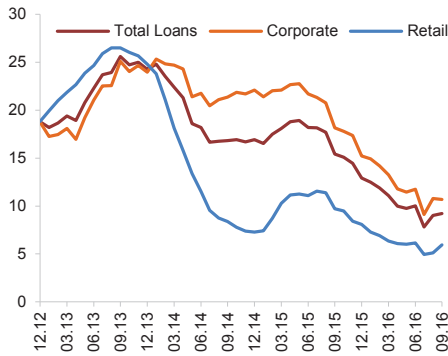


The deceleration in credit growth rates continues, albeit with a slower pace.

Chart III.1.1
Annual Loan Growth
(FX-Adjusted, Percent)

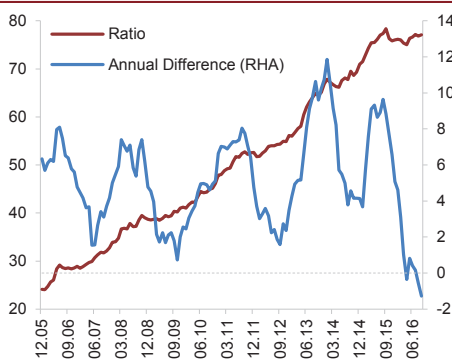


Note: FX loans are adjusted using a dollar-euro basket, and FX-indexed loans are included in FX loans.
Source: CBRT (Latest Data: 09.16)

III. Financial Sector

Following a long period of slowdown, retail lending is showing signs of recovery thanks to easing macroprudential measures, supportive fiscal policies, and interest rate developments underpinning the increase in demand. In commercial lending, credit costs and weak trend in investments and economic activity resulted in a shortage of demand. In this period, banks' general macroeconomic outlook and credit risk evaluations resulted in tighter credit supply. With the credit growth recovering, Non-performing Loan (NPL) ratios are stable. The moderate recovery in loan growth is expected to continue in the upcoming period with the effect of supporting measures.

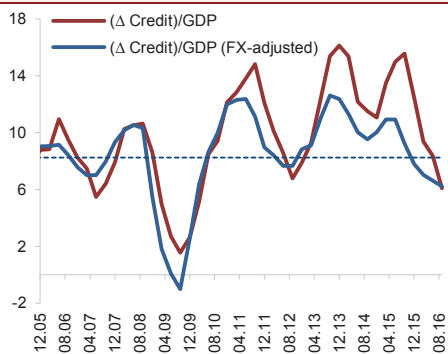
Chart III.1.2
Credit/GDP Ratio
(Percent)



Note: The ratio takes stock of credit over the sum of monthly GDP over the past 12 months.
Source: CBRT, TURKSTAT (Latest Data: 09.16)

Just as banks' use of foreign resources remains stable, their liquidity buffers are adequate to cover any global liquidity shocks. Although the amount of external debt is stable, the maturity composition changed in favor of longer terms, partly owing to the policies adopted; thus, the resilience of the banking sector against potential volatilities in international markets increased.

Chart III.1.3
Change in Credit/GDP
(Percent)



Note: The annual change in credit is reported as a ratio of flow GDP. The change in corporate FX credits takes 3-month differences of stock values to calculate the flow variable. The value is then FX adjusted using 3-month averages of CBRT buy rates. Annual values are calculated by adding up 4 quarters. FX-indexed are included in FX loans. The blue dashed line shows the long term average of the FX-adjusted value.
Source: CBRT, TURKSTAT (Last Data: 09.16)

The capital of the sector strengthened as a result of the recovery in profitability and increased capital adequacy ratios together with the moderate credit growth. The rise in profitability was driven both by the improvement in net interest income and by the decline in non-interest expenses, especially by a proportional decrease in general provisioning costs due to relative change in loan compositions, and by austerity measures in operational expenses. Moreover, the decline in the loss generated by combination of securities, foreign exchange and derivatives transactions also contributed to the increase in profitability.

III.1 Credit Developments and Credit Risk

Credit growth rates continued their year-long decline up until September 2016 when a level performance in corporate loan growth and the recent pickup in retail loans backed its recovery. The

revival in retail loans was mainly driven by the decline in interest rates, particularly in housing loans, and easing in relevant macroeconomic measures imposed on retail loans. As the credit and nominal GDP growth rates remained close in the past six months, the credit/GDP ratio stayed rather stable within the 75 to 80 percent range in the last 12 months (Chart III.1.1 and Chart III.1.2). The ratio of the banking system's annual net lending to GDP continued to decline (Chart III.1.3).

Despite the slowdown in credit growth rates over the last year, the ratio of bank loans to non-financials to GDP remains high relative to peer emerging markets (Chart III.1.4).

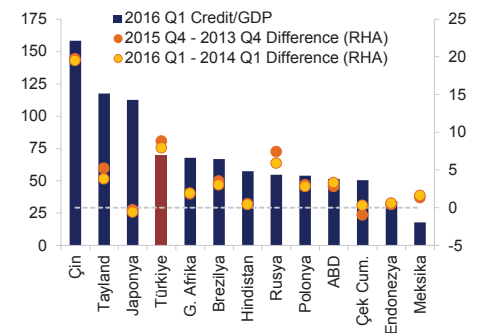
The slowdown in bank lending over the last six months was driven by supply and demand-side dynamics. On the demand side, the level of interest rates, the slowdown in economic activity and the slump in investment demand played a major role, whereas on the supply side banks' tightening credit standards due to credit risk assessments was the main driver. Meanwhile, as mentioned above, in the last two months, the decline in loan interest rates, the supportive changes in macroeconomic policies and fiscal policy incentives were influential in the recovery of the credit growth rate. It is projected that the positive effects of these factors on credit demand and volume will continue in the upcoming period.

III.1.1 Corporate Loans

Steered by TL loan dynamics, corporate loans slowed down in the past 12 months. The exchange rate-adjusted growth rate was 10.7 percent in September (Chart III.1.1). The decline in TL corporate loan growth across all firm sizes in the second quarter of 2016 decelerated, albeit a significant difference across firm sizes (Figure III.1.5). In September, TL corporate loans grew at a similar rate as they did in August, above the nominal increase in GDP, at 12.3 percent. The progress of FX loans is chiefly determined by large firms that use 80 percent of the volume of FX credits in total. While the growth rate of total FX loans remained flat, growth rate of SME loans continued to fluctuate, but remained positive in the third quarter of the year (Chart III.1.6).

Credit growth rate is relatively high, despite the recent slowdown.

Chart III.1.4
Credit/GDP in Different Countries
(Percent, Percentage Points)

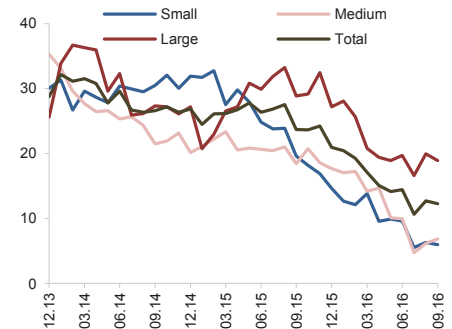


Note: Data covers all private non-financial sector credit, with the latest data taken from 2016Q1. The dashed line marks the zero line for the RHA, the two year differences are calculated between the first and last quarters of the years indicated.

Source: BIS (Latest Data: 03.16)

While TL corporate loans are decreasing across all firm sizes ...

Chart III.1.5
Annual Growth in TL Corporate Loans by Firm Size
(Percent)

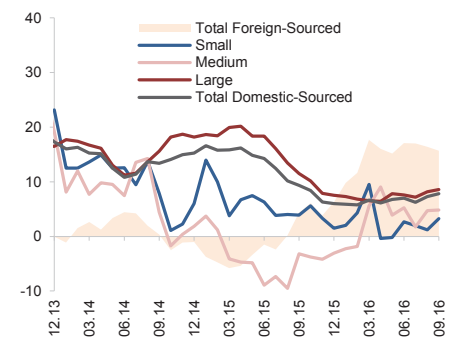


Note: FX-indexed loans are excluded. Micro and Small SMEs are grouped together under the Small heading.

Source: CBRT (Latest Data: 09.16)

...Domestic-sourced FX corporate loans continue on a moderate path.

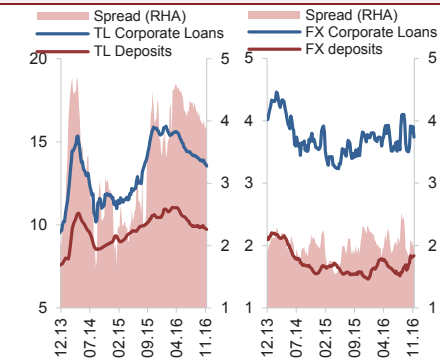
Chart III.1.6
Annual Growth in FX Corporate Loans by Size
(FX-adjusted, Percent)



Note: Total foreign sourced FX credit growth takes the foreign FX loans and other FX liabilities of all non-financials, excluding foreign branches and affiliates of domestic banks, in USD. FX-indexed loans are included in the total and size distribution. Micro and Small SMEs are grouped together under the Small heading.

Source: CBRT (Latest Data: 09.16)

Chart III.1.7
Corporate Loan Interest Rates and Spreads
(4-weekMA, Percent)



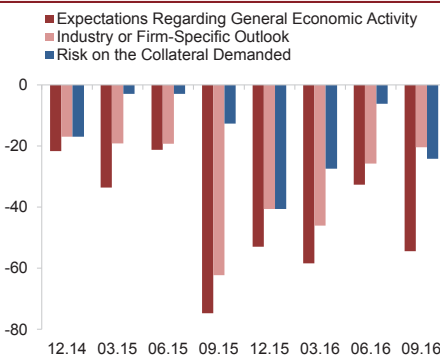
Note: Overdraft accounts and credit cards, as well as loans with zero interest starting from July 2015 are excluded.

