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ABBREVIATIONS

AQR	Asset Quality Review
GDP	Gross Domestic Product
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
rhs	Right scale
ECB	European Central Bank
€STR	Euro Short-term Rate
EU	European Union
EUR	Euro
EUREP	Eurosystem Repo Facility for Central Banks
EURIBOR	Euro Interbank Offered Rate
FED	Federal Reserve
FSIs	Financial Stability Indicators
FTSE	Financial Times Stock Exchange
GBP	Pound Sterling
HHI	Herfindahl-Hirschman Index
HP	Hodrick-Prescott filter
JPY	Japanese Yen
LIBOR	London Interbank Offered Rate
Mln	Million
Bln	Billion
IMF	International Monetary Fund
IRS	International Accounting Standards
MSCI	Morgan Stanley Capital International
IFRS	International Financial Reporting Standards
p.p.	Percentage points
PPP	Purchasing Power Parity
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

Pursuant to the Constitution of Montenegro and the Central Bank of Montenegro Law (OGM 40/10, 46/10, 6/13, 70/17), the Central Bank of Montenegro is the institution responsible for monetary and financial stability. Since monetary policy instruments available to the Central Bank of Montenegro`s (CBCG) are limited, primarily because the CBCG is not an issuing central bank, it largely aims at fostering and preserving financial stability, i.e. stability of the banking system as the most important part of the financial system in Montenegro. The Central Bank of Montenegro Law (CBCG Law) also prescribes the obligation of publishing financial stability reports (Article 39).

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 effects influence the entire system. This enables the focus on the complex relationship between banks and other economic 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 other economic and financial policy makers in the financial sector and the general public on the sources of financial stability risk.

In the 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 general or target 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 economic 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 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 local private real sector and 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 in the banking sector itself.

1. SYSTEMIC RISKS ANALYSIS AND ASSESSMENT

Systemic risks were moderate at end-2021 and at somewhat lower level relative to end-2020. The recovery of economic activity during the year had a significant impact on the condition and direction of risks, despite the prolonged effects of the coronavirus pandemic.

The reduced impact of the pandemic and the reopening of borders contributed to the recovery of the economy in 2021. The revival of tourism and the related activities brought back economic activity to the path of renewed growth, i.e. real GDP grew at a double-digit rate of 12.4%.

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 substantially relative to GDP (due to a notable increase in nominal GDP in 2021)[1].

In 2021, the resident non-financial insitutions' debt towards the Montenegrin banks rose by 4.4%, while the share of this debt in GDP declined from 26.5% to 23.6%. Also, funds of debtors blocked in the process of enforced debt collection increased from 745.5 million euros to 857.3 million euros (17.5% of GDP), while the number blocked economic entities rose 3.2%, to 15,657.

Households` debt to Montenegrin banks significantly increased over the past few years although it is still considerably lower compared to the peak leverage if observed in relation to GDP (close to 35% at end-September 2008, 33.3% at end-2020, and 29.1% at end-2021). Real earnings saw a minor decline of 0.9%[2] y-o-y. On the other hand, the unemployment rate (as per the Labour Force Survey) recorded a decline to 16.6% compared to 17.9% in 2020. Due to the methodological changes unemployment rates are not comparable, but this year`s uneployment rate is certainly high, with a pronounced structural component. The unemployment rate published by the Employment Agency of Montenegro (ZZZCG) stood at 24.73% in 2021, which also speaks in favour of a pronounced systemic 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 borrowings for the construction of the priority highway section and due to the corononavirus pandemic. The recovery of economic activity and the repayment of the debt on Eurobonds led to a reduction in debt during 2021 to 84.8% of GDP.

[1] Compared to end-2019, the debt was several percentage points higher.

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

As of March 2021, *Standard & Poor`s* assigned B credit rating to Montenegro, with a stable outlook. This rating and outlook were confirmed after the reporting period (March 2022). In addition to the ongoing pandemic and the situation in Ukraine[3], the challenges for public finances will continue in 2022 as well, when the repayment of the debt on Eurobonds and other credit arrangements will continue. However, the mitigating factor is that the state has available funds at its disposal, as well as that there will be no principal repayment for Eurobonds in the period 2022- 2024.

When it comes to the banking sector, a very good capitalization was preserved, as the solvency ratio fell slightly during the year, as a result of the implementation of measures contained in the Asset Quality Review (AQR), but was still significantly higher than the statutory minimum. 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 following: the share of non-performing loans (NPLs) in total loans, banks' exposure to the government, banks' exposure to households (especially in cash loans), as well as an increasing 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). A realistic picture of the situation regarding NPLs and solvency ratios was additionally confirmed once the AQR was completed, as well as after the termination of the CBCG's temporary measures, which provided significant relief for regulatory credit treatment.

The situation with regard to non-performing loans exacerbated in 2021 as the share of NPLs increased from 5.5% to 6.2%, but this growth does not indicate a significant increase in risk. This was expected considering the ongoing pandemic. However, as a result of the experience in 2008, this share also exerts a pressure on banks' risk appetite, that is, the level of lending activity and lending conditions. Loans were on the risein 2021 despite the pandemic and the growth reached 6.4%[4].

Banks' exposure to the government (Central Government) increased during 2021 from 647.2 million euros to 762,4 million euros (to 14.3% of banks' assets), which is still significant. An increase in indebtedness is due to an increase in debt arising from securities, while loan debt dropped by 32.7 million euros. In any case, the movement of banks' exposure to the government will remain subject to continuous monitoring by the CBCG.

Although abating, risks arising from retail cash (all-purpose) loans are not completely neutralized, therefore the Central Bank adopted measures at end-2021, in a slightly modified version, to continue limiting the growth of this segment of loans, which were applied as of 1 January 2020. The previous measures, with a certain impact of the coronavirus pandemic on lending activity, had a significant impact on stopping the rapid growth of these loans. At end-2021, retail cash loans amounted to 577.6 million euros or 6.1% less in relation to 615.1 million euros at end-2020 and 707.3 million euros at end-2019. In addition, their share in total retail loans fell from 43.8% to 39.8% in 2021.

The maturity structure of retail cash loans did not change significantly: 92.5% were loans with agreed maturity over three years, whereby as much as 48.9% of them are loans with agreed maturity over

[3] An event following the reporting period.

[4] Growth of loans to residents was 1.5%, but the higher growth of total loans was caused by the robust growth of loans to non-residents, by 49.6%. Growth of loans to non-residents was primarily driven by the growth of deposits held by banks with foreign banks, which are included in the scope of loans.

eight years. The plan is for the measure to continue until end-2022 and the CBCG continues to monitor the trends in this segment of the credit market.

During 2021, the Herfindahl-Hirschman Index fell slightly below 1,400 points (moderate market concentration), which is certainly much lower than the value of over 2,400 points, which was the index value in the period before the 2008/2009 crisis.

Higher interest income and commission/fee income, despite higher impairment and provisioning costs, contributed to the realisation of profit of 31.4 million euros at the system level, which is significantly more than 22.3 million euros in 2020. However, the profit was significantly lower than in the pre-crisis 2019, so it is evident that the banking sector has taken on some of the costs of crisis adjustments.

Banks are the most stable segment of the economic system, which substantially reflects the stability of deposits in the banking system. They stood at 4.2 billion euros and made up the largest portion of banks' liabilities and capital (78.8%) at end-2021. It was the growth of deposits that conditioned the growth of banks' assets, with banks redirecting the funds received much more into liquid assets and less into loans.

To wit, total liquid assets of banks increased during 2021 by 38.3%, to 1.4 billion euros, as did their share in relation to assets and deposits, to 26.4% and 33.4% (from 22.2% and 30.1%), 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 among them (insurance companies).

With regard to the real estate prices, as the key form of property (and collateral) in the situation of relatively underdeveloped financial markets and instruments, it cannot be said that prices were substantially different from their "fundamentals" despite the significant increase in real estate prices in 2021.

Turnover on the Montenegro Stock Exchange amounted to 46.5 million euros (0.9% of GDP) compared to 31.4 million euros in 2020 (0.7% of GDP), the increase being generated from higher trade in shares and government bonds. The Monex index declined by 4.5% relative to end-2020 and it was still multiple times lower relative to its maximum values in April 2007.

The CBCG`s payment system and the CSDCC`s securities settlement system, as the financial infrastructure pillars in Montenegro, continued working smoothly in 2021.

Scheme 1.1

Key financial stability risks as at 31-Dec-2021	
High level of public debt and budget deficit, considering the coronavirus pandemic and limited growth prospects of the Montenegrin economy in the medium term	→ (red)
Negative feedback loop between the share of non-performing loans and credit growth in the context of uncertain economic growth	↑ (orange)
Share of retail cash loans in total loans, with extended maturity of these loans	→ (orange)
Exposure of banks to the government considering the challenges in government finances	→ (yellow)

Explanation

- High systemic risk (red)
- Moderate systemic risk (orange)
- Low systemic risk (yellow)

Colour represents the level 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 in April 2022 showed the global economy growth of 6.1% in 2021 or the year-on-year decline of 3.1%. Advanced economies recorded a growth of 5.2%, while in developing and emerging countries the growth was 6.8%. Among advanced economies, the euro area grew by 5.3%, while the USA and Japan recorded respective growths of 5.7% and 1.6%. China was the main driver of growth with 8.1% both in the group of developing and emerging economies and on the global level. The economic activity growth was estimated at 4.7% for Russia. It is estimated that a group of European developing and emerging economies[5] including Montenegro as well, recorded a growth of 6.7% compared to a decline of 1.8% in the previous year (Table 2.1).

Table 2.1

Overview of selected global indicators, %

Indicator	2020	2021 estimate	Forecasts		Difference in relation to the October 2021 projections, pp	
			2022	2023	2022	2023
Real GDP growth						
World	-3.1	6.1	3.6	3.6	-1.3	0.0
Advanced economies	-4.5	5.2	3.3	2.4	-1.2	0.2
USA	-3.4	5.7	3.7	2.3	-1.5	0.1
Euro area	-6.4	5.3	2.8	2.3	-1.5	0.3
Japan	-4.5	1.6	2.4	2.3	-0.8	0.9
Emerging and developing economies	-2.0	6.8	3.8	4.4	-1.3	-0.2
China	2.2	8.1	4.4	5.1	-1.2	-0.2
India	-6.6	8.9	8.2	6.9	-0.3	0.3
Russia	-2.7	4.7	-8.5	-2.3	-11.4	-4.3
European emerging and developing economies	-1.8	6.7	-2.9	1.3	-6.5	-1.6
Commodity prices, average rate						
Oil	-32.7	67.3	54.7	-13.3	56.5	-8.3
Non-energy producing products	6.8	26.8	11.4	-2.5	12.3	-1.0
Consumer prices, average rate						
Advanced economies	0.7	3.1	5.7	2.5	3.4	0.6
Developing and emerging economies	5.2	5.9	8.7	6.5	3.8	2.2

Source: IMF, April 2022

[5] Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Montenegro, Croatia, Kosovo, Hungary, Moldova, Poland, Romania, Russia, North Macedonia, Serbia, Turkey and Ukraine

The IMF expects the world economy to grow by 3.6% both in 2022 and 2023. In early 2022, the world economy is in a weaker position than previously expected. Some countries reintroduced restrictive measures to suppress the spread of coronavirus, and financial markets experienced a higher volatility. Rising energy prices and disruptions in supply chains caused a general rise in prices, which was higher than initially projected. According to the IMF, procurement disruptions reduced global GDP from 0.5 pp to 1.0 pp in 2021, adding one pp to core inflation.

Monetary policy changes could pose other risks to global financial stability. If the reaction in the financial markets is hasty, the most affected countries will be developing and emerging countries as they coud see rising finance costs, pressure on exchange rates, capital flows and fiscal positions that are already burdened by the rising debt levels.

The projected growth rate for China's economy in 2022 is significantly lower, 4.4%. Imbalances in the Chinese real estate market were the introduction to a greater slowdown in its economy. If the risks in the real estate market were to spill over into the real sector, this would further worsen spending, which is already expected to be lower than projected due to measures for suppressing the coronavirus. Certainly, the slowdown in China's economy will have a negative effect on commodity exporting countries and on developing and emerging countries.

The occurrence of new strains of the coronavirus could prolong the pandemic and cause new imbalances in the global economy, with geopolitical tensions further exacerbating availability of energy products and slowing international trade.

Commodity prices increased by 48.9% during 2021. Energy prices rose by 103.1%, with oil prices rising by 53.9%, whereas natural gas prices and coal prices recored respective growths of 287.9% and 84.7%. Non-energy product prices rose by 14.7%, with prices of metal being 5.7% higher while food and beverages were 24.8% higher. The IMF forecasts suggest that oil prices will record the average annual increase of 54.7% in 2022, while non-energy products, as a heterogeneous group of commodities, will rise by 11.4%.

2.2. Global financial trends

The monetary authorities of the world`s leading economies continued to pursue an expansionary monetary policy during 2021. The measures established by the central banks by end-2020, in response to the coronavirus pandemic, continued throughout 2021. However, by the year-end, many central banks of the world's leading economies announced the normalization of monetary policy in 2022.

The ECB made no changes to its reference interest rates, thus the interest rate on the main refinancing operations (MRO) remained at 0%. As a result of significant inflationary pressures in late 2021 and early 2022, especially in the euro area's largest economies, the implicit path of the ECB's reference rate indicates that financial markets expect it to increase in 2022.

In order to support the monetary policy transmission mechanism and the euro area economy, the ECB continued to implement asset purchase and liquidity assistance programmes for banks in 2021. As a part of the so-called emergency programme for the purchase of pandemic-related assets, the ECB retained a cumulative net purchase in the amount of 1.85 trillion euros during 2021 as well. It was announced that this programme will first be reduced, and then cancelled at end-March 2022. The ECB also implemented the previously introduced Asset Purchase Programme (APP), in the net amount of 20 billion euros per month. Adequate liquidity was provided by refinancing operations, especially through the third series of targeted long-term refinancing operations (TLTRO III), which are very favourable sources of financing for banks, and ultimately for the economy and households.

