III. Non-Financial Sector

Türkiye's household indebtedness (financial debt/GDP) continued to decrease, and it is significantly below the averages of advanced and emerging economies. The household debt is increasing at a milder pace than household assets. The rise in debts is mainly driven by personal credit card balances while the growth in housing and general-purpose loans lags behind the GDP growth. The share of wage-earners with low income volatility in liabilities remains high, which limits the household credit risk. While the strong increase in household financial assets continues, the share of TL in asset composition is growing. Among household assets, TL deposits are increasing significantly on the back of implementations encouraging conversion to the Turkish lira whereas the preference for FX deposits is on the decline. In addition, there is a growing household interest in non-deposit financial assets, which is deemed to be a positive development in terms of broad-based use of other instruments as an alternative to deposits.

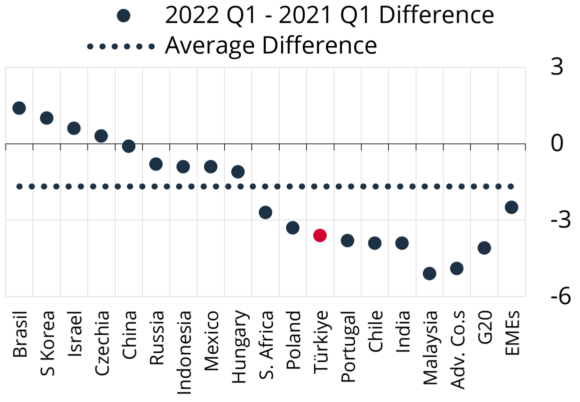
While Türkiye's non-financial corporate sector indebtedness remains moderate compared to peer countries, the ratio of its financial liabilities to assets continues to decline. The outlook for liquidity, profitability and debt service indicators of non-financial corporate sector firms remains positive. The developments in exchange rates and commodity prices as well as inflationary pressures have driven up the working capital needs and financial liabilities of firms. On the other hand, their assets are backed by the increase in turnover and profitability driven by strong economic activity. Corporate sector firms continue to repay their FX debts, and the FX risk outlook keeps improving. While firms' access to external financing has increased strongly, the corporate sector's external debt renewal ratio remains high. Profitability of corporate sector firms is rising on the back of strong economic activity, exports, and inventory revaluation. The improvement in debt service and liquidity indicators of firms is maintained.

III.1 Household Developments

Household indebtedness in Türkiye continues to remain below that of advanced and emerging economies.

While expansionary policies have been lifting due to fading effects of the pandemic and the rebound in economic activity, financial conditions have been tightened amid global inflation developments. Following the pandemic, the household indebtedness ratio of many countries receded (Chart III.1.1). Likewise, household indebtedness in Türkiye decreased in this period, and the household financial debt/GDP ratio fell to 13.3% (Chart III.1.2). The low level of household indebtedness to national income limits the household indebtedness-driven risks in our country.

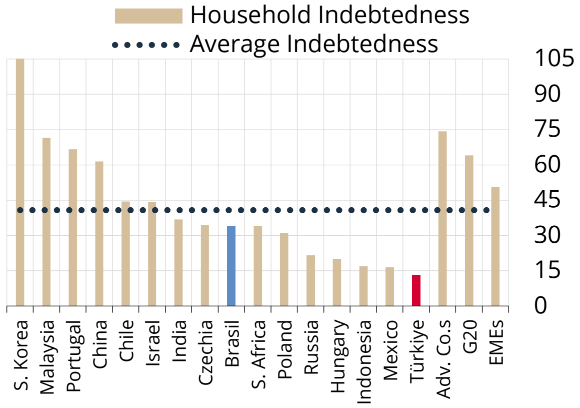
Chart III.1.1: Change in Household Indebtedness (Percentage Points)



Source: BIS Last Observation: 2022Q1

Note: Household indebtedness is calculated as the total of debt securities and loans of households and non-profit institutions serving households / GDP ratio. Difference values denote the one-year change in indebtedness ratio. The horizontal line shows the change in the average indebtedness of selected countries over the last one year.

Chart III.1.2: Household Indebtedness (Debt/GDP, %)



Source: BIS Last Observation: 2022Q1
Note: The country marked in blue has median indebtedness in the sample. Horizontal lines are the average values for selected countries.

A breakdown of household financial debt by subcategories reveals that the largest increase was seen in vehicle loans and personal credit cards (PCC), while housing and general-purpose loans realized a slower growth relative to the previous reporting period (Table III.1.1). Price increases in consumer goods and services account for the rise in PCC balance. The introduction of macroprudential policies for housing and general-purpose loans in June 2022 has resulted in a decline in the ratio of housing and general-purpose loans to GDP during the last year. On the other hand, the growth in PCC balance is aligned with the growth in economic activity, and the ratio of PCC balance to GDP remains flat.

Table III.1.1: Household Financial Liabilities

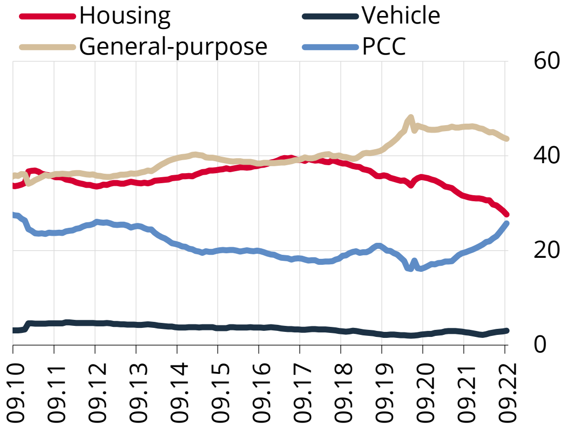
	09.21		03.22		09.22		6-Month Growth (Annualized)
	TL Billion	Ratio to GDP	TL Billion	Ratio to GDP	TL Billion	Ratio to GDP	
Total liabilities	**1,017.4**	**15.6**	**1,137.8**	**13.5**	**1,417.8**	**12.5**	**55.3**
Housing	310.1	4.8	338.3	4.0	381.6	3.4	27.2
Vehicle	27.0	0.4	25.4	0.3	41.9	0.4	171.8
General-purpose	455.9	7.0	500.5	6.0	602.9	5.3	45.1
Personal Credit Cards	193.8	3.0	240.7	2.9	355.4	3.1	118.0
AMC Receivables	30.7	0.5	32.9	0.4	36.0	0.3	19.9

Sources: CBRT, BRSA, TOKİ
Note: Liabilities also include NPL. Estimated values for 2022Q3 GDP.

The share of general-purpose loans within household financial liabilities is the largest, while that of housing loans is diminishing.

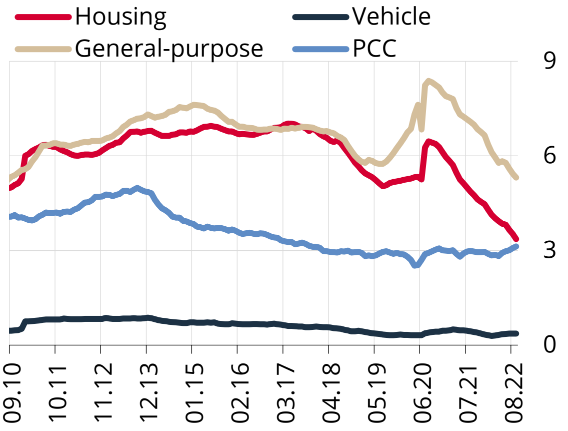
The historic development of general-purpose and housing loans shows that these two items have had almost equal share and accounted for the largest share in household liabilities until 2018 (Chart III.1.3). In succeeding years, general-purpose loans grew faster than housing loans, which led to a divergence in the distribution of shares. The share of PCC balance in total liabilities has increased significantly due to the effect of recent price movements in addition to the spread of digital shopping platforms and contactless payments during the pandemic. On the other hand, as a result of a terminating period of loan promotions previously introduced during the pandemic, the rise in general-purpose and housing loans lagged behind the increase in economic activity and the share of these loan types within GDP declined (Chart III.1.4). While the ratio of housing and general-purpose loans to GDP stood significantly below the average of the last 10 years before the pandemic, the ratios for PCC and vehicle loans remained low. This development both strengthens the repayment performance of retail loan debts and also has positive effects on the asset quality indicators of the banking sector.

Chart III.1.3: Breakdown of Household Financial Liabilities (%)



Sources: BRSA, TURKSTAT Last Observation: 09.22
Note: Liabilities include NPLs.

Chart III.1.4: Breakdown of Household Financial Liabilities Compared to GDP (%)



Sources: BRSA, TURKSTAT Last Observation: 09.22
Note: Liabilities include NPLs. Estimated values for 2022Q3 GDP.

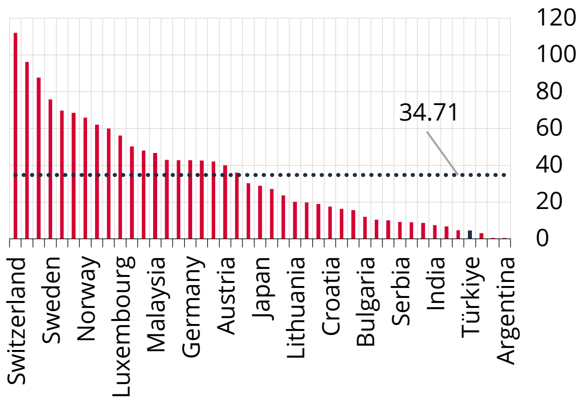
In Türkiye, while the ratio of retail loans, excluding housing, to GDP is slightly higher than the average of other countries, the ratio of total housing loans to GDP is well below that of other countries.

The lack of long-term housing financing opportunities as in advanced economies and the preference of individuals in housing purchases with cash are seen the main underlying reasons for this (Chart III.1.5). On the other hand, the high course of the ratio of retail loans to GDP excluding housing is attributed to the higher use of PCC (Chart III.1.6).