Source: CBRT (Latest Data: 11.11.16)

Foreign-sourced corporate FX loans followed a more vibrant path than loans of domestic origin (Chapter II.2). This is the result of direct involvement of intergovernmental organizations and foreign private banks in the financing of PPP investments, which require large and long-term financing (see Box II.2.II).

The deceleration in credit growth rates in the past year is attributed to tighter bank lending standards due to credit risk, and weaker investment appetite. In addition to the policy rate cuts implemented by the CBRT between March and September, public finance policies supporting economic activity are expected to affect TL loan growth positively (Chart III.1.7). Corporate support and incentive programs, which have recently been increased especially for SMEs, will likely support the recovery in demand for TL loans in the coming period.

Chart III.1.8
Contributions to Corporate Loan Supply
(Net Percent Change)

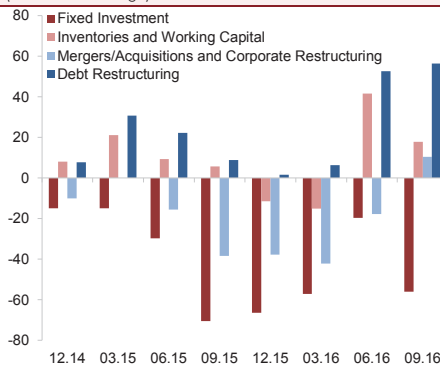


Note: The quarterly Survey asks respondents to compare current quarter to the previous. Zero is the neutral state of no change.

Source: CBRT (Latest Data: 09.16)

Developments in loan interest rates are important as they affect demand dynamics, and reflect banks' credit risk pricing. The widening of the TL loan-deposit spread starting from the beginning of 2015, in tandem with the increase in corporate NPL ratios, indicates that credit risk plays an important role in loan pricing. In addition to the increase in the credit risk premium, the rise in deposit rates due to the deposit competition (See Special Topic IV.1) also significantly raised TL loan costs. The Bank Loans Tendency Survey suggests that the tightening in interest rate conditions caused by rising average loan margins in the second quarter continued in the third quarter. This proves that the increase in the TL credit-deposit margin is driven by credit risk. Meanwhile, FX loans, which have lower NPL ratios, saw an increase in interest rates, albeit much more limited, as deposit competition pushed FX deposit interest rates up.

Chart III.1.9
Contributions to Corporate Loan Demand
(Net Percent Change)



Note: The quarterly Survey asks respondents to compare current quarter to the previous. Zero is the neutral state of no change.

Source: CBRT (Latest Data: 09.16)

The Bank Loans Tendency Survey confirms the importance of supply-side factors in corporate credit growth in the past quarter. Expectations over general economic activity and risks associated with loan collaterals tightened credit supply in the third quarter of 2016, as it did in the past two years (Chart III.1.8). Banks reported that lending standards are tight across all firms sizes, and especially for SMEs, on long-term loans and FX-denominated loans. Tighter standards are perceived as a step taken by banks to protect their asset quality given their risk perceptions based on the overall

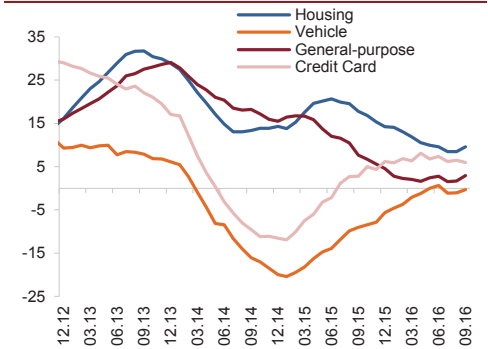
economic outlook. With the impact of fiscal policy incentives and the increase in retail loans, it is likely that any pick-up in economic activity could contribute to easing in credit standards.

The primary factors affecting the demand for corporate loan growth rates are credit costs, and the general economic demand and outlook. The Survey confirms that supply-side factors as well as the dynamics of credit demand were influential in corporate loan developments (Chart III.1.9). According to the Survey, firms, as implied by national accounts statistics, have substantially decreased their demand for investment credit; while debt restructuring continued to support demand. Although this development is confirmed by higher levels of financial indebtedness observed in the real sector (See Section II.2), their prolonged maturities and the steady course of their interest coverage ratios is remarkable. Business capital and stock financing became secondary factors pushing up credit demand. This factor increases loan demand due to weakened cash flows during periods of slow economic activity as attested by both historical data and theory. As another reflection the rise in firms' demand for cash, in the Survey, the firms have listed discounts and other benefits in cash purchases as a factor increasing credit demand.

III.1.2 Retail Loans

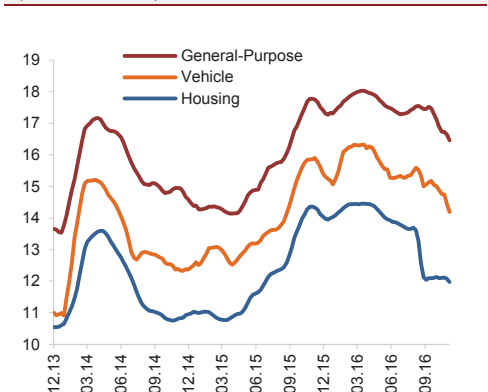
Retail loans, which have been displaying a weaker growth performance compared to corporate loans, grew annually by 6 percent in September (Figure III.1.1). Recently, however, general-purpose and housing loans, which together make up the majority of retail loans, have shown signs of a strong recovery (Figure III.1.10). The interest rate cuts in August of 2016 played an important role in the recovery in housing loans, while the increase in general-purpose loans was mainly driven by the easing in macroprudential measures in September (Graph III.1.11 and Graph III.1.12). The base effect-driven acceleration observed in credit cards and vehicle loan growth rates were recently replaced by a level growth rate. The relatively weak performance of vehicle loans issued by the banking sector can be attributed to the rising share of financing companies in these types of loans.

Chart III.1.10
Annual Growth in Retail Loans
(Percent)



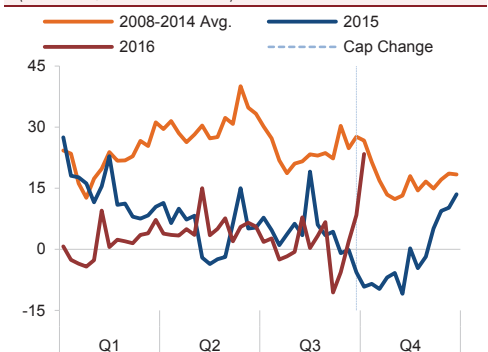
Source: CBRT (Latest Data: 09.16)

Chart III.1.11
Retail Loan Lending Rates
(4-week MA, Percent)



Source: CBRT (Latest Data: 11.11.16)

Chart III.1.12
General Purpose Loan Weekly Growth Rates
(4-week MA, Annualized Percent)

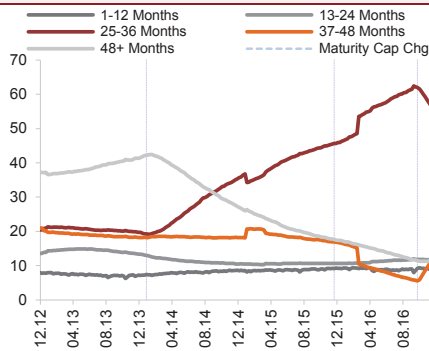


Note: The maturity cap change is shown to include the week it took effect in.

Source: CBRT (Latest Data: 11.16)

General-purpose loans up to 36 months are losing their share to loans up to 48 months.

Chart III.1.13
General-Purpose Loans Maturities
(Stock, Percent)

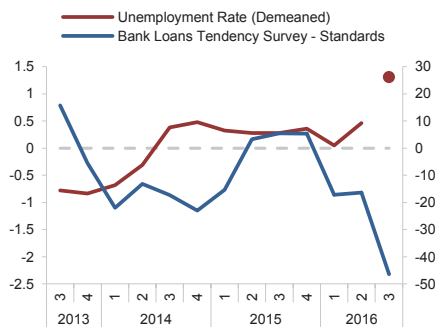


Note: The maturity cap change in 2013 limited the maturities with 36 months. The change at the end of 2015 removed the cap for education loans, and since 09.2016 the 36 month maturity cap has been increased to 48 for all general-purpose loans. The sharp movements in the beginning of 2015 and 2016 are due to changes in definition and coverage. As general-purpose loans and "other" types of retail loans not classified elsewhere are reported together since 2015, they are graphed together for the entire duration of the Chart. The maturity cap changes are shown to include the weeks they took effect in.

Source: CBRT (Latest Data: 11.11.16)

General-purpose loans, which make up almost half of consumer lending, started to slow down in the first quarter of 2015 and annual growth rates dipped below 2 percent in the past year, due to tight macroprudential measures implemented, banks' credit risk concerns, level of interest rates, and weak consumer confidence in general. While the tightness in credit standards for general-purpose loans continued (Chart III.1.14), changes, which were made in the regulations in September 2016, increased the maximum maturity cap from 36 months to 48 and thus accelerated growth rates (Chart III.1.12).¹ The fact that general-purpose loans rapidly increased immediately after the change in regulation, and that the said increase was concentrated in loans above 36 months, confirms that the recovery is chiefly determined by these late developments (Chart III.1.13). Meanwhile, the decline in interest rates is considered to have contributed to these developments as well.

Chart III.1.14
Survey and the Economic Outlook
(Percent, Net Percent Change)

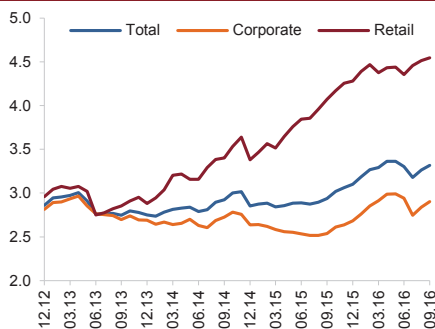


Note: The standards shown are only for general-purpose loans. The zero line shown in dashed marks the neutral level; values below indicate tightening standards, values above indicate easing standards. The unemployment level is adjusted for seasonality and demeaned. Since September labor data are not yet reported, the third quarter for unemployment is shown with a marker.

