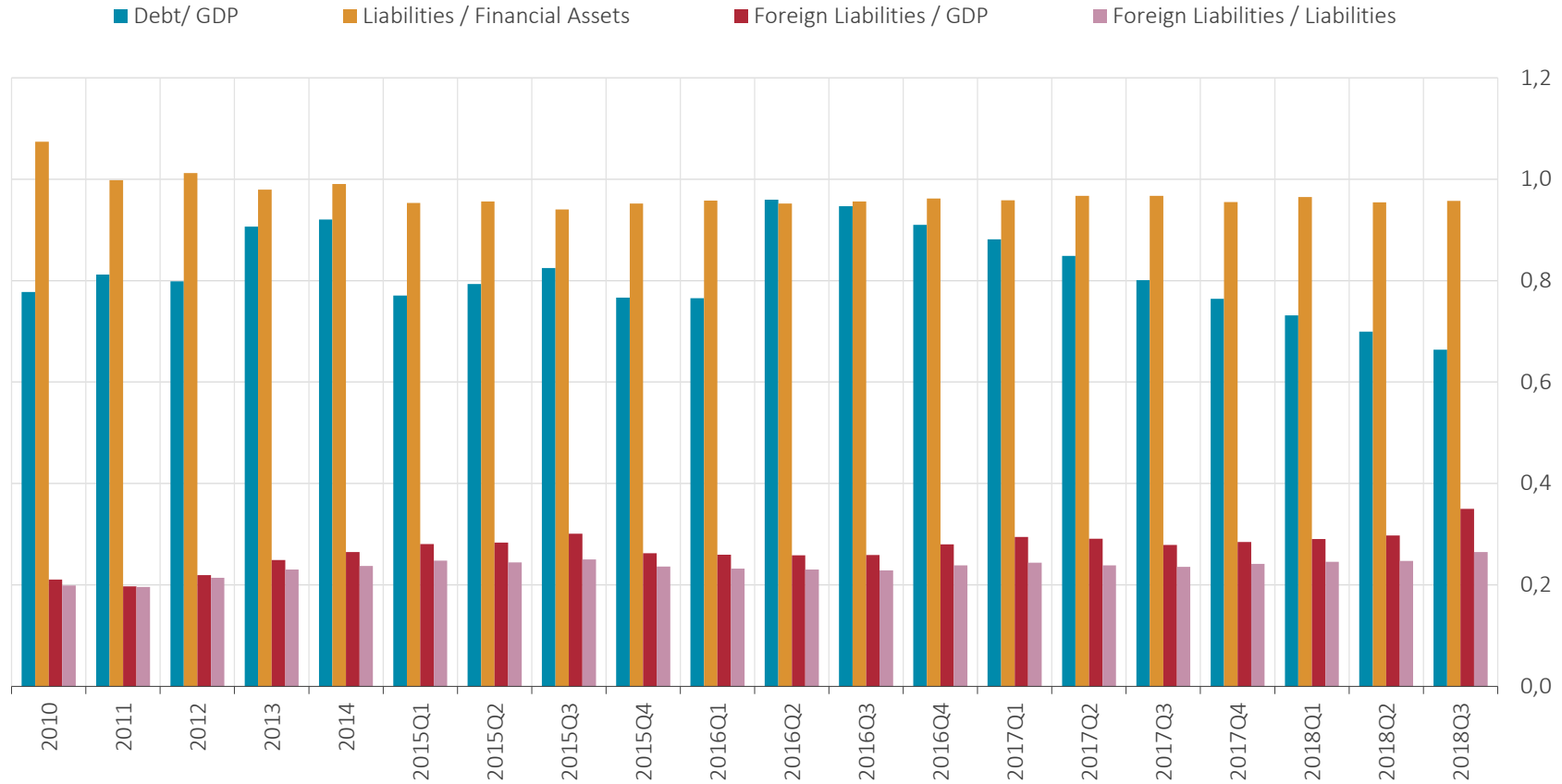


Source:CBRT Financial Accounts

Debt is composed of Currency and Deposits, Debt Securities and Loans.

