TÜRKİYE CUMHURİYET MERKEZ BANKASI

Financial Accounts Report

2017-IV

Summary

The financial balance sheets of sectors indicate that the Turkish economy maintained its position as a net debtor in 2017Q4, with households and the rest of the world being the two major financing sectors. The non-financial corporations sector proved the most indebted sector, which was followed by the general government.

An analysis of the ratio of sectors' net financial transactions to GDP reveals that despite a decline in the last two quarters, the domestic economy remained as a net debtor throughout 2017.

A cross-country comparison of households' and non-financial corporations' indebtedness ratios demonstrates that Turkey stood among countries with the lowest indebtedness.

financial.account@tcmb.gov.tr

This report is produced together with the CBRT's Financial Accounts Statistics and aims to inform the public for a better understanding of these statistics.

Contents

1. Evaluations

In 2017Q4, total financial assets of the Turkish economy were TRY 11.289 billion while the liabilities were TRY 12.969 billion, creating a net liability of TRY 1.679 billion to the rest of the world. Thus, the rest of the world and the household sectors emerged as the largest contributors to the financing of the domestic economy (Table 1).

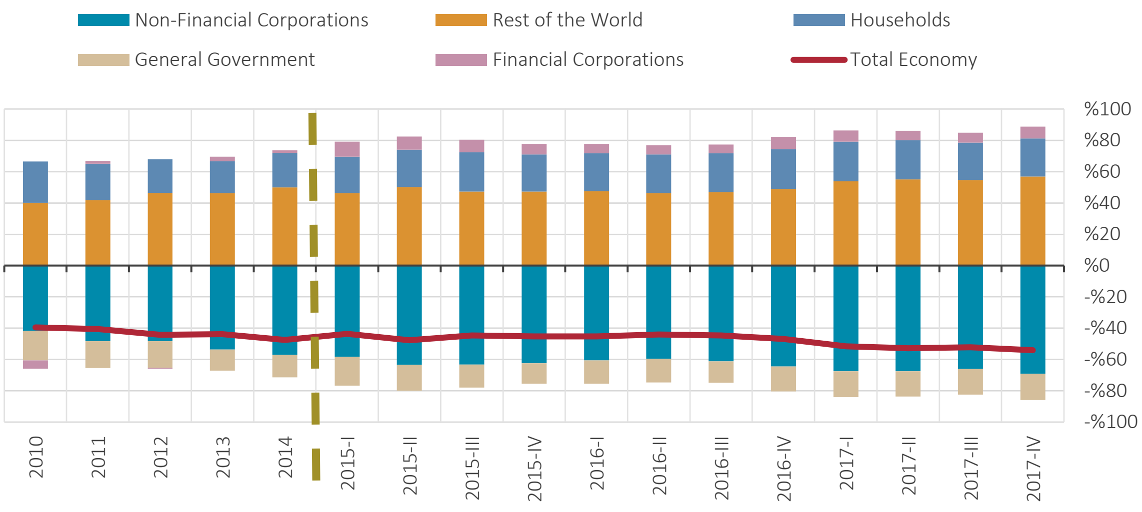
Tablo 1: Financial Net Worth by Sectors (2017Q4, TRY Billion)[1,2]

	Total Economy	Non-Financial Corporations	CBRT	Other Monetary and Financial Institutions	Insurance Corporations and Pension Funds	Financial Intermediaries and Auxiliaries	General Government	Household	Rest of the World
Financial Assets	11.289	5.050	637	3.175	175	258	664	1330	819
Liabilities	12.969	7.195	610	2.986	179	236	1.184	564	2.588
Financial Net Worth	-1.679	-2.145	27	189	-4	23	-520	703	1.769

Source: CBRT

An analysis of the domestic economy's financial balance sheets by sectors from 2010 to 2017Q4 suggests that households and the rest of the world generated a financial surplus and assumed a creditor role, whereas non-financial corporations and the general government ran a financial deficit and assumed a debtor role. Meanwhile, due to their financial intermediation activities, financial corporations maintained their balanced position with a financial net worth close to zero (Chart 1).

Chart 1: Financial Net Worth to GDP by Sectors (%)[2]

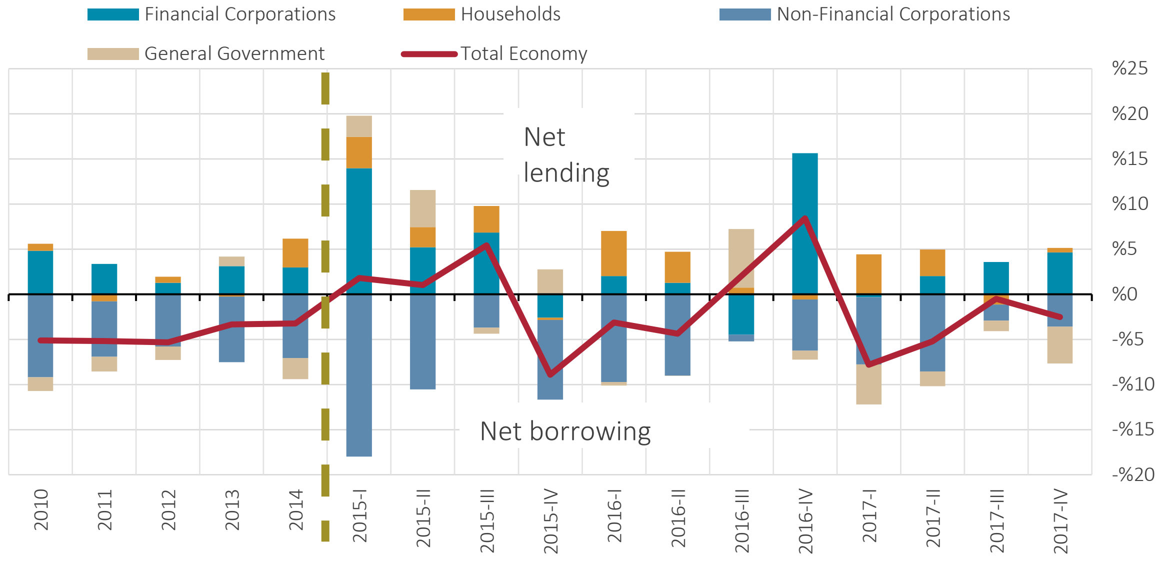


Source: CBRT, TURKSTAT

[1]Pursuant to the methodology, there is a difference between the financial net worth of total domestic economy and rest of the world since there is no counterpart sector for monetary gold. The rest of the world has been reported based on residency, so as to be compatible with the International Investment Position Statistics.

[2] The households sector covers non-profit institutions serving households as well.