Source: CBRT, BRSA (Latest Data: 09.16)

It is expected that the amendments in regulation relaxing maturities for general-purpose loans and credit card installments will continue to contribute to the growth tendency of the related loan types with decreasing effect in the coming period. Indicators of general economic activity and unemployment will be of material as far as credit risk is concerned (Chart III.1.14).

Chart III.1.15
NPL Ratios
(Percent)



Source: BRSA (Latest Data: 09.16)

Housing loans continue to be the fastest growing retail loan. The main driver of housing loans is demand-side developments. Historical data implies that interest rates are the most significant determinant of demand. The interest rate cuts in August of 2016 played a designating role in the recent rapid rise in housing loans. In addition to the increase in demand from the interest rate channel, it is expected that the increase in the loan-to-value ratios will support demand for housing loans.

¹ According to the amendments made to the regulations regarding the credit transactions of and credit cards issued by banks on 27 September 2016; The maturity cap for general-purpose loans, while retaining some exceptions, has been raised to 48 months and current balances on performing loans are allowed to be restructured with maturities up to 72 months. If this restructuring requires a new credit to be issued, the maturity is again limited by 48 months. The loan-to-value ratio for housing loans or loans with housing as collateral other than vehicle loans has been increased from 75 percent to 80 percent. With the exclusion of various consumption items, the number of installments in retail and corporate credit card spending and cash withdrawals has been increased from 9 to 12 months, and as in general-purpose loans, current balances on performing loans are allowed to be restructured with maturities up to 72 months.

III.1.3 Non-Performing Loans

NPL ratios, which had been on the rise since the last quarter of 2015, reversed its course over the last three months and declined to a total of 3.26 percent in September (Chart III.1.15). Factors contributing to this change are write-offs through substantial sales especially in corporate loans in June, the withdrawal of a bank in the SDIF structure from the banking system in July, and the decline in the large firm NPL ratios in August respectively (Chart III.1.16 and Chart III.1.17).

Despite the upward trend in NPL ratios, the level of, and the 2-year change in the NPL ratio in the first quarter of 2016 is similar to the average of peer emerging markets (Chart III.1.18).

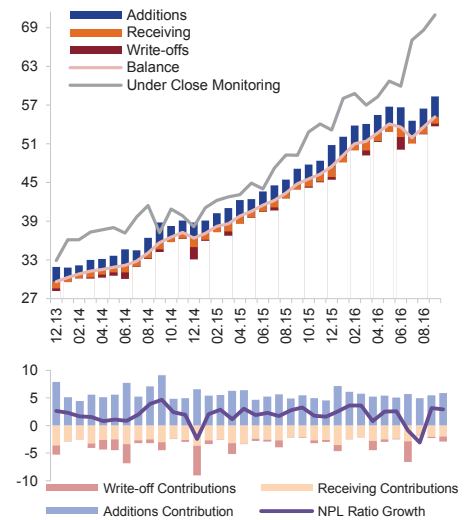
While corporate NPL ratios follow a more moderate path relative to retail NPL ratios, they diverge significantly based on firm sizes. Accordingly, while NPL ratios of large-scale business loans are around 2 percent, the ratio for SME loans is close to 4.5 percent.

Dissecting corporate NPL ratios by currency; NPL ratios in FX loans are considerably lower than NPL ratios in TL loans (See Box II.2.1). Likewise, the recent increase in corporate loans under close monitoring is mainly stemming from TL loans.

While NPL is rising across the board in the real sector; the latest NPL ratios show that there are substantial differences across sectors (Table III.1.1). The biggest contribution to corporate NPL increase comes from the two largest sectors in total corporate loans; manufacturing, and wholesale and retail trade. Meanwhile, the NPL ratios in hotels and restaurants sector, which includes tourism companies that were exposed to significant negative shocks, experienced a limited increase.

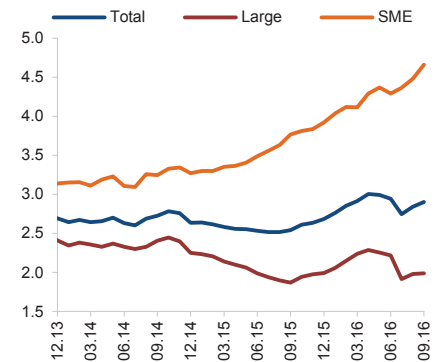
The persistence of the decline in NPL ratios of large firms in the upcoming period will depend on improvements in profitability conditional on the general economic outlook, and the developments in firms' leverage ratios. As shown in Section II.2, even though the leverage ratios of BIST firms increased due to the rise in

Chart III.1.16
NPL Components and Contributions to its Growth
(Billions TL, Percent)



Source: CBRT (Latest Data: 09.16)

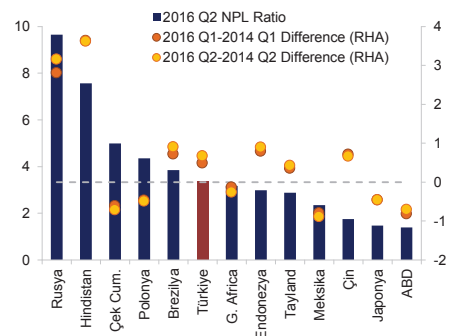
Chart III.1.17
Corporate NPL Ratios
(Percent)



Source: CBRT (Latest Data: 09.16)

The NPL ratio is moderate in international comparison.

Chart III.1.18
NPL Ratios in Different Countries
(Percent)



Note: The dashed line marks the zero line for the RHA, the two-year differences are calculated between the first and last quarters of the years indicated. As Japanese data is not available for Q2, the bars show values for 2016 Q1 and the two-year differences are taken for 2015 Q4 and 2016 Q1.

Source: IMF-IFS, BRSA (Latest Data: 06.16)

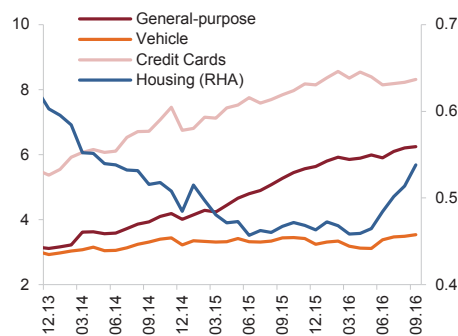
financial debts since the beginning of the year, the fact that their debt is mostly long-term strengthens their debt-paying capacities. As stated in the October Inflation Report, it is expected that incentives and rising consumer confidence will help improve domestic demand that in turn will support corporate revenues.

Table III.1.1Sectoral Breakdown of NPL Ratios
(Percent)

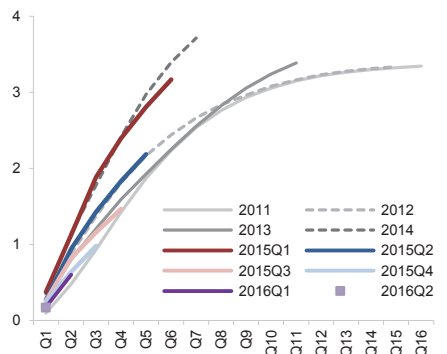
	09.15 NPL Ratio	09.16 NPL Ratio	Percent Change	Share of Credit
Manufacturing Industry	2.6	3.5	34.9	25.2
Wholesale and Retail Trade	3.0	4.0	31.7	20.8
Construction	3.7	3.8	2.4	11.5
Electricity, Gas and Water Resources	1.2	0.6	-51.8	9.3
Transportation, Inventory, Communication	1.3	1.9	50.7	7.4
Real Estate, Renting, and Management	0.9	1.0	13.0	6.8
Agriculture, Livestock, Forestry	2.2	2.6	17.7	6.0
Hotels and Restaurants	2.0	2.4	17.4	4.3
Mining and Quarrying	3.5	2.7	-23.6	1.7

Note: Sectoral breakdown is based on the loan purpose indicated at the time of application. The shares are calculated excluding retail loans and the financial sector, and the selected sectors represent 93% of real sector loans.

Source: BRSA (Latest Data: 09.16)

Chart III.1.19Retail Loans NPL Ratios
(Percent)

Source: CBRT (Latest Data: 09.16)

Chart III.1.20General-Purpose Loans Vintage Curves
(Percent)

Note: The vintage analysis reports NPL ratios cumulatively in the quarter following the issuance of a loan.

Source: CBRT (Latest Data: 09.16)

The upward trend in the NPL ratios in retail loans continues (Chart III.1.15). NPL balances have been following a flat trend since March following write-offs through sales from the NPL portfolios in credit cards (Chart III.1.19). Despite the deceleration in the growth rates of vehicle and general-purpose loans, the upward trend in their NPL rates weakened which can be considered a positive development.

The course of NPL ratios in general-purpose loans, which is the main determinant of retail loan NPL dynamics, remained moderate in the second and third quarters of 2016. The NPL ratio of the general-purpose loans increased from 5.85 percent in March to 6.25 percent by the end of September. The recent strong recovery in these loans is expected to have a dampening effect on NPL rates in the short term.

Vintage curves display cumulative NPL ratios following the quarter in which the retail loan was issued. The curves show that since 2015, new loans issued in each quarter have performed better than those issued in the preceding quarter (Chart III.1.20). In addition to the macroeconomic outlook which affects NPL performances, the tight supply conditions in general-purpose loans in 2016 may have

played a role in the level performance of their NPL ratios. The regulatory amendments that brought about a longer maturity cap and higher installment opportunities will support credit growth rates. At the same time, it is expected that the regulatory arrangement, which allows restructuring of current performing loan balances with longer maturities may lower conversion rates to NPL by mitigating the pressure on debtors' monthly debt payments.

