CENTRAL BANK OF MONTENEGRO

FINANCIAL STABILITY REPORT 2022

Podgorica, 2023

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ABBREVIATIONS

CBCG	Central Bank of Montenegro
CSDCC	Central Securities Depository and Clearing Company of Montenegro
CHF	Swiss Franc
DAX	Deutscher Aktienindex
DJIA	Dow Jones Industrial Average
DNS	Deferred Net Settlement
ECB	European Central Bank
€STR	Euro Short-term Rate
EU	European Union
EUR	Euro
EUREP	Euro system repo facility for central banks
EURIBOR	Euro Interbank Offered Rate
FED	Federal Reserve
FSIs	Financial Stability Indicators
GBP	Pound Sterling
GDP	Gross Domestic Product
HHI	Herfindahl-Hirschman Index
HP	Hodrick-Prescott filter
IMF	International Monetary Fund
IFRS	International Financial Reporting Standards
JPY	Japanese Yen
Lhs	left-hand scale
LIBOR	London Interbank Offered Rate
IRS	International Accounting Standards
MSCI	Morgan Stanley Capital International
NPL	non-performing loans
Pp	Percentage points
rhs	right-hand scale
ROAA	Return on Average Assets
ROAE	Return on Average Equity
RTGS	Real Time Gross Settlement
USA	United States of America
USD	United States Dollar

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INTRODUCTORY NOTES

The main goal of the Central bank of Montenegro is to maintain financial stability. The orientation of business towards such an immeasurable goal is conditioned by the chosen monetary regime, as a result of which the CBCG is limited in the pursuit of monetary policy. Maintaining the financial stability is the backbone of the Bank`s activities, meaning that the attention and priority actions focus on all risks, especially those that can have a systemic impact.

The CBCG primarily uses microprudential regulation and supervision in fostering and maintaining financial stability. However, since this approach is primarily focused on stability of individual banks, the CBCG uses, as necessary, macroprudential instruments which affect the entire system. This enables the focus on the complex relationship between banks and other business entities in order to adequately assess potential vulnerabilities of the entire economy. The financial stability report represents one of the ways the CBCG contributes to financial stability through raising awareness of the sources of financial stability risk among other economic and financial policy makers in the financial sector itself and with the general public.

In its Financial Stability Report, the CBCG analyses trends of those risks that are considered to be or may be systemic in nature. Basically, a systemic risk may occur as the consequence of certain internal imbalances and vulnerabilities of the financial system/banking sector, and it can also occur as the consequence of external shocks that may hit the economy, in the wider sense, or specifically the financial system. Certainly, vulnerabilities can intensify and build up instability of the entire economic system via the system of communicating vessels and the spillover of instability among business entities.

The report comprises of four sections. The first section gives an overview of systemic risk trends and assessments. The second section depicts trends and expectations in international economic and financial environment, which is very important considering the connectivity of the Montenegrin economy with the international economic and financial flows. The third section summarises generally accepted local macroeconomic trends and the balance of payments developments as an overview of the relationship between Montenegro and foreign countries, as well as the risks and vulnerabilities in the local private real sector and the general government to which Montenegrin banks are exposed. The forth section, which is the main analytical section of the report, discusses trends and risks in the banking sector and other relevant segments of the financial system. A spectrum of financial soundness and macroprudential indicators most directly reflects the banking sector stability as a result of activity of both factors discussed in the second and third section of the report and factors generated by the banking sector itself.

1. SYSTEMIC RISKS ANALYSIS AND ASSESSMENT

At the end of 2022, systemic risks were moderate and remained at a similar level as in 2021.

The continued weakening of the impact of the coronavirus pandemic contributed to the growth of the economy, which in mid-2022 fully recovered from the 2020 drop, the year of the outbreak of the pandemic. On the other hand, the growth of retail prices and the state of public finances represent a concern, primarily in the context of the situation in Ukraine, but also the coronavirus pandemic which is still ongoing and has consequences in certain segments of the economy.

When it comes to the non-financial segment of the economy, it should be noted that the debt of resident non-financial institutions and households to banks increased slightly in nominal terms, but it declined relative to Gross domestic product - GDP (due to a notable increase in nominal GDP in 2022)[1].

The resident non-financial institutions' debt towards Montenegrin banks rose by 9%, while the share of this debt in GDP declined from 23.4% to 21.8%. In addition, the liquidity of the real sector indicates that risks remain present. Namely, funds of enforced debtors that had been frozen in the process of enforced debt collection increased from 857.3 million euros to 971.5 million euros (16.8% of GDP), while the number of blocked business entities rose 2.8% and reached 16,102.

Households' debt to Montenegrin banks significantly increased over the past few years although it has remained considerably lower compared to the peak leverage if observed in relation to GDP (close to 35% at end-September 2008, 28.9% at end-2021, and 26.8% at end-2022). Real earnings were 18.4%[2] higher year-over-year in 2022. On the other hand, the unemployment rate (according to the Labour Force Survey) recorded a 14.7% decline in 2022 when compared to 16.6% in 2021. However, it should be noted that this is still a high unemployment rate with a pronounced structural component. The registered unemployment rate, published by the Employment Agency of Montenegro stood at 20.9% in 2022, which is also quite a challenge.

The level of public debt remains the key systemic risk in Montenegro. To wit, after a certain reduction of public debt in relation to GDP during 2016 and 2017, the public debt increased from 64.2% in 2018 to 105.3% in 2020, which is primarily due to the coronavirus pandemic and borrowings for the construc-

[1] Observed as a percentage of GDP, the debt is at a similar level as at the end of 2019.

[2] Observed through an average of 12 monthly data.

tion of the priority highway section. The recovery of economic activity and the repayment of the debt on Eurobonds led to a debt reduction in 2021 and 2022 to 70.8% of GDP.

As of March 2021, Standard & Poor`s assigned "B" credit rating to Montenegro (with a stable outlook). The rating and outlook were confirmed after the reporting period (March 2023). In addition to the ongoing situation in Ukraine, growing global uncertainty in the market, worsening financing conditions due to the normalization of monetary policy in the European Union (EU) and the coronavirus pandemic, challenges for public finances will also exist in 2023 with debt repayment under the credit arrangements and interest for Eurobonds. However, the mitigating factor is that the state has some available funds at its disposal and there will be no principal repayment for Eurobonds in the period 2023 - 2024.

When it comes to the banking sector, very good capitalization was preserved, since the capital adequacy ratio increased slightly during the year and is still at a significantly higher level than the legally prescribed minimum, and the regulatory capital is mainly made up of the highest quality share capital. In addition, liquidity of banks remained high, with a further increase during the year.

Among the main structural vulnerabilities of banks, those that stand out are the share of non-performing loans in total loans, banks` exposure to the government (especially for cash loans), a growing maturity mismatch between sources and funds (due to the general growth of demand deposits on the one hand and long-term loans on the other) as well as the increase in euro interest rates on the international financial market. Temporary measures to mitigate the negative impact on the financial system exerted by the pandemic of the infectious disease COVID-19 and the situation in Ukraine are still needed in order to preserve the stability of the system.

The situation slightly improved in 2022 as the share of non-performing loans declined from 6.2% to 5.7%. However, this share is not negligible, it is a reflection of the credit risk in the system and exerts unfavourable pressure on banks' risk appetite, that is, on the level of lending activity and lending conditions. When it comes to credit risk, it should be emphasized that the results of the completed and implemented asset quality review (AQR) are encouraging, demonstrating a high quality and resilience of the banking sector. Credit growth in 2022 was high and amounted to 8.9%.

Banks' exposure to the central government increased during 2022 from 762.4 million to 850.6 million euros, which is still significant despite the drop in the share of that exposure in assets from 14.3% to 13.3%. This increase in indebtedness is due to a growing debt arising from securities, while loan debt recorded a minor decline. In any case, the trend of banks' exposure to the government will remain subject to continuous monitoring by the CBCG.

Although weakening, risks arising from retail cash (all-purpose) loans were not completely neutralized, so at end-2022, the CBCG adopted a decision to continue with the measure of limiting the growth of this segment of loans during 2023 as well. Previous measures had a significant impact on stopping the rapid growth of the aforementioned loans. At end-2022, retail cash loans amounted to 552.7 million euros or 4.3% less than at end-2021 (577.6 million euros), while they reached 707.3 million euros at end-2019. In addition, their share in total retail loans fell from 39.8% to 34.9% during 2022.

The maturity structure of retail cash loans did not change significantly. At end-2022, 91.4% were loans with agreed maturity of over three years, whereby as much as 42.8% of them were loans with agreed maturity of over eight years. The plan is for the measure to continue until end-2023 and the CBCG continues to monitor the trends in this segment of the credit market.

Higher net interest and fees/commissions income and much lower impairment and provisioning costs added to the profit of 85.7 million euros at the system level, which is three times more than 27.5 million euros profit in 2021. The profit was significantly higher than in the pre-crisis year (2019), so it can be said that the banking sector successfully absorbed the costs of crisis adjustment.

Banks are the most stable segment of the economic system, which substantially reflects the stability of deposits in the banking system. They stood at the record 5.2 billion euros and made up the largest portion of banks' liabilities and capital of 81.5% at end-2022. To wit, total liquid assets of banks increased during 2022 by 41.5% to almost 2 billion euros, as did their share in relation to assets and deposits, to 31% and 38.1% (from 26.4% and 33.4%), respectively. In the context of structural limitations of Montenegro`s economic growth, these liquid assets are currently banks' best safety reserve against the risk of asset quality deterioration and/or deposit outflow.

Other financial intermediaries do not represent sources of systemic risk primarily due to their limited size, importance in the Montenegrin financial market, and also the nature of activities they perform (non-depository institutions) as well as a solid financial position of some of the most important ones (insurance companies).

With regard to the real estate prices, as the key form of property (and collateral) in the situation of the relatively underdeveloped financial market and instruments in Montenegro, it cannot be said that prices were substantially different from their "fundamentals" despite the significant increase in real estate prices in 2022.

Turnover on the Montenegro Stock Exchange amounted to 78.2 million euros (1.3% of GDP) compared to 46.5 million euros in 2021, primarily owing to a higher trade in shares. The MONEX index grew by 43.3% relative to end-2021 and it was still multiple times lower relative to its maximum values from April 2007.

The CBCG`s payment system and the Central Securities Depository and Clearing Company of Montenegro (CSDCC) securities settlement system, as the financial infrastructure pillars in Montenegro, continued working smoothly in 2022.

Scheme 1.1

Key financial stability risks as at 31 December 2022	
High level of public debt and the budget deficit, taking into account the situation in Ukraine, the coronavirus pandemic and the deteriorating credit conditions of financing sources	→
Negative feedback loop between the share of non-performing loans and credit growth in the context of uncertain economic growth	↓
Share of retail cash loans in total loans, with extended maturity of these loans	↓
Exposure of banks to the government considering the challenges in government finances	→

Explanation:

- High systemic risk
- Moderate systemic risk
- Low systemic risk

Colours represent the levels of risk as a combination of probability of materialisation and potential impact in case of materialisation during the next two years based on the CBCG expert assessment. The arrow shows the direction of change in the level of risk relative to the previous Financial Stability Report.

2. INTERNATIONAL ECONOMIC AND FINANCIAL ENVIRONMENT

2.1. Global economic trends

The latest IMF assessments made in January 2023 show that the global economic growth amounted to 3.4% in 2022, as compared to 6.2% in 2021. Before that, the 2022 global economic growth forecast from January of that year of 4.4% was revised downwards twice later during the year, down to 3.2%.

Table 2.1

Overview of selected global indicators, %

Indicator	2021	2022 estimate	Forecasts		Difference in relation to October 2022 projections, pp.	
			2023	2024	2023	2024
Real growth of GDP						
World	6.2	3.4	2.9	3.1	0.2	-0.1
Advanced economies	5.4	2.7	1.2	1.4	0.1	-0.2
USA	5.9	2.0	1.4	1.0	0.4	-0.2
Euro area	5.3	3.5	0.7	1.6	0.2	-0.2
Japan	2.1	1.4	1.8	0.9	0.2	-0.4
Developing and emerging economies	6.7	3.9	4.0	4.2	0.3	-0.1
China	8.4	3.0	5.2	4.5	0.8	0.0
India	8.7	6.8	6.1	6.8	0.0	0.0
Russia	4.7	-2.2	0.3	2.1	2.6	0.6
European emerging and developing economies	6.9	0.7	1.5	2.6	0.9	0.1
Commodity prices, average rate						
Oil	65.8	39.8	-16.2	-7.1	-3.3	-0.9
Non-energy producing products	26.4	7.0	-6.3	-0.4	-0.1	0.3
Consumer prices, average rate						
Advanced economies	3.1	7.3	4.6	2.6	0.2	0.2
Developing and emerging economies	5.9	9.9	8.1	5.5	0.0	0.2

Source: IMF, January 2023

Advanced economies recorded a growth of 2.7%, while in developing and emerging countries the growth was 3.9%. Among advanced economies, in the euro area, growth was 3.5%, while the USA and Japan recorded respective growths of 2% and 1.4%. The slower economic growth in China (3%), had a significant impact on reduction of the growth rate in the group of developing and emerging economies, but also on the growth at the global level. The economic activity fall in Russia was estimated at 2.2%.

It is estimated that a group of European developing and emerging economies[3], including Montenegro, recorded a growth of a mere 0.7% compared to the growth of 6.9% in the previous year (Table 2.1).

In January 2022, the IMF published a global growth forecast for 2023 of 3.8%, but it has been revised downwards several times, so the latest forecast is 2.9%. The IMF forecasted lower growth in advanced economies (1.2%) compared to 2022 (2.7%). The euro area economy will record a growth rate of 0.7% in 2023, while a slowdown in the growth of the US economy will be less pronounced (1.4%). According to the same forecast, the economies of developing and emerging countries will record slightly higher growth rates in 2023 (around 4%).

These forecasts rely on the assumptions that energy and non-energy prices will be lower in 2023, and that global interest rates will increase further, as announced by the largest central banks. In addition, the IMF forecasted an average annual drop in oil prices and non-energy producing products prices of 16.2% and 6.3%, respectively. In advanced economies, the growth rate of consumer prices will be significantly lower (4.6% vs 7.3% in 2022) although the inflation rate is not expected to fall within the targeted range before 2024. In developing and emerging countries, decline in the inflation rate will be less pronounced, from 9.9% in 2022 to 8.1% in 2023. According to the same forecasts, its larger decline is expected in 2024, down to 5.5% (table 2.1).

Three key factors characterized the world economy in 2022: activities of most central banks were aimed at curbing inflation, the economic consequences related to the situation in Ukraine, and the new wave of the COVID-19 pandemic in China. The IMF lowered its economic growth forecasts in the first part of the year, only to raise them in the rest of the year. In 2022, certain problems from the previous period, such as disruptions in supply chains, were partially resolved, which reduced input costs and stimulated growth in many economic sectors. A general increase in prices was already evident in many countries at the beginning of 2022, and the consequences of the situation in Ukraine affected further price increase. The largest impact on the growth of inflation was caused by a sharp rise in the prices of energy generating products which, however, recorded a large drop in the second half of the year. In China, containment measures were again introduced during the reporting year to prevent the spread of the coronavirus, which also affected the global trade and commodity prices.