# Risk Indicators

## Monetary and Financial Institutions



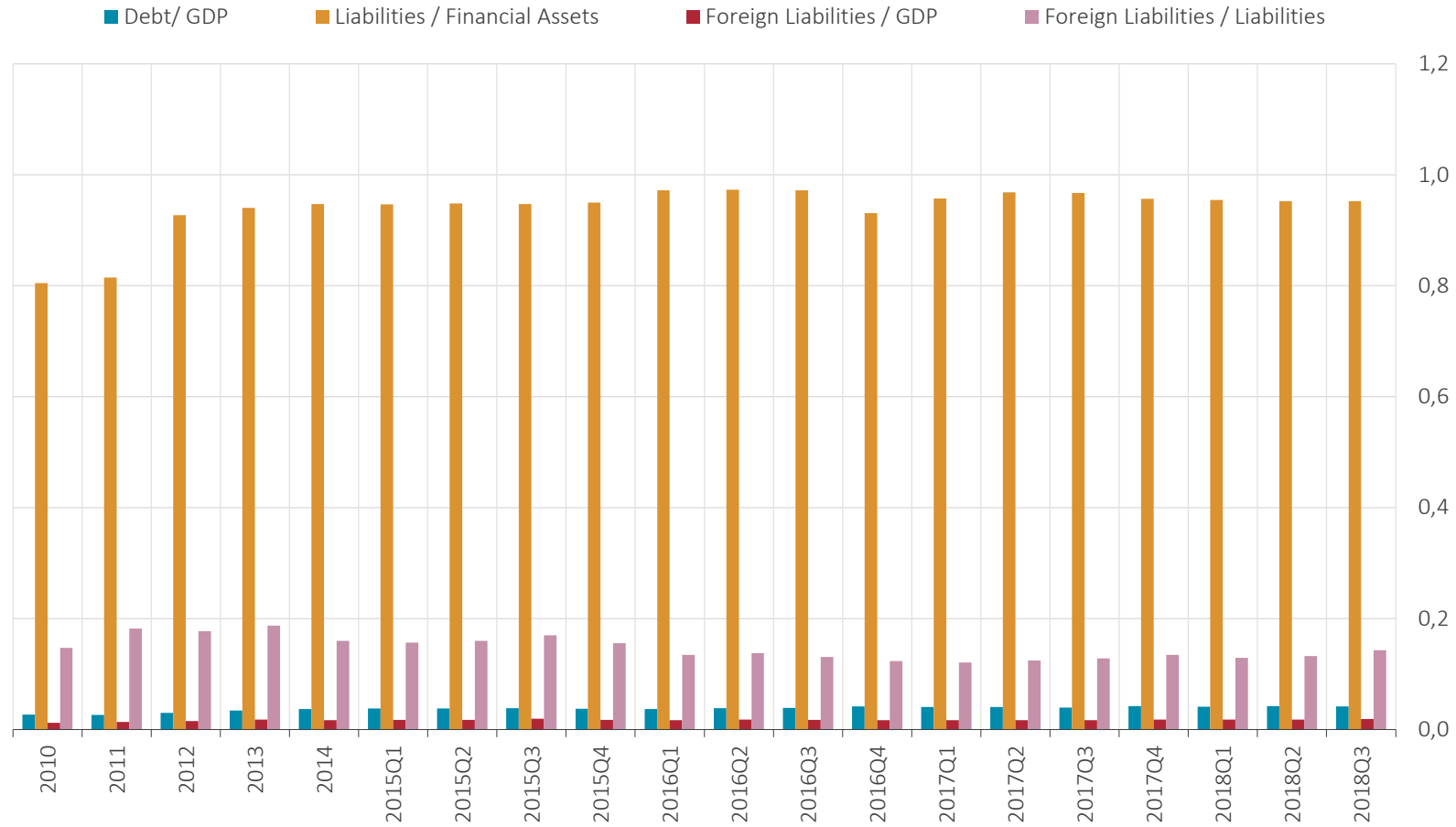
Source:CBRT Financial Accounts

Debt is composed of Currency and Deposits, Debt Securities and Loans.