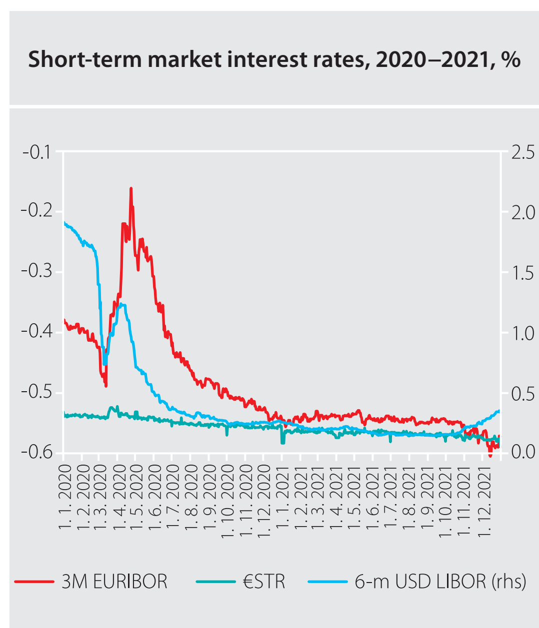
Throughout the year, the Fed implemented a bond purchase programme, supporting the extention of loans to corporate sector and households. During 2021, the Fed maintained a reference interest rate range of 0 - 0.25%, which was in effect since the beginning of the pandemic. Assessing that the inflation rate of 2% has been exceeded for some time, and that the situation on the labour market is favourable, the Fed expects an increase in the reference rate in 2022. According to the estimates of the Federal Open Market Committee members, three increases in the reference interest rate can be expected in the next year, which could lead to the value of the rate in the range of 0.75 - 1.0%.

For most of 2021, the Bank of England maintained the interest rates at the level of 0.1% as well as the same volume of securities purchases established in 2020. As of December 2021, the Bank of England started increasing the reference interest rate, by 0.15 pp to 0.25%, and already in early 2022 by the additional 0.25 pp to 0.5%. The latest market expectations show that the rate will reach 1.1% by end-2022.

During 2021, the Bank of Japan and the Swiss National Bank maintained their reference interest rates at the level of -0.1% and -0.75%, respectively.

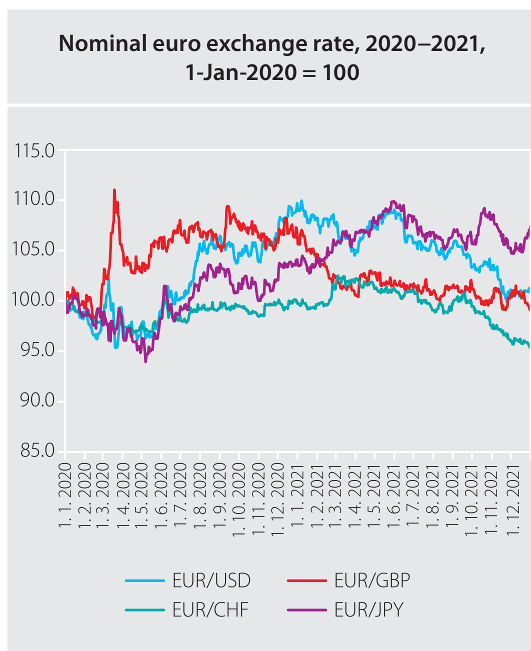
Short-term reference interest rates mostly mirrored the reference interest rates of the central banks (Graph 2.1). *LIBOR* and *EURIBOR* both increased significantly in the midst of the pandemic in April 2020, and then decreased towards the end of the year, showing no larger fluctuations in 2021. The six-month *USD LIBOR* slightly increased as the year went on, amounting to 0.34% which is an increase of 0.08 pp annually. At end-2021, the 3-month *EURIBOR* was -0.57%, being 0.03 pp lower annually. The *€STR* remained almost unchanged at -0.59%.

Graph 2.1



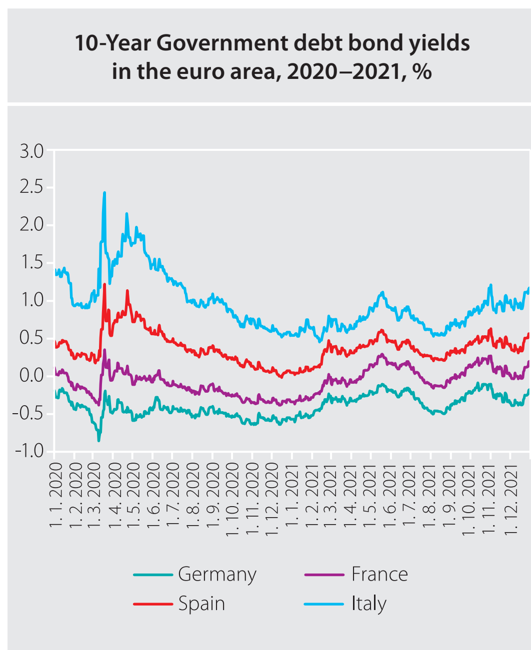
Source: Bloomberg

Graph 2.2



Source: Bloomberg, CBCG calculations

Graph 2.3



Source: Bloomberg

During the reporting year, the euro depreciated nominally against the USD (-6.9%), the GBP (-5.9%), and the CHF (-4%), yet it appreciated against the JPY (3.7%) (Graph 2.2). The highest exchange rate fluctuation of the EUR, measured by the variance ratio, was in relation to the USD, CHF, and GBP, while the lowest fluctuation was in relation to the then JPY. The euro depreciated against the USD from 1.2216 to 1.137, averaging at 1.1829 USD for 1 EUR.

The situation with extremely low yields on government bonds continued in 2021 as well. Such developments were particularly pronounced in the euro area. For instance, the average 10-year debt yields in 2021 and their annual change in yields for the following selected countries were: France (-0.0% / 0.2 pp), Greece (0.9% / -0.4 pp), Ireland (0.1% / 0.1 pp), Italy (0.8% / -0.4 pp), Germany (-0.3% / 0.2 pp), Portugal (0.3% / -0.1 pp), and Spain (0.4% / -0.0 pp). Also, Government Bond Yields of Japan experienced no major changes (averaging at 0.1% against 0.01% in 2020). Average yields on the UK (0.7%) and US (1.4%) government bonds were on upward trend, recording respective annual growth of 0.4 pp and 0.5 pp.

The spreads, meaning the differences between the yields on securities of the largest euro area economies and German government bond yields, were even lower in 2021, remaining very compressed (Graph 2.3). With regard to 10-year government bonds, spreads on French, Italian, and Spanish debt averaged at 0.32 pp, 1.09 pp, and 0.67 pp, respectively. Yields were significantly shaped by the specificity of monetary policy, having in mind that the positions of public finances of all three countries are somewhat unstable, i.e. public debt exceeded 100% beside significant budget deficit. In the past two years, the debt yields of many countries were at their lowest levels, not sufficiently reflecting the vulnerability of some countries' economies and public finances.

Observing through the VIX index[6], the level of instability in the financial markets and the impact of epidemics were reduced. During 2021, the index recorded a relatively stable trend with smaller increase, averaging at 19.6 points. Observing through the TED spread[7], the level of instability in the financial markets was very low in the reporting year as the TED spread averaged at around 0.12 pp.

The price of gold, as a specific indicator of stress and risks in the global economy and financial markets, was at a slightly higher level. Observed by the average price level, the price of an ounce rose by 1.6%, but it was lower by 3.6% at the year-end (amounting to about 1,830 USD/oz). Thus, gold prices remained above the pre-pandemic level, given that they rose by an average of 27.1% in 2020.

The growing trend continued in the stock markets in developed countries, which was particularly pronounced in the U.S.A. Most of the leading global indices reached new record highest values, such as the New York *DJIA* or the Frankfurt *DAX*. On the other hand, earlier this year, the stock exchange index *MSCI* for emerging and developing markets initially kept the momentum from the previous year, to decline as of mid-February, resulting in a decline of 4.6% at end-2021. Observed through average values in 2021, the year-on-year growth of this index was 24.2%.

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

[7] As of 31 January 2022, it is no longer published.

3. DOMESTIC ECONOMIC ENVIRONMENT

3.1. General macroeconomic developments

According to preliminary Monstat data, Montenegro`s real annual GDP increased by 12.4% in 2021.

Data by industries shows that overall growth was spurred by growths reported in tourism, transport, retail trade and industrial production, while forestry and construction recorded a decline (Table 3.1). Looking at the GDP components, as per the expenditure method, the GDP growth in the reporting year was mainly driven by the growth in visible and invisible exports (a 12.7 pp contribution), and to a lesser extent by an increase in final consumption (3.8 pp), whereas gross fixed capital formation and changes in supplies had a negative contribution.

Table 3.1

Change rates in key industries, 2021/2020, %

Industry	Annual rate of change
Tourism, all accommodations, arrivals	276.3
Tourism, all accommodations, overnights	281.6
Passenger transport, roads	38.9
Passenger transport, railways	17.3
Passenger transport, air	150.8
Retail trade, constant prices[8]	16.3
Industrial production	4.9
Construction, value of performed construction work	-4.8
Construction, effective working hours	0.7
Forestry, produced assortments	-48.5

Source: Monstat

As laid out in the 2022-2024 Economic Reform Program, the Ministry of Finance and Social Welfare baseline scenario forecasted 6.4% and 5.1% growth rates in 2022 and 2023, respectively, while the low-growth scenario forecasted respective growths of 3.7% and 4%. On the other hand, according to the latest forecasts of the reference international institutions, mostly made after the situation in Ukraine started, a slower continuation of recovery of the Montenegrin economy is expected. According to the IMF forecasts from April 2022, Montenegro's GDP will achieve a real growth rate of 3.8% in 2022, the World Bank forecasts (April 2022) the economy to grow at a rate of 3.6%, while forecasts by the Euro-

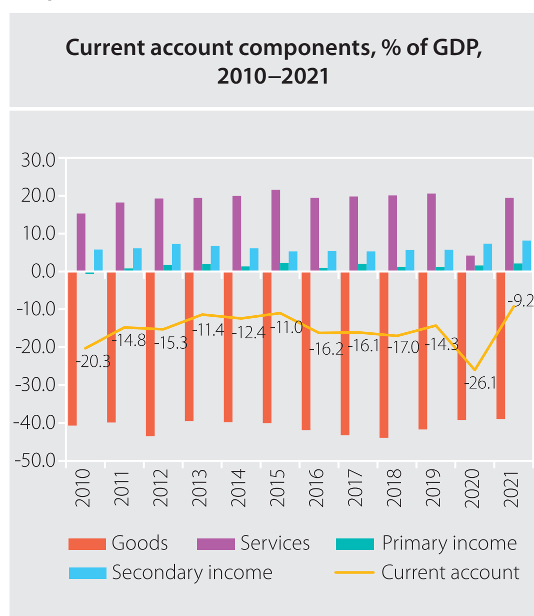
[8] As an average of annual rates of change for quarterly turnover data.

pean Commission (May 2022) and the EBRD (March 2022) show that the growth rate will be 3.8% and 3.7%, respectively.

Inflation growth is mostly the result of global growth in the prices of energy, metals and food, and due to the country`s import dependence, external factors determined the increase in prices as well. Measured by the CPI, prices in December 2021 were 4.6% higher year-on-year, which is a significant deviation from the average annual inflation rates in December 2010-2020 of 1.4%.

The current account deficit amounted to 453.4 million euros or 9.2% of GDP in 2021, being 58.4% lower year-on-year, as a result of an increase in surplus in the services account, and on the primary and secondary income account (Graph 3.1). As expected, the deficit was generated by the negative balance in the goods account which amounted to 1.91 billion euros or 16.6% more in relation to the comparative period. The surplus on the services account amounted to 955.7 million euros, which is about five times more relative to 2020. Estimated revenues from travel-tourism in 2021 amounted to 757.8 million euros, which is 5.2 times more than in the comparative period. In the observed period, a surplus of 504.9 million euros was recorded on the primary and secondary income accounts, which is 34.6% more than in the comparative period, due to increased inflows arising from primary and secondary income.

Graph 3.1



Source: CBCG calculations

As in the previous years, the deficit was primarily financed by foreign direct investments whose net inflow amounted to 552 million euros or 11.2% of GDP in 2021. Historically, the permanent current account deficit was financed through foreign direct investments but also through portfolio investments and other foreign investments, followed by the accumulation of Montenegro's external debt in all resident sectors, not only public sector, although the public external debt has been the most pronounced.

3.2. Position of non-financial institutions[9]

Debt of non-financial institutions to banks saw a slight rise in 2021[10] from 1,109.2 million euros to 1,157.5 million euros. In relation to GDP, it fell from 26.5% to 23.6%, due to strong GDP growth. New borrowings by non-financial institutions from banks resulted in a new debt of 611.5 million euros, which was 25.6% more year-on-year. In reference to the purpose, new debts mostly referred to loans

[9] 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.

[10] Non-financial institutions cover resident business entities (private and state companies).

granted for *liquidity for working assets* of 64.4%. This type of loan has been the most common type of loans extended to non-financial institutions[11] for years, this being particularly pronounced in 2021, as their annual growth was 21.5%.

With a stronger growth of deposits (18.2%) in relation to the growth of loans (4.4%), the non-financial sector went from a net debtor to a net lender in mid-2021. Debt of non-financial institutions to banks in previous years reduced for one portion of loans sold by banks to third parties - mainly parent banks, either directly or through factoring companies founded by them or through other entities for the purchase of receivables. Banks sold assets in the amount of 891.2 million euros between 2006–2019. A significant portion of the sold assets referred to non-performing loans (debt) of non-financial institutions, which is still present in debtors' balance sheets. In the previous two years, sales of assets amounted to only 4.2 million euros, therefore, the loan-to-deposit ratio can be considered to show a situation much more credible than before.

At end-2021, the number of blocked business entities in the CBCG's enforced collection system was 15,657, which is the annual increase of 3.2%. In relation to the total number of 52,683 active business entities, 29.7% of them were blocked, which is the slight reduction in relation to end-2020 (30.3%). Total debt based on which business entities were blocked amounted to 857.3 million euros, which is 15% more year-on-year or 38.6% more in relation to end-2019. Due to a high debt concentration, the debt of the top ten borrowers accounted for 24.1%, while that of the top 50 borrowers made up 45.9% of total debt.