The outlook for global growth and financial stability in 2023 may be affected by conflicting factors and risks. On one hand, higher demand can be driven by rising wages, a stable labour market, savings, and a stronger recovery of China's economy. However, these factors could encourage inflation, which may be followed by a further tightening of monetary policy, resulting in a decline in economic activity in the future.

During 2022, growth forecasts for the euro area for the period 2022–2023 changed significantly, both according to the IMF and the European Commission. The latest forecasts of the European Commission[4] are somewhat more optimistic, and the growth rate of economic activity in the euro area for 2022 is estimated at 3.5%. During the first three quarters, the economic activity of the euro area recorded positive growth rates, while in the last one, the expected contraction was barely avoided, with a growth rate standing at 0%. The euro area economy faced aggravating factors in 2022, such as high energy

[3] Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Montenegro, Kosovo, Hungary, Moldova, Poland, Romania, Russia, The Republic of North Macedonia, Serbia, Turkey and Ukraine.

[4] *European Economic Forecast*, Winter 2023, European Commission.

generating products' prices for retail sector and the economy, rising core inflation and the consequent tightening of monetary policy and/or difficult investment conditions, as well as lower consumption given the slower growth of nominal wages compared to inflation. The forecasted growth rates for the euro area for 2023 and 2024 are 0.9% and 1.5%, respectively.

2.2. Global financial trends

After years of low inflation rates, expansive monetary policy and low volatility, the world economy experienced a turnaround in 2022. The jump in commodity prices further increased the existing inflationary pressure, due to which central banks were faced with the challenge of combating inflation and ensuring economic recovery amid still present pandemic. Most of the central banks of developed countries have begun to tighten monetary policy, which according to the latest expectations will continue in 2023. Some monetary authorities tightened their policy significantly more often and to a greater extent than market expectations, which especially refers to monetary authorities in the USA and the euro area. In the second half of 2022, inflation reached its peak, but the full impact of monetary policy on inflation is expected only in 2024. However, core inflation in most economies is still rising and is significantly above the pre-pandemic level.

As a result of significant inflationary pressure in late 2021 and early 2022, especially in the largest economies of the euro area, the implicit path of the ECB`s reference rates indicated that financial markets expected them to be increased in 2022, which the ECB did only in July, increasing all three interest rates by 0.5 pp each, although it was previously announced that the increase would be 0.25 pp. It was the first interest rate growth in eleven years. At the beginning of the year, the ECB reduced and then ended its Pandemic Emergency Purchase Programme (PEPP). Rising prices of energy generating products and food, recovery in supply chains and demand in general, led to price pressure and inflation growth, which the ECB characterized as too high, expecting such a situation to remain for a longer period of time. By the end of the year, there were three more interest rate increases, so the interest rate on the main refinancing operations at the end of the year amounted to 2.5%. Given that inflation in the euro area reached double digits in October and November, the ECB announced a further significant tightening of monetary policy in December in order to reduce inflation to 2% in the medium term.

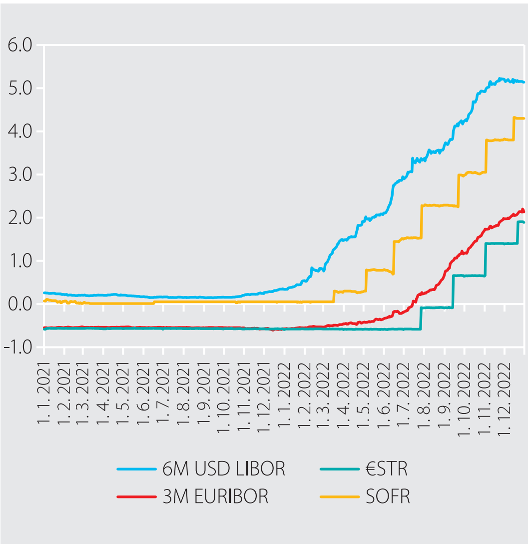
The Federal Reserve (FED) started 2022 with the announced tightening of monetary policy, which, as time progressed, significantly intensified and resulted in four consecutive increases in the reference interest rate of 0.75 pp each. At the end of the year, the reference rate was in the range of 4.25-4.5%, well above the Open Market Committee's original expectations, which were in the range of 0.75-1%. The FED announced that with new interest rate increases, among other things, it will take into account the delay with which monetary policy affects economic activity and inflation, as well as economic and financial trends. In addition, the FED will continue to reduce the portfolio of securities according to the adopted balance sheet reduction plan.

The Bank of England started increasing the reference interest rate as of December 2021. Market expectations in early 2022 indicated that the rate would reach 1.1% by the end of the year. However, there were eight interest rate increases during the year, so the rate reached 3.5% at the end of 2022 and new increases were announced. Also, in September, the Bank of England announced temporary and targeted measures for the purchase of long-term government bonds due to disruptions in the bond market that threatened to generate major consequences for financial stability (a sharp drop in GBP and bond prices).

In order to prevent higher inflationary pressure, which was relatively low compared to other countries, the Swiss National Bank raised its reference rate three times during 2022 to the level of 1%. The Bank of Japan was one of the rare institutions among developed countries whose monetary policy went in the opposite direction, meaning that it continued its expansionary policy of maintaining a low reference interest rate and a targeted range of yield on government debt.

Graph 2.1

Short-term market interest rates, 2021–2022, %

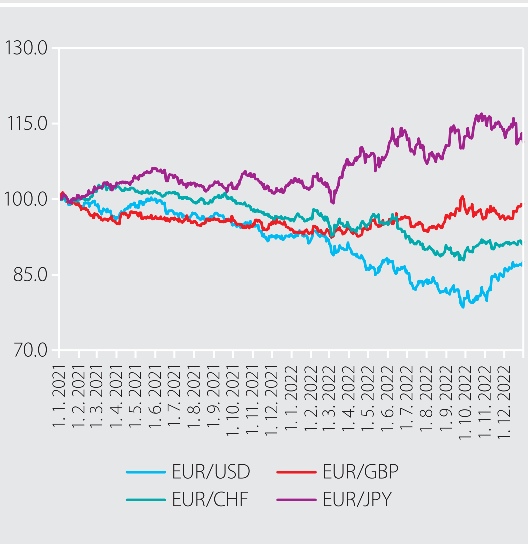


Source: Bloomberg

Global financial conditions deteriorated during 2022. Certain developing countries with worse macroeconomic parameters faced capital outflows as well. Higher yields and spreads on reference bonds made external financing more difficult. For many issues, bond markets provided worse financing conditions than in the pre-pandemic period. Market liquidity showed signs of deterioration for a number of instruments, including some highly liquid, standardized exchange-traded products (lower trading volume, higher bid-ask spreads and higher liquidity premiums). In the coming period, many real estate markets could suffer unfavourable consequences from a more aggressive tightening of monetary policies, higher borrowing costs and tighter credit standards, especially considering the long-term rise in real estate prices.

Graph 2.2

Nominal euro exchange rate, 2021–2022, 1 January 2021 = 100



Source: Bloomberg, CBCG calculations

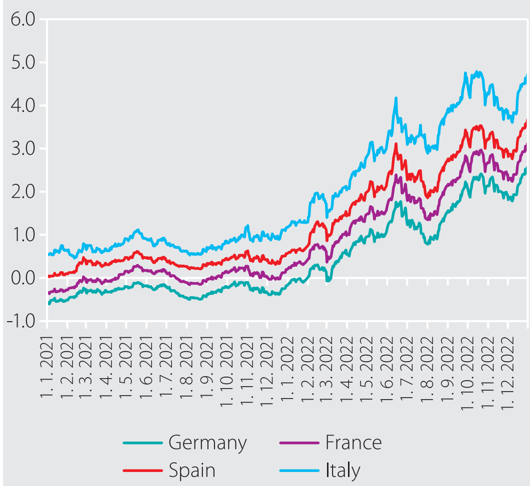
Short-term market reference interest rates increased several times in 2022, following the normalization of monetary policy (graph 2.1). At the end of 2022, the three-month Euro Interbank Offered Rate (EURIBOR) and the Euro Short-term Rate (€STR) amounted to 2.13% and 1.89% and they were 5.7 and 5.2 times higher on an annual basis, respectively. The Secured Overnight Financing Rate (SOFR) and the six-month USD London Interbank Offered Rate (LIBOR) at the end of the year stood at 4.3% and 5.14%, respectively, and they were also several times higher at the annual level.

During the reporting year, the euro depreciated nominally against the USD (-5.9%) and the CHF (-4.6%), yet it appreciated against the JPY (7.3%) and the GBP (5.2%) (graph 2.2.). The highest exchange rate fluctuation of the EUR, measured by the variance ratio, was in relation to the USD, JPY and CHF, while the mildest fluctuation was in relation to the GBP. The euro depreciated against the USD from 1.137 to 1.071, averaging at 1.053 USD for 1 euro.

Over the years before 2022, the yields on the debt of many countries were at the lowest levels, not reflecting to a sufficient extent the vulnerability of economies and state finances, because the yields were shaped to a significant extent by the specific nature of monetary policies. With change in the policies, the yields on the bonds of those countries recorded significant growth. For instance, the average 10-year debt yields in 2022 and their annual change in yields for the following largest euro area economies were: France (1.71%, 1.70 pp), Italy (3.13%, 2.34 pp), Germany (1.2%, 1.5 pp) and Spain (2.23%, 1.88 pp). Average yields on the UK (2.39%) and US (2.95%) government bonds were on upward trends, recording respective annual growth of 1.65 pp and 1.52 pp. Given that there were no changes in monetary policy in Japan, Japanese debt yields have not changed significantly (averaging 0.23% vs 0.07% in 2021).

Graph 2.3

10-year Government debt bond yields in the euro area, 2021–2022, %



Source: Bloomberg

The spreads, meaning the differences between the yields on securities of the largest euro area economies and German securities had been "compressed for years by monetary policy, and they increased significantly in 2022 (graph 2.3). With regard to 10-year government bonds, spreads on French, Spanish, and Italian debt averaged at 0.51 pp, 1.04 pp, and 1.93 pp, respectively (in 2021 they amounted to 0.32 pp, 0.67 pp, and 1.09 pp, respectively).

The volatility and growth of the VIX[5] index reflected the instability in the financial markets, mostly due to geopolitical risks. The average value of the index was 25.8 points or about one third more than in the previous year. The index, however, ended the year at a lower level, indicating a lower degree of instability in the financial markets at the end of the year. The price of gold, as a specific indicator of stress and risks in the global economy and financial markets, fluctuated significantly during 2022. In the first quarter, it reached the maximum value of 2,050 USD/Oz, only to decline afterwards to 1,622 USD/oz.

Stock markets in developed countries were generally on a downtrend, especially in the first three quarters when most market indices were at their annual lows. Financial markets showed high sensitivity to the news on inflation. In this regard, the stock markets reacted very positively to the data on the reduction of inflation rates and anticipated that the central banks would start reducing the reference interest rates earlier, despite the fact that many central banks clearly announced new increases. In the last quarter, the key European indices recorded notable growths. Nevertheless, most indices in the world ended 2022 at lower values than the year before. The SE index - Morgan Stanley Capital International (MSCI) for developing and emerging markets fell by 22.4% during the year.

[5] A measure of the expected volatility of the U.S. stock prices.

3. DOMESTIC ECONOMIC ENVIRONMENT

3.1. General Macroeconomic Developments

Preliminary MONSTAT data indicate that Montenegro`s real annual GDP increased by 6.1% in 2022. According to the GDP components as per the expenditure method, the GDP growth in 2022 was primarily driven by the growth of final consumption (contribution of 7.3 pp) and to a lesser extent by changes in inventories (2.5 pp), while negative contribution was recorded by the balance of imports and exports (3.5 pp) and gross fixed capital formation (0.2 pp).

Annual MONSTAT data by industries shows that overall growth was spurred by increases reported in tourism, transport, retail trade and forestry, while industrial output and construction recorded declines (table 3.1).

Table 3.1

Change rates in key industries, 2022/2021, %	
Industry	Annual rate of change
Tourism, all accommodations, arrivals	30.7
Tourism, all accommodations, overnights	25.9
Passenger transport, roads	55.7
Passenger transport, railways	40.2
Passenger transport, air	45.8
Retail trade, constant prices[6]	14.2
Industrial production	-3.3
Construction, value of performed construction work	-4.4
Construction, effective working hours	-2.9
Forestry, produced assortments	78.3

Source: MONSTAT

According to the CBCG forecast, the real growth rate of economic activity in 2023 will be 3.4%. As laid out in the 2023-2025 Economic Reform Program, the Ministry of Finance forecasted 4.4% and 4% growth rates in 2023 and 2024, respectively, while the low-growth scenario forecasted respective growths of 2% and 2.9%. According to the latest forecasts of reference international institutions, a slightly lower growth rate of the Montenegrin economy is expected in 2023. According to IMF forecasts from October 2022, the GDP of Montenegro will record a real growth rate of 2.5% in 2023. According to the forecasts of the World Bank (January 2023), the economy will grow at a rate of 3.4%,

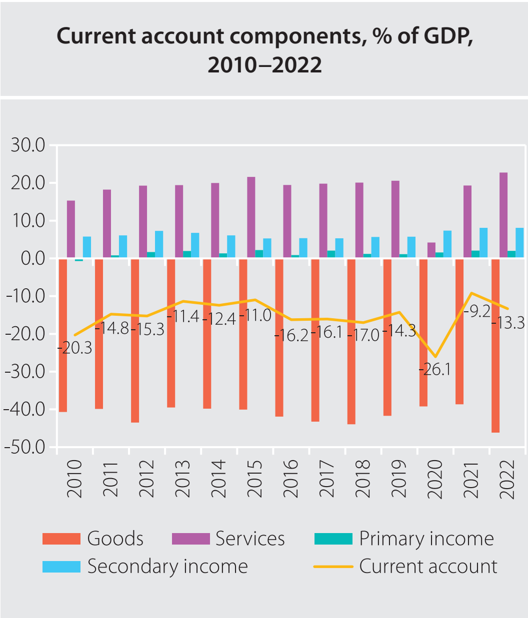
[6] As an average of annual rates of change for quarterly turnover data.

while according to the forecasts of the European Commission (November 2022), the growth rate will be 2.9%. The CBCG expects a real growth rate in a similar range as international financial institutions.

Inflation growth, measured by the consumer price index, averaged at 13% in 2022, and the annual inflation rate stood at 17.2% at the end of the year. Undoubtedly, inflation recorded in 2022 was the highest since the introduction of the euro in Montenegro and it could have a negative impact on competitiveness of Montenegrin products and services, which may consequently elevate certain risks in the system.

External factors largely determined the rise in prices in Montenegro as well. The categories *food and non-alcoholic beverages* (22.6%), *housing, water, electricity gas and other fuels* (9.4%) and *transport* (16.2%) had the highest impact on the average growth of inflation in 2022.

