III. Non-Financial Sector

III.1 Household Developments

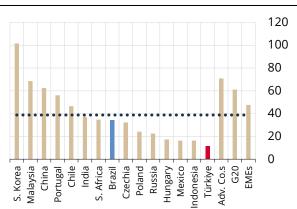
Household indebtedness in Türkiye remains significantly below the average of advanced and emerging economies.

Standing at 11.4% in the first quarter of 2024, the household financial debt/GDP ratio in Türkiye is well below those of peer countries (Chart III.1.1 and Chart III.1.2). The decline in indebtedness in recent years is attributed to buoyant economic activity, the rapid growth in nominal GDP amid high inflation, and the macroprudential measures on retail loans. The limited increase observed in this ratio in 2023 was mainly driven by the use of personal credit cards (PCCs). In 2024, macroprudential measures for retail loans are expected to continue, while tighter financial conditions are expected to restrain debt growth. Amid tightening financial conditions, the relatively low level of the household total indebtedness ratio contributes to the management of risks stemming from household debts.

Chart III.1.1: Household Indebtedness in Türkiye (Debt/ GDP, %)



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



Source: BIS

Last Observation: 2023 Q3

Note: Household indebtedness is calculated as the ratio of (the total of debt securities and loans of households and nonprofit institutions serving households) to GDP. The country marked in blue has median indebtedness in the sample. The horizontal line shows the average values of selected countries. Türkiye's data for 2024Q1 has been estimated in Table III.1.1.

Chart III.1.3: Ratio of Housing Loans to GDP (%)

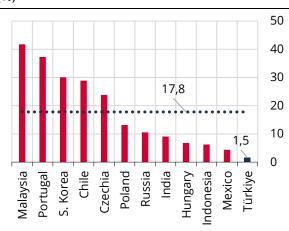
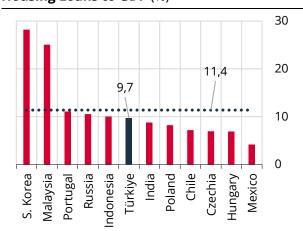


Chart III.1.4: Ratio of Retail Loans Excluding Housing Loans to GDP (%)



Sources: IMF, Global Economy

Last Observation: 12.23

Note: The ratio is calculated as the current total housing loan and retail loans excluding housing loans balance divided by end-2023 GDP. Horizontal lines are average values for selected countries. Retail loan balance excluding housing loans includes all other types of loans extended to households (such as PCC, vehicle loans, and student loans) except housing loans. A breakdown of indebtedness reveals that the ratio of housing loans to GDP is also well below the average of other countries, while the ratio of retail loans excluding housing loans to GDP is slightly below the average of peer countries. In recent years, the contraction in house purchasing power due to the increase in house prices, macroprudential regulations imposed on housing loans and high interest rates have led to a decline in the utilization and share of housing loans in Türkiye. Moreover, the fact that housing loans in Türkiye are extended with shorter maturities compared to advanced economies and that principal debt gradually reduces due to the fixed interest rate structure of the debt has led the housing loan/GDP ratio to remain below the averages of other countries (Chart III.1.3). The relatively high ratio of retail loans excluding housing loans to GDP in Türkiye is driven by the fact that credit cards, which provide ease of payment amid increased digitalization, offer an easily accessible financing opportunity with installment facilities, especially during inflationary periods, and by the preference for general purpose loans for the purchase of durable/semi-durable goods and services (Chart III.1.4).

Table III.1.1: Household Financial Liabilities

	0	03.23		09.23		3.24	2 Manath Grandh	
	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	3-Month Growth (Annualized)	
Total Liabilities	1,988	11.6	2,580	11.4	3,224	11.5	59.0	
Housing Loans	447	2.6	507	2.2	512	1.8	7.5	
Vehicle Loans	74	0.4	96	0.4	102	0.4	-9.5	
General Purpose Loans	844	4.9	949	4.2	1,130	4.0	51.0	
Personal Credit Cards	585	3.4	988	4.4	1,433	5.1	102.9	
AMC Receivables	37	0.2	41	0.2	47	0.2	33.5	

Sources: CBRT, BRSA, TOKI

Note: Liabilities also include NPL. Estimated values for 2024Q1 GDP. AMC: Asset Management Companies.

The rise in household financial liabilities is driven by credit card debts.

Factors such as consumer inflation in core goods and services, ease of use by increased digitalization, the decline in the use of banknotes in payments and the widespread use of cards, banks' high limit increases, and installment facilities in credit card spending have been influential in credit card balance growth. Moreover, maximum contractual interest rates on credit cards that were significantly lower than the interest rates on general purpose loans until the last quarter of 2023, and the trend of not paying off the total balance of credit card debts in an inflationary environment also contributed to the increase in personal credit card (PCC) balances (Table III.1.1). In March and April 2024, following the increase in the maximum contractual interest rates applicable to credit card cash withdrawals (including ODA) and credit card shopping transactions, the growth in PCC balances slowed down.

Chart III.1.5: Households' Financial Liabilities to GDP Ratio (%)

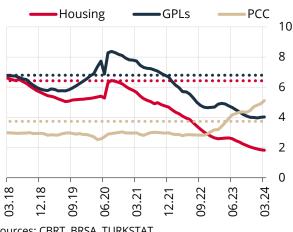
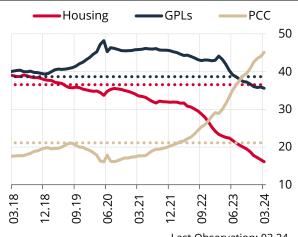


Chart III.1.6: Breakdown of Households' Financial Liabilities (%)



Sources: CBRT, BRSA, TURKSTAT

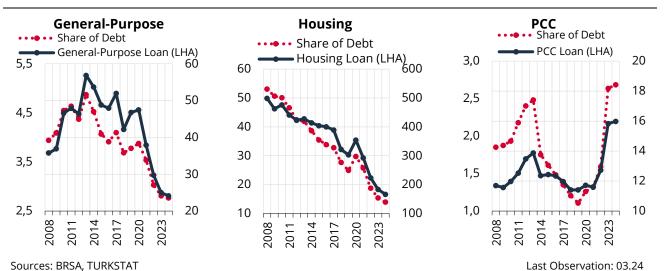
Note: Liabilities include NPLs. GDP forecasts for 2024Q1 are estimated values. Dashed lines are the average values of the related series for 2012-2019.

