საქართველოს ეროვნული ბანკი
National Bank of Georgia

ANNUAL REPORT 2022

საქართველოს ეროვნული ბანკი
National Bank of Georgia

ANNUAL REPORT

2022

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ABBREVIATIONS

API - Application Programming Interface

ARA - Assessing Reserve Adequacy

BCBS - Basel Committee on Banking Supervision

BI - Business Intelligence

BIA - Business Impact Analysis

BIS - Bank for International Settlements

BISIP - BIS Investment Pool

BMatch – Bloomberg's foreign exchange trading platform

BSCEE - Banking Supervisors from Central and Eastern Europe

CAREC - Central Asia Regional Economic Cooperation

CBDC - Central Bank Digital Currency

CICR – Currency-Induced Credit Risk

CIF - Cost, Insurance and Freight

CPMI - Committee on Payments and Market Infrastructures

CRA - Credit Risk Adjustment buffer

CRD IV - Capital Requirement Directive

CRR - Capital Requirements Regulation

CSP - Customer Security Program

CYFI - Child and Youth Finance International

DDoS - Distributed Denial-of-Service attack

DeFi - Decentralized Finance

DPM - Data Point Model

EAD - Exposure at Default

EBA - European Banking Authority

EBITDA - Earnings Before Interest, Taxes, Depreciation and Amortization

EBRD - European Bank for Reconstruction and Development

ECB - European Central Bank

EFSE DF - Development Facility of the European Fund for Southeast Europe

ESG - Environmental, Social, and Governance

ETL - Extract, Transform, Load

EVE - Economic Value of Equity

FAO - Food and Agriculture Organization

FATF - Financial Action Task Force

FEA Georgia - Financial Education Association of Georgia

FinEdu - First Georgian Financial Education Portal (www.finedu.gov.ge)

FINREP - Financial Reporting (A European regulation that applies to credit institutions)

FOB - Free on Board

FRD - Fraud Data

FSAP - Financial Sector Assessment Program

FSI - Financial Stability Indicators

GAN - General Adversarial Networks

GET - German Economic Team

GFIN - Global Financial Innovation Network

GGF - Green for Growth Fund

GRAPE - General Risk Assessment Program

GSSS - Georgian Securities Settlement System

HR - Human Resources

HRMS - Human Resources Management System

IFC - International Finance Corporation

IFRS - International Financial Reporting Standards

IFT - Inflation Forecast Targeting

IIA - Institute of Internal Auditors

IMF - International Monetary Fund

IOSCO - Technical Committee of the International Organization of Securities Commissions

IPPF - International Professional Practice Framework

ISO - International Organization for Standardization

IT - Information Technology

LCR - Liquidity Coverage Ratio

LTV - Loan to Value ratio

NGFS - Network for Greening the Financial System

NII - Net Interest Income

NPL - Non-Performing Loan

NSFR - Net Stable Funding Ratio

OECD - Organization for Economic Cooperation and Development

OECD/INFE - Organization for Economic Cooperation and Development/International Network on Financial Education

PTI - Payment to Income ratio

ROA - Return on Assets

ROE - Return on Equity

ROSC - Report on the Observance of Standards and Codes

RTGS - Real Time Gross Settlement

RTP - Request to Pay

SBA - Stand-by Arrangement

SBFN - Sustainable Banking and Finance Network

SDR - Special Drawing Rights

SECO - State Secretariat for Economic Affairs

SEPA - Single Euro Payment Area

SMEDA - Small and Medium Enterprise Development Authority

SWIFT - Society for Worldwide Interbank Financial Telecommunication

TIBR - Tbilisi Interbank Rate

TMS - Taxonomy Management System

UNCTAD - United Nations Conference on Trade and Development

USAID - United States Agency for International Development

XBRL - Extensible Business Reporting Language

INTRODUCTION

The 2022 Annual Report of the National Bank of Georgia (NBG) has been developed in accordance with Articles 60 and 61 of the Organic Law on the National Bank of Georgia and includes a review of audited financial statements and monetary, foreign exchange and regulatory policies.

According to the Organic Law of Georgia on the National Bank of Georgia, the focal task of the National Bank of Georgia is safeguarding price stability.[1] The NBG is also missioned to secure the stability and transparency of the financial system and to promote the sustainable economic growth of the country so as not to jeopardize its core objectives. Price stability implies having a level of inflation in the medium term that is optimal for high and sustainable economic growth. Focusing on the medium term is particularly important as inflation may deviate from target in the short run. However, the NBG's policy makes sure that inflation will return to the target in the medium term, thus achieving price stability.

To ensure price stability, the National Bank of Georgia implements monetary policy using an inflation-targeting regime. Globally considered to be the most modern and effective model, this regime implies announcing the inflation target in advance and implementing policies in a manner to ensure that inflation is close to the target level in the medium term. The key instrument of the National Bank of Georgia's monetary policy is the monetary policy rate, which changes according to the inflation forecast. If the forecast is higher than the target, the National Bank of Georgia will tighten its monetary policy, and, conversely, if the inflation forecast is below the target, the monetary policy will be loosened. This tactic safeguards price stability and the lowest long-term interest rates. With the development of monetary policy instruments and the monetary policy transmission mechanism, public spending is also reduced to ensure price stability.

The National Bank of Georgia is persistently improving its monetary policy instruments and increasing the efficiency of the monetary policy transmission mechanism. The National Bank of Georgia first adopted the inflation-targeting regime in 2009. Since then (2009-2022), the average annual inflation rate in Georgia has been 4.7%. In the period 2000-2008, before the inflation-targeting regime was adopted, inflation averaged at 6.6%. Once inflation targeting was introduced, the inflation target was initially set at 6%, gradually declining over the following years to reach 3% in 2018, which remains the long-term target for annual inflation.

Because exogenous shocks (those that are independent of monetary policy) are inevitable for Georgia, as well as other open economies, it is possible for inflation to deviate from the target. As monetary policy is a tool to influence demand, central banks generally only respond to demand-side shocks, as responding to supply-side shocks (e.g., excise taxes, rising international transportation costs, and fuel prices) can cause high costs to the economy, leading to economic growth fluctuations and reduced employment in the long run. Deviations from the target can also raise inflation expectations, which may be reflected in higher inflation in the future. Studies show that it takes some time to for monetary policy changes to be transmitted to the economy and it is therefore advisable to allow deviations from the inflation target in the short run, so long as, in the medium term, inflation is projected to return to its target.[2] If such types of shocks raise medium-term inflation expectations and forecasts, the NBG will change its policy accordingly.

Both globally and in Georgia, inflation was expected to decrease in 2022. The impact of pandemic-driven demand-supply imbalances, the disruption of global supply chains, and the increased transportation costs resulting logistical disturbances were all predicted to be gradually regulated during the year. Against the backdrop of these factors, global inflationary pressure was expected to ease. However, on 24 February 2022, at a point when the supply chain problems caused by COVID-19 and the imbalance of supply and demand on the international market had not yet been completely overcome, Russia started a war in Ukraine. Before the war, Ukraine and Russia were major exporters of various products and important participants in the world transport system. The war and the resulting

1 Paragraph 1, Article 3 of the Organic Law of the National Bank of Georgia.

2 Bernanke & Blinder (1992) The Federal Funds Rate and the Channels of Monetary Transmission, American Economic Review; Vol. 82, Issue 4, 901-21; Bernanke & Gertler (1995) Inside the Black Box: The Credit Channel of Monetary Policy Transmission, The Journal of Economic Perspectives, Vol. 9, No. 4, pp. 27-48.

sanctions against Russia further disrupted supply chains and worsened the supply-demand imbalance on the international market. In the first months of the war, prices of food products on international markets rose to record highs[3], and oil prices reached their highest level in many years, giving global prices a new, powerful push.

Inflation in 2022 posed a challenge to both developing and developed countries. Expensive energy resources and commodity prices caused inflation to sharply increase globally, reaching historic highs in some countries. Inflation in the USA was 8.0% in 2022, and was 8.4% in the eurozone.

The global upward price trend was soon transferred to the Georgian market, causing a price hike on widely consumed products such as fuel and food (including bread and oil). The depreciation of the GEL in the early stages of the war also added to the rise of inflationary expectations and the increase in prices. As a result, the expected pre-war trend of reduced inflation slowed down, and inflation would ultimately significantly exceed the target rate during the year. Nevertheless, inflation did show a downward trend during the year, and the annual inflation level decreased to 9.8% in December. From the second half of the year, a trend of stabilized commodity prices and reduced transportation costs was evident on the world market. Meanwhile, imported inflation was moderated by the appreciated exchange rate as a result of strong foreign demand and an improved current account balance. The downward inflation trend was facilitated by the NBG's tightened monetary policy, fiscal consolidation and additional macroprudential instruments.

According to preliminary data, the gross domestic product (GDP) of Georgia increased by 10.1% in 2022 compared to the previous year. The high growth of the economy was to a large extent caused by the sharp rise in income from abroad. By early 2022, pandemic-related restrictions had almost completely lifted, bringing increased inflows of international visitors/tourists. This was followed by the war started by Russia in Ukraine that brought a large number of migrants into the country, leading to a sharp increase in income from travelers and remittances. Taken as a whole, revenues from international travel almost tripled during 2022 (increasing by 182.5%) compared to the previous year, and remittances from abroad increased by 86.1%.

The high growth of monetary income from abroad was especially reflected in the service sector, where the participation of immigrants is relatively high. Services accounted for 6.7 percentage points (pp) of the observed economic growth. Most of that came from transport, information and communication, and accommodation and food service activities, including restaurants and hotels.

As a consequence of the Russia-Ukraine war, Georgia saw an increased number of long-term visitors from Russia, Belarus and Ukraine during the year, resulting in higher income from international travel. The easing of restrictions that had been imposed to contain the spread of COVID-19 also had a positive effect on the recovery of tourism globally. Migration also increased the volume of remittances. Ultimately, as a result of these trends, external demand was high in 2022 and the current account balance improved significantly.

In 2022, the current account deficit of the balance of payments amounted to only 4.1% of GDP, a historic low for Georgia.

Trade in goods is the most deficient component of the current account. The volume of the goods trade deficit increased by 35% in 2022 compared to the previous year and amounted to 20.9% of GDP. The trade deficit was widened by the high growth of imports. Imports of goods increased by 35.8% in 2022 against the background of strong economic activity. This upsurge was also expedited by higher prices on imported goods as expressed in US dollars. Exports of goods rose by 36.0% annually during 2022. Although the increase in exports of goods slowed down slightly in the first quarter of the year, due to Russia-Ukraine war, exports of goods to other countries continued to grow. Exports to EU countries grew at a high annual rate, while those to Russia rose slightly – mostly due to lower sales of ferroalloys. Exports picked up later in the year, both in the region and in other countries, which was due to a faster-than-expected economic recoveries in most countries.

Official international reserves increased by USD 629 million in 2022, amounting to USD 4.9 billion. This upsurge was affected by foreign exchange interventions, increased balances on the reserve accounts of non-residents resulting from an increase in foreign currency deposits, and the funds raised by the government from international organizations. In 2022, net purchases of the NBG in the foreign

3 Food and Agriculture Organization of the United Nations, International Food Index, https://www.fao.org/worldfoodsituation/foodpricesindex/en/

exchange market (both through foreign exchange auctions and through the BMatch platform) amounted to USD 565 million. Foreign debt servicing and other foreign exchange expenses of the government also had an impact on international reserves.

A reserve adequacy assessment using the IMF's ARA methodology[4] showed that Georgia's international reserves at the end of 2022 were around 107%, which, according to the methodology, is within the required level (from 100-150%) to insure against foreign and liquidity shocks.

Promotion of financial stability, as a prerequisite for sustainable economic growth, is one of the crucial tasks of the NBG. To attain financial stability, the NBG pursues macroprudential policy and supervises the financial sector. By identifying, evaluating, and monitoring systemic risks, the NBG develops response policies to reduce such risks, thereby boosting the stability of the financial system. In the wake of the pandemic, financial stability issues and macroprudential policy have gained increased relevance on a global scale

The countercyclical capital buffer is used as one of the main macroprudential policy instruments. Its goal is to limit excessive credit growth that leads to the build-up of systemic risks. The countercyclicality of the buffer serves the main purpose of macroprudential policy, which is to reduce systemic risks. In November 2022, the Financial Stability Committee of the National Bank of Georgia, upon the recommendation of the Basel Committee, decided to update the framework for setting the countercyclical buffer.[5] By the end of 2022, lending activity remained at a sustainable level, economic growth remained high, the financial indicators of banks had improved, and real estate price and rent hikes were observed. Considering these trends, the Financial Stability Committee considered it important for the financial sector to accumulate capital buffers for use in times of stress, as had happened at the beginning of the pandemic.

Thanks to the macroprudential and microprudential measures taken by the NBG before the pandemic – as well as the financial stability policy developed after the pandemic and at the start of the Russia-Ukraine war – the financial sector remained stable and successfully continued lending to the economy in 2022. The majority of banks have already restored the buffers that were released during the shock of the pandemic and thus faced the threats related to regional geopolitical tension with solid buffers. The readiness of the financial sector was also supported by the solid quality of the banks' assets, which was largely a result of the macroprudential measures taken in the pre-crisis period to reduce the over-indebtedness of households and to lower the dollarization of loans. Financial indicators have improved as a consequence of the implementation of these measures, which reflects the soundness of the country's financial system. Direct sanctions related to the Russia-Ukraine war only affected one bank, which was a subsidiary of a Russian bank, and the problem was soon resolved by selling part of its assets and liabilities to other banks. The non-banking financial sector is also stable and remains subject to prudential requirements.

The improvement of the economic situation, compared to the previous year, decreased the credit risk of households. The deteriorating solvency of households during the pandemic was reflected in an increase in the share of non-performing loans; however, with the recovery of the economy, the quality of loans improved significantly. Despite this positive trend, the high growth rate of consumer loans and inflation were notable in 2022. The latter has a negative impact on the real incomes of households. Households with low income and a high debt service burden are particularly vulnerable. In response to these risks and to promote the solvency of borrowers, the NBG updated separate requirements of the Responsible Lending Regulation in 2022. The maximum term of mortgage loans issued in foreign currency was reduced to 10 years; the requirement of 25% of the loan service ratio was extended to persons with a monthly income of up to GEL 1,500; the borrower solvency assessment for granting a variable interest rate loan included a 3 pp interest rate shock; and the maximum term of consumer loans was temporarily reduced from 4 to 3 years.

The measures taken during the year and the tightening of monetary policy slowed down lending. In December 2022, the annual growth of loans, excluding the effect of the exchange rate, decreased by 6.1 pp compared to the same period of the previous year, to 12.1%. Over the year, the debt-to-GDP ratio also declined, reflecting the effects of high nominal economic growth and exchange rate appreciation. The third quarter of 2022 saw the ratio of loans to GDP fall behind its long-term trend, although its

4 For details, see https://www.imf.org/external/np/spr/ara/

5 See nbg.gov.ge/fm/ფინანსური_სტაბილურობა/კომიტეტის_გადაწყვეტილებები/eng/fsc-pressrelease-q4-eng.pdf?v=5gpx8

current level is comparable to the indicators of similar countries. Preliminary data show real GDP growth in 2022 of 10.1%, which has helped maintain the debt burden at a sustainable level. Restoring the capital buffers released at the beginning of the crisis and the improvement of the level and quality of capital, as had been planned pre-crisis (based on the Regulation on Determining Capital Buffers for Commercial Banks According to Pillar 2), acted as a countercyclical buffer. Slowing down lending helps to reduce inflation.

The NBG continued taking actions according to the Sustainable Finance Roadmap.[6] These included approval of the Regulation on Loan Classification and Reporting, according to the Sustainable Finance Taxonomy[7] (Taxonomy Regulation[8]). The Taxonomy Regulation formally defines green, social, and sustainable loans and imposes reporting requirements on commercial banks for loans that comply with the taxonomy. This secures the availability of comparable and consistent data on green loans in Georgia and helps develop the sustainable finance market. The NBG published its second Sustainable Status Report in 2022.[9] This presents an overview of current trends, policies and future plans for sustainable finance in Georgia. In accordance with the requirement established by the Corporate Governance Code, banks disclosed environmental, social, and governance (ESG) information using the NBG template for the second time in 2022. The templates completed by financial institutions in 2021-2022 are published on the NBG website[10], representing an important source of information about ESG issues for investors and other stakeholders. As part of the Sustainable Finance Roadmap, the NBG hosted a two-day sustainable finance hybrid event in November 2022. The event was held in cooperation with the International Finance Corporation (IFC, a member of the World Bank Group) and the IFC's Sustainable Banking and Finance Network (SBFN) and with the support of the Swiss State Secretariat for Economic Affairs (SECO). In addition, in 2022 the NBG developed a report on the climate-related risk radar for the economic sectors of Georgia and its possible application for the financial sector. The NBG is currently working on the development of ESG risk-management guidelines and a framework for climate change scenarios and stress tests. In 2023, the NBG will develop a new roadmap for sustainable finance, which will combine an action plan and a list of measures for the next few years. The roadmap will aim to create a reliable, predictable, and stable regulatory framework to prepare the market for the transition to sustainable finance.

The National Bank of Georgia started working on the implementation of the framework for the recovery and resolution of commercial banks in 2021. As work on this continued, during 2022 the NBG closely cooperated with the International Monetary Fund (IMF) and the World Bank. As part of the IMF's technical assistance mission, presentations were made on all major issues related to resolution and recovery, and practical recommendations were developed for the staff of the relevant structural units of the NBG, the Deposit Insurance Agency, and the Ministry of Finance. A World Bank team, as part of the mission, conducted a simulation of the resolution with the participation of the NBG, the Deposit Insurance Agency, and the Ministry of Finance. The simulation tested preparedness for a financial crisis and gave practical recommendations. A second stage of the simulation is planned for 2023 to test the implementation of the resolution framework.

In 2022, all members of the banking sector prepared recovery plans, which include measures to be implemented by commercial banks to improve their financial situations and to restore and maintain critical functions in the event of significant financial distress and/or disruption of critical functions.

As in 2021, the NBG published an updated edition of the Supervisory Strategy for 2020-2022.[11] The supervisory priorities of the NBG remained unchanged in the 2022 edition, but the information regarding completed tasks was updated. The annual strategy document placed particular emphasis on the key tasks and changes in supervisory priorities planned for the next 12-18 months. In 2020-2022, the NBG focused on the following supervisory priorities: strengthening corporate culture to encourage leadership and initiative; strengthening cooperation with stakeholders; promotion of the sustainable functioning of the financial sector; getting closer to international standards; and the development of a sustainable financial technology ecosystem.

6 See nbg.gov.ge/page/მდგრადი-დაფინანსების-გზამკვლევი
7 See nbg.gov.ge/page/მდგრადი-დაფინანსების-ტაქსონომია
8 See https://nbg.gov.ge/legal-acts/acts
9 See https://nbg.gov.ge/en/page/sustainable-finance-roadmap
10 See https://nbg.gov.ge/financial-stability/esg-reporting-and-disclosure
11 For details, see Supervisory Strategy 2022 edition

During 2022, a primary legislative package was developed to establish a regulatory framework regarding “micro-banks”, a new form of supervisory entity. The Parliament of Georgia approved a draft Law of Georgia on the Activities of Micro-banks and other related draft laws. The NBG is actively working on additional by-laws. The legislative package creates a medium-sized, stable business model and establishes a new financial institution with a high reputation in the financial sector. Its goal is to promote lending to entrepreneurs and agriculture, increase competition and reduce interest margins on credit products.

During 2022, the NBG continued to work on aligning its supervisory legislation with the legislation of the European Union. The amendments made in September 2022 to the Law of Georgia on the Activities of Commercial Banks included improved requirements for the licensing of commercial banks, making the suitability criteria of administrators and shareholders substantially consistent with the EU Directive on the Activities and Prudential Regulation of Credit Institutions operating in the European Union (CRD). These changes were important both for the fulfillment of the commitment stipulated by the Georgia-EU Association Agreement and for joining the Single Euro Payment Area (SEPA).

As of 31 December 2022, 15 commercial banks were operating in the banking sector of Georgia, with Paysera Georgia JSC being licensed during the year. At the same time, the participation of non-resident owners in the assets of the banks, according to ultimate ownership, was 87.9% and was 87.4% in terms of share capital.

By 31 December 2022, the total loan portfolio of the banking system reached GEL 45 billion, and its annual growth rate, excluding the exchange rate effect (using the exchange rate at the end of 2021), was 13%. The composition of the loan portfolio (except for interbank loans) slightly changed in terms of segments: the share of retail and small and medium segments in the total portfolio increased during the year, while that of the corporate segment decreased.

The loan portfolio is diversified by sector. At the end of December 2022, the total share of economically vulnerable sectors (real estate development, real estate management, hotels and tourism, restaurants and catering facilities, and car dealers) in the portfolio amounted to 16.6%, which is 1.5 percentage points less than the same figure for December 2021.

As far as the quality of the retail loan portfolio is concerned, although the share of non-performing loans in mortgage loans decreased in 2022 compared to the previous year, the share of non-performing loans in the total retail product portfolio increased. This was largely due to a deterioration in the quality of consumer loans, which resulted in a large volume of consumer loans being written off. As a result of the write-offs and the growth effect of the portfolio, the percentage share of the reserve in the portfolio was reduced for all retail products.

During 2022, the GEL exchange rate appreciated against the main currencies and banks continued working with stable currency positions. The foreign exchange exposure limit is set at 20% of the regulatory capital. However, banks mostly operate with a closed currency position to reduce currency risk. At the end of the year, the cumulative foreign exchange position is long and is within 1.6% of regulatory capital. From 2023, the currency position will be presented in accordance with international financial accounting standards. As dollarization in the banking system of Georgia is still high, the currency risk factor remains important for Georgian banks. The National Bank of Georgia thus continues its supervisory work on improving the current approach to foreign exchange risk management. Several important factors affecting the profitability of the banking system should be noted in terms of the decomposition of profits in 2022. During the year, net interest and non-interest income increased as lending activity picked up. Also, banks showed improved operational efficiency.

Banks operated with adequate liquidity buffers as the volume of liquid assets increased during the year to reach 23% of total assets and 37% of non-bank deposits. The liquidity coverage ratio (LCR) remained at a high level. Fluctuations between the ratios for GEL and foreign currency were caused by transactions with currency derivatives. The Net Stable Funding Ratio (NSFR) also remained high. With the minimum requirement set at 100%, banks operated with adequate buffers with the ratio reaching 133.6% as of the end of the year.

Dollarization of assets posed a significant risk to financial stability, as the currency risk of unhedged borrowers increased the credit risk of banks, entailing the need for raising additional capital. The NBG maintained a reasonable approach to this and set prudential requirements. The updated methodology for additional capital requirements for foreign currency loans disbursed to non-hedged borrowers (which is mandatory from 2023) increases proportionally to the dollarization of a bank's loan portfolio. More conservative additional credit standards are imposed on individuals. To support the

larization of liabilities, the NBG applies more favorable liquidity and minimum reserve requirements for national currency loans.

The NBG is working with commercial banks to assess and improve operational and cyber risk management. Commercial banks continue to be inspected for compliance with the operational risk management framework of the NBG. A great deal of attention is paid to commercial banks' business continuity performance under various scenarios, which also includes outsourcing (including cloud services), observance of data quality and protection against accuracy risks, and raising awareness of operational risks in the financial sector. Banks are recommended by the NBG to pursue awareness-raising activities for both their employees and customers.

The NBG's operational risk team developed two documents: Operational Risk Loss Accounting Guidelines for Commercial Banks and Principles of Effective Risk Data Aggregation and Risk Reporting. In addition, the Regulation on the Management of Operational Risks by Commercial Banks is being amended to include more precise requirements for outsourcing, while the Regulation on Exchange of Information on Major Operational Risk Events regulates the timely and centralized exchange of information on major operational risk events between the National Bank of Georgia and individual commercial banks through an information sharing and analysis portal. Due to the pandemic and current macroeconomic environment, it has become more urgent to expand operational risk forecasting tools. In this regard, operational risk stress tests are being studied and developed. These will play a significant role in determining the relevant guidelines and requirements for commercial banks.

The NBG conducted an audit of the cyber security practices of commercial banks in 2022. Key areas for improvement included the formalization of cyber and information security policies and procedures, improvement of risk management practices, and persistent attention to raising awareness and strengthening the competencies of human resources employed in information and cyber security.

Audits and penetration testing of information systems is important for the cyber and information security of the financial sector. The National Bank of Georgia places great importance on the conduct of appropriate field tests/audits and quality control, and for that purpose in 2022 the Guidelines for the Audit of Information Systems and Cyber Security Management Framework in Commercial Banks was approved.

The National Bank of Georgia monitors current events in the banking sector to make sure that, whenever cyberattacks are detected, information is provided to the sector as a whole. The production of quarterly reports on cyber incidents allows the dynamics of cyber incidents to be illustrated. During the year, the banking sector faced so-called phishing and Distributed Denial-of-Service (DDoS) attacks.

The NBG also introduced a portal for sharing information on cyber threats in 2022, and commercial banks are included in this. Platform members have the opportunity to receive information about current trends, expected threats, and past experiences.

The National Bank of Georgia closely monitors technological innovations in the financial sector, which, in turn, can pose cyber and information security challenges. The increased use of cloud outsourcing services led to the development of guidelines for the use of such services by financial institutions, and discussions were held on this matter with relevant stakeholders.

Events were also organized by the NBG and commercial banks as part of a cyber security awareness campaign. This included contests, conferences, and educational videos that helped raise awareness of cyber security among the general public.

The NBG continued to align capital adequacy standards with the EU regulations. A preferential weighting in the amount of 35% was added to the capital adequacy standards in relation to existing risk positions towards beneficiaries of state funds (e.g., pensions).

The transition of commercial banks' supervisory reports to International Financial Reporting Standards (IFRS) under the 2020-2022 Supervisory Strategy was one of the most important priorities for harmonization with international standards. Over these years, the NBG has developed the concept and made changes for transition to IFRS. The Regulation on Identifying Risk Categories of Financial Instruments and Expected Credit Losses was approved and the changes made to relevant decrees were enacted on 1 January 2023. Having transitioned to the IFRS, commercial banks must comply with the supervisor’s regulations and the methodology based on IFRS. As a result of these developments, the supervisory reporting of Georgian banks will become more relevant and comparable to that of developed countries.

The stated principle of the NBG is that, when transitioning to IFRS, other things being equal, a

neutral approach to the cost of regulatory capital should be maintained. This principle was introduced so that the change in accounting standards would not cause additional capital costs for the banking sector. At the same time, banks' capital positions should not deteriorate. A neutral approach to the cost of capital implies reducing the buffer on total regulatory capital in the banking system at the expense of increasing the capital surpluses on CET1 and Tier 1 capital (see Diagram 4.3). For this purpose, a credit risk adjustment (CRA) buffer was introduced and a procedure for its calculation was included in the Regulation on Determining Capital Buffers for Commercial Banks under Pillar 2. The CRA buffer serves to reduce credit risk caused by insufficient expected credit loss provisions for assets and to determine an adequate capital buffer.

In 2022, to effectively accomplish its supervisory mandate and strategic priorities, the National Bank of Georgia cooperated with supervised entities, the Bankers' Association, external auditors, public institutions, the media, supervisors from other countries, and international organizations.

The financial sector is currently witnessing the advent of an increasing number of innovative organizations. These bring new opportunities but also new risks. The financial sector remains one of the most regulated economic sectors in the world, and the extent of this regulation is steadily increasing. As a result, the current supervisory framework for the sector is extensive, technical, and complex, especially for new financial start-ups. Encouraging innovators with fintech ideas and facilitating the transformation of these ideas into a sustainable financial model is a significant challenge for financial sector regulators. In response to this, the National Bank of Georgia is developing a series of supervisory techniques to promote basic infrastructure for fintech activities.

Work was underway during the year to expand Open Banking services and create prospects for fintech companies to engage in such services. Open Banking involves the immediate electronic exchange of information between financial institutions, based on a client's desire and consent. Work on the Open Banking project at the National Bank of Georgia started in 2019. At the beginning of 2020, the Open Banking Committee was established with the Georgian Bankers' Association to develop a common standard for the introduction of Open Banking to Georgia and to promote the further development of the project. Open Banking services have been available in Georgia since 31 March 2021. In 2022, services for exchanging information on standard products and exchanging account information for legal entities were added to the available services. Other services introduced included transfer initiation for individuals and legal entities and remote identification using Open Banking.

The credit register, which was set up based on consultations with the working group of the World Bank, is a database that allows collecting comprehensive information on credit risk. The NBG continued to receive credit register data in a test mode during 2022. To enhance the information collected, updates were made to the credit register form and a procedure to verify the accuracy of the data received was initiated.

The non-banking financial sector continued its sound and stable development path in 2022. As in 2021, it maintained a moderate growth rate and smoothly provided micro lending services to customers throughout the country, especially in the regions. Despite the slowdown in access to funds from institutional creditors due to the Russia-Ukraine war, a 13% increase in assets was recorded in the non-banking financial sector, and the sector's share in the total financial sector remained at almost the same level (3.3%) with a value of GEL 2.4 billion. Despite the growth indicators, sufficient capital and liquidity buffers were secured in the microfinance sector.

As of 31 December 2022, the non-banking financial sector was represented by 36 microfinance institutions (396 branches), 176 lending entities (332 branches), 511 currency exchange bureaus (689 branches) and one credit union.

The NBG made strides to promote the development of new products in the securities market in 2022. The local bond market has seen good growth in recent years and this upward trend continued in 2022. The development of a number of legislative and regulatory reforms is therefore expected to maintain this dynamic and to further contribute to the development of the capital market. In 2022, similar to the previous year, there was an upward trend in the bonds market. This segment grew by 39.4% compared to the previous year, accounting for 4.2% of GDP. As much as 71.3% of the bonds issued were denominated in GEL by international financial institutions. The market of bonds issued by international financial institutions grew by a notable 49.3%, and the segment of corporate bonds grew by 19.7%.

The Pension Agency started diversifying its investment portfolio in 2022 to approach the

benchmark portfolio.[12] According to the decision of the Investment Board, foreign currency was gradually purchased during the year, and was then invested in global and local financial instruments. As the Investment Policy Document states, foreign equities were purchased through the iShares MSCI World ETF ("ticker symbol": URTH), which, in turn, includes more than 1,500 companies and is diversified by industry. For the first time, in 2022 the Pension Agency issued a bond in the local market. As of 31 December 2022, 2.0% of pension assets were held in interest-bearing current accounts, 16.2% in domestic Treasury bills, 10.5% in US Treasury bills, 7.4% in global equities, 0.8% in Eurobonds, 0.1% in domestic corporate bonds, and 63.0% in domestic certificates of deposit and term deposits.

As in previous years, protection of consumer rights and the promotion of financial education was a priority for the National Bank of Georgia. A number of important activities were carried out in this direction in 2022, including the improvement of the current legal framework and the introduction of best international practices, which included consultations and workshops with the sector. A Code of Ethics for Financial Institutions for Loan Recoveries was approved, and important changes were made to the Regulation on the Protection of Consumers' Rights in the Provision of Services by Financial Institutions. The same regulation will undergo further amendments in the future, including, among other things, alignment with the directives provided in the framework of the Association Agreement between Georgia and the European Union. In parallel with the above, compliance with the requirements set by the financial sector was continuously monitored.

In addition, the NBG continued work to raise the financial education of citizens in 2022. Finedu – the NBG financial education portal (www.finedu.gov.ge) – continued to function well, providing necessary, consistent, unbiased, and reliable information to aid making financial decisions. New projects were developed and webinars, online meetings, and competitions were held for different target groups, including children, the youth, teachers, and adults. Animated videos on key issues related to financial education were created. The annual awareness-raising events of Global Money Week, World Savings Day, Consumer Rights Day, International Youth Day, Cyber Security Month, and Innovation Camp benefitted from the traditional involvement of partner organizations. In addition, a new initiative of celebrating Insurance Day, was introduced, and a memorandum of cooperation was signed with the Small and Medium Enterprises Development Association and Caucasus International University to promote the improvement of financial education.

Measures were planned and implemented in accordance with the Supervisory Framework of the National Bank of Georgia for Combating Money Laundering and Financing of Terrorism and within the framework of the risk-based supervisory strategy. These included remote assessment of financial institution risks and on-site inspections. In addition, the measures implemented by the NBG during the year to ensure compliance with international sanctions related to the Russia-Ukraine war are noteworthy.

The Parliament of Georgia adopted legislative amendments related to virtual asset service providers in 2022. These changes concerned the mandatory registration of such providers, verification of the suitability criteria of administrators, and NBG supervision related to the prevention of money laundering and financing of terrorism.

Representatives of the financial sector were intensively trained during the year to make sure they were adequately introduced to relevant methodological guidelines, and that current challenges were effectively managed. Regular meetings were held to share information and understand supervisory expectations.

The effective and smooth functioning of payment systems is an essential factor for the stability of the financial sector and the development of the national economy. Payment systems have undergone significant transformation in recent decades, both technologically and functionally. Remote and mobile technologies were some of the main drivers of that development, leading to the rapid development of cashless electronic payments, especially in the retail sector. This trend was given additional impetus by the COVID-19 pandemic, accelerating the digital transformation of a number of industries and creating additional need for new electronic payment products. The increased volume of payments made through mobile banking is particularly impressive, having doubled almost every year for the last five years, both in terms of the number and amount of payments. In

12 The less risky portfolio benchmark consists of three classes of assets: Georgian Treasury bonds (20%), certificates of deposit in GEL (60%), and foreign equities (20%).

2022, these accounted for 18% of the total number of cashless payments and 12% of the amount, which is 15 and 10 pp higher than the corresponding figures of 2017, respectively. From a quantitative point of view, mobile bank payments are inferior only to non-cash payments made by payment cards, which in 2022 increased by 34% compared to the previous year and amounted to 77% of the total number of non-cash payments. Cards were the most frequently used payment instrument. To support these trends, the National Bank of Georgia continues to work to ensure the effective and reliable functioning of the country's payment system, both in improving current systems and supporting the introduction of new ones. For this purpose, work on the bidding documentation for an instant payment system was completed in 2022. This system will be purchased in 2023 in accordance with the procurement procedure of the World Bank.

The statistical activity of the National Bank of Georgia continued in 2022. Similar to previous years, monetary and financial statistics projects were undertaken that reflected trends introduced by advanced international statistical organizations. An extended structure of data families for remittances and foreign currency operations was developed to ensure the collection of detailed data. Implementation of these updated data families is planned for 2023.

The National Bank of Georgia takes care of the quality and reliability of the data collected in the SebStat system for obtaining, processing, storing, and distributing financial and statistical data. A unified database of legal entities registered in Georgia was developed and introduced for reporting purposes. The database specifies characteristics related to a legal entity's institutional sector, a classifier of type of economic activity (NACE Rev 2), and the size of the enterprise.

The National Bank of Georgia continued to work on the design and issue of collector coins during the reporting period to promote the national currency and the country. To increase the availability of collector coins for numismatists, collectors, and all interested persons, during 2022 the National Bank of Georgia introduced the practice of pre-ordering collector coins through the NBG's online store.

The year was quite busy in terms of legislative innovations for the financial sector. Parliament adopted legislative amendments related to Georgia's accession to the Single Euro Payment Area (SEPA) in an accelerated manner. The payment system and payment services regulation was updated. Other updates included legal issues related to the granting of a banking license, the suitability criteria of administrators and owners of a significant share of a commercial bank, and the services of virtual assets. Amendments to the Law of Georgia on Payment Systems and Payment Services were made to comply with the revised Directive on Payment Services (Directive (EU) 2015/2366 on payment services) provided within the framework of the Association Agreement. In addition, the Law of Georgia on the Activities of Commercial Banks was amended to ensure full compliance with EU requirements related to the eligibility criteria for buyers/owners of a significant share of a commercial bank and the administrators of a commercial bank (compliance with Directive 2013/36/EU of the European Parliament and the Council of 26 June 2013, the on Access to the Activity of Credit Institutions and the Prudential Supervision of Credit Institutions and Investment Firms(CRD Directive 2013/36/EU), and the relevant standards as defined by the European Banking Authority).

Overall, considerable achievements towards European integration were recorded in 2022. In addition to the legislative amendments adopted for the purpose of approximation with EU standards and the submission of the application for joining SEPA, the NBG played an important role in filling out the questionnaire for obtaining candidate status for joining the European Union. The NBG worked on the sections of the questionnaire related to financial stability, macroeconomic policy, financial services, and other issues within the NBG's competence.

The Law of Georgia on Mortgage-covered Bonds and accompanying legislative amendments were adopted in 2022 to create a long-term, cheap, and stable alternative source of financing for commercial banks.

The NBG's legal acts also underwent a range of important amendments that concerned, amongst other things, the protection of consumer rights, lending to individuals, regulation of the supervisory framework and resolution of commercial banks, activities of the Credit Information Bureau, and prevention of money laundering and financing of terrorism.

In 2022, Global Finance, the world's leading financial publication, named the Governor of the National Bank of Georgia among the world's best central bank leaders for the fifth time in a row. The NBG Governor was first included in Global Finance's ratings in 2018, and in 2022 was again named on the list of the best leaders of central banks with A and A- ratings. The Global Finance Awards are widely

recognized in the international financial community and reflect the high reputation and successful performance of the awarded individuals and their banks. The assessment of central bank leaders is based on several aspects of central banks' policy, including monetary policy.

Despite challenges related to Russia's invasion of Ukraine, rising prices on commodity markets, and the continued negative consequences of the global pandemic, Georgia's credit ratings determined by international rating agencies remained unchanged in 2022. This was thanks to both the effective macroeconomic policy response from the National Bank of Georgia and the resilience of the banking system. The stable assessment of the investment situation in Georgia by international ratings agencies strengthens the confidence of international institutions and investors towards the national economy and has a positive impact on the country's business environment.

MACROECONOMIC ENVIRONMENT

1

1.1 Global Economy

The invasion of Ukraine by the Russian Federation in February 2022 exposed the global economy to new, severe challenges. The war and the sanctions imposed by the international community against Russia in response to the aggression, challenged the economies of many countries at the same time. Amid the severe, war-induced disruptions to global supply chains, inflation rates rose to unprecedented levels in a number of countries, and monetary policies were tightened in response to the accompanying deterioration in inflation expectations. Consequently, growth rates worsened in 2022, especially in developed economies. According to the April 2023 forecast of the International Monetary Fund (IMF), global economic growth amounted to 3.4% in 2022.[13] The notable increase in consumer prices, which was observed in both advanced and emerging and developing countries, was also due to the partial maintenance of supply-side disruptions in the context of the pandemic, the release of pent-up demand resulting from the weakening of pandemic-related restrictions, and the increasing dynamics of product prices on international commodity markets. The food price index, on average, increased by 14.3% in 2022, compared to the previous year, and by 46.4% compared to 2020.[14] Meanwhile, the international price per barrel of Brent oil in 2022 averaged about USD 100.9, which was 42.4% higher than the figure of 2021.

In the face of the Russia-Ukraine war and a high number of COVID-19 cases in the eurozone and Great Britain, economic activity there slowed in the first half of 2022. Consumer and business sentiment deteriorated, and the inflation rate increased amid the depreciation of local currencies and the maintenance of high prices on commodities in the international market. Consequently, the European Central Bank (ECB) completed an extensive Quantitative Easing Program and tightened the monetary policy rate several times during the year, which affected economic activity. Economic activity also slowed in emerging and developing economies, albeit at a slower pace than in developed countries. This was also due to the Russia-Ukraine war and the global high-inflationary environment. As a consequence of the inflationary pressure stemming from increased prices on international markets, central banks significantly tightened their monetary policy rates to limit aggregate demand.

In the first half of 2022, economic activity slowed in the USA. This was due to a higher number of COVID-19 cases early in the year, sharply increased consumer prices, worsened net exports, and decreased inventory investments. In parallel with the Russia-Ukraine war, several packages of sanctions imposed by the US government against Russia posed additional challenges to the country. As the rate of inflation was high during the year, the American Federal Reserve system increased the federal funds rate several times. According to the IMF's April 2023 estimates, US real economic growth in 2022 was 2.1%, and annual inflation averaged 8%.[15]

The growing humanitarian crisis and high inflationary environment in the background of the Russia-Ukraine war put the economies of developed countries in front of major challenges. Economic sanctions against Russia created expectations of an energy crisis. In parallel with the high inflationary environment and the ongoing war in Ukraine, consumer and business sentiment worsened in Germany as exports and investments declined. However, consumer spending was high early in the year due to the lifting of pandemic-related restrictions. According to the IMF, the German economy grew by 1.8% in 2022.[16] Economic activity improved in Italy in the first half of the year, but the pace of that improvement slowed in the second half amid expectations of an energy crisis. The inflationary environment was also

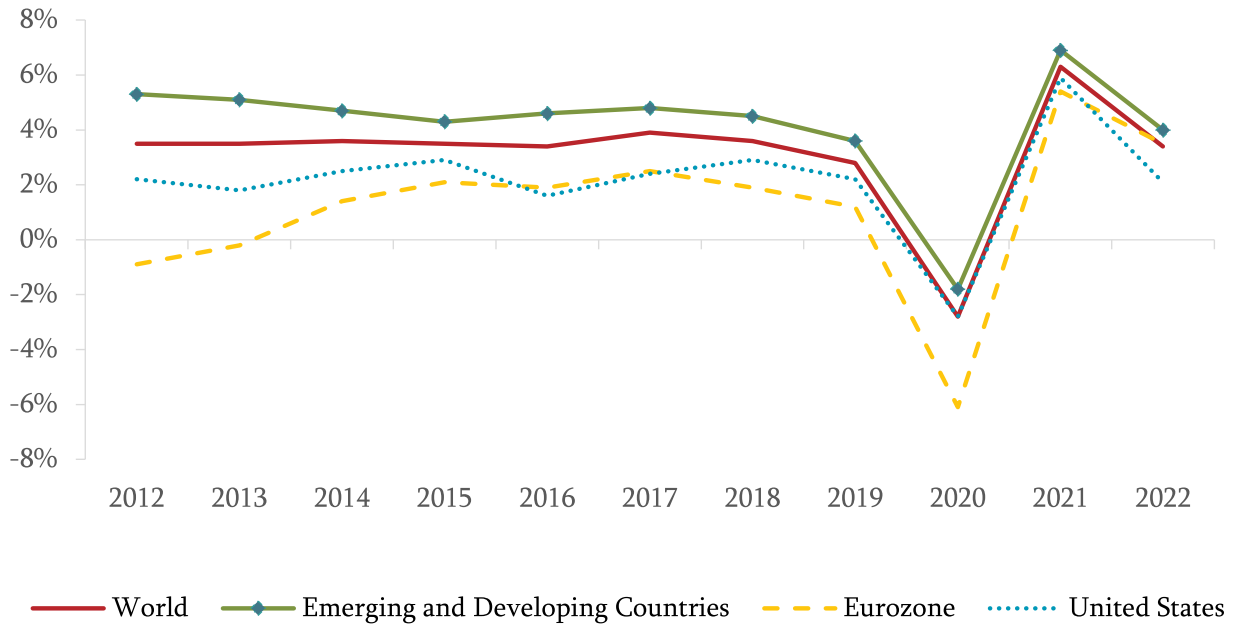
13 International Monetary Fund (2023). The World Economic Outlook: A Rocky Recovery. Washington, D.C. April. (Hereafter: WEO April, 2023).

14 According to the UN Food and Agriculture Organization (FAO).

15 WEO April, 2023.

16 Ibid.

Diagram 1.1 Global real GDP growth



Source: IMF

high. Ultimately, Italy's real economy grew by 3.7% in 2022. Economic activity also slowed slightly in France later in the year, where both consumer and business sentiment deteriorated. According to IMF estimates, France's real economy grew by 2.6% in 2022.[17] The rate of improvement in economic activity also slowed in Spain, as a result of the high inflationary environment as well as the expectations of an energy crisis. Spain's real economy grew by 5.5% in 2022. Inflation and inflation expectations in the eurozone increased considerably in 2022, and the annual rate of inflation was unprecedentedly high, averaging 8.4%. This led the European Central Bank to increase the monetary policy rate from 0% to 2.5%.

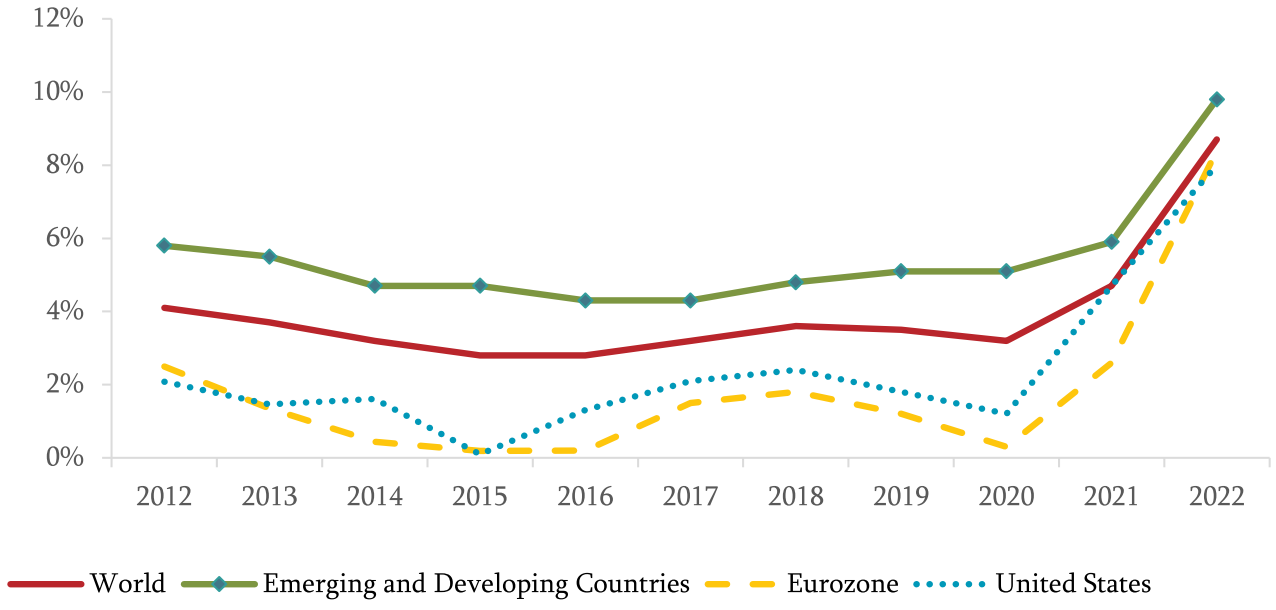
Following the high activity recorded in 2021, Türkiye showed a slower pace of improvement in economic activity in 2022. Consumer sentiment worsened, and consumption weakened. Industrial production and retail sales also decreased. This was mostly due to the record depreciation of the lira during the year, which further strengthened inflationary pressure; however, the trade balance improved. According to the IMF, Türkiye's real economy grew by 5.6% in 2022, as inflation averaged 72.3%.[18]

Economic sanctions imposed by the West weakened economic activity in Russia during 2022, with investments, consumer spending and retail sales all declining. The business environment also worsened. The annual inflation rate increased significantly soon after the start of the war, amid a record depreciation of the ruble – in spite of its subsequent appreciation. In response to higher inflation expectations, the Central Bank of Russia decided to tighten the monetary policy rate to 20% in February, before gradually reducing it to 7.5% in December. Active use of capital controls since the end of March helped the official exchange rate of the ruble to stabilize against the US dollar. According to IMF estimates, the real economy in Russia decreased by 2.1% in 2022, and the inflation level was 13.8% on average.[19]

The number of war-related deaths in Ukraine is increasing every day, and more than 8 million Ukrainians have already left the country. The war instigated by Russia destroyed critical infrastructure

17 Ibid.
18 Ibid.
19 Ibid.

Diagram 1.2 Global CPI inflation



Source: IMF

facilities such as roads, bridges, ports, airports, and energy facilities, reducing the potential of the economy. According to the IMF, the real economy of Ukraine shrank by 30.3% in 2022, and the inflation level was 20.2% on average.[20] It should be underscored that in relation to the war, the civilized world, including Georgia, supports Ukraine.

In 2022, there was high economic activity in Armenia. As in Georgia, this was mostly due to the high level of migration of Russian citizens. This activated the service sector, although the tense geopolitical situation and the military conflict with Azerbaijan both had a negative impact on the economy. The annual rate of inflation remained high during the year (8.7% on average), leading the Central Bank of Armenia to increase the monetary policy rate several times. According to the IMF, the economic growth of Armenia in 2022 amounted to 12.6%.[21]

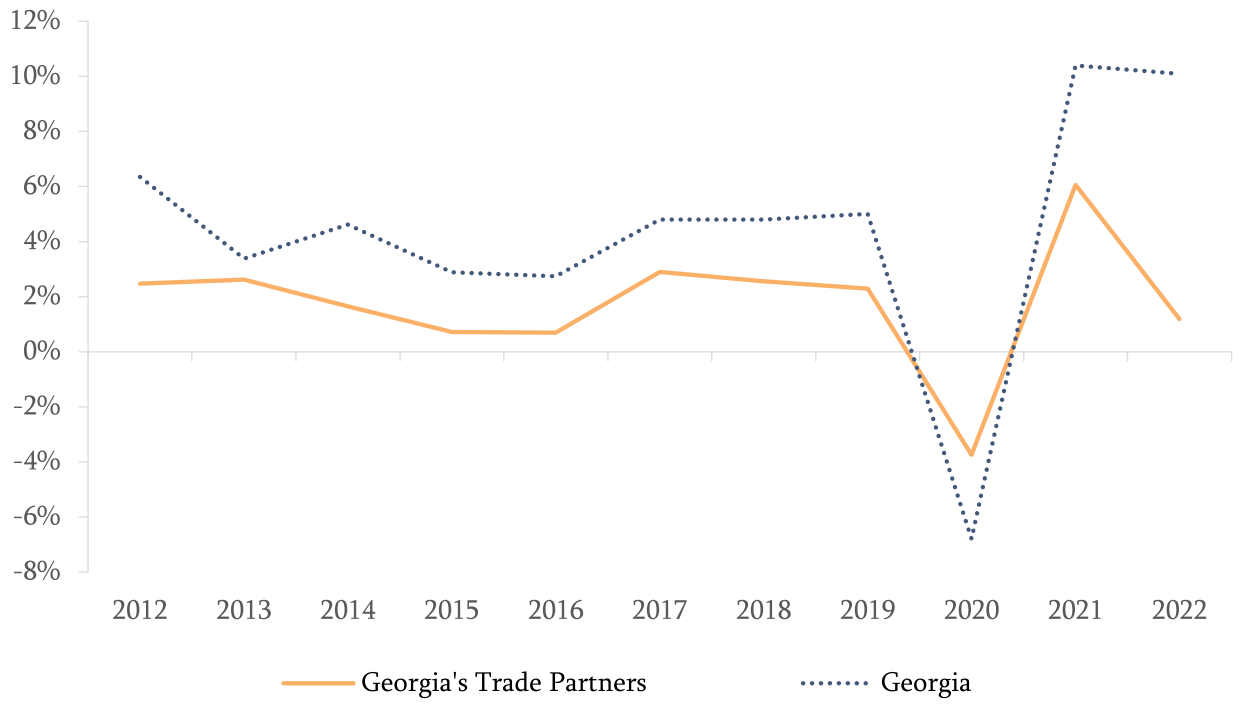
Growth rates in both the oil and non-oil sectors improved in Azerbaijan in 2022. This was mostly facilitated by high oil prices in the international market and the recovery of the domestic industrial sector, along with the growth of investments. The trade balance also improved; however, the level of inflation was high during the year, leading the Central Bank of Azerbaijan to increase the monetary policy rate several times. According to IMF estimates, in 2022 the real GDP of Azerbaijan increased by 4.6%, and annual inflation averaged 13.8%.[22]

In summary, the economies of Georgia's trading partners grew by an average of 1.2% in 2022, compared to the average 6.1% growth in the previous year. As for Georgia, according to preliminary data, real GDP in 2022 increased by 10.1%, which followed the high growth of 10.4% recorded in 2021 (see Diagram 1.3), and inflation averaged 11.9%.

The central banks of Georgia's trading partner countries increased their monetary policy rates several times during 2022 in response to stronger inflationary pressure and higher inflation expectations. Türkiye is the exception to this trend, where, despite the high rate of inflation, the monetary policy rate was reduced later in the year. The US Federal Reserve raised its federal funds rate to the range of 4.25-4.5% in 2022 and the European Central Bank increased its interest rate to 2.5%.

20 Ibid.
21 Ibid.
22 Ibid.

Diagram 1.3 Real GDP growth in Georgia and the weighted average growth of trading partner countries



Source: National Statistics Office of Georgia (GeoStat), IMF, NBG calculations

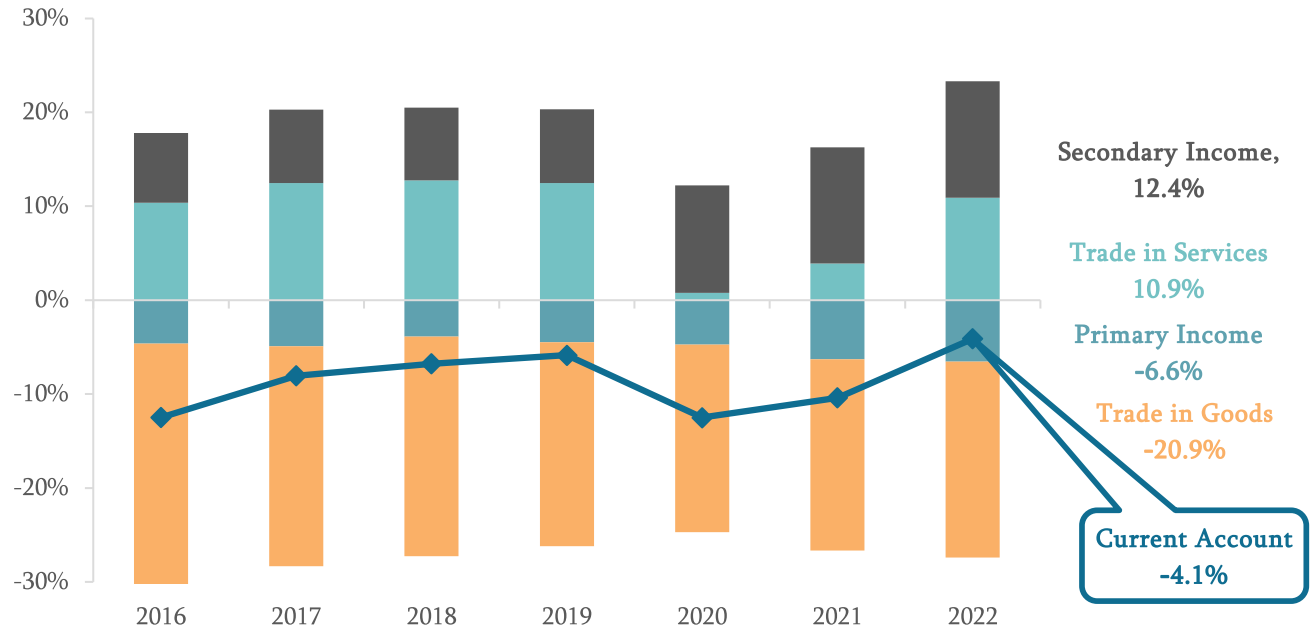
1.2 External Sector and Balance of Payments

Russia's invasion of Ukraine in February 2022, and the subsequent scale of the hostilities has had a detrimental effect on the global economic situation. However, the ongoing war has had a mixed effect on different countries. The negative impact of the war on the countries of the region, including Georgia, has not yet become evident. As the war is still ongoing, Georgia witnesses a much higher number of long-term visitors from Russia, Belarus and Ukraine, leading to higher revenues from international travel. The latter was also positively affected by the global recovery of tourism resulting from the easing of COVID-19 restrictions. The high levels of migration increased the volume of money transfers. External demand for export goods was also high. These trends improved the current account balance, and the current account deficit of the balance of payments amounted to 4.1% of GDP in 2022, a historic low for Georgia (see Diagram 1.4).

The current account deficit in 2022 was 6.3 pp of GDP less than in the previous year. In absolute terms, the current account deficit improved by USD 926 million and amounted to USD 1,011 million (see Table 1.1). The goods trade deficit to GDP increased to 20.9% in 2022. In the face of a sharp increase in revenues from international travel (which saw annual growth of 182.7%, representing a 7.7% increase over 2019), the surplus of trade in services increased substantially and contributed significantly to the improvement of the current account balance. The current account balance in 2022 was negatively affected by the deficit of primary income[23], which was largely due to the increase in net investment income on assets of non-residents in Georgia. As in previous years, both the volume of dividends issued and reinvested income was high, which increased the current account deficit.

23 Primary income is a current account item that records resident and non-resident income related to production processes and property (salaries, investment income, etc.).

Diagram 1.4 Current account components to GDP



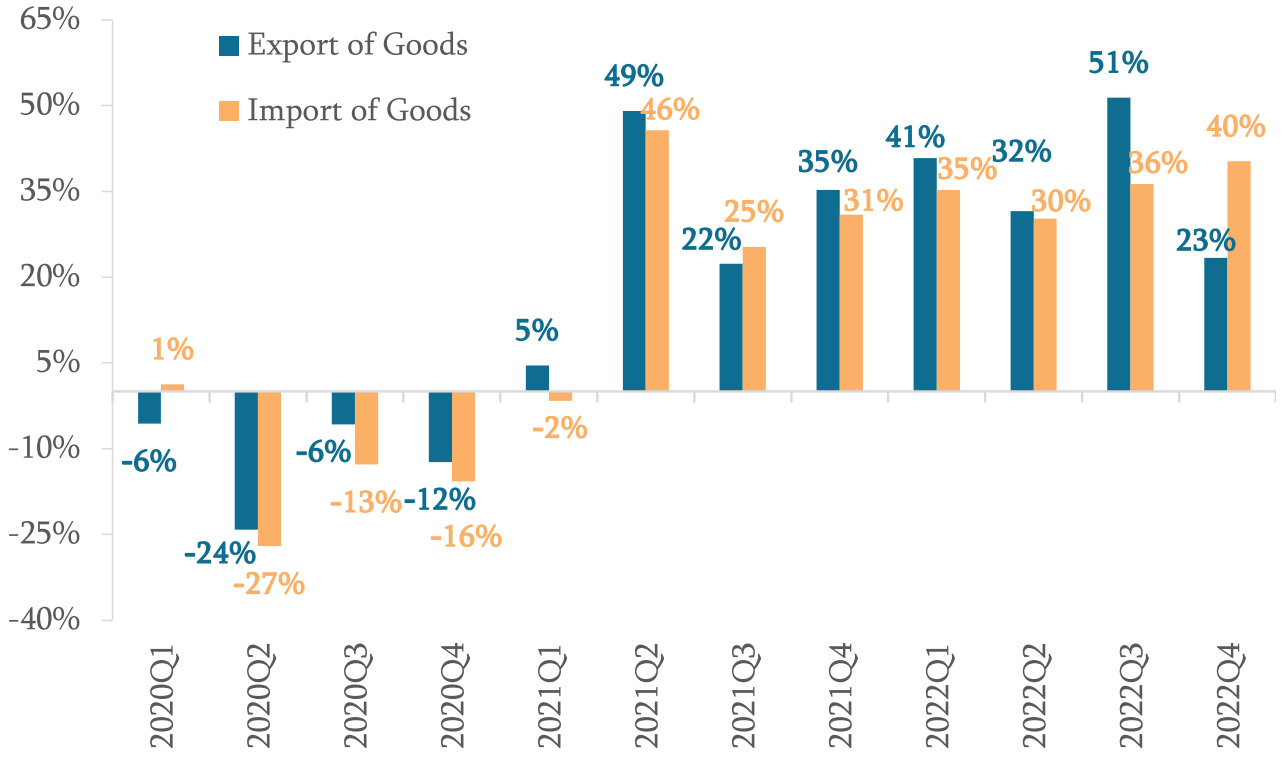
Source: NBG

Trade in goods is still the most deficient component of the current account. The volume of the trade deficit in goods increased by 35% compared to the previous year and amounted to 20.9% of GDP. The widening of that deficit was caused by the rapid increase in imports. Prompted by strong economic activity, imports of goods increased by 35.8% in 2022. The increased trade deficit over the previous year had a negative impact on the current account balance (see Error! Not a valid bookmark self-reference. 1.5). Exports of goods increased by 36.0% annually during 2022. The increase in exports accelerated later in the year, in both the region and other countries, which was due to the faster-than-expected recovery of the economies of most of these countries. Exports to the EU grew at a high annual rate, while those to Russia rose slightly, mostly due to lower sales of ferroalloys.

Exports of goods from Georgia increased in almost all trading partner countries except Ukraine in 2022. The increase in exports to regional countries was largely due increases to Armenia (by 128.2%), Kazakhstan (by 147.6%) and Azerbaijan (by 26.5%). Bulgaria (by 66.8%) and Poland (by 33.4%) stood out in terms of export growth to EU countries, while a significant decrease was observed in exports to Spain (-42.2 %). From other countries, higher exports to Peru (11.2 times more) and China (rising by 19.7%) made a high contribution to the growth of export earnings.

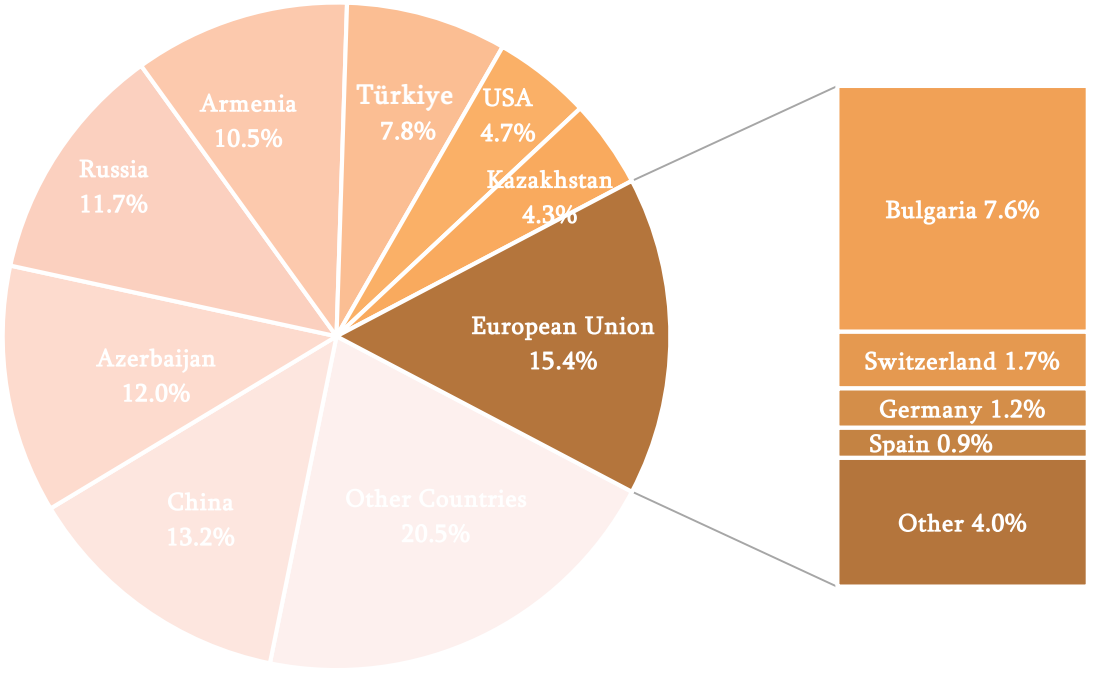
The 2022 data show that foreign trade with the Central Asian countries significantly increased, largely due to re-exports of motor cars. Of other countries, China (13.2%) and Türkiye (7.8%) both had high shares in total exports. As much as 90% of Georgia's exports to China were again driven by re-exports of precious metals, as well as copper ores and concentrates, while to Türkiye exports of electricity and textiles took the leading positions. Compared to the previous year, exports of goods became more diversified by destination country.

Diagram 1.5 Annual change in commodity exports and imports[24]



Source: NBG

Diagram 1.6 Exports structure by country, 2022

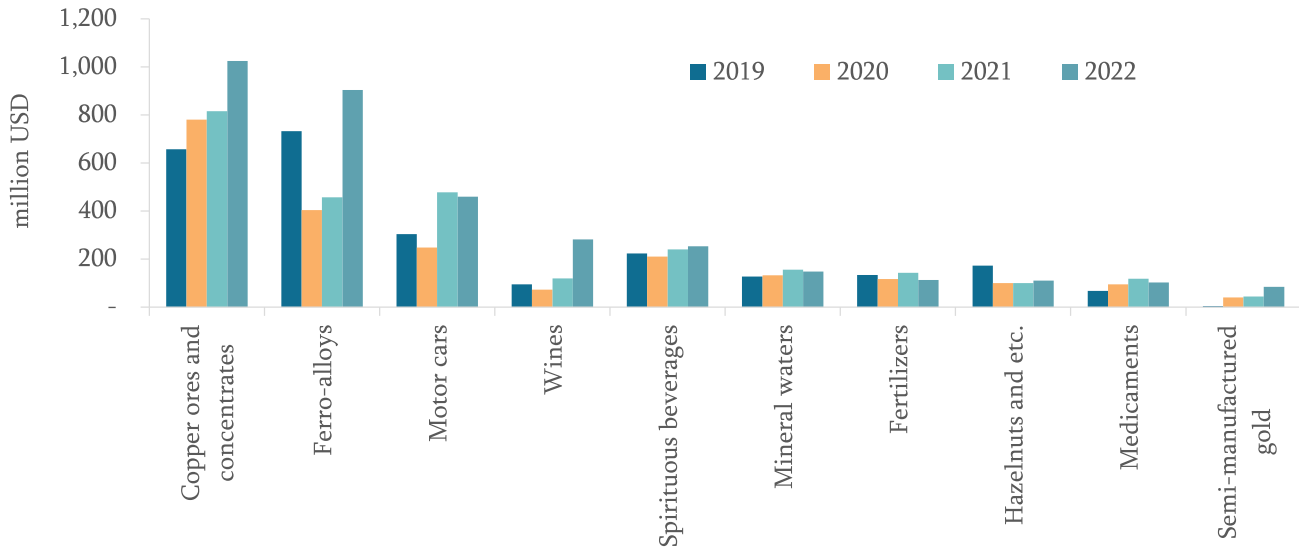


Source: GeoStat

24 Export of goods on the balance of payments (BoP) and import of goods. Foreign trade and trade in BoP goods are different notions that are based on different concepts. The principle of crossing the border is the determinant for foreign trade, while for BoP goods trade it is the change of ownership between a resident and a non-resident. In foreign trade statistics, exports are given at FOB prices, while imports are given at CIF prices, while for trade in BoP goods, both exports and imports are given at FOB prices.

Re-exports of copper ores and concentrates held a significant share in overall exports of goods in 2022. These increased by 25.6% compared to the previous year and amounted to 18.3% of total exports. Re-exports of light vehicles also had a high share, increasing by 98.0% annually and thereby exceeding the pre-pandemic level by 23.3%. Globally increased prices for cars also made a contribution to the increased proceeds from the export of motor cars. The export of mineral and chemical fertilizers, electricity, live bovine animals, and mineral water topped the group of locally produced goods; with their export volumes increasing by 135.5%, 436.5%, 75.1% and 43.0%, respectively. In addition, sales of natural grape wines and semi-manufactured gold remained at a high level. In contrast, the export of nuts and spirits decreased slightly. Overall, registered exports of goods increased by 31.8% in 2022, and the export of domestic goods increased by 18.4%. As the price of export goods continued to increase throughout the year, in real terms exports of goods from Georgia increased by about 10.5% over the year. Exports also became less diversified by commodity groups.

Diagram 1.7 Top 10 export commodities, 2019-2022

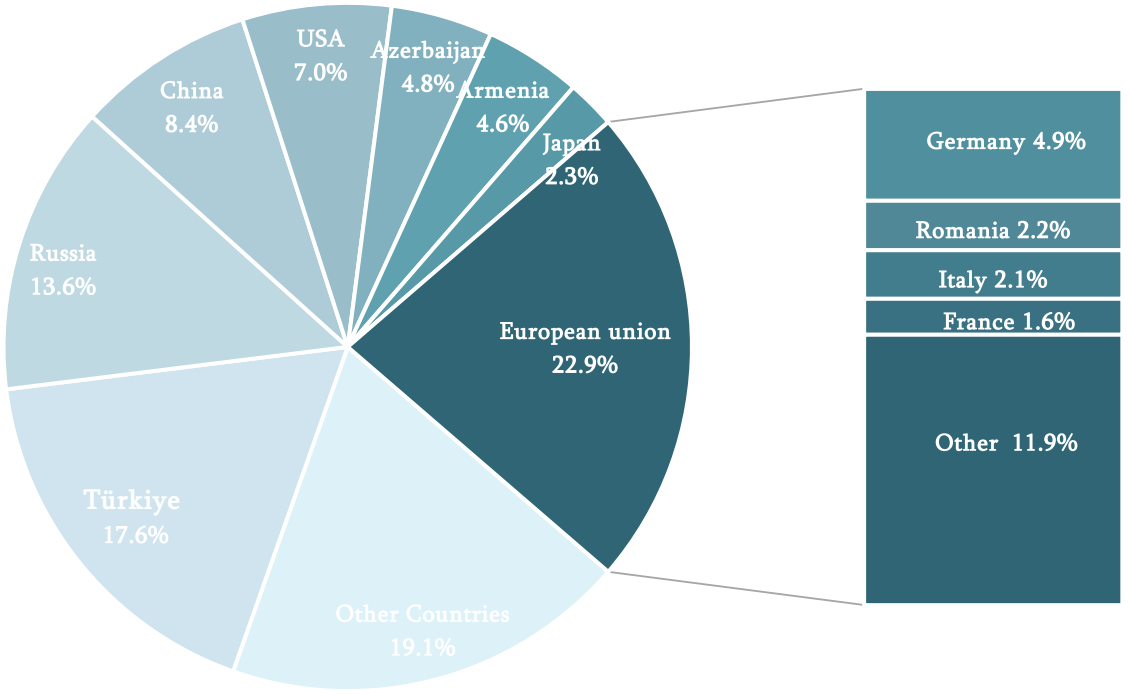


Source: GeoStat

A regional analysis of imports shows increased imports from both the EU (up by 33.0%) and other countries (by 35.0%). Russia (rising by 8.0 pp), Türkiye (5.4 pp) and the USA (3.7 pp) all highly contributed to the growth of imports. An increase in imports from Germany (1.9 pp) and Romania (1.1 pp) made a notable contribution to the growth of total imports from EU countries. In contrast, due to the ongoing war, imports from Ukraine have dropped, mostly reflected in a decline in purchases of cigarettes/ cigarillos and semi-finished carbon steel.

After the EU, Türkiye continued to be a leading import source for Georgia, with imports increasing by 29.8% annually in 2022 due to higher purchases of motor cars, cigarettes/cigarillos and medicaments. Imports from Russia increased by 79.4% due to the sharp increase in the import of oil and petroleum products, while increased imports from the US were again driven by an increase in purchases of motor cars. Purchases of polyacetals, rubber tires, and semi-finished carbon steel from China also increased imports (see Diagram 1.8).

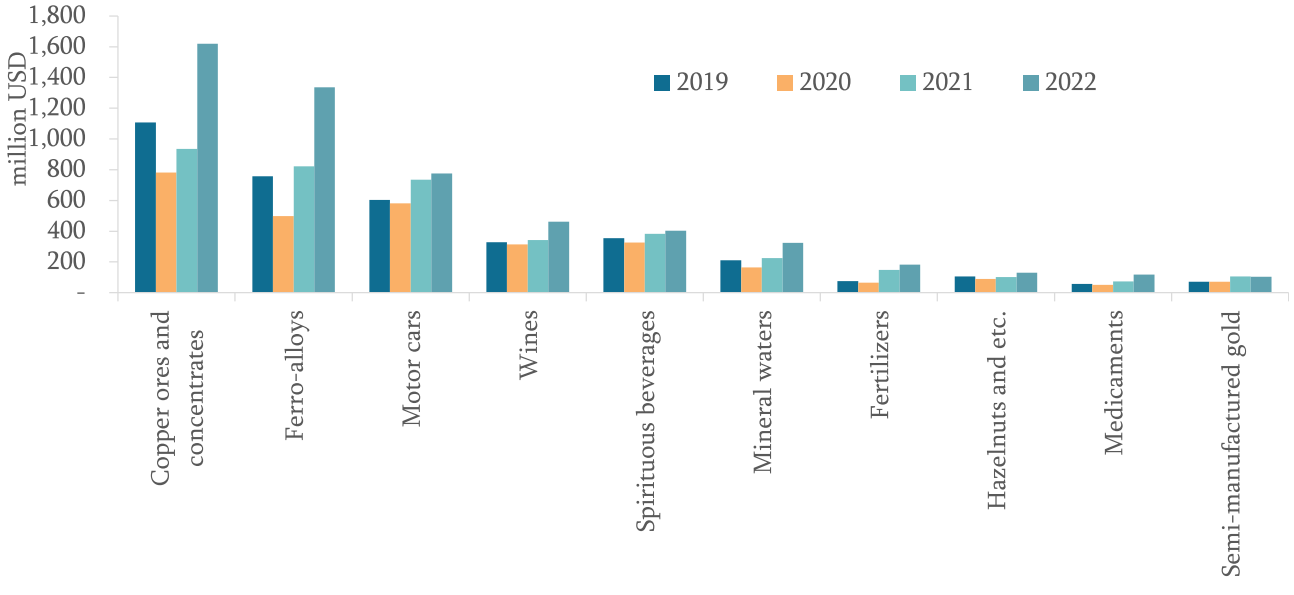
Diagram 1.8 Import structure by country, 2022



Source: GeoStat

Consumer goods made a major contribution to the growth of imports of goods. This was due to strong aggregate demand and intensified re-exports. Re-exports of motor cars played a major role in higher imports of consumer goods. In addition, imports of oil and petroleum products (9.8% of total imports) rose, which was partly a reflection of the higher price of oil on international markets. Expenditure on oil and oil products imports increased by 62.4%, of which the price effect accounted for 57.8 pp, while imports increased by 4.6% in real terms. The increase in imports of intermediate goods was mainly caused by increased imports of petroleum gases, precious metals, copper ores and concentrates, wheat flour, and carbon rods. In terms of investment goods, other aircraft, large construction equipment, telephone sets, automatic data processing machines and units made a high contribution to the increase in imports (see Diagram 1.9).

Diagram 1.9 Top 10 import commodities, 2019-2022

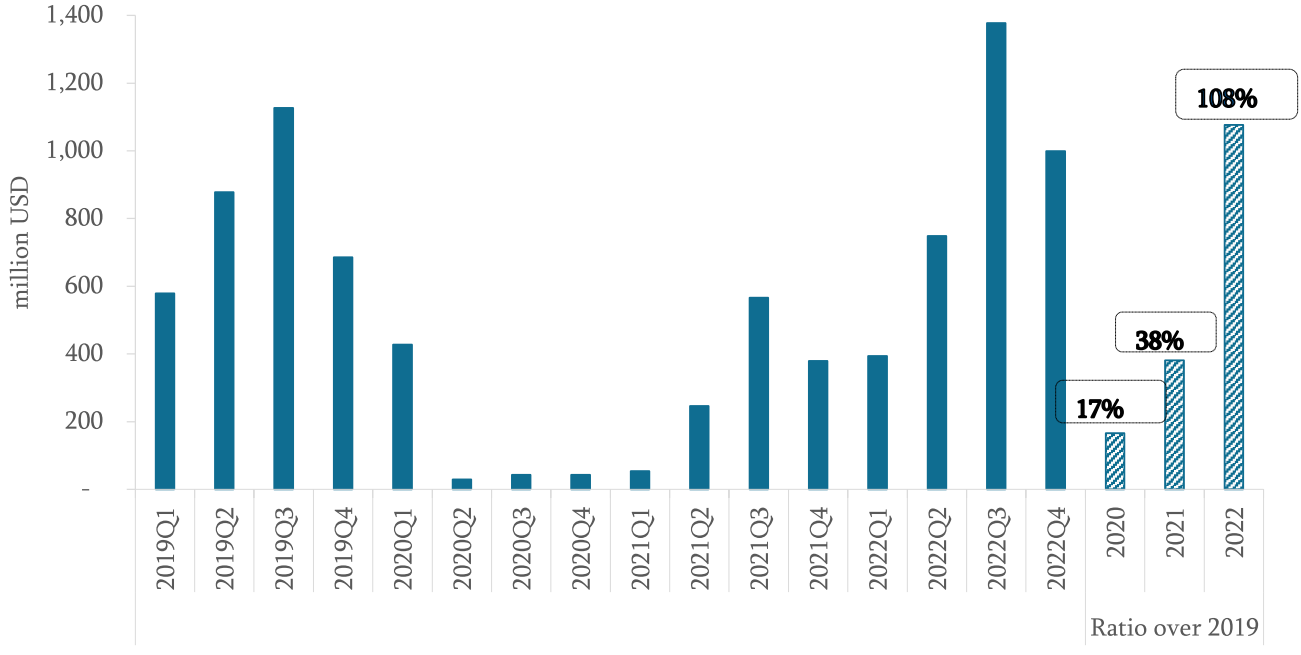


Source: GeoStat

The boost of import of goods in 2022 was also facilitated by the increase in US dollar prices of imported goods. In nominal terms, the import of goods increased compared to 2019 (by 42.7%), although real imports are still slightly below the pre-pandemic level. Imports became less diversified by commodity group in 2022, largely due to sharp increases in imports of motor cars and petroleum products.

The heightened surplus of trade in services in 2022 had a positive effect on the current account balance: the ratio of surplus of service trade to GDP was 10.9%, 7.0 percentage points higher than in the previous year. In absolute terms, the positive balance of trade in services in 2022, compared to the previous year, saw an increase of USD 1,958 million and amounted to USD 2,682 million. The easing of global COVID-19-related restrictions has, as expected, had a positive impact on exports of services – including tourism and related business activities. As migration flows to Georgia increased amid Russia's invasion of Ukraine, foreign visitors faced higher costs for services in the local market, especially for accommodation and food. Revenues from international travelers, representing export of services, amounted to USD 3,520 million in 2022, which was 182.7% higher than the previous year (see Diagram 1.10). Travel revenues increased by 8% compared to the pre-pandemic levels observed in 2019. As in previous years, revenues from international travel was one of the most important sources of funding the trade deficit.

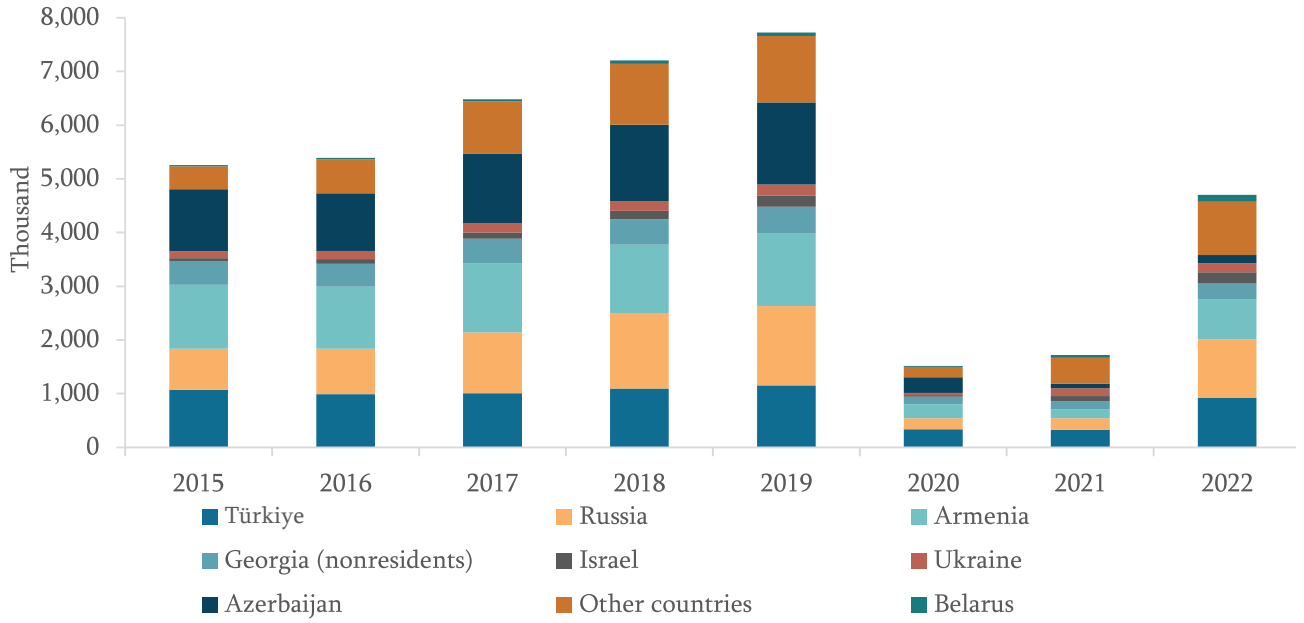
Diagram 1.10 Revenues from international travel



Source: NBG

The year saw an increased number of international visitor arrivals, up by 173.3% annually, although these were still lower (by -39.1%) than the pre-pandemic level. This was driven by both the recovery of global tourism and a larger number of migrants since the start of the Russia-Ukraine war. The growth of visitors was largely due to the higher number of visitors from Russia (up by 410.5%), Türkiye (up by 183.5%), Armenia (up by 350.9%) and Israel (up by 108.7%). Increased arrivals from Germany and the United Kingdom stood out among European countries. The number of visits made by Georgian residents abroad also increased in 2022.

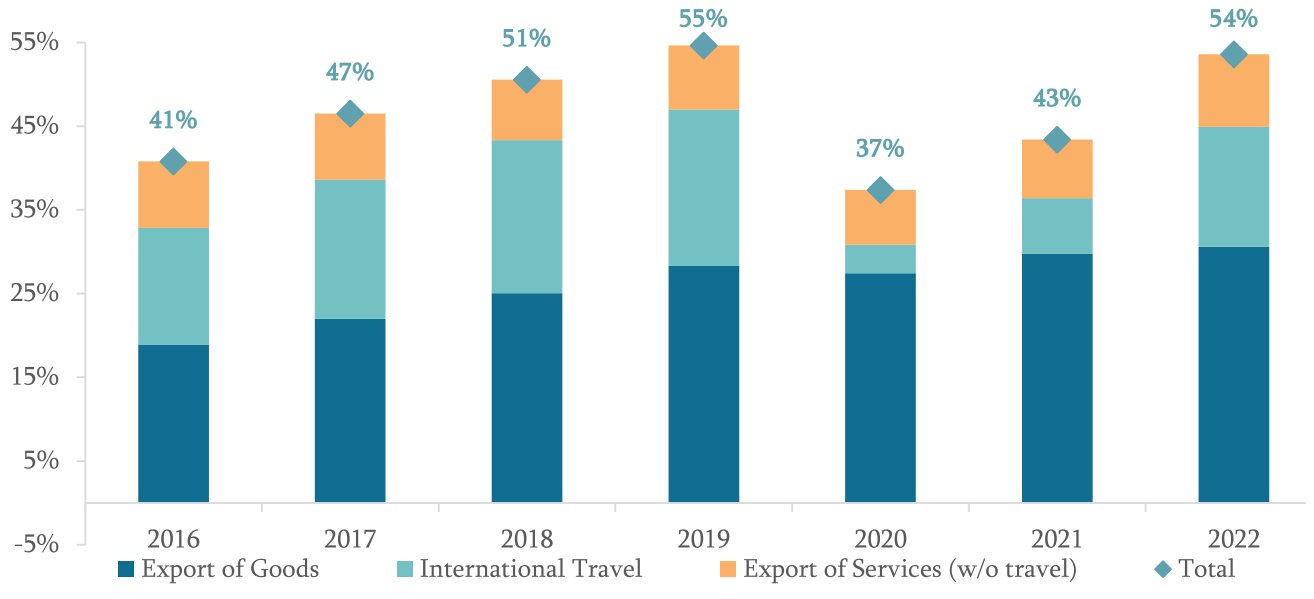
Diagram 1.11 Number of international visitors by country



Source: Ministry of Internal Affairs of Georgia

In 2022, revenues from international travel, unlike other exports of services, increased significantly (see Diagram 1.12). Such high revenues from services exports led to a substantial reduction in the current account deficit in 2022.