Graph 3.1



Source: CBCG calculations

The current account deficit was 773 million euros or 13.3% of GDP in the reporting year and it was 69.6% higher year-over-year, which is the result of an increase in the deficit in the goods account, despite the growth of the surplus in the services account, as well as in the primary and secondary income accounts (graph 3.1). As expected, the current account deficit was generated by the negative balance in the goods account which amounted to 2.68 billion euros or 39.7% more in relation to the comparative period. High growth was recorded in both imports and exports, which were generated by the trade in energy products and non-ferrous metals which, in addition to the impact regarding quantity, was also affected by an increase in the prices of these products. The surplus on the services account amounted to 1,317.8 million euros, which is 37.8% more relative to 2021. Estimated revenues from travel-tourism amounted to 1,054.7 million euros, which is 39.2% more than in 2021 and is the result of an increase in foreign tourists overnight stays.

Deficit was primarily funded by foreign direct investments which net inflow amounted to 782.6 million euros or 13.5% of GDP. Historically speaking, the permanent current account deficit was financed through foreign direct investments, but also through portfolio investments and partially through other foreign investments, which affected the level of external debt of Montenegro. During 2022, there was a slight increase in external debt of all resident sectors, not only the government sector, although the government external debt accounted for the largest share.

3.2. Position of non-financial institutions[7]

Debt of non-financial institutions to banks saw a 9% increase[8] in 2022, from 1,157.5 million euros to 1,211.9 million euros. In relation to GDP, it fell from 23.4% to 21.8% due to a strong GDP growth. During the year, non-financial institutions borrowed a record 779.9 million euros or 27.5% more year-over-year and this can be considered an adequate support of the banking sector to the economy. In reference to the purpose, the new debt mostly included *liquidity loans* (63.4%). For years, this type of loans had represented the most common type of loan extended to non-financial institutions[9], this being particularly pronounced in 2022, as their annual growth was 26.3%.

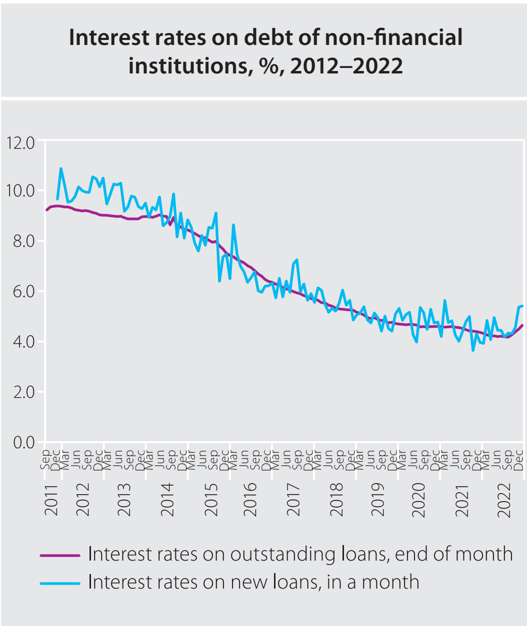
With a significantly higher growth of deposits (47.2%) over loans (9%), the position of net creditor of the non-financial sector increased in 2022 (7.9% of total assets).

When it comes to the maturity of non-financial institutions` debt to banks, debts maturing after three years accounted for the main share of 64.6% at end-2022[10]. Debt with the agreed maturity of over one year made up 79.2%. As for the debt currency structure, the entire debt of non-financial institutions was in euros, which is also the situation that has not changed essentially over the past years.

The quality of the debt of non-financial institutions to banks improved slightly during the reporting year, considering that the share of non-performing debt in the total debt of non-financial institutions decreased from 10.5% to 9.9%. According to the banks' classification, non-performing debt amounted to 125.5 million euros compared to 121.7 million euros at end-2021.

The average interest rate on the debt balance of non-financial institutions for loans increased during 2022 from 4.4% to 4.6%. In August 2022, it was at its historically lowest level, but throughout the rest of the year the rate increased, departing from its long-term downward trend (graph 3.2). Similarly, the average interest rate on new loans increased from 4.4% to 4.6%[11], and the growth of interest rates was particularly notable in the last quarter. The cost of borrowing by the non-financial sector is one of the conditions for

Graph 3.2



Source: CBCG

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7 Since Montenegro does not have the financial account statistics. i.e. an overview of financial assets and liabilities by all institutional sectors of the economy, the position of non-financial institutions and households is primarily monitored through their relationship with Montenegrin banks through data the latter submit to the CBCG.

8 Non-financial institutions cover resident business entities (private and state companies).

9 These data refer to all legal persons but they are sufficiently representative, since 83.9% of total debt arising from loans to legal persons in 2022 referred to non-financial institutions.

10 Data as per the initially agreed maturity.

11 The rate is obtained by weighting monthly interest rates on new debt with monthly annuities.

Domestic Economic Environment

its profitability and international competitiveness, but not the only one, because structural factors such as productivity, the general business environment, and the like play a very important role. The cost of borrowing to this sector was generally high despite the multi-year decline.

At end-2022, the number of blocked business entities in the CBCG's enforced collection system was 16,102, which is the annual increase of 2.8%. In relation to the total number of 57,784 active business entities, 27.9% of them were blocked, which is the slight reduction in relation to end-2021 (29.7%). Total debt based on which business entities were blocked amounted to 971.5 million euros or 13.3% more compared to the previous year. Due to a high debt concentration, the debt of the top ten borrowers accounted for 26.5%, while that of the top 50 borrowers made up 48.3% of total debt.

A total of 1,489 business entities were under uninterrupted account blockage up to 365 days with the frozen funds in the amount of 39.4 million euros, while this amount reached 48.8 million euros at end-2021. A total of 14,613 business entities were blocked over 365 days, with the frozen funds in the amount of 932.2 million euros, accounting for 95.9% of the debt.

3.3. Households' position

In 2022, the households' debt to banks increased by 8.7%[12], from 1.43 to 1.56 billion euros, fuelling the debt growth initiated in 2013 after a period of deleveraging between September 2008 and end-2012. The level of indebtedness of the households thus reached its historically peak in absolute terms. Observed in relation to GDP, the debt of households decreased by 2.1 pp to 26.8% of GDP as a result of a strong GDP recovery.

On the other hand, the household debt based on new loans amounted to 535.8 million euros, which is an increase of 37.5% year-on-year. Observed according to purpose, new borrowings of the household sector were primarily in *cash (all-purpose) loans*, 52.4%. In addition, new debt based on loans for *housing purchase and renovation* loans increased in absolute terms, from 83.1 million euros to 111.1 million euros, but it also slightly declined if observed as a share in total new household debt, from 21.6% to 20.8%.

Due to a strong growth of deposits in the second half of the year, the position of the household sector as a net creditor strengthened (2.3% of total bank assets), and they were at their historical maximum, amounting to 1.7 billion euros.

With regard to the maturity of the household debt to banks, the debt with maturity of over three years accounted for the main share of 94.6%[13] at end-2022, mainly due to the cash and housing loans. Debt with agreed maturity over one-year made up 98.5% of the debt. Retail loans practically have no currency risk because in the currency structure of the debt, other foreign currencies make up only 0.2%.

The quality of households' debt to banks improved during the reporting year. According to the classification of banks, the amount of non-performing loans of households decreased by 2.1% to 61.9 million euros in 2022. Thus, the share of non-performing debt in total debt of households fell from 4.4% to 4%.

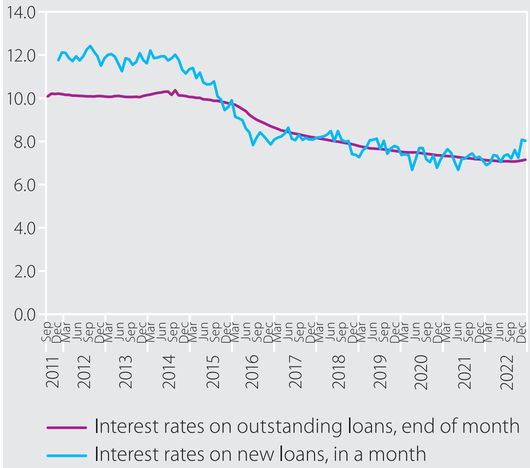
[12] Households include only resident natural persons.

[13] Data as per the initially agreed maturity.

The average interest rate on the household loans was the same as at the end of the previous year, 7.2%. On the other hand, the average interest rate on new loans grew from 7.2% to 7.4% in 2022[14]. In general, borrowing by the retail sector is "more expensive" compared to the corporate sector. Although the cost of borrowing by the retail sector has dropped significantly in previous years, it is still very high.

Graph 3.3

Interest rates on household debt, %, 2012–2022



Source: CBCG

According to the Labour Force Survey, an average unemployment rate stood at 14.7% in 2022 and it was almost 2 pp lower year-on-year. After a substantial decline in unemployment during the last boom period (2006-2008) when it had dropped from 30.3% in 2005 to 16.8% in 2008, the rate saw a mild downtrend followed by oscillations in some of the subsequent years, clearly indicating a prominently structural character of unemployment in Montenegro, which is also indicated by the Employment Agency of Montenegro data. Namely, according to this source, the unemployment rate recorded the annual decline from 24.7% to 20.1%.

Viewed through the average of 12-month data, nominal net earnings recorded growth of 33.8%, from 532 to 712 euros in 2022. At the same time, real net earnings saw an average growth of 18.4% in the reporting year. Compared to 2006, both nominal and real earnings increased by 151.4% and 58.6%, respectively. With a high jump in earnings due to changes in tax burden, the real value of earnings also increased. However, the uptrend of inflation in 2022 significantly eroded the growth of real earnings, which at the end of the year were still significantly higher than in 2021.[15]

3.4. State finances

The 2022 government budget recorded a deficit of 260.2 million euros (4.5% of GDP) or 193 million euros less than planned. The fiscal deficit has been recorded for the fourteenth consecutive year. Average deficit in the period 2012–2022 was 4.9% of GDP. A higher deficit is planned for 2023, which is projected at 5.9% of GDP (table 3.2). The presence of a deficit in the long term represents one of the systemic risks, given that this deficit is mostly debt-financed.

Budget revenues were 4.1% higher than planned and amounted to 2,010.4 million euros. The better realization of budget revenues is primarily the result of higher revenues based on value added tax and

14 The rate is obtained by weighting monthly interest rates on new debt with monthly annuities.

15 The calculations were made by deflating nominal earnings by the consumer price index and/or the cost of living index using 2006 as the base year.

fees. On the other hand, contributions, revenues based on excise duties and personal income were lower compared to the plan. Budget revenues were 5.2 % higher compared to 2021. Viewed in relation to GDP, budget revenues amounted to 34.7% of GDP, which was 3.9 pp less than in 2021 and 2.6 pp below the ten-year average. It should be noted that the growth of budget revenues was also affected by high inflation.

Budget expenditures were 4.8% lower than planned and amounted to 2,270.6 million euros. Expenditures were reduced due to lower social security transfers, lower capital expenditures, and lower gross wages and contributions paid by the employer. The largest increase in expenditures compared to the plan was recorded in transfers to institutions, individuals, non-government and public sectors, and in borrowings and loans. On the annual basis, expenditures increased by 12.9%. In relation to GDP, budget expenditures amounted to 39.2% and they were 1.4 pp lower than in the previous year and 3.1 pp below compared to the ten-year average.

Table 3.2

Main categories of Montenegro's budget, 2021–2023

	2021		2022		2023	
			(estimate)		(budget realization plan)	
	million euros	% of GDP	million euros	% of GDP	million euros	% of GDP
Budget revenues	**1,911.4**	**38.6**	**2,010.4**	**34.7**	**2,147.5**	**34.8**
direct taxes	756.1	15.3	636.0	11.0	657.4	10.6
indirect taxes	982.3	19.8	1,207.9	20.8	1,282.8	20.8
non-taxable income	173.0	3.5	166.4	2.9	207.2	3.4
Budget expenditures	**2,010.9**	**40.6**	**2,270.6**	**39.2**	**2,513.8**	**40.7**
Current expenditures	1,806.7	36.5	2,030.1	35.0	2,262.7	36.6
of which: Gross earnings	535.1	10.8	542.5	9.4	627.3	10.2
of which: Transfers for social welfare	567.4	11.5	668.4	11.5	785.2	12.7
Capital expenditures	204.2	4.1	240.5	4.1	251.1	4.1
Surplus/deficit, cash	**-99.5**	**-2.0**	**-260.2**	**-4.5**	**-366.3**	**-5.9**
Net increase/decrease of liabilities		0.0		0,0		0.0
Surplus/deficit, adjusted		**0.0**		**0.0**		**0.0**

Source: Ministry of Finance

As at 31 December 2022, public debt amounted to 4.1 billion euros or 70.8% of GDP, of which the external debt made up 3.58 billion euros, domestic debt was 468.8 million euros, and debt of local self-governments accounted for 75.9 million euros. During 2022, the public debt decreased by 13.2 pp of GDP. Certainly, in addition to the slight reduction of the public debt in absolute amount, the large drop in the ratio of public debt to GDP was primarily affected by the continuation of a strong recovery of economic activity. In 2021, public debt decreased by 21.3 pp of GDP. At the end of that year, the state also had a significant reserve of liquid assets so that the net public debt amounted to 68.8% of GDP, which is a decrease of 5.8 pp of GDP at the annual level.

According to the baseline forecast scenario of the Economic Reform Program for Montenegro for the period 2023-2025, public debt (gross) will amount to 73.6% of GDP at the end of 2023. During the forecast period, the public debt is expected to grow in absolute terms every year. Thus, it is expected that it will reach 4.54 billion euros in 2023, and 5.15 billion euros or 74.8% of GDP at the end of 2025.

As at 31 December 2022, government debt amounted to 4.03 billion euros or 69.5% of GDP. Of this amount, 3.58 billion euros or 61.4% of GDP related to external debt, while 468.8 million euros or 8.1% of GDP was domestic debt. Within the external debt, debt arising from Eurobonds accounted for the main share of 49.2%. The current outstanding bond issues are those from 2018, 2019, and 2020, which collected a total of 1.75 billion euros. Within the domestic debt, two bond issues are active on the Montenegro Stock Exchange as of 2019 and they mature in 2024 and 2026.

The state borrowed the amount of 221.8 million euros in 2022, of which 116.8 million euros from foreign creditors (based on the withdrawal of funds from previously concluded credit arrangements), 66 million euros from domestic commercial banks, and 39 million euros through issues of Treasury bills. The characteristic of this year's debts is that they were made at significantly higher interest rates compared to those that the state managed to contract in previous years. Under the impact of geopolitical events and the tightening of monetary policies, as well as the impact on market interest rates, the growth of yields, and very uncertain economic prospects, it is clear that the planned budget debt will be more expensive and will represent a great challenge for the state budget in the coming period and, therefore, have a negative impact on the state of fiscal risk and potentially on the stability of the system.