The ratios of housing and general-purpose loans to GDP are still below their historical averages (Chart III.1.5). The share of housing loans in retail loans, which was approximately 37% in the 2012-2019 period, declined to 16%. While the share of general-purpose loans remained close to the period average, the share of PCC increased rapidly and reached 44% (Chart III.1.6).

While the per capita debt and ratio of per capita debt to income in PCC increase, the same items have been decreasing in other consumer loans.

The downward trend observed in real per capita debt amount of general-purpose and housing loans since 2013, which constitute a significant portion of household indebtedness, continued in the first quarter of 2024 (Chart III.1.7). Debt stemming from housing and general-purpose loans, which are utilized at fixed and low interest rates, decreased in real terms amid the high inflation environment. The structure of individuals' debts in proportion to their incomes is considered to limit risks to household repayment ability. However, it should be noted that this assessment is based on average income and thus, may vary according to borrowers' income profile and income distribution. On the other hand, the per capita debt balance and its share in per capita income have been on an uptrend since 2020. The PCC debt has a short-term nature and deferring the credit card debts at high interest rates may strain households' debt service capacity.

Chart III.1.7: Per Capita Debt Balance in Retail Loans and Share of Per Capita Debt in Disposable **Income** (%, Inflation-Adjusted TRY Thousand)



Note: Dashed lines indicate the share of debt in per capita disposable income. Loan per capita is calculated by dividing the total credit balance in the related item by the number of borrowers, singularized by banks. Per capita loan amount is deflated by CPI. Real income is assumed to have remained unchanged in 2024. Per capita disposable income from the Household Consumer Tendency Survey is calculated by subtracting inter-household transfers (including alimony) and tax payments from income from salaries, wages, rents, etc.

Average maturities of retail loans have been shortening led by general-purpose loans and PCC.

Shortening in maturities of total retail loans continues due to ongoing maturity constraints in generalpurpose loans and the rise in the share of PCC, which is a short-term loan (Chart III.1.8). The average maturity of retail loans, which were abundantly extended with long maturities and grace periods, had approached 60 months during the pandemic, but decreased to 26 months in the following period. Meanwhile, macroprudential measures taken in vehicle and general-purpose loans are also considered to have been effective in the shortening in maturities (Chart III.1.9).

In addition to high interest rates, the shortening in the average maturity of retail loans implies an additional tightening in households' financial conditions, which may lead to an increase in the credit risk of individuals with debt/income mismatch.

Chart III.1.8: Average Maturity in Retail Loans (Months)

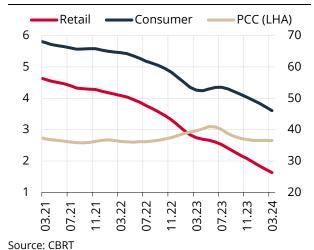
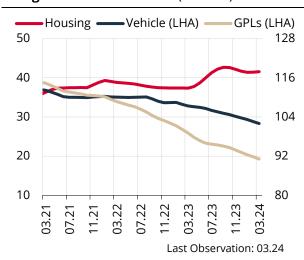


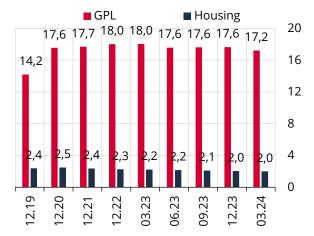
Chart III.1.9: Average Maturity in Sub-**Categories of Retail Loans (Months)**



The number of housing and general-purpose loan borrowers has been declining moderately.

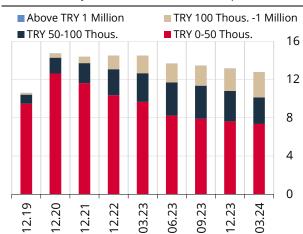
Due to the rise in general-purpose loan interest rates and macroprudential measures, the number of borrowers has decreased (Chart III.1.10). This decrease mainly took place among those with debts below TRY 100 thousand. In the current Report period, the number of people with debts up to TRY 100,000 decreased from 11.4 million to 10.1 million, while the number of people with debts above TRY 100,000 increased from 2.1 million to 2.6 million (Chart III.1.11). In the housing loan market, the relatively high course of interest rates as well as the 75% reduction in the loan-to-value ratio for those who will buy a home that is not their first, and the increase in the risk weight for these loans from 35% to 150% are considered to have been effective in the decline in the number of people with housing loan debts.

Chart III.1.10: Number of People with **Consumer Loan Balance** (Million People)



Sources: Risk Center, CBRT Last Observation: 03.24 Note: Reports the number of individual general-purpose and housing loan borrowers in the banking sector. Generalpurpose loans include overdraft accounts (ODA).

Chart III.1.11: Per Capita Debt by Amount in **General Purpose Loans** (Million People)

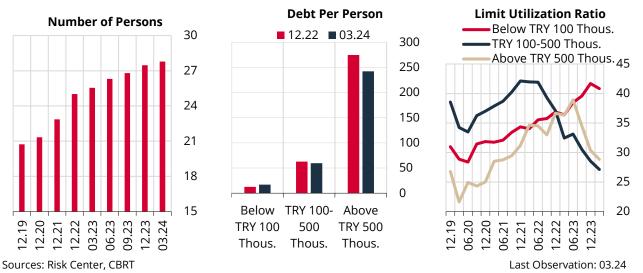


Sources: Risk Center, CBRT Last Observation: 03.24 Note: Amount brackets show the outstanding generalpurpose loan debt amounts per person at all banks. The number of people is the total number of people in the relevant bracket. ODA and general-purpose loans classified as NPLs are excluded.

While the number of PCC users is growing, the limit utilization ratio of cards with high limits is decreasing.

The number of active credit card users approached 28 million. In this period, individuals have significantly increased their credit card balances and limits, whereas in high credit card limit groups with more significant limit increases, the rise in balances has been slower than the limit increases (Chart III.1.12).

Chart III.1.12: Number of People Actively Using PCC, Card Balance and Limit Per Customer, Card Limit Utilization Rate (Million People, TRY Thousand, %)

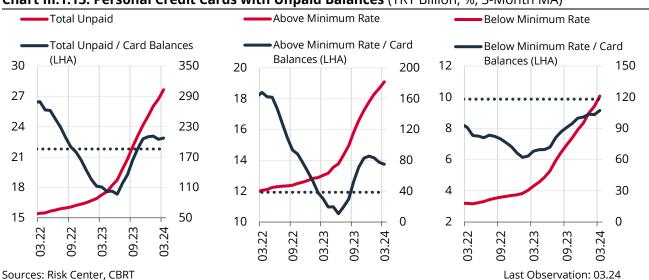


Note: People with credit card balances of zero have been excluded.