In the current reporting period, the share of liabilities of households with fixed income in household total indebtedness posted a limited rise.

The number of people with consumer loans and overdraft accounts decreased slightly in 2022 compared to the end of the previous year. This is attributed to the regulation on tightening the maturity conditions in general-purpose loans (Chart III.1.7). On the other hand, the number of people with housing loans decreased after the adjustments in loan-to-value ratio. Meanwhile, the share of wage-earners in consumer loan utilization, which increased after the pandemic, followed almost a flat course in this period. Although this ratio lags slightly behind past years, it still maintains a high course (Chart III.1.8). As the majority of consumer loan borrowers consists of wage-earners with low income volatility, the household-driven credit risk for the banking system remains low, which contributes to maintain financial stability.

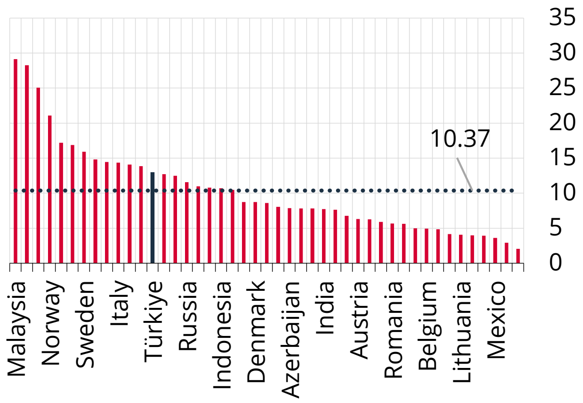
Chart III.1.5: Ratio of Housing Loans to GDP (% Ratio)



Sources: WB, Global Economy Last Observation: 09.22

Note: The ratio is calculated by dividing the current total housing loan balance in 2022 by 2021 year-end GDP. Data from 45 countries including AE and EE have been used. Horizontal lines are average values of selected countries.

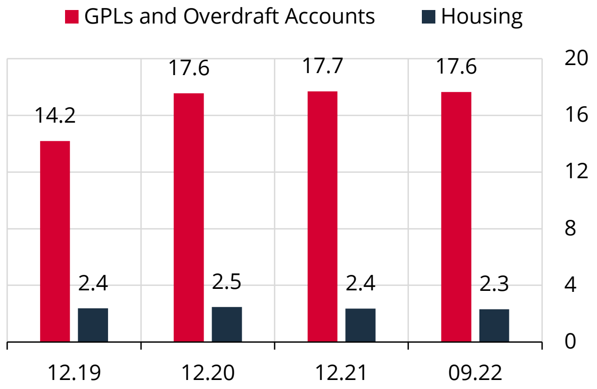
Chart III.1.6: Ratio of Retail Loans Excluding Housing Loans to GDP (% Ratio)



Sources: WB, Global Economy Last Observation: 09.22

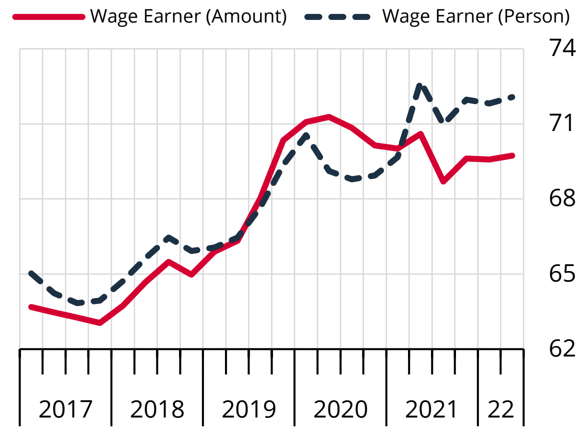
Note: The ratio is calculated by dividing the total retail loan balance excluding current housing loans in 2022 by 2021 year-end GDP. Credit balance includes all other types of loans (such as PCC, vehicle loans, student loans) provided to households, excluding housing loans. Horizontal lines are average values of selected countries

Chart III.1.7: Number of People with Consumer Loan Balance (Million Individuals)



Sources: Risk Center, CBRT Last Observation: 09.22
Note: Reports the number of individual general-purpose and housing loan borrowers in the banking sector. General-purpose loans include overdraft accounts. Zero-balance overdraft accounts are excluded.

Chart III.1.8: Income Profile of Consumer Loan Borrowers (% Share)



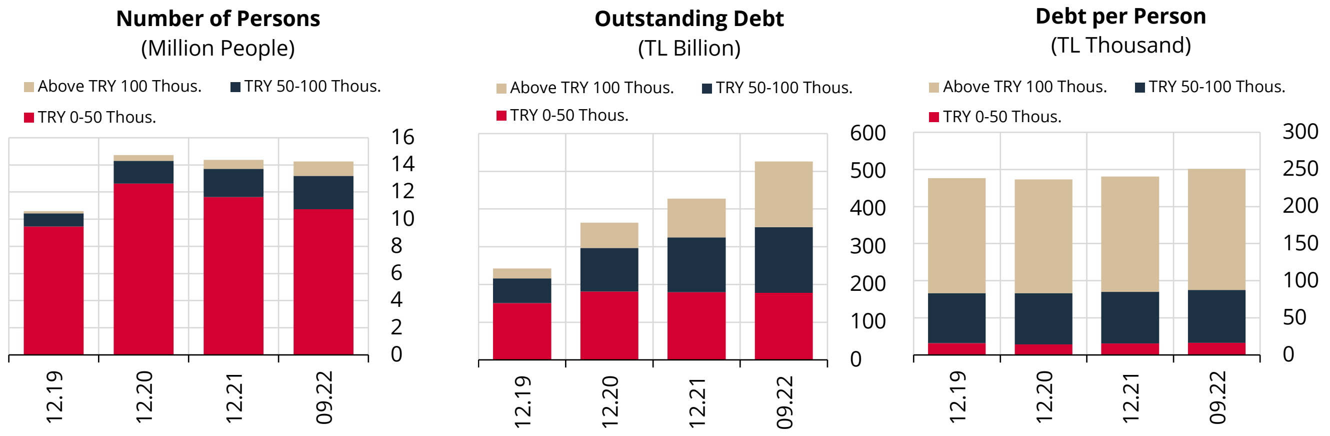
Source: BAT Last Observation: 2022Q2

Note: Loan borrowers have been categorized into wage-earners and other. The chart shows the share of wage-earners in total. Wage earner amount-person shares show the quarterly flow developments. Consumer loan is the total of retail loans excluding PCC. The data is obtained from 32 banks that are members of the Banks Association of Türkiye (BAT).

Macroprudential measures had a positive impact on general-purpose loan debt indicators. The number of borrowers decreased, and the rise in the debt per person remained below price developments.

General-purpose loans lost its growth momentum as a result of tightened maturities starting from June and the number of general-purpose loan borrowers declined (Chart III.1.9). The fall in the number of borrowers mainly stemmed from general-purpose loan with balances in the bracket of TL 0-50,000, on the other hand the increase in the number of borrowers of general-purpose loans with balances over TL 50,000 was more limited compared to the previous year. Yet, the number of general-purpose loan borrowers continued to concentrate on small loans (TL 50,000 and below). On the other hand, the flat course of the debt per capita across all amount ranges indicates that the general-purpose loan debt maintains its positive outlook, despite price developments.

Chart III.1.9: Number of General-Purpose Loan Borrowers, Outstanding Debt Distribution, and Per Capita Debt by Amount



Sources: Risk Center, CBRT

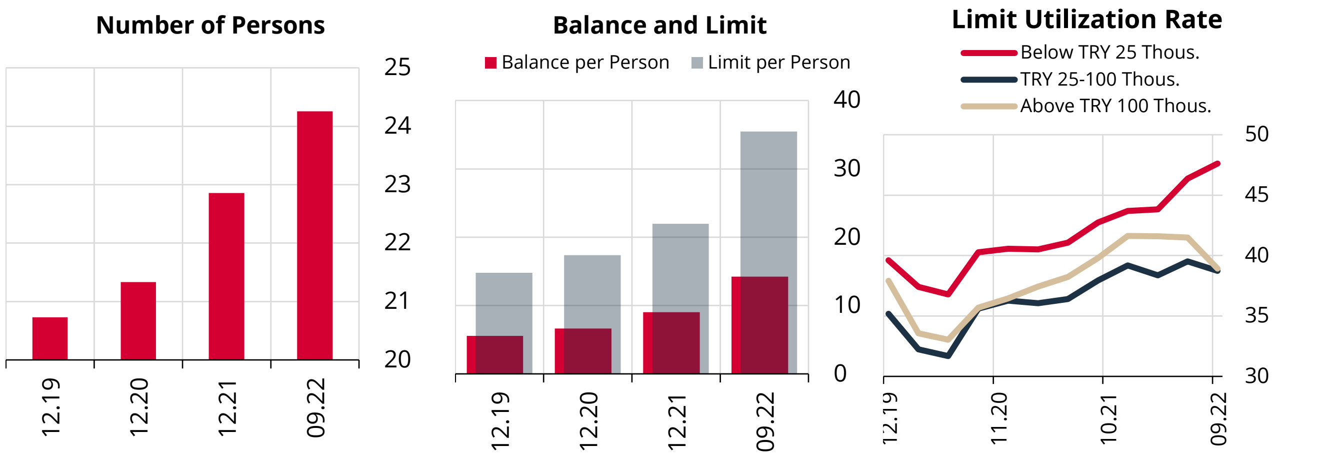
Last Observation: 09.22

Note: Amount brackets show the stock general-purpose loan debt amounts per person at all banks. The number of people is the total number of people in the relevant bracket. General-purpose loans under overdraft accounts and NPLs are excluded.

