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Economic Analysis and Financial Stability Department

33 Garibaldi, Prishtina 10000

Tel: +383 38 222 055 Fax: +383 38 243 763

Website www.bqk-kos.org

Email address economic.analysis@bqk-kos.org

ABBREVIATIONS:

ATM **Automated Teller Machines**

CAR Capital Adequacy Ratio

CBK Central Bank of the Republic of Kosovo

EBRD European Bank for Reconstruction and Development

ECB European Central Bank

FDI Foreign Direct Investments

GDP Gross Domestic Product

IMF International Monetary Fund

KAS Kosovo Agency of Statistics

KCGF Kosovo Credit Guarantee Fund

KPST Kosovo Pension Savings Trust

MFI Micro Finance Institutions

MFLT Ministry of Finance, Labour and Transfers

MTA Money Transfer Agencies

NFA Net Foreign Assets

NIM Net Interest Margin

NPL Nonperforming Loans

ODC Other Depository Corporations

POS Point of Sales

pp Percentage Points

ROAA Return on Average Assets

ROAE Return on Average Equity

RWA Risk Weighted Assets

TPL Third Party Liability

VAT Value Added Tax

Note: Users of the data are required to cite the source.

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1. Governor's Foreword

The Central Bank of the Republic of Kosovo (CBK) presents to the public the 19th issue of the Financial Stability Report (FSR). Employing a risk-based analysis perspective, FSR aims to inform the public about the state of the financial system and increase transparency and foster a professional debate on the developments and challenges of the financial system and its infrastructure.

High insecurities that characterized the global economy in 2022, driven mainly by the consequences of the Ukrainian war on the dynamics of prices of energy and other basic products, as well as the high rate of inflation that prevailed throughout the year, initiated the change of easy monetary policies in an almost synchronized manner by the central banks. After 11 years, in July 2022, the European Central Bank decided to raise interest rates, as a countermeasure to a rising rate of inflation, while economic activity in the euro area appears to have weakened.

For 2023, the main risks to financial stability at the global level continue to be increased geopolitical tensions, the slow rate of inflation decline (core inflation remains high), and as a result, the continuation of monetary policy tightening through increased interest rates - a dynamic that risks keeping the euro area, the countries of the region and Kosovo in an environment with weakened economic activity.

Similar to the dynamics in the global and regional economy, the economy of Kosovo marked a slowdown in general activity. The deterioration of the economic outlook, especially in the second half of the year as a result of the increased uncertainties at the global and euro area level, inflation and the decline in consumer confidence, resulted in a weakening of the overall demand in the country.

Bashkim NURBOJA **Acting Governor**

The fiscal support packages, the increase in remittances, the increase of salaries, as well as the increase in lending helped to support the consumption of households, compensating the drop in real incomes due to inflation. In addition to the easing of inflationary pressures in 2023, the recovery of economic activity is expected to be generated by domestic demand and the improvement of the net export position. However, the tightening of credit conditions in the euro area and the weakened economic activity in the conditions of a high rate of core inflation may translate into a decline in disposable incomes in the euro area and, consequently, reduce the high contribution of incomes from the diaspora.

Despite the increased macroeconomic risks, the constituent segments of the financial system of Kosovo continued to grow, reflecting the system stability. The banking sector has continued to the general economic support activity throughout 2022, a year when lending turns out to have recorded the highest growth rate in the last eleven years. For 2023, inflationary pressures as well as uncertainties about economic activity are expected to have an impact on the potential decline in credit demand and the overall level of financial intermediation.

Such circumstances of high prices, the weakening of economic activity, the increase in interest rates globally and in Kosovo, as well as the more limited fiscal space to support the economy of Kosovo, the credit risk and the liquidity risk of the banking sector are increasing and will be monitored more closely.

While the progress of these developments is accompanied by high uncertainties, financial system in Kosovo has adapted prudent operating approaches in relation to the circumstances, as well as created satisfactory reserves of capital and liquidity to cope with its increased operational risks in the following period.

2. Summary of main risks and developments of financial stability

The year 2022 was characterized by increased risks and numerous uncertainties towards the functioning of the financial system, which were mainly driven by the consequences of the Ukrainian war on the dynamics of energy prices and other basic products, as well as the deepening of restrictions on supply chains and the increase in inflation, which had already been driven by the pandemic situation. Despite the increased risks, Kosovo's financial system continued to grow, reflecting stability in all its constituent sectors.

Lending activity marked a slowdown in the increasing trend in the second half of the year, influenced by the tightening of credit supply as a result of the more pessimistic outlook for developments in the local and global market and the tightening of financing conditions. However, thanks to the better-thanexpected economic performance of the enterprise sector, as well as positive developments in the labor market, the increase in risks did not materialize in the performance of the banking sector, which continues to have adequate reserves of capital and liquidity.

However, risks to financial stability remain high. Prospects for slower economic growth as well as high inflation may burden the financial situation of economic agents (enterprises households), with an increased reflection of credit risk in the following period. The tightening of financing conditions, in addition to the continuous increase in competition in the country and the slowdown in deposit growth, increases the exposure to financing and liquidity risk, which requires careful monitoring.

The main risks to financial stability continue to stem from worsening macroeconomic factors, and despite expectations for improvement, remain increased for the following year. Globally, the growth rate of economic activity almost halved in 2022, as a result of increased geopolitical tensions and their effect on rising energy and food prices. Purchasing power decreased and financing conditions worsened as a result of the almost synchronized tightening of monetary policy. The overall global inflation resulted 8.7 percent in 2022, and core inflation reached record levels in some advanced economies in 2023. The continuation of geopolitical tensions, the slow rate of decline in inflation as well as the continuation of the tightening of monetary policies - the increase in interest rates represent the sources of risk for the following period, especially in the circumstances of the sudden crisis in certain regional banks in the USA and Credit Suisse in Switzerland, which despite being isolated cases, have raised more general concerns about the sustainability of banks in a higher interest rate environment.

The euro area* recorded a slowdown in economic growth from 5.3 to 3.5 percent. As a result of high inflation rates and the tightening of monetary policy, financial conditions in the euro area marked a deterioration, a dynamic that continues even in 2023 due to high pressures on core inflation. The countries of the Western Balkans were characterized by an even more pronounced slowdown in economic growth, to 3.8 percent compared to 8.6 percent in 2021. Inflation dynamics in the euro area were reflected in the Western Balkans region relatively quickly, considering the region's trade ties with the euro area as well as the dependence on the import of food and energy goods. The average annual inflation rate in the region reached 11.6 percent in 2022 with all

^{*} Kosovo's main trading partner and at the same time the region with the highest origination of remittances and other diaspora income.

countries, except Albania, recording doubledigit inflation growth. The fiscal support packages, the increase in remittances, the increase of salaries, as well as the increase in lending helped to support household consumption, partially compensating the decrease in real incomes due to inflation. However, the continuation of high inflation in circumstances of the narrowing of the fiscal space for continuous support, may negatively affect economic activity, with indirect negative effects on developments in the financial system as well.

The economy of Kosovo marked a slowdown in activity, similar to the dynamics in the global and regional economy. The beginning of the year was characterized by an increase in private consumption andexports, continuation of positive post-pandemic dynamics. However, from the second quarter there was a slowdown in both categories as a result of the deterioration of the economic outlook from the war in Ukraine, inflation and the decline in consumer confidence. The high increase in inflation, namely the prices of imported goods, affected the increase in the import component, giving a negative contribution to economic growth, together with the public expenditure and investment component. Estimates suggest that annual GDP growth in 2022 slowed to 3.55 percent, from 10.7 percent in 2021. The sectors with the highest growth in value added were the processing industry and services sector, while as a result of cost increases of construction, the construction sector recorded a continuous decline from the second quarter until the end of the year. The dependence of Kosovo's economy on the import of energy and food goods made the acceleration of the prices of these goods in the global markets to be reflected relatively quickly strong inflationary pressures in the country. The consumer price index (CPI) rate reached 11.6 percent in 2022 (3.4 percent in 2021), with food and energy prices being the main drivers of inflation with a contribution of 6.6 and 2.9 percentage points respectively to the total

inflation rate. Core inflation, as an indicator of the longer-term inflation trend, resulted in average annual growth of 4.9 percent in 2022, with the highest historical level recorded in December 2022 of 6.8 percent. The decline in energy prices in international markets, which was more pronounced in the first quarter of 2023, is expected to influence the decline in inflationary pressures, alongside the further easing of obstacles in supply chains as well as the expected effect of tightening monetary policy in the slowdown of economic activity the drop in demand. However, the decline in core inflation is expected to be slower, and in real terms, food prices are expected to remain higher than in the pre-pandemic period, thus becoming more expensive especially for lowincome households. According to the basic scenario of the CBK's current forecasts, the average rate of inflation is expected to be 4.9 percent in 2023. In addition to the easing of inflationary pressures, expectations are for a slight improvement in economic activity during 2023, generated by domestic demand and net exports. But, the uncertainties are high, and lean in the direction of negative effects. The tightening of credit conditions in international markets, the expected slowdown in economic activity and the decrease in disposable income in the euro area, may reduce the income from the diaspora. Risks for geopolitical tensions remain high, and their implications for trade policies, inflation trends and available incomes, under conditions of narrowing fiscal support space, may further weigh on purchasing power and consumer confidence.

The fiscal position markedanimprovement during the year, as a result of higher budget revenues generated by the effect of price increases and increased formalization of the economy. Government spending also increased, influenced increased spending on fiscal support measures to overcome the energy crisis and inflation, as part of the Economic Recovery package. However, the lack of capital expenditures influenced the increase in expenditures to be lower than the increase in revenues, so the fiscal position improved. Consequently, the public debt in relation to the GDP also decreased. Rising wages in the public sector, expectations for increased public capital investment, increased cost of financing, as well as a slow decline in inflation/needs for subsidy of the most affected layers, may increase the pressure on the fiscal sector in 2023.

Table 1. Key risks and sustainability of the banking sector



Source: CBK.

*Construction methodology of the table of risk and sustainability of the banking sector is partially based on the methodology of the Financial Stability Map of Kosovo

(according to which the value of the main relevat indicators is scored in relation to its historic statement) and analysts' jugdment.

The arrow direction suggests the risk/sustainability trend in the recent period (last quarter), and the development expectations on the following one-year

Despite the positive dynamics in Kosovo's goodsof andexports services, characterized by expansion of the export base, partner countries and volume, the current account deficit significantly deepened. The main contributors to the expansion of the deficit were the increase in the price of imports as well as the decrease in the positive balance of the primary income account. While, addition to the increase in exports of goods and services, the increase noted in the component of secondary income, namely remittances, turns out to have had an effect in mitigating the negative impact from the *increase in imports.* The positive trend of the component of the net export of services, which marked a record increase in the previous year, continued in 2022, driven by the increase in the number of diaspora visits and their spending in Kosovo. The export of computer services was also characterized by growth, which is considered a sector with high potential for growth. Remittances, which constitute an important source of financing with a share of 13.7 percent in the country's GDP, marked a slowdown in growth from last year's record growth rate. The beginning of the year marked a slight slowdown in the growth of the flow of remittances, while from the second half of the

year, an increased flow of remittances was observed, despite the challenges of high inflation in the countries with the concentration of the Kosovar diaspora, and the possible effect of the macroeconomic circumstances in their financial position.

Chart 1. Construction, producer and agriculture input price indices



Source: CBK.

The contribution of the diaspora was also high in the foreign direct investment (FDI) sector, through the purchase of real estate, which represented 67.3 percent of the total FDI. Other sectors with a contribution to the annual growth of FDI were the financial and insurance activities sector, as well as the construction sector.

High inflation has influenced the increase in turnover in commercial enterprises,

while the volume of industrial production recorded low growth. The debt enterprises and households has continued the growth trend, but it was slower compared to the previous year as a reflection of the weaker market outlook. The continuation of inflationary pressures as well as the increase in the cost of financing/debt servicing risks the deterioration of the financial situation, in particular for the households which are facing a high increase in the prices of basic products aswell asservices, incircumstances of unchanged compensations/salaries, or low growth. The turnover index in retail trade recorded an increase of 9.1 percent, with the highest increase in the fuel trade sector. While, despite the high price increase, the index of the volume of industrial production, which represents the performance of the production of enterprises in four sectors of the industry, recorded a small increase of 0.3 percent in 2022, which suggests a slowdown in industrial activity. The construction sector, despite facing the highest increase in input prices, was characterized by the highest number of new registered enterprises, while the trade sector resulted in a decrease in the number of new enterprises. High inflation and higher financing costs have weighed on the financial position of both companies and households. The trend of labour emigration and the lack of professional skills have also increased the cost of labour, and expectations are that this aspect will worsen, especially after visa liberalization in early 2024. The financial position of households is considered to have worsened due to the high increase in prices, but insufficient data does not allow a more accurate assessment of the situation. Official labour market data is not available beyond Q1 2022, when unemployment was reported to have dropped to 16.6 percent, or 9.2 percentage points lower compared to the same period in 2021. Indirect indicators such as income tax and pension contributions², remittances, compensation of workers abroad as well as savings suggest an increase in

funding sources. However, the high growth of inflation throughout 2022, as well as the continuation of growth further into 2023, is expected to affect the weakening of the financial position of households, especially those with lower incomes and social schemes beneficiaries. The average net salary turns out to be an average of EUR 446 per month³, an annual increase of EUR 14. The new circumstances in the context of the high price increase not only of basic products but also of other products and services, suggest a decrease in purchasing power, with potential consequences in the deterioration of debt repayment capacity and an increase in credit risk in the banking sector. While businesses generally pass on the effect of prices to consumers, the nevertheless threatens them through the channel of falling demand and raising pressure on wages. The degree of transfer of the effects of the deterioration of the financial position of the private sector to the banking sector during 2022 was low. The household sector - those having loans - is more concentrated towards workers with public sector income and more stable employees. This, together with remittance assistance, increased employment abroad and relatively low wage growth, is thought to have reduced the sensitivity of the household sector to loan defaults as a result of the cost of living crisis - high inflation. However, the extension of high inflationary pressures beyond 2022 and rising interest rates - potentially combined with stagflation in the euro area in 2023 - could weaken debt repayment capacity with effects on higher credit risk growth.

The slowdown in economic activity influenced therateof financial intermediation to increase slightly, despite the slowdown in the debt growth trend. Enterprise debt to GDP value reached 43.9 percent, 0.6 percentage points higher than the previous year, while for households this ratio reached 20.8 percent, 0.3 percentage points higher than the previous year. Enterprise debt recorded an annual increase of 15.9 percent. The debt structure is dominated

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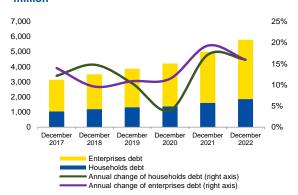
by loans to banks and local microfinance institutions. However, external debt has continued the trend of increasing share, reaching 28.7 percent of total debt in December 2022. The net debtor position of enterprises to the banking sector in the country increased by 14.8 percent, influenced by the higher growth of the absolute value of loans in relation to deposits. In terms of currency, the enterprise sector has a net credit position to the banking sector, as a result of the higher level of foreign currency deposits compared to loans, but which, however, remains low since the participation of foreign currency deposits to total deposits was 3.0 percent, while loans in foreign currency to total loans only 0.4 percent. Household debt recorded an annual increase of 16.0 percent in External debt, which has a low participation of only 2.3 percent, recorded an annual decrease of 5.9 percent. While the internal debt, which mainly consists of loans to the banking and microfinance sector, recorded slower annual growth compared to the previous year. The net credit position of households to the banking sector increased by 2.4 percent as a result of the increase in deposits.

The cost of borrowing has increased both for enterprises and for households. The increase in interest rates has influenced the increase in the participation of variable rate loans to 27.2 percent from 21.0 percent in 2021, as a mechanism for transferring the risk from interest rates to borrowers, which in the current circumstances of expectations for further tightening of monetary policy, results in higher debt servicing costs for borrowers.

Credit activity of the banking sector accelerated growth, marking the highest growth rate in the last eleven years. This dynamic was influenced by the developments in the first half of the year where credit was characterized by a more pronounced growth, while in the second half there was a slowdown in the increasing trend. The credit supply has generally tightened in the second half of the year, influenced by the risks associated with the poor outlook in the local and global markets. Continued inflationary

pressures as well as uncertainties about economic activity are expected to affect the decrease in the credit demand in 2023, especially for households.

Chart 2. Debt of enterprises and households, EUR million

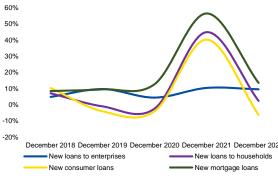


Source: CBK

The dynamics of lending activity, during most of 2022, according to the bank lending survey, was mainly determined by movements in credit demand. The marked increase in credit demand from enterprises was driven by the demand for financing inventories and working capital and fixed investments, while for households, the demand for credit was influenced by the demand for financing consumption expenses and the outlook of the real estate market. The stock of active loans in the country's banks reached EUR 4.35 billion, representing an annual increase of 16.1 percent, the highest in the last 11 years. The corporate segment influenced the growth, while the households recorded a slowdown in the increasing trend. New loans marked a pronounced slowdown in the increasing trend, returning to the growth levels of the pre-pandemic years. Only the first quarter of the year was characterized by an increase in new loans, while, after the outbreak of the war in Ukraine and the increase in inflationary pressures, there was a slowdown, an annual decrease of new loans, respectively consumer loans of households. New mortgage loans slowed significantly the growing trend, after the growth of over 50 percent in 2021. The most pronounced increase in mortgage loans in recent years resulted in a change in the structure of loans by maturity, in which case long-term loans (over 5 years) dominated the structure of the sector's total loans. In circumstances of high uncertainties about global economic developments, banks during 2023 expect negative effects both on the demand for credit and on the supply side, which will mainly be manifested through the tightening of the interest rate and increased vigilance in internal procedures for analyzing loan requests.

The increase in the interest rate as well as the credit activity influenced the increase in the sector profit, despite the higher expenses in all categories of expenses (general and administrative, interest as well asexpenses for provisions). Furthermore, thehigh interest rate environment is expected to have a positive effect on the net interest margin, an effect that can be neutralized to some extent by the higher rate of provisions as a result of the increase in credit risk.

Chart 3. Annual change of new loans



Source: CBK.

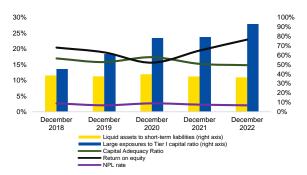
The sector's profit recorded an annual increase of 19.4 percent, influenced by the growth in all revenue categories. Inflationary pressures that started as early as the end of 2021 have encouraged the monetary authorities to tighten monetary policies, which has created an environment with increased interest rates, thus reflecting the increase in interest income on placements in other banks and interest income in securities. Interest income on loans also contributed to growth, more due to the quantitative effect of increased lending. On the other hand, interest expenses also increased as result ofcompetitive pressures withdrawing deposits, but at a much lower level than interest income. As a result, the net interest margin increased to 4.6 percent from 4.3 percent in the previous year. The sector's average return on assets and equity increased to 2.5 percent, respectively 23.0 percent from 2.3 percent and 19.5 percent a year ago. The increase in the level of profit and profitability indicators of the sector was higher than the decrease in the countries of the region, increasing the difference over the average of the region that the banking sector of Kosovo has. In the following period, the weakening of the repayment ability of customers as a result of the rate of inflation and the weakening of economic activity is expected to be accompanied by an increase in the level of provisions designed to cover possible losses from loans - thus affecting the increase in expenses and eventual decrease in income from unrealized interest. The effects of monetary policy tightening can be felt in both aspects of the banks' profit margin in the country, but with an expected positive effect on the net interest margin due to the low cost of funding from deposits. However, there is a risk that competitive pressures will push certain banks not to raise the interest rate on loans to the level of the interbank rate in an effort to retain customers and not to jeopardize repayment ability, while on the other hand, their funding costs may increase to higher proportions due to the application of increased rates by financial institutions and increased rates on deposits.

The increased credit activity influenced the key indicator of the quality of the credit portfolio, namely the ratio of nonperforming loans to total loans, to decrease further. In spite of the low level of this indicator, the uncertainties added by the progress of the price level and the increase in the value of non-performing loans at the end of 2022 place the credit risk as the most eminent risk of the banking sector and financial stability. The NPL rate continued the decreasing trend from 2021, even after the end of the last phase of restructuring to mitigate the effects of the pandemic in January-February 2022. In December 2022, this indicator decreased to 2.0 percent from 2.3 percent a year ago, mainly as a result of high lending growth, as the NPL value increased by 4.5 percent to EUR 87.9 million, as a result of developments in the last quarter of the year. The rapid economic recovery in 2021 and the

good financial performance of enterprises throughout most of 2022 influenced that the materialization of the increased risks from high prices is not reflected in the deterioration of the payment performance. Other factors that influenced the neutralization of the increased risks from the macroeconomic environment and the increase in prices were the ability to transfer the high cost from enterprises to the final consumer. As for the segment of households, the factors with a neutralizing effect were the increase in remittances, fiscal aids, salary increases, exposure to households with salaries in the public sector and those with more stable sources of financing, as well as the relatively low rate of financial intermediation of the sector. However, the continuous increase in prices with the effect of a high increase in basic inflation, the increase in energy tariffs in the country, and uncertainties about economic activity are expected to deepen the crisis of the cost of living with potential effects on the repaying capacity of households, in the conditions of the highest debt growth in recent years. The enterprise sector, in addition to the risk of a drop in overall demand, is facing the challenge of a lack of workers and a skill gap, a challenge that is expected to deepen further in 2024 when the implementation of the measure of free movement for citizens of Kosovo in the Schengen countries begins. The increase in migration that is expected to follow the visas liberalization represents a challenge for the operation of enterprises, especially construction and production sector, with potential negative effects on their financial performance and, consequently, their repayment capacity.

The capital adequacy ratio of the sector decreased as a result of the high growth of risk-weighted assets, namely lending. However, the level of capital remains above regulatory minimum levels. Systemically important banks result with a higher capitalization rate and at the sector level, the variance between the capital adequacy ratio of individual banks to the average of the banking sector has decreased, i.e. approximation to the sector average.

Chart 4. Selected indicators of financial soundness



Source: CBK.

The regulatory capital ratio dropped to 15.5 percent, from 16.4 percent last year. However, the increase in capital from the smaller banks which had a lower level of capitalization rate reflects a positive development in terms of the increase in absorptive capacity. The sector capitalization position is also reflected to be at an adequate level by the capital adequacy ratio of Tier-1 capital to risk-weighted assets, as well as financial leverage, which stood at 13.5 percent, respectively 9.3 percent. However, increased competition and faster growth by certain banks increases the need to assess the capital position and level of provisioning, especially given the circumstances of operating in an environment with increased risks to financial stability. The stress test analysis suggests that the sector in general would be able to cope with possible losses in two of the three designed scenarios of macroeconomic developments (the basic scenario as well as the moderate scenario). Whereas, in the aggravated scenario with economic decline at the level of the decline experienced during the pandemic (which by definition is possible, but has a very low probability of occurrence), namely the economic decline of 5.6 percent, the sector would face problems in its capital position.

The accumulated liquidity of banks over the years as well as the continued growth of private sector deposits, despite facing the inflation crisis, enabled the financing of increased credit activity even in 2022. The main liquidity indicators, despite the decline, remained above the minimum regulatory levels, maintaining the stable liquidity position of the sector. However, the change in monetary policy by the ECB

and the increase in interest rates has translated into increased competitive pressures to secure sustainable funding. Furthermore, the weaker economic growth in the euro area and in the local economy, the stillevident inflationary be reflected pressures, may in the weakening of the diaspora's saving capacity with a reflection in the savings in the country as well.

The liquid assets ratio to short-term liabilities decreased to 36.5 percent compared to 37.2 percent in 2021. The tight liquidity ratio, which includes only highly liquid assets (cash and equivalents, current accounts and placements). to current liabilities also decreased to 29.3 percent from 30.4 percent a year ago, due to higher increase in liabilities against liquid assets. The liquidity reserves of commercial banks continue to be at high levels, exceeding the required reserve held at the CBK by 49.2 percent. The tightening of monetary policy at the global level has been immediately reflected in the increase in the cost of financing for the banking sector in Kosovo, both from external sources and from local deposits. Throughout the second half of the year, term deposits have taken on more attractive dimensions from the higher rates offered in the market under the pressures of competition for keeping depositors. The already slowing trend of growth of household deposits may slow down further in the circumstances of the continuation of high inflation and the decline of economic activity, which will increase the pressure on the financing of the banking sector and the liquidity position, both in terms of maintenance of the level of deposits as well as in terms of the cost of their maintenance. From 2023, the banking sector will start reporting two key indicators of liquidity and funding under Basel III, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), which will provide a basis of valuable information for assessing the sector's ability to withstand liquidity shocks and maintain stable sources of financing.

The pension sector in 2022 marked a significantly slower growth compared to the previous year, as a result of large fluctuations in the international financial markets influenced $\boldsymbol{b}\boldsymbol{y}$ geopolitical tensions and inflationary pressures, which were reflected in negative returns from investments for the sector. In the fourth quarter of the year, a normalization was marked in the global markets, which may be an indication of mitigation of the risks to the pension sector performance. The value of the sector's assets reached EUR 2.42 billion at the end of 2022, which corresponds to an annual growth of 2.4 percent from 18.2 percent in 2021. The sector closed the year with a negative return in the amount of EUR 118.9 million, in contrast to the record return of EUR 228.4 million in the previous year. New collections from existing and new contributors accelerated growth to 13.1 percent from 9.8 percent in the previous year, supported by rising wages and employment rates, as well as efforts to stimulate private sector formalization. In the fourth quarter of the year, in accordance with the trends for normalization in the global markets, the returns of the pension sector of Kosovo were positive. Although the year 2023 continues to be characterized by still high uncertainties, in general the expectations are for a more favorable year for global economies and financial markets, mainly as a result of the normalization to some extent of some prices on the stock exchange, the reduction of the demand/supply gap and mitigation of geopolitical tensions at the global level.

The insurance sector was characterized by accelerated growth of assets supported by the increase in premiums. The ratio of claims paid to written premiums improved, as a result of higher growth in premiums collected in relation to claims paid. The sector's net profit was lower than the previous year as a result of increased expenses driven by inflationary pressures. However, this year marks the third year in a row that the sector has operated with further contributing profit. reduction of losses carried over from previous years. The value of premiums written by insurers recorded an annual increase of 14.1 percent, with a more pronounced increase in the health insurance category. Claims paid, including the claims of the Kosovo Insurance Bureau (BKS), increased by 5.4 percent. The claims/premium ratio decreased by 4.0 percent to 48.0 percent. The sector closed the year with a positive financial result of EUR 2.1 million, compared to EUR 6.3 million last year, as a result of the increase in the cost of purchasing goods and services, as well as administrative expenses, namely compensation for workers, these developments driven by the pressures of the high inflation that characterized the year 2022. At the sector level, during 2022 there was a slight decrease in liquidity indicators, as well as a slowdown in capital growth as a result of the lower profit during the year.

The microfinance sector continued its accelerated growth, influenced by the expansion of credit and leasing activity. The profit of the sector exceeded the level of the previous year, marking a historical record. Since the source of the sector's financing is loans taken abroad, in the following period, the dynamics of the increase ininterest ratesininternational markets are expected to be reflected in the further increase in the cost of financing, with a potential effect on the increase in the interest rate for loans. Borrowings from the external sector, which represent 61.1 percent of the sector's liabilities and capital, fully recovered from the critical pandemic year, recording annual growth of 12.1 percent (2.2 percent increase in 2021). Lending households both and non-financial corporations marked a pronounced increase in 2022 (16.6 percent, respectively 26.9 percent). All economic sectors were characterized by an increase in lending, among which the second highest growth was in the agricultural sector, which has the largest share in the portfolio of loans to non-financial corporations. increase in lending to agriculture supported by the guarantee provided by KCGF to cover the risk for loans in the Agro sector for MSMEs, which was 23.9 percent higher than the amount of guarantees in the previous year.

Interest rates, on average, registered a slight annual decline to 18.6 percent from 19.4 percent a year ago, despite the increase in base interest rates globally. The sector realized the highest annual profit since the beginning of its operation, in the amount of EUR 17.2 million, as a result of the higher growth of revenues in relation to expenses. All income categories recorded growth, but high growth in lending activity was the main contributor to overall income growth. Within expenses, there was also growth in all categories, driven by the increase in operating costs as a result of high inflation, as well as the increase in foreign financing. The level of non-performing loans to total loans remains low and has further decreased by 0.6 percentage points, to 1.8 percent. At the same time, the coverage level of non-performing loans with provisions increased to 153.2 percent from 141.6 percent.

The continuous growth of innovation and digitalization of payment systems affected the reduction of the cost of transfers, affecting the decrease of income from transfers for financial auxilaries, despite the annual increase in the volume of remittances sent through these agencies. Other sources of income of financial auxilaries recorded growth, but the higher increase in expenses affected the lower profit of this sector compared to the previous year. This sector, with a low weight of only 0.4 percent in the total assets of the financial system, consists of exchange bureaus and money transfer companies (MTC), whose main source of income is income from transfers, with a share of 59.3 percent in December 2022. The sector's assets recorded a higher annual growth of 45.1 percent, mainly influenced by methodological changes in the categorization of these institutions.4 The sector closed the year with a net profit of EUR 2.9 million, i.e. 11.5 percent lower than the previous year.

The macroprudential supervision of the financial sector by the CBK has continued, in addition to continuing efforts

intermediaries, as well as another institution, with a lower share of capital and assets, has moved from the category of intermediaries to that of microfinance.

⁴ An institution with a higher share of capital and assets has been recategorized from the category of microfinance to that of financial

increase monitoring and capacities as well as narrowing the data gap for a more qualitative assessment of systemic risk. The macroprudence advisory committee, as an internal body of the CBK, has held regular quarterly meetings, examining selected indicators for the assessment of systemic risk, which in general in 2022 have suggested the stability of the sector despite operating in an environment with increased risks. The systemic risk assessment, among other things, is subject to significant data gaps, and efforts to close the data gap have continued. In this aspect, technical assistance has been received from the IMF, which, in addition to the instructions for raising the capacities for macro stress testing, has instructed for the creation of a special database for the purposes of systemic risk assessment. At the same time, the CBK received technical assistance in building the capacities for macro modeling, and with the help of the IMF, a national initiative was initiated to create a database of real estate prices in Kosovo.

The financial infrastructure has continued to advance. **Digitization** initiatives have continued intensified pace since the instigation by the pandemic crisis. In addition to the benefits that digitization is bringing, it has also influenced the increase in exposure to operational/cyber risk, which increased the need for investment in proactive surveillance to protect against this risk. The payment system has continued to operate without interruption despite increase in risks, providing the appropriate flexibility security, efficiency and participants, in order to maintain financial stability and identify and address potential problems early. The rapid trend of virtual infrastructure development, which was boosted by the pandemic circumstances, has continued. Banks have increased overall efforts for digitalization and automation of services, in order to increase efficiency competitiveness. E-banking bank accounts, through which banking services are performed 'online', have increased by 28.1 percent compared to the previous year. The banking infrastructure has continued to expand also in the context of the network of the number of ATMs and the number of devices for payment through cards - POS. Further, the rapid developments of artificial intelligence after the revolution of 2022 with the discovery of chatbots are expected to have implications in the functioning of the financial sector as well. The use of artificial intelligence will enable numerous benefits in terms of process automation and cost reduction, as well as in many other dimensions such as improving the customer experience, risk assessment, etc. At the same time, the increase in the use of digitized services and intelligence simultaneously increased the challenges and risks of operation as well as the degree of possible cyber attacks, thus increasing the exposure to operational risk as well as the need for pro-active surveillance to protect against this risk.

Box 1. Financial Stability Map⁵

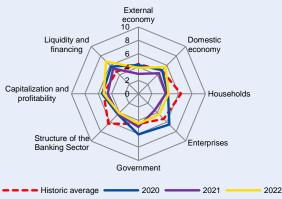
The financial stability map⁶ presents developments in the main indicators of risks to the financial stability of Kosovo (chart 4). In 2022, significant changes were observed in the risk to financial stability, namely increased risk in almost all risk dimensions, as a result of the consequences of the Ukrainian war and the pandemic crisis on the increase in prices, as well as their impact - together with the tight monetary policy measures - in the slowdown of economic activity.