While the amount of unpaid debt on credit cards has increased, the ratio of this amount to the total credit card balance has slightly exceeded its historical average.

The ratio of unpaid debt to total card balance is 13.7% on credit cards for which a payment of the minimum payment amount or more has been made, and the ratio of unpaid debt to total card balance is 9.1% on credit cards for which less than the minimum payment amount is paid (Charts III.1.15 and III.1.16). With the rise in the recent months, the ratio of unpaid debts to total PCC balance rose to 22.9%, exceeding the historical average. With increasing credit card interest rates, carrying a credit card balance and not paying the debt fully may increase the debt service burden, especially for individuals with income/borrowing mismatch.

Chart III.1.13: Personal Credit Cards with Unpaid Balances (TRY Billion, %, 3-Month MA)



Note: "Above Minimum Rate" refers to the total outstanding debt for PCCs paid at or above the minimum payment rate; "Below Minimum Rate" refers to the total outstanding debt for PCCs for which a payment is made below the minimum payment rate. Dashed lines show the 2012-2019 seasonal averages of the relevant ratios.

In last Report period, the share of households' balances in ODA and the share of ODA in general-purpose loans increased, while the share of cash advances with installments (CAWI) in PCC decreased (Chart III.1.14 and Chart III.1.15). The uptrend in ODA is attributed to the growth restrictions imposed on general-purpose loans excluding ODA.

Chart III.1.14: Quarterly Change in ODAs (TRY Billion, %)

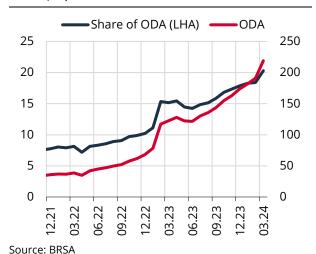
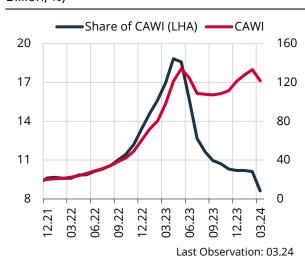


Chart III.1.15: Quarterly Change in CAWI (TRY Billion, %)

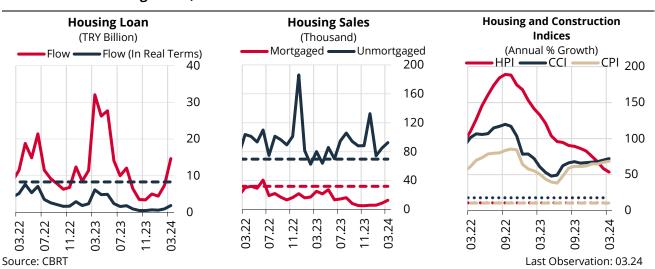


Note: "ODA Ratio" is the ratio of real persons' ODA in general purpose loans, while "CAWI Ratio" is the ratio of CAWI to PCC

Housing loan utilization remains below its historical average, while houses are sold mostly without mortgages.

The current level of house prices, the tightening in financial conditions and macroprudential policies for multiple home ownership have limited housing loan utilization. Therefore, the outlook for housing loan utilization and mortgaged house sales has been weak since the second half of 2022 (Chart III.1.16). Against this backdrop, the annual rate of increase in house prices continued to decelerate, falling below the increases in the construction cost index (CCI) and the CPI. In the upcoming period, individuals' disposable income is expected to improve as rent increases follow house price developments.

Chart III.1.16: Housing Loans, House Sales and House Prices

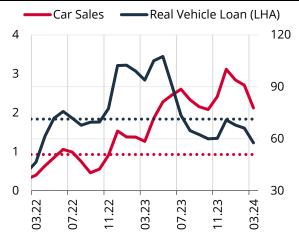


Note: Housing loans are shown in terms of monthly flow disbursements. Dashed lines show the average annual index changes in the 2012-2019 period (2016-2019 period for the CCI), real housing loans extended and related housing sales. Data have been deflated by the HPI.

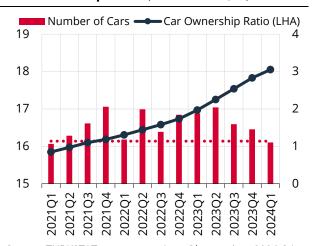
While vehicle loan utilization has been weak since the second half of 2023, increased supply of vehicles and campaigns may boost new car sales.

Sales of new cars are well above their historical averages; however, loan utilization has slowed down (Chart III.1.17). At the end of 2023 and in the first quarter of 2024, vehicle sales campaigns by firms as well as the normalization in vehicle supply have played a decisive role in buoyant demand for new vehicles. On the other hand, the lack of a price update in the loan-to-value ratio regulation, which is applied gradually according to vehicle prices, significantly slowed down the use of vehicle loans. While the number of transferred vehicles has been decreasing since the third quarter of 2023, the vehicle ownership rate continued to increase and reached 18% (Chart III.1.18). The slowdown in second-hand vehicle transfers is also associated with the favorable conditions in new vehicle sales.

Chart III.1.17: Vehicle Loans and New Car Sales Chart III.1.18: Number of Used Car Sales and (Thousand Units, TRY Billion, 3-Month MA) Car Ownership Ratio (Million Units, %)



Sources: ODD, BRSA Last Observation: 03.24 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.



Source: TURKSTAT Last Observation: 2024 Q1 Note: Used car sales refer to vehicles whose ownership has changed hands once or more through public notaries. Shows the quarterly sums of the number 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. Car ownership ratio is the ratio of cars registered in the traffic to the total population.

The weight of TL-denominated assets and non-deposit financial instruments in households' financial asset composition continues to increase.

The ratio of household assets to GDP increased by 4 percentage points to 46% over the last 1-year period. The uptrend in the ratios of TRY savings deposits, equity and fund investments to GDP continued (Table III.1.2). In this period, when the shares of TRY deposits and non-deposit financial instruments increased, the share of FX-protected products in household assets has been decreasing. The rise in the weight of TRY in household asset composition is expected to continue on the back of high levels that deposit rates have reached in real terms after policy rate hikes as well as the improvement in exchange rate expectations.