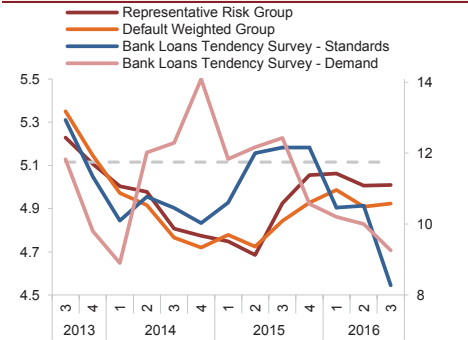
The Bank Loans Tendency Survey suggests that banks retained their cautious stance in general-purpose loans in 2016, which is confirmed by data from the Credit Bureau of Turkey (KKB). Accordingly, both the average representative risk group of general-purpose loan users calculated based on their Retail Loan Scores (RLS), and the adjusted group weighted by the likelihood of delinquency for each RLS group decreased since the beginning of the year (Chart III.1.21). While these two groups moved in tandem previously, the default-weighted group displayed lower risk scores at times of tighter standards which is a further indicator that banks choose less risky customers while extending loans.

The NPL ratio for housing loans was 0.54 percent in September. Given the solid collateral structure of housing loans and the level of the NPL ratio, the effects of housing NPL developments on banks are deemed to be negligible.

Another factor that may affect housing NPL performance in the upcoming period is the increase in the loan-to-value ratio. It is anticipated that the effect on the NPL ratio will be limited due to the narrow size of the change.

In September, housing loan applicants had the highest RLS, both historically and relative to the recent performance of other types of retail loans (Chart III.1.22). Owing to banks' selective attitude in extending housing loans, just as in other types of retail loans, housing loan clients diverge positively from the average (Chart III.1.23). The recent high growth rate of housing loans is considered feasible for the banking system since the credits extended are chosen among high RLS applicants, housing loans are still highly collateralized following the amendments, and the NPL ratios were stable at low levels in the past.

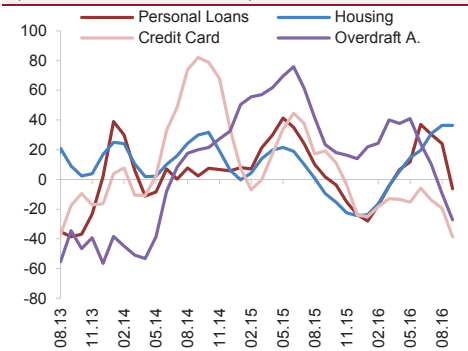
Chart III.1.21
New General Purpose Loans and the Survey
(Average Risk Group)



Note: Standards and demand values from the Survey are only for general-purpose loans. These values, which were also referenced in Chart III.1.14 and are reported as net percent change, are rescaled in this Chart to fit the risk group range. The dashed zero line shows the neutral point for the Survey. Values above are easing and below are tightening.

Source: KKB, CBRT (Latest Data: 09.16)

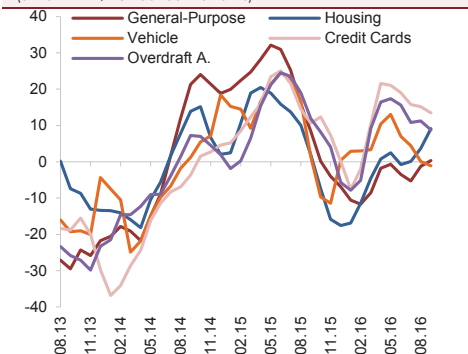
Chart III.1.22
New Loan Applications by RLS
(3-Month MA, Demeaned RLS Points)



Note: Vehicle and general-purpose loans are reported together under the personal loans heading.

Source: CBRT (Latest Data: 09.16)

Chart III.1.23
Newly Issued Retail Loans by RLS
(3-Month MA, Demeaned RLS Points)

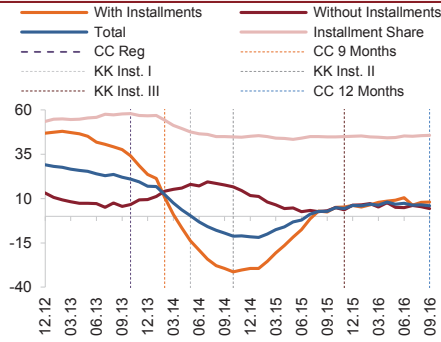


Note: Group means are calculated using the 11 different RLS groups reported for each type. The same methodology employed for applications returns a similar chart to Chart III.1.22 and confirms that Chart III.1.23 is representative, even though it is calculated over group means.

Source: CBRT (Latest Data: 09.16)

Chart III.1.24

Growth in Personal Credit Card Balances and Installment Share (Percent)



Note: The changes in the relevant regulations are respectively: in 2013, among other changes minimum payments were linked to card limits and new card limits to income. In February 2014, the number of monthly installments were limited to 9, and jewelry, telecommunications, food, and petroleum expenses were exempted from the right to installments. The 1st regulation removed the right to installments for gift cards and cheques; the 2nd brought about 4 months of installments to jewelry; the 3rd extended household goods, furniture and educational expenses to 12 months of installments. In September of 2016, the maximum installment numbers were extended to 12, and in addition to the existing exceptions, electronics and computer spending was limited by 6, airline, transportation, travel agency, hotels, health and social services, health products, club and association membership and tax payments were limited to 9 months, and direct sales, sales abroad, and cosmetic and office supplies spending were exempted from installments.

Source: CBRT (Latest Data: 09.16)

The recent amendment in the number of retail credit card installments could both increase households' debt burden in the long run by changing the credit card balance growth rates, and alter the stable course of the installment balance share of the total credit card balance observed for over a year in favor of the balance with installments (see Chart III.1.24). Nevertheless, the increase in the number of installments and the opportunity to restructure existing debt will aid households in their debt service.

III.2 Liquidity Risk

The short and long-term liquidity positions of the banks remain strong. While the Liquidity Coverage Ratios (LCRs) ensure that banks hold their one month maturity short-term liquidity positions in a safe zone, the Reserve Options Mechanism and FX required reserves provide a one-year window for banks to hedge themselves against FX liquidity shocks even under the most adverse scenarios. The maturities for non-core funding items, which were concentrated mostly in FX liabilities, continued to lengthen thanks to the measures implemented, increasing the resilience of the banking sector to possible global liquidity shocks.

The short-term liquidity position of the Turkish banking sector maintains a solid outlook. The sector's LCRs regulated for total and FX, are well above the legal limits that aim to keep banks' short-term liquidity positions in a safe zone.¹ Besides, the LCRs that are calculated for most of the banks, both for the total and the FX, already meet the legal sub-limits of 100 percent for the total and 80 percent for the FX, which were reported as the final amounts to be reached in 2019 (Chart III.2.1 and III.2.2). The possibility of accessing TL liquidity in the interbank money market by placing foreign exchange deposits -a facility provided by the CBRT- also contributes positively to the banks' short term liquidity management. This practice limited the costs and liquidity-related risks that banks may face in swap markets within the framework of liquidity management.²

The share of non-core liabilities in total resources remains flat. Approximately 60 percent of deposits and non-equity liabilities are comprised of foreign banks and foreign currency denominated borrowings through issuance. The share of funds provided from abroad in total liabilities fluctuated with changes in exchange rates and has followed a flat course since the last report period. Domestic

¹ The LCR, the details of which have been determined by the Basel Committee and which is currently being used by the BRSA, has been taken as the criterion for banks' short-term liquidity positions. The LCR shows to what extent a bank can cover its 30-day net cash outflows from its high quality liquid asset stock.

² The effects of the aforementioned facility were elaborated in a study entitled "The Collateral FX Deposit Facility and Its Impact on Currency Swap Markets" in the Inflation Report published on 27 October 2016.

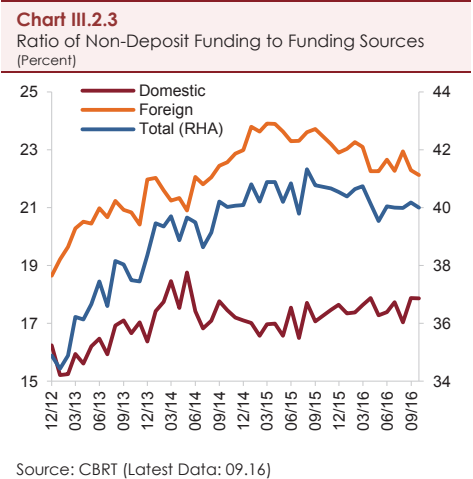
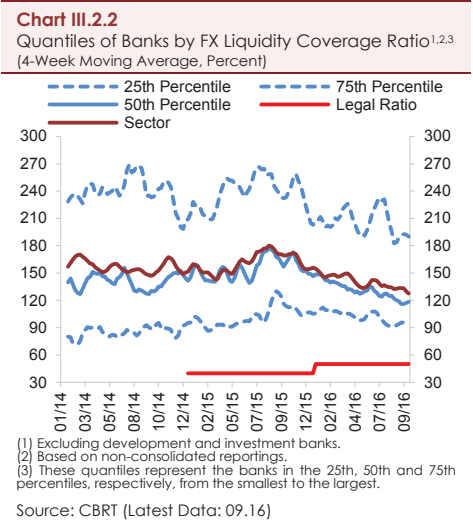
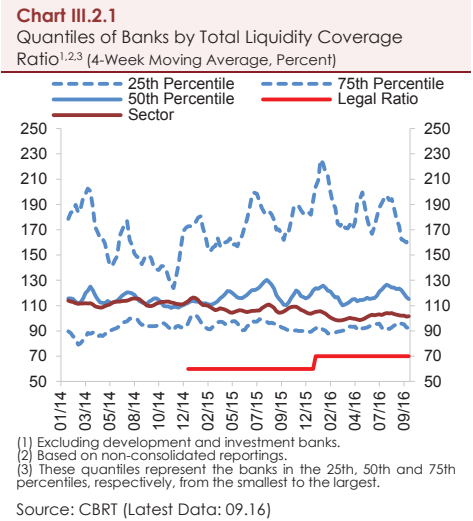
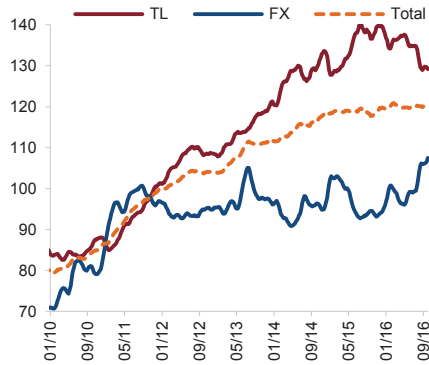
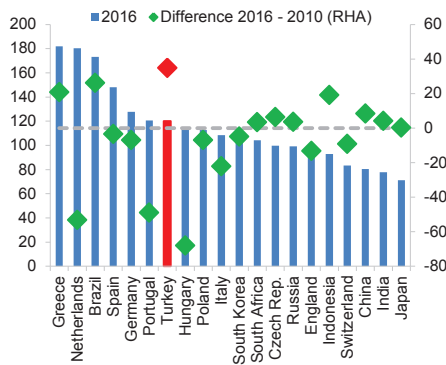