The personal credit card debt per person has increased, and the card limits have been revised based on the increase in income.

The number of people actively using cards has risen steadily since the pandemic period (Chart III.1.10). Figures for PCC balances were shaped by increased spending tendencies of individuals due to price developments as well as holidays and school periods. Meanwhile, there were upward revisions in PCC spending limits following income increases. The limit utilization rate reached to 47.6% in credit cards with limits of TL 25,000 and below, which is higher compared to the previous reporting period. On the other hand, the limit utilization rates of PCC with a limit of over TL 25,000, that have had a tighter requirement of a minimum payment rate of 40%, followed a downward trend.

Chart III.1.10: Number of Persons Actively Using PCC, Card Balance and Limit Per Customer, Card Limit Utilization Rate (Million People, TL Thousand, %)



Sources: Risk Center, CBRT

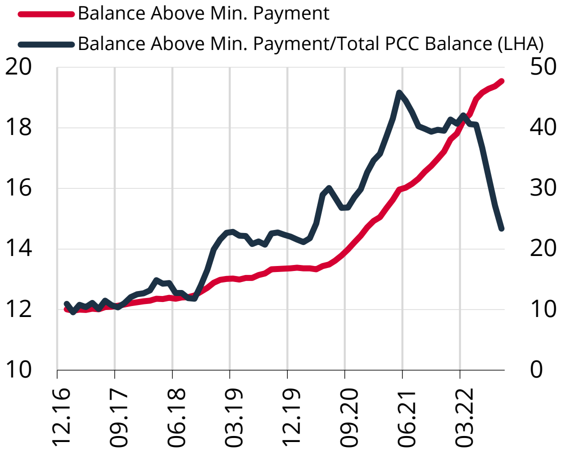
Last Observation: 09.22

Note: Chart excludes people with a credit card balance of zero.

Households' performance in credit card debt repayment has improved.

Despite the recent brisk trend in the PCC total balance, a decline is observed in the unpaid debt/total balance ratios due to the relatively moderate increase in unpaid debts. The share of unpaid debts in the total PCC for cards with a minimum payment rate or more dropped to 14.2%, and the share of unpaid debts for cards with payments below the minimum payment rate fell to 7.1% (Charts III.1.11 and III.1.12). The moderate course in the PCC debt balance with the paid portions below the minimum amount supports the positive outlook in retail loan indebtedness.

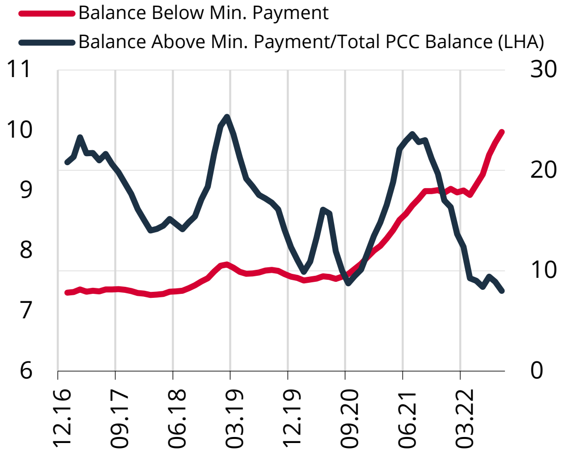
Chart III.1.11: The Remaining Card Balances Above Minimum Payment Ratio (TL Billion, %, 3-month MA)



Source: BRSA Last Observation: 09.22

Note: Debt above minimum denotes total unpaid PCC debts for which the minimum and higher amounts are repaid.

Chart III.1.12: The Remaining Card Balances Below Minimum Payment Ratio (TL Billion, %, 3-month MA)



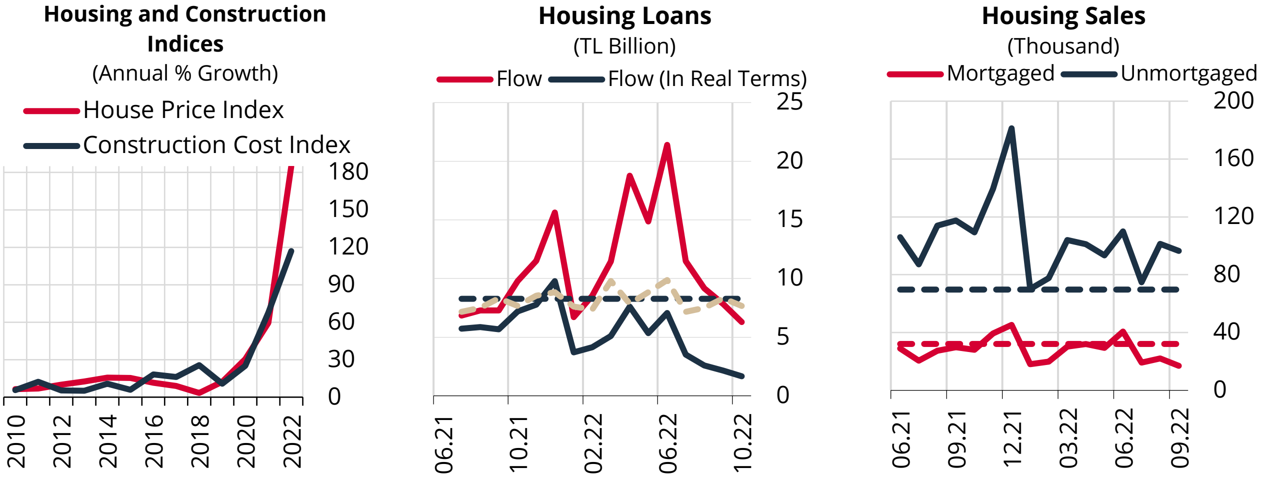
Source: BRSA Last Observation: 09.22

Note: Debt above minimum denotes total unpaid PCC debts for which the minimum and lower amounts are repaid.

As a result of the new regulation which differentiated loan-to-value ratios for housing loans according to the loan amounts, housing loans, which had accelerated in the first half of 2022, slowed down and the share of unmortgaged house sales increased.

In the second half of 2022, the rate of increase in the housing price index and the construction cost index started to diverge. Housing loans slowed due to the rise in house prices as well as the macroprudential measures implemented in June, and the fall in the amount of low-cost loans extended by state banks. An analysis of the housing loan utilization adjusted for housing price effects also confirms the slowdown and housing loans remain below its historical average. Accordingly, unmortgaged house sales are above the historical average, whereas mortgage sales are below the historical average (Chart III.1.13).

Chart III.1.13: Housing Loans, Sales, and Price Developments



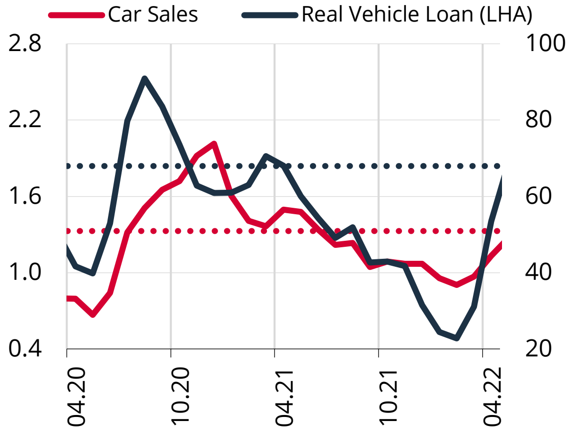
Source: CBRT Last Observation: 10.22 (Indices: 08.22)

Note: Housing loans are shown in terms of monthly flow disbursements. Dashed straight lines show the average real housing loan utilization and the related housing sales between 2012 and 2019 while the dashed and moving line shows the average housing loans in the relevant months of the 2012-2019 period. Data have been deflated by the house price index, and the September-October data has been estimated with the CPI.

The acceleration in vehicle loans and vehicle sales at the beginning of 2022 started to decline in the second half of the year due to seasonal effects.

The ongoing chip crisis, the negative impact of the pandemic on supply chains, and the energy crisis resulting from geopolitical developments have slowed the pace of automobile production worldwide, and this has also limited the use of vehicle loans. The decline observed in automobile sales across the last year and in the first quarter of the year came to a halt in this period. In the current reporting period, automobile sales and vehicle loans, which were slightly above the long-term average, lost some momentum in recent months due to seasonal effects (Chart III.1.14).

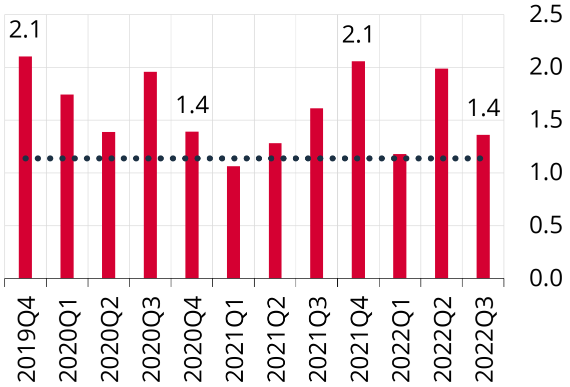
Chart III.1.14: Vehicle Loan Disbursements and New Car Sales (Thousand, TL Billion, 3-Month MA)



Sources: ODD, BRSA Last Observation: 10.22

Note: Data for monthly flow vehicle loans of banks and financing companies, and new car sales have been used. Deflated by the vehicle prices sub-index of the CPI. Dashed lines show the average real vehicle loan disbursements and car sales between 2012 and 2019.

Chart III.1.15: Number of Used Car Sales (Million Units)



Source: TURKSTAT Last Observation: 2022Q3

Note: Used car sales refer to vehicles whose ownership has changed hands once or more through public notaries. Shows the quarterly sums of the numbers of vehicles changing hands. Dashed line shows the average number of used car sales amounting to 1.1 million between 2012 and 2019 in quarterly periods.