The share of households' holdings in equities, IPS and mutual funds in their total financial assets has exceeded 30%.

In recent years, the tendency of households towards the equity market has been strong, while the number of investors holding portfolios has been flat since the last quarter of 2023. The number of equity investors, which was 7.6 million at the end of 2023, stood at 8.2 million in the current period. In the same period, the real index of household equity portfolio increased slightly.

Table III.1.2: Household Financial Assets

	03.23		09.23		03.24		3-Month Growth	
	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	(Annualized)	
Total Assets	7,157	41.8	10,613	46.9	12,901	46.0	66.6	
TL Savings Deposits	1,759.4	10.3	1,833.6	8.1	3,197.7	11.4	42.5	
KKM and DDM	1,250.6	7.3	2,495.5	11.0	1,617.2	5.8	-46.3	
FX Savings Deposits	1,553.2	9.1	2,091.8	9.2	2,513.6	9.0	75.2	
- (Billion USD)	81.1		76.7		78.1		21.4	
Precious Metal Deposits	572.2	3.3	707.9	3.1	1,038.4	3.7	137.4	
- (Billion USD)	29.9		25.9		32.3		64.5	
Bonds and Bills	189.9	1.1	250.4	1.1	308.1	1.1	21.4	
Mutual Funds	886.8	5.2	1,436.6	6.3	2,318.5	8.3	251.0	
Pension Mutual Funds	401.7	2.3	593.3	2.6	802.8	2.9	99.5	
Other Mutual Funds	485.0	2.8	843.3	3.7	1,515.7	5.4	390.8	
Equity Securities	857.7	5.0	1,652.2	7.3	1,801.6	6.4	146.5	
Repo	11.8	0.1	16.2	0.1	23.5	0.1	151.2	
Currency in Circulation	75.1	0.4	129.3	0.6	82.6	0.3	42.8	

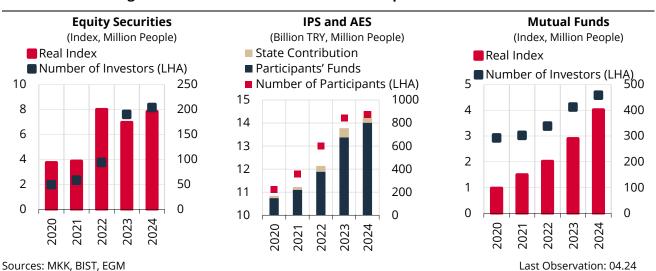
Sources: CBRT, MKK, EGM

Note: Month-end exchange rates have been used. Pension mutual funds show the total funds of participants in the Voluntary Participation System (IPS) and the Auto Enrollment System (AES), minus the state contribution. Deposits refer to resident real persons' deposits. Estimated value for 2024Q1 GDP data.

Funds in the Voluntary Participation System (IPS) and Automatic Enrollment System (AES), which are among the major asset items of households, have been on a moderate rise. Similarly, the number of participants in the pension system exceeded 14 million in this Report period. Households developing a habit of accumulating savings in long-term instruments is expected to contribute to financial stability.

The number of mutual funds and investors continues to increase steadily. The number of investors in mutual funds reached approximately 4.5 million as of April 2024, while the real index value of mutual funds increased significantly. Mutual funds, which amounted to TRY 850 billion in the last quarter of the year, exceeded TRY 1.6 trillion as of April 2024, while funds appreciated by 52% percent in real terms in this period (Chart III.1.19).

Chart III.1.19: Changes in Households' Assets other than Deposits



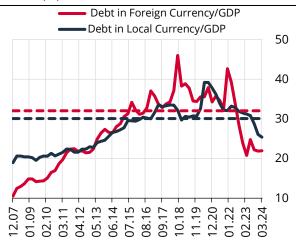
Note: The real index for equities and mutual funds is CPI-adjusted and indexed to 100 in January 2021. IPS and AES data are in aggregated terms, and the number of participants has been singled out. Stocks and mutual funds are 3-month MA.

III.2 Corporate Sector Developments

The ratio of corporate sector debt to GDP is on the decline.

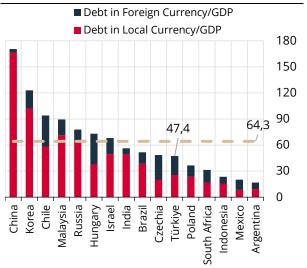
The ratio of corporate sector firms' Turkish lira and FX debts to GDP declined considerably. As of the first quarter of 2024, the corporate sector's debt ratio was 47.4%, significantly below both its historical average and the average of peer countries (Charts III.2.1 and III.2.2).

Chart III.2.1: Debt/GDP Ratio of the Corporate Sector (%)



Sources: CBRT, IIF Last Observation: 03.24 Note: Dashed lines denote the historical average of the relevant ratio between 2012Q4 and 2021Q4. Imputed value is used for the GDP value for 2024Q1. Assumptions are employed for the last two quarters to harmonize with other country data sources.

Chart III.2.2: Debt/GDP Ratio of Corporate Sector (%)



Last Observation: 03.24 Source: IIF Note: The countries in the chart are ranked from larger to smaller according to Total Debt/GDP ratios for 2024Q1. The dashed line shows the average of peer countries' indebtedness in 2024Q1.

Monetary policy rate hikes and macroprudential measures led to a tightening in financial conditions, and the ratio of corporate sector debt to GDP continued to decline (Table III.2.1). The financing that firms obtained through bond issuances also increased slightly, despite having a very limited share in borrowing. While the share of firms' Turkish lira loans in GDP decreased, FX loan utilization increased somewhat due to relatively low FX financing costs. The decrease in Turkish lira indebtedness was driven by rising Turkish lira financing costs and regulations restricting loan growth. On the other hand, low FX borrowing costs relative to Turkish lira borrowing, and the improvement in exchange rate expectations played a decisive role in the rise in FX indebtedness. The increase in FX indebtedness is expected to be on a milder track due to the 2% growth limit introduced for FX loans on 23 May 2024.

The financial leverage ratio of the corporate sector continues to hover below its historical average.

The ratios of the corporate sector's debts and assets to GDP dropped slightly. The financial leverage ratio, which shows the ratio of corporate sector debts to assets, increased somewhat due to upward exchange rate movements and growing financing costs, after hitting its lowest historical level in September 2023 (Chart III.2.3). The relatively low level of the corporate sector's financial leverage ratio enhances firms' resilience against tighter financial conditions and increased financing costs.