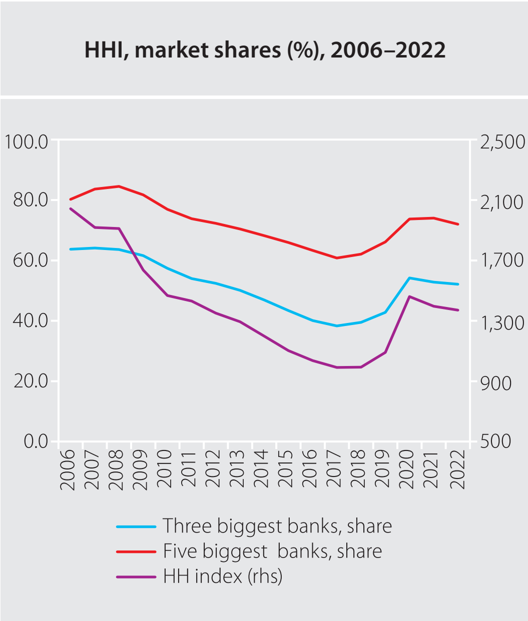
More than three quarters of the government debt is repaid at a flat rate (78.5%), and the rest at a variable interest rate (23.1%). Regarding the currency structure, which had significantly improved during 2021, at the end of 2022, 95.3% of the debt repaid was in euros and only 2.5% in USD, while 2.2% was in other currencies.

The balance of debt under state guarantees was reduced compared to the end of 2021 by 13.6 million euros and amounted to 176.5 million euros or 3% of GDP at end-2022. Also, the debt balance arising from external guarantees amounted to 146.1 million euros (2.5% of GDP), while debt balance arising from domestic guarantees was 30.4 million euros (0.5% of GDP).

4. FINANCIAL SYSTEM

At the end of 2022, the value of financial sector assets amounted to 6.8 billion euros, or 117.3% of GDP. On the annual level, the assets of the financial sector recorded a significant growth of 18.9%, primarily due to the growth of banks' assets. The banking sector has the dominant position in assets of the financial sector (94.2%), while as in the previous period, the insurance sector represents the second most important group of institutions (4%). The remaining segments of the financial sector - microcredit financial institutions (MFIs), leasing companies, and factoring companies – accounted for a collective share of a mere 1.8% in the structure of the financial system.

Graph 4.1



Source: CBCG

In the past few years preceding 2022, the number of banks in the Montenegrin banking market had declined as a result of bank mergers and the introduction of bankruptcy in certain banks. During 2022, eleven banks operated in the system, eight of which are majority foreign owned. Banks with majority foreign ownership account for some 80% of banking assets in the system.

The banking sector concentration, according to the HHI index, decreased slightly from 1,397 to 1,370 points (graph 4.1). As per the same indicator, market concentration of loans was significantly higher (2,076 points), while deposits were more evenly distributed as the index stood at 2,079 points at the year-end. Looking at assets, the market share of three and five largest banks amounted to 52.1% and 72%, respectively.

Nine companies performed insurance activities in the Montenegrin insurance market during 2022, of which four companies engaged in life insurance, and five companies in non-life insurance activities. Taken as a whole, the insurance market was characterized by moderate market concentration, however, it is important to note that individually, both life and non-life insurance segments are characterized by high market concentration, especially the life insurance segment. The share of gross invoiced insurance premiums in GDP stood at 1.9% at the end of 2022, which was at a significantly lower level compared to developed European markets.

In 2022, eight microcredit financial institutions, one leasing company, two factoring companies, and two receivables repurchase companies were operating in Montenegro.

Box 4.1 – CBCG`s macroprudential measures for 2023

With the aim of preserving and fostering financial stability, the CBCG adopted several macroprudential measures to be implemented in 2023.

First of all, capital buffers should be set aside, and in addition to them, macroprudential measures related to unsecured cash loans of natural persons, as well as temporary measures related to the coronavirus pandemic and the situation in Ukraine, are also being implemented.

The countercyclical capital buffer rate applied in Q1 2023 was prescribed at the level of 0%, and the implementation of the 0% rate was extended in the second quarter of that year by a subsequent decision[16]. Such a decision was made as the available cyclical systemic risk indicators, including the deviation of credit and GDP ratios from their long-term trends, did not indicate the need to introduce a positive countercyclical capital buffer rates. Certainly, the mentioned rate applies to the territory of Montenegro, and every credit institution is subject to the so-called specific countercyclical buffer rate.

The buffer rate for structural systemic risk, prescribed at the level of 1.5%, will also be applied in future. The application of the buffer for structural systemic risk began on 1 January 2022, so the next regular review of that rate will be carried out at the end of 2023, with the aim of defining the rate that will be valid starting from 2024. If necessary, the review can be carried out earlier. When the structural systemic risk buffer is applied equally to all exposures, then the credit institution are obliged to maintain the higher of the structural systemic risk buffer or the O-SICI buffer.

The regular annual determination of O-SICI was carried out, resulting in 10 O-SICIs or one more compared to 2021. A high number of O-SICIs compared to the total number of credit institutions (10 out of 11), on the one hand, is a consequence of the consistent implementation of the EBA methodology and the use of all so-called mandatory indicators, and on the other hand, dispersed market share of credit institutions in Montenegro, observed through different mandatory indicators, so that in the end, there are 10 institutions that exceed the minimum threshold for determining a credit institution as an O-SICI.

After determining the O-SICIs, the CBCG also prescribed buffer rates that the O-SICIs are obliged to maintain. The O-SICIs buffer rates are, depending on the systemic importance of the credit institution, determined at the level of 1.25% to 2%, with application starting as of 31 March 2023. In addition to the aforementioned link to the structural systemic risk buffer, Article 163 paragraph 3 of the Law on Credit Institutions stipulates that an O-SICI that is a subsidiary of an EU-based parent credit institution shall maintain an O-SICIs buffer rate that shall not exceed 1% and an O-SICI buffer rates prescribed on a consolidated basis for the parent credit institution by the relevant EU authority. Like last year, the buffer rates for the O-SICI were determined using the equal expected impact method.

Additionally, the Law on Credit Institutions defines that the capital preservation buffer in 2023 amounts to 1.25% (after 0.625% in 2022).

[16] The countercyclical capital buffer rate review and the adoption of the decision are carried out quarterly, and more often, as appropriate.

In practice, the mentioned buffer rates affected the capital requirements for banks on 31 March 2023 to remain higher than the minimum 8% prescribed by the Law on Credit Institutions and higher than in 2022. Depending on the credit institution, they range from 10.75% to 11.25%[17]. We should remember that capital buffers are allocated in the form of regular share capital, while the minimum 8% of regular share capital must be 4.5 pp.[18]

In addition to capital buffers, macroprudential measures related to retail loans granted by credit institutions are also in place. The aim of the measures is to mitigate the risks arising from unsecured retail cash loans, which have been on a strong uptrend in recent years, with large loan amounts and long maturities. Basically, the measures limit the maturity of cash retail loans that have not been secured by quality collateral to the period of eight or (under certain conditions) six years. These are the same measures that were applied in 2022, and in a slightly different version in the period 2020-2021.

Finally, temporary measures to mitigate the negative effects of the COVID-19 pandemic on the financial system and situation in Ukraine are also in place, and they were introduced for the fifth time in a series of decisions targeting the impact of the coronavirus pandemic and situation in Ukraine on the financial system (OGM 135/22). The key measures of the fifth decision are: 1. Prohibition of dividend payment to shareholders of credit institutions, except for payment in the form of shares of the credit institution; 2. The possibility for the credit institution to exclude 100% of the amount of unrealized losses, determined after the entry into force of this decision, from the calculation of regular share capital items, when valuing certain debt financial instruments available for sale in accordance with International Financial Reporting Standards (IFRS) 9, which are included in the total other result; 3. The possibility that the credit institution, in the process of assessing the creditworthiness of the borrower and allocating asset items to the appropriate classification group, i.e. subgroup, excludes all or certain criteria established in accordance with Article 12 paragraph 3 of the Decision on minimum standards for risk management in credit institutions, which refer to 2020; 4. Reduction from 12% to 6% (annually) of the fee that credit institutions are obliged to pay to the CBCG for using the prescribed amount of reserve requirement which they do not return on the same day.

4.1. Banks' balance sheet structure

The growth trend in the total assets and liabilities of banks continued in 2022. The growth of the balance sheet amounted to 20.2%, and it was under the prevailing influence of the growth of deposits.

Deposits have been the primary source of bank funding for many years now and they accounted for 81.5% of total liabilities at end-2022, while their share in the balance sheet increased by 2.7 pp annually (graph 4.2). At end-2020, due to the coronavirus pandemic, deposits recorded their first annual decline as of 2010. After that, the growth trend was re-established and growth was achieved in 2021 and in 2022 when deposits increased every month except in March, achieving the annual growth of 1.02 billion euros or 24.4%. Thus, total deposits were at their historic high of 5.22 billion euros and such inflow of deposits undoubtedly indicates confidence in the banking sector.

[17] Assuming that the specific countercyclical capital buffer rate is 0% for each of the credit institutions and disregarding any potential special capital requirements for a given credit institution, i.e. Basel Pillar 2.

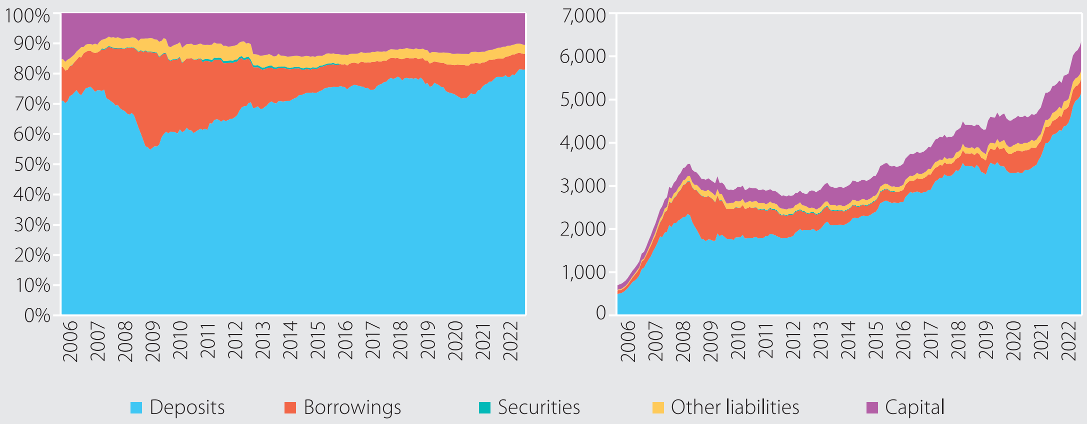
[18] In practice, almost the entire regulatory capital of credit institutions is made up of the Common Equity Tier 1 capital.

Retail deposits amounted to 1.7 billion euros and they were 17.9% higher year-over-year. Deposits by the non-financial sector amounted to 1.77 billion euros or 47.2% more y-o-y. Both sectors were at their historic peaks this year. In addition, year after year, non-residents had been becoming an increasingly important segment in total deposits, and the growth of non-resident deposits amounted to 150.8 million euros or 12.9%, although their share in total deposits decreased from 27.8% in 2021 to 25.2% in 2022.

Despite certain oscillations during the year, loans recorded a decrease at the end of 2022 of 4.1%, amounting to 310.4 million euros. Their share in total liabilities and capital was 4.8% and it decreased by 1.2 pp compared to the previous year. Banks mostly relied on borrowings from parent banks and members of their banking group, whose share in total borrowings was 36.7% at the end of 2022. At the end of the year, short-term borrowings of parent banks recorded a drop of 31.8% and their share in total loans amounted to 8%.

Graph 4.2

Liabilities and capital: structure (lhs) and amount in million euros (rhs), 2006–2022



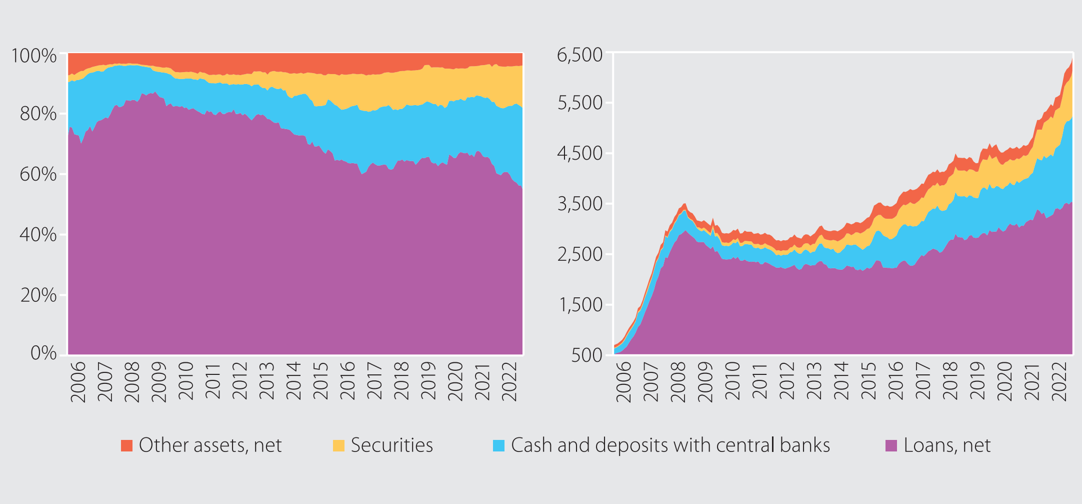
Source: CBCG

A large liquidity inflow resulted in an increase in cash and deposit accounts with central banks of 579.4 million euros or 48.9%, which totalled 1.76 billion euros and accounted for 27.5% of total assets and liabilities, which is 5.3 pp more than at the end of the previous year (graph 4.3).

Part of the enormous inflow from deposits is invested in securities. Securities were up 25.8% year-on-year and amounted to 923.9 million euros or 14.4% of total assets and liabilities. Historically, this is the highest level and share of these instruments.

Graph 4.3

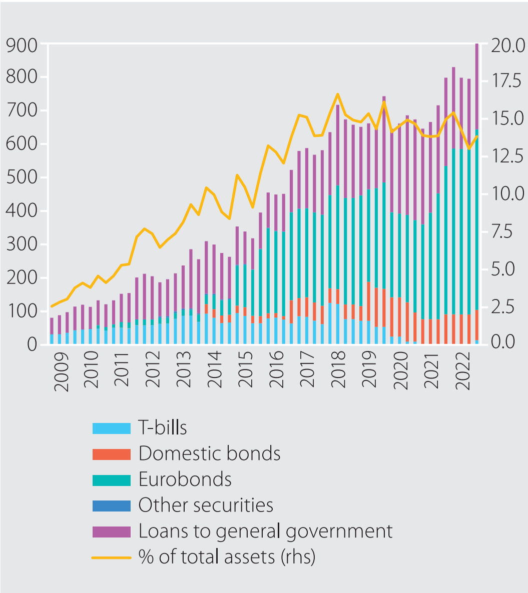
Assets: structure (lhs) and amount in million euros (rhs), 2006–2022



Source: CBCG

Graph 4.4

Banks' exposure to the general government, in mil. euros and % of assets, 2009–2022



Source: CBCG

As in the previous period, government securities accounted for the majority of the banks` securities portfolios (69.6%). Banks generally consider these as investments with a favourable interest rate in relation to risks, and this has been especially appealing to banks in recent years. In addition, regulatory risk weight for this type of investment is 0%, whereby banks make profit for this type of portfolio and do not have any related regulatory capital requirements. In 2022, banks increased the portfolio of government securities of Montenegro to 643.5 million euros or 20.4%, but also the position of foreign securities, which at the end of the year amounted to 294.8 million euros.