A total of 1,576 business entities were under uninterrupted account blockage up to 365 days with the blocked funds in the amount of 48.8 million euros, while this amount reached 89.3 million euros at end-2020. A total of 14,081 business entities were blocked over 365 days, with the blocked funds in the amount of 808.4 million euros, accounting for 94.3% of the debt.

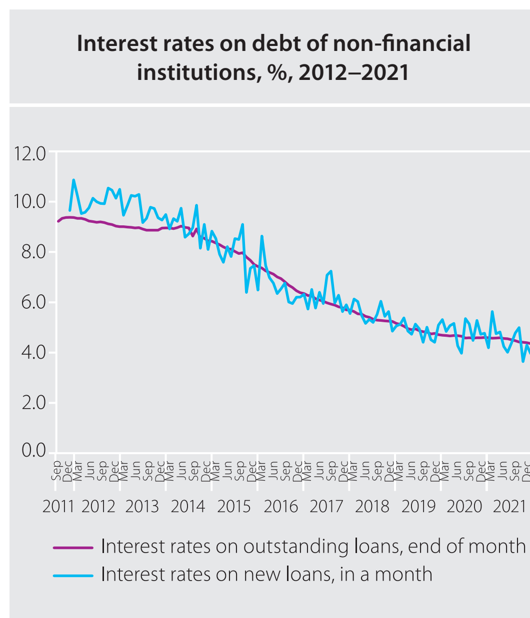
When it comes to the maturity of non-financial institutions` debt to banks, debts maturing after three years accounted for the main share of 64.1% at end-2021[12]. Debt with agreed maturity of over one year made up 80.7% of the debt. As for the debt currency structure, the entire debt of non-financial institutions was in euros, which was also the situation that has not changed essentially over the past years.

The quality of debt of non-financial institutions to banks deteriorated during 2021 and remained below the system average. According to the banks' classification, non-performing debt amounted to 121.7 million euros at end-2021 compared to 91.7 million euros at end-2020. Thus, the share of non-performing debt in total non-financial institutions' debt rose from 8.3% to 10.5%.

[11] These data refer to all legal entities but they are sufficiently representative, since 84.5% of total debt arising from loans to legal persons in 2021 referred to non-financial institutions.

[12] Data as per the initially agreed maturity.

Graph 3.2



Source: CBCG

The average interest rate on total non-financial institutions' loan debt further declined during the reporting year, from 4.6% to 4.4%, signalling a continuance of the rate's downtrend (Graph 3.2). Similarly, the average interest rate on new loans declined from 4.8% to 4.4% (as compared to 10% in 2012)[13]. Regardless of their significant decline recorded over the past eight years, the non-financial institutions' borrowing costs remain high. Moreover, this decline has not significantly changed the non-financial institutions' position, which serves as a confirmation that lower borrowing costs are just one of the prerequisites for achieving profitability and international competitiveness of these institutions. In other words, structural factors, such as competitiveness, productivity as well as the overall business environment, play a more important role here.

3.3. Households' position

In 2021[14], the households' leverage towards banks additionally increased from 1.39 to 1.43 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 population thus reached its historically peak in absolute amount. Observed in relation to GDP, the debt of households decreased by 4.2 pp (reaching 29.1% of GDP) as a result of a strong GDP recovery.

On the other hand, households` debt based on new loans amounted to 389.7 million euros, which is an increase of 33.5% year-on-year. As for loan purpose, 56.3% were *cash (all-purpose) loans* (57.7% in 2020 and 69.2% in 2019), as the most represented type of loans granted to the household sector for years. In addition, new leverage based on loans for *apartment purchase and refurbishing* increased in absolute terms, from 67.2 million euros to 84.2 million euros, but they also declined if observed as a share in total new households' leverage, from 23% to 21.6%.

At end-2021, the household sector moved from the net debtor position (3.1% of total assets at end-2020) to the net creditor position (0.2% of total assets of banks at end-2021) due to strong deposit growth in H2 2021, which were at their historical peak, amounting to 1.44 billion euros.

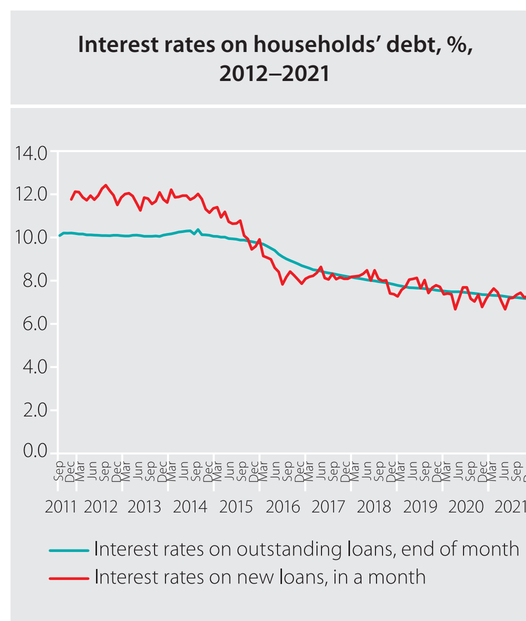
[13] The rate is obtained by weighting monthly interest rates on new debt with monthly amounts of new debt.

[14] Households include only resident natural persons.

With regard to the maturity of the households' debt to banks, the debt with agreed maturity of over three years accounted for the main share of 95% of the debt at end-2021 (94.2% at end-2020)[15], mainly due to the cash loans-based leverage. Debt with agreed maturity over one-year made up 98.4% of the debt. As for the debt currency structure, the debt in euros accounted for 99.7% and a mere 0.3% referred to debt in other currencies.

The quality of households' debt to banks slightly deteriorated during the reporting year. As per banks` classifications, non-performing debt of households amounted to 62.5 million euros at end-2021, compared to 57 million euros at end-2020. Thus, the share of non-performing debt in total debt of households rose from 4.1% to 4.4%.

Graph 3.3



Source: CBCG

An average interest rate on total households' debt based on loans additionally declined during 2021 from 7.4% to 7.2%, continuing the rate's downtrend initiated after 2014 (Graph 3.3). Similarly, the average interest rate on new loans declined from 7.3% to 7.2% in 2021 (as compared to 12% in 2012)[16]. Regardless of its significant decline recorded over the past seven years, the households' borrowing costs are obviously still high.

According to the Labour Force Survey, the 2021 unemployment rate was 16.6% or 1.2 pp lower year-on-year. After a substantial decline in unemployment during the last boom (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`s data. Namely, according to this source, the unemployment rate is 24.74%.

Observed through the average 12-month data, nominal net earnings rose by 1.5% in 2021, from 523.5 euros to 531.3 euros, which is their highest annual level since the introduction of the euro as the legal tender in Montenegro. At the same time, real net earnings saw an average decline of 0.9%[17] in the reporting year. Compared to 2006, both nominal and real earnings increased, by 87.7% and 33%, respectively. The real earnings still remained below their record levels from 2010.

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[15] Data as per the initially agreed maturity.

[16] The rate is obtained by weighting monthly interest rates on new debt with monthly annuities.

[17] 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.

3.4. Government finances

The 2021 government budget recorded a deficit of 100.4 million euros (2% of GDP) or 75 million euros less than planned under the budget revision (Table 3.2). Its structure shows that budget revenues were 31.2 million euros (1.7%) higher than planned under the revision, this primarily due to higher revenues from the collection of VAT (by 80.1 million euros or 13.1%) and excise duties (7.7 million euros or 3.2%). On the other hand, contributions totalled 27.4 million euros or 4.7% less than envisaged under the budget revision. Budget expenditures totalled 44 million euros or 2.1% lower than planned. Expenditures decreased as a result of lower social protection tranfers (31.8 million euros or 5.3%), but also due to lower capital expenditures compared to the plan (31.1 million euros or 13.2%). The largest increases in expenditures were in the repayment of liabilities from previous years (15.7 million euros or 151%) and gross earnings and contributions (12 .3 million euros or 2.4%).

The budget deficit has been recorded for the thirteenth consecutive year. The average deficit in the period 2009–2021 amounted to 5.1% of GDP and the 2021 deficit being the lowest in the reporting period. A larger deficit is planned for 2022, which is projected at 5.1% of GDP.

Table 3.2

Main categories of Montenegro's budget, 2020–2022

	2020 (draft Law on the annual statement of accounts)		2021 (estimate)		2022 (budget realization plan)	
	million euros	% of GDP	million euros	% of GDP	million euros	% of GDP
Budget revenues	**1,638.5**	**39.1**	**1,911.2**	**38.9**	**1,934.8**	**36.5**
Direct taxes	727.8	17.4	756.1	15.4	709.6	13.4
Indirect taxes	769.3	18.4	982.3	20.0	1.052.8	19.8
Non-taxable income	141.4	3.4	172.9	3.5	172.3	3.2
Budget expenditures	**2,064.7**	**49.3**	**2,011.6**	**41.0**	**2,202.8**	**41.5**
Current expenditures	1,834.7	43.8	1,807.1	36.8	1,960.3	36.9
of which gross earnings	499.1	11.9	535.3	10.9	545.9	10.3
of which transfers for social welfare	558.7	13.3	567.4	11.6	651.7	12.3
Capital expenditures	229.9	5.5	204.5	4.2	242.4	4.6
Surplus/deficit, cash	**-426.2**	**-10.2**	**-100.4**	**-2.0**	**-268.0**	**-5.1**
Net increase/decrease of liabilities	14.3	0.3		0.0		
Surplus/deficit, adjusted	**-440.4**	**-10.5**		**0.0**		

Source: Ministry of Finance and Social Welfare

According to the latest Ministry of Finance and Social Welfare data, public debt amounted to 4.16 billion euros or 84.8% of GDP as at 31 December 2021, of which external debt made up 3.69 billion euros, internal debt was 401.5 million euros, and debt of local self-governments accounted for 72.8 million euros. The public debt declined by no less than 20.5 pp of GDP during the reporting year after a growth of 28.8 pp in 2020. At end-2021, the state had a significant reserve of liquid assets so the net public debt amounted to 75.3% of GDP, which is an decrease of 9.2 pp of GDP on the annual level. Certainly, in addition to the reduction of public debt in absolute terms and without new borrowings during 2021, the sharp decline in the public debt to GDP ratio was influenced by a strong recovery in economic activity.

Within the external public debt, debt arising from Eurobonds accounted for a significant share. Montenegro entered the international bond market for the first time in September 2010 and there have been nine Eurobond issues ever since. The latest repaid issue is that from March 2016 that became due in March 2021. The current outstanding issues are those from 2018, 2019, and 2020, which collected a total of 1.75 billion euros.

The latest Eurobonds were issued at end-December 2020 in the amount of 750 million euros, with contracted 7-year maturity and at the interest rate of 2.875%. The interest rate was slightly higher compared to the issue from 2019, but the 2020 issue was realized in an incomparably worse economic period. It is generally positive that this issue was realized in the amount necessary to reasonably cover debts due in 2021 and provide a certain reserve of funds having in mind all the circumstances related to the coronavirus pandemic.

The Government budget realised a portion of its earlier funding needs through four issues of bonds in the Montenegro Stock Exchange, two of which were repaid. The remaining two issues are from 2019, with maturities of five and seven years. Seven-year bonds in the planned amount of 50 million euros and at the interest rate of 3.5% were sold as one tranche, with the realization of the issue amount slightly above the planned. Five-year bonds with an interest rate of 3% were sold through two tranches, but the planned issue of 140 million euros[18] was not executed even after the second tranche.

Recent issues of Eurobonds and bonds issued on the Montenegro Stock Exchange have significantly extended an average maturity of the bond debt (7.7 years on the remaining outstanding debt). The borrowing costs have been declining for years, with the weighted average interest rate on government debt standing at 2.7% at end-2020[19]. Roughly three quarters of the government debt is repaid at a fixed interest rate (74.7%) and one quarter at a variable interest rate (25.3%). The currency structure greatly improved in 2021, as 96.7% of debt is repaid in euros, 1% in dollars, and 2.3% in other foreign currencies.

This year was also characterised by the beginning of the repayment of the loan for the highway construction which is quite challenging for public finances, in the environment of global uncertainties and having in mind the fact that the highway is still not open for traffic. In 2021, the Ministry of Finance and Social Welfare concluded an exchange rate protection arrangement (so-called hedge agreement), which protects the entire amount of funds withdrawn from the loan for the highway constuction of 818 million dollars, while it was announced it will cover the rest of the debt up to the agreed 944 million dollars, after withdrawing total amount of funds. The arrangement is concluded until the end of the loan repayment, with a possibility of changing the terms and conditions after two years. The first installment was repaid in July 2021, and the budget savings on that grounds were 3.91 million euros.

According to the baseline scenario, the Ministry of Finance and Social Welfare projected a public debt drop to 76.6% of GDP at end-2022, while the lower-growth scenario stands at 79.3% of GDP. The respective scenarios for the end of the forecasted period (2024) envisage the public debt declines of 69.9% and 75.7% of GDP, respectively.

[18] In the first tranche, 24.6 million euros were collected, and 67.8 million euros in the second tranche conducted at end-May.

[19] The year of the last issue of Eurobonds.

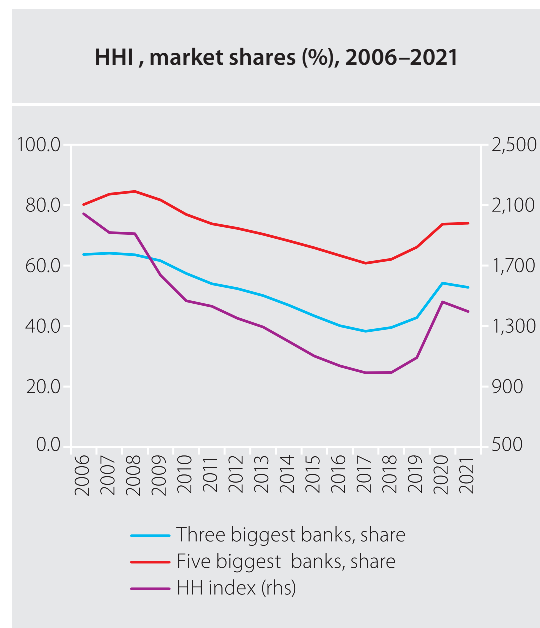
At end-2021, the balance of debt arising from government guarantees stood at 190.1 million euros or 3.9% of GDP. Moreover, debt arising from external guarantees amounted to 154.8 million euros (3.2% of GDP), while the balance of debt on domestic guarantees was 35.2 million euros (0.7% of GDP). At end-2020, debt arising from government guarantees stood at 212.1 million euros or 5.1% of GDP. In general, the government has pursued a moderate and prudent policy of issuing guarantees over the past few years, as guarantees are given in relatively limited numbers and exclusively for infrastructure and development projects.