The indicators of the internal and external economy were characterized by increased risk, followed also by the activity of economic agents such as enterprises and households. The increase in risk was also reflected by the indicator of Capitalization and profitability, as well as Liquidity and financing, where the latter was the indicator with the most significant increase. Indicators such Government and the structure of the banking sector indicated a slight decrease in the risk rating. Two of the indicators that had the most pronounced growth during the year, Liquidity and Financing, as well as the Domestic Economy, also exceeded the level of the average historical risk score (chart 5).7

The dynamics in the sub-indicators of the external economy for 2022 suggest a more pronounced increase in risk in the sub-indicator of the rate of economic growth of Kosovo's main trading partners, which were characterized by a slowdown in economic growth. The drop in corporate sentiment as well as the increase in interest rates as a result of the change in monetary policy also contributed to increased risk. While the oil price indicator was characterized by a decrease in risk compared to 2021 when price growth had reached its peak. The unemployment indicator also contributed to a decrease in risk, since the negative dynamics in the real sector and the tight monetary policy were not reflected during the year in the labor market in European countries with the highest concentration of the Kosovar diaspora. Further into 2023, the expectations are that risks from the external sector will continue to be high, with the possibility of worsening.

The risk from the domestic economy marked a more pronounced increase, reflecting the impact of the slowdown in economic growth in the country as well as the continuous increase in consumer prices. The expansion of the external debt as well as the current account deficit in relation to GDP also contributed to the increase in risk, but at a lower level. Only the strengthening of the EUR currency in relation to the currencies of trading partners had a positive contribution to the risk score. The performance of the sub-indicators for 2023, as well as the expectations for slower economic growth, suggests the continuation of the higher risk from the domestic economy.

Chart 5. Financial stability map



Source: CBK.

Enterprise sector marked a more pronounced risk, as a result of the downward trend in turnover indices in the main sectors with the largest weight in the country's economy. Accordingly, the industrial turnover index, the service sector turnover index, as well as the added value in GDP from the trade sector decreased. The sub-indicator of the credit gap was characterized by a positive contribution as a result of the slowdown in the lending trend in addition to the slowdown in economic activity, which resulted in a slight narrowing of the positive credit gap in relation to GDP. Also, the sub-indicator of the quality of the credit portfolio had a positive contribution, as a result of the improvement of the non-performing loans rate in relation to lending to enterprises. However, for 2023, the expectations are for a slowdown in the lending trend as well as a deterioration in the quality of the portfolio, as a

reflects an increase in risk and a decrease in the ability to withstand shocks to financial stability, and vice versa. The complete methodology of the FSM model for Kosovo, which has undergone continuous revisions in indicators and their calculation method, is presented in CBK Study Material No. 6.

⁵ The calculation of the indicators is based on the GDP value until March 2021, and does not include the last revision of the GDP in April

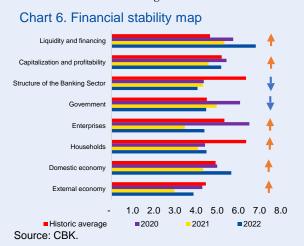
⁶ The Financial Stability Map (FSM) chartically presents the movement of the degree of risk in the main categories of risk to financial stability in the banking sector of Kosovo, as well as enables comparison with the historical average grade of risk for the respective categories. The increase in the distance from the center of the map for the indicators

 $^{^{7}}$ The progress of the risk from the indicators of the Financial Stability Map and the contribution of the constituent components to the corresponding level of risk is presented in the Appendix 1.

reflection of the continuation of high risks from the real sector, namely the deterioration of economic activity and price increases, with a potential reflection in the increase of risk from enterprises.

The risk from **households** marked a lighter growth, completely influenced by the slowdown in the growth trend of immigrants' remittances. The credit gap to GDP marked a decrease in risk as a result of the slowdown in the growth trend of households. The quality of the credit portfolio also contributed to the decline, as the increased risks were not reflected in the increase in non-performing loans. While, information on other important sub-indicators for assessing the risk of households, such as the labor market/unemployment and the affordability of expenses, was also lacking for 2022. The trend of high inflation that is also characterizing the first months of 2023 represents increased risk for the activity of the private sector and the financial situation of households, so the expectations are for the deterioration of the financial position of households for the year 2023. The risk from the government sector marked a slight decrease, as a result of the decrease in the risk score in three sub-indicators: the sovereign risk premium, the budget balance in relation to the GDP as well as the size of the public debt. The tightening of the monetary policy has influenced the more pronounced increase in the interest rate on the German government's treasury bonds, compared to those of the Kosovo government, which experienced a lower increase in the rate, thus being reflected in the narrowing of the difference, respectively decrease in the sovereign risk premium. The decrease in the other two sub-indicators was the result of the slowdown in the growth of public debt and the decrease in budget expenditures, namely the positive budget balance in relation to GDP. The cost of debt marked an increase in risk as a result of the increase in interest rates and contributed to an increase in the risk rate. The sub-indicator of tax revenues also recorded an increase in the risk score, due to the slowdown in the growth trend compared to the previous year when tax revenues had reached the highest historical level. As for 2023, the tightening of monetary policy at the global level is expected to influence the increase in the cost of debt. The slowdown in economic growth can affect a lower level of tax revenues, as well as an increase in public spending to stimulate economic activity, with a potential effect on increasing the risk score from the government sector.

⁸ The loan/deposit rate indicator has followed a naturally increasing trend since the beginning of the sector's operation, and in recent periods Within the internal indicators of the stability of the sector, the capitalization and profitability indicator was characterized by an overall increase in risk, but with variable dynamics within its subindicators. The capital reserve, namely the difference between the capitalization rate and the minimum required by regulation, was reduced compared to the previous year, giving the main contribution to the increase in the risk scoring.



The ratio of equity to sector assets also marked a decrease, and together with the increase of large exposures in relation to the capital of the first class, influenced the increase of risk. The sub-indicators with a contribution to mitigating the risk were the decrease in the ratio of non-performing loans, the increase in interest income, as well as the increase in profit.

The indicator of liquidity and funding of the sector marked the highest increase in risk, influenced by the increase in the risk score in all subindicators. The dynamics of the higher growth of lending and the slowdown in the growth of deposits, namely household deposits, was the main factor that influenced the increase in the loan/deposit ratio as well as the decrease in the liquidity ratio, being reflected in a higher risk score of these sub-indicators that simultaneously had the highest weight in the overall risk increase. The liquidity gap for the 3month period also widened, as a result of the increase in the maturity of deposits, namely the increase in time deposits as a result of the higher interest rate.

The high increase in the average risk score of the liquidity and funding indicator in 2022 again widened the deviation above the historical average level that this indicator had over the years, which largely reflects the nature of the components included in the indicator.8

we reflect a higher ratio (higher risk score). Similarly, the trend of the growth rate of household deposits has been characterized by significant fluctuations throughout the years, being higher at the beginning of the

The structure of the banking sector marked a decrease in risk, after the increase in the previous year, which was an exception to the trend of gradual improvement/decrease in risk that characterized it over the years. The sub-indicator with the greatest weight in the decrease of risk was that of the negative deviation of the capitalization rate to the average capitalization rate, which was characterized by an improvement, namely a narrowing of the deviation of individual banks to the average capitalization of the sector. This development was influenced both by the decline in the average capitalization rate affected by the largest banks, and by the improvement of the

capital position by some smaller banks that had the rate below the sector average. The general competition sub-indicator, namely the assets of the 3 largest banks to the assets of the sector, marked an improvement, contributing to the risk reduction. The sub-indicator of business loan portfolio diversification was also characterized by positive developments. Whereas, the sub-indicators that suffered an increase in risk were the decrease in the degree of diversification of the banks' credit portfolio compared to that of the market, as well as the diversification of the banks' funding sources.

sector's operation and naturally starting to fall as a result of the sector's development, but which has increased again in the last period.

3. The external environment developments in the domestic economy

The global economic activity was characterized by a slowdown in 2022, following the deterioration of the global economic outlook as a result of the increase in energy and food prices in international markets and the resulting in purchasing power, increased decline uncertainties about geopolitical tensions, as well as the almost synchronized normalization of monetary policy. According to estimates by the International Monetary Fund (IMF), global economic activity slowed down to 3.4 percent in 2022, from 6.3 percent in 2021. In the short term, falling energy prices, the reopening of China's economy, the reduction of supply constraints and strong labor markets in developed economies are expected to positively impact the global economy. However, monetary policy tightening alongside high inflation rates and other risks undermining the outlook for the global economy are expected to slow economic activity further to 2.8 percent in 2023.

Overall global inflation, which was 8.7 percent in 2022, followed a decreasing trend but at a slow pace. In international markets, food prices are expected to ease in 2023 and 2024 based on the progress of Ukraine's wheat and grain exports. However, in real terms, food prices are expected to remain higher than before the pandemic, making them more expensive, especially for low-income households. On the other hand, the decline in energy prices in international markets was stronger in the first quarter of 2023, and is expected to lower further as a result of the stabilization of energy prices. However, the indirect effect of the drop in energy prices on the prices of other goods in global markets is expected to be slower. Consequently, core inflation pressures continue to be strong with core inflation reaching record levels in several advanced economies in 2023. Throughout 2023, inflation is expected to slow down supported by the easing of bottlenecks in supply chains, the drop in energy prices, as well as the slowdown in overall demand as a result of tight monetary policies and the increase in the cost of financing. However, as a result of tight labor markets and high wage growth in developed economies, inflationary pressures despite the slowdown are expected to remain high, where according to IMF projections, the average global inflation rate in 2023 is expected to be 7.0 percent, to then slow down to 4.9 percent in 2024.

Pursuant to the mandate of maintaining price stability, central banks with an inflation targeting regime undertook monetary austerity measures through quantitative tightening and interest rate increases, which were reflected in the tightening of lending conditions and consequently a slowdown in lending and general demand. Moreover, the space for fiscal support turns out to have decreased globally as a result of high levels of public debt (inherited and accumulated as a result of facing the pandemic health crisis), and the increase in the cost of financing public debt after increase in interest rates. These dynamics are expected to weigh further on the purchasing power, especially of households with lower incomes with the cessation of fiscal support measures.

While the risks from the macroeconomic environment are expected to continue to undermine the outlook of the global economy, the increase in risks emanating from the financial system with the difficulties and failure of several regional banks in the US and Credit Suisse in Switzerland contributed to the increase of concerns about the possible amplification of a wider financial crisis. Despite this, as a result of slow inflation containment, the Federal Reserve, the European Central Bank, the Central Bank of England, as well as other central banks with significance in the global financial system continued to increase interest rates to curb inflation towards the target of 2.0 percent. Moreover, based on unclear signals from the dynamics in the labor market as well as the decision-making of databased monetary policies, it remains unclear when we can expect the cessation of the increase in interest rates and the growing challenge is the right duration of the elevated interest rates to curb inflation while avoiding the contraction of economic activity.

The economy of the euro area and the Western Balkans

After strong economic growth of 5.3 percent in 2021, economic activity in the euro area recorded slower growth of 3.5 percent in 2022. This happened as a result of the acceleration of inflation and the negative consequences on the purchasing power and reliability of consumers (table 2). In the first quarter of 2022, economic growth was supported by net exports, as a result of the easing of obstacles in supply chains, while with the reopening of the euro area economy in the following quarter, an

increase in consumption, especially of services, was recorded. However, the outlook for the euro area economy worsened in the second half of 2022 as a result of jeopardizing the security of energy supply (following the reduction of natural gas exports from Russia). This situation was reflected in increasing uncertainties and decreasing consumer confidence. Rising energy prices, and consequently other prices, was translated into higher living costs and weaker domestic demand during the last quarter of the year - when the euro area economy stagnated compared to the previous quarter.

Table 2. Selected macroeconomic indicators

Description		Real G	DP (%)			Inflatio	on (%)	
Description	2019	2020	2021	2022	2019	2020	2021	2022
Euro area	1.6	-6.1	5.3	3.5	1.2	0.3	2.6	8.4
Austria	1.5	-6.5	4.6	5	1.5	1.4	2.8	8.6
France	1.8	-7.8	6.8	2.6	1.3	0.5	2.1	5.9
Germany	1.1	-3.7	2.6	1.8	1.4	0.4	3.2	8.7
Greece	1.9	-9	8.4	5.9	0.5	-1.3	0.6	9.3
Italy	0.5	-9	7	3.7	0.6	-0.1	1.9	8.7
Spain	2	-11.3	5.5	5.5	8.0	-0.3	3	8.3
Kosovo	4.8	-5.3	10.7	3.5	2.7	0.2	3.4	11.6
Albania	2.1	-3.5	8.9	4.2	1.7	2.2	2.3	6.6
Montenegro	4.1	-15.3	13	6.6	0.5	-0.5	2.5	11.9
Bosnia and Herzegovina	2.9	-3	7.4	4	0.6	-1.1	2	14
Serbia	4.3	-0.9	7.5	2.3	1.9	1.8	4	11.7
Republic of North Macedonia	3.9	-4.7	3.9	2	0.7	1.2	3.4	14

Source: Eurostat, and Statistical Agencies of the Western Balkan countries (2023)

The increase in food and energy prices in international markets resulted in an increase in import prices, which was reflected in an increase in the cost of production and consumer prices. The HICP in the euro area reached 8.4 percent in 2022. To bring inflation back within the 2.0 percent target, the European Central Bank (ECB) intervened by normalizing monetary policy through a ban on asset purchases and a reduction in the reinvestment of principal payments from securities, as well as through the increase of interest rates by 250 basis points in 2022.

The ECB's tightening of funding conditions continued into 2023, with interest rates until May 2023 resulting in an additional 125 basis point increase, bringing a cumulative increase of 375 basis points since the start of monetary policy tightening in July of 2022.

However, despite slowdown of the general inflation with the decline in energy prices, core inflation pressures appear to have increased significantly, with the core inflation rate reaching the highest historically recorded rate of 5.7 percent in March 2023. The high rate of inflation and the consequences on the available income of households and the profit margins of enterprises, as well as the tightening of financing conditions, present increasing risks for economic agents and overall economic activity. As a result, the prospects for economic growth in 2024 and 2025 have been revised downwards to 1.6 percent from 1.9 and 1.8 percent, respectively. Whereas, for 2023, ECB projections predict economic growth of 1.0 percent (upward revision from 0.5 percent in December 2022forecasts) based assumptions of falling energy prices, the proven resilience of the euro area economy against shocks from the external environment, the growth of real incomes as well as the improvement of the outlook of global economic activity after the reopening of China's economy.

Inflationary pressures, although at a lower magnitude, still continue to be fueled by bottlenecks in supply chains - with particular emphasis on commodity price pressures. Meanwhile, the prices of services continue to be affected by the revival of domestic demand after the reopening from the pandemic and the increase in wages. Moreover, despite the appreciation of the EUR currency, depreciation noted during 2022 continues to be felt in consumer prices. In 2023, inflation is expected to slow to 5.3 percent in the euro area, as a result of falling energy prices and monetary tightening measures expected to slow aggregate demand. Moreover, this projection is also based on assumptions of anchored consumer inflation expectations of 2.0 percent. While in the medium term, inflation is expected to slow to 2.9 percent in 2024 and 2.1 percent in 2025. On the other hand, the pace of core inflation is expected to be slower due to the slow indirect effect of falling energy prices on other prices, strong labor markets and rising wages to offset

As a consequence of the continuous tightening of the monetary policy through the increase of interest rates, the resulting increase in credit risk, as well as the reduction of the banks' tolerance to risk, the banks in the euro area have tightened the lending standards, which means the tightening of the criteria for loan approval. According to the ECB's bank lending survey in the first quarter of 2023, the strongest tightening of lending standards was recorded in lending to enterprises with 27.0 percent of banks in the euro area tightening lending conditions to this segment, as well as lending to households, namely mortgage loans with 19.0

the fall in real incomes from inflation.

percent of banks that tightened lending conditions as the average interest rate on mortgage loans reached 3.4 percent (2.0 percentage points higher than the previous year). Similarly, the dynamics in the demand for loans indicate a weakening of the lending activity in the euro area, with the demand for mortgage loans and the demand for loans from enterprises that decreased beyond the forecasts of the banks. While the decrease in the demand for loans from enterprises was mainly the result of the increase in interest rates and the decrease in fixed investments, the decrease in the demand for mortgage loans was also influenced by the increase in risks in the real estate market, the decrease in consumer confidence as well as the decrease in household spending on durable goods. Tightening of consumer credit conditions was recorded in 10.0 percent of banks in the euro area, while the decline in household demand for this type of loans was lower. Banks' expectations in the euro area are for further weakening of lending dynamics and loan demand from both segments, but at a lower rate than in the first quarter of 2023.

Economic activity in the Western Balkans region also marked a slowdown, where economic growth was 3.8 percent in 2022 compared to 8.6 percent in 2021. In the first half of 2022, economic activity was supported by the strengthening of domestic demand as a result of the increase in private consumption with the lifting of the restrictive measures of the pandemic that were accompanied by the expansion of economic activity in the service sectors, as well as in certain economies, and from the increase in public investments. On the other hand, the positive contribution from the aforementioned dynamics was neutralized by the negative effect of net exports, as a result of the increase in import prices.

Inflation dynamics in the euro area were quickly reflected in the Western Balkans region, given the region's trade ties with the euro area as well as the dependence on the import of food and energy goods. Consequently, the average annual inflation rate in the region reached 11.6 percent in 2022 with all countries,

except Albania, recording double-digit inflation growth. However, fiscal support packages, increased remittances, increased wages and lending helped support household consumption, partially compensating the decrease in real incomes from inflation.

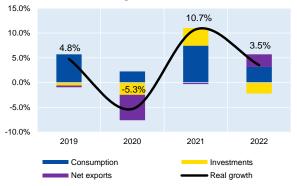
To curb inflation, countries in the region with conventional monetary policy such as Serbia and Albania undertook steps to tighten monetary policy by raising interest rates, with the interest rate in Serbia rising to 5.5 percent until February 2023, while the base interest rate in Albania in June 2023 was 3.0 percent. Although the dynamics of loan demand were positive in Serbia, the prospects are for weakening demand for borrowing as a result of forecasts for relatively low economic growth in Serbia (2.0 percent according to the IMF). On the other hand, there was a tightening of lending conditions as a result of the increase in interest rates and in line with the tightening of financing conditions at the global level. By contrast, in Albania the demand for loans is expected to remain in a more favorable position and is expected to be driven more by the demand for mortgage loans. However, the increase in interest rates has affected the deterioration of the prospects for the quality of loans as well as the prospects of NPLs, thus affecting the tightening of lending conditions, which is expected to be more pronounced in lending to enterprises.

3.1. Domestic economy

Economic activity in Kosovo, similar to the dynamics in the region and beyond, was also characterized by a slowdown in 2022, with the real growth rate resulting in 3.55 percent according to the preliminary estimates of KAS, against 10.7 percent in 2021 (chart 7).

In the first quarter of 2022, economic growth was mainly generated by private consumption and exports as a result of positive dynamics from the previous year. However, as a result of increased uncertainty related to the war in Ukraine and rising food and energy prices eroding household available income, significant slowdown in domestic demand was evident from the second quarter onwards.

Chart 7. Real GDP growth rate and contributors to the growth



Source: KAS and CBK calculations.

Moreover, the increase in commodity prices in global markets affected the increase in the value of imported goods in the first quarter, contributing negatively to economic growth. However, the increase in the prices of imported goods alongside the decline in purchasing power affected the slowdown and eventually the decline of imports throughout 2022. As a result of the deterioration of the economic outlook, in the last two quarters of 2022, a slowdown in domestic demand was evident, especially in fixed investments as a result of the increase in raw material prices and the low execution rate of capital investments, while consumption remained in positive territory, albeit low, partially supported by fiscal remittances and credit, as compensation for the effect of inflation on disposable income.

The sectors with the highest increase in added value were the sector of the processing industry, trade, financial and insurance activities, information and communication, hotels and restaurants, etc., while as a result of the increase in the cost of construction, the construction sector recorded a decrease continuously from the second quarter to the end of the year.

The increase in economic activity, especially in the services sector, is also shown in the shortterm statistics of services, where an increase in turnover has been observed, partly as a result of the increase in prices and an increase in the employment rate, supported by the increase in the formalization of jobs and fiscal packages.

Chart 8. Index of sales and employees in services sector (2015=100)



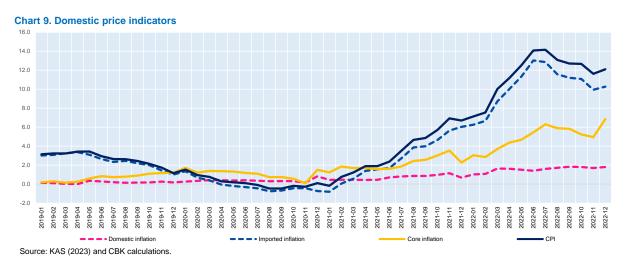
Source: KAS

The sectors that recorded the highest sales growth were hotels and restaurants (48.5 percent), followed by trade (33.3 percent), information and communication (24.1 percent), architectural and engineering activities (16.6 percent), and transport and storage (11.3 percent). On average, the index of net sales in the service sector increased by 20.3 percent in 2022, while the average index of the number of employees increased by 11.2 percent (chart 8).

For 2023, CBK predicts that economic growth will be around 4.0 percent. The improvement of economic activity during this year is expected to be generated by domestic demand and net exports. Consumption is expected to record a real growth of 1.8 percent, while the nominal growth is expected to be 5.6 percent. Factors that are expected to positively contribute to consumption, among others, are the positive dynamics in remittances, workers' compensation, the increase in consumer loans and the increase in public consumption. Moreover, investments in 2023 are predicted to record a real growth of 2.6 percent (6.1 percent decrease in 2022). An important contribution to the increase in investments is expected to be the increase in public investments and positive price dynamics in global markets. The deficit of net exports is expected to decrease by 6.3 percent in real terms, as a result of the increase in the export of goods and services by 7.1 percent, while the import of goods and services is expected to increase by only 1.0 percent.

However, the uncertainties surrounding these projections are high and tend to the downside due to the tightening of credit conditions in international markets and the direct effects on borrowing costs in the country, the slowdown in economic activity in the euro area and the potential consequences on general revenues from diaspora, risks for geopolitical tensions and implications for trade policies and the position of investments, consequences from the still high rate of inflation, and others.

The dependence of Kosovo's economy on the import of energy and food goods influenced that the acceleration of the prices of these goods in the global markets was reflected relatively quickly in strong inflationary pressures in the country. The consumer price index (CPI) rate reached 11.6 percent in 2022, with food and energy prices being the main drivers of inflation with a contribution of 6.6 and 2.9 percentage points respectively to the total inflation rate (chart 9).



Considering the weight of these goods in the consumption basket, especially in that of households with lower incomes, the burden of inflation on purchasing power is asymmetric, affecting more households with lower incomes. Furthermore, the increase in the cost of production that burdened the enterprises resulted in the transfer of the increased cost of production to the sale prices respectively consumption. Consequently, an expansion of the inflation base by 80.5 percent of the basket of consumption that recorded annual growth higher than 5.0 percent in 2022.

In this context, an increase was also recorded in internal inflation, which constitutes percentage points of inflation in 2022, against 10.1 percentage points which was imported inflation. Similar to the dynamics in the euro area, internal inflationary pressures intensified in the country mainly as a result of the acceleration of service prices. Core inflation as an indicator of the longer-term inflation trend resulted in average annual growth of 4.9 percent in 2022, with the highest historical level recorded in December 2022 of 6.8 percent.

The remaining obstacles in supply chains and large fluctuations in commodity prices in global markets translated into the growth of three other price indices in the country, namely that of production which recorded an average annual increase of 9.4 percent, the import price index with an increase of 18.9 percent, as well as the cost of construction with an annual increase of 20.1 percent.

The dynamics predicted in the global markets are expected to be reflected in Kosovo's economy. According to CBK forecasts, the average annual inflation rate in 2023 is expected to slow down to 4.9 percent. Factors expected to contribute to the slowdown in inflation include falling energy prices, further easing of supply chain constraints, the downward trend in headline inflation in the euro area, slowing economic activity in the euro area and domestically, and others. However, inflation projections are accompanied by risks that lean to the upside and include potential risks of new disruptions in supply chains as a result of potential escalation of geopolitical tensions and geoeconomic fragmentation, reduced oil production, potential acceleration of energy and other goods, shifting consumer expectations for inflation, and others.

2022, the fiscal sector characterized by an increase in budget revenues by 13.7 percent and an increase in budget expenditures by 10.5 percent. The increase in budget revenues was mainly an outcome of the high rate of inflation and the efforts undertaken to formalize the economy, through the formalization of employment as well as the increase of field checks and inspections. As a result of increased budget revenues, the primary budget deficit was fairly low, falling to 0.1 percent of GDP from 0.9 percent in 2021. Public debt as a percentage of GDP fell to 20.7 percent from 21.5 percent as compared to 2021. This reduction was a result of the improvement of the government's budget balance and the increase in nominal GDP, which reduces the debt-to-GDP ratio. However, in absolute terms, public debt has reached EUR 1.75 billion, which is 4.2 percent higher compared to 2021. The increase in public debt is attributed to the increase in external public debt by 11.2 percent, reaching EUR 641.2 million, as well as the increase in internal public debt by 0.5 percent, which reached EUR 1.11 billion.

In 2022, the external sector of Kosovo recorded a decrease in the position of the current and capital account, reflecting the challenges and the imbalance in the activities of trade of goods. dynamics were neutralized to some extent by the positive dynamics characterized the position of the financial account. The current account deficit of the balance of payments increased by 35.4 percent, reaching EUR 940.3 million, corresponding to 10.5 percent of GDP in the country. The increase in the goods account deficit by 20.2 percent and the decrease in the positive balance of the primary income account by 40.5 percent were the main factors that contributed to the increase. However, the positive balance of the secondary income account, which increased by

11.6 percent and of services by 32.9 percent, helped mitigate the negative impact from the dynamics of trade in goods.

In 2022, the export of goods from Kosovo increased by 21.7 percent, reaching the value of EUR 920.4 million, as a result of the increase in the demand for exports and the quantity of exported goods. The most exported goods continue to be basic metals, plastics, rubber and mineral products, while the main export partners are EU countries and the Western Balkans. While efforts to diversify exports of goods must be intensified, global dynamics, especially those in the euro area and the Western Balkans, may have significance in the dynamics of Kosovo's exports in the following periods.

The increase in import prices throughout 2022 resulted in an annual increase in the value of goods imports of 20.4 percent to EUR 5.6 billion, equivalent to 63.0 percent of GDP. Mineral products, foodstuffs and machinery recorded the highest increase in imports. EU states accounted for 42.3 percent of total imports, while Turkey and China were the main non-EU sources.

The increase in the export of services has the to contribute continued strengthening of the positive balance of trade in services in the country. Trade in services in Kosovo has recorded an increase in the positive balance supported by the increase in exports of 31.3 percent and reaching EUR 2.5 billion, while the import of services marked an increase of 29.4 percent and reached EUR 1.1 billion. The change in the structure of exported services over the years constitutes a very important dynamic towards the transformation of the country's economy model. Such evidence is illustrated by the data of the balance in computer services - which show a continuous and stable increase in their contribution to the growth of the total trade in services, from almost 0.7 percentage points in 2018 (about 3 percent of the total exported services) to 5.8 percentage points in 2022 (8.4 percent of exported services). The growth of travel services, a category that also has the highest

share in the total account of services, was mainly influenced by the increase in the expenses of the diaspora in Kosovo, but also by the increase in the number of travelers by 37.3 percent compared to the previous year. Imported services, on the other hand, were dominated by the dynamics in the travel category, which recorded an annual increase of 30.4 percent and reached the value of EUR 449.6 million, and the transport services category, which recorded an annual increase of 39.1 percent and reached EUR 290.5 million.

The balance of primary income has decreased by 60.0 percent, reaching the value of EUR 90.1 million, (EUR 151.4 million in 2021). The main factor that influenced this decline was the balance of direct investments, specifically, the dividend return of EUR 218.0 million mainly in the financial and trade sectors. Further, the category of income from workers' compensation increased by 8.7 percent, supported by the increase in income from Kosovo resident workers who work abroad for a certain period.

Remittances received in Kosovo reached the value of EUR 1.22 billion, an annual increase of 6.0 percent, which represents 13.7 percent of GDP. The slow growth of remittances during 2022 can be attributed to a certain extent to the potential deterioration of the financial position of the Kosovar diaspora, as a result of the increase in the cost of living due to increase in the general level of prices, interest rates and due to the increase in debt and the weakening of general demand in the euro area. As the majority of remittances come from the euro area countries (60.2 percent), the uncertainties about the macroeconomic dynamics in 2023 increase the uncertainties for these important revenues for the country's economy (13.7 percent of GDP). making the position of the households in the country more difficult, with potential indirect effects on credit risk dynamics.

In 2022, foreign direct investments in Kosovo increased by 85.0 percent and reached EUR 778.2 million. The real estate sector has continued to remain the most important sector for foreign investments and constitutes 67.3 percent of total FDI. Other sectors with a contribution to the annual growth of FDI were the financial and insurance activities sector, as well as the construction sector. Taking into account the data gap in the real estate segment, both in the context of the lack of a real estate price index and the extent of lending in this segment (high growth recorded in recent years), monitoring the risks coming from this segment is associated with high uncertainties.

Box 2. The contribution of diaspora to the economy of Kosovo: the base scenario and the alternative scenario

The contribution of the diaspora to the economy of Kosovo is multifaceted and challenging to quantify. The diaspora contributes to the reduction of poverty through the financing of a part of the consumption, the improvement of the social situation, the financing of the trade deficit, etc. Furthermore, diaspora remittances are estimated to have a significant effect on the liquidity position of the banking sector, through their contribution to the deposit base. While initiatives have been undertaken to quantify the weight of diaspora deposits in the total deposits of the sector, the dynamics of the high growth of deposits and, simultaneously, the reduction of new consumer loans in the third quarter give indications of the contribution of these incomes to the indicators of financial system. On the other hand, the diaspora also constitutes the main channel through which shocks from the external economy could be transmitted to Kosovo - as a result of the high weight it has in the total GDP generated in the country (around 40 percent of GDP)

In general, the diaspora has supported the general economic activity, through:

Remittances: which are an important source of income for many families in Kosovo. The diaspora sends significant amounts of money in the form of remittances, which help alleviate poverty and improve living standards. In 2022 alone, the diaspora sent EUR 1.2 billion or 6.0 percent more compared to the previous year. Remittances have been

characterized by stable growth over the years and are a secure source of income for many Kosovar families;

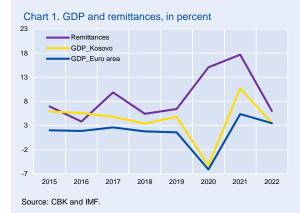
- Investments: Diaspora invests in businesses in Kosovo, contributing to economic growth and job creation. However, investment in real estate is the main form of diaspora investment, and in 2022 alone, it reached the value of EUR 523.7 million;
- Tourism: As a result of close family ties, as a cultural but also economic aspect, the diaspora visits Kosovo several times during the year, with a focus on the third quarter of each year, thus contributing to the growth of the tourism industry through spending money in hotels, restaurants and local businesses. In 2022, the increase in the number of visitors from the diaspora was accompanied by an increase in their spending in Kosovo, a value that reached about EUR 1.9 billion;
- Transfer of knowledge and skills: Through the skills acquired over the years in the main countries in the European Union such as Germany and Switzerland, and the practices of doing business in these countries, the diaspora has the potential to influence on the skills gap in the labor market in the country and increase the overall productivity.

The weight that the diaspora has in the activity generated in the country, estimated through important sources of financing consumption and investments such as remittances, investments and tourism, reached the value of EUR 3.6 billion in 2022, which corresponds to 40.4 percent of GDP (table 1).

Table 1. Financial inflows of the diaspora, EUR million

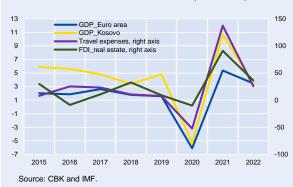
Description	2015	2016	2017	2018	2019	2020	2021	2022
Remittances	665.5	691.0	759.2	800.5	851.7	980.1	1,153.4	1,223.0
Travel services export	719.7	901.4	1,112.1	1,228.2	1,321.4	628.0	1,490.1	1,875.3
Real estate investments	153.3	139.7	154.7	205.2	223.8	201.1	384.0	523.7
Total	1,538.5	1,732.1	2,026.0	2,233.9	2,396.9	1,809.2	3,027.5	3,622.0
% of GDP	27.1	28.7	31.9	33.5	34.0	26.7	38.0	40.4

Source: CBK



The contribution of a diaspora depends on its size and the connection it has with the country of origin. The Kosovar diaspora is estimated to be 1/3 of the population of Kosovo, and in economic, social and cultural terms, it has strong family and social ties with Kosovo. An evidence supporting it is particularly the counter-cyclical character of diaspora remittances in the pandemic year (15.1 percent in 2020 and 17.7 percent in 2021), and the altruistic motive⁹ of these remittances (chart 1).