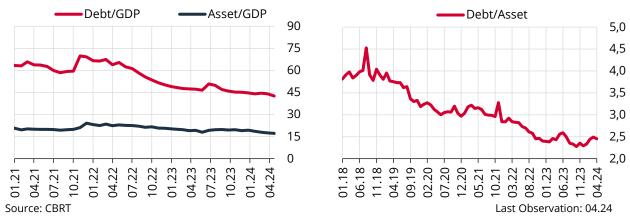
Table III.2.1: Financial Liabilities of the Corporate Sector

	02.23		09.23		02.24		Annual	
	Billion TRY	Ratio to GDP (%)	Billion TRY	Ratio to GDP (%)	Billion TRY	Ratio to GDP (%)	Growth (%)	
I. Domestic Loans (i+ii)	6,070.2	37.0	7,983.0	35.3	9,143.6	33.6	50.6	
i. Turkish Lira	3,985.3	24.3	5,051.0	22.3	5,632.2	20.7	41.3	
A.Bank	3,728.4	22.7	4,709.8	20.8	5,232.2	19.2	40.3	
B.NBFI	190.8	1.2	263.0	1.2	307.7	1.1	61.3	
C.Bonds Issued	66.1	0.4	78.2	0.3	92.3	0.3	39.7	
ii. FX (FX-indexed loans included)	2,084.8	12.7	2,932.0	13.0	3,511.4	12.9	68.4	
USD Equivalent (A+B+C)	110.3	0.7	107.1	0.5	112.8	0.4	2.3	
A.Bank	104.9	0.6	102.0	0.5	107.8	0.4	2.8	
B.NBFI	4.7	0.0	4.5	0.0	4.5	0.0	-4.6	
C. Past-Due Loans Taken Over by SDIF	0.7	0.0	0.5	0.0	0.5	0.0	-26.2	
II. External Loans	1,940.0	11.8	2,750.9	12.2	3,172.2	11.7	63.5	
USD Equivalent	102.6		100.5		101.9		-0.7	
III. Bonds Issued Abroad	174.5	1.1	226.3	1.0	282.5	1.0	61.9	
USD Equivalent	9.2		8.3		9.1		-1.7	
Total Financial Debt (I+II+III)	8,184.7	49.9	10,960.2	48.4	12,598.3	46.3	53.9	
Total FX Loans (Billion USD)	222.2		213.9		223.8		0.7	

Last Observation: 02.24 Sources: CBRT, BRSA

Note: The "ratio" columns show the ratio of the relevant items to GDP. The last column denotes the annual change between February 2023 and February 2024.

Chart III.2.3: Debts and Assets of the Corporate Sector (%, Ratio)



Note: Debts include the corporate sector's domestic and external loans, leasing, factoring debts and bond issuances. Assets include Turkish lira and FX deposits and securities, but direct capital investments abroad and export receivables are not included. GDP values used in calculations are annual estimated values. The latest GDP data is the CBRT's estimate. Endmonth foreign exchange buying rate is used in calculations.

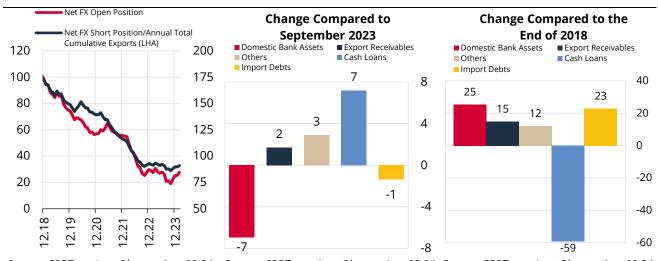
The improvement in the net FX short position of the corporate sector continues.

The decline in the corporate sector's net FX short position observed since 2018 has been replaced by an upward trend since September 2023. This upward trend observed in the current Report period was driven by the fall in FX deposits and the rise in FX loans.

As for the FX position trend of the corporate sector in the long term, the net short position dropped by USD 89 billion to USD 84.8 billion as of February 2024 from USD 173 billion at the end of 2018. Compared to end-2018, the net short position decreased by 51%. This decrease was mainly due to the strong increase in

FX deposits of domestic banks and export receivables as well as the decline in FX loans taken out from domestic banks. While the ratio of the net FX short position to 12-month exports remained flat at around 30%, the capacity of export revenues to cover the short position strengthened compared to the end of 2018 (Chart III.2.4).

Chart III.2.4: Net FX Position of the Corporate Sector (Billion USD)

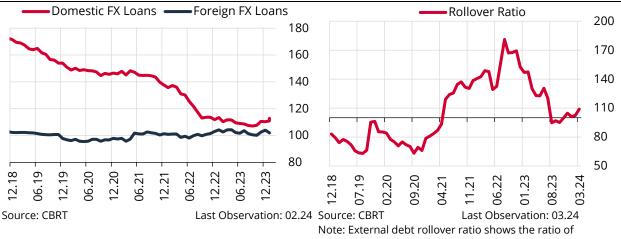


Last Observation: 02.24 Source: CBRT Source: CBRT Last Observation: 02.24 Source: CBRT Last Observation: 02.24 Note: Export values are the sum of 12-month cumulative amounts. Values in the chart show the change in net FX short position and the breakdown of this change. The change in the "Other" item covers the change in the assets with banks abroad, securities and direct capital investments abroad.

While domestic FX loan demand of firms is reviving, they continue to access external funding.

In the current Report period, corporate sector firms' demand for domestic FX loans has increased amid high Turkish lira financing costs, the growth limit for Turkish lira commercial loans, and improved exchange rate expectations. Despite rising interest rates in global markets and tight monetary conditions, firms continue to have solid access to external financing and their external debt rollover ratios remain above 100% (Chart III.2.5).

Chart III.2.5: Indicators of Corporate Sector's FX Loans and External Debt Rollover (Billion



the cumulative external borrowing over a 12-month period to the debt repayment in the same period.

Last Observation: 02.24

Firms have a high capacity to cover short-term FX liabilities.