4. THE FINANCIAL SYSTEM

At end-2021, the value of the financial sector assets amounted to 5.7 billion euros or 116.3% of GDP, as a result of a significant increase in bank assets, as well as an incomplete recovery of GDP relative to the pre-crisis level. The banking sector continues to be the backbone of financial intermediation in Montenegro, having a dominant position in the assets of the financial system (93.3%). The insurance sector, as in the previous period, represents the second most important group of institutions (4.5%). The remaining segments of the financial sector - microcredit financial institutions (MFIs), leasing companies, and factoring companies - have a collective share of as little as 2.2% in the structure of the financial system.

Over the past few years, the number of banks in the Montenegrin banking market has been declining, as a result of bank mergers and the introduction of bankruptcy in certain banks. At end-2021, the merger of Komercijalna banka AD Podgorica with NLB banka was completed, resulting in eleven banks operating in the system at the year-end. The banking sector concentration, according to the HHI (assets), decreased slightly from 1,460 to 1,397 points, as some smaller banks increased their market share during the year (Graph 4.1). As per the same indicator, market concentration of loans was significantly higher (1,720 points), while deposits were more evenly distributed as the index stood at 1,355 points at the year-end. Looking at assets, the market share of three and five largest banks amounted to 52.8% and 74%, respectively. Banks with the majority foreign ownership accounted for 80% of assets.

Graph 4.1



Source: CBCG

Nine companies performed insurance activities in the Montenegrin insurance market during 2021, of which four engaged in life insurance, and five companies dealt with non-life insurance activities. The general features of the insurance market are both stability and high market concentration. Compulsory transport insurance still has the most significant share in the insurance market. This market has a significant potential for further growth and development, which is confirmed, inter alia, by the fact that insurance premiums saw a decline of only 1.1%, and that a growth of 5.5% was recorded in 2021,

exceeding the premium levels prior to the coronavirus pandemic outbreak. Observed per capita and in relation to GDP, the premium is still significantly lower than in more developed European markets, which also reveals potential of this segment of the financial system.

In 2021, eight microcredit financial institutions, two leasing companies, two factoring companies, and two receivables repurchase companies were operating in Montenegro.

Box 4.1 – CBCG`s macroprudential measures for 2022

With the aim of preserving and fostering financial stability, the Central Bank of Montenegro adopted several macroprudential measures to be implemented in 2022.

First of all, these are capital buffers, as the most characteristic macroprudential instruments, which introduction was enabled under the new Law on Credit Institutions. In addition to the capital conservation buffers, a countercyclical capital buffer, a structural systemic risk buffer, and other systemically important credit institutions (O-SICIs) buffer were introduced.

The countercyclical capital buffer rate applied in Q1 2022 was prescribed at the level of 0%, and this rate was maintained in the second quarter.[20] 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 rate. The counetrcyclical capital buffer rate is valid for the territory of Montenegro and each credit institution is subject to the so-called specific countercyclical capital buffer rate, calculated as a weighted average of exposure in Montenegro and other countries and the prescribed countercyclical capital buffer rates in Montenegro and other countries.

The structural systemic risk buffer rate was prescribed at 1.5%, with effect as of 1 January 2022. The decision was made as the available indicators of structural systemic risk indicated the need to introduce such level of buffer rate. The rate is equally applied to all exposures which, pursuant to the Law on Credit Institutions, links this buffer to the O-SICIs buffer. Namely, when the structural systemic risk buffer is applied equally to all exposures, then the credit institution are to maintain the higher of the structural systemic risk buffer or the O-SICI buffer. The introduction of a structural systemic risk buffer is not mandatory, but once introduced, the rate is reviewed at least every two years.

After the O-SICIs[21] were determined in accordance with a special methodology, the CBCG also prescribed buffer rates that 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 0.5% to 2%, with application starting as of 31 March 2022. 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.

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

[21] Decision on identifying other systemically important credit institutions (OGM 127/20).

The O-SICI buffer rates are determined by the equal expected impact approach, which balances the expected impact of disruptions in the work of O-SICIs on the entire system with the expected impact of disruptions in the so-called reference credit institutions. The introduction of an O-SICI buffer is not mandatory, but once introduced, the review of the buffer rate is conducted at least once a year. On the other hand, the review of the list of O-SICIs is mandatory, and is conducted once a year.

In practice, the mentioned buffer rates made the capital requirements for banks higher than the minimum 8% prescribed by the Law on Credit Institutions and, depending on the credit institution, they range from 10.125% to 10.625%[22]. It should be reminded 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.[23]

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 cash retail 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 measures that will be in effect for one year and which represent the continuation of the measures that were in force over the period 2020 - 2021, albeit slightly modified. The key change is that credit institutions with a share of below 3.5% of non-performing cash loans in total cash loans with a contractual maturity of more than six years that are not secured by quality collateral can approve cash loans or agree to extend the initially cotracted eight and/or six-year repayment period for additional two years.

Finally, temporary measures to mitigate the negative effects of the COVID-19 epidemic on the financial system are also in place, and they were introduced for the fourth time in a series of decisions targeting the impact of the coronavirus pandemic on the financial system. Compared to the previous three decisions, this one is less comprehensive, which is understandable given the more favourable situation at the time of passing the decision from the epidemiological and economic and financial point of view. In line with the current decision, the most important measure is the restructuring of retail loans designed for natural persons whose finances have been significantly affected by the pandemic, in the manner specified therein. Restructuring is optional from a debtor`s point of view, but it is mandatory for the creditor if the debtor is applying for restructuring and if they meet the necessary requirements. Temporary measures include, inter alia: 1) ban on the payment of dividends to shareholders of credit institutions, except payments in the form of shares of a credit institution, or 2) reduction from 12% to 6% (annually) of fees to be paid by credit institutions to the CBCG for using the prescribed amount of reserve requirement they have not replenished on the same day.

[22] 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.

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

4.1. Banks' balance sheet structure

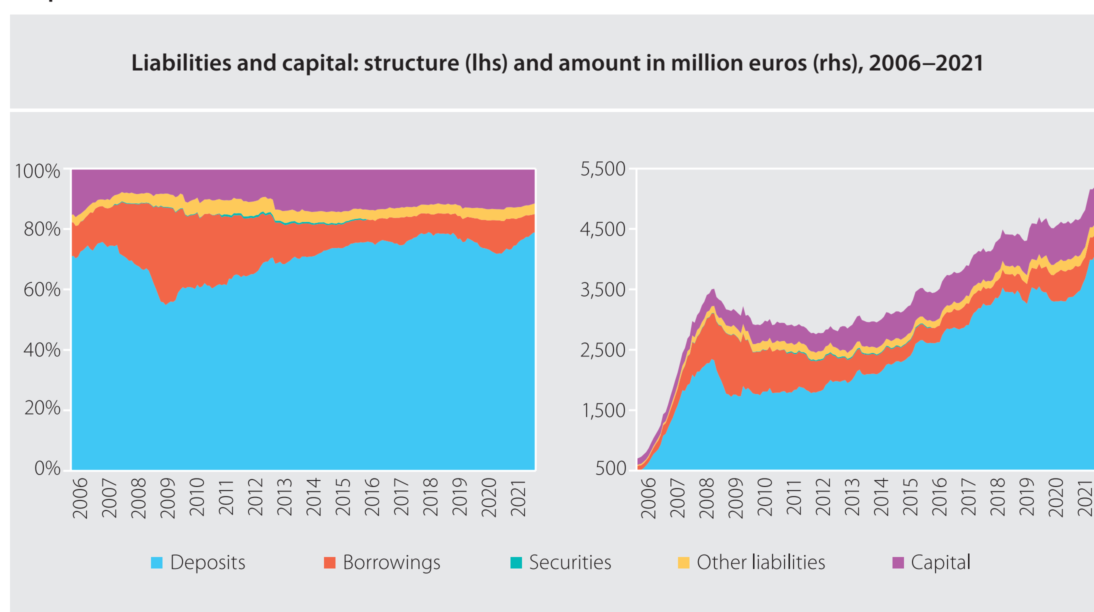
Changes in the structure of total assets and liabilities during 2020-2021 mainly related to changes in liabilities, i.e. bank financing.

In 2020, bank financing from borrowings inceased sharply, both in terms of the amount and the share in total liabilities, reaching 11.1% of the balance sheet total. Most of the new borrowings were with agreed maturity of up to one year and they were mostly foreign borrowings by parent banks or other members in their banking groups. Borrowings then began to decline relatively quickly, indicating that banks had established solutions to emergencies. Borrowings continued trending downward during 2021, accounting for 6.1% of total liabilities at the year-end.

Deposits have been the primary source of bank financing for many years now and they accounted for 78.8% of total liabilities at end-2021, while their share in the balance sheet total increased by 5.3 pp annually (Graph 4.2). At end-2020, due to the coronavirus pandemic, deposits recorded their first annual decline as of 2010. However, from September 2020 to end-2021, deposits increased each month, with the rise reaching as much as 828.4 million euros or 24.6% in 2021. Thus, total deposits were at their historical peak of 4.2 billion euros, and such inflow of deposits undoubtedly indicates confidence in the banking sector.

Retail deposits amounted to 1.44 billion euros and they were 15% higher y-o-y. Deposits by the non-financial sector amounted to 1.2 billion euros or 18.2% more y-o-y. Both sectors were at their historical peaks this year. In addition, non-resident deposits have become an important segment in total deposits over the years, as their share rose to 27.8%. The growth of non-residents' deposits amounted to 394.5 million euros or 51%.

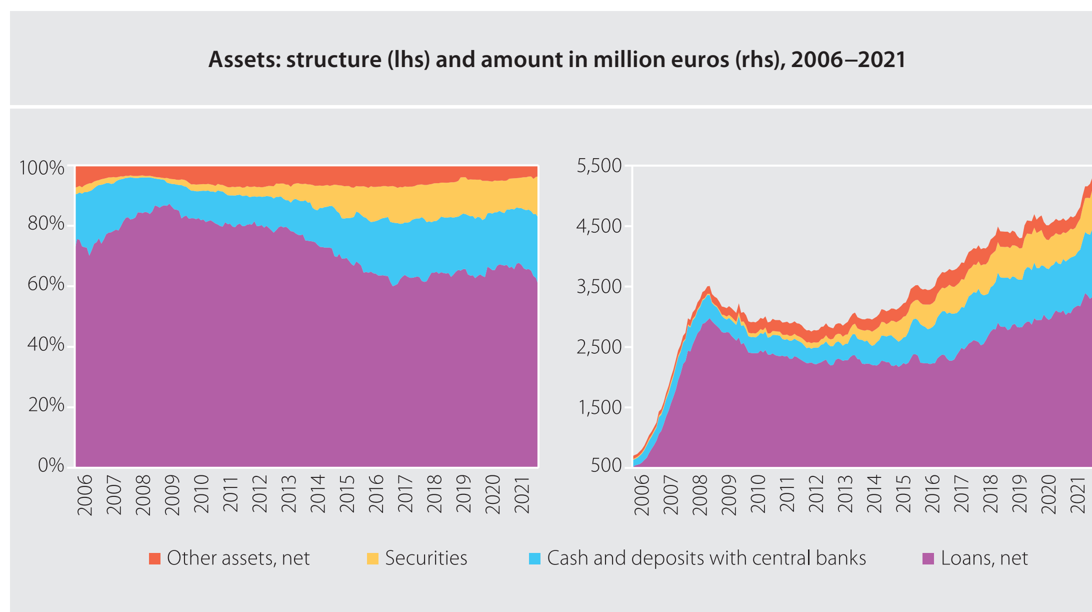
Graph 4.2



Source: CBCG

The large liquidity inflow resulted in an increase in cash and deposit accounts with central banks of 301.4 million euros or 34.1%, which totalled 1.18 billion euros and accounted for 22.2% of the balance sheet total, 3 pp more than at the end of the previous year (Graph 4.3).

Graph 4.3



Source: CBCG

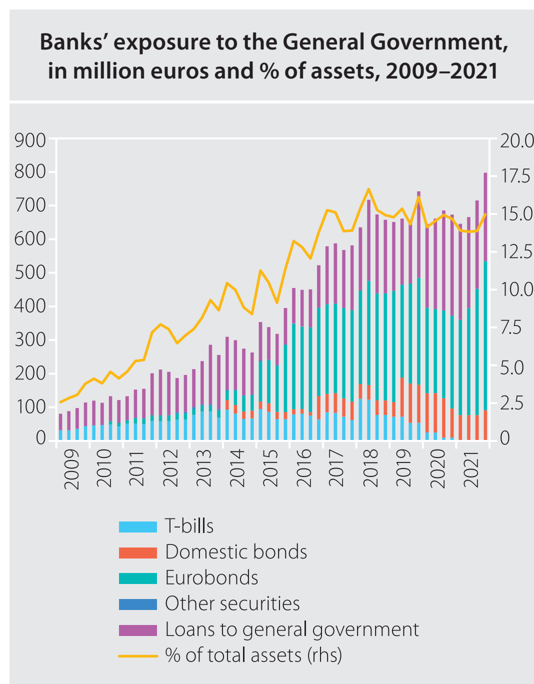
A part of the enormous inflow from deposits is invested in securities. In H2 2021, banks intensified their investing of funds in these instruments, whose position on an annual level was 55.9% higher and amounted to 734.4 million euros or 13.8% of the balance sheet total. Historically, this is the highest level and share of these instruments in the balance sheet total.