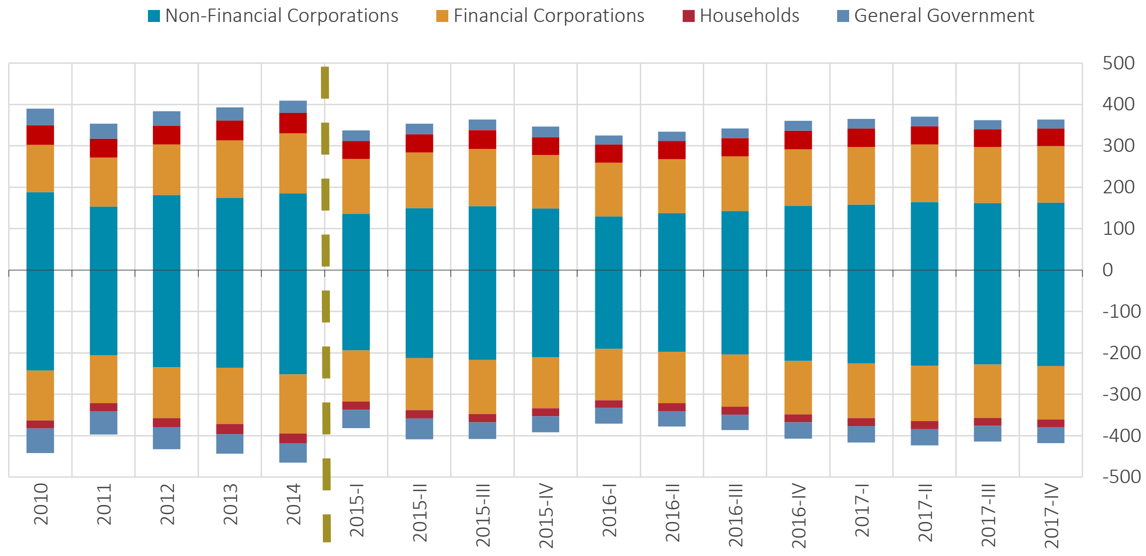
Chart 2: Net Lending\ Borrowing, Ratio to GDP by Sectors (%) [2]



Source: CBRT, TURKSTAT

Sectors' net financial transactions reveal that notwithstanding a decline in the last two quarters, the domestic economy maintained the net debtor position across 2017 (Chart 2).

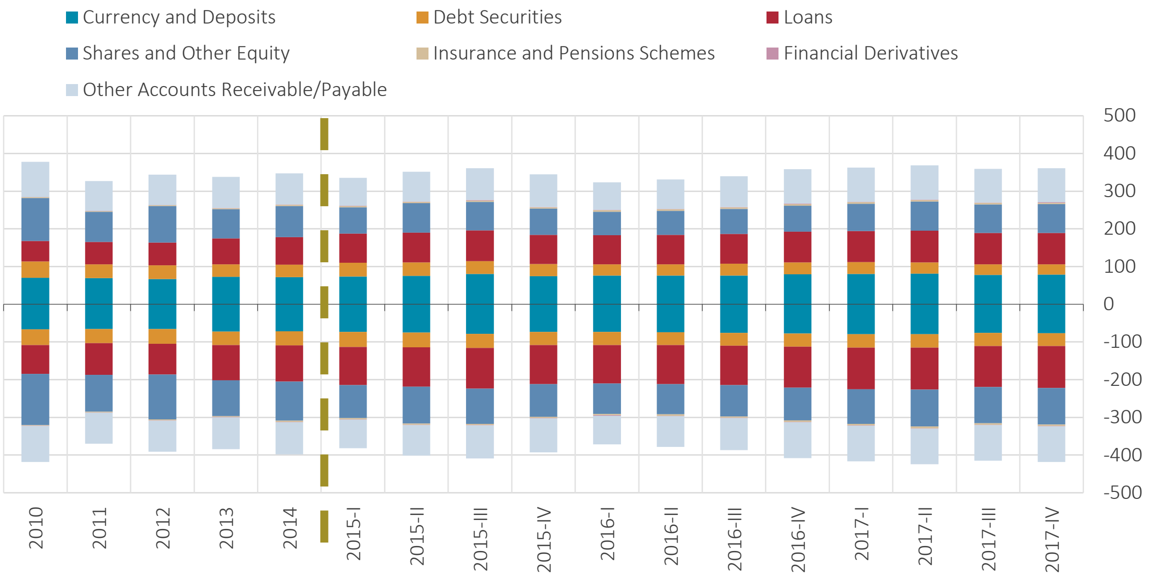
Chart 3: Ratio of Financial Assets and Liabilities to GDP by Sectors (%)[2]



Source: CBRT, TURKSTAT

An analysis of financial assets and liabilities by sectors in the last period suggests that the non-financial corporations sector became the largest sector in terms of liabilities and assets, followed by financial corporations (Chart 3).

Chart 4: Distribution of Financial Instruments-Total Economy, Ratio to GDP* (%)



Source: CBRT, TURKSTAT
(*) Monetary gold and SDR have been excluded.

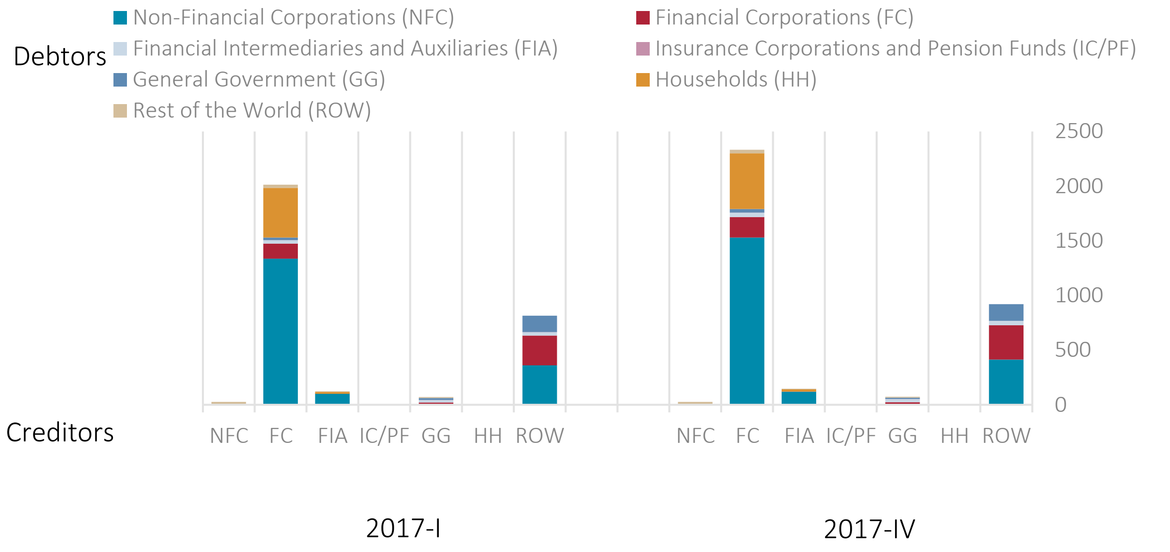
As for the distribution of financial instruments, loans and other accounts receivable had the largest weight in assets in 2017Q4, while the loans and the shares and other equity items had the largest weight in liabilities, respectively (Chart 4).

2. From-Whom-to-Whom (Deposits and Loans)

Below is the breakdown of relations among economic sectors compiled as deposits and loans through from-whom-to-whom matrices.

From-whom-to-whom matrices of loans indicate that the strongest connection occurred between non-financial corporations and monetary and financial institutions in 2017Q4. Monetary and financial institutions extended a total of TRY 2.334 billion worth of loans, granting TRY 1.531 billion of it to non-financial corporations and TRY 508 billion to households. The rest of the world offered loans totaling TRY 921 billion, TRY 413 billion of which was received by non-financial corporations, and TRY 313 billion by monetary and financial institutions (Chart 5).