Total exposure of banks to the government was 14% of total assets or 0.9 pp in relation to end-2021 (graph 4.4). In absolute amount, it amounted to 899.9 million euros[19]. This year, the government used more of the possibility of taking new loans from banks (67.5 million euros) than was the case in previous years (7.1 million euros in

[19] The exposure relates to government securities and loans granted to the general government. General government includes central government, local governments (municipalities) and social security funds.

2021). Despite that, the central government debt arising from loans was reduced by 1.9% to 223.5 million euros. In 2022, the state again issued treasury bills and their value in the portfolio of banks amounted to 14 million euros at the end of the year.

At end-2022, banks' receivables from non-residents in the form of deposits were 10.3% higher than at the end of the previous year. These were mainly demand deposits with non-resident banks, amounting to 366.6 million euros at the end of the reporting year.

Total receivables from non-residents stood at 1.10 billion euros or 17.1% of assets at end-2022. Total liabilities to non-residents amounted to 1.55 billion euros or 24.1% of liabilities (foreign deposits make the largest share of these liabilities, and they reached 1.32 billion euros at the year-end, increasing by 12.9% annually). High exposure to the non-resident sector affects liquidity risk because, albeit stable and steady in the long term, this source can become a source of instability in the event of a sudden withdrawal. Thus, net foreign assets of banks stood at -7% of their total assets and liabilities at end-2022.

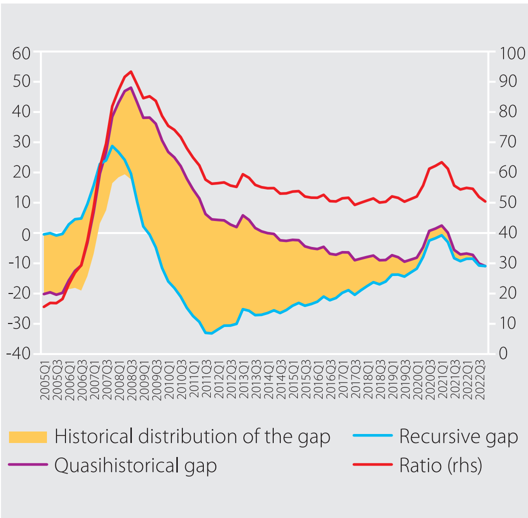
4.2. Credit growth and non-performing loans[20]

In general, a solid growth of banks' lending activity continued in 2022, but we cannot speak of any generally excessive credit growth.

Total loans were at their historic high in November and amounted to 3.69 billion euros, and although they fell to 3.66 billion euros by the year-end, they recorded the annual growth of 8.9%. The share of net loans in assets decreased from 60.3% in 2021 to 54.9% in 2022. Lending activity in terms of new loans amounted to 1.47 billion euros or 31.5% more than in the previous year.

Graph 4.5

Credit-to-GDP ratio (%) and gap (pp), Q1 2005 - Q4 2022[21]



Source: CBCG

Since the beginning of the pandemic, the gap between loans and GDP has decreased (closure), as a result of the significant drop in GDP in 2020 and at the beginning of 2021. With the recovery of economic activity, we got a more realistic value of the gap, which is in line with its long-term

[20] Unless otherwise stated, the data on loans presented in this chapter, as well as in the rest of the report, refer to loans and other receivables of the credit type on a gross principle (with corresponding value adjustments), without accrued interest and prepayments and accruals of interest/fees.

[21] The gap measures the difference between the current loans-to-GDP ratio and the long-term trend of the loans-to-GDP ratio. At the same time, the recursive gap refers only to the data available at the end of the given quarter and is calculated only for the given quarter (ignoring data related to the following quarters), while the quasi-historical gap is calculated for both the last and all previous quarters, taking into account all historical data available as at 31 December 2022. For more information on the methodology, see the information on the countercyclical capital buffer rate for Montenegro on the CBCG website (*https://www.cbcg.me/en/core-functions/financial-stability/macroprudential-measures/countercyclical-capital-buffer*).

trend. Nevertheless, the gap between the ratio and the ratio trend was pronounced at end-2022 when it was additionally deepened due to the stronger growth of nominal GDP compared to the growth of loans in the last few quarters.

At the end of the fourth quarter of 2022, the ratio of credit to GDP was at the level of 51.3%. In relation to its long-term trend, the ratio deviated by -10.7 pp, which was below the lower threshold of 2 pp, i.e. the minimum value that would indicate the need to introduce a non-zero countercyclical capital buffer rate in the first quarter of 2023, which made the value of the buffer guide 0%.

The largest share of banks' loan portfolio referred to retail loans (42.5%) and they have been recording positive growth rates over the last eight years. In 2022, this rate was 8.6%. The volume of new retail loans in 2022 was 37.5% higher compared to the previous year, recording a 5.6% higher level compared to the pre-crisis period in 2019. New retail loans amounted to 535.8 million euros in the reporting year and most of these were cash loans (52.4%).

Loans to resident non-financial institutions accounted for 34.5% of total loans at end-2022, and they increased by 9% at the annual level. Observed by new loans, this is still the sector that banks finance the most, with 779.9 million euros in 2022, which is 27.5% and 60.2% more than in 2021 and 2020, respectively. As in the previous years, the main share of new loans to resident non-financial institutions referred to loans for liquidity (working capital). The share of liquidity loans in new corporate loans increased from 62.2% in 2020 to 64.4% in 2021 and then recorded a share decline to 63.4% in 2022.

In terms of FX risk, i.e. currency induced credit risk, the loans' currency structure is still very favourable. A negligible share of loans was approved in other foreign currencies, which has been characteristic of banks' loan portfolios for a longer period.

In reference to the maturity structure of loans as per initially agreed maturity, long-term loans accounted for 90.8% (not including credit-type receivables) at end-2022. Observed in terms of remaining loan maturity, the share of long-term loans appears to be somewhat lower, 81.4%.

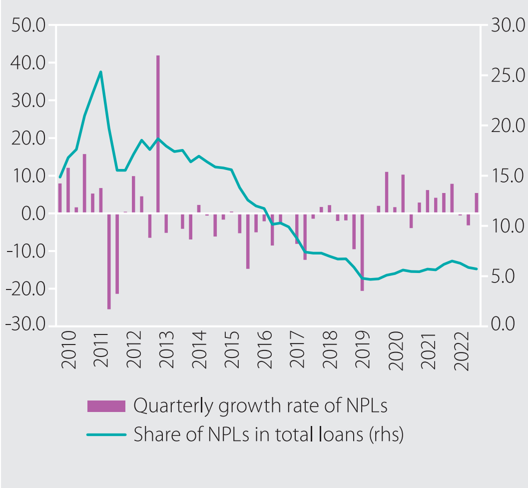
Looking at non-performing loans (NPLs), credit risk reduced during 2022. At the aggregate level, the NPL share in total loans fell by 0.5 pp year-on-year, reaching 5.7% at end-2022 (graph 4.6), with six banks having higher, and five banks having lower shares of NPLs than at end-2021.

Total NPLs recorded a decline during 2022. The sum of NPLs increased by 0.8% and amounted to 209.1 million euros. The NPLs to GDP ratio amounted to 3.6%, being slightly lower compared to the end of the previous year (4.2%), with GDP growing significantly this year. At end-2019, this indicator stood at 2.9%. The share of loans that were over 30 days past due decreased in the one-year period and accounted for 4% of total loans.

Distribution of the share of NLPs by banks at the end of 2022 indicates a similar situation as at the end of 2021 (graph 4.7). The range between the lowest and the highest share decreased, while the range between the first and third quartile was higher, but lower values were recorded for both quartiles, indicating a reduction in credit risk at the system level. The share of NPLs of four large banks was below or equal to the median NPL value of 6.4%.

Graph 4.6

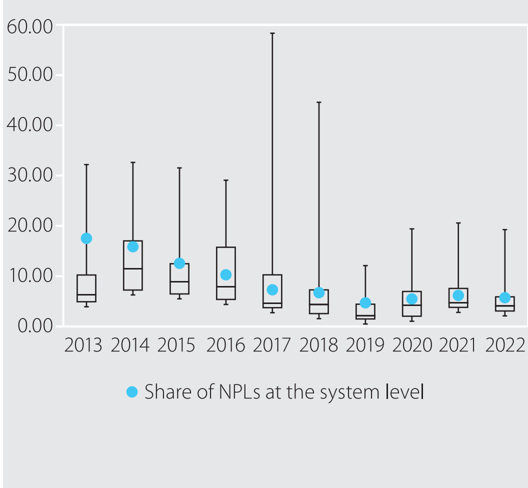
Quarterly growth rate of NPLs and share of NPLs in total loans, %, 2010–2022



Source: CBCG

Graph 4.7

Distribution of the share of NPLs and their share at the system level, %, 2013–2022[22]



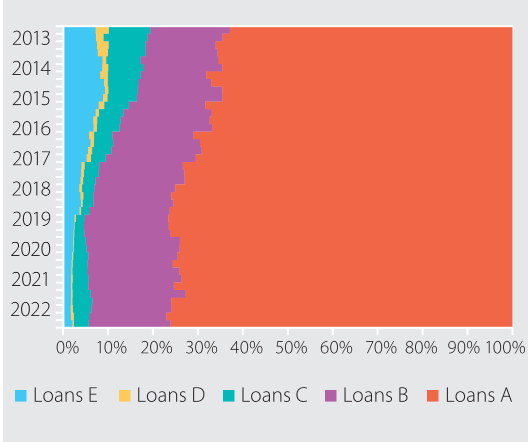
Source: CBCG

The biggest change in the structure of loans by quality category was realized in category A loans whose share increased from 72.8% to 76.1% during the year. The share of B category loans decreased from 21.1% to 18.2%, while their annual decrease amounted to 5.8%. In some banks with a higher market share, this category of loans accounted for a significant portion of their loan portfolio. A significant decline was recorded by loans from category C. Their participation in total loans at the end of the year fell to 3.3%, while the annual decline in the sum of category C loans amounted to 10.7%. The D and E category loans were much smaller in share and accounted for 0.3% and 2.1%, respectively.

A development of credit risk can be seen by observing how banks perceive the movement of risk according to the expected credit losses, i.e. in accordance with the IFRS 9.

Graph 4.8

Trends of classified loans, 2013–2022

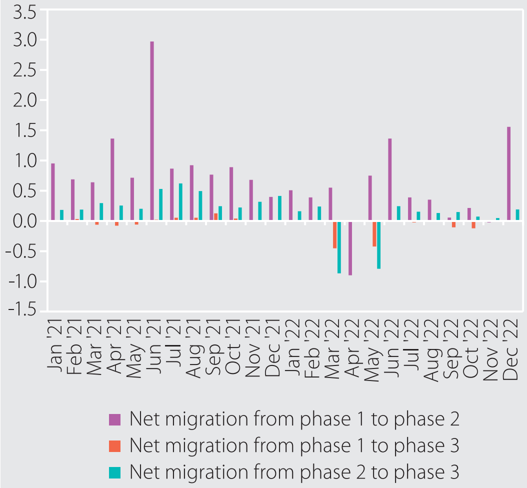


Source: CBCG

22 Reading from the bottom up, the graph's horizontal lines for each year mark the minimum, first quartile, second quartile (median), third quartile and maximum.

Graph 4.9

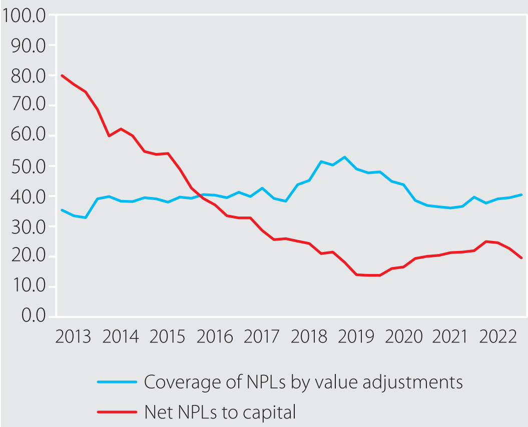
Monthly net loan migration per phases, % of total loans, 2021–2022



Source: CBCG

Graph 4.10

Selected credit risk indicators, %, 2013–2022



Source: CBCG

Phase 1 loans which still represents by far the largest category, increased during 2022,[23] therefore their share in total loans amounted to 78.1% at the end of the year.

During the whole 2022, banks transferred significantly less loans to phase 2 compared to the previous year (graph 4.9).[24] At end-2022, the annual increase in phase 2 loans amounted to 3% and their share in total loans decreased from 17.3% to 16.2% in a year.

Phase 3 loans, i.e. those loans with objective evidence of loan losses[25], recorded a continuous annual fall (26.8% at end-2022), while their share decreased from 8.6% to 5.7%. During 2022, loans in phase 3 recorded annual growth during each quarter.

The share of NPLs in total loans of non-financial institutions was 9.9% at end-2022, while it had amounted to 7.5% in the pre-crisis period[26]. The growth of credit risk was less pronounced in the retail sector. Macroprudential measures of the CBCG related to unsecured retail cash loans had a positive effect on reducing this risk.

The sum of retail NPLs decreased by 2.1% and their share in total retail loans stood at 4% at end-2022. The share of retail loans that are more than 30 days past due in total retail loans was 4%.

The coverage of NPLs by value adjustments for loan losses (only for NPLs) amounted to 40.4% at end-2022, while they stood at 39.7% at the previous year-end. A somewhat lower amount of capi-

[23] Phase 1 includes financial instruments which did not significantly deteriorated credit risk or which had low credit risk at the time of reporting.

[24] Phase 2 covers financial instruments where there was a significant increase in credit risk, but there was no objective evidence that loan losses had occurred.

[25] Phase 3 contains financial assets which had objective evidence of incurred loan losses.

[26] End-2019.

tal was exposed to credit risk as the ratio of net NPLs („uncovered“) and capital decreased on the annual basis from 22.0% to 19.6%[27].