As in the previous period, government securities accounted for the majority of the banks` securities portfolios (72.8%). Banks generally consider these as investments at a favourable interest rate in relation to risks they carry, 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 2021, banks increased the portfolio of government securities of Montenegro to 534.5 million euros or 43.4%. However, banks also significantly increased the position of foreign securities (more than double), and it amounted to a close to 200 million euros at the year-end.

Total exposure of banks to the government at end-2021 was 15% of total assets or 0.3 pp more (Graph 4.4). In absolute terms, it amounted to 797.6 million euros[24]. This year, the government made incomparably less use of the possibility of taking new credits from banks (7.1 million euros) than was the case in previous years (88.5 million euros in 2020). In addition, the central government debt arising

[24] 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.

Graph 4.4



Banks' exposure to the General Government, in million euros and % of assets, 2009–2021

Source: CBCG

from loans was reduced by 12.6% to 227.7 million euros. In 2021, the government did not issue treasury bills, in which domestic banks were the most active investors.

At end-2021, banks' receivables from non-residents in the form of deposits were 50.6% higher than at the end of the previous year. These were mainly demand deposits with non-resident banks, amounting to 332.3 million euros at the end of the reporting year. Total receivables from non-residents stood at 884.6 million euros or 16.6% of assets at end-2021. Total liabilities to non-residents amounted to 1,421.7 million euros or 26.7% of liabilities (foreign deposits accounted for the largest share of these liabilities and reached 1,167.2 million euros at the year-end, increasing by 51% annually). Thus, net foreign assets of banks stood at -10.1% of their total assets and liabilities at end-2021.

4.2. Credit growth and non-performing loans[25]

In 2021, banks' lending activity slightly intensified. Total loans were at their all-time high in August and amounted to 3.53 billion euros, although they fell to 3.36 billion euros by the year-end. Lending activity in terms of new loans amounted to 1.11 billion euros or 22.6% more than in the previous year. In general, lending activity was not at the pre-crisis level, but it was satisfactory considering the circumstances of the ongoing coronavirus pandemic.

At end-2021, the gap between the loan of the non-financial sector[26] and GDP ratio and the long-term trend of this ratio was negative (-8.9 pp) (Graph 4.5). The trend of this indicator in the past two years was conditioned by a sharp drop in GDP under the influence of the coronavirus pandemic in 2020, followed by the recovery of GDP in 2021. Such a situation cannot justify the introduction of restrictions on general credit growth and certainly does not generate risks to stability of the financial system.

The largest share of banks' loan portfolio referred to retail loans (42.6%) and they have been recording positive growth rates over the last eight years. At end-2021, this rate was 2.7%. The volume of new retail loans in 2021 is higher than in the previous year, but it did not reach the pre-pandemic lev-

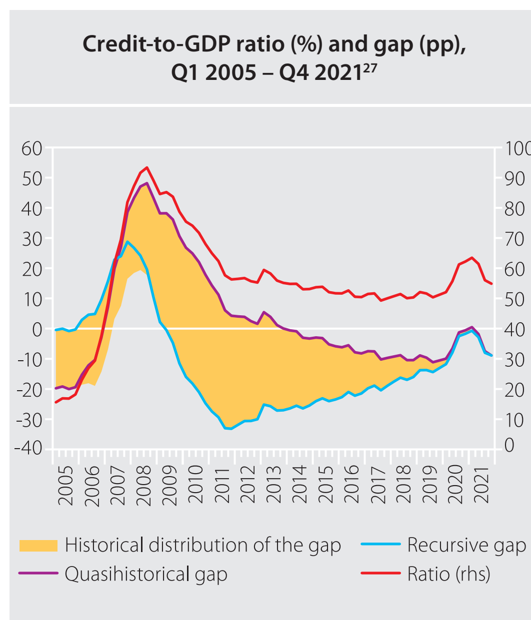
[25] Unless otherwise stated, the data on loans presented in this chapter, as well as in the rest of the report, refer to loans and other receivables of the credit type on a gross principle (with corresponding value adjustments), without accrued interest and prepayments and interest/fee accruals.

[26] Resident natural persons (households and entrepreneurs) and resident non-financial institutions (state companies and private companies).

els. New loans were by one third higher than in 2020, but almost by a quarter lower than in the record-breaking 2019. At end-2021, new retail loans amounted to 389.7 million euros. Most of these were cash loans (56.3% of total new retail loans).

Loans to resident non-financial institutions accounted for 34.4% of total loans at end-2021, and they increased by 4.4% at the annual level. Observed by new loans, this is still the sector that banks finance the most, with 611.5 million euros in 2021, which is 25.3% and 10.4% more than in 2020 and 2019, 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 loans jumped from 49.4% in 2019 to 62.2% in 2020 and finally to 64.4% in 2021.

Graph 4.5



Source: CBCG

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 91.5% (not including credit-type receivables) at end-2021. However, observed in terms of remaining loan maturity, the share of long-term loans appears to be lower, 69.7%.

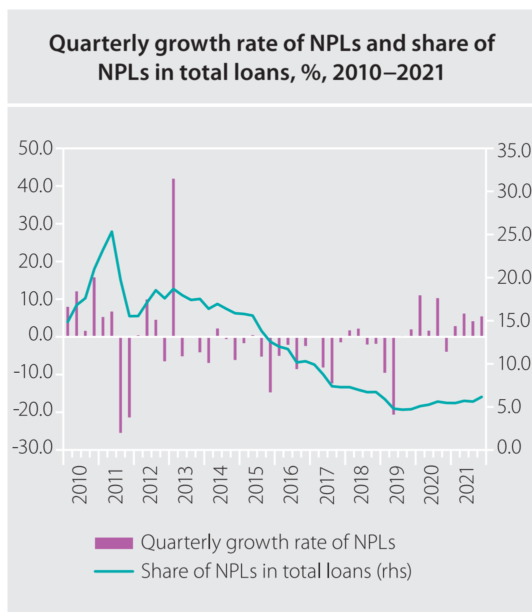
If we observe the impact of the crisis on credit risk, in terms of the overall growth of non-performing loans, the materialization of the crisis on banks' balance sheets was limited. The spillover of the crisis from the real to the financial system was, for the time being, significantly mitigated owing to temporary measures the Central Bank that continued to be implemented during 2021, modifying those in several iterations. With the aim of preserving financial stability, the Central Bank endevoured to mitigate the effects of the crisis for both loan beneficiaries and banks through a comprehensive approach.

At end-2021, eight banks had higher shares and four banks had lower shares of NPLs in their total loans than at the end of the previous year. Total non-performing loans had a slight but clear growth trend during 2021.

At the aggregate level, the NPL share in total loans rose by 0.7 pp year-on-year, reaching 6.2% at end-2021 (Graph 4.6). The sum of NPLs increased at the annual level by 19.9% and amounted to 207.4 million euros. The ratio of the sum of NPLs and GDP amounted to 4.2%, being slightly higher compared to the end

[27] For more information on the methodology, see the information on the countercyclical capital buffer rate for Montenegro on the Central Bank website (*https://www.cbcg.me/en/core-functions/financial-stability/macroprudential-measures/countercyclical-capital-buffer*).

Graph 4.6



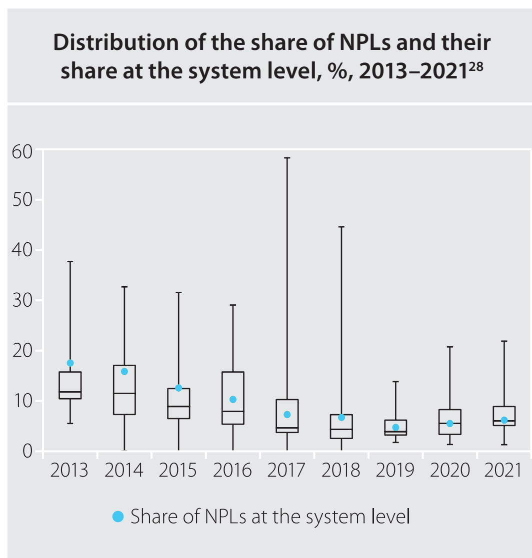
Source: CBCG

of the previous year (4.1%), with GDP also growing significantly this year. At end-2019, this indicator was 2.9%. The share of loans that were over 30 days past due also increased year-over-year and accounted for 4.9% of total loans.

In addition to the increase in the share of NPLs at the system level, the range between the lowest and highest share of non-performing loans increased at end-2021 (Graph 4.7). The range between the first and third quartile was smaller, but higher values were recorded for both quarters, indicating an increase in credit risk at the system level. At end-2021, the percentage of non-performing loans with one bank was in the highest quarterly range. The shares of non-performing loans of the other three large banks were below the system average of 6.2%.

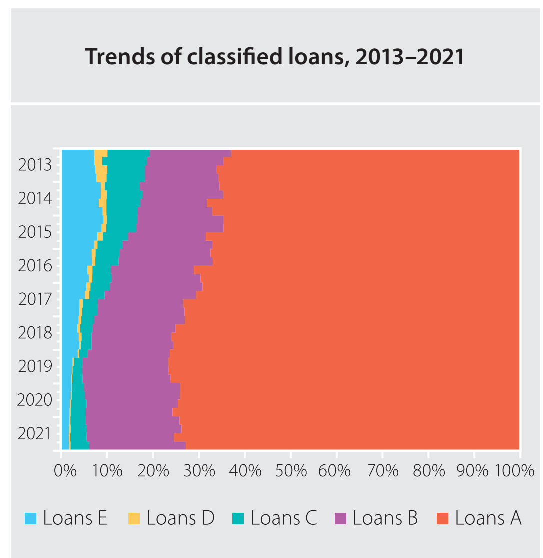
The largest change in share was recorded in category A loans, which fell from 75.6% to 72.8% during the reporting year. The share of B category loans increased from 18.9% to 21.1%, while their annual increase amounted to 18.7%. In some banks with a higher market share, this category of loans accounted for a significant portion of their loan portfolio. The C category loans recorded a significant increase. Their share in total loans increased to 4% at the year-end, while the annual growth of the sum

Graph 4.7



Source: CBCG

Graph 4.8



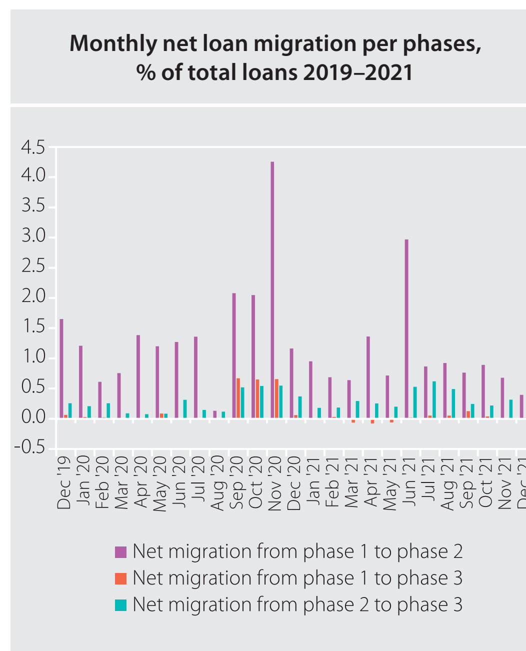
Source: CBCG

[28] 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.

of the C category loans amounted to 29.5%. D and E category loans accounted for much smaller shares of 0.3% and 1.8%, respectively.

A different, and possibly more realistic picture of the development of credit risk can be seen by observing how banks perceived the movement of risk according to the expected credit losses, i.e. in accordance with the IFRS 9. With the outbreak of the coronavirus pandemic in 2020, many banks reacted promptly by applying a conservative approach in assessing the new situation. Thus, in the loan portfolio, viewed according to the so-called phases[29], it is very clear that banks have been intensively relocating loans to phase 2 throughout the year (Graph 4.9). At end-2021, the annual increase in phase 2 loans amounted to 9.2% and their share in total loans rose from 14.9% to 15.3% in a year. On the other hand, quarterly changes in H2 2021 indicate a slight decrease in the amount of phase 2 loans.

Graph 4.9



Source: CBCG

Phase 3 loans, i.e. loans with objective evidence of loan losses, recorded a continuous annual growth in the last seven quarters (32% at end-2021), while their share increased to 8.5%.

Finally, phase 1 loans which still represent by far the largest category, decreased during 2021 as well, therefore their share in total loans amounted to 76.3% at the end of the year. For the sake of comparison, at end-2019, the shares of loans in phases 1, 2, and 3 were 87.5%, 6.8% and 5.7%, respectively.

The share of NPLs in total loans of non-financial institutions was 10.5% at end-2021, while it amounted to 7.5%[30] in the pre-crisis period. In line with the expected credit losses, credit risk of corporate loans was much worse than credit risk and migration in phases 2 and 3 compared to retail loans[31]. Of course, the speed of migration of corporate loans in phases 2 and 3 was higher than the growth of non-performing loans of non-financial institutions (Graph 4.10).

Credit risk growth was less pronounced among households this year as well, but it was significantly controlled by a set of CBCG measures. The sum of retail NPLs increased by 10.7% and their share in total retail loans stood at 4.4% at end-2021. The share of retail loans that are more than 30 days past due in total loans was 4.7%.

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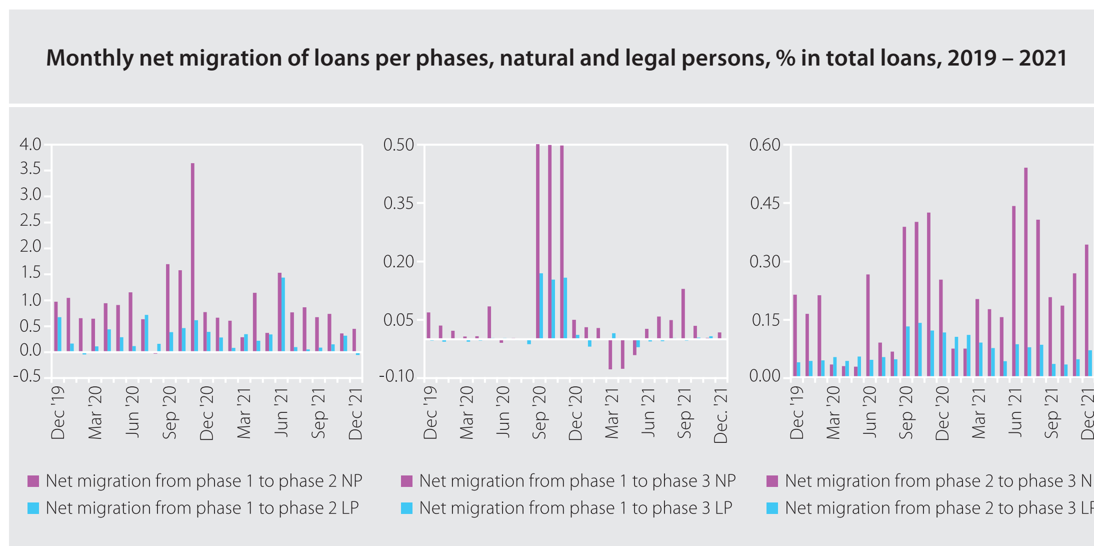
[29] Phase 1 includes financial instruments that did not significantly deteriorate credit risk due to recognition or which had low credit risk at the time of reporting. Phase 2 covers financial instruments where there was a significant increase in credit risk, but there was no objective evidence that loan losses had occurred. Phase 3 contains financial assets which had objective evidence of incurred loan losses.