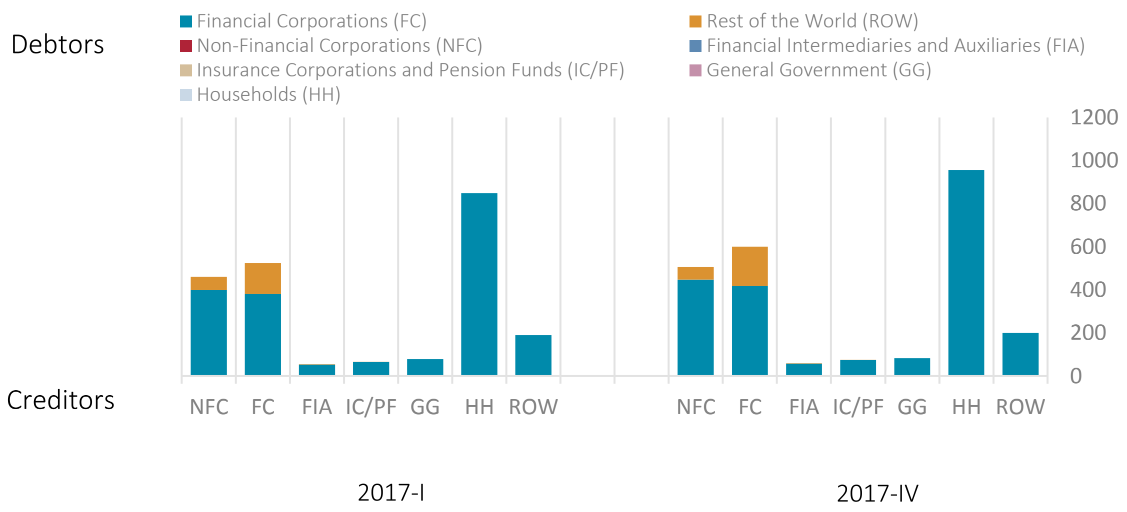
Chart 5: Loans, From Whom to Whom (2017Q4, TRY Billion)



Source: CBRT

Of the total TRY 2.480 billion worth of deposits opened by domestic and foreign sectors in 2017Q4, TRY 2. 237 billion were taken by monetary and financial institutions and TRY 243 billion by the rest of the world. A large portion of deposits taken by monetary and financial institutions belongs to households (TRY 934 billion) and non-financial corporations (TRY 447 billion). On the other hand, the majority of deposits taken by the rest of the world (TRY 182 billion) were opened by monetary and financial institutions (Chart 6).

Chart 6: Deposits, From-Whom-to-Whom (2017Q4, TRY Billion)

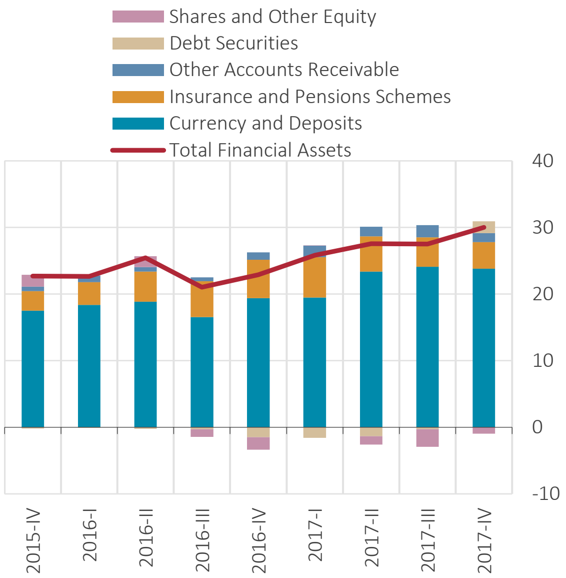


Source: CBRT

3. Households

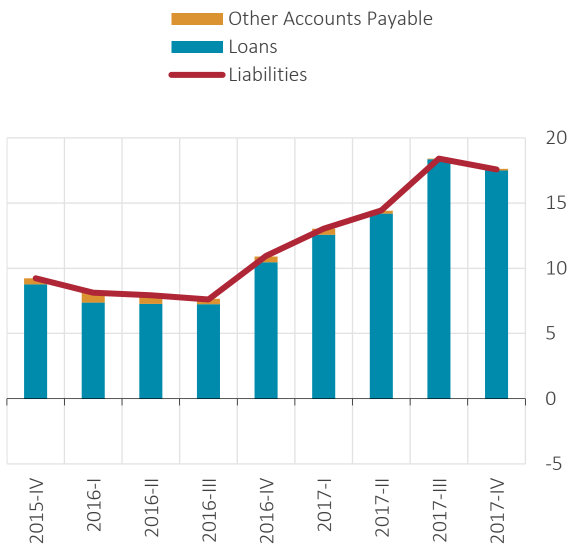
In the fourth quarter of 2017, financial assets and liabilities of households remained flat quarter-on-quarter. The rise in assets was mainly driven by deposit transactions in assets, while the increase in liabilities stemmed from loan transactions (Charts 7 and 8).

Chart 7: Financial Assets, Transaction (Moving Average of 4 Quarters, TRY billion)



Source: CBRT

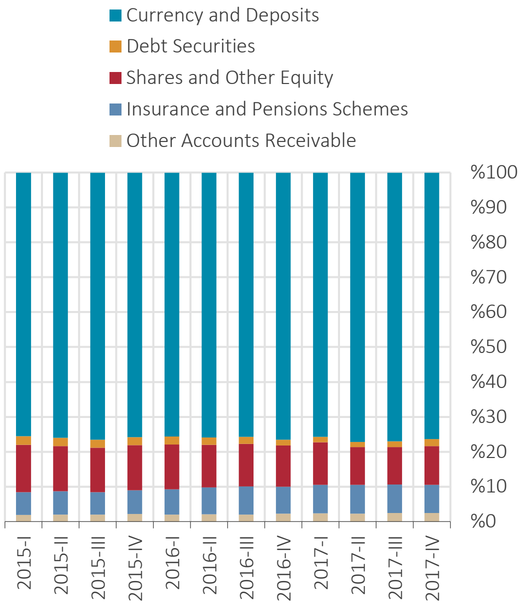
Chart 8: Liabilities, Transaction (Moving Average of 4 Quarters, TRY billion)



Source: CBRT

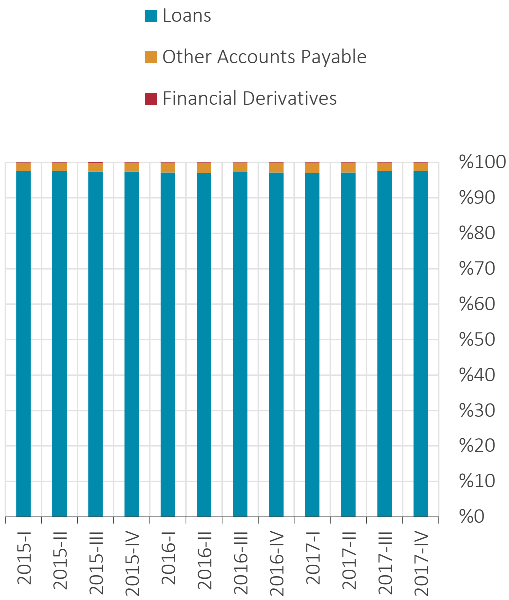
The leading instrument in household financial assets was deposits with a share of approximately 77 percent, followed by shares and other equity. During the data period, the share of the shares and other equity item in total financial investments increased, while that of deposits remained flat (Chart 9). As for liabilities, almost all of liabilities were composed of loans (Chart 10).