The increase in vehicle prices is a determining factor since it makes the macroprudential measures, which are progressively applied based on vehicle prices, even more restrictive in all vehicle groups. On the other hand, in the March-September period of 2022, the number of transferred vehicles (second-hand sales and purchases) increased compared to the same period of the previous year, and purchases and sales of used vehicles stood above the long-term average levels (Chart III.1.15).

The strong growth trend in household financial assets, especially TL savings deposits, was maintained with the support of KKM accounts.

In this period, the composition of household financial assets showed a significant change. The share of TL assets in household financial assets is on the increase. On the deposits side, the ratio of TL savings deposits to GDP has increased (Table III.1.2). Likewise, the USD equivalent of FX and precious metal investments declined as a result of individuals' shift to the KKM as well as the fall in the gold price per ounce. The main driver of the strong growth in household financial assets was the surge in TL savings deposits. Households also showed strong preferences for non-deposit financial assets in this period. In particular, the ratios of mutual funds and stock investments to GDP increased by 1.7 percentage points compared to the values of the previous year and reached to 10%. While the ratio of household financial debt to GDP continues to decline, the ratio of financial assets to GDP is around 50%.

Table III.1.2: Household Financial Assets

	09.21		**03.22**		**09.22**		**6-Month Growth** (Annualized)
	TL Billion	**Ratio to GDP**	**TL Billion**	**Ratio to GDP**	**TL Billion**	**Ratio to GDP**	
Total Assets	**3,033.0**	**46.5**	**4,297.4**	**51.1**	**5,638.1**	**49.7**	**72.1**
TL Savings Deposits	1,069.8	16.4	1,248.6	14.9	1,894.9	16.7	130.3
FX Savings Deposits	1,011.2	15.5	1,615.9	19.2	1,882.3	16.6	35.7
- (Billion USD)	*114.4*		*110.3*		*101.7*		
Precious Metal Deposits	272.2	4.2	441.2	5.2	475.1	4.2	15.9
- (Billion USD)	*30.8*		*30.1*		*25.7*		
Bonds and Bills	70.3	1.1	107.3	1.3	151.2	1.3	98.6
Mutual Funds	315.5	4.8	479.6	5.7	602.4	5.3	57.7
Pension Mutual Funds	168.4	2.6	250.6	3.0	308.6	2.7	51.6
Other Mutual Funds	147.1	2.3	229.0	2.7	293.8	2.6	64.5
Equity Securities	226.9	3.5	344.3	4.1	537.4	4.7	143.7
Repo	4.5	0.1	7.0	0.1	9.1	0.1	69.5
Currency in Circulation	62.5	1.0	53.4	0.6	85.8	0.8	157.6

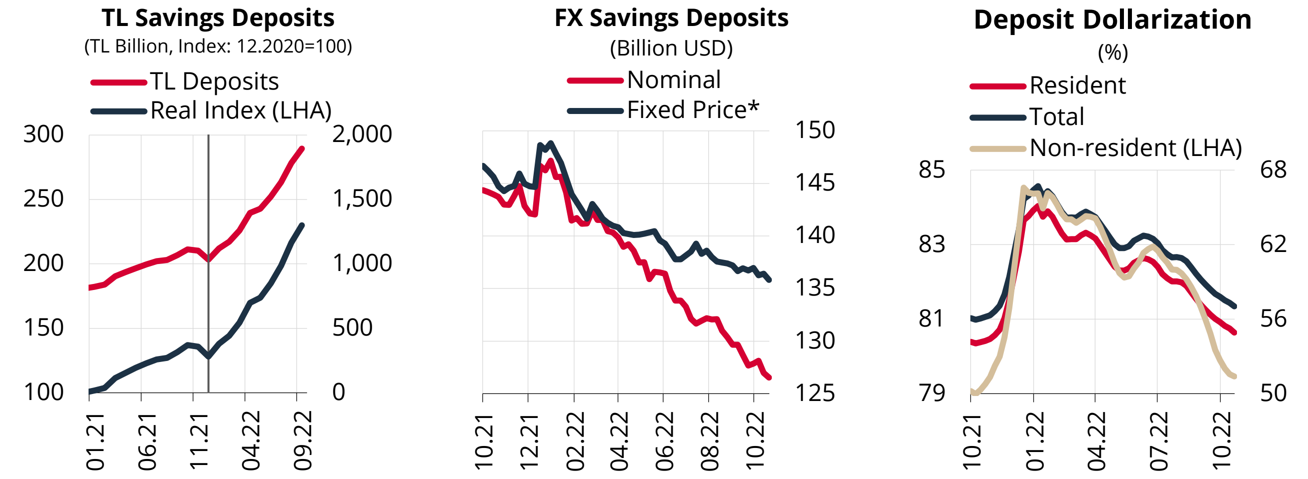
Sources: CBRT, MKK, PMC

Note: Month-end exchange rates have been used. Pension mutual funds show the total funds of participants in the Private Pension System (PPS) and the Auto Enrollment System (AES), minus the state contribution. Deposits refer to resident real persons' deposits. Estimated value for 2022 Q3 GDP data.

After the introduction of KKM, households' preferences for FX deposits have been declining.

In the current reporting period, households' TL deposit balance continued to increase significantly (Chart III.1.16). This is attributed to the households' shift in savings away from FX deposits to KKM. With the improvement to be realized in inflation as well as inflation expectations, it is foreseen that the portfolio preferences of households will strengthen further in favor of TL deposits and the liraization of household assets will be intensified. The dollarization rate of the households remained on a downward track, while the deposit dollarization rate in resident real persons declined to 54.9%.

Chart III.1.16: TL and FX Savings and Dollarization Rate



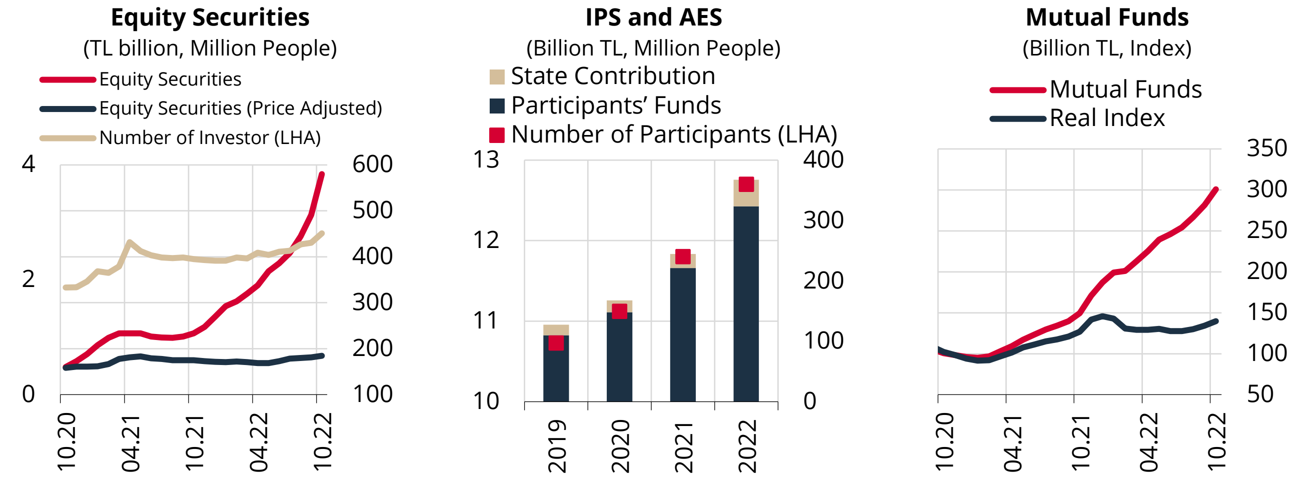
Source: CBRT Last Observation: 10.22

Note: TL and FX deposits of resident real persons. Real index is obtained by adjusting the monthly change in deposits by the CPI. The vertical line marks the exchange rate movement in December 2021. FX deposits refer to resident real persons' deposits, including precious metal accounts. For the fixed price*, the parity between exchange rates has been taken as constant. Shows the dollarization tendency of resident real persons in four-week MA terms.

The upward trend in households' non-deposit financial assets continues.

The household stock portfolio continued to expand in line with the stock index and reached to the highest value of all time (Chart III.1.17). In this period, the portfolio size of stocks adjusted for price effects also tended to increase. However, the increase in the household stock portfolio is largely attributed to price effects. On the other hand, the number of stock investors rose considerably in the current reporting period and exceeded 2.8 million people. Funds in the private pension and auto enrollment systems (PPS and AES), one of the most important households' assets items, remained on an upward track. Likewise, the number of participants in PPS continued to increase in this period. It is considered that households' acquisition of the habit of investing their savings in long-term instruments will contribute to financial stability. On the other hand, mutual funds held by households continued to rise due to price developments. Even excluding price effects, an upward trend is observed also in household mutual fund investments.

Chart III.1.17: Household Non-Deposit Asset Developments



Sources: MKK, BIST, PMC Last Observation: 10.22

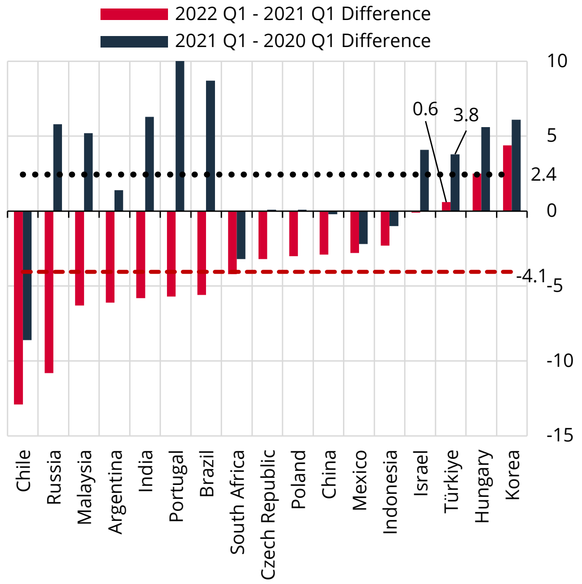
Note: Equity securities portfolio in real terms is adjusted for changes in the BIST 100 index value and real index mutual funds are adjusted for the CPI. PPS and AES data are in aggregated terms, and the number of participants has been singled out. In mutual funds, December 2019 has been indexed to 100, and data refers to three-month MA.