[30] End-2019

[31] Data on the phases contain only a division into legal and natural persons, but legal entities approximate non-financial institutions quite well.

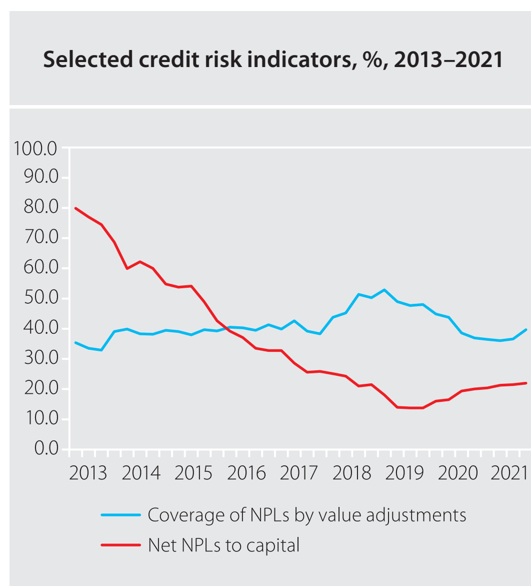
Graph 4.10



Source: CBCG

Of the total amount of loans (excluding credit type receivables), 369.5 million euros or 12.4% of loans were restructured at the year-end. Those loans whose restructuring was carried out as a part of the temporary CBCG measures amounted to 183.6 million euros or 6.2% of loans, of which tourism and agriculture, forestry, and fishery sectors accounted for 48%. Loans that were restructured independently of the aforesaid measures were 8.2% higher year-on-year and they amounted to 185.9 million euros at end-2021.

Graph 4.11



Source: CBCG

In 2021, moratoriums were carried out in a much smaller scope than in the previous year. There was only 0.04% of loans in the moratorium at the end of the year. During the year, most loans in the moratorium came from tourism, agriculture, forestry and fisheries.

The coverage of NPLs by value adjustments for loan losses (only for NPLs) amounted to 39.7% at end-2021, while they stood at 36.9% in the previous year. A somewhat higher amount of capital was exposed to credit risk as the ratio of net NPLs („uncovered") and capital increased on the annual basis from 20.1% to 22%[32].

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

4.3. Liquidity

Liquid assets of banks amounted to 1.4 billion euros, while their annual growth was 38.3%. At end-2021, liquid assets of banks accounted for 26.4% of total assets, which is 4.2% pp more year-on-year (Graph 4.12).

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 763.6 million euros or almost 54.4% of liquid assets at end-2021. Banks hold significant funds with foreign financial institutions and these are primarily demand deposits. They amounted to 325.6 million euros or 23.2% of liquid funds at the end of the year. Also, banks held cash in their vaults in the amount of 202.4 million euros.

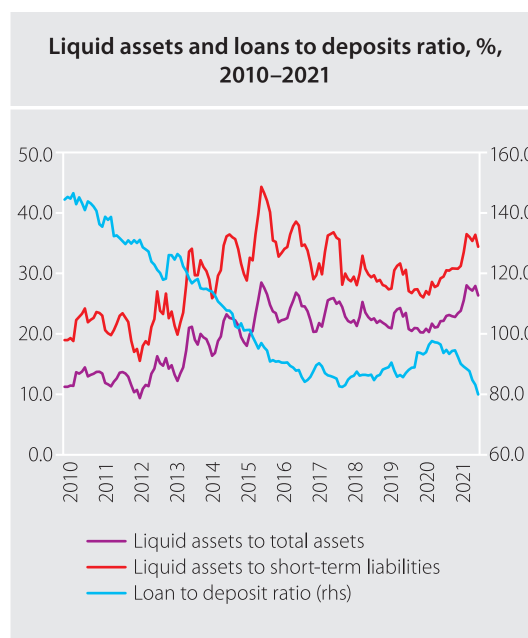
Bank borrowings were on a downtrend throughout the year, being 28.3% lower year-on-year, reaching the amount of 323.8 million euros or 6.1% of total liabilities. At end-2021, short-term borrowings of parent banks and members of the group recorded the largest decline (75.8%) and accounted for 14.6% of total borrowings, thereby improving the maturity structure of loans.

The loan to deposit ratio decreased year-on-year and reached 80%, as the increase in deposits (828.4 million euros) was more than four times higher than the increase in loans (201.1 million euros).

Demand deposits accounted for the main share in the structure of deposits by maturity and this was the seventh year in a row they were higher than term deposits. At end-2021, they accounted for 73.2% of total deposits or 1.8 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 term deposits became less attractive.

Ratio of liquid assets and financial liabilities (up to one year) stood at 34.4% and it was 5 pp higher year-on-year. If we observe the ratio of liquid assets and financial liabilities up to three months, then this ratio amounted to 39.7%. Both indicators were higher at the end of the year due to an increase in liquid assets.

Graph 4.12



Source: CBCG

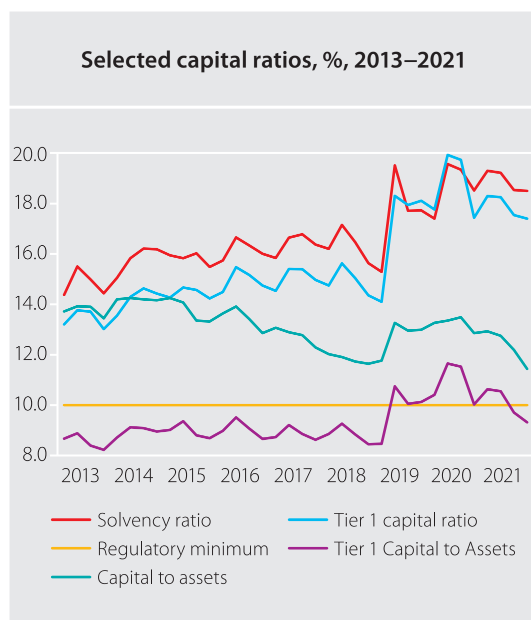
The European Central Bank (ECB) decided to extend the deadline for the Central Bank to use the EUREP credit line until March 2022 (later extended until January 2023) instead of June 2021, as initially agreed. The extension of the credit line by the ECB provided additional safety for maintaining the stability 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, the Deposit Protection Fund provided 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.

4.4. Solvency

Observed through capital ratios at the aggregate level, the resistance to shocks of Montenegrin banks was satisfactory. The capital adequacy ratio at the system level was 18.5% at the end of the year and it was above the regulatory minimum with all banks (Graph 4.13). In four largest banks, it ranged from 16.3% to 23.6%. The ratio of core capital (*Tier 1*) and risk-weighted assets amounted to 17.4%.

Graph 4.13



Source: CBCG

One non-systemic bank was recapitalised during the reporting year. Two smaller banks offset losses from previous years, reducing their share capital by 104.5 million euros. Both banks had satisfactory solvency ratios at the end of the reporting year. One large bank increased its share capital arising from retained earnings from previous years and collected issued premiums in the amount of 36.4 million euros.

At end-2021, total capital of banks was 3.4% higher than at end-2020, and it amounted to 609.5 million euros.[33] The share of total capital in total assets and liabilities of banks was 11.4%, while the share of Tier 1 capital was 9.3%.

[33] Refers to balance sheet capital.

Box 4.2 – Asset quality review (AQR)

In accordance with the 2016 FSAP mission recommendations, the CBCG, in cooperation with independent external audit firms, carried out an asset quality review (AQR) of the entire banking system. The AQR was carried out using financial data as of 31 December 2019, in all 13 banks operating on the Montenegrin market at the time. The AQR was conducted in line with the methodology based on the European Central Bank's *Asset Quality Review Phase 2 Manual* from June 2018, adapted to the local institutional and legal framework, and the market specifics.

The leading consultant of the Central Bank to support the management of this project was the auditing and consulting company Ernst & Young (EY) Serbia, Bosnia and Herzegovina & Montenegro, with the support and cooperation of their colleagues from EY Germany, EY Croatia and EY Czech Republic, while independent asset quality review of banks was conducted by external auditors, also adhering to the methodology. The auditors were selected following the Guidelines on the Selection of Auditors and Valuers Hired to Carry out AQR, with the CBCG consent, for the teams of the auditing and audit-consulting firms PWC, KPMG and TPA.

The AQR was carried out from March 2020 to September 2021, in the period characteristic for challenges caused by the coronavirus pandemic and the CBCG measures taken to mitigate the negative effects of the pandemic on population and economy of Montenegro, as well as the merger of CKB banka and Podgorička banka, which was the most extensive integration of banks in the Montenegrin market.

As per its features, the AQR represents a prudential exercise, which was not previously carried out in the domestic banking system and which has the character of an extremely complex and comprehensive procedure:

- The procedure covered all 13 banks present on the Montenegrin market at the time;
- The selection of credit exposures that were subject to the AQR provided high coverage of risk-weighted assets at the banking sector level (as much as 84.4%);
- Three independent audit firms and 12 external assessment firms (engaged in the AQR performance in individual banks), a number of the CBCG employees and employees in banks that were subject to AQR, were engaged from March 2020 to September 2021 on various AQR-related activities;
- Over 90 individual receivables portfolios were the subject of analysis, with carrying amount amounting to 3.74 billion euros at the reference date;
- Auditors individually reviewed loan files of over 2,700 debtors.
- Over 2,800 residential and commercial properties were reviewed or re-reviewed or their existing assessed market value was analysed in line with the AQR criteria.

The main AQR objectives were as follows:

- Review of the stability of the banking system in Montenegro;
- Asset quality review of banks applying a unique and conservatively established methodology, including the review or re-review of collaterals in accordance with internationally recognised valuation standards;
- Providing a basis for improving regulatory and supervisory regulations, in particular in the area of the International Financial Reporting Standards (IFRS), such as improving the IFRS 9 application.

The AQR results confirmed the stability of Montenegro`s banking sector, satisfactory asset quality and capital adequacy of the local banking system.

Total effects of AQR in terms of the impact on the amount of capital at the banking system level amounted to -40.3 million euros (416 million euros against 456.3 million euros), resulting in the solvency ratio decrease of 1.6 pp. The actual solvency ratio at the banking sector level was therefore 16.2%, being significantly above the statutory minimum of 10%[34].

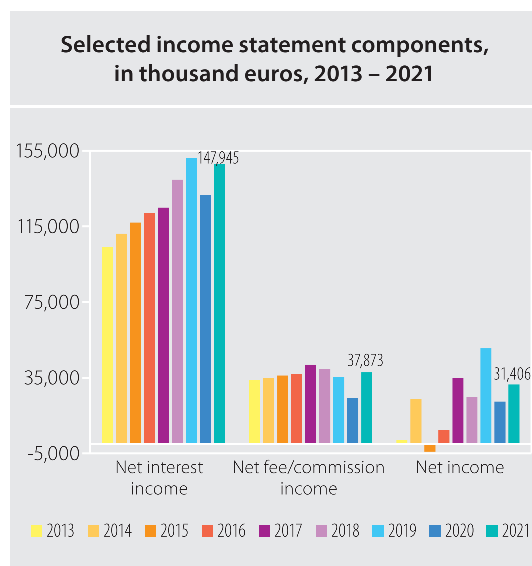
The need for capital conservation measures has been identified only for one bank. The Bank reacted proactively so that with the date of application of the AQR results, its capital adequacy ratio was within the legally prescribed limits.

After applying the AQR effects, according to the reports submitted by banks, the capital adequacy ratio at the system level was 18.1% (as at 31 October 2021), whereas it equalled 18.5% as at 31 December 2021, which further indicates that the asset quality review, having quite rigorous rules, showed that the Montenegro`s banking system is stable and able to absorb a number of possible shocks without consequences for future banking operations.

4.5. Profitability and interest rates

Net profit of banks amounted to 31.4 million euros in 2021, which was 40.6% 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 28.2 million euros. One medium-sized and one smaller bank operated with loss.

Graph 4.14



Source: CBCG

Interest income and similar revenues were 10.6% higher year-on-year at the system level. Banks also earned interest on the portfolio of securities, whose share in total interest income was 8.6%. In recent years, income from fees and commissions has become more prominent and they accounted for over 50% of interest income in 2021. Moreover, after their decline in 2020, these revenues recorded a growth of 38.4% in 2021 and they were higher than in 2019.

Net interest and similar incomes were 12.4% higher year-on-year, while net income from fees and commissions increased by 55.8% (Graph 4.14).

[34] The calculated impact of AQR as of 31 December 2019 was presented here, with the effects of AQR being applied later - as of 31 October 2021.

Significantly increased provision expenses had a restrictive effect on net profit growth. Allowances for impairement[35] increased slightly, but far less than in 2020, when as a result of the outstanding situation, they were almost three times higher than in 2019.