Chart 9: Breakdown of Financial Assets by Instruments (%)



Source: CBRT

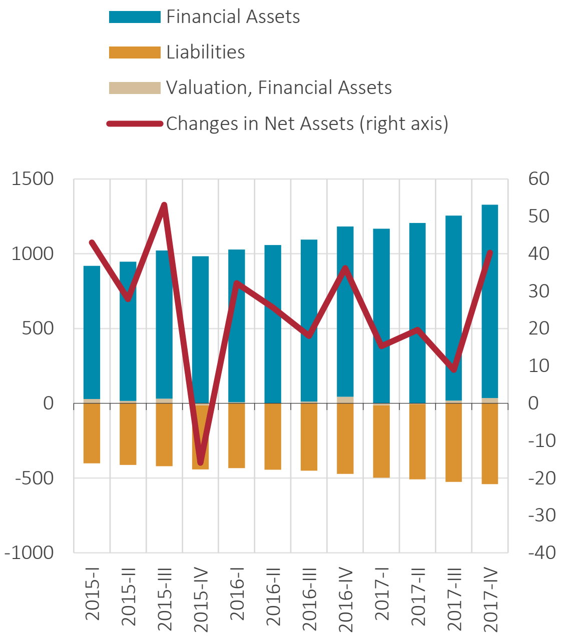
Chart 10: Breakdown of Financial Liabilities by Instruments (%)



Source: CBRT

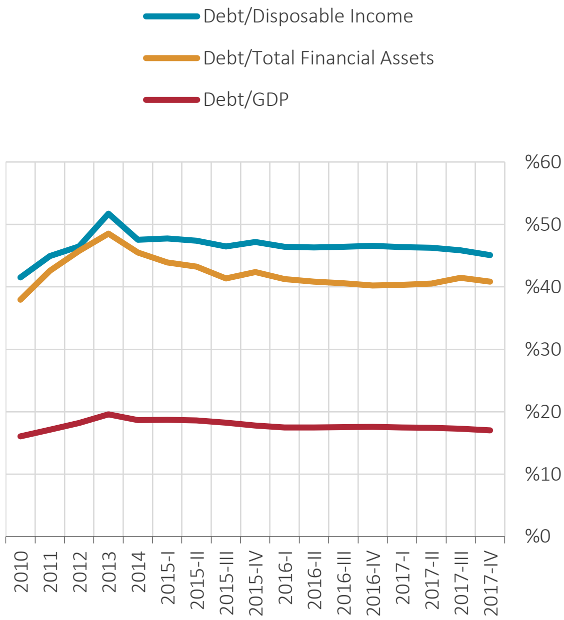
In the fourth quarter of 2017, the household financial net worth increased by TRY 40 billion quarter-on-quarter (Chart 11). Household indebtedness indicators suggest that the ratio of household debt to GDP remained at around 17 percent, and the ratios of debt to disposable income and debt to total financial assets were flat in 2017Q3 (Chart 12).

Chart 11: Change in Net Assets of Households (TRY Billion)



Source: CBRT

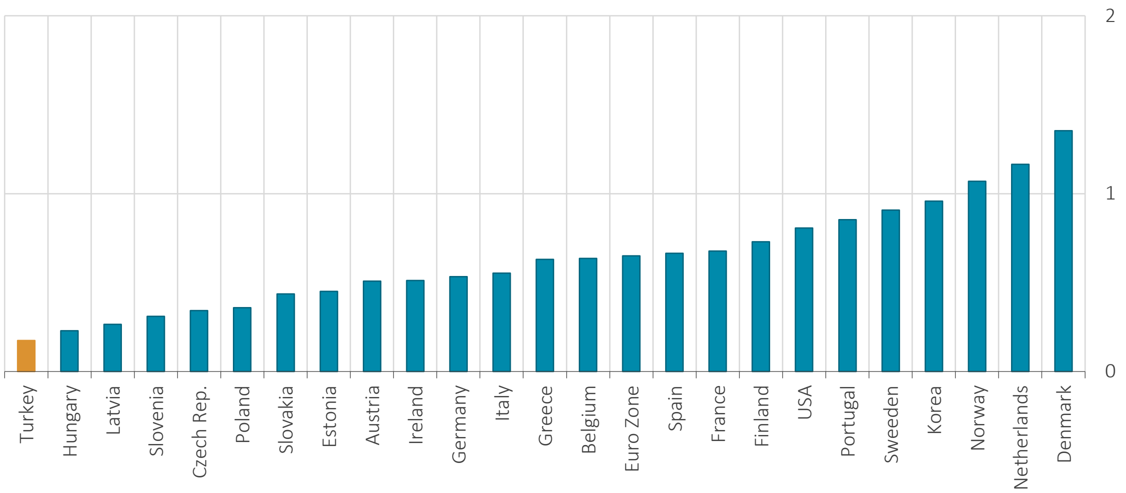
Chart 12: Household Debt* (%)



Source: CBRT, TURKSTAT
*Household debt is composed of the loan item.

The ratio of household liabilities to GDP indicates that Turkey had the lowest level of indebtedness among countries compared in 2017Q4 (Chart 13).

Chart 13: Household Liabilities/GDP, Comparison*

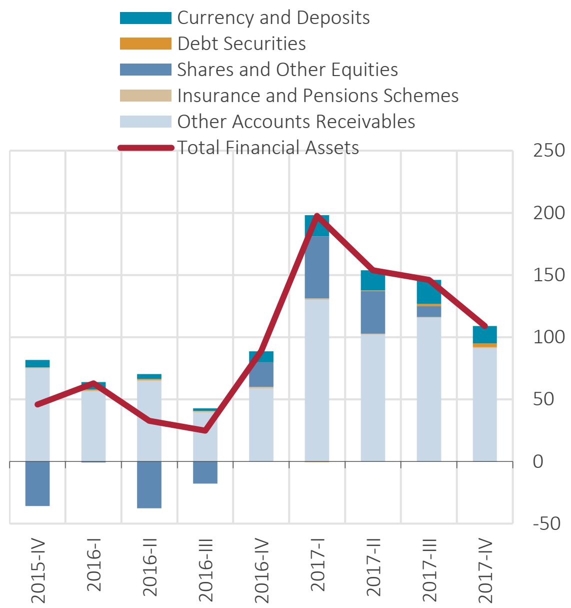


Source: CBRT, TURKSTAT, OECD
(*) Data for Korea is as of 2017Q3.

4. Non-Financial Corporations

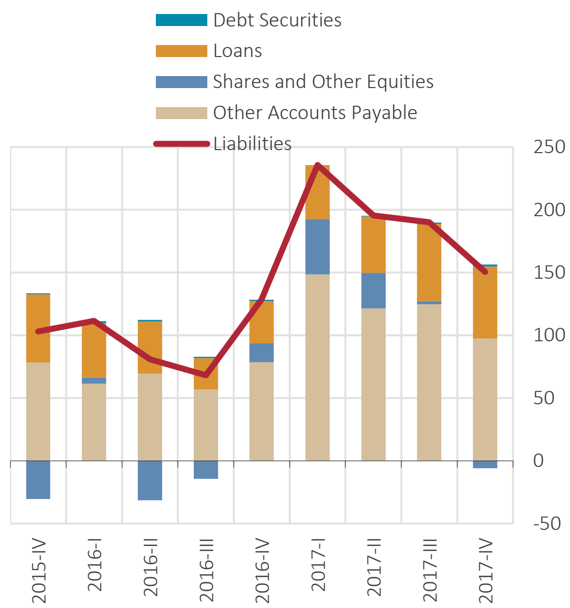
In the fourth quarter, financial assets and liabilities of non-financial corporations slightly fell quarter-on-quarter and this fall was mainly driven by the decline in other accounts receivable/ payable (Charts 14 and 15).