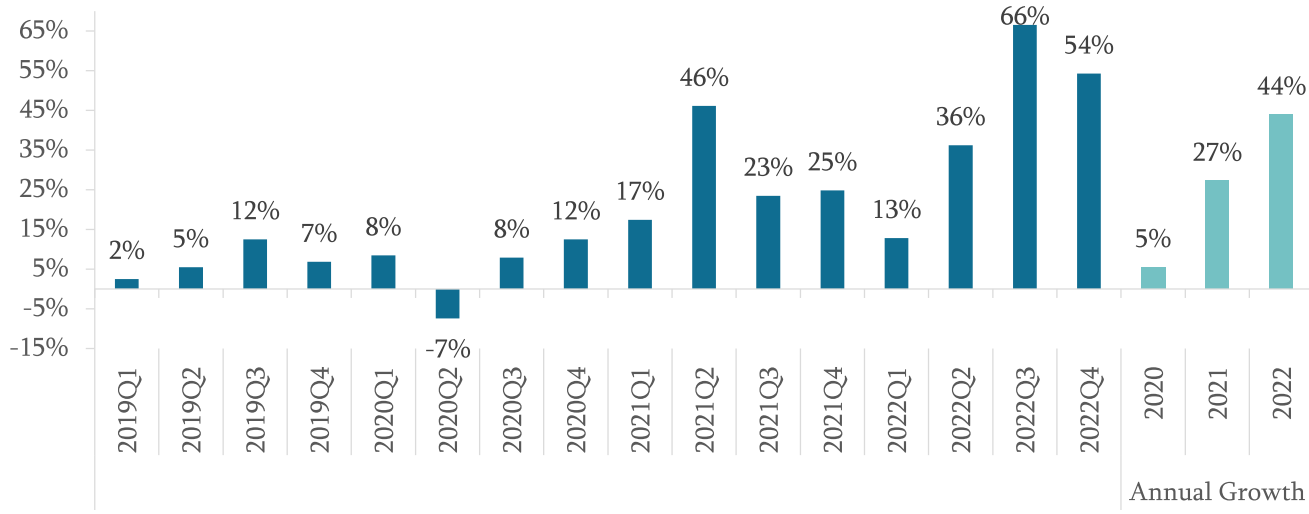
Diagram 1.12 Revenues from export of goods and services to GDP



Source: NBG

The primary income account deficit in 2022 was extended by USD 437 million compared to the previous year and amounted to USD 1,613 million. The negative balance of investment income remains the main reason for the high deficit, which expanded by USD 646 million in 2022 tand reached USD 2.3 billion. The high level of the investment income deficit is due to the increase in the interest income of other investments and higher income related to foreign direct investment (FDI) – in terms of both dividends paid and reinvestments. Although the latter negatively affects the current account balance, it does record an inflow of FDI in the financial account. As a result, other things being equal, this action has no impact on the foreign exchange market in the current period. The balance of workers' wages increased by USD 208 million in 2022 and amounted to USD 671 million. Such wage growth was due in part to the higher-than-expected economic activity and the post-pandemic employment growth in regional countries.

Diagram 1.13 Annual growth rate of personal remittances



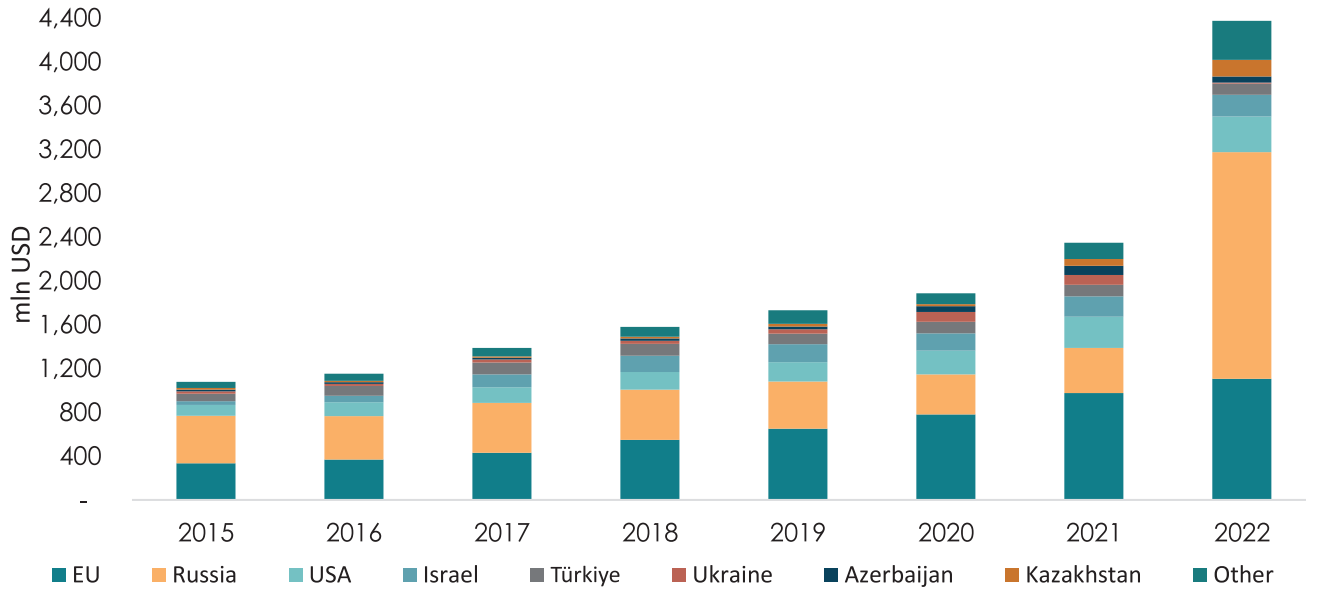
Source: NBG

Secondary income grew substantially (by 32.5%) in 2022.[25] This was largely due to higher worker remittances from abroad. Personal transfers, which is usually the largest part of secondary income, grew by 43.9% annually (see Diagram 1.13). Instant money transfers were steadily increasing throughout the year, especially in the later part, and were largely a consequence of migration flows. Higher money transfers from Russia, the European Union and Kazakhstan made a significant contribution to the upsurge in remittances in 2022 (see Diagram 1.14). In recent years, Russia's share in remittances had been decreasing, with funds received from the European Union topping the list; however, this trend changed in 2022 as transfers from Russia increased five times annually to twice exceed those from the European Union. In contrast, the volume of instant money transfers from Türkiye gradually decreased after April, making a negative contribution to the annual growth of money transfers.

In 2022, as in previous years, net FDI remained an important source of funding the current account deficit (see Diagram 1.15). FDI in Georgia amounted to USD 2.0 billion, which was up by 61.1% over the previous year. The growth of FDI was mostly caused by the increase of investments in equity capital. The real estate, energy, and construction sectors accounted for the largest part of direct foreign investments. Compared to the previous year, investments mostly increased in the directions of real estate and energy, and decreased in manufacturing industry and healthcare and social services.

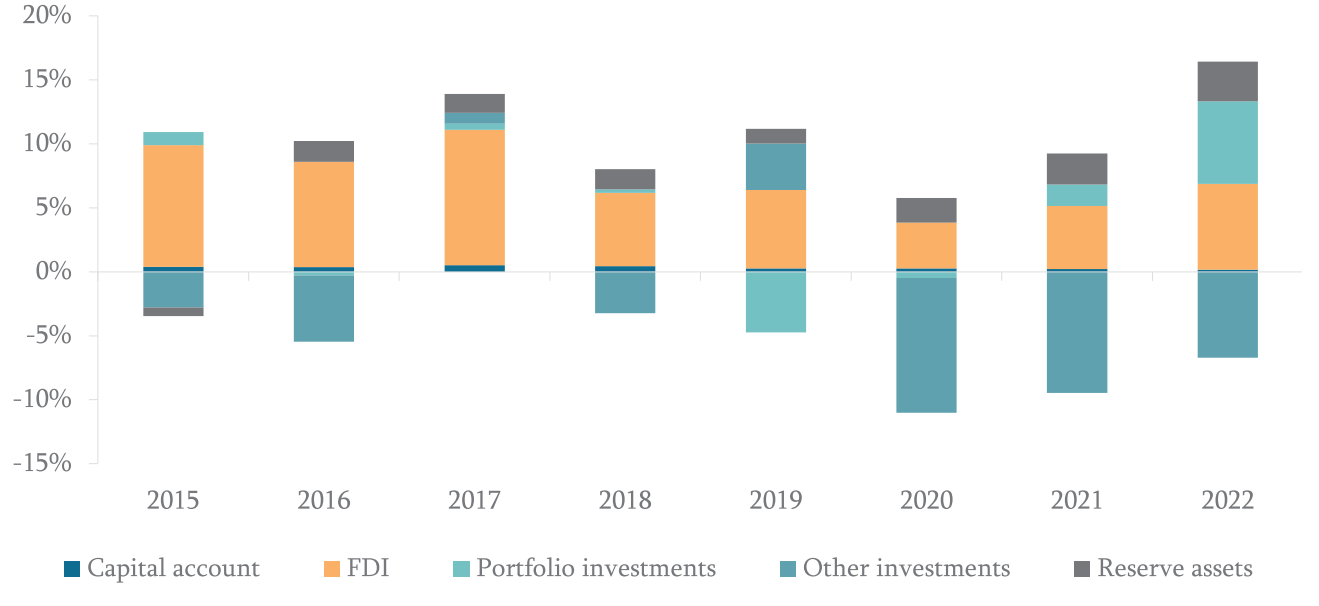
25 Secondary income is a current account item that records current transfers between residents and non-residents (except capital transfers), such as personal transfers, international cooperation aid and grants, and social assistance.

Diagram 1.14 Remittances by country of origin



Source: NBG

Diagram 1.15 Financing the current account deficit (% of GDP)



Source: NBG

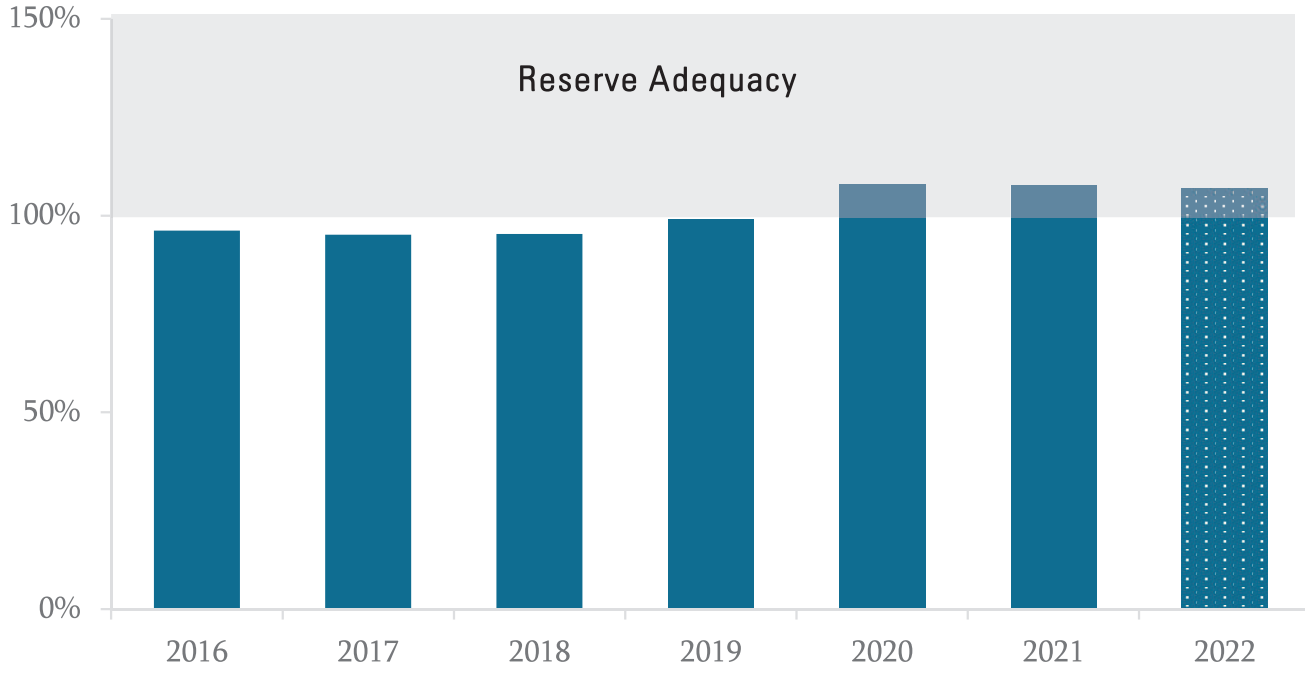
In contrast, net portfolio investments of residents increased and amounted to USD 1.6 billion in 2022, the largest part of which came from the banking sector. The value of foreign securities owned by the resident private sector was boosted in 2022, largely due to higher global interest rates. In addition, residents continued to purchase bonds issued by international financial companies in GEL, and bonds issued in previous years were repaid by taking new loans in the other sector.

Other investments made little contribution to fund the current account deficit compared with 2021. In terms of inflows, the increase in liabilities was mainly on the part of loans raised in both the government and private (non-banking) sectors. Long-term loans obtained by the state sector totaled USD 850 million. Also, amid the economic recovery, the banking sector accumulated excess liquidity in the form of cash and deposits.

In 2022, official international reserves increased by USD 629 million and amounted to USD 4.9 billion. Foreign exchange interventions and the funds raised by the government from other international organizations acted to enlarge the international reserves. Also, the increase in foreign currency deposits of non-residents increased the amount of money to be secured by minimum reserve requirements, which in turn led to greater balances on reserve accounts and amplified international foreign exchange reserves. In 2022, the net purchases of the National Bank of Georgia in the foreign exchange market (both through foreign exchange auctions and through the BMatch platform) amounted to USD 565 million. Foreign debt servicing and other foreign exchange expenses of the government had an impact on lessening the international reserves.

A reserve adequacy assessment using the IMF's ARA methodology[26] indicated that the level of Georgia's international reserves by the end 2022 was around 107%. According to the same methodology, this is thus within the adequate level (of 100-150%) to secure against external and liquidity shocks. By the end of 2022, the ratio of total reserves to months of imports (forecasted imports of 2023) was around 4.2 months.

Diagram 1.16 Assessment of the adequacy of official international reserves according to the IMF methodology (ARA metrics)



Source: NBG

26 For details, see https://www.imf.org/external/np/spr/ara/

Table 1.1 Balance of payments (million USD)[27]

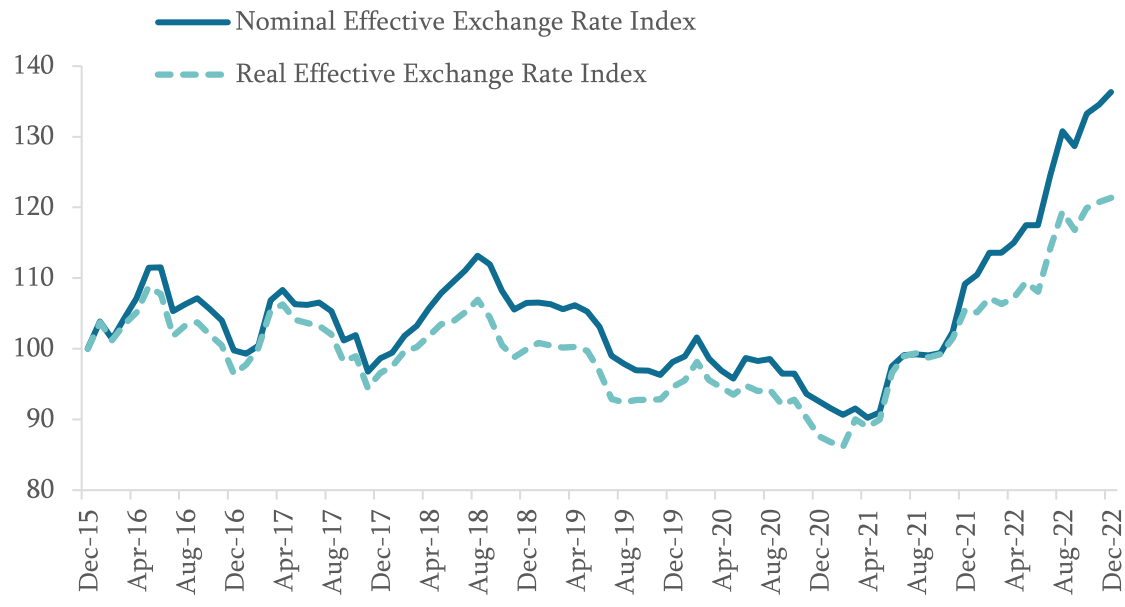
	2017	2018	2019	2020	2021	2022
Current Account	**-1,308**	**-1,192**	**-1,025**	**-1,981**	**-1,937**	**-1,011**
Goods	-3,809	-4,116	-3,792	-3,165	-3,790	-5,133
Export	3,570	4,407	4,946	4,347	5,539	7,536
Import	7,379	-8,522	-8,737	-7,512	-9,329	-12,669
Services	2,024	2,244	2,176	124	725	2,682
Credit	3,990	4,490	4,600	1,580	2,547	5,654
o/w: Revenues from Travel	2,704	3,222	3,269	542	1,245	3,520
Debit	1,966	2,246	2,425	1,456	1,822	2,972
Primary income (Net)	-794	-684	-784	-749	-1,176	-1,613
o/w: Investment Income	-1,416	-1,381	-1,590	-1,238	-1,639	-2,284
o/w: Compensation of Employees	623	697	807	488	463	671
Secondary income (Net)	1,273	1,364	1,375	1,810	2,304	3,052
o/w: General Government	233	173	133	256	200	182
o/w: Financial corporations, nonfinancial corporations, households, and NPISHs	1,040	1,190	1,242	1,553	2,104	2,870
Capital Account	**83**	**76**	**47**	**41**	**38**	**41**
Financial Account	**-1,255**	**-1,253**	**-1,067**	**-2,034**	**-1,920**	**-956**
Direct Investment (Net)	1,711	1,011	1,071	567	920	1,652
o/w: Direct Investments in Georgia	1,921	1,305	1,382	552	1,267	2,034
Portfolio Investments (Net)	76	48	-829	-75	311	1,585
Financial derivatives (other than reserves) and employee stock options (Net)	0	1	-4	-27	-1	-3
Other Investments (Net)	-138	569	-634	1,670	1,764	1,651
o/w: General Government	432	351	346	1,445	1,333	510
o/w: Others	-570	218	-980	225	430	1,141
Reserve Assets	-242	-278	-202	-305	-453	-765
Net Errors and Omissions	**-29**	**-137**	**-90**	**-94**	**-21**	**15**
Important Coefficients						
Reserve Assets in Months of Predicted Imports of the Next Year (Months)	3.6	3.5	3.5	5.1	5.0	4.2
Export/Import (G&S)	-81%	-83%	-86%	-66%	-73%	-84%
CAB/GDP	-8.0%	-6.8%	-5.9%	-12.5%	-10.4%	-4.1%
FDI/GDP	11.8%	7.4%	7.9%	3.5%	6.8%	8.3%
Revenues from Travel/GDP	16.6%	18.3%	18.7%	3.4%	6.7%	14.3%
Personal Transfers/GDP	9.5%	9.9%	10.7%	12.4%	13.4%	14.6%

Source: NBG

27 See the 6th edition of the Balance of Payments Statistics Manual.

Sharply increased foreign inflows and the improvement of the current account balance caused both the real and the nominal exchange rates to appreciate (see Diagram 1.17). The real effective exchange rate appreciated by 18.7% in 2022, while the nominal effective exchange rate rose by 27.1%, which, other things being equal, implies a decrease in foreign competitiveness. In 2022, the currencies of Türkiye, the eurozone and China made a high contribution to the appreciation of the real effective exchange rate (see Table 1.2).

Diagram 1.17 Indices of real and nominal effective exchange rates (Dec. 2015=100)



Source: NBG

Table 1.2 Annual change in effective exchange rates in 2022

	Nominal effective exchange rate change, %	Real effective exchange rate change, %	Share in real effective exchange rate
Effective exchange rate	**27.1**	**18.7**	**18.7**
Eurozone	24.5	28.5	5.0
Türkiye	107.8	35.2	6.7
Ukraine	33.0	23.4	1.6
Armenia	-4.6	-1.8	-0.1
USA	10.7	14.7	1.1
Russia	3.2	1.5	0.2
Azerbaijan	10.4	8.5	0.9
China	15.6	27.0	3.6
Bulgaria	24.5	20.7	0.8
Poland	27.9	24.9	0.5

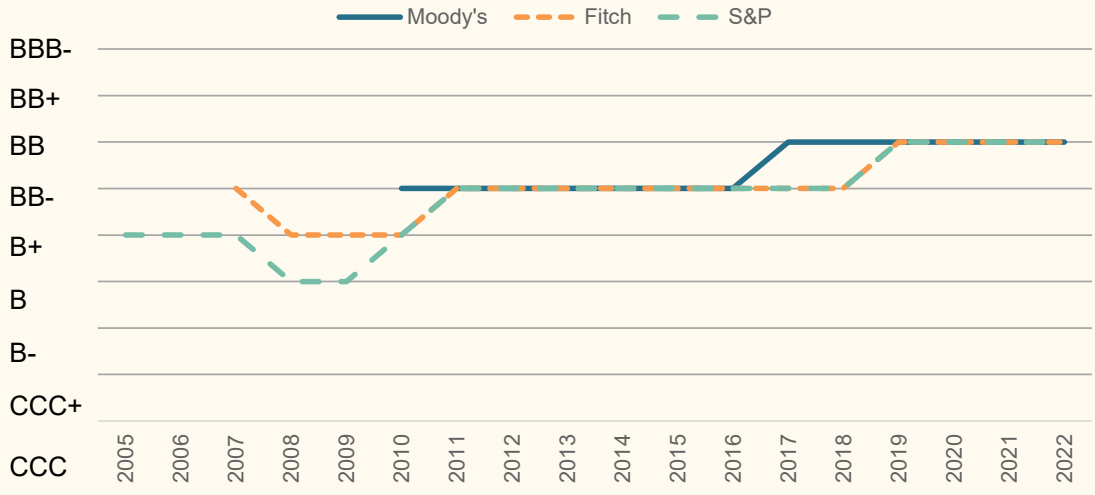
Source: NBG

Box 1 New Arrangement of the International Monetary Fund and Ratings by International Rating Agencies

An agreement was signed between the IMF and Georgian authorities on a three-year Stand-by Arrangement (SBA) for the amount of SDR 210.4 million (about USD 289 million) or 100% of Georgia's quota. The first review of the program was completed in December 2022, and SDR 30 million (about USD 40 million) became available for Georgia. However, this program is of a preventive nature and the loan allocated in 2022 was therefore not utilized. According to the results of the first review, which were published in December, "The Georgian economy has performed strongly, the authorities have appropriately used recent positive outturns to reduce the deficit... and the National Bank of Georgia has appropriately taken advantage of favorable conditions this year to rebuild international reserves more quickly than programmed".[28]

In the face of Russia's invasion of Ukraine, rising prices on commodity markets and the negative consequences of the global pandemic, Georgia's credit ratings by international rating agencies remained unchanged in 2022. This was thanks to the effective macroeconomic policy response by the National Bank of Georgia and the resilience of the banking system. In August, the international rating agency Standard&Poor's (S&P) confirmed Georgia's sovereign rating at the "BB" level with a stable outlook. In July, Fitch Ratings maintained Georgia's sovereign rating at the BB level with a stable outlook. According to Fitch's July 2022 assessment, "Georgia's economy showed higher growth than expected"[29]. Fiscal discipline, which helps to reduce the public debt and, a tight monetary policy, though high levels of dollarization, which helps to bring inflation closer to the target rate, has a positive impact on the country's sovereign rating". In February 2023, Fitch upgraded the outlook to positive. In July and December 2022, the international rating agency Moody's rated Georgia at Ba2, and confirmed a negative outlook.

Diagram 1.18 Georgia's sovereign ratings



Source: International Rating Agencies (Fitch, Moody's, S&P)

Maintaining these ratings against the background of the pandemic and the subsequent Russia-Ukraine war is testament to the successes that the Georgian economy has achieved through the implementation of consistent macroeconomic policies and the reasonable promotion of economic activities in the face of increasing global uncertainty and difficulties. This assessment of the investment situation of Georgia by international rating agencies further strengthens the confidence of international institutions and investors towards the economy of Georgia and has a positive impact on the country's business environment.

28 See https://www.imf.org/en/News/Articles/2022/12/21/pr22443-imf-executive-board-completes-first-review-under-the-stand-by-arrangement-with-georgia

29 See https://www.fitchratings.com/research/sovereigns/fitch-affirms-georgia-at-bb-outlook-stable-29-07-2022

1.3 Economic Growth

In 2022, Georgia's real GDP increased by 10.1% compared to the previous year, which was largely due to a sharp increase in foreign income. By the beginning of 2022, the pandemic-related restrictions had almost completely been lifted, and foreign visitor/tourist inflows began to recover at a rapid pace. At the same time, the war started by Russia in Ukraine brought a large number of migrants into the country, which led to a sharp increase in income and remittances from travelers. Revenues from travelers almost tripled (increased by 182.5%) during the year, and remittances from abroad increased by 86.1%.

The high growth of income from abroad was especially reflected in the service sector, where the participation of immigrants is relatively high. As a result, that sector contributed 6.7 pp to overall economic growth. Of this, a significant contribution was made by transport (28.4% growth, making a 1.6 pp contribution to overall growth), information and communication (49.9% growth, a 1.5 pp contribution), and accommodation and food supply (16.7% growth, a 0.5 pp contribution).

The manufacturing sector, where the weight of export-oriented enterprises is high, stands out among the industrial branches, observing 7.8% growth and making a 0.8 pp contribution to overall GDP growth. Electricity, gas, steam, and air conditioning supply grew by 38.9% and contributed 1.1 pp to growth, while construction grew by 14.8% and made a 1.0 pp contribution to growth (see Table 1.3).

Table 1.3 GDP by economic activities

	2022Q1		2022Q2		2022Q3		2022Q4		2022	
	Real growth	Contribution to growth	Real growth	Contribution to growth	Real growth	Contribution to growth	Real growth	Contribution to growth	Real growth	Contribution to growth
Agriculture, forestry and fish farming	2.6%	0.1%	10.1%	0.8%	0.6%	0.0%	-2.8%	-0.1%	2.9%	0.2%
Mining and quarrying	19.8%	0.3%	15.5%	0.2%	31.3%	0.4%	25.3%	0.3%	22.8%	0.3%
Manufacturing	20.8%	1.8%	4.7%	0.5%	5.5%	0.6%	5.0%	0.5%	7.8%	0.8%
Electricity, gas, steam and air conditioning supply	54.4%	1.6%	72.6%	1.7%	34.7%	1.0%	8.2%	0.2%	38.9%	1.1%
Water supply; Sewerage, waste management and remediation activities	26.1%	0.2%	6.9%	0.1%	7.1%	0.1%	0.8%	0.0%	9.2%	0.1%
Construction	13.0%	0.8%	-2.6%	-0.2%	9.1%	0.6%	33.2%	2.4%	14.8%	1.0%
Wholesale and retail trade; Repair of motor vehicles and motorcycles	5.6%	0.7%	-3.9%	-0.6%	8.8%	1.1%	13.1%	1.8%	6.1%	0.8%

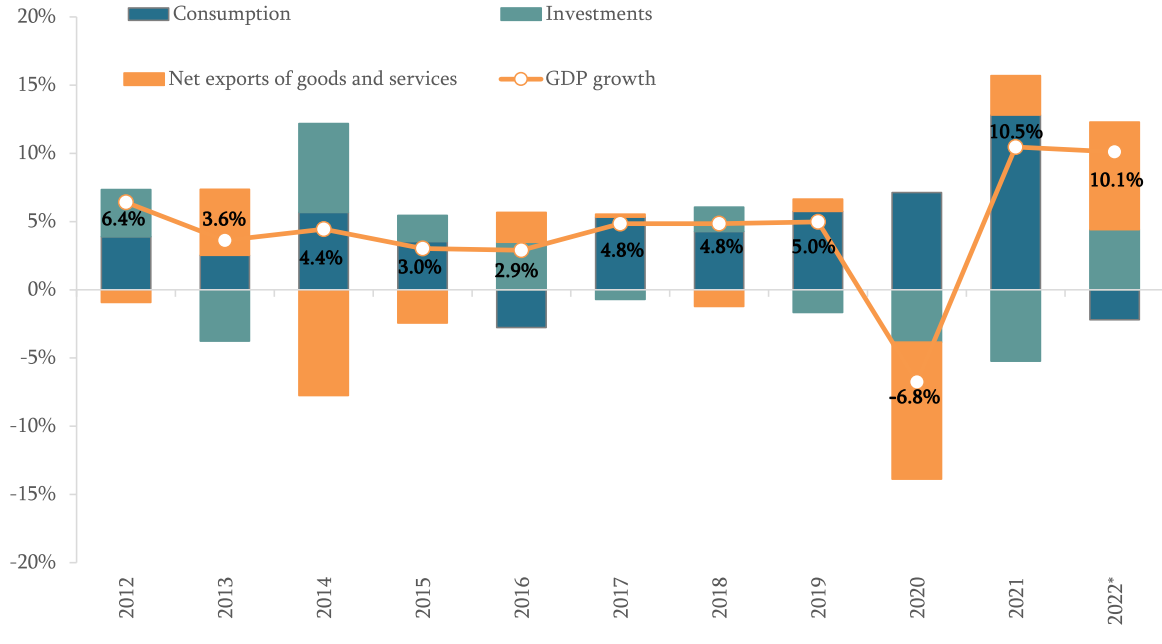
Transportation and storage	31.0%	1.6%	26.4%	1.5%	29.0%	1.6%	27.9%	1.6%	28.4%	1.6%
Accommodation and food service activities	63.7%	1.2%	9.0%	0.3%	11.7%	0.4%	10.0%	0.3%	16.7%	0.5%
Information and communication	22.3%	0.7%	35.4%	1.1%	74.9%	2.2%	60.9%	1.9%	49.9%	1.5%
Finance and insurance activities	3.4%	0.2%	6.9%	0.3%	6.8%	0.3%	3.3%	0.1%	5.1%	0.2%
Real estate activities	6.6%	0.7%	-9.1%	-0.8%	-6.3%	-0.5%	-8.7%	-0.8%	-4.8%	-0.4%
Professional, scientific and technical activities	11.9%	0.2%	-7.7%	-0.1%	-5.7%	-0.1%	-5.2%	-0.1%	-2.4%	0.0%
Administrative and support services	36.1%	0.3%	26.8%	0.2%	6.9%	0.1%	13.8%	0.1%	17.9%	0.1%
Public administration and defense; compulsory social security	1.0%	0.1%	4.7%	0.3%	5.1%	0.3%	2.3%	0.1%	3.3%	0.2%
Education	5.2%	0.3%	7.8%	0.3%	2.5%	0.1%	0.8%	0.0%	4.1%	0.2%
Health and social work activities	19.5%	0.9%	-13.9%	-0.6%	-14.3%	-0.6%	-8.8%	-0.4%	-5.7%	-0.2%
Art, entertainment and recreation	46.9%	1.3%	7.7%	0.3%	12.0%	0.4%	16.8%	0.6%	17.3%	0.6%
Other services	53.8%	0.3%	31.4%	0.2%	34.8%	0.3%	22.5%	0.2%	33.0%	0.2%
Activities of households as employers; undifferentiated goods and services producing activities of household for own use	-6.0%	0.0%	11.0%	0.0%	127.8%	0.1%	59.1%	0.0%	39.4%	0.0%

(+) Taxes on products	13.0%	1.6%	14.6%	1.8%	10.8%	1.4%	5.8%	0.8%	10.6%	1.4%
(-) Subsidies on products	-2.2%	0.0%	1.8%	0.0%	-0.7%	0.0%	-3.4%	0.0%	-0.8%	0.0%
GDP		**15.0%**		**7.2%**		**9.8%**		**9.7%**		**10.1%**
Of these:										
Agriculture		0.1%		0.8%		0.0%		-0.1%		0.2%
Industries		4.8%		2.3%		2.6%		3.5%		3.2%
Services		10.1%		4.1%		7.1%		6.4%		6.7%

Demand

Revenues from international travelers to Georgia recovered to pre-pandemic levels in 2022. Due to the ongoing war in Ukraine, the country saw an increased number of long-term visitors and a boost in remittances received from abroad. These factors entailed higher export of services, which rose by 85.7% compared to the previous year. Total exports of goods and services were up by 38.2%, considerably outweighing the 14.4% increase in imports of goods and services. Ultimately, net exports contributed 7.9 pp to the growth of the economy. Investments increased real GDP by an additional 4.4 pp over the same period. Contrary to the upward trend of investment, the contribution of consumption to economic growth was negative, reflecting the slowdown in lending and fiscal consolidation. The contribution of consumption to GDP growth amounted to a negative 2.2 pp in 2022 (see Diagram 1.19).

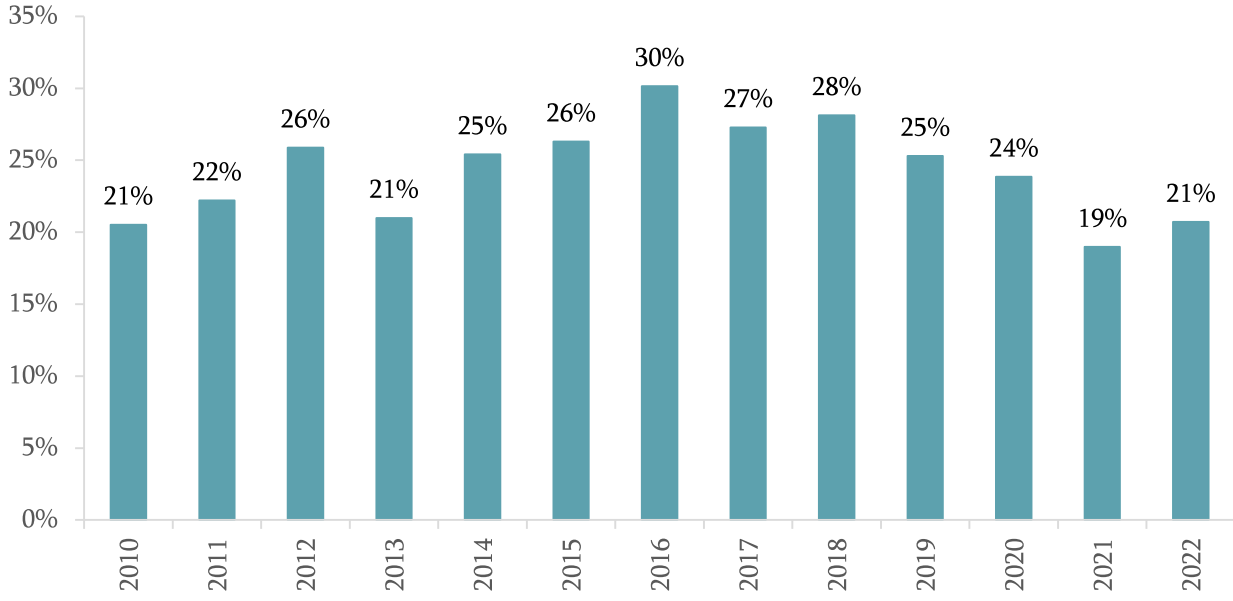
Diagram 1.19 GDP growth by category of use



Source: GeoStat and NBG estimates

Following the high growth of consumption and some decline in investment in 2021, the ratio of investments to GDP increased to 21% in 2022. In 2019-2021, this indicator had a decreasing trend and made a negative impact to economic growth. The indicator has since made a turnaround and can now be considered as being at a more or less adequate level for the development of Georgia's economy (see Diagram 1.20). The high level of the ratio of investments to GDP contributes to the accumulation of capital and, therefore, to the growth of the potential of the national economy.

Diagram 1.20 Investments to GDP



Source: GeoStat

1.4 Inflation

Inflation was expected to fall both globally and in Georgia in 2022. It was expected that the demand-supply imbalance caused by the pandemic and the increased cost of transportation entailed by the disruption of supply chains and logistics delays would gradually settle, which in turn would ease inflationary pressure. However, on 24 February 2022, at a point when the above-mentioned COVID-triggered problems had not yet been completely eliminated, Russia started a war in Ukraine. Before the war, Ukraine and Russia had been major exporters of various products and participants in the world supply chain. The war and the resulting sanctions against Russia exacerbated the crisis in supply chains and the imbalance of supply and demand in the international market. In the first months of the war, the prices of food on international markets rose to record highs[30], and oil prices reached their highest level in many years. There was a new, powerful push for global price rises. This soon spilled over to Georgia, and the local prices of widely used products such as fuel and food (e.g., bread and oil) climbed sharply. The depreciation of the GEL caused by deteriorating expectations was added to inflationary expectations and the price growth early in the year. As a result, the rate of the decline in inflation that had been expected before the war slowed, and inflation significantly exceeded the target rate over the year. Nevertheless, inflation still had a decreasing trend, and the annual inflation level fell to 9.8% in December (see Diagram 1.19). Late in the year, world markets began to show a clear trend of stabilization of goods prices and a reduction of transportation costs. Alongside this, the appreciated GEL exchange rate, resulting from strong foreign demand and an improved current account balance, also reduced imported inflation. The downward trend of inflation was facilitated by the tightened monetary policy of the National Bank of Georgia and the use of additional macroprudential instruments.

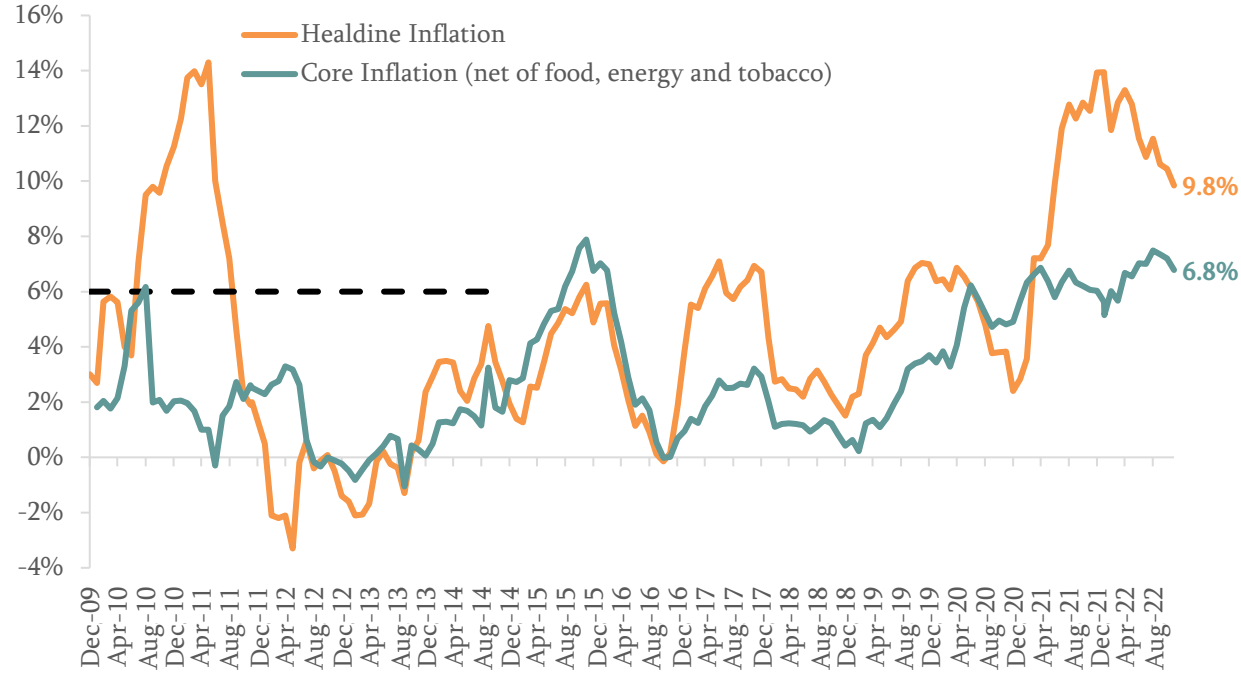
30 See the Food Price Index of the UN Food and Agriculture Organization (FAO) https://www.fao.org/worldfoodsituation/foodpricesindex/en/

Annual inflation in Georgia in 2022 was 11.9% on average. Core inflation, which excludes highly volatile changes in the prices on food, energy, and cigarettes, was lower than headline inflation, and averaged 6.5% (see Diagram 1.21).

Food prices rose to record levels globally in the early months of the war. This especially concerned those products whose major exporters had been Ukraine and Russia before the war (cereals, sunflower oil, etc.). These trends spilled over to the Georgian market as the prices on these products climbed sharply. Although food prices stabilized and even decreased in the following months, the contribution of food to inflation remained steadily high during the year. On average, 5.2 pp of the 11.9% overall inflation was on food.

Oil prices showed similar dynamics. Immediately after the Russian invasion of Ukraine, prices increased sharply before gradually decreasing in the following months. The contribution of fuel prices to annual inflation in Georgia increased to 2.1 pp in March 2022 and then gradually fell in the following months to reach 0.1 pp in December.

Diagram 1.21 Headline and core (excluding food, energy and tobacco) inflation



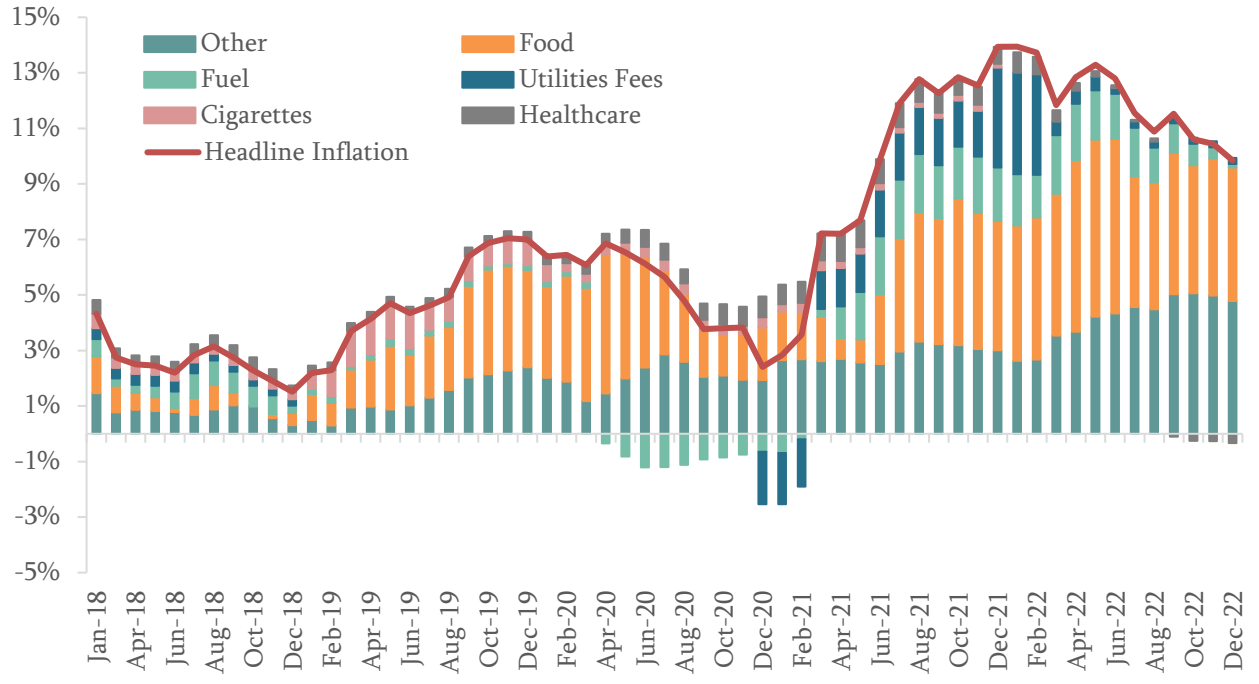
Source: GeoStat

Propelled by the ongoing war, the number of long-term visitors to Georgia from Russia, Ukraine, and Belarus sharply increased, leading to much higher demand for rental housing and, accordingly, affecting the price of apartment rent. Increased residential apartment rental prices at the end of the year contributed 0.7 pp to headline inflation, and 1.4 pp to core inflation. The soaring prices, encouraged by the high spending power of migrants, affected many other products as well, which is indicated by their high contribution to inflation (4.2 pp on average during the year; see Diagram 1.22).

Since the second half the year, inflation was reducing at the expense of imported and mixed products. This was facilitated by a certain stabilization of the prices of commodities on international markets, reduced costs on international transportation, and the appreciation of the GEL exchange rate. Imported and mixed inflation decreased to 5.5% and 6.4%, respectively, in December 2022.

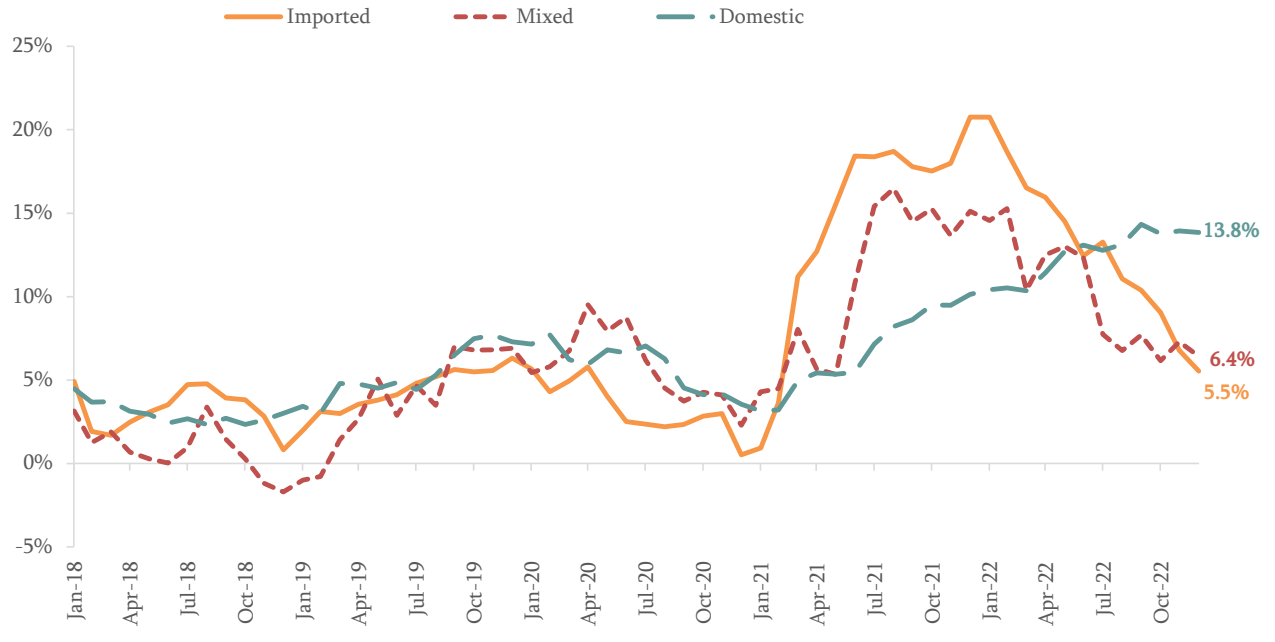
In contrast, the inflation of domestically produced goods and services had an upward trend during 2022. Annual domestic inflation was 13.8% in December (see Diagram 1.23). The high level of domestic inflation was related to both the high inflation on food (bread, cheese, meat, etc.), and to the increase in the price of services, of which the sharp increase in the price of apartment rent is particularly notable (see Diagram 1.23).

Diagram 1.22 Contribution of core components to headline inflation



Source: GeoStat and NBG estimates

Diagram 1.23 Inflation of imported and domestic goods



Source: GeoStat

Table 1.4 Inflation indicators according to individual components, their share in the consumer basket and contribution to CPI

	2022 weights	Dec. 2022/Dec. 2021		2022 average/2021 average	
		inflation	contribution	inflation	contribution
Total	100.0%	9.8%	9.8%	11.9%	11.9%
Food and Non-Alcoholic Beverages	32.2%	16.3%	5.4%	17.9%	5.8%
Food	28.9%	15.9%	4.8%	17.7%	5.2%
Bread and Bakery	5.6%	22.1%	1.3%	27.4%	1.6%
Meat and Meat Products	6.8%	9.7%	0.7%	10.5%	0.7%
Fish Products	0.5%	13.4%	0.1%	16.1%	0.1%
Milk, Cheese, and Eggs	6.3%	17.5%	1.2%	18.1%	1.1%
Oil and Fats	1.9%	6.8%	0.2%	16.7%	0.4%
Fruits, grapes	1.6%	6.4%	0.1%	13.2%	0.2%
Vegetables, Melons, Potatoes and other Tubers	3.3%	27.4%	1.0%	20.9%	0.7%
Sugar, Jams, Honey, Syrups, Chocolate, Pastry	2.3%	14.1%	0.3%	16.9%	0.4%
Other Food Products	0.6%	11.5%	0.1%	10.0%	0.1%
Non-alcoholic beverages	3.3%	20.5%	0.6%	20.6%	0.6%
Alcoholic Beverages and Tobacco	6.4%	9.3%	0.6%	7.4%	0.5%
Clothing and Footwear	3.8%	-2.5%	-0.1%	-0.5%	0.0%

Housing, Water, Electricity, Gas and other Fuels	9.0%	15.8%	1.4%	17.0%	1.5%
Furnishings, household equipment and maintenance	5.3%	8.8%	0.5%	10.1%	0.5%
Healthcare	7.8%	-3.6%	-0.3%	1.2%	0.1%
Transport	13.0%	5.5%	0.6%	15.7%	1.8%
Communication	3.6%	-0.3%	0.0%	0.6%	0.0%
Recreation and Culture	3.7%	3.6%	0.1%	4.2%	0.1%
Education	4.6%	6.6%	0.3%	4.5%	0.2%
Hotels, Cafes and Restaurants	5.4%	14.8%	0.6%	14.4%	0.6%
Miscellaneous Goods and Services	5.3%	11.6%	0.6%	8.9%	0.5%
Non-durable goods	61.5%	10.5%	6.5%	14.9%	9.0%
Semi-durable goods	7.2%	3.5%	0.3%	4.8%	0.4%
Durable goods	4.7%	-6.5%	-0.3%	-0.5%	0.0%
Services	26.6%	12.2%	3.3%	9.1%	2.5%

Source: GeoStat

MONETARY AND EXCHANGE RATE POLICY 2

2.1 Monetary Policy

Fostering price stability is the primary goal of the National Bank of Georgia.[31] Price stability implies a level of inflation over the medium term that is optimal for high and sustainable economic growth in the long term.

The monetary policy of the NBG follows an inflation-targeting framework. Under the inflation-targeting regime, the target rate of inflation (i.e., the level of inflation optimal for the country) is set in advance. Monetary policy is then conducted in a way that there will always be an expectation of inflation returning to its target rate over the medium term, including from the private sector. While this regime ensures that inflation is close to its target level in the medium term, it also allows inflation to temporarily deviate from the target level in response to exogenous shocks to minimize overall macroeconomic fluctuations.[32] That is why professional circles often refer to inflation targeting as flexible inflation targeting.[33] The complete elimination of short-term one-off factors affecting inflation cannot and should not be the goal of monetary policy, because such a policy would result in excessively high macroeconomic volatility, making it difficult to achieve price stability in the medium term. Monetary policy is a tool to influence demand. That is why central banks mainly respond to demand-side shocks, because responding to supply-side shocks (for example, increases in excise duty, global commodity prices, and international transportation costs) is costly to the economy, leading to fluctuations in economic growth and decreased employment in the long run. It is also important to note that, as Bernanke & Blinder (1992) and Bernanke & Gertler (1995) show, it takes some time for monetary policy changes to be transferred to the economy.[34]

Under the inflation-targeting regime, the monetary policy rate (refinancing rate) is the NBG's main monetary policy tool to achieve the target level of inflation. The monetary policy rate changes according to the inflation forecast. The decision to change the monetary policy rate is made following the analysis of the macroeconomic environment, study of the current situation in the financial markets, forecast of the inflation dynamics, evaluation of macroeconomic risks affecting inflation, and inflation expectations. If the forecast inflation rate is higher than targeted, the NBG will tighten its monetary policy; conversely, if the inflation forecast is below the target, the NBG will loosen the monetary policy. This tactic safeguards price stability and the lowest long-term interest rates. With the development of monetary policy instruments and its transmission mechanism, public spending is also reduced to ensure price stability. That is why the NBG is persistently improving the monetary policy instruments and increasing the efficiency of the monetary policy transmission mechanism.

Monetary policy is implemented in accordance with the Main Directions of the Monetary and Exchange Rate Policy that has been developed by the NBG and approved by the Parliament of Georgia. According to this document, the inflation target has been set at 3% since 2018.[35] Relatively high inflation, compared to developed economies, is a characteristic of transition economies and is consequence of the faster rate of productivity growth in such countries.[36]

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31 Paragraph 1, Article 3 of the Organic Law on the National Bank of Georgia.

32 The term "exogenous shocks" implies external changes that are independent from monetary policy.

33 "Under the flexible IFT framework, strong exogenous macroeconomic shocks did lead to significant deviations of inflation from the target, and of economic activity from potential. But monetary policy instruments were systematically adjusted to bring inflation back to target over time." Clinton, Hlédik, Holub, Laxton, & Wang (2017) Czech Magic: Implementing Inflation-Forecast Targeting at the CNB, IMF Working Paper, p. 30.

34 Bernanke & Blinder (1992) The Federal Funds Rate and the Channels of Monetary Transmission, American Economic Review, Vol. 82, Issue 4, pp. 901-21; Bernanke & Gertler (1995) Inside the Black Box: The Credit Channel of Monetary Policy Transmission, The Journal of Economic Perspectives, Vol. 9, No. 4 (Autumn, 1995), pp. 27-48.

35 Resolution of the Parliament of Georgia on the Main Directions of Georgia's Monetary and Exchange Rate Policies for 2023-2025, paragraph 1.

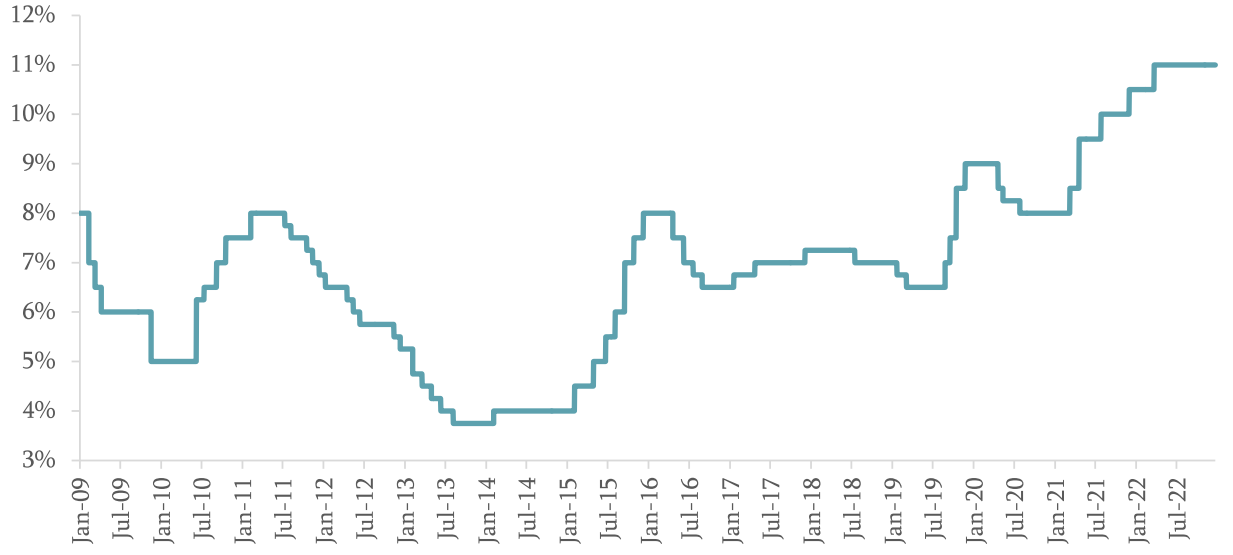
36 Balassa, B. (1964) The Purchasing Power Parity Doctrine: A Reappraisal, Journal of Political Economy, 72, pp. 584-96; Samuelson, P. (1964) Theoretical Notes on Trade Problems, Review of Economics and Statistics, 23, pp. 1-60.

Inflation was expected to decrease globally and in Georgia in 2022. The demand and supply imbalances affected by the pandemic, the disruption of global supply chains, and the higher transportation costs amid logistical disruptions, were all expected to gradually settle. Global inflationary pressure was then predicted to ease as these factors lessened. However, the war started by Russia against Ukraine on 24 February put the world economy, which was still emerging from the pandemic-induced recession, in greater trouble. The new shock widened the demand-supply imbalance on the international market. There were expectations of a major drop in oil supply due to the sanctions imposed on Russia and oil prices thus rose sharply early in the year, reaching a peak in June. Grain prices did the same as Russia and Ukraine were the largest pre-war exporters of grain. According to the United Nations Food and Agriculture Organization (FAO), international food prices peaked in March 2022. These developments caused inflation to rise dramatically on a global scale.

Georgia, as a country with a small open economy, is susceptible to global events, and the higher global prices were echoed in the local market. Early in the year, inflation remained at a high level, and its further reduction came at a slower pace than had been expected before the war. In January 2022, inflation was 13.9%, and by December it had fallen below double digits, although remaining high at 9.8%. The lessening of inflation was largely caused by the decrease in imported inflation: the initial imbalance in the international commodity markets caused by the war was gradually adjusted during the year. An agreement reached on the export of Ukrainian grain to the Black Sea ports helped lower prices on commodity markets, along with the humanitarian corridors created by the European Union. Restrictions on grain exports from Ukraine were lifted in July thanks to the agreement, immediately lowering grain prices and continuing the downward trend in the following months. Later in the year, oil prices also began to decline, and at the year-end had diminished by 34.3%, compared to the peak rate of June 2022. The cost of international shipments also reduced during the year. These trends and the appreciated GEL exchange rate, along with the decline in imported inflation, all acted to reduce headline inflation. On the other hand, the appreciated exchange rate was the consequence of a higher-than-expected increase in foreign demand, as propelled by the large influx of citizens from Russia, Belarus and Ukraine and the gradual recovery of tourism.

In the face of high inflation, monetary policy was tightened during the year as the NBG remained focused on bringing down inflation. The NBG also launched additional macroprudential mechanisms to reduce inflation, which slowed down the growth rate of total credit activity and helped the trend of reducing inflation through this channel. High inflationary pressure and uncertainty on a global scale kept inflationary risks high during 2022, posing risks of an increase in medium-term inflationary expectations. Successive shocks have kept inflation above the target rate for a long time, aggravating risks of the so-called “second round” effect and the growth of medium-term inflationary expectations. As a result, at the Monetary Policy Committee meeting convened on 30 March 2022, the monetary policy rate was increased from 10.5% to 11.0%, and the policy rate was maintained at this tightened level throughout the year (see Diagram 2.1).

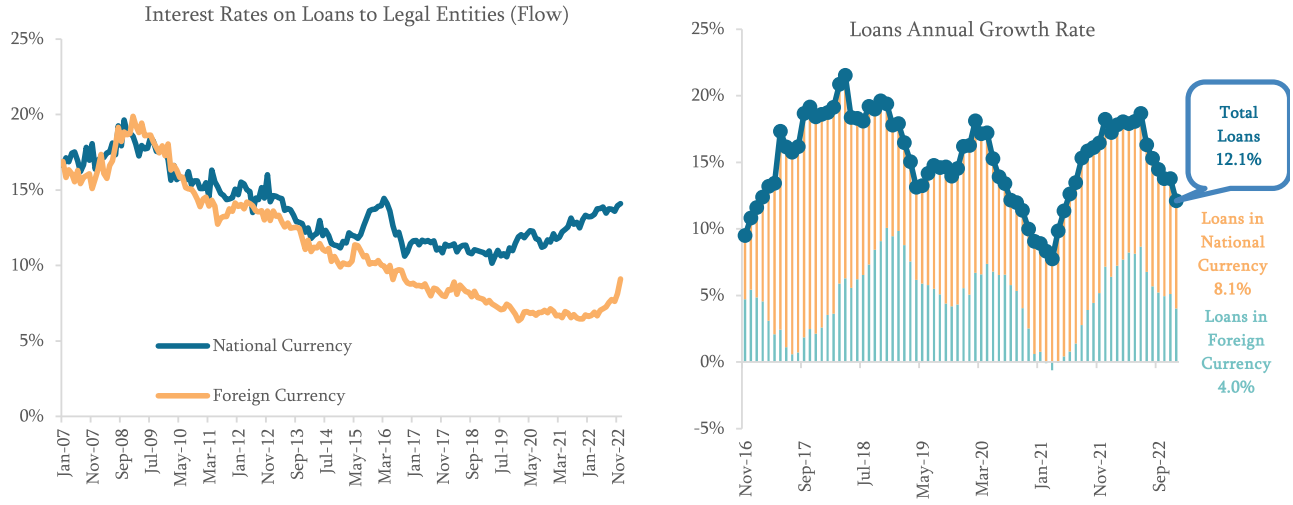
Diagram 2.1 Monetary policy rate



Source: NBG

The credit channel is one of the main mechanisms of monetary policy transmission. In the case of a tightened monetary policy, market interest rates are high, which reduces the incentive to lend and thus suppresses aggregate demand, ultimately lowering the level of inflation. However, despite the maintenance of tight monetary policy since the beginning of 2022, credit activity remained at a high level, which was largely caused by the increase in foreign currency lending. The latter was facilitated by an increase in the spread between the interest rates on GEL and FX loans, making the monetary policy transmission mechanism less effective.

Diagram 2.2 Interest rate spread and credit activity (annual growth rate of loans by currencies)



Source: NBG

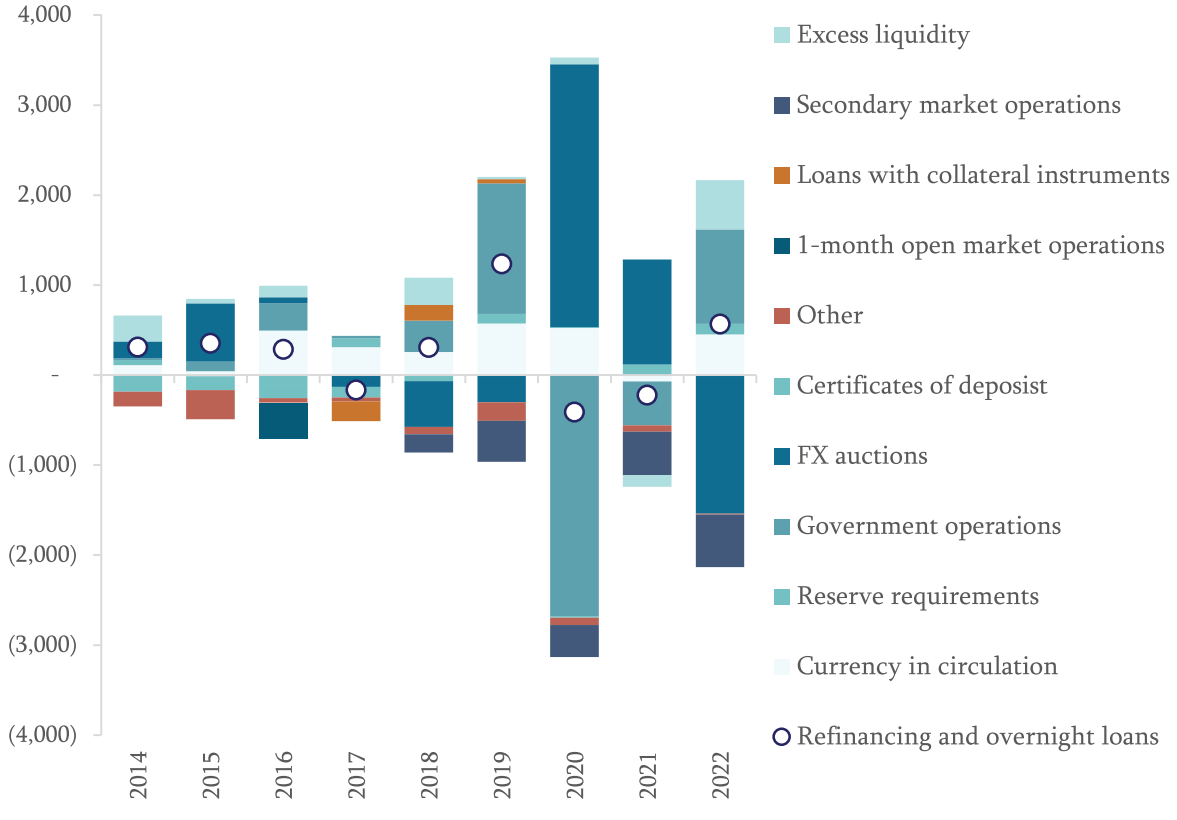
To increase the effectiveness of the monetary policy transmission mechanism, the NBG considered it appropriate to implement additional measures. The accrual of interest on mandatory reserves of funds raised in US dollars and euros, despite the increase in interest rates by the US Federal Reserve System and the European Central Bank, remained fixed at 0%. This made holding foreign currency more expensive for banks, which in turn helped keep interest rates on foreign currency deposits at a low level but pushed up interest rates on foreign currency loans. In addition, the protracted hyperinflationary environment led the top central banks, including the Federal Reserve System and the European Central Bank, to increase their policy rates. That further increased foreign currency interest rates and had the additional effect of tightening the terms for foreign currency lending. As a result, the annual growth of loans passed the peak level and began to decrease later in the year, largely thanks to a slowdown in foreign currency lending. Despite the tightened monetary policy, consumer loans grew at a high rate. To slow down consumer lending, in August 2022 the maximum maturity of consumer loans was reduced from 4 to 3 years. Credit activity showed a downward trend later in the year, and the annual growth rate of total loans slowed to 12.1% by the year's end, which was 6.1 pp less than the indicator of December 2021. This served to slow down aggregate demand, which, together with fiscal consolidation and the appreciated exchange rate, pushed down inflation.

Under the inflation-targeting regime, the operational objective of the NBG is to manage short-term interest rates to safeguard price stability. To ensure the effectiveness of monetary policy, it is important for changes in the policy rate to be reflected in the interbank interest rate and, ultimately, affect the real economy. Short-term interest rates, in turn, are managed using the liquidity management framework. The liquidity management framework of the NBG includes both liquidity supply and liquidity withdrawal instruments. These include open market operations (refinancing loans and certificates of deposit), minimum reserve requirements, and permanent instruments. In April 2020, the NBG launched FXswap, an additional instrument of

liquidity support, to reduce the shock caused by the pandemic and to help maintain the stability of the financial sector. The FX swap instrument was initially intended for use for just one year; however, due to the continued negative effects of the pandemic, it was extended for another year and finally ended in April 2022. The NBG also uses a stand-by swap instrument to provide the financial sector with the necessary liquidity; this allows banks and microfinance institutions to meet the increased demand for GEL liquidity without taking additional risks. The term of the stand-by swap was reduced to seven days instead of one month on 1 May 2022. In addition, as the pandemic-related shocks diminished, a temporary liquidity support instrument to support small and medium-sized businesses was set with a tapering schedule from 2022 to close by the end of 2023. The NBG also continued to issue 3-month certificates of deposit to form the short-term part of the yield curve. As a result, with these operations, the NBG kept the balance of certificates of deposit at a minimum level, within the range of GEL 60-80 million.

In 2022, banks vigorously used refinancing loans to manage their liquidity and balance fluctuations arising from other sources of liquidity supply. The volume of refinancing loans increased compared to 2021, a trend that was influenced by several factors during the year (see Diagram 2.3). As the GEL exchange rate appreciated, the NBG purchased foreign currency using foreign exchange auctions and BMatch, the rule-based bilateral intervention mechanism. The instrument provided the market with GEL resources, reducing the demand for refinancing loans. Also, the NBG's purchase of government securities on the secondary market had a lessening impact on refinancing loans. On the other hand, higher demand for cash and, as a consequence of fiscal consolidation, the operations of the government pushed the growth of refinancing loans. The use of the temporary liquidity supply instruments that had been launched during the pandemic gradually decreased, creating higher demand for refinancing loans. As the use of FX swap operations ended, the volume of loans issued by the instrument in support of the liquidity of small and medium businesses decreased during the year.

Diagram 2.3 Factors affecting the annual change in refinancing loans

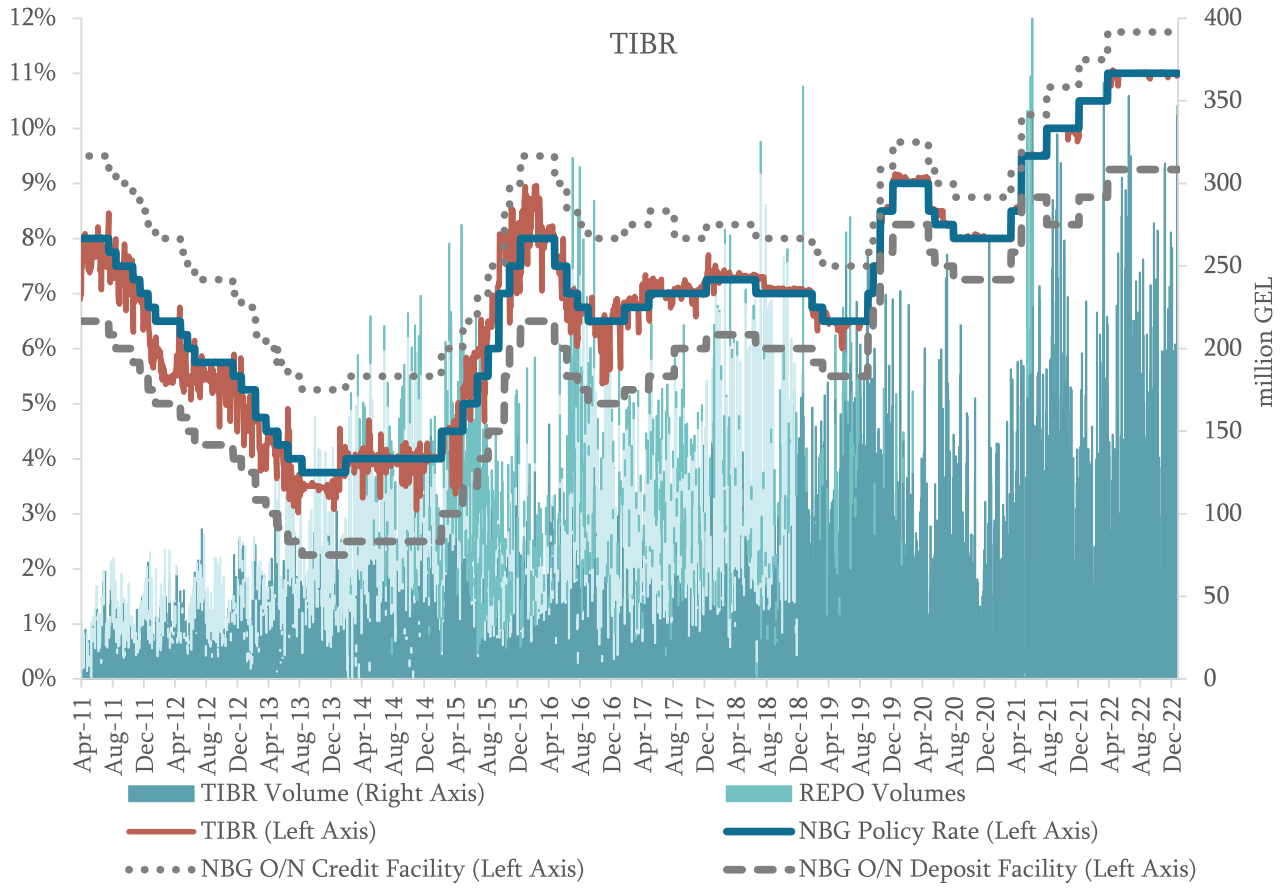


Source: NBG

The NBG used the instruments described above to provide short-term liquidity to the financial sector as needed. As a result, interest rates in the interbank money market remained close to the policy rate. As can be seen in Diagram 2.4, the NBG provided the financial system with the appropriate amount of liquidity during the year.[37] If the system is supplied with less than the required liquidity, then the interbank interest rate increases relative to the policy rate and, conversely, it falls in the case of excess liquidity. This causes greater interest rate fluctuations and the reduced effectiveness of monetary policy. The availability of sufficient GEL resources for the banking system and their effective management is important to encourage GEL lending and to promote de-dollarization (larization), and that, in turn, reduces risks to financial stability.

In 2022, the Executive Board of the International Monetary Fund (IMF) completed its first review of the Stand-by Arrangement (SBA) for Georgia, providing SDR 30 million (about USD 40 million) to be utilized as necessary. This facility for Georgia strengthens the country's macroeconomic stability, reduces inflation, and replenishes fiscal and foreign reserves.

Diagram 2.4 Interbank money market



* The TIBR calculation is an approximation until 2013

Source: NBG

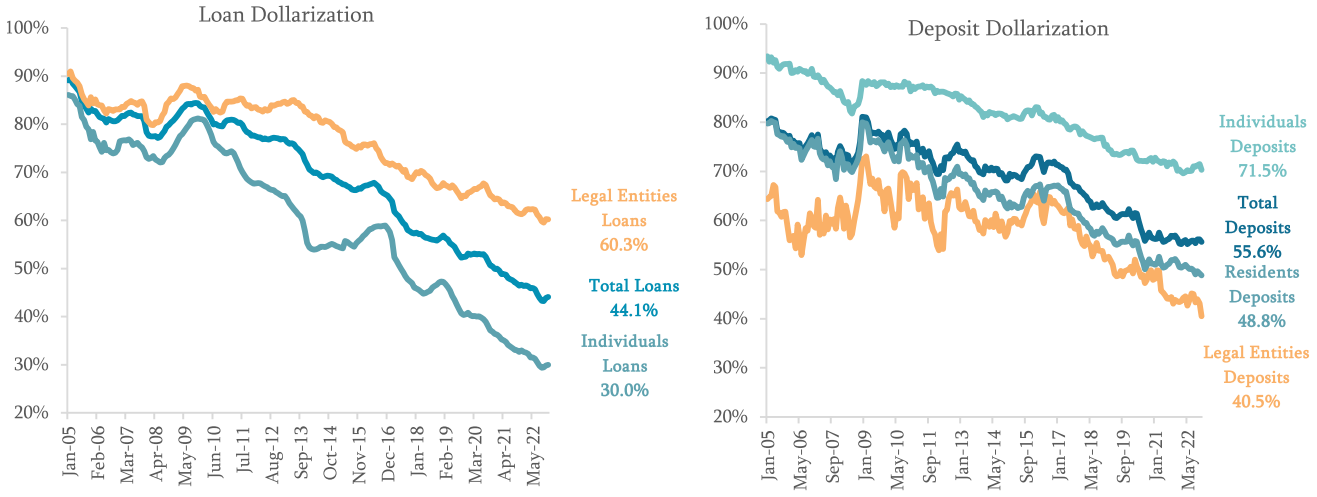
Promoting larization is a long-term goal for the NBG. Dollarization is an important challenge that becomes especially relevant with the increase in GEL interest rates, as a larger spread between GEL and foreign currency interest rates is reflected in higher foreign currency lending. High dollarization limits the effectiveness of monetary policy and contains risks to financial stability. Encouraging larization is a prerequisite for reducing macro-financial risks and increasing resilience to external vulnerabilities. Therefore, the NBG prioritizes the growth of larization and implements reforms to support it.

37 IMF Country Report No. 17/97 (April 2017) https://www.imf.org/en/Publications/CR/Issues/2017/04/13/Georgia-Request-for-Extended-Arrangement-Under-the-Extended-Fund-Facility-and-Cancellation-44834

Larization continued vigorously in 2022 and it is thus important to highlight some of the actions that were undertaken in this direction. Charging 0% on the reserve requirements for funds raised in US dollars and euros acted to reduce foreign currency lending. Furthermore, the maximum term of foreign currency mortgage loans was reduced from 15 to 10 years. Reducing the maturity will speed up the amortization of loans, will reduce credit risks, and promote liquidity. This became even more relevant after the NBG had to significantly increase the monetary policy rate to fight inflation. As most mortgages are variable-rate loans, they are accompanied by interest rate risk, which became more significant considering the prerequisites of a possible increase of interest rates on the US dollar and euro on the international market. To ensure there are necessary buffers to respond to this risk, from 1 May 2022 commercial banks began to consider an interest rate shock of 3 pp when assessing a borrower's solvency for issuing a variable-rate loan. This buffer became increasingly important as the growth of interest rates in developed countries accelerated in response to high inflation.

A detailed evaluation of the actions taken to address dollarization suggests a need to discuss the dollarization of loans and deposits separately. The dollarization of loans initially increased during 2022, when the spread between interest rates on GEL and foreign currency loans was noticeably high; however, the macroprudential measures discussed above subsequently put the dollarization of loans back on a decreasing trend. By December 2022, the dollarization of loans was at 44.7%, 2.5 pp less than in December 2021. In terms of deposits, the high volume of migration due to the Russia-Ukraine war increased the deposits of non-residents, which were mainly denominated in foreign currency. This slowed down the trend of reducing dollarization of deposits. Dollarization of total deposits during the year, excluding the effect of the exchange rate, decreased by 0.7 pp and equaled 56.2%. Meanwhile, the dollarization of deposits of residents decreased considerably towards the end of the year, serving as a positive reflection of the changes made in this direction.

Diagram 2.5 Banking sector dollarization (excluding the exchange rate effect)



Source: NBG

2.2 Monetary Policy Instruments

The implementation of Monetary Policy Committee decisions (tightening, easing, or keeping monetary policy unchanged) is done through monetary operations. The objective of these operations is to keep interbank interest rates stable and close to the policy rate as determined by the Monetary Policy Committee of the NBG. The NBG's operational framework consists of the following monetary instruments: refinancing loans, the one-month open market instrument, open market operations with government securities, overnight loans, overnight deposits, certificates of deposit, and minimum reserve requirements.

The interbank deposit/loan market is the money market where banks can trade in short-term liquidity. This market is of great interest to the National Bank of Georgia, as it plays a crucial role in the functioning of the monetary policy transmission mechanism. The NBG influences interest rates by monetary policy decisions and employing monetary policy instruments.

The Tbilisi Interbank Interest Rate (TIBR) index of the money market is the overnight interest rate benchmark. It is based on actual transactions on the interbank money market, which increases the credibility of the index. The reliability of the index is further enhanced by the involvement of the NBG in the process of collecting information and its calculation. On 14 March 2019, the National Bank of Georgia started publishing TIBR term rates for the use of medium- and long-term instruments in the market as a benchmark (especially GEL variable rate instruments). These are based on the overnight TIBR index and represent a more effective way to manage interest rate risks. In a market economy, the interest rates on financial instruments (coupons, interest) are of different maturities (a month, three months, six months, a year). Management of financial risks arising from exchange rate volatility requires appropriate maturity insurance mechanisms and appropriate maturity indices for pricing. Such indices, in turn, rely on a transparent methodology so market players can trust these as an independent source.

The methodology for calculating the TIBR index and TIBR term rates, which includes procedures for calculating and publishing the indices, was developed in close cooperation with players on money markets and with the help of the EBRD. This methodology also provides procedures for data control and methodology review. The TIBR indices are published daily (at 9 a.m.) on the official website of the National Bank of Georgia.

In 2022, the volume of transactions performed in national currency on the interbank market was 123.0% of the previous year's figure and amounted to GEL 38.3 billion. As the monetary policy rate of the National Bank of Georgia changed, so did the interbank interest rates, moving close to the monetary policy interest rate in 2022. As part of the decisions of the Monetary Policy Committee, and based on the short-term liquidity forecast in the banking system, the National Bank of Georgia sets the weekly volumes of refinancing loans and one-month open market instruments. The NBG manages these processes in such a way that the average interest rate announced at the auction is kept close to the monetary policy rate.

2.2.1 Refinancing Loans

The National Bank of Georgia used the refinancing loan instrument on a weekly basis throughout 2022 to ensure short-term liquidity in the banking system. The refinancing instrument provides adequate liquidity to the banking system. Representing a reliable and low-risk source of short-term liquidity, refinancing loans have positively affected the development of the money market and overall financial stability. GEL liquidity risks in the money market and fluctuations in market interest rates are declining, as is evident from the TIBR interest rate dynamics over the last decade. As the National Bank of Georgia is the sole provider of short-term liquidity in lari on the market, the NBG has the capacity to achieve its desired interest rate on the interbank market with the help of the refinancing loan instrument. The interest rate for refinancing loans offered at auction are based on the NBG's monetary policy rate.

In 2022, the collateral base of monetary operations encompassed certificates of deposits of the National Bank of Georgia, Georgian government securities, lari-denominated securities issued by international financial intuitions, lari-denominated securities issued by legal entities, and loan assets of commercial banks. To qualify for certain operations, the NBG defined appropriate criteria for each type of collateral (in terms of minimum level, residual maturity, currency, etc.). Commercial banks used all types of collateral in their operations with the National Bank of Georgia in 2022.

2.2.2 One-Month Open Market Instrument

Similar to other monetary instruments, the one-month instrument functions to manage short-term interest rates on the interbank market and its use is in line with best international practice and the recommendations of the International Monetary Fund's Technical Assistance Mission. The liquidity forecasting group evaluates the short-term liquidity deficit in the banking system on a weekly and monthly basis, and an auction is then announced, based on which, a specific volume of the one-month open market instrument is offered. The minimum interest rate on this instrument at auction equals the monetary policy rate. The same assets as for refinancing loans are used as collateral.