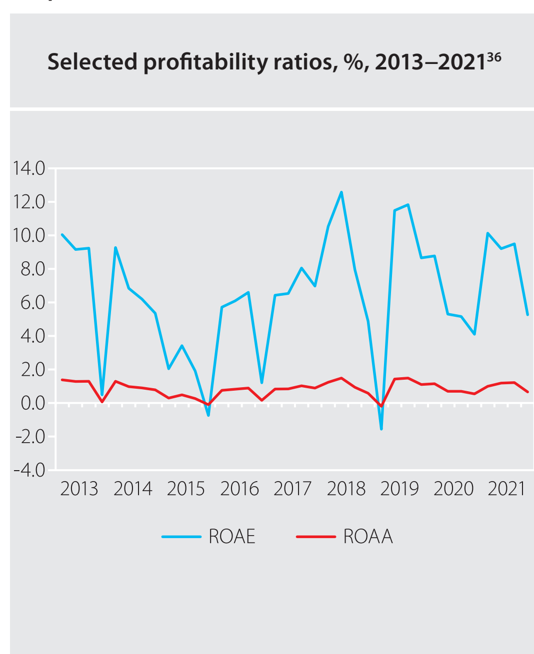
In line with the better financial result, the ROAA increased from 0.6% in 2020 to 0.7% in 2021, while the ROAE increased from 4.1% to 5.3% (Graph 4.15).

The decomposition of return on average capital shows that net interest income has the largest positive contribution (Graph 4.16). 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 8.5% year-on-year. The negative contribution of allowances for impairement in *ROAE* was 5.2 pp.

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-2021, and fell below four pp due to lower interest income (Graph 4.17). The spread per banks was very uneven, ranging from -0.58 pp to 4.84 pp. Average earning assets were 20.7% higher than in 2020, accounting for 80% of average assets.

Graph 4.15

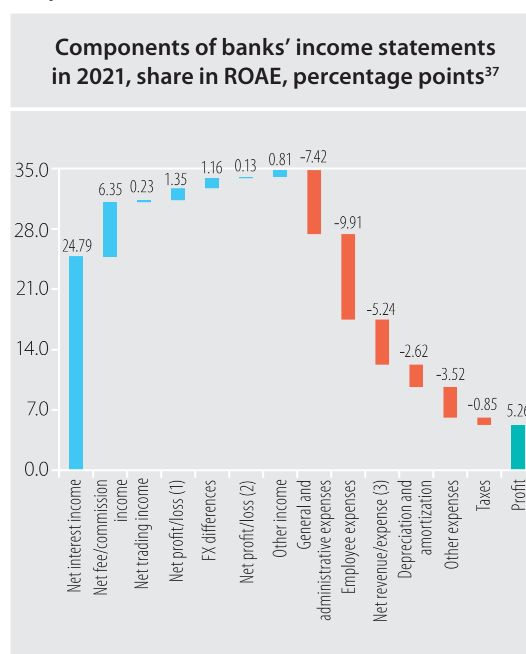
Selected profitability ratios, %, 2013–2021[36]



Source: CBCG

Graph 4.16

Components of banks' income statements in 2021, share in ROAE, percentage points[37]



Source: CBCG

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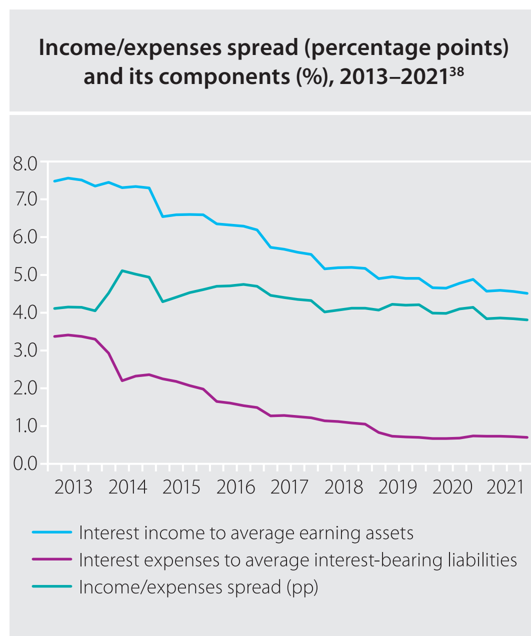
[35] Impairment of financial instruments that are not measured at fair value through income statement.

[36] 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.

[37] 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 4.17

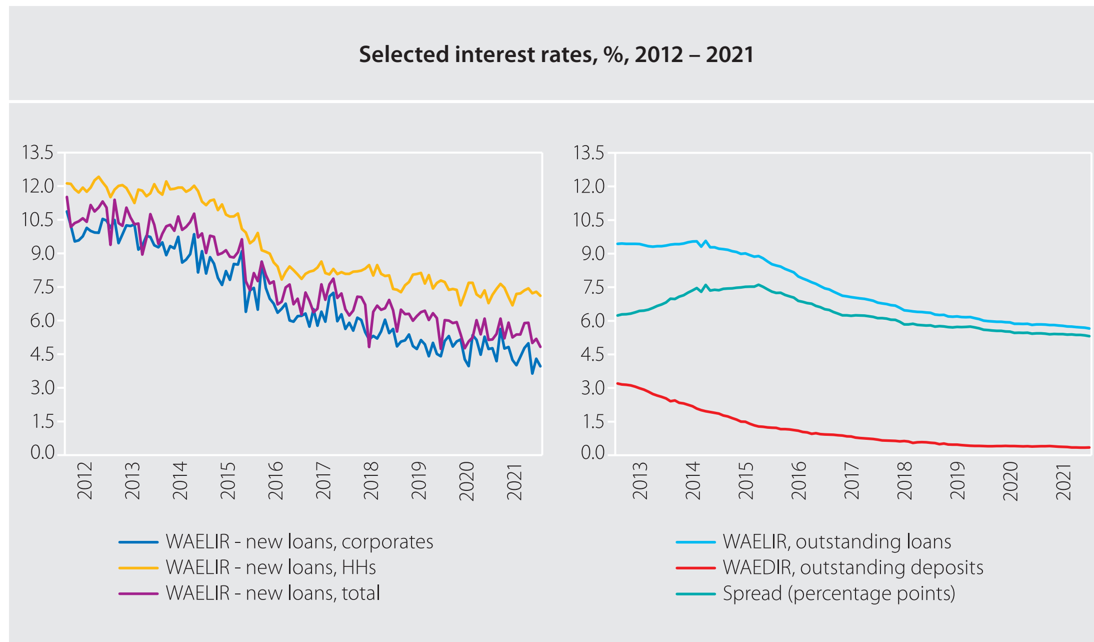


Source: CBCG

The downtrend in the weighted average lending interest rate (for the entire loan portfolio of banks, i.e. on unpaid principal/debt) continued in 2021 and it dropped by 0.18 pp (Graph 4.18). As for the weighted average deposit interest rate, its annual decline was 0.05 pp. At end-December this year, the weighted average lending interest rate was 5.66%, while the weighted average deposit interest rate was 0.35%. Thus the interest spread additionally decreased, reaching 5.31 pp at the year-end.[38]

Lending interest rate on new loans for the entire 2021 (weighted by monthly amounts of new loans) was 0.08 pp lower compared to 2020 and it amounted to 5.38%. This decline was driven by lower interest rates on new corporate loans, where investments were 0.42 pp cheaper than a year ago. According to the same calculation method, interest rates on new retail loans were slightly lower, standing at 0.03 pp.

Graph 4.18



Source: CBCG

[38] 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

4.6. Sensitivity analysis

Sensitivity testing using four credit risk tests showed significant resilience of banks, with some sensitivity of individual banks in the first and fourth test. To wit, three banks failed the first test with the total amount of capital shortfall of 11.2 million euros, while four banks did not pass the fourth test as they were lacking capital in the amount of 39.5 million euros. However, the solvency ratio at the sector level did not fall below the statutory minimum after any of the tests applied.

Table 4.1

Sensitivity analysis of credit and market risks as at 31 December 2021

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, %						
		12.8	14.8	20.3	23.8	18.5		
	Credit risk test							
1.	Negative reclassification of classified loans' structure[39]	6.6	9.7	19.1	22.9	16.5	11,185	3
2.	Increase in non-performing loans by 30% and value adjustments by 40%	11.2	13.4	19.1	23.0	17.6	0	0
3.	Large debtor bankrupcy[40]	11.5	12.8	18.5	22.4	17.4	0	0
4.	Largest debtor bankrupcy	-75.2	9.0	16.6	20.3	14.3	39,510	4
	Market risks test							
1.	Interest rate increase by adding 2 percentage points to cumulative gap of interest rate sensitive positions with 181–365 days maturity	12.1	14.8	20.7	23.9	18.2	Not calculated	0
2.	Adjustment of net open FX position by 20%	12.8	14.8	20.3	23.8	18.5	Not calculated	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 0.3 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, actually tested as a risk of deposit run, was conducted through seven extremely severe and less probable tests. In addition to the most liquid banks' funds in the country, the tests very conservatively assumed the possibility of using only 50% more of the reserve requirement[41]. On the other hand, the possibility of using bank funds in the form of demand deposits

[39] 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.

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

[41] 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 Central Bank of Montenegro (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), 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.

held abroad, which amounted to 325.6 million euros at end-2021, was not assumed nor did the remaining 50% of the reserve requirement (108.5 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 2021

No.	Test	Coverage by immediately available liquid assets, thousand euros (967,372 as at 31 December 2021)			Coverage by available liquid assets, thousand euros (1,075,903 as at 31 December 2021)		
		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	-293.002	7	-398.952	-184.471	7	-325.564
2.	Outflow of 30% of demand deposits	-11.862	7	-239.362	96.669	4	-173.974
3.	Outflow of 30% of demand deposits: 20% for natural persons and 40% for legal persons	-29.164	6	-249.550	79.367	4	-180.748
4.	Outflow of term deposits 30% for natural persons and 40% for legal persons	656.241	1	-3.089	764.772	1	-2.054
5.	Outflow of deposits of the largest depositor	726.237	2	-14.485	834.768	2	-8.202
6.	Outflow of 50% of deposits of 10 largest depositors	537.802	2	-28.231	646.333	2	-21.948
7.	Outflow of 100% of deposits of public sector	533.914	2	-37.037	642.445	2	-29.381

Source: CBCG

Even under these rigorous assumptions, testing expectedly indicated good liquidity of the sector as a whole, although in the case of the first three tests the sector did not have liquid funds to respond to deposit withdrawals even after using 50% of reserve requirement, where the most problematic was the first test. In all other cases, 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 180.7 million euros.

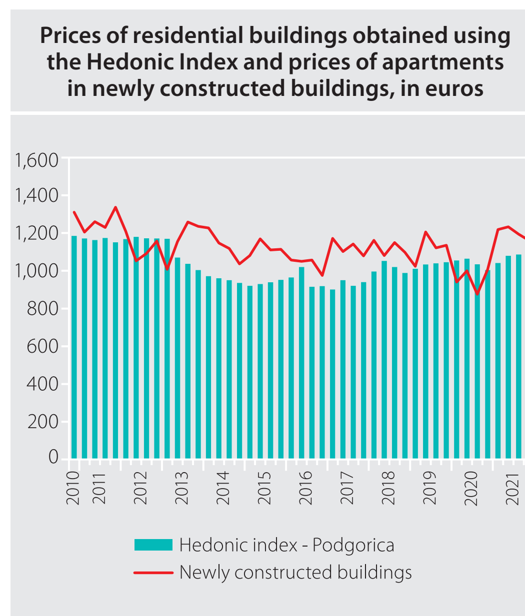
However, with the use of deposits that banks have in foreign accounts and with the full amount of reserve requirement, the system as a whole could respond to the withdrawal of deposits in the first test, with some deficits in several banks. Moreover, with the use of the mentioned deposits abroad and full reserve requirement, almost all banks would pass the scenario from all other tests (except the first). 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.

4.7. Real Estate Market

The 2021 real estate market parameters recorded positive trends as a result of recovery from the global economic crisis caused by the coronavirus pandemic. Results of the December survey suggest that the average price of a real estate in Podgorica amounted to 1,094 euros per square meter, which rep-

resents the year-on-year[42] increase of 9% (Graph 4.19). The average price per square meter of a new apartment[43] in Podgorica had a significantly higher value in December 2021 (1,232 euros) and it recorded the year-on-year increase of 25.1%. When it comes to the whole county, prices of newly built apartments were 1,161 euros with an annual growth rate of 15.3%. It should be noted that the differences in the prices of residential units in newly built buildings depend mostly on the share of the Montenegrin Fund for Solidarity Housing Development, thus, the higher the share of these housing units, the lower the prices of newly built housing units and vice versa.

Graph 4.19



Source: CBCG and Monstat

Based on a survey conducted by the Central Bank of Montenegro[44], 50% of agencies recorded an increase in trade. Also, most of them (79%) estimated that the average price per square meter increased between 10% and 30%. During the year, demand concentrated on apartments worth 900 to 1,500 euros/m^2. Most real estate agencies expect increase in demand and prices per square metre.

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

Table 4.3

Housing loans trend, 2015-2021

Year	Stock at year-end, in 000 €	y-o-y growth, %	Per capita (in €)	% of GDP	% of total loans
2015	308,869	-2.0	496.5	8.5	12.9
2016	328,558	6.4	528.0	8.3	13.6
2017	330,983	0.7	531.8	7.7	12.3
2018	365,737	10.5	587.7	7.9	12.5
2019	413,423	13.0	664.5	8.4	13.5
2020	470,407	13.7	756.0	11.0	14.9
2021	487,443	3.6	785.3	9.9	14.5

Source: CBCG and Monstat

[42] 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.

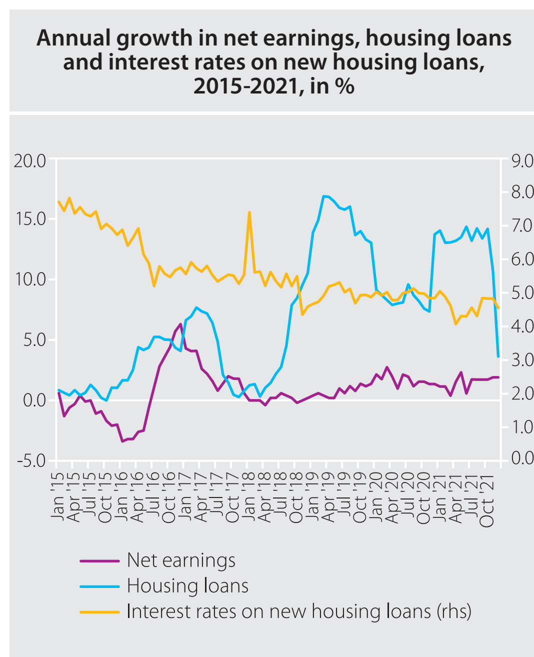
[43] Monstat data.