Chart 14: Financial Asset, Transaction (Moving Average of 4 Quarters, TRY billion)



Source: CBRT

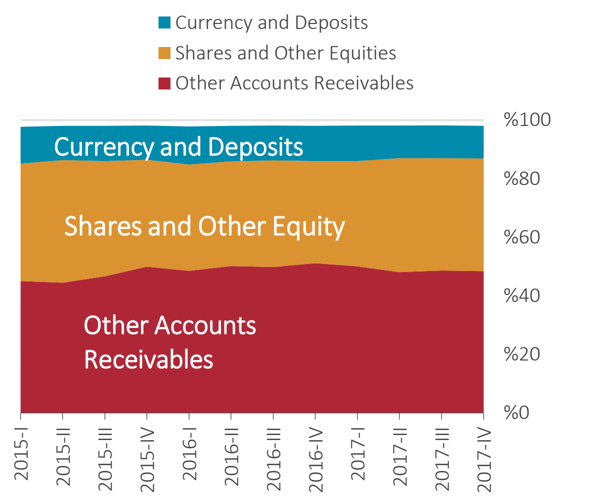
Chart 15: Liabilities, Transaction (Moving Average of 4 Quarters, TRY billion)



Source: CBRT

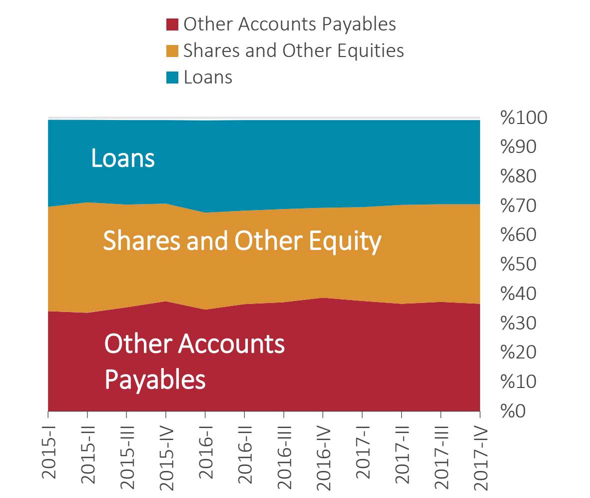
In the fourth quarter of 2017, the most significant item on the assets side of non-financial corporations was the other accounts receivable item (48 percent) composed of the sum of trade credits and advances, and other items. The share of the shares and other equity item was 39 percent, and that of currency and deposits was 12 percent (Chart 16). On the liabilities side, the share of financing through issues of shares and other equity in total liabilities was 34 percent, while the shares of other accounts payable and loans used were 36 percent and 29 percent, respectively (Chart 17).

Chart 16: Breakdown of Financial Assets by Instruments (%)



Source: CBRT

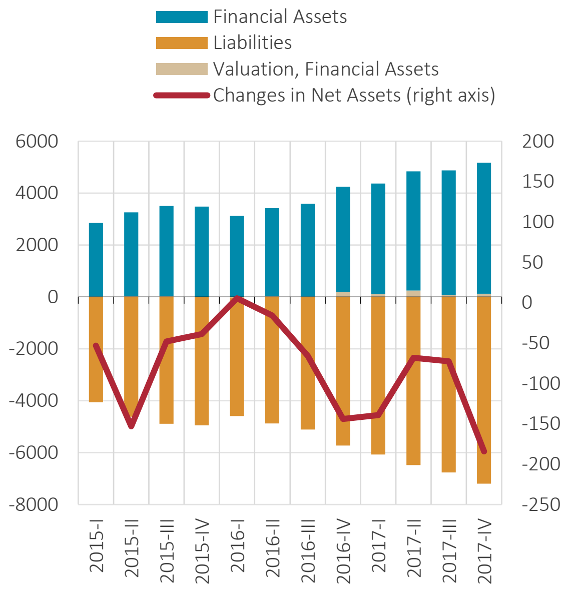
Chart 17: Breakdown of Financial Liabilities by Instruments (%)



Source: CBRT

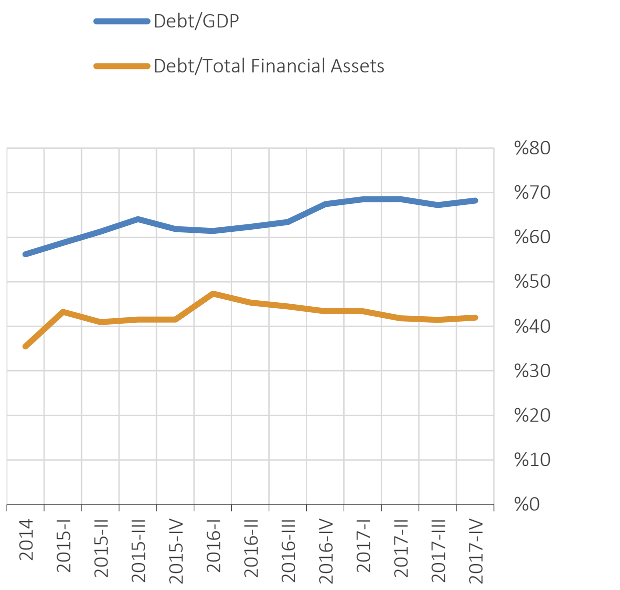
In the fourth quarter, net assets of non-financial corporations decreased by TRY 184 billion quarter-on-quarter (Chart 18). The ratio of non-financial corporations' debts to GDP was 68 percent in 2017Q4, while the ratio of debts to total financial assets recorded a slight increase (Chart 19).

Chart 18: Change in Net Assets of Non-Financial Corporations (TRY Billion)



Source: CBRT

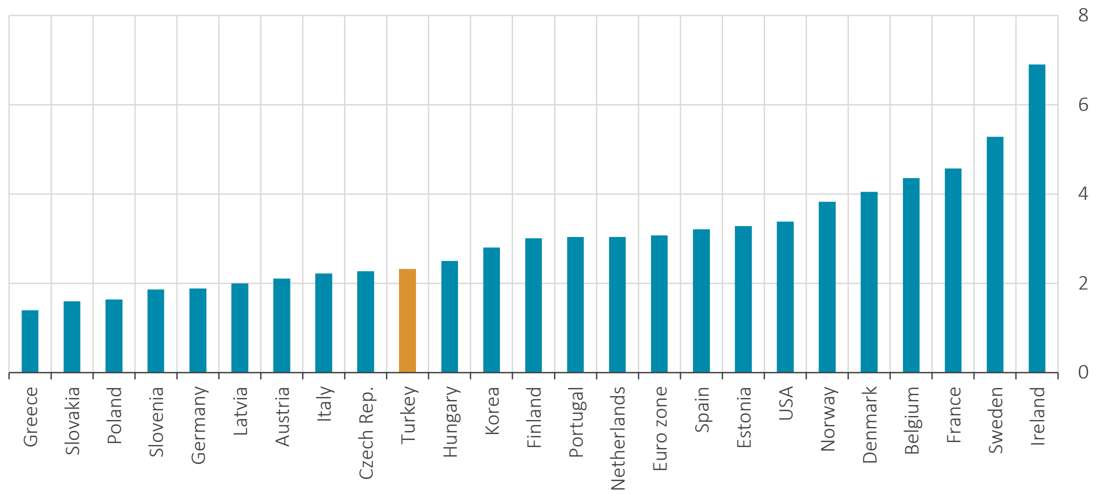
Chart 19: Non-Financial Corporations' Debt* (%)



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

A comparison of the ratios of non-financial corporations' debts to GDP with those of several countries shows that Turkey ranked among the countries with the lowest indebtedness levels in 2017Q4 (Chart 20).

Chart 20: Non-Financial Corporations' Liabilities / GDP, Comparison (*)



Source: CBRT, TURKSTAT, OECD.
(*) Data for Korea is as of 2017Q3.

5. BOX: Flow of Funds of Financial Corporations (2010-2017)

Introduction

Globalizing markets lead to an enhanced interaction among economies and sectors, which result in deepening in debt/credit relations as well as financial integration among sectors.

Disclosing the relationship among economic sectors also signifies the value of obtaining the information on the sectors which finance or which are indebted to another. Particularly, a sector that experiences a negative shock in periods of financial crisis may have an adverse effect on other associated sectors. Due to such spillovers, an effect that emerges in only a limited part of financial markets at first, may expand into other sectors, and impact all economic units in global terms. To be able to predict the direction and dimension of the potential effects and to help the policy makers take the necessary measures to minimize these effects, compilation and follow-up of the flow of funds data that demonstrates financial relationships among sectors have grown in importance.