III.2 Corporate Sector Developments

Corporate sector indebtedness, which declined on a global scale with the rebound in economic activity following the termination of pandemic restrictions, displays a similar trend in Türkiye and remains at a moderate level compared to peer countries.

Owing to the measures to curb the adverse impacts of the pandemic as well as the incentives offered, corporate sector indebtedness (Financial Debt/GDP) across all countries increased in the one-year period following the first quarter of 2020. On a global scale, corporate sector indebtedness declined to some extent due to the alleviation of pandemic-related measures as of the second half of 2021 as well as the rebound in economic activity. In Türkiye, corporate sector indebtedness posted a mild increase. In the 12-month period from the first quarter of 2021, corporate sector firm indebtedness fell by around 4 percentage points in peer countries, while corporate sector financial indebtedness in Türkiye rose by 0.6 percentage points (Chart III.2.1). The latest data for Türkiye (August 2022) reveals a decline in indebtedness by 0.7 percentage points. As of the first quarter of 2022, the corporate sector financial debt to GDP ratio of Türkiye (72.6%) is slightly above the peer countries' (66.3%) and the median country average (67.5%) (Chart III.2.2).

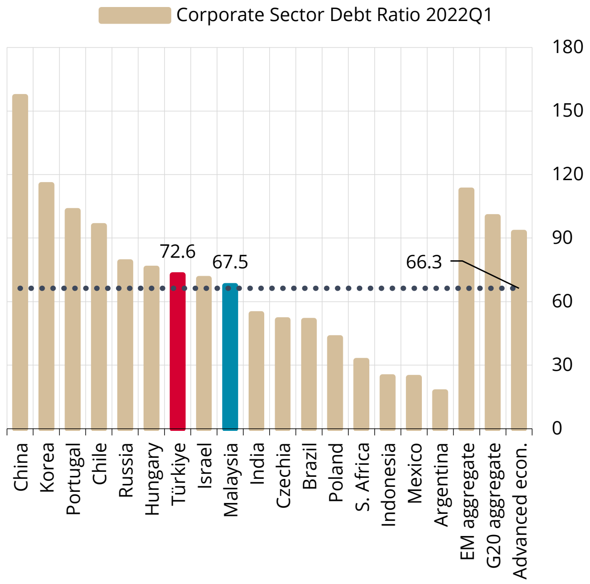
Chart III.2.1: Change in Financial Debt/GDP Ratio of Corporate Sector (% Points)



Source: BIS Last Observation: 03.22

Note: Difference denotes the one-year change in indebtedness. Difference values represent the changes between the first quarter values of 2021 and 2022 and those of 2020 and 2021. The ranking in the chart is from larger to smaller according to the difference between 2022Q1 and 2021Q1. The blue dashed line is the average of 2021Q1-2020Q1 differences, while the red dashed line is the average of 2022Q1-2021Q1 differences.

Chart III.2.2: Corporate Sector Indebtedness Financial Debt/GDP (%)



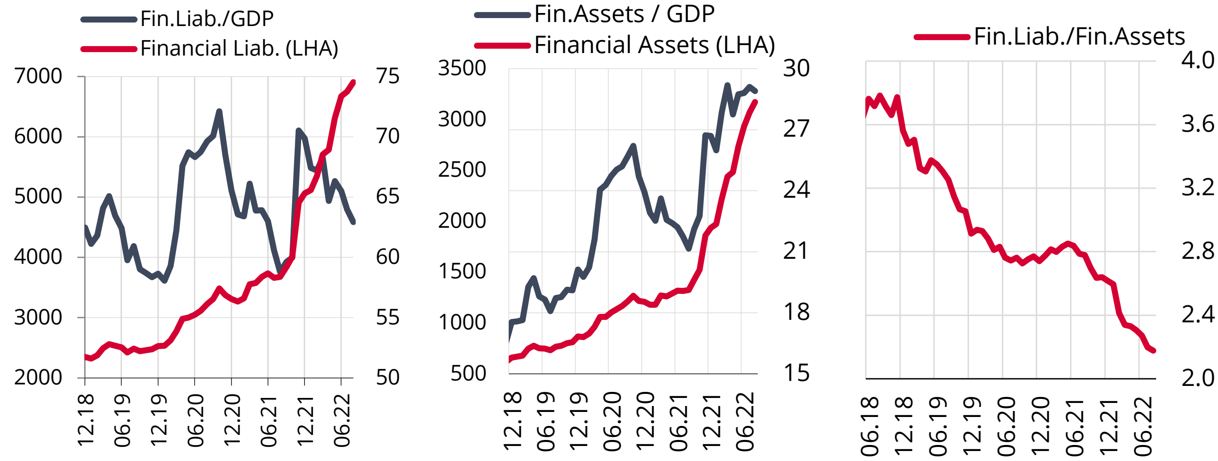
Source: BIS Last Observation: 03.22

Note: The total financial debt definition for the corporate sector includes domestic and external loans utilized by firms, their bond issues, performing and non-performing loans and interest rediscounts. According to 2022Q1 values, the median value is highlighted in blue. Countries in the chart are ranked from larger to smaller in terms of indebtedness. The dotted line shows average indebtedness.

Financial assets of the corporate sector grew steadily compared to its financial liabilities, while the financial leverage ratio of the corporate sector hovered close to the lowest level recorded over the last 10 years.

Following the exchange rate volatility in the last quarter of 2021, the corporate sector debt to GDP ratio, which trended upwards amid the increased TL equivalent of FX loans, declined in 2022. In this period, financing needs stemming from the rise in commodity prices due to geopolitical developments and higher working capital expenditures led to an increase in financial liabilities of firms. On the other hand, as a result of the brisk course of economic activity and the relatively alleviated exchange rate volatility, the corporate sector debt to GDP ratio has declined. While firms' assets were positively affected by the higher exchange rate, increased profitability with strong economic activity supported the corporate sector's asset creation. The ratio of corporate sector financial assets to GDP followed almost a flat course. Thus, the financial leverage ratio of the corporate sector (financial liabilities/assets) maintains its historically low level (Chart III.2.3).

Chart III.2.3: Corporate Sector's Financial Assets and Liabilities (Ratio, TL Billion)



Source: CBRT
Last Observation: 08.22

Note: Financial liabilities include the corporate sector's domestic and international loans, leasing, factoring debts and bond issuances. Financial assets include TL and FX deposits and securities, but direct capital investments abroad and export receivables are not included. Annual GDP values in monthly frequency are calculated by the CBRT. The latest GDP data is the CBRT's estimate. End-month foreign exchange buying rate is considered in calculations.

Table III.2.1: Corporate Sector's Financial Liabilities (TL Billion)

	08.21		03.22		08.22		**Growth**
	(TL Billion)	(Ratio to GDP)	(TL Billion)	(Ratio to GDP)	(TL Billion)	(Ratio to GDP)	(Annualized)
I. Domestic Loans (i+ii)	**2.727.1**	**43.6**	**4.031.5**	**48.2**	**4.833.6**	**45.8**	**54.6**
i. TL	1.523.8	24.4	2.040.4	24.4	2.702.4	25.6	96.3
A. Bank	1.435.6	22.9	1.918.6	22.9	2.558.4	24.3	99.5
B. NBFI	72.5	1.2	101.4	1.2	118.2	1.1	44.7
C. Bonds Issued	15.6	0.2	20.3	0.2	25.8	0.2	76.7
ii. FX (FX-indexed loans included)	1.203.4	19.2	1.991.2	23.8	2.131.2	20.2	17.7
USD Terms *(A+B+C)*	*144.9*		*136.0*		*117.3*		*-29.9*
A. Bank	138.5	2.2	130.1	1.6	112.0	1.1	-30.2
B. NBFI	5.6	0.1	5.2	0.1	4.6	0.0	-25.9
C. Past-Due Loans Taken Over by SDIF	0.7	0.0	0.7	0.0	0.7	0.0	0.0
II. External Loans	**868.4**	**13.9**	**1.527.0**	**18.3**	**1.889.7**	**17.9**	**66.8**
USD Terms	*104.6*	*1.7*	*104.3*	1.2	*104.0*	1.0	*-0.7*
III. Bonds Issued Abroad	**84.0**	**1.3**	**148.8**	1.8	**183.6**	**1.7**	**65.7**
USD Terms	*10.1*	-	*10.2*	**-**	*10.1*	-	*-1.6*
Total Financial Debt (I+II+III)	**3.679.5**	**-**	**5.707.3**	**-**	**6.906.9**	**-**	**58.1**
For Info: Total FX Loans (Billion USD)	*259.6*	-	*250.5*	-	*231.4*	-	*-17.3*
Financial Debt/GDP (%)	58.8	-	68.3	-	65.5	-	-9.4

Source: CBRT, BRSA
Last Observation: 08.22

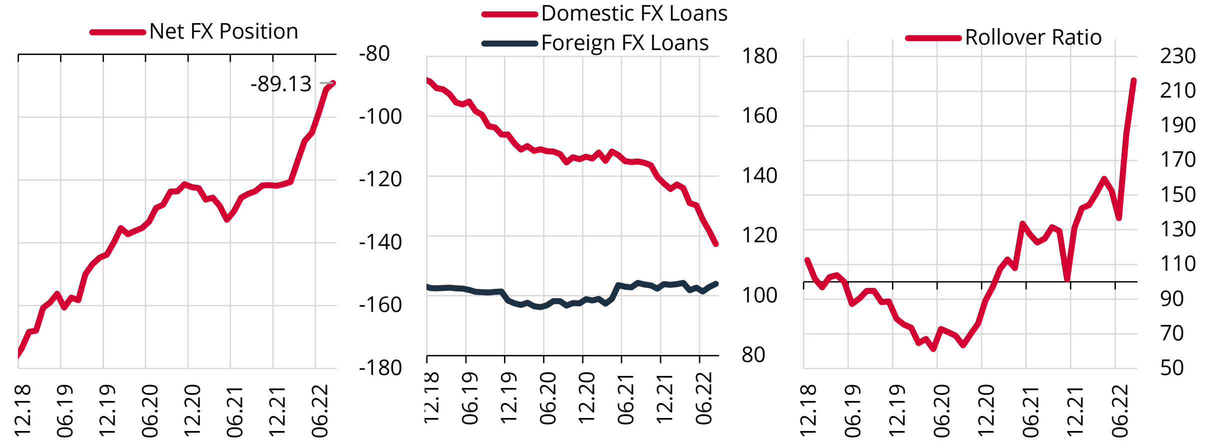
Note: The last column reflects annualized five-month change between 03.22 – 08.22 using the compound calculation method. Financial Debt/GDP in this column is the difference between the two ratios in the current reporting period.