Chart 2. GDP, investments and travel expenses, in percent



An important determining factor for the diaspora's contribution to a country, based on numerous studies, is also the economic perspective both in the country of origin and in the country where a diaspora is located. Macroeconomic dynamics in the two countries turn out to be decisive in the level of contribution of a diaspora in the countries of origin (chart 2).

Simulating the reduction of income from the diaspora

Considering the high weight of diaspora revenues, CBK and other relevant actors should have a proactive approach in assessing the sensitivity of these revenues to various internal or external factors, through close monitoring, specific analyzes and relevant policies.

percent, compared to 3.5 percent in 2022. However, the slowdown of economic activity in the euro area may negatively affect the contribution of the diaspora to the economy of Kosovo. June projections from the ECB suggest a slowdown in real GDP growth in the euro area to 0.9 percent in 2023. In these circumstances, CBK has simulated an alternative scenario of economic growth for the year 2023, assuming that the contribution of the diaspora to the economy of Kosovo would be lower compared to the base scenario. In this analysis, the main results of the impact of

Projections made at the beginning of 2023 predict an

increase in economic activity in Kosovo of around 4.0

the diaspora on economic activity are presented using a combination of simulations: a shock to real estate investment and travel expenses with a deviation of -3.2 percentage points from the base scenario, as well as a shock to remittances with a deviation of -1.6 percentage points from the base scenario (table 2). The magnitude of these shocks has been determined arbitrarily, in the absence of direct shocks on these revenues in previous periods.

Table 2. Shocks in the alternative scenario, in percentage

-			
Description	Baseline scenario	Alternative scenario	Deviation, p.p
Remittances	7.6	6.0	-1.6
Real estate investments	2.6	-0.6	-3.2
Travel expenses	13.6	10.4	-3.2

Source: CBK.

The shocks were given only for the year 2023, and their effect was analyzed and evaluated in the same

Table 3. GDP forecast according to the basic scenario and the alternative scenario, in percentage

and the diternative economy, in percentage						
Description	Baseline scenario	Alternative scenario	Deviation, p.p			
Consumption	1.1	1.0	-0.1			
Investments	2.6	0.5	-2.0			
Net exports	-6.3	-3.6	2.7			
GDP	4.0	2.4	-1.6			

Source: CBK.

In this alternative scenario, where a lower contribution of the diaspora is simulated through the two main channels, against the base scenario, it results that the real GDP growth would be 2.4 percent in 2023, i.e. 1.6 percentage points lower compared to the base scenario (table 3).

⁹ Emigrants send more money when their families in the country of origin face lower income levels.

In this scenario, the deficit of net exports would improve by 3.6 percent or 2.7 percentage points less compared to the base scenario, investments would increase by only 0.5 percent, while consumption would grow at almost the same rate as in the base scenario. In general, in the alternative scenario, the overall negative impact on real GDP is evident, indicating that the reduction in diaspora income has a relatively high negative impact on Kosovo's economic performance.

3.2. Financial position of enterprises

Economic and financial indicators of enterprises suggest an increase in turnover in retail trade, while industrial volume recorded production growth during 2022. As a result of the increase in prices, the turnover index in retail trade recorded an increase of 9.1 percent. The highest growth was recorded in the retail trade of fuels (34.6 percent) and in almost all other sectors, with the exception of the trade of IT and communication equipment, a segment that recorded a decrease of 4.3 percent. On the other hand, the industrial production volume index, which represents the production performance of enterprises in four industry sectors, recorded a low growth of 0.3 percent in 2022. low growth of activity manufacturing sector can be attributed to a certain extent to slowing down of the growth of domestic demand, namely, the decline of general investments by 6.1 percent in 2022. Within the industrial production index, the electricity supply index recorded an increase of only 0.2 percent while the added value in GDP was lower by 0.3 percent. The indices of extractive industry and processing industry were almost unchanged, while the added value in GDP showed a slower growth.

Similar to the increase in economic activity, entrepreneurial initiative has also increased. In 2022, 11,024 enterprises were registered, or 3.5 percent more than in 2021, while 1,784 enterprises were closed, or 10.9 percent more.

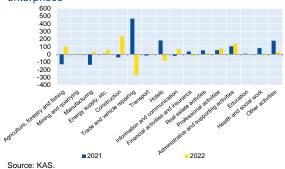
The sectors that recorded the highest increase in the number of registered enterprises were

However, the alternative scenario does not take into account other factors that may have a significant impact on economic activity. The slowdown of economic activity in the euro area, in addition to the negative impact on income from the diaspora, also means weaker demand for exports of goods. Furthermore, the alternative scenario is prepared based on the same fiscal and deflationary assumptions of the baseline scenario.

the construction sector, with 238 more enterprises compared to the previous year, administrative and support activities with 141 more enterprises, agriculture with 101 more enterprises, etc. In the trade sector, one of the sectors with the largest number of enterprises, fewer enterprises were registered compared to 2021 (chart 10).

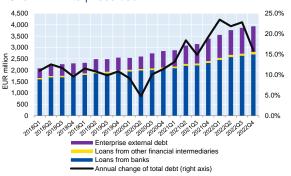
The debt of enterprises to local and financial institutions foreign has continued the trend of rapid growth, but at a lower rate compared to the previous year. In total, corporate debt recorded an annual increase of 15.9 percent in 2022 (chart 11) and reached 43.9 percent of GDP.

Chart 10. Annual change in the number of new enterprises



Internal debt, namely the debt of enterprises to credit institutions in the country has increased by 16.6 percent (13.3 percent increase in 2021), as a result of the increase in bank loans of 16.2 percent but also the increase of 26.8 percent in loans issued by other financial intermediaries, which have a smaller weight (3.7 percent) in the total debt of enterprises to the financial sector. Mainly as a result of the increase in commercial loans, the external debt of enterprises increased by 14.4 percent and reached 28.7 percent of the total debt. The increase in lending enterprises from the banking sector has contributed to the increase in the level of financial intermediation. The ratio lending to enterprises by local credit institutions to GDP reached 31.3 percent in 2022 (30.2 percent in 2021). This increase in the lending ratio to GDP has led to a positive credit gap to GDP.10

Chart 11. Enterprises debt



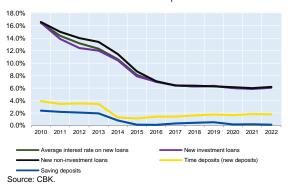
Source: CBK.

The net debtor position of enterprises to the banking sector increased by 14.8 percent (9.4 percent increase in 2021). Corporate deposits recorded a growth rate of 19.0 percent, while the credit growth rate for the corporate sector was 16.6 percent. So, despite the higher growth of deposits, the much larger volume of loans to enterprises has influenced the growth of the debtor position of enterprises towards the banking sector. In terms of currency, the enterprise sector has a net credit position to the banking sector, as a result of the higher level of foreign currency deposits compared to loans. However, the foreign currency position remains low as the participation of foreign currency deposits to total deposits was 3.0 percent, while foreign currency loans to total loans were only 0.4 percent.

New loans to enterprises increased by 9.6 percent in 2022 (10.4 percent increase in 2021). New non-investment loans recorded slower growth of 7.8 percent and reduced participation in the structure from 42.6 percent to 41.9 percent of total new loans to enterprises. On the other hand, investment loans recorded an increase of 9.0 percent and constitute 54.4 percent of the total new loans to enterprises. In terms of maturity, loans with a maturity of more than 5 years make up about 17.5 percent of new loans and in 2022 they marked a decrease of 22.1 percent. Loans with maturity over 2 to 5 years, as the main category, increased the share from 47.2 percent to 53.4 percent in the overall structure of new loans to enterprises.

An important supporter of lending to micro, small and medium enterprises was the Kosovo Credit Guarantee Fund. The growth in 2022 was at a lower rate compared to the previous year due to the closing of the Economic Recovery window at the end of 2021. However, with the support of donors, the KCGF has launched new windows in 2022 which focus on supporting different sectors and company profiles.

Chart 12. Interest rates for enterprises



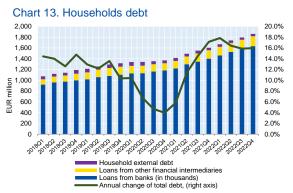
The cost of borrowing for enterprises has increased, after the downward trends in the previous years. The average interest rate on new banking sector loans to enterprises was 6.1 percent in 2022, which represents a slight increase compared to the rate of 5.9 percent in 2021. The increase in interest rates is mainly attributed to the tightening of the ECB's monetary policy, which translated into an increase in the cost of financing for banks and further into the upward dynamics of interest rates. On the other hand, the average interest rate on time deposits as well as savings has marked a slight decrease (chart 12).

3.3. Financial position of households

Household debt, as well as corporate debt, has increased. In total, household debt increased by 16.0 percent in 2022 and reached 20.8 percent of GDP. Internal debt to the

¹⁰ The credit gap calculated with the Hodrick-Prescott filter.

banking sector and debt to microfinance institutions recorded a similar increase of 16.6 percent. On the other hand, the external debt of households, which has a low share in the total debt of households (2.3 percent), recorded a decrease of 5.9 percent (chart 13).

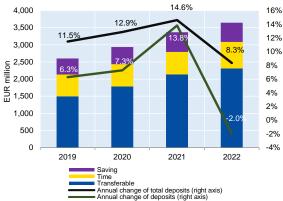


New loans issued by the banking sector to households showed a slower growth. According to the purpose, new mortgage loans increased by 13.5 percent, investment loans by 2.9 percent, while consumer loans - which at the same time have the highest share (62.5 percent) in total new loans decreased by 6.3 percent. The net credit position of households towards the banking sector increased, mainly as a result of the increase in deposits.

Household deposits reached the value of EUR 3.6 billion¹¹, representing an annual increase of 8.3 percent (chart 14).

Also, loans recorded an increase of 16.6 percent, reaching the value of EUR 1.6 billion. As a result, the credit position which households traditionally have towards the banking sector, marked an annual increase of 2.4 percent. As for the net foreign currency position, the household sector has recorded a decrease in its credit position by 34.8 percent, as a result of the decrease in foreign currency deposits by 34.6 percent and the decrease in foreign currency lending by 20.2 percent.

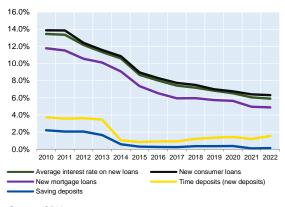
Chart 14. Household deposits



Source: CBK

Total household deposits increased by 8.3 percent (14.6 percent increase in 2021). The slower growth of household deposits can be attributed to a certain extent to the reduction of household disposable income. Time deposits increased by 18.4 percent, where the average interest rate on time deposits was 1.54 percent or 0.35 percentage points higher compared to 2021. Savings deposits decreased of 2.0 percent, while the interest rate on savings deposits was 0.14 percent (0.11 percent in 2021).

Chart 15. Interest rates for households



Source: CBK.

The cost of new household debt decreased slightly, influenced by competitive pressures. The average interest rate on new consumer loans of 6.4 percent in 2021 decreased to 6.3 percent in 2022 (chart 15), while the interest rate on investment loans of 9.8 percent fell to 9.5 percent.

¹¹ Including deposits in foreign currency, converted into equivalent values in euros.

Table 3. Debt to banks and performance of households

Description	2019	2020	2021	2022
Household debt to banks (EUR million)	1,104.7	1,182.2	1,401.2	1,634.1
Of which in foreign currency	2.6	2.3	2.2	1.7
Household deposits at banks (EUR million)	2,601.9	2,937.1	3,366.1	3,646.9
Of which in foreign currency	138.5	155.4	176.1	115.1
Net position to banks (credit position), EUR million	1,497.3	1,754.9	1,964.9	2,012.9
Average value of loans per employees	3,041.6	3,406.3	3,655.7	4,205.7
Economic dependence rate	253.0%	275.0%	248.0%	243.0%

Source: CBK.

Sources of household income showed an upward trend, where remittances increased by 6.0 percent, while workers' compensation¹² marked an annual increase of 12.5 percent. As for the labor market, the labor force participation rate was 38.6 percent in the first quarter of 2022 or 1.3 percentage points lower compared to the same period of 2021.

The employment rate has increased to 32.2 percent, which is 2.9 percentage points higher compared to the same period of 2021. Even the indicator of economic dependence, which represents the ratio between the general inactive population (over 15 years old) and employment, in the first quarter of 2022 has decreased to 243 percent from 248 percent in 2021. On the other hand, the unemployment rate has decreased to 16.6 percent, or 9.2 percentage points lower compared to the same period of 2021.

¹² Income from workers' compensation - income of seasonal workers abroad as well as Kosovar workers abroad for a period of less than one year.

Box 3. Indebtedness of Individual borrowers in Kosovo

The indebtedness of borrowers in Kosovo has been estimated based on the total population of individual clients from all banking and microfinance institutions in Kosovo, namely physical borrowers with active loans reported in the Credit Registry of Kosovo (CRK) - according to the situation as of the end of December 2022, represented by a total of 331,914 natural customers with a total of 576,527 active loans¹³. Highlighting the lack of consensus on the 'best'

indicator, different indicators are used to assess specific aspects of the indebtedness in order to get at a more realistic picture of the situation. The indicators, which are in line with most of the principles elaborated in various studies, reflect four aspects of the indebtedness such as: the high share of debt in relation to income, overdue payments, the frequent use of loans and the subjective aspect of considering debt as a heavy burden. Consequently, in this analysis, the assessment of the indebtedness was made through some of these objective indicators, as well as the relationship between them was tested and analyzed (table 1).

Table 1. Objective indicators of over-indebtedness

Category	Indicator	Assessment/Indicator	Results
Cost of debt servicing: Debt	Borrowers spending over 50% of their gross monthly income to pay secured and		28.3% of borrow ers use over 50% of their income to pay their installments
to income ratio	unsecured debt	of active borrowings =>50% of gross monthly income of borrowers):	26.1% of borrow ers w ith active borrow ing use over 50% of their income to pay their installments only for their borrow ings
Arrears	Borrowers in arrears for more than 2 months in paying their credit contracts	Borrowers are in arrears for more than 60 days (sample 331,914 debtor)	12.5% of borrow ers are in arrears for more than two months on paying their credit installments. While from 183,743 of borrow ers w ho have only one credit contract 14.4% of them (or 8.0% of total borrow ers) are in arrears for over 2 moths
Number of credit contracts	Households—>4 active credit contracts	Borrowers=>4 active credit contracts (sample	5.84% of borrowers have 4 or more than 4 active credit contracts

Source: CBK.

The indebtedness index of borrowers is constructed according to the methodology used in the two previous studies¹⁴ of the indebtedness, namely as a ratio of the amount of monthly installments to the borrower's monthly income. Indebtedness levels are defined according to four classifications, depending on the value of the index:

- 1) Unburdened (debt load index < 0.50): borrowers who spend less than 50 percent of their monthly income on paying monthly loan installments.
- 2) At risk (debt load index = 0.50 0.75): borrowers who spend 50 percent to 75 percent of their monthly income on paying monthly loan installments.
- 3) In critical phase (debt load index = 0.75 1.0): borrowers who spend 75 percent to 100 percent of monthly income in paying monthly loan installments. 4. Non-solvent (debt load index > 1.0): borrowers who spend all their monthly income

on paying monthly loan installments; therefore, the monthly installments exceed the value of the monthly income.

In order to measure the indebtedness level as realistically as possible, the necessary treatments of income and monthly installments were done beforehand in the observations where this information was missing. In the case of the borrower's monthly income, the last income was taken as a basis, namely the income that was reported in the last loan issued to the respective borrower. In cases where the information was missing, the average of the revenues reported in all observations (active loans) was considered. However, there were cases when the value of the income reported in the last loan deviated negatively from the average income for the same customer, as well as cases when the monthly installments of the debt significantly exceeded the last reported income, which from a sample of evaluation, it was observed that they are related to

¹³ The socio-demochartic and socio-economic characteristics are presented in Table 3.

¹⁴ INDEBTEDNESS OF BANKING CUSTOMERS IN KOSOVO | Central Bank of the Republic of Kosovo (bqk-kos.org)

loans issued to the agricultural sector 15, or loans issued to professions such manager/owner/director, etc., who, in addition to income as an individual, also have income from individual businesses. In order to eliminate such a problem, i.e. overestimation of the load, i.e. nonsolvency, in these cases when the deviation of the last reported value of revenues and the average ones for the same customer was negative and the amount of installments significantly exceeded the value of the last revenues, then the maximum incomes were taken as the basis, under the assumption that they represent the most realistic incomes of the borrower (considering that such clients also have incomes that are generated from the business but that were not reported in the last loan). From the entire population of clients with active loans, the share of cases with missing information on the last reported income was 16.7 percent, while with the inclusion of average or maximum incomes where information was missing (in relation to the types of cases elaborated above), the share of cases with a lack of information on incomes is reduced down to 13.5 percent.

Lack of information on credit installments is treated specifically according to credit products. In the group of credit facilities (loans, leasing and mortgage loans), the monthly installment was missing in 3,032 cases (2.4 percent of the total portfolio of loans). For these cases, calculations were made in relation to the available information. However, in some of the observations, the interest rate was at extreme levels, which raised doubts about the quality of the reporting of this variable. Therefore, in order to eliminate doubts, the calculation of the installment in the observations where this information was missing, was based on the average interest rate on household loans, which corresponds to the type of loan, the year of disbursement of that loan, as well as the type of lending institution (bank or microfinance institution). For the overdraft credit facility, the calculation of credit installments in observations where information was missing (29 percent of cases with used balance of the total portfolio of overdrafts), was realized by applying the average interest rate for overdrafts. While for those observations where the remaining maturity was lower than one month from the effective date (December 2022), it has been treated in a manner where the entire outstanding value is considered as an installment. For the credit facility: credit card, the lack of information on the installments

(63.2 percent of cases with used balance in the entire credit card portfolio), were treated as follows: for credit contracts that had no payment delays, 15 percent of the installment was considered amount owed, which represents the minimum level that a credit card user must pay in the following month. In cases where there were overdue payment of installments of more than 30 days and when the effective interest rate was available, then the installments were calculated based on outstanding amount owed, while in cases where information on the effective rate was not available, then the average interest rate on all credit cards of the population under analysis was taken into account. With the relevant treatments, information on credit installments was available for 85.6 percent of borrowers, while in 14.4 percent of cases, the installment was equal to zero reflecting unused balances of credit facilities such as credit cards and overdrafts.

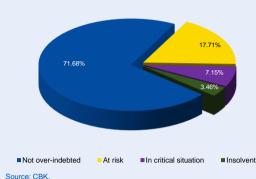
As a result of the lack of information about borrowers' incomes and the zero value of credit installments in some observations, indebtedness index was missing in 13.5 percent of cases or resulted in a zero value in 10.8 percent of cases (which are the cases of zero installments). Consequently, based on the availability of data and the corresponding treatments carried out as above, the assessment of the level of indebtedness has been calculated for 75.7 percent of the total borrowers.

The results of the indebtedness assessment suggest that 28.3 percent of borrowers are over-indebted.¹⁶ In the first stage of overindebtedness - that is, at risk of overindebtedness because the monthly installment constitutes 50 to 75 percent of the monthly income - they are 17.7 percent of the borrowers. 7.2 percent of borrowers are in the critical phase. Cases where the borrower's installment expenses completely exceed the gross monthly income, passing into a non-solvent state, are presented in 3.5 percent of the sample of borrowers (chart 1).

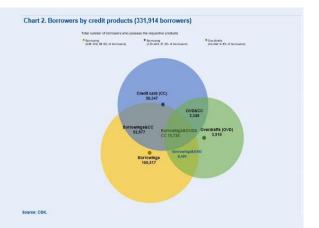
Agricultural loans in most cases have irregular payment frequency, namely high installments divided into less frequent

¹⁶ Over-indebtedness includes cases when the level of monthly debt for all credit products (the sum of monthly installments of loans. leases, overdrafts, and active credit cards) exceeds 50 percent of monthly income.





It is important to note that the current level of overindebtedness does not necessarily reflect the actual situation of borrowers. This level may represent an overestimation of the state of over-indebtedness, due to the lack of data on other members of the



household or co-borrowing, which were therefore not considered, as well as due to the high informality in the economy that, in addition to the income declared and supported by contract, borrowers may also have other sources of income.

The indicator is also calculated separately for credit products. Among all borrowers, 68.92 percent have active loans (228,794 borrowers), while 31.08 percent only have other credit products. 9.8 percent of borrowers (32,494 borrowers) have overdrafts with a used balance, while 37.2 percent of all borrowers (123,443 borrowers) have credit cards with a used balance (chart 2).

The level of debt burden only for the loan credit product (loan, leasing, mortgage loan), excluding other credit products such as credit cards and overdrafts, was calculated for 60.2 percent of the total population of borrowers, suggesting that 26.1 percent of them are overburdened by debt.

The burden assessment for borrowers who own the overdraft credit product with utilized balance was carried out in the population of 10,335 customers or 3.1 percent of the entire population of borrowers, and suggests that 11.4 percent of these borrowers are overburdened by debt.

While the load index for borrowers who own credit cards is calculated for 35.4 percent of all borrowers, which results suggest that only 1.1 percent of them are overburdened by debt.

The probability of over-indebtedness is the highest among borrowers with three or more active credit contracts as well as with loans in institutions in and both sectors - banking microfinance simultaneously. So, the highest level indebtedness of borrowers is associated with multiple borrowing - with the possession of many active credit contracts in several different institutions.

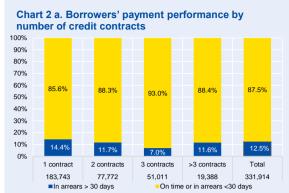
Multiple borrowers in different institutions had 47.3 percent of over-indebtedness cases compared to 38.9 percent of borrowers with several credit contracts but only in one institution. Comparing the level of indebtedness separately by sector, trends for overindebtedness were higher among borrowers with active loans in the banking sector (29.1 percent of borrowers, compared to 17.7 percent of overindebted borrowers with loans only in the microfinance sector).

Having a credit history and credit contracts backed by collateral are associated with higher levels of indebtedness. Problems in payment performance were also found to be related to the highest level of indebtedness, with the highest level of overindebted cases being expressed among borrowers with arrears of more than 180 days in paying credit installments (table 2).

From the socio-demochartic characteristics that had statistically significant differences in overindebtedness appear to be gender (the most overindebted are male borrowers), marital status (the most over-indebted are borrowers in the group with marital status "married"). This result, namely the over-indebtedness highest among married borrowers, is related to the fact that in many cases married people take loans through co-borrowing which was not considered during the assessment of the burden in this analysis, due to incomplete data on co-borrowings, and as a result may have overestimated the state of the indebtedness of this category. Furthermore, the region results with statistical significance in the level of overindebtedness (the region of Prishtina and Mitrovica has more frequent cases of over-indebtedness); \boldsymbol{age} (the most frequent cases of over-indebtedness occur among borrowers in the 31-40 and 51-65 age group); and income level (the most frequent cases of overindebtedness occur among borrowers with incomes of EUR 250-450) (table 2).

Table 2. Borrowers' over-indebtedness by socio-demographic and socio-economic characteristics and borrowing models

Characteristics	Not over-indebted (monthly	Over-indebted (Monthly installment> 50% of HH income)				
Characteristics	installment<50% of HH income)	At risk (debt/income= 50%-75%)	In critical situation (debt/income=75%-100%)	Insolvent (debt/income= Over 100%)		
	Socio-demographic and s	ocio-economic characteristics of in	dividual borrow er			
		Borrower's gender				
Woman	71.5%	18.1%	7.4%	3.0%		
Man	71.6%	Marital status	7.1%	3.7%		
Not married	76.3%	15.8%	5.5%	2.5%		
Married	69.2%	18.7%	8.1%	4.0%		
Divorced	72.1%	17.4%	6.4%	4.19		
		Type of borrower				
Individual residency Individual non-resident	71.7%	17.7%	7.2%	3.59		
maividuai non-resident	82.9% Page	8.9% ion of respective borrower	4.7%	3.49		
Prishtina	69.5%	19.4%	7.5%	3.7%		
Mitrovica	70.4%	18.9%	7.4%	3.3%		
Prizren	75.4%	15.4%	6.4%	2.89		
Ferizaj	73.9%	16.1%	7.0%	3.19		
Gjilan	73.6%	16.4%	6.7%	3.4%		
Gjakovë Poja	72.3%	16.8%	7.0%	3.99		
Peja	71.5% Ad	17.2% ge of respective borrower	7.3%	4.0%		
< 30 years of age	78.9%	14.2%	4.7%	2.2%		
30 - 40 years of age	69.4%	19.2%	7.8%	3.79		
40 - 50 years of age	68.5%	19.2%	8.3%	4.0%		
50- 60 years of age	68.4%	19.3%	8.2%	4.0%		
> 60 years of age	84.6%	8.4%	3.6%	3.4%		
Up to 170 EUR	34.0%	Borrower's income level 26.2%	20.5%	19.3%		
170 -249 EUR	64.7%	18.1%	11.0%	6.3%		
250-449 euro	68.6%	19.9%	8.1%	3.49		
450-749 euro	69.1%	20.8%	7.5%	2.7%		
750-999 euro	78.6%	14.8%	4.6%	2.19		
1000-2000 euro	85.4%	9.6%	2.9%	2.2%		
Over 2000 euro	91.9%	4.8%	1.6%	1.79		
		BORROWING MODELS				
On a setting and the section of	Over-indeb 89.0%	tedness by number of credit contra 7.1%	2.4%	4.50		
One active credit contract Two active contracts	68.3%	21.4%	7.2%	1.5% 3.1%		
Three active contract	52.4%	30.8%	12.0%	4.99		
Four or more active credit contracts	32.6%	32.6%	22.4%	12.49		
	Over-indel	otedness by type of credit contra	act			
Borrowing, leasing, mortgage loan	73.9%	17.4%	5.9%	2.89		
Overdrafts with used balance	88.6%	4.3%	4.6%	2.6%		
Credit cards with positive used balance	98.9%	0.9%	0.2%	0.19		
	Over-inde	otedness by type of lending instituti	on			
Bank	70.9%	19.8%	6.4%	2.8%		
Microfinance	82.3%	10.3%	4.8%	2.7%		
Bank and microfinance simultaneously	49.4%	24.7%	17.0%	8.9%		
		by multiple borrow ings and in many				
Many contracts - one lending institution	61.1%	27.5%	8.2%	3.2%		
Many contracts - several lending institutions	52.7%	24.9%	14.9%	7.5%		
		r-indebtedness by credit history	0.40	4.00		
No closed contract	84.4%	10.3%	3.4%	1.9%		
At least one closed contract	67.1% Over-indeb	20.4% tednees by collateralized contra	8.5% cts	4.0%		
No collateralized contract	76.8%	14.5%	5.6%	3.19		
At least one collateralized contract	70.5%	14.5%	7.5%	3.17		
		dness by credit classification (in arr		3.57		
On time, or in arrears <30 days	72.0%	17.8%	7.0%	3.29		
In arrears 30- 60 ditë	72.3%	16.7%	7.3%	3.79		
In arrears 60-90 days	73.6%	14.6%	7.1%	4.89		
	. 3.070					
In arrears 90 - 180 days	71.3%	15.3%	8.7%	4.89		
In arrears 90 - 180 days In arrears > 180 days	71.3% 65.3%	15.3% 17.1%	8.7% 9.3%	8.29		



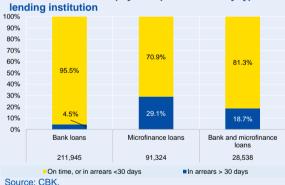
Source: CBK

Chart 2 b. Borrowers' payment performance, by collateral



■In arrears > 30 days
On time or in arrears <30 days
Source: CBK.

Chart 2 c. Borrowers' payment performance by type of lending institution



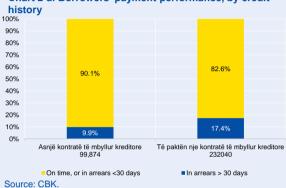
Tendencies for arrears in monthly installments differ according to the same sociodemographic characteristics as those of over-indebtedness, except for the case of *marital status*, where the most frequent tendencies for arrears in installments are the cases of borrowers in the group with marital 'unmarried'. Within the borrowing models, the number ofcredit contracts. collateralization, type of lending institution, credit history, and multiple borrowings were **statistically significant** in the tendency to have arrears.

The most frequent cases of arrears are presented in the group of borrowers with two and four or more credit contracts (chart 2a).

The most frequent cases of arrears appear in collateralized contracts (chart 2b).

The highest tendencies of arrears are presented in borrowers with loans only in microfinance (chart 2c).

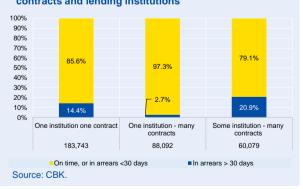
Chart 2 d. Borrowers' payment performance, by credit



The most frequent arrears are presented in the group of borrowers with a credit history with at least one closed contract (chart 2d).

Also, the highest tendencies in loan payment delays were among multiple borrowers - more than one active credit contract and from different institutions. About 20.9 percent of multiple borrowers, with credit products at different institutions, are in arrears, compared to only 2.7 percent of multiple borrowers but at the same institution (chart 2e).

Chart 2 e. Payment performance by number of credit contracts and lending institutions



The results obtained from the total population are very close to the results from the last study conducted¹⁷. The indebtedness calculated for the total population of borrowers suggests that 26.1 percent are overburdened with loan debt, while in the previous study sample¹⁸ of 1,805 individual borrowers who possessed the loan product, 27.4 percent were over-indebted. This analysis does not reflect the incomes of other members of the household, because the analysis is based only on the data of the CRK that contain information about the borrower, while in the previous study was analyzed the level of indebtedness for the households interweaving information that is in CRK and information provided by financial institutions for their clients (data also for the incomes of other family members of the respective borrower).

Finally, the oveer-indebtedness has been tried to be evaluated through three indicators, such as the indebtedness index, arrears in the payment of installments and the possession of many credit contracts, which together provide important information on the level of indebtedness of the borrowers of the financial sector in Kosovo. Although the results suggest that overindebtedness is associated with multiple borrowing and poorer payment performance, the cause-and-effect relationship between these factors is not established, and may run in different directions. Having more credit contracts definitely affects the increase in the monthly debt for payment and has an impact on the increase in the level of the borrower's indebtedness. However, there is a possibility that borrowers take on additional debt to service existing debt in cases of default, thereby affecting over-indebtedness.

However, the results of the study may be subject to some limitations in terms of the quality of the available data and the assumptions made due to the deficiencies encountered. In terms of data availability, cases such as: lack of information on incomes in certain observations, significant differences between the last reported incomes and the maximum or average ones (in all active credit contracts) as well as very low incomes reported in the last contract that were exceeded by credit installments for the respective borrower were recorded. This may be influenced by the possible inconsistency of updating the data for the borrower, or by the non-recording of all sources of the borrower's income (income from private business, remittances, income of other members of the household), which were considered during the review of the loan application, but which were not documented with a contract or bank statement, factors that may influence the under-estimation or over-estimation of the current indebtedness. Also, the lack of complete information about coborrowings can influence the overestimation of the borrower's burden. In terms of quality, there have been cases of reporting extreme values, very high or zero income, very high or low interest rates (which are necessary for calculating the installment in observations where it was lacking), very high installments, which in some cases clearly exceeded the monthly income of the borrower and which consequently overestimate the indebtedness. However, some of such cases have been dealt with in relation to the possibilities and available data, which are elaborated at the beginning of this analysis. Other technical errors were also observed, such as the lack of coding of professions, errors in data entry, such as the loan issuance date being later than the maturity date, etc.

The limitations in the availability and quality of data, and the complex and very important nature of the problem of over-indebtedness, emphasize the need for interaction of institutions, namely the commitment of all relevant parties in the collection and provision of quality data, as recommended in the previous study of the indebtedness of households, carried out in 2022 (BQK_FSR_18.pdf (bgk-

Income and installment (in EUR)	Average	Median	Maximum	
Income	787	488	50,000	
Total installment	203	127	140,176	
Borrowing installment	169	106	140,176	
Overdraft installment	3	-	8,241	
Credit card installment	26	-	4,551	
Mortgage installment	5	-	15,249	
Loans approved amount	11,498	5,600	2,114,800	
Outstanding amount	8,334	3,432	1,977,813	

initially included 1,841 customers with a total of 5,014 active loans. While the indebtedness index for the loan credit product was calculated for 1,805 customers.