Financial Accounts Tables that present flow of funds data in our country are compiled according to the classifications in the United Nations System of National Accounts (SNA 2008). Financial assets and liabilities resulting from the transactions of resident sectors among each other or with the rest of the world are calculated in accordance with these international standards. If the financial net worth obtained by subtracting financial liabilities from financial assets is positive, this implies that a sector finances other sectors, in other words, there is a flow of funds from this sector to others. In this study, based on the data composing the Financial Accounts table, “From-Whom-to-Whom” (flow of funds) was constructed for financial corporations, and financial connections belonging to this sector - one of the leading actors of the economy - were analyzed.

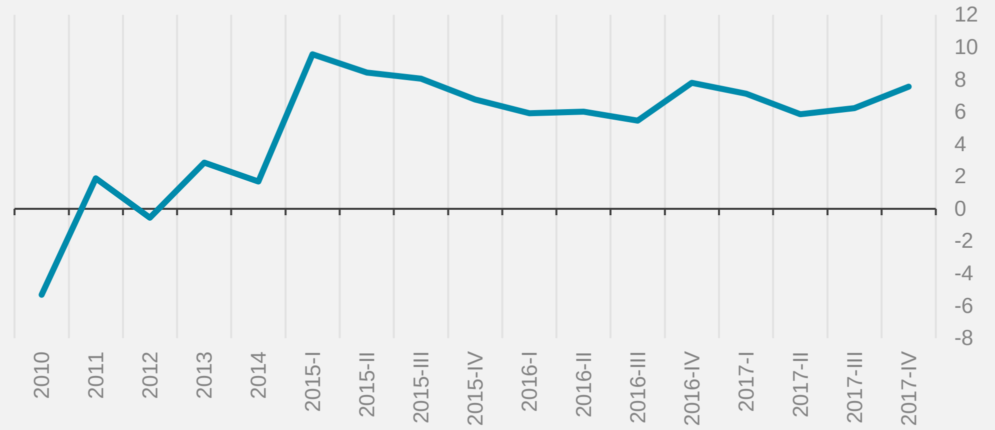
Sectoral Classification

The financial corporations sector covers all resident institutions and corporations providing mainly financial services in an economy according to the SNA 2008 classification and is divided into two as “monetary and financial corporations” and “other financial institutions”. The “Central Bank” and “other monetary and financial institutions” that include all banks operating in Turkey as well as monetary market funds make up “monetary and financial corporations”. This sub-sector is the essential component of financial corporations in terms of asset size and scope of activity. Sub-sectors such as “financial intermediaries”, “financial auxiliaries”, “insurance corporations” and “pension funds” are classified under “other financial corporations” according to these international classifications. Financial intermediaries engage mainly in intermediation services and perform financial transactions on their behalf, while financial auxiliaries offer intermediation services to their clients only, and they are not entitled to perform financial transactions in their name and behalf. Insurance corporations are institutional units providing life and non-life insurance services, and reassurance services are also included. Pension funds under scope of the individual pension system are also classified as a sub-sector (Table 1).

Table 1: Sectoral Classification of Financial Corporations

Monetary and Financial Institutions		Other Financial Institutions			
Central Bank	Other Monetary and Financial Ins.	Financial Intermediaries	Financial Auxiliaries	Insurance Companies	Pension Funds
	• Deposit Banks • Development and Investment Banks • Participation Banks • Money Market Funds	• Financial Leasing Companies • Factoring Companies • Financing Companies • Intermediary Institutions • Financial Holding Companies • Saving Funds • Asset Management Companies, Investment Associations etc.	• SDIF • BRSA • CMB • Borsa Istanbul • Portfolio Management Companies • Exchange Offices, etc	• TNCIP • Agricultural Insurance Pool • National Reassurance • Private Insurance Companies • Reassurance Companies	• Pension Investment Funds • Private Pension Corporations • Corporations making Pension Commitments to Employees

Chart 1: Financial Net Worth of Financial Corporations (% GDP)

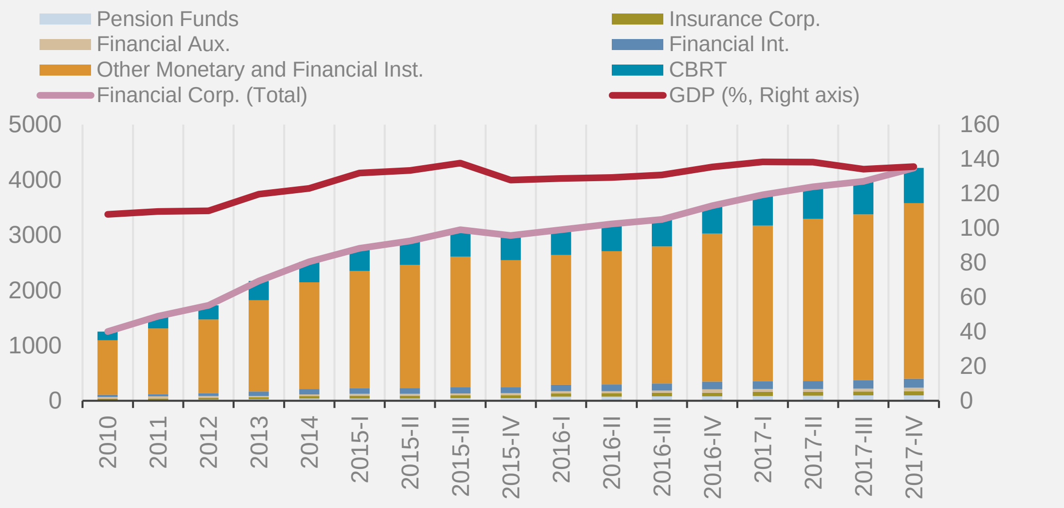


Source: CBRT

In 2010, the ratio of financial net worth of financial corporations to GDP was -5.3 percent, but it became 7.56 percent in 2017. In other words, financial corporations turned from net financial debtor position to net financial creditor position in this period (Chart 1).

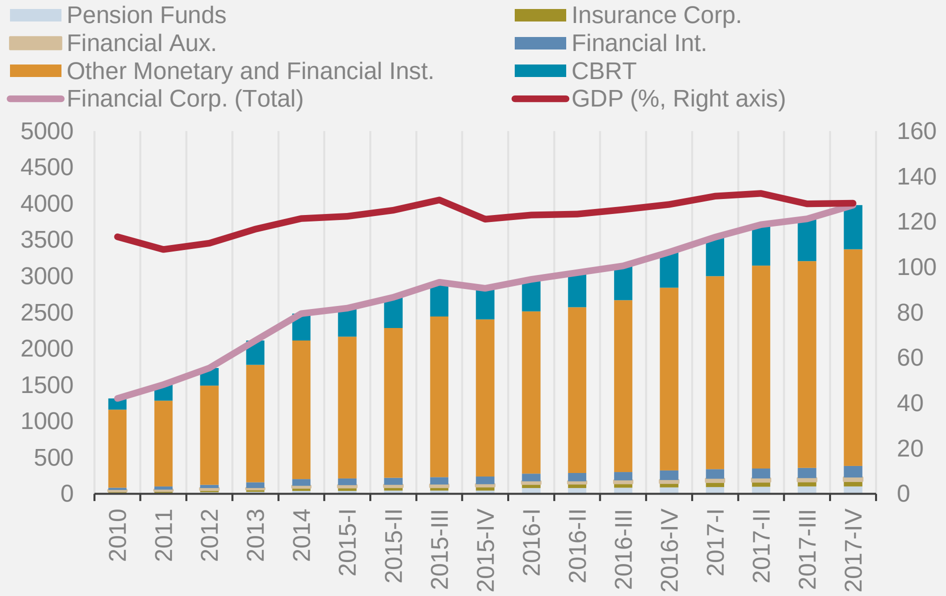
An analysis of the ratio of financial assets and liabilities of financial corporations to total assets and liabilities, and to GDP suggests that a large portion of financial assets and liabilities belongs to other monetary and financial institutions. The ratio of financial assets and liabilities to GDP, which has been on the rise since 2010, trended downwards in the last two periods, while this ratio in total financial assets of financial corporations, which was 108 percent in 2010, increased to 136 percent at end-2017. On the liabilities side, these ratios posted a more limited increase from 113 percent to 128 percent in the analyzed period (Charts 2 and 3).