Financial liabilities of the corporate sector are predominantly composed of loans extended by domestic banks (Table III.2.1). In the current reporting period, the amount of FX loans utilized by companies from domestic banks decreased considerably in FX terms, while FX loans extended by banks abroad remained unchanged in FX terms. In this period, the amount of bonds that firms issue abroad rose by 66% in TL terms, and firms diversified financing resources. The total of financial debts grew by 58% in annualized terms in this reporting period, whereas total FX loans declined by 17%.

While the FX-denominated financial debt of the corporate sector decreased due to FX loans borrowed from domestic banks, the improvement in the net FX short position was sustained.

The improvement in the corporate sector' net FX short position continued in the current reporting period, and the net FX position has dropped by USD 33 billion to USD 89 billion since the end of 2021. The ongoing declining trend in FX loans borrowed from domestic banks contributed to the sharp decrease in the net FX open position. The corporate sector firms' total FX loan debt to domestic and foreign banks has decreased by another USD 20 billion since the publication of the previous Report. Despite a slight decrease in November, firms' external debt rollover ratio maintained its strong trend above 150% throughout the reporting period and went above 200% in August (Chart III.2.4). This is considered favorable with respect to firms' capacity to access external finance and the flow of foreign funds to Türkiye amid mounting global volatility.

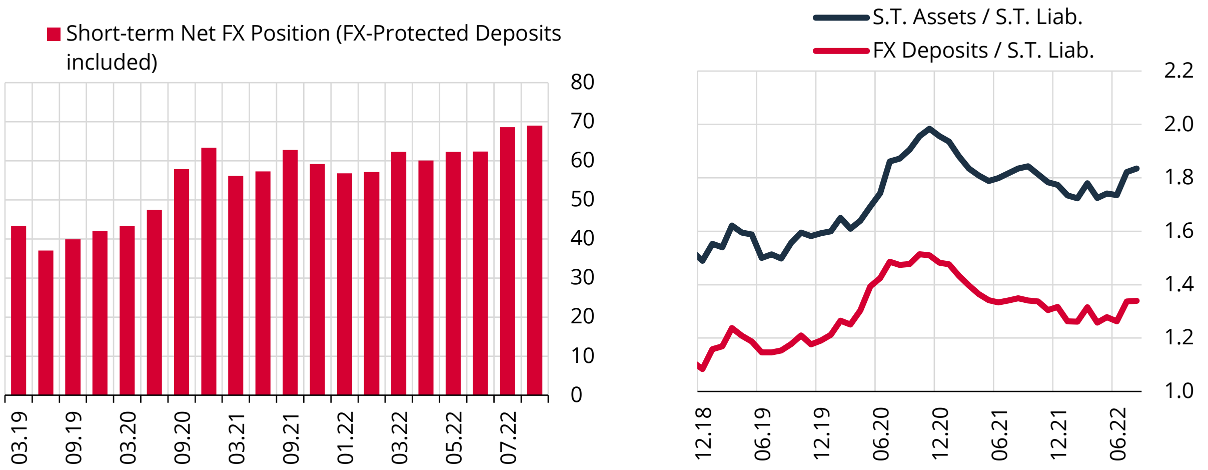
Chart III.2.4: FX Position, FX Liabilities, External Debt Rollover Ratio (Billion USD, %)



Source: CBRT Last Observation: 08.22

Note: External debt rollover ratio shows the ratio of the total amount of external borrowing in a 6-month window to the total debt repayment in the same period.

Chart III.2.5: Indicators of Corporate Sector's FX Risk (Billion USD, Ratio)



Source: CBRT Last Observation: 08.22

Note: FX deposits are the total amount of FX deposits held by resident real sector companies in domestic and foreign financial institutions. Net FX position calculations include FX-protected deposits.

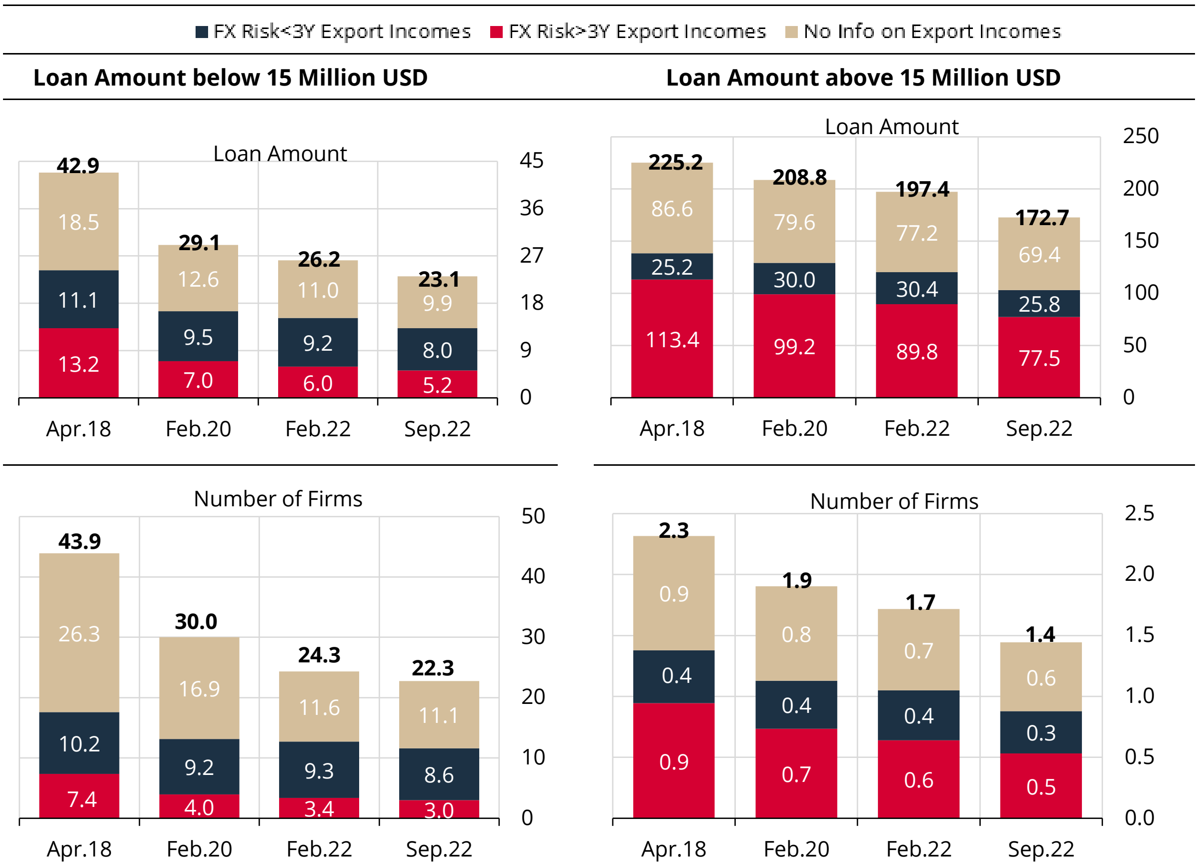
The positive outlook for the exchange rate risk indicators of the corporate sector is maintained.

The corporate sector's short-term net FX long position climbed to USD 69 billion as of August 2022, also with the contribution of KKM accounts (Chart III.2.5). Accordingly, the firms' short-term FX assets to short-term liabilities ratio and the FX deposits to short-term liabilities ratio increased slightly in July and August. This rise was driven by the fall in firms' short-term FX liabilities as well as the increase in their short-term assets stemming from the KKM.

While the downward trend in the FX indebtedness of firms and the number of firms having FX loans continued, the FX income profile of firms with FX loans improved further.

Following the arrangement that related FX loan utilization of companies with FX risk below USD 15 million to their FX income within the last three years (for details: FSR-May 2018, Special Topic I.1, Page 81), the loan balance of firms with FX loan debts below USD 15 million receded by 46% from USD 42.9 billion in April 2018 to USD 23.1 billion in September 2022. The loan balance of firms with FX loan debt above USD 15 million, for which the arrangement did not impose any restrictions, dropped by 23% from USD 225.2 billion to USD 172.7 billion in the same period (Chart III.2.6). Over the same period, the number of firms with FX loan debt below USD 15 million fell by 48%, and the number of firms with FX loan debt above USD 15 million decreased by 38%. Among the firms using FX loans, the FX income profile also improved further in the current reporting period. Moreover, the number of firms with FX risk balance exceeding their three-year export income as well as their share in the total decreased among the companies whose export information could be accessed. The improvement in the export profile of the group with FX loan debts above USD 15 million, which is not subject to regulation, is considered positive in terms of increasing the efficiency of large-scale companies in FX risk management.