2.2.3. Overnight Loans and Overnight Deposits

In 2022, the National Bank of Georgia continued to use the interest rate corridor in the interbank market to support the development of the money market, reduce the volatility of interbank interest rates, and increase the activity of the money market. The latter facilitated the interbank market to maintain a stable interest rate. The interest rate corridor was defined as an equal deviation from the monetary policy rate to form the upper and lower bounds of interest rates. The upper bound of the interest rate was used for overnight (O/N) loans of the National Bank of Georgia, and the lower interest rate bound was used for O/N deposits of the National Bank of Georgia. In 2022, the interest rate corridor was 2.5 pp – the monetary policy rate plus/minus 0.75 pp. From March 2022, the interest rate on overnight deposits was defined as the monetary policy rate minus 1.75 pp in order to maintain the advantage of interbank deposits over overnight deposits of the National Bank of Georgia. The use of the interest rate corridor reduces the excessive volatility of interest rates in the interbank market and, in turn, helps bring the interbank interest rate closer to the monetary policy rate.

Overnight loans of the National Bank of Georgia represent the fastest source of liquidity for the banking sector, albeit being offered at a higher price in comparison with the market rate. The collateral base accepted for overnight loans is the same as that for refinancing loans.

Commercial banks can use the O/N deposit instrument to place excess GEL liquidity on correspondent accounts on the National Bank of Georgia's overnight deposits at the end of the day. Such deposits are returned to the commercial banks' correspondent accounts at the beginning of the next business day. This instrument plays an important role in stabilizing interest rates in the interbank market.

2.2.4 Additional Liquidity Supply Instruments

In the context of the pandemic, and to minimize potential liquidity risks to the financial sector, in 2020 the National Bank of Georgia launched the following temporary liquidity instruments: currency swaps, standby swaps, and liquidity supply instruments for small- and medium-sized businesses.

Swap Operations

The National Bank of Georgia continued to use currency swap operations to provide additional liquidity for the banking sector in the first quarter of 2022. The need to apply this instrument was prompted by the problems and uncertainties that arose in the economic environment as a result of the pandemic, which in turn threatened to increase liquidity risks in the financial sector. Swaps were made available to commercial banks and microfinance institutions. In swap operations, the National Bank of Georgia bought foreign currency in the national currency for one month at the spot rate on the condition of selling it back at its forward rate. As the pandemic ended and liquidity risks diminished, this instrument was no longer relevant and was stopped from April 2022.

Currency swap transactions were conducted a total of three times in 2022, with the participation of five commercial banks. The amount of the currency swap operations varied by month and ranged from USD 72-75 million, accounting for 18-18.7% of the resources allocated.

Standby Swap Instrument

In May 2020, the National Bank of Georgia introduced and launched a standby swap instrument for the banking sector. Functioning as an additional liquidity support instrument, and to help insure against liquidity risks, this allowed commercial banks to receive additional lari liquidity on any day at a penalty interest rate. Due to the higher interest rate offered, this instrument was used only in rare instances. Commercial banks only used this instrument once in 2022, amounting to GEL 5 million in total. In May 2022, the maturity of the standby swap was reduced to 7 days.

Liquidity Instrument to Support SME

In June 2020, the National Bank of Georgia launched an additional liquidity instrument to reduce the negative impact of the pandemic on the economy and to support small- and medium-sized businesses. The one-month liquidity instrument offered the possibility of monthly renewals and was used by six commercial banks in 2022. Based on the need for liquidity, the volume of the instrument changed over the months; its maximum was GEL 589.7 million early in the year, while at the end of the year its minimum was GEL 371.9 million. Supply of liquidity through this mechanism was gradually reduced throughout the year. This mechanism of liquidity management

will remain operational until the end of 2023 (with a tapering schedule), with the possibility of a monthly renewal.

2.2.5 Securities

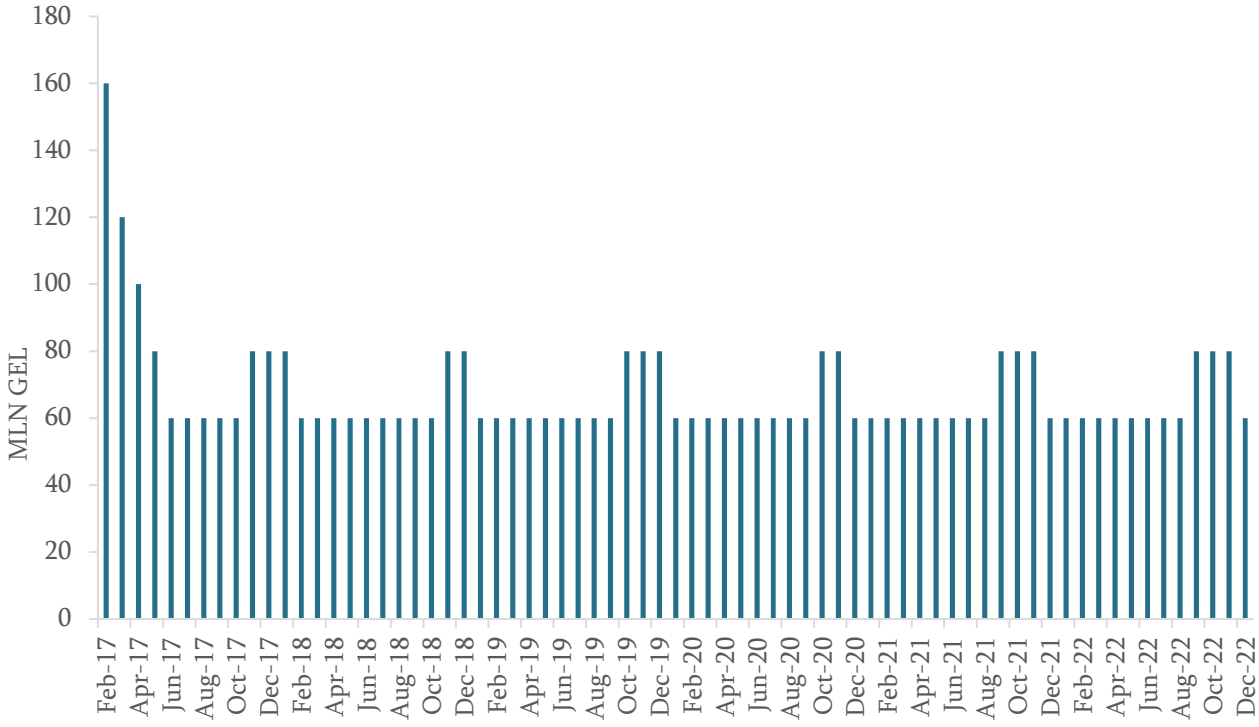
The National Bank of Georgia issued 3-month certificates of deposit, and the Government of Georgia issued 6-month, and 1-, 2-, 5- and 10-year Treasury securities in 2021. These securities were in high demand by commercial banks and helped to establish a stable yield curve. This curve provides important information about interest rates at different maturities and the expectations of financial market players.

Certificates of Deposit

The National Bank of Georgia issues 3-month certificates of deposit, which continued to be used by the banking sector as an attractive and effective short-term liquidity management tool in 2022.

In each of the 13 auctions announced in 2022, commercial banks purchased the full amount of certificates of deposit on offer. In total, certificates of deposit with a nominal value of GEL 260 million were placed and the same were repaid. As of 31 December 2022, GEL 60 million of certificates of deposit were in circulation and were held by five commercial banks.

Diagram 2.6 Volume of the certificates of deposit portfolio



Source: NBG

Government Bonds

As of 31 December 2022, the National Bank of Georgia held government bonds with a nominal value of GEL 152 million. These were not used for open market operations during the year.

Treasury Bills and Treasury Bonds

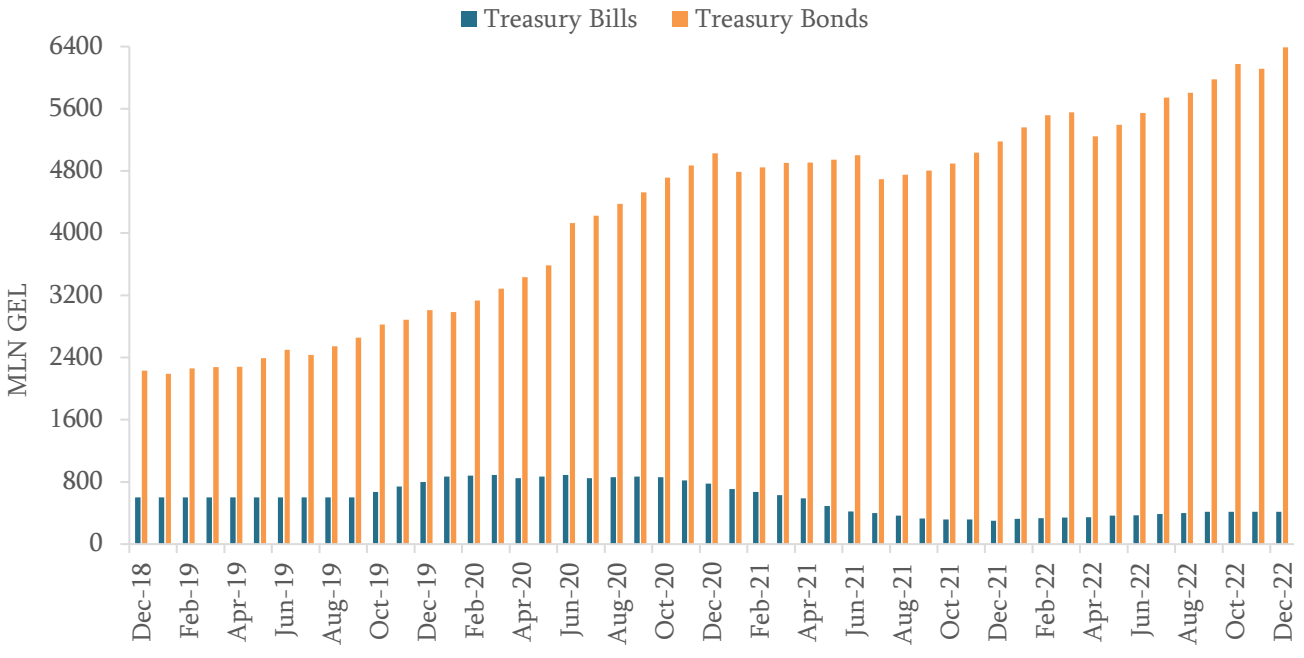
To further develop the GEL money market, it was crucial that the Ministry of Finance of Georgia increased the emission of government securities. In 2022, the Ministry of Finance issued 6-month and 1-year discount securities (Treasury bills), and 2-, 5-, and 10-year coupon securities (Treasury bonds). These securities were denominated in the national currency in dematerialized form. The nominal value of a security is GEL 1,000. The placement of Treasury bills and bonds are executed through a multiple price auction conducted by the NBG via the Bloomberg trading platform. All commercial banks licensed by the National Bank of Georgia can participate directly in an auction and any legal entities or individuals

may also participate using a commercial bank as an agent.

In 2022, 54 auctions of Treasury bills and notes were conducted, and GEL 2.8 billion worth of securities were offered. As of 31 December 2022, 14 commercial banks, the NBG and non-banking investors held GEL 6.8 billion worth of securities in circulation. Non-banking investors held Treasury securities worth GEL 882.0 million.

The volume of government securities in circulation in the market is still small compared to the size of the economy. In order to increase market liquidity, the Government of Georgia has issued 2-, 5- and 10-year benchmark bonds since 2018. This has led to an increase in the issuance of Treasury securities, which contributes to the reduction of foreign exchange risk.

Diagram 2.7 Dynamics of the Treasury bills and Treasury bonds portfolio



Source: NBG

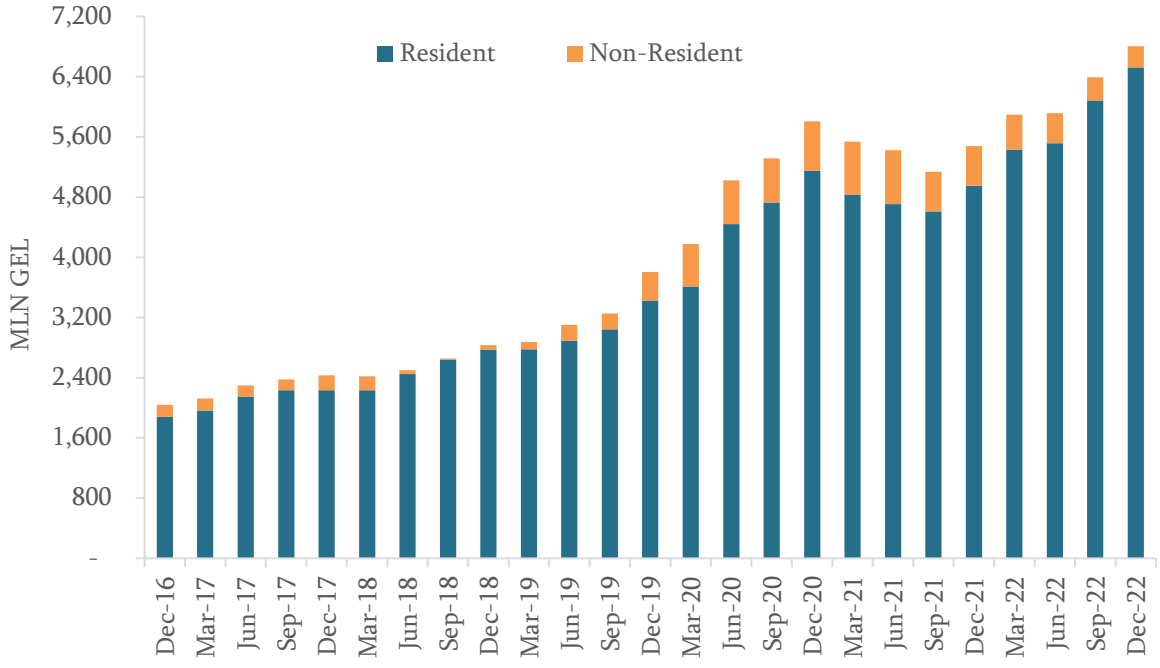
Treasury securities are mainly owned by residents. The portfolio of securities owned by residents amounted to GEL 6,520.7 million as of 31 December 2022, while the portfolio owned by non-residents amounted to GEL 284.8 million.

To provide incentives for the secondary securities market, and in accordance with current requirements, the National Bank of Georgia continued to foster the full functioning of the Georgian Securities Settlement System (GSSS) and its various integrated systems with its own material and intellectual investments.

The interbank repo market, based on the repo master agreement, was established in line with best international practice and was initiated by the National Bank of Georgia in close cooperation with the Georgian banking community. A repo transaction is the sale of securities with a subsequent obligation to sell back the same or equivalent securities under pre-agreed terms. Banks used the Bloomberg trading platform and the Georgian Securities Settlement System (GSSS) to conduct repo transactions. Using these systems, a total of 12 repo transactions were made between commercial banks worth GEL 1,133.7 million in 2022.

The National Bank of Georgia closely cooperates with Bloomberg to support the development of the financial market. Over the past decade, the Bloomberg platform has been dynamically used by both the National Bank of Georgia and local market players. The interbank market started using the new E-Bond platform in 2022, with the active participation of the National Bank of Georgia and commercial banks. Notably, Georgia was the first country where this new Bloomberg platform was introduced. The Bloomberg E-Bond technology solution allows local market players to trade repo transactions using modern technologies. The platform provides the market with all necessary instruments, price quotations, and

Diagram 2.8 Treasury bills and Treasury bonds portfolio dynamics



Source: NBG

analytical data for concluding repo transactions. The platform is integrated through a secure interface with the local GSSS, providing fast and secure settlement of the transactions concluded.

The infrastructure and experience gained in the securities market provide a good basis for the further activation of the secondary securities market, which should lead to an increase in the liquidity of the securities market.

Pilot program for a primary dealer system for the development of the securities market

The development of the Treasury securities market is a strategic focus for the broader development of the Georgian financial market and government debt management. In recent years, the volume of the securities market has been gradually increasing. Benchmark bonds were first issued in 2018, with their volumes gradually increasing.

To take the development of the securities market to the next level, to expand the investor base, and to activate the secondary market, the National Bank of Georgia and the Ministry of Finance of Georgia considered it expedient to establish a primary dealer institute, as observed in international practice. The institute of a primary dealer can act as an important mediator in the securities market, operating between the Ministry of Finance of Georgia (as the issuer of Treasury securities) and investors. A well-developed government securities market will, in turn, help the advancement of the capital market. Primary dealers will take care of the diversification of the investor base and increase the liquidity of the secondary market through regular price updates and the provision of appropriate trade and settlement infrastructure.

The National Bank of Georgia and the Ministry of Finance of Georgia, with the technical assistance of the International Monetary Fund and the World Bank, has spent a great deal of time in recent years preparing a pilot program for primary dealers. A jointly prepared memorandum of understanding was discussed with market players. Ultimately, six commercial banks operating in Georgia expressed readiness to participate in a pilot primary dealer program, and memoranda of understanding were signed with them. The pilot program was launched in November 2020 and its validity period was initially set at 1-1.5 years. The progress of the pilot program is assessed on a regular basis. As it develops further, the results of the pilot will be summarized and future development plans will be outlined.

NBG Operations in the Secondary Market

The National Bank of Georgia works on the improvement and development of monetary instruments and on the liquidity management

framework on an ongoing basis. Buying and selling securities through open market operations is one of the monetary policy instruments that serves the task of managing liquidity.

In 2022, the NBG continued purchasing securities under open market operations in the secondary market. The goal of these operations was to effectively manage the liquidity of the national currency, along with promoting the development of the securities market.

The National Bank of Georgia held 12 auctions during 2022 in which it purchased Treasury securities with GEL 900 million of nominal value. As of 31 December 2022, the securities portfolio held by the National Bank of Georgia amounted to GEL 2,043.8 million, considering the balances of securities repaid in 2022 and acquired in previous years. At the end of 2021, the volume of this portfolio was GEL 1,477.0 million.

2.2.6 Minimum Reserve Requirements

By employing the minimum reserve requirements instrument, the National Bank of Georgia creates a precondition for the effective use of other monetary instruments. Minimum reserve requirements for funds raised in GEL have not changed recently. However, they did change in late 2021 for foreign currency-attracted funds, which stayed in the range of 10-25% during 2022, subject to the level of dollarization at each commercial bank. The higher the dollarization of deposits at a commercial bank, the higher the reserve requirements are for the bank. In terms of residual maturities, funds borrowed in the national currency with a maturity of more than one year and in foreign currency with a maturity of more than two years are exempt from reserve requirements.

Minimum reserves placed in the national currency by commercial banks at the National Bank of Georgia during 2022 were subject to the monetary policy rate (active at that period) accrued on them by the National Bank of Georgia.[38] Before 13 May 2022, US dollar minimum reserves were accrued at 50 basis points lower than the US Federal Reserve's upper policy limit, and at 0% after 13 May 2022 to the year's end. Euro minimum reserves were accrued at 20 basis points lower than the European Central Bank's deposit rate before 15 September 2022, and after that date at 0% to the end of the year.

2.2.7 Development of the Securities Settlement System in Georgia

The Securities Settlement System has been operating at the National Bank of Georgia since 2010. This modern, high-tech, fast, and secure electronic system ensures safe and transparent securities transactions for government- and NBG-issued securities.

Launched on 3 December 2018 and successfully operating throughout 2020, the Georgian Securities Settlement System (GSSS) provides both local and international financial market members with high-quality services. This system can settle the whole spectrum of both public and private securities. Transactions with securities have become faster, cheaper, more convenient and fully protected. This project is a clear example of successful cooperation between the National Bank of Georgia and the private financial sector. The innovative GSSS includes modern approaches such as effective liquidity management mechanisms, partial settlement capacity, netting of reverse transactions, automatized pledging, and intraday liquidity provision mechanisms. All local commercial banks, as well as some brokerage companies, are connected to the GSSS. The system is integrated with the stock exchange and Bloomberg trading platforms and automates the entire trading and settlement cycle. Thus, it only takes a few minutes from the time of a transaction to its settlement. With the introduction of the new system, available procedures and payment procedures, which were based on principles recognized in international best practice, were renewed. Investors' security holdings will now be more securely protected, making it easier and more convenient to convert them into cash if needed (through sales, pledge, or repo operations). This will undoubtedly increase the attractiveness of the Georgian capital market for local and foreign investors.

The updated GSSS allows the integration of the Georgian Central Securities Depository in the system, permits services to be provided to all members of the Georgian securities market, and allows registration and settlement of all types of securities in the system (including bonds and shares issued by private companies). Private securities issuance, repayment, buying and selling, repo, coupon, and dividend payment operations registered in this system are fully

38 Detailed information is available on the NBG's website: https://www.nbg.gov.ge/index.php?m=558

automated, as is their pledging to the National Bank of Georgia or professional market members.

The updated GSSS is expected to make the Georgian financial market attractive for foreign financial institutions and investors, while helping the local securities market infrastructure become more reliable and up to date.

2.3 Exchange Rate Policy and International Reserves Management

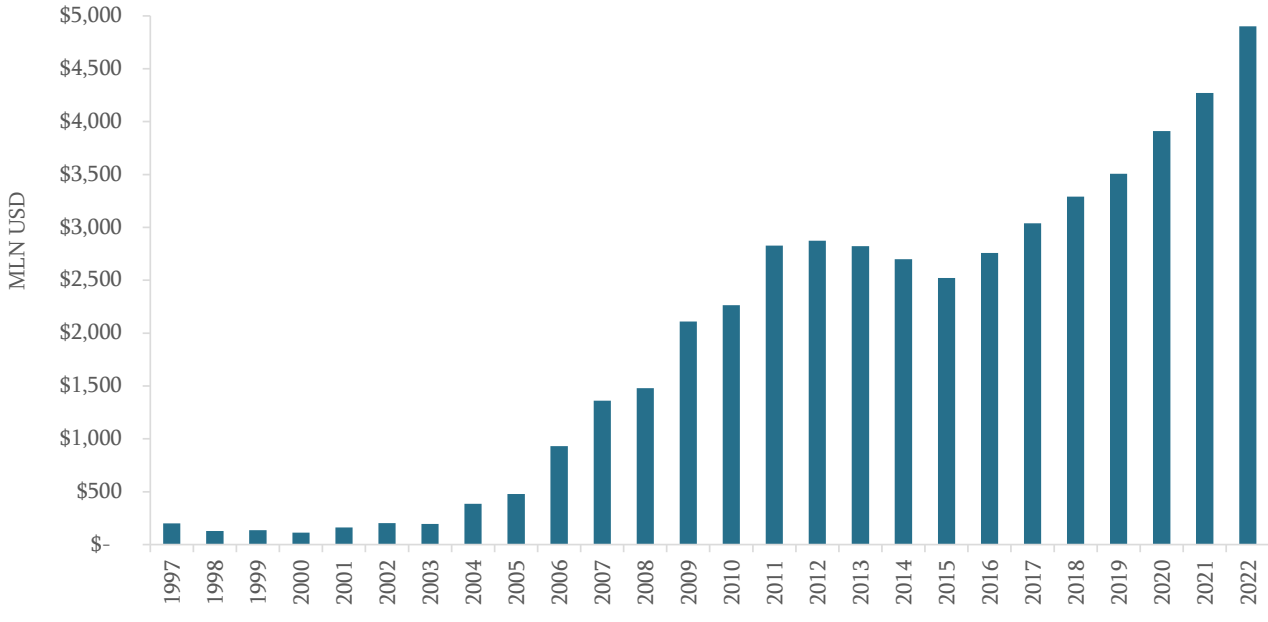
Exchange Rate Policy

In 2022, similar to previous years, the monetary policy of Georgia was based on a floating exchange rate regime, which involves maintaining market pricing principles for the national currency. The exchange rate is thus formed on the basis of market supply and demand and fundamental macroeconomic factors. A floating exchange rate mechanism is recognized as the optimal currency regime for small open economies, like Georgia. The main advantage of this regime for the economy is that the exchange rate functions as an automatic stabilizer and helps reduce the negative impact of external shocks.

Despite the ongoing crisis in the region, 2022 saw the rapid recovery of the country's economy, a solid revival of the tourism sector compared to the previous year, and a dramatic increase of migrants from countries involved in the war. This led to a substantial increase in remittances and additional foreign exchange inflows. During 2022, the National Bank of Georgia intervened in the foreign exchange market through foreign exchange auctions and the BMatch platform to reduce sharp fluctuations in the exchange rate and to maintain reserves at an adequate level. Through foreign exchange auctions, the National Bank of Georgia sold USD 93.8 million and purchased USD 80.0 million during the year.

The National Bank of Georgia also used the BMatch platform, which was launched in 2020, during the reporting period. NBG interventions on the BMatch platform are rule-based and are performed within a pre-defined amount and terms. This allowed a reduction of excess volatility in the foreign exchange market through small-scale interventions, whereas exchange rate fluctuations were caused by low liquidity (low activity) in the foreign exchange market. During 2022, the National Bank of Georgia mainly performed foreign currency purchase operations through the BMatch platform, and the net volume of purchases amounted to USD 578.9 million.

Diagram 2.9 Official international reserves, 1997-2022 (million USD, year-end)



Source: NBG

Net purchases of the National Bank of Georgia in the reporting year thus totaled USD 565.1 million.

The nominal exchange rate of GEL appreciated considerably in 2022, rising by 27.1% YoY, while the real effective exchange rate appreciated by 18.7% YoY.

International Reserves Management

The volume of international reserves of the National Bank of Georgia increased by USD 628.98 million in 2022 compared to the previous year and, as of 31 December 2022, amounted to USD 4.9 billion (see Diagram 2.9).

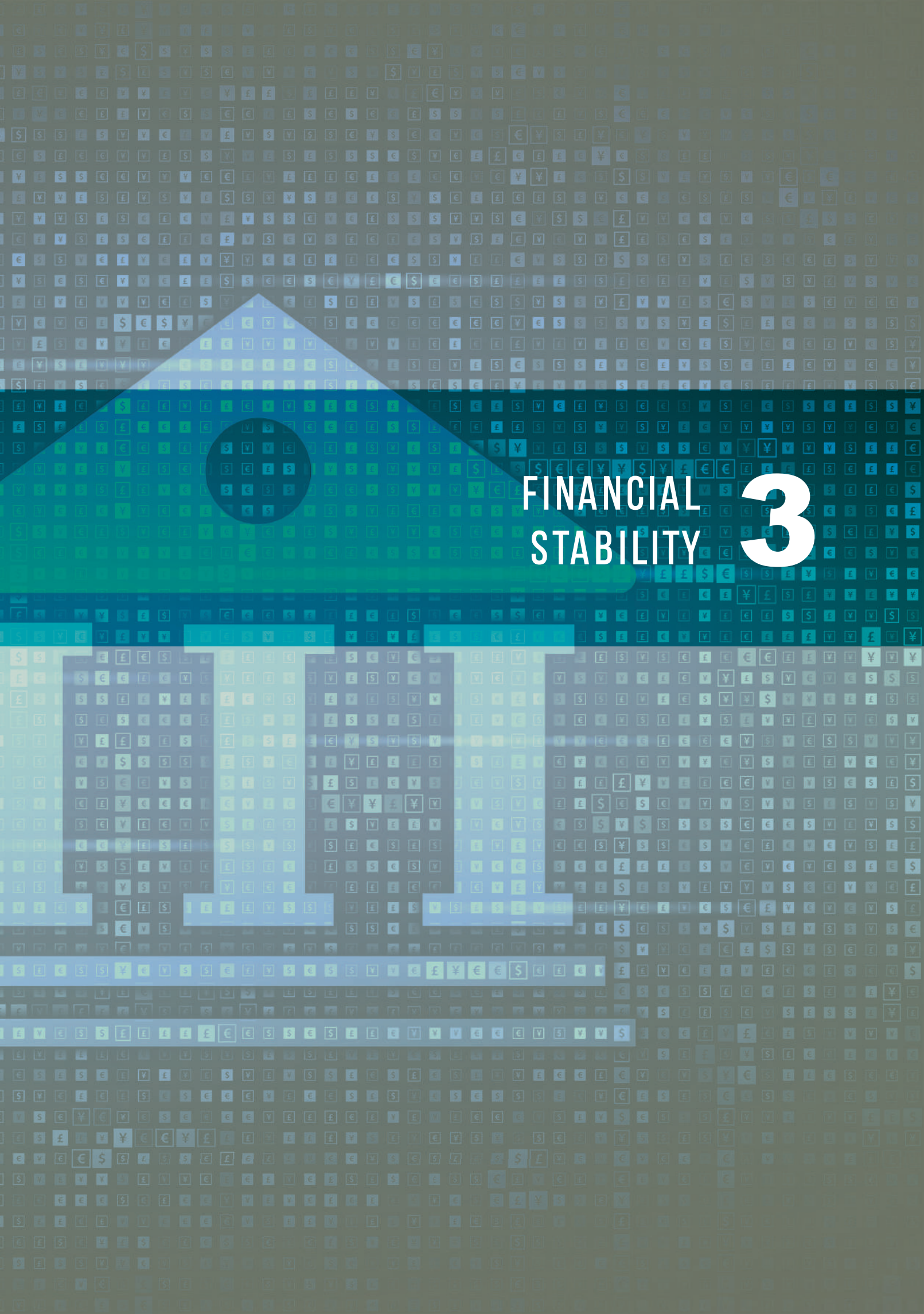
The factors that affected the volume of the NBG's international reserves during 2022 were the foreign exchange auctions of the NBG, the servicing of government debt and FX expenses, credits and grants from international institutions, and the change of balances on reserve accounts. The NBG was a net purchaser in the FX market during 2022: net foreign exchange purchases of the NBG through foreign exchange auctions and Bloomberg's Bmatch platform amounted to USD 564.6 million. The amount of grants and loans received from international financial institutions and donor states in foreign currency to NBG accounts to finance various programs and projects was about USD 520.9 million.

In 2022, the rise in foreign currency deposits of non-residents increased commercial banks' foreign currency funds to protect minimum mandatory reserves. This, in turn, led to an increase in balances on reserve accounts and amplified international foreign exchange reserves. Sovereign external debt servicing and foreign exchange expenses amounted to approximately USD 978.7 million.

The investment policy of the National Bank of Georgia continued to be conservative and focused on reducing credit risks in 2022. The NBG's international reserves were placed in government Treasury bills and high liquidity securities of US, eurozone and Canadian government agencies and supranational financial institutions, and in international credit institutions with high credit ratings. Revenues from the International Reserve Management of the National Bank of Georgia during 2022 amounted to GEL 202.2 million. The sharp rise in global rates late in the first quarter of 2022 had a significant impact on the dynamics of reserve earnings.

The National Bank of Georgia continued its cooperation with the World Bank within the framework of the Sovereign Investment Partnership Program in 2022. The NBG joined this program in 2009. It provides technical support for the further development of international reserves management, infrastructure development, and knowledge accumulation, and includes the World Bank sharing its experience in portfolio and risk management, settlement, accounting, legal, and information technology issues.

The cooperation between the National Bank of Georgia and the Bank for International Settlements (BIS) continued in 2022. The National Bank of Georgia joined its investment program, the BIS Investment Pool (BISIP), in late 2014. The program involves the management of joint funds in a single portfolio involving various central banks and international financial institutions. The BISIP program also includes assistance in reserve management and sharing of experience.



FINANCIAL STABILITY 3

3.1 Financial Stability Policy

Promoting financial stability as a precondition for sustainable economic growth is one of the fundamental goals of the NBG. As defined by the Organic Law on the National Bank of Georgia, the NBG is mandated to maintain financial stability in the country as long as that objective does not come into conflict with its main mandate of maintaining price stability. Financial stability refers to the state under which the financial system can provide crucial services to market players in both good times and times of stress.

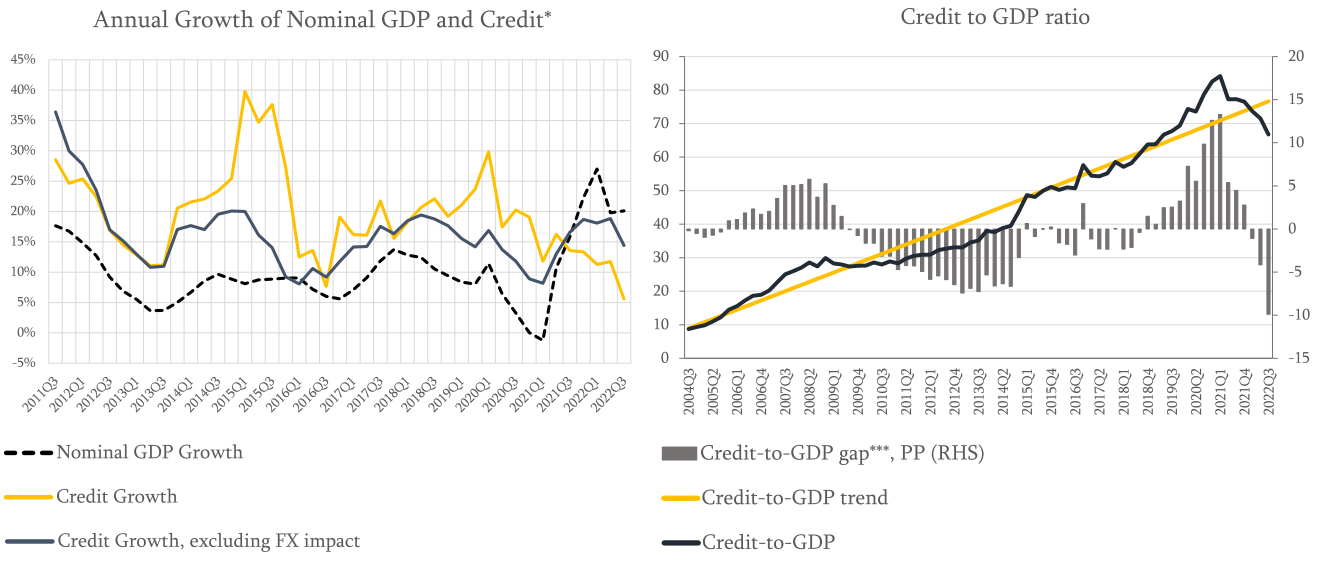
The NBG conducts macroprudential policy with the goal of maintaining financial stability. The NBG identifies, evaluates, and monitors systemic risks and implements corresponding policies to prevent or mitigate those risks, thereby enhancing the resilience of the financial system. The Financial Stability Committee (FSC) of the NBG, which is chaired by the NBG's Governor, coordinates macroprudential policy within the NBG's mandate. The FSC identifies and analyses systemic risks and ways to mitigate them, makes recommendations on the use of macroprudential measures, and coordinates actions that promote financial stability.

The countercyclical capital buffer is used as one of the main macroprudential policy instruments. Its goal is to limit excessive credit growth that leads to the build-up of systemic risks. The countercyclicality of the buffer serves the main purpose of macroprudential policy, which is to reduce systemic risks. In the event of negative shocks, the countercyclical capital buffer should help the financial system avoid a significant deterioration of lending to the economy and thus help prevent a further worsening of conditions in the financial sector and the economy as a whole. In November 2022, the Financial Stability Committee of the NBG, following the recommendation of the Basel Committee, decided to update the framework for setting the countercyclical capital buffer.[39] While the existing standard countercyclical capital buffer base rate is equal to zero and takes a positive value in case of excess lending, the base rate of the positive cycle-neutral countercyclical capital buffer will be positive under normal conditions as well. According to the new framework, the required level of the countercyclical buffer consists of the sum of the neutral and cyclical components. The neutral component has a positive value even in normal conditions, that is, even when the post-crisis economic recovery is complete, lending activity is not excessive, the quality of banking system assets is improved, profitability is stable, and the current trends of the economy are positive. The cyclical component, on the other hand, can be determined against the backdrop of excessive credit growth accompanied by rising cyclical risks. The analysis of the latter depends on factors such as the credit-to-GDP ratio and relevant indicators of its deviation from the long-term trend, lending conditions, various indicators of the cyclical position of the financial sector, and the characteristics of the domestic and foreign macro-financial environment.

By the end of 2022, lending was at a sustainable level and economic growth remained at a high level. The financial indicators of banks also improved, while real estate and rental prices had an increasing trend. Considering these developments, the Financial Stability Committee considered it important for the financial sector to accumulate capital buffers for use during period of stress, as was the case at the beginning of the pandemic. Considering the risks arising from the current situation in the region, the accumulation of capital buffers will help banks in mitigating risks, ensuring financing of the economy during periods of stress, and supporting a rapid recovery. A growing number of countries have already set a positive buffer as a base rate. For these countries, the base rate of the positive cycle-neutral countercyclical buffer ranges between 1-2%. The National Bank of Georgia is actively studying international experience for establishing a positive neutral countercyclical capital buffer and will determine its size at a meeting of the Financial Stability Committee in the first quarter of 2023.

39 See nbg.gov.ge/fm/ფინანსური_სტაბილურობა/კომიტეტის_გადაწყვეტილებები/eng/fsc-pressrelease-q4-eng.pdf?v=5gpx8

Diagram 3.1 Comparison of credit and nominal GDP growth rates



*Loans include loans issued by banks and microfinance institutions, as well as local bonds issued by companies.

** The gap of the credit-to-GDP ratio is the difference between the ratio and its long-term trend. An HP filter is used to evaluate the trend according to the Basel recommendation.

Source: National Bank of Georgia, GeoStat

In addition to the countercyclical capital buffer, the NBG uses other capital buffers that are consistent with Basel III standards. These macroprudential instruments include the payment-to-income and loan-to-value ratios, sectoral risk weights and other instruments.

As a result of the macroprudential and microprudential measures the NBG implemented prior to the pandemic – alongside the financial stability policy introduced after the pandemic and the beginning of the Russia-Ukraine war – the financial sector was able to maintain its resilience and continue smooth lending to the economy. As the majority of banks had already restored the buffers released during the pandemic, they had solid buffers in place to face the threats arising from the regional geopolitical tensions in 2022. The readiness of the financial sector was further supported by the stability of the quality of the banks' assets, which were backed by the macroprudential measures taken in the pre-crisis period to reduce the over-indebtedness of households and limit the dollarization of loans. Following these measures, financial indicators have improved, indicating the soundness of the country's financial system. In the context of the Russia-Ukraine war, direct sanctions only affected one subsidiary of a Russian bank, and the problem was swiftly resolved by selling parts of its assets and liabilities to other banks. The non-banking sector, which is also subject to prudential requirements, remains resilient.

With the improvement of the economic situation in 2022, the credit risk of households decreased compared to the previous year. The deteriorating solvency of households during the pandemic resulted in an increase in the share of non-performing loans; however, with the recovery of the economy, the quality of loans improved significantly. Despite these positive developments, the high growth rate of consumer loans and inflation need to be taken into account. The latter has a negative impact on the real incomes of households. Households with low income and high debt service burdens are particularly vulnerable to this risk. With globally rising inflation, an increase in foreign currency interest rates is also notable, which has a negative effect on households' debt servicing ability. Despite a decreasing trend, loan dollarization remains a major challenge. In response to these risks and to support the rise of borrowers' solvency, the NBG recalibrated certain requirements of the Responsible Lending Regulation in 2022. In particular, the maximum term of mortgage loans issued in foreign currency was reduced to 10 years;

the requirement for 25% of the payment-to-income ratio was extended to persons with an income up to GEL 1,500; consideration of a 3 pp interest rate shock was required when evaluating a borrower's solvency when issuing a loan with a variable rate; and the maximum term of consumer loans was temporarily reduced from 4 to 3 years.

As a result of the measures implemented during the past year and the tightening of monetary policy, lending slowed down. In December 2022, the annual growth of credit, excluding the exchange rate effect, decreased by 6.1 pp compared to the same period of the previous year, reaching 12.1%. Over the past year, the credit-to-GDP ratio also declined, reflecting the effects of high nominal economic growth and exchange rate appreciation. The third quarter of 2022 saw the credit-to-GDP ratio fall below its long-term trend, although its current level in Georgia is comparable to that of peer countries. Preliminary data show that real GDP growth in 2022 was 10.1%, which helps maintain the debt burden at a sustainable level. Restoration of the capital buffers released at the beginning of the crisis alongside the improvement of the level and quality of capital (which had been planned pre-crisis in recognition of the Regulation on Determining Capital Buffers for Commercial Banks According to Pillar 2) acted as a form of countercyclical buffer. In addition, the tightened monetary policy also reduces credit activity in GEL and thus contributed to the reduction of inflation.

3.2 Development of the Financial Stability Framework

The development of the financial stability framework is part of the NBG's mandate to provide financial stability, which is one of the key factors determining the country's economic development. The importance of financial stability and macroprudential policy has increased all over the world in recent years. The global economic crisis caused by the 2020 pandemic, as well as the protracted recovery of the global economy in the face of the Russia-Ukraine war, reaffirmed the importance of financial stability. A sound and efficient framework for financial stability ensures a smooth supply of financial resources, even during periods of economic downturn, and makes a significant contribution to the rapid recovery of the economy. Best international practice requires a comprehensive and in-depth analysis of financial stability, which encompasses not only an evaluation of risks in the banking sector, but also requires consideration of external factors, which have been a source of significant risks in recent years. Financial stability also considers the domestic macro-financial environment, including households, companies, and non-banking institutions.

The NBG continues to develop the financial stability policy framework in accordance with the best international practice of other central banks. As this requires developing adequate analytical capacity, the first step in this direction was focused on developing complex and Georgia-specific financial stability indicators. These indicators are used to make cyclical macroprudential policy decisions. Having done this, the NBG published its macroprudential policy strategy.[40] This reflects the basic principles of the NBG's macroprudential policy and aims to improve the decision-making process, communication, and accountability to the public. In addition, the National Bank of Georgia is continually working on the development of analytical instruments. These instruments are based on international experience as well as on country-specific characteristics. A research paper prepared by the Financial Stability Department in 2020 is important in this regard, as it offers the analytical tools to ensure the timely detection of systemic risks and thus establish a credible macroprudential policy guide.[41]

Macro-financial modeling is another important part of the financial stability analysis framework. The NBG is actively working on the development of a macro-financial model that aims to assess the risks to financial and macroeconomic stability; construct and analyze macro-financial scenarios; and conduct macroeconomic stress tests. This acts as a foundation for appropriate macroprudential policymaking. The development of the financial system and its accompanying challenges are expanding the scope for the application of the macro-financial model and create growing demand for it. The development and advancement of the model is therefore an ongoing process, in which technical support from partner international institutions will be crucial.

Increasing transparency and improving communication are some of the most important aspects of the financial stability framework. The NBG is constantly updating the financial stability

40 Refer to https://www.nbg.gov.ge/index.php?m=738

41 Credit Gap Assessment as a Guide to Macroprudential Policy in Georgia; see bit.ly/36me1EE

section of its website in order to increase public awareness about financial stability policy. Specifically, the website outlines the core tasks of the Financial Stability Committee (FSC) and describes the available macroprudential policy tools; it also provides a calendar of committee meetings, FSC statements and decisions, and information related to IFRS 9[42], the sustainable finance framework, etc.

The NBG also supports the efficient transition of financial intuitions to the new financial accounting standards (IFRS 9). The NBG regularly publishes macroeconomic and financial forecasts and risk scenarios along with quantitative assessments[43] of macroeconomic trends to aid the transparent, consistent and efficient implementation of IFRS 9, and ensure comparability across submitted reports. The estimates provided within these scenarios can be used for calculating expected credit losses. The macroeconomic forecast scenarios for IFRS 9 are based on the macro-financial model and incorporate additional analysis and expert judgment. The provided scenarios are countercyclical by nature, which helps mitigate the potential impact of financial cycles. Given the high uncertainty caused by Russia's invasion of Ukraine in 2022, the NBG released two updates to its forecast scenarios, thus allowing the financial sector to reflect macroeconomic forecast information in their loan loss reserve estimates in a timely manner.

A sustainable financial system is essential for financial stability. This revolves around the effective management of environmental, social and governance (ESG) risks and is one of the main factors contributing to sustainable development. The NBG became a member of the Sustainable Banking and Finance Network (SBFN) in September 2017. Since then, it has been intensively working on developing a framework for sustainable finance.

The NBG continues implementing measures under its Roadmap for Sustainable Finance.[44] The roadmap summarizes all the actions that the NBG had planned to accomplish before the end of 2022. In 2023, the NBG will develop a new roadmap, which will combine the action plan and measures to be implemented over the next few years. The ultimate goal of the roadmap is to provide a credible, predictable and stable regulatory framework and to help prepare the market for a transition to sustainable finance.

In accordance with the requirement established by the Corporate Governance Code, banks disclosed their ESG information using the NBG's template for the second time in 2022. The templates completed by financial institutions in 2021-2022 are published on the NBG website.[45] Banks submit these reports annually, and this will help provide investors and other stakeholders with relevant ESG information.

The NBG published the Sustainable Finance Status Report for 2022. The report has been prepared on an annual basis since 2021 and is published on the NBG website.[46] It provides an overview of current trends, policies, and future plans regarding sustainable finance in Georgia. The NBG's actions are analyzed, current and upcoming projects are described, and the information submitted by commercial banks in the ESG forms is summarized. The report also presents trends related to the issuance of green and sustainable bonds in Georgia and to the capital market in general.

The development of the Sustainable Finance Taxonomy[47] is one of the crucial phases in the development of sustainable finance, and is a step specified in the Sustainable Finance Roadmap. The lack of common definitions and classification systems in this area is recognized as one of the major challenges in the development of sustainable finance. To address this challenge, the NBG approved a taxonomy[48] and the attendant Regulation on Loan Classification and Reporting According to the Sustainable Finance Taxonomy (hereafter the "taxonomy regulation") in 2022.[49]

The taxonomy regulation formally defines green, social, and sustainable loans and imposes reporting requirements on commercial banks for such loans that comply with the taxonomy. The regulation states that, from 2023, a commercial bank can call a loan green, social, and/or sustainable only if it meets the technical criteria defined in the taxonomy. Banks are also obliged to make monthly statements related to green loans in a reporting form as determined by the regulation. The disclosure of information on green,

42 International Financial Reporting Standards (IFRS 9).

43 Refer to https://www.nbg.gov.ge/index.php?m=694

44 Refer to https://nbg.gov.ge/en/page/sustainable-finance-roadmap

45 Refer to https://nbg.gov.ge/financial-stability/esg-reporting-and-disclosure

46 Refer to https://nbg.gov.ge/en/page/sustainable-finance-in-georgia

47 The Sustainable Finance Taxonomy is a document that identifies and classifies activities and economic activities that have positive environmental and/or social impacts.

48 Refer to https://nbg.gov.ge/en/page/sustainable-finance-taxonomy

49 Refer to https://nbg.gov.ge/legal-acts/acts

social, and sustainable loans in the ESG reporting and disclosure form[50] under the Pillar 3 Annual Report must also be done in accordance with the taxonomy regulation. This is expected to ensure the availability of comparable and consistent data on green loans in Georgia and to facilitate the development of the sustainable finance market.

The need to develop a taxonomy for Georgia was prompted by different factors, including the peculiarity of the financial system of Georgia, the development stage of sustainable finance, and the need to consider the urgency of underlying sustainability issues. It was in response to these challenges that the NBG developed the sustainable finance taxonomy. The document integrates Georgia's sustainable development priorities, incorporates international best practice, and includes green and social taxonomies. The definition of technical standards of taxonomy involved industry experts from the Ministry of Environmental Protection and Agriculture of Georgia and the Ministry of Economy and Sustainable Development of Georgia. Consultations with international experts and other concerned stakeholders and obtaining feedback from local financial institutions were also part of this process.

The NBG has launched a new project with the support of the Green for Growth Fund (GGF) Technical Assistance Program that has been implemented by the offices of PwC Georgia and PwC Czech Republic. The project developed screening and reporting tools for effective and consistent implementation of the taxonomy, and the NBG consulted with financial institutions and provided training for commercial banks. In November 2022, the NBG hosted a two-day hybrid Sustainable Finance Forum. The event was organized in cooperation with the International Finance Corporation (IFC, a member of the World Bank Group) and the IFC Sustainable Banking and Finance Network (SBFN), with the support of the Swiss State Secretariat for Economic Affairs (SECO). The first day was dedicated to the Sustainable Finance Forum, which saw about 300 participants from 55 countries attending, including high-rank representatives of EU and SBFN member states and central banks, local financial institutions, international organizations, private and public sector representatives, and other stakeholders. On the second day, a working meeting of SBFN member countries was held. Members of the working group discussed current and future projects. This forum, which was dedicated to the issues of sustainable finance, is the fourth event hosted by the NBG in partnership with IFC/SBFN. The first meeting was held in 2018, and it has since become an annual event, serving as a platform for fruitful discussions among various stakeholders on the development of sustainable finance in Georgia and other countries of the region.

In 2022, the NBG prepared a report on the climate-related risk radar for the different economic sectors of Georgia and its possible application for the financial sector. The report presents the climate risk score of Georgia's economic sectors and assesses, using a risk map, the dependence of commercial banks on the high-risk sectors so identified. The sectoral climate risk assessment includes both acute and chronic physical risks and transition risks. The analysis also considers other environmental, social and governance risks. This project was implemented in cooperation with the German Sparkassenstiftung for International Cooperation and incorporated recommendations and evaluations of local experts. A description of the methodology and detailed results are presented in the report on the NBG website.[51]

Georgia's progress taken in the development of the sustainable finance framework has received international recognition. During 2022, the NBG was invited to attend various sustainable finance conferences and workshops to share their success story. An event organized by the World Bank's Financial Sector Advisory Center in May 2022 was important in this regard: NBG representatives were invited to discuss supervisory challenges and green finance issues in the post-pandemic environment together with representatives of Eastern European and Central Asian partner countries. Also, the NBG's Vice-Governor spoke about the NBG's sustainable finance actions with the Network of Central Banks and Supervisors for Greening the Financial System (NGFS).[52] He emphasized the importance of the sustainability of the financial system for financial stability, which implies the management of ESG risks. The NBG also participated in the regional forum on the "Development of the Green Economy in Central Asia", held in the Kyrgyz Republic, where the issues covered included the development of the green economy, promotion of the sustainable development

50 Refer to https://nbg.gov.ge/financial-stability/esg-reporting-and-disclosure

51 Refer to https://nbg.gov.ge/en/page/climate-risk-radar

52 Refer to https://www.ngfs.net/sites/default/files/medias/documents/ngfs_in_conversation_with_national_bank_of_georgia_papuna_lezhava_final.pdf?fbclid=IwAR1uzCeHhrlZAxoVlqppTIJkC-RwC3gx5ArT9JdthEGUxlNAGmX08-LTTtc

of the region, and the role of the financial sector in the transition to a net zero economy. The NBG representative introduced participants to the NBG's sustainable finance regulations and policies and spoke about the importance of strengthening the role of the financial sector in the sustainable development of the country.

With the NBG making strides in sustainable finance, the Sustainable Finance Division was established within the Financial Stability Department in November 2022. The division will strive to achieve further development of the sustainable finance framework, strengthening the role of the financial sector in this area.

The NBG published the next edition of the Financial Stability Report in 2022.[53] The updated version of the report, which was developed in close cooperation with the International Monetary Fund (IMF), has been published since 2019. The report is based on forward-looking macro-financial analysis and incorporates best international practices. The report presents an assessment of the vulnerabilities and risks in the financial system (with an emphasis on the medium and long term), the structural characteristics of the financial sector, and those aspects of the Georgian economy that are important for financial stability. The Financial Stability Report also includes an analysis of the sustainability of the local financial system. In addition, the report presents in detail the measures taken by the National Bank of Georgia to foster financial stability. Macroprudential measures focused on the entire banking system and microprudential measures aimed at increasing the sustainability of individual financial institutions are both reviewed in detail.

Stress testing is another important part of the financial stability analysis framework. In 2019-2020, the National Bank of Georgia, with the support of the IMF technical mission, advanced the stress test model. The website of the National Bank of Georgia[54] contains detailed information on the key characteristics of the stress test model.

Stress tests are used to assess the resilience of banks to adverse shocks. This tool allows central banks to find ways of mitigating shocks and develop policies aimed at the smooth operation of financial intermediaries in stressful conditions, thereby helping to reduce the duration of the stress and to rapidly restore the economy.

In 2022, the NBG published the revised results[55] of the interactive stress test to assess the financial resilience of commercial banks. The interactive platform allows interested parties to select a hypothetical stress scenario for each macroeconomic variable and to observe the dynamics of these on a commercial bank's capital ratio. The results of the stress test show that in the case of moderate and severe stress scenarios, all banks maintain resilience, while in the extreme stress scenarios, some banks require additional capital to meet the minimum requirements. It is also worth noting that the stress test does not consider the banks' active response to shocks or changes in their business models that might help to mitigate the impact of the shock. However, according to the current estimate, and depending on the current ownership structures, the banks have a good opportunity to replenish their capital. Therefore, hypothetical capital losses do not threaten the stability and resilience of the system. Consideration should also be given to the fact that in the extreme stress scenario, the capital ratio begins to recover in the second year, which, along with the improvement in asset quality, is further supported by sustainable operating profitability.

3.3 Recovery and Resolution Framework

In 2021, the National Bank of Georgia started working on the implementation of the Commercial Bank Recovery and Resolution Framework (hereinafter, the resolution framework).

Intensive work continued during 2022, with the NBG closely cooperating with the International Monetary Fund and the World Bank. Presentations were made on all major issues concerning resolution and recovery during the year as part of the IMF's technical assistance mission, and practical recommendations were developed for representatives of relevant NBG structural units, the Deposit Insurance Agency, and the Ministry of Finance. The World Bank team, as part of the mission, conducted a simulation of the resolution with the involvement of the NBG, the Deposit Insurance Agency, and the Ministry of Finance. The simulation tested preparedness for a financial crisis and gave practical recommendations. The second part of the simulation is planned for

53 Refer to https://nbg.gov.ge/publications/financial-stability-reports
54 Refer to https://nbg.gov.ge/en/page/-top-down-stress-test
55 Refer to https://nbg.gov.ge/en/page/interactive-stress-test

2023 when the implementation of the resolution framework will be tested.

On the recommendation of the International Monetary Fund and World Bank experts, the National Bank of Georgia implemented some structural changes this year. The Resolution and Liquidation Division was separated from the supervision area and became a part of the Financial Stability Department. The separation of supervision and resolution conforms with European practice.

Each member of the banking sector prepared a recovery plan in 2022. These plans describe the recovery measures to be implemented by commercial banks to improve their financial state and to restore and maintain critical functions in the event of significant financial distress and/or the disruption of critical functions. The National Bank of Georgia examined each bank's recovery plan and provided appropriate feedback in consideration of the regulatory procedure and international best practice.

An important element in a commercial bank's recovery plan is the self-assessment of critical functions and, in the event of these being terminated, the assessment of timely substitutability by other market participants, considering the impact of this on counterparties and the real economy.

The following functions are deemed critical for the system:

- ✓ Taking deposits
- ✓ Lending
- ✓ Payment services, cash settlement, clearing, settlement services, and savings services
- ✓ Security market services
- ✓ Wholesale funding

The requirements for recovery plans are regulated by the resolution framework. The document focuses on marking indicators for recovery purposes and calibrating their boundaries, determining recovery measures, testing the extent of financial loss and the effectiveness of recovery measure(s) by using adverse stress scenarios relevant for the bank, and doing preparatory work. The document also focuses on the management of governance issues, with the aim of the early detection of deteriorating financial conditions and the need for further organizational management.

The mandatory categories of recovery plan indicators are as follows:

- ✓ Capital
- ✓ Liquidity
- ✓ Profitability
- ✓ Asset quality

The commercial banks update their recovery plans and the NBG evaluates them on an annual basis. The resulting assessment document is integrated into the overall risk management framework of the banks.

The resolution mechanism, presented with appropriate resolution tools, is an opportunity to resolve a bank in the event of a severe financial crisis. It is used when recovery measures are unlikely to be implemented within a reasonable time and when, to avoid a significant negative impact on the stability of the financial sector, it is advisable to maintain the critical functions of the financial institution while restricting the use of taxpayers' funds.

The resolution authority of the National Bank of Georgia includes the individual or combined use of the following resolution instruments without the need for consent from, or prior notice given to, shareholders and/or creditors:

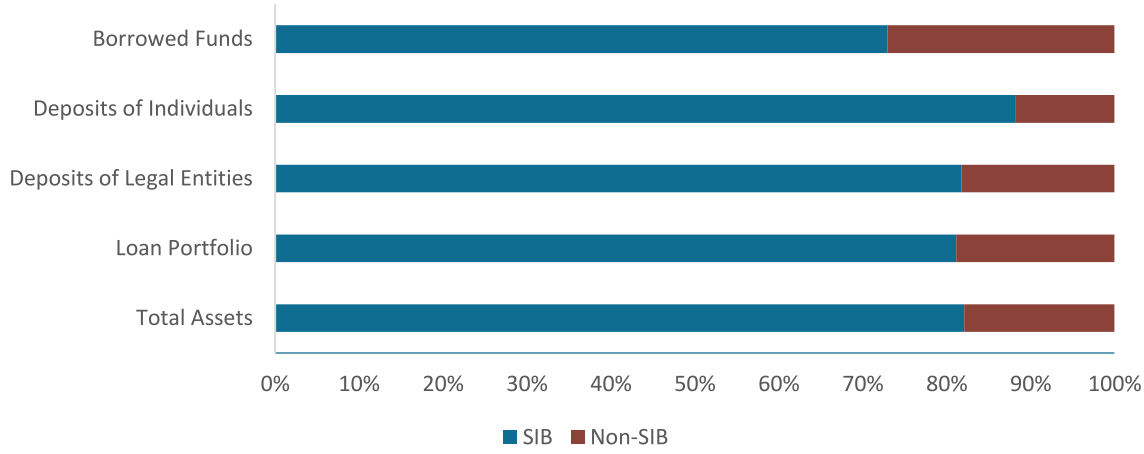
- ✓ The merger of a commercial bank.
- ✓ The sale of shares, assets and/or liabilities of a commercial bank.
- ✓ The transfer of shares, assets and/or liabilities of a commercial bank to a bridge bank.
- ✓ Recapitalization of a commercial bank by issuing new shares.
- ✓ Recapitalization of a commercial bank by means of the write-down or conversion of the bank's liabilities (bail-in).

The peculiarities of the banking sector and the high concentration of systemically important banks reflect their critical economic functions and the attendant need for resolution plans. The NBG thus revised and updated the resolution plans for systemically important banks. Upon the IMF's recommendation, a resolution plan was also developed for one relatively large, non-systemic bank.

The key elements of the resolution plans entail assessing resolvability and determining the preferred resolution strategy. Doing so includes the following: determining plan triggers, qualitative and quantitative analyses of instruments, key phases of the resolution, and core processes. The development and operational organization of resolution instruments remains a topical issue, even in advanced countries, and important work thus continued to operationalize the resolution framework. Upon the IMF's recommendations, the NBG also started work on resolution instruments, the so-called playbooks, and work will continue on these over 2023.

A meeting of the Resolution Committee was held in 2022. No need for resolution in the banking sector, or early warning signs for such action, were identified in the course of the year, nor were any grounds for implementing recovery measures observed.

Diagram 3.2 Concentration of systemic banks in the banking sector (31 December 2022)



Source: National Bank of Georgia

3.4 Interagency Financial Stability Committee

The Interagency Financial Stability Committee was set up in 2020 within the framework of the powers granted by the legislation of Georgia. This new cooperative platform was established in compliance with the principle of independence and is in alignment with the NBG's missions to promote the stable functioning of the financial system, ensure the regular exchange of information, further the development of financial crisis management mechanisms, and enhance effective coordination. The committee is represented by the Minister of Finance, the NBG Governor, the head of the Deposit Insurance Agency, and the head of the State Insurance Supervision Service. The interagency committee is chaired by the Minister of Finance of Georgia, and the NBG performs secretarial functions. The committee holds a meeting at least once a year or at the request of the NBG. The core task of the committee is to develop mechanisms for managing crisis situations and to promote the stable functioning of the financial system.

The 2022 annual meeting of the Interagency Financial Stability Committee focused on the key elements and aspects of the resolution framework, the interaction of the National Bank of Georgia with the banking sector, and the need to enhance cooperation between agencies. The NBG shared information about the dynamics of the financial stability indicators of the banking sector, the current assessment of the credit cycle, and the results of the stress tests. The committee members present at the meeting also discussed and supported the changes to be made to the statute of the Interagency Financial Stability Committee. These were developed based on IMF recommendations and concern making the role of the committee more specific and clearly defining its powers.

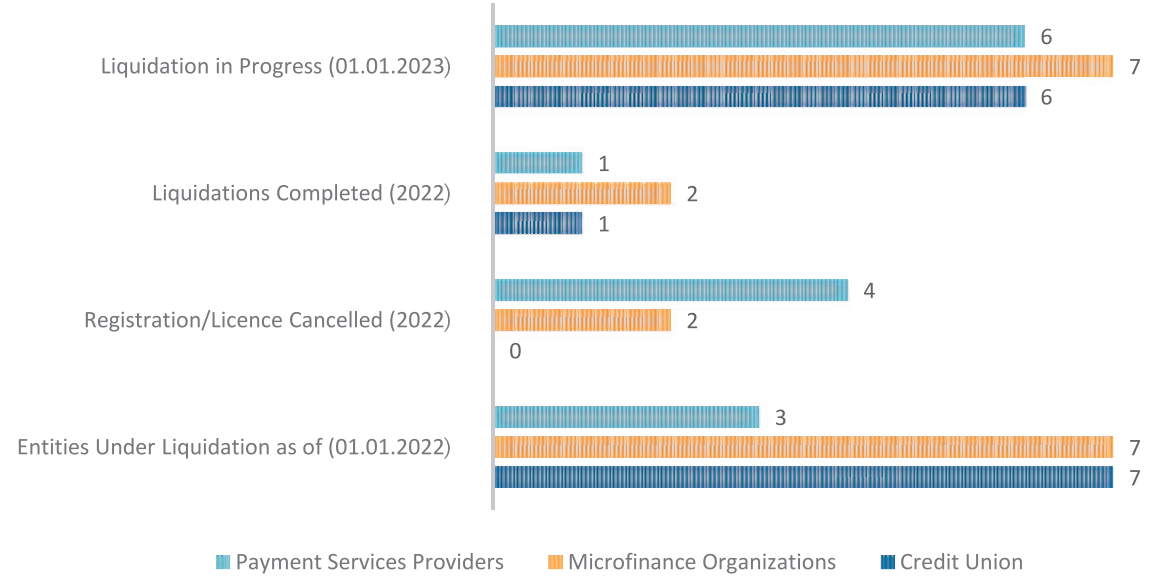
3.5 Liquidation of Financial Institutions

As of 31 December 2022, there were 15 commercial banks operating in Georgia, along with 36 microfinance institutions, one credit union, and 30 providers of payment services. No cases of bank liquidation were initiated in 2022 (the last liquidation in the banking sector was completed in 2019). During and after the liquidation of supervised entities, the National Bank of Georgia records the unclaimed funds from creditors on a special account, administers them and, upon the holder being revealed, ensures the return of these funds to them. The National Bank of Georgia also

manages assets discovered after the liquidation of a commercial bank (in the early years, there were such occurrences where, after a liquidation was completed, the funds received from the sale of such assets were distributed among the remaining creditors of the liquidated bank in accordance with a relevant order[56]). In 2022, proceedings for the disposal of two newly discovered assets of liquidated commercial banks were underway. In one of these cases, the funds partially recovered and distributed to creditors had been paid in previous years. The proceedings related to such assets will continue into 2023.

In carrying out its liquidation functions, the National Bank of Georgia is guided by the applicable laws and decrees in relation to supervisory entities. In addition to the existing legal acts, the National Bank of Georgia also develops procedures and other technical internal control documents that help improve governance during liquidations and make processes more organized and standardized.

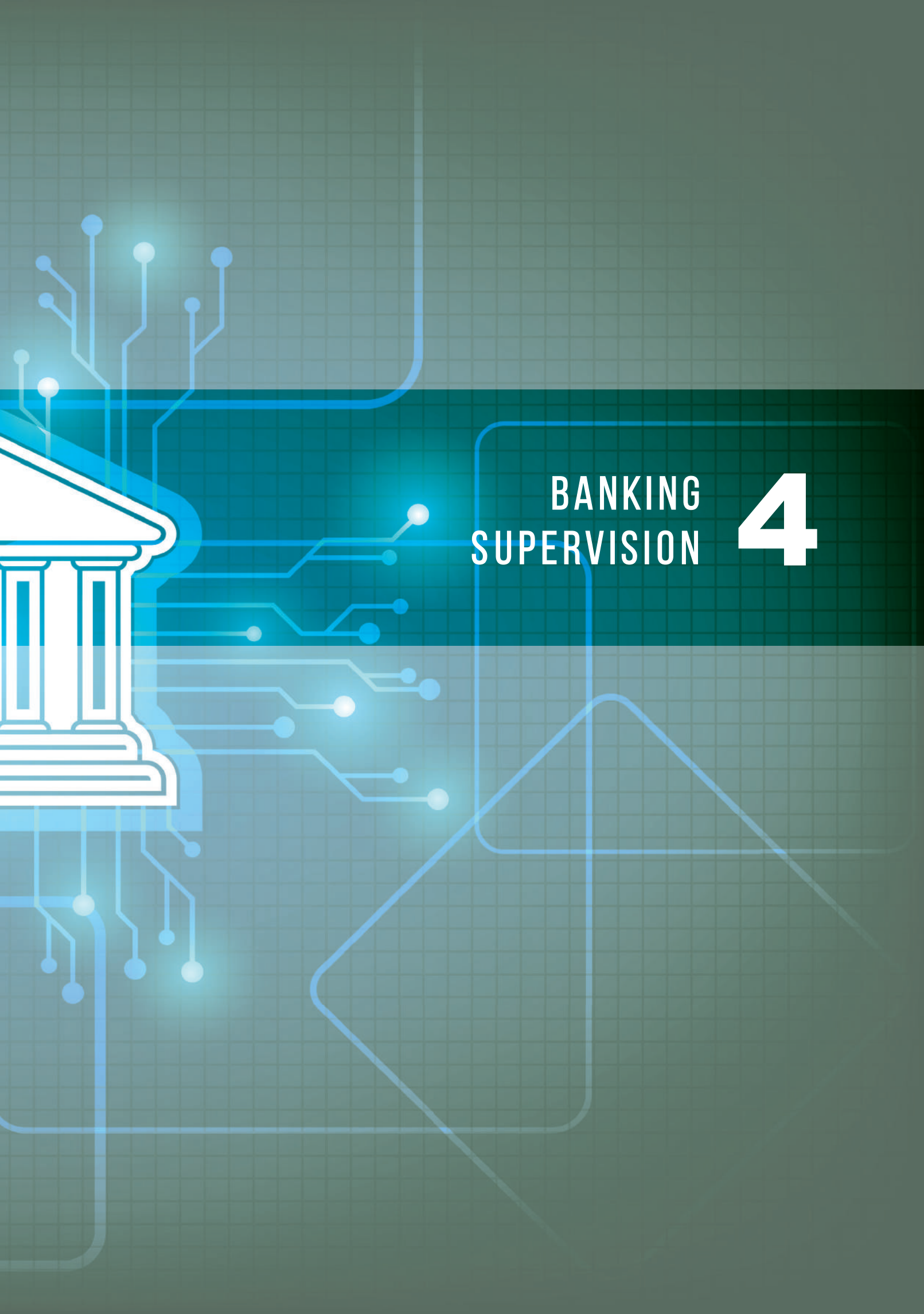
Diagram 3.3 Progress of the liquidation of financial institutions in 2022



Source: NBG

The National Bank of Georgia partnered to initiate a package of legislative changes in 2020-2022 that will be submitted to Parliament for approval. The proposed legislative changes encompass the Organic Law of Georgia on the National Bank of Georgia, the Law of Georgia on Microfinance Institutions, the Law of Georgia on Payment Systems and Payment Services, and several other legal acts. The legislative changes will give the NBG greater authority in terms of the liquidation, insolvency/bankruptcy of microfinance institutions and payment service providers, as well as related to their temporary administration. These amendments give the NBG the sole authority to declare a microfinance institution and payment service provider insolvent and/or bankrupt. This, in turn, will make sure that the claims of the creditors of the microfinance institutions and payment service providers are satisfied in a timely and effective manner. The NBG will appoint a temporary administrator and liquidator for such entities and they will be accountable to the NBG. The supervisory framework of the NBG for the regulation and supervision of microfinance institutions will be strengthened once these legislative amendments are approved.

56 A recovered asset, which was an asset of a commercial bank before the issuance of the individual administrative-legal act on the completion of liquidation, will automatically be considered as an asset of the liquidated commercial bank and the National Bank of Georgia acquires the right to dispose of it (the Law of Georgia on the Activities of Commercial Banks, Article 37(12), paragraph 15).



4 BANKING SUPERVISION

4.1 Development of Supervisory Framework

The primary legislative package for a regulatory framework regarding a new type of supervisory entity, micro-banks, was developed in 2022. The draft Law of Georgia on the Activities of Micro-banks and related legal acts were approved by Parliament and the NBG is actively working on additional by-laws in this direction. The legislative package creates a medium-sized, stable business model and establishes a new, highly reputable financial institution in the financial sector that is orientated towards promoting lending to entrepreneurs and agriculture, increasing competition, and reducing interest margins on credit products.

During the year, the National Bank of Georgia continued to work intensively on improving its supervisory framework, bringing it closer to EU legislation. The September 2022 amendments made to the Law of Georgia on the Activities of Commercial Banks set improved requirements for the licensing of commercial banks, and regarding the suitability criteria of administrators and shareholders, substantially aligning these with the Directive on the Activities and Prudential Regulation of Credit Institutions Operating in the European Union (CRD). These changes were important both for the fulfillment of the obligation stipulated in the Georgia-EU Association Agreement and for joining the Single Euro Payment Area (SEPA).

An additional important step after these legislative changes were enacted was ensuring the compliance of the regulatory acts of the NBG with the updated requirements. At the end of 2022, the NBG thus updated the regulations on the licensing of commercial banks and the suitability criteria of administrators, and adopted a new regulation on the acquisition of a significant share.

It is important to note that the work on the legislative amendments and by-laws involved consultations and discussions with the sector, and a deadline of 1 August 2023 was established to ensure compliance with the updated requirements (Box 2, below, provides details of the legislative amendments implemented).

Box 2 Amendments to Ensure Approximation with EU Legislation

The September 2022 amendments to the Law of Georgia on the Activities of Commercial Banks concerned three important areas:

- Licensing requirements.
- Requirements for the suitability of administrators.
- Acquisition of a significant share and suitability requirements for shareholders.

The amendments ensure the substantial compliance of Georgian legislation with the Directive on the Activity and Prudential Regulation of Credit Institutions Operating in the European Union (CRD). The changes were essentially based on the reports and recommendations prepared by experts from the Polish Financial Supervision Authority (UKNF) within the framework of the Twinning Project supported by the European Union in 2019.

Licensing requirements – technical changes were made to the part of the law regarding licensing criteria. Licensing criteria were defined within a separate article, although the content of the requirements has remained unchanged and still includes the following issues: minimum capital, the suitability of shareholders and administrators, the transparency of ownership/group structure, adequacy of business plans, and the location of head offices.

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An important change to the procedural part of the law included the license application review period being increased from three to six months. Issues related to identifying a defect and for requesting additional information were specified, and a maximum 12-month term for the review of a license application was determined.

The NBG was also authorized to issue a conditional license to a legal entity in order to promote the stability and development of the financial sector (or based on the interests of the banking sector), including the use of essentially new and innovative financial technologies on the local market; and to increase consumer access to financial services. A conditional license is issued by temporarily simplifying the requirements for the licensing of a commercial bank in relation to the minimum capital as established by the legislation of Georgia; but entails the addition of appropriate restrictions or individual/additional requirements in order to reduce possible risks.

Suitability requirements for administrators – part of the suitability criteria for administrators (related to education/experience and reputation) was already defined in the same way as the CRD directive before the changes in the law. The changes serve to improve that criteria and introduce new criteria related to independence of judgment and sufficient time to fulfill one's duties properly.

The allowed number of simultaneously held positions was also changed: one executive position is now compatible with two non-executive positions, holding five non-executive positions is allowed, and positions held in non-entrepreneurial (non-commercial) organizations do not count. In addition, positions held within the same group (a commercial bank, its parent company/companies, and the subsidiary company/companies of a commercial bank) and positions held in the company/companies in which the bank owns a significant share are considered as one position.

The NBG act now contains more specific procedural issues related to the administrator's suitability, the information needing to be presented, and the content of the criteria.

Acquisition of a significant share and shareholder eligibility requirements – this change improves both general issues related to the acquisition of a significant share of a commercial bank and the eligibility criteria for acquirers/owners of a significant share.

Prior to the change, the NBG required notification and permission to exceed a 10%, 25% and 50% share of a commercial bank. The change sets these notification thresholds similarly to the CRD directive, so that exceeding a 10%, 20%, 30% and 50% share of a bank, as well as the acquisition of control over the bank, becomes subject to notification and permission. In addition, more specific definitions of control, subsidiary, and parent enterprise, were adapted as provided by the CRD directive.

The changes also affected procedural aspects: the application review period was extended from one month to 60 working days. Issues related to presenting additional information and identifying the deficiencies in presented documentation were also specified.

There were no significant changes made to the eligibility criteria. The existing law provided for a large part of the criteria even before the changes were initiated. One novelty with the law is that the part regarding reputation will now include an assessment of relevant competence. Also, if a share is purchased in such an amount that would give the acquiring bank the right to appoint administrators, the buyer of the share must consider the compatibility of the persons selected as potential administrators with the requirements for the suitability of administrators at the time that consent was given for the purchase of the share.

Update of legal acts

With the legislative changes implemented in September 2022, the deadline for the National Bank of Georgia to align its legal acts with the updated requirements was set for 1 November 2022. The NBG completed its work on these legal acts in time and by the deadline had approved the updated regulations on the licensing of commercial banks and the suitability criteria of administrators, and the new regulation on the acquisition of a significant share.

The relevant by-laws provide more detail regarding individual concepts, content, and criteria. They also contain information on procedural issues and list the complete information and documentation to be submitted to the NBG for the purposes of both licensing and assessing the suitability of administrators and shareholders.

The issues included in the legal acts were based on the CRD Directive and the joint guidelines of the EBA and the European Securities and Markets Authority on the prudential assessment of acquisition of a significant share[57] and the assessment of suitability of administrators.[58]

Following the FSAP recommendations and the commitment assumed under the Letter of Intent signed in 2022 by the International Monetary Fund, the Government of Georgia and the National Bank of Georgia, the NBG approved the Guidelines on the Definition of Certain Grounds for Application of Supervisory Measures, Early Intervention Measures and Revocation of a Banking License of a Commercial Bank. The guidelines explain some of the grounds for the use of supervisory measures, the use of early intervention measures, and the revocation of a banking license – as defined by the Law of Georgia on the Activities of Commercial Banks – and also define related procedural matters.

The NBG developed new transparency requirements for financial institutions. When offering financial products in combination, financial institutions must now provide customers with complete information about both the combined offer and the selling price of individual financial products. These requirements concern the transparency of prices on combined financial products, helping consumers make the most informed decisions and encouraging market competition.

The National Bank of Georgia published the 2022 edition of the Supervisory Strategy for 2020-2022.[59] The supervisory priorities of the National Bank of Georgia remained unchanged in the 2022 edition of the strategy paper, while the information on already completed activities was updated. The annual strategy document placed particular emphasis on the key tasks and changes in supervisory priorities that are planned for the next 12-18 months. In 2020-2022, the National Bank of Georgia conducted its work in consideration of the following supervisory priorities: strengthening corporate culture to encourage leadership and initiative; strengthening cooperation with stakeholders; promoting the sustainable functioning of the financial sector; approximation to international standards; and the development of a sustainable financial technology ecosystem.

The NBG is intensively working on the institutionalization of supervisory practices, developing and improving a number of internal

57 Refer to https://www.eba.europa.eu/regulation-and-policy/other-topics/joint-guidelines-for-the-prudential-assessment-of-acquisitions-of-qualifying-holdings

58 Refer to https://www.eba.europa.eu/joint-esma-and-eba-guidelines-assessment-suitability-members-management-body-revised

59 For details, refer to 2022 Supervisory Strategy

policies and procedures. The NBG developed an internal procedure for the general risk assessment program (GRAPE) that defines, in detail, the course of the process, the relevant deadlines, the structural units involved, and the decision-making processes. In accordance with risk-based supervision and principles-based regulation, the GRAPE guide was updated to align with best international practices and to incorporate the recommendations of the FSAP assessment. These changes make the risk assessment processes more efficient and transparent.

A number of draft changes and supervision regulations were published on the website of the National Bank of Georgia to give the general public the opportunity to share their comments and recommendations and to permit public consultations. The NBG will continue to publish draft legal acts in this manner, with the process being further improved alongside an upgrade to the website to make it in line with best international practices.

4.2 Corporate Governance and Group Structure Risk

The practical implementation of the changes introduced in the 2021 Corporate Governance Code of Commercial Banks was closely monitored in 2022 to improve the corporate governance of the banking sector and align it with best international practices. Specifically, following consultations with commercial banks, lists of material risk takers, as per the NBG's instructions, were approved by the supervisory boards of the commercial banks. The identified material risk takers became subject to the remuneration policy principles as defined by the Corporate Governance Code, which will significantly limit excessive risk-taking incentives on the part of material risk takers in banks. In addition, compliance with the updated requirements for supervisory boards was monitored, including those related to their functions and duties performed, the number of independent members, and the composition of the committees. Following consultations with commercial banks, the compliance of remuneration policies with the updated requirements of the Corporate Governance Code was also ensured.

The Corporate Governance Code of Commercial Banks was amended on 24 August 2022 to improve gender diversity in the supervisory boards and directorates of commercial banks. From no later than 1 June 2023, banks' supervisory boards should have at least a 33% share of the opposite (minority) sex, rising to at least 40% no later than 1 June 2025. In addition, a recommendation note was added to the Corporate Governance Code regarding the composition of the directorates of banks, stating that they are also desired to have at least 33% representatives of the opposite sex on them. The gender diversity requirement first appeared in the Corporate Governance Code in 2018 (which then stated that at least 20% of the supervisory board should be composed of the opposite sex). As of December 2022, total share of female representatives on the boards of commercial banks is 30%, which is much higher than the currently set requirement. This requirement is based on latest international best practice and various studies. Research finds that there is a negative correlation between gender diversity and risk taking, and women are, on average, more risk-averse than men. It is important to note that, according to the IMF, equal participation of women in the workforce leads to higher economic growth.[60] Also, a high share of women on supervisory boards is associated with greater stability of a financial institution.[61] Adding at least one female board member, according to a study of Leeds University Business School, reduces the likelihood of a company going bankrupt by 20%.[62] Moreover, a consensus of academic research suggests that boards with more women improve corporate governance, decision making, employee communication, customer satisfaction, corporate social responsibility, and reduce misconduct/fines.[63]

One of the requirements of the Corporate Governance Code is the evaluation of a bank's supervisory board. This includes both self-evaluation and periodical evaluations by an external auditor. To assess banks' corporate governance, the NBG closely monitors the findings of these evaluations and studies commercial banks' internal audit functions to ensure their independence and sound functioning. These evaluations will be incorporated into the framework of the general risk assessment program (GRAPE).

Risk assessment of corporate governance and the group structure of commercial banks is part of the GRAPE. The assessment relates to the ownership

60 Refer to IMF Working Paper: Gender Equality and Inclusive Growth
61 Refer to IMF Staff Discussion Note - Women in Finance: A Case for Closing Gaps
62 Refer to Women on boards February 2011
63 Refer to Journal of Corporate Finance: Gender diversity and bank misconduct

structure of the bank, risks related to the bank's investments, and transactions completed within members of the banking group. As part of the assessment, the National Bank of Georgia monitors developments in the parent countries of the international banking groups represented in Georgia and assesses investors who own significant shares.

In response to Russia's hostile military actions in Ukraine and the subsequent imposition of sanctions on Russia, the National Bank of Georgia conducted a thorough examination of the banking groups and operations within the countries where the banks licensed in Georgia originated. This analysis aimed to ensure the proper transfer of underlying risks to the banks. As a result of the sanctions imposed on Russia, VTB Bank Georgia JSC was affected. To safeguard the depositors and borrowers of VTB Bank Georgia JSC, necessary measures were taken to transfer them to Basisbank JSC and Liberty Bank JSC.

The NBG also worked on updating the Conflict of Interests regulation and developed a draft of important changes. Related party transactions and their compliance with the requirements of the regulation are now part of the corporate governance and group structure risk assessment of commercial banks.

A new digital bank, Paysera Georgia JSC, was licensed in November 2022. The business model of the bank is based on integration with the financial system of the European Union and involves offering innovative digital products to clients. Paysera Georgia JSC will work in a test mode for four months after licensing and will have limited banking activity in the real environment. The bank will be authorized to undertake banking in a real mode gradually, following the fulfillment of licensing requirements and subject to the NBG's approval.

As of 31 December 2022, 15 commercial banks were operating in the banking sector of Georgia after Paysera Georgia JSC was licensed. The share of non-resident owners in the assets of these banks, by final ownership, is 87.9%, and 87.4% in equity.

The NBG continues to work on the consolidated supervision framework, scheduled to be completed by the end of 2023. Legislative changes made to the Organic Law of Georgia on the National Bank of Georgia at the end of 2017 gave the NBG a mandate to perform supervision at the level of the banking group (so-called consolidated supervision).

Following a global trend, banking groups in Georgia have started developing electronic trading platforms and relevant ecosystems. The National Bank of Georgia has thus developed additional requirements for banks to promote transparency and sound competition between banks and such electronic platforms. A draft of these regulations has been shared with stakeholders for consultation.

4.3 Capital Adequacy

By the end of 2022, the banking system of Georgia continued to maintain an adequate level of capital within the Basel III capital adequacy framework and in consideration of the supervisory measures related to COVID-19.

In November 2022, the Financial Stability Committee of the National Bank of Georgia decided to update the framework for establishing a countercyclical capital buffer considering the recommendations of the Basel Committee on Banking Supervision (BCBS).[64] This implied the establishment of a positive cycle-neutral countercyclical capital buffer to accumulate capital buffers in periods of stress (see Box 3).