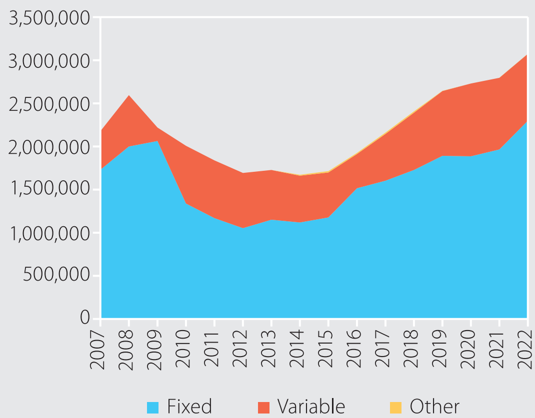
Box 4.2 – Loans with a variable interest rate in Montenegro

Variable interest rates are interest rates that change during the loan repayment period, thus changing the monetary amount of interest which is paid in that period. The variable interest rate is usually linked to some reference interest rate, in Montenegro usually from the euro market, in such a way that the variable rate represents the sum of the reference interest rate and the so-called fixed margins, i.e. of the unchanging/fixed part of the interest rate. In this way, it can be at least equal to the fixed margin (when the reference interest rate is equal to zero or below zero), and any increase in the reference interest rate directly increases the variable rate above the level of the fixed margin. Variable interest rates are usually lower than fixed interest rates, due to the higher risk for clients because of their potential increase. They are generally suitable for financing loans with a relatively shorter repayment term, i.e. in situations where their growth is not expected in the medium to long term.

At end-2022, loans with a variable interest rate accounted for 25.2% of total loans. The three largest banks accounted for 94.4% of those loans, and 82.8% of the loans had a remaining maturity of more than three years. The non-financial sector accounted for 47.1% of loans with a variable rate, of various purposes, while 23.6% of loans related to the retail loans, of which 63.2% were housing loans.

Graph 1

Loan structure according to interest rate volatility, 2007-2022, in thousand euros



Source: CBCG (Credit Registry)

After a multi-year period of zero or negative reference interest rates, an increase in euro interest rates began in mid-2022, after the ECB raised the interest rate on the main refinancing operations from zero for the first time in more than six years. In July, it increased to 0.5%, and at the end of the year, after three more increases, it amounted to 2.5%, with announcements of its further growth. The increase in the ECB interest rates affected an increase in market reference interest rates (EURIBOR of various maturities), thus, for example, three-month and six-month EURIBOR, from the negative zone from the beginning of June, ended 2022 at the level of 2.1% and 2.7%, respectively. This directly spilled over to the increase of variable (but also fixed) interest rates in Montenegro.

Therefore, banks in Montenegro were proactive, informing users of loans with variable interest rates about the increase in variable interest rates and proposing programs for converting variable to fixed interest rates. According to data from the Credit Register, in the period June - December 2022, the conversion of interest rates was carried out more and more intensively, and interest rate was converted in

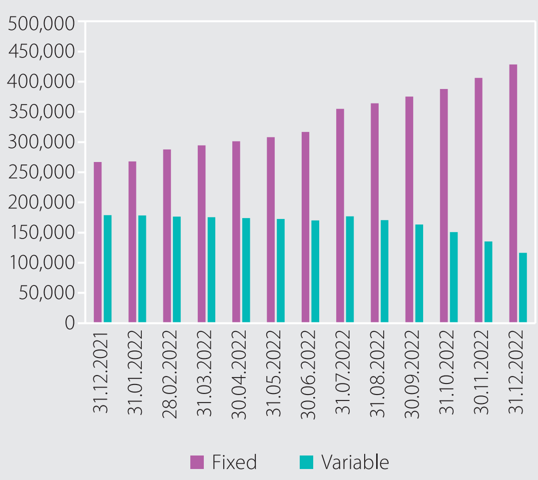
[27] In order to achieve consistency of the coefficients in this paragraph, non-performing loans include both interest receivables and prepayments and accruals, because there is no separate classification of quality for interest and prepayments and accruals for value adjustments but only for the total amount/sum: principal, interest and prepayments and accruals.

1,782 contracts. Of the total amount of remaining receivables at the end of the conversion month it was 79.2 million euros. The three largest banks accounted for 98.6% of the conversion amount, with 80.3% for the households. Housing loans accounted for 68% of the conversion amount, and the remaining maturity over five years accounted for 89.7% of the conversion amount. The conversion made it necessary for the contracts in which the conversion was carried out, the (fixed) interest rates after the conversion to be on average about 0.35 pp higher than the (variable) interest rates before the conversion.

Observed in relation to the balance of loans with a variable interest rate at the beginning of June, the amount of conversion in the period June - December amounted to 9.2%, reaching 10-15% with two banks and over 15% with one bank. Also, compared to the beginning of June, by the end of December, 23% of loans with a variable interest rate given to households, 31.2% of housing loans or 27.8% of loans with a variable interest rate with a remaining maturity of over 10 years were converted.

Graph 2

Structure of housing loans of natural persons according to interest rate volatility, 2022, in thousand euros



Source: CBCG (Credit Registry)

The aforementioned increase in euro interest rates and the conversion process consequently affected the change in various aspects of the loan structure according to the type of interest rate, at end-2022 compared to end-2021. The amount of loans with a variable interest rate decreased, in absolute terms, from 830.2 million euros to 775.3 million euros, while their share in total loans fell from 29.7% to 25.2%. The number of users of loans with a variable interest rate decreased from 14.4 thousand to 10.9 thousand, partly due to conversions and partly due to repayments (of previously taken loans) during the year. At the end of 2021, the share of housing loans with a variable interest rate in total loans was 40.1%, while the same share at the end of 2022 was 21.3% (graph 2). At the end of 2021, the share of natural persons' loans with a variable interest rate in total natural persons' loans was 20.5%, while the same share at the end of 2022 was 12.1%. The mentioned percentages indicate that there is still room for the conversion of variable to fixed interest rates, and this is a process that will probably continue in 2023.

4.3. Liquidity

Liquid assets of banks amounted to 2 billion euros, recording a strong annual growth of 41.5%. At end-2022, liquid assets of banks accounted for 31% of total assets, which is 4.7 pp more year-on-year (graph 4.11).

Banks maintained satisfactory daily and ten-day liquidity levels during the entire reporting year. Significant funds were available to banks in a very short period of time for their liquidity needs, primarily deposits that banks hold in settlement accounts with the CBCG (besides reserves requirement), which amounted to 1.26 billion euros or 63.5% of liquid assets at end-2022. Banks hold significant funds with foreign financial institutions and these are primarily demand deposits. They amounted to 348.9 million euros or 17.6% of liquid funds at the end of the year. Also, banks held cash in vaults in the amount of 242 million euros.

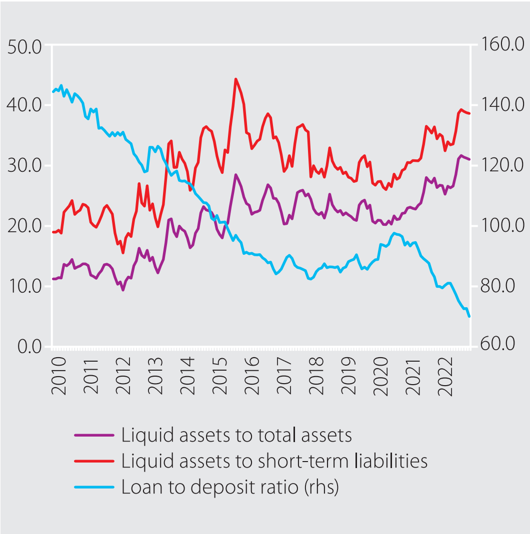
The loan to deposit ratio decreased year-on-year and reached 70.1%, as the increase in deposits (1 billion euros) was more than three times higher than the increase in loans (299.8 million euros).

Demand deposits accounted for the main share in the structure of deposits by maturity and this was eighth year in a row they were higher than time deposits. At end-2022, they accounted for 78.9% of total deposits, or 5.7 pp more than at the end of the previous year. For the purpose of comparison, this share was 42% at end-2013. This could be explained with a downtrend in deposit interest rates so time deposits became less attractive.

The liquid assets to financial liabilities ratio (up to one year) stood at 38.6% and it was 4.2 pp higher year-over-year. If we observe the ratio of liquid assets to financial liabilities up to three months, then this ratio amounted to 42.9%. Both indicators were higher at the end of the year due to an increase in liquid assets.

Graph 4.11

Liquid assets and loans to deposits ratio (rhs), %, 2010–2022



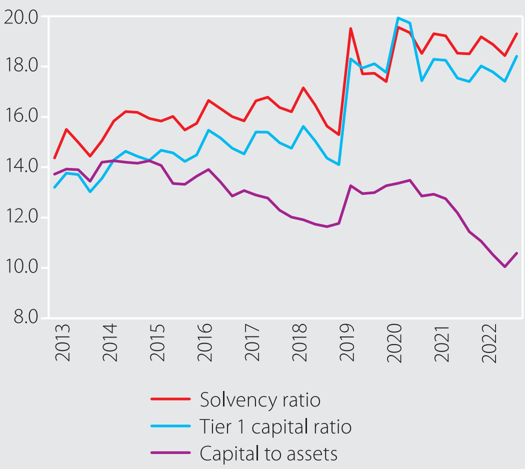
Source: CBCG

The ECB decided to extend the deadline for the CBCG to use the Eurosystem repo facility for central banks (EUREP) credit line until March 2022 (later extended until January 2023), instead of until June 2021, as initially agreed. The extension of the credit line provided additional safety for maintaining stability of the country's financial system because in case of need, the EUREP credit line enabled Montenegro to apply for funds to support systemic liquidity in the amount of up to 250 million euros.

In order to address potential vulnerabilities of banks, the Deposit Protection Fund secured a stand-by arrangement with the European Bank for Reconstruction and Development in the amount of 50 million euros, which will be active for another three years. It should be added that most banks in the system had a formally agreed liquidity support from their parent banks, which further complements the picture of stability of the system in terms of liquidity.

Graph 4.12

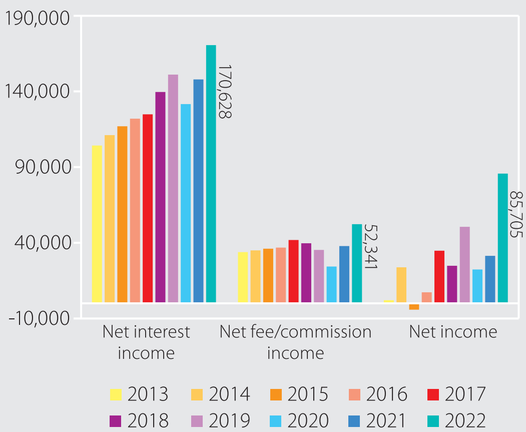
Selected capital ratios, %, 2013–2022



Source: CBCG

Graph 4.13

Selected income statement components, in thousand euros, 2013 – 2022



Source: CBCG

4.4. Solvency

Observed by capital indicators at the aggregate level, banks were adequately capitalized. At the system level, the total capital adequacy ratio was 19.3% at the end of the year, while the share capital adequacy ratio was 18.4%. At the four largest banks, the total capital adequacy ratio ranged from 13.2% to 28.7%. During the year, all banks in the system had capital ratios above the prescribed regulatory minimums.

During 2022, recapitalization was carried out by three banks of medium to large size. In two banks, the share capital was increased by issuing shares. At the third bank, there was an increase in share capital by converting the subordinated debt into additional share capital.

At end-2022, total capital of banks[28] was 11.9% higher than at end-2021, and it amounted to 677.9 million euros. The share of total capital in total assets and liabilities of banks was 10.6%, while share capital[29] accounted for 8.3%.

4.5. Profitability and interest rates

Net profit of banks amounted to 85.7 million euros in 2022, which was 211.7% more than in the previous year. Four largest banks, which individually hold more than 10% of market share in terms of assets, recorded a profit of 77.8 million euros. No bank in the system operated with loss.

Interest income and similar revenues were 12.5% higher year-on-year at the system level. In recent years, income from fees and commissions have gained importance, and they accounted for 63% of interest income and similar revenues in 2022. After a decline in 2020, these revenues recorded a growth of 38.4% in 2021 and 34.6% in 2022.

[28] Refers to balance sheet/accounting capital

[29] Refers to regulatory capital

Net interest and similar income were 15.3% higher year-on-year, while net income from fees and commissions increased by 38.2% (graph 4.13).

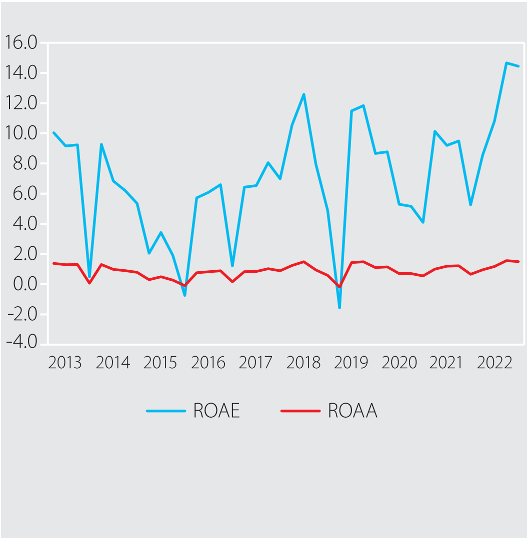
The biggest difference compared to the result from 2021 was induced by the provisioning cost, which amounted to -21.4 million euros (a negative cost has a positive effect on the result) in 2022, while in 2021 they stood at 23.2 million euros, which is a difference of almost 45 million euros. Allowances for impairment[30] declined by 10.9% relative to 2021.

In line with the better financial result, the Return on Average Assets (ROAA) increased (1.5% in 2022 in relation to 0.6% in 2021, while the Return on Average Equity (ROAE) increased from 4.6% to 14.4% (graph 4.13).

The breakdown of return on average capital shows that net interest income had the largest positive contribution (graph 4.15). On the other hand, regular expenses accounted for the largest share of expenditure, these being employee expenses and general and administrative expenses. At the system level, banks` employee expenses increased by 13.3% year-on-year. The only positive contribution was made by other expenses (with a -3.4 pp decline), which were mostly provisioning expenses.

Graph 4.14

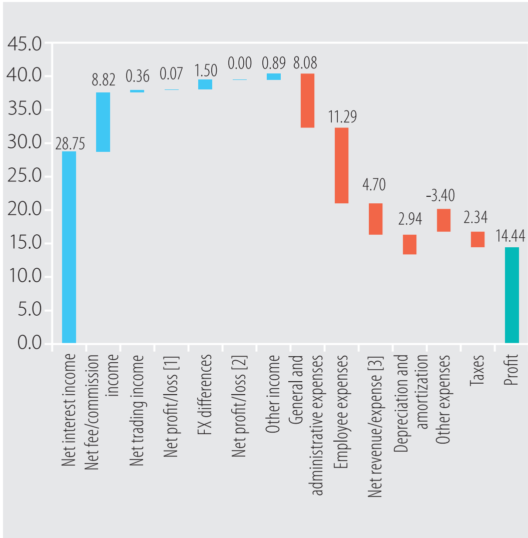
Selected profitability ratios, %, 2013–2022[31]



Source: CBCG

Graph 4.15

Components of banks' income statements in 2022, share in ROAE, percentage points[32]



Source: CBCG

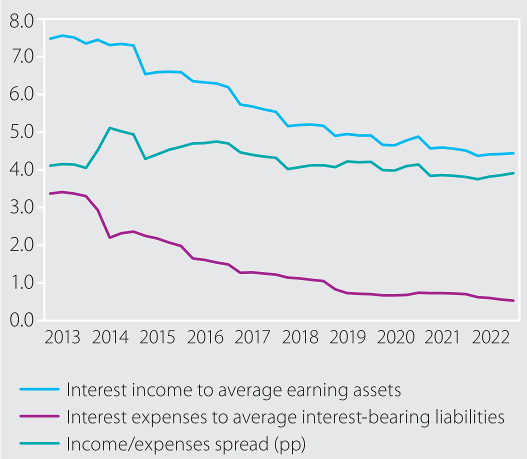
30 Impairment of financial instruments that are not measured at fair value through income statement.