Chart III.2.6: Firms' FX Loan Balance Compared to Three-year Exports Income and Number of Firms (Billion USD, Thousand firms)



Source: Risk Center, CBRT, TURKSTAT

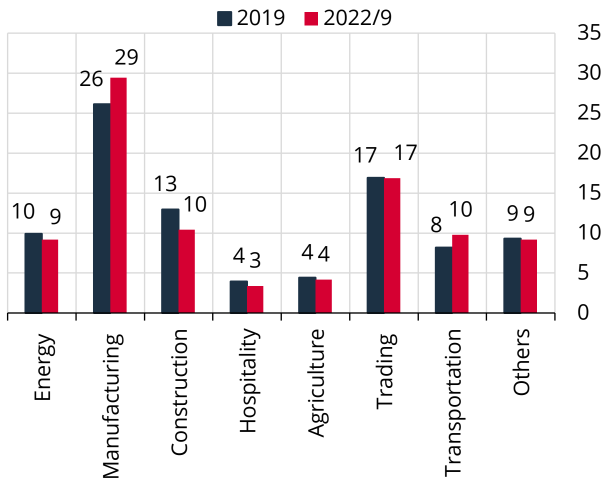
Last Observation: 09.22

Note: Export revenues are the sum of the company's end-year revenues from exports of goods over the last three years starting from the relevant date. Firms with no export income data show firms that do not have export income records in the database, and these firms are likely to have revenues from exports of goods or FX-indexed income. FX loan debt includes loans extended from abroad via domestic banks. Direct loans from abroad are not included.

On the back of macroprudential regulations, the share of loans received by manufacturing sector firms with higher export and investment ratios is increasing.

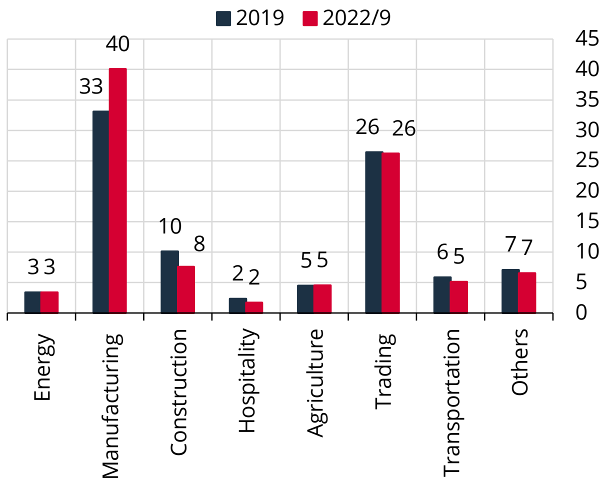
Stock loan shares of the sectors over the years have not recorded any significant change except for the manufacturing, construction, transportation and information-communication sectors (Chart III.2.7). On the other hand, the share of the manufacturing sector rose by 3.3 percentage points to 29% from end-2019 to September 2022, and that of the transportation sector increased by 1.6 percentage points to 9.8%. Meanwhile, the share of the construction sector decreased by 2.6 percentage points to 10%, and the accommodation-catering sector decreased by 0.6 percentage points to 3.4%. The share of the trade sector remained the same in the relevant period. It is considered that targeted credit policies that support exports have contributed to the increase in the share of the manufacturing industry sector in particular. In fact, an analysis of the change in flow loan shares of the sectors reveals a more evident increase in the share of manufacturing sector loans (Chart III.2.8). The share of the manufacturing sector in total flow loans, which had a share of 33.1% in total loans extended in the pre-pandemic period in 2019, rose by 7 percentage points to 40.1% in September 2022, while shares of the other sectors remained stable or declined (Chart III.2.8). Loan distribution by sectors are largely in line with the turnover, profitability and profit margin distribution of the sectors.

Chart III.2.7: Stock Loans by Sectors (% Share)



Source: CBRT Last Observation: 09.22

Chart III.2.8: Flow Loans by Sectors (% Share)



Source: CBRT Last Observation: 09.22

Note: Loans include TL loans used domestically or loans extended from abroad via domestic banks. The chart shows the distribution of sectors that have higher weight in the flow loan portfolio. The Other Services sector in the chart includes L-Real estate activities, M- Professional, scientific and technical activities, N- Administrative and support services activities, P-Education, Q- Health, R- Culture, arts, entertainment, recreation, sports and S- other services activities under NACE classification. Sectors whose NACE classification was not reported were not taken into account in the distribution calculation. The columns in the chart show the flow and stock loan share of the sectors for the relevant periods. Flow data for 2019 are calculated using data from September 2019 to December 2019. Stock loans are year-end values. “2022/9” period in flow loans covers the January 2022-September 2022 period.

The uptrend in the corporate sector’ financial assets continues to increase mainly due to TL deposits.

While financial assets of the corporate sector mounts further due to the rise in TL and FX deposits, it is noteworthy that companies also invested in public sector bonds in this period. On the FX deposits side, the TL equivalent of FX deposits rose again due to higher exchange rates in the current reporting period. The increase in TL deposits is attributed to the large-scale KKM product renewals of legal entities since February 2022, and the exchange rate difference payments of KKM accounts. On the other hand, while the USD equivalent of firms' FX deposits fell by 14% in the previous reporting period, it rose by 8% to reach USD 80 billion in the current reporting period (Table III.2.2). Although the mentioned increase is considered to be led by parity developments, the increases in FX deposits in terms of US dollars imply that companies continued to purchase FX for their commercial activities, albeit to a limited extent.

Table III.2.2: Corporate Sector's Financial Assets (TL Billion)

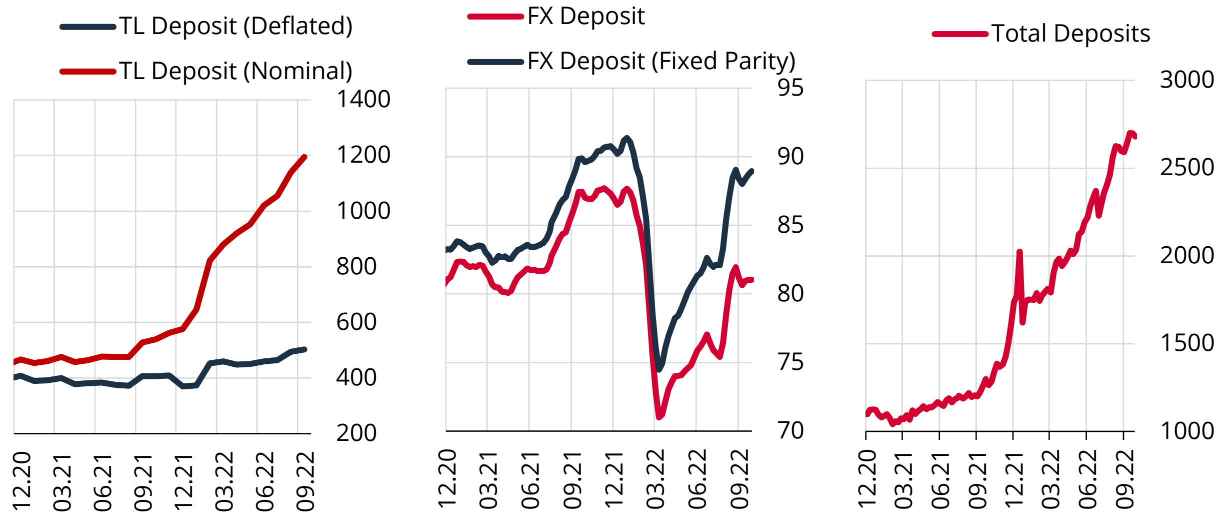
	09.21		03.22		09.22		6-Month Growth (Annualized)
	(TL Billion)	(Share of GDP)	(TL Billion)	(Share of GDP)	(TL Billion)	(Share of GDP)	
Total Assets	**1.506**	**23**	**2.303**	**28**	**3.082**	**27**	79.2
TL Commercial Deposit	528	8	880	11	1.195	10	84.2
YP Commercial Deposit	927	14	1.342	16	1.796	16	79.1
-(Billion USD)	104		92		99		16.2
Public Debt Instruments	11.6	0.2	25.5	0.3	31.4	0.3	51.8
Private Sector Debt Instruments	39.9	0.6	54.9	0.7	60.2	0.5	20.4
Total Assets / GDP	23.4		27.5		27.0		-4.2

Source: CBRT Last Observation: 09.22

Note: The share column shows the ratio of the relevant item to GDP. The last column reflects the annualized value of the six-month change between 03.22 – 09.22 using the compound calculation method. Total Assets/GDP in this column is the difference between the two ratios for the current reporting period.

TL deposits of corporate sector continued to increase in nominal and real terms (Chart III.2.9). TL deposits increased due to the launch of the KKM in January 2022, the firms' conversion of foreign currency deposits to TL deposits, the increasing TL commercial loan volume and the brisk economic activity in the first half of the year. FX deposits, which were USD 87 billion before the launch of the KKM products in the previous reporting period, fell to USD 70 billion in the first week of March. They increased slightly in the current reporting period and reached USD 80 billion at the end of September. This level is below the levels before the launch of the KKM, and KKM still provides a hedge against exchange rate volatility for companies that need FX.