[44] For the purpose of the analysis, 87 real estate agencies were surveyed, most of which have their activities in Podgorica and the coastal region of Montenegro. Of a total of 87 respondents, 14 submitted their answers.

In December 2021, housing loans increased by 3.6% y-o-y. New retail loans for the purchase and refurbishing of apartments in 2021 amounted to 84.2 million euros, which is 25.2% more y-o-y. There was a slight decline in the interest rate on new housing loans this year (0.41 pp), which amounted to 4.5% (as a weighted average interest rate).

Graph 4.20

Annual growth in net earnings, housing loans and interest rates on new housing loans, 2015-2021, in %



Source: CBCG

According to the Bank Lending Survey, credit standards for housing loans were tightened since Q1 2020, i.e. since the beginning of the coronavirus pandemic, but they were somewhat eased in 2021. The assessment of banks regarding the demand for housing loans in the period when the effects of the coronavirus pandemic gradually subsided, generally indicated a recovery, however, with large oscillations.

The share of housing loans in the structure of total loans amounted to 14.5%, which is 0.4 pp lower year-on-year and it is the result of higher growth in total loans. The share of loans in GDP decreased by 1.1 pp and it amounted to 9.9% due to a strong recovery of GDP. This share was still significantly lower than the EU average (by some third of the value), which may be the result of lower solvency of citizens, but also less favourable lending conditions compared to the EU countries. In relation to the previous year, the amount of housing loans per capita increased by 3.9%.

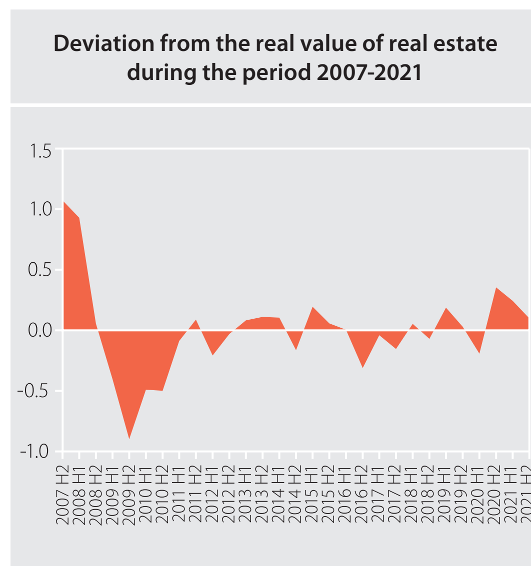
Considering the importance of the real estate market for the business cycle and financial stability, a risk assessment of the market was performed. Four essential series were used that would approximate the real (fundamental) value of a real estate. Any major deviation from the calculated real estate value could signal an increased risk in the real estate market which, as the financial crisis has shown, may affect financial stability.

The four series used for the given analysis are: 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, and the share of housing loans in GDP. 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. These series are available for the period 2007-2021. The *principal component* analysis was applied to these four 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 HP filter method (applying the recommendations of Ravn and Uhlig (2004) in estimation). The given cyclical movements are presented in Graph 4.21.

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 characterized by much underestimated real estate values (*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 stabilization of prices in relation to its fundamentals came a few years following the financial crisis. The 2011-2019 period was characterized by weaker oscillations in the real estate market and the prices that were rather similar to their fundamentals.

Graph 4.21



Source: CBCG

In the period before the pandemic (H2 2019), real estate prices were almost equal to their fundamental values. The coronavirus pandemic briefly halted the real estate market, due to pronounced uncertainty and declining interest in real estate. Therefore, a slight downward deviation in prices was recorded in H1 2020. However, already in H2 2020 and thoroughout 2021, real estate prices were higher than their fundamental values. Increased demand contributed to this, as buyers were investing in real estate, which is traditionally considered a safe investment, due to fear and uncertainty about the coronavirus pandemic, but also growing inflationary pressures. On the other hand, the increase in inflationary pressures in 2021 also increased construction costs, due to rising prices of construction materials and execution of construction works.

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 health and economic crisis in both 2020 and 2021.

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 was higher. The series that would, in case of availability, improve the quality of risk assessment are investments in real estate, investments in the construction sector, the amount of rent, and the like.

4.8. Capital market

The turnover of 46.5 million euros was recorded on the Montenegro Stock Exchange (0.9% of GDP) in 2021, as compared to 31.4 million euros in the previous year.

Trading in shares made up 58.8% of the secondary turnover, of which trading in shares of companies amounted to 27.3 million euros and trading in shares of investment funds to a mere 118.3 thousand euros. The rest of the secondary turnover (19.2 million euros) referred to bond turnover, with government bond trading in the amount of 17.4 million euros, i.e. trade in corporate bonds in the amount of 1.6 million euros. There were no primary issues.

At end-2021, the SE indices Monex and MNSE10 stood at 9,867.37 and 764.72 points, respectively, recording the respective year-on-year declines of 4.5% and 7.3%.

4.9. Payment System

The CBCG`s payment systems - RTGS system and DNS system, as the main payment infrastructure in the country, worked smoothly and according to the system schedule during all 256 working days in 2021 despite the crisis caused by the coronavirus pandemic. There was no downtime or extensions to the operation of the system, making its availability of 100%. In addition, as in the previous year, the operation of the system was slightly different on 31 December in relation to other business days.

A total of 11.4 million payments worth 15.5 billion euros were effected, which is 7.3% and 2.9% more than in 2020, respectively. Of the total number of payments, 36.7% were effected in the RTGS system, with the share in the total value of payments of 94.3%. On the other hand, 63.3% of the total number of payments was effected in the DNS system (5.7% of the total value of payments).

A relatively 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 instance, due to a lack of funds on the account, only 19 payments (all in the RTGS system) were put on hold and all of them were effected after the inflow of funds later during the same day.

5. CONCLUSION

In 2021, Montenegro`s economy made great progress on the road to recovery 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 the banks are, is still uncertain. In order to reach the real GDP from 2019, it is necessary for the growth in 2022 to be at the level of about 5%, which is attainable, but it may be jeopardized by the consequences of the situation in Ukraine.

Pressures on government finances still pose a systemic risk in Montenegro. Indirectly, the public debt level 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 ongoing coronavirus pandemic and the situation in Ukraine, a decisive continuation of measures of responsible and well-balanced fiscal policy is necessary, aimed at solving structural economic issues and bringing Montenegro into a relatively "safe zone".

A substantial portion of 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 and still manages to borrow under low interest rates compared to the historical standards. However, even in such circumstances, interest expenses were significant and estimated at 114.1 million euros (2.3% of GDP) in 2021, while their 2022 projections point to the amount of 92.5 million euros (1.7% of GDP). Therefore, a period of normalisation of interest rates on the international financial market, which will occur at a certain point in time, will pose a special challenge to financing interest expenses and for debt refinancing.

Direct financial links between the government and banks add to the complexity of Montenegro's position. During 2021, exposure of the banking sector to the government increased by 124.4 million euros to 797.6 million euros or 15% of banks' assets (in relation to assets, a slight increase of 0.3 pp was recorded). 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 Central Bank.

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 result.

The coronavirus pandemic re-actualized the issue of non-performing loans, so their share increased to 6.2% in 2021. This was less than expected, but it certainly has a negative impact on lending activity.

Banks still have the perception of a high credit risk in the real economy, which is best indicated by relatively prudent lending activity as well as still high lending interest rates (regardless of the reduction of average lending interest rate) and other lending conditions.

For now, however, the banking sector has successfully responded to the challenge of non-performing loans owing to significant and high-quality buffers of liquid assets and capital. Certainly, it should be borne in mind that the CBCG's temporary measures to mitigate the consequences of the pandemic - moratoriums and restructuring - have in a way „frozen" or changed the picture of the actual situation regarding this issue, but this will be fully known after the measures have expired. However, all indicators point out that banks have well absorbed all risks.

The CBCG`s macroprudential measures to limit the growth of unsecured retail cash loans (adopted in mid-October 2019 and effective in the period 2020-2021), with the likely impact of the coronavirus pandemic itself, acted to mitigate the trends related to these loans from the previous period. At end-2021, retail cash loans amounted to 577.6 million euros or 6.1% less in relation to 615.1 million euros at end-2020, while that amount reached 707.3 million euros at end-2019. Also, their share in total retail loans fell further in 2021, from 43.8% to 39.8%.

However, the maturity structure of cash loans remains still incomparably closer to the maturity structure of housing loans. There may be several reasons for this, and one of the possible ones is the partial substitution of housing loans with cash loans. Having in mind the credit history of this type of loans, it can be said that banks adequately control that risk. However, the problem may arise in the case of rising unemployment and/or falling real earnings. Therefore, the mentioned CBCG`s measures, in a slightly modified version, will be in force during 2022 as well.

Higher interest income and fees/commissions, despite higher impairment and provisioning costs, added to a profit of 31.4 million euros at the system level, which is significantly more than 22.3 million euros of profit in 2020.

The solvency ratio at the system level (18.5%) indicates that there is a high resilience of banks to possible further problems with non-performing loans, especially since this figure includes adjustments established in the Asset Quality Review (*AQR*). Certainly, the solvency ratios of all banks will be reviewed through the CBCG`s ongoing supervisory process.

ANNEX

Table 1 – Financial Stability Indicators (FSIs), 2017–2021

	2017	2018	2019	2020	2021			
	XII	XII	XII	XII	III	VI	IX	XII
Basic indicators of financial stability for credit institutions								
Total regulatory capital / risk weighted assets [1]	16.4	15.6	17.7	18.5	19.3	19.2	18.5	18.5
Tier 1 regulatory capital / risk weighted assets [1]	15.0	14.4	18.1	17.4	18.3	18.2	17.5	17.4
Net non-performing loans / capital [2]	28.9	21.0	14.9	21.2	20.6	21.5	22.4	22.6
Regular Tier 1 regulatory capital / risk weighted assets [1]	---	---	---	---	---	---	---	---
Tier 1 regulatory capital / assets	8.5	8.4	10.0	9.9	10.5	10.4	9.6	9.2
Non-performing loans / total loans [3]	8.3	7.4	5.1	5.9	6.0	6.3	6.6	6.8
Non-performing loans / total loans [4]	7.3	6.7	4.7	5.5	5.5	5.7	5.6	6.2
Concentration of loans by economic activities [5]	67.8	68.4	67.4	66.5	66.6	67.7	66.3	67.1
Impairment allowance / non-performing loans	42.1	56.7	52.9	40.0	39.6	39.1	39.6	42.4
ROA [6]	0.9	0.7	1.2	0.5	1.4	1.3	1.3	0.8
ROE [7]	6.9	4.9	9.0	3.7	10.1	9.3	9.6	5.9
Interest margin / gross income [8]	54.5	56.1	56.6	60.8	62.5	59.3	57.3	55.6
Interest-free expenses / gross income	73.7	82.5	75.0	74.4	67.6	66.5	68.3	72.3
Liquid assets / total assets [9]	25.1	22.3	20.6	21.8	22.6	23.5	27.1	26.0
Liquid assets / short-term liabilities [10]	49.2	35.4	31.1	35.1	36.8	36.0	41.3	39.7
Liquidity coverage ratio [11]	---	---	---	---	---	---	---	---
Net stable financing ratio [11]	---	---	---	---	---	---	---	---
Net open position in foreign currencies / capital [12]	0.8	0.0	0.6	0.7	0.5	0.5	0.4	0.1
Residential real estate prices, annual percentage change [13]	10.7	1.8	3.4	-11.3	29.7	23.3	36.3	15.3
Additional financial stability indicators								
Credit institutions								
Large exposures / capital [14]	153.9	138.1	97.4	96.8	82.5	93.1	120.6	118.1
Geographical structure of loans, in relation to total loans [15]								
Montenegro	---	96.4	96.7	97.2	96.5	96.4	95.9	95.7
Developed economies	---	0.7	0.6	0.7	0.6	0.6	0.5	0.5
Emerging and developing economies	---	2.9	2.6	2.1	2.9	3.0	3.6	3.8

Table 1 – Financial Stability Indicators (FSIs), 2017–2021 – continued

	2017	2018	2019	2020	2021			
	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
European emerging and developing economies, excluding Montenegro	---	1.4	1.7	1.1	1.3	1.4	1.4	1.6
Latin America and the Caribbean	---	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	1.7	1.6	2.2	2.2
Sub-Saharan Africa	---	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]	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Trading revenue / total revenue [16]	3.0	1.8	3.8	3.1	3.6	4.0	3.9	3.8
Employee expenses / non-interest bearing expenses	37.8	32.2	37.3	34.9	35.9	35.9	34.7	31.6
Difference between reference lending and deposit interest rates (in basis points) [17]	612	580	560	544	540	541	537	531
Customer deposits / total loans, excluding interbank loans [18]	131.9	123.1	116.1	108.3	109.7	114.4	126.3	131.0
Loans denominated in foreign currencies / total loans [19]	0.7	0.5	0.4	0.2	0.2	0.2	0.3	0.2
Liabilities denominated in foreign currencies / total liabilities [20]	6.5	6.3	6.4	4.8	5.1	4.7	5.0	5.3
Private sector credit growth [21]	7.5	9.4	6.6	3.0	1.7	2.3	1.4	3.4
Real estate market								
Housing loans / total loans [22]	13.6	13.5	13.9	14.3	14.2	14.4	14.6	14.2
Commercial real estate loans / total loans [23]	7.4	6.7	6.1	5.5	5.5	5.7	5.5	5.6

The text of all footnotes can be found in the excel file available at *https://www.cbcg.me/en/statistics/statistical/financial-soundness-indicators*, 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 requirements of IFRS 9 (former IAS 39), the definition treats bank deposits with other banks and depository institutions as loans, which is especially relevant for the account No. 1009 (from the Decision on Chart of Accounts for Credit Institutions, OGM 128/20). Prior to 2013, the definition of loans did not include the aforementioned 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 was 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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