Source: CBRT

The short-term net FX position of firms was USD 58.1 billion as of February 2024. Indicators of firms' capacity to cover shorter-than-one-year FX debt continue to hover above historical averages. These liquidity indicators show that corporate sector firms are resilient against possible exchange rate and external financing shocks (Chart III.2.6)

S.T. Assets / S.T. Liabilities Short-term Net FX Position FX Deposits / S.T. Liabilities 80 2,2 2,0 60 1,8 1,6 40 1,4 20 1,2 1,0 12.19 12.23 06.7

Chart III.2.6: Indicators of Corporate Sector's Exchange Rate Risk (Billion USD, Ratio)

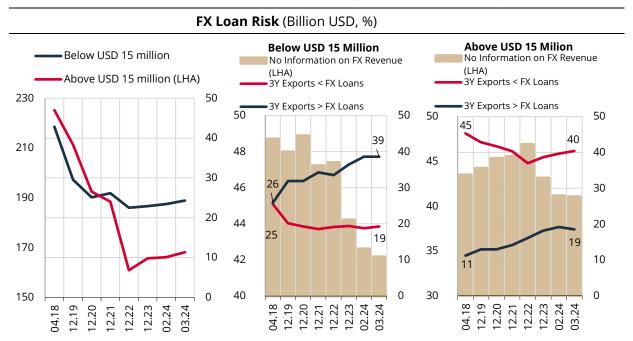
Note: FX deposits are the total amount of FX deposits held by resident corporate sector firms at domestic and foreign financial institutions. Net FX position calculations include FX-protected deposits. Dashed lines show the historical average of the relevant data between 01.12 and 12.21. The abbreviation S.T. stands for "short-term".

Firm-based indebtedness indicators show that the capacity to cover FX loan debt with export revenues continues to improve.

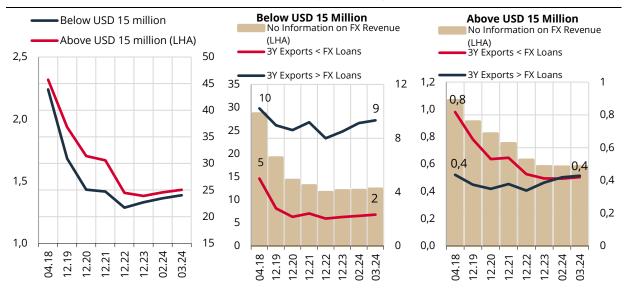
Following the 2018-dated regulation linking FX loan utilization of firms to their export revenues for the last three years, among the firms with an FX loan amount below USD 15 million, the share of firms with threeyear export revenues above their FX loans rose to 39% from 26%. Among the firms with an FX risk of USD 15 million or above that are not subject to any restrictions from this regulation, the share of those with three-year export revenues above their FX loan debt also continues to increase as well. As of March 2024, among the firms with no accessible FX revenue data, the share of those with FX loan debt below and above USD 15 million dropped to 42% and 41%, respectively. Besides, the foreign trade data that the calculation of firms' FX revenues is based on covers exports of goods, and these firms are likely to generate FX revenues through exports of services.

The number of firms with FX loans declined until 2023 across both the firms with an FX loan amount below USD 15 billion and those with an FX loan amount above USD 15 million, while the number of firms utilizing FX loans has increased somewhat in the recent period. In both groups of firms, the number of firms whose last three years of export revenues are below their FX risk is decreasing, while the number of firms with an export revenue is increasing. These indicators suggest that the capacity of firms' export revenues to cover their FX loan debt continues to improve. Moreover, the FX loans-driven deterioration in the asset quality outlook after the exchange rate shock in 2018 has urged banks to act more prudently in the current period. Accordingly, among the firms with an FX loan amount above USD 15 million that are not affected by the abovementioned regulation, banks have provided loans predominantly to those firms earning FX revenue (Chart III.2.7). In addition to the regulation linking FX loan utilization to export revenues, the monthly growth limit for FX loans introduced in May 2024 is also expected to contribute to the management of risks arising from FX loan utilization.

Chart III.2.7: FX Loan Balances and Number of Firms (Billion USD, Thousand)



Number of Firms (Thousand)



Sources: Risk Center, CBRT, Ministry of Trade

Last Observation: 03.24

Note: Export revenues are the sum of the firm's year-end revenues from exports of goods over the last three years as of the relevant date. FX loan debt includes loans extended from abroad via domestic banks. Direct loans used from abroad are not included. Firms that do not have export revenue records in the database for the last three-year period before loan utilization are classified as firms with no info on FX revenues. FX loan value calculations are based on the average USD buying rate in the relevant month.

While the share of Turkish lira deposits in the corporate sector's financial asset composition is growing, that of KKM accounts is decreasing.

The upward trend in Turkish lira deposits of firms continues, while KKM accounts decrease gradually, accompanied also by a decline in FX deposits since April. With the tightening in financial conditions becoming more pronounced, firms started to meet their requirements with their financial assets, especially as of the final quarter of 2023. Having been on an upward trend until 2023, the ratio of financial assets to GDP fell somewhat in the last two quarters. However, financial assets of firms are assessed to be still

significantly above the levels of the previous year and can serve as a buffer for some firms against tight financial conditions (Table III.2.2).

FX deposits of firms are on the decline following the rise in Turkish lira deposit rates after January 2024 (Chart III.2.8). While the share of KKM in total deposits continues to decline after August 2023, that of Turkish lira deposits has reached levels similar to those of FX deposits through mild increases. Firms' preferences for FX deposits have weakened following the policy rate hike, Turkish lira deposit rates exceeding inflation expectations, and the improvement in exchange rate expectations. However, foreign trade payments and FX loan developments will also play a decisive role in the FX commercial loan volume in the upcoming period.