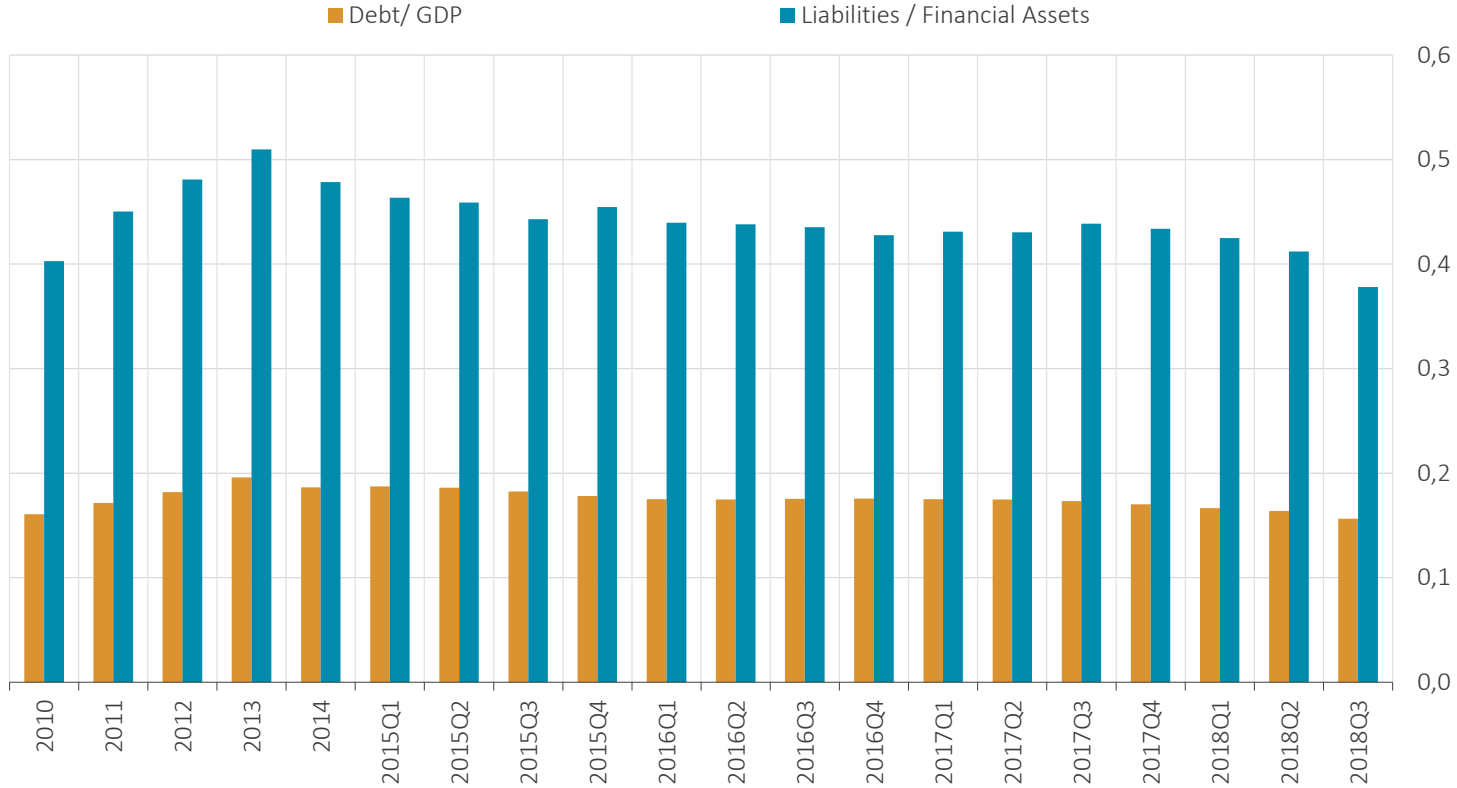
# Risk Indicators

## Other Financial Corporations

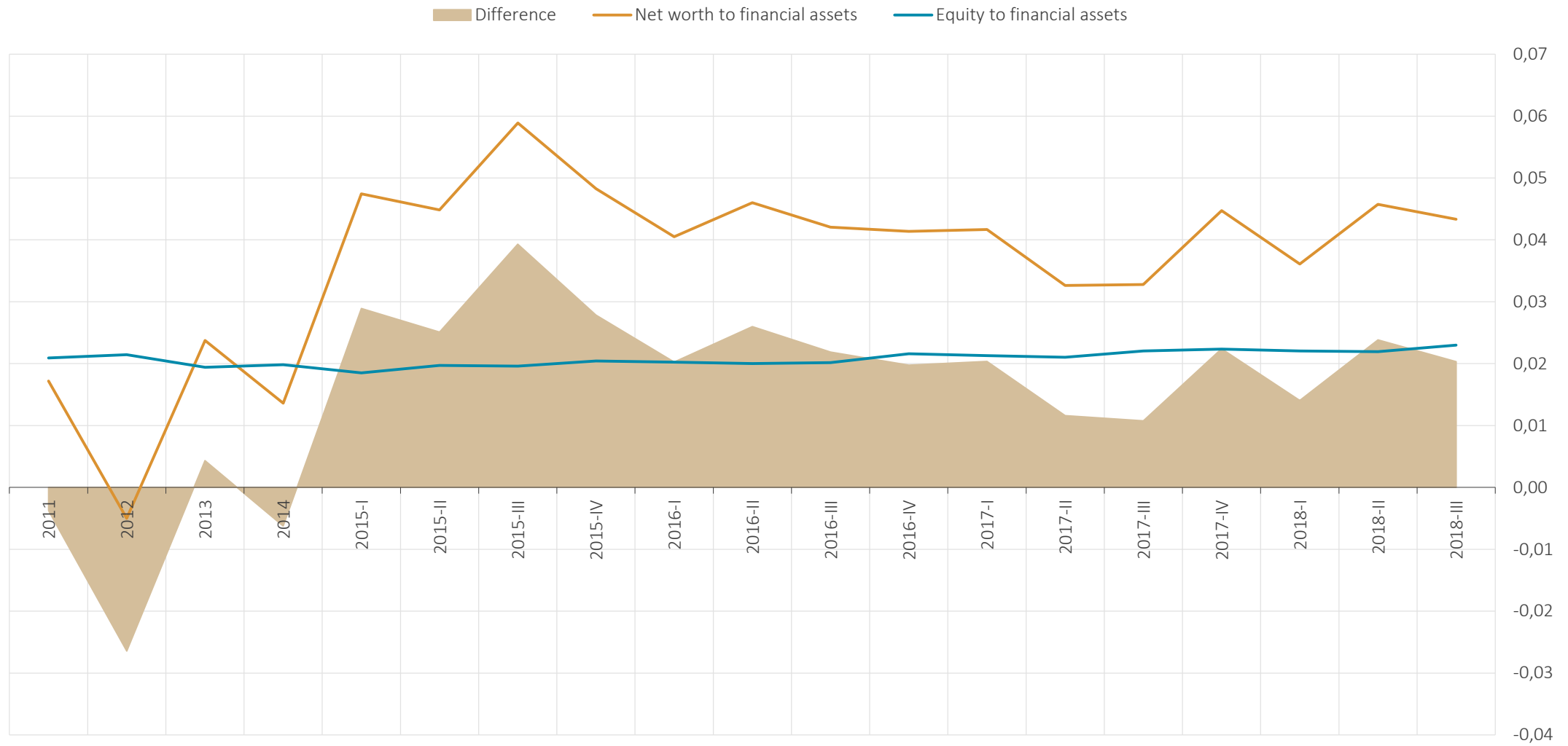


# Risk Indicators

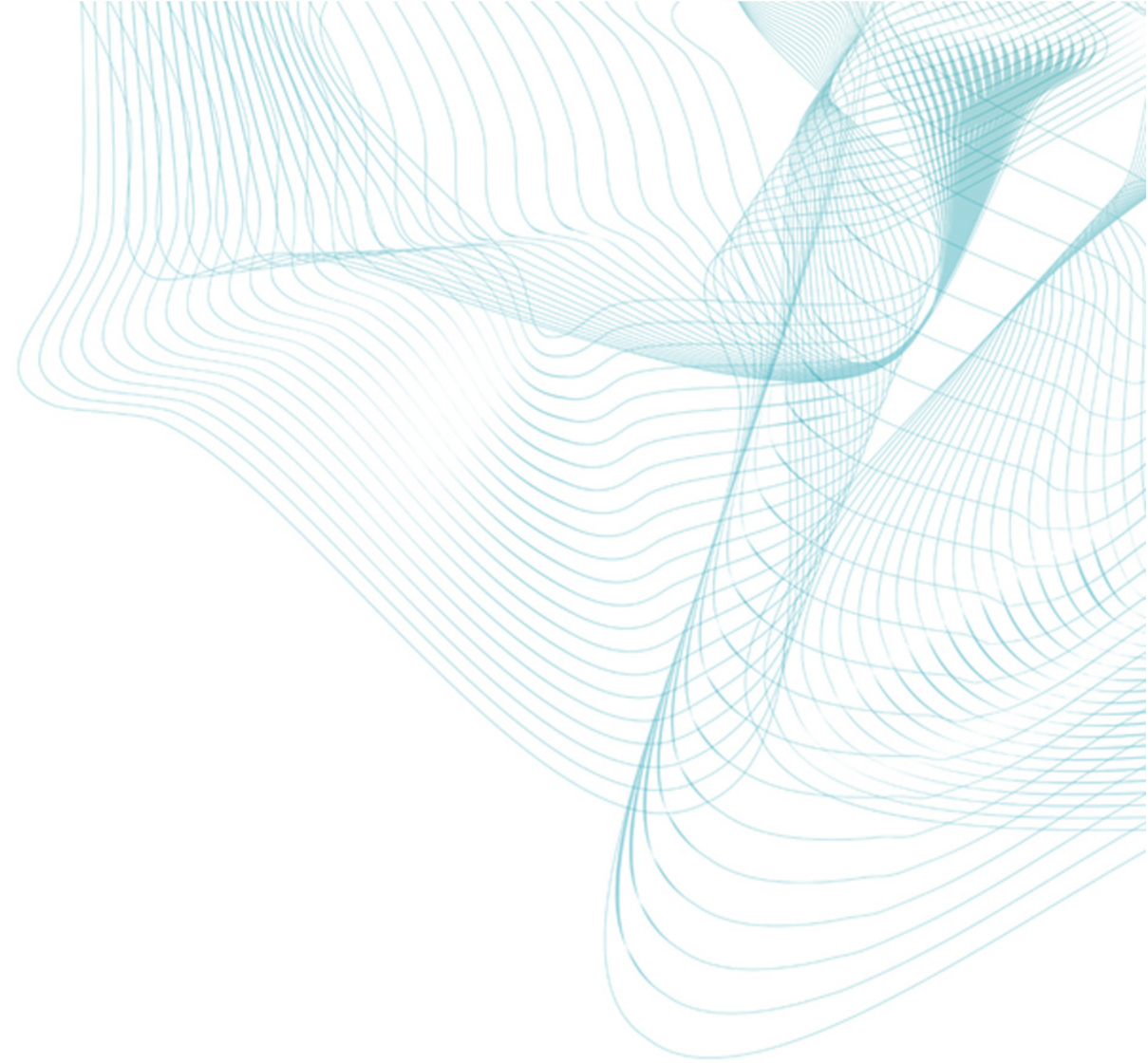
## Households



# Capital Position