Chart III.2.4
Loan/Deposit Ratio¹
(4-Week Moving Average, Percent)



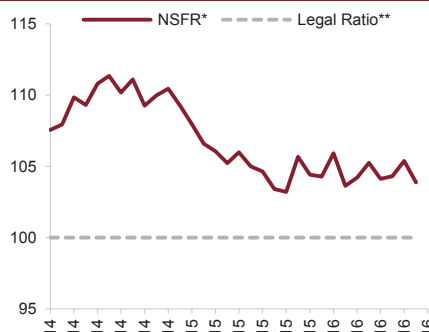
(1) Excluding development and investment banks.
Source: CBRT (Latest Data: 09.16)

Chart III.2.5
Loan/Deposit Ratio of Selected Countries
(Percent, Percentage Point)



Source: SNL Financial (Latest Data: 2016)

Chart III.2.6
Net Stable Funding Ratio
(Percent)



(*) Based on the information available in Basel III, some assumptions have been made regarding the uncertain points. In the context of these assumptions, assets and liabilities are taken into account according to the original maturity. TL saving deposits subject to insurance are stable, not insured savings and SME deposits are considered low-stable. Commercial deposits under TL 250,000 are considered as SME deposits. All repo transactions are included in repo transactions with financial institutions. Net liabilities from other liabilities and derivative transactions remaining in the balance sheet are taken into account with the current stable funding factor of 0 percent. The receivables from financial institutions are taken into consideration with the required factor of 15 percent. All securities subject to deposit are considered as level 1 assets. Assets of reverse repurchase agreements are assumed to be level 1. In the derivative transactions, 85 percent of the initial assurance is taken into consideration, and 100 percent is considered under other balance sheet items. Net receivables from derivative transactions are taken into account with the required factor of 100% regardless of the guarantee of transactions. 100 percent of the required funding factor was applied to other assets.
(**) Represents the expected lower limit to be implemented in Basel III framework.

Source: CBRT (Latest Data: 09.16)

non-deposit funds mainly consist of repo transactions and issuance from money markets. The share of the related liabilities in the total also remains flat (Chart III.2.3).

The Loan/Deposit (L/D) ratio, which is one of the main indicators of the long term liquidity position of the banking sector, preserves its flat course. The L/D ratio, which represents the extent to which the loans constituting the bulk of the banks' illiquid assets are funded with steady resources, hovered around 80 percent in 2010 in overall figures; but approached to 120 percent by end-2014 and started to follow a flat course at this level (Chart III.2.4). Anecdotal evidence suggests that bank preferences are also influential in the sense that banks perceive this ratio as an important indicator (See Special Topic IV.1). On the other hand, a comparison of the Turkish banking sector's L/D ratio with other selected countries suggests although the ratio has recently increased significantly, it has not exhibited a negative divergence from the countries compared (Chart III.2.5).

Although the L/D ratio is an important indicator for the follow-up of long-term liquidity positions of banks and the measurement of funding risks, it still falls short of measuring the risk thoroughly as it does not take into account the maturity matching in assets and liabilities of bank balance sheets. In addition to deposits, the equity, subordinated debts, long-term issuances and other long-term debt instruments can also be evaluated as stable sources of funding for banks. Indeed, the long-term liquidity risk, in other words, the net stable funding rate (NSFR) that is developed to limit the conversion of bank maturities and expected to be implemented in 2018 has been broadly defined in Basel III standards, including the items mentioned above. Chart III.2.6, illustrating the progress of the NSFR ratio calculated for the Turkish banking sector, indicates that the sector' average NSFR is above the minimum rate of 100 percent, as set by the Basel regulation. Therefore, according to the perspective set forth by the Basel regulation, banks are able to sustain credit growth without weakening the quality of their funding by extending the maturity of foreign borrowing (See Special Topic IV.1).

External Funds

The banking sector's external fund utilization remains flat.

Banks' utilization of external funds has remained weak since the beginning of 2015, which is attributed mainly to weakening of banks' demand for foreign resources rather than the conditions and costs of accessing external borrowing. As the foreign resources have been transferred to the corporate sector mostly to finance their investment decisions, the slowdown in corporate sector investments limits banks' demand for external financing (Chart III.2.7). The development of external borrowing costs also supports this assessment.

While the amount of external debt is flat, the maturity composition changes in favor of long-terms. Foreign debt rollover ratios have recently been at 100 percent levels, yet the rollover ratios for the short and long term show significant divergence from each other (Chart III.2.8). This situation reflects the effects of the changes made by the CBRT in the reserve requirements, as mentioned in previous reports. Following the revision of the regulation related to reserve requirements, the weighted average maturity of the foreign debt of the sector started to increase as of February 2015 and extended up to 55 months as of September 2016 (Chart III.2.8). In this period, banks renewed their medium and long-term foreign debts by large margins and the stock amount increased rapidly and their short-term sources were renewed below 100 percent. Since early 2015, the banks significantly reduced their external borrowings up to one year maturity and increased their medium and long-term resources by shifting from short to long-term maturities in all types of external borrowing. The rollover of due syndicated loans with maturities of one year by maturities up to three years, the shift from short to long maturities for other credits, the strong course of securitization credits provided on longer term maturities were the main drivers of this transition (Chart III.2.9).

The extension of external borrowing maturities reinforces the resilience of the banking sector against any possible volatility in international markets. As of September 2016, banks' FX foreign debt payments due within the next six months and one year were 47 and 78 billion US dollars, respectively. In this framework, banks will continue to pay regard to the developments in the global markets

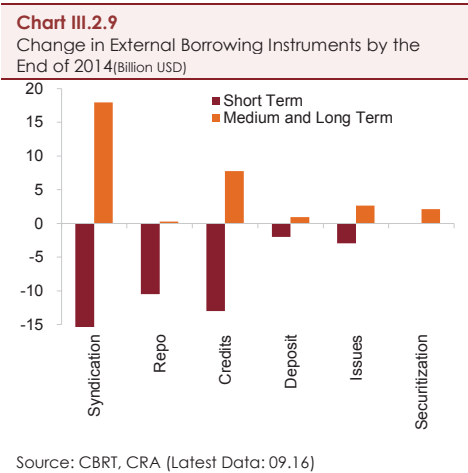
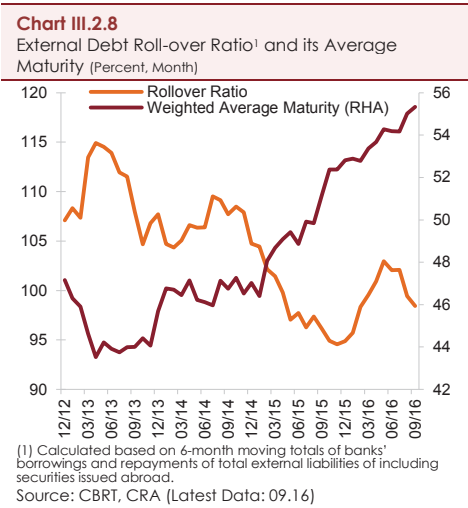
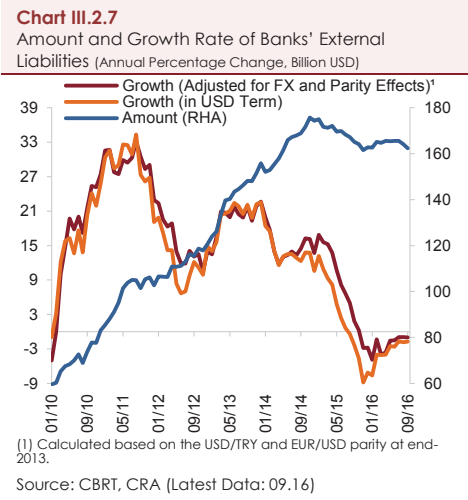
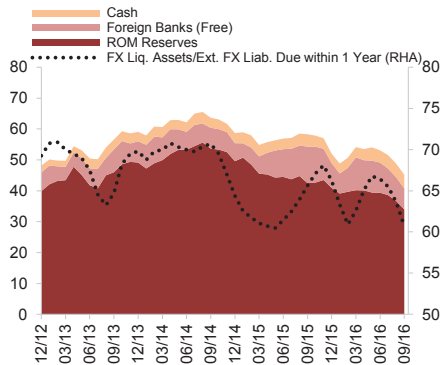


Chart III.2.10

FX Liquid Assets¹ and FX External Liabilities Due Within 1 Year (Percent)



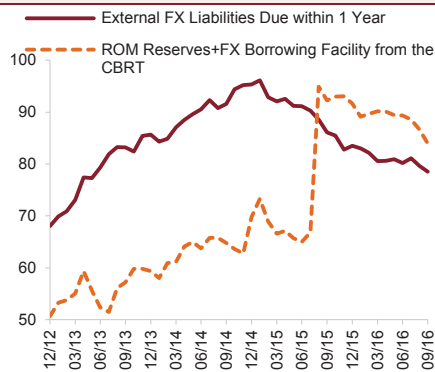
(1) Selected FX Liquid Assets: Cash+Foreign Banks (free) + Required Reserves held within the ROM facility.