In January 2023, the regulation on establishing a systemic buffer for systemically important commercial banks was updated, setting points for systemic importance and relevant weights. The new regulation set system buffers for three banks at the following rates:

Commercial Bank	System Buffer Rate
Bank of Georgia JSC	2.5%
TBC Bank JSC	2.5%
Liberty Bank JSC	1%

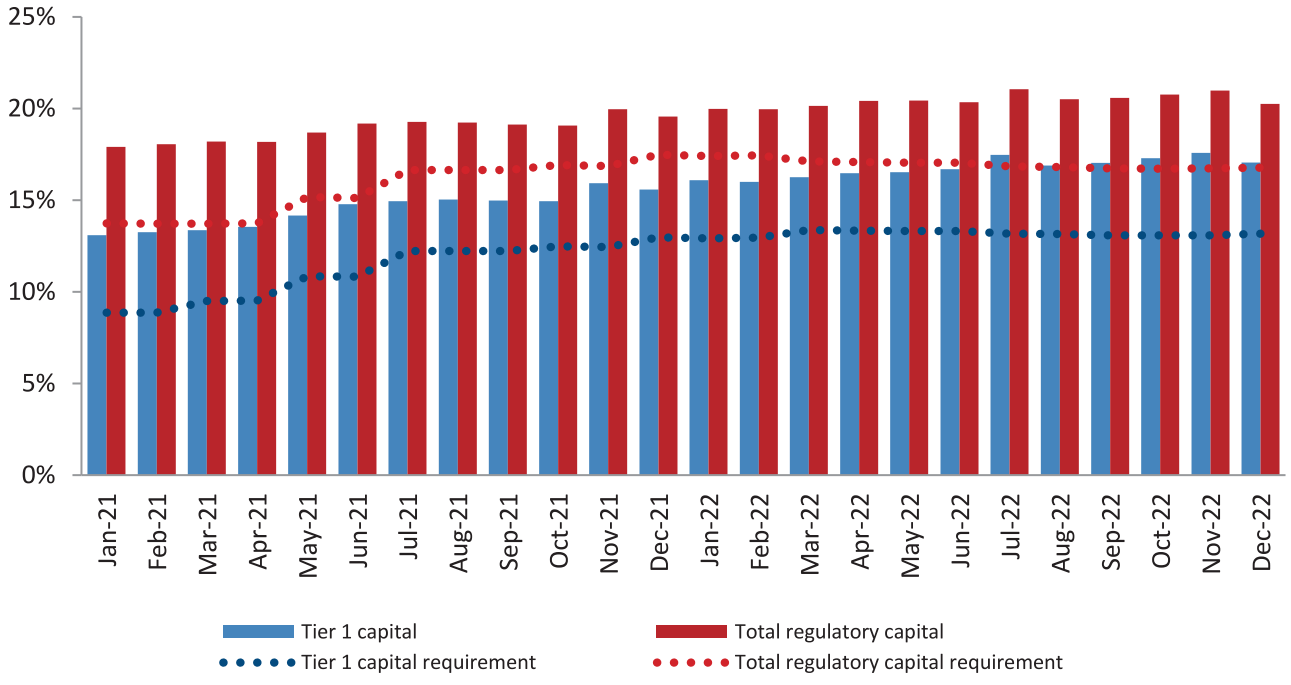
If a bank's market share in deposits exceeds 40%, the system buffer will increase to 3%. In the event of that happening, banks will have 12 months to satisfy the increased requirement.

As of 31 December 2022, the Tier 1 capital ratio was 17.06% and the total regulatory capital ratio was 20.25%, which was 3.88 pp and 3.47 pp higher than the respective total capital adequacy requirements.

As of 31 December 2022, the leverage (capital-to-assets) ratio was also high, equal to 12.97% and exceeding the requirement by 7.97 pp.

64 Buffer usability and cyclicality in the Basel framework, October 2022 - https://www.bis.org/bcbs/publ/d542.pdf

Diagram 4.1 Capital adequacy ratios under Basel III



Source: NBG

The Pillar 2 framework defines the capital buffer requirement for loan portfolio concentration risk (both nominal and sectoral concentration risks), the foreign currency-induced credit risk buffer (CICR), the net stress test buffer calculated based on supervisory stress tests, and the procedure for determining the net GRAPE buffer established by the National Bank of Georgia under the general risk assessment program.

It is important to note that the capital buffers imposed under Pillar 2 (except for the credit risk adjustment (CRA) buffer) are required to be complied with the same proportion of regulatory capital elements as required by the minimum requirements (CET1 capital: 4.5%, Tier 1 capital: 6%, and total regulatory capital: 8%). Accordingly, 56% of the capital required under Pillar 2 must be observed by CET1 capital elements and 75% by Tier 1 capital elements. Commercial banks were given appropriate deadlines to comply with these requirements (see Table 4.1)

Table 4.1 Concentration and net GRAPE buffer phase-in dates before COVID-19-related supervisory actions

Concentration (nominal and sectoral) and net GRAPE buffers	31/03/2021	31/03/2022	31/03/2023 and onward
CET1 Capital	30%	45%	56%
Tier 1 Capital	40%	60%	75%
Total Regulatory Capital	100%	100%	100%

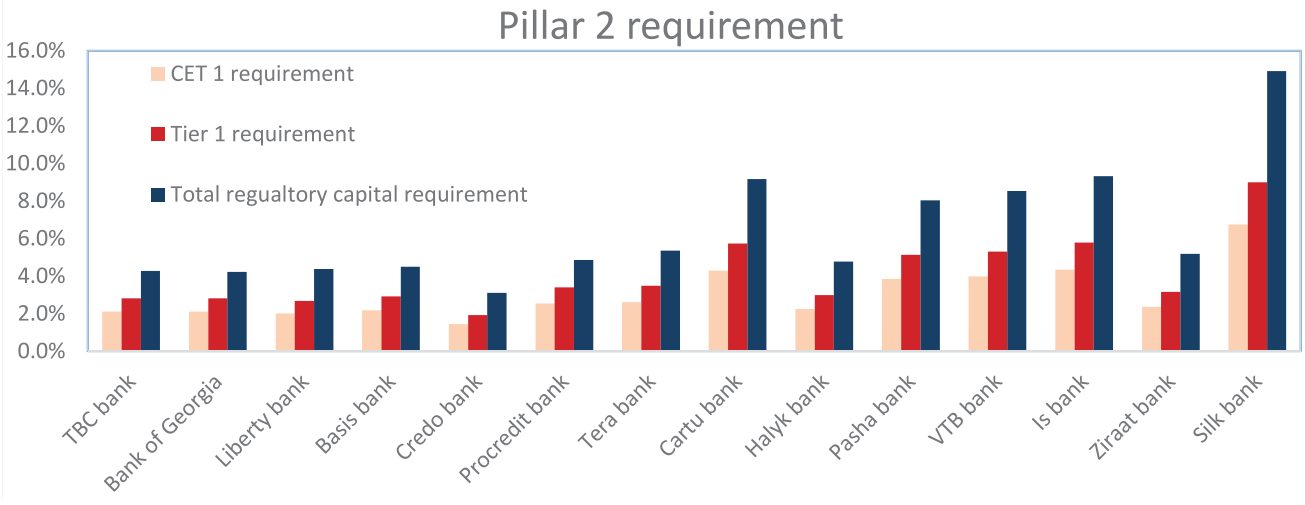
The buffers released at the beginning of the COVID-19 crisis started to be restored on 1 January 2022. Banks were given a deadline of 1 January 2023 to restore the CICR buffer, and until 1 January 2024 to meet the capital conservation buffer requirement. Despite this restoration plan, as of 31 December 2022, most banks had already restored the mentioned buffers, and only five commercial banks still used the capital release. Banks were also actively raising capital instruments, both in the form of Tier 2 and Additional Tier 1 (AT1) capital instruments in 2022. AT1 capital instruments were issued by two banks, one of which is a so-called "green" capital instrument (which implies its use to fund green initiatives).

Despite a considerable decline, dollarization remains one of the main challenges for the financial sector. To address this, a new methodology for calculating the CICR buffer was approved in March 2022, which will become mandatory from March 2023. With this change, whenever a bank's dollarization is 40% or less, the additional risk weight will be equal to 40% (instead of 75%), and every one pp increase in a bank's dollarization will increase the additional risk weight by 3 pp, up to a maximum of 100%. At the transitional stage, the CICR calculation scheme at the system level will not lead to a material change in the capital requirements for the banking system as a whole; however, the buffer requirement for individual banks will change depending on their level of dollarization.

The NBG did not impose a net stress test buffer in 2022, since the NBG's approach to the capital adequacy framework involves a countercyclical distribution of requirements (i.e., the accumulation of capital buffers in periods of economic growth and their release in periods of stress). However, based on the results of the updated stress tests, and if the environment allows it, the National Bank of Georgia will consider setting a stress test buffer in 2023.

The net GRAPE buffer, which was launched in 2018, is set as part of the continuous risk-based supervision cycle and assesses the risks of commercial banks. The GRAPE is used to assess the risk profile of each commercial bank. In August 2022, NBG updated the net GRAPE buffers and individual GRAPE buffers were then determined in the range of 1.3-9.3% of risk-weighted assets.

Diagram 4.2 Pillar 2 aggregate requirements for commercial banks as of 31 December 2022[65]



Source: NBG

The NBG continued to align capital adequacy standards with EU regulations in 2022. As such, a preferential weighting in the amount of 35% was added to the capital adequacy standards in relation to risk positions towards the beneficiaries of state funds (e.g., pensions).

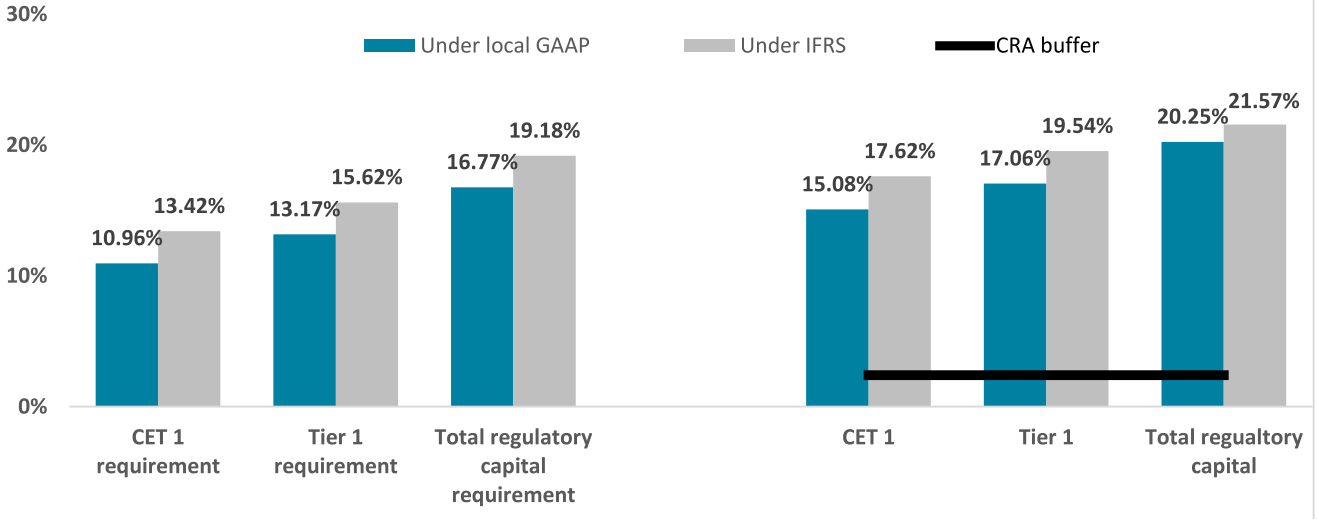
Under the 2020-2022 Supervisory Strategy, the transition of commercial banks' supervisory reports

65 The requirements of Pillar 2 are given under the COVID-19 regulatory measures, taking into account the reduction of the currency-induced credit risk (CICR) buffer requirement.

to International Financial Reporting Standards (IFRS) was one of the most important priorities for harmonization with international standards. Over these years, the NBG has developed the concept and identified the changes required for transition to IFRS. The Regulation on Identifying Risk Categories of Financial Instruments and Expected Credit Losses was approved, and changes were made to the relevant decrees. These were enacted on 1 January 2023. Having transitioned to the IFRS, commercial banks must comply with the supervisor's regulations and the methodology based on IFRS. As a result, the supervisory reporting of Georgian banks became more relevant and comparable to that of developed countries.

The stated principle of the NBG is that, when transitioning to IFRS, other things being equal, a neutral approach to the cost of regulatory capital should be maintained. This principle was introduced so that the changes in accounting standards would not cause additional capital costs for the banking sector. At the same time, banks' capital positions should not deteriorate. A neutral approach to the cost of capital implies reducing the buffer on total regulatory capital in the banking system at the expense of increasing the capital surpluses on CET1 and Tier 1 capital (see Diagram 4.3). For this purpose, a credit risk adjustment (CRA) buffer was introduced and a procedure for its calculation was included in the Regulation on Determining Capital Buffers for Commercial Banks under Pillar 2. The CRA buffer serves to reduce the credit risk caused by insufficient expected credit loss provisions for assets and to determine an adequate capital buffer.

Diagram 4.3 Capital adequacy indicators and requirements by local accounting standards and IFRS



Source: NBG

4.4 Financial Reporting and Transparency

The transition of commercial banks' supervisory reports to International Financial Reporting Standards (IFRS) was part of the 2020-2022 Supervisory Strategy. By switching to IFRS, the public and supervisory reporting of the banking sector will be closer to the practices of Europe and other developed countries. The transition to IFRS requires commercial banks to comply with supervisory regulations with IFRS-based numbers and methods. Respective changes to the regulatory framework entered into force on 1 January 2023.

The Regulation on Identifying Risk Categories of Financial Instruments and Expected Credit Losses is based on IFRS 9 and specifies the approach for commercial banks to follow when using IFRS 9 in supervisory reporting. The introduction of the regulation will support the comparability of the approaches to calculating expected credit losses of the financial instruments of commercial banks and help improve financial reporting. In formulating this regulation, the National Bank of Georgia worked closely with commercial banks, the Bankers' Association, auditing firms, and World Bank consultants.

Box 3 The Revised Framework for the Countercyclical Capital Buffer

The countercyclical buffer is a capital element recommended by the Basel Committee on Banking Supervision (BCBS). The buffer is set based on the deviation from the long-term trend of the loans-to-GDP ratio. The other metrics used to set it are lending trends, other indicators of the cyclical position of the financial sector, and characteristics of the country's internal and external macro-financial environment. Moreover, instead of a mechanical and automated approach, this methodology relies on expert judgement.

The COVID-19 pandemic has reaffirmed the need for a countercyclical capital buffer. Most countries with a positive countercyclical buffer requirement reduced it after the start of the pandemic (as some countries with other capital requirements). However, other countries had no countercyclical capital buffer in place before the pandemic, as indicators did not clearly point to a need to increase capital.

The positive cycle-neutral countercyclical capital buffer proposed by the Basel Committee[66] serves to eliminate these shortcomings. It is a buffer that can be released during stressful circumstances and is not related to credit growth.

If the standard countercyclical capital buffer base rate is zero, the positive cycle-neutral countercyclical capital buffer base rate should be positive in normal times. A growing number of banking authorities, such as those in Australia, the Netherlands, Sweden, the UK, Hong Kong, Estonia, Lithuania, and Ireland, have introduced a positive buffer of between 1% and 2% as a base rate.

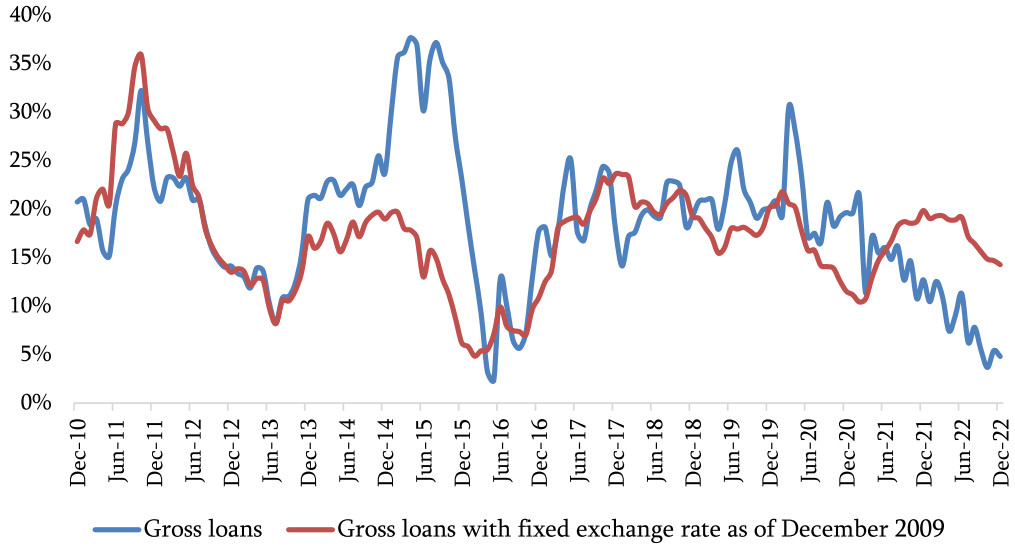
It is necessary for the banking system to have buffers that can be reduced during shocks so that they can continue lending to the economy in times stress.

Since 2022, parallel reporting has been in place that involves the submission of reporting forms meeting both current local and IFRS requirements. This process is temporary and serves to prepare the ground for the full replacement of local reporting standards with IFRS. Work also continued on the implementation of FINREP reporting forms, which is one of the more important parts of the IFRS transition project. Commercial banks have been filling out these forms in a test mode since 2018 and FINREP reporting forms became a monthly requirement in 2022.

4.5 Credit Risk

By 31 December 2022, the total loan portfolio of the banking system reached GEL 45 billion. Annual growth, without the effect of the exchange rate (taking the exchange rate at the end of 2021), was 13%.

Diagram 4.4 Change in total loan portfolio compared to the previous year



Source: NBG

66 Buffer usability and cyclicality in the Basel framework, October 2022 - https://www.bis.org/bcbs/publ/d542.pdf

Table 4.2 Composition of the loan portfolio (excluding interbank loans) by segment, without exchange rate effect (exchange rate as of end of 2021)

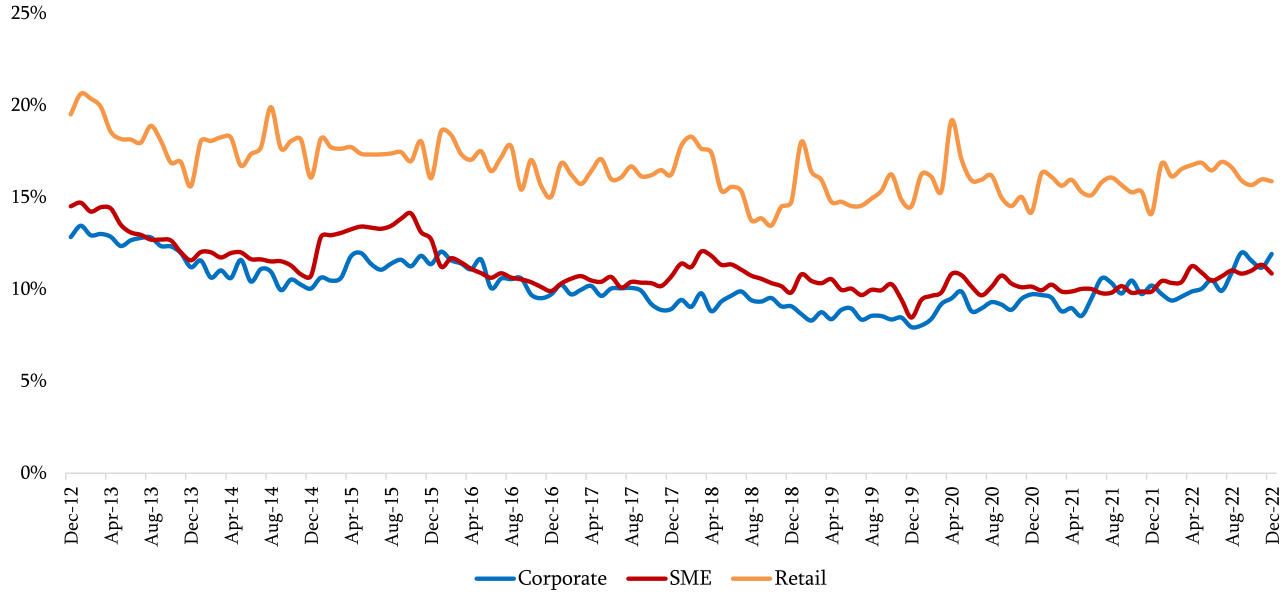
	Dec21		Dec-22		Change %	Change without reclassification effect,%
	Million GEL	share %	Million GEL	share %		
Corporate loans	14,632	34%	15,437	32%	5.5%	4.2%
SME loans	11,501	27%	13,438	28%	16.8%	18.8%
Retail loans	16,949	39%	19,413	40%	14.5%	14.3%
Total	43,082	100%	48,289	100%	12.1%	12.1%

Source: NBG

The composition of the loan portfolio (except for interbank loans) slightly changed in terms of segments: the share of the retail and small and medium segments in the total portfolio increased during the year, while the share of the corporate segment decreased.

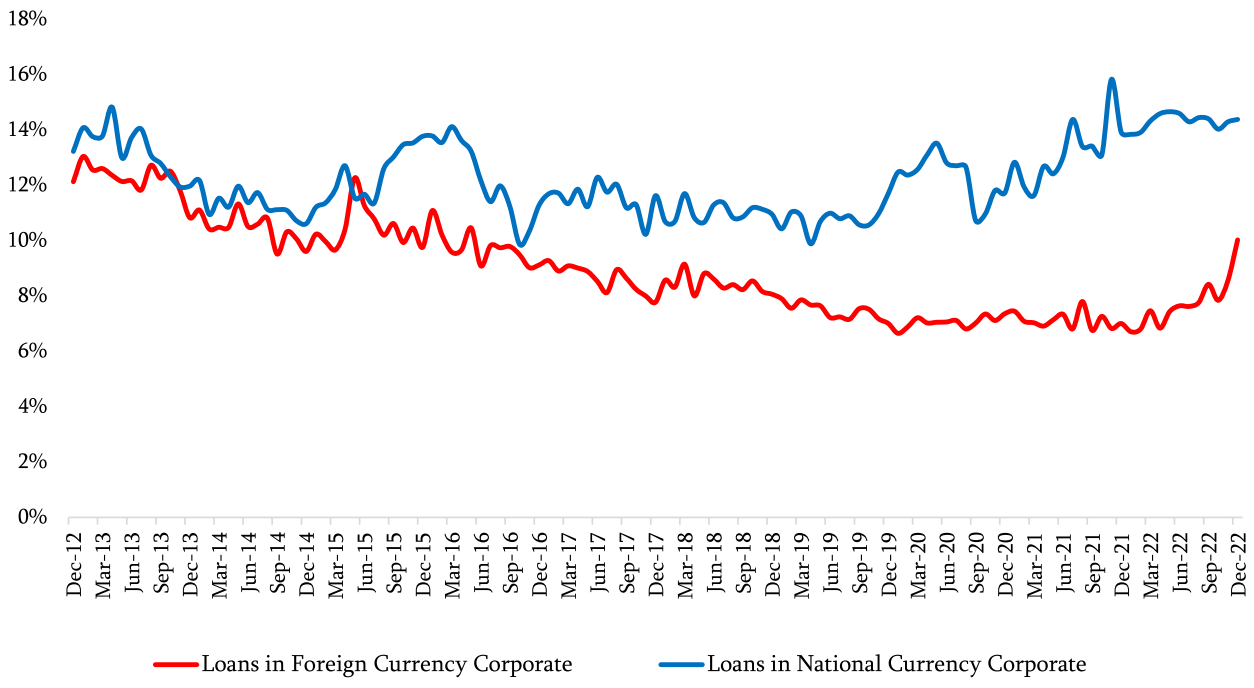
In 2022, loans were issued at an average rate of 1 percent higher than in 2021, caused by the increase in the interest rate on GEL loans.

Diagram No. 4.5 Monthly weighted average interest rates on loans (flow) per segment



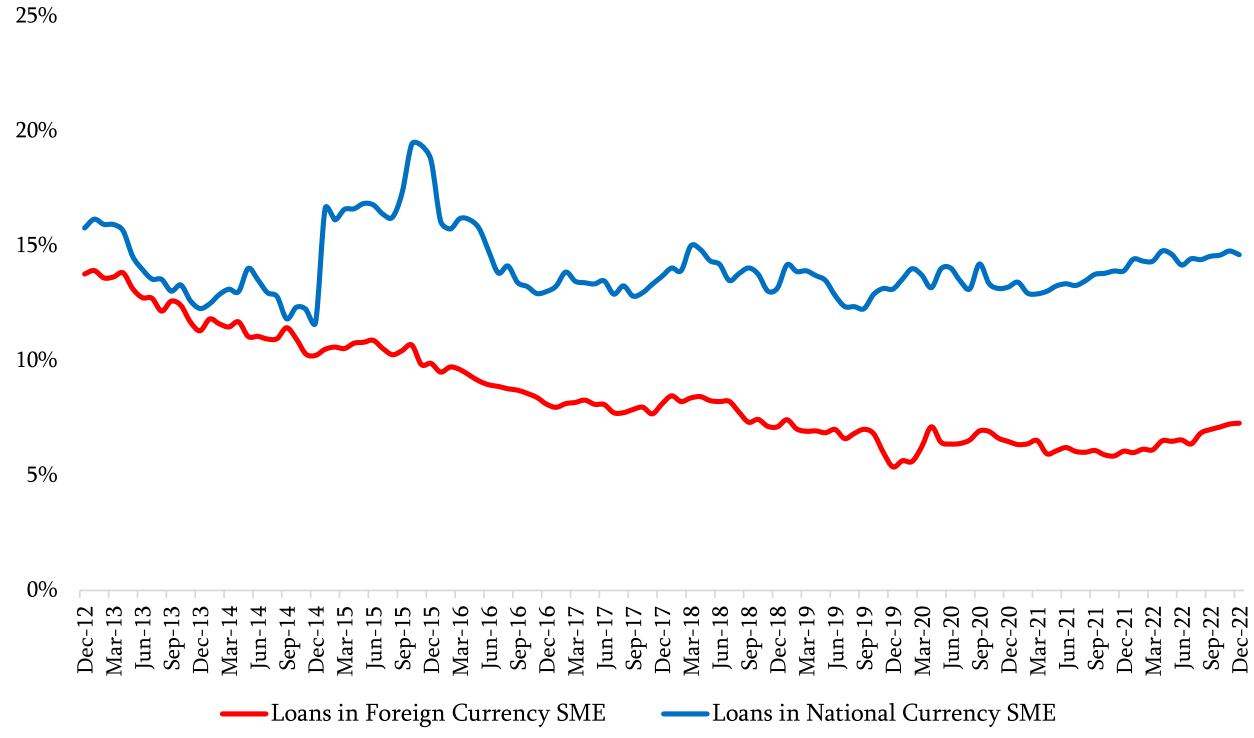
Source: NBG

Diagram No. 4.6 Average weighted interest rates on loans (flow) for the corporate segment



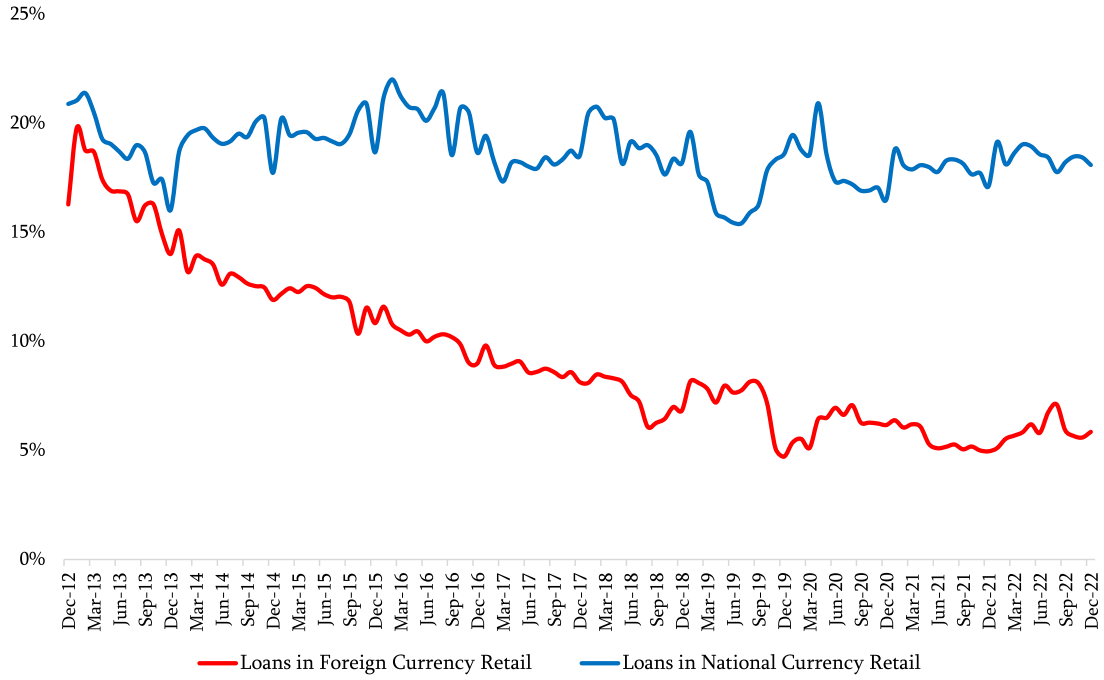
Source: NBG

Diagram No. 4.7 Weighted average interest rates on loans (flow) for the SME segment



Source: NBG

Diagram No. 4.8 weighted average interest rates on loans (flow) for the retail segment



Source: NBG

The loan portfolio is diversified in terms of sectors. At the end of December 2022, the total share of economically vulnerable sectors (real estate development, real estate management, hotels and tourism, restaurants and catering, and car dealers) in the portfolio was at 16.6%, 1.5pp less than in the same period of the previous year.

Table 4.3 Sectoral distribution of the loan portfolio

Sector (excluding interbank loans, million GEL)	Share in total portfolio	Loan balance	Loan reserve	Loan reserve /portfolio
Business loans	59.6%	26,700	1,092	4.1%
State Organizations	0.3%	121	2	2.0%
Financial Institutions	1.4%	611	13	2.1%
Pawn-shop Loans	1.3%	561	16	2.9%
Real Estate Development	3.6%	1,633	79	4.8%
Real Estate Management	5.6%	2,500	104	4.2%
Construction Companies (not developers)	1.8%	792	44	5.6%
Procurement, Production and Trade of Construction Materials	2.7%	1,189	46	3.9%
Trade in Consumer Goods	3.6%	1,593	49	3.1%

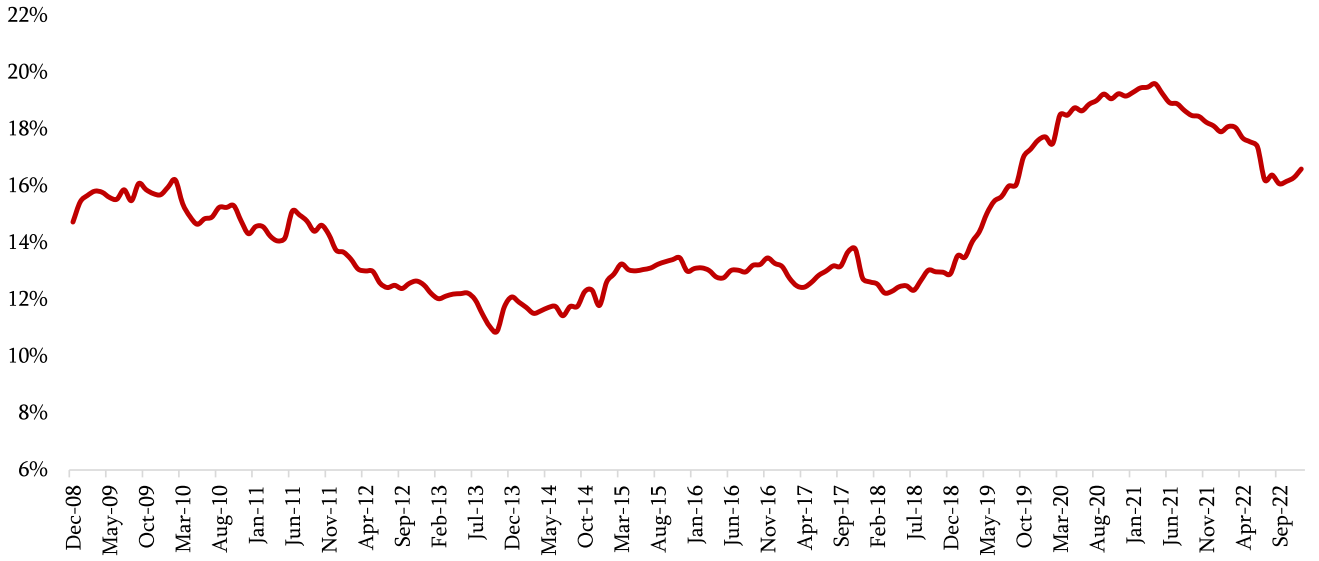
Production of Consumer Goods	3.5%	1,570	95	6.1%
Production and Trade of Durable Consumer Goods	1.0%	458	15	3.2%
Production and Trade of Clothes, Shoes and Textiles	0.8%	353	11	3.2%
Trade (other)	4.0%	1,798	73	4.1%
Production (other)	1.6%	722	23	3.2%
Hotels and Tourism	5.6%	2,498	132	5.3%
Restaurants, Bars, Cafes and Fast-food Outlets	1.3%	599	31	5.2%
Heavy Industry	1.5%	671	42	6.3%
Loans to Gas Stations and Gasoline Importers	0.8%	360	15	4.2%
Energy	3.6%	1,625	38	2.4%
Car Dealers	0.5%	204	5	2.6%
Healthcare	2.0%	894	22	2.5%
Pharmaceuticals	0.3%	133	3	2.5%
Telecommunications	0.5%	202	12	6.2%
Service	5.5%	2,471	93	3.7%
Agriculture Sector	6.1%	2,735	108	3.9%
Other (involving scrap metal business)	0.9%	407	17	4.3%
Retail products	**40.4%**	**18,077**	**703**[67]	**3.9%**
Car Loans	0.4%	170	6	3.7%
Consumer Loans	16.6%	7,416	338	4.6%
Instant Installment	0.8%	378	12	3.1%
Overdrafts	0.1%	52	6	10.9%
Credit Cards	1.0%	429	22	5.2%

67 The reserve on retail products includes general provision.

Loans for Apartment Renovation	1.8%	800	23	2.9%
Mortgages	19.7%	8,832	296	3.3%
Loan portfolio (net of interbank loans)	**100.0%**	**44,776**	**1,800[68]**	**4.0%**

Source: NBG

Diagram 4.9 Share of economically vulnerable sectors in the total loan portfolio



Source: NBG

The year saw a higher growth of retail products compared to 2021. An increase was observed in all products except overdrafts. However, given the fixed exchange rate, the increase in mortgage and consumer lending was the main driver of the growth in retail products, although the latter grew more than mortgages.

The structure of the retail product portfolio has changed slightly compared to the previous year, which has been echoed in the higher share of consumer loans and lower share of mortgage and renovation loans. The decrease in the share of mortgage loans was mainly due to the higher growth rate of consumer loans, but is also a consequence of the appreciation of the GEL exchange rate compared to the end of 2021 as dollarization in mortgage loans is higher.

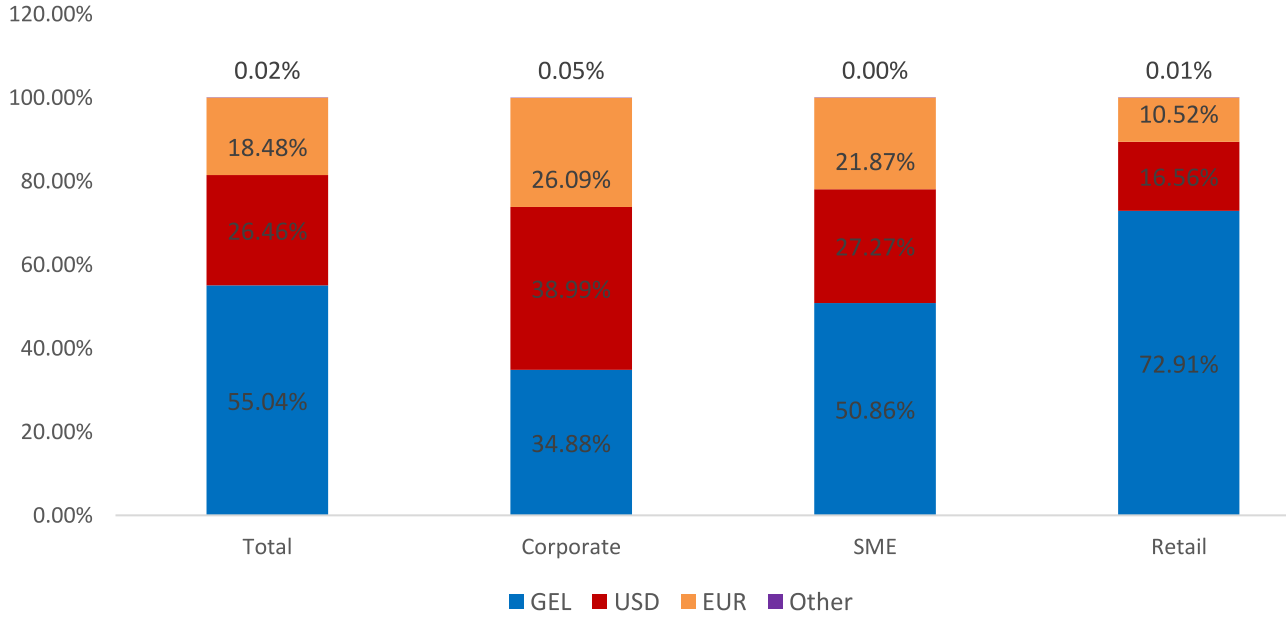
68 The reserve on loan products (excluding interbank loans) includes general provision.

Table 4.4 Growth of retail products (excluding the exchange rate effect, at the exchange rate active as of the end of 2021)

Product	Dec. 2021		Dec. 2022		change, % fixed rate	change, million GEL
	Million GEL	share, %	Million GEL	share, %		
Retail products	16,540	100%	18,954	100%	14.6%	2,414
Car loans	145	1%	181	1%	24.9%	36
Consumer loans	6,260	38%	7,541	40%	20.5%	1,281
Instant installment	359	2%	378	2%	5.3%	19
Overdrafts	54	0%	53	0%	-1.8%	-1
Credit Cards	380	2%	430	2%	13.0%	49
Loans for apartment renovation	761	5%	837	4%	10.1%	77
Mortgages	8,581	52%	9,534	50%	11.1%	953

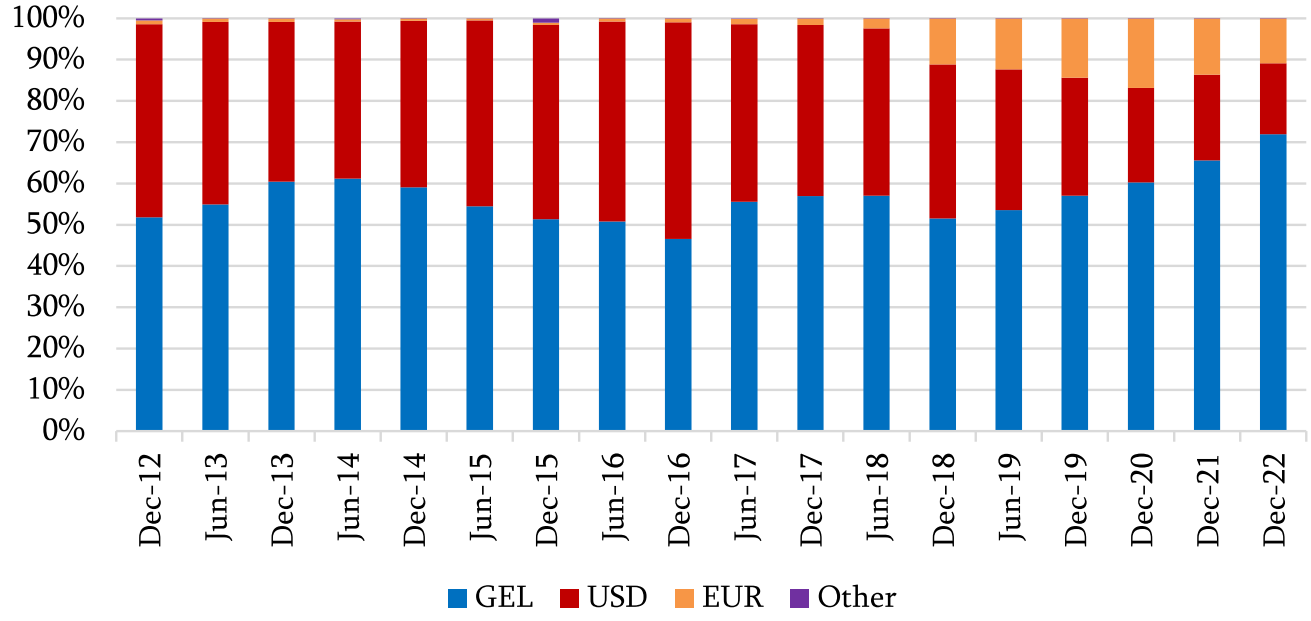
Source: NBG

Diagram 4.10 Segment balances by currency at the end of 2022 (excluding interbank loans)



Source: NBG

Diagram 4.11 Composition of the retail portfolio by currency



Source: NBG

Table 4.5 Classification of the loan portfolio by quality

Category (except interbank loans)	Amount in million GEL	Share	Reserve
Standard	40,898	91.3%	2%
Negative loans	3,879	8.7%	25%
Watch	2,040	4.6%	10%
Non-performing	1,838	4.1%	42%
Substandard	1,042	2.3%	30%
Suspicious	347	0.8%	47%
Non-performing	449	1.0%	66%
Total:	44,776	100%	4%

Source: NBG

Table 4.6 Portfolio quality by segment

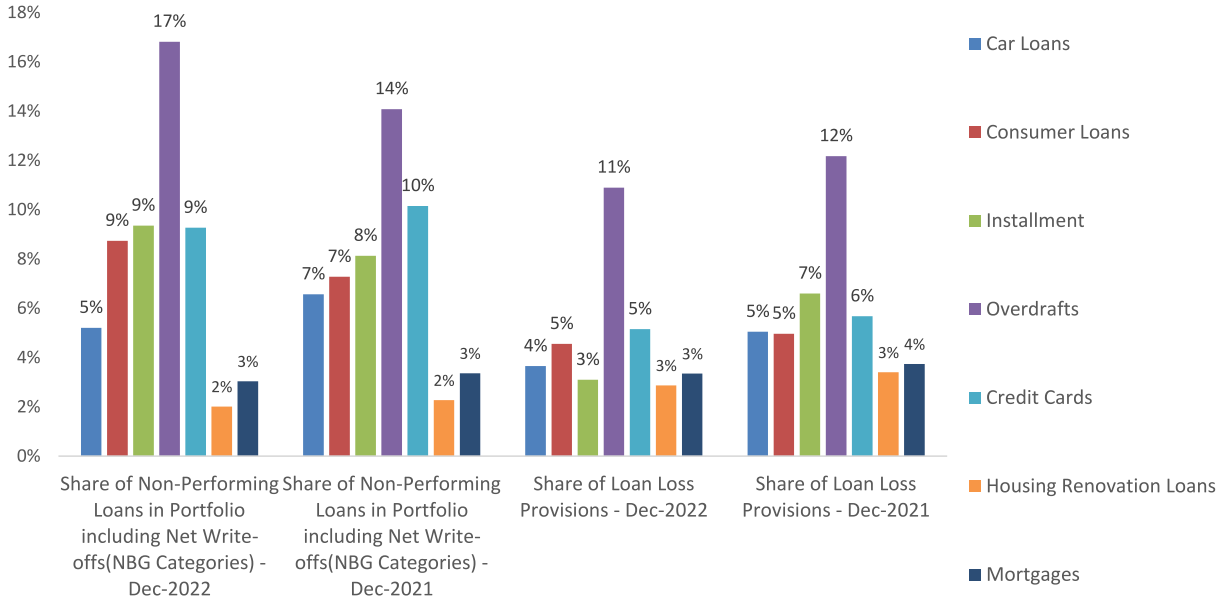
Segment	Negative loans	Non-performing loans	Average reserve
Corporate	12.06%	3.30%	3.96%
Small and medium	9.18%	5.32%	4.25%
Retail	5.82%	3.90%	3.88%

Source: NBG

In 2022, the quality indicators of the portfolio (the share of negative/non-performing loans and possible loan losses) significantly improved compared to 2021.

In terms of the quality of the retail loan portfolio, although the share of non-performing loans in mortgage loans decreased in 2022 compared to the previous year, the share of non-performing loans in the overall retail products portfolio increased, which was largely due to the deterioration in the quality of consumer loans. This led to the write-off of large volumes of consumer loans. Considering the effect of write-offs and portfolio growth, the percentage of the reserve in the portfolio was reduced for all retail products.

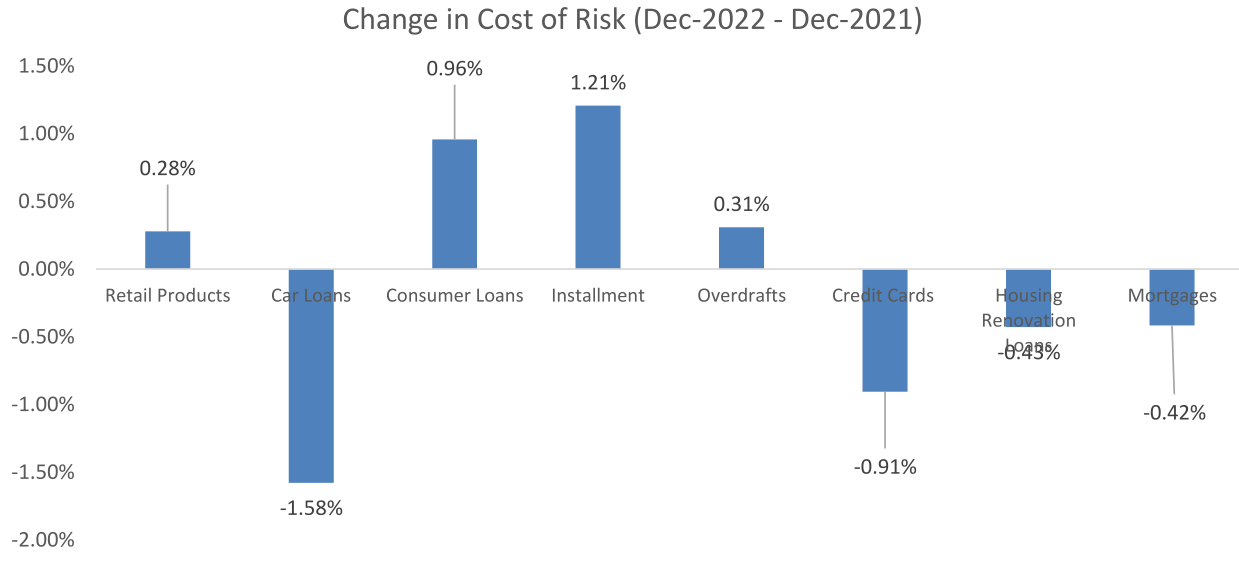
Diagram 4.12 Quality of the retail portfolio and cost of risk by product



Source: NBG

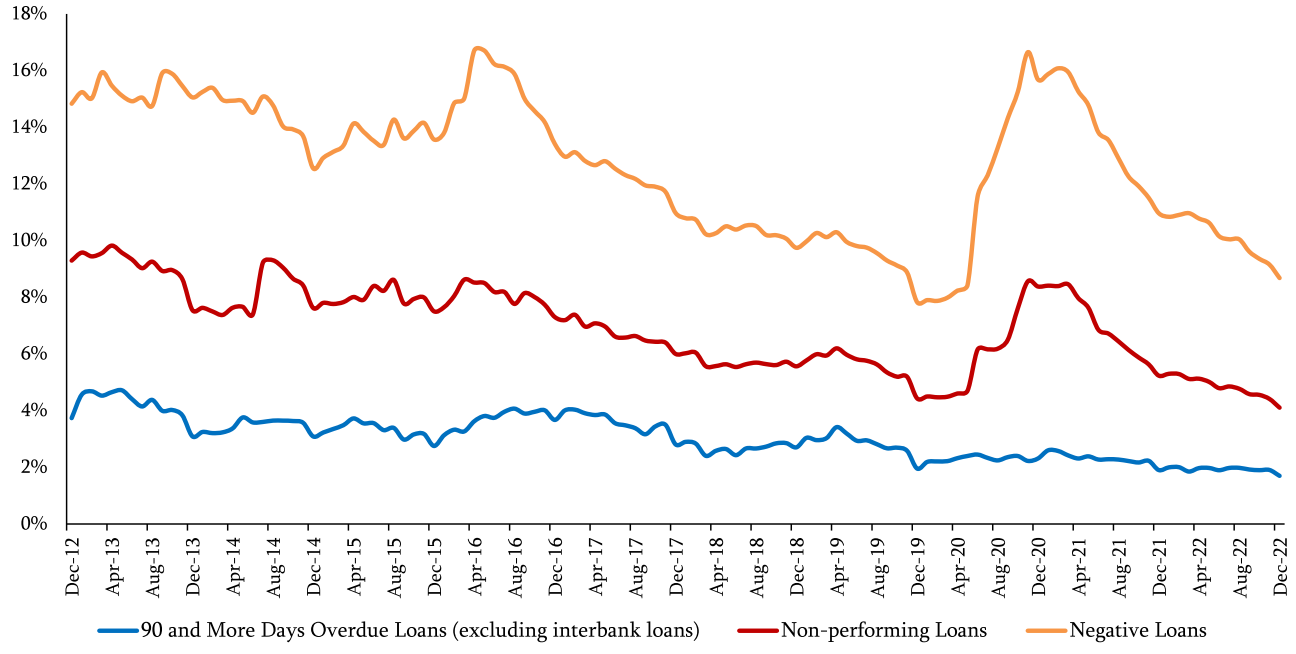
The cost of risk for the retail product portfolio increased in 2022, compared to 2021, although the cost of risk for car loans, credit cards, renovation loans and mortgages decreased compared to the previous year. For consumer loans, instant installments, and overdrafts, the increase in the cost of risk compared to the previous year was caused by the increased write-offs of loans.

Diagram 4.13 Change in cost of risk (Dec. 2022 – Dec. 2021)



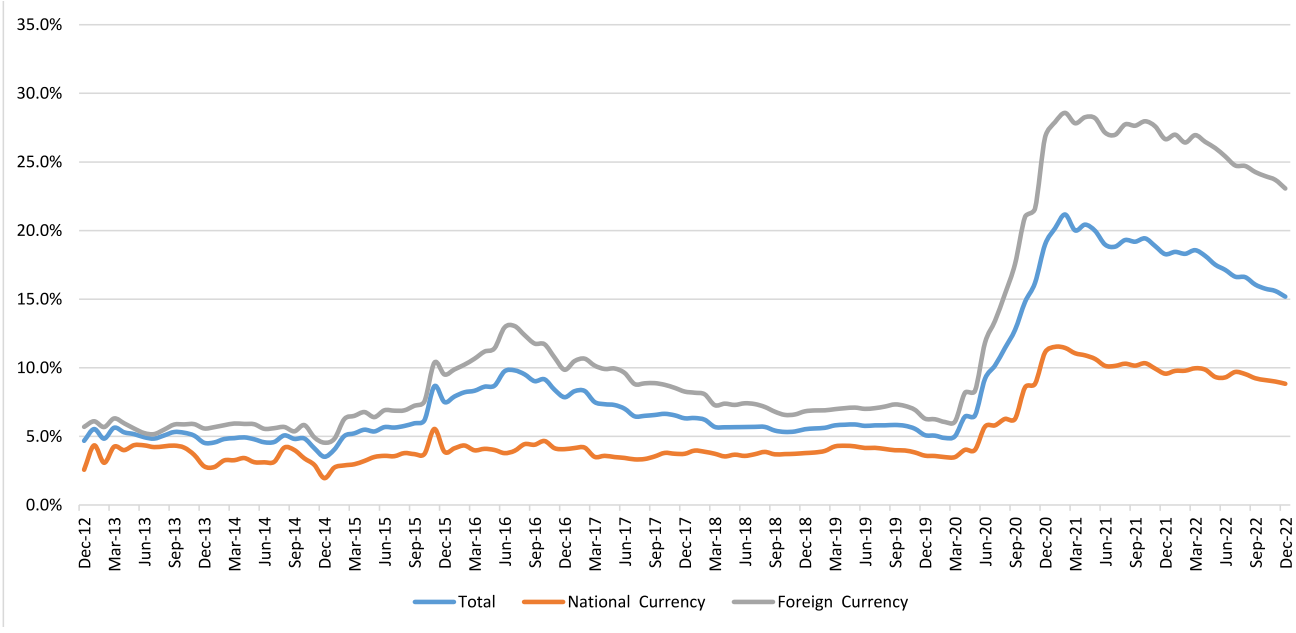
Source: NBG

Diagram 4.14 Loan portfolio by quality indicators (except interbank loans)



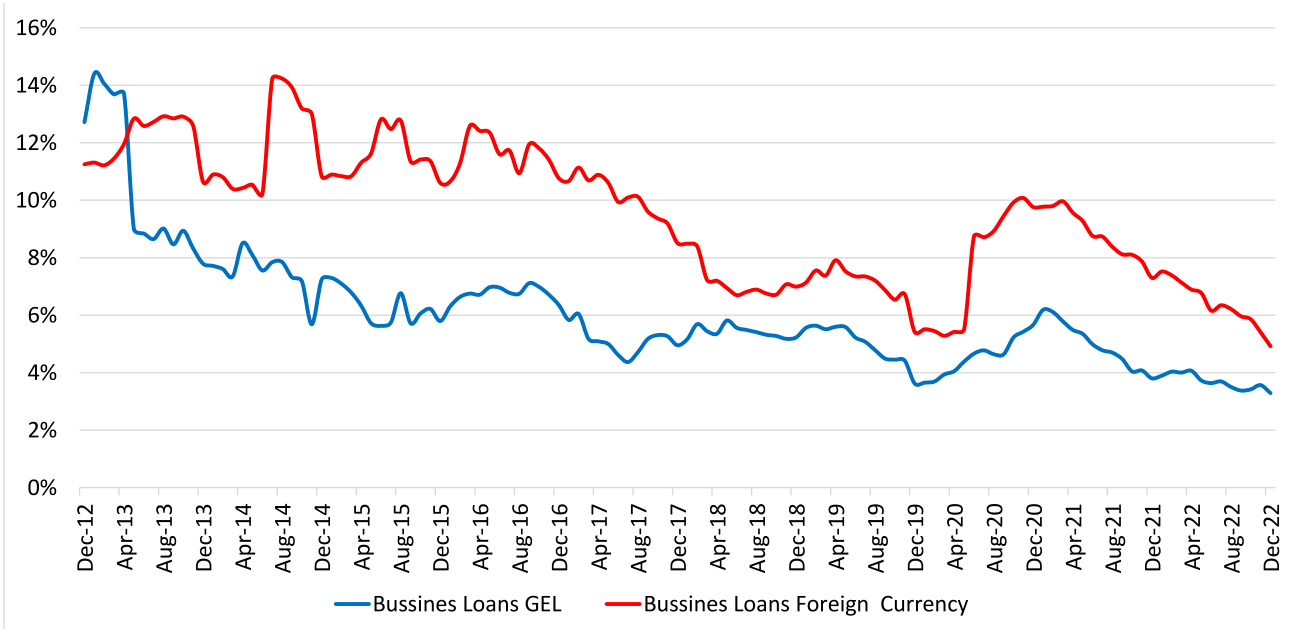
Source: NBG

Diagram 4.15 Share of restructured loans by currency in the total loan portfolio



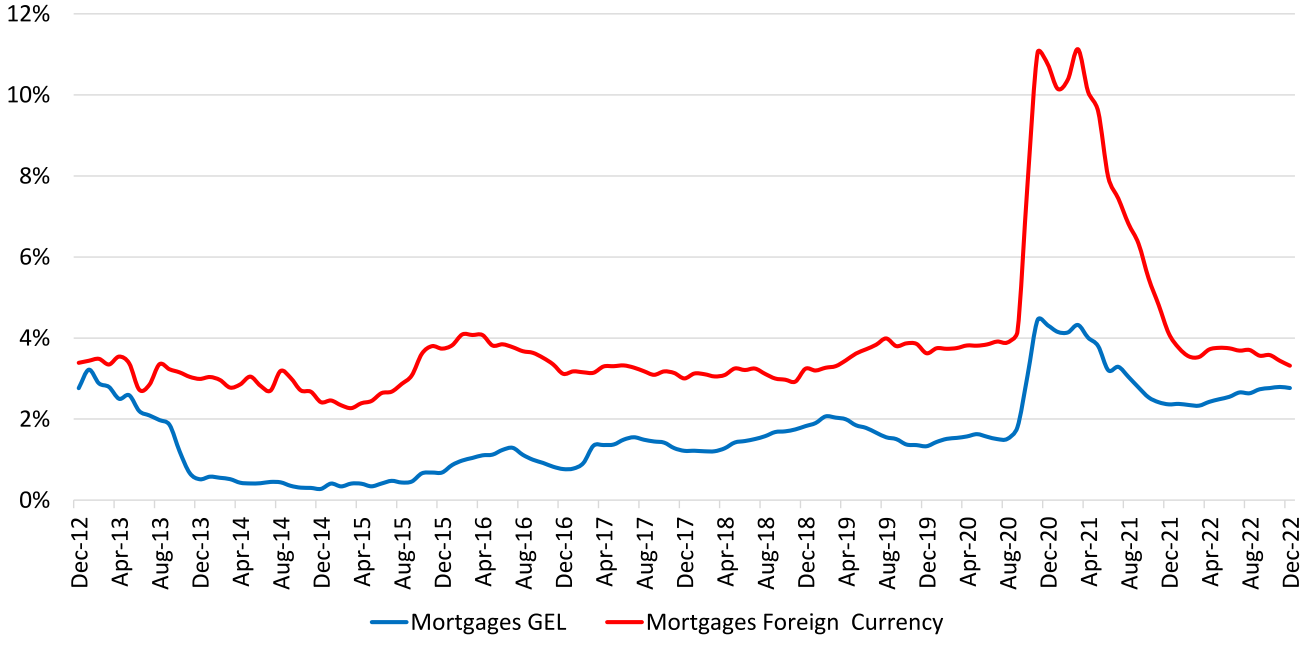
Source: NBG

Diagram 4.16 Share of non-performing loans by currency in the Business loan portfolio



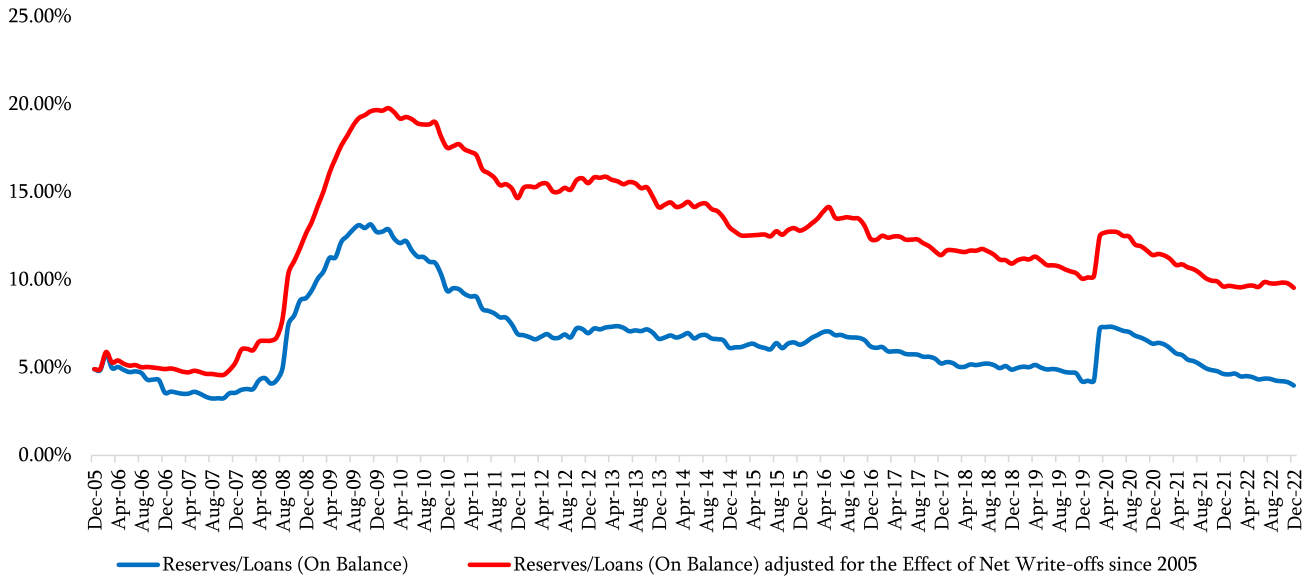
Source: NBG

Diagram 4.17 Share of non-performing loans by currency in the mortgage loan portfolio



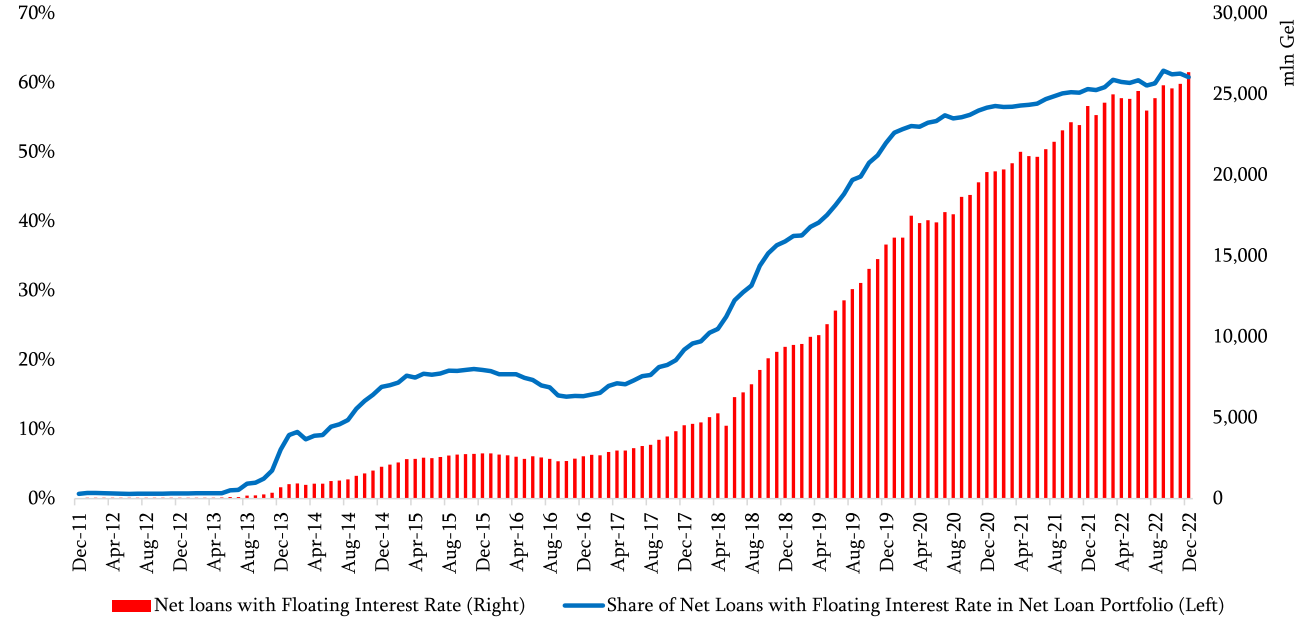
Source: NBG

Diagram 4.18 Loan loss reserves to total portfolio[69]



Source: NBG

Diagram 4.19 Volume and share of net floating interest rate loans in the net loan portfolio[70]



Source: NBG

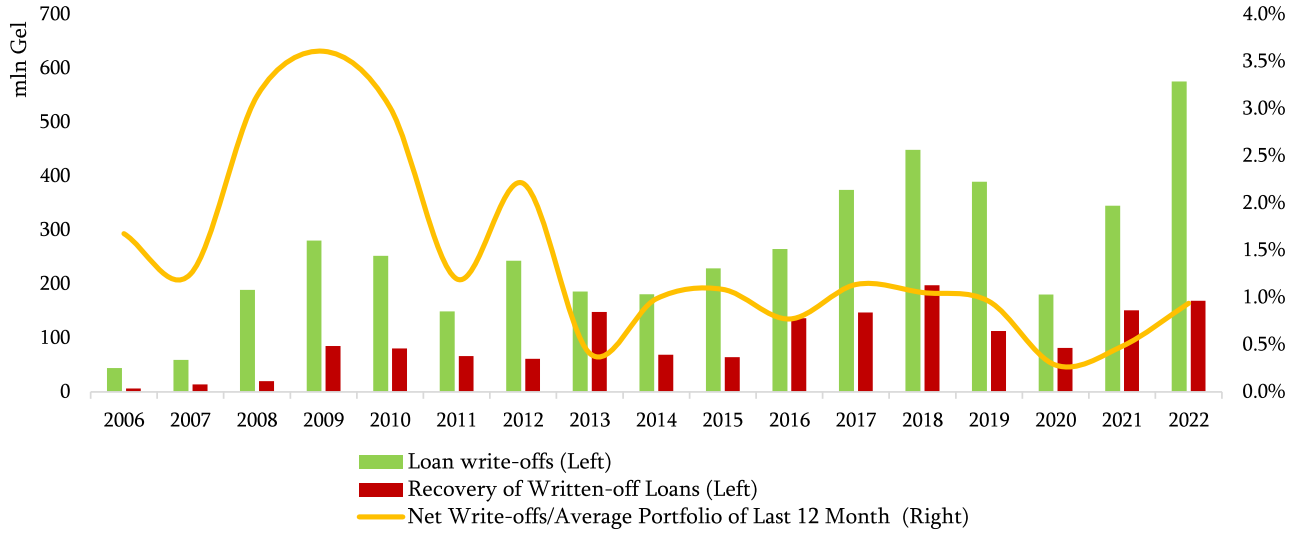
69 Includes general provision.

70 Net loans refers to the volume of loans after deducting loan loss reserves.

The volume of net written-off loans in 2022 increased by 109.5% compared to the same period in 2021. A large share of the net written-off loans came from the retail segment, as in the previous year. An increase was recorded in both written-off assets and recoveries of written-off assets, although the latter showed slower grow than the former.

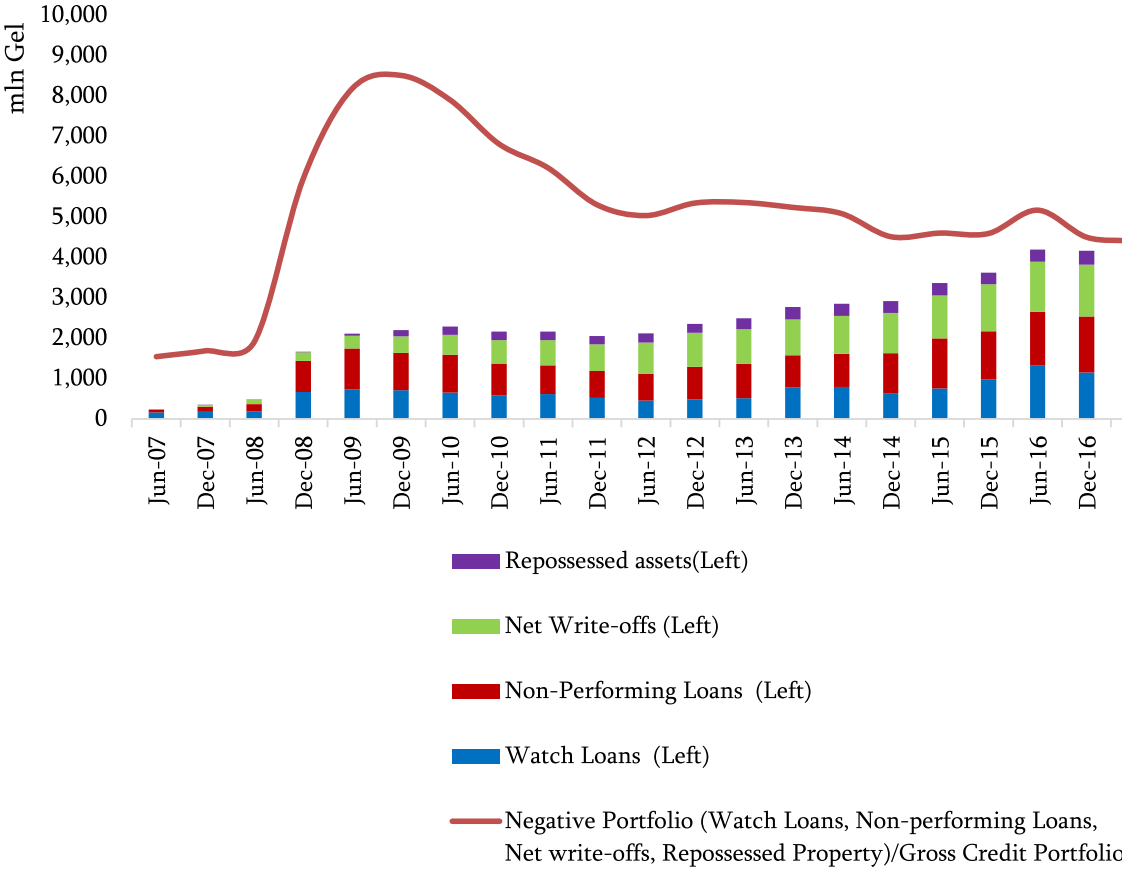
There were no major changes in the share of repossessed property in total investments (loans plus repossessed property) in 2022 YoY.

Diagram 4.20 Loan write-offs and recoveries



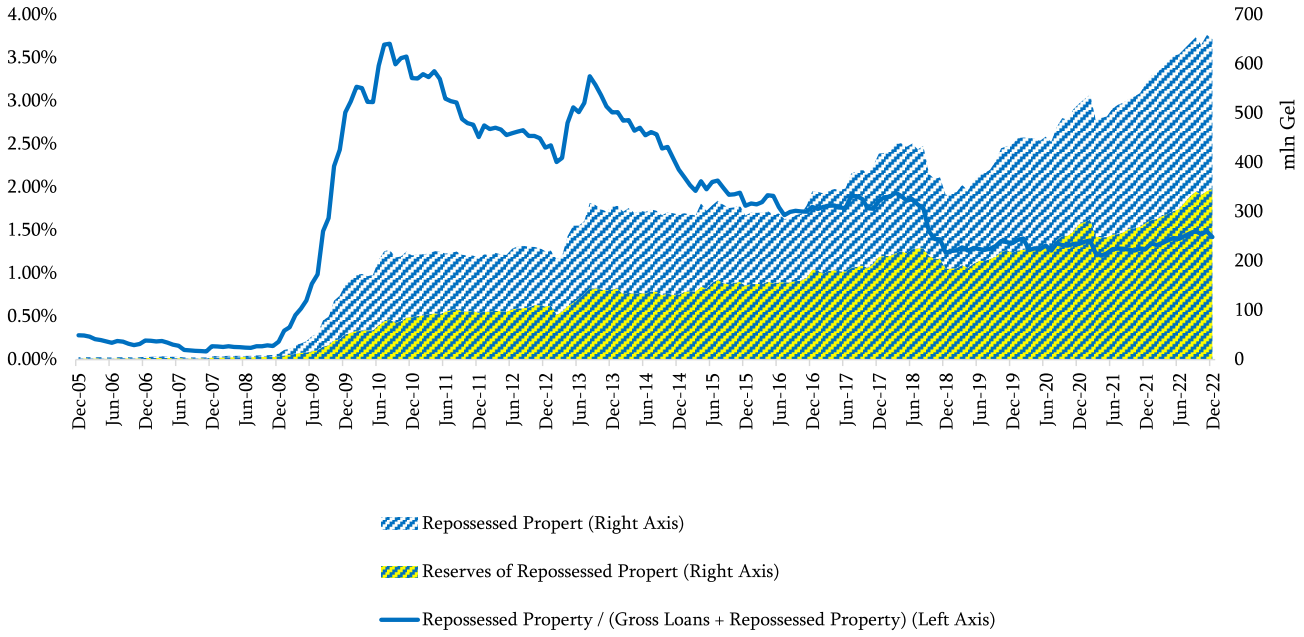
Source: NBG

Diagram 4.21 Problem assets



Source: NBG

Diagram 4.22 Repossessed assets



Source: NBG

Real Estate Development Research

The real estate development sector is particularly sensitive to economic shocks. The loan portfolio of the sector in the banking system has increased approximately 2.5 times over the last four years, amounting to GEL 1.516 billion as of October 2022 and accounting for 5.9% of the banking business loan portfolio.[71] The importance of this sector has led the National Bank of Georgia to conduct a real estate development sector study. This reviews the Georgian residential real estate market and compares it with that of European countries. The research also presents information regarding the sector's loan portfolio.

Factors affecting the sector are related to the demand and supply of real estate. The rapid recovery of GDP after the pandemic and the high growth rate[72] created positive expectations in the sector. The sector showed better-than-expected results during the stress caused by the pandemic, which was partly due to the benefits received from both the state and the financial sector. On the other hand, the sector has been affected by the high inflation rate, which is already a global challenge. In efforts to manage inflation, the world's leading central banks and the National Bank of Georgia have tightening their monetary policy rates.[73] This, in turn, has spilled over to the interest rates of loans in the banking sector, including both business and mortgage loans. As a result, real estate developers face higher costs, and buyers are less motivated to purchase properties with a mortgage. In addition, the investment cost becomes more expensive for those investors who buy a property for the purpose of renting it out, and it becomes more attractive to invest in a less risky bank deposits (which offer more benefits).

According to the public registry, the number of house/apartment purchase transactions in 2022 already exceeded the respective pre-pandemic period. Most of the transactions come from Tbilisi, although the share of the capital city is decreasing due to the growth of the market in Batumi. The secondary market is the largest part of the residential real estate market in Georgia (accounting for 77% of the market as of November 2022), of which Batumi is an exception (where it accounted for only 27% as of November 2022). As much as 73% of purchase transactions in Batumi during the first 11 months of 2022 related to apartments under construction.[74]

71 NBG.
72 GeoStat.
73 NBG.
74 NBG calculations based on the public registry data.

Demand factors: Population growth is a major source of demand for the residential real estate sector. Data on last year's migration balance have not yet been published, although data from various sources confirm that the geopolitical events in the region have propelled a large influx of migrants from Russia, Belarus and Ukraine. As these people are often long-term visitors, they play a role in the increased demand for local residential real estate. Based on public registry data, the participation of immigrants in home/apartment purchase transactions in Tbilisi increased to 8.8% (as of September) compared to January 2022 when the same figure was 5%; although this remained below the high of 9% observed in July 2019. This increase mainly comes from Russian citizens. Batumi is more popular than Tbilisi among both Russian citizens and other immigrants. Batumi attracts more immigrants due to its being an investment destination.

Despite the low population growth rate in Georgia, the higher level of urbanization and the lessening of the average household size can also generate significant demand. These parameters show favorable dynamics for the real estate market and create stable demand in the long run. Observing the countries of the European Union, we can say that the economic development of Georgia is likely to be accompanied by an increase in urbanization and a decrease in the average number of family members. It is true that the high correlation between these indicators does not mean an unconditional cause-and-effect relationship, but if we assume that the same trend will be maintained in Georgia, then there is the possibility of demand for residential real estate strengthening. When making comparisons with EU countries, it is also necessary to consider the culture and traditions specific to Georgia that may prevent this trend from spreading at the same proportion in the Georgian market (e.g., the tradition of large families and multi-generational households).

In addition to a lower level of urbanization compared to the EU (60% vs 72%) and a higher average number of household members (3.2 vs 2.3)[75], the rate of ownership of a residential property by a single household is also significantly different in Georgia. As much as 91% of households in Georgia own a place of residence, which is influenced by traditions, urbanization, and the level of economic development. In the case of European countries, it was found that there is a strong negative correlation between the home ownership rate and GDP per capita (purchasing power parity in USD), and a strong positive correlation with mortgage loans. If we assume that Georgia will follow a similar path in the future, it is expected that fewer households will live in owned real estate and more will live in rented properties. This will increase demand for residential real estate, but more so from investors and less directly from residents.

In addition, as much as 70% of residential real estate is over 30 years old in Georgia, which means that some of these buildings are already depreciated or will require replacement in the near future. Therefore, even if other contributing factors remain unchanged in the real estate market, it will still be necessary to replace existing apartments with new ones, which will additionally reinforce demand in the market. There are several major sources of funding for the purchase of residential real estate for individuals in Georgia, including salaries, remittances, and mortgage loans. All three of these indicators show an upward trend that is expected to be sustained.

Supply factors: To measure the volume of future supply, we can observe the number and volume of building permits issued in square meters (m^2). The volume of permits issued in 2021-2022 was much higher than in the pre-pandemic period (2018-2019), which is why supply in the market is expected to increase. It is interesting that the average size of one permit issued in Batumi in square meters is considerably higher than that of Tbilisi. According to the information published by GeoStat, the construction cost index increased by 8.17% from February to October 2022. Despite the fact that construction materials have a much greater weight (57%, by our calculations) in the calculation of the index compared to the wage cost (22%), wages will remain the largest contributor to the increased index, and the increase in the price of construction materials will follow. The same source indicates that the average salary paid in this sector is the third highest (GEL 2,305) among other economic sectors and has been increasing since the second quarter of 2021.[76]

This year's rise in residential real estate prices relates to fundamental factors from both the demand and supply sides. The higher demand coming from both residents and non-residents allows developers to raise prices. In addition, expenditures included in the cost price have increased and the appreciation of the

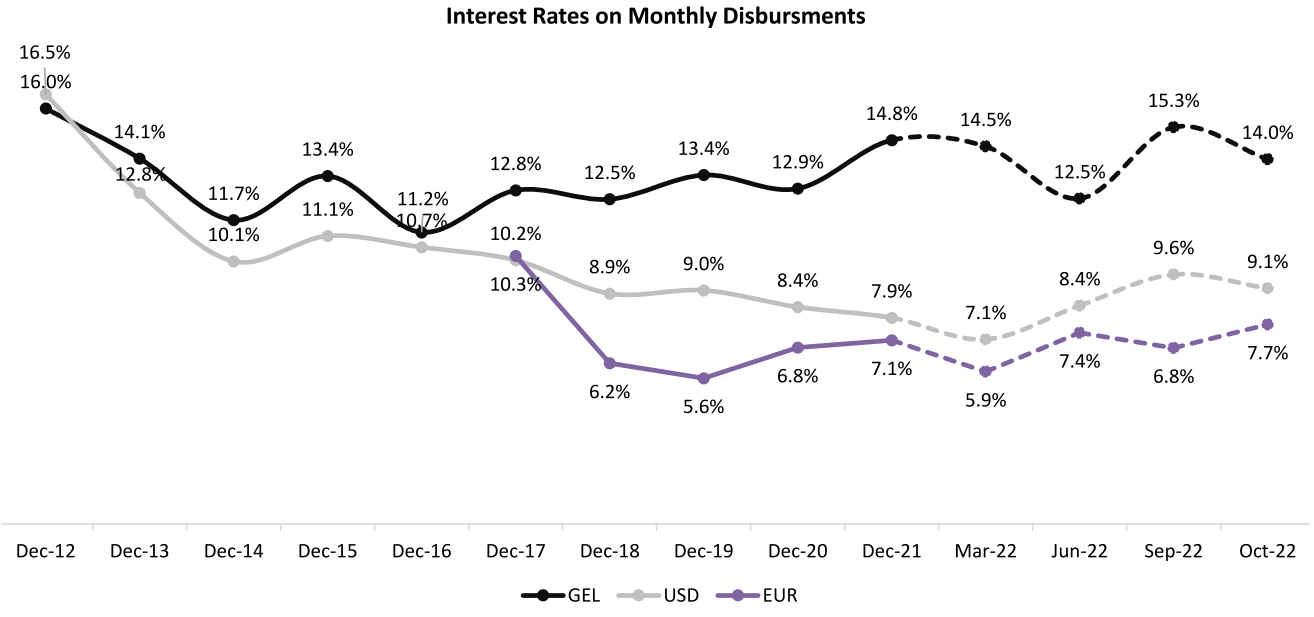
75 GeoStat; Eurostat.
76 GeoStat; NBG calculations.

GEL exchange rate has pushed up USD-denominated prices.

The loan portfolio of the real estate development sector ranks seventh in terms of the business loans of the banking system, with a volume of GEL 1.5 billion (as of October 2022). After the first quarter of 2022, the portfolio has been decreasing at a slow pace because of the appreciation of the GEL and the high dollarization of the portfolio. However, it is still at a higher level compared to the previous year. The sector is mainly funded for current assets (construction) and loans for the purpose of funding long-term assets are rare. Accordingly, the weighted average maturity of business loans in the real estate sector is one of the shortest among other business sectors (a residual maturity of up to 30 months) and repayment terms are adjusted to business essentials. The sector is highly sensitive to economic shocks and investment thus entails relatively high risk for banks, which is reflected in high interest rates for loans.

Real Estate Development Portfolio quality continues to recover after deteriorating during the pandemic. The NPL coverage ratio has improved compared to December 2019, while the share of non-performing loans is decreasing.

Diagram 4.23 Interest rates for intra-month disbursements



Source: NBG

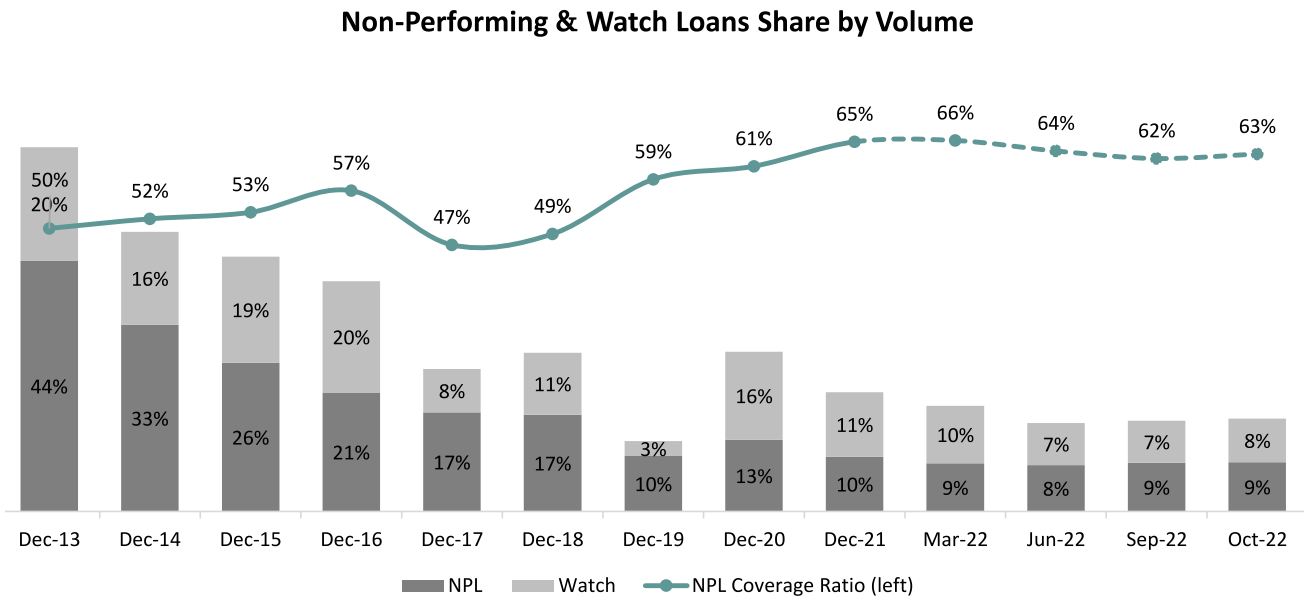
The largest volume of loans restructured during the pandemic were foreign currency loans. All baskets of overdue loans (long-, medium-, and short-term loans) have been significantly reduced since the first year of the pandemic.