¹⁷ The previous study, published in 2022, reflects the state of the indebtedness according to the data for March, 2021.

¹⁸ The sample in the previous study was selected respecting the confidence level of 99% and with 3% margin of error. This sample

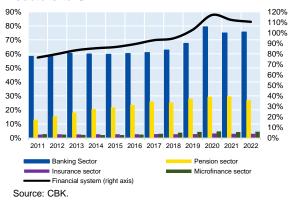
Socio-demographic and socio economic characteristics of individual borrow er	Share (%)	Number / Frequency			
Number of borrowers: 331.914 Number of active credit contracts: 576.527					
SOCIO-DEMOGRAPHIC AND SOCIO-EC	CONOMIC CHARACTERISTICS OF	INDIVIDUAL BORROWERS			
	Borrower's gender				
		102.6			
Woman Man	31.8% 68.2%	102,4 219,6			
	us of the respective borrowe				
Not married	39.6%	130,1			
Married					
Divorced	0.5%	1,5			
	Type of borrower				
Individual resident	98.3%	326,1			
Individual non-redient	1.7%	5,7			
Region	of respective borrower				
Prishtina	36.3%	120,3			
Mitrovica	11.9%	39,3			
Prizren	14.6%	4,8			
Ferizaj	9.4%	31,2			
Gjilan Gjakovë	8.9% 9.2%	29,3			
Реја	9.2%	30,3 32,3			
	of respective borrower	UZ,C			
< 30 years of age	23.7%	7,8			
30 - 40 years of age	26.7%	88,7			
40 - 50 years of age	22.6%	75,0			
50- 60 years of age	23.5%	77,9			
> 60 years of age	3.5%	11,5			
Во	rroer's income level				
Up to 170 EUR	2.3%	6,6			
170 -249 EUR	8.4%	24,2			
250-449 euro	34.2%	98,1			
450-749 euro	29.8%	85,6			
750-999 euro	8.7%	24,9			
1000-2000 euro	11.4%	32,8			
over EUR 2000	5.2%	14,8			
	BORROWING MODEL				
	ers by number of credit cont				
One active credit contract Two active contracts	55.4% 23.4%	188, ⁻ 77,7			
Three active contracts	23.4% 15.4%	77,7 51,0			
Four or more active credit contracts	5.8%	19,3			
	owers by number of institutio	<u></u>			
Clients with a contract in only one institution	81.9%	271,8			
Clients with contracts in multiple institutions	18.1%	60,0			
Number of borrow	ers by type of lending institu				
Bank	63.9%	211,9			
Microfinance	27.5%	91,3			
Bank and microfinance at the same time	8.6%	28,5			
	borrowers by credit history				
No closed contract	30.1%	99,8			
At least one closed contract Number of borro	69.9% ow ers by collateralized contra	232,0 cts			
No active collateralized contract	16.1%	53,5			
At least one collateralized contract Source: CBK.	83.9%	278,3			

4. Developments in the financial system

The financial system recorded increase in activity despite facing higher risks - inflation and a weaker economic outlook. All constituent sectors were characterized by an acceleration of the upward trend, with the exception of the sector, which marked pronounced slowdown in growth.

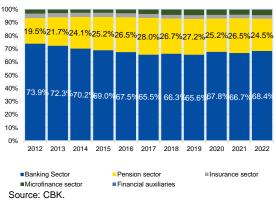
In December 2022, the value of financial system assets reached EUR 9.89 billion, corresponding to an annual growth of 10.8 percent (12.7 percent in 2021). The rate of financial intermediation (the ratio of assets to GDP) decreased for the second year in a row, decreasing to 110.4 percent from 112.2 percent in 2021. Higher nominal GDP growth, as a result of the economic recovery in the postpandemic period, influenced the decreasing trend of the intermediation rate after 2020 (chart 16).

Chart 16. The weight of financial system sectors to GDP



banking sector played the contribution to the expansion of the total financial system assets, which in December 2022 represented 68.4 percent of the total financial system assets. The microfinance sector was characterized by a pronounced increase in activity, and despite the low share of only 4.1 percent in the total assets of the system, it ranked second in terms contribution to the total annual growth of assets. The pension sector was characterized by a decrease in the value of investments, which was reflected in a marked slowdown in the growth trend of the assets of this sector and, consequently, in the decrease in the weight/contribution to the growth of the total financial system assets (chart 17). While the insurance and financial intermediaries sector, due to their lower weight, had a more limited impact on the overall structure of the system's assets, despite the acceleration of growth.

Chart 17. The share of respective sectors to financial system assets



The year 2022 ended with 4 financial institutions more than the end of the previous year, respectively with 131 active institutions. In 2022, a new bank with local capital began operating, increasing the total number of banks to 12. The number of financial auxiliaries (currency exchange offices) - with a marginal participation in the financial system assets of 0.4 percent - increased to 59 from 53 in the previous year. Whereas, the number of insurance brokers decreased to 16 from 19 a year ago (table 4).

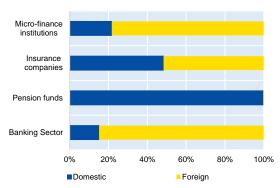
Foreign capital dominates most of the sectors of the financial system, especially the sectors dealing with lending activity.

Table 4. Number of financial institutions

Description	2015	2016	2017	2018	2019	2020	2021	2022
Commercial banks	10	10	10	10	10	11	11	12
Insurers	15	15	15	14	13	13	12	12
Pension funds	2	2	2	2	2	2	2	2
Financial auxiliaries	44	40	43	50	50	57	53	59
Insurance intermediaries Microfinance institutions and non-bank financial	18	16	16	16	18	18	19	16
institutions		22	25	29	29	29	30	30

Source: CBK.

Chart 18. Ownership of financial system constituent sectors, December 2022



Source: CBK.

The banking sector is dominated by capital originating from the EU, which includes the three banks with the highest share of assets in the market. Increased competition from other banks, including the operation of a new bank during 2022, affected the decline in the concentration ratio¹⁹ (also the share of banks with capital originating from the EU) to 51.9 percent from 52.5 percent a year ago. The entry into the market of a new bank with local capital influenced the share of local banks in total market assets to increase to 15.1 percent (14.5 percent in December 2021). Banks originating from Albania increased their participation to 16.1 percent from 14.6 percent, surpassing the participation of Turkish banks which in December 2022 represented 15.2 percent of the sector's assets (16.6 percent in December 2021).

The microfinance sector is also dominated by institutions with foreign capital (chart 18), and characterized by a high degree of concentration, in which case the ratio of the

assets of the three largest institutions to the total assets of the sector in December 2022 was 56.1 percent (56.5 percent a year ago). The insurance sector continues to have a lower level of concentration as a result of the more balanced distribution of assets in the market. However, over the last four years there is a trend of increased concentration of insurance sector assets, mainly influenced by the revocation of the license of two insurers (one in 2019 and one in 2021).

Insurance companies with local capital constitute 48.3 percent of the total assets of the sector, from 50.2 percent in the previous year. Meanwhile, companies with foreign capital with a share of 51.7 percent have their country of origin in Austria, Slovenia and Albania.

The financial system in Kosovo has a balance sheet simple structure, relation to the traditional model of activities, with low degree of complexity and interconnection of activities between sectors of the system.

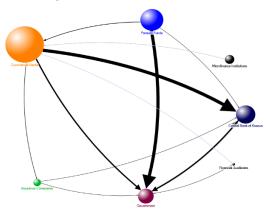
The banking sector, as a central entity, has the highest degree of interconnection with different sectors. The most prominent connection continues to be with the CBK, in the form of deposits and cash (mandatory reserve and the surplus of this reserve), followed by the link with the Central Government in the form of investments in securities. The interconnection of the banking sector with other financial sectors such as the pension sector, the insurance sector and the microfinance sector is generally low, analyzed from the perspective of the banking sector (the

¹⁹ Expressed as a ratio of the assets of the three largest banks to the total assets of the sector.

demand of commercial banks towards these sectors constitutes 0.2 percent of the banking sector assets). However, the deposits that nonbank financial institutions hold in commercial banks represent a high inter-institutional exposure for some of these institutions, so this interdependence emphasizes the importance of monitoring and understanding the effects of the spread of risks within the financial system. The liquidity of the banking sector represents an important factor in the stable functioning of other financial sectors, since in the context of interconnections, deposits constitute one of the main channels for the possible transmission of inter-institutional problems.

The financial sector as a whole has the highest interconnection with the government sector in the country, in the form of investments in securities. The pension sector is one of the main investors in government securities, followed by CBK (through the secondary market), and commercial banks. Other financial institutions also have claims against the Government in the form of government securities, while the government has claims (exposure) only against the CBK and commercial banks through the deposits it holds in these institutions.

Figure 1. Institutional interconnections of the **Financial System of Kosovo**



Source: CBK.

Note: the size of each node (circle) reflects the total assets of each institution, excluding the Central Government, where the total liabilities in the form of securities to these institutions are taken as a basis. The direction of the arrows means the claims to the institution to which the arrow is directed, while the thickness of the hyphen and the arrow reflects the level or size of the connection. Status is as of December

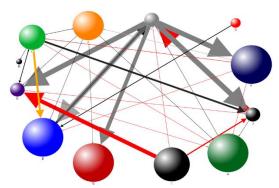
The dynamics in the connections between the actors of the financial system in 2022 have undergone slight changes compared to the previous year. The main link with the higher change was the decrease in the exposure

of the banking sector to the Central Government, namely the decrease in investments in securities of the Government of Kosovo, mainly as a result of the lower offer from the government (figure 1). The interconnection between the pension fund as well as commercial banks and the CBK marked an increase, influenced by the increase in fund institutions. placements in these development reflects, among other things, the reluctance to invest in the foreign market, as a result of high volatility in global markets.

In the framework of inter-hank connections, the connection between the banking sector and the parent banks continues to be at a higher level, as a proactive line for increasing the absorption capacity for possible losses, as well as for financing.

Large banks have their main exposures in foreign markets, to parent banks or other banks/financial institutions (figure 2). The high credit growth may have influenced the fact that one of the large banks increased the liabilities to the parent bank more. However, one bank has significant connections with the parent bank in the form of claims against it, namely deposits in the parent bank and other branches of the group. Relatively smaller banks have significant exposures to larger banks, as well as lower exposures to each other. Banks of Turkish origin show greater interconnections among themselves. Mainly the connections between banks are in the form of deposits, short-term loans and to a lesser extent loans.

Figure 2. Banking interconnections of the banking sector of Kosovo



Source: CBK.

Note: the size of each node (circle) reflects the total assets of each banking institution, excluding the parent banks, where the total claims that the parent banks have in the form of credit lines or interdependent debt to the respective banks in the country are taken as a basis. The direction of the arrows means the claims to the banking institution to which the arrow is directed, while the thickness of the hyphen and the arrow reflects the level or size of the connection. Status is as of December 2022.

4.1. Banking activity

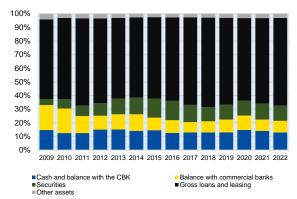
The banking sector during 2022 was characterized by a marked increase in activity, despite continuing to face increased risks as a result of unfavorable geopolitical and macroeconomic developments. The ongoing inflationary pressures and accompanying risks did not materialize in the sector's activity and performance.

The assets of the banking sector increased by 13.5 percent from the previous year, and reached the value of EUR 6.76 billion. Credit activity continued acceleration, marking the highest annual growth in the last eleven years. The balance with other banks was the second component in a row in terms of contribution to the acceleration of asset growth, while other items slowed down $_{
m the}$ growth Investment in securities slowed annual growth to 9.8 percent from 17.2 percent in the previous year, influenced by the decline in investment in domestic securities, while securities in the foreign market recorded a marked increase of 30.6 percent. Cash and balances with the CBK also slowed growth to 4.3 percent from 6.2 percent in the previous year, which suggests an orientation of funds to instruments with higher financial returns as compensation for losses/depreciation from inflation.

The sector has not undergone structural changes in terms of assets over the years, with the exception of the subcategory of securities, which increased from 2012 as a result of the start of the internal securities market and the active participation of banks in this market (chart 19). In 2022, the banking sector's investments in Kosovo government securities recorded an annual decrease of 14.9 percent compared to the increase of 22.6 percent in the previous year, mainly influenced by the lower supply.

The activity of the banking sector continues to be financed mainly by the deposits of households and non-financial corporations, which this year marked growth slowdown, despite the accelerated increasing trend of total deposits.

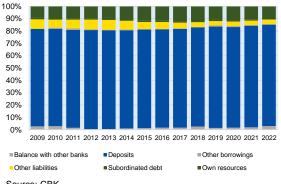
Chart 19. The share to assets structure



Source: CBK.

Total deposits in the banking sector in Kosovo marked an accelerated annual increase of 13.3 percent (increase of 12.4 percent in December 2021) and reached the level of EUR 5.6 billion. The deposits of the two dominant segments in the structure of total deposits - households and corporations non-financial showed slowdown in growth, but the high growth in deposits of financial corporations, public corporations as well as deposits from nonresidents determined the accelerated increasing trend of total deposits. At the end of 2022, deposits represented 82.3 percent of the financing sources of the banking sector (chart 20).

Chart 20. Share to liabilities structure and own resources



Source: CBK.

Household deposits, the category dominates the structure of total deposits in the banking sector with a share of 65.7 percent in December 2022, slowed growth to 8.3 percent from 14.6 percent a year ago.

The slowing growth trend of household deposits may have been influenced by higher household spending this year as a result of high price growth, while incomes/wages remained at the same level or increased at a much lower rate.

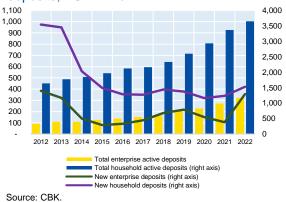
Non-financial corporations deposits, the second largest share in the structure of deposits, recorded similar annual growth, namely a slight slowdown in the growth rate to 19.0 percent from 19.3 percent in 2021.

Other financial corporations recorded a high annual increase in deposits, of 52.2 percent, compared to the annual decline of 25.3 percent in the previous year. All sectors within this category (pension funds, the insurance sector as well as other financial enterprises) were characterized by an increase in deposits, but the main contribution to the total high growth was made by pension funds.

The year 2022 was characterized by an increase in new deposits, namely term deposits, as a result of the increase in the interest rate on deposits. Also, consistent inflation and uncertainties about the economic outlook may have increased the need for saving, discouraging investment.

The new deposits collected by households, which include only term deposits, reached the value of EUR 421.4 million, which represents an annual increase of 10.4 percent, while the previous year there was an annual decrease of 24.0 percent (chart 21).

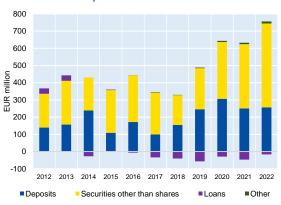
Chart 21. Stock of total deposits and new deposits, EUR million



This increase is mainly attributed to the increase in interest rates on deposits for this category, which were increased by banks in an effort to keep deposits/financing to support the high level of lending in the country, in circumstances of the increase in the cost of financing from outside. Similarly, new deposits

of non-financial corporations increased to EUR 356.2 million from 106.2 million in 2021.

Chart 22. Net position to non-residents



Source: CBK.

Favorable offers to attract time deposits from the banking sector are expected to continue in 2023, suggested by the Bank Lending Survey, influencing the further growth of time deposits in the financing structure of the sector.

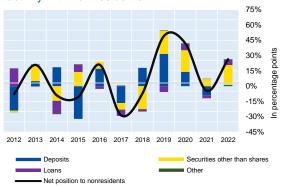
The exposure of the banking sector to the external sector marked an increase in 2023, but in terms of participation continues to be relatively low.

The net credit position to the external sector reached EUR 739.5 million, marking an annual increase of 26.4 percent in contrast to the decrease of 4.6 percent in the previous year (chart 22 and 23). The increase in the net credit position during 2022 is mainly attributed to the increase in investments in securities in the external sector, which recorded a more pronounced increase, followed by investment in deposits and loans.

Claims against non-residents account for 15.6 percent of the total assets of the banking sector, where 87.5 percent of them are deposits and investments in securities. The banking sector's liabilities to non-residents constitute 4.7 percent of the total banking sector's liabilities, in the form of credit lines and foreign sector deposits held in the country. These two items constitute 99.5 percent of the total liabilities to non-residents.

The banking sector continues to have low exposure to the external sector. The low level of assets in foreign currency further reduces the effects of the transfer of problems from the external sector as well as avoids possible losses from unfavorable changes in exchange rates against the EUR currency.

Chart 23. Items contribution to annual change activity with non-residents



Source: CBK

4.1.1 Credit developments

The credit activity of the banking sector accelerated growth, marking the highest growth rate in the last eleven years. This dvnamic was influenced bv developments in the first half of the year, which was characterized by a more pronounced growth, while in the second half, the increasing trend slowed down. Continued inflationary pressures as well as uncertainties about economic activity are expected to affect the decrease in the demand for credit in 2023.

The dynamics of lending activity, during most of 2022, according to the bank lending survey, was mainly determined by movements in credit demand. The credit supply has generally tightened in the second half of the year, affected by the risks associated with the poor outlook in the local and global markets. The factors that supported the credit supply during the year were the good liquidity position of the sector, the pressures of competition between banks, as well as the support from the Kosovo Credit Guarantee Fund.

The significant increase in credit demand from enterprises was driven by the demand for financing inventories and working capital and fixed investments, while for households the demand for credit was influenced by the demand for financing consumption expenses and the real estate market outlook. The demand from households was high, despite the continuous expectations of the banks for a decrease in demand, influenced by the high uncertainties about the dynamics in the country's economy.

Bank sentiment for 2023 again suggests lower demand, especially from households, as well as continued operation in an environment of high uncertainty, which is also expected to be reflected on the side of increased vigilance in internal procedures for analyzing demands for credit, as well as tighter credit offer.

Chart 24. Annual growth of loans to enterprises and households



Source: CBK

The stock of active loans in the country's banks reached EUR 4.35 billion, representing an annual increase of 16.1 percent. The segment of non-financial corporations recorded an annual increase in the loan stock of 15.7 percent, which coincides with the acceleration of the annual growth trend by 2.6 percentage points. Meanwhile, loans to households recorded an annual increase of 16.7 percent, which compared to the previous year represents a slowdown in growth by 1.9 percentage points (chart 24).

New loans marked a slowdown in the increasing trend, returning to the growth levels of the pre-pandemic years. The growth in new loans was high in the first quarter of the year, but in the subsequent part, after the outbreak of the war in Ukraine and the increase in inflationary pressures, there was a slowdown, namely an annual decrease in new loans. The growth trend of new loans slowed to 6.5 percent compared to a sharp increase of 22.9 percent in 2021. This development was mainly influenced by the dynamics of new loans in the fourth quarter, which was characterized by an annual decrease in loans in two segments - nonfinancial corporations and households.

Chart 25. Stock of total loans and new loans to households and enterprises, EUR million



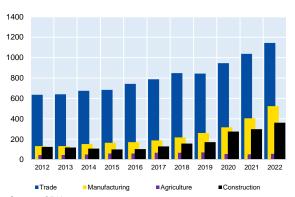
Source: CBK

Overall during 2022, the household sector was characterized by much slower annual growth, of only 2.4 percent compared to 45 percent growth in 2021, while new non-financial corporate loans grew by 9.6 percent from 10.4 percent in 2021 (chart 25). In 2022 there has been an increase in the use of credit products such as overdrafts and credit lines, both by non-financial corporations and by households, suggesting an increase in the need for emergency/short-term financing.³

All economic sectors were characterized by an increase in lending, among which manufacturing and construction had the highest increase in lending. In December 2022, lending to the manufacturing sector had the highest contribution to the growth of total loans to the non-financial corporate segment, as a result of the high annual growth of 29.4 percent. The trade sector recorded an annual growth of 10.3 percent and was the second largest contributor to the growth of loans to non-financial corporations. The construction sector recorded an accelerated growth of 21.1 percent, despite the challenges faced by this sector due to high inflation - the increase in the price of construction materials. The agricultural sector this year was characterized by a positive growth of 9.7 percent, in contrast to the pronounced decline in the previous year.

In terms of loans to non-financial corporations, the trade sector has the highest participation over the years, followed by manufacturing and construction, which have gradually expanded increasing participation. The agricultural sector continues to have low participation (chart 26).

Chart 26. Stock of loans, by economic sectors



Source: CBK.

The production sector has been supported in through the Economic Recovery Package, namely the measure of subsidizing investment loans for manufacturing The implementation ofbusinesses. measure during $_{
m this}$ year may contributed to the higher acceleration of the growth of loans for production.

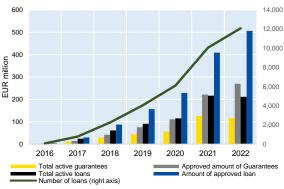
An important supporter of lending to micro, small and medium-sized enterprises continues to be the Kosovo Credit Guarantee Fund, the utilization of which has continued to gradually increase. Growth continued in 2022, but at a lower rate compared to the previous year due to the closing of the Economic Recovery window²⁰ at the end of 2021. The cumulative number of bank loans to SMEs, guaranteed by KCGF, at the end of 2022 reached 12,084, with a total amount of EUR 506.3 million. With the support of donors, new windows have been created in 2022 that focus on supporting different sectors and profiles of enterprises, such as the Grow window - the Green Recovery and Opportunities window, the export window, the women in business window as well as the window of new enterprises – StartUp.

Mainly, the structure of guaranteed loans by KCGF is a representation of the general structure of loans of the banking sector. Compared to the previous year, the

²⁰ The package provided by the Government of Kosovo, as part of the measures to support companies to overcome the challenges created by the pandemic situation.

manufacturing sector decreased participation agriculture services, construction sectors recorded slight growth. (chart 27).

Chart 27. Loans approved and guaranteed by **KCGF**



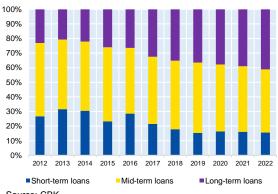
Source: KCGF.

In the context of new loans to households, consumer loans recorded an annual decrease, in contrast to the marked increase in the previous year, while mortgage loans slowed down increasing trend. As of December 2022, new consumer loans marked an annual decline of 6.3 percent (an increase of 40.3 percent in 2021), while mortgage loans slowed growth to 13.5 percent from 56.5 percent growth a year ago.

Long-term loans have gradually increased their share in the total lending stock, dominating the share in the total structure of loans by maturity.21 The growth of long-term loans was more pronounced in the last two years, influenced by the growth of mortgage loans which have longer maturities.

In December 2022, these loans recorded annual growth of 22.8 percent (20.4 percent growth in 2021), and represented 55.0 percent of total loans. Loans with medium-term maturity slowed annual growth by percentage points (7.9 percent annual growth) and narrowed participation to 34.1 percent. While short-term loans recorded a similar growth rate of 11.6 percent (11.8 percent in 2021) and had a participation of 10.8 percent to total loans (11.2 percent in December 2021).

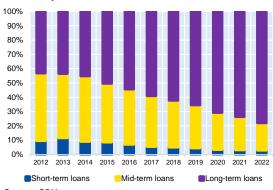
Chart 28. Loans to enterprises, share by maturity



Source: CBK.

Short-term and medium-term maturity loans are mainly dominated by loans issued to nonfinancial corporations (chart 28), while longterm lending is mainly characteristic of the credit portfolio of the household segment (chart 29).

Chart 29. Loans to households, share by maturity



Source: CBK.

²¹ Short term includes maturity up to 1 year, medium term includes maturity from 1 to 5 years, and long term includes maturity over 5 vears.

Box 4. Bank Lending Survey 22

The latest results of the Bank Lending Survey²³ reflect developments in bank lending activity during the period October - December 2022 (referred to as Q4 2022)²⁴, as well as expectations for lending activity for the period January - March 2023 (referred to as Q1 2023).

The dynamics of lending to **enterprises** during Q4 2022, according to the bank lending survey, turns out to have been affected positively at a higher level

by the demand for credit, while the credit supply did not have significant changes.

In terms of credit supply, banks have reported unchanged loan standards during the process of assessing the enterprises' applications for loans in the fourth quarter of 2022.

For the first quarter of 2022, banks are expected to apply marginal changes to loan standards, mainly positive changes to SMEs and negative ones to large enterprises (chart 1).

Chart 1. Credit standards applied when assessing credit applications of enterprises



In the context of economic slowdown expectations, risks related to the poor outlook in global markets had the main negative contribution regarding loan standards. On the other hand, the factors that had a positive impact on loan standards were the good liquidity position of the sector, the pressures of competition between banks, as well as the support from KCGF.

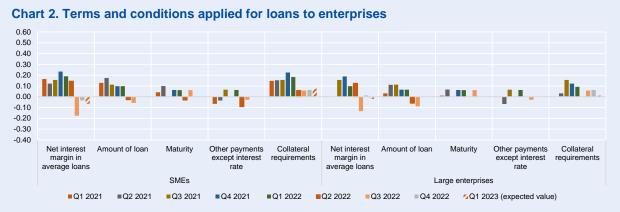
In the context of loan supply, banks reported that the conditions and rules applied by banks when granting loans had marginal movements for both segments of enterprises. Specifically, marginal relief was applied to collateral demand as a result of KCGF support and competitive pressure (chart 2). In the first quarter of 2023, banks are expected to apply changes to conditions and rules mainly for SMEs, increasing the interest rate on loans on the one hand and easing the demand for collateral on the other. Positive changes to the conditions and rules of loans for enterprises are expected to be driven by the support from KCGF and competitive pressures, while negative changes are expected to be driven by the poor outlook in the global and local market, as well as expectations for the deterioration of the quality of the credit portfolio.

²² Bank Lending Survey is conducted by the Central Bank of the Republic of Kosovo with 9 banks operating in Kosovo and representing 99.9 percent of the total sector lending. The survey includes the period October - December 2019 and the expectations for January – March 2020.

²³ Responses of individual banks were aggregated by using the appropriate weight of each single bank to total credit portfolio of the banking sector. Positive values of the Credit Standards Index show

ease of lending whereas negative values are characterized by a tightening of lending. Also, positive values of the Credit Demand Index show an increase of demand and the negative values show a decline. The most widely used methodology can be found in the Bank Lending Survey Report on the CBK website.

²⁴ The period October - December is referred to as the 'fourth quarter' – Q4, while the period January - March is referred to as the 'first quarter' – Q1.

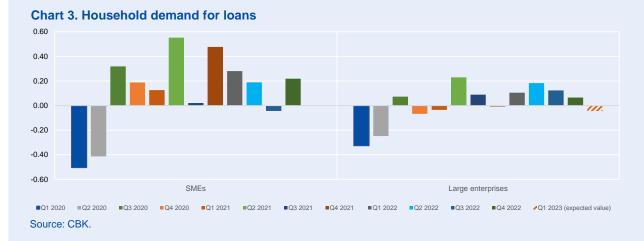


Source: CBK.

During the reporting period, there significantly higher increase in the demand of enterprises for bank loans compared to the previous quarter. The increase in demand for enterprises is mainly attributed to the demand from SMEs, while for large enterprises there was a marginal increase (chart 3). This increase in demand, according to the banks' statements, was mainly driven by the increase in the demand for financing inventories and working capital. The ratio of non-performing loans to enterprises improved slightly during Q4 2022 according to bank statements in the survey generating a low negative index.

Uncertainties in the outlook in the country and abroad are dictating the banks' expectations regarding changes in the demand for loans. Consequently, during the first quarter of 2023 banks expect a reluctance to undertake debt based on the marginal index generated, which implies insignificant movements in the demand for loans, from both categories of enterprises, compared to the current quarter.

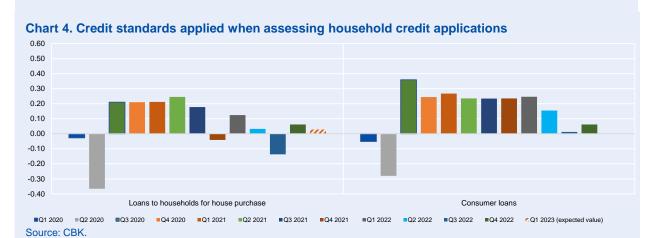
Regarding the quality of the corporate loan portfolio, banks expect that during the first quarter the ratio of non-performing loans to total loans will increase where responses generated high positive index.



Regarding the term of the loans, the results of the survey show that there was a greater increase in demand from the enterprises during this period regarding short-term loans. Demand for long-term loans did not have significant changes. Whereas, the credit offer divided according to the maturity of loans, showed a tightening of long-term maturity loans, and remained mainly unchanged for shortterm maturity loans. In the next quarter, banks expect low level marginal easing of credit standards mainly for short-term loans. Whereas, in terms of demand, banks do not expect a significant change of request for loans in terms of maturity, both short and long-term (chart 7).

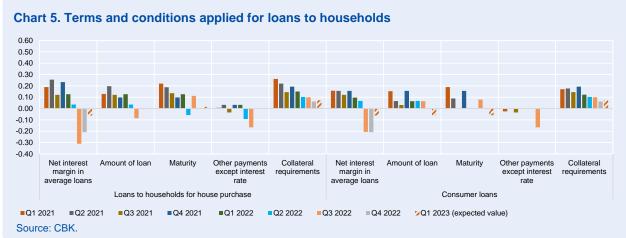
The dynamics of lending activity to households during the reporting period, according to the survey, were mainly supported by the loan demand, as the loan supply had margjinal changes. The credit standards applied during the review of loan applications from households were eased for both types of loans (chart 4). This change was expressed by a systemically important bank which relied on reducing the risk from the required collateral, mainly as a result of agreements with construction companies.

Banks' expectations for Q1 2023 do not provide significant changes to loan standards for both types of loans to households.



Terms and conditions for new loans to households were generally tightened to some extent. The results generated mainly reflect tightening at the same level for both types of loans. More precisely, the banks applied constraints through the increase of the interest rate. Meanwhile, marginal ease was

applied to collateral requirements. The main factor in the increase of the interest rate was the poor outlook of the global markets, which for most of the banks means the increase of the EURIBOR rate, the rate applied to loans with a variable interest rate (chart 5).



For the first quarter of 2023, banks generally expect marginal tightening in terms and rules for household loans. The tightening of conditions and rules is expected to be to a higher extent for consumer loans. Mainly, terms and rules for both

categories are expected to be tightened through interest rate increases, although at a significantly lower level than the values for Q4 2022, and to ease collateral requirements at a low level.



Banks reported increased demand for household loans. Both categories of household loans had an approximate increase in demand (chart 6). The need for consumer financing and the perspective of the real estate market were the factors that contributed positively, while the decrease in confidence of clients regarding the capacity to repay loans was a factor that contributed negatively to loan demand. According to the survey, the ratio of non-performing loans to total loans for households decreased, which for the next quarter is expected to change direction, generating a high positive index. Expectations mainly influenced by the dynamics of price growth

in the country, and consequently also by the decrease in the purchasing power of customers.

In the first quarter of 2023, banks do not expect large movements in the demand for loans from households. Banks generally expect negative marginal movements in the demand for loans, precisely these movements reflect expectations for a marginal decline in the demand for loans for the purchase of houses. The results of the survey suggest that banks expect that the decrease in the confidence of clients about the capacity to repay loans will affect to some extent the decrease in the demand for loans during the next quarter.

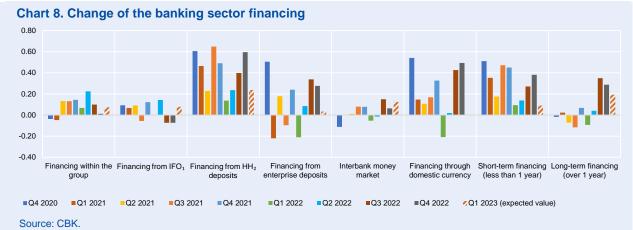
Chart 7. Change of credit standards and demand for loans, by maturity



Source: CBK.

Regarding the time periods, the results of the survey show that households during Q4 2022 had a higher increase in demand for short maturity loans than for long maturity loans.

Also, the credit supply to households, divided according to credit maturity turns out to have been eased at greater extent for short-term loans. Banks expect that in the next quarter, the credit supply easing will be oriented at a higher level towards short-term loans than long-term loans. While, a decrease in demand for long-term loans is expected and almost unchanged demand for short-term loans (chart 7).