Source: CBRT, CRA (Latest Data: 09.16)

with respect to the renewal of their external debts at appropriate maturities and costs. As of September 2016, the selected FX liquid assets of the banks were 46 billion US dollars. These assets are at an adequate level to cover around 61 percent of the FX debts due within one year (Chart III.2.10).¹ As a significant portion of external loans due within one year was borrowed by pledging Eurobond and GDDS, the facility enabling banks to use the TL-denominated government debt securities as collateral in the FX and banknotes markets within the CBRT provides an additional support to the banks. The sum of the Foreign Exchange Deposit limits allocated to the banks and the foreign exchange and gold assets held at the CBRT in the scope of the ROM facility is adequate to meet the banks' external FX debt payments due within one year (Chart III.2.11).

Chart III.2.11

ROM Reserves + FX Borrowing Facility and External FX Liabilities Due Within 1 Year (Billion USD)

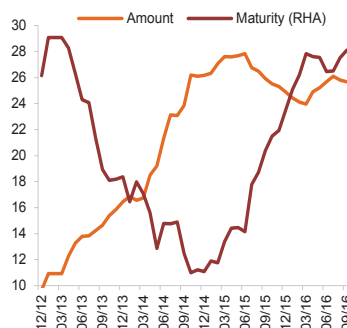


Source: CBRT, CRA (Latest Data: 09.16)

The stagnation experienced in FX-denominated securities issued abroad of the banking sector, which is highly sensitive to global liquidity developments, has recently been replaced by a limited increase. In response to the expectations that implementations supporting liquidity conditions would continue in the global monetary policies and the rise in risk appetite, the average maturity of FX-denominated securities issued abroad, whose amount had increased by 5 percent in the first three quarters of 2016, reached 69 months due to the decrease in short-term issues from November 2014 (Chart III.2.12). There was no remarkable recovery in the amount or average maturity of the banking sector's domestic security issues (Chart III.2.13).

Chart III.2.12

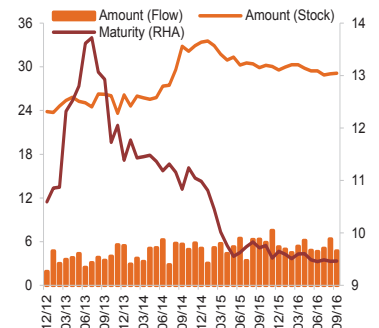
FX Issues Abroad
(Stock, Billion USD, Month)



Source: CRA (Latest Data: 09.16)

Chart III.2.13

Domestic TL Security Issues
(Billion TL, Month)



¹ The extent to which banks can use the ROM reserves is related to the extent to which they can provide the TL needs arising from the use of the ROM facility. The sector's free GDDS portfolio is at an adequate level to cover the TL reserves and at the end of October 2016 the ratio of the free GDDS portfolio to the TL equivalent of the ROM reserves was 135 percent.

III.1 Interest Rate and Exchange Rate Risk

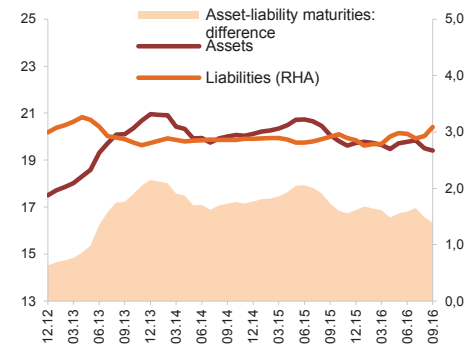
No significant development has been observed in the sensitivity of the Turkish banking system to interest rate risk since the last report period. Maturities of TL assets, which had decreased by about one month from the second quarter to the end of 2015, continued to fluctuate within a narrow band in 2016. As for TL-denominated liabilities, maturities have exceeded 3 months for the first time since the second quarter of 2013 resulting from the increase in the maturities of fixed rate securities issued (Chart III.3.1). Easing of the maturity restrictions for the general-purpose loans from 36 months to 48 months in September 2016 and the restructuring provided for the existing credit balances up to 72 months are expected to result in a moderate increase in the maturities of TL assets in the upcoming period.

An analysis of the FX-denominated balance sheet items suggests that the increase in the maturities of FX liabilities came to an end in response to the matured effects of the arrangements made in reserve requirements for non-core FX liabilities to encourage long-term borrowing. Because the maturities of FX assets also continued their horizontal trend, the FX asset-liability maturity mismatch remained largely constant (Chart III.3.2).

The banking sector continues to stay resilient to interest rate shocks. In order to observe the sector's sensitivity to interest rate shocks through the repricing channel, interest rate risk-related losses were measured by exposing the banking system to an interest rate shock that would last for a period of one year. Based on banks' balance sheets at the beginning of the period, interest rate sensitive TL and FX assets and liabilities with maturities up to one, three, six and twelve months were repriced assuming a five-point increase in the interest rate. The calculations suggested that losses due to the TL interest rate shock corresponded to approximately 2.3 percent of the capital, while losses due to the FX interest rate shock were about 1.6 percent of the capital. (Chart III.3.3). The fact that the losses are limited despite the size of the shocks verifies the resilience of bank balance sheets to interest rate shocks.

Limited improvement in the TL asset-liability maturity mismatch.

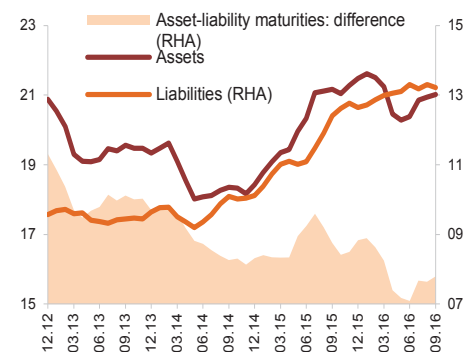
Chart III.3.1
Maturities of TL Assets-Liabilities of Banks
(Interest rate-sensitive assets and liabilities, 3-Month MA, Month)



Source: CBRT (Latest data: 09.16)

Horizontal course in the FX asset-liability maturity mismatch continued.

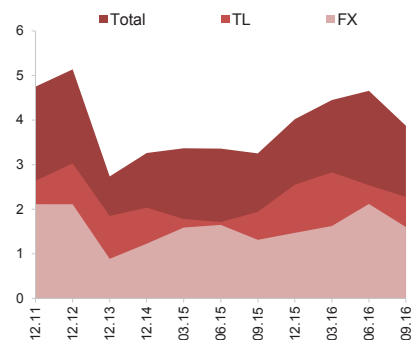
Chart III.3.2
Maturities of Banks' FX Assets-Liabilities
(Interest rate-sensitive assets and liabilities, 3-Month MA, Month)



Source: CBRT (Latest data: 09.16)

Impact of interest rate shocks on capital is limited.

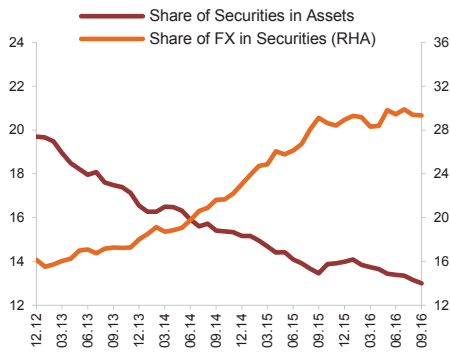
Chart III.3.3
Loss/Capital after TL and FX Interest Rate Shocks
(Percent, Point)



Note: Calculations are based on the data of banks with an asset size of TL 6 billion and more (excluding Eximbank and Provincial Bank- İller Bankası).

Source: CBRT (Latest data: 09.16)

Chart III.3.4
Securities Portfolio
(Percent)



Source: CBRT (Latest data: 09.16)

In addition to the repricing channel, another channel through which the financial intermediation system can be affected by external interest rate shocks is the revaluation of securities. The share of securities in the banking sector assets declined to 13 percent. Approximately 30 percent of the portfolio consists of FX-denominated securities. The average maturity of TL-denominated securities is five years while that of FX-denominated securities is four years (Chart III.3.4).

The Turkish banking system maintains its resilience to exchange rate risk. The regulation on the net FX general position puts a restriction on the total foreign currency short position of the banking system, yet it does not impose any restrictions concerning cross currency swaps. Nevertheless, banks refrain from taking positions in the US dollar and euro, which constitute a considerable part of their FX assets and liabilities. With the recent decline in the costs of funding in euro, firms' preferences in foreign currency loans have significantly shifted towards euro-denominated loans. Additionally, banks started to hold significant amounts of euro deposits at the CBRT following the removal of the restrictions on the collateral FX deposit facility in July 2016, which provided banks with the opportunity to borrow in TL by placing FX deposits as collateral. As a result, banks had on-balance sheet long positions in euro. Banks offset their on-balance sheet long positions in euro by taking off-balance sheet short positions in euro through euro-US dollar currency swaps (Chart III.3.5, Chart III.3.6). As of November 11, 2016, limitations on the collateral FX deposits resumed. It is predicted that this practice will narrow the on-balance-sheet long and off-balance-sheet short positions of banks in euro.

Euro and US dollar denominated net short positions are at low levels.