The loan portfolio issued to the real estate sector is quite concentrated, with the top five groups holding 24% of the portfolio.[77]

The National Bank of Georgia conducted a study across 11 commercial banks, which included 93 construction projects throughout Georgia. It found that the sales of developer companies are largely generated by domestic installments, followed by mortgage loans. However, once construction is completed, a large part of the remaining domestic installments are often converted into mortgage loans based on pre-agreed terms between a commercial bank and the developer company. The lowest share of mortgage loans is in Batumi. This result is explained by Batumi being the leader in sales to non-residents (50% of sales). Non-residents have less access to loan products in the Georgian banking system and the alternatives are to either purchase real estate with their own funds or to make domestic installments. As much as 88% of construction projects in Batumi offer a internal installments service to clients, making the city a leader in this regard.[78] Batumi also offers the

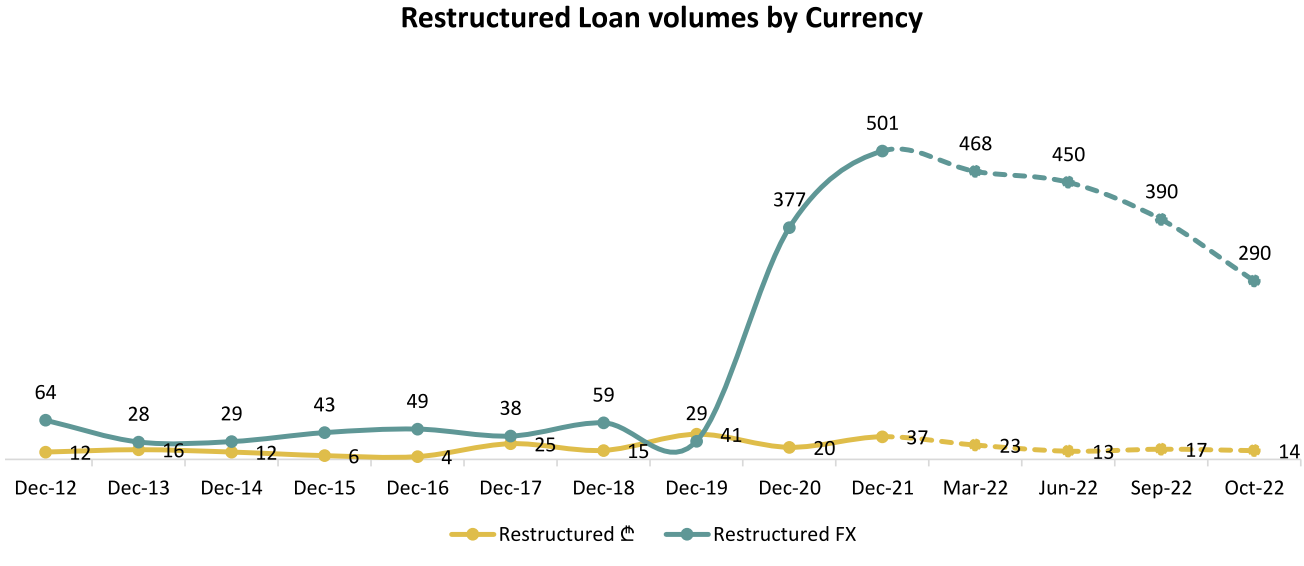
77 NBG consolidated reports.
78 NBG real estate development research.

Diagram 4.24 NPL/watch loans in the portfolio



Source: NBG

Diagram 4.25 Restructured loans by currency



Source: NBG

longest-term domestic installment (of about three years, compared to two years in other cities). The same research found that the sales process of developer companies almost never lasts more than four years, and, on average, within two years after the start of sales 66% of the available space is sold.

The design of living spaces varies considerably in different cities. Larger apartments tend to be designed in Tbilisi (an average of 85 m^2) than in other cities. The apartments in the coastal buildings in Batumi average only 38 m^2, and 75 m^2 in the central part. This difference relates to the purpose of the apartments. The coastline is used less for residential purposes and more for investment (as it is a resort area), and so there is less need for large apartments. There is also a difference between the districts of Tbilisi: apartments with a larger area are designed in central neighborhoods rather than in the suburbs. There are similar proportions in terms of parking lots. The largest parking spaces in buildings are found in the central districts. In general, the average volume of parking spaces in one block of Tbilisi is much higher than in any other Georgian city. The number of parking spaces calculated per apartment in Tbilisi is three times higher than in Batumi, where parking spaces are not actually considered. In terms of parking, the situation is even worse in Bakuriani than in the big cities.

Based on the Tbilisi projects included in the selection, average price of 1 sq.m. residential space, most of all has increased for apartments sold in a "white frame" condition. The price of commercial premises in Tbilisi has increased less, mainly in the central areas. In contrast, the price of these has doubled in the coastal area of Batumi where commercial premises account for a large part of the buildings on the coastline. In contrast, commercial space is not included in the design of winter resorts.

It is interesting to see the composition of expenditures in the cost price by region. Winter resorts have the largest share in the cost of land, and the smallest share is found in Batumi and other regions. The volume of construction projects is important in both Batumi and winter resorts, providing economies of scale to developers in Batumi and vice versa for winter resorts. Land is cheap in other regions, unlike in the resorts and Tbilisi. The share of steel-concrete costs in the cost price (without land) is relatively less in winter resorts. This is based on the peculiarity of these resorts: low-rise buildings, compared to high-rise buildings, require less reinforced concrete; and in winter resorts the facades of these in most cases are covered with wood material for both visual effect and warming, which reduces the share of the cost of reinforced concrete in the cost price. Depending on the investment purpose for residential premises, the overall profit margin in resorts is higher (Batumi 43%, winter resorts 40%) than in Tbilisi (37%), although there is no material difference. The average profit margin of developer companies in other regions is significantly lower (21%).[79]

As external developments change, the NBG will continue to monitor the real estate development sector.

Bottom-up stress test to assess the potential negative impact of the Russia-Ukraine war on the loan portfolio in the banking system

Immediately after the start of the Russia-Ukraine war, the National Bank of Georgia began to assess the readiness of the banking system to the expected negative effects. A bottom-up stress test was thus conducted following a pre-developed scenario. Borrower companies whose economic sector, by preliminary assessment, was most dependent on the Russian and Ukrainian markets were selected for the stress test from the loan portfolio of the banking system. From exports, these sectors were alcoholic beverages, non-alcoholic beverages, and tourism (hotels), while from imports these were trade in consumer goods, gas stations and import of gasoline, trade in tobacco products, and the agricultural sector. Each borrower company for all sectors other than hotels was selected individually. Additional selection criteria were material debt in the banking sector (>5,000,000 GEL) and a high share of Russia and Ukraine in total income (or in the cost price, in the case of importers). According to these criteria, a total of 26 groups of related companies with a credit debt of USD 230 million were selected. The post-stress debt/EBITDA ratio was calculated to assess the effects of stress. Exchange rate stress was also considered in the scenario. The stress was only applied to turnovers related to Russia and Ukraine.

In contrast to the exporters and importers of goods, a random selection was made for the hotel sector from the micro, SME, and corporate loan portfolios of the banking system (a total of 121 interconnected

79 NBG real estate development research.

groups, GEL 801 million portfolios were selected). The stress score on the top six borrowers was adjusted individually to account for group structure and diversified repayment sources. The result obtained for the total sample was extrapolated to the sector's total portfolio.

The potential impact of the stress scenario on loans issued on the basis of remittances received from Russia and Ukraine was assessed for the retail portfolio. Assumptions provided for a material reduction in the volume of shipments, as well as an increase in unemployment in these countries. To calculate the effect of stress, the payment to income (PTI) ratio was used and the possibility for an extension of liabilities was considered.

The stress scenario did not find the deteriorated quality of the portfolio in relation to regulatory capital to be critical, which allowed the National Bank of Georgia to wait on further developments to make more accurate forecasts in the light of the uncertainty surrounding the initial period of the war.

As alcoholic beverage exporters showed particularly high dependence on the Russian market, the decision was made to conduct more complex research on the borrowers of this sector on an ongoing basis. The expectations of banks and borrowing companies regarding the situation were also ascertained, relating to such matters as to what extent funds were received from debtors in Russia and Ukraine, if there were any changes, whether the agreed terms of loan payment had changed, etc. The export parameters were also analyzed in more detail. The results of the study are briefly summarized below.

Over 2021, USD 400 million worth of wine and spirits were exported from Georgia. The shares of Russia and Ukraine in these exports was 44% and 17%, respectively. Whereas in the first six months of 2022, USD 153 million worth of wine and spirits were exported from Georgia, reflecting a 13% decrease compared to the respective six months of 2021. Table 4.7, below, presents information on exports of wine and spirits by destination country.

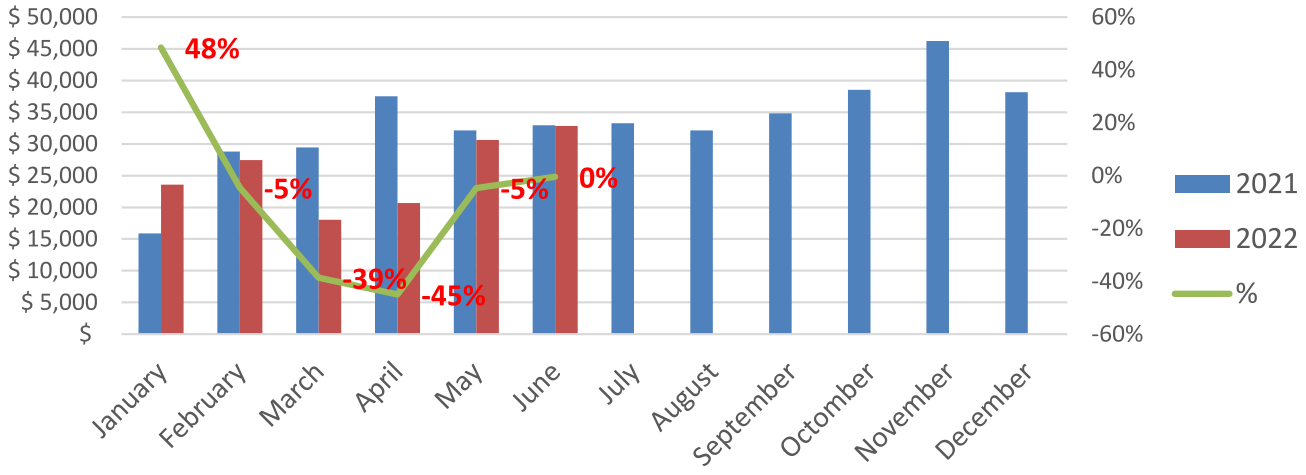
Table 4.7 Exports of wines and spirits by destination country

Export of Wines and Spirits	2021	%	2021 6 months	2022 6 months	change
Russia	$ 175 031 984	44%	$ 62 610 455	$ 57 938 492	-7%
Ukraine	$ 68 611 867	17%	$ 10 233 631	$ 3 402 967	-67%
Belarus	$ 20 179 603	5%	$ 2 274 850	$ 2 271 894	0%
China	$ 18 379 877	5%	$ 7 535 574	$ 7 195 420	-5%
Poland	$ 14 701 006	4%	$ 5 932 317	$ 7 507 517	27%
Other countries	$ 102 992 432	26%	$ 88 134 388	$ 74 861 730	-15%
Total export	$ 399 896 770	100%	$ 176 721 216	$ 153 178 021	-13%

Source: GeoStat

A significant decline in exports was observed due to the war in March and April 2022, while the dynamics improved in the following months (see Diagram 4.26).

Diagram 4.26 Export dynamics of wine and spirits, 2021-2022 (thousands of USD)



Source: GeoStat

The banking system had a loan portfolio of USD 155 million for wine and spirits exporting companies at the time the study was conducted. Due to the uncertainty during the initial period of the war, a small number of exporters that were significantly dependent on the Russian and Ukrainian markets used a several-month grace period for repaying the principal amount on their loans. At the same time, banks conducted an additional analysis of exporting companies to assess the challenges arising from the war and to reflect the emerging risks in their respective loan reserves.

4.6 Market Risk

4.6.1 Currency Risk

The exchange rate of the GEL appreciated against key currencies during 2022, while banks proceeded with stable currency positions. The aggregate currency position was within 1.6% at the end of the year.

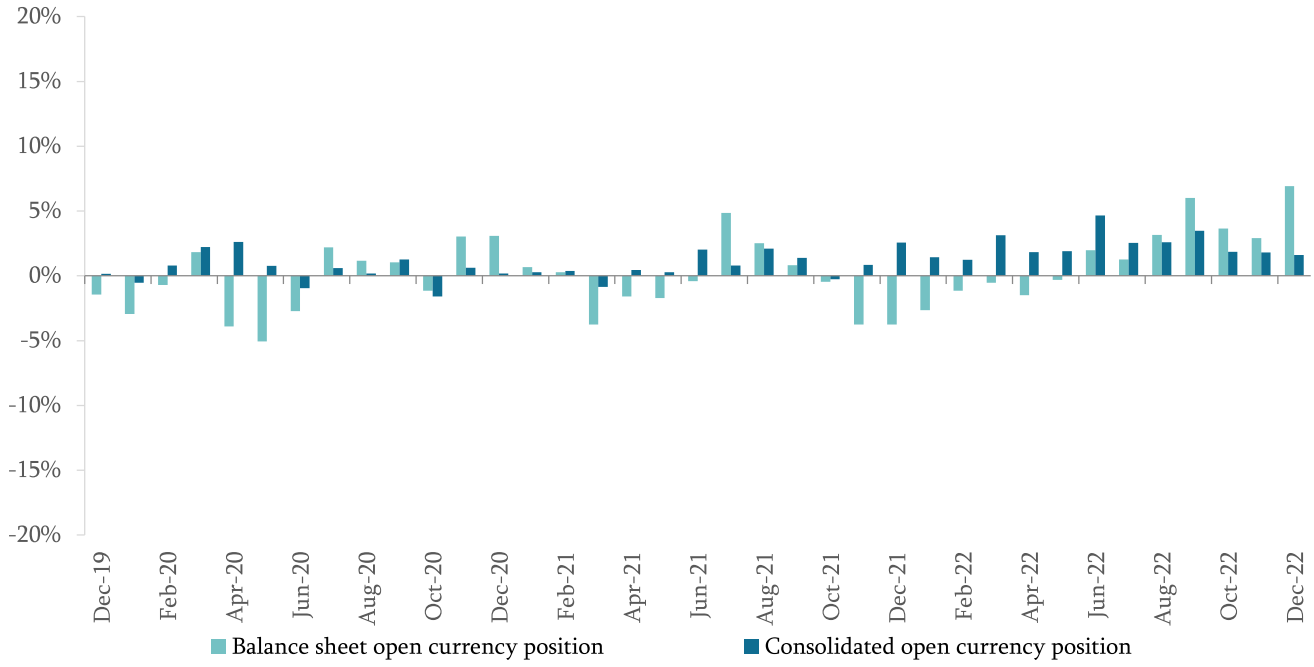
The share of foreign currency assets and liabilities in the Georgian banking system is still high, so the currency risk factor remains important. The National Bank of Georgia continues its supervisory work, striving to improve the current methodology of foreign exchange risk management, including improvements for reflecting the reserve of foreign currency assets in the open currency position. The scheduled timeline determined by the NBG for these improvements was completed at the end of the year. Starting from 2023, the foreign currency position is presented in accordance with IFRS, where reserves for the possible loss of foreign currency assets are fully deducted.

4.6.2 Interest Rate Risk

In 2022, the refinancing rate increased by 0.5 pp. There was also a significant increase in the international rates of the US dollar and euro. A similar fluctuation of interest rates reaffirms the significance of interest rate risk in banks and underlines the need for its regular monitoring and adequate assessment.

Banks operating in Georgia hold almost no securities for trading. However, banks that have a

Diagram 4.27 Balance sheet and consolidated open currency positions to regulatory capital



Source: NBG

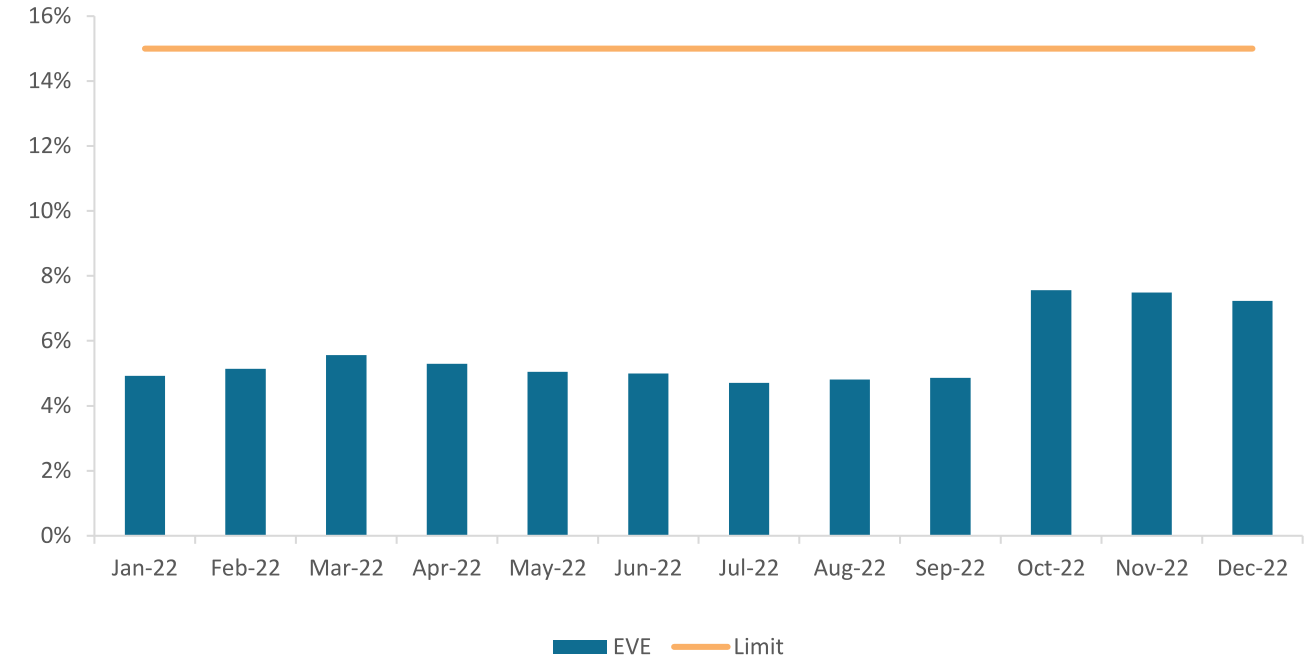
trading book[80] are required to develop appropriate procedures and to report to the National Bank of Georgia. If monitoring identifies the possibility of significant portfolio growth, trade book risk management regulations will apply.

At present, the regulation and approaches for interest rate risk for the banking book are applied to the aggregate balance. The Regulation on the Management of Interest Rate Risk for the Banking Book (IRRBB) is meant to identify, assess, and manage interest rate risk arising on the banking book, and, in compliance with related limits, to promote the stability and sound functioning of commercial banks and the financial sector. Interest rate risk reflects a bank's sensitivity to changes in interest rates. It refers to the current or future risk to a bank's capital and income that arises from changes in interest rates and affects banking book positions. Changes in interest rates change the net present value and residual maturities of future cash flows, changing the respective assets, liabilities, and off-balance sheet items and their economic value (EVE). Changes in interest rates also affect a bank's net interest income (NII), being a result of changes in income and expenses that are sensitive to interest rate risk. This risk management has a significant impact on a bank's profitability and capital.

As of December 2022, based on the current interest rate risk approach, the ratio of changes in system economic value (EVE) and net interest income (NII) to equity was 7.2% and 4.4%, respectively. The figures for 2022 remain far below the maximum regulatory limit.

80 The trading book includes the financial instruments that a commercial bank owns:
a) For selling in the short term.
b) Due to an expected change in price, with the expectation of profit obtained by revaluation.
c) To generate revenues using it through arbitration.
d) For insuring the risk positions of the instruments purchased for the purposes of a), b) or c) above.

Diagram 4.28 Change in EVE to Tier 1 Capital

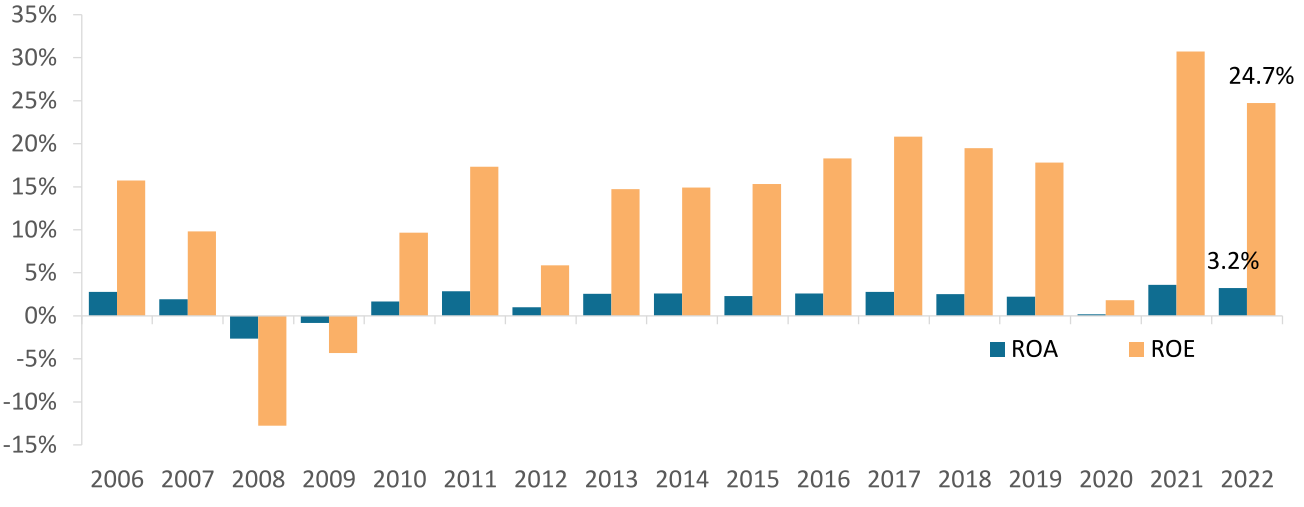


Source: NBG

4.7 Profitability Risk

In 2022, return on assets and equity[81] amounted to 3.2% and 24.7% respectively, which was slightly below the previous year's figures of 3.6% and 30.7% respectively. Unlike in previous years, the impact of one-off factors caused by the COVID-19 pandemic on profitability was eliminated. The indicators of the banking system are stable and meet the level of acceptable return on capital for shareholders.

Diagram 4.29 Return on equity and assets

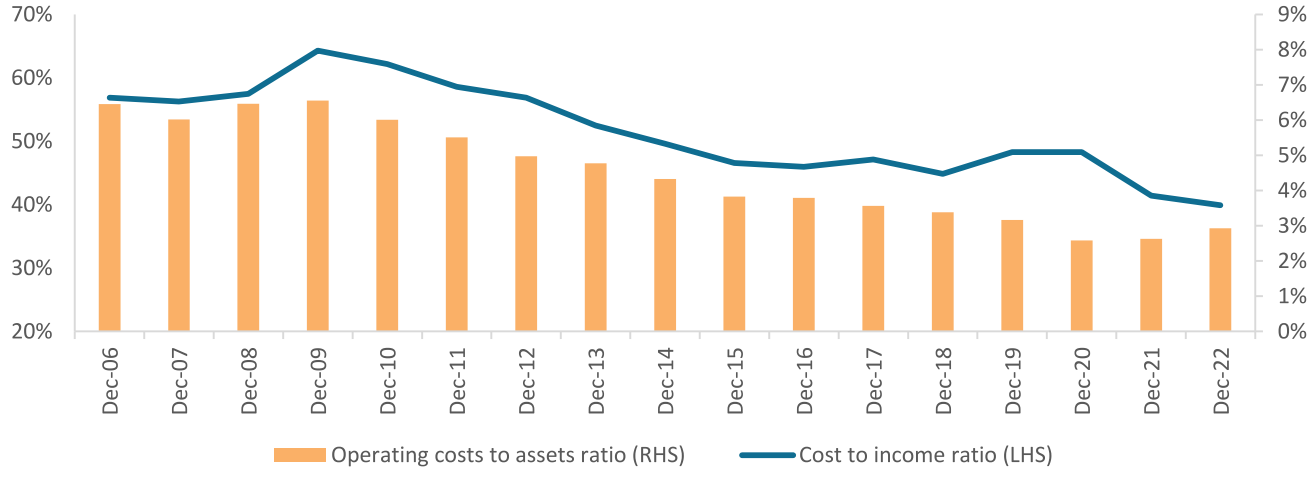


Source: NBG

81 ROE is the net profit to the average annual equity, and ROA is the net profit to the average annual assets. In these calculations, net profit is calculated as the sum of the net interest income and net non-interest income less provisions for potential losses on loans and other financial assets, after paying unforeseen income and taxes.

In terms of profit decomposition for 2022, several important factors affecting the profitability of the banking system are worth noting. Net interest income and non-interest income increased by 19.4% and 49.8% respectively, mainly due to the livening up of lending activity. Lower growth of operating expenses compared to revenues led to an increase in efficiency. Despite a 24.6% increase in non-interest expenses, the cost-to-income ratio decreased from 41.4% to 39.9%. The cost-to-assets ratio increased marginally to 2.9%.

Diagram 4.30 Cost-to-income and cost-to-assets ratios



Source: NBG

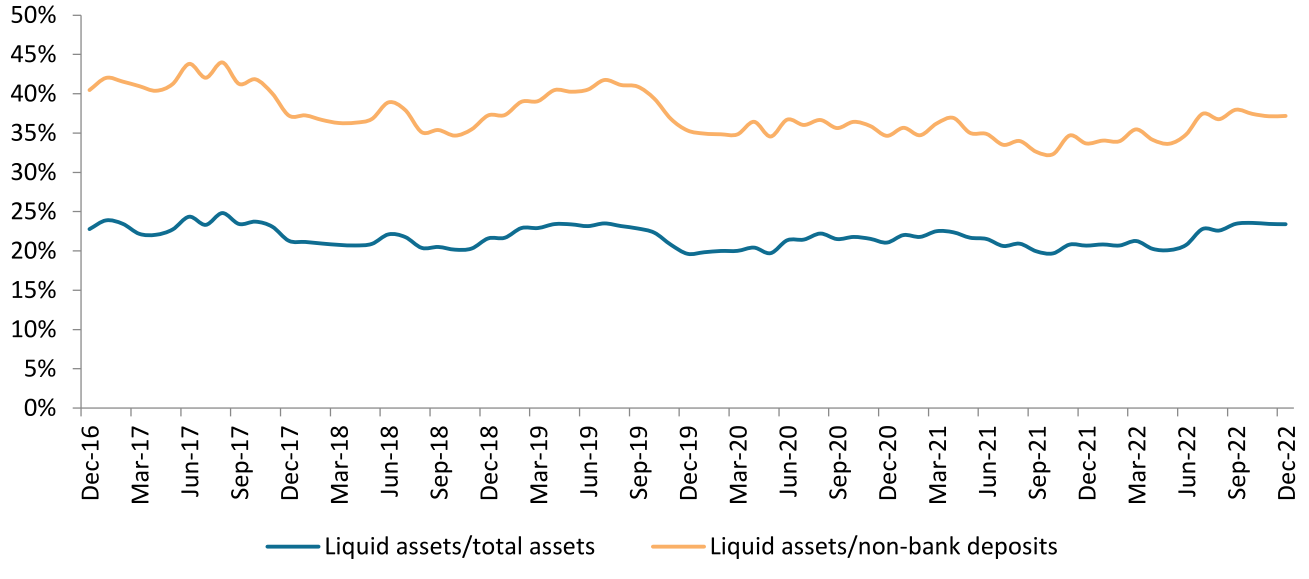
The National Bank of Georgia continues to review the profitability forecasts of banks, analyze the business models and strategies of individual institutions, and assess mitigating factors relevant to risks. Considerable attention is paid to scale effect, market niche and/or other competitive advantage, and projected credit loss factors. The development and improvement of pricing models for bank products is closely monitored.

4.8 Liquidity Risk

4.8.1 Liquid Asset Structure

The volume of liquid assets grew in 2022. As a result, liquid assets account for 23% of total assets, enough to cover up to 37% of non-bank deposits.

Diagram 4.31 Level of liquid assets



Source: NBG

The liquidity coverage ratio (LCR) for 2022 was stable overall. The fluctuations between the GEL and foreign coefficients were caused by transactions related to currency derivatives.

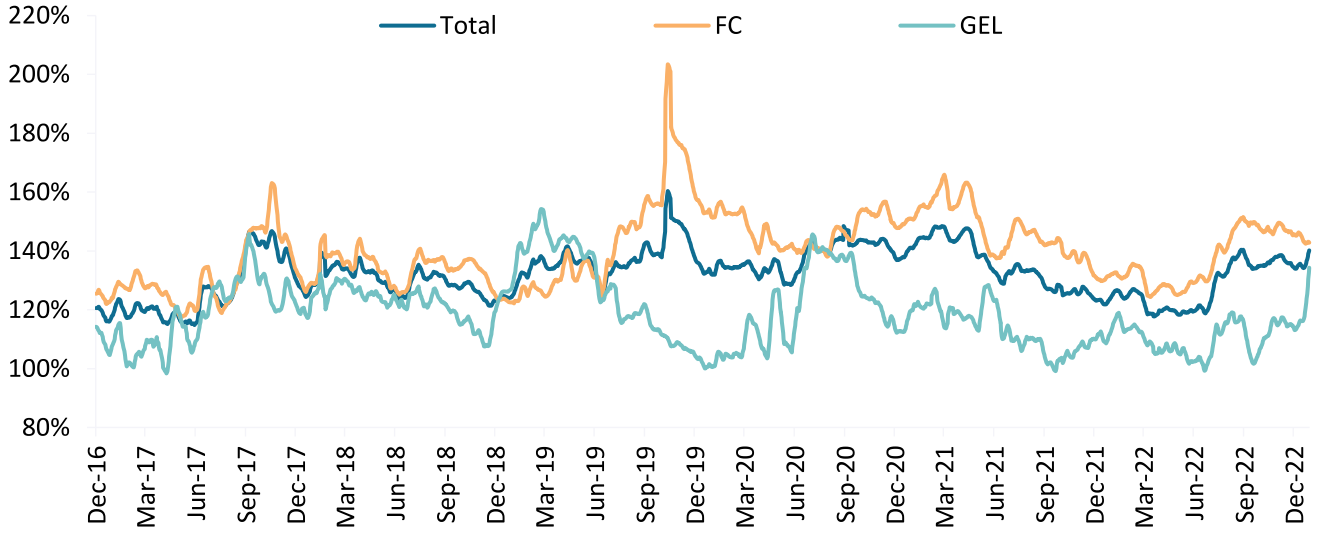
Following the risks associated with the COVID-19 pandemic, the National Bank of Georgia continued a number of actions to support liquidity in 2022:

- ✓ Low-interest and affordable GEL/USD swap operations with the NBG were offered to the financial sector until 15 April 2022. The term for the standby swap operation instrument was reduced to 7 days and its use was extended until the NBG decides otherwise.
- ✓ The GEL collateral base remains expanded, allowing commercial banks to attract additional GEL resources from the National Bank of Georgia by securing them with loans to small- and medium-sized enterprises. Microfinance institutions can attract additional resources from commercial banks depending on the size of their own loan portfolios. This mechanism, which operates with a tapering schedule from 2022, will operate until the end of 2023 with the possibility of a monthly renewal.

The annulment of other temporary measures did not have a material impact on the system, as banks operated with high liquidity buffers. The growth of ratios later in the year was related to the high growth of deposits. The Net Stable Funding Ratio (NSFR) also remained high and reached 133.6% as of the end of the year.

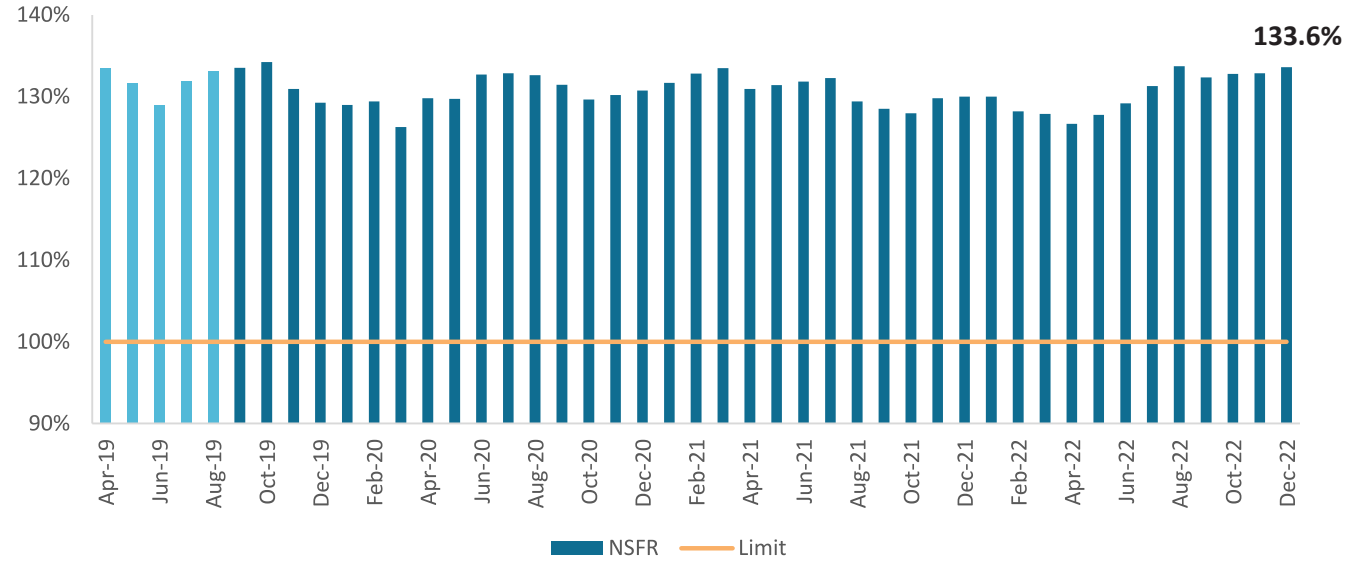
In 2022, the liquid asset gap structure remained stable for both the up-to-1-year and more-than-1-year time baskets.

Diagram 4.32 Liquidity coverage ratio (LCR) dynamics (10-day floating average)



Source: NBG

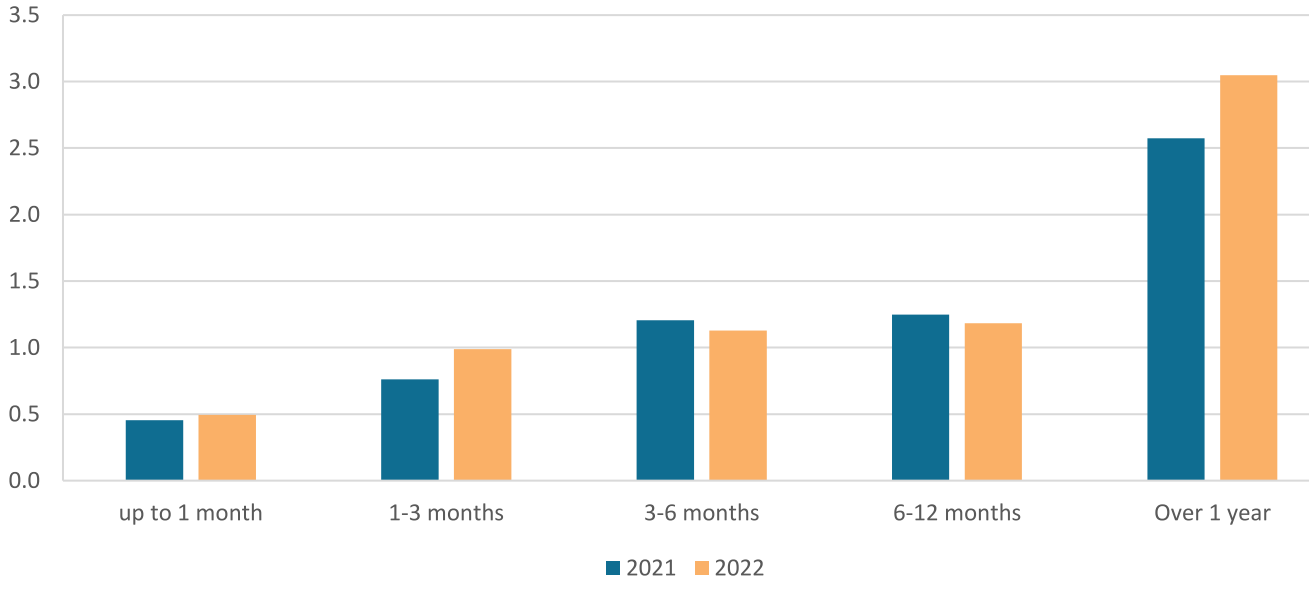
Diagram 4.33 The Net Stable Funding Ratio (NSFR)*



Source: NBG

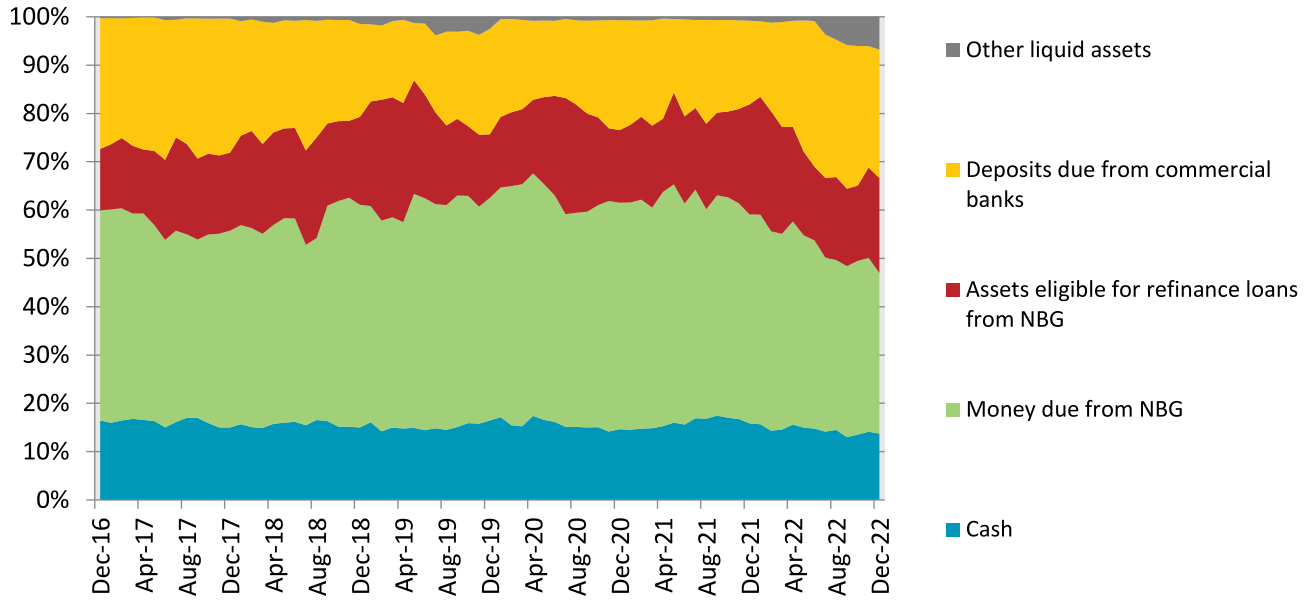
*Decree enacted from 1 September 2019.

Diagram 4.34 Liquidity gap: assets-to-liabilities ratio



Source: NBG

Diagram 4.35 Volume and structure of liquid assets



Source: NBG

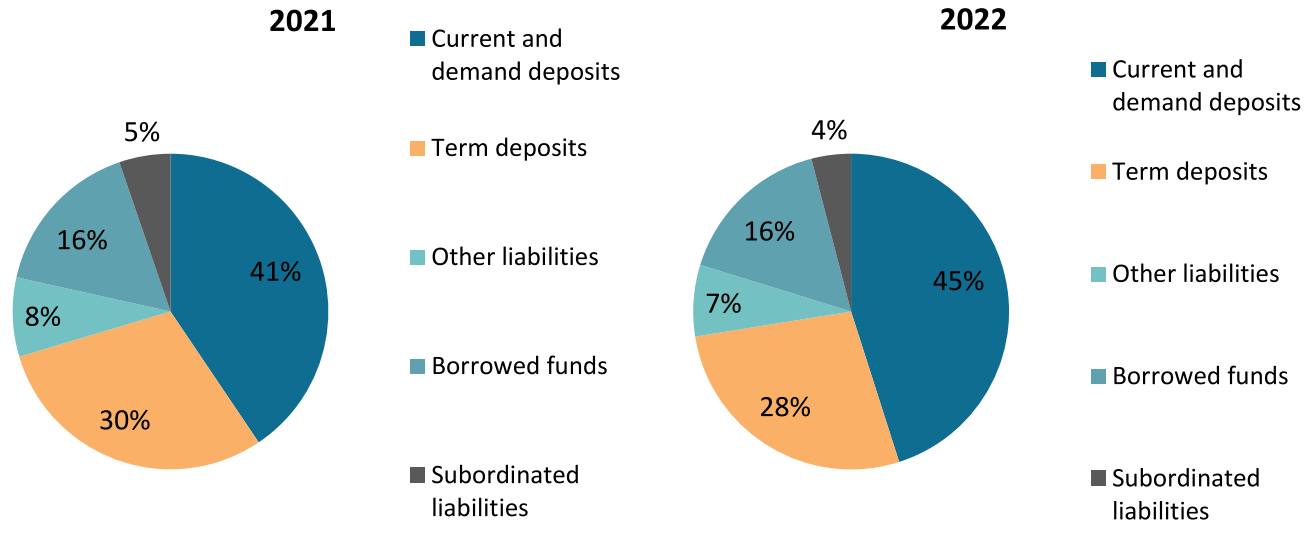
4.8.2 Liability Structure

The liability structure remains stable. Compared to the previous year, the share of current and demand accounts has slightly increased. The share of borrowing is unchanged and the share of term deposits is slightly reduced. At the same time, banks maintain a fairly comfortable level of liquid assets as relevant to the liability structure risks.

4.8.3 Retail Funding

During 2022, non-bank deposits increased by GEL 7.1 billion (by 19.1%, or 29.0% net of the effect of the exchange rate) and amounted to GEL 44.3 billion by December. In terms of depositor structure, the growth of deposits of individuals and legal entities was 18.3% and 19.9%, respectively (30.6% and 27.1%, respectively, net of the effect of the exchange rate).

Diagram 4.36 Liability structure

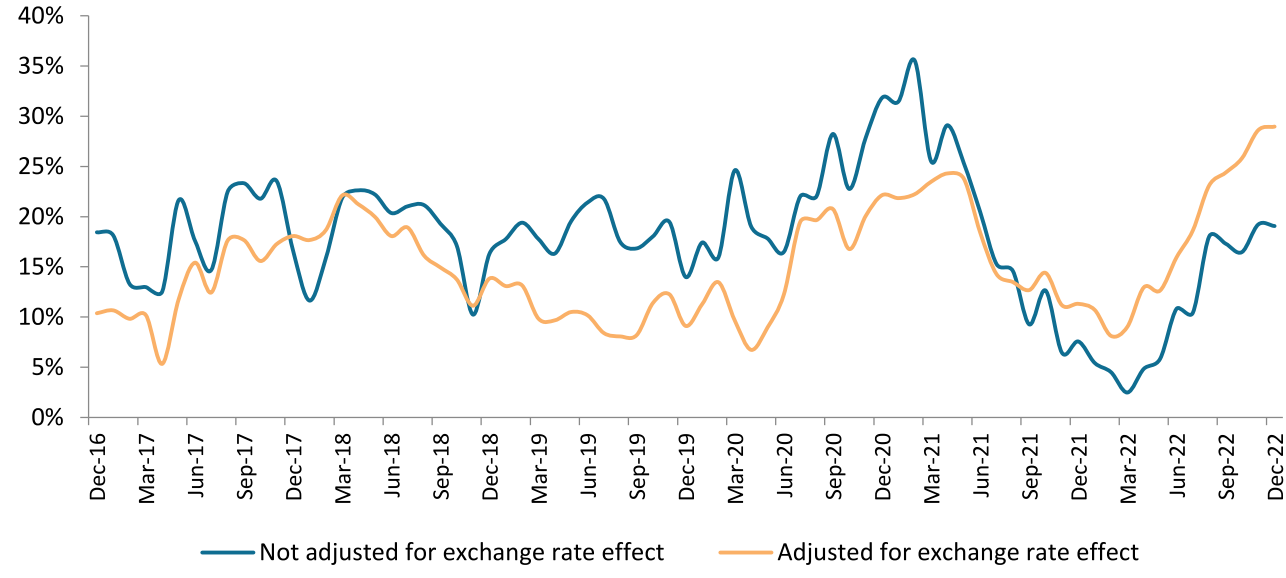


Source: NBG

During 2022, the deposit larization ratio increased and reached 43.9% by the end of December.

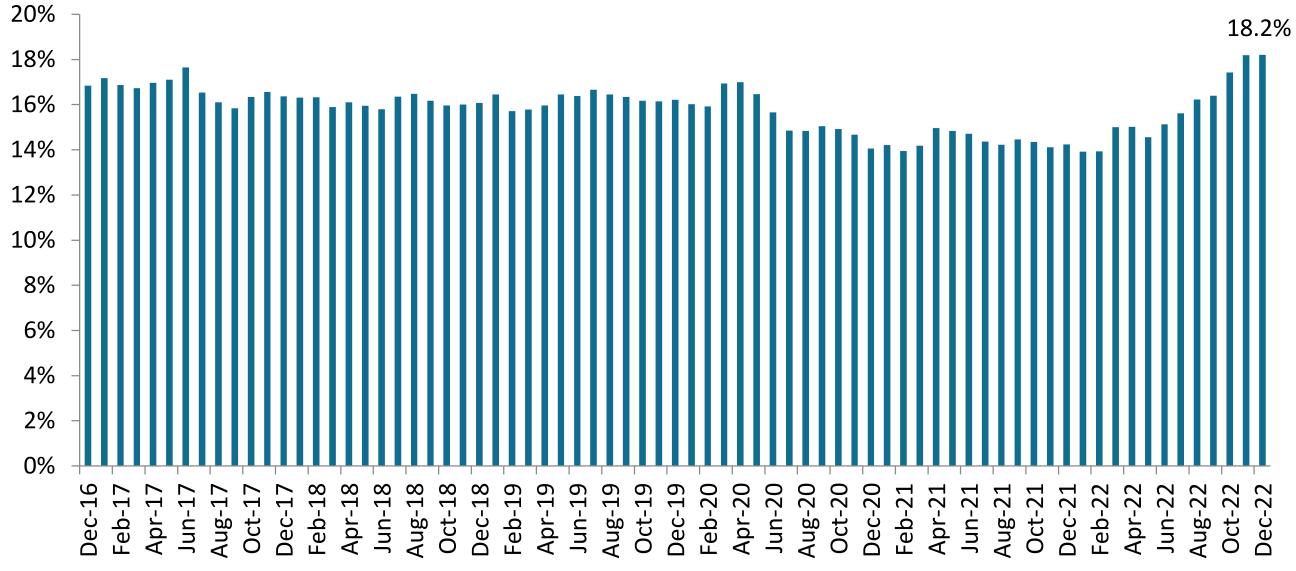
The share of deposits of non-resident customers in total non-bank deposits increased by 4 pp during 2022 and reached 18.2% by the end of December. By origin, the share of Russian citizens in the total deposits of non-residents increased to 37%, although in total these deposits are still diversified by both country and type of deposit, which is a positive factor in terms of risk. In order to prevent excessive dependence on this type of funding, the National Bank of Georgia maintains an additional liquidity requirement for deposits raised from non-residents.[82] The need for additional liquidity in banks with a high share of non-resident deposits reduces the incentive to attract this type of deposit portfolio.

Diagram 4.37 Annual growth of non-bank deposits



Source: NBG

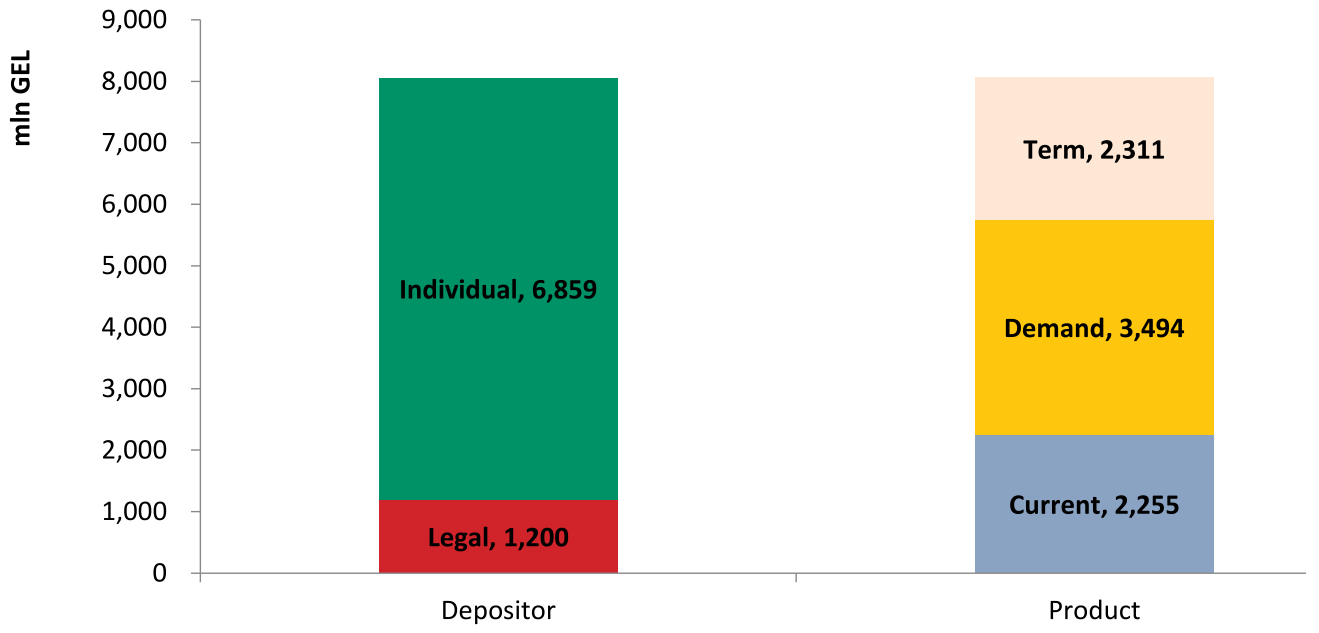
Diagram 4.38 Share of non-resident depositors



Source: NBG

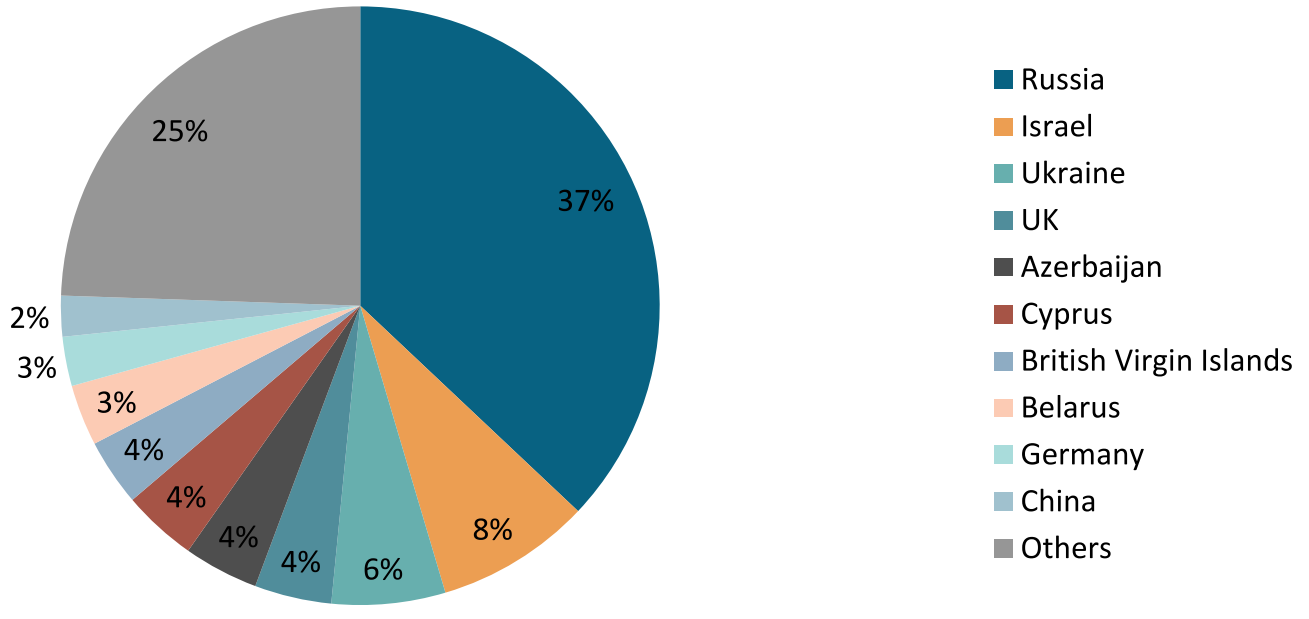
82 For the purpose of calculating the liquidity coverage ratio and the net stable funding ratio, non-resident deposits are subject to higher liquidity requirements than those of residents.

Diagram 4.39 Non-resident deposit structure (Dec. 2022)



Source: NBG

Diagram 4.40 Non-resident deposits by country (Dec. 2022)



Source: NBG

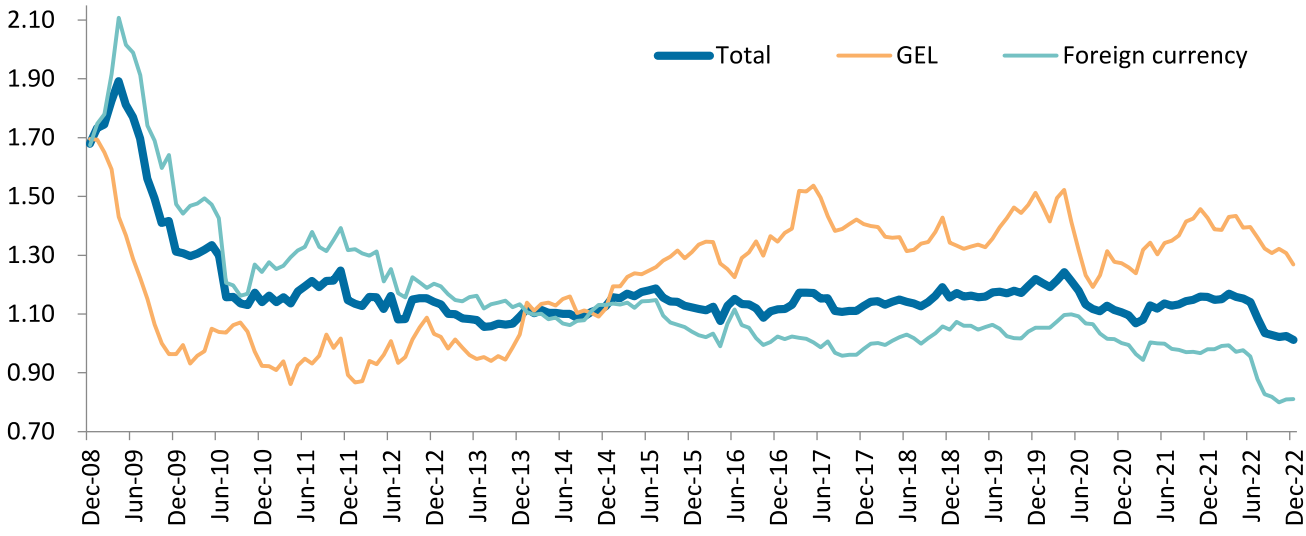
4.8.4 Wholesale Funding

Loan-to-deposit ratios during 2022 were relatively reduced due to the high growth of deposits; however, these remain at a high level. It is worth noting that the ratio calculated for loans and deposits in GEL still exceeds the index calculated for loans and deposits in foreign currency. To some extent this is caused by the high growth of loans in GEL due to currency risks and larization measures.

Funds received from external sources of wholesale funding are quite diversified in terms of both the type of lenders and residual maturities. The residual maturity of more than 45% of the mentioned funding exceeds two years, which reduces the risks of system funding.

A total of 58.6% of wholesale funding comes from international financial institutions, 8.9% from parent/affiliated companies, and 32.5% from other private institutions. The high share of international financial institutions and the long-term repayment schedule can be considered as being low risk. For the purposes of managing funding risk, the NBG regularly monitors the relevant covenants.[83]

Diagram 4.41 Total loans to non-bank deposits ratios by currency



Source: NBG

Table 4.7 External sources of wholesale funding and their repayment schedule (as of 31 December 2022)

Months	<1	1–3	3–6	6–12	12–24	24–36	36–60	>60	Total
Sum	**11.1%**	**2.9%**	**3.3%**	**10.3%**	**27.0%**	**16.2%**	**16.9%**	**12.2%**	**100.0%**
International financial institutions	3.6%	1.8%	1.7%	7.5%	10.3%	10.1%	13.0%	10.6%	58.6%
Parent/affiliate financial institutions	0.8%	0.0%	1.1%	1.5%	2.7%	0.6%	1.4%	0.9%	8.9%
Other private funding	6.7%	1.1%	0.6%	1.3%	14.0%	5.5%	2.5%	0.7%	32.5%

Source: NBG

83 Covenants are limitations set under loan agreements.

4.9 Macroprudential Risks

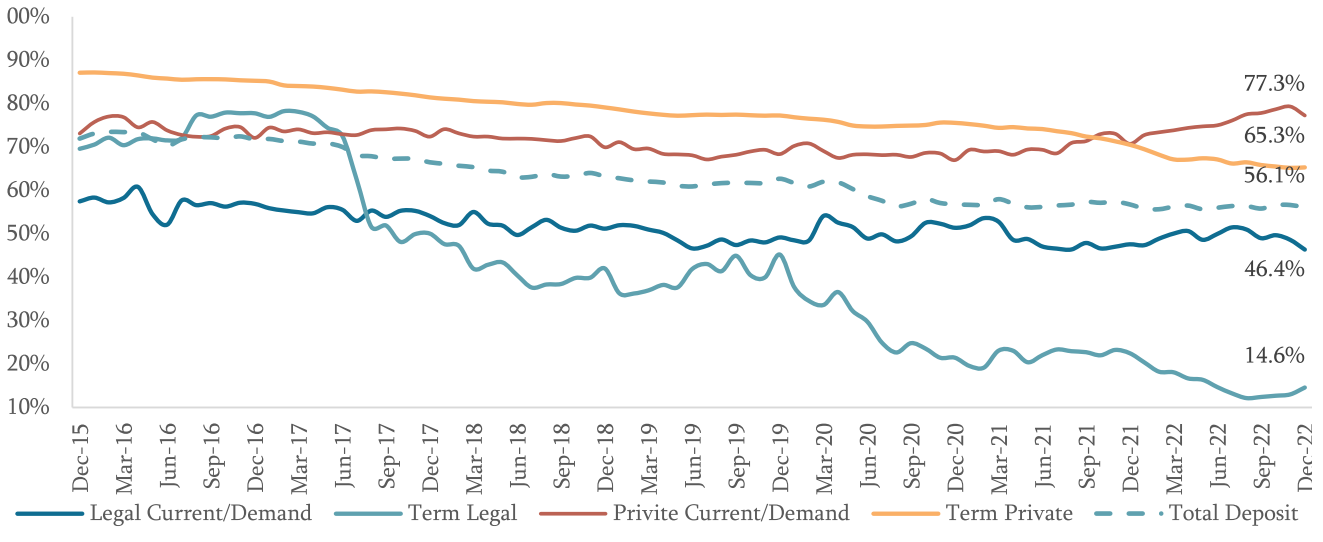
The National Bank of Georgia continues to monitor systemic risk indicators that may have a material impact on the banking sector. Information about these risks is provided in different chapters of this report. The main challenge in this regard in 2022 was to assess risks to the stability of the financial sector arising from regional uncertainty and to develop and implement appropriate macroprudential and supervisory policies.

The National Bank of Georgia performs macroprudential supervision focused on the following main areas: the increased debt burden for non-hedged borrowers due to foreign currency loans; the over-indebtedness of the vulnerable part of the population; fierce competition in business and mortgage lending amid imperfect pricing models; cyber risks and scams across the system; the potential growth of non-regulated financial intermediation based on financial technologies; and geopolitical threats in the region. During 2021-2022, several important decisions were made for mitigating these risks:

- ✓ The Financial Stability Committee, upon the recommendation of the Financial Sector Assessment Program (FSAP) of Georgia, recalibrated separate requirements of the Responsible Lending Regulation.
- ✓ The buffers released at the beginning of the pandemic began to be restored on 1 January 2022 and the overall process will last three years.
- ✓ Banks were given until 1 January 2023 to restore the CICR buffer and until 1 January 2024 to meet the capital conservation buffer requirement.
- ✓ The method for calculating the CICR buffer will change and will depend on the level of dollarization of a commercial bank's loan portfolio. This will motivate the larization of loans.
- ✓ The countercyclical buffer remained unchanged at 0% during the year. However, the National Bank of Georgia announced an increase of the countercyclical buffer at the next committee meeting.

Dollarization of deposits is challenge for the financial sector, and this remains high despite significant reductions in recent years. This indicator varies by type of customer and deposit. Dollarization is higher in deposits of individuals and relatively low in the accounts of legal entities due to the need for GEL in companies' operating activities. Of particular note is the 65% dollarization of term deposits of individuals. This type of deposit is the largest item in the entire portfolio and, because its dollarization trend has a large impact on the dollarization of total deposits, it is a good measure of the exchange rate expectations of individuals.

Diagram 4.42 Dynamics of the dollarization of deposits (fixed exchange rate)



Source: NBG

The National Bank of Georgia maintains a prudential approach to credit risk caused by currency mismatches. More specifically, the requirement of additional capital applies to foreign currency loans issued to non-hedged borrowers, while in the case of individuals, more conservative additional credit standards are imposed. To support the larization of liabilities, the NBG uses more preferential requirements for liquidity and minimum reserves on the national currency.

Box 4 Systemic Buffers

Financial difficulties arising in systemically important banks can pose considerable threats to the country's financial stability. The systemic buffer thus acts to boost the stability of systemically important commercial banks. This buffer is set individually for each commercial bank that is considered to have systemic importance. When identifying systemically important banks, the NBG considers the Basel recommendations and the methodologies issued by the European Banking Authority. The specific characteristics of the local financial sector are also incorporated.

Work got underway in 2022 to provide greater transparency to the updated approaches used by the National Bank of Georgia in identifying systemically important commercial banks and in setting systemic buffer scores, and to update and establish buffers for such systemically important banks using these methods. The systemic buffer methodology was updated at the beginning of 2023.

Following these changes, the scores of systemic importance were calculated by the following indicators and weights:

Criterion	Indicator	Weight
Size (55%)	Total risk position	20%
	Customer deposits	20%
	Gross income	15%
Relation (15%)	Assets of the interbank system	5%
	Obligations of the interbank system	5%
	Wholesale funding	5%
Replaceability (25%)	Number of branches	10%
	Number of depositors	7.5%
	Number of borrowers	7.5%
Complexity (5%)	Investments in capital	5%

In addition, the following were established: the limit of the systemic score, the buffer size, and the approach to determine the upper limit of the buffer according to the concentration.

In accordance with the updated approaches, three commercial banks were defined as systemically important and were assigned systemic buffers at the following rates:

a) TBC Bank JSC: 2.5%

b) Bank of Georgia JSC: 2.5%

c) Liberty Bank JSC: 1%

4.10 Operational Risk

Operational risk is the risk of losses arising from deficient/inefficient internal processes, people, systems, or external events. The most pressing external factor during 2022 was the Russia-Ukraine war, which has had a large-scale impact on the world and has made the financial sector a focus area in terms of operational risk. The sanctions imposed on Russia also affected one commercial bank operating in Georgia. However, it should be noted that the banking sector of Georgia flexibly coped with the impact of the imposed sanctions and the expected operational risks did not result in high losses.

Business continuity risk, cyber risk, and modern-day challenges related to cyber security management are some of the key risks in terms of operational risk management. The National Bank of Georgia is actively working with commercial banks on the implementation and establishment of business continuity management principles and plans. The National Bank of Georgia also pays attention to various important components of business continuity management, including infrastructure soundness and business continuity plan testing. It is important for banks to continuously ensure business continuity testing according to various scenarios, which include outsourcing processes (including cloud services).

It is equally important for the financial sector and banking systems to focus on their recovery plans. The NBG continues to monitor the testing of commercial banks' business continuity plans, with particular emphasis on the continuity of employees and smooth operation of critical processes. The Operational Risks Division of the NBG is involved in the assessment of the recovery plans of commercial banks.

In addition, the NBG continued remote inspections to assess the operational and cyber risk management framework of commercial banks in 2022.

Because of the pandemic and the uncertain macroeconomic environment, it has become more urgent to expand operational risk forecasting tools. To that end, operational risk stress tests are being studied. These provide an opportunity to determine the expected impact of a negative event on the capital and financial conditions of an organization and thereby help reduce the impact of such an event should one occur. With this in mind, greater importance is also given to recording and improving historical data related to losses from potential or real operational risks, the cause-effect analysis of operational risk events, and the assessment of systemic impact.

The banking sector coped quite well with the challenges caused by the pandemic. However, the pandemic did urge the introduction of new technologies and innovations in the financial sector, potentially exposing it to greater risk. Over the past year, the Operational Risk Supervision Division was actively involved in the study and assessment of operational and cyber risks related to Open Banking, digital banking, the remote identification of a person, and electronic signatures in the banking sector.

The banking sector is currently continuing to switch from a remote to a regular work mode. A hybrid work environment is practiced in some cases, entailing novelty and new challenges. Remote work now functions better, in terms of both risk management and the formalization of the process. However, as remote services and digitization are more widely practiced in the financial sector, this necessitates the continuous improvement of control mechanisms for fraud and technological risks.

A large number of commercial banks have started implementing the electronic signature process. At the current stage, two electronic signature options are offered: 1. qualified electronic signatures; and 2. advanced electronic signatures. Although electronic signatures are currently a novelty, this process has become one of the contributing factors for the advancement of remote services. While this a step forward for financial institutions, the risks that may accompany the use of electronic signatures should be considered and the process needs to be studied in practice.

The National Bank of Georgia pays great attention to raising awareness of operational risks in the financial sector of Georgia, to expanding operational risk management, and to developing supervisory principles. Furthermore, banks were advised to conduct awareness-raising initiatives for both their employees and customers.

The NBG places special importance on data quality and accuracy risk in the banking sector. Guidance for accounting for operational risk losses will be published and put into effect in the third quarter of 2023. The principles for effective risk data aggregation and risk reporting were developed. The Regulation on the Management of Operational Risks by Commercial Banks is being amended to specify the requirements for outsourcing. In addition, the Regulation on Exchange of Information on Major

Operational Risk Events was developed. This regulates the timely and centralized exchange of information on major operational risk events between the National Bank of Georgia and commercial banks through an information sharing and analysis portal.

A supervisory questionnaire was developed for non-banking financial institutions and an accuracy risk management document was drafted.

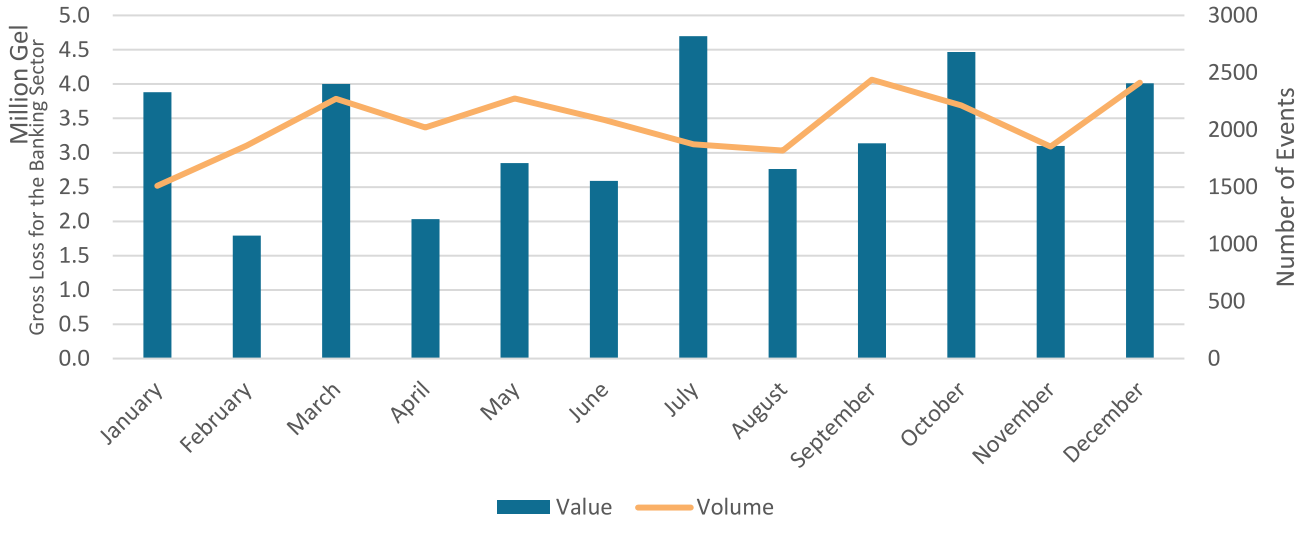
Throughout the year, the National Bank of Georgia worked with commercial banks to support them in having appropriate and flexible control mechanisms in place, and to develop and introduce improved fraud monitoring management tools and information systems. The development of processes for detecting and preventing fraud related to payment cards is one of the priorities for the National Bank of Georgia.

4.10.1 Operational Risk in the Georgian Banking Sector

The local banking system is characterized by a relatively low complexity of banking products and services, but there is constant development and transformation in the sector: new banking products and services are being introduced at a fast pace and these are increasingly based on information systems. This fact increases the subsequent operational risk of the financial sector. Similar to the case in 2021, the number of digital services increased in 2022. This was partly due to the pandemic, during which various business processes and services were performed remotely.

In 2022, the total operational losses of commercial banks in Georgia amounted to GEL 39.3 million, which was 30% higher than the total losses in 2021. The gross losses relate to the initial amount of the operational event prior to any reimbursement of operating losses. There were 24,632 operational loss events in 2022, which was a 26% increase over 2021. Within the operational risk reporting of the National Bank of Georgia, commercial banks are obliged to record all operational loss events with a total value equal to or greater than GEL 10. Diagram 4.43 shows the dynamics of total operational losses in 2022.

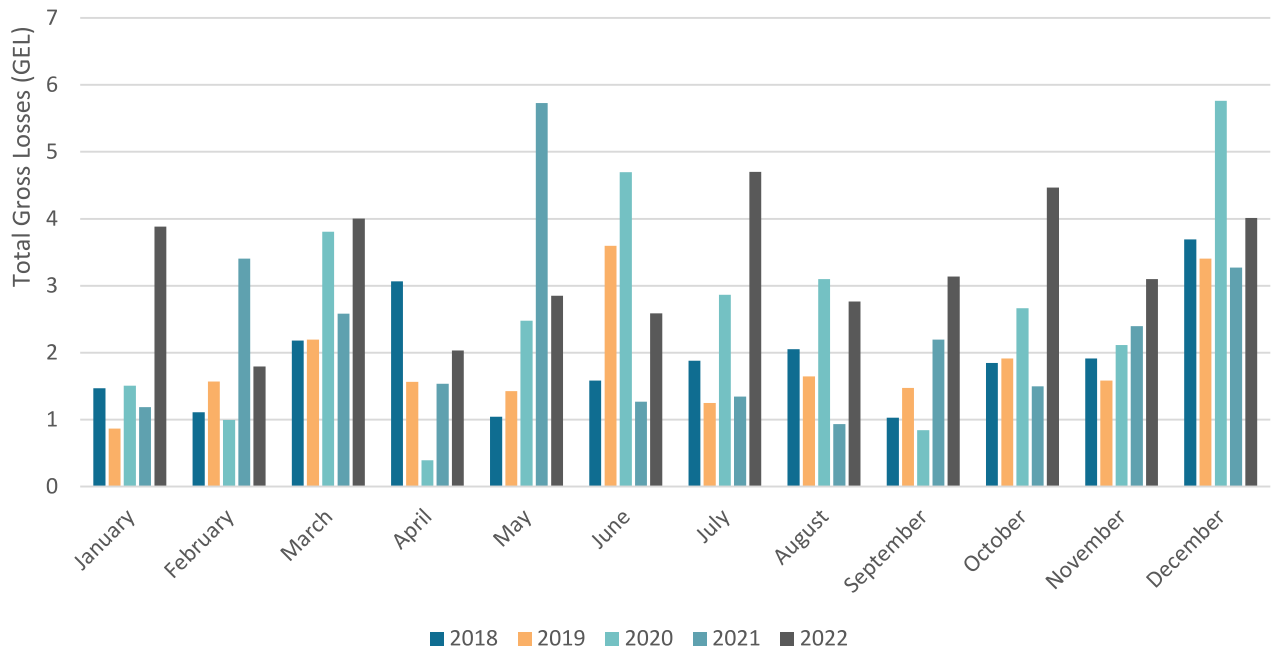
Diagram 4.43 Total losses of the banking sector in 2022



Source: NBG

Diagram 4.44 shows the dynamics of total operational losses over the last five years (2018-2022). A major operational risk event was recorded in July 2022, leading to an increase in operational risk losses in that month as compared to the same period of the previous year. Historically, December records more operational events than other times of the year, which is largely related to the end of the reporting year.

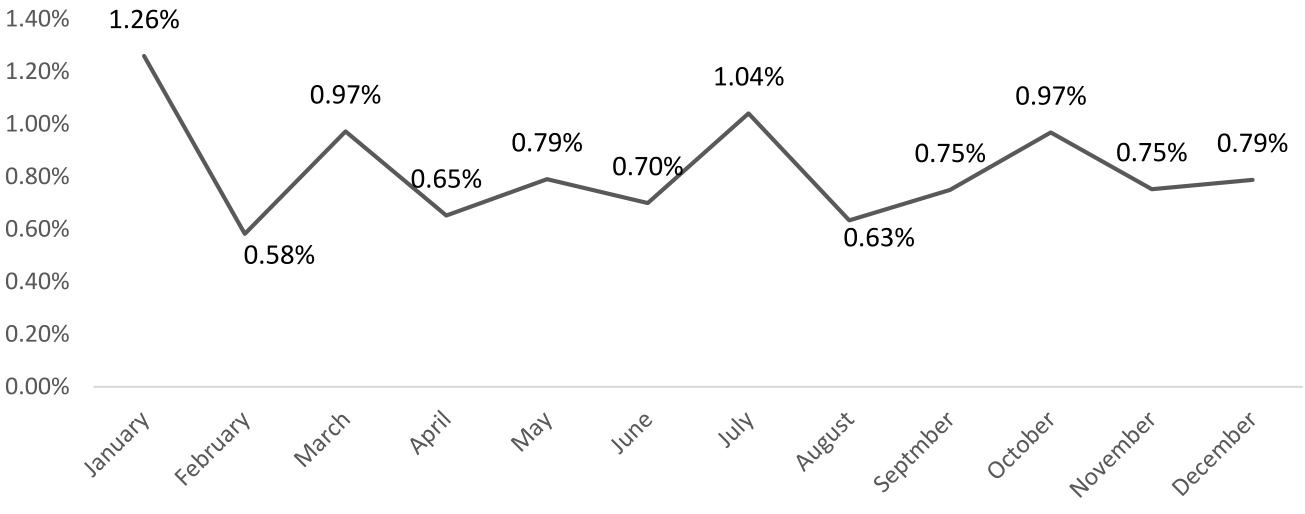
Diagram 4.44 Total operational losses for the last five years (2018-2022)



Source: NBG

The operational risk loss indicator is one of the best measures to determine the operational risk of the financial system. This indicator is calculated by the ratio of the total operational losses of the financial system to the total income. In 2022, the ratio of total annual gross losses to gross income calculated under Basel II was 0.83%. Diagram 4.45 shows the monthly dynamics of the operational loss indicator of the Georgian banking sector.

Diagram 4.45 Dynamics of the operational loss indicator in 2022 (total loss to total income)

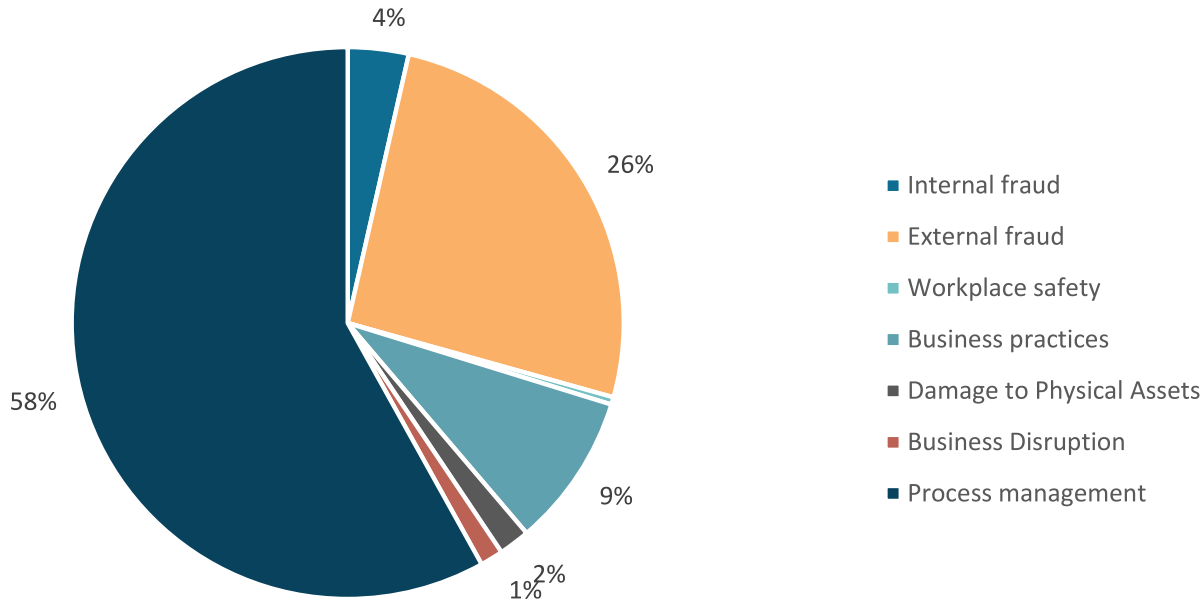


Source: NBG

In 2022, as in 2021, operational losses were mainly recorded in retail banking services and, to some extent, in commercial banking services. The retail banking business line, along with direct retail banking, also includes operational losses related to payment cards.

Looking at operational losses by event categories reveals that the category of process management recorded the largest share of losses in terms of value (58% of total losses), while external fraud was the second largest category (a 26% share). The proportional increase in external fraud compared to the previous year was due to one major event of external fraud that was observed in the financial sector in October 2022 (the structure of operational losses in 2022 is shown in Diagram 4.46).

Diagram 4.46 Distribution of total losses of the banking system in 2022 by category of event



Source: NBG

4.11 Cyber Risk

The importance of cyber security (as one subcategory of operational risk) is increasing in the wake of digital transformation. The 2022 summary report of the International Financial Institute notes that cyber risk is the biggest threat to the financial sector. According to the same report, cyber risk has replaced credit risk as the most noteworthy risk category in the financial sector. Like last year, in 2022 the focus on cyber threats and challenges was predominately caused by the impact of the pandemic. However, it is equally important to mention the war between Russia and Ukraine, which has become an important factor in the overall context of cyber security.

Given the increasing adoption of remote services, ensuring and maintaining cyber security at an appropriate level remains one of the most important challenges for the financial sector. The National Bank of Georgia continuously observes current trends in the banking sector and carries out relevant monitoring activities so that, in the case of a cyber-attack within an individual financial institution or sector, a timely response and recovery actions is ensured and the relevant information can immediately be shared with interested parties.

In 2019, the National Bank of Georgia approved supervisory requirements related to cyber security for commercial banks. The cyber security management framework is the baseline criteria used by the NBG to monitor and supervise the implementation, maintenance, and continuous improvement of cyber security management in the banking sector.

During 2022, the NBG carried out supervisory assessments of commercial banks in order to

determine their compliance with the above-mentioned framework. Assessments were mostly conducted remotely, with physical visits to check datacenters. At the end of each assessment, a relevant report was presented to the individual supervised entity, which contained the findings and mandatory requirements and recommendations for corrections.

Considering the current challenges, the main areas for improvement included the formalization of policies and procedures for ensuring cyber and information security, the improvement of risk management practices, constant attention to raising awareness, and strengthening the human resources employed in information and cyber security with appropriate competencies. Special attention was paid to business continuity and preparedness plans and their likely effectiveness in the event of a potentially large-scale cyber incident.

In addition to the abovementioned supervisory requirements, commercial banks are requested to conduct audits (internal and external) and penetration testing (external) of their information systems. Those audits and tests serve to identify and reduce weaknesses and, consequently, reduce cyber risks. The National Bank of Georgia pays special attention to the results of the relevant tests/audits and their quality control.

The availability of effective processes and mechanisms for managing cyber incidents is an important component of cyber security oversight. The Cyber Risk Supervision Division continues to analyze the mandatory reports on cyber incidents from commercial banks and to produce quarterly reports that allow the dynamics of cyber incident trends to be tracked for both for individual banks and for the system.

During 2022, the banking sector was a target of phishing and distributed denial-of-service (DDoS) attacks. These involve hackers stealing users' confidential and sensitive information and then using it for their own purposes (phishing) or interrupting the services of commercial banks (DDoS attacks). The National Bank of Georgia, together with commercial banks, has been intensively working to improve appropriate control mechanisms to prevent similar incidents, identify/eliminate incidents in a timely manner, and communicate with stakeholders.

Having up-to-date and accurate information about cyber threats and sharing this among stakeholders is an important practice related the effective management of cyber risk. In 2022, the NBG set up a portal for sharing information on cyber threats allowing the involvement of commercial banks. The platform provides an opportunity for members to share timely and accurate information related to cyber threats and actionable supervisory directives. Sharing such information on the platform helps members understand current trends, anticipate threats, and learn from past experiences that can be used for the prevention of cyber risks.

The year saw active cyber security awareness-raising campaigns be conducted for the financial sector and consumers. The financial sector continued to participate in the international Cyber Security Awareness Month campaign organized by the National Bank of Georgia, which was launched for the second time in 2022. Events were organized by the NBG and commercial banks, including competitions, conferences, and educational videos supporting awareness of cyber security among the general public.