Banks reported a significant increase in access to financing during the fourth quarter of 2022, exceeding the level recorded in the previous quarter (Q3 2022). The aggregated result of the banks' responses was influenced by the responses of eight banks which declared an increase in financing, of which two banks of systemic importance declared a significant increase in access to financing. Household deposits had the largest increase, followed by corporate deposits. Meanwhile, funding from international financial institutions marked a marginal decline. By maturity, short-term deposits

were the source of funding with the highest growth during this quarter. For the next quarter Q1 2023, banks expect an increase in access to financing, but at a significantly lower level than that of the current quarter. Financing through household deposits is expected to lead to an increase in the financing of the banking sector, followed by financing from the money markets. As for the maturity of financingmin this quarter, banks expect the increase in financing to be dominated by deposits with long-term maturity. Dynamics driven by favorable offers to attract term deposits by the banking sector (chart 8).

5. Risks of the banking sector

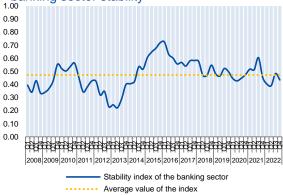
During 2022, the banking sector experienced new dynamics created by high inflation, caused initially by the effects of the pandemic and intensified later by the geopolitical crisis. The slowdown of economic activity in the country during 2022, turns out to have been neutralized to some extent by the positive dynamics that characterized the activity of enterprises, the increase in remittances, the increase in lending and credit the good performance borrowers.

Uncertainties that have accompanied macroeconomic dynamics, such as the inflation rate and the weakening of general demand, remained evident even further into 2023, while the consequences in the contraction of real disposable income have increased the sensitivity to both credit and liquidity risk. Further, the tightening of monetary policies by central banks at the global level, as a response to the rate of inflation, have translated into an increase in the cost of financing, creating pressure both in maintaining the liquidity of banks and in their profitability.

The banking sector was exposed to an increase risks that are related some inconsistencies due to increases in some balance positions. More specifically, faster credit growth has increased risk-weighted assets, increased term deposits and increase in interest rates have increased financing costs affecting profit and capital, and incresed term deposits with maturity up to 5 years and increased crediting up to 10 years affected increased maturity term mismatches between assets and liabilities. However, all indicators of the financial health of the banking sector remained in favorable positions to support the sector in the event of risks materializing.

The stability index of the banking sector, elaborated below, evaluates the internal conditions of the banking sector, which reflect its stability in the last period in relation to the historical situation over the years.

Chart 30. Aggregated index of the banking sector stability



Source: CBK.

The index is built on the basic financial indicators of the stability of the banking sector, taking values in the range of 0 to 1, where higher values represent downward risk and vice versa. The index is calculated on a quarterly basis, through which it is assessed whether there is an increase or decrease in risk sensitivity.25

According to the general aggregated index of the stability of the sector, on average, an annual increase in sensitivity to risks was noted (chart 30). The general increase in sensitivity to risks was influenced by indicators with increased risk such as solvency and liquidity. Whereas, a decrease in sensitivity was noted in the indicators of profitability, credit and market risk. The increased sensitivity to solvency risk is attributed to the lower level of the capital adequacy ratio, due to the increase in risk weighted assets resulting from the higher crediting, while the regulatory capital had marked an increase (chart 31). The increased sensitivity to liquidity risk is attributed to the lower level of liquidity indicators, such as the ratio of liquid assets to short-term liabilities. The increase in short-term deposits has influenced that short-term liabilities have

²⁵ For more information about the methodology of building the stability index of the banking sector, refer to the Financial Stability Report No.9.

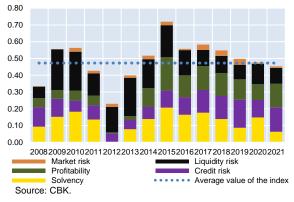
increased faster against the increase in liquid assets.

However, the decrease in sensitivity to credit risk was the result of the annual decrease in the ratio of non-performing loans, impacted mainly by the significant increase in lending, even though the stock of nonperforming loans marked an increase. The decrease of the sensitivity to profitability risk is attributed to the higher profit realized from interest and non-interest income (fees and commissions), which exceeds the increase of expenses throughout the year.

The indicator that assesses the sensitivity of the market to risk, measured through the open position in foreign currency against the Tier 1 capital, has also recorded a decrease. However, this indicator has a very low weight in the general index of financial stability (chart 31).

The aggregated overall index suggests increased sensitivity to risk, compared to the historical average of the index (2008–2021), but also to the average of the last five years. Despite the positive developments during the year, in the second and third quarters increased sensitivity to risks was more significant due to the increase in inflation and consequences felt as a result.

Chart 31. Stability index of the banking sector, by risk criteria



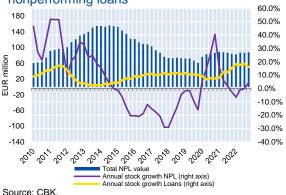
However, the state of the health indicators of the banking sector at the end of the year remains satisfactory as it suggests the capacity to cope with the risks that the sector may potentially face in the following year.

5.1. Credit risk

The general dynamics affecting the credit during 2022, dimension, characterized by the general increase in the price level and the slowing down of economic growth, dynamics that further with worse \mathbf{the} increase geopolitical tensions and later, with the tightening of monetary policies as a measure against inflation. The latter measure resulted in an increase in the cost of financing, while the expectations of commercial banks suggested materialization of the credit risk in the second half of 2022, as a result of macroeconomic dynamics, the deterioration of the credit portfolio was evidenced only in the quarter of the end of the year. The preservation of financial performance good consequently, also the repayment ability, has been attributed to a certain extent to the transfer of the increased cost from enterprises to the final consumer, while the absorptive capacity of consumers is estimated to have been supported by from the income diaspora and government relief measures throughout year.

Although the trend of the key quality indicators of the credit portfolio indicates a low credit risk, the uncertainties added by the performance of the price level and the increase in the value of non-performing loans at the end of 2022 place the credit risk as the most eminent risk of the banking sector and financial stability. The NPL rate continued its downward trend from 2021, even after the termination of the last phase of restructurings for mitigating the effects of the pandemic in January-February 2022. NPL rate decreased to 2.0 percent at the end of the year, from 2.3 percent a year ago. The accelerated growth of lending has influenced the improvement of the credit risk indicator, because the value of nonperforming loans increased compared to the previous year. The value of NPLs increased by 4.5 percent to EUR 87.9 million (from EUR 84.1 million in 2021) (chart 32), against lending that recorded an annual increase of 16.1 percent (15.3 percent in 2021 and 7.4 percent in 2020). According to the results of the bank lending survey, the sentiment of the banks as early as the third quarter indicated the confidence they have in the absorptive capacity of their clients, in the short term. These expectations where based on their process of reviewing loan applications and increased monitoring during this period. Despite the trust in customers, the banks, based the continuous increase inflationary pressures during $_{
m the}$ declared that they expect deterioration of the repayment ability of customers in the second half of the year. In fact, these expectations were materialized in the fourth quarter where the value of NPLs changed direction from the downward trend of the first three quarters to an upward trend. Most banks had a decrease in new non-performing loans on a monthly basis and compared to the previous year, the cumulative number of new non-performing loans was 73.0 percent lower than in the previous year (EUR 477.3 thousand from EUR 1.8 million in the year 2020). The exception is the performance of December, which recorded a higher level of new non-performing loans in most banks.

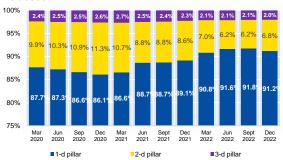
Chart 32. Annual growth of loans stock and nonperforming loans



Although the credit risk is estimated to be the eminent risk that threatens the banking sector, its materialization has not yet been reflected in the levels of credit classifications. addition. 2022, in there was

improvement in the performance of loans from the category with the lowest classification quality to the one with the highest quality, namely from pillar 2 to pillar 1 of the credit classification.

Chart 33. Loans by new credit classification in three classes

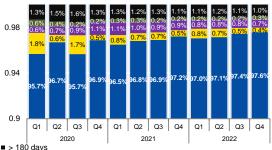


Source: CBK.

The participation of loans in the second pillar of credit classification decreased to 6.8 percent in December 2022 from 8.6 percent in December 2021, while loans in the first pillar increased participation to 91.2 percent from 89.1 percent (chart 33).

In December 2021, credit exposures without delays (less than 30 days past due) have increased participation to 97.6 percent from 97.2 percent in December 2021. Loans 30 to 90 days past due had marginal decline in share of 0.1 percentage points to 0.4 percent of total loans. Meanwhile, non-performing loans (with low probability of payment, as well as those with delays over 90 days) have reduced participation to 2.0 percent from 2.3 percent in December 20201 (chart 34).

Chart 34. Structure of loans classified by past due payments, new method



■> 90 days <= 180 days

- Low probability of loans payments with no past due or with past due<=90 days
- > 30 days <= 90 days
 No past due, or past due<=30 days

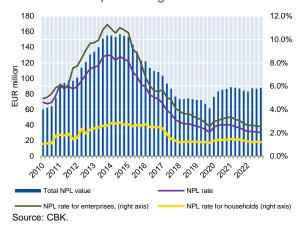
Source: CBK.

The inflationary increase in pressures encouraged banks for more prudent credit management. In this respect, the banks were more conservative in the allocation of reserves and the classification of the most affected sectors, as well as tightened the criteria for new lending. While the corporations and SMEs in the country, based on the questionnaires carried out by the banks with their clients, have continuously reported that one of the main risks to their performance comes from the labor market (availability of labor force and skills gap), this risk is expected to increase further in 2024. Banks have factored the growing risk from migration for two years now, whereas with the approval of free movement for Kosovo citizens in the Schengen countries starting from 2024, this risk may get worse. Based on the developments in the countries of the region, following visa liberalization, waves of labor force movements are expected to affect the imbalance of the labor market, with consequences on the performance profitability of businesses and further on their debt repayment capacity. Therefore, the dimension of credit risk should be a special focus in the following periods, taking into account the growth of factors that have direct consequences in its further deterioration, in the general financial stability of the country.

Households and the enterprise segment recorded a decrease in the ratio of nonperforming loans. The ratio of nonperforming loans for households decreased to 1.2 percent from 1.3 percent in the previous year. The double-digit growth of lending to the household segment in recent years (excluding 2020, when the general revenues in the economy have not increased uniformly, is assessed as an increasing credit risk. The rapid growth of lending (16.6 percent) turns out to have neutralized the increase in the value of non-performing loans for this segment (5.5 percent) and influenced the decrease in the rate of NPLs by 0.1 percentage points (chart 35).

The enterprise segment has also recorded an improvement in credit quality, where the NPL rate decreased to 2.5 percent from 2.8 percent a year ago. The value of nonperforming loans in this sector increased by 4.4 percent, while loans increased by 15.6 percent. According to AKB, the stable financial performance and consequently the repayment capacity of the enterprise segment is attributed to the transfer of the additional cost of supplier/raw material prices to the final consumer.

Chart 35. Nonperforming loans

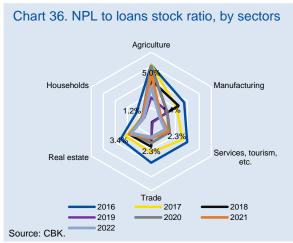


Although the direct effect of higher input prices has been carried forward, the increase in the prices of final products turns out to have slowed down consumption capacity and overall demand in the economy, with consequences to the financial cycle as well.

Developments in the quality of the loan portfolio of economic sectors were positive, influenced mainly by significant increase in lending in the largest part of the sectors (chart The agriculture sector, which characterized by the highest rate of NPLs, recorded a decrease of 2.1 percentage points by declining to 5.0 percent. The trade sector, which represents the most credited sector, recorded a marginal decrease of NPL rates by 0.1 percentage points. Increase in NPL ratio was marked in the mining sector with 0.5 percentage points, and the sector of financial services and other sectors, more precisely with an increase of 0.4 percentage points.

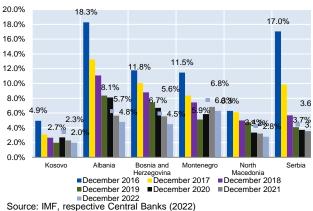
Expectations for the deterioration of the quality of the credit portfolio remain evident even for 2023, based on the high rate of inflation and the weakening of available income over the last two years, the decline in consumption capacity as a result, and potentially, of repayment capacity. While households are expected

be most affected as a segment, especially those with lower incomes, the construction and manufacturing sectors are also expected to be affected by the risk of migration.



In contrast to the region, banking sector in the country continues to have better \mathbf{of} performance loan repayment. Throughout the years, Kosovo has the lowest ratio of non-performing loans compared to the countries of the region, which have gone through a several-year phase of improving the quality of the credit portfolio (chart 37).

Chart 37. NPL to total loans ratio, in the region countries

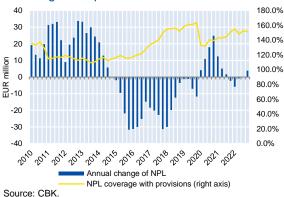


However, the general macroeconomic environment with a poorer economic growth and high inflation rate risk to overthrow the progress achieved through years. magnitude of the loans quality deterioration will largely depend on the management of such a situation in the meaning of the support measures taken by the governments and relevant authorities, review of revenues at the right time and adaptation of lending policies by the banking sector.

The provision coverage ratio of the sector remained similar to the previous year, more precisely at 151.5 percent, a marginal increase of 0.5 percentage points. This marginal movement resulted from the annual increase in the stock of allocated provisions of 4.8 percent, and simultaneously, the increase in the value of NPLs of 4.5 percent (chart 38).

The higher value of provisions this year was expected due to the assessment of increased credit risk. Although the banking sector has allocated a higher level of provisions this year, the rate of provisions spent (loan provision expenses) for the sector, was lower in December 2022 (-0.3 percent) compared to the previous year (-0.4 percent) as a result of stable credit performance.

Chart 38. Annual change of NPL stock and coverage with provisions



5.1.1 Large credit exposures

The credit exposure rate recorded an increase to 93.2 percent, compared to 79.3 percent in the previous year, although it continues to be well below the maximum regulatory level.²⁶ The annual increase in the value of large exposures by 26.4 percent, along with the lower growth of increase of first tier

While all large credit exposures together cannot exceed more than 300% of Tier I capital. Bank branch exposures are excluded here.

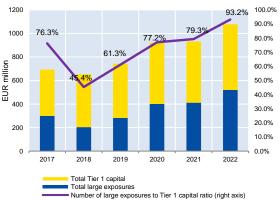
²⁶ Ratio of total large credit exposures to Tier I capital. Large credit exposures, as defined by the CBK Regulation on Large Exposures, are considered any exposure to a single person or related group of persons whose value exceeds 10% of the Tier I capital of the bank.

capital by 7.5 only for the banks under analysis, excluding bank branches 27), resulted in an increase in the rate of credit exposure (chart 39).

The concentration of credit risk, expressed as the ratio between the values of large exposures to the number of these exposures, is considered similar to the previous year. The average value of large exposures 28 stayed at EUR 9.6 million, similar value to the previous year, as a result of the effect of a higher increase in the amount of large exposures (annual growth of 25.6 percent).

The ratio of the three largest exposures to total large credit exposures marginally declined to 50.2 percent from 50.4 percent. This change was influenced by the approximate annual growth of the three largest exposures and total exposures by 25.8 percent and 26.4 percent, respectively.

Chart 39. Concentration of credit risk



Source: CBK

Results of the sensitivity analysis of the sector to shocks in the three and five largest exposures of banks, indicate in general the sensitivity of the sector to shocks in these exposures. Therefore, although the sector is below the maximum regulatory level of credit exposures, it is sensitive to possible shocks in these positions, which should be closely monitored in terms of current dynamics. Also, it is emphasized that the increase in the concentration of credit exposures in conditions further deepening ofthe economic

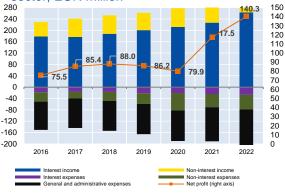
27 Large exposures reported by bank branches are not included in the analysis, because they are not eligible according to the Regulation in force. Operating in the capacity of a foreign bank branch, these institutions are not subject to the regulation of limiting the ratio of weakening represents a marked increase in the sensitivity to credit risk.

5.2. Sustainability of profit and interest rate risk

The profitability position of the sector was favoured by all categories of profit realization. Despite increase in expenses, the higher realized revenues influenced the profit of the banking sector to be higher compared to the previous year by **19.4 percent.** Revenues were characterized by faster annual growth than expenses, in which case interest revenues in bank placements, followed by interest revenues in securites and loans were the revenue category contributed the most to profit realization.

The value of net profit reached EUR 140.3 million from 117.5 million in the previous year (chart 40).

Chart 40. Profit structure of the banking sector, EUR million



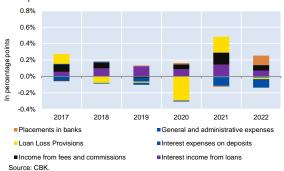
Source: CBK.

Inflationary pressures that started as early as the end of 2021 have encouraged the monetary authorities to tighten monetary policies, which has created an environment with increased interest rates, thus being reflected in the increase in income from interest on placements in other banks and income from interest in securities. On the other hand, interest expenses also increased, but at a much lower level than interest income (chart 41).

exposures to the Tier I capital of the bank but to the Tier I capital of parent banks, and regardless of this, it cannot exceed over EUR 25

²⁸ Ratio of total exposure to the number of exposures.

Chart 41. Main contributors to the growth / decline of the profit

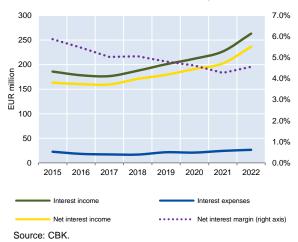


Revenue for the banking sector increased by 15.0 percent, as a result of higher growth in interest revenue (mainly placements with other banks) and to some extent in noninterest revenue (fees and commissions).

Net revenue from the interest was among contributers to the growth of profit in relation to the contribution of net revenues from noninterest. Net revenue from the interest increased by 16.9 percent or EUR 34.2 million, as a result of revenue from bank placements, revenue from investments in securities and from increased lending activity.

While the net non-interest revenue increased by 2.4 percent or EUR 0.9 million, as a result of the increase in revenue from fees and commissions.

Chart 42. Interest income and expenses



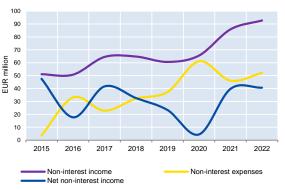
Also, the net interest margin increased to 4.6 percent from 4.3 percent in the previous year, which is attributed more to the effect of interest rates - i.e. interest income on interestbearing assets (16.1 percent annual increase) than to the quantitative effect - increase in the

stock of interest-bearing assets (9.7 percent annual growth) (chart 42).

Interest income increased by EUR 36.5 million, i.e. by 16.1 percent. While only the income from interest in placements with banks increased by EUR 16.4 million, from the decrease of EUR 1.4 million in the previous year.

Income from interest on securities increased by EUR 7.8 million from last year's decrease of EUR 0.6 million. Income from interest in loans increased by EUR 10 million (4.7 percent) at a lower level than in the previous year, which increased by EUR 16.8 million (or 8.5 percent).

Chart 43. Non-interest income and expenses



Source: CBK

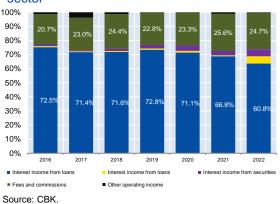
Non-interest revenue (fees and commissions as well as other operating income) increased by 8.0 percent, or by EUR 6.9 million compared to increase of 31.0 percent or by EUR 20.3 million (chart 43 and 44).

All expenditure categories have increased throughout the year. The increase in expenses of 12.4 percent (or by EUR 25.4 million) was mainly influenced by the increase in general and administrative expenses of EUR 14.6 million (chart 45).

Non-interest expenses have increased in contrast to the decrease in the previous year, as a result of expenses for fees and commissions and expenses for provisions. Expenses for fees and commissions increased by EUR 3.4 million, while expenses for commissions increased by EUR 2.5 million.

Interest expenses on deposits increased by 10.7 percent, from 5.7 percent in the previous year, but the impact of the increase was not transmitted to profit due to the higher positive effects of other categories.

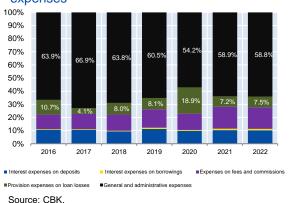
Chart 44. Income structure of the banking sector



In the following months, the profit of the banking sector is characterized growing uncertainties caused by price fluctuations and the weak outlook on economic activity. The increase in the basic interest rates by the central banks has been accompanied by the general increase in interest rates and volatility in

Chart 45. Structure of the banking sector expenses

liquidity and financing positions.



In this way, the effects of monetary and macroeconomic developments can be felt in both aspects of the profit margin of banks in the country. On the one hand, banks, in an effort not to jeopardize the borrowers' repayment ability, may not raise the interest rate on loans to the level of the interbank lending rate, while on the other

hand, financing costs may increase to higher

²⁹ Region countries include Albania, Serbia, Bosnia and Herzegovina,

proportions, due to the application of increased rates by financial institutions and increased rates on deposits under the influence of their competition for insurance and maintenance. The weakening of the repayment ability of customers as a result of the inflation rate and the weakening of economic activity is expected to be accompanied by an increase in the level of provisions designed to cover possible losses from loans - thus affecting a decrease in the revenues of the sector and an increase expenses. **Profitability** indicators increased as a result of profit growth, and continue to remain at the highest level in the region. The average return on assets and capital of the banking sector of Kosovo increased to 2.5 respectively 23.0 percent, from 2.3 respectively 19.5 percent a year ago (chart 46).

These levels are well above the average of the region's banks, which recorded an average return on assets of 1.6 percent and a return on equity of 12.6 percent. The countries of the region also recorded an increase in profitability indicators during this year, but lower than the banking sector in Kosovo, which is why the difference between the average of Kosovo and these countries has increased.29

Chart 46. Profitability indicators of the banking sector



5.2.1 Risk from interest rate fluctuations

The continued growth of long-term lending by banks on the one hand and the high share of deposits with shorter

North Macedonia and Montenegro. The source of information is the IMF Financial Health Indicators database and the respective central banks.

maturity on the other hand, in general, have increased the exposure of the banking sector of Kosovo to the risk of changes in interest rates because they have increased the mismatch of maturity between interest-bearing assets liabilities. Moreover, this dynamic in an environment of increased interest rates on deposits means that the refinancing of deposits due to their short-term maturity will increase the pressure on banks' expenses.

The cumulative gap between assets and liabilities sensitive to interest rates in 2022 was positive in the amount of EUR 1,048.8 million, compared to EUR 951.3 million in the previous year. Liabilities sensitive to interest rates recorded higher annual growth in the maturity terms "over 5 years", "91 - 365 days" and "1-5 years". The growth of assets was similar to that of liabilities, and the highest growth was mainly in the maturity term '1 - 30 days' and '91 - 365 days'. The higher level of growth in liabilities and the increase in mismatches in maturities between assets and liabilities are mainly related to the higher level of deposits created by the inflow of the diaspora, the growth of remittances through formal and informal channels and higher propensities to save, as a result of the more favorable offers offered by banks during this vear.

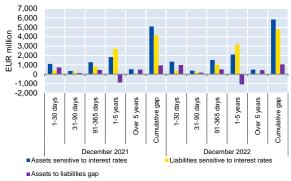
The balance of the banking sector in Kosovo is mainly characterized by fixed interest rates (73.0 percent of loans are with fixed rates), therefore the sector is affected by interest rate movements mainly in the maturity of these positions. However, the number of loans with a fixed interest rate has been decreasing over the years, and especially in the last two years as a result of the increased uncertainties first from the pandemic and then from the continuous increase in prices globally. The tightening of monetary policy by the ECB from mid-2022 is expected to further increase the cost of financing. Therefore, the risk of interest rate fluctuations is an increasing risk. Specifically, the increase in risk is observed in the increase in the cost of financing during 2022, as a result

of the increase in interest rates on deposits as a step towards securing financing from banks. Therefore, the refinancing of deposits at a higher cost affected the increase in the spending pressure of the sector, since most of the main category of assets, loans, are contracted with a fixed interest rate and have longer maturities. If we analyze only loans and deposits, which make up the largest part of the banks' balance sheet, the cumulative gap between them is negative as a result of the higher level of deposits compared to loans, especially for the group with maturity term '1-5 years'.

Compared to the previous year, the positive gap between assets and liabilities widened for all maturities, while the negative gap for the category with maturity '1 to 5 years' deepened further as a result of the increase in deposits with this maturity term (chart 47).

The expansion of mismatches in these categories of maturities between assets and liabilities can present increased exposure to the risk of fluctuation, respectively the increase of interest rates for the relevant time periods, because it can increase the balance of expenses for refinancing assets in relation to the revenues that will be generated from the reinvestment of funds in these terms.

Chart 47. Assets and liabilities sensitive to interest rates



Source: CBK.

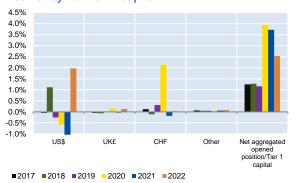
5.3. Risk from the position in foreign currencies

Banking sector exposure to the risk of changes in foreign exchange rates has decreased compared to the previous year. The aggregate net open position for all foreign currencies decreased to EUR 14.9 million equivalent from EUR 20.3 million, which consists of a ratio of 2.5 percent of Tier 1 capital compared to 3.7 percent in 2021 (chart 48). The decline in foreign currency positions resulted mainly from reduced exposures to the British currency and the U.S. dollar.

By specific currencies, the net position to Tier 1 capital for the U.S. dollar results in positive territory, from the negative position of the previous year as a result of the higher decline in liabilities and the decrease of assets in this currency. This means that the banking sector is more exposed to the risk of possible depreciation of the EUR against these currencies.

The ratio of net open positions for each individual currency to Tier 1 capital remains well below the maximum level of 15 per cent allowed under the relevant regulation. Therefore, currency fluctuations have a marginal impact on the financial position of the sector, given the rather low level of foreign currency open positions. This is also evidenced by the 'stress test' analysis which suggests a low level of sensitivity of the sector's capital position to exchange rate fluctuations.

Chart 48. Opened positions in foreign currency to Tier 1 capital



Source: CBK.

The indirect credit risk from foreign currency exposure remains low as foreign currency loans remain at a marginal level. Loans in foreign currency constitute only 0.3 percent of total loans, despite increase of EUR 2 million in the foreign currency credit portfolio compared to the previous year.

Chart 49. Loans and deposits in foreign currency



Source: CBK.

Foreign currency deposits also have a low share, 3.2 percent, while they decreased by EUR 48.6 million from the previous year (Chart 49).

5.4. Capital

The banking sector continues to have a ratio above the capital required levels.30 regulatory high However, lending activity has increased weighted assets on banks' balance sheets, resulting in the Capital Adequacy Ratio (CAR) being lower.

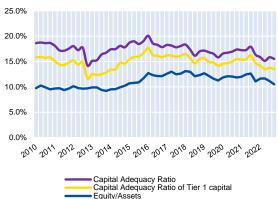
The capital ratio decreased to 15.5 percent, from 16.4 percent in the previous year, whereby mainly systemically important banks have a higher capitalization ratio. At the sector level, the variance between the CAR of individual banks to the average of the banking sector has decreased (approximation of the CAR to the average of the sector). The capitalization position of the sector is reflected to be at an adequate level also by the indicator of the adequacy of the Tier 1 capital to riskweighted assets, which remained at 13.5 percent, although lower than last year as a result of the increase in risk-weighted assets that mainly consist of long-term loans (chart 50).

be at least 4.9 percent of RWAs, while the regulatory Tier 1 capital must remain at least 9 percent in relation to RWAs.

³⁰ The capital adequacy ratio must be above 12 percent of riskweighted assets at all times. The core Tier 1 capital must at all times

The annual growth rate of RWAs was 16.4 percent from 13.1 percent a year ago, as a result of the acceleration of lending activity. The regulatory capital recorded an annual increase of 10.5 percent, influenced by the increase in profit in the current year and the higher retained profit from previous years.

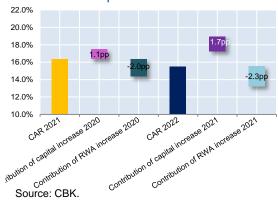
Chart 50. Banking sector capitalization



Source: CBK.

The increase risk-weighted in assets contributed by 2.3 percentage points to the decrease in the capital adequacy indicator, while the increase in regulatory capital contributed to the increase in CAR by 1.7 percentage points (chart 51). The higher effect of the increase in risk-weighted assets than the increase in capital gave a higher downward contribution to the capital adequacy indicator, of 0.8 percentage points.

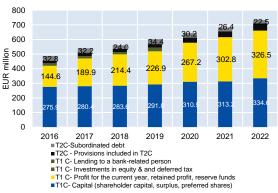
Chart 51. Contribution of regulatory capital and RWA to capitalization ratio



The banking sector has a strong regulatory capital base, 86.9 percent of which is Tier 1 capital, and retained profit has a high share in

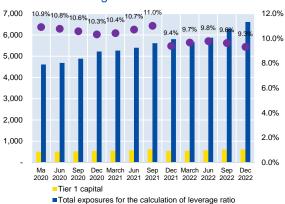
31 According to Basel III, the leverage rate is calculated as the ratio between Tier 1 capital and exposures following regulatory changes. Tier 1 capital (36.0 percent), suggesting that banks are oriented towards capital generation mainly within their activity (profit capitalization).

Chart 52. Structure of regulatory capital



All categories of regulatory capital increased. The value of goodwill, current year's profit and share capital as well as provisions held were characterized by higher growth. (chart 52). In the total profit, the retained profit had the highest effect, being higher for 15.2 percent, while the current year's profit was higher by 8.8 percent.

Chart 53. Leverage ratio



Source: CBK.

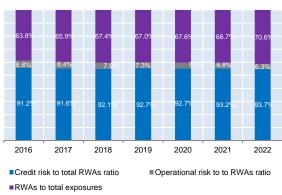
The financial leverage indicator (the ratio of Tier 1 capital to exposures after regulatory corrections) in December 2022 stood at 9.3 percent (chart 53). This ratio stands above the minimum suggested by the Basel III framework for financial leverage of a minimum of 3.0 percent³¹, and suggests a good capital position.

This rate must be equal to or above 3 percent. The CBK, as of 2020, commenced calculating this rate, according to the Basel III standard.

In the context of risk-weighted assets, credit risk-weighted assets recorded a higher growth rate of 17.1 percent from 13.7 percent a year ago, resulting from increased lending activity.

Assets weighted for operational risk recorded an increase of 7.4 percent from 5.8 percent. The share of risk-weighted assets remains similar, with 93.7 percent of RWAs weighted for credit risk, 6.3 percent for operational risk and a very low share, 0.001 percent, for market risk (chart 54).32

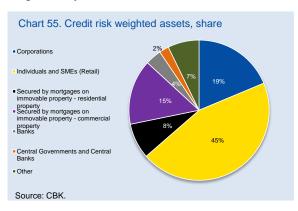
Chart 54. RWAs to total sector assets ratio



Source: CBK.

Credit risk weighted assets (chart 55) recorded a value of EUR 4.3 billion (3.7 billion in 2021). In the context of these assets, retail loans dominate at 44.9 percent, followed exposures to corporations at 18.7 percent.

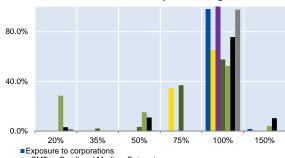
Mortgage loans backed up by commercial and residential real estate have a share of 14.0 and 8.2 percent respectively. Exposure to other banks, governments and central banks was relatively low at 3.7 percent and 2.2 percent, respectively.



³² Market risk-weighted assets were reported for the first time starting from 2020, according to the new reporting format required by the CBK.

Other remaining exposures constitute 7.2 percent of exposures, which include local authorities, the public sector, development banks, international organizations (chart 55).

Chart 56. Asset classes, by risk weight



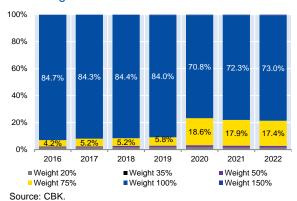
- SMEs Small and Medium Enterprises
- Secured by mortgages on immovable property commercial property

 Secured by mortgages on immovable property residential property
- Exposure to financial institutions ■Exposure to central government and central banks

Other exposures

According risk weight, the category weighted 100 percent, which by also constitutes the category with the pronounced weight in total risk-weighted assets (73.0 percent), and which includes retail exposures, loans to corporations and mortgage loans backed up by commercial property, marked the most pronounced increase this period (by EUR 488.4 million) (charts 56 and 57).