of the Financial Corporations (ratio)



# Future Work



## Future Work

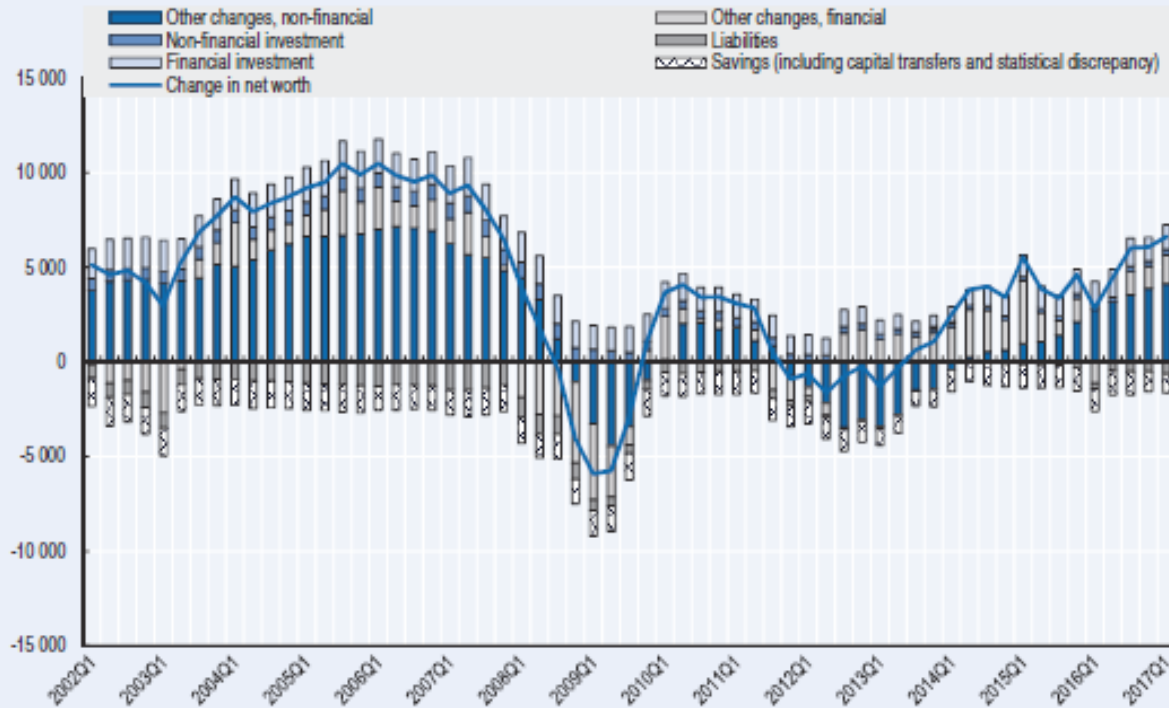
« The more granular the sector breakdown, the more useful the analytical possibilities brought by FWTW information become. »

Understanding Financial Accounts (2017)


need for developed whom to whom matrices

# Future Work

Figure 11.2. Accumulation of households' net assets:  
changes in household net worth, 2002-17  
EUR per capita; changes over four quarters



Source: ECB and Eurostat (2017).

StatLink  <http://dx.doi.org/10.1787/888933589409>

need for coherent Integrated Accounts

## Future Work

need for longer series

Annually 2009 - 2014  
Quarterly 2015Q1-...