The Georgian legislation on Information Security was updated in 2021 and entered into force in 2022. In relation to this, the NBG's cyber risk supervision team participated in joint meetings with three systemic banks and the Digital Governance Agency of the Ministry of Justice of Georgia.

Considerable actions were taken in 2022, as in the previous year, to introduce and develop Open Banking with the involvement of the National Bank of Georgia, the Bankers' Association, and commercial banks. This entailed allowing third-party financial service providers to access the banking and financial data of clients (upon their request and consent) through Application Programming Interfaces (APIs). The involvement of payment service providers in Open Banking – who will own, process, and share sensitive financial information – is accompanied by risks related to data leaks, human error, weaknesses in third-party information systems, outsourcing services, and other cyber security risks. This might allow cyber attackers to gain access to sensitive information and perform fraudulent financial transactions. To minimize the cyber risks related to Open Banking and the expected negative impact should they materialize, the Cyber Risk Supervision Division of the National Bank of Georgia developed cyber security requirements for those payment service providers willing to engage in Open Banking. Meetings with stakeholders during 2022 were dedicated to discussing these requirements.

4.11.1 Regulatory Actions Addressing Cyber Risks

The National Bank of Georgia developed the Guidelines for the Audit of Information Systems and Cyber Security Management Framework in Commercial Banks with the goal of developing the supervision function and regulatory instruments. This document ensures the effectiveness and quality of the assessment of information systems and cybersecurity frameworks.

In recent years, the financial sector, especially banking institutions, have been using cloud outsourcing services. As such, the NBG has prepared cloud outsourcing service guidelines and shared these with stakeholders. These represent preventative requirements, the timely implementation of which will support supervised entities in managing the challenges/risks related to the cloud environment. The guidelines impose a number of requirements on financial institutions related to the preliminary evaluation of cloud outsourcing service providers, the assessment of critical and/or important functions, the assessment of cyber and information security risks, the acquisition of appropriate industry credentials, the realization of audit and supervision rights, monitoring, and exit strategies.

The year was also marked by the introduction of a number of new products and services in the financial sector that were increasingly based on information systems. During 2022, the Cyber Risk Supervision Division continued to participate in the evaluation of these products. The team issued a number of recommendations/instructions to relevant stakeholders, resulting in a significant reduction in the use of single-factor authentication/verification procedures by financial institutions in systems that serve to remotely identify users.

The NBG developed a legislation on the registration, cancellation of registration, and regulation of the Credit Information Bureau. Among other requirements, the regulation sets out requirements for the information systems of the bureau and its platform. The Cyber Risk Supervision Division developed a number of guidelines for applicant organizations wishing to be registered on the platform. The supervisory directives concern information security policies and procedures, as well as the security of information systems. Special attention was paid to professionally performed audits and penetration tests, the reports of which should be used for further improvement of the system.

Since the importance of cyber security is increasing day by day, it is important for the National Bank of Georgia to have cyber security specialists with strong competences. The Cyber Risk Supervision Division thus participated in a number of industry seminars and trainings during 2022 and the team members hold internationally recognized industry certificates.

4.12 Development of Financial and Supervisory Technologies

4.12.1 Promoting Financial Innovations

The speed of innovation in the financial sector is increasing, which brings about new opportunities as well as new risks. The financial sector remains the most regulated economic sector in the world, and the extent of this regulation continues to grow. As a result, the modern supervisory framework is quite technical and complex, especially for new financial startups. It is thus an important challenge for financial sector regulators to encourage innovators with fintech ideas at the same time as supporting the transformation of these ideas into sustainable financial models. In response, the NBG is paving the way for making basic fintech infrastructure available by developing various supervisory tactics.

Financial Innovations Office[84]

The Financial Innovations Office is an effective platform for the NBG to communicate with the financial innovator community. The mission of the office is to facilitate responsible innovation in the financial sector and to assist fintech organizations/ startups in learning about the National Bank of Georgia's regulatory approach.

During 2022, the office hosted a number of important meetings: the TechSprint competition held at the beginning of 2022 received a fairly high response from students, and a joint event conducted with USAID in May was important in addressing the importance of the central bank digital currency.

The office maintained close contact with USAID, the German Economic Team, BaFin, GFin, and other

84 Information on the Financial Innovations Office is available on the Financial Stability section of the NBG's website: https://www.nbg.gov.ge/index.php?m=742

organizations throughout the year to learn about new developments and supervisory methods.

The first digital bank in Georgia was licensed in 2022 with the support of the Financial Innovations Office. Work also got underway on the licensing of a number of other digital banks, a process which will continue in 2023.

Regulatory Sandbox

The regulatory sandbox is an important tool for promoting financial innovation that allows for the real-time testing of innovative products and services. In 2022, the innovative remote identification service of one entity was tested in the real environment of the regulatory sandbox. Over the next year, it is planned to use the sandbox to evaluate such innovative products as digital banks, the Credit Information Bureau platform, and online currency conversions.

Digital GEL

The idea of central bank digital currency (CBDC) is a topic quite relevant for the majority of central banks. The characteristics and technological aspects of digital currencies differ by country depending on their purpose. The National Bank of Georgia publicly announced its interest in digital currency in April 2021 and invited fintech companies to cooperate in exploring its development. In 2022, the NBG continued to communicate with technological companies that expressed their desire to join the digital GEL project. The digital GEL project is still under consideration. The Central Bank Digital Currency and Decentralized Finance Conference, which was a joint event of the NBG Innovations Office and USAID, was held in Tbilisi on 4-5 May 2022. Top technology companies were in attendance. After the conference, the technological requirements that the digital GEL technology should meet in a pilot mode were specified, the characteristics of the pilot mode were specified, and the launch of the pilot mode was planned for 2023.

Credit Registry

The National Bank of Georgia continued collecting credit registry data in a test mode in 2022. The credit registry form was updated and the accuracy of the received data was verified. Developed in consultation with the World Bank Working Group, the Credit Registry is a database that allows the collection of comprehensive information on credit risk. The data filed to the NBG on a monthly basis include the following data sets:

- ✓ Loan liability details
- ✓ Loan liability collateral data
- ✓ Information on refinanced loans
- ✓ Information on investments
- ✓ Information on rejected loan applications
- ✓ Information on loan files closed during the reporting month

To eliminate shortcomings related to data accuracy, it is planned to collect information using the revised form and to start parallel reporting in 2023.

Box 5 Regulation of Stablecoins

In 2022, the National Bank of Georgia studied types of so-called stablecoins, the principles for their regulation, and the models adopted by key players.

A stablecoin is a digital currency designed in such a way that its price is stable in relation to a national currency or other asset linked to it; this distinguishes such digital currency from other cryptocurrencies such as Bitcoin, Ethereum and others, whose prices tend to frequently fluctuate.

Table 4.8 Types and issuers of stablecoins

	Conventional assets	Alternative mechanisms
Collateral type	(i) Cash currency (ii) Commodity products (iii) Securities (iv) Other traditional assets	(i) Cryptocurrencies (ii) Algorithmic stabilizers
Top stablecoins	(i) Tether (conventional assets basket) (ii) USDC (conventional assets basket) (iii) Binance (cash currency) (iv) Pax (cash currency) (v) TUSD (cash currency)	(i) Fei (algorithmic stabilizer) (ii) DAI (cryptocurrencies)

The study of stablecoins identifies two types of financial models: the issuer of stablecoins as a payment system and the issuer of stablecoins as a bank.

As we see in the Bank of England study, if a stablecoin issuer acts as a payment system, it should be regulated by current payment systems regulations; whereas if it acts as a bank, then it should be subject to the regulations that currently apply to commercial banks.

A similar approach is taken by FINMA in Switzerland, which has clearly presented in its guidelines[85] that it will use an individual approach to each category of stablecoin and will, accordingly, apply the regulation that is most suitable.

In June 2022, the Basel Committee published a consultation document setting out initial proposals regarding the prudential treatment of crypto assets by banks. The document presents the criteria for considering a crypto asset a stablecoin and hence allowing it to be subject to relatively less stringent capital requirements than those crypto assets that do not meet these criteria (e.g., Bitcoin).

In the US, the President's working group on stablecoins, partnered with the FDIC and the OCC, produced a joint report addressing the key challenges. The main functions related to the release of stablecoins outlined in this report are as follows:

- ✓ **Governance** – these functions include ensuring compliance with standards related to the purchase, repurchase, storage and transfer of stablecoins.
- ✓ **Management of reserve assets** – this function sets standards with respect to reserve assets to ensure a 1:1 ratio of the nominal value of these assets and the issued stablecoins. Reserve asset management involves making investment decisions regarding reserves, which also includes assessing the riskiness of reserve assets.
- ✓ **Settlement** – transfer of stablecoins as a digital asset to DLT requires the involvement of other parties (e.g., for authentication and validation).
- ✓ **Distribution** – the distribution of stablecoins to users includes providing access channels and other services that allow users to receive, store, and transfer stablecoins.

These functions can be performed by the stablecoin issuer itself, as well as by third parties. If the functions listed above are distributed to different parties, it will be necessary to apply regulations to each of them separately.

In 2023, the NBG will continue its study of stablecoins to determine, in more detail, the type of each stablecoin in order to be able to either extend the currently active rules of regulation or to develop new types of regulations that will deal with future risks arising from this type of digital currency.

4.12.2 Model Risk

The use of different statistical models for business decision making has become common practice in the financial sector. Such models are widely used in lending, financial accounting, and risk management. There has been an especially large growth in the use of mathematical/statistical models in the area of retail lending and models based on machine learning and artificial intelligence algorithms have recently started to be used more frequently. Although use of these techniques increase the efficiency of models, they can also complicate analysis and risk assessment.

In response to this challenge, over two years ago, the National Bank of Georgia developed a draft of the Regulation on Risk Management of Data-Driven Statistical, Artificial Intelligence and Machine Learning Models. An updated version of this statute was published in 2022.

Three new areas were added to the regulation, and comments and recommendations from the financial sector were incorporated. The amendments to the regulation reflect current practices, challenges, and modern international supervisory experience in the financial sector of Georgia. This framework will facilitate the wider and more efficient use of these models in the financial sector.

Current trends in the sector prompted the necessity to develop a framework for the ethical use of models. To address this issue, the regulation

85 FINMA 2019 - The Swiss Financial Market Supervisory Authority Stablecoins guideline

sets out the ethical aspects related to model development, implementation and application, and ways to mitigate the possible unethical use of these models. This change has been implemented for the benefit of customers: there is a risk that a model built without ethical principles may unfairly classify a certain group of consumers and restrict their rights. The second change concerns the expansion of the risk-based approach: the new amendment offers a methodology for ranking/grouping models by risk. It is important that the entities using a model can ensure its transparency and interpretability by employing the statistical method. The third change will restrict model users from using 'black boxes' and shifting the responsibility for a model's results to the model's creators.

Models for accounting for expected credit losses in financial institutions following the introduction of IFRS 9 are being introduced at the NBG. Based on their complexity and the impact on a bank's financial position, these models can carry high risk. The NBG will thus use its resources to create an orientation model for their analysis. The orientation model will be one of the means for evaluating the models of financial institutions. The results of the model and the software code will be shared with those financial institutions that are in the initial stages of the development of statistical models.

TechSprint Competition

The National Bank of Georgia continues implementing projects that involve young people in financial technologies. Initiated by the NBG, TechSprint was a competition dedicated to supervision technologies and was open to anyone interested in data science. The competition turned out to be especially popular among students.

The National Bank of Georgia will continue to organize other competitions, striving to encourage talented people and promote its role as a financial innovator.

4.12.3 Credit Information Bureau

The NBG has been regulating and supervising the work of the Credit Information Bureau since 2018. Over the years, the functioning of the bureau, as well as the entities that have a contractual relationship with it, have been supervised in accordance with the procedures approved by a decree of the Governor of the National Bank of Georgia. As of December 2022, 229 lending entities and 31 organizations enrolled on a non-mandatory basis are cooperating with the bureau. Naturally, this figure varies year by year, as the registration and liquidation of lending entities affects their use of the bureau's database. The regulations related to the supervision of the bureau changes at certain intervals with the purpose of improving the functioning of the industry and reflecting the experience of the sector in practice. A package of amendments were made in this direction in September 2022. These covered the following areas: the market entry of entities whose functions are similar to, but not the same as, those of the bureau, such as the Credit Information Bureau platform; adherence to a strong authentication rule when remotely obtaining consent from a data subject; and preparation of reports on income from remittances of individuals and filing these reports to the bureau. The change also affected existing records on consumer protection. The NBG pays considerable attention to the study of, and adequate responses to, customer claims for the proper presentation of data.

4.12.4 Open Banking

Work was completed in 2022 on expanding Open Banking services in Georgia and creating the opportunity for fintech companies to engage in Open Banking. A number of meetings were held with both NBG-supervised entities and fintech companies to share information about the possibilities of Open Banking and its further development. Open Banking involves the immediate exchange of information between different financial institutions using electronic technologies, based on the client's desire and consent. The National Bank of Georgia first started working on the Open Banking project in 2019. At the beginning of 2020, the Open Banking Committee was established with the Georgian Bankers' Association to develop a common standard for the introduction of Open Banking in Georgia and to promote the further development of the project. Open Banking services have been available in Georgia since 31 March 2021. In 2022, services for exchanging information on standard products and exchanging account information for legal entities were added to the available services of Open Banking, as were additional services such as a transfer initiation service for individuals and legal entities and a remote identification service.

The development of Open Banking is not limited to these services. The transition to Open Finance is the next step, which will involve a much wider exchange of information. It is planned to include other representatives of the financial sector and licensed fintech companies in the system along with commercial banks in 2023. This, in turn, is expected to support the greater availability and variety of banking services.

4.13 Data Processing and Supervisory Technologies

The National Bank of Georgia continues using the International Standard XBRL (Extensible Business Reporting Language) information system in its efforts to improve the exchange of supervisory reports and data quality. Its two important components are: a reporting portal and the Taxonomy Management System (TMS). The project enjoys cooperation with Corefiling, a top British company.

Through the reporting portal, banks can submit the required supervisory reports, including in XBRL format. The validity of the reports submitted in XBRL format are checked by the appropriate taxonomy. With the help of the portal, banks can view the validation results before sending the data to the NBG. After the data is validated, the information provided is recorded in the database and is made available for analysis as required for banking supervision.

The portal continued to support the full conversion of reporting to IFRS in 2022. The NBG started receiving IFRS statements from commercial banks using the portal. Meanwhile, the adoption of individual FINREP financial statements established in the European Union with the XBRL standard continued in accordance with the EBA's Reporting Framework version 2.8. In the coming years, FINREP reporting will continue to be received from banks with appropriate updates, which the XBRL information system has the ability to do automatically.

The taxonomy management system (TMS), in addition to the portal, is an important component of the XBRL information system, allowing the NBG to create taxonomies based on the Data Point Model (DPM) architecture. A taxonomy is a set of information that contains metadata about reports. The information presented in the taxonomy includes definitions, relations between elements, hierarchies, and other rules that define how information should be presented in order to meet the reporting requirements of the NBG.

To create the taxonomy, the staff of the Information Processing and Supervision Technologies Division of the National Bank of Georgia went through intensive training on the introduction of the XBRL information system. However, as the technical characteristics of taxonomy are constantly changing, the knowledge acquired needs to be updated annually. The NBG staff thus attended a 3-day workshop at the 27th Eurofiling Conference in Madrid in 2022. Alongside other important issues, the workshop featured discussions of the DPM Refit update and its features. This will be gradually implemented in the National Bank of Georgia following in the footsteps of European countries. Considerable time was also devoted to discussing the ESG model, which was a novelty for European countries.

The staff of the NBG continue to work on the creation of taxonomies using the knowledge and experience they have accumulated. Work proceeded on the supervisory taxonomy of the NBG using the taxonomy management system in 2022, which was developed using the DPM methodology of the EBA. Intensive work is also underway to create a taxonomy for IFRS reports and to accept ESG reports in XBRL format, which is a challenge even for the most advanced countries of the world.

In addition to the XBRL information system, the NBG uses the world-renowned Business Intelligence system Tableau for data processing and visualization; it is also used for analytical dashboards for supervisory purposes in 2022. Additional credit bureau and credit register data were processed, and appropriate visuals were created based on these. Work also continued on making analytical dashboards available to a wider audience through the website of the National Bank of Georgia.

Knowledge sharing was intense during the year, both across the NBG and with external partners. At the Eurofiling conference held in Madrid, the NBG staff shared the challenges of implementing the XBRL information system in Georgia and the experience of processing supervisory data at the NBG.

Leading European countries are dynamically working on several key issues identified in 2022. Of these, the processing of granular data and implementation of ESG reporting are particularly important challenges. In response to these and other challenges, the NBG is committed to the further development of supervisory technologies.

CONSUMER RIGHTS AND FINANCIAL EDUCATION 5

5.1 Protection of Consumer Rights

IMPROVING THE LEGISLATIVE FRAMEWORK

Regulation on Consumer Rights

Following best international practice, and as a result of studying and analyzing customer feedback and market challenges, in 2022 the National Bank of Georgia approved amendments to the Regulation on the Protection of Consumers' Rights in the Provision of Services by Financial Institutions, Decree No. 32/04 of the Governor of the National Bank of Georgia dated 9 March 2021. These amendments included important issues such as:

- ✓ **Standardized assumptions for calculating the effective interest rate on demand deposits**, which allows for easy comparison of different products and increases the transparency of different interest-accruing schemes.
- ✓ **Additional requirements when calculating the effective interest rate for loans secured by movable property**, which ensures better compliance with the requirements defined by the Civil Code of Georgia in relation to interest rates.
- ✓ **Increased transparency of information about overdrafts**. Customers will have the opportunity to receive information about their own funds and the amount of available overdraft separately at ATMs. This will allow them to see more clearly what part of the overdraft limit is available to them, thereby helping them make an informed decision about using this limit. To further increase customer awareness, the amendments further require financial institutions to inform customers about their use of overdrafts by means of a short text message.
- ✓ **Increased availability and transparency of information**. Financial institutions are required to post samples of loan and deposit agreements and information about important terms and conditions on their websites. Details of loan and deposit agreements signed with financial institutions and the important terms of such agreements, including information about the effective interest rate, should also be made available through internet banking. In addition, certain requirements regarding information to be indicated in the header of agreements were established: if a loan is disbursed without solvency analysis, as determined by Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020 on the Approval of the Regulation on Lending to Individuals, then the header of the agreement must include text stating that, in the event of failure to meet the liability, the claim will only be considered satisfied when the relevant measures (including the sale and/ or repossession of the property) provided for by Georgian legislation are taken in relation to the collateral of the loan concerned.
- ✓ **Properly informing clients about the changes**. Before changing important terms in a loan agreement, financial institutions are obliged to provide information about such changes to clients and other persons related to the loan, as defined by the regulation, at least five working days in advance.

Work continued in 2022 on other changes to the regulation, which are planned before its approval and implementation in 2023. These changes, among others, include the requirement to transparently disclose the prices of products included in a package when offering financial products in combination. Financial institutions must ensure that the price of each financial product is transparently indicated and properly disclosed to consumers. With these changes, clients will be able to compare the financial products offered by one or more financial institutions, helping them make informed decisions. Financial institutions will not, however, be required to indicate the price of a financial product that they only offer to customers in combination with other financial products (such products that are not available for sale as an independent product). In such cases, it will be sufficient for the financial institution to inform customers that they cannot purchase those specific financial products separately.

Work was also carried out during the year to align the legislation provided for in the Georgia-EU

Association Agreement with European directives. Some of the changes concern the obligation of financial institutions to cancel, upon a client's request, unsecured and movable-property-secured agreements without imposing an early repayment fee within 14 days after signing.

Code of Ethics for loan recovery

A Code of Ethics for Financial Institutions for Loan Recoveries was approved on 17 February 2022. The goal of its adoption was to establish rules and norms, as adopted by best international practice, for relations with clients during loan recovery, to strengthen the reputation of financial institutions as reliable partners, and to promote the protection of consumer rights in the process of loan recovery based on loan agreements. The Code of Ethics is based on requirements adopted in developed economies and incorporates the specifics of the local financial sector as well as important issues raised by consumers. Work on the code enjoyed the involvement of the sector, ensuring the development of a sophisticated and high-standard document.

The Code of Ethics regulates the obligations of financial institutions towards customers in the process of loan recovery, which includes the following important issues:

- ✓ The document sets the obligation to provide truthful information to clients, to observe ethical and moral norms, and to communicate in a polite and businesslike manner.
- ✓ The code establishes rules for communicating with clients, contact persons, and third parties related to clients, which includes, among other things, regulations regarding the form of communication, its timing, and the list of information to be provided and/or sought. It is possible to contact the contact person only in those cases provided for by the valid/active contract, and it is possible to contact third parties in order to determine the location of the borrower. However, it is not allowed to provide information about a client's liability to a third party. Communication with the aforementioned persons is only permitted between 09:00 a.m. and 08:00 p.m.; also, both the contact person and third parties related to the client have the right to request that the financial institution stop communicating with them.
- ✓ The code requires financial institutions to produce records of communication with customers and/or contact persons and to keep these for a period of two months.
- ✓ The document prohibits alienation (transfer) of the loan portfolio to persons who are not entities subject to the supervision of the National Bank of Georgia. An exception to this is the case with legal entities, when, per agreement between the parties, it is permissible to transfer a loan to an entity that is not a supervisory entity of the National Bank of Georgia.

The core requirements of the Code of Ethics came into effect on 1 March 2022, and the obligation to produce records of communication with customers and contact persons was enacted on 1 June 2022.

Credit Information Bureau

Clients can lay claims to the Credit Information Bureau and such reports have been filed to the National Bank of Georgia every month since 2019. On the basis of such reports received and the claims clients have made directly to the NBG, relevant issues have been studied and analyzed in detail. Doing so allows for the resolution of specific issues and the elimination of deficiencies identified at the systemic level. In 2022, the NBG implemented certain changes to the Regulation on Providing Information to the Credit Information Bureau in Georgia, Recording and Accessing Information in the Database of the Credit Information Bureau; these changes include the following important issues:

- ✓ The Credit Information Bureau is obligated to develop a Code of Ethics for relations with consumers, based on which it will act in observance of the principles of honesty, transparency, and justice when communicating with consumers.
- ✓ New requirements for responding to claims made by consumers. The Credit Information Bureau has a deadline to confirm/notify the receipt of the claim. The bureau also now has a timeframe to study a client's complaint that should not exceed 30 working days.

The draft document was published to achieve the maximum involvement of the sector's stakeholders in the process and to receive their comments and questions about the changes.

Consumer Rights Protection Law

In March 2022, the Law of Georgia on the Protection of Consumer Rights was passed, the main requirements of which came into effect on 1 June, and some further requirements on 1 November 2022. Although the legal acts previously developed by the National Bank of Georgia largely covered the requirements stipulated

by the law, the law additionally defined such important issues as the prohibition of unfair standard contract terms and unfair commercial activities. The National Bank of Georgia will be monitoring the compliance of representatives of the financial sector with the requirements of this law.

REMOTE AND ON-SITE INSPECTION OF CONSUMER RIGHTS PROTECTION STANDARDS IN THE FINANCIAL SECTOR

There were no on-site inspections of financial institutions for consumer rights protection in either 2021 or 2022; however, the NBG continued remote inspections of its supervised entities in 2022 to monitor the protection of consumer rights for financial services. Issues identified in the customer applications were studied remotely and a number of supervisory actions were taken in response to identified violations of the legal requirements. Written instructions were sent to five commercial banks, one microfinance institution and 38 lending entities; four commercial banks were fined a total of GEL 35,000, one microfinance institution was fined GEL 1,000, and 30 loan lending entities were fined a total of GEL 31,000.

CUSTOMER APPLICATIONS

In 2022, a total of 7,512 customer applications were recorded by the Consumer Rights Protection Division of the National Bank of Georgia, which is an increase of about 13% over the previous year. The majority of applications, 5,947 cases, were reported by phone (79.17%), 957 cases were recorded by e-mail (12.74%), 358 (4.77%) in writing, 181 (2.41%) through social networks, and 69 (0.92%) by a personal visit.

Content-wise, most of the applications concerned administration/service, restructuring, and general information requests. In terms of products, the most frequent applications were related to consumer, mortgage, and problem loans.

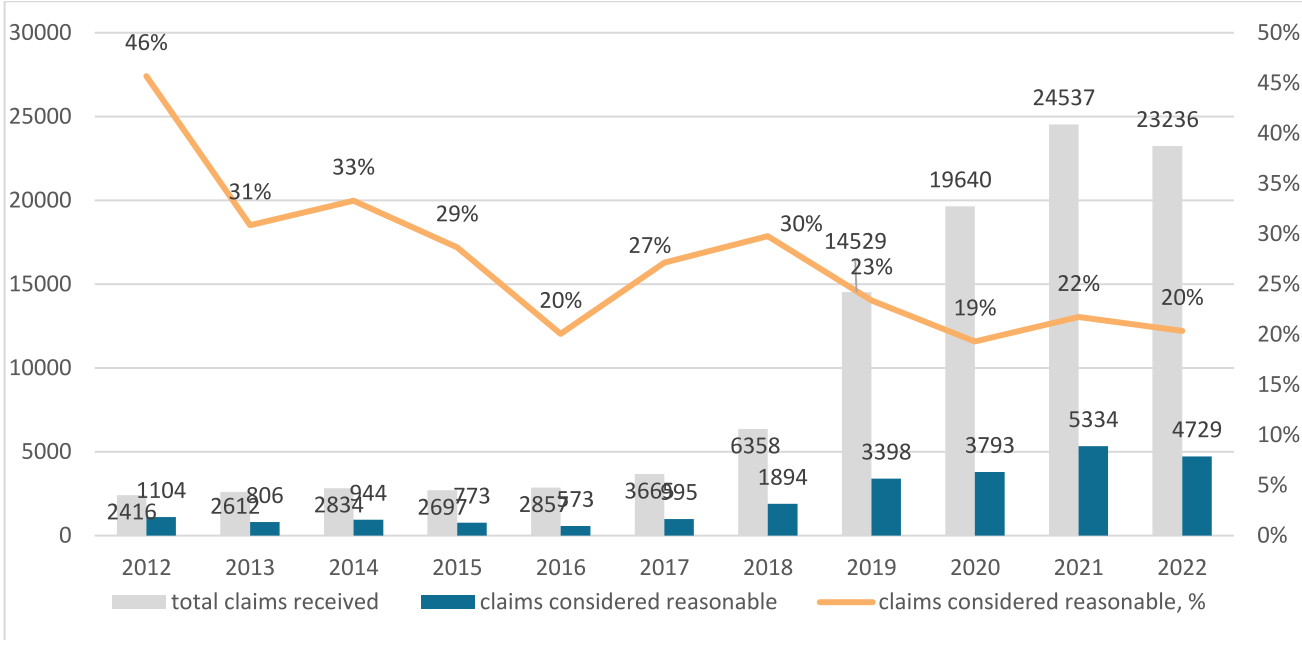
Claims Recorded in Financial Institutions

The reports on claims made by consumers in financial institutions by type (commercial banks, microfinance institutions and loan lending entities) are published in a consolidated form on the NBG's website.

The reports indicate that during 2022, a total of 23,236 claims were recorded in commercial banks, which was 5.6% less than the previous year. Claims recorded in commercial banks had previously shown increasing dynamics since 2012, which indicates better consumer awareness of the enforcement mechanisms of their rights. The increase in the number of claims in 2020-2021 was mainly caused by pandemic-related developments, and the fewer claims recorded in 2022 are thus due to the lessening of these challenges.

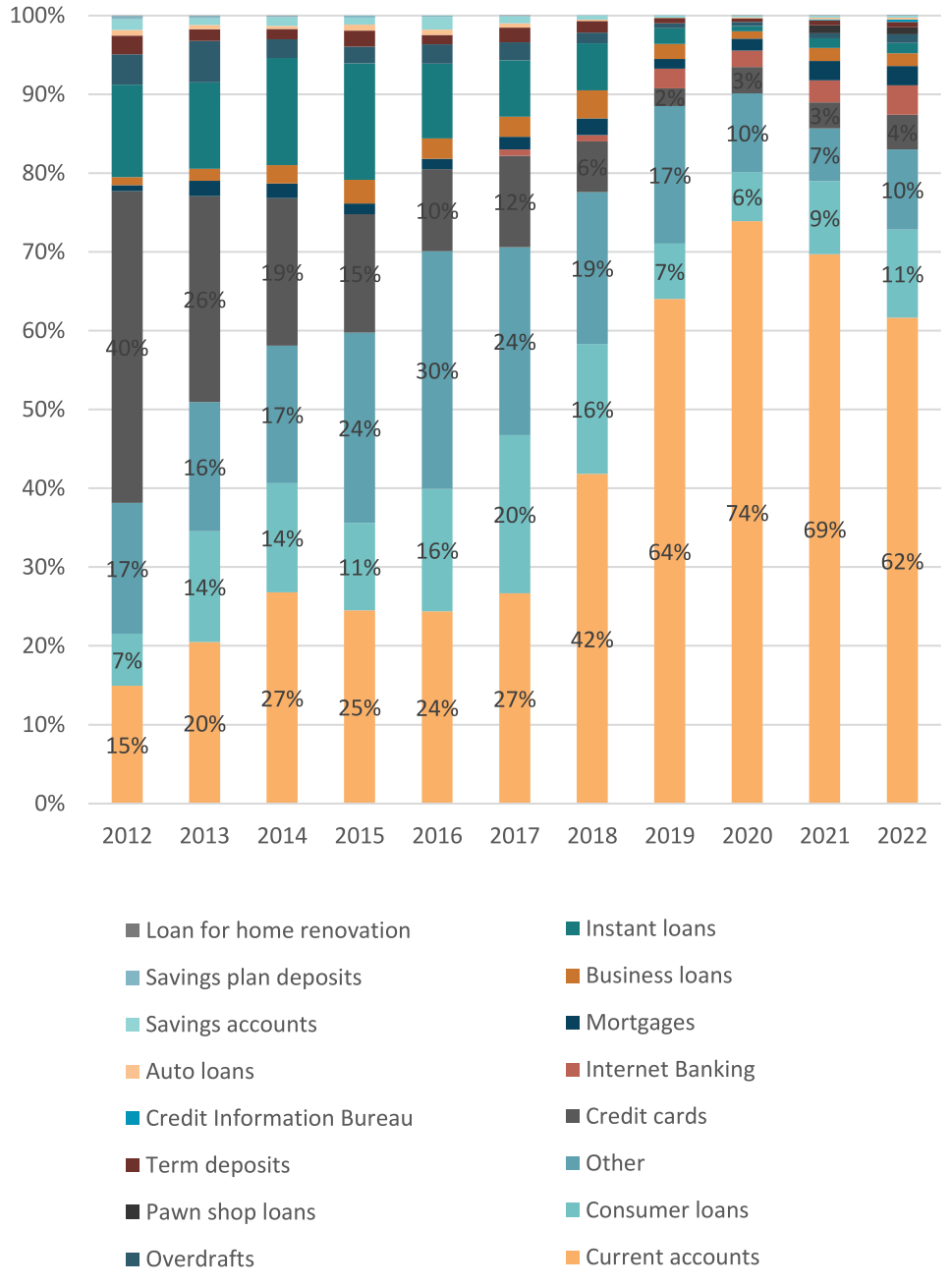
As in previous years, issues related to transactions, administration/service, and contractual terms were still relevant in terms of the complaints recorded in commercial banks. In terms of product types, the most frequent claims were related to current accounts/debit cards, consumer loans, and credit cards.

Diagram 5.1 Distribution of claims made at commercial banks by status



Source: NBG

Diagram 5.2 Distribution of claims made at commercial banks by product

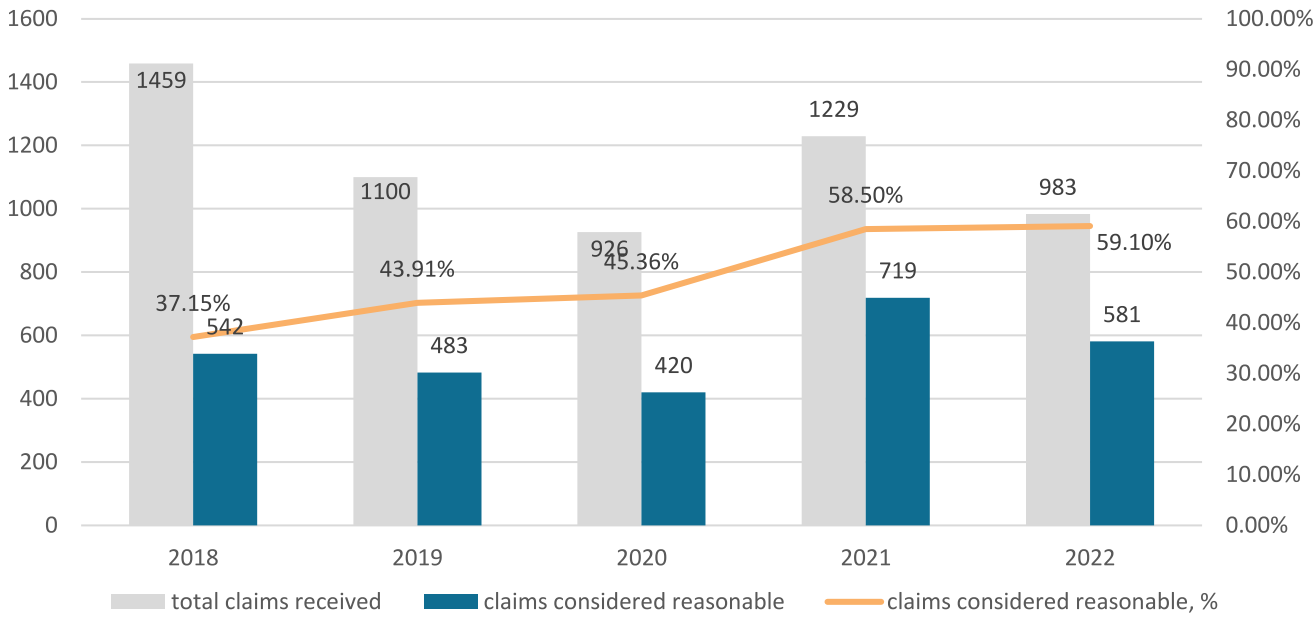


Source: NBG

A total of 983 claims were recorded in microfinance institutions during 2022, which was a decrease of about 25% over the previous year. As was the case with commercial banks, this decline was due to the elimination of COVID-related challenges.

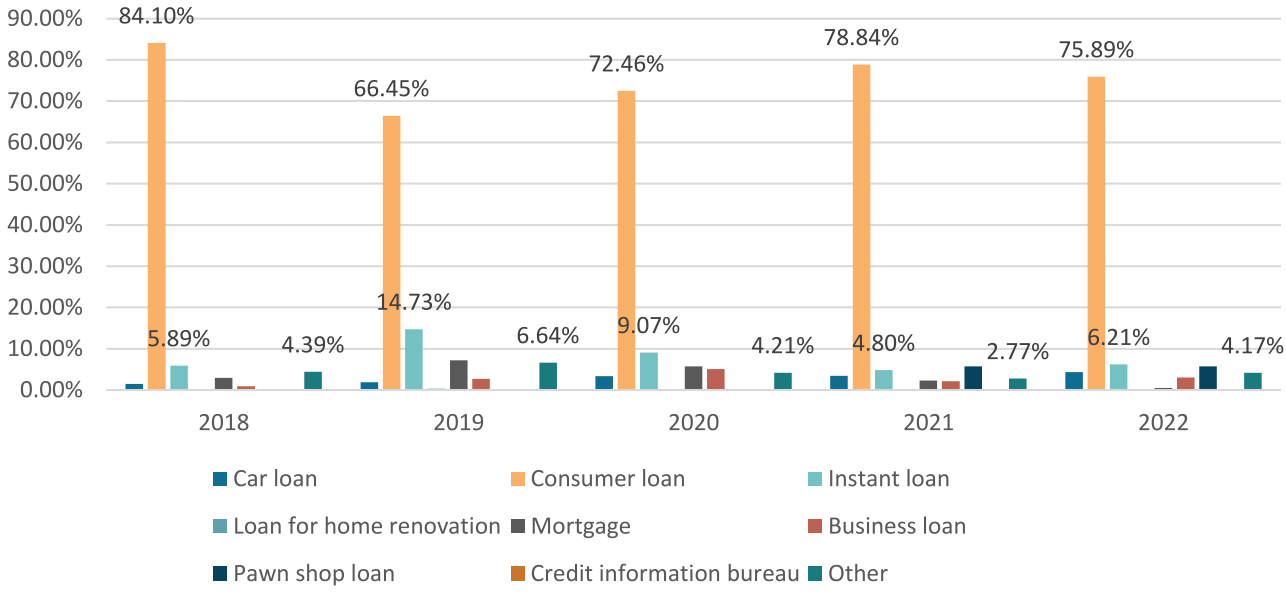
In 2022, roughly 76% of the claims registered in microfinance institutions were related to consumer loans (which is to be expected since this is the key product that microfinance institutions offer). The methodology for recording claims has slightly changed since April 2021, and three additional products were acknowledged in the reports: debit cards, the Credit Information Bureau, and pawn loans. Despite the change in methodology, the specific share of consumer loans within the recorded claims remains high. So is the share of instant installments and pawn loans in total claims. In terms of the nature of the claims, most concerned penalties and overdue payments, and administration/service-related issues.

Diagram 5.3 Distribution of claims made at microfinance institutions by status



Source: NBG

Diagram 5.4 Distribution of claims made at microfinance institutions by product



Source: NBG

The statistics on claims made by borrowers in loan lending entities have been published since the beginning of 2022, and a total of 3,493 claims were recorded during the period. About 96% of these claims relate to consumer loans, which, as with microfinance institutions, is because these are their key product. As for the nature of the claims, most related to administration/service and other charges.

5.2 Financial Education

FINANCIAL EDUCATION PORTAL (WWW.FINEDU.GOV.GE)

www.finedu.gov.ge, which is the financial education portal launched by the National Bank of Georgia in September 2020, and its social media channels (Facebook, Instagram, LinkedIn and YouTube) remained sustainable and flexible ways to spread financial education throughout Georgia in 2022.

The Finedu web portal was updated with new, exciting material, including text and video media related to all the events and news that took place during 2022. Crosswords are planned to be added to the website in early 2023, and the effective interest rate and securities calculators will be updated.

The Finedu social channels were widely used during 2022 to share website materials, information on events/contests/campaigns, and to plan and implement Facebook events. Through these channels financial education activities and materials became available to citizens living anywhere in Georgia.

As of the end of 2022, the financial education portal had over 209 thousand new unique visitors, more than 277 thousand sessions, and more than 440 thousand page views. The Finedu Facebook page had over two million unique visitors in 2022 and gained up to 5,000 new followers. In 2022, the combined number of followers of the Finedu Instagram and LinkedIn pages was 2,308.

AWARENESS RAISING CAMPAIGNS

The NBG continued to organize annual awareness-raising events, including International Consumer Rights Day, Global Money Week, Innovation Camp, International Youth Day, Cyber Security Awareness Month, and World Savings Day. In addition, Insurance Day marked a new initiative that was established together with representatives of the insurance sector.

International Consumer Rights Day

For the second time, the financial sector, joined by the insurance sector for the first time, joined the international tradition of marking the International Consumer Rights Day on 15 March 2022. Celebrated in different countries since 1983, the event helps raise awareness of consumer rights. The Georgian slogan of the International Consumer Rights Day was: “Know your rights - be protected!”

Events planned as part of Consumer Rights Day included the sharing of information about consumer rights – in the form of videos, blogs, and articles – on the websites and social channels of Finedu and the National Bank of Georgia. Commercial banks, microfinance institutions, insurance companies, as well as the Banking Association of Georgia, Georgian Insurance Association, Insurance State Supervision Service of Georgia, Financial Education Association of Georgia/FEA Georgia, Insurance Education Hub, and Caucasus International University were all involved in the development and dissemination of the information.

Global Money Week

The National Bank of Georgia and Finedu organized Global Money Week in Georgia for the eighth time on 21-27 March 2022. Commercial banks, microfinance institutions, the Financial Education Association of Georgia, Caucasus International University, the Banking Association of Georgia, the National Youth Palace, and the NGO Junior Achievement Georgia were all involved in the events.

Global Money Week is marked annually in over 170 countries to promote financial, economic and entrepreneurial awareness among children and young people. Georgia shared the 2022 international motto of the event: “Build your future, be smart about money!”.

NBG Governor Koba Gvenetadze took part in the opening event, which was organized by the International Network on Financial Education of the Organization for Economic Cooperation and Development (OECD/INFE). Governor Gvenetadze spoke at length about the importance of financial education at a panel and summarized the actions taken by the National Bank of Georgia in this area.

Global Money Week featured educational materials, including blogs, articles and tests posted on the financial education website and its social networks. Facebook Live events on the topic of money, as well as webinars with schoolchildren, were held and blog and drawing contests were announced. As these contests were planned during the ongoing Russian invasion and hostilities in Ukraine, these were dedicated to supporting the idea of peace in Ukraine and the world.

The blog contest was organized by the National Bank of Georgia and Finedu, with the participation and support of Basisbank JSC, Liberty Bank JSC, TBC Bank JSC, Credo Bank JSC, Bank of Georgia JSC and the microfinance institution Micro Business Capital

JSC. The competition identified 17 winners, on whose behalf cash prizes of GEL 500 each were transferred to accounts supporting Ukraine.

About 200 works of young people aged under 18 entered the "Money and Peace" drawing competition: five winners were selected based on the number of reactions to the Facebook post of Finedu, and an additional five winners were selected by a special jury headed by a representative of the NBG's Money Museum. Souvenirs and educational materials were given to the winning authors as prizes, and five additional participants were given a certificate of appreciation for their contribution to promoting the idea of the competition.

Webinars on the topic of money were held for schoolchildren as part of Global Money Week. The National Bank of Georgia and Finedu conducted online classes for IV-VI-grade students devoted to a brief discussion of the history of money, the functions of the NBG, and the importance of money management and saving. The online classes were guided by Finedu ambassadors – the NBG staff and representatives of partner organizations: TBC Bank JSC, microfinance institution Micro Business Capital JSC, Caucasus International University, and the Association of Financial Education of Georgia. NBG staff additionally visited four schools in Tbilisi. In total, the project covered 27 schools, 34 teachers and about 900 students from different regions of Georgia. Schools and teachers were given certificates from the National Bank of Georgia, and educational brochures were given to students.

Representatives of the financial sector and other partners of the event held a number of educational events. Crystal, the financial inclusion organization, and Micro Business Capital, a microfinance institution, organized lectures on the topic of money for university students. Bank of Georgia published quizzes and articles on Tik Tok, Facebook and Instagram. Caucasus International University and the Financial Education Association of Georgia held a series of online meetings for graduating students interested in business, tourism management, and finance.

The National Youth Palace celebrated the event, as has become a tradition, together with members of Aflatoun International. Junior Achievement Georgia led an entrepreneurship education festival, where representatives of various organizations, including the National Bank of Georgia and the Ministry of Education, participated as jury members. Partner organizations also held a number of other interesting events.

Insurance Day in Georgia

Insurance Day was celebrated in Georgia for the first time on 2 May 2022. This was initiated as part of the National Strategy of Financial Education by the NBG, Finedu and the State Insurance Supervision Service of Georgia, with the support of the Association of Insurance Companies of Georgia and the involvement of representatives from the insurance sector.

The idea of establishing a day to help raise public awareness about insurance came up during the discussions on projects to be implemented as part of the National Strategy of Financial Education. The chosen day, 2 May, was symbolic as the first law on insurance was signed on the same day in 1997.

A number of information campaigns were carried out by the organizations involved in the event and interesting educational materials on insurance were featured on the website of Finedu, as well as in the social networks. A competition, "More Protection, Less Risk", dedicated to Insurance Day saw 140 works be submitted, 54 in the blogs category, and 86 in the slogans and posters category.

A jury determined two winners for each category. The jury members included representatives of the Association of Georgian Insurance Companies, Ardi Insurance JSC, International Insurance Company Irao JSC, New Vision Insurance JSC, PSP Insurance JSC, the risk management and insurance company Global Benefit Georgia JSC, Aldagi Insurance Company JSC, Imedi L Insurance Company JSC, and the National Bank of Georgia.

The first-place winners in both categories were awarded cash prizes of GEL 2,000, and the second-place winners were awarded prizes of GEL 1,000.

An event to celebrate Insurance Day was held at the Biltmore hotel where NBG Governor Koba Gvenetadze spoke about the importance of raising awareness about insurance and financial education. The winners of the competition were also awarded their prizes at the event.

Innovation Camp on Financial Education

The NBG and Junior Achievement Georgia organized the Innovation Camp on Financial Education for the fifth time in 2022. The event was co-sponsored and funded by five commercial banks – Basisbank JSC, TBC Bank JSC, Credo Bank JSC, Bank of Georgia JSC, and Terra Bank JSC – and the microfinance institution Micro Business Capital, with the involvement of the Banking Association of Georgia. The camp was held as part of the United

States Agency for International Development (USAID) project "Supporting Entrepreneurial Education in Europe and Eurasia".

The Innovation Camp is an intensive idea-generation event where students work as a team on a specific business challenge and try to solve it using effective and innovative methods. The 2022 event was titled "Innovation Camp: Financial Literacy", and was dedicated to raising the level of financial education of micro and small entrepreneurs, the proper planning of business finance, and the use of a variety of financial products. The 12-hour event was held at Black Sea University and enjoyed the attendance of over 100 participants aged 15-18 from Tbilisi and different regions of Georgia.

The participants of the camp were advised by banking and financial experts. The presentation made by the representative of the National Bank of Georgia concerned the necessity and importance of financial education. At the end of the event, the participating teams presented their ideas before a competent jury. The winners and other participants of the event were given symbolic gifts and certificates.

International Youth Day

The National Bank of Georgia, with the involvement of representatives of the financial sector, was happy to mark International Youth Day for the second time in 2022.

In 1999, the United Nations General Assembly declared 12 August as International Youth Day. Around the world, this day is dedicated to discussing the problems facing young people and encouraging their ideas and initiatives.

A competition for young students invited participants to present their individual visions for teaching financial education to schoolchildren. The competition was initiated by the National Bank of Georgia and Finedu and was supported by Bank of Georgia JSC, TBC Bank JSC, Credo Bank JSC, Basisbank JSC, the microfinance institution Micro Business Capital JSC, financial organization Crystal, and Caucasus International University.

Out of the 57 works submitted, a jury identified 12 finalists according to the competition criteria. The final of the competition was held on 12 August, International Youth Day, at the NBG headquarters, where the finalists presented their ideas to a jury and answered questions. The jury evaluated contestants using the criteria set out in the terms of the competition and announced five winners. The first-place winner was awarded a cash prize of GEL 3,000 from Bank of Georgia JSC, the winner of the second place was awarded a cash prize of GEL 2,000 from Basisbank JSC, and the winners of the third, fourth and fifth places received cash prizes of GEL 1,000 from Micro Business Capital JSC, Credo Bank JSC and TBC Bank JSC.

In addition, the National Bank of Georgia offered three finalists internships in the Financial Education Division of the National Bank of Georgia. All successful contestants in the competition were given souvenirs from the coordinators and partners.

World Savings Day

The National Bank of Georgia celebrated World Savings Day for the eleventh time in 2022 with the participation of the financial sector. The event was supported by TBC Bank JSC, Credo Bank JSC, Liberty Bank JSC, Bank of Georgia JSC, Terra Bank JSC, and the microfinance institution Micro Business Capital JSC.

The goal of the World Savings Day is to raise awareness and encourage savings in children and young people.

An educational campaign was planned to mark World Savings Day in 2022. One of the main activities of this was holding open lessons in classrooms on saving. These events were independently planned and implemented by partner organizations. One event, planned by Finedu, was "Invite Finedu to Class", which involved Finedu ambassadors - NBG staff conducting lessons in interested classes. The number of pupils wishing to register for the Finedu ambassador classes was unprecedentedly high: Finedu was invited to more than 230 classes in two days. Given the limited NBG staff resources, visits to a few dozen schools were initially contemplated; however, in response to schools' requests, additional resources made sure that the interest of all interested schools were met. TBC Bank JSC, Credo Bank JSC, Liberty Bank JSC, Bank of Georgia JSC, Terra Bank JSC, and the microfinance institution Micro Business Capital JSC supported the project, making it possible, in most cases, to conduct classroom lessons in the regions of Georgia instead of online. Meetings were held with 5,000 students from IV-VII grades in 150 schools. Schools participating in the event were given educational materials and certificates.

Cyber Security Awareness Month

In 2022, the National Bank of Georgia launched a cyber security awareness campaign for the second time. This campaign has been celebrated internationally in October since 2004. The slogan of this year's campaign was "Don't get hooked, be cybersmart".

The campaign involved a number of activities. Special educational materials, videos and tests were developed and published, and live events were held on the topic of cyber security for both individuals and businesses.

Together with the NBG and Finedu, the National Cyber Security Alliance, the Banking Association of Georgia and five commercial banks – Bank of Georgia JSC, Basisbank JSC, Liberty Bank JSC, Credo Bank JSC, and ProCredit Bank JSC – were involved in the events.

Other Financial Education Projects

Finosophy Diaries Facebook Live Series

The "Finosophy Diaries" successfully continued on Finedu's Facebook page. The project involves a series of conversations in the Facebook Live format, presenting financial issues from different, interesting angles and promoting the formation of reasonable attitudes towards finance among the general public.

The Finosophy Diaries held 21 sessions during 2022, involving invited speakers who talked about financial issues from a non-standard, original and interesting angle. Anyone interested was allowed to watch the sessions without prior registration. Viewers also had the opportunity to write their own questions in the comments section during the meeting to have the speakers answer them.

The recordings of the sessions are available on the Finedu portal and YouTube channel.

Expert on Finedu Facebook Live Series

"Expert on Finedu" was another Finedu Facebook project that successfully continued in 2022. Launched in 2021, it is a series of conversations in the Facebook Live format that offers objective and competent coverage of important issues that directly or indirectly affect people's finance and financial decisions.

There were 14 Expert on Finedu sessions held during the year, involving invited speakers talking about current topics, answering viewers' questions, and discussing interesting cases.

The recordings are available on the Finedu portal and YouTube channel.

Conversations on Business Facebook Live Series

"Conversations on Business" was launched in 2022 as a series of conversations in the Facebook Live format, where invited speakers talk about the financial decisions of entrepreneurs and the continuity of business operations. All interested parties were welcome to listen to the conversations without prior registration requirements. The viewers could write their own questions in the comments section during the meeting and the speakers would answer them.

Conversations on Business held 18 sessions during the year. In addition to the Facebook page, the recordings were made available on the Finedu page and on the YouTube channel.

Educational Competitions

The NBG announced contests through the Finedu social channels to spark interest among the public in financial education. The contests "Financial Lessons in Fiction", dedicated to International Book Day and "Financial Education Crosswords on Finedu" both turned out quite popular and were open to any interested person. Bakur Sulakauri Publishing and Saba e-book awarded gifts to the winners of the competition dedicated to International Book Day, while the winners of the Financial Education Crosswords on Finedu competition were awarded Finedu-branded prizes.

Educational media involvement

The NBG continued to enhance its communication with the general public regarding current educational topics through a series of television and radio broadcasts that offered an analysis of the current state of financial education, cyber security, business needs in terms of financial education, wise spending, and saving for important dates and holidays.

Financial education projects for school students

In 2022, the NBG and Finedu conducted an online financial education course for students of VII-IX grades, consisting of three lessons that covered the topics of personal finance management, savings and loans.

The meetings were held online, led by representatives of the NBG, including interns selected from the finalists of the International Youth Day competition. The lessons were conducted with about 300 students from 19 schools.

Responding to the initiatives of schools, the NBG also held meetings for students on the topic of financial education at the NBG's headquarters and within schools.

School Bank Project

The National Bank of Georgia trained a new stream of teachers in 2022 for the School Bank project. Teachers from both public and private schools were invited from different regions of Georgia to attend the training.

The School Bank project, which was developed by the National Bank of Georgia and Child and Youth Finance International (CYFI), includes 15 lessons designed to raise the level of financial education of VII-IX-grade students. By using simple language and through fun activities, students are introduced to key topics of financial education, such as saving and budgeting, banking products, reasonable borrowing, consumer rights and responsibilities, and financial security.

The School Bank project manual summarizes all the topics and active methods of teaching that are discussed at the teacher training. The teachers will then implement their newly acquired knowledge in their schools and will conduct a 15-lesson course with at least one class of pupils during the current school year.

LOCAL AND INTERNATIONAL COOPERATION

The National Bank of Georgia cooperates with other organizations for the dissemination of financial education. The Steering Committee for the National Strategy for Financial Education brings together representatives of 11 organizations, including with the National Bank of Georgia, who conduct annual events and campaigns. The NBG always responds to the initiatives of other organizations working on the dissemination of financial education among citizens. Cooperation started under such initiatives often becomes continuous, leading to memoranda of mutual cooperation being signed.

Memorandum of cooperation between the National Bank of Georgia and the Small and Medium Enterprise Development Association

A memorandum of cooperation was signed between the National Bank of Georgia and the Small and Medium Enterprise Development Association (SMEDA) to increase the availability of financial education and raise the awareness of micro, small and medium entrepreneurs.

SMEDA was involved in the distribution of materials designed for the target segment and in live events on Finedu. The material posted on Finedu became available to a wide group of small- and medium-sized entrepreneurs via social networks.

Memorandum of cooperation between the National Bank of Georgia and Caucasus International University

A memorandum of cooperation was signed between the National Bank of Georgia and Caucasus International University. The document aims to increase access to financial education and to raise the awareness of younger generations. NBG Governor Koba Gvenetadze held a lecture at the University where he spoke at length about the importance of financial education and what the country's central financial institution does to promote this.

Presentation of the compliance of educational materials with the National Strategy for Financial Education

The National Bank of Georgia is willing to cooperate with anyone who can provide competent and unbiased information to citizens interested in financial education. To facilitate this, Finedu published a procedure that sets criteria and terms for using the Finedu platform for the distribution of financial education materials (e.g., brochures, manuals, videos, etc.) developed by any interested party.

The procedure describes the step-by-step process for publishing material on Finedu, including verifying the compatibility of the educational material provided with the principles of the National Strategy for Financial Education, classifying the content of the material, adding the material to the Finedu menu based on its content, and ensuring free public access to the material.

Educational material published on Finedu can be in the form of brochures, manuals, training modules, guides, audio and video materials, games, and apps. However, there are special terms for the publication of blogs on Finedu.

International conference on financial education

The National Bank of Georgia participated in the annual international conference on financial

education titled "Financial Education in Times of Uncertainty". The conference was held for the fourth time in 2022 within the framework of the 5-year technical assistance project of the Ministry of Finance of the Kingdom of the Netherlands and the International Network on Financial Education of the Organization for Economic Development and Cooperation (OECD/INFE), co-organized by the National Bank of Croatia. The technical assistance project brought six South-Eastern European countries (Bulgaria, Moldova, Montenegro, Romania, North Macedonia, and Croatia) together with Georgia to promote financial education in the region. Other experts, invited from the USA, Canada, Great Britain, Germany, Italy, Poland, Estonia, Latvia, and Spain, among other countries, also attended the conference and were pleased to share their experiences.

The participants of the conference discussed the challenges and achievements of financial education in the region and shared their experiences and best practices. Topics included the level of financial education of micro, small and medium entrepreneurs in the region and financial education programs for specific target groups such as the youth and elderly populations. In addition, they discussed the relationship between culture and financial education in the participating countries, the possibilities of spreading financial education digitally, the results achieved within the project, and future plans.

Acknowledgment of the Ministry of Finance of the Netherlands

In a 2022 report, the Ministry of Finance of the Netherlands named Georgia as the leading country in the region in terms of spreading financial education. The report states that the National Bank of Georgia has made a great contribution to the country's success and emphasizes the involvement of the NBG Governor in spreading financial education.

Current Projects

Financial education game

In 2021, the National Bank of Georgia started working on a financial game project with funding from the European Fund for Southeast Europe Development Facility (EFSE DF). An idea for a game was developed, market research was carried out, a development company was selected, and work began at the end of the year.

The business simulation game will be produced for both web platforms and as a mobile application (iOS and Android). Using the game, players will be able to draw a parallel with their own reality to make informed financial decisions that will affect their wellbeing.

The project seeks to raise citizens' awareness of financial education through an alternative, game-based learning method, so that they can learn to better plan and manage their personal finance in real life. The target segment of the game is wide ranging, and it will be interesting for users of any age.

In 2022 the core logic of the game was formed, the functionality was set, and a so-called alpha version was developed. Completion of the project and its presentation to the public is planned for 2023.

Educational animated videos

Development of educational animated videos began in 2022, on the initiative of the NBG. This project seeks to disseminate information related to important issues of financial education via 15-20-second videos presented in simple and understandable language. The project will be completed in early 2023.

Financial Education Initiatives

Presentation of new draft National Strategy for Financial Education

The NBG presented a new draft of the National Strategy for Financial Education in 2022.

The first effective strategy for financial education was developed in 2016 and was based on international experience and best practices. The strategy emphasized the importance of financial education, raising awareness of the benefits of financial education, and aimed to achieve enhanced coordination and cooperation among stakeholders and expanded opportunities for financial education. The updated strategy was developed based on ongoing experience in this field and, therefore, is able to better respond to the current underlying challenges of financial education.

The new strategy will be a key reference document for any party interested in promoting financial education. The strategy sets key priorities and tasks and promotes cooperation between interested parties in a more practical format; encourages increased access to financial education by covering all target groups and implementing activities tailored to them; and ensures the sustainability and continuity of such activities.

The draft strategy was published on the websites of the NBG and Finedu in order to ensure the active

involvement of interested parties, including public, private and civil sector representatives. Stakeholder feedback was reflected in the final version of the draft and this was officially approved at a special event in January 2023.

NON-BANK SUPERVISION 6

6.1 Regulation of the non-banking sector and regulatory framework

The non-banking financial sector continued its sound and stable development in 2022. As in the previous year, it maintained a moderate growth rate and smoothly provided micro-lending financial services to customers across the country, especially in the regions. Despite the slowdown in access to funds from institutional creditors due to the Russia-Ukraine war, a 13% increase in assets was recorded in the non-banking financial sector. The share of the non-banking sector in the total financial sector remained at almost at the same level in 2022, at 3.3%, amounting GEL 2.4 billion. However, despite these growth indicators, the microfinance sector maintained a sufficient level of capital and liquidity buffers.

During the pandemic, currency exchange bureaus were also included in the remote supervision portal launched by the National Bank of Georgia for non-banking institutions (joining microfinance institutions and lending entities already included in the portal). This enabled instant communication with these entities and led to greater flexibility in supervision.

The form and method of submitting quarterly reports of currency exchange bureaus to the National Bank of Georgia were altered during the year. Like other non-banking institutions, currency exchange bureaus now submit reports using the NBFI remote monitoring portal.

Non-banking institutions were actively supervised during the year to determine their compliance with current legislation and to ensure the correctness of the reporting data submitted to the National Bank of Georgia.

6.2 Non-bank Financial Institutions

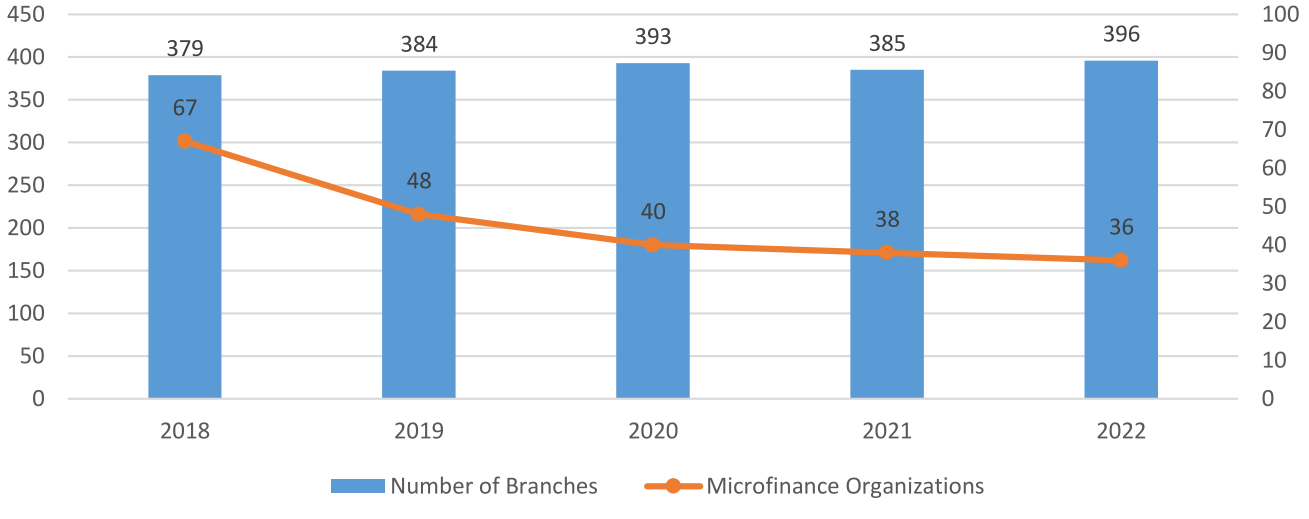
As of 31 December 2022, the non-bank financial sector was represented by 36 microfinance institutions (396 branches), 176 lending entities (332 branches), 511 currency exchange bureaus (689 branches), and one credit union.

The total assets of the non-bank financial sector are within GEL 2.4 billion, of which the largest share, GEL 1.9 billion, is taken by the microfinance sector.

6.2.1 Microfinance Institutions

Two microfinance institutions were liquidated in 2022; however, due to their insignificant share in the market, this did not have a significant impact on the indicators of the sector.

Diagram 6.1 Number and branches of microfinance institutions

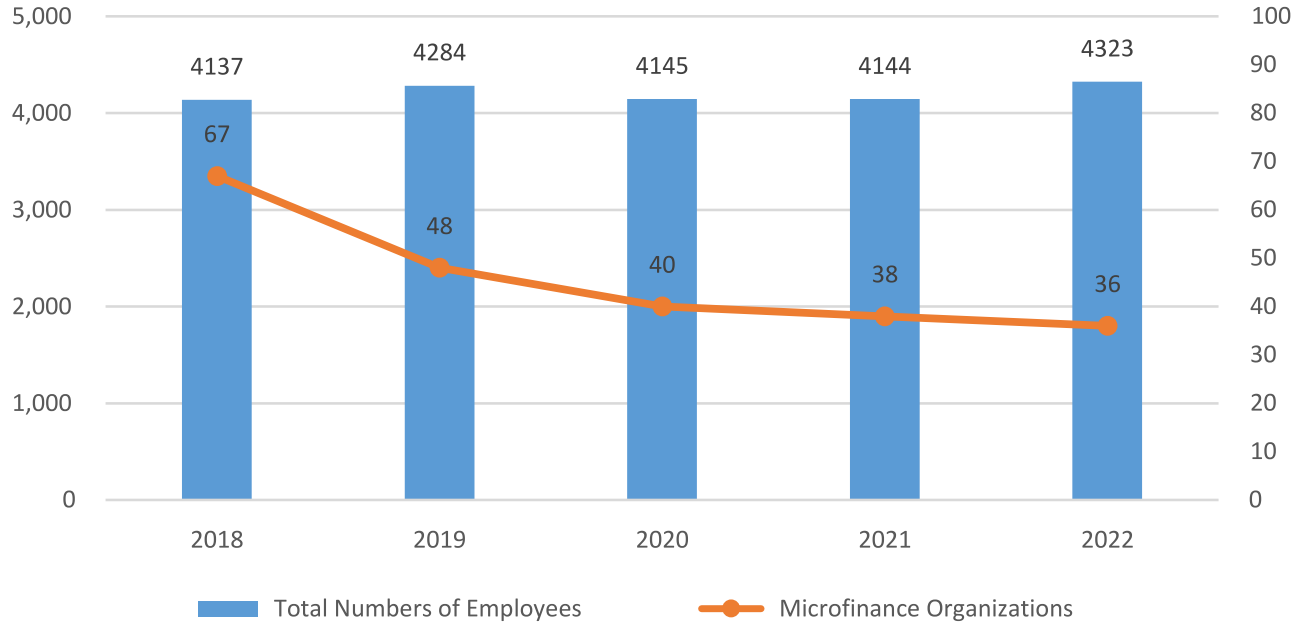


Source: NBG

The number of branches and employees in microfinance institutions has increased over the year.

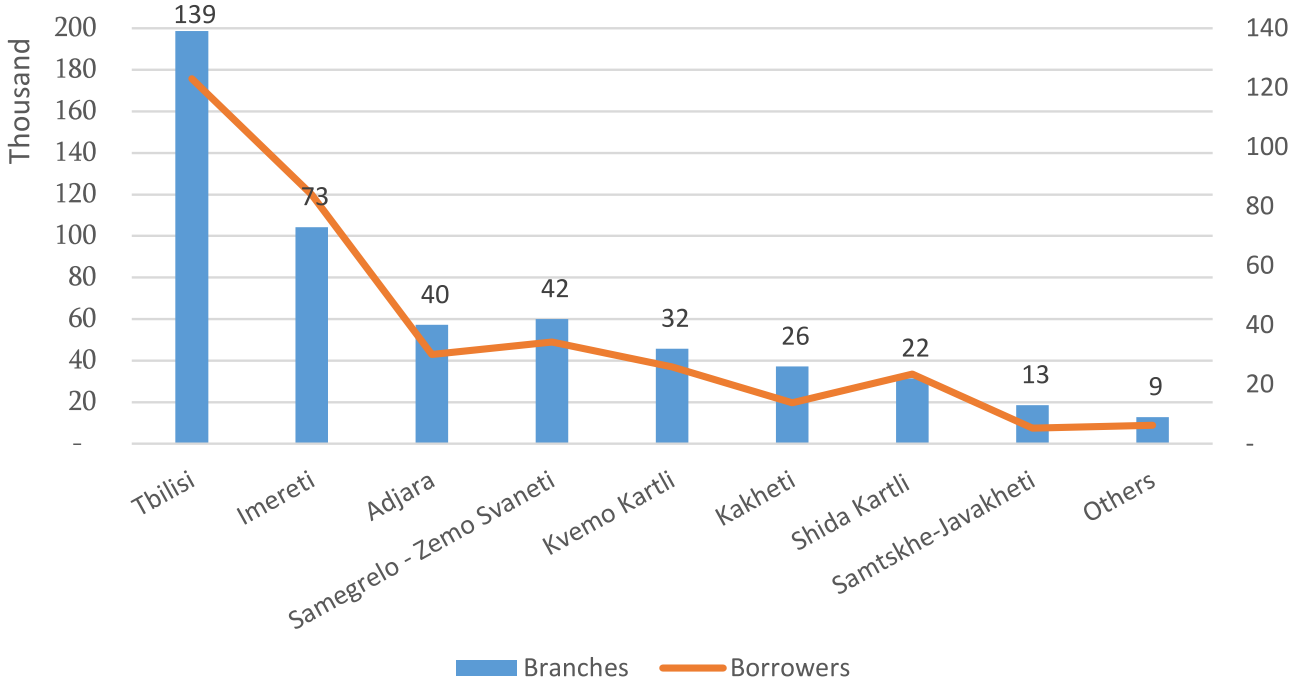
The share of the microfinance sector in the overall financial system is small (2.5%); however, its role in terms of access to finance is important. Regional coverage is high, both in terms of the number of branches and the number of borrowers (accounting for 25% and 20% of the system, respectively).

Diagram 6.2 Number of staff at microfinance institutions



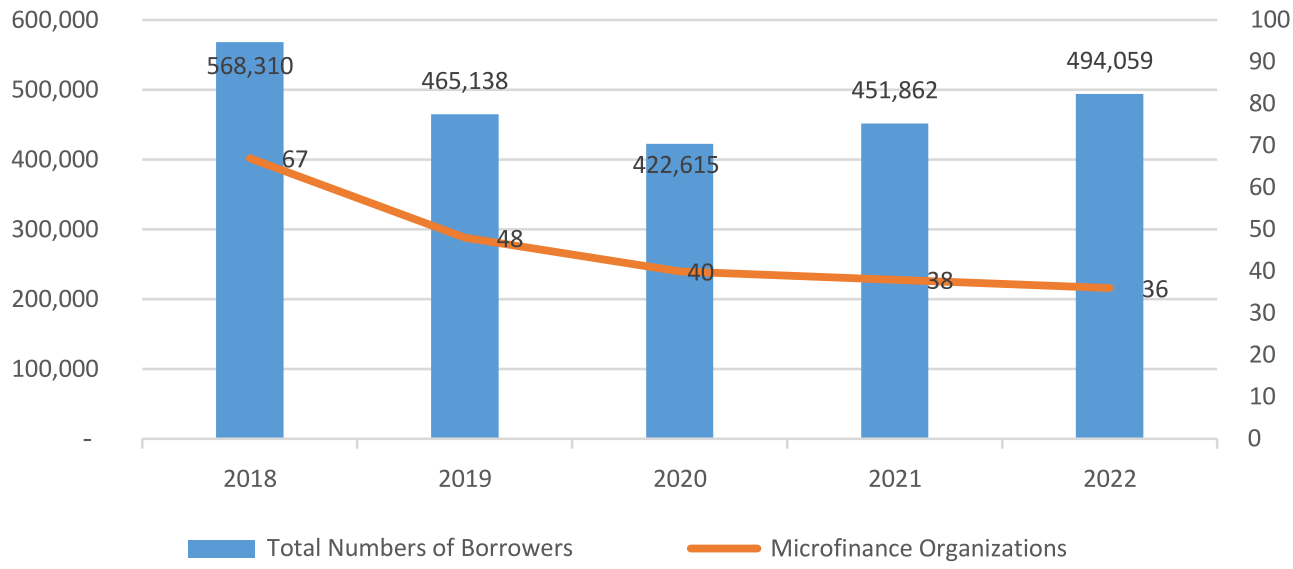
Source: NBG

Diagram 6.3 Regional distribution of branches and borrowers of microfinance institutions



Source: NBG

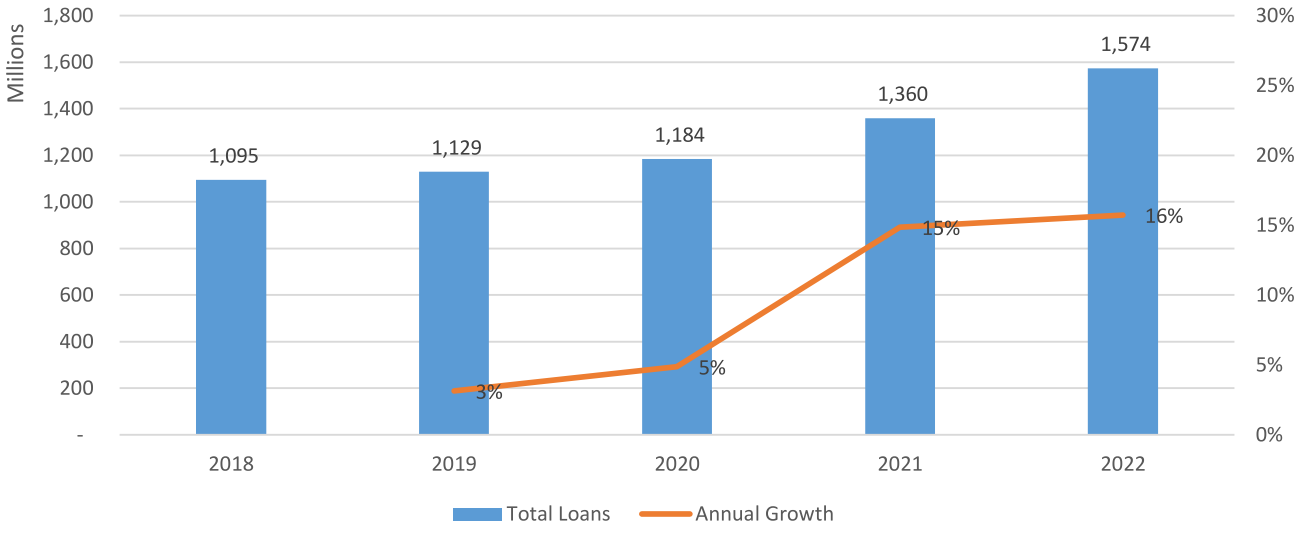
Diagram 6.4 Number of microfinance institutions and borrowers



Source: NBG

Although the liquidation of two microfinance institutions was initiated, the number of borrowers in the sector increased during 2022. The loan portfolio also maintained an annual growth rate of 16% and amounted to GEL 1.6 billion.

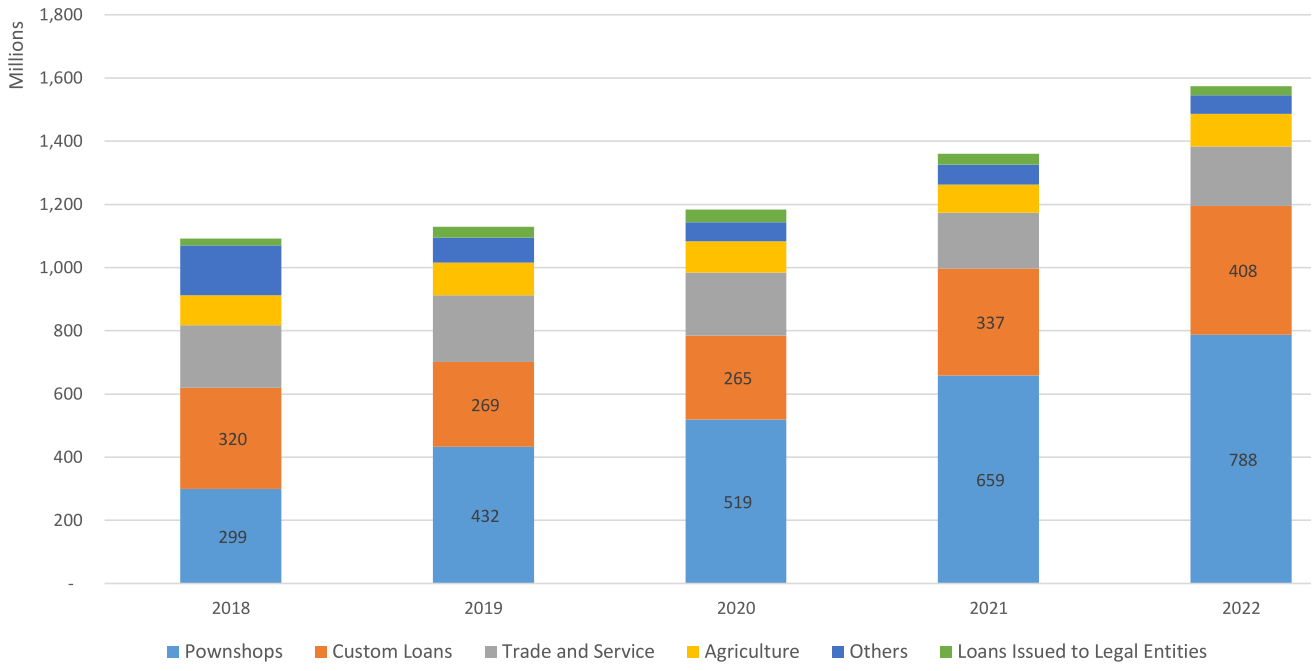
Diagram 6.5 Volume of the loan portfolio of microfinance institutions



Source: NBG

Consumer loans issued to individuals is the main direction of lending in the microfinance sector, making up 80% of the total loan portfolio of the sector, amounting to GEL 1.3 billion. The remaining 20% comes from loans granted to the business and agriculture sector, amounting to GEL 319 million.

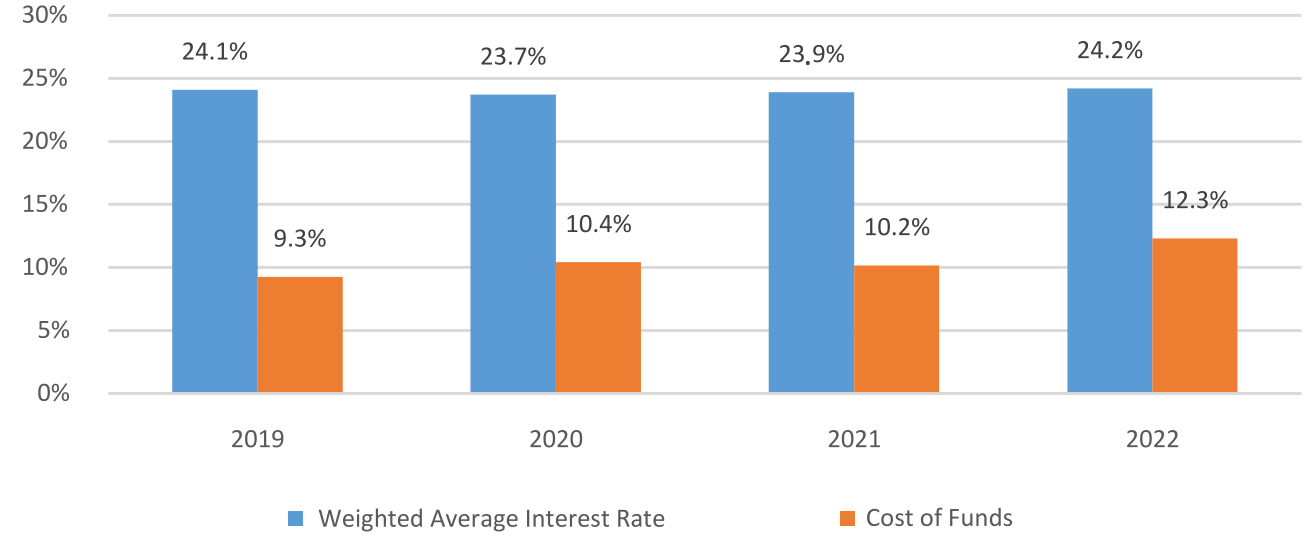
Diagram 6.6 Loan portfolio structure



Source: NBG

It is notable that the pawnshop portfolio accounts for much of the material growth in the sector, amounting to GEL 129 million, while other consumer loans increased by GEL 67 million. Trade and services and agricultural sector loans experienced an increase of GEL 24 million. In contrast, loans issued to legal entities decreased by GEL 6 million, and in total, accounted for only 2% of the total portfolio in 2022. The increase in the value of the funds of the microfinance sector was partly due to the increased interest rate on funds raised from resident commercial banks.

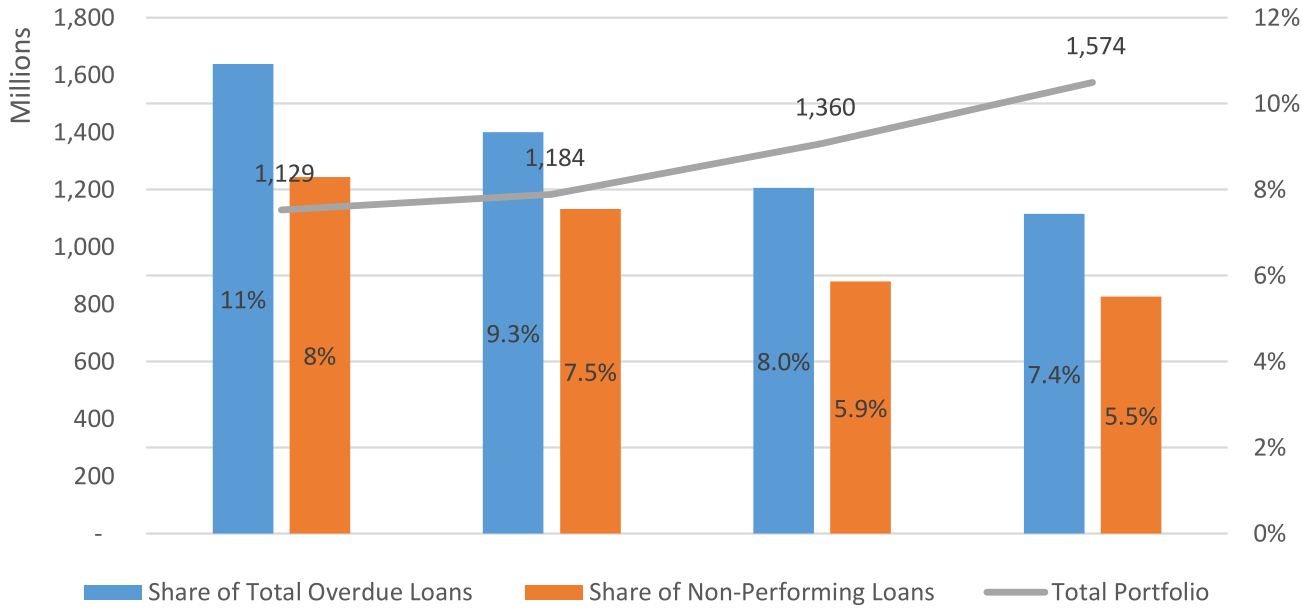
Diagram 6.7 Cost of weighted average interest rates and funds in the portfolio



Source: NBG

The quality of the loan portfolio has improved compared to 2021. The share of non-performing loans in the total portfolio decreased from 8.0% to 7.4%, and the share of the overdue portfolio decreased from 8.0% to 5.5%, due to the granting of new loans. The total portfolio reserve is within 5%.

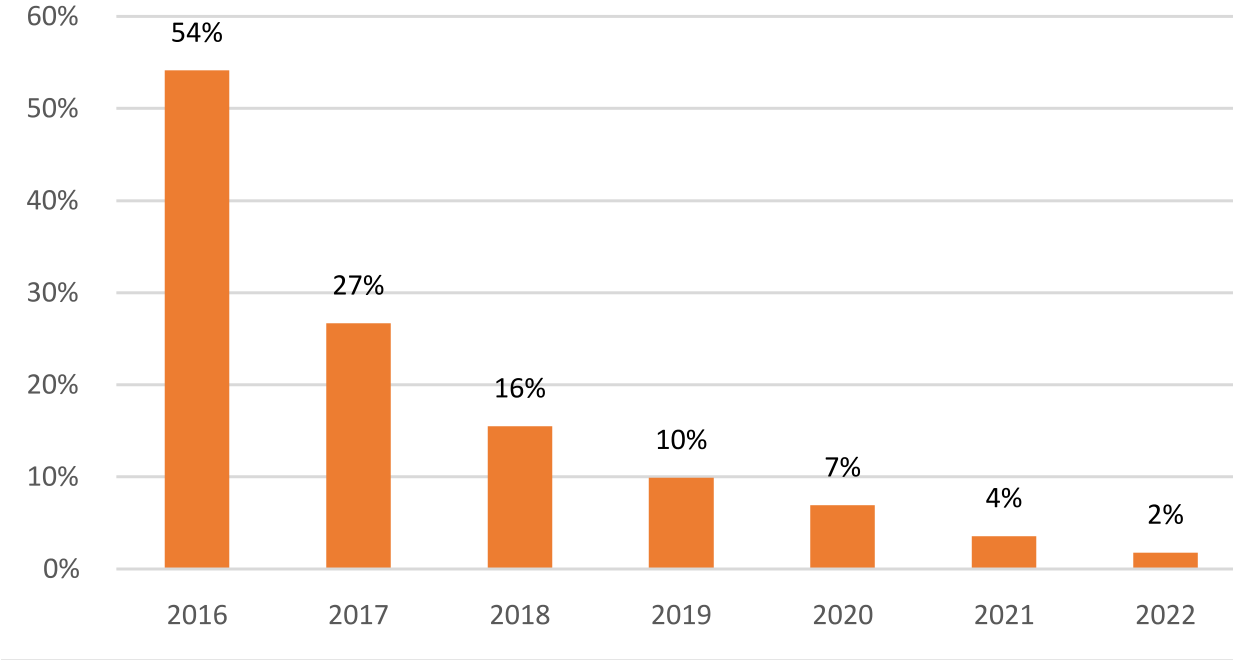
Diagram 6.8 Quality of the loan portfolio



Source: NBG

The changes made to Article 625 of the Civil Code of Georgia, which prohibits issuing loans to an individual in foreign currency under value of GEL 200,000, has resulted in a declining share of credit denominated in foreign currency in the total portfolio.