Chart 57. RWA structure for credit risk, by risk weight



Likewise, assets with a risk weight of 75 percent (which includes retail loans and mortgage loans backed up by residential real estate) recorded an increase of EUR 90.9 million (or 12.7 percent). The category of assets with a risk weight of 20%, which includes

lending to financial institutions, governments and the central bank, recorded an increase of 15.7 percent. This development suggests higher credit growth in the retail segment - for individuals, corporations and lending backed up by residential real estate (charts 56 and 57).

5.5. Financing and Liquidity Risk

The liquidity position of the banking sector has been further strengthened, mainly supported by the marked increase in private sector deposits. The increase in interest rates at the global level, which resulted from monetary policy decisions to raise base rates, has caused new challenges in the context of financing costs and maintaining the liquidity position.

The growth of deposits was slower during the beginning of 2022 compared to the trend of the previous year, due to uncertainties from rising inflation and other tensions created at the geopolitical level. Further, tight monetary policies in the second half of 2022 in response to ever-increasing inflation result in an environment of increased interest rates and increased competitive pressures to attract and retain deposits.

Prospects for 2023 give indications of new increased challenges in the context of liquidity and financing. On the one hand, the persistence of inflation in some segments, and potentially much weaker affect will economic activity availability of liquidity in the market, while the further increase in interest rates in the competition for securing liquidity will cause pressure on financing costs.

The liquidity position of the sector during 2022 was further supported by the continuous growth of deposits, and in particular private sector deposits. Household deposits characterized by reliable and stable nature, due to the fact that their main goal is 'saving/retention" of means33. Moreover, in times of uncertainty, households tend to save more in order to be prepared for eventual unforeseen expenses. Banks can meet possible liquidity needs through other mechanisms such as liquidity reserve management, interbank liquidity agreements and funding from parent banks. While CBK, as the last source of liquidity, although limited to the spectrum of mechanisms for direct injection of liquidity into the market (in the absence of monetary policy) in case of urgent needs to support the sector with liquidity, has in its availability the mandatory reserve instrument, the Emergency Liquidity Fund instrument and repurchase agreements with banks based on government securities (REPO agreement).

Despite the high liquidity rate at the sector level, most banks have recorded a decrease in their liquidity ratio from last year, among which some with a more pronounced decrease. Some banks can be deemed more sensitive in this aspect, due to the structure of the balance sheet, the more limited availability of financing sources and consequently the more limited room to maneuver in the environment with increased interest rates.

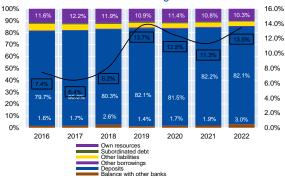
Transferable deposits have continued their expansion, being the dominant category of deposits, while under the influence of increasing interest rates, the participation of term deposits has also expanded, which in combination with the continuous growth of longer-term lending contributed to the emphasis of mismatches between assets and liabilities in some maturity categories. However, the main liquidity indicators give positive signals for the current state of banking liquidity, where both the high level of banks' liquidity reserves held in the CBK and total liquid assets, makes the sector resistant to possible negative effects that may result when the mismatches of maturity terms between investments and financing are highlighted.

³³ In the sense not of savings deposits but of retaining their means.

5.5.1 Bank financing

The financing structure of the banking sector is dominated by private sector deposits, which continued to grow and remian the most reliable and stable form of financing. While household deposits serve mainly for saving purposes (therefore they are considered more stable), companies keep deposits in terms of ensuring liquidity to finance the continuation of their daily activities.

Chart 58. Structure of financing



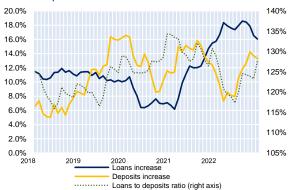
Source: CBK.

Interbank financing is at a very low level, while banks continue to have low exposure to financing in the external sector. This year, deposits exceeded loans by 127.7 percent, an indicator that decreased by 3.1 percentage points from the previous year, under the influence of higher lending growth (chart 59).

While in the first quarter of the year, the trend of deposit growth slowed down, the increase in interest rates in the second half of the year was accompanied by a reinforced increase in the value of total deposits.

Household deposits marked an increase of 8.7 percent, which was slower compared to the increase of 13.8 from the previous year. Their stock reached EUR 3.7 billion (chart 60). Most of them were transferable deposits, which, with their annual growth of 8.4 percent contributed to the base of total deposits. However, it was term deposits that recorded a more marked increase of 18.7 percent, influenced by the banks' campaigns for term deposits, in the competition for attracting deposits. (chart 61).

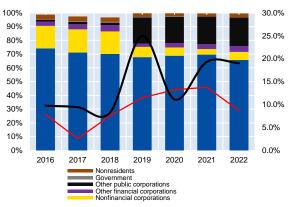
Chart 59. Increase of banking sector loans and deposits



Source: CBK.

Enterprise deposits recorded an annual growth of 19.0 percent (19.3 percent annual growth in 2021). mainly influenced by the accelerated growth of term deposits (of 127.4 percent). The increase was particularly pronounced towards the second and third quarter, more specifically December and September 2022 constitute the highest level of deposits.

Chart 60. Structure of deposits

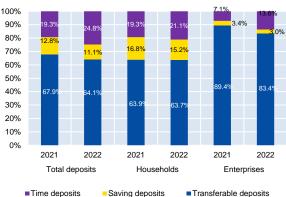


Source: CBK.

The stock of enterprise deposits reached EUR 1.2 billion, with 20.9 percent share in total deposits.

The growth of enterprise deposits was mainly influenced by the increase of transferable deposits as thev comprise dominating category, however, the marked increase in term deposits had a high positive effect on the overall increase in company deposits.

Chart 61. Structure of deposits, by maturity



Source: CBK.

The preference of companies for keeping transferable deposits versus time deposits is related to the purpose for which these deposits serve. Enterprises mainly focus on the use of deposits for liquidity issues and for the purpose of financing their daily activity. However, during the last two years, companies may have been encouraged to time deposit their funds as a result of the weakened economic perspective but also as a result of numerous campaigns with higher interest rates.

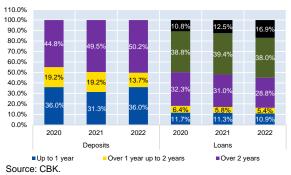
Deposits of other financial institutions and public institutions also recorded significant annual growth, although they characterized by frequent fluctuations throughout the year due to the more flexible nature of the withdrawal of these deposits.

The structure of total deposits maturity is dominated by transferable deposits with a share of 64.1 percent, which recorded an increase this year as well, at an annual rate of 7.9 percent. Time deposits were characterized by the most pronounced growth of 47.1 percent, a dynamic that also results in an increase in the share of these deposits to 25 percent, from 19 percent in the previous year (chart 61).

Transferable deposits are mainly owned by households (65.6 percent) while the remaining part (27.2 percent) belong to enterprises. While transferable deposits and savings deposits increases. time deposits characterized by an annual decrease of 0.9 percent.

The maturities of deposits and loans reveal the structural mismatches between them, which are more pronounced with periods of 'up to 1 year' and 'over 1 year to 2 years'. Time deposits with maturity of 'over 2 years' dominated the structure of time deposits and increased their relative share to 50.2 percent of total time deposits (from 49.5 përqind), while loans with higher share are those with maturity period of 'over 5 to 10 years', comprising 38.0 percent in total loans (chart 62).

Chart 62. Maturity structure of deposits and loans



The high share of transferable deposits and the increase of the requirements for more stable financing increases the need for more prudent supervision of the bank practices in relation to their financing opportunities and related costs towards their increased lending activity. As long as foreign financing is at a low level, the increase of their cost will represent a challenge, especially at this period of increase of inflation and interest rates.

5.5.2 Liquidity risk

The banking sector continues to maintain satisfactory liquidity position, demonstrating its capacity to support lending activity, as well as its high capacity to face potential risks. However, the change in monetary policy by the ECB and the increase in interest rates has translated into increased competitive pressures secure sustainable Furthermore, financing. the weaker economic growth in the euro area and the country and the still evident inflationary pressures can be reflected in weakening of the saving capacity (taking into account the impact that the diaspora has on the deposit cycle).

In 2022, the liquid assets to short-term liabilities ratio decreased to 36.5 percent compared to 37.2 percent in 2021. This result was driven by the higher increase of short-term liabilities versus the increase of liquid assets by 9.2 percent (or EUR 411.8 million), and 7.0 percent (or EUR 116.3 million) respectively. The liquidity ratio would fall to 32.2 percent, if the securities of the government of the Republic of Kosovo were excluded from the liquid assets. Likewise, the narrow liquidity ratio, which includes only highly liquid assets (cash and cash equivalents, current accounts and placements), compared to short-term liabilities, decreased slightly to 29.3 percent from 30.4 percent in the previous year, due to the higher increase of liabilities versus highly liquid assets.

The ratio of liquid assets to total assets decreased to 27.1 percent (28.8 percent in 2021), as assets grew faster than liquid assets (chart 63).

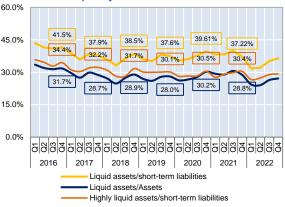
The increase in liquid assets during the period resulted mainly from the increase investment of marketable securities of foreign governments of EUR 43.2 million (32.3 percent increase) and increase in deposits with shortterm maturity up to 30 days placed with the banks abroad of EUR 22.3 million. Also, an important contribution to the growth of liquid assets had the growth of EUR 5.2 million of the dominant category, which is the liquidity reserve with the central bank (with a share of 33.0 percent), then of cash of EUR 32.9 million or 13.1 percent annual growth.

Whereas, the category of investments in securities of the government of Kosovo had a decreasing effect on liquid assets, which decreased by EUR 39.3 million (18.9 percent annual decrease).

The liquidity reserves of commercial banks continue to be at high levels, exceeding the required reserve held at the CBK by 49.2 percent.

Since 2016, the CBK has applied a negative interest rate on the surplus of the required reserve that commercial banks in the country hold at the central bank, in line with the ECB's decision. Despite the applied negative rates, the banks have been quite liquid and in the of absence attractive opportunities investment of funds, they have continued to exceed the mandatory reserve by an average of 40-60 percent. However, recent dynamics with interest rates may create space for alternative investments with more attractive returns.

Chart 63. Liquidity indicators



Source: CBK.

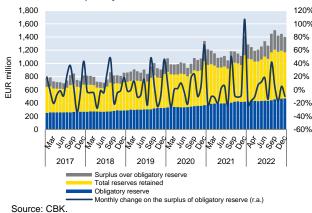
Continuous inflationary pressures have created pressure against the tightening of monetary policies. The transmission of changes in the basic interest rates by the ECB, in the second half of the year, has been reflected in all segments of the financial market in the country, where the deposit rate with which the CBK charges its depositors has also been affected in the same line. The rate level depends on the rates that euro area banks apply to the CBK, as well as on the investment returns in the current investment portfolio. Consequently, with the increase in interest rates globally, the CBK has started to apply a positive interest rate of 0.15 percent from January 2023 to all depositors at the CBK, as well as for commercial banks - applicable on the minimum reserves held at the CBK. The level of the surplus of bank reserves during 2022 of 49.2 percent has decreased compared to 2021 which was at the level of 68.3 percent and 82.3 percent in 2020, as a result of the much higher annual growth of lending activity, against the continuous growth of deposits (chart 64).34

during the third quarter months and in December of the respective years.

³⁴ Liquidity surplus is characterized by seasonality effects. The tendency to increase the level of excess liquidity reserves is observed

The environment of low interest rates for a long time has stimulated households to shift their deposits in favour of shortterm maturity, which, in addition to the growing trend of long-term lending, has resulted in highlighting maturity mismatches between assets liabilities. Throughout the second half of 2022, the maturity of deposits has taken on more attractive proportions from the highest rates offered in the market, a development that has resulted in a more widening pronounced \mathbf{of} the especially in the "1-5 years" maturity category".



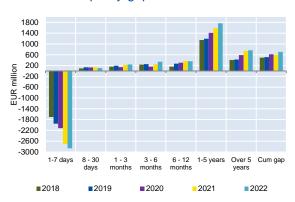


Maturity mismatches between investments and financing in certain categories of maturity terms have increased further in conditions where trasferable and time deposits up to 5 years have increased, while at the same time the long-term mortgage lending is increasing, a movement that is increasing the challenges in liquidity management.

The cumulative liquidity gap in 2022 expanded to EUR 709.6 million, from EUR 598.8 million in the previous year. This result was mainly influenced by the more pronounced expansion of the positive gap between assets and liabilities with maturities of "1 to 5 years", due to the higher growth of liabilities with this maturity (44.5 percent growth). About 38.9 percent of the assets are categorized in the term of '1-5 years", in relation to the liabilities of this term, which constitute 13.9 percent of all liabilities. The much higher participation of assets in this category and the annual growth

of 19.8 percent has influenced the mismatches to expand into positive territory despite the increase of liabilities in this category of 44.5 percent.

Chart 65. Liquidity gap*



Source: CBK.

The next higher expansion was in the negative gap between assets and liabilities with maturities of "1 to 7 days", due to the higher share of liabilities in this maturity, since the growth was the same for both assets and liabilities. The high participation transferable deposits in the total liabilities of the sector means that 71.2 percent of the liabilities are categorized in the term "1-7 days" in relation to the assets of this term which constitute only 20.6 percent of the total assets.

Other categories of maturities also recorded growth, which created a positive liquidity gap, with the exception of maturity categories '8-30 days" and "6-12 months", in which mismatches were narrowed.

Consequently, the mismatches in the maturity terms of the balance sheet items are the most pronounced in the categories of maturity of '1-7 days' and '1-5 years' (chart 65). This situation presents a challenge for the management of banks' liquidity with the continuation of the rapid growth of long-term lending and financing competition.

5.6. Shock absorption capacity - Stress-test analysis35

The assessment of the stability of the banking sector against the increased risks resulting from exposure to unfavorable economic and financial situations, has been carried out through the calibration of scenarios based on real forecasts as well as more extreme but possible events for the next one-year period. The last three years were characterized by many challenges for the banking sector directly created by the highly fluctuating dynamics at the global level. The start of the war in Ukraine, the intensification of inflation and the resulting energy crisis clouded the prospect for continued economic growth in the euro area, to which the country's economy and financial system are much more exposed. Further, the inevitable reaction of monetary policy to the situation with inflation, through

the increase of the base interest rates, gave indications for a possible recession at the end of the year and into 2023. However, the economies performed better than expected and therefore forecasts changed accordingly, for slower growth. At the same time, despite the created situations, even the banking sector in the country so far demonstrated resilience without any materialization of risks.

For this reason, beyond the forecasts, the developments and consequently also the assumptions made in this resilience analysis, are accompanied by high uncertainties due to the more fluctuating economic outlook, which is related to the future developments in the geopolitical order, the progress with inflation, the progress with interest rates as well as the follow-up costs of future monetary decisions, which consequently subjectivize the economic performance of all actors in the market.

Table 5. Assumptions for credit risk scenarios

Indicators	Baseline scenario	Adverse scenario	Severe scenario	Moderated scenario of credit risk in combination with market risk		
	Assumptions					
GDP (real grow th rate, %)	4.0	2.4	-5.6	2.4		
Gross loan (credit growth rate, %)	12.6	12.6	8.6	12.6		
Interest growth rate in balance sheets (for percentage points loans/deposits)	n/a	n/a	n/a	2.0pp/1.5pp		
profit (profit growth rate, %)	0.9	-9.7	-24.8	-0.7		

Source: CBK.

The construction of credit risk scenarios will include macroeconomic financial shocks to the capital position. This exercise considered three scenarios and one combined scenario, at the sector level, based on the assumptions that were built on the predicted levels of economic growth influenced by several factors such as the drop in income from the diaspora and the tightening of lending conditions mainly originating from the dynamics of the inflation rate.³⁶ The direct implications of inflation on consumer purchasing power and

living standards are of particular importance for the chain effect they can have on the credit performance of borrowers (weakening repayment ability) and on banks' liquidity (possible reduction of deposits due discouraging savings as a result of inflation and/or increased opportunities for investments with more attractive returns, increased concentration of deposits in the most competitive banks with interest rates, etc.).

Despite the downward trend of headline inflation, inflationary pressures remain at high levels. The persistence of inflationary

 $^{^{35}}$ The Stress-test does not represent a forecasting model, but contains supposed scenarios of macroeconomic and financial shocks in order to measure the banking sector's resistance to these negative shocks without prejudice that such situations may or may be expected to occur in the future.

³⁶ The rate of inflation growth is predicted with the ARIMA statistical model.

the pressures and prospect oftheir continuation influenced the ECB to respond with a further increase in basic interest rates at the May meeting, the sixth decision since July 2022. The increase in basic interest rates has implicated the financing conditions and the liquidity situation, being transferred directly to the financial market in the country. Such a situation is reflected on both sides of the banks' balance sheet, increasing the focus of all actors on liquidity risk. In the newly created circumstances, in the fourth compiled scenario, the market risk is also combined, based on the assumption of an increase in interest rates that reflect the increase in rates at the global level and the increase in risks in the market. These new developments in the financial market are considered to have a negative effect on the perspective of economic growth, as they may limit lending conditions and confidence in the market.

According to the results from the credit portfolio shock test, the capital position of the banking sector, in general, could withstand shocks in two of the three designed scenarios (chart 71, table 7).

Table 6. Relisience coefficient of NPL rate

Description	Resilience	NPL rate reactions			NPL rate reactions		
		Baseline scenario	Adverse scenario	Severe scenario			
Expansion of output gap	0.80 pp	-0.48 pp	0.83 pp	7.21 pp			

Source: CBK.

At the level of banks, in the most severe scenario, many of them would face the need for additional capital to cope with shocks to their credit portfolio.37

The results from the shock test on the liquidity position suggest that the banking sector in its entirety has the financial capacity to withstand the supposed withdrawal of a significant number of deposits or larger depositors, even though some banks appear more sensitive to assumed scenarios. In all the assumed scenarios, the liquidity position of the majority of banks is stable, except for the assumption of withdrawals of 38.3 percent of deposits at the end of the fifth day in a row, where four banks would be presented with a lack of liquid funds (table 9).

5.6.1. Assessment of resilience to shocks in the credit portfolio and capital position

The stress-test analysis for credit risk assesses the resilience of the banking sector, through the application of three scenarios: the basic scenario based on expected developments, alternative (moderate) scenario which has as a starting point the assumption of the decrease in economic activity due to the reduction of revenues from diaspora, and the worse-case scenario that assumes a more pronounced economic slowdown influenced by forecasts for an economic slowdown in the euro area under prolonged inflationary pressures, and the creation of more limited

financing conditions (tables 5 and 6). In the first two scenarios, credit growth is assumed to be 12.6 percent, lower than this year's growth, and 8.6 percent in the worst-case scenario, due to uncertainties about the progress of inflation and economic activity (table 5).

The basic scenario relies on expected macroeconomic developments. In this scenario, economic activity in the country is forecasted to have a positive and higher growth compared to the previous year of 4.0 percent. Economic growth is assumed to be accompanied by slower credit growth, which is on average slower compared to the previous year, based on the forecasts of individual banks38 (table 5 and 7). It is also assumed that higher incomes will be realized because the income from interest on

^{37 10} out of 11 banks operating in the Kosovo market are included in the analysis. Credins Bank is not included, considering it is at the beginning of its activity.

³⁸ According to banks' forecasts for 2023, the annual growth of banking sector lending will average 13.0 per cent (provided by the Department of Banking Supervision)

loans can increase from the increase in lending. These assumptions are reflected in the calculation of the profit for the 2022, so that the net profit after tax realized during the year 2021 was taken as the basis, to which was than applied the deduction of the revenues that would have been realized if the NPL had not been increased. In this case, the profit will be higher than in the current year by 0.9 per cent due to the decrease in NPLs39 along with the increase in lending.40 The results based on these assumptions suggest that the ratio of non-performing loans will decrease by 0.48 percentage points, due to increased economic activity, in which case the capitalization rate will improve to 17.1 percent from the current level of 15.3 percent⁴¹. The increase in the capitalization rate mainly results from the higher increase in revenues expected to be realized in the following year against the requirements for the additional provisions expected from the increase in lending, as well as due to the inclusion of the profit realized in the current year in the calculation of capital level, under the assumption that no dividend will be distributed (chart 68, chart 69, table 7). Two banks (one bank results with a capital ratio below the regulatory requirement even before the shock, which is a bank branch and therefore is not subject to the minimum capital requirement of 12 per cent), would experience deterioration of the capital position.

In the second scenario, a slowdown in economic activity to 2.4 percent is assumed, simulating the drop in income from the diaspora, diaspora visits, and the drop in real estate investments. 42

The duration of inflationary pressures has created obvious consequences, which, in addition to the weight in the consumer basket, also affected financing and lending

39 The assessment of the 'lost' revenues as a result of the increase in NPLs was initially done by calculating ex-post the general interest rate on loans for each bank, which was then multiplied by the NPLs added value.

conditions with consequences to the general economic activity.

Chart 66. Capital Adequacy Ratio, by scenarios



Source: CBK.

While prices in international financial markets have fallen, inflationary pressures as a result of rising wages and prices of services remain evident in the euro area. Slowed economic growth in the euro area could be reflected in the country through the decline of remittances and other inbound sources that are linked to the diaspora. According to the results of this scenario, based on the coefficient of elasticity of NPLs to economic growth, the rate of nonperforming loans would increase by 0.83 percentage points to 2.9 percent (table 6). assumptions are reflected in the calculation of the profit for 2023, which would suffer a shock by decreasing by 9.7 percent as a result of the increase in the loan default rate. The losses of the sector would reach the value of EUR 31.1 million (chart 72). These losses would be charged directly to capital, but the high level of current provisions held to cover loan defaults makes the sector more resilient to the shocks assumed in this scenario, with the resulting capital adequacy ratio at 16.0 percent. Two banks would be undercapitalized (one bank branch), for which the capital adequacy ratio would decrease to 10.0 percent and 9.5 percent, respectively. The additional funds needed to raise the capital to the required minimum level would reach the value of EUR 1.7 million (table7).

⁴⁰ The impact of these developments on the quality of the credit portfolio is calculated through the coefficient of resilience of nonperforming loans to the production gap of 0.8pp. IMF research paper,

unpublished, 'CESE Bank Loss Projection and Stress Testing Exercise', July 2009.

⁴¹ The provisioning ratio according to the credit pillars for each bank, in order to calculate the additional provisions necessary with the increase of NPLs, has been determined to be the same as the provisioning ratio of each correspondent bank, which is realized in 2021.

⁴² For constructed scenarios of economic growth, refer to Box 2.

Table 7. Results of stress test scenarios for credit risk

Description	Number of banks w		Capitalization rate		NPL rate			Additional assets needed for recapitalization (EUR thousands)
		higher level	low er level	sector level	higher level	low er level	sector level	
		higher level	low er level	sector level	higher level	low er level	sector level	
Current levels (prior to shocks)		95.0	13.2	15.3	2.8	0.0	2.0	
Scenarios results								
Baseline scenario: NPL decline rate for 0.48pp, credit growth for 12.6%, profit increase for 0.87%	2	55.4	10.5	17.1	2.4	-0.5	1.6	884
Adverse scenario: NPL grow th rate for 0.83pp, credit grow th for 12.6%, profit decline for 9.7%	2	55.3	9.5	16.0	3.7	0.8	2.9	1,719
Severe scenario: NPL growth rate for 7.21pp, credit growth for 8.6%, profit decline for 24.8%.	6	65.5	6.5	11.9	10.1	7.2	9.3	51,545
Moderated scenario of credit risk in combination with market risk	0	57.0	13.2	17.6	3.7	0.8	2.9	0
Failure of three largest borrowers	3	67.9	9.2	14.7	38.1	2.1	7.9	1,157
Failure of five largest borrowers	5	59.4	5.4	13.0	52.3	2.1	10.5	17,319

Source: CBK

In the adverse scenario, more extreme negative developments of the current dynamics and higher sensitivity of the economic activity in the country to these developments, although with a lower probability of occurrence, are estimated. Real GDP is assumed to decline by 5.6 percent, close to the level experienced throughout the pandemic period. This situation can be characterized by increased uncertainty in the generation of incomes and further weakening of the borrowers' solvency. Although a difficult scenario, lending is assumed to increase by an average of 8.6 percent, taking into account that some banks have their own capital capacities that support lending despite the situation of increased uncertainties. The banking sector would cope with an increase in the ratio of non-performing loans by 7.2 percentage points, increasing to 9.3 per cent. In the analysis, the possibility of realizing collateral or increasing capital from other sources is not considered, since the efficiency and possibility of realizing these actions is very uncertain in times of crisis. Profits will suffer a shock from the increase in the default rate of existing loans, decreasing by 24.8 per cent. The sector losses would reach the value of EUR EUR 219.0 million (chart 72) and the level of capitalization after the shock will

go down to 11.9 per cent (table 6). The number of banks with problems in the capital position would increase to six, of which two banks of systemic importance and another bank of systemic importance very close to the regulatory limit, whose CAR would decrease to 11.8 per cent and 9.9 per cent. The additional funds needed to raise the capital to the required minimum level would reach the value of EUR 51.5 million (chart 72, table 7).

5.6.1.1 Credit risk scenario combined with market risk

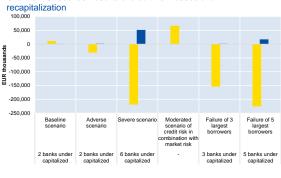
The moderate credit risk scenario, which forecasts an economic decline of 4.7 per cent is associated with the market risk scenario, namely with the assumption of a 2.0 percentage point increase in interest rates on asset positions and 1.5 percentage points in liability positions (table 5). The transmission of the increase in the basic interest rates from the ECB and Euribor, which are currently at the level of 3.3 per cent 43 would not be complete but it would affect assets more than liabilities, while liabilities under the influence of competition between banks to ensure stable financing are assumed to suffer a rate increase of 1.5 percent points.

However, the assumption of an increase in interest rates in this scenario is based on the

⁴³ According to the data of the month of May (<u>Key ECB interest rates</u> (europa.eu); Euribor 3 months - 3 month Euribor interest rate (globalrates.com))

current situation of increased inflation and the fact that the monetary authority of the euro area has given signals that the possibility of a further increase in basic interest rates is not excluded, and this will indirectly further affected interest rates in the country. The analysis is based on 1-year static balance sheet; therefore, it is considered that the same instruments that mature within one year will be reinvested and refinanced with assumed interest rates in this scenario. Also, on the asset side, positions with a maturity of over one year are also included, but only those with variable rates, because the cost of these loans changes depending on the movements of the Euribor even within the year.





Source: CBK.

The share of non-performing loans to total loans would remain the same as in moderate credit risk, at 8.9 per cent. While the sector losses with application of the assumption on the increase of interest rates at this level would be reduced by EUR 97.2 million to 66.1 million (chart 72). In this scenario, the assumption of an increase in interest rates has given positive effects on net interest income, since the sector a positive balance sheet gap with sensitivity to interest rates and under the assumption that the same positions would be reinvested, it turns out that the sector's income would be higher - albeit with negative effects on borrowers' costs.

The level of capitalization after the shock is 17.6 percent for the year 2023, which is improved over the current level (chart 67 and table 7).

5.6.1.2 Scenario of the risk from failure of large credit exposures

In this scenario, the stability of the banks against the possible failure of the three and five largest borrowers has been evaluated. The assumption of the failure of the three largest borrowers would affect the capitalization level of the sector to fall to 14.7 per cent from 15.3 per cent and the losses to reach EUR 169.7 milion (chart 67 and table 7).44 Three banks would face high losses, among them two bank branches that are not subject to capital regulation.

The failure of the five largest borrowers would further worsen the situation in these three banks, as well as two other banks, while one of them is of systemic importance. The losses would reach EUR 225.4 million and the CAR of the sector would decrease to 13.0 per cent. Under-capitalized banks would need an additional EUR 17.3 million to increase capital to the minimum regulatory level (chart 72 and table 7). The results of this scenario suggest that the sector is sensitive to large exposures, whose performance should be closely monitored under the current crisis conditions. It is also emphasized that the increase in the concentration of credit exposures in conditions of further deepening of the economic crisis represents a marked increase in the sensitivity to credit risk.

5.6.1.3 Capital capacity of banks to absorb the growth of non-performing loans

The banking sector is able to handle the NPLs to total loans ratio up to 8.5 per cent without need for additional capital injection maintain the sector's CAR at the required regulatory level of 12.0 per cent. Also, the NPLs affordability levels of each bank before capital problems appear are high for some banks. The lowest tolerance threshold for an increase in the NPL rate was 4.99 per cent,

the ratio of exposures to the tier 1 capital of the bank, but to the tier 1 capital of of parent banks, despite this, cannot exceed the amount of FUR 25 million

⁴⁴ The large exposures reported by bank branches are included in the analysis, which although operate in the capacity of branches of foreign banks, these institutions are not subject to the regulation for limiting

while a systemically important bank would be able to withstand an increase in the NPL rate of up to 7.2 per cent. The highest level of coping with the increase in the NPL rate is 13.1 per cent, before the bank is presented with the need for additional capital.

5.6.2 Assessment of resilience to shocks in the liquidity position

The resilience test of the liquidity position of the banking sector aims to assess the financial ability of banks to cope with the lack of liquidity caused by extreme situations.

The test is based on two hypothetical scenarios that assess the sufficiency of banks' liquid assets to cope with withdrawals of a value of deposits within 5 days, as well as coping with the risk of failure of concentrated deposits. The scenarios are quite conservative due to the fact that the possibility of banks meeting part of the liquidity needs through external sources of financing has not been taken into account. Also, in the scenarios of the immediate withdrawal of the largest depositors, the fact that some depositors have specific contracts with the bank. orhave bank-client

relationships in such a way that their withdrawal is more predictable and/or not easily feasible based solely on the subjective judgments of customers have not been taken into account, except for extreme objective situations that may occur.

Scenario 1: Withdrawal of deposits on a daily basis

In this scenario, the withdrawal of deposits divided by structure and subjects, at different levels of withdrawals on a daily basis (table 8). for five consecutive days, is taken into consideration. After each day, 5 per cent of the deposits are allocated from the remaining deposits for the purposes of the bank's operation in the following days. This implies that, under the assumed scenarios, the reserve requirement of 10 per cent would be halved. The scenario is also built on the assumption that during this period the possibility of converting liquid assets into cash would be 80 per cent of liquid assets, while non-liquid assets would be only 1 per cent of these assets within the day.

Table 8. Assumptions about liquidity risk scenarios

Withdraw als of deposits	Assumptions for time withdrawals	Level of deposits withdrawal
Households- Transferable Deposits	Every day, for 5 consecutive days	10.0%
Enterprises - Transferable deposits	Every day, for 5 consecutive days	9.0%
Other entities - Transferable deposits	Every day, for 5 consecutive days	8.0%
Saving deposits	Every day, for 5 consecutive days	10.0%
Time deposits	Every day, for 5 consecutive days	8.0%
Five largest depositors	Intra day	100.0%
Tw enty largest depositors	Intra day	100.0%

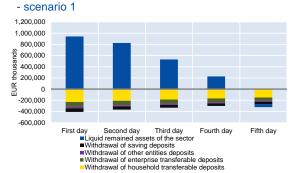
Source: CBK.

The banking sector in Kosovo has no history of previous financial crises and the situations created during and after the pandemic crisis have not translated into high levels of deposit withdrawals. In these circumstances, more extreme levels have been assumed to assess the banking sector capacity to withstand losses. These more extreme levels are based on the experiences of countries in the region,

which have evidence of such situations of significant deposit withdrawals in the past (table 8).

The scenarios results suggest that the most of banks would be able to afford to withdraw deposits according to the defined levels, on a daily basis until the fourth day, where two banks would end up needing additional liquidity.





Source: CBK.

On the fifth day, liquidity problems would appear in four banks, including three banks of general systemic importance. The value of liquid assets in the absence would reach EUR 169.9 million (chart 68, table 9). The general withdrawal rate of deposits in the banking sector on the fifth day would reach 38.3 per cent of total deposits (table 9).