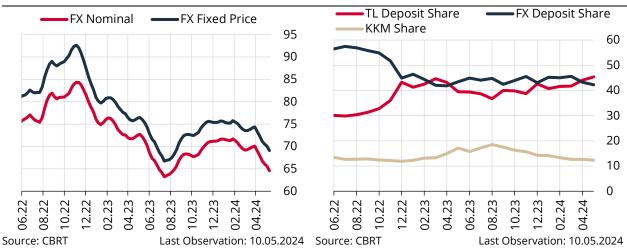
Table III.2.2: Financial Assets of the Corporate Sector

-	03.23		09.23		03.24		Annual
	Billion TRY	GDP Share (%)	Billion TRY	GDP Share (%)	Billion TRY	GDP Share (%)	Growth
Total Assets	3,490	20.4	4,742	21.0	5,383	19.2	54.3
Turkish Lira Commercial Deposits	1,963	11.5	2,654	11.7	2,842	10.1	44.8
KKM Accounts	451	2.6	809	3.6	661	2.4	46.7
FX Commercial Deposits	1,424	8.3	1,958	8.7	2,384	8.5	67.4
(Billion USD)	74		72		74		-0.4
Public Debt Instruments	39.0	0.2	44.0	0.2	48.6	0.2	24.6
Private Sector Debt Instruments	63.2	0.4	85.7	0.4	108.5	0.4	71.7
Total Assets / GDP	20.4		21.0		19.2		-1.2

Source: CBRT Last Observation: 03.24 Note: GDP share shows the ratio of the relevant item to GDP. The last column denotes the 12-month change between March 2023 and March 2024. The "Total Assets / GDP" value in this column is the difference between the two ratios in the current

Report period.

Chart III.2.8: Commercial Deposits (Billion USD, %)



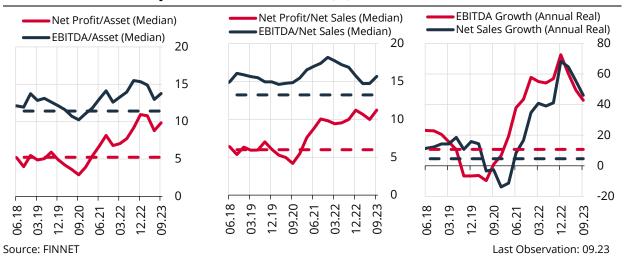
Note: In the FX deposit constant price assumption, the EUR/USD parity and ounce gold values are fixed to the exchange rate on 30.07.2020 and the values on the chart are the four-week moving averages. As of 10.05.2024, the shares of Turkish lira deposits, FX deposits, and KKM were 45.4%, 42.3%, and 12.4%, respectively.

Profitability indicators of publicly traded firms continue hovering above historical averages.

Although firms' profit margins have decreased to some extent since early 2023, they remain above historical averages (Chart III.2.9). The growth trend in firms' deflated annual net sales as well as in earnings before interest, taxes, depreciation and amortization (EBITDA) continued from the second quarter of 2021 to the second quarter of 2023 on the back of favorable financing conditions, followed by a partial fall due

to tightened financial conditions. Despite this fall, the growth in these indicators is above historical averages.

Chart III.2.9: Profitability Indicators of BIST Firms (%)



Note: The analysis includes 298 corporate sector firms. EBITDA shows the sum of Net Operating Profit/Loss + Amortization expenses. Dashed lines show the average annual real changes in long-term EBITDA/Asset, Net Profit Margin/Asset, EBITDA, and Net Sales Income. These average values are calculated for the 2012Q1 - 2021Q4 period. The chart on the right shows the annual real change in annualized EBITDA and Net Sales Income. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Although the share of publicly traded firms with a Net Profit/Asset ratio above 10% in total firms has declined due to increased financing costs, it is still above historical averages (Chart III.2.10). Meanwhile, the ratio of firms with an EBITDA/Asset ratio above 10% to total firms does not diverge across sectors. The fact that these ratios hover above historical averages indicates that firms operating in services and nonservices sectors have high profitability in general (Chart III.2.11).

Chart III.2.10: Share of Firms with a Net Profit/Asset Ratio Above 10% (%)

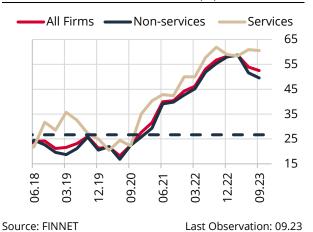
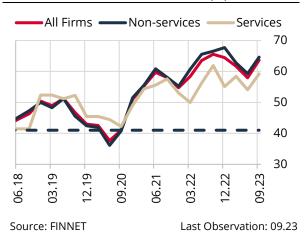


Chart III.2.11: Share of Firms with an EBITDA/Asset Ratio Above 10% (%)



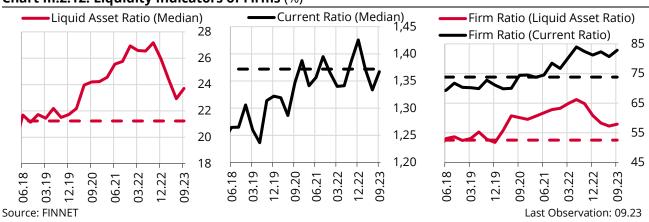
Note: The analysis covers 298 corporate sector firms. The shares of services and non-services firms are calculated using the number of firms in these sectors. The dashed line indicates the historical ratio average of firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Firms listed on the BIST began to apply inflation accounting starting with their annual financial reports for the accounting period that ended on 31.12.2023. In periods of high inflation, sales of firms increase due to price revisions and brought-forward demand while their costs arising from inventories and fixed assets are not revised at the same rate as inflation. This causes firms' profitability to seem nominally higher. Firms' profitability ratios are expected to diverge from normal periods after the revisions to be made in assets and equity items on firms' inflation accounting-applied balance sheets. In particular, revaluations of inventories and fixed assets will increase the asset values of firms' balance sheets, and may drive a fall in the net endof-period profit-before-tax ratios by leading to a rise in amortization expenses of the relevant items. This fall may be larger in the manufacturing industry due to large inventories and equipment pools. On the other hand, inflation accounting will bring tax advantages to some firms. Although inflation accounting is expected to have the abovementioned general effects, the direction of its effect on an individual firm will depend on multiple valuations such as the firm's fixed asset structure, dates of entry of fixed assets and inventories into assets, inventory turnover, and equity/debt ratio.

Strong liquidity structures of publicly traded firms make them resilient against possible shocks.

The liquid asset ratio, which shows the share of liquid assets and inventories in assets, continues to hover above its historical average despite a fall in 2023. On the other hand, the current ratio, which shows firms' capacity to cover their short-term debts with current assets, maintained its upward trend until the end of 2022 despite fluctuations. As of the third quarter of 2023, the liquid asset ratio was 24% and the current ratio was above the threshold value of 1, which indicates that firms have adequate liquidity to meet their working capital requirements and cover their short-term debts. Although the share of firms with a liquid asset ratio above 20% in total firms has declined after the second quarter of 2022, 58% of firms have strong liquid assets. On the other hand, the ratio of firms with a current ratio above 1 is close to 85%. The sustained course of these ratios above the historical average shows that firms in general have adequate liquidity in the face of possible shocks and financial tightening that affect the cash flow (Chart III.2.12).