Chart III.3.5
On- and Off-Balance Sheet Items - USD
(Billion TL)

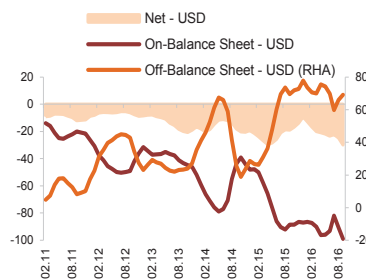
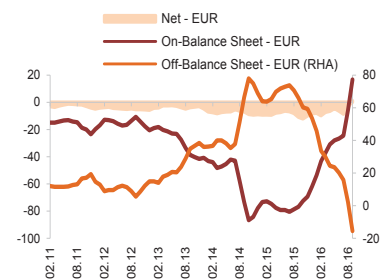


Chart III.3.6
On- and Off-Balance Sheet Items - Euro
(Billion TL)



Source: CBRT (Latest data: 09.16)

III.4 Profitability and Capital Adequacy

As of September 2016, the banking sector's annual cumulative net income increased by around 50 percent compared to the same period last year. Accordingly, the return on assets (ROA) and return on equity (ROE) of the banking sector also increased significantly over the past one year. This improvement in the indicators of profitability is a widespread phenomenon on a bank-by-bank basis. The enhancement in profitability supported equities and thus, with slowdown in loan growth, affected capital adequacy ratio (CAR) positively. As a result, the sector's CAR increased to 16 percent (Chart III.4.1 and Chart III.4.2).

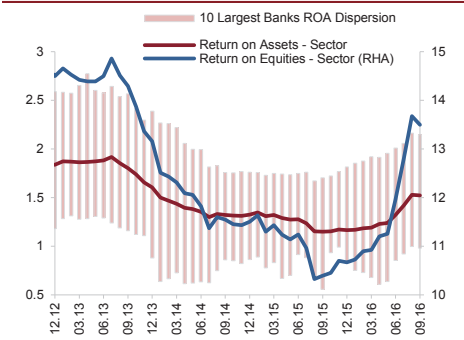
III.4.1 Developments in Profitability

Profitability indicators of banking sector began to deteriorate by mid-2013, when the FED announced taper tantrum, and this trend continued until September 2015. Interest expenses increased as a result of rising funding costs, which in turn contributed to the decline in profitability in this period. The decrease in non-interest income such as banking service revenues due to the BRSA's regulations and unfavorable outlook in other non-interest income/expenses item driven mostly by increasing currency swap rates were other potent elements in the recession of profitability. On the other hand, a more efficient management of non-interest expenses was the primary factor that partially limited the negative effects (Chart III.4.3).

The recovery observed in profitability in the past one year was mainly due to the improvement in non-interest expenses, the partial recovery in net interest income, and the decrease in losses in securities trading, derivatives and foreign exchange transactions (Chart III.4.3). The most influential item in non-interest expenses was reduced general provision expenses due to changes in asset composition and regulations. The growth in consumer loans -except housing- and credit cards, the items having higher provision rates, was more limited than the growth in other types of loans with lower provision rates. The general provision rates in consumer loans and credit cards, which had previously been 4 percent for the first group of loans and 8 percent for the closely monitored loans, were

Profitability shows a strong recovery.

Chart III.4.1
Return on Assets (ROA) and Return on Equities (ROE)
(Percent)

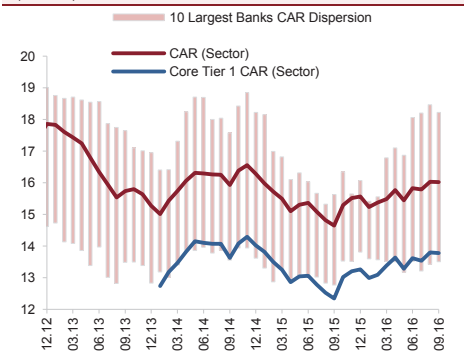


Note: Profitability ratios are calculated by dividing the annual cumulative profit by one year's average denominator.

Source: CBRT (Latest Data: 09.16)

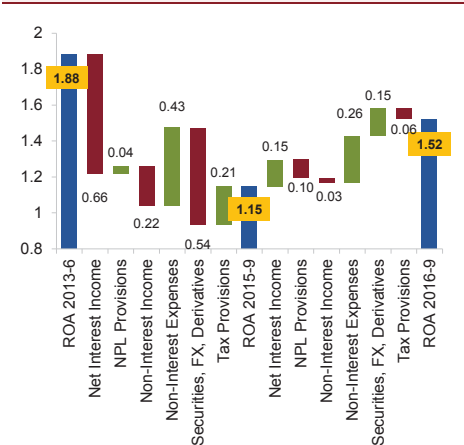
Capital adequacy has gained momentum with the strengthening of the profitability and the slowing down of the loans.

Chart III.4.2
CAR and Core Tier 1 CAR
(Percent)



Source: CBRT (Latest Data: 09.16)

Chart III.4.3
Effects of Income Statement Items on Return on Assets (Points)

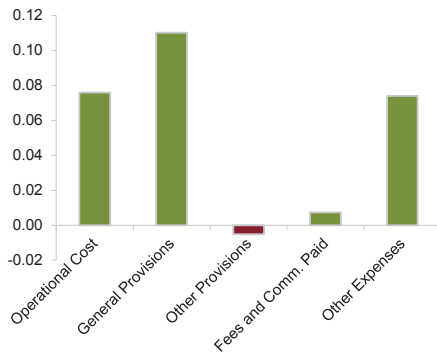


Note: Red columns indicate decreasing, green columns indicate increasing effects.

Source: CBRT (Latest Data: 09.16)

Virtually all sub-components have had positive effect on non-interest expenses.

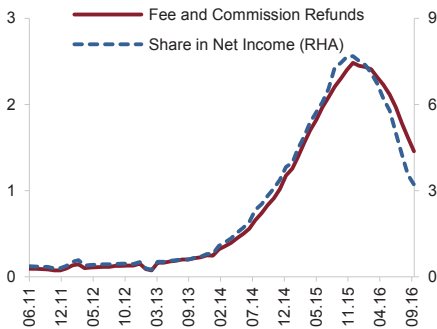
Chart III.4.4
Effects of Non-interest Income Items on ROA
(between 2015 Sep. – 2016 Sep., Points)



Note: Red columns indicate decreasing, green columns indicate increasing effects.
Source: CBRT (Latest Data: 09.16)

The effect of fee and commission refunds is gradually diminishing.

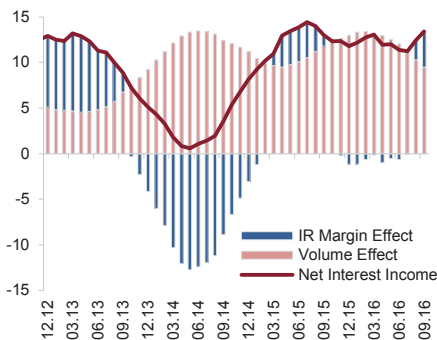
Chart III.4.5
Fee and Commission Refunds
(Annualized, Billions TL, Percent)



Source: CBRT (Latest Data: 09.16)

The decline in interest rates has begun to affect the net interest income positively.

Chart III.4.6
Contribution to Changes in the Net Interest Income
(Annualized, Billion TL)



Source: CBRT (Latest Data: 09.16)

reduced to 1 percent and 2 percent respectively, effective September 2016, in accordance with the other types of loans. Therefore, the positive impact of general provisions on profitability is expected to prevail in upcoming periods.¹

A significant portion of the positive surplus in non-interest expenses stems from the limitation of operational expenses through austerity measures taken by banks. As a matter of fact, in the last one year, nearly 200 branches were closed and the total number of personnel decreased by more than 3,300 in the sector.² Finally, other non-interest expenses item, which generally accounts for one-time impacts and adjustments, also contributed to the increase in profitability with the decline in the effects of fees and commission repayments from previous years (Chart III.4.4 and Chart III.4.5). On the other hand, non-interest income continued to post a relative decline after the regulations in 2014³, however, the Turkish banking sector recorded an inflow of approximately TL 1.6 billion through this item due to the global restructuring of Visa in 2016, which, in turn, reduced the negative effect of the non-interest income on profitability.

The limited recovery in the net interest income item in the last one year raised the return on assets by around 10 basis points (Chart III.4.3). In the last six months, the effect of volumetric growth on net interest income decelerated; but the net interest income trended up with the recovery in the interest margin between funding and lending (Chart III.4.6). The reduced funding costs as a result of the CBRT's interest rate cuts stood out as the most influential factor in widening interest rate margins in this period. Due to the maturity mismatch between assets and liabilities, the decline in interest rates led to a faster decline in interest expenses than interest income. On the other hand, the fact that the deposit rates have a relatively limited decline compared to the loan rates and the adaptation of

¹ Before September 2016, the higher provision rates were applied to banks whose loan portfolio consisted of more than 25 percent of consumer loans and whose NPL ratio in consumer loans - excluding housing loans- were over 8 percent. This application was abolished by the Regulation on the Amendment to the Regulation on the Procedures and Principles for the Determination of the Qualifications of Loans and Other Receivables and the Provisions to be Held by Banks (O.G. of 27.09.2016 No: 29840).

² The calculations do not include the change in branches and personnel of banks transferred to the SDIF.

³ Regulation on Procedures and Principles on the Fees to be Obtained from Financial Consumers (O.G. of 03.10.2014 No. 29138)

the asset returns to the new interest rates over time could limit the contribution from the interest margin to the net interest income in the upcoming period. However, the impact of falling interest rates on the loan demand is expected to strengthen the positive contribution from the volume channel.