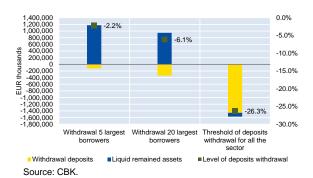
Scenario 2: Withdrawal of deposits from larger depositors

Although the financing position of banks is generally considered to be stable, inherited from good practices over the years, recent developments in the economy and the financial market with the increase in interest rates have shaken the stability of liquidity, increasing the sensitivity to this risk. The increase in competitive pressures in the deposit market in the country may endanger and result in an increase in the concentration of deposits. Consequently, with the addition of attractive deposit offers, there may be a risk of depositors leaving less competitive banks, contributing to a more concentrated funding base in other banks. If the resilience test (stress test) is applied, under the assumption that within the day the five largest depositors will withdraw their deposits, then the liquidity position in most banks turns out to be able to withstand the withdrawal of deposits from five the largest depositories. However, three banks appear to have much more concentrated funding, resulting in illiquid conditions if the three largest depositors withdraw from their

⁴⁵ In the absence of monetary policy and having only a few liquidity instruments available - elaborated in more detall in the liquidity risk section.

banks, in which case the loan-to-deposit ratio would increase to 191.0 percent at one of these banks from 73.6 percent.

Chart 69. ST results for liquidity risk - scenario 2



While under the assumption that **the twenty** largest depositors of each bank withdraw their deposits within the day, then the liquidity situation would weaken further in these three banks. The lack of funds for these three banks would reach EUR 60.0 million (chart 71, table 9). The results of this scenario generally suggest that the banking sector of Kosovo does not have a significant concentration of the source of financing, namely deposits, excluding banks that have just entered the market. However, the issue of liquidity management remains sensitive, under of CBK's the conditions limited opportunities for quick intervention in the market in case of a liquidity crisis45, high seasonality of deposits (business cycle and diaspora influence) as well as situations in the market that banking digitization and fast information has created. The rapid spread of panic from a negative event and the consequent very rapid withdrawal of deposits, made possible by digitalization, increases the sensitivity of each bank to liquidity risk.

5.6.2.1 Coping level of deposit withdrawal before the liquidity position reaches critical levels

The results suggest that the banking sector would be able to handle the withdrawal of close to a third (26.3 percent) of the total deposits within the day, without the need for additional liquid assets (chart 69 and table 9).

Whereas at the bank level, the bank with the lowest withdrawal threshold stands at 19.0 percent, which is a systemically important bank, while the highest withdrawal threshold is 80.0 percent and 68.0 percent (as a result of the high level of liquid assets that these banks posses as well as the fact that they are in the initial stage of credit activity).

Table 9. Results of stress test scenarios for liquidity risk

Results of credit risk scenarios	Number of banks which lack liquid assets	Level of withdrawal deposits (%)	Additional needed liquid assets (in thousands of EUR)	Loans to deposits ratio
Scenario 1: Withdraw al of deposits on a daily basis at the end of the fifth day	4	-38.3%	(169,857)	126.9%
Scenario 2.1: Withdraw al of deposits from 5 largest borrow ers	3	-11.3%	(21,472)	88.2%
Scenario 2.2: Withdraw al of deposits from 20 largest borrowers	3	-17.4%	(59,999)	94.8%
Threshold - Withdraw al of deposits to the critical level of liquidity		-26.3%	(113,512)	106.2%

Source: CBK.

Box 5. Assessment of the integration of climate change risk management in the banking sector

The dynamics that have characterized the globe in environmental terms and the ever increasing challenges in addressing the risks that accompany this dimension have been set at the top of international agendas especially in recent years. Climate change has already been identified as a source of risk to overall financial stability, and central banks and financial supervisory authorities have taken initiatives in building analytical and modeling capacities to address the vulnerability of the financial system to climate change. This analysis, which is a continuation of the analysis focused on the last financial stability report⁴⁶, elaborates on the findings of a survey carried out with banks in the country. The survey in question was carried out within the initiative for drafting the Green Strategy of CBK, through technical assistance from FinSAC. Seven banks participated in the survey, out of a total of twelve operating in

Kosovo, which constitute about 93 percent of the total assets of the banking sector. The survey aimed to assess the extent to which banks have included the aspect of climate change in their governance

frameworks, strategies, risk management practices, stress-test analysis, supervisory functions and lending and investment activities. The findings in this survey provide a comprehensive overview of current climate risk management in the banking sector and provide guidance for actions needed to increase capacity in the future.

The survey for this study consists of 70 questions divided into several sections, designed to assess the banks' organizational structure, risk management practices, internal control systems and their approach to the main risks that are affected by risks related to climate change. The questionnaire is divided into ten main sections (highlighted in the analysis), each focusing on specific aspects of banking operations and risk management.

In the general questions section, the banks' responses address their general perceptions and strategies regarding the impact of climate change and environmental factors on the banking sector. In this context, a part of banks (three out of seven banks) assessed the impact of climate change as one of the most relevant risks for banks in the current environment. Further, the two banks emphasized the role of banks as key actors in addressing climate-related risks, acknowledging the important role they have in advancing sustainable financing.

⁴⁶ Financial Stability Report, issue 18. Box 5. Climate change and its importance to financial stability (https://bqk-kos.org/wpcontent/uploads/2022/07/BQK_FSR_18.pdf)

On the one hand, the majority of banks (five banks) emphasized the physical risk related to climate change as an increasing risk in the short term, which includes natural events relevant to our country such as floods, storms or droughts. Meanwhile, the risk of transition is expected to affect the sector in the medium and long term. On the other hand, banks perceived as an opportunity the development and offering of new products related to climate change management, such as green financial products.

The results indicate potential for further development organizational structure, and administration risk management practices in terms of climate change risks. While four banks appear to have identified an executive director responsible for sustainability and climate change risks, three banks have not responsibilities. specifically assigned these Moreover, in terms of the adequate allocation of resources, three banks declared that they have sufficient resources, while one bank declared that they were lacking, and the other three banks emphasized that they plan to address these shortages through training or recruitment. While a number of banks (three banks) have established regular reporting and discussions on sustainability and risks related to climate change at senior management levels, another part (two banks) has not currently adapted these practices. However, there are plans by two other banks to adapt regular reporting and discussion practices in the near future.

The internal control systems section focused on banks' strategies for risk management, including tolerance, limits, identification, assessment and mitigation of risk.

Regarding risk management strategies, three banks have developed qualitative and/or quantitative environmental sustainability objectives integrated them into their risk strategies, two banks have not applied such an approach, and the remaining two banks stated that plan to set these objectives in the future. As one of the main drivers of the impact of climate change on the banking sector, which is also related to the bank's risk strategies, was the physical risk, stated by three surveyed banks. In addition, three out of seven banks participating in the survey have launched green products for both individuals and enterprises.

The survey results showed that only two banks have included a well-defined description of climate change risks in their risk inventory. However, five

banks have included qualitative statements about avoiding exposure to certain customers or economic activities, based on the environmental impact they carry, showing a proactive approach to managing climate change risks. The limitation of exposures to certain sectors also constitutes the limits set by the banks against the risks related to climate change, where exactly four banks applied these limits. On the other hand, although physical risk was seen as the main driver and the most eminent risk, none of the banks have applied limits in terms of geography (specific locations) to avoid areas most sensitive to climatic events, such as floods, droughts or storms.

Furthermore, only two banks have identified climate change risks as material risks. At the same time, although these risks are included in their risk inventory, they are not treated as separate individual risks, but integrated into existing risks.

As for the banks' capacity to assess the transition risk, the four banks that claimed to have the capacity to assess this risk are currently in the process of assessment. Whereas, as far as physical risk assessment is concerned, only two banks confirmed the capacities for such an assessment, which are also currently in the assessment process. The key obstacles in the assessment of these risks turn out to be the lack of technical knowledge and resources in this field, the lack of data, as well as the lack of regulations and legal guidelines.

The survey results show that the majority of banks (six banks) have not yet included physical and environmental risks arising from climate change in their decision-making criteria and risk mitigation procedures. This suggests that banks have not fully integrated climate change-related risks into their risk mitigation frameworks.

In terms of information and communication systems, the survey examined banks' approach to managing data on climate change risks, developing internal infrastructure, using external data sources, and publishing relevant data. The results show that only one of the banks has the most advanced internal data infrastructure, producing data such as emissions data, climate change strategies and targets, the probability of potential physical hazard events, as well as granular geographic data. Meanwhile, another bank has initiated a survey regarding the risks of climate change with their corporate clients. On the other hand, none of the banks possess or receive data from external sources. Also, these data are not published by any bank.

The results of the survey show that currently none of the banks have included climate change risks in their 'Stress Test' analysis. However, two banks plan to integrate these risks in the future. Reasons for not including these risks include the need for guidance, lack of resources, lack of a regulatory requirement, as well as not including climate change risks in the bank's policies.

The supervisory functions within the banking sector consist of three main components: the risk management function, the compliance function and the internal audit function. These functions work together to ensure the effective identification, assessment and management of risks, including those related to climate change.

The survey results show that most banks (five banks) have defined the duties and responsibilities of the risk management function for climate change risks. However, banks gave mixed responses regarding the sufficiency of human and technical capacity to oversee these risks, with an equal number of banks stating sufficiency and insufficiency, exactly three banks. Further, five banks have taken action to improve their capacity to manage climate change risk, while a minority have not identified any specific action. This shows that while progress has been made in defining duties and responsibilities, there is still a need for banks to ensure they have the appropriate capabilities and undertake continuous improvement measures to effectively oversee risks related to climate change and the environment.

The results of the survey show that the majority of banks (five banks) have not defined sustainability or climate change-related functions within compliance function. While a minority of banks (two banks) have verified non-engagement greenwashing'47 practices and have sufficient skills in the compliance function to oversee climate change risks, a significant number of banks (five banks) showed a lack of skills in this regard.

Further, three banks have included climate and environmental risks in their annual audit plans, demonstrating recognition of the importance of assessing these risks by the internal audit function. However, four banks stated that internal audit did not conduct reviews of their system for managing risks related to climate change and environment.

In the **credit risk** section, the survey findings suggest that most banks (six banks) have yet to fully integrate climate change-related risks into their credit risk management policies and practices. Although some banks have taken initial steps to recognize these risks, there is still room for improvement in the continued inclusion of climate change impacts, information on carbon intensity and environmental factors in the assessment and cost of credit risk. The results of the survey suggest that none of the banks currently consider climate change risks when determining credit ratings or when calculating Probability of Default (PD) and Loss Given Default- LGD'). However, two of the banks expressed their intentions to include these factors in the future. Additionally, survey findings indicate that currently only one bank conducts periodic or ad-hoc assessments of climate-impacted collateral throughout the life of the loan. Finally, the survey results show that most banks have yet to develop an environmentally sustainable lending policy or establish a system for the continuous assessment and monitoring of their credit portfolio for climate change risks.

The market risk section examined the integration of criteria related to climate change (for example, the exclusion of certain activities that contribute to climate change or projects focused on reducing energy consumption) in the banks' investment policies and procedures. The survey findings revealed that only two banks have included specific criteria related to factors related to climate change in their investment policies. Although this shows progress, it is worth noting that the rest of the banks have not yet incorporated these criteria. However, a bank is in the process of developing policies and procedures to integrate such criteria into their investment policy.

The liquidity risk section examined banks' use of green financing instruments, such as green bonds, as part of their liquidity management strategies and policies. The results of the survey revealed that none of the banks in the country have issued green financing instruments and have not planned to do so in the near future. This development is expected based on the lack of capital market and basic infrastructure for trading this type of instrument.

In the **operational risk** section, the survey results show that five banks consider business continuity

⁴⁷ Practices of presenting the bank, in general, or assets, income or other items, in particular, as sustainable for the environment, when in fact they are not. Examples can be: a) false environmental commitments, b) lack of transparency on their investment practices, c)

claims for green investments, where only a marginal part of investments are such, and d) use of non-clear for environmental initiatives, without clear definitions.

risk driven by physical risk from climate change, and have included physical emergencies affected by climate change in business continuity plans and disaster recovery plans. Also, five banks have registered the materialization of operational risk as a result of natural events from climate change. At the same time, six banks stated that they have insured their operations against climate events such as fire, floods and storms, however the insurance in question is not specific to climate change risks. Only two of the banks have included physical risk from climate change in their operational risk management policies. These results indicate that there is variation in the extent to which banks have integrated climate change risks into their operational practices. Barriers identified by banks include lack of data and methodologies, lack of external guidance, lack of resources and expertise in this area, and lack of customer awareness.

In the section on the role of the Central Bank, the majority of banks (six banks) believe that the Central Bank should play a role in regulating the risks associated with climate change. The preferred form of involvement is through regulation, although guidance is also seen as useful. Banks also expressed the need for guidance from the Central Bank on managing climate change risks, and welcome knowledge-sharing activities from the These findings indicate Central Bank. assessment of the impact and potential guidelines of the Central Bank in promoting effective climate change risk management practices within the banking sector in Kosovo.

Shortcomings and potential areas for improvement

The results of the survey provide valuable information that can guide future improvements in climate change risk management practices in the banking sector. Based on the findings, there are several areas where banks can focus their improvement efforts in order to increase their resilience to climate change risks.

First, banks should further strengthen governance by providing clear mandates and responsibilities for dedicated structures responsible for climate change

risk management. This includes ensuring that these structures have the necessary expertise and resources to effectively oversee and manage the risks associated with climate change. Furthermore, banks should consider integrating these risks into their board-level discussions and decision-making processes, to foster a culture of awareness and accountability for climate change and the environment.

Second, banks should improve their management framework by further integrating climate change-related risks into their risk identification, assessment and mitigation processes. This means including factors related to climate change in credit risk assessments, stress test scenarios and risk mitigation measures. Banks can also explore using scenario analysis techniques to understand and quantify the potential impact of climate change risks on their portfolio.

Furthermore, there is a need for data collection and to support climate change management. In this regard, banks should invest in infrastructure and data systems that enable the collection, aggregation and analysis of climate change data. This includes collaborating with relevant stakeholders to improve data availability and quality, as well as exploring partnerships with external data sources to provide access to specialist databases in the field.

Finally, effective cooperation and knowledge sharing between banks and CBK is essential for advancing climate change risk management practices. Banks should be actively engaged to share best practices and participate in capacity building initiatives. The Central Bank, on the other hand, should continue to design and implement guidelines and finalize the regulatory framework, as well as provide support to banks in implementing effective risk management frameworks related to climate change.

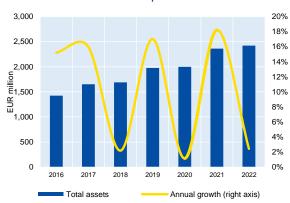
By focusing on these areas for improvement, the banking sector can increase the ability to identify, assess and mitigate risks related to climate change, thereby contributing to the long-term stability and sustainability of the financial sector.

6. Non-banking financial institutions

6.1 Pension sector

The pension sector in 2022 marked accelerated slower growth compared to the previous year, mainly as a result of developments in the international financial markets with the dynamics created as a result of geopolitical tensions and inflationary pressures.

Chart 70. Assets of the pension sector



Source: CBK.

The pension sector in 2022 was characterized by a marked slowdown in activity compared to the previous year. The value of assets reached EUR 2.42 billion at the end of 2022, which coincides with an annual increase of 2.4 percent (chart 70). This slower growth was due to the negative performance of investment returns, while collections from contributors increased compared to last year and represent stable income for pension funds. The efforts of central banks to control inflation through the tightening of monetary policies sent signals inversely correlated with stock and bond prices and, as a result, negatively affected investment returns starting from the first quarter of the year, which was further emphasized in the second quarter. Only in the fourth quarter of the year there was normalization and a positive return on investments. The pension sector continues to have a stable and growing level of contributions collected contributors. This increase, both in the value of collected contributions and the number of contributors, is also a result of fiscal policies (facilities) to stimulate the formalization of the private sector.

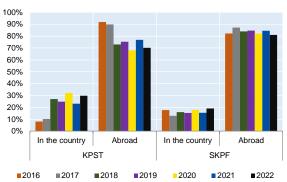
Developments in the pension sector continue to be dictated by the performance of the Kosovo Pension Savings Trust (KPST), which has the highest participation in the total assets of the sector (99.6 percent), while the remaining part is managed by the Slovenian-Kosovar Pension Fund (SKPF). The new collections marked an annual increase of 13.1 percent (9.8 percent in 2021), the value of which reached EUR 242.1 million at the end of the year. However, in terms of financial performance, the pension sector closed the year 2022 with a negative return in the amount of EUR 118.9 million.

The structure of KPST's assets continues to be dominated by investments in the foreign market. However, in contrast to the previous year, investments abroad have seen a decrease in participation as a result of negative prospects since the end of the first quarter of 2022. At the end of 2022, the investment portfolio in foreign markets had the value of EUR 1.69 billion, which represents an annual decrease of 6.5 percent (annual increase of 33.7 percent in 2021).

Investments abroad in December 2022 had a participation of 70.2 percent of the total assets of KPST's (76.9 percent in 2021). Meanwhile, investments within the country marked an expansion of participation in the total assets of KPST's, to 29.8 percent at the end of 2022 (23.1 percent in 2021). The value of investments within the country increased to EUR 719.5 million, which represents an annual increase of 32.1 percent (chart 71).

Within the framework of investments within the country, the securities of the Government of Kosovo continue to be the category with the largest weight, followed by certificates of deposit and cash held in the country. However, the share of securities decreased by 13.3 percentage points to 77.0 percent (90.3 percent in 2021), against the increase of certificates of deposit by 10.8 percentage points, to 19.0 percent (8.2 percent in 2021). The share of securities held in the CBK in the total assets held within the country increased to 4.0 percent, from 1.5 percent participation in 2021.

Chart 71. Structure of pension sector investments



Source: CBK

As a result of the uncertainties in the external sector and financial losses during the first three quarters of the year, KPST invested / kept a significant part of the funds within the country. As a result of the beginning of the increase in the interest rate on deposits from local banks, the KPST distributed a significant part of the funds to local banks in the form of Certificates of Deposit. At the end of December 2022, this category reached the value of EUR 136.9 million (EUR 44.8 million at the end of 2021). Investments in the domestic securities market also increased, but at a lower rate compared to that of Certificates of Deposit. Investments in securities of the Government of Kosovo at the end of 2022 reached the value of EUR 553.7 million (EUR 491.5 million at the end of the previous year). At the end of December 2022, the value of the total assets of KPST reached EUR 2.41 billion, which represents an annual increase of 2.5 percent (annual increase of 18.2 percent in 2021).

At the end of 2022, the value of total assets of SKPF reached EUR 8.6 million, marking an annual decrease of 9.4 percent. The new collections marked the value of EUR 608.4 thousand, which corresponds to an annual decrease of 11.3 percent (chart 72), a performance similar to that of KPST.

The majority of SKPF's assets continue to be invested abroad, namely 75.9 percent of total assets. Similar to the performance of KPST investments throughout 2022, SKPF also reduced its presence in the foreign market, increasing the level of investments in the domestic sector as a result of fluctuations in foreign markets throughout most of 2022.

Chart 72. Contributions collected by pension funds



Source: CBK

The structure of investments abroad consists mainly of investments in the form of shares (85.4 percent), securities (6.6 percent), and cash (8.0 percent). On the other hand, investments in Kosovo increased by 3.4 percentage points, with a share of 24.1 percent of the total assets of SKPF. Investments in the domestic market were distributed in securities of the Government of Kosovo (61.0 percent), deposits in commercial banks (1.4 percent), cash in the SKPF treasury (11.6 percent), and others (26.0 percent).

6.1.1 Pension Sector Financial Performance

The dynamics created in the international financial markets. accompanied the worsening by geopolitical tensions, inflationary pressures, pressures in the labor markets and recently, the tightening of monetary policies, was reflected in the volatility of foreign markets, thus also affecting the pension sector financial performance.

The Kosovo Pension Savings Trust in 2022 had a negative return on investments in the amount of EUR 118.9 million, against the record profit of the previous year of EUR 227.3 million. The unit price of KPST fell to EUR 1.63, from EUR 1.72 a year ago (on the last day of the year) (chart 73).





Source: CBK.

SKPF had a similar performance, which recorded a negative return on investments in the amount of EUR 0.8 million, compared to a profit of EUR 1.1 million a year ago. Likewise, the share price of SKPF fell to EUIR 179.67 from EUR 198.77 a year ago (chart 74).

Chart 74. Financial performance of Slovenian-Kosovo Pension Fund



Source: CBK.

Despite the still high uncertainties, the year 2023 is expected to be a more favorable year for global economies and the financial sector in mainly as a result ofnormalization to some extent of some prices in the stock market, the reduction of the demand/supply gap and the mitigation of geo political tensions at the global level.

6.2 Insurance sector

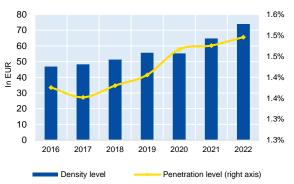
6.2.1 Activity of the insurance sector

The insurance sector for the fourth year in a row recorded double-digit growth in assets, mainly influenced by the main financing source - premiums written from sold policies. Also, for the third year in a row, the sector operated with positive financial results.

The insurance sector is the fourth largest sector within the financial system with a share of 2.7 percent in the total assets of the financial system.

The level of intermediation and density of the insurance sector marked a marginal annual increase (chart 75).

Chart 75. Development indicators of insurance sector



Source: CBK.

Expressed through gross written premiums in relation to GDP, the intermediation of the sector continues to remain at a relatively low level compared to the average of the countries of the European Union, to 1.50 percent (1.48 percent in 2021). Similarly, the level of density remains low, measured through premiums written per capita, which in 2022 reached the value of EUR 73.9 (EUR 64.8 in 2021).48

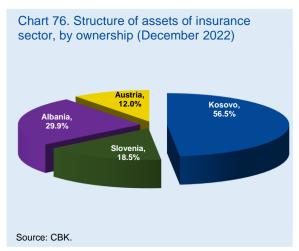
The structure of the insurance sector continues to be dominated by the services of 'non-life' insurers, representing 91.6 percent of the assets of the insurance market, while the remaining part consists of the assets of 'life'

More than half of the insurance market is represented by local insurers (56.5 percent), while the other part by the insurers of foreign origin. Within the companies with foreign capital, insurers from Albania have the highest share in assets,

(premiums written per capita), while the level of penetration (intermediation) in the market during this period stood at 6.80 percent.

⁴⁸ According to statistics published in the Insurance Europe database, the level of density in 2020 in 32 European countries was 3,679 Euros

followed by insurers from Slovenia and insurers from Austria (chart 76).



The insurance market in Kosovo characterized by a lower degree concentration compared to other sectors of the financial system. However, in the last three years, we have a slight increase in concentration, especially in assets, as a result of the liquidation of two insurers (one in 2019 and another in 2021). Compared to a year ago, the Herfindahl Index 49 for gross written premiums (GWP) remained unchanged at 981 points. The same index calculated based on the insurance market assets shows lower values, but compared to the previous year, it turns out to have increased by 15 basis points to 928 points for 2022.

At the same time, CR5 index⁵⁰ for 2022, calculated in relation to GWP for the insurance sector, results in 58.2 percent (56.6 percent in 2021), while calculated in relation to assets, results in 53.5 percent (53.3 percent in 2021). Thus, the slight increase in concentration both in relation to assets and gross written premiums reflects the reduction in the number of insurers in recent years, while concentration is higher in the market of insurers offering 'life' insurance services due to their low number.

assets of the insurance sector reached the value of EUR 269.7 million and recorded an annual increase of 12.1 percent (chart 77). "Non-life" insurance recorded annual growth of 12.4 percent and represented 91.6 percent of the total assets of the sector at the end of 2022. Meanwhile, "life" insurances, which comprise the rest of the assets, recorded an annual increase of 9.1 percent.

Chart 77. Assets of insurance sector



Source: CBK.

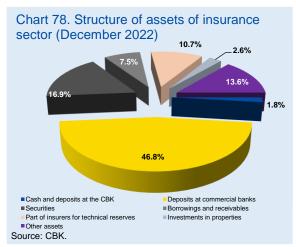
Within assets, the most significant increase was recorded in the category of deposits held in commercial banks, which are mainly in the form of time deposits – which derive from written premiums (policies sold). In 2022, the second category in terms of weight, that of the Securities of the Government of Kosovo also showed an increase (chart 78), although more slowly compared to the previous year as a result of the lower level of debt issued by Government ofKosovo. Likewise. competition to buy Kosovo's state debt from the banking and pension sectors has influenced the slower growth of this category within the assets of the insurance sector. Other balance sheet items recorded growth, with the exception of property investments, which is one of the two categories with the lowest weight within assets.

As for the liabilities of the sector, technical and mathematical provisions make up the largest part with a total of 64.0 percent, followed by equity with 25.2 percent and other balance sheet items with a lower weight (chart 79).

⁴⁹ The Herfindahl index is calculated with the following formula: HI = \sum (i=1)^n $[(s) i^2$, where S is the company's share in the total means (gross written premiums - GWP) of the insurance market, n is the total number of institutions in the respective sector. If the index lies between the

intervals of 1.000 - 1.800 units, the level of concentration in the insurance sector is considered acceptable.

 $^{^{50}}$ The CR5 index combines the market share of the 5 companies with the highest asset values in relation to the total assets of the sector and GWP to the total GWP of the sector.



The value of the capital has recorded slower growth compared to the previous year as a result of the lower profit realized in 2022, but that the profitable operation for the third year in a row has influenced the further reduction of the losses carried over from previous years. As a result, the value of losses accumulated over the years by the sector was reduced by EUR 5.4 million, to EUR 36.9 million at the end of 2022.

The value of premiums written by insurers in 2022 recorded slower annual growth compared to last year, as a result of the low base of premiums written in 2020 (as a result of the outbreak of the COVID-19 pandemic). The value of premiums written by insurers in 2022 reached EUR 134.0 million, marking an annual increase of 14.1 percent (18.2 percent in 2021).

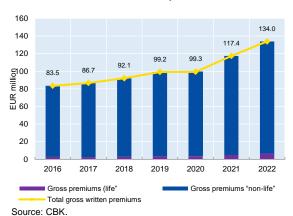
The structure of written premiums continues to be dominated by "non-life" insurance premiums which represent 95.2 percent of The value of written premiums. premiums written from "non-life" insurance in 2022 reached EUR 127.7 million, which represents an annual increase of 13.5 percent (chart 80).

This increase in written premiums of the 'nonlife'category is also reflected in the increase in the volume of policies sold in 2022, namely EUR 1.32 million, an annual increase of 15.1 percent⁵¹. "Non-life"insurance continues to be dominated by compulsory insurance with a participation of 58.9 percent in the total gross written "non-life" premiums, while the rest includes voluntary insurance.



The value of premiums written by "life" insurance reached EUR 6.4 million, which represents a higher value of 31.5 percent compared to 2021, mainly as a result of the increase in the premiums of the category 'Life of the debtor' ("life insurance"), from EUR 1.6 million to EUR 3.1 million.

Chart 80. Gross collected premiums



Compulsory insurance products recorded annual growth of 7.1 percent, influenced by "MTPL" products (table 10). Meanwhile, within the framework of voluntary insurance, there was a significant increase in the 'Accident and health' category for 29.3 percent, to EUR 28.4 million in written premiums. Moreover, only in the subcategory 'Health Insurance' within 'Accident and Health', the number of policies sold in 2022 has

⁵¹ Only non-life insurance is included.

increased by 86.8 percent compared to the previous year to 265.7 thousand, which is a positive signal for increasing the number of citizens who have health insurance. In addition, the level of per capita premiums for health insurance has increased to EUR 14.81 in 2022, from EUR 11.30 in 2021.

Claims paid by the insurance sector, which includes the claims of insurers and the Kosovo Insurance Bureau (KIB), recorded an annual increase of 5.4 percent (24.4 percent a year ago), reaching the value of EUR 64.3 million at the end of 2022 (EUR 61.0 million in 2021). Of the total amount of claims paid, EUR 55.5

million were claims paid by insurers, while EUR 8.8 million were claims paid by KIB.

Claims paid by reinsurers account for 19.5 percent of the total amount of claims paid by insurers⁵² (14.4 percent in the previous year). The lower growth in claims paid by the insurance sector in 2022 of 5.4 percent mainly reflects the higher base value of claims paid a year ago, and not necessarily a slowdown in claims occurring this year.

The value of claims paid by "life" insurance in 2022 reached the value of EUR 1.15 million (EUR 1.11 million a year ago), which represents an annual increase of 3.3 percent.

Table 10. Gross written premiums, by business classes (EUR million)

Activity	2021	2022	Annual change	Share: 2021	Share: 2022
Total non-life	112.5	127.7	13.5%	95.9%	95.2%
Obligatory insurance					
MTPL	60.0	63.2	5.4%	51.1%	47.1%
TPL+	3.0	3.6	18.8%	2.6%	2.7%
Border insurance	7.3	8.4	16.1%	6.2%	6.3%
Voluntary insurances					
Accident and health	21.9	28.4	29.3%	18.7%	21.1%
Casco	7.2	8.6	19.5%	6.1%	6.4%
Loans and guarantees	6.5	7.6	16.8%	5.6%	5.7%
Fire and other damages in property	4.9	6.0	23.4%	4.1%	4.5%
Overall liabilities	1.8	1.9	7.2%	1.5%	1.4%
Total life	4.8	6.4	31.5%	4.1%	4.8%
Total market	117.4	134.0	14.1%	100.0%	100.0%

Source: CBK

Table 11. Claims paid, by business classes (EUR million)

Activity	2021	2022	Annual change	Share: 2021	Share: 2022
Total non-life	59.9	63.2	5.4%	98.2%	98.2%
Obligatory insurance					
MTPL	29.4	30.9	5.2%	48.2%	48.1%
TPL+	0.2	0.3	39.9%	0.4%	0.5%
Border insurance, FG MoU	10.2	8.8	-13.3%	16.7%	13.7%
Voluntary insurances					
Accident and health	10.6	13.0	22.3%	17.5%	20.3%
Casco	4.6	5.5	19.9%	7.5%	8.5%
Loans and guarantees	1.0	1.8	86.2%	1.6%	2.9%
Property insurance	3.4	2.7	-20.3%	5.6%	4.2%
Insurance of goods in transit	0.0	0.0		0.0%	0.0%
Overall liabilities	0.5	0.0	-97.4%	0.8%	0.0%
Total life	1.1	1.1	3.3%	1.8%	1.8%
Total market	61.0	64.3	5.4%	100.0%	100.0%

Source: CBK.

⁵² KIB is not included.

The increase in the level of claims paid in 2022 within "non-life" insurance was mainly influenced by the claims payments of the voluntary 'Accident and Health' insurance; as well as 'MTPL' within the framework of compulsory insurance (table 11). The value of claims paid by voluntary insurance increased by EUR 3.0 million compared to the previous year, to EUR 23.1 million. Meanwhile, the value of damages paid by the compulsory insurance increased by EUR 0.2 million, to EUR 40.1 million in 2022.

The ratio of claims paid to premiums written in 2022 improved by 4.0 percentage points compared to the previous year, decreasing to 48.0 percent (chart 81).

Chart 81. Received premiums and claims paid



Source: CBK.

This came as a result of the higher growth of revenues (premiums collected) compared to the growth rate of expenses (claims paid) in 2022 compared to the previous year (tables 10 and 11).

6.2.2 Financial performance of the insurance sector

The insurance sector closed this year with a positive financial result of EUR 2.1 million, a weaker performance compared to last year when it recorded a net profit of EUR 6.3 million (table 12).

"Non-life" insurers recorded profits in the amount of EUR 2.5 million, compared to the value of EUR 5.8 million in 2021. Meanwhile, "life" insurers recorded losses in the amount of EUR 413.1 thousand compared to profits of EUR 492.4 thousand in 2021. The decrease in realized profit compared to the previous year mainly reflects the increase in operating expenses, namely the cost of purchasing goods and services (affected by inflationary pressures in 2022) and administrative expenses (mainly compensation for workers). Also, compared to last year, there was an increase in the category of expenses for the incurred claims (value and number), which is the result of the increase in the number and value of written premiums.

The level of liquidity in the insurance sector remained at a level similar to last year (marginal decrease). The ratio between cash and cash equivalents to reserves remained at the level of 102.5 percent (103.2 percent in 2021), as a result of the slower annual growth of cash and cash equivalents of 11.9 percent, compared to the higher 12.7 percent growth of the insurance sector's technical reserves. Similarly, the ratio between cash and cash equivalents to total liabilities decreased to 87.6 percent, from 89.2 percent a year ago.