Chart III.2.9: Commercial Deposits (TL Billion, Billion USD)



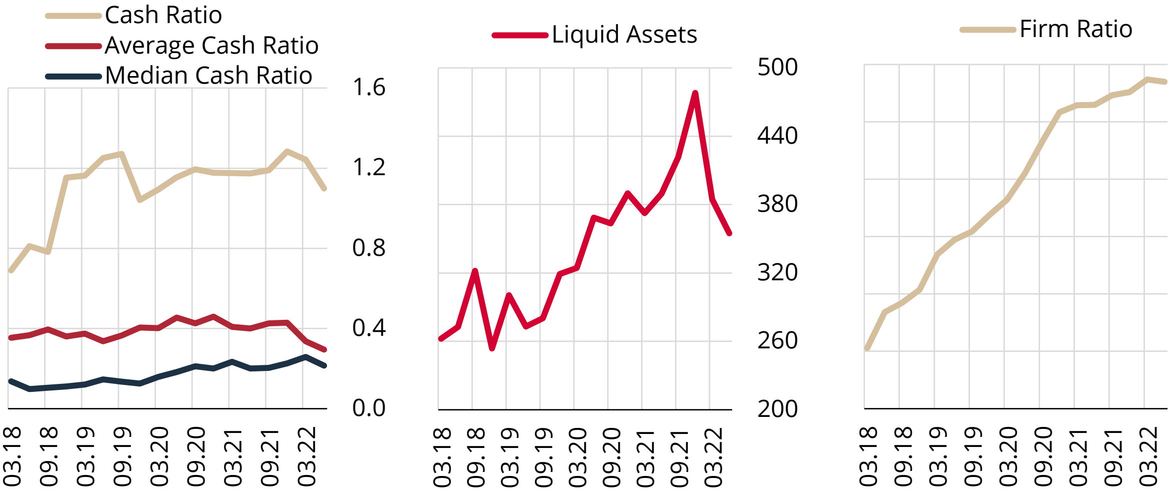
Source: CBRT Last Observation: 09.22

Note: TL deposits (deflated) are obtained by deflating nominal deposits by inflation according to the CPI. Assuming a fixed price for FX deposits; EUR/USD parity and gold ONS values are fixed at the rate recorded on 30.07.2020 and the values on the chart are four-week moving average values. Total deposits reflect the total of TL deposits and FX deposits adjusted for exchange rates and precious metals obtained from weekly data. The USD buying rate is employed to calculate the TL equivalent of other foreign currency deposits. XAU/TL value is used in calculating the TL equivalent of precious metals.

The positive outlook in liquidity, profitability, debt service and collection indicators is maintained for the corporates listed on BIST.

The cash ratio showing the ratio of firms' short-term debts covered by firms' liquid assets accelerated during the pandemic. This ratio continued to rise, albeit modestly till the end of 2021, despite exchange rate developments, rising production costs and inflationary pressures (Chart III.2.10). Meanwhile, as the exchange rates stabilized and KKM was put into effect, the FX deposits of firms declined, and the rise in short-term TL commercial loan disbursements elevated the short-term debt balance, leading to a decline in cash ratio and liquid assets. On a firm basis, the ratio of firms with a cash ratio higher than the threshold value of 0.20 (as accepted by the relevant literature) to the total number of firms, which increased during the pandemic, has been hovering above 50% since the end of 2020. Strong liquidity structure of real sector balance sheets makes firms prepared against any shocks related to FX or access to funds in an environment of geopolitical risks and setbacks in energy markets led by the energy crisis.

Chart III.2.10: Firms' Activity and Liquidity Indicators (TL Billion, Inflation-adjusted, Ratio)

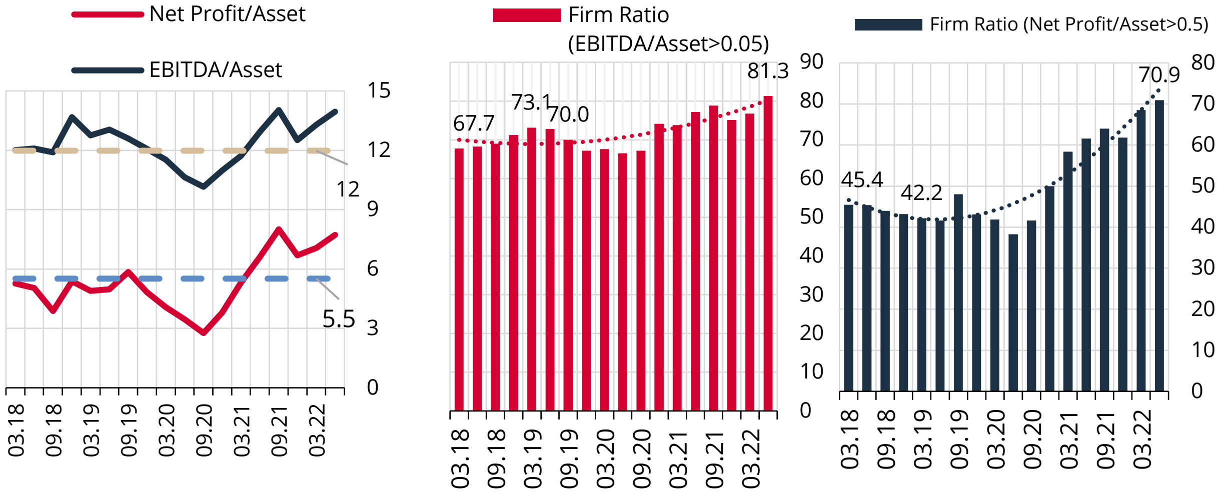


Source: FINNET Last Observation: 06.22

Note: As of the latest data, 299 corporates were included in the analysis. The cash ratio is the ratio of the sum of liquid assets and securities to the short-term debt. Cash ratio average is the average of the cash ratio calculated separately for each firm. The cash ratio median is the median value of the calculated cash ratios for all firms. The firm ratio gives the ratio of firms with a cash ratio above 20% (0.02) to the total number of firms. Liquid assets are adjusted for CPI by taking the three-month moving average.

The profitability of corporates listed on BIST continued to increase owing to the ongoing strong exports- despite higher input costs due to rise in exchange rates and commodity prices, the rise in the value of existing inventories and tax advantages offered by KKM accounts in the current reporting period (Chart III.2.11). On the other hand, among the firms listed on BIST, the share of those with EBITDA/Asset ratio above 5% reached to 81.3%, while the ratio of firms with Net Profit/Asset ratio above 5% rose to 70.9%, indicating that increases in profitability spread across all firms.

Chart III.2.11: Profitability Indicators and Distribution of BIST Firms (Ratio, %)

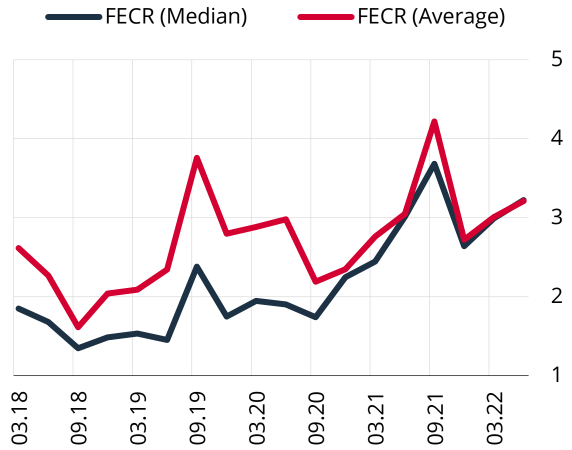


Source: FINNET Last Observation: 06.22

Note: 299 corporates were included in the analysis. EBITDA: Net Profit + Financial Expenses + Tax Expenses + Depreciation and Amortization Costs. The firm ratio shows the ratio of firms with EBITDA/Asset and Net Profit Margin/Asset values above 5% (0.05) to total number of firms. Long-term EBITDA/Asset and Net Profit Margin/Asset averages are shown in dashed lines. Long-term EBITDA/Asset and Net Profit Margin/Asset average values are calculated for the 2017 Q4 – 2022 Q2 period.

Financing expenses, which increased due to exchange rate developments in the last quarter of 2021, led to a slight deterioration in indicators of BIST firms' capability to pay their debts, but increased in the first quarter of 2022 with the rise in firms' profitability (Chart III.2.12). Financial data for the second quarter of 2022 suggests that firms' operating profits are strong enough to cover the financing costs for the next 3.2 years. Moreover, 72% of firms have a financial expense coverage ratio (FECR) above 1.5, which is accepted as the threshold in the relevant literature, while 65% have an FECR above 2 (Chart III.2.13). While the weighted average and median FECRs increased in the second quarter of 2022, a larger number of firms stood above the threshold indicates that the decline in the likelihood of firms to experience financial distress spread across the whole.

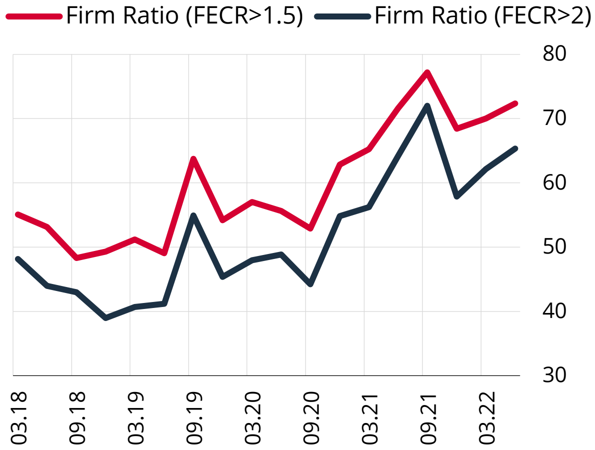
Chart III.2.12: BIST Firms' Financial Expenses Coverage Ratio (Ratio)



Source: FINNET Last Observation: 06.22

Note: Financial Expenses Coverage Ratio (FECR)= EBITDA / Financial Expenses. 299 corporates are included in the analysis.

Chart III.2.13: Firms' Share in Financial Expenses Coverage Ratio (%)



Source: FINNET Last Observation: 06.22

Note: Firm share is the ratio of firms with a financial expenses coverage ratio greater than 1.5 to total number of firms. 299 corporates are included in the analysis