Chart III.2.12: Liquidity Indicators of Firms (%)



Note: Based on the latest data, 298 corporate sector firms were included in the analysis. Liquid asset ratio is calculated as the ratio of the sum of liquid assets and inventories to assets for all firms. The median liquid asset ratio is the median value of the liquid asset ratios calculated for all firms. The firm ratio gives the ratio of firms with a liquid asset ratio above 20% to the total number of firms. The median current ratio is calculated as the ratio of current assets to short-term liabilities. The firm ratio for current ratio is the ratio of firms with a current asset/short-term debt ratio above 100% to the total number of firms. Dashed lines show the historical average of the relevant data. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

¹ According to the Tax Procedure Law, income and corporate taxpayers that determine their earnings on the balance sheet basis should make an inflation adjustment in their financial statements if the increase in the price index (D-PPI) exceeds 100% over the last three accounting periods (including the current period) and 10% in the current accounting period. Pursuant to the relevant article of the law, the inflation adjustment practice will end if and when these two conditions do not appear concurrently. In addition, taxpayers that are allowed to keep their books in currencies other than the Turkish lira will not make an inflation adjustment even though they are subject to the relevant article. Accordingly, a number of BIST firms have not applied inflation accounting.

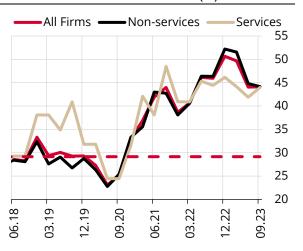
Prospects for firms' debt repayment ability remain strong.

The EBITDA/total debt ratio, which shows the degree of firms' ability to cover debts with their operating profits, hovered above its historical averages as of the third quarter of 2023 (Chart III.2.13). The ratio of firms with an EBITDA/total debt ratio above 25% to total firms also remains well above the historical averages despite falling somewhat in 2023 (Chart III.2.14). This indicates that annual profits of almost half of firms are adequate to cover at least a quarter of their total debts. The rise in financing costs is expected to cause a slight decline in this ratio in the upcoming period.

Chart III.2.13: EBITDA/Debt Ratio of BIST Firms (Median, %)

Non-services All Firms Services 30 25 20 15 10 12.19 03.19 03.22 12.22 23 06.21 20 90 9 9

Chart III.2.14: Share of Firms with an EBITDA/Debt Ratio Above 25% (%)



Source: FINNET Last Observation: 09.23 Source: FINNET Last Observation: 09.23

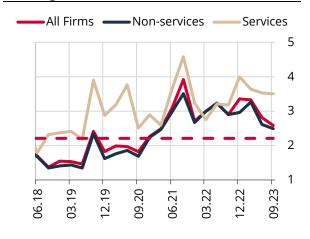
Note: The chart on the left shows the median EBITDA/Total Debt ratio. The chart on the right shows the ratio of firms with an EBITDA/Total Debt ratio above 25% to the total number of firms. The analysis includes 298 corporate sector firms. Dashed lines show the historical average of the financial expenses coverage ratio for all firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

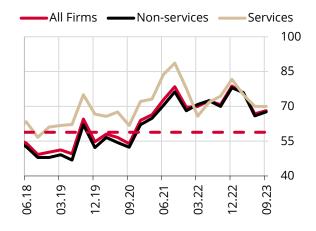
Financing costs that increased due to upward exchange rate movements and tightening steps in the third quarter of 2023 triggered a fall in the financial expenses coverage ratio (FECR) of publicly traded firms (Chart III.2.15). The year-end data for 2023, to which inflation accounting was applied, suggest that the fall in firms' FECR also continued in the last quarter of the year (Table III.2.3). Despite the decline in the FECR throughout 2023, the FECR level remains above its historical average across firms and sectors. In the current Report period, 70% of publicly traded firms have an FECR above the threshold level of 1.5. The fact that the majority of firms have an FECR above 1.5 limits the risks to the solvency of firms and asset quality of banks (Chart III.2.16).

A comparison of BIST firms' year-end balance sheet items for 2022 and 2023 revised in line with inflation accounting provides information about the performance of firms over the last one year (Table III.2.3). Accordingly, in general, profitability ratios of firms increased somewhat in 2023 compared to the previous year. On the other hand, threshold value ratios that measure the spread of the improvement in the relevant indicator point to a decline in profitability and liquidity indicators. Meanwhile, the FECR dropped compared to the previous year due to increased financing costs during the monetary tightening process in 2023. While the rise in profitability ratios of firms despite increased inflation and costs is considered a favorable development, the fall in the spread of the improvement in these indicators as well as in the FECR is closely monitored.

Chart III.2.15: BIST Firms' Financial Expenses Coverage Ratio (Median, Ratio)

Chart III.2.16: Share of Firms with Financial Expenses Coverage Ratio Above 1.5 (%)





Source: FINNET Last Observation: 09.23 Source: FINNET Last Observation: 09.23

Note: FECR= EBITDA/Financial Expenses. The chart on the right shows the ratio of firms with an FECR ratio above 1.5 to the total number of firms. The analysis includes 298 corporate sector firms. Dashed line shows the historical average of the financial expenses coverage ratio for all firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Table III.2.3: Profitability, Liquidity and Indebtedness Indicators of Corporate Sector Firms Based on Inflation Accounting

	2022Q4	2023Q4
Net Profit/Asset (%)	9.2	9.6
EBITDA/Asset (%)	14.0	11.7
Net Profit/Net Sales (%)	7.9	11.0
EBITDA/Net Sales (%)	12.1	13.4
Share of Firms with Net Profit/Asset > 10% (%)	35.1	30.3
Share of Firms with EBITDA/Asset >10% (%)	57.5	51.3
Liquid Asset Ratio (%)	23.7	21.9
Current Ratio	1.46	1.42
Share of Firms with Liquid Asset Ratio > 20% (%)	60.4	54.6
Share of Firms with Current Ratio > 100% (%)	85.9	84.1
EBITDA/Debt (%)	25.3	22.7
Financial Expenses Coverage Ratio (FECR)	2.4	1.95
Share of Firms with EBITDA/Debt > 25% (%)	50.5	45.0

Note: The analysis includes 271 corporate sector firms that applied inflation accounting as of 2023Q4.