31 Quarterly data for the first three quarters refer to cumulative amounts - first three months, first six months, and first nine months of the year, respectively, and for the annual level they were transferred by multiplying by 4, 2, and 4/3, respectively.

32 From the graph above, net profit/loss: (1) Due to derecognition of financial instruments that are not measured at fair value through income statement, (2) from financial instruments disclosed at fair value in income statement that are not held for trading, (3) from impairment of financial instruments that are not measured at fair value through income statement.

Graph 4.16

Income/expenses spread (percentage points) and its components (%), 2013–2022[33]



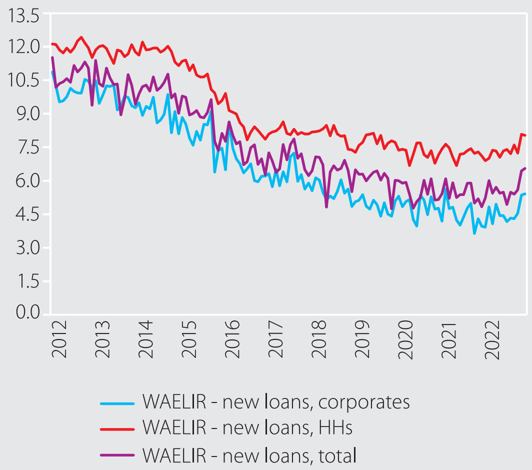
Source: CBCG

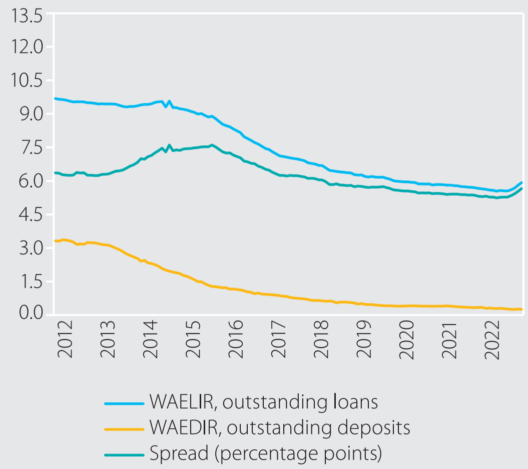
The difference between the interest income to average earning assets ratio and the interest expenses to average interest-bearing liabilities ratio was lower at end-2022 and it fell below 4 pp (graph 4.16). The spread per banks was very uneven, ranging from -0.5 pp to 5.4 pp. Average earning assets was 14.2% higher than in 2021, accounting for 75.4% of average assets.

The downward trend of weighted average lending interest rate (for the entire loan portfolio of banks, i.e. on outstanding principal/debt), albeit at a slower pace, was recorded throughout the year until the last two months of 2022, only to reach a growth of 0.26 pp at the year-end (graph 4.17). As for the weighted average deposit interest rate, its annual decline was 0.08 pp. At end-December this year, the weighted average lending interest rate was 5.92%, while the weighted average deposit interest rate was 0.26%. Thus the interest spread amounted to 5.66 pp at the year-end.

Graph 4.17

Selected interest rates, %, 2012 – 2022





Source: CBCG

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[33] Quarterly data for the first three quarters refer to cumulative amounts - first three months, first six months, and first nine months of the year, respectively, and for the annual level they were transferred by multiplying by 4, 2, and 4/3, respectively.

Lending interest rate on new loans for the entire 2022 (weighted by monthly amounts of new loans) was 0.31 pp higher compared to 2021 and it amounted to 5.69%. This decline was driven by lower interest rates on new corporate loans, where investments were 0.21 pp more expensive than a year ago. According to the same calculation method, interest rates on new retail loans were 16 pp higher.

4.6. Sensitivity analysis

Sensitivity testing using four credit risk tests showed a significant resilience of banks, with some sensitivity of individual banks in the first and fourth test. To wit, one bank failed the first test with the total amount of capital shortfall of 19.2 million euros, while four banks did not pass the fourth test as they were lacking capital in the amount of 37.9 million euros. However, the solvency ratio at the system level did not fall below the statutory minimum after any of the tests.

Table 4.1

Sensitivity analysis of credit and market risks, 31 December 2022

No.	Test	Solvency ratio after the test, %					Amount lacking capital at the sector level, thousand euros	Number of banks that failed the test
		Minimum	Q1	Q3	Max	System		
		Solvency ratio before the test, %						
		13.2	16.4	22.5	28.7	19.3		
Credit risk test								
1.	Negative reclassification of classified loans' structure[34]	1.9	11.3	21.0	24.9	16.9	19,199	1
2.	Increase in non-performing loans by 30% and value adjustments by 40%	11.2	15.1	21.4	27.9	18.5	0	0
3.	Large debtor bankrupt[35]	11.5	15.2	20.9	25.9	18.1	0	0
4.	Largest debtor bankrupt	-95.2	9.5	17.0	23.8	15.2	37,869	2
Market risks test								
1.	Interest rate increase by adding 2 pp to cumulative gap of interest rate sensitive positions with 181–365 days maturity	11.8	17.0	23.0	29.4	18.9	0	0
2.	Adjustment of net open FX position by 20%	13.2	16.4	22.5	28.7	19.3	0	0

Source: CBCG

As expected, the sensitivity to interest rate risk and the sensitivity to FX risk test showed minor negative impacts on the solvency ratio which, in the first case, declined by 0.4 pp to 18.2% at the sector level, while in the latter case, it dropped by a mere 0.003 pp.

The sensitivity to liquidity risk test, which was actually tested as a risk of bank run, was conducted through seven extremely severe and less probable tests. In addition to the most liquid banks' funds

[34] Reclassification of the structure of classified loans and receivables is implemented as follows: 1) category A – "pass" - calculated in the amount of 90%, and category B was increased by 10% of loans from category A, 2) category B – "special mention assets" – calculated in the amount of 95% of the increased category B, 3) category C – "substandard assets" – calculated in the amount of 5% from category B, whereby 95% of category C was kept, 4) category D – "doubtful assets" - calculated in the amount of 5% from category C assets, while 95% from category D was kept, and 5) category E - "loss" amount was increased by 5% of the amount from category D assets.

[35] Median value of the debt of banks' 20 top debtors.

in the country, the tests very conservatively assumed the possibility of using only 50% of the reserve requirement[36]. On the other hand, the possibility of using bank funds in the form of demand deposits held abroad, which amounted to 348.9 million euros at end-2022, was not assumed nor did the remaining 50% of the reserve requirement (131.6 million euros). Also, the options of selling non-cash assets (e.g. securities) or taking loans from parent banks, other participants in domestic or foreign markets or possibly from the CBCG or the state, were not taken into account.

Table 4.2

Sensitivity analysis of liquidity risk, 31 December 2022

No.	Test	Coverage by immediately available liquid assets, thousand euros (1,500.659 as at 31 December 2022)			Coverage by available liquid assets, thousand euros (1,632.198 as at 31 December 2022)		
		Lacking amounts (-), sector	Number of banks that failed the test	Lacking amounts (-) for banks that failed the test	Lacking amounts (-), sector	Number of banks that failed the test	Lacking amounts (-) for banks that failed the test
1.	Outflow of 30% of deposits	-66,636	7	-291,047	64,903	6	-203,883
2.	Outflow of 30% of demand deposits	178,831	5	-173,058	310,370	2	-107,116
3.	Outflow of 30% of demand deposits: 20% for natural persons and 40% for legal persons	119,937	4	-197,472	251,476	4	-122,868
4.	Outflow of time deposits 30% for natural persons and 40% for legal persons	1,228.328	0	0	1,359.867	0	0
5.	Outflow of deposits of the largest depositor	1,198.468	0	0	1,330.007	0	0
6.	Outflow of 50% of deposits of 10 largest depositors	960,927	1	-358	1,092.466	0	0
7.	Outflow of 100% of deposits of public sector	1,035.079	1	-231	1,166.618	0	0

Source: CBCG

Even under these rigorous assumptions, testing expectedly indicated good liquidity of the banking sector as a whole, although the most problematic was the first test, where the sector as a whole could respond to the withdrawal of deposits only after using 50% of the required reserve funds. In all other tests, inadequacy of liquid funds to cover deposit outflow appeared in individual banks. The most pronounced inadequacy, and after the use of 50% of reserve requirement funds, occurred after the conduct of the third test when four banks failed the test with the liquidity shortfall of 122.9 million euros.

However, with the use of deposits that banks have in accounts abroad and with the full amount of reserve requirement, only one bank would fail the first test (and would pass the other tests), while all other banks would pass all tests. Again, it should be kept in mind that these conditions also exclude some of the abovementioned additional layers of liquidity in the form of sale of securities or potential borrowings from other entities.

[36] Available liquid funds represent free liquid funds increased by 50% of reserve requirement. Pursuant to the Decision on Bank Reserve Requirement to be Held With the CBCG (OGM 19/22), a bank may use up to 50% of the reserve requirement without the fee charged by the CBCG, if it returns taken funds by the end of the working day. Technically, even with the CBCG fee of 12% per annum (reduced to 6% by temporary measures to mitigate the negative effects of the coronavirus pandemic and situation in Ukraine), the bank can use more than 50% of reserve requirement, i.e. use reserve requirement for a period longer than the end of the working day.

4.7. Real Estate Market

Results of the CBCG December survey suggest that the average price of a real estate in Podgorica amounted to 1,298 euros per square meter, which represents the year-on-year increase of 18.7%[37] (graph 4.18). The price of an apartment in a new building[38] in the area of Podgorica had a higher value in December 2022 (1,477 euros/m²) and recorded the annual growth of 19.9% (annual growth in the same period of the previous year was 20.5%). When it comes to the whole county, prices of apartments in a new building cost 1,399 euros per square meter, which is the annual growth of 20.5%. It should be noted that the differences in the prices of dwellings in new residential buildings depend mostly on the share of the Montenegrin Fund for Solidarity Housing Development, so the higher the share of these housing units, the lower the prices of newly built housing units and vice versa. In 2022, the average price of apartments of solidarity housing development was 594.8 euros per square meter.

Graph 4.18

Prices of residential buildings obtained using the Hedonic Index and prices of dwellings in new residential buildings, in euros[39]

Source: CBCG and MONSTAT

Based on a survey conducted by the CBCG[40], 75% of agencies recorded turnover increase in 2022. Most of the real estate agencies (88.2%) estimated that the average price per square meter increased from 5% to 40%. In agencies, the prevailing opinion is that prices will remain unchanged in the coming period. The agencies also believe that the demand will not decrease, moreover, it will remain the same or increase. During the year, demand was concentrated in apartments worth 1,000 to 2,560 euros/m². The most wanted apartments were in the wider centre of the capital, as well as in cities in the southern part of the country.

Housing loans are a significant determinant of demand on the real estate market, and the most important trends are presented in table 4.3.

[37] As per the Hedonic Index obtained from the CBCG survey where the prices do not reflect actual prices but essentially represent subjective prices of the real estate owners, i.e. the prices below which they would not be willing to sell their property.

[38] MONSTAT data

[39] The market price per square meter of an apartment in a new building includes apartments sold by companies, while the total price in a new building also includes apartments sold by institutions of solidarity housing development.

[40] For the purpose of the analysis, 164 real estate agencies were surveyed, most of which have their activities in Podgorica and the coastal region of Montenegro. Answers were submitted by 17 agencies.

Table 4.3

Housing loans trend, 2015-2022					
Year	Stock at year-end, in thousand euros	y-o-y growth, %	Per capita (in €)	% of GDP	% of total loans
2015	284,276	-2.8	456.9	7.8	11.9
2016	315,646	11.0	507.2	8.0	13.1
2017	323,845	2.6	520.4	7.5	12.0
2018	359,981	11.2	578.6	7.7	12.3
2019	395,202	9.8	635.5	8.0	12.9
2020	422,333	6.9	680.4	10.1	13.4
2021	431,546	2.2	698.7	8.7	12.8
2022	493,091	14.3	798.3	8.5	13.5

Source: CBCG and MONSTAT

According to the survey on the banks' lending activity, the credit standards for housing loans were tightened as of the first quarter of 2022. The most important factors that affected the change in lending standards for housing loans are the general economic situation and prospects, the willingness to take risks, and in the last quarter, the costs of sources of funds. All of the above factors, according to the banks' expectations, will also be present at the beginning of 2023. Banks' assessment of the demand for housing loans generally pointed to growth despite fluctuations. In addition, in the second half of the year, the share of rejected requests for approval of housing loans was higher. Also, banks considered that higher earnings in 2022 were an important factor in the overall growth of the demand for retail loans.

Graph 4.19

Annual growth in net earnings, housing loans in %, and interest rates on new housing loans, 2015-2022

Source: CBCG

The share of housing loans in GDP was 8.5% and it was almost at the same level as at the end-2021. The share in GDP was still significantly lower than the EU average (over third of the GDP value), which may be the result of lower solvency of citizens, but also less favourable lending conditions compared to the EU countries.

Looking at total loans, housing loans were higher (0.7 pp) than in the comparative year and accounted for 13.5%, rising 14.3% year-over-year. Also, banks approved 37.7% more new housing purchase and renovation loans, in the amount of 116.3 million euros. Interest rates on new housing loans recorded a moderate growth (0.42 pp) and the rate amounted to 4.97% (as an average weighted interest rate).

4.7.1. Risk assessment of the real estate market

Considering the importance of the real estate market for the business cycle and financial stability, a risk assessment of the market was performed. For this assessment, five indicators were used, monitored in the period 2006 - 2022, which approximate the real (fundamental) value of real estate. Any major deviation from the calculated real estate value could signal an increased risk in the real estate market which, as the financial crisis has shown, may affect financial stability. In relation to the previous analysis of risk assessment in the real estate market, this analysis has been enhanced by adding the participation of foreign direct investments in real estate in total FDI.