analysis

## Future Work



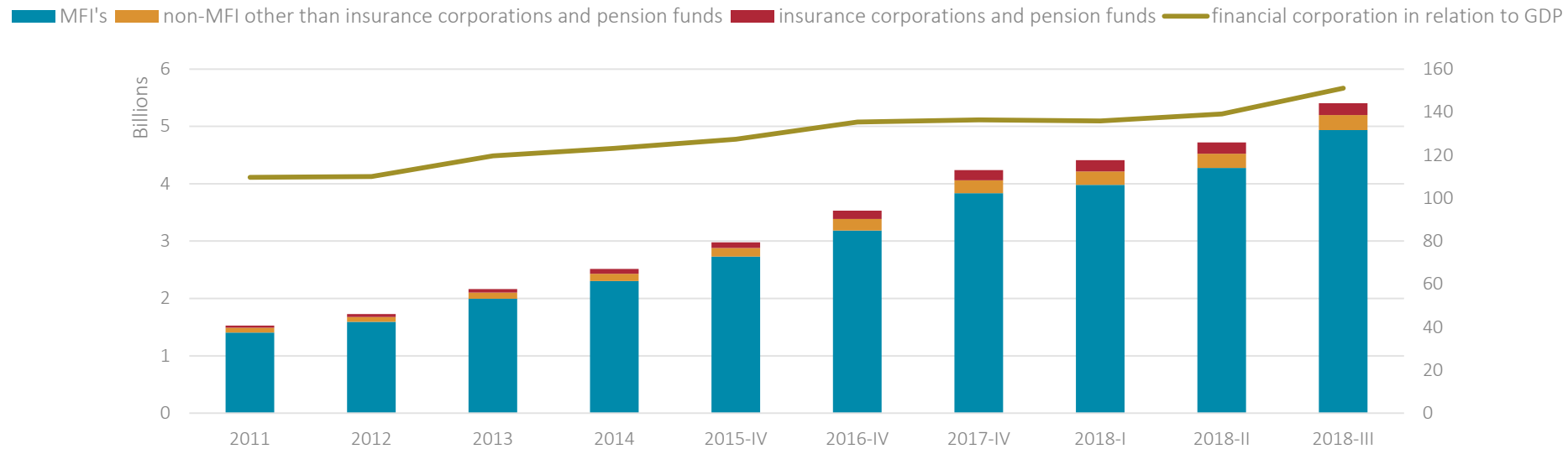
need for improved data awareness





# Future Work

## Financial assets held by financial corporations (Billion TRY)



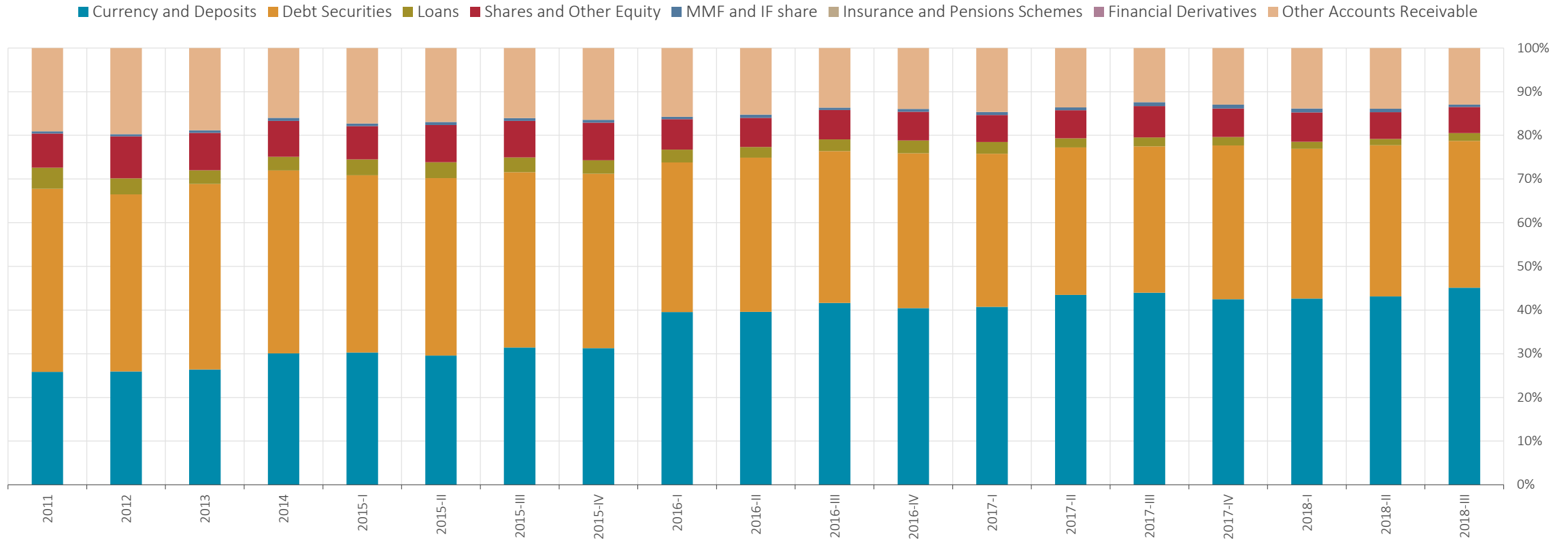
The increased role of MFI and OFI in financial intermediation reflects both cyclical & structural factors

=> interest rates, regulatory changes, demographic trends & transition to ESA 2010.

**need for more granular info**

# Future Work

## Financial assets held by ICPFs(%)



need for split of Pension Funds in Defined Benefit-Defined Contribution schemes



## Future Work



need further work for engouraged  
breakdowns

NFCs and FCs according to  
ownership/control

loans and debt securities according  
to remaining maturity

financial derivatives as options and forwards

Please contact for further information

Thanks

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