Diagram 6.9 Dollarization of the loan portfolio

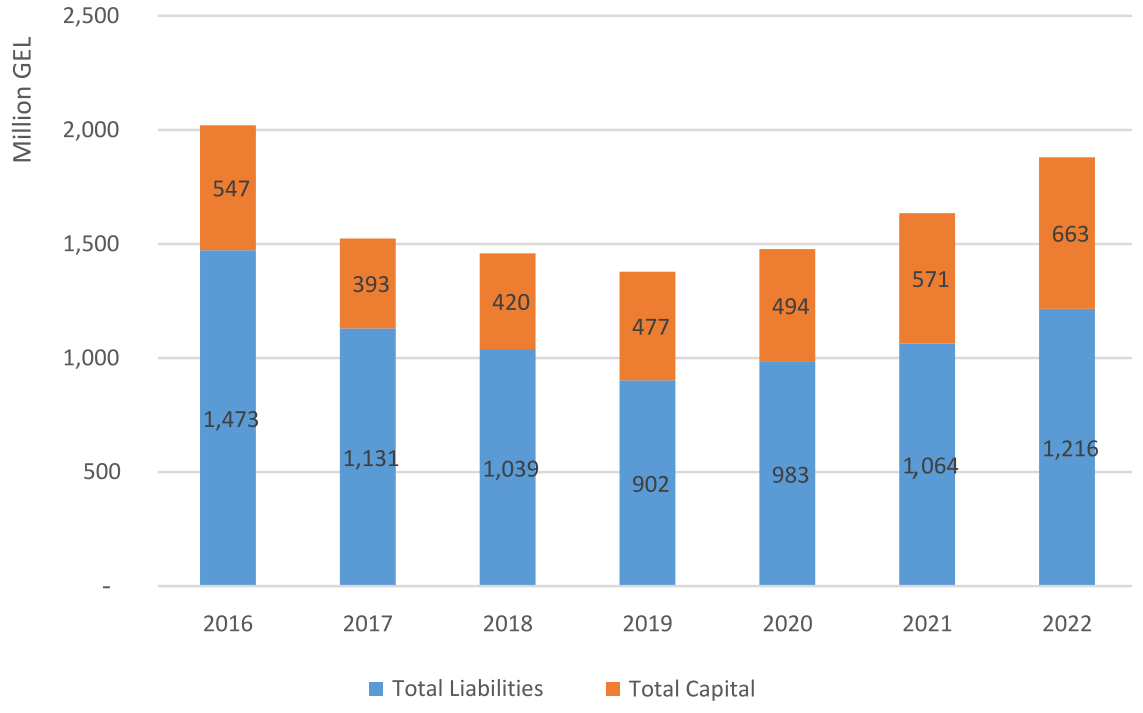


Source: NBG

Despite the 15% increase in capital volume, it still has a 35% share in the funding structure. The volume of liabilities experienced a 14% increase.

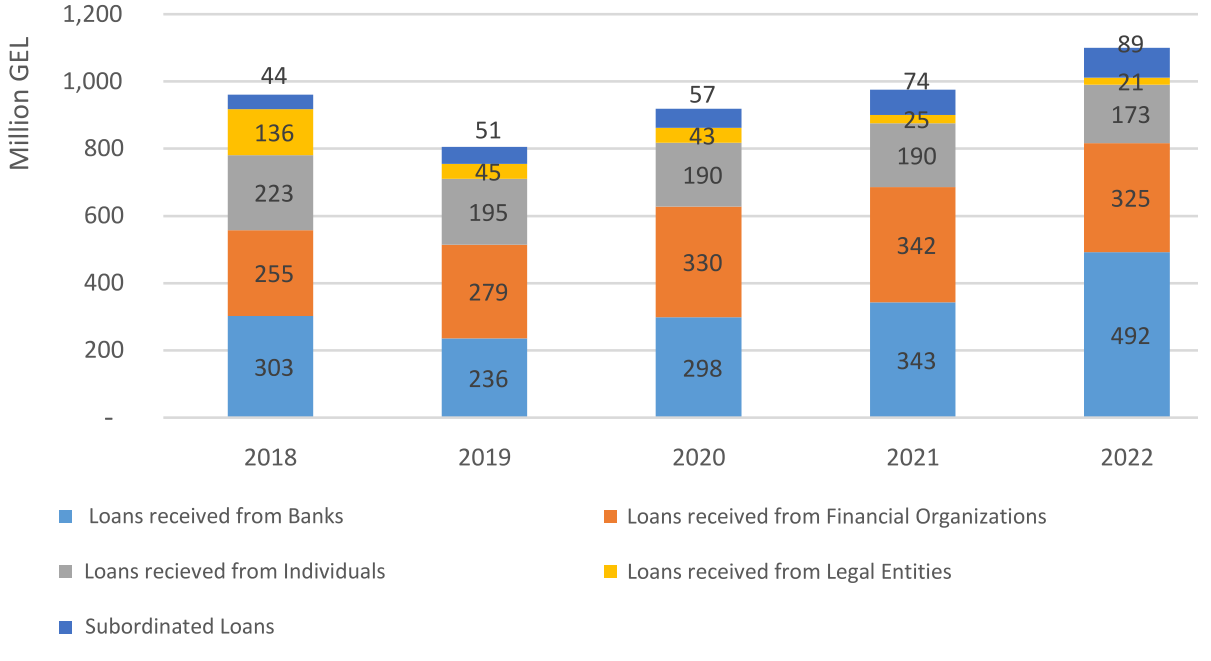
Borrowing increased by GEL 125 million in 2022 and amounted to GEL 1.1 billion to provision for the increased lending activity. As in previous years, funds borrowed from individuals decreased in 2022. The increase in borrowing was mainly due to the increase in loans from banks, amounting to GEL 149 million.

Diagram 6.10 Source of funding



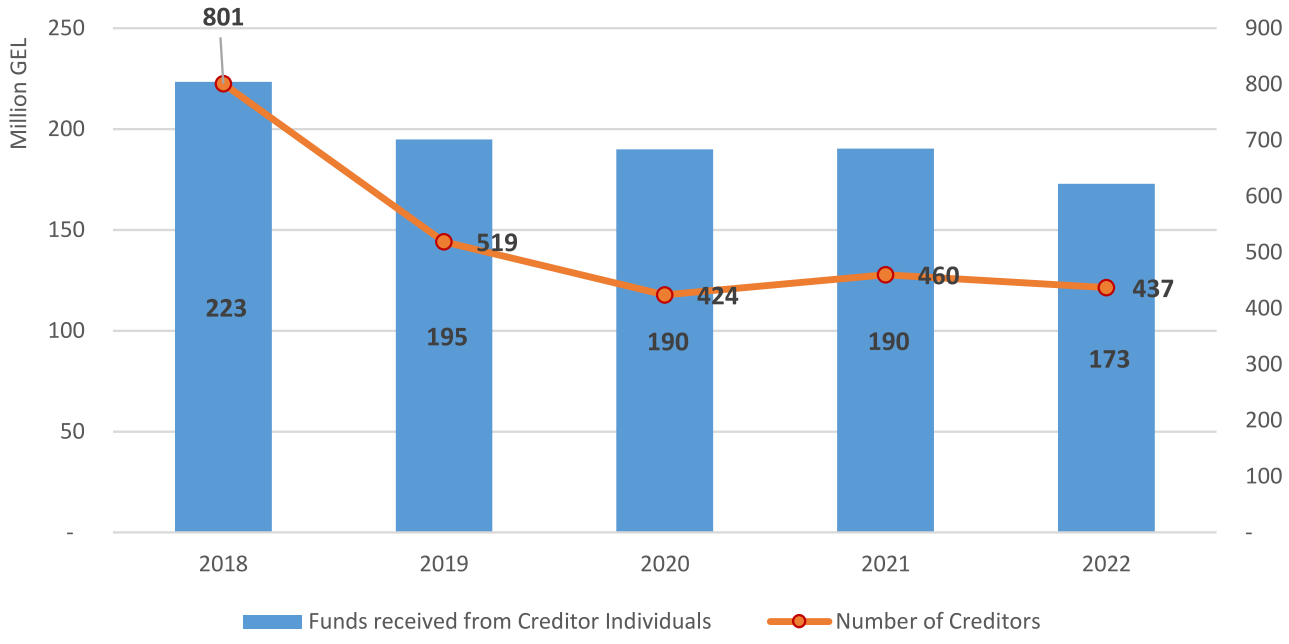
Source: NBG

Diagram 6.11 Structure of borrowing



Source: NBG

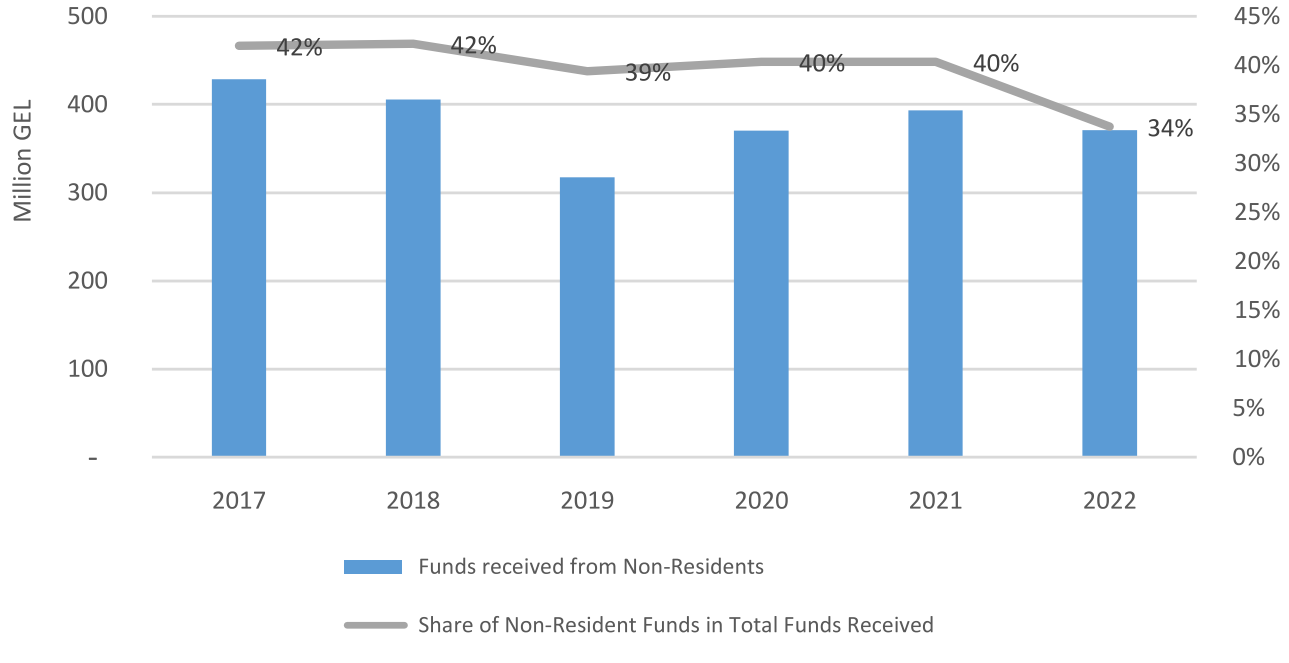
Diagram 6.12 Borrowing from individuals and number of individual creditors



Source: NBG

The share of borrowing from non-residents decreased by 6 pp, amounting to GEL 24 million, which was somewhat related to the crisis caused by the Russia-Ukraine war.

Diagram 6.13 Funds of non-residents

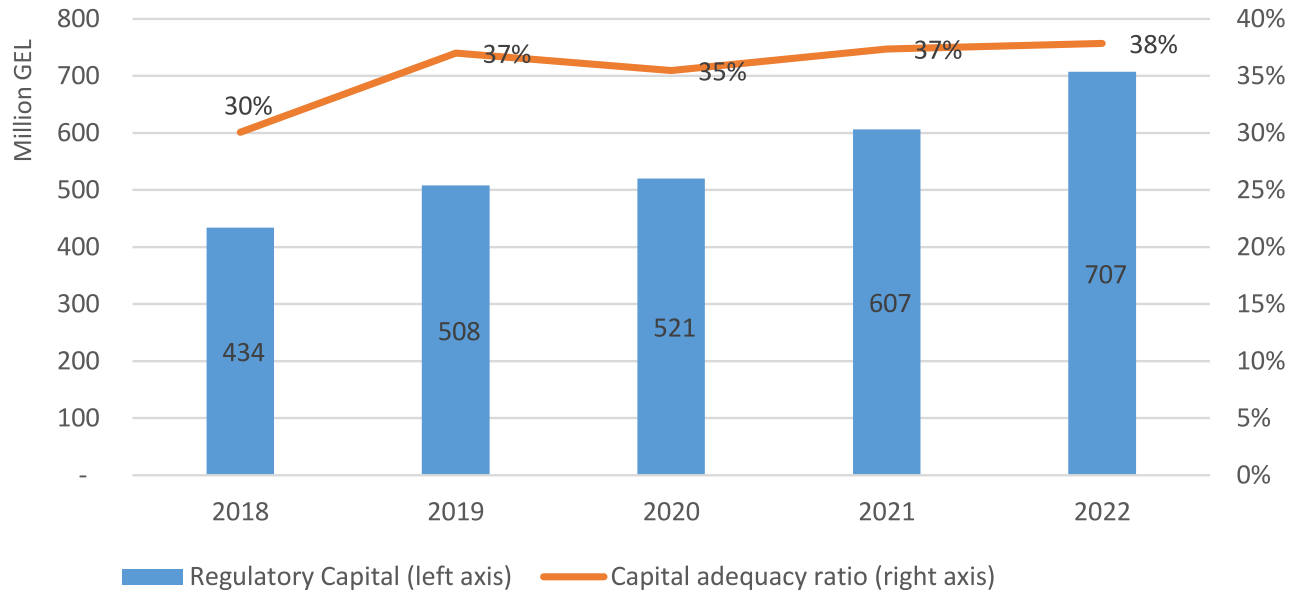


Source: NBG

The sector maintained a high level of capital adequacy in 2022, similar to previous years.

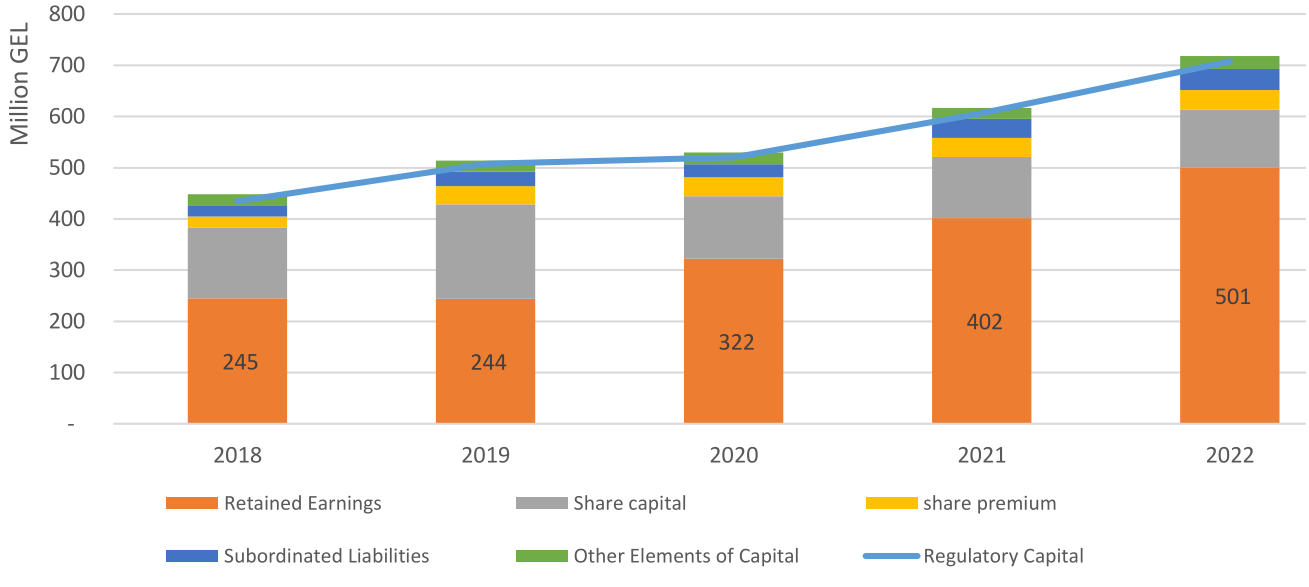
The 17% increase in regulatory capital, amounting to GEL 100 million, was mainly due to an increase in retained earnings.

Diagram 6.14 Regulatory capital



Source: NBG

Diagram 6.15 Structure of regulatory capital

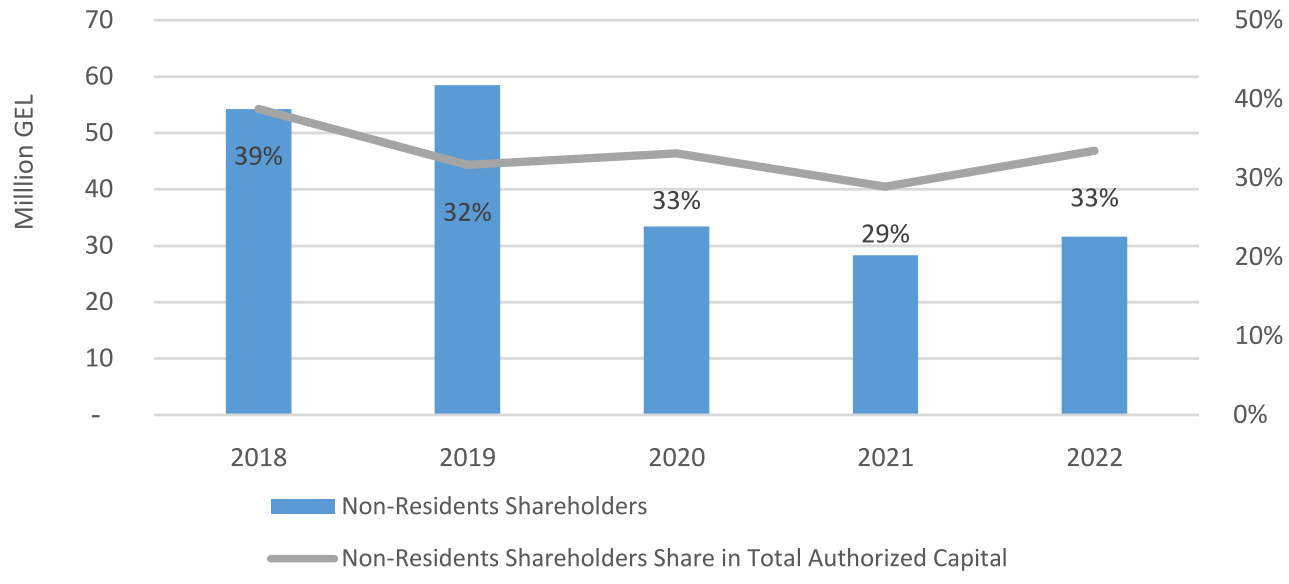


Source: NBG

The increased share of non-resident shareholders in authorized capital, rising from 29% to 33%, is mainly related to the changes made in the share capital of one microfinance institution.

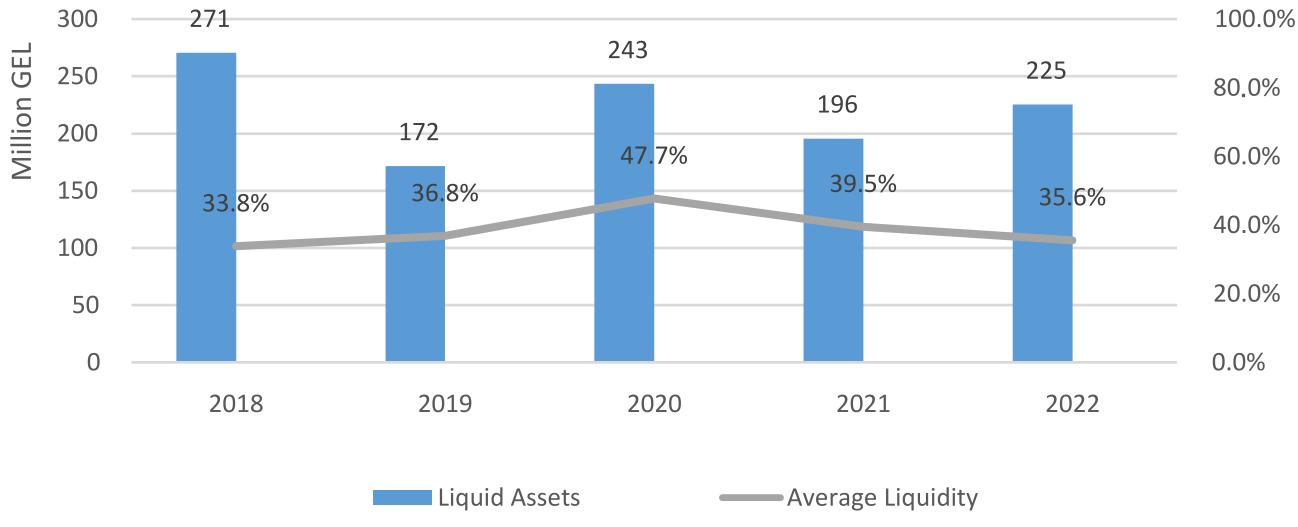
It is important that the sector still maintains adequate liquidity in the face of high lending activity.

Diagram 6.16 Capital structure by residency



Source: NBG

Diagram 6.17 Structure of liquid assets



Source: NBG

The vast majority of microfinance organizations ended 2022 with a profit.

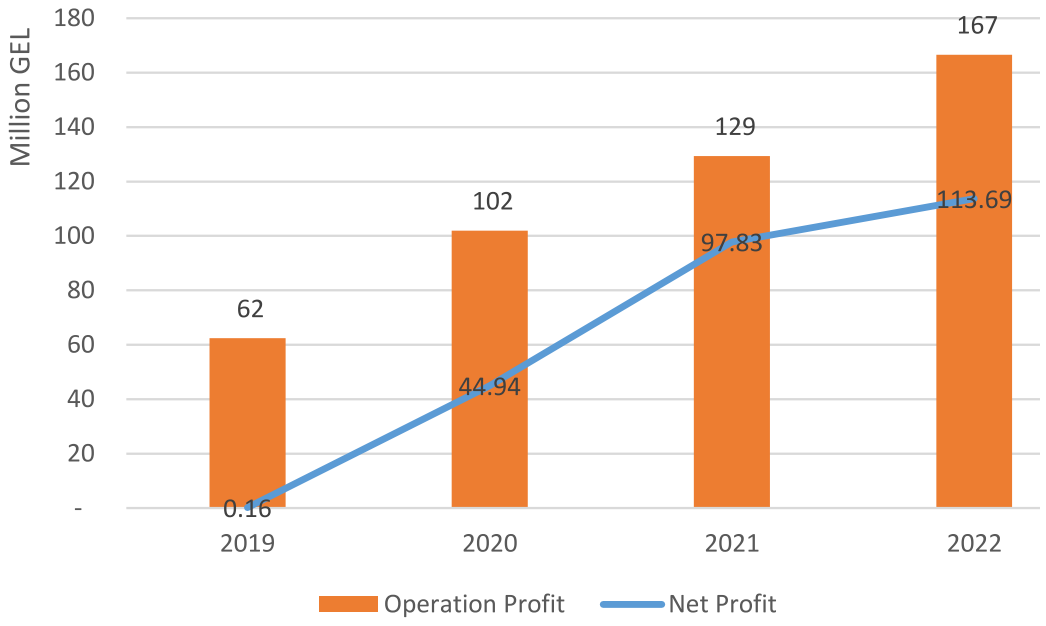
The high growth rate of the loan portfolio led to a 21.7% increase in operating profit and the net profit was GEL 114 million.

The sector's return on equity in 2022 stood at 18%, which was similar to the previous year's figure; while the return on assets increased from 6% to 7%. The increase in profitability was influenced by the high rate of loan portfolio growth and quality improvement.

6.2.2 Lending Entities

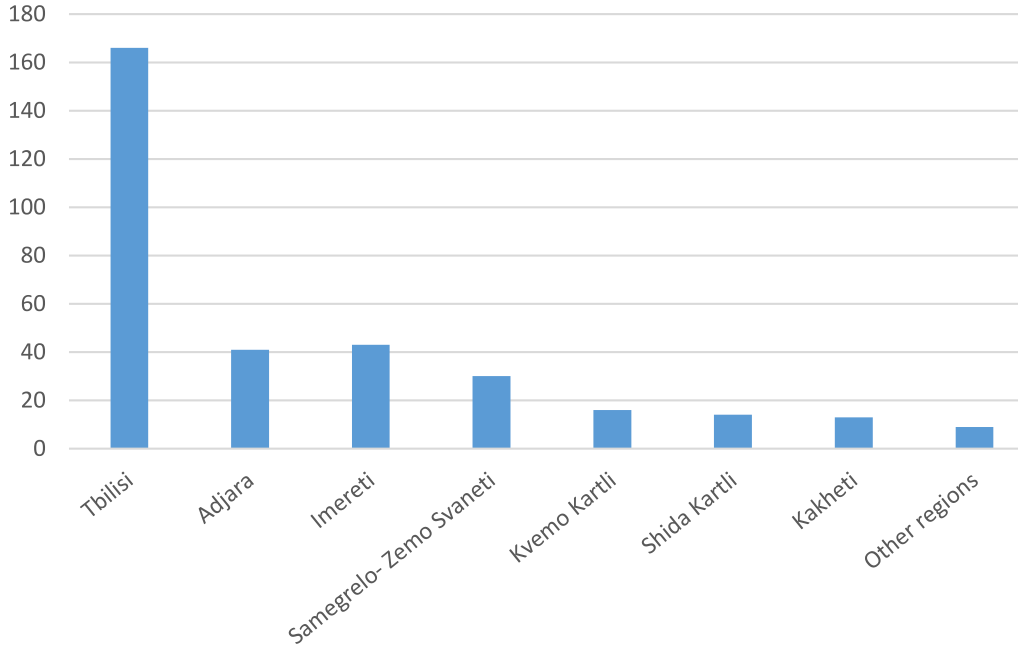
During 2022, 11 new lending entities were registered, and 18 had their registration revoked. Accordingly, as of 31 December, there were 176 registered lending entities, with 332 branches located across the country.

Diagram 6.18 Net operating profit



Source: NBG

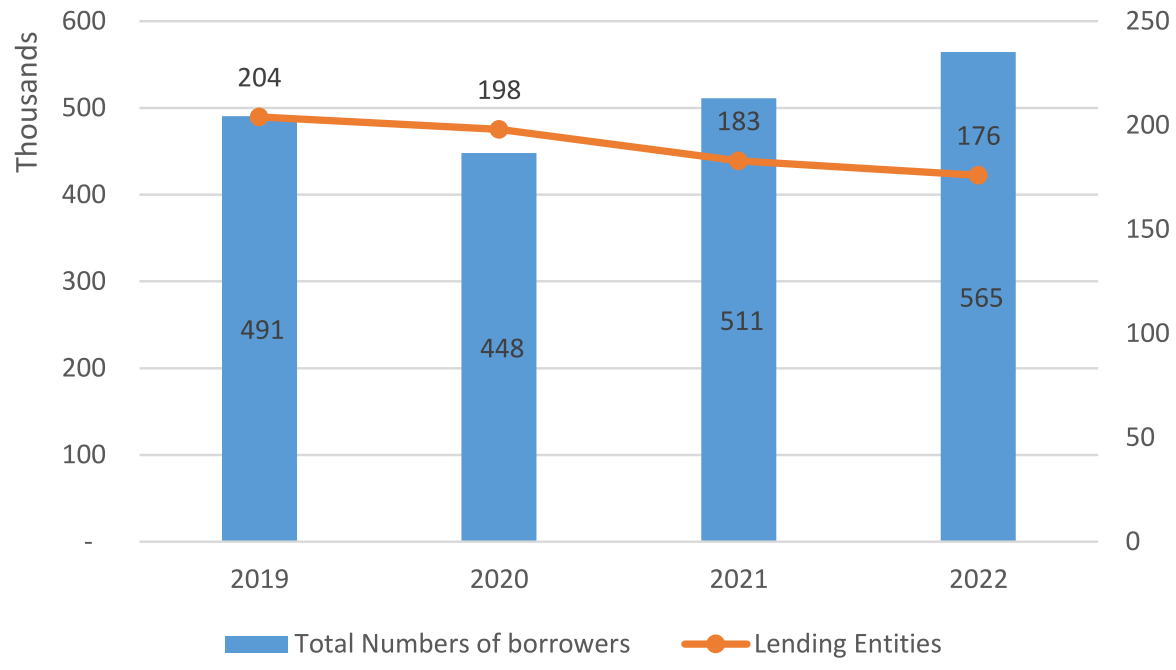
Diagram 6.19 Regional distribution of the branches of lending entities



Source: NBG

It is important to note that lending entities account for more than half of the total number of borrowers in the non-banking sector. These are mostly individuals as the sector mostly concerns the provision of small consumer loans and pawn products. Lending entities also operate in the recovery of problem consumer loans.

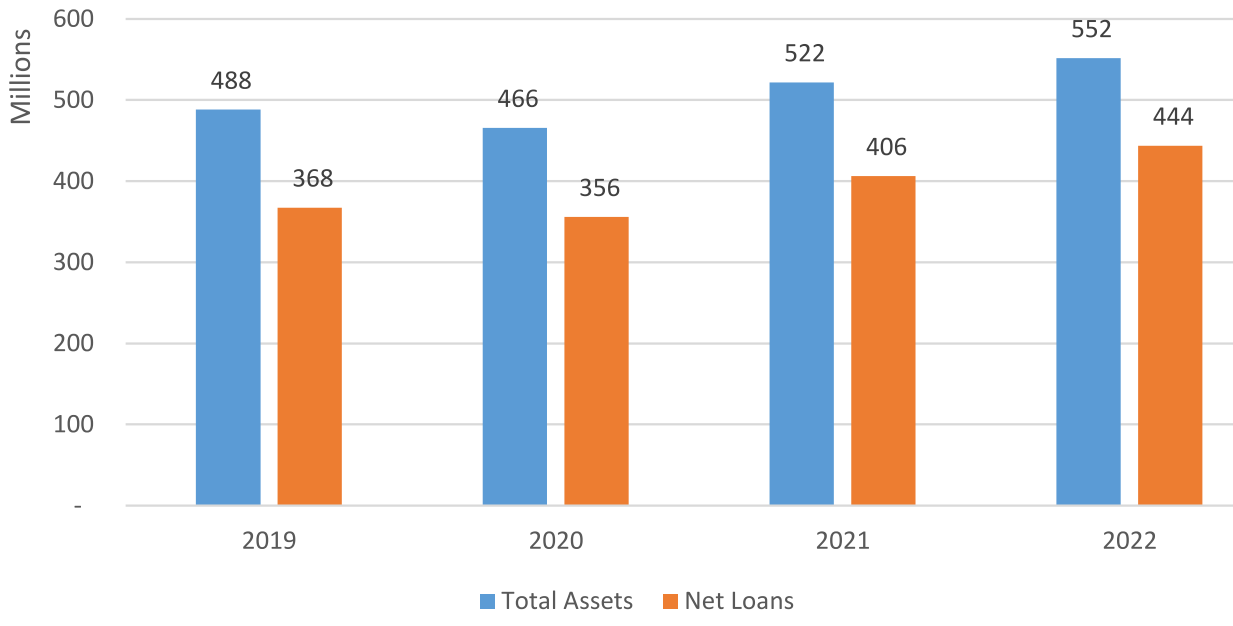
Diagram 6.20 Lending entities and number of borrowers



Source: NBG

The reduction of the number of lending entities by seven units did not affect the total volume of assets or net loans of this sector. During the year, there was a 6% growth of total assets and a 9% growth of net loans.

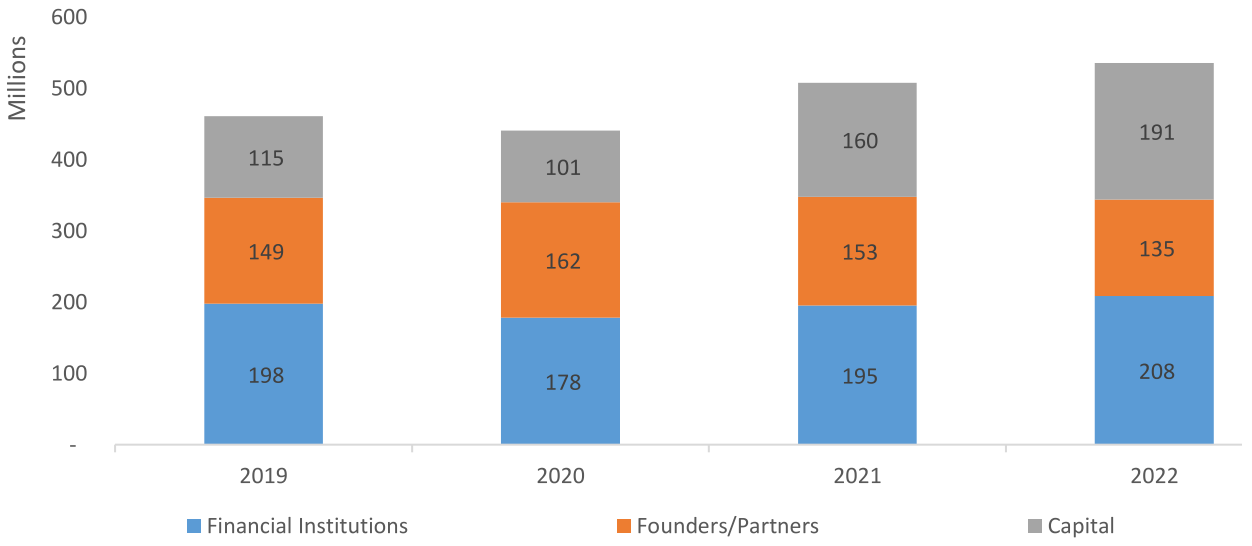
Diagram 6.21 Dynamics of total assets and total loans



Source: NBG

Funds from partners and financial institutions are the main sources of funding for lending entities. However, a positive trend of capital growth was observed over 2022.

Diagram 6.22 Source of funding for lending entities



Source: NBG

As of 31 December 2022, the returns on equity and assets amounted to 24% and 8% respectively.

6.2.3 Currency Exchange Bureaus

Some 56 currency exchange bureaus were registered during 2022, while 106 had their registrations revoked. As of 31 December, there were 511 registered currency exchange bureaus with 689 branches in locations throughout the country.

The registrations of 58 currency exchange bureaus (out of the 106 to lose their licenses) were revoked based on their own application, the majority of which being in Tbilisi. The registrations of the remaining bureaus were revoked due to non-compliance with the requirements established by law.

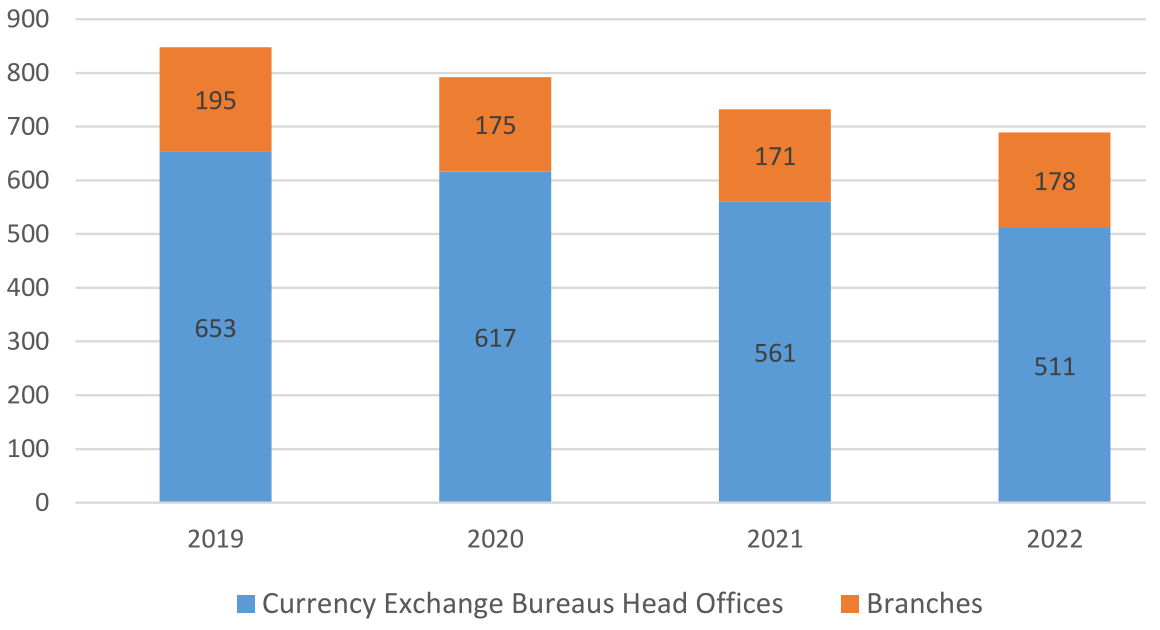
In 2022, 312 currency exchange bureaus (headquarters/branches) were inspected to verify their observance of the terms of registration under the Regulation on Registration and Regulation of Currency Exchange Bureaus, with the obligation to keep customers properly informed, and to determine the accuracy of the reporting data submitted to the National Bank of Georgia.

6.2.4 Credit Unions

The legislative amendments of 2017 set a limit for the number of members in a credit union and defined principles for their operation. This meant bringing together individuals residing in an administrative unit of the same self-governing community and uniting them on a common ground. These changes served to eliminate unsound practices established in the sector, under which credit unions had been using the funds attracted as deposits from their members for lending activities that were inappropriate the purposes of the cooperative.

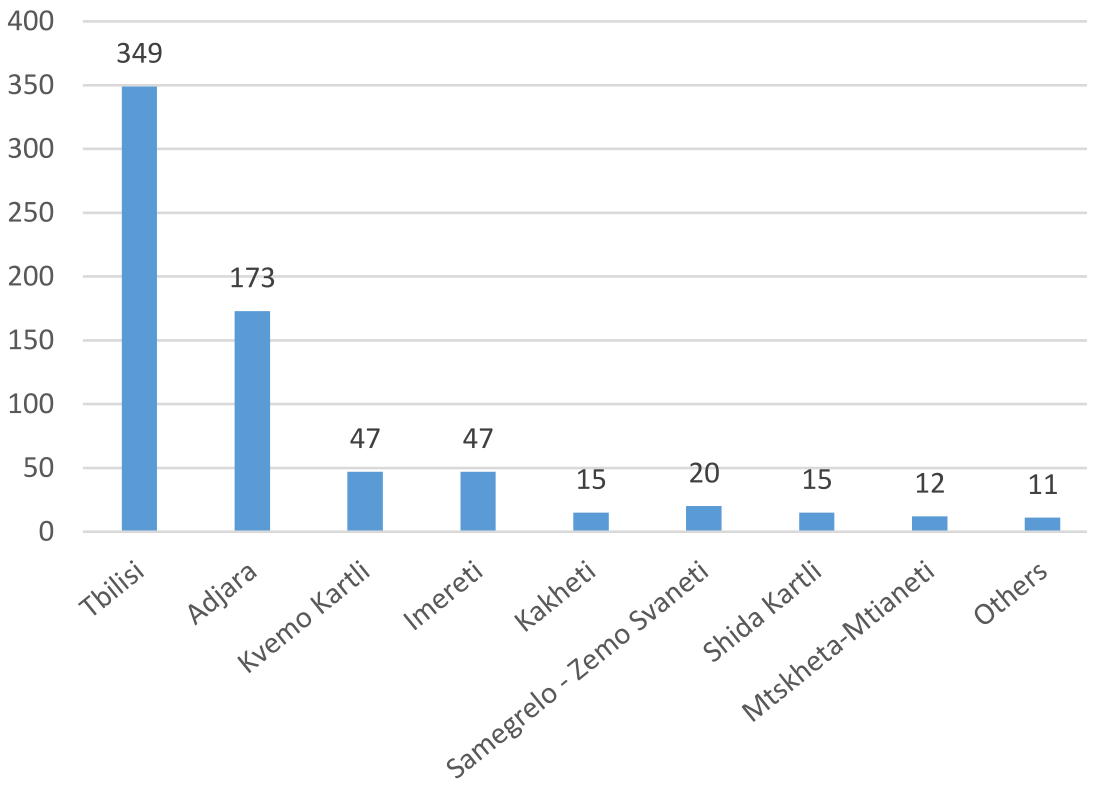
As of 31 December 2022, only one credit union, holding assets of GEL 0.5 million, continued to operate in the market.

Diagram 6.23 Number and branches of currency exchange bureaus



Source: NBG

Diagram 6.24 Regional distribution of structural units of currency exchange bureaus



Source: NBG

SECURITIES MARKET 7

7.1 Measures and reforms implemented to introduce new products on the securities market

In 2022, the NBG made strides to promote the development of new products on the securities market.

In March 2022, the draft Law of Georgia on Mortgage-covered Bonds[86], as developed by the NBG, and drafts of accompanying legislative amendments were submitted to the Parliament of Georgia following the legislative initiative of the Government of Georgia. Parliament approved this package on 29 November 2022. Experts from the Asian Development Bank, the European Bank for Reconstruction and Development, and the International Finance Corporation were actively involved in the work to develop a framework for mortgage-covered bonds. Moody's, the international rating agency, commended the new framework in a special report published in early 2022.

The NBG participated in an annual conference dedicated to mortgage-covered bonds in Central European countries in June 2022. Held in Warsaw, Poland, the conference was organized by the Polish mBank Hipoteczny and the Association of German Pfandbrief Banks (Verband deutscher Pfandbriefbanken - vdp). The forum brought together experts (from the private sector, regulatory authorities, and academia) to discuss mortgage-covered bonds. Georgia was represented at the conference for the first time by the NBG.

In 2022, the NBG was actively involved in the preparation of the securitization[87] framework in cooperation with the Ministry of Economy and Sustainable Development of Georgia. In October 2022, the Government of Georgia submitted to the Parliament of Georgia the draft law on securitization and accompanying drafts of legislative amendments. Experts from the US Agency for International Development, the Asian Development Bank, and the European Bank for Reconstruction and Development were involved in consultations related to the development of the securitization framework.

In June 2022, the Report on the Observance of Standards and Codes (ROSC) was presented. Developed as part of the joint program of the World Bank and the International Monetary Fund, the report highlighted recent improvements in corporate governance regulations, including Decree No. 172/04 of the Governor of the National Bank of Georgia, dated 7 December 2021, on the Approval of the Corporate Governance Code for Issuers of Public Securities, which came into force on 1 January 2022.

The actions taken by the government, including the NBG, to improve the securities regulatory framework in recent years were positively evaluated by the European Commission in a 2023 report[88], with which it concluded the opinion approved on 17 June 2022 regarding Georgia's application to join the European Union. The report states that the Corporate Governance Code of Public Securities Issuers developed by the National Bank of Georgia reflects the recommendations of the European Commission and the principles of the Organization for Economic Cooperation and Development (OECD). The report also mentions that the framework for the prevention of insider trading and market manipulation, as well as the legislation regulating collective investment schemes (investment funds) in Georgia, are in accordance with the requirements of the European Union.

86 A mortgage-covered bond is a debt security issued by a commercial bank that is secured by assets (mainly mortgage loans) to which mortgage bondholders have preferred and direct recourse as creditors.

87 Securitization is a transaction in which a securitization special purpose vehicle (SPV) assumes the credit risk associated with underlying assets by purchasing the underlying assets or otherwise (including through a derivative) and issues securitization instruments whose value and/or yield depend on such risk.

88 Analytical Report following Communication from the Commission to the European Parliament, the European Council and the Council, Commission's Opinion on Georgia's application for membership to the European Union (Brussels, 1.2.2023 SWD(2023) 31).

Box 7 Draft Law of Georgia on Securitization

The draft law on securitization, as developed by the National Bank of Georgia and the Ministry of Economy and Sustainable Development of Georgia, alongside drafts of accompanying legislative amendments, were submitted to the Parliament of Georgia in October 2022. Experts from the US Agency for International Development, the Asian Development Bank, and the European Bank for Reconstruction and Development were involved in consultations on the development of the securitization framework, and consultations were also held with the financial sector.

The purpose of the draft law is to increase alternative sources of funding for both the financial and non-financial sectors through the capital market. Securitization enables a business entity to transform underlying assets (any asset related to future cash flows) into liquid assets. That is achieved by a special purpose vehicle (SPV) acquiring the risks of the underlying assets and issuing securities based on them.

The draft law shares the experience of developed securitization markets and incorporates the main principles of the securitization regulation in effect in the European Union (Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017).

7.2 Securities Market Indicators

The local bonds market has been showing a rapid growth trend in recent years, and this continued in 2022. The enactment of a number of legislative and regulatory reforms is expected to maintain this momentum and help the market develop further.

Bonds Market

As in previous years, 2022 saw a growing trend in the bonds market. This market segment grew by 39.4%[89] and totaled 4.23%[90] of GDP in size. Of the bonds issued, 71.3% were GEL-denominated bonds by international financial institutions. Issuance from

Box 6 Law of Georgia on Mortgage-covered Bonds

On 29 November 2022, the Parliament of Georgia approved the draft Law of Georgia on Mortgage-covered Bonds, as developed by the NBG and submitted by the Government of Georgia as a legislative initiative, alongside accompanying drafts of legislative amendments. The NBG first started working on the mortgage-covered bonds framework in 2018, and experts from the Asian Development Bank, the European Bank for Reconstruction and Development, and the International Finance Corporation were actively involved in the process. Active consultations with commercial banks as potential issuers was also ongoing.

Mortgage-covered bonds are considered a cheap and stable means of accessing funding for credit institutions, along with deposits and other alternative sources of funding. These are a widely used mechanism for the transformation of mortgage loans into liquid assets, which will help to attract long-term GEL resources in the financial sector and increase the possibility of fixed-to-term pricing. The parties that may be interested in mortgage-covered bonds include commercial banks, as well as investment and pension funds deciding to invest for portfolio diversification or other reasons. Commercial banks will also be able to use mortgage-covered bonds as collateral in their monetary operations with the NBG.

In 2022, in a statement published regarding the framework of mortgage-covered bonds, the rating agency Moody's noted: "Georgia's new covered bond law is a solid foundation to develop the market. The law has strong safeguards for investors, similar to rules in other European countries, including provisions to preserve cover pool quality, and overcollateralization requirements that are higher than in some other established covered bond markets."

The law on mortgage-covered bonds encompasses best European practices and experience and, among other things, complies with the European Union Directive on the issuance and public supervision of covered bonds (Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019).

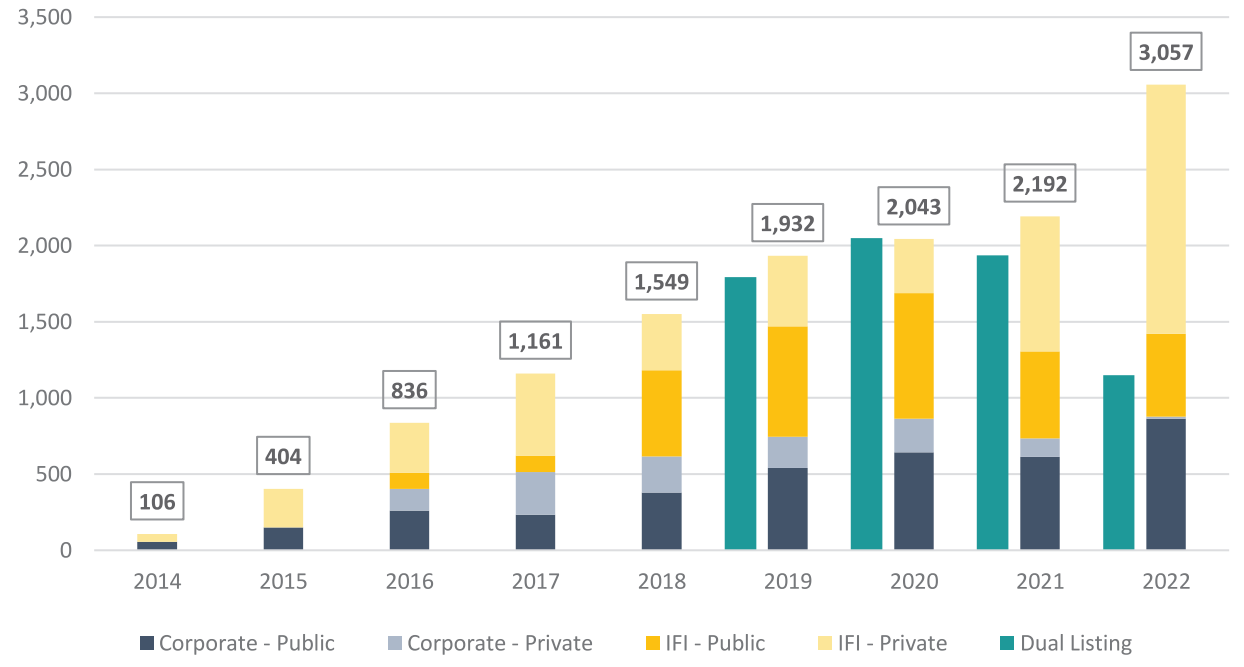
89 This data does not include the non-government debt securities and certificates of deposit dually listed on the Georgian stock exchange.

90 The expected data of the Ministry of Finance of Georgia for 2022 is taken for GDP.

international financial institutions increased by 49.3%, while the corporate bond segment rose by 19.7%.

The first local green corporate bond was issued on the capital market in 2022, with a value of USD 80 million. In 2022, seven public corporate bonds (compared to three in 2021) and seven private bonds of international financial institutions (six in 2021) were issued on the local market (see Diagram 7.1).

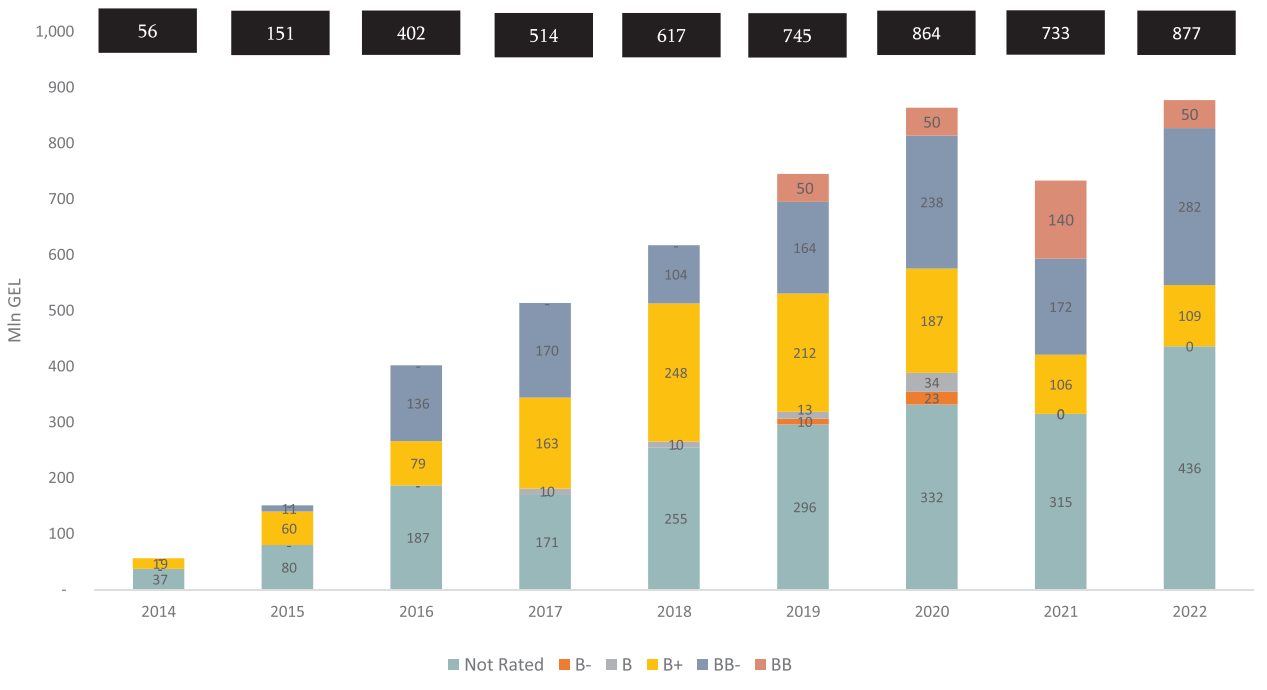
Diagram 7.1 Balances of commercial bonds at end of period (2014-2022)



Source: NBG, Georgian Stock Exchange, Bloomberg, other public sources

At the end of 2022, 62% (62% in 2021 too) of public corporate bond issuers had a rating assigned by international credit rating agencies (Fitch, Moody's, Scope), which made up 49% of the balance of public bonds on the market (compared to 53% in 2021). Of the credit-rated public bond issuers, 12% of bond balances in 2022 were rated BB (17% in 2021), and 74% were rated BB/BB- (64% in 2021).

Diagram 7.2 Balances of corporate bonds by international credit ratings (2014-2022)

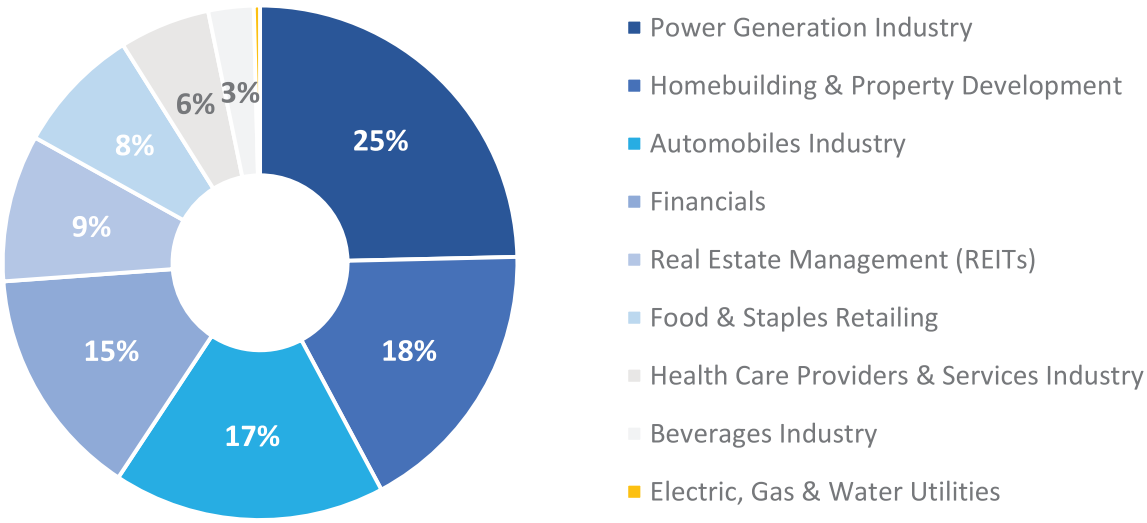


Source: NBG

The corporate bond market was diversified and included issuers from nine industries in 2022. In terms of corporate bond balances, the power generation sector held 25% of bonds, which was the largest share in the market (in 2021 the largest share was the 24% held by the financial sector), while 50% of the market was represented by issuers in the construction, real estate management and financial sectors (in contrast, in 2021, 50% was held by the construction, healthcare and retail sectors).

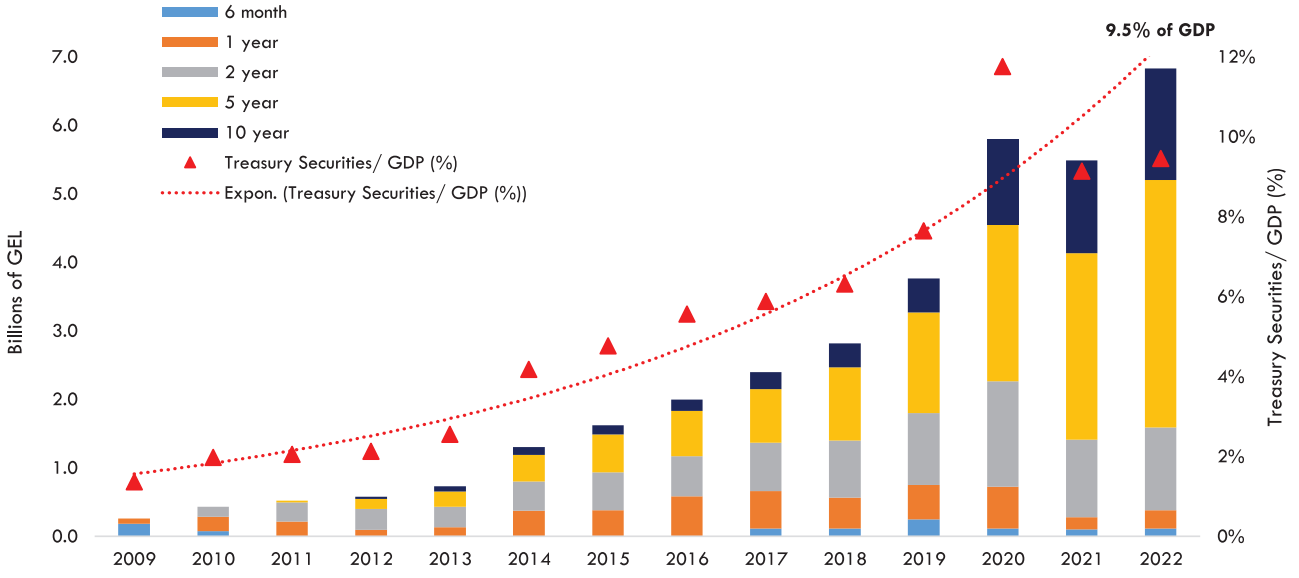
Following the 5.29% decline observed in 2021, the Treasury bond market grew by 24.5% in 2022 and accounted for 9.5% of GDP (see Diagram 7.4).

Diagram 7.3 Distribution of corporate bond balances by industry (2022)



Source: NBG

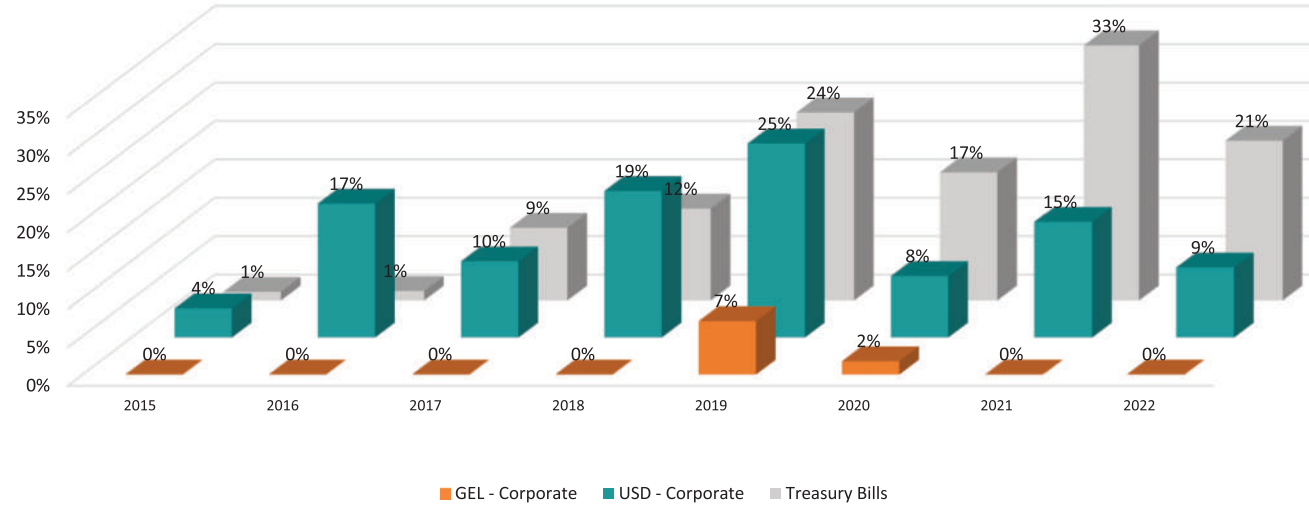
Diagram 7.4 Balances of Treasury securities by maturities (2009-2022)



Source: Ministry of Finance of Georgia, GeoStat

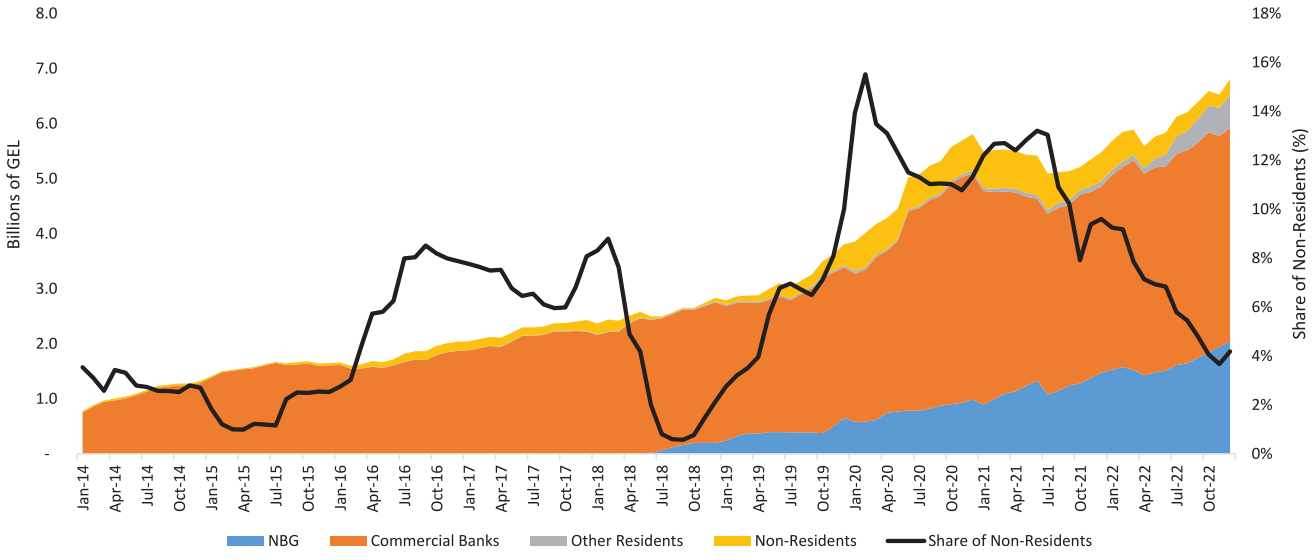
Local market liquidity[91] varied for different segments of the bond market in 2022. For foreign-currency denominated bonds in the corporate securities market, the indicator was 9%. For Treasury bonds, the volume of secondary market transactions in 2022 was 20.8%. A significant share of transactions in the secondary market of Treasury securities was taken by NBG transactions (see Diagrams 7.5 and 7.6).

Diagram 7.5 Secondary market activity for debt securities issued in Georgia[92] (2015-2022)



Source: NBG, Georgian Stock Exchange

Diagram 7.6 Distribution of Treasury securities by ownership (2014-2022)



Source: NBG, Georgian Stock Exchange

91 The data is calculated by the ratio of the value of transactions performed in the secondary market during the year to the average annual balance of bonds.

92 The graph shows the secondary market activity during the year by comparing the volume of secondary market transactions with the average annual balances of securities.

7.3 Overview of Market Players

By the end of 2022, there were two stock exchanges, one central securities depository, nine brokerages and three independent securities registrars were operating in the Georgian securities market. Two out of the nine brokerages were not members of the stock exchange.

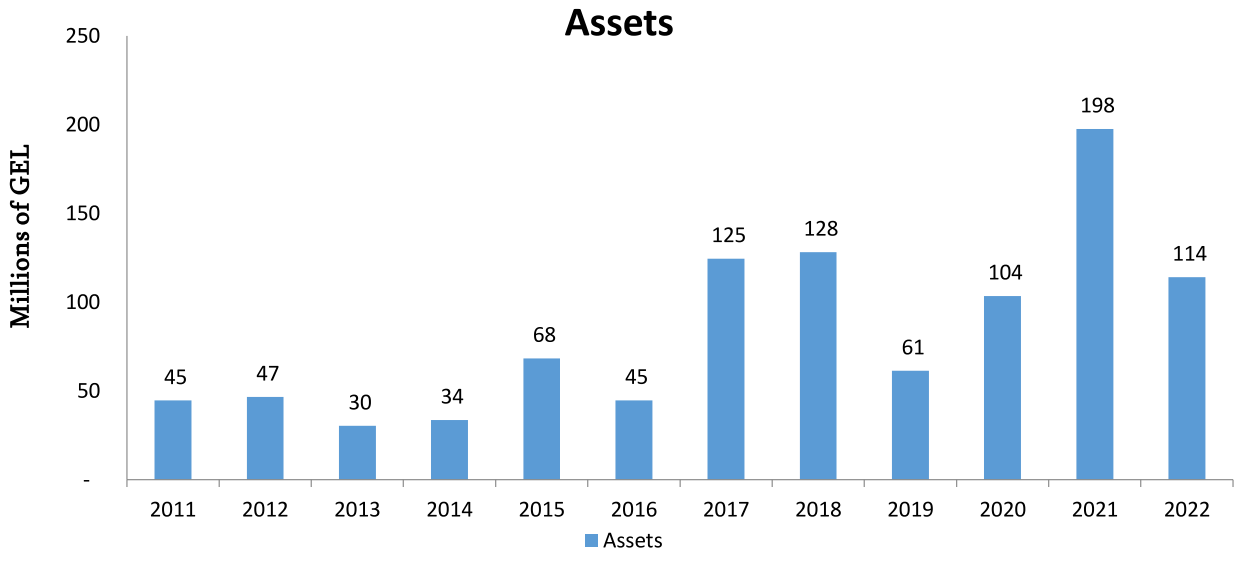
Brokerages

As of 31 December 2022, the total assets of the operating brokerage companies amounted to GEL 114 million.

The total value of clients' securities on the securities accounts of brokerage companies and commercial banks amounted to GEL 7.7 billion at the end of 2022, representing an increase of 17% compared to 2021 (net of the exchange rate effect). This increase is related to foreign securities accounts. Importantly, 33% of client securities balances are on non-resident investor accounts. As of the end of 2022, a total of 26,061 clients were receiving brokerage services from brokerage companies and banks, of which the majority (91%) were resident individuals. At the end of the year, compared to the same period in 2021, the number of clients of brokerage companies increased by 129%.

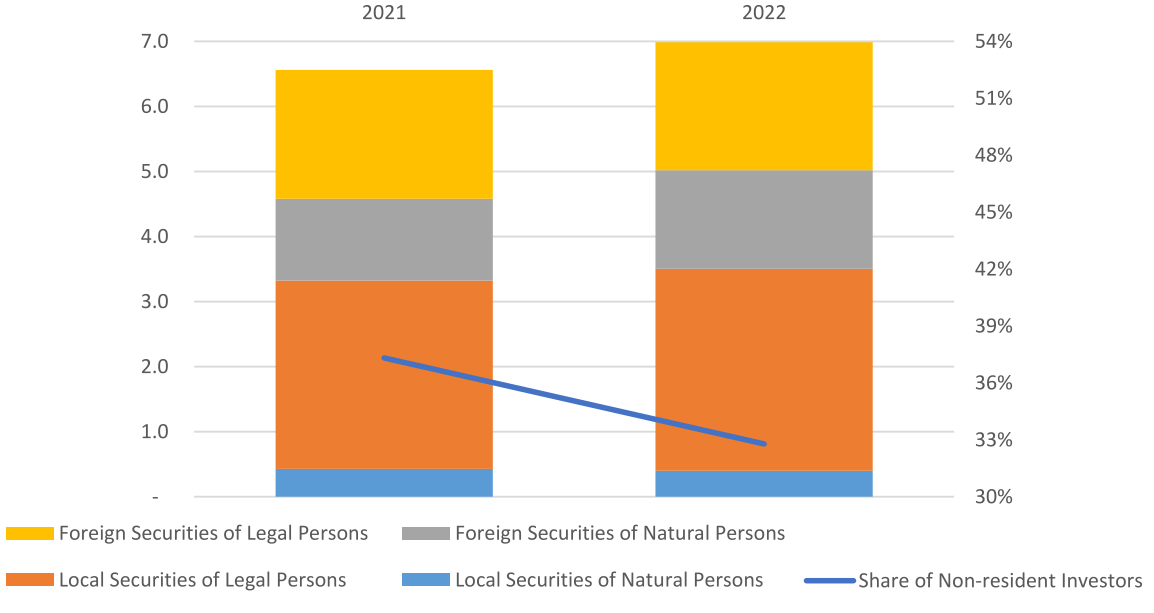
As much as 93% of client securities balances and 94% of the number of clients were concentrated in the two largest brokerages and their related commercial banks.

Diagram 7.7 Aggregate assets of brokerage companies by year (2011-2022)



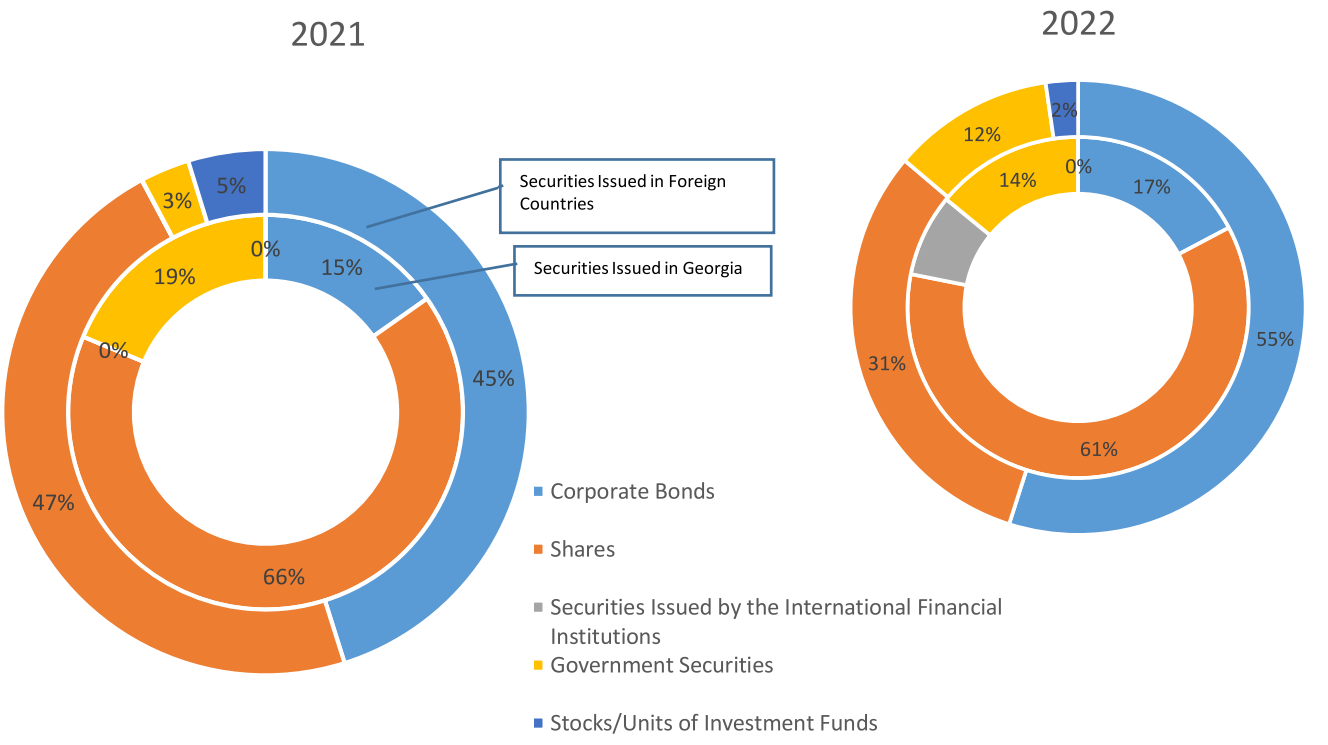
Source: NBG, quarterly and annual financial reports of brokerage companies

Diagram 7.8 Total value of client securities accounts of brokerage companies and banks (billion GEL)



Source: National Bank of Georgia, monthly reports of brokerages and commercial banks

Diagram 7.9 Distribution of client securities portfolio on securities accounts of brokerages and banks (securities issued in foreign currencies and GEL)



Source: Monthly reports of brokerages and commercial banks

Stock Exchange

As of 31 December 2022, securities of 31 issuers were admitted to the trading system of the Georgian Stock Exchange. The total value of transactions recorded in trading sessions and on the stock exchange during the reporting period amounted to GEL 37.8 million (2 million units of securities). Of which, a total of GEL 7.4 million was traded at the stock exchange, and GEL 30.4 million was recorded on trading sessions.

Table 7.1 Aggregate information based on rates recorded in trading sessions and on the exchange (2021-2022)

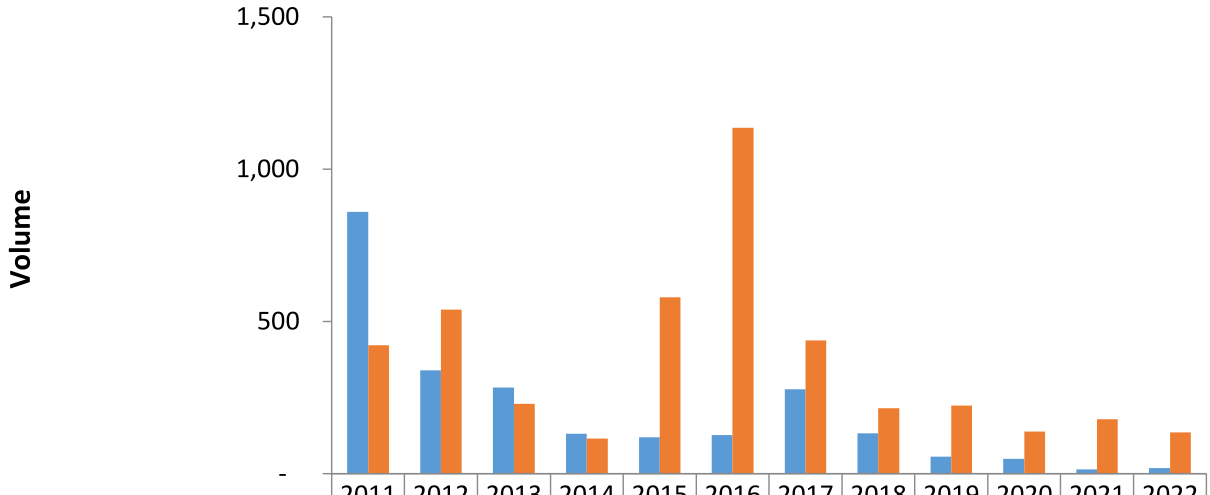
	Number of deals		Number of securities		Value of securities (GEL)	
Year	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Stock exchange	34	14	1,256,350	176,775	7,395,948	104,078
Recorded	121	179	700,824	178,534,049	30,366,907	58,945,873
Total	**155**	**193**	**1,957,174**	**178,710,824**	**37,762,855**	**59,049,951**

Source: Annual Report of the Georgian Stock Exchange

Diagram 7.10 Key trade indicators (transactions offered at trading sessions and recorded in the stock exchange), 2011-2022

Source: Annual Report of the Georgian Stock Exchange

Diagram 7.11 Number of transactions recorded on trading sessions and at the stock exchange by year (2011–2022)



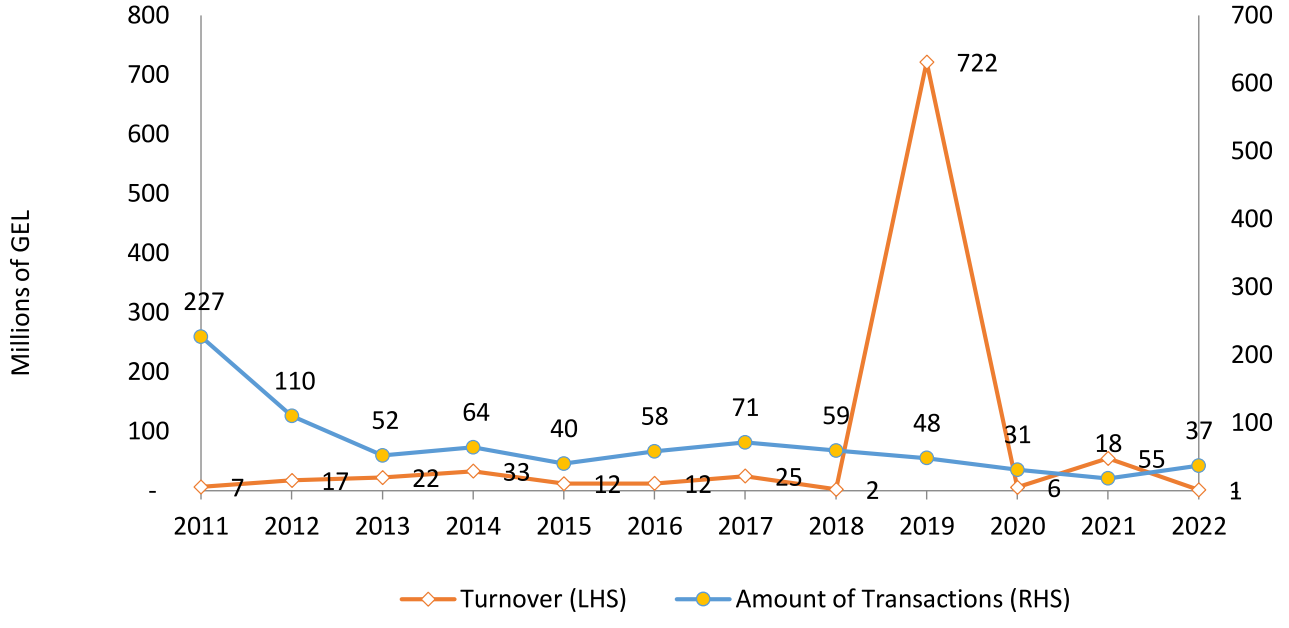
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Stock Exchange Trades	860	339	283	131	120	127	277	133	56	48	14	19
OTC Trades registered at the Stock Exchange	421	538	230	115	579	1,135	438	215	224	139	179	136

Source: Annual Report of the Georgian Stock Exchange

Central Depository

In 2022, the Central Depository had 1.4 million securities and GEL 3.8 million deposited in it. Of which, 69% of cash deposit transactions and 88% of the total amount were made with the participation of Bank of Georgia JSC. The number of transactions on securities deposited with the Central Depository increased by 106% compared to the same period in 2021, while the number of securities fell by 53 million units. A total of 20 new accounts were opened with the Central Depository throughout 2022.

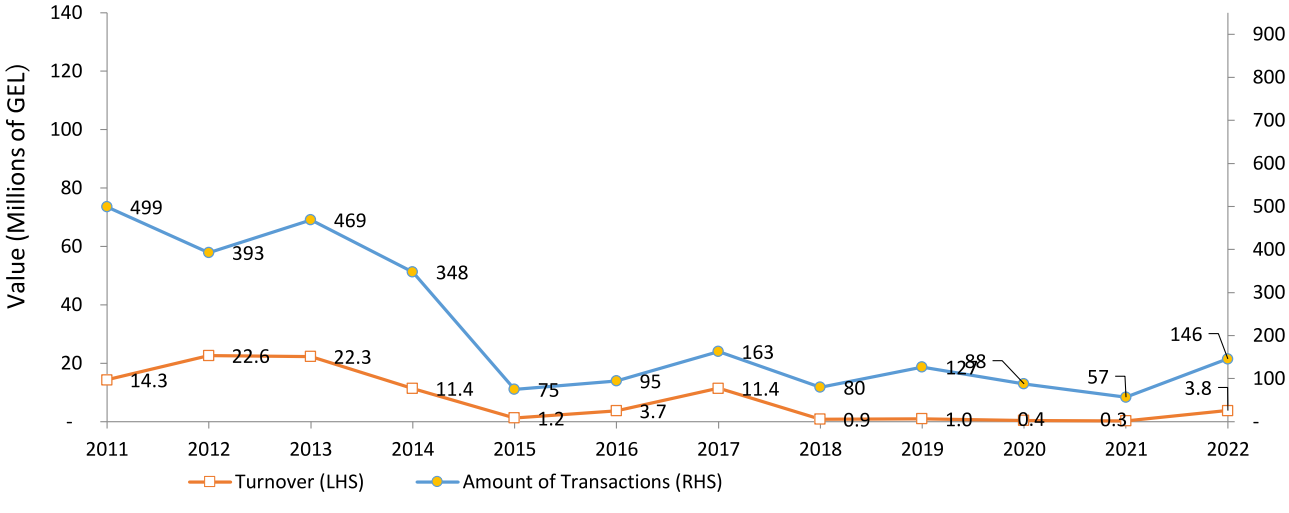
Diagram 7.12 Securities deposited with the Central Depository by year (2011-2022)



Source: Annual Report of the Georgian Securities Central Depository

Cash flow in the Central Depository decreased by GEL 3.5 million in the reporting year. The number of cash transactions was 156% higher than in the previous year.