Table 12. Financial result (EUR million)

Description	2019	2020	2021	2022
Non-life insurance	-5.1	2.0	5.8	2.5
Life insurance	0.5	0.3	0.5	-0.4
Total market	-4.7	2.3	6.3	2.1

Source: CBK.

6.3. Microfinance sector and financial auxiliaries

6.3.1 Activity of the microfinance sector

The microfinance sector in 2022 recorded an accelerated growth of assets, mainly

influenced by the expansion of lending and leasing, which were mainly financed by loans received from the external sector. The financial result exceeded last year's level and turns out to be the highest since the consolidation of the microfinance sector, influenced by the

growth of revenues expenses. However, in the following periods, the dynamics of the increase in interest rates in the international markets are expected to be reflected in the increase in financing costs for the microfinance sector.

The microfinance sector continues to be financed by loans from the external sector, own capital, as well as other loans within the (mainly $_{
m the}$ banking Considering the financing structure of this sector, the increase in interest rates as a result of the ECB's policies to curb inflation and soften it to the threshold below 2.0 percent may affect the increase in the cost of financing the activity of the microfinance sector. Such a dynamic would be reflected both in the profit margin of the sector and in the transfer of the cost to borrowers through the increase in financing rates for the main products (credit and leasing).

The assets of the sector reached the value of EUR 400.8 million in 2022, which corresponds to an annual growth of 17.9 **percent**; accelerated growth compared to the previous year (chart 82).

Thirty microfinance institutions⁵³ operate in the domestic market, of which 13 have foreign ownership and represent 78.3 percent of the total assets of the sector. Herfindahl-Hirschman index for assets resulted in 1,528 points in 2022, which represents a slight increase in concentration from the same period of the previous year (1,518 points). While, the share of the assets of the three largest institutions in the total assets of the sector decreased to 56.1 percent, from 56.5 percent in 2021.

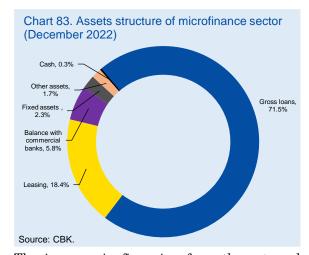
Loans continue to be the largest category in terms of weight within the assets of the sector, followed by leasing and the category of the balance held in commercial banks (chart 83).

Chart 82. Assets of the microfinance sector



Source: CBK

forliabilities. the Asactivity microfinance sector is mainly financed by loans, which constitute 63.9 percent of total liabilities and capital, while only financing from the external sector constitutes 61.7 percent of total liabilities and capital. Financing from the external sector fully recovered from the critical pandemic year (2020), recording an annual increase of 21.0 percent in 2022 (increase by 3.6 percent in 2021), and reached the value of EUR 247.2 million at the end of the period.



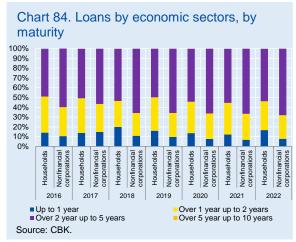
The increase in financing from the external sector also reflects the positive prospects in the local economy for 2022, despite the uncertainty created by the negative geo-political developments and financial market prospects as a result of the invasion of Ukraine by Russia, high inflation and monetary tightening

number of MFIs also includes NBFI with money transfer/payment/exchange activity, which have influenced a significant increase in the number of financial institutions in this sector.

 $^{^{\}bf 53}$ This also includes ten non-banking financial institutions that perform lending, leasing and factoring activities. Also, if the data is compared with previous years, you can notice that there is a highlighted difference in the number of MFIs reported this period compared to previous periods due to methodological differences. The

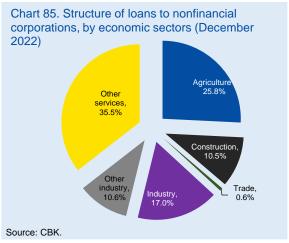
policies by central banks (ECB, Federal Reserve, Bank of England, etc.).

The total stock of loans in the microfinance sector at the end of 2022 reached the value of EUR 286.5 million, which represents an annual increase of 19.8 percent (annual increase of 17.1 percent in 2021). significant increase in lending for the second year in a row reflects the demand for loans from both segments, that of households (which had the main contribution to the overall loans) non-financial increase in and corporations. Lending to households increased by 16.4 percent and reached the value of EUR 182.1 million at the end of the period.



Meanwhile, loans to non-financial corporations recorded an annual increase of 26.2 percent and reached EUR 104.4 million. According to the maturity period, loans to households and non-financial corporations with a maturity period of "more than 2 to 5 years" dominate the structure of these loans, followed by those with a maturity of "more than 2 to 5 years" (chart 84).

Lending to non-financial corporations by followedeconomic sectors has general trend, showing growth in each segment. In contrast to the banking sector, the stock of loans to the agricultural segment has the largest share in total lending to nonfinancial corporations of MFIs/NBFIs of 25.8 percent (chart 85). Moreover, this segment had the second highest contribution to the increase in total lending to non-financial corporations, marking an annual increase of 25.4 percent in 2022 and reaching the value of EUR 26.9 million (chart 86). The guarantee offered by KCGF to cover the risk for loans in the agricultural sector for SMEs also had an impact on the increase in lending for the agricultural sector.⁵⁴. Compared to a year ago, the amount of loans approved by the FCGC for microfinance institutions reached EUR 5.6 million, an increase of 6.5 percent compared to the previous year. As a result of the guarantees from the FCGC, especially in the last two years, MFIs have responded positively to the demand for loans for this sector, which is considered as the sector that carries the highest risk.



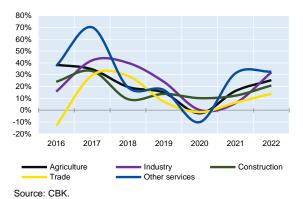
The segment of industry, construction and trade was also characterized by double-digit growth during this period. Lending to the other services segment⁵⁵ had the highest contribution and growth during this period.

Leasing continued to grow at a high rate in recent years, where the main contribution was made by leasing to non-financial corporations, while the contribution of leasing to households was more limited (chart 89). Leasing to nonfinancial corporations has a share of 61.4 percent in total leasing. This category of leasing recorded an annual increase of 16.2 percent and reached the value of EUR 45.3 million.

⁵⁴ Micro, small and medium enterprises (MSMEs)

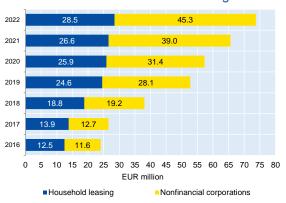
⁵⁵ Hotels and restaurants, other trade, use of financial services, real estate, rent, other services, etc.

Chart 86. Microfinance sector growth rate of loans to nonfinancial corporations, by economic sectors



According to the maturity of leasing to nonfinancial corporations, the majority dominated by medium-term leasing 'over 2 to 5 years' with a share of 80.9 percent, followed by leasing with a maturity term of 'over 5 to 10 years' with a share of 12.1 percent.

Chart 87. Microfinance sector leasing



Source: CBK

While, leasing to households marked a slower growth of 7.1 percent, reaching a value of EUR 28.5 million at the end of 2022. Within leasing to households, 'mortgage leasing', which represents the dominant category, marked an annual growth of 6.4 percent in 2022 (1.0 percent annual growth in the previous year). This category of leasing had the main contribution to the growth of leasing to households in 2022, since they represent about 71.5 percent of leasing to this segment.

Leasing to households continue to dominated by long-term leasing 'over 10 years' which have a share of 52.1 percent, followed by leasing with a maturity period of 'over 5 to 10 years' with a share of 31.3 percent.

The increase in the basic interest rates from the central banks from the middle of 2022 is expected to be reflected in the financing cost of the sector potentially higher translate into application of interest for rates households non-financial and corporations.

Interest rates on microfinance sector loans recorded a slight annual decrease to 18.6 percent, from 19.4 percent in December 2021.

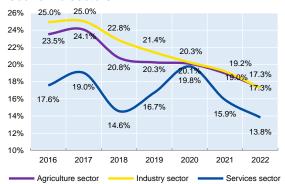
Chart 88. Average interest rate on microfinance sector loans



Source: CBK.

The interest rates for loans to households were higher compared to those for non-financial corporations. The average interest rate in December 2022 for households decreased to 20.7 percent, an annual decrease of 0.2 percentage points. However, the average interest rate for non-financial corporations in December 2022 decreased to 15.3 percent, an annual decrease of 2.1 percent (chart 88).

Chart 89. Average interest rate on loans, by economic sectors



Source: CBK

In terms of loans to non-financial corporations, on an annual basis, the average interest rates were reduced for all economic activities - with special emphasis on the services sector (chart 89). The interest rate on loans to the agriculture and industry sectors decreased by 1.7 and 1.9 percent, respectively, standing at 17.3 percent in December 2022. Meanwhile, loans to the service sector had the lowest interest rate of 13.8 percent, an annual decrease of 2.1 percent.

6.3.2 Microfinance sector performance

The microfinance sector in 2022 recorded high financial results (net profit in the amount of EUR 17.0 million), as a result of the more pronounced increase in income compared to the increase in expenses.





The revenues of the microfinance sector reached the value of EUR 56.1 million, an annual increase of 14.9 percent compared to last year. Within revenues, interest revenues, representing the dominant category revenues (89.8 percent), recorded an annual increase of 15.9 percent (3.0 percent increase in 2021), as a result of high credit growth in the last two years. The category of non-interest income in 2022 increased by 6.6 percent, but their contribution to the increase in total income was limited due to the low weight in total income (10.2 percent).

The expenses of the sector reached the value of EUR 39.1 million, which represents an annual increase of 12.6 percent. Within the expenses, the increase recorded in the subcategory of non-interest expenses was mainly attributed to personnel expenses and administrative expenses. This subcategory recorded an annual increase of 18.9 percent (7.7 percent a year

ago), which was mainly attributed to the increase in expenses for workers, and to a lesser extent, administrative expenses. The increase in the number of personnel during 2022 and the increase in wages in the sector (in response to the rate of inflation) appear to have contributed to the increase in this subcategory of non-interest expenses. Meanwhile, the category of interest expenses (21.4 percent of total expenses) recorded an annual increase of 4.6 percent in 2022 (decrease of 9.0 percent a year ago), which mainly reflects the increase in the level of loans from the external sector.

The ratio of expenditures to revenues of the microfinance sector improved, decreasing by 1.4 percentage points, as a result of the higher growth of revenues compared to the growth of expenditures. In 2022, this indicator stood at 69.7 percent (chart 90).

Chart 91. Profitability indicators of microfinance sector

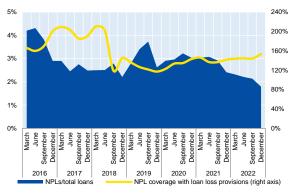


Source: CBK

The financial results during 2022 were also reflected in other profitability indicators of the sector. The Return on Average Assets (ROAA) increased to 4.9 percent (4.6 percent in 2021), while the Return on Average Equity (ROAE) marginally decreased, to 16.5 percent (17.0) percent in 2021) (chart 91).

The microfinance sector continues to have a relatively low level of nonperforming loans and good coverage with provisions (chart 92). However, the macroeconomic general dynamics indicate an increase in risk as a result of price increases and economic slowdown, as well as the application of conservative policies by central banks at the global level (increase in basic interest rates). This sector is mainly financed by loans taken from the external sector and the eventual increase in financing costs can be passed on to customers. Therefore, taking as a basis the fact that real disposable incomes may have decreased as a result of the higher growth of inflation against wages in the last year; may have a negative impact on the solvency of customers in the coming year. The level of non-performing loans to total loans remains low and has further decreased by 0.6 percent to 1.8 percent at the end of 2022. At the same time, the coverage level of nonperforming loans with provisions stood at 153.2 percent (141.6 percent in 2021).

Chart 92. Indicators of credit portfolio quality



Source: CBK.

The financial auxiliaries sector comprises the largest number of financial institutions in the country, although it manages only 0.4 percent of total assets. This sector consists of exchange bureaux and money transfer agencies (MTAs). The value of assets of financial auxiliaries in 2022 reached EUR 35.9 million, which represents an annual increase of 45.1 percent. The marked increase in the sector's assets came mainly as a result of the change in the activity of two financial institutions in the country, which was reflected in the increase in the assets of the financial auxiliaries sector. 56

The structure of assets of financial auxiliaries mainly consists of cash and cash held in the banking sector, which make up about 65.2 percent of total assets. Meanwhile, the rest of 6.8 and 28.0 percent consists of fixed assets, respectively other assets. The sector is mainly financed by own capital and borrowings, which constitute 55.1 and 40.8 percent of the total liabilities. The revenues of financial auxiliaries recorded an annual increase of 10.5 percent and reached the value of EUR 11.3 million at the end of December 2022.

The structure of financial auxiliaries revenues is dominated by revenues from transfers (participation 59.3 percent), which were characterized by an annual decrease of 1.3 percent. The second most important category in terms of weight, that of other incomes (39.9 percent), marked an increase of EUR 1.1 million compared to the previous year, to EUR 4.5 million in 2022 and at the same time had the main contribution to the increase in total Expenses recorded an annual revenues. increase of 20.9 percent, reaching the value of EUR 8.4 million, which is mainly the result of an increase in general operating expenses for 26.3 percent compared to the previous year. This category accounts for about 90.2% of the sector's total expenditures, and the rest consists of interest expenditures and transfer expenditures. As a result of the higher growth of expenses against the progress of revenues, the sector made a profit of EUR 2.9 million in 2022, which represents an annual decrease of 11.5 percent.

another financial institution has changed its activity from that of financial auxiliaries to that of microfinance, but due to its low weight, it has not had a great impact on the respective sectors.

⁵⁶ One financial institution has changed its activity from microfinance to that of financial auxiliaries (it has influenced a significant increase in the assets of financial assistants due to the large weight). Meanwhile,

7. Financial infrastructure in Kosovo

7.1. Payment system

The Interbank Payment System (IPS), which enables the processing of a number payment instruments, interbank clearing and settlement of securities, has been characterized by a marked increase in both the number and value of transactions carried out through it.

In Kosovo, there is a single system for interbank payments, the Interbank Payment System (IPS), operated and supervised by the Central Bank of the Republic of Kosovo. The number of transactions processed by IPS in 2022 reached 17.5 million (14.6 million in 2021), which represents an annual increase of 19.1 percent (12.9 percent in the previous year). Also, in the same period, the value of the total transactions realized increased to EUR 20.3 billion (EUR 17.2 billion in 2021), which

represents an annual increase of 18.6 percent (annual increase of 22.5 percent in 2021). Regular mass payments and priority mass payments represented about 78.7 percent of the total number of interbank transactions (table 13). Mass priority payments represent about 8.1 million completed transactions (46.6 percent of the total number of transactions) and are mainly payments from government institutions (such as salaries and pensions). Meanwhile, the regular mass payments represent about 5.6 million completed transactions (or 32.1 percent of the total number of transactions) and are mainly payments in the beneficiaries are government institutions and include the payment of taxes, duties, customs, etc. While 0.7 million are turnover payments dedicated mainly to public service payments (bills of public service companies, government institutions such as the customs service and the Kosovo Property Agency) (table 13)

Table 13. Share of payment instruments in total IPS transactions, as a percentage

Description	Number of total	al transactions	Value of total transactions	
Description	2021	2022	2021	2022
Regular	14.3%	14.0%	11.5%	11.6%
Prioritized	4.0%	3.1%	42.3%	44.5%
Regular - massive (payments from taxes, fees, customs, etc)	36.3%	32.1%	5.5%	5.5%
Priorities - massive (salaries and pensions from the	40.2%	46.6%	8.7%	8.3%
Giro payments	4.9%	4.0%	8.3%	7.8%
Securities	0.0%	0.0%	4.5%	4.2%
Direct debiting	0.0%	0.0%	0.0%	0.0%
Bank-Bank	0.0%	0.0%	19.0%	18.1%
Returned	0.2%	0.2%	0.1%	0.1%

Source: CBK.

As for the value of transactions, priority payments are the category with the highest share in the transactions carried out, a category that reached the value of EUR 9.04 billion, followed by the bank-to-bank category, which reached the value of EUR 3.67 billion by the end of 2022. The number of total valid bank accounts⁵⁷ in 2022 reached 2.37 million, representing an annual decrease of 0.6 percent. The decrease in the number of savings accounts by 11.3 percent compared to the

previous year (mainly accounts of individuals) has influenced the overall decrease by 0.6 percent.

fast The and safe trend of virtual infrastructure development has continued throughout 2022. Banks have increased overall efforts for digitization and automation of banking services. E-banking bank accounts, through which banking services are performed 'online', have continued to grow. By the end of 2022, the total number of E-banking accounts

⁵⁷ The total number of bank accounts includes: the number of current, savings and other accounts in the bank.

reached 688.9 thousand58 (table 14), which represents an annual increase of 28.1 percent. The structure of E-banking accounts continues to be dominated by individual accounts with a participation of 89.6 percent of the total E- banking accounts, followed by business accounts with a participation of 10.4 percent.

Table 14. Banking sector network

Description	2018	2019	2020	2021	2022
Number of bank branches	46	47	50	43	49
Number of bank sub-branches	166	159	149	145	141
ATM number	491	497	513	516	534
POS number	13,183	13,769	13,421	13,836	14,769
Number of E-banking accounts	250,733	337,693	411,346	537,733	688,891

Source: CBK.

The total number of cards (debit and credit cards) offering services for cash withdrawals and various payments increased by 2.1 percent. The number of cards with debit function recorded an annual increase of 2.0 percent and reached 1,306,884, while the number of cards with credit function recorded an increase of 2.9 percent, to 181,691.

Visa cards had the highest share among cards according to operators (55.5 percent), followed by Master Cards (40.6 percent), while local cards had a share of 3.9 percent. The banking infrastructure in the country has expanded in the context of the network of the number of automated teller machines (ATM) and the number of POS devices (Point-of-Sale) compared to the previous period (table 14).

Table 15. Share of transactions value processed with cards by terminals to total card transactions value, as a percentage

Description	2018	2019	2020	2021	2022
ATM w ithdraw als in cash	58.9%	59.5%	62.7%	58.8%	56.1%
ATM deposits	30.9%	29.9%	27.3%	30.8%	32.2%
Credit transfers through ATMs	0.1%	0.1%	0.0%	0.0%	0.0%
POS cash w ithdraw als	0.2%	0.2%	0.1%	0.2%	0.2%
Card payments through POS	9.8%	10.3%	9.8%	10.2%	11.6%

Source: CBK.

The number of deposits in the banking sector through ATMs during this period amounted to 2.3 million transactions worth EUR 2.22 billion. As a result, 32.2 percent of the total value of card transactions through terminals belonged to ATMs with deposit function (table 15).

In the same period, the number of payments through card sales points at POS terminals reached 25.9 million in the amount of EUR 799.0 million. The value of payments through POS to total card transactions in 2022 had a share of 11.6 percent.

changed. This number represents the number of current accounts that have access to e-banking, while according to the previous methodology all accounts were reported, including current, savings and time accounts.

⁵⁸ With the entry into force of the "Regulation for the reporting of statistics of payment instruments" from 2018, the methodology of reporting the number of accounts accessible from the Internet has also

8. Macroprudence framework

The primary aim of the macroprudential policy is to identify, monitor and assess the systemic risk of financial stability, and to take measures aimed at preventing or reducing systemic risks and strengthening the stability of the financial system against these risks. The intermediate objectives are aimed at mitigating systemic risks that may be caused by developments in certain economic indicators.

In 2016, the Central Bank of the Republic of Kosovo, in accordance with Law No. 03/L-209 on the Central Bank, which mandates the CBK to draft and implement policies to maintain financial stability in the country, has adopted the Macroprudence Policy. In accordance with macroprudential mandate, Macroprudential Advisory Committee (MAC) has held regular quarterly meetings where it has reported on market dynamics and risks for financial stability. On a regular basis, among other things, the results of two instruments calibrated for the purposes of macroprudential oversight that apply Capital based Buffers are presented in MAC. In order to address the dynamics within the cyclical dimension of systemic risk, quarterly results Countercyclical Capital Buffer, which is mainly based on the parameter of the Credit/GDP gap, have been presented in MAC. Also, in order to address the structural and cross-sectoral dimension of risk, MAC has also analysed the quarterly results of Capital Buffer based on the assessment of systemically important banks.

While the relevant regulatory changes that will specifically address the CBK's macroprudential mandate are in process⁵⁹, changes that, among other things, will define

the methodology of these instruments and potentially redefine the levels of capital buffers, the calibrated instruments have served to monitor the dynamics of these risks and the indications they have given have been presented at the highest executive levels. The other relevant indicators presented in table 14 and elaborated within the chapter of banking sector risks in this report, in addition to the credit gap, are further supplemented with qualitative information and the judgment of relevant experts, to finally shape the judgment on the weight of specific developments in overall systemic risk.

The outlook for financial stability in the euro area has worsened with rising inflationary pressures throughout 2022, further worsened with geopolitical tensions. This has encouraged the euro area countries to be more active in the application of relevant macroprudential measures or the activation of new measures regarding increased risks. The increased risks in many dimensions and especially the increased risk over the years from the real estate market in the euro area, has impacted many countries to start tightening the macroprudential policy through increase in requests for countercyclical capital buffers, activation of new capital buffers based on sectoral systemic risk (CRD V60) as well as the implementation of other macroprudential measures, such as restrictions on household lending⁶¹. In 2021, the general dynamics in selected indicators of macroprudence were characterized by stability, resulting in high parameters above the regulatory requirements. Economic activity in the country in 2022 marked slower growth compared to the previous year, influenced by the weakening of general demand.

risks for the respective countries, the so-called the buffer for systemic sectoral risk.

https://www.ecb.europa.eu/pub/financialstability/fsr/shared/pdf/measures/Overvieë_measures_notified_to_ECB_A pril_2022.xlsx?129e7e6b656f325c6455ba0b4f28a06a

⁵⁹ The new draft law on banks is in the process of review and approval, and this will assign the CBK as the only authority responsible for macroprudential supervision and exercise of the mandate for macroprudence, while simultaneously enabling regulatory instruments to be issued regarding systemic risk assessments.

⁶⁰ The 5th Capital Requirements Directive (CRD V), a directive brought under the discretion of the local authorities of the euro zone, has enabled the application of capital buffers according to the specific

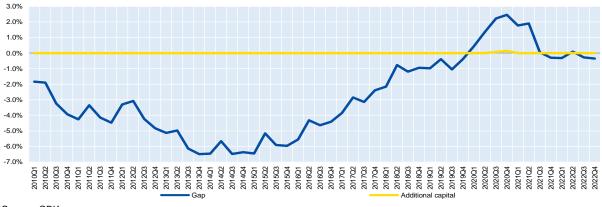
⁶¹ Instruments applied since the end of 2021, by euro area countries: https://www.ecb.europa.eu/pub/financial-stability/macroprudential-measures/html/index.en.html

Table 16. Objectives, systemic risk assessment indicators and macroprudential policy instruments

	OBJECTIVES	RISK INDICATORS DETERMINED BY OBJECTIVES	SUPPORTING INSTRUMENTS
1	Reducing and preventing an excessive increase of Lending and leverage	-Macroeconomic environment (GDP, inflation) -Lending by segments and economic sectors -Capitalization -Loan-to-GDP gap	Capital based measures: 1. Countercyclical capital buffer(CCyB) 2. Sectoral capital buffer 3. Buffers on Leverage ratio Borrower based measures: 1. Loan-to-Value ratio (LTV) 2. Debt-to-income ratio (DTI) & Debt-service-to-
2	Reducing and preventing excessive inconsistencies of maturity and liquidity in the market	-Liquidity indicator (liquid assets to short-term liabilities -Loans to deposits ratio -Liquidity reserves -Liquidity gap	income (DSTI) Liquidity based measures: 1. Liquidity-coverage-ratio (LCR) 2. Net-stable-funding-ratio (NSFR) 3. Restrictions on funding resources 4. Large exposure limits
3	Direct and indirect credit exposures	-Credit risk concentration (large credit exposures); large credit exposures to Tier 1 capital	Other measures: 1. Large exposure restrictions
4	Limitation on systemic impact from incorrect initiative in order to reduce moral hazard	- Banks financial performance -Interest rate on loans and deposits -Assets concentration -Banks with systemic importance	Capital based measures: 1. SIFI capital surcharges OSII

Source: European Systemic Risk Board

Chart 93. Countercyclical capital buffer



Source: CBK.

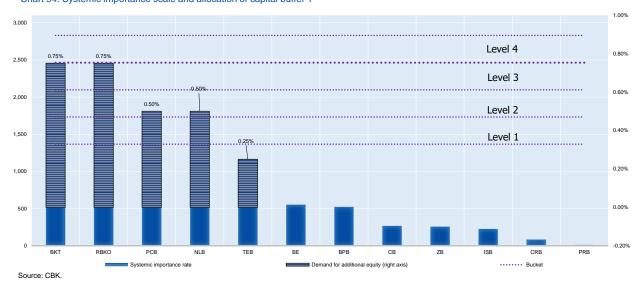
Financial institutions in the country (banks and microfinance institutions) are the main source of financing the activities of nonfinancial corporations and households. Bank lending policies are estimated to have been in line with the absorption capacity of economic agents in the market. The credit to GDP gap at the end of 2022 is in negative territory of -0.354 percent from -0.305 percent a year ago. The

negative gap of -0.354 suggests that the lending activity in the country in 2022 has not passed into the so-called 'over-crediting' period, leaving room for further growth, without jeopardizing the overall financial stability in the country (chart 93).

In 2022, the banking sector turns out to have five banks of systemic importance, similar to the previous year. The capital buffer to systemically important banks is calibrated and presented in chart 94, based on the Basel III framework and the methodology recommended by the European Banking Authority (EBA).

However, these two methods and relevant macroprudential instruments⁶², in the absence of a legal basis, are currently used only as an indication of the level of risk.

Chart 94. Systemic importance scale and allocation of capital buffer 1

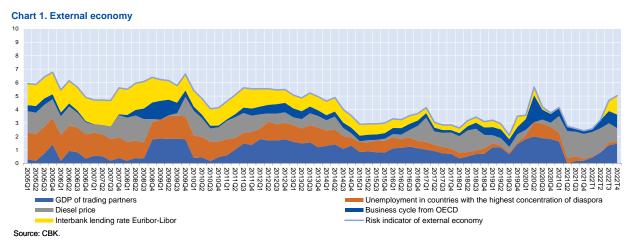


 $^{^{\}rm 62}$ Methodology of both methods is found in previous versions of the FSR.

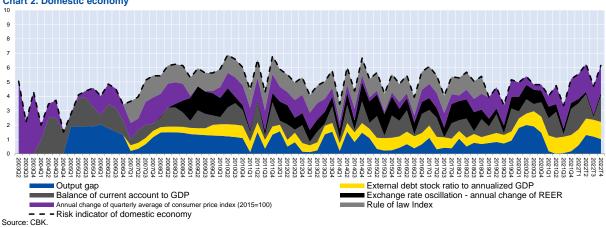
9. Statistical Appendix

Appendix 1. Financial Stability Map - Dynamics of change of risk indicators and contribution to risk by relevant components

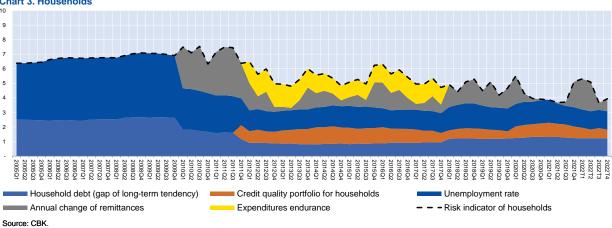


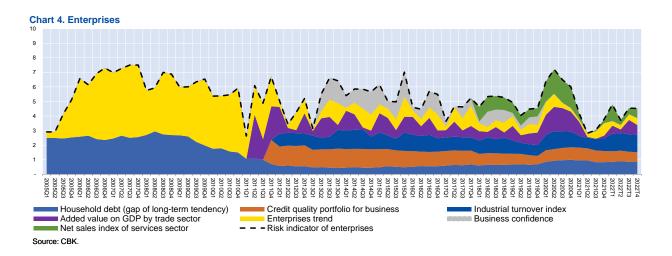


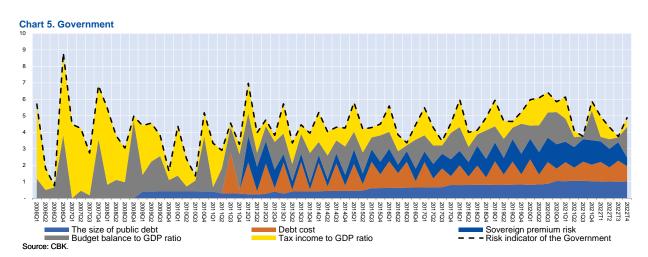


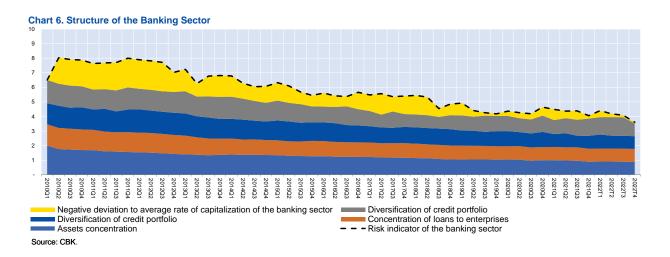




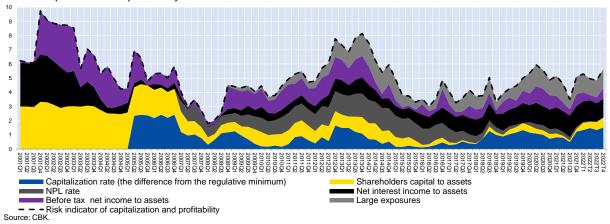




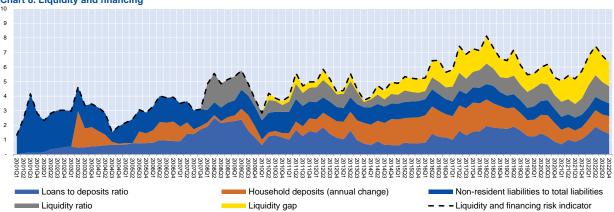












Source: CBK.

Table 1. Financial sustainability indicators, as e percentage

Banking sector	Core set	December 2019	December 2020	December 2021	December 2022
Capital Adequacy	Regulatory capital to risk-w eighted assets	15.9	16.5	16.4	15.5
	Regulatory Tier I capital to risk-w eighted assets	14.2	14.7	14.7	13.5
	Nonperforming loans net of provisions to capital	1.5	4.6	3.4	3.6
Assets quality	Nonperforming loans to total gross loans	1.9	2.5	2.3	2.0
Sectoral distribution of loans to total loans	Other financial corporations	0.2	0.2	0.3	0.3
	Public nonfinancial corporations	0.00	0.00	0.00	0.00
	Other nonfinancial corporations	63.3	63.3	62.3	62.1
	Households	36.4	36.4	37.4	37.6
	NPISH	0.03	0.03	0.02	0.01
	Nonresidents	0.0	0.1	0.0	0.1
	Total	100.0	100.0	100.0	100.0
Earnings and profitability	Return on assets (ROA)*	2.1	1.7	2.1	2.6
	Return on equity (ROE)*	17.2	14.0	17.3	20.7
	Interest margin to gross income	80.6	79.2	76.5	76.7
	Noninterest expenses to gross income	48.1	46.1	45.4	43.8
Liquidity	Liquid assets (core) to total assets	28.8	30.1	28.8	26.8
	Liquid assets (broad) to total assets	23.3	23.2	23.7	21.5
	Liquid assets (core) to short-term liabilities	31.2	31.1	30.6	29.3
	Liquid assets (broad) to short-term liabilities	37.6	40.4	37.2	36.5
Sensitivity to market risk	Net open position in foreign exchange to capital	4.7	3.5	1.5	2.3
	Encouraged set				
	Capital to assets	11.2	11.7	11.1	8.9
	Large exposures to capital	81.8	89.5	89.8	104.1
	Personnel expenses to noninterest expenses	43.5	43.3	43.2	44.5
	Spread between reference lending and deposits rates	4.8	4.7	4.5	3.9
	Customer deposits to total (noninterbank) loans	129.2	133.9	130.9	127.9
	Foreign-currency-denominated liabilities to total liabilities	4.4	4.2	4.3	3.0

Data from January 2022 is in line with the new recommended methodology for FSIs (FSI Guideline 2019).