Chart 2: Financial Assets of Financial Corporations (TRY Billion, %GDP)



Source: CBRT

Chart 3: Liabilities of Financial Corporations (TRY Billion, %GDP)

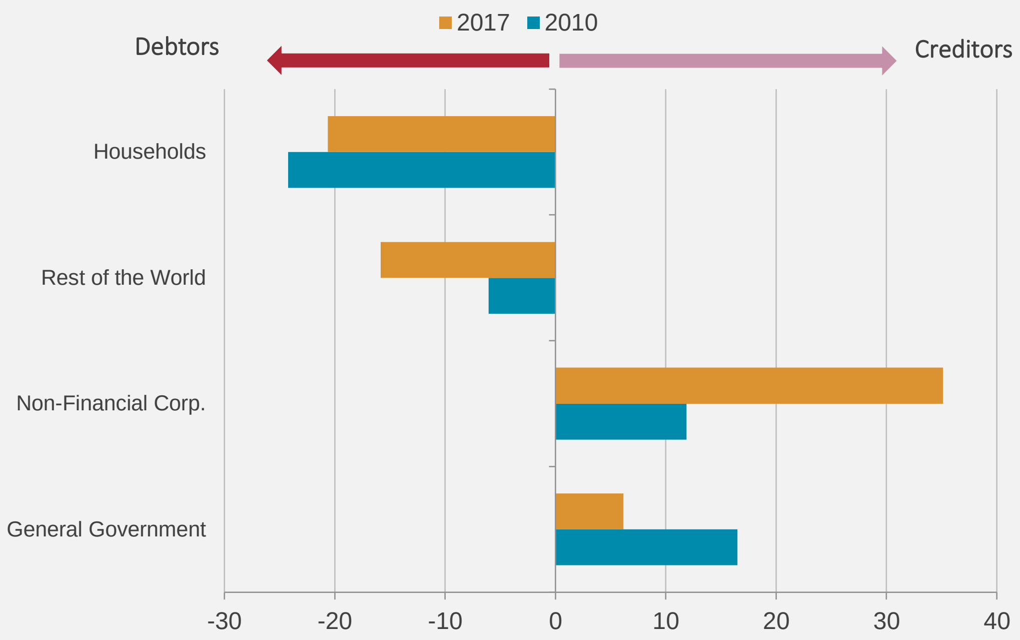


Source: CBRT

Flow of Funds

Information on the debtor and creditor sectors can be obtained through the calculation of the flow of funds data. Accordingly, financial connections of financial corporations within their own sectors as well as with the other sectors in the economy are analyzed for the 2010 and 2017 period as follows:

Chart 4: Net Financial Connection between Financial Corporations and Other Sectors [1],Stock (%GDP)

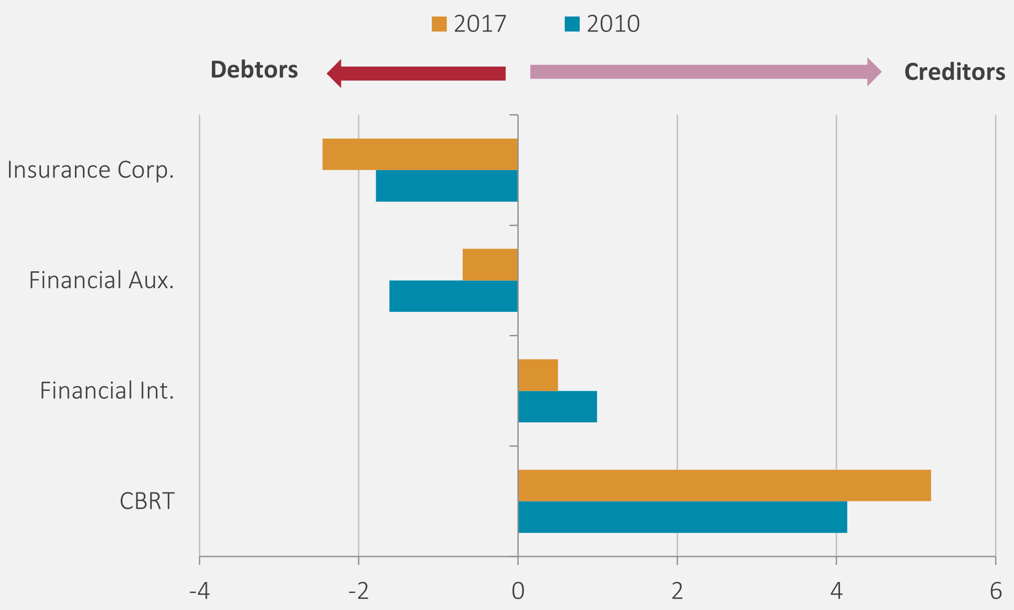


Source: CBRT

Analysis of financial corporations based on sectors and GDP proportions reveals that they are generally indebted to the households and the rest of the world, while they are creditors for non-financial corporations and the general government. In 2010, the debt of financial corporations to the households was 24 percent, while this ratio dropped to 20 percent in 2017. The debt of financial corporations to the rest of the world in this period soared from 6 percent to 15.8 percent. On the other hand, receivables from non-financial corporations stood at 11.9 percent in 2010 and reached 35 percent in 2017 in line with the rising loan utilization. In the general government sector in which financial corporations are net financial creditors, the ratio of accounts receivable receded somewhat between the two periods (Chart 4).

[1] The household sector also includes "Non-Profit Institutions Serving Households".

Chart 5: Intra-sectoral Net Financial Connection of Other Monetary and Financial Institutions, Stock (%GDP)



Source: CBRT, TURKSTAT

The ratio of flow of funds between other monetary and financial institutions and the sub-sectors to GDP in 2010 and 2017 suggests that they are mostly indebted to insurance corporations and financial auxiliaries, but are creditors for financial intermediaries and the Central Bank. In the analyzed period, indebtedness to insurance corporations posted an uptick due to the rise in time deposits, while the ratio of debts to financial auxiliaries declined somewhat due to the fall in stocks. The largest sub-sector that is indebted to other monetary and financial institutions proved to be the Central Bank, and this ratio rose from 4.1 percent in 2010 to 5.2 percent in 2017 due to the demand deposits (Chart 5).