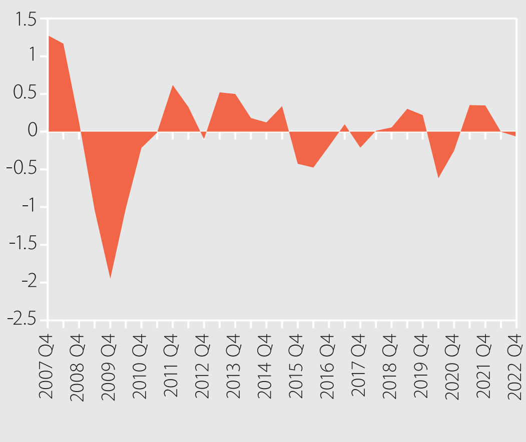
Five series used for given analysis are the following: the ratio of subjective real estate prices and net earnings in Podgorica, the ratio of new construction prices to net earnings in Montenegro, the percentage share of the value of effective construction hours in GDP, as well as the share of the inflow of foreign direct investments into real estate in total foreign direct investments. The first two series approximate the factors that determine demand (purchasing power of the population). The third series approximates the factors that affect the supply in the real estate market. The fourth series approximates the situation in the banking sector, which significantly determines the trends in the real estate market. The fifth series approximates the importance of foreign demand on the real estate market in Montenegro, which is very important considering that Montenegro is recognized as a tourist destination. These series are available for the period 2006-2022. The principal component analysis was applied to these five series, which creates a new variable that includes the common variability of the given series during the specified period.

In order to estimate the deviations from the real value of real estates, cyclic movements were calculated using the Hodrick-Prescott filter (HP) method (applying the recommendations of Ravn and Uhlig (2004) in the estimation). The given cyclical trends are presented in graph 4.20.

Based on the given graph, it can be estimated that the period up to 2008 had been characterized by overestimated real estate values on the market (boom), while the period 2008–2011 was characterised by much underestimated real estate values in relation to its fundamentals (bust). This cycle (boom and bust) is a consequence of the global financial crisis that hit Montenegro precisely because of the overemphasized price bubble in the real estate market. The post-crisis period is characterized by smaller fluctuations in real estate prices compared to fundamentals. Although real estate prices are generally overvalued (more than the real value of the fundamentals), the oscillations are small and do not represent a financial risk.

Graph 4.20

Deviation from the real value of real estates during the period 2007-2022



Source: CBCG

In the year of the beginning of the pandemic (2020), it is noted that real estate prices were below the value of the foundations. Namely, in order to protect the health of the population and prevent the spread of the pandemic, Montenegro was in lockdown and applied a more rigid international transport policy, which resulted in weaker demand, investments and lending, so the prices were slightly underestimated. The real estate market recovered already in 2021, and then real estate prices were again somewhat higher than their real value. Finally, it can be concluded that real estate prices are very much affected by macroeconomic trends, but also by shocks such as the global financial crisis in 2008 and the coronavirus pandemic in 2020.

In 2022, tax reforms were implemented, resulting in an increase in real wages by 18.4%. Due to the real growth in demand and the purchasing power of households, real estate prices, although being on an uptrend, are not higher than their fundamental values but reflect real changes on the demand side of the real estate market.

The shortcomings of this analysis are short series that do not cover the complete business cycle from the period before 2007, but also the sensitivity of the HP filter method to the length of the series. Also, the analysis would be improved if the number of variables used for the principal component analysis was higher. The series that would contribute to improving the quality of the analysis, but are unfortunately currently unavailable, are: investments in the construction sector, the amount of rent, and the like.

4.8. Capital Market

The turnover of 78.2 million euros was recorded at the Montenegro Stock Exchange (1.3% of GDP) in 2022, as compared to 46.5 million euros in the previous year.

Trading with shares made up 98.5% of the secondary turnover, of which trading with shares of companies amounted to 77 million euros and trading with shares of investment funds totalled a mere 38.7 thousand euros. The rest of the secondary turnover (1.2 million euros) related to bond trading, and this almost entirely corporate bond trading. There were no primary issues.

At end-2022, the SE indices Monex and MNSE10, stood at 14,141.35 and 1,009.24 points, respectively, recording the respective year-on-year growths of 43.3% and 32%.

4.9. Payment Systems

The payment system of the CBCG, which consists of the Real Time Gross Settlement (RTGS) system and the Deferred Net Settlement (DNS) system, worked without interruption and in accordance with the time schedule of the system during all 255 working days in 2022. Short interruptions in the operation of the system with the duration of 16 minutes and 22 seconds were recorded (one day in March), so the availability of the system at the level of the year was 99.99%. In addition, as in the previous year, the operation of the system was slightly different on 31 December in relation to other working days.

A total of 12.5 million payments worth 18.3 billion euros were effected, which is 9.9% and 17.9% more than in 2021, respectively. Of the total number of payments, 36.8% were effected in the RTGS system, with the share in the total value of payments of 93.9%. On the other hand, 63.2% of the total number of payments was effected in the DNS system (6.1% of the total value of payments).

A very small number of rejected and pending payments was recorded, which indicates that liquidity of participants in the system was excellent and that the reasons for putting payments on hold and/or refusing payments were primarily of technical and operational nature. For example, due to the lack of funds in the account, only four payments were put on hold (all of them in the RTGS system), where three payments were made according to the inflow of funds during the day, while only one payment was not made.

5. CONCLUSION

In 2022, the Montenegrin economy fully recovered from the recession caused by the coronavirus pandemic. However, key indicators show that risks are still present, i.e. that the financial position of non-financial institutions and households, the two main groups of clients to which banks are exposed, is still under the influence of uncertainty, especially in the context of geopolitical tensions and the coronavirus pandemic.

Pressures in government finances still pose a systemic risk in Montenegro. Indirectly, the public debt growth in the case of Montenegro points to a relatively weak international competitiveness, high spending relative to low accumulation, and increased dependence on foreign capital inflows. In the context of the current situation in Ukraine, the coronavirus pandemic and the tightening of financing conditions on the international market, a determined continuation of the measures of a responsible and well-balanced fiscal policy is necessary. It is aimed at solving structural economic problems, and bringing Montenegro to a relatively safe zone.

A substantial portion of the public debt was created in the period of relatively available and cheap money on international financial markets, which largely resulted from the policy of historically lowest interest rates of the leading central banks. Against this background, the state managed to borrow under low interest rates compared to the historical standards. In addition, interest expenses were significant and they were estimated at 92 million euros (1.6% of GDP) in 2022. Therefore, an additional challenge for financing interest costs and for debt refinancing will be the period of interest rate growth on the international financial market, which began in mid-2022 (projected interest expenses in 2023 amount to 109.9 million euros or 1.8% of GDP).

Montenegro is characterised by additional complexity in terms of the fiscal situation and government borrowing due to the limited credit potential of banks and the possible effect of crowding out funds from economic flows by the state. During 2022, exposure of the banking sector to the government increased by 102.2 million euros to 899.9 million euros or 14% of banks` assets (a decline of 0.9 pp). However, although significant, the mentioned exposure is still lower than in a number of the EU countries and does not pose a threat to financial stability, but is subject to close monitoring by the CBCG.

Although affected by the coronavirus pandemic, banks are the healthiest segment of Montenegro's economic and financial system, which is indicated by high capitalisation, liquidity and a positive business results.

During 2022, the share of non-performing loans decreased from 6.2% to 5.7%. Banks still have the perception of a high credit risk in the real economy, which is best indicated by relatively prudent lending activity, high lending interest rates, and other lending conditions. The banking sector has successfully responded to the challenge of non-performing loans from the pandemic period owing to significant and high-quality liquidity and/or capital buffers.

The CBCG`s macroprudential measures to limit the growth of unsecured retail cash loans (adopted in mid-October 2019 and implemented in the period 2020-2022), acted to mitigate the tendencies related to those loans from the previous period. At end-2022, retail cash loans amounted to 552.7 million euros or 4.3% less in relation to 577.6 million euros at end-2021, while that amount had reached 707.3 million euros at end-2019. In addition, their share in total retail cash loans fell from 39.8% to 34.9% in 2022.

However, the maturity structure of cash loans remains incomparably closer to the maturity structure of housing loans. There can be several reasons for this, and one of the possible reasons is a partial substitution of housing loans with cash loans. Considering the credit history of this type of loan, it can be noted that banks adequately control this risk. However, the problem may arise in the case of rising unemployment and/or falling real earnings. Therefore, the mentioned CBCG`s measures will be in force during 2023 as well.

The solvency ratio at the system level of 19.3% indicates that there is a high resistance of banks to possible further problems with low-quality loans or a decline in the value of other asset segments. However, temporary measures to mitigate the negative impact of the pandemic of the infectious disease COVID-19 and the situation in Ukraine on the financial system are still needed in order to preserve the stability of the system.

ANNEX

Table 1 – Financial Stability Indicators (FSIs), 2018–2022

	2018	2019	2020	2021	2022			
	XII	XII	XII	XII	III	VI	IX	XII
Basic indicators of financial stability for credit institutions								
Total regulatory capital / risk weighted assets [1]	15.6	17.7	18.5	18.5	19.2	18.9	18.4	19.3
Tier 1 regulatory capital / risk weighted assets [1]	14.4	18.1	17.4	17.4	18.0	17.8	17.4	18.4
Net non-performing loans / capital [2]	21.0	14.9	21.2	22.6	25.9	24.6	23.8	21.4
Regular Tier 1 regulatory capital / risk weighted assets [1]	---	---	---	---	18.0	17.8	17.4	18.3
Tier 1 regulatory capital / assets	8.4	10.0	9.9	9.2	8.6	8.5	7.8	7.9
Non-performing loans / total loans [3]	7.4	5.1	5.9	6.8	7.2	6.9	6.7	6.3
Non-performing loans / total loans [4]	6.7	4.7	5.5	6.2	6.5	6.3	5.9	5.7
Concentration of loans by economic activities [5]	68.4	67.4	66.5	67.1	68.2	66.4	67.8	66.7
Impairment allowance / non-performing loans	56.7	52.9	40.0	42.4	40.2	41.8	42.1	43.0
ROA [6]	0.7	1.2	0.5	0.8	1.0	1.3	1.7	1.7
ROE [7]	4.9	9.0	3.7	5.9	8.3	10.4	14.3	13.9
Interest margin / gross income [8]	56.1	56.6	60.8	55.6	58.5	57.0	54.4	54.0
Interest-free expenses / gross income	82.5	75.0	74.4	72.3	51.9	52.6	55.7	58.4
Liquid assets / total assets [9]	22.3	20.6	21.8	26.0	24.9	26.3	31.3	30.7
Liquid assets / short-term liabilities [10]	35.4	31.1	35.1	39.7	36.9	37.9	43.6	42.9
Liquidity coverage ratio [11]	---	---	---	---	257.4	280.4	344.4	317.7
Net stable financing ratio [11]	---	---	---	---	---	---	---	---
Net open position in foreign currencies / capital [12]	0.0	0.6	0.7	0.1	-0.3	0.0	-0.2	0.1
Residential real estate prices, annual percentage change [13]	1.8	3.4	-11.3	15.3	3.8	11.5	10.5	20.5
Additional financial stability indicators								
Credit institutions								
Large exposures / capital [14]	138.1	97.4	96.8	118.1	128.9	143.0	175.1	132.6
Geographical structure of loans, in relation to total loans [15]								
Montenegro	96.4	96.7	97.2	95.7	95.9	95.6	94.5	94.7
Developed economies	0.7	0.6	0.7	0.5	0.5	0.6	0.6	0.5
Emerging and developing economies	2.9	2.6	2.1	3.8	3.6	3.8	4.9	4.8

Table 1 – Financial Stability Indicators (FSIs), 2018–2022 – continued

	2018	2019	2020	2021	2022			
	XII	XII	XII	XII	III	VI	IX	XII
Asian emerging and developing economies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
European emerging and developing economies, excluding Montenegro	1.4	1.7	1.1	1.6	1.4	1.6	2.6	2.6
Latin America and the Caribbean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East and Central Asia	1.5	0.9	1.0	2.2	2.2	2.2	2.3	2.2
Sub-Saharan Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross asset position in financial derivatives / capital [12]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross liabilities position in financial derivatives / capital [12]	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Trading revenue / total revenue [16]	1.8	3.8	3.1	3.8	2.9	2.5	3.1	3.6
Employee expenses / non-interest bearing expenses	32.2	37.3	34.9	31.6	47.1	43.4	38.7	37.3
Difference between reference lending and deposit interest rates (in basis points) [17]	580	560	544	531	528	527	534	566
Customer deposits / total loans, excluding interbank loans [18]	123.1	116.1	108.3	131.0	129.7	132.4	147.4	151.8
Loans denominated in foreign currencies / total loans [19]	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Liabilities denominated in foreign currencies / total liabilities [20]	6.3	6.4	4.8	5.3	5.0	4.6	5.7	4.8
Private sector credit growth [21]	9.4	6.6	3.0	3.4	6.7	9.1	9.0	8.8
Real Estate Market								
Housing loans / total loans [22]	13.5	13.9	14.3	14.2	14.3	14.4	15.3	14.9
Commercial real estate loans / total loans [23]	6.7	6.1	5.5	5.6	5.9	5.6	5.9	5.5

The text of all footnotes can be found in the excel file available at https://www.cbcg.me/me/statistika/statisticki-podaci/indikatori-finansijske-stabilnosti, and here, as the most important, the footnotes are shown below.

3/ Non-performing loans refer only to the principal of loans, without interest and prepayments and accruals of interest and fees. On the other hand, total loans (in addition to the principal) include interest and prepayments and accruals of interest and fees for performing loans, while interest and prepayments and accruals of interest and fees for non-performing loans are excluded from the scope. Exceptionally, for the period before 2013, total loans in addition to the principal include only the mentioned interest rates, because data on prepayments and accruals of interest and fees were not available.
Prior to 2013, loans classified in category E (i.e. in the worst classification category - „loss“) were kept in off-balance sheet, so that the counter of this indicator (i.e. non-performing loans) contains loans classified as E, while the denominator of this indicator (i.e. total loans) does not contain the same.

4/ Internal definition, according to the methodology used in the CBCG.
By definition, interest and prepayments and accruals of interest and fees are completely excluded from both non-performing loans and total loans. Also, according to the IFRS 9 requirements (formerly IAS 39), the definition treats deposits of credit institutions deposited with other credit institutions as loans, which is particularly relevant for account no. 1009 (from the Decision on the accounting framework for credit institutions, (OGM 128/20). Before 2013, the definition of loan did not include the mentioned deposits.

* On 1 January 2018, IFRS 9 replaced IAS 39, with limited impact on the comparability of data series before and starting from 1 January 2018.
IAS 39 is introduced on 1 January 2013. The introduction of IAS 39 resulted in incomparability of a significant number of data series before and starting from 1 January 2013. Most importantly, on 1 January 2013: non-performing loans increased, as well as accounting capital, then total loans to a lesser extent and to an even lesser extent assets. The comparability of loan loss provisions, and therefore the comparability of net profit, was also affected by the change. As a consequence, all indicators calculated using these data series are basically incomparable before and starting from 1 January 2013. The consistency of other data series or indicators, such as liquid assets or capital adequacy ratios, has been largely maintained.

Source: Quarterly and monthly reports of banks; MONSTAT

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