In the last year, the most negative impact to the sector profitability came from the specific provision expenses. Due to the increase in NPL rates and the decline in collection rates, banks act prudently and increase their specific provisions significantly. On the other hand, the increase in the closely monitored loans indicates that the upward trend in NPL rates may continue for an extended period. Therefore, it seems probable that the cost of provisions will put pressure on bank profits, depending on progress in NPLs. However, as stated in the previous Financial Stability Reports, the banks are already allocating high provision rates for NPLs when all collaterals are taken into account. Owing to the prudent attitude of banks vis-à-vis the provisioning, a likely recovery to be observed in collections rates on the back of the revival of the economic activity can make a vigorous contribution to profitability (Chart III.4.7).

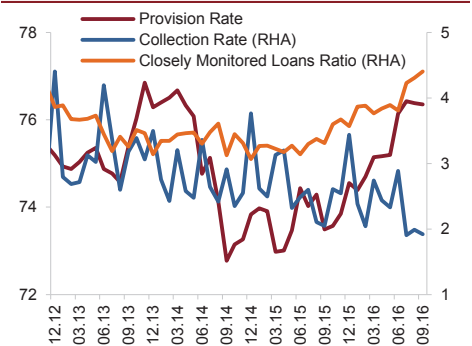
Other non-interest income/expenses item, in which the positions of banks in securities trading, derivatives and foreign exchange (FX) transactions are accounted for, had a more positive outlook and affected the profitability favorably compared to period when the ROA was declining. While the gains from securities trading are maintained, the resultant of derivative and FX transactions, used for the asset-liability management by banks, costed less due to the lower FX swap rates (Chart III.4.8).

In response to the decreasing banking profitability ratios of banks, the market value/book value indicators of the banking sector have recently posted a worldwide decline. The Borsa Istanbul (BIST) banking index market value/book value indicator, previously showing a similar behavior as in the case of other emerging market indices; but diverged from them following the negative domestic developments in July. With the fading effects of this negative development in time, the increase in the profitability of banks is expected to reflect on market indicators and the Turkish banking

As the collection rates decrease, the provision ratios are drawn to more cautious levels.

Chart III.4.7

Additional Indicators on NPLs (Percent)

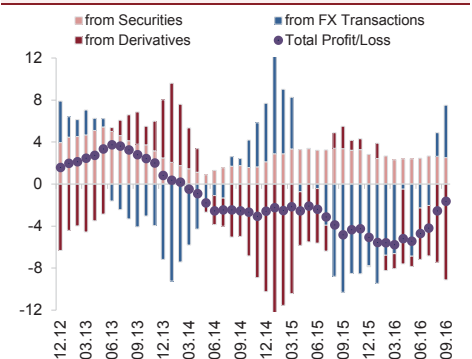


Source: CBRT (Latest Data: 09.16)

The negative effect of derivative and FX transactions on profitability is decreasing.

Chart III.4.8

Profit/Losses from Security, Derivative and FX Transactions (12-Month Cumulative, Billion TL)

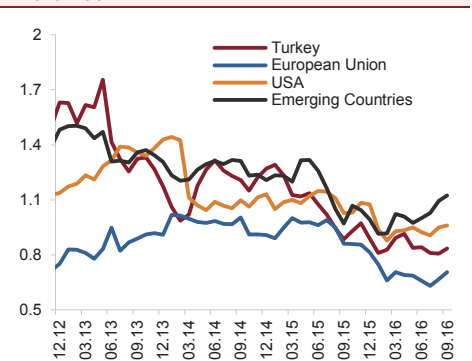


Source: CBRT (Latest Data: 09.16)

The Turkish banking sector showed signs of divergence from other countries in the markets due to negative domestic developments.

Chart III.4.9

Banking Sector Market Value/Book Value Worldwide



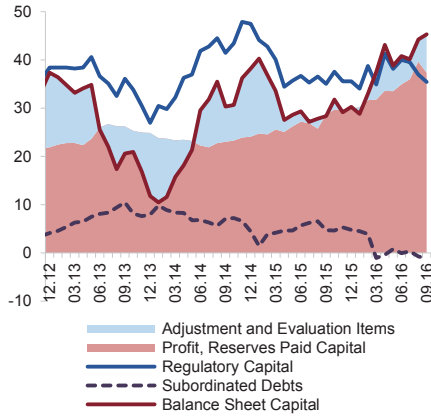
Source: CBRT (Latest Data: 09.16)

indicators are estimated to converge to those of other emerging economies (Chart III.4.9).

Capital strengthens with increased profitability.

III.4.2 Capital Adequacy

Chart III.4.10
Changes in Items Affecting Capital
(12 Months Cumulative, Percent)

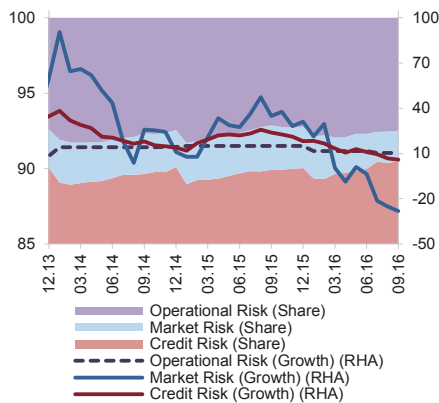


Source: CBRT (Latest Data: 09.16)

The strong recovery in profitability emerged as the most important element affecting capital in the last one year. In this period, the significant decrease in the interest rates on government securities also positively affected the capital via securities reevaluation channel. However, the recent uptrend in the interest rates on government securities indicates that the cumulative contribution from this channel to capital might taper in the coming periods. On the other hand, the exclusion of some of the subordinated debts that had been acquired in the past and have some certain conditions, stock cancellation profits and general provisions for possible risks from the legal capital definition affected the capital adversely (Chart III.4.10).¹

Slowdown in credit growth is also seen in credit risk.

Chart III.4.11
Risk Components
(Percent)



Source: CBRT (Latest Data: 09.16)

In the last one-year period, there was no significant change in the risk-weighted asset composition, and credit risk maintained its predominant role with a weight of about 90 percent. With the amendments made to the Capital Adequacy Regulation in January 2016, the risk weighting of 50 percent in housing loans decreased to 35 percent and the risk weights ranging from 75 to 250 percent in unsecured consumer loans and credit cards decreased to 75 percent, positively affecting the risk weighted items.² When the development of risk weighted asset components is examined, it is seen that the credit risk has been acting virtually in direct proportion with loan growth and has been slowing down. The market risk decelerated, thus turned negative because of the relatively increased predictability of the FED's policies. The operational risk amount, which is updated once a year by banks, increased by 12 percent compared to the previous year (Chart III.4.11). The reductions in the credit rating of Turkey could increase the risk weights applied to the foreign currency receivables from the central government and the Central Bank, to 100 percent from 50 percent

¹ Regulation on the Amendment to the Regulation on Equities of Banks (O.G. of 23.10.2015 No. 29511 and O.G. of 20.01.2016 No: 29599)

² Regulation on the Amendment of the Regulation on Measurement and Evaluation of Capital Adequacy of Banks (O.G. No. 29599 on 20.01.2016)

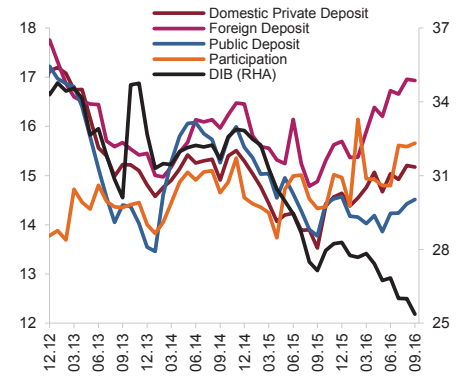
(depending on the credit rating agencies that the banks previously determined and reported to use in their assessments) and may play a negative role on CARs.¹

Increase in the profitability strengthened the capital, and the slowdown in the loan growth rate limited the risk-weighted asset growth. Depending on these factors, the sector's capital adequacy strengthened significantly in the last one-year period. The strengthening of the capital adequacy became more pronounced in all banking groups, except development and investment banks (DIBs), which already have very high CAR values; but is more limited in public deposit banks due to their higher loan growth rates (Chart III.4.12).

According to the analysis of the relationship between the capital adequacy ratio and the credit growth in view of profitability levels recently reached, by using the methods and parameters in Box III.4.1 of the November 2015 Financial Stability Report, if the banking system continues to work with the current ROA, which is 1.5 percent, it will be able to support an annual nominal loan growth of around 11 percent without lowering the current level of CAR. On the other hand, at such a level of profitability, a nominal loan growth of 15 percent can be supported by 22 years, and a growth of 20 percent can be supported by up to five years, without falling under the target CAR limit (12 per cent). Finally, if the CAR limit is considered to be the legal minimum level including the capital protection buffer (10.5 percent), the sector will not face any constraints in terms of the capital adequacy while supporting of a loan growth of less than 17 percent (Chart III.4.13).

Capital adequacy is strengthening in all banking groups except DIBs.

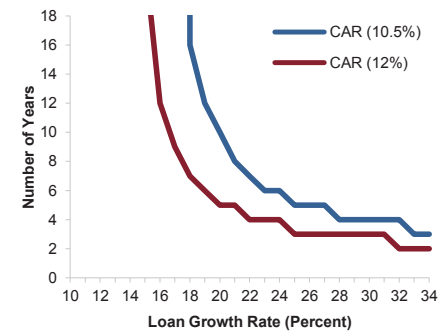
Chart III.4.12
CARs According to Bank Types
(Percent)



Source: CBRT (Latest Data: 09.16)

Capital adequacy and return on assets are strong enough to support higher growth rates.

Chart III.4.13
Relationship Between the CAR and Loan Growth Rate under the Current Profitability



Source: CBRT, Authors' Estimations (Latest Data: 09.16)

¹ Following the rating cuts by Moody's and S&P, only three of the banks in the sector started to apply one hundred percent weight for foreign currency receivables from the central government and the Central Bank. The effects of this situation are seen in the relevant banks as of September 2016.