Conclusion

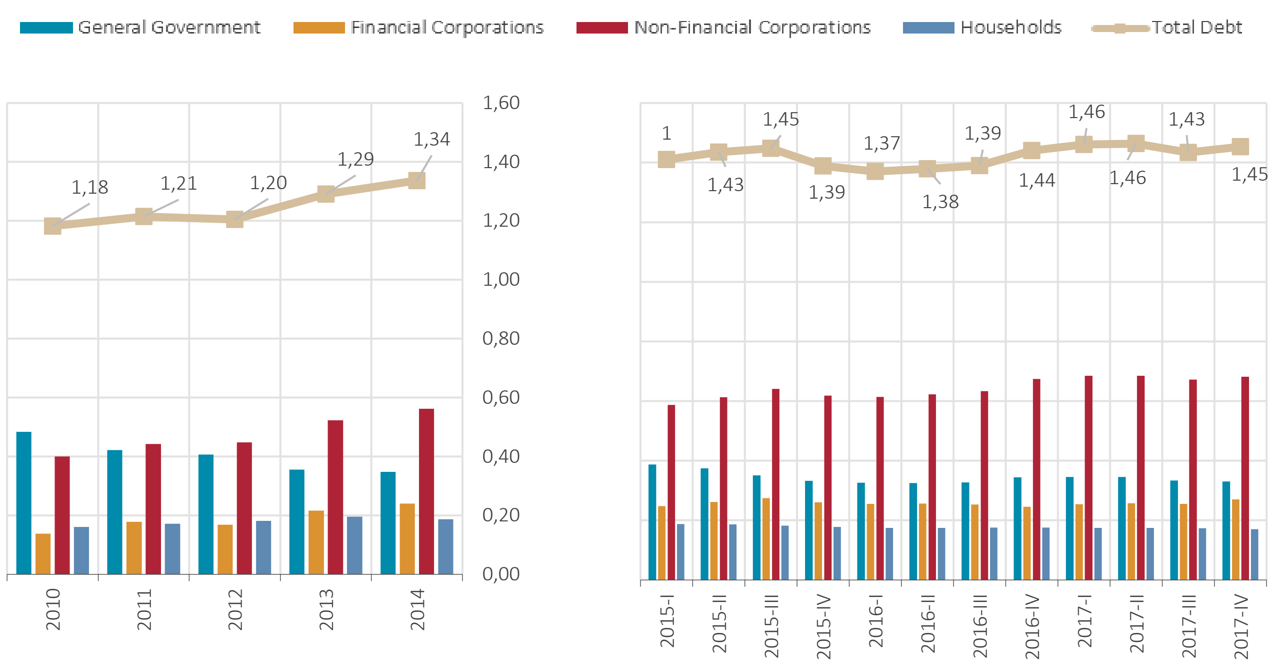
An analysis of flow of funds of financial corporations in the light of the data compiled under the Financial Accounts indicates that financial corporations, which held a net financial debtor position in 2010, attained the net financial creditor position in 2017. Financial corporations are indebted primarily to households through the collected deposits, and secondly to the rest of the world through the utilized loans. Despite the fall in the indebtedness to households/GDP ratio in the 2010-2017 period, indebtedness to the rest of the world posted an increase. In other words, deposits collected from households registered a decline in ratio in the financing of financial corporations, while an upward trend was seen in external loans. Financial corporations, through these resources, finance mostly non-financial corporations, and the amount of this funding increased gradually from 2010 to 2017.

Intra-sectoral flow of funds of other monetary and financial institutions indicate that they have accounts receivable from the Central Bank.

6. Total Debt of Resident Sectors

The resident sectors' financial accounts-defined total debt -that is the sum of the loans that they utilize and the debt securities they issue- to GDP increased compared to the previous quarter (Chart 21).

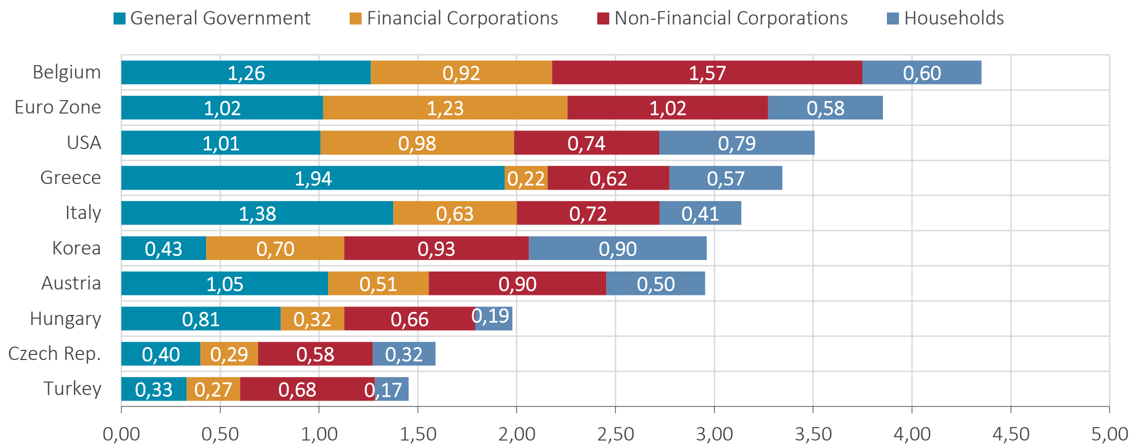
Chart 21: Total Debt of Sectors /GDP [2]



Source: CBRT.

A cross-country comparison of this indebtedness ratio reveals that the total debt of resident sectors in Turkey stood low in 2017Q4 (Chart 22).

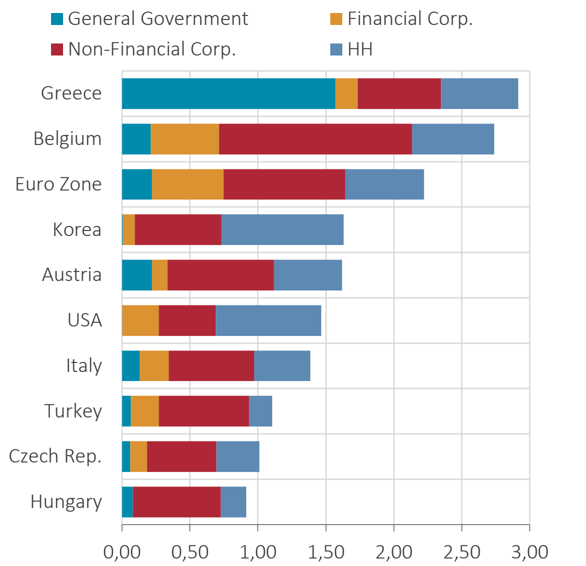
Chart 22: Cross Country Comparison of Debt/GDP by Sectors (2017Q4)*[2]



Source: CBRT, TURKSTAT, OECD.
(*)Data for Korea is as of 2017Q3.

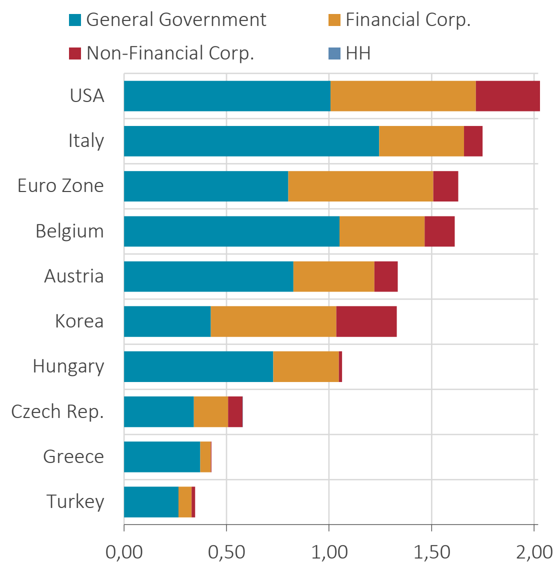
A cross-country analysis of indebtedness ratios by financial instruments shows that Turkey posted low levels of loan/ GDP and debt securities/GDP ratios in the fourth quarter of 2017. While the largest sector with respect to loan indebtedness ratio was the non-financial corporations with a ratio of 66 percent of GDP; the general government was the leading sector in debt securities with a ratio of 27 percent (Charts 23 and 24).

Chart 23: Cross Country Comparison of Loan/GDP By Sectors (2017Q4)[2]



Source: CBRT, TURKSTAT, OECD.
(*)Data for Korea is as of 2017Q3

Chart 24: Cross Country Comparison of Debt Securities/GDP By Sectors (2017Q4)[2]



Source: CBRT, TURKSTAT, OECD.
(*)Data for Korea is as of 2017Q3.