Diagram 7.13 Funds deposited at the Central Depository by year (2011-2022)



Source: Annual Report of the Georgian Securities Central Depository

7.4 Investment Activities of the Pension Agency

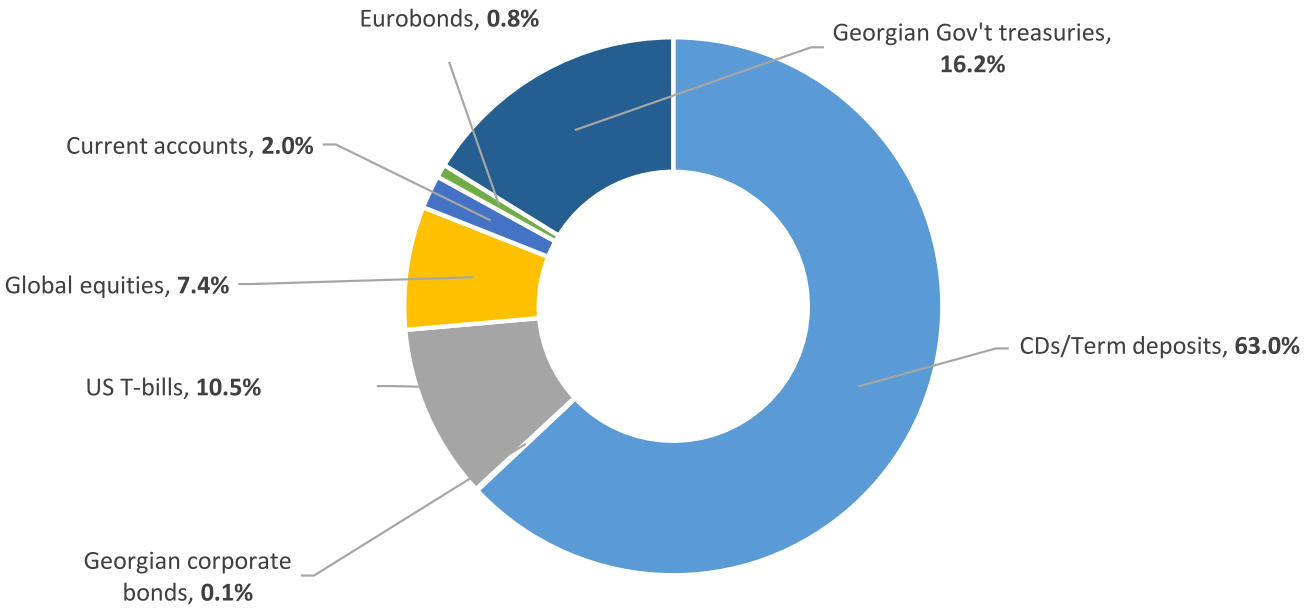
Investing in local and foreign securities

In 2022, the Pension Agency started diversifying the investment portfolio and approached the benchmark portfolio.[93] According to the decision of the Investment Board, foreign currency was gradually purchased during the year, and the funds were then invested in global and local financial instruments.

In accordance with the Investment Policy Document, foreign shares were purchased through the iShares MSCI World ETF ("ticker symbol": URTH), which includes more than 1,500 companies and is diversified by industry. In terms of the local market, in 2022 the Pension Agency invested in a bond issued in the local market for the first time.

As of 31 December 2022, 2.0% of pension assets were held in interest-bearing current accounts, 16.% in local Treasury bonds, 10.5% in US Treasury bonds, 7.4% in global equities, 0.8% in Eurobonds, 0.1% in local corporate bonds, and 63.0% was invested in local certificates of deposit and term deposits.

Diagram 7.14 Distribution of the pension assets portfolio, 31 December 2022

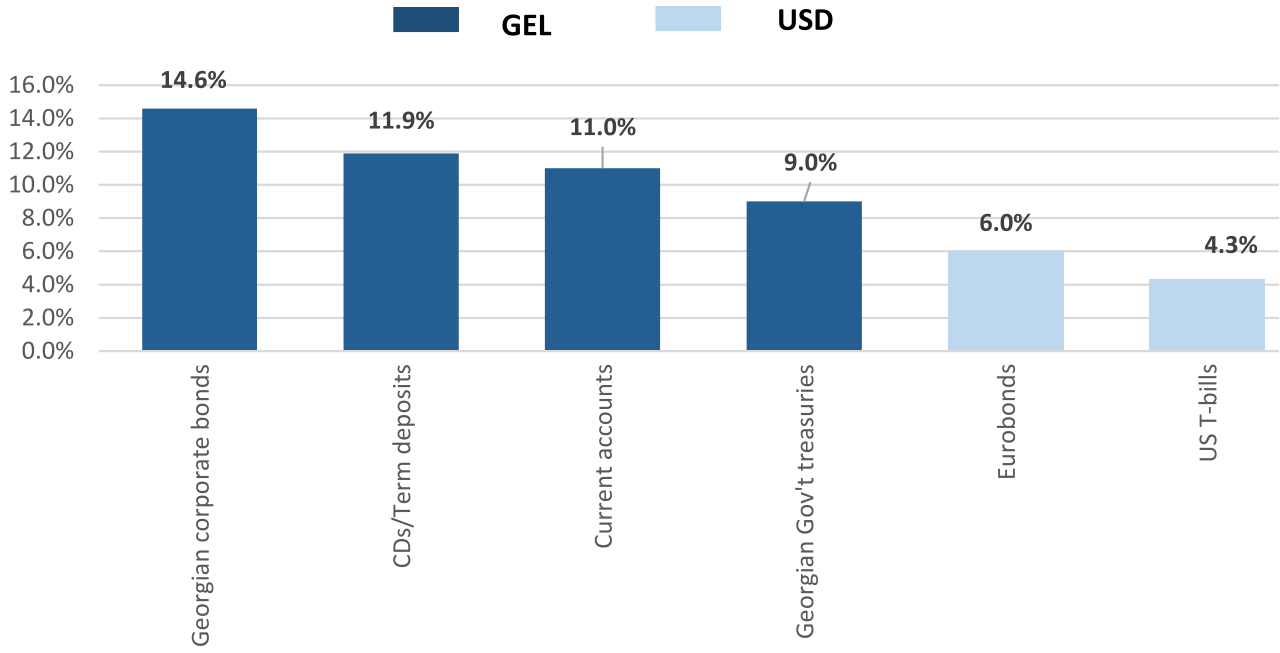


Source: Pension Agency

Interest rates on financial instruments rose sharply amid increased global inflation in 2022, which allowed the Pension Agency to invest in financial instruments such as US Treasuries, Eurobonds and local corporate bonds.

93 The less risky portfolio benchmark consists of three classes of assets: Georgian Treasury bonds (20%), certificates of deposit in GEL (60%), and foreign equities (20%).

Diagram 7.15 Pension instrument yields, 31 December 2022



Source: Pension Agency

As of 31 December 2022, the size of the pension fund was GEL 2.95 billion (of which the net return since inception amounted to GEL 438 million), 18.8% was denominated in US dollars, and 81.2% in GEL. The pension fund's net return since its launch (on 1 January 2019) until December 2022 was 40.8%, and the real return (inflation adjusted) during the same period amounted to 2.69%. The total net return generated during 2022 was GEL 183 million, equivalent to approximately 7.3% annual nominal growth (-2.3% real growth).

Diagram 7.16 Returns by class of assets, 2022

2022	
Asset class	**Return (GEL)**
Treasury bills	309,998
US Treasury bills	(14,938,621)
Georgian Treasury bonds	27,138,307
Local corporate bonds	44,834
Eurobonds	665,181
Certificates of deposit/term deposits	177,519,588
Current accounts	40,709,286
Global equities	(40,050,260)
Total administrative expense	(8,115,000)
Net return	183,283,312

Source: Pension Agency

Selection of Brokers and Dealers

The Pension Agency selected brokers and dealers to invest in local and foreign securities. Citi and JP Morgan Chase, two of the world's leading investment banks, were selected as the main brokers/dealers and were tasked with making investments in international financial markets on the instructions of the Pension Agency and in accordance with the requirements of the law. In the local capital market, the Pension Agency cooperates with brokers and primary dealers as intermediaries of the securities market.

7.5 Overview of the Work of Investment Funds

Over the course of 2022, three private investment funds were registered in Georgia (Diversified Loan Portfolio JSC, Foresight Capital JSC, and Common Fund "Real Estate Fund Elysium 1"). An asset management company (Elysium Asset Management LLC) also obtained registration in 2022.

In total, five investment funds and four asset management companies now operate in Georgia.

As of 31 December 2022, the total volume of the portfolio under management of the active investment funds was GEL 92 million.

MONEY LAUNDERING INSPECTION AND SUPERVISION

8

In line with the Supervisory Framework for Combating Money Laundering and Terrorism Financing, and in accordance with the risk-based supervisory strategy, various effective measures were planned and implemented by the National Bank of Georgia in 2022. The process of remote identification and assessment of risks – both sectoral and for each financial institution – became the basis for these measures.

To identify and assess risks remotely, the National Bank of Georgia received and processed money laundering and terrorism financing risk supervision reports from each of the entities subject to AML/CFT supervision (as listed in Diagram 8.1) twice in 2022.

Diagram 8.1 Remote supervision, 2022

Financial Sector	number
Commercial banks	14
Microfinance institutions	39
Payment service providers	32
Brokerage companies	8
Currency exchange bureaus	519
Securities registrars	3
Credit union	1
Lending entities	176

Source: NBG

The supervisory measures implemented during 2022 included complex and thematic, special and follow-up on-site inspections. In light of the identified sectoral threats and risks, the on-site inspections focused on the following topics:

For commercial banks:

- ✓ Adequacy of classifying clients (including those identified/verified through remote channels) according to risk, and reassessing the risk and adequacy of implemented preventive measures in relation to risk.
- ✓ Identification and verification of the beneficial owners of clients with complex ownership structures; the bank's knowledge of clients related to offshore and high-risk jurisdictions by governance and ownership structure, as well as knowledge of transactions and parties involved in such areas.
- ✓ Assessment of the adequacy of the process of compliance with US, EU, and UK sanctions.
- ✓ Effectiveness of risk management associated with internet acquisitions.
- ✓ Effectiveness of the process of detecting the origin of cash.
- ✓ Effectiveness of the process of detecting suspicious/unusual transactions (including

detecting the use of fictitious companies/ transit companies, measures taken for the implementation of UN resolutions (TF/ Proliferation), adequacy of software, the bank's knowledge of transactions performed by charitable and non-entrepreneurial (non-commercial) legal entities).

- ✓ Effectiveness of the risk management process for correspondent relations.

For payment service providers:

- ✓ Adequacy of classifying clients according to their risk, and reassessing the risk and adequacy of implemented preventive measures in relation to risk.
- ✓ Effectiveness of detecting suspicious/ unusual transactions (including measures taken for the implementation of the UN resolutions (TF/Proliferation), and software adequacy).
- ✓ Assessment of the adequacy of the process of compliance with US, EU, and UK sanctions.
- ✓ Effectiveness of the monitoring process of gambling-related transactions and those carried out at self-service kiosks.

For brokerages:

- ✓ Adequacy of classifying clients according to risk, risk reassessment and adequacy of implemented preventive measures in relation to risk.
- ✓ Identification and verification of the beneficial owners of clients with complex ownership structures.
- ✓ Brokerage company's knowledge of intermediaries and the adequacy of the process of monitoring transactions performed through them.
- ✓ Effectiveness of detecting suspicious/ unusual transactions (including measures taken for the implementation of the UN resolutions (TF/Proliferation), and software adequacy).
- ✓ Assessment of the adequacy of the process of compliance with US, EU, and UK sanctions.
- ✓ Effectiveness of organizational risk assessment and management processes.
- ✓ Effectiveness of the process for determining the origin of cash.
- ✓ Inspection of the accuracy of filling out reporting forms.

For microfinance institutions:

- ✓ Adequacy of classifying clients according to risk, risk reassessment and adequacy of implemented preventive measures in relation to risk.
- ✓ Organization's knowledge of international transactions (including those related to offshores and high-risk jurisdictions).
- ✓ Assessment of the adequacy of the process of compliance with US, EU, and UK sanctions.
- ✓ Effectiveness of detecting suspicious/unusual transactions (including measures for the implementation of the UN resolutions (TF/ Proliferation), and adequacy of software).
- ✓ Effectiveness of the process for determining the origin of cash.
- ✓ Inspection of the accuracy of filling out reporting forms.

In 2022, 245 representatives of the financial sector were inspected to determine their compliance with the Georgian AML legislation. The Money Laundering Inspection and Supervision Department of the National Bank of Georgia conducted follow-up inspections of 25 entities subject to supervision to ensure the correction of deficiencies identified during earlier inspections. Special attention was paid to the on-site supervision of currency exchange bureaus in 2022. In this regard, the National Bank of Georgia conducted on-site inspections of 212 currency exchange bureaus. The NBG also completed complex inspections of the four largest lending entities over the course of the year.

The total amount of the imposed fines for violations of the Georgian AML legislation amounted to GEL 2,275,400.

In addition to the fines imposed following on-site inspections, various corrective measures were applied to representatives of the financial sector during 2022. In order to immediately eliminate the identified weaknesses and increase the level of compliance of representatives of the financial sector, a number of recommendations were issued based on the results of on-site inspections.

Diagram 8.2 Fines issued in 2022

Financial Sector	Fines in GEL
Commercial banks	270,500
Microfinance institutions	186,500
Payment service providers	45,700
Lending entities	150,000
Currency exchange bureaus	1,607,700
Securities registrars	15,000

Source: NBG

Diagram 8.3 Number of recommendations issued in 2022

Financial Sector	Number of recommendations
Commercial banks	62
Microfinance institutions	38
Payment services providers	15
Brokerage companies	16
Lending entities	0
Currency exchange bureaus	684

Source: NBG

The measures implemented during 2022 to ensure compliance with international sanctions are also worth mentioning. The Money Laundering Inspection and Supervision Department was expanded with the creation of a new division – the Department for Supervision of the Implementation of International Sanctions. This division actively worked on the development of methodology documents, instructions, and forms for receiving additional information, while monitoring compliance with sanctions and maintaining close cooperation with international partners with the aim of sharing experience.

The Parliament of Georgia adopted legislative amendments on virtual asset service providers in 2022. These legislative changes provide for mandatory registration of virtual asset service providers, the verification of the administrator's fit and proper criteria, and the supervision of virtual asset service providers in terms of money laundering and terrorism financing risks.

Based on the analysis of the best practices of EU countries, the regulation on determining and imposing monetary fines for NBG-supervised investment funds was approved in 2022. This regulation includes sanctions that correspond to the severity of the violation, and fines for repeated and systemic violations.

The Money Laundering Inspection and Supervision Department evaluated the organizational and group-wide risk assessment documents of commercial banks in order to improve financial institutions' own perception of risks and support them in planning measures to mitigate these risks. In 2022, commercial

banks were instructed to update their organizational risk assessment documents in terms of compliance with international sanctions.

In order to remotely assess the compliance of commercial banks' compliance control systems with the AML legislation, as well as the requirements established by the NBG and international best practices, in 2022 an analysis was carried out based on the supervision questionnaire related to commercial banks' compliance control systems. As in previous years, the Money Laundering Inspection and Supervision Department also individually reviewed the products developed and presented by financial institutions.

The National Bank of Georgia attaches special importance to the implementation of preventive supervisory measures, keeping the financial sector updated on supervisory expectations and, in this way, increasing their level of compliance. For this purpose, training of financial sector representatives was actively carried out during the year to introduce methodological guidelines and supervisory documents, to support their effective implementation in practice, and to support the effective management of current challenges. The training modules and the number of attendees, grouped by sectors, are presented in Diagram 8.4.

Diagram 8.4 Training modules in 2022

Training	Commercial banks	Microfinance institutions	Payment service providers	Currency exchange bureaus	Lending entities	Brokerage companies	Registrars	Investment funds
Compliance control system		38	32	53	26			6
Risk assessment and preventive measures		38	32	53	26	9	6	6
Compliance with international sanctions	14							

Source: NBG

In parallel with this training, communication with the financial sector was intensive in 2022. Online meetings were held to share information and communicate supervisory expectations. In addition, representatives of the financial sector were provided with relevant information on a daily basis, and were advised on the effective implementation of legal requirements and methodological guidelines in practice.

PAYMENT SYSTEMS 9

Payment systems have undergone significant transformation in recent decades, in both technological and functional terms. The development of remote and mobile technologies was one of the main drivers pushing the rapid development of cashless electronic payments, especially in retail payments. Completely new opportunities for the development of e-commerce have emerged, and new payment service products make payments easier and more convenient in both merchant outlets and remotely via the internet. The development of electronic payments was given additional impetus by the pandemic in 2019, accelerating digital transformation in a number of sectors and creating an additional need for the development of new electronic payment products. The latter was ultimately manifested in accelerated growth rates of electronic payments, especially mobile banking and card payments. To support these trends, the National Bank of Georgia continues to work to ensure the effective and reliable functioning of payment systems across the country, both in improving current systems and supporting the introduction of new ones. For this purpose, work on the tender documentation for the instant payment system was completed in 2022. The system will be purchased in 2023 in accordance with the procurement procedure of the World Bank. The instant payment system will allow for the 24/7 transfer of funds within a few seconds from the initiation of the operation from the payer's account to the payee's account.

Processing request-to-pay (RTP) messages is an additional advantage of the instant payment system. The scheme allows users to request payment from a payer. Upon confirmation of the payment request by the payer, an instant (through the instant payment system for small value transactions) or conventional (through the RTGS system for small and large value transactions) payment will be made. In addition, it will be possible to use various simple identifiers (mobile phone number, email, identification code, etc.) instead of the account number when making instant payments. This is provided by the PROXY database, through which the recipient's IBAN account will be searched and delivered to the payer with simple identifiers (mobile phone number, etc.).

The introduction of common and secure open standards of communication along with the instant payment system, will significantly strengthen financial market infrastructure, create an environment favorable for all members in terms of payment services, and support the development of electronic payments.

In parallel with implementing the instant payment system, the National Bank of Georgia started work on updating the RTGS system. The RTGS system will be upgraded in terms of function, infrastructure, and technology. This will improve the performance of the system and make its functionality more diverse to enable integration with other systems, including the instant payment system for liquidity management and settlement purposes.

The year was also remarkable in terms of the important steps taken towards European integration in the payment area. On 20 September 2022, the National Bank of Georgia submitted an application for Georgia's membership of the Single Euro Payment Area (SEPA). Membership of SEPA will be beneficial in several aspects: it will boost the credibility of the Georgian financial sector in the international arena; it will facilitate trade relations with the European Economic Area; and Georgian citizens will benefit from cheaper, simplified services, which is especially important considering the growing trend of EUR remittances received from EU countries. The submitted application includes several subcategories: substantiation of close economic and legal relations with the European Union; confirmation of the functional equivalence of payments and financial sector legislation, as well as competition and personal data protection legislation; and the demonstrated ability to process EUR transactions. The team of the National Bank of Georgia worked closely with government agencies to fill out the application.

9.1 Payment Systems Oversight

Legislative Framework

A solid legal framework is important for both the development of the payments sector and for dealing with challenges and facilitating future innovations. In order to have such a legal framework in place, it is

necessary to monitor the market, obtain the opinions of stakeholders, and study international best practice.

The National Bank of Georgia was busy continuing its dynamic work in improving the payment legislation in 2022. The following section presents information about the progress achieved on various legal acts, the work on some of which began in previous years.

Amendments to the Law of Georgia on Payment System and Payment Services

The Association Agreement between Georgia, the European Union and the European Atomic Energy Union and their member states provides for Georgia's commitment to harmonize its national legislation with that of the European Union. In terms of payment systems and services, Georgia is committed to ensure the implementation of the directive on payment services (Directive 2007/64/EC, so-called PSD1). Even before the Association Agreement, the National Bank of Georgia was working on the draft Law on Payment Systems and Payment Services, which was adopted by the Parliament of Georgia in 2012. While working on this law, the National Bank of Georgia relied on PSD1 and shared most of the provisions of the directive based on the market situation. Further compliance with the directive was ensured to a large extent through legislative changes and improvements in legal acts.

The Association Agreement includes a provision on dynamic approximation, meaning that the national legislation should be updated in line with amendments made to the EU legislation. Following the dynamics and readiness of the payment services market – and given Georgia's aspiration towards EU-integration and the potential to join the Single Euro Payments Area (SEPA) in the future – in 2018 the National Bank of Georgia started working on implementing the updated directive on payment services ((EU) 2015/2366, so-called PSD2, which is one of the important criteria for joining SEPA). In 2018-2019, a compliance table was developed, and then the work on drafting legislative changes began. This process involved multiple discussions with payment service providers, including banks, as well as local and international payment systems/schemes and other stakeholders, for sharing and accepting opinions/ positions. A series of joint and individual meetings were held, some of which were undertaken remotely due to the pandemic.

In working on the project, the National Bank of Georgia was supported by experts from the Central Bank of Poland and the Financial Supervision Authority, as well as the Central Bank of Lithuania (as part of the two-year EU twinning project).

In 2022, the National Bank of Georgia completed its work on a comprehensive package of legislative amendments, included related draft laws. The Government of Georgia initiated the legislative package, and the Parliament of Georgia adopted the amendments in September 2022. By doing so, almost full compliance with PSD2 was achieved.

The amendments to the Law of Georgia on Payment Systems and Payment Services target the multi-faceted development of payments. Among other things, the legislation added new definitions and provided a more specific list of payment services and permitted activities, including related to those services to which the law does not apply. The law introduced new payment initiation services and account information services, hence paving the way for Open Banking, and made it possible for so-called fintech companies to enter the payment services market (as payment initiation service providers and/ or account information service providers). To encourage a more competitive environment, issues regarding access to payment systems/schemes were improved, including the so-called right to indirect participation/access and the direct participant's obligation to provide access. To promote the competitiveness of registered payment service providers, commercial banks are to ensure provider access to the account and related services on an objective, non-discriminatory, and proportionate basis, so that providers can provide payment services to users smoothly and efficiently.

Consumer rights protection mechanisms were also strengthened. Providers have unified time limits for responding to customer complaints on payment matters. The rights and obligations related to non-execution, delay, and incorrect and unauthorized execution of a transaction were improved. Especially important is the obligation for the provider, in the presence of relevant conditions, to reimburse the amount of the unauthorized transaction no later than by the end of the next business day. The law also establishes an alternative mechanism for resolving consumer disputes: the independent Dispute Resolution Commission with the National Bank of Georgia is tasked to review disputes between consumers and providers based on the rights and obligations stipulated in the payment services legislation. The commission gives consumers the opportunity to review disputes related to payment services directly, as opposed to in a court, thereby

conducting the process in a much shorter time frame and free of charge.

Regulation on technical requirements for the execution of EUR-denominated credit transfers and direct debits

The National Bank of Georgia developed and approved the Reles on determining the technical requirements for the performance of euro-denominated credit transfers and direct debits under Decree No. 122/04 of the Governor of the National Bank of Georgia of 16 September 2022. This defines the requirements for credit transfers and direct debits denominated in euro and applies to those commercial banks licensed by the National Bank of Georgia and registered payment service providers that are, or plan to be, engaged in the Single Euro Payment Area (SEPA) credit transfer or direct debit scheme. The regulation fully incorporates the pertinent provisions of EU Regulation 260/2012.

The implementation of the issues included in the act in Georgia's national legislation is one of the criteria for joining the SEPA.

Regulation on common and secure open standards of communication

The National Bank of Georgia started working on the design of the Regulation on Common and Secure Open Communication Standards of Communication in 2020, and this was approved in October 2022. The statute relies on EU Regulation 2018/389, which is part of PSD2. The statute ensures effective and secure communication as services related to access to account information and payment initiation are rendered; it defines uniform and secure open standards of communication for all parties involved; promotes the development of innovative products; ensures the confidentiality and integrity of information by introducing enhanced security requirements for communication sessions; and ensures the compatibility of different technological solutions. This legislation is essential for the introduction of competitive Open Banking, especially for fintech companies.

Regulation on Registration and Regulation of Payment Service Providers

A draft of amendments to the Regulation on Registration and Regulation of Payment Service Providers was developed based on current practice and PSD2. The following issues were made more specific in the new version: the compliance of the administrator of the interested party and those payment service authorized persons, the records related to business plan, fee policy, and the structural organization of the head office were specified. The regulation also includes criteria for recognition as an important provider.

An important amendment was made to the Law of Georgia on Payment Systems and Payment Services: legal entities, solo entrepreneurs, and other organizational formations without the status of a legal entity will now be able to participate in the electronic money scheme as payers under certain conditions. This will allow payment service providers to provide a full range of payment services to legal entities and will support the development of the market.

Regulation on Capital Adequacy Requirements of Payment Service Providers

In 2022, the National Bank of Georgia continued to work on the Regulation on the Capital Adequacy Requirements of Payment Service Providers. The work involved an exchange of opinions and sharing of positions with payment service providers and a simulation of the impact of the regulation. The regulation provides for minimum regulatory capital requirements and a regulatory capital calculation methodology. Compliance with this regulation will be mandatory for important payment service providers, including electronic money providers. Approval of the regulation is planned in 2023.

Assessment of securities settlement systems

Assessment of the performance of the payment and securities settlement systems based on the CPMI-IOSCO Principles for Financial Market Infrastructures is a significant focus. The National Bank of Georgia had already performed two self-assessments of the Real Time Settlement (RTGS) system based on these principles in previous years. In 2022, self-assessments of two securities settlement systems – the Central Depository System of the National Bank of Georgia and the Central Securities Depository of Georgia – were completed with the support of World Bank experts, thus accomplishing the recommendation the Financial Sector Assessment Program (FSAP) made in 2021. The assessments found that the securities settlement systems largely comply with the requirements of the principles of financial market infrastructure and

have a solid legal base and governance structure. The business continuity and information security policy is based on widely used international standards. Based on the design of the systems, financial risks are avoided as much as possible, and where they cannot be completely avoided, mechanisms are implemented to monitor and minimize said risks. The evaluation process found minor inconsistencies and potential for improvement, including the formalization of rules and procedures. Based on these findings, an action plan was developed to achieve full compliance with the principles of financial market infrastructure.

Transparency of fees related to payment services

The effective functioning of the payment market requires adherence to the principles of transparency, as this helps protect the rights of consumers and sparks competition. A draft Rule on the Availability of Service Fees Related to Payment Accounts was developed in 2022 based on the Payment Account Directive 2014/92/EU. Work also began on creating a unified portal of payment service providers' fees for payment products, which is meant to guide customers to easily compare the rates of services/products set by different providers and use different calculators.

During the development of the project, the method for the presentation of information by various parties (including international card schemes) was specified. Logical schemes related to the various functionalities (comparison of rates, calculators) to be implemented on the website were also developed. Approval of the regulation and the completion of the last phase of the project for publishing payment services rates on the NBG's website are planned for 2023.

Monitoring of the payment market

The National Bank of Georgia continues to work on strengthening the monitoring of the payment market. In this regard, it is particularly important to improve the collection of market information. In November 2022, the instructions for filling out and submitting payment service providers' statistical reporting forms for card instruments were approved. These instructions establish the methodological basis for the compiling and submission of statistical reporting forms for the card instruments to the National Bank of Georgia, as well as defining the content, structure, rules, and conditions of compiling and submitting these forms. The instructions apply to microfinance institutions and payment service providers registered by the National Bank of Georgia who issue and/or acquire card instruments. The instructions incorporate the peculiarities of such members of the payment market and support obtaining more complete information about card-based instruments.

In 2022, work also continued on improving Seb-Stat, the unified financial and statistical information system of the National Bank of Georgia. Additional forms were developed to support the National Bank of Georgia in obtaining statistical information about unauthorized transactions/incidents performed with a card-based payment instrument, card device and via other remote channels.

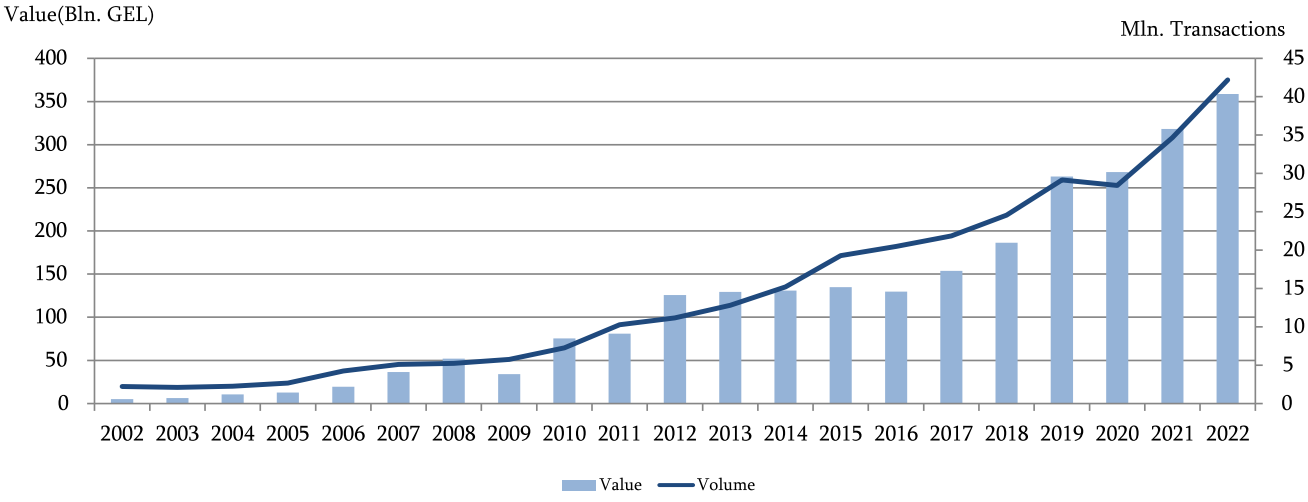
9.2 RTGS system transactions

The NBG's Real-Time Gross Settlement (RTGS) system is the key mechanism for interbank payment in the national currency. As of December 2022, its members included 14 commercial banks licensed in Georgia, the National Bank of Georgia, and the Treasury Service of the Ministry of Finance. Both large interbank payments and retail payments of members' customers are processed through the RTGS system. The RTGS system also ensures the settlement of transactions processed in the Georgian Securities Settlement System (GSSS) and international card systems. Due to its importance, the RTGS system has a business continuity plan that was developed in accordance with best international practices, and is regularly tested using pre-defined scenarios. At least once every three years, the National Bank of Georgia performs a self-assessment of the RTGS system based on the principles of financial market infrastructure (the most recent self-assessment was undertaken in 2021 within the scope of the Financial Sector Assessment Program (FSAP), involving a joint mission of the World Bank and the International Monetary Fund).[94]

In 2022, 42.2 million payment operations were carried out through the RTGS system, amounting to GEL 358.6 billion, which was 22% more in terms of volume and 12.7% more in terms of value than the corresponding figures of the previous year. The value of payments between commercial banks increased by 30%, and the number rose by 30.6%. See Diagrams 9.1-9.4 below for the dynamics of the value and the volume of payments made through the RTGS system.

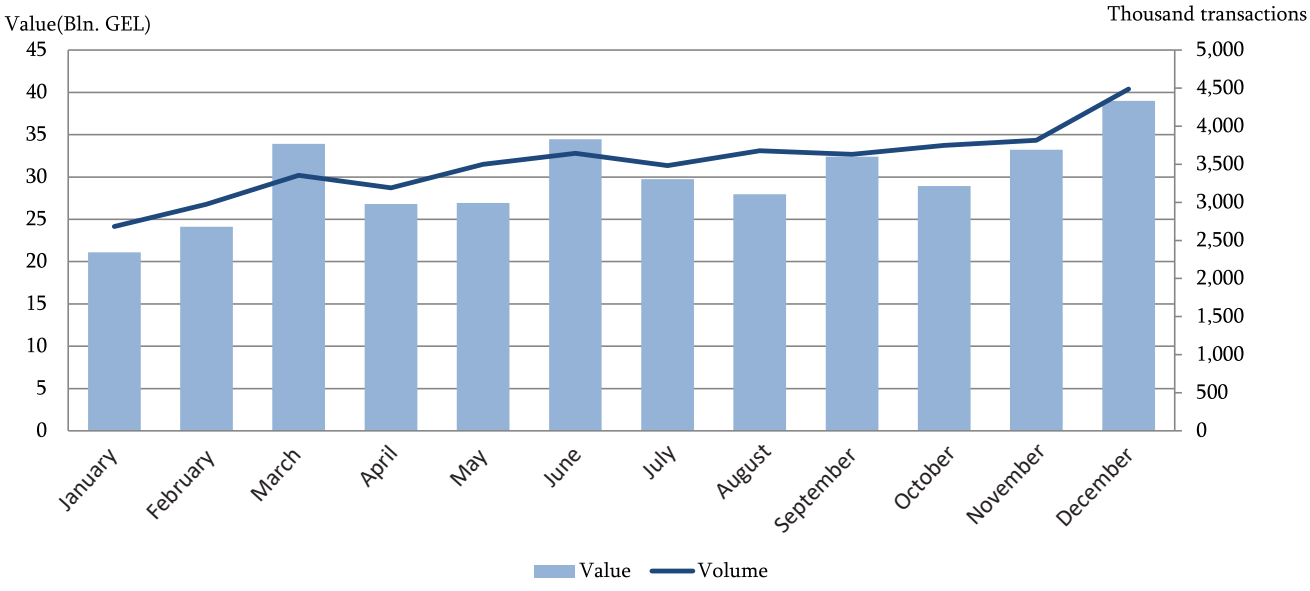
94 See https://www.imf.org/en/Publications/CR/Issues/2021/09/17/Georgia-Financial-System-Stability-Assessment-465911

Diagram 9.1 Transfers through the RTGS system (2002-2022)



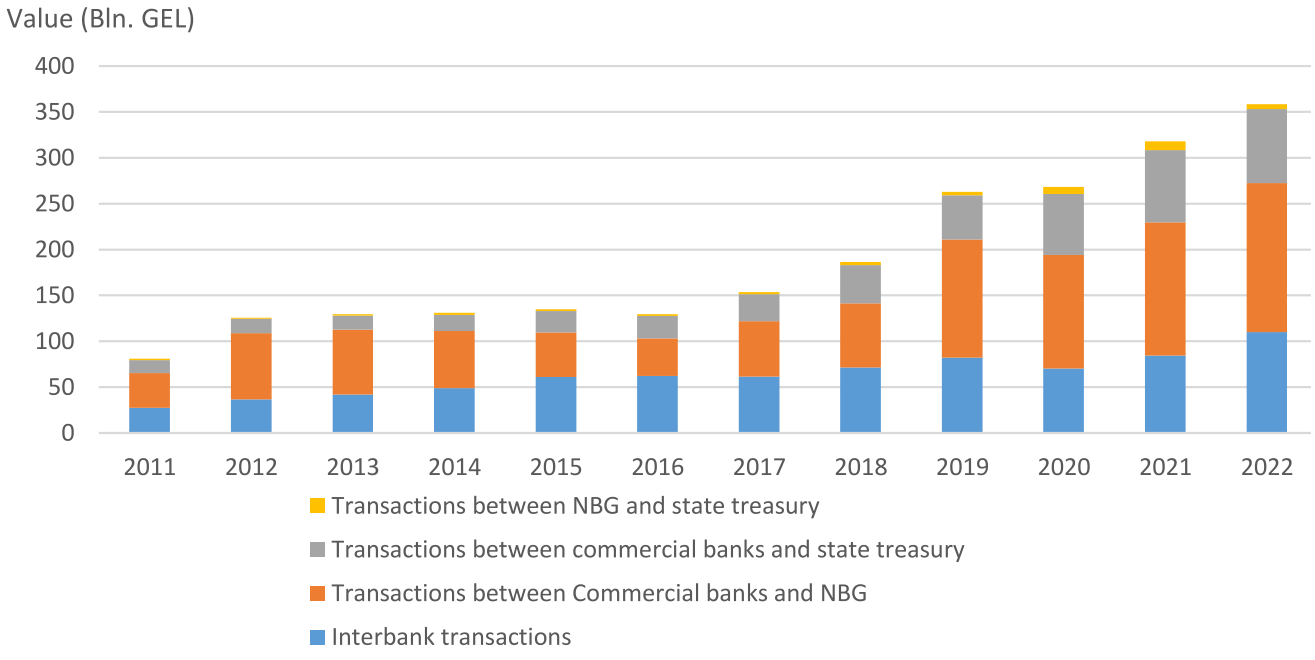
Source: NBG

Diagram 9.2 Transfers through the RTGS system (2022)



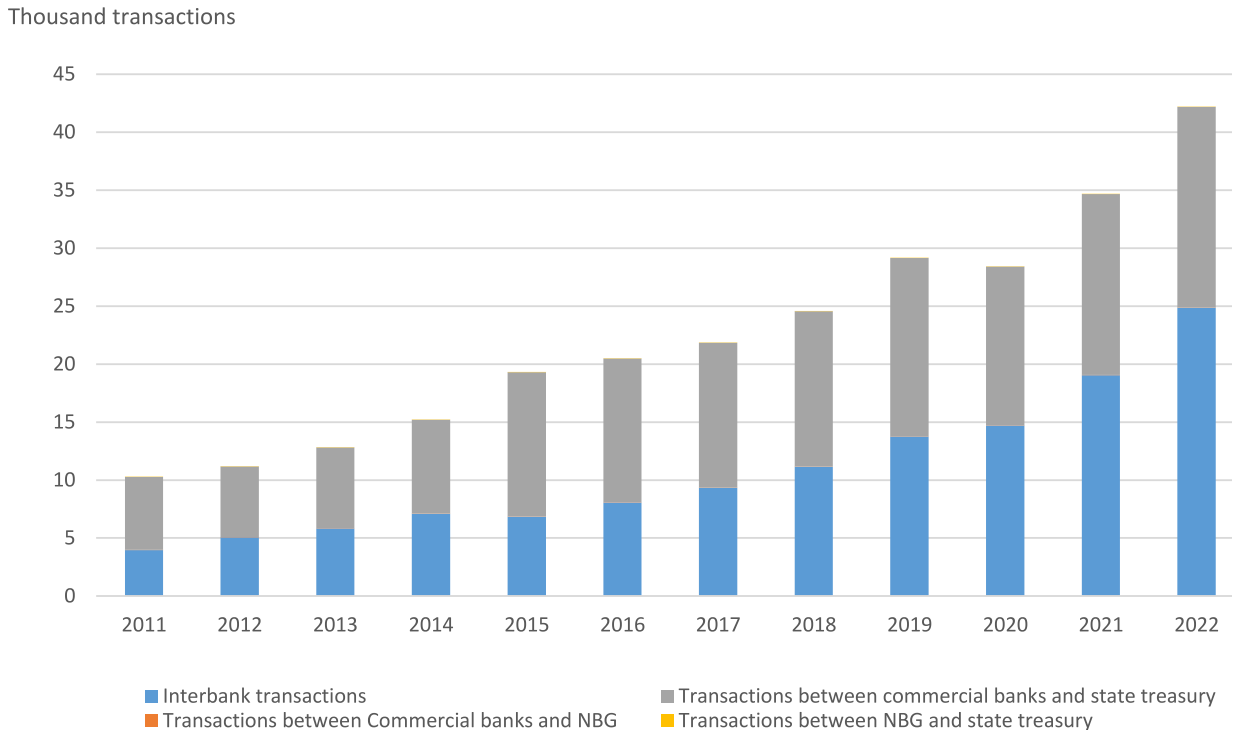
Source: NBG

Diagram 9.3 The Value of RTGS Transactions by the participants (2011-2022)



Source: NBG

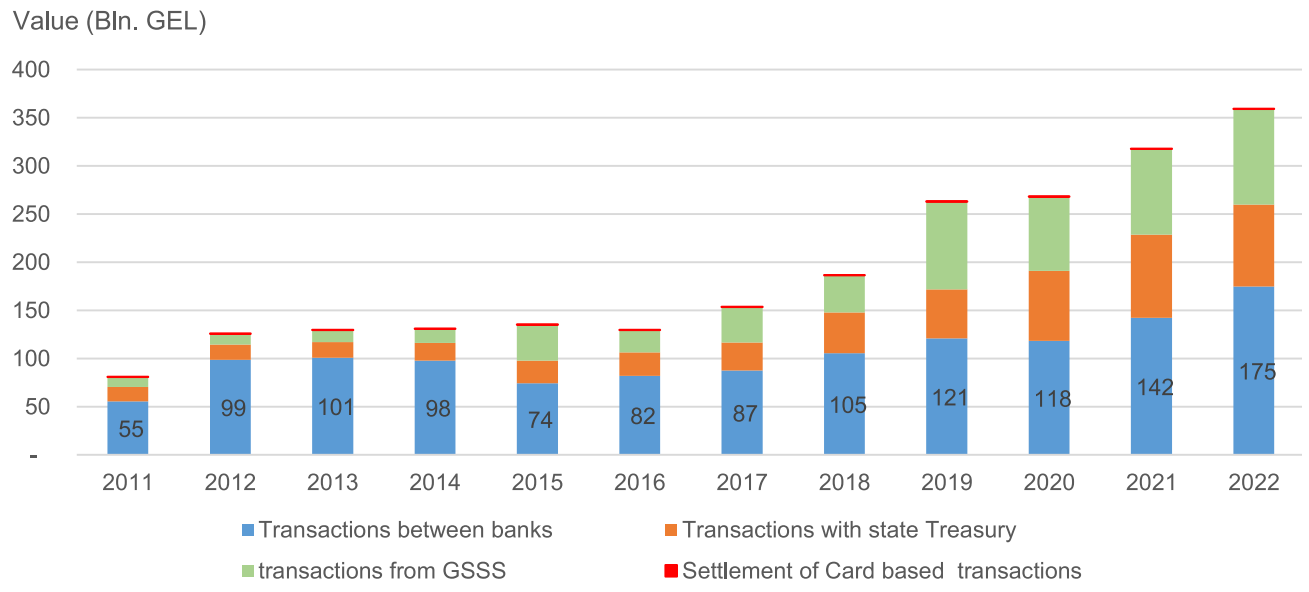
Diagram 9.4 Number of RTGS transactions by the Participants (2011-2022)



Source: NBG

As in previous years, the role of the RTGS system as a payment mechanism for other systems remained important. In 2022, the value of final settlement transactions for other systems increased by 11.6%, and the share of final settlement transactions for other systems in total RTGS transactions was 27.7%, which was 0.3 percentage point lower than in 2021 (see Diagram 9.5).

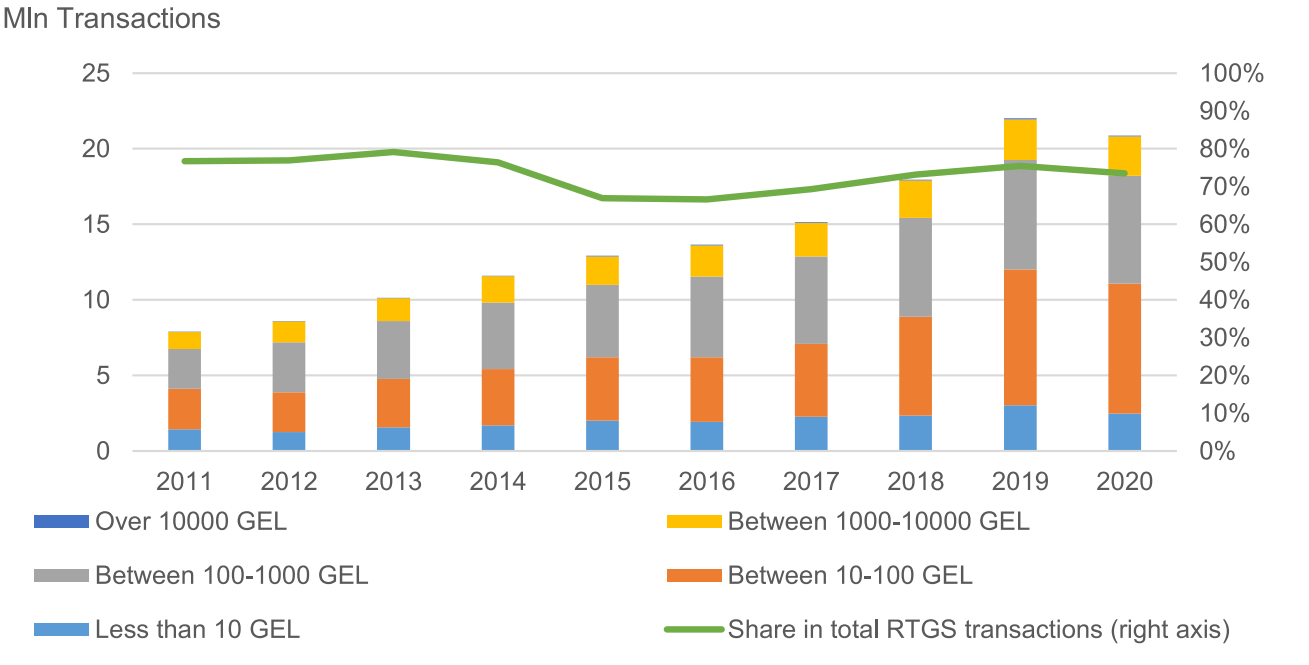
Diagram 9.5 The Value of RTGS transactions by settlement (2011-2022)



Source: NBG

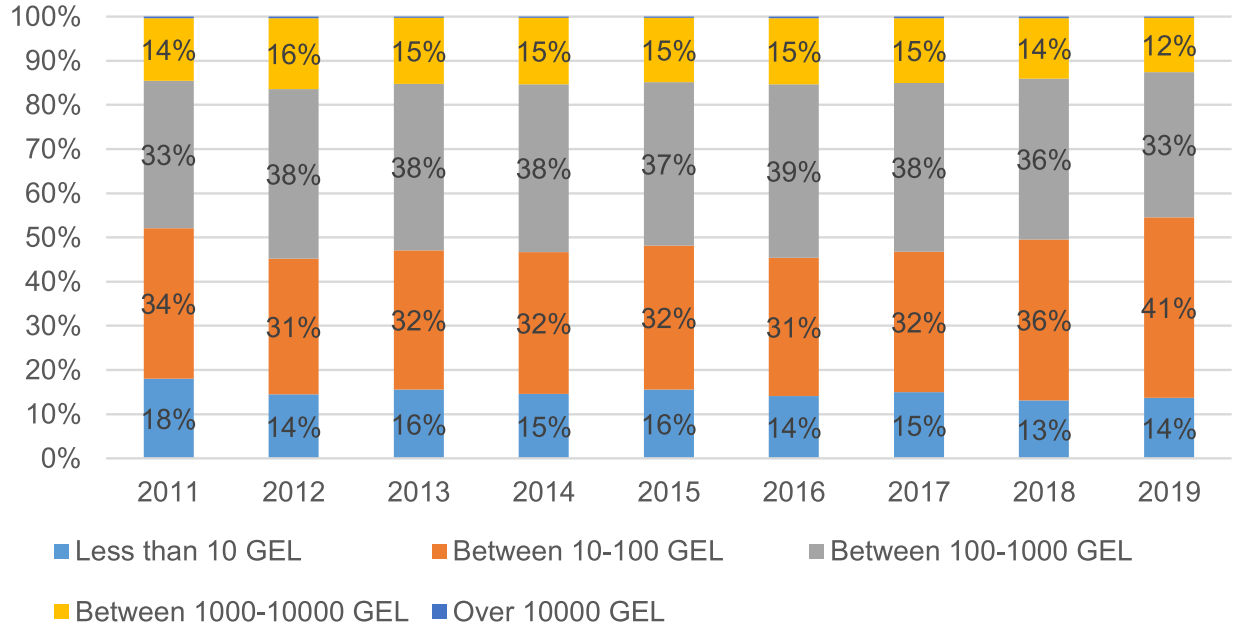
The RTGS system plays an important role in both large and retail payments. In 2022, the share of payments by commercial bank clients in total RTGS payments was 28.9% in terms of value and 83.9% in terms of volume. Payments ranging from GEL 10 to GEL 100 make up 32% of retail payments (see Diagrams 9.6 and 9.7).

Diagram 9.6 Number of payments by bank clients according to value limits



Source: NBG

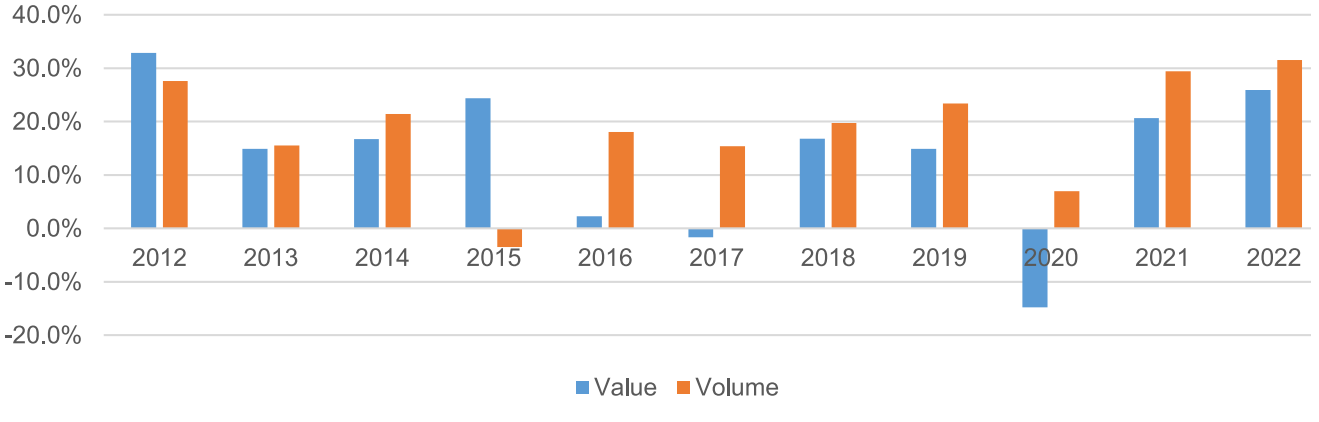
Diagram 9.7 Distribution of payments by bank clients by value



Source: NBG

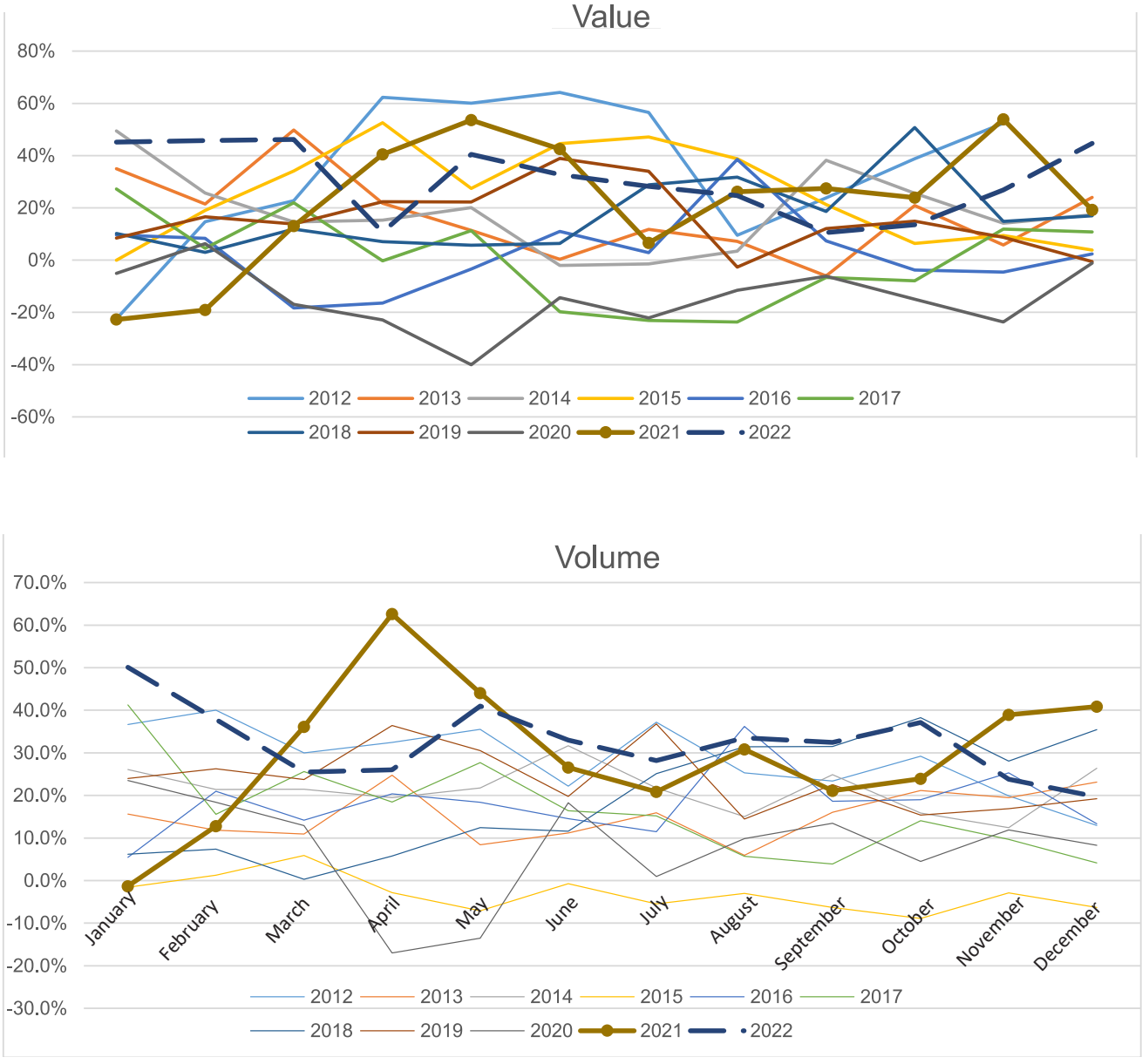
The 2020-2021 pandemic hit virtually all sectors of the global economy and a number of sectors in Georgia are still suffering from the consequences. This shock naturally spilled over to RTGS operations. The number of payments between commercial banks and the treasury dropped drastically in 2020. Compared to the 2018 and 2019 data, the growth rate of both the number and amount of customer payments between commercial banks also decreased, leading to a decline in the growth rate of RTGS transaction amounts. However, payment market players and consumers adapted to the altered circumstances quite well, and, as 2021 data suggest, despite several waves of COVID-19 during the year, the dynamics of operations in the RTGS system returned to the previous trends which was the result of regaining the growth rate of interbank transactions (2018 – 21.3%, 2019 – 41.1%, 2020 – 2%, 2021 – 18.6%). According to 2022 data, the growth rate of interbank transactions was biggest in last 10 years and it reached 25.9% by value and 31.5% by volume. This dynamics is clearly shown in Diagrams No. 9.8-9.9.

Diagram 9.8 Annual change in payments between commercial banks through the RTGS system



Source: NBG

Diagram 9.9 Change in payments between commercial banks through the RTGS system compared to the corresponding month of previous years (2012-2022)



Source: NBG

9.3 Electronic Means of Payment

The development of digital and mobile technologies over the past decade has greatly affected the use of electronic means of payment. These trends were further accelerated by the digital transformation of business pushed by the pandemic. Payments made through mobile banking are particularly noteworthy in this regard. Mobile banking has been the fastest growing payment channel since 2015, both in terms of value and volume, and in 2020 it had already firmly established itself as the most frequently used payment method after card-based payment instruments. Compared to the previous year, the number of payments made using mobile banking increased by 175% and amounted to 18% of total non-cash payments, which was 8 percentage points higher than the same rate in 2021. In terms of volume, the most frequently used electronic means of payment is the card-based instrument. In 2022, the number of payments made through cards increased by 34% and amounted to 77% of total cashless payments. The number of payments made through internet banking also increased, rising by 14% and

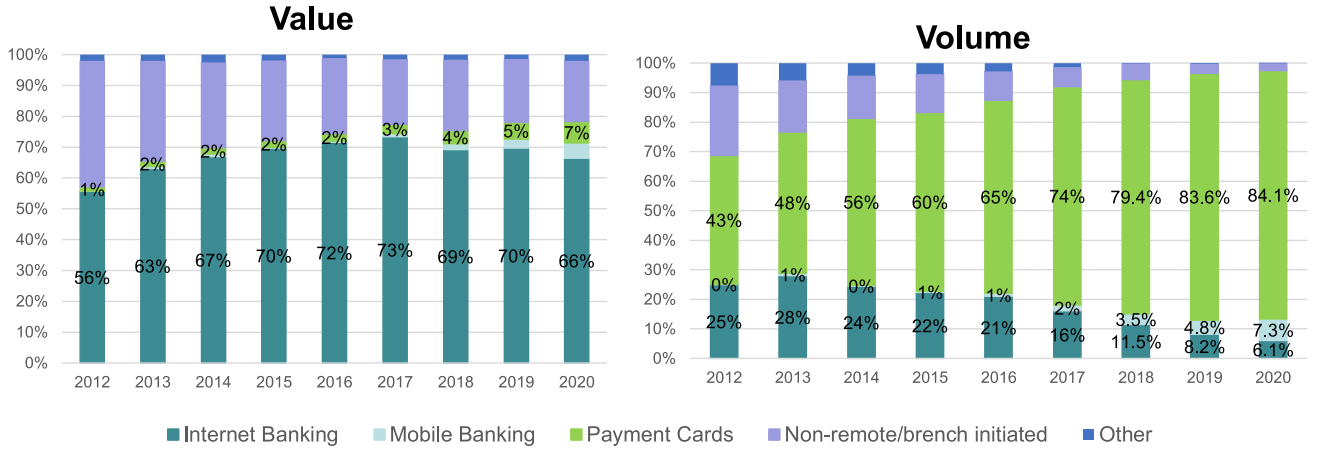
totaled 4% of the number of non-cash payments. Judging by these trends, it is no surprise that the number of non-remote payments in 2022 decreased by 9% compared to the previous year and amounted to 1% of the number of non-cash payments.

Mobile banking payments are the fastest growing payment channel in terms of value. The amount of payments made through mobile banking increased by 97% in 2022 YoY, and made up 12% of total non-cash payments. This is 5 pp higher than the previous year. Despite this trend, internet banking remains the most important channel of payment in terms of value. In 2022, the value of credit payment orders initiated through internet banking increased by 12%, and its share in total non-cash payments amounted to 62%, which was 2 pp less than the same indicator of the previous year. Despite the 17% increase YoY, in terms of value, payments made by card based paymet instruments are insignificant, accounting for 8% of total non-cash payments. In addition to the above, 3% of total non-cash payments were made using other electronic means.

The value of credit payment orders initiated by clients directly in the service centers of commercial banks has been steadily decreasing over the last 10 years and, as the aggregate figures of 2022 suggest, amounted to 15% of the total amount of non-cash payments, representing a 3 pp decline over the similar figure of 2021. Nevertheless, in terms of value, payment orders initiated in bank service centers still exceed the value of payments made through mobile banking and card-based payment instruments, falling only behind payments made through internet banking. The indicators in terms of volume show a different picture.

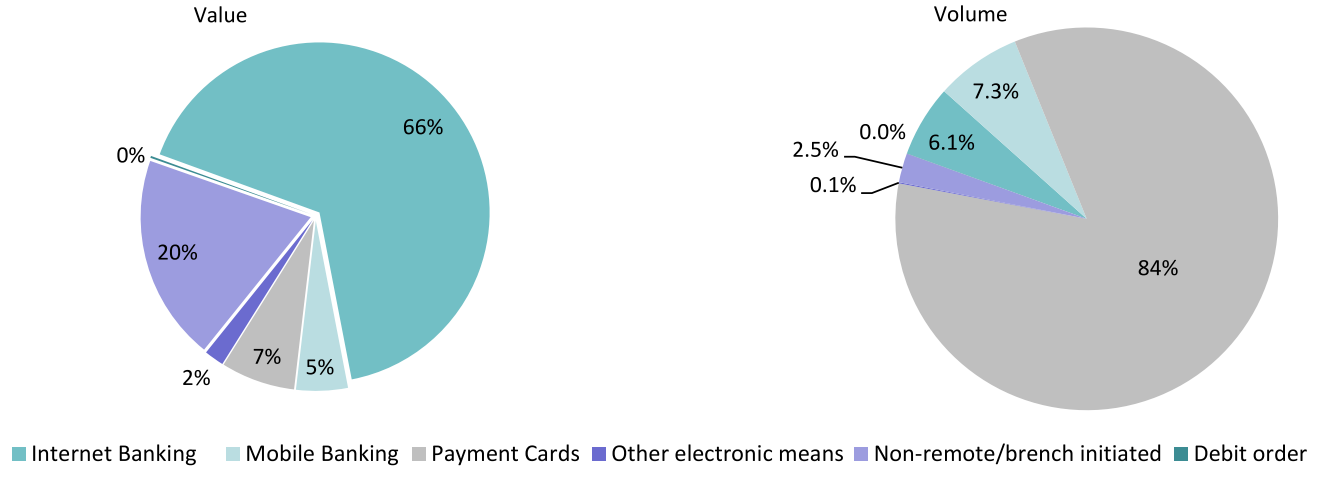
The statistical data of non-cash payments, sorted by means of initiation, are shown in Diagrams 9.10 and 9.11.

Diagram 9.10 Use of cashless payment initiation means, 2012-2022



Source: NBG

Diagram 9.11 Distribution of cashless payments by means of initiating payment orders (2022)



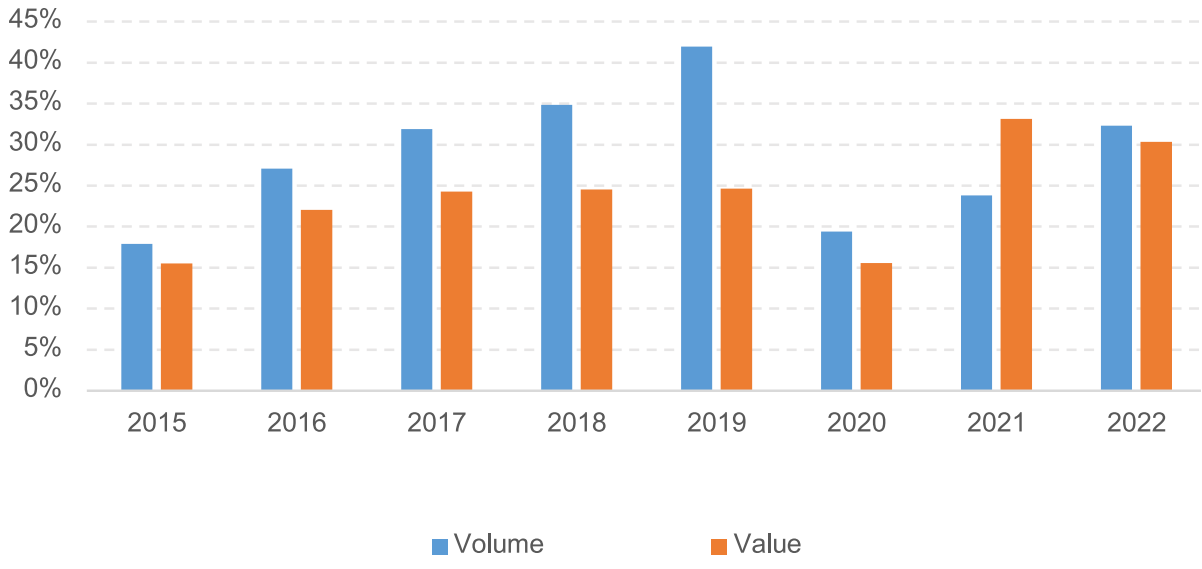
Source: NBG

9.4 Card Instruments Market

The GooglePay service was introduced to the card market in 2022, allowing Android users to use mobile app payments (ApplePay has been present in the Georgian market since 2019). The introduction of this new payment application increased the number of payment cards integrated into mobile applications by 30%. Payment applications have developed the card market in two main directions: the introduction of tokenization services and digital cards. Tokenization significantly increases security in card operations ensuring users are more protected from fraud.

The development of mobile applications was accompanied by an increase in card transactions performed with these applications. Operations performed with mobile applications increased by 31% in both terms of volume and value YoY. Mobile payments have almost doubled compared to 2019 wich may be the reason for the accelerated growth of card operations by 8 pp compared to the previous year may. The growth rate by value was higher by the end of pandemic period (2020-2021), than in 2021-2022 (decreased by 3 pp). The growth rates of card operations in 2022, as compared to 2021, were 32% in terms of volume and 30% in terms of value. The percentage growth of card operations, since 2015 YoY, in both terms of volume and value, is shown in Diagram 9.12.

Diagram 9.12 Annual growth of card operations, by amount and number



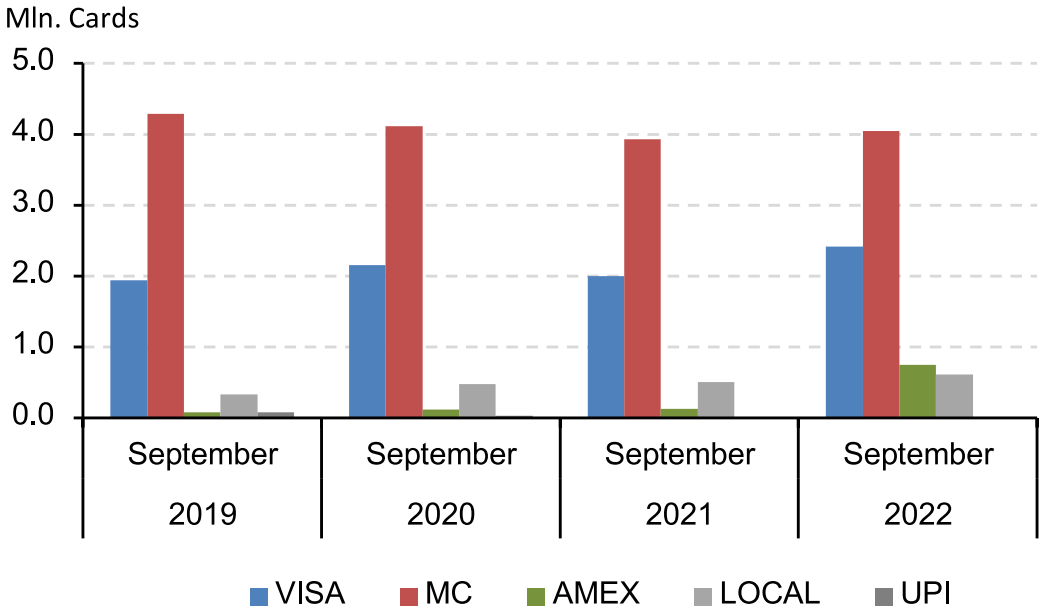
Source: NBG

During 2022, 671.3 million transactions (worth GEL 59.1 billion) were performed with card instruments issued in Georgia, both domestically and overseas. From this, 92% of the number of transactions and 90% of the value were performed within the country; 86% of the number of these transactions and 38% of the value were payment operations performed at merchant outlets, and the rest were cash withdrawals; 20% of the number of payment transactions and 36% of the value were e-commerce transactions. On average, about 16 operations a month were performed with one active card[95], amounting to GEL 1.4 thousand. This represents an increase of three operations and GEL 0.3 thousand over the same indicators of the previous year.

The number of debit and credit payment cards issued by commercial banks in Georgia by the end of 2022 amounted to 7.8 million, which is 14% more than the corresponding indicator of 2021. As much as 84% of issued cards are chip cards, 7% are credit cards, and 63% integrated to a mobile application. The number of payment cards issued per capita is 2.1 cards. Cards from international card schemes still dominate in Georgia (92%). The dynamics of payment cards issued by year according card system is shown in Diagram 9.13.

95 An active card refers to an issued payment card through which at least one transaction was performed during the reporting period.

Diagram 9.13 Number of cards issued by commercial banks according card system



Source: NBG

In 2022, mobile POS terminals appeared in the Georgian market (these are mobile phone applications that allow to accept card payments using contactless technology). In addition, marketplaces were created for merchants that allowed them to complete an application online to integrate and receive card e-commerce card payments. These projects supported the inclusion of merchants in the electronic payments space. By the end of 2022 there were approximately 85 thousand payment POS terminals, eight-thousand e-commerce POS terminals, and eight-thousand POS mobile terminals in Georgia. Of these, 69% of the payment POS terminals and 36% of the mobile terminals are located in the capital city. The dynamics of card devices by year is given in Table 9.1.

Table 9.1 Dynamics of card devices[96] (December 2015-2022)

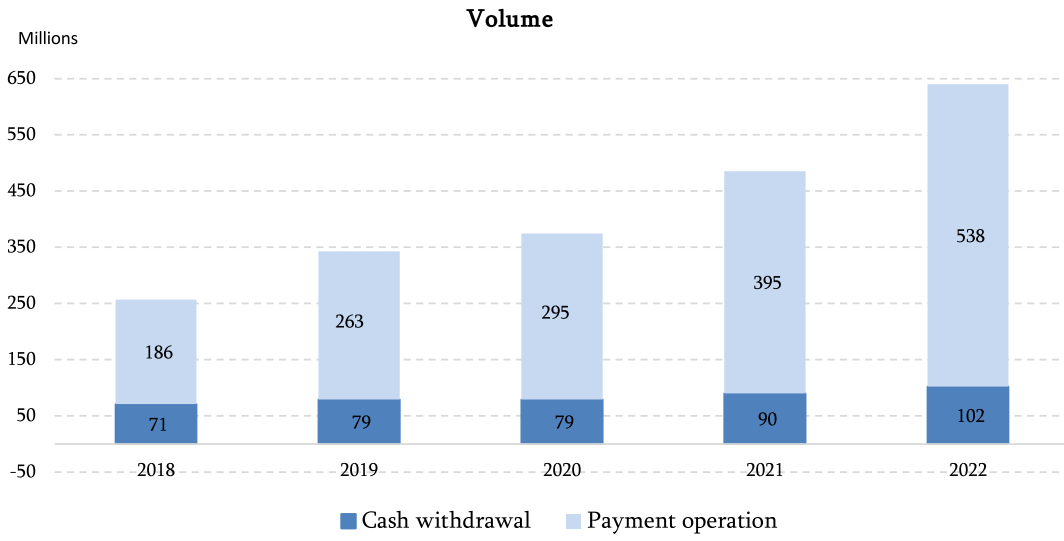
	ATM	% Change	POS at merchant outlet	% Change	POS at bank outlet
2015	2,124		22,233		1,647
2016	2,240	5%	28,757	29%	1,589
2017	2,281	1.8%	32,456	13%	1,446
2018	2,323	1.8%	38,444	18%	1,470
2019	2,537	9.2%	51,488	34%	1,416
2020	2,655	4.7%	60,221	17%	1,184
2021	2,821	6%	72,680	21%	1,163
2022	2,902	3%	85,360	17%	1,135

Source: NBG

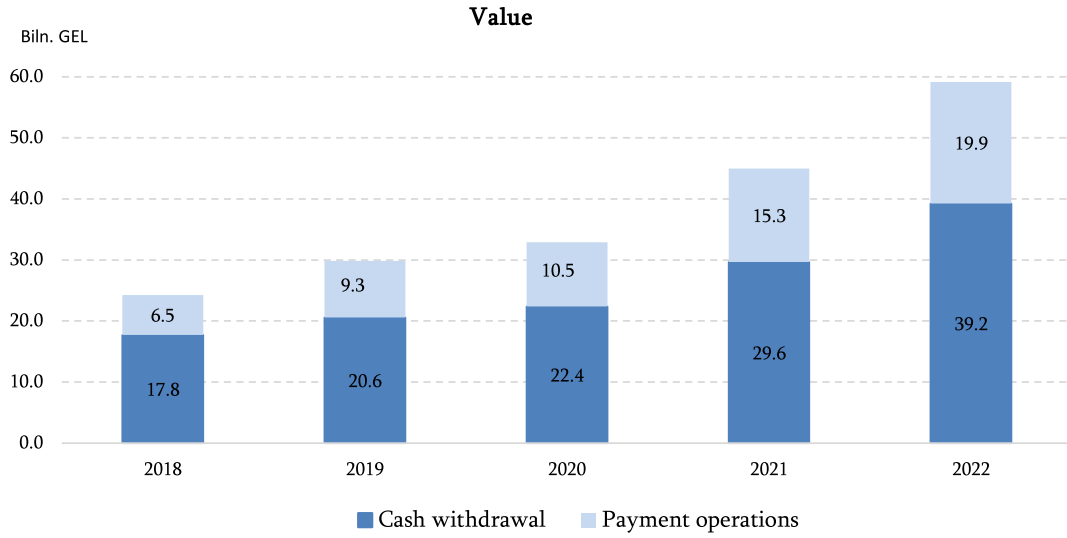
96 A provider POS terminal is a POS terminal located in the provider's branch office or service center that is used to withdraw cash from a card account.

In 2022, a total of 639.8 million operations were performed with card devices located in Georgia, amounting to GEL 59.1 billion. These indicators are 32% higher in terms of volume, and 31% higher in terms of value than the same indicators of 2021. In 2022, 96% of the number of transactions and 94% of the value were performed with card-besed paymet instruments issued in Georgia, and the rest were performed with foreign card-based payment instruments. As much as 85% of the number of transactions performed (and 34% of the value) were payment transactions. The dinamics of the share of payments and cash withdrawals by years is shown in Diagram 9.14.

Diagram 9.14 Share of payment and cash withdrawal operations performed with card devices located in Georgia by year



Source: NBG



Source: NBG

9.5 Payment Service Providers

As of 31 December 2022, 30 payment service providers were registered with the National Bank of Georgia. During the year, two new entities were registered at the NBG, while four entities had their registrations revoked and went into liquidation process. Important changes were made in the automation of reporting: reporting forms and procedures were reworked, and, starting from 2023, providers can upload statistical information to the remote supervision portal. These changes will allow the NBG to perform remote supervision of providers more effectively. It will also make it easier for the providers themselves to submit periodic reports.

Provider payments (except for e-money transactions)

In 2022, 135 million transactions worth a total of GEL 10.5 billion were performed by payment service providers. Compared to 2021, the number of payments decreased by 4.1%, and the total amount increased by 28.4%. The dynamics of provider payments (except for electronic money) are shown in Diagram 9.15.

Self-service kiosks, which are used to initiate electronic payments with cash, continued to be widely used. As much as 94.3% of the number of payments and 95.1% of the amount were made through kiosks, which reflected a decrease of 1.4 pp and 0.3 pp over the similar figures of 2021, respectively. Payment service provider websites are also often used to initiate payments. Through those, 3.3 million payments totaling GEL 113 million were made, which was an increase of 45% and 50% over the previous year's figures, respectively.

In 2021, the share of provider payments made using agents in the total payments changed slightly. Registered payment service providers made 46.5% of the number of payments and 20% of the total amount using agents, which was 0.3 pp and 1.3 pp less than the previous year, respectively.

Diagram 9.15 Payments by payment service providers (except e-money)

Source: NBG

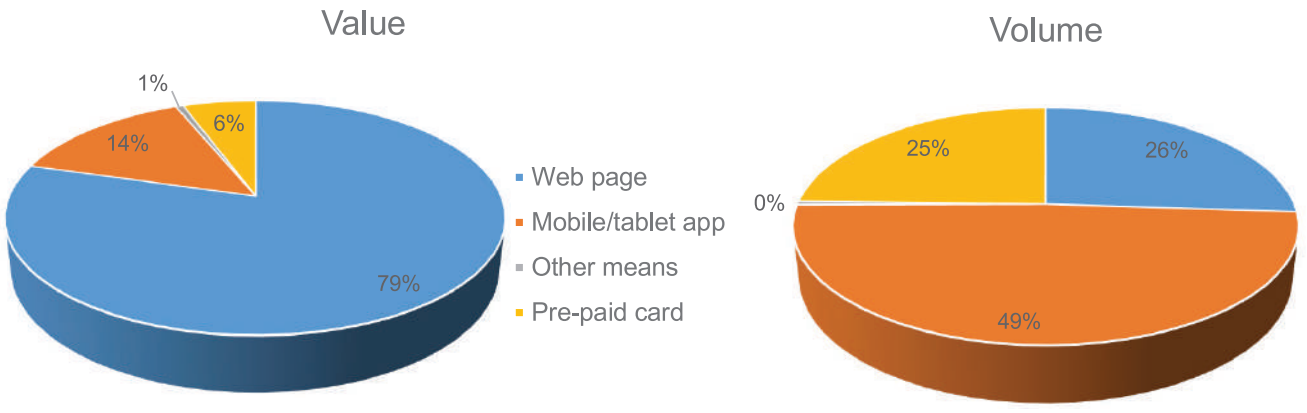
Source: NBG

Payments with e-money

In 2022, prepaid transport cards, as usual, had a special place in the electronic money payments market. Transport cards are actively used to pay for travel on city public transport, which is why the number of payments made through these cards far exceeds the number of payments made with other electronic money. In addition, the average single payment made using these cards is GEL 0.44, which makes their dynamics drastically different from payments made with other electronic money. Transport cards made up 98.6% of the total number of payments made with electronic money, and 13% of the amount. As a result of these stark differences, the analysis of the electronic money payments market that follows will not consider transport cards.

Electronic money providers made 1.6 million payments for a total amount of GEL 337.9 million in 2022. Payments made through websites accounted for 44% of the total number of payments and 72% of the amount. A significant portion of e-money payments (29.1% of volume and 21.4% of value) were initiated using a mobile phone/tablet application.

Diagram 9.16 Payments with electronic money (excluding the transport card instrument), 2022



Source: NBG

Payments between providers

When implementing payment services, providers often use intermediary providers to conduct their activities more efficiently. According to the data of 2022, 29.3% of payment orders received by a provider from a payer were performed using intermediary providers, which is 5 pp less than the same indicator for 2021. As for the value credited to recipients' accounts, 99% of payments made by providers, like in the previous year, were made in the resident commercial banks of Georgia.

10 DEVELOPMENT OF INFORMATION TECHNOLOGIES

In 2022, the Infrastructure Management Division of the NBG's Information Technologies Department introduced a modern data storage system that completely replaced the outdated Tape Library system. This accelerated tasks and made performing them more efficient.

The system enables storage and protection of backup copies for a longer timeframe in the two active data processing centers of the National Bank of Georgia, which is undertaken in accordance with the backup management procedure. Using "stubbing" technology, which contributes to server optimization and speed, the system allows archiving of different types of files located on the file server. Moreover, by using the modern S3 (Simple Storage Service) protocol, the solution allows file data intended for software to be stored in the new system, thus improving the performance and speed of the databases.

Outdated network switches were replaced with new models in 2022. This change provides a more efficient and stable connection in the data processing centers, resulting in a high degree of stability and efficiency.

An additional internet provider was connected to the data processing center, making it possible to distribute the load of the internet flow in both active data processing centers. These changes will significantly improve the delivery of services in accordance with the Business Continuity Plan.

The following major infrastructure changes have also been made, as required by the SWIFT Customer Security Program (CSP):

- ✓ Isolation of the SWIFT environment from the core network.
- ✓ A domain system was introduced, and work related to the migration and registration of existing users has been performed.
- ✓ A multifactor authentication system has been integrated.
- ✓ Additional network firewalls have been integrated for additional security for the SWIFT network environment.
- ✓ As a result of intensive cooperation with the Cyber Security Division, the logging of the SWIFT environment and control of privileged users is carried out by using dedicated solutions.

In 2022, the staff of the Infrastructure Management Division passed official manufacturer trainings and received certificates on managing modern data storage systems and the administration of firewalls.

Cyber security remained one of the priority areas for the National Bank of Georgia in 2022.

Through the information security incident monitoring and management system, automation of the real-time detection and response to cyber security incidents has been carried out throughout the year.

The scope of the privileged access monitoring system has been expanded. More specifically, from 2022, the bank's internal privileged users will also be monitored through the system.

In the process of strengthening cyber security, it is important to ensure the security of information technology infrastructure components, services and systems, to discover/identify their weaknesses and to proactively remediate them. Therefore, penetration tests and several vulnerability scans were carried out in 2022. Based on the results of these, relevant work has been completed and future activities are planned to strengthen this area.

As in previous years, in 2022 the National Bank of Georgia performed a self-assessment of its compliance with the framework of the SWIFT Customer Security Program. The Cyber Security and Infrastructure Management Divisions of the Information Technology Department took a number of measures in order to ensure compliance with the requirements of the 2022 framework and to successfully complete the self-assessment.

The Cyber Security Division has traditionally been actively involved in raising NBG employees' cyber awareness and in undertaking various proactive activities. In 2022, two "phishing" simulations were carried out across the NBG to check the level of cyber awareness of staff and to test response times to the incidents. Based on the results of the simulations, employees were given further cyber-awareness training.

The year was also fruitful for the Cyber Security Division in terms of the professional development of its staff, who attended various online conferences and seminars. Among them was the Cyber Range exercise, which focused on the growth of cyber security capabilities and was held as part of the strategic partnership between Georgia and Estonia. In addition, the division's staff attended various international trainings and received certificates from CompTIA Security+ and EC Council Certified Security Specialists.

In 2022, the Data Management and Software Division carried out important work for the functional improvement of electronic systems, which also includes involvement in the implementation of new projects. A web service was set up to integrate the new electronic system for managing employee activities (SAP SuccessFactors) with the NBG's employee portal database. This generates a predefined set of data in the form of an XML file from the employee portal. Authorized users are able to download the data from a designated interface at any time of the day.

The Unified Statistical Information System (SebStat) of the National Bank of Georgia was updated and a new FRD data family was introduced to record statistical data of unauthorized operations in the system. As part of the task, the database and certain table structures were updated, and functional changes were made to almost all modules, file upload logic, and reporting. The updated functionality of the notification module ensures that commercial banks are informed about the deadlines for submission of data as established by law. The complete automation of the process excludes the involvement third parties in the process, and letters are sent on the internal site of SebStat based on pre-specified data.

Both the operating systems and the SQL server of the NBG's critical systems databases were updated. These updates provide support and ensure compatibility and security improvements.

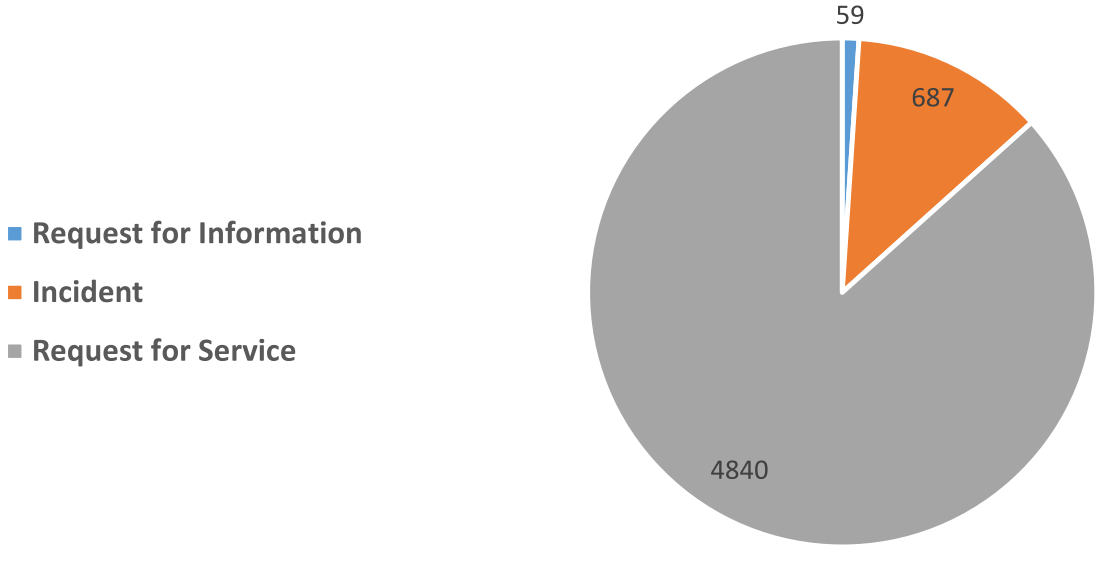
In 2022, the following changes were made to business applications by the Applications Administration Division:

- ✓ The Automated Human Resource Management System (HRMS) was updated and the changes included both functional and technology components.
- ✓ The electronic records management system (eDocument) was updated and new functionality was added to the system.
- ✓ A confidential document management system was set up and maintained in a test environment.

In 2022, additional portable computers were purchased as the majority of the NBG's staff worked remotely. Considering the requirements of remote work, the laptops were technically prepared and given to employees in the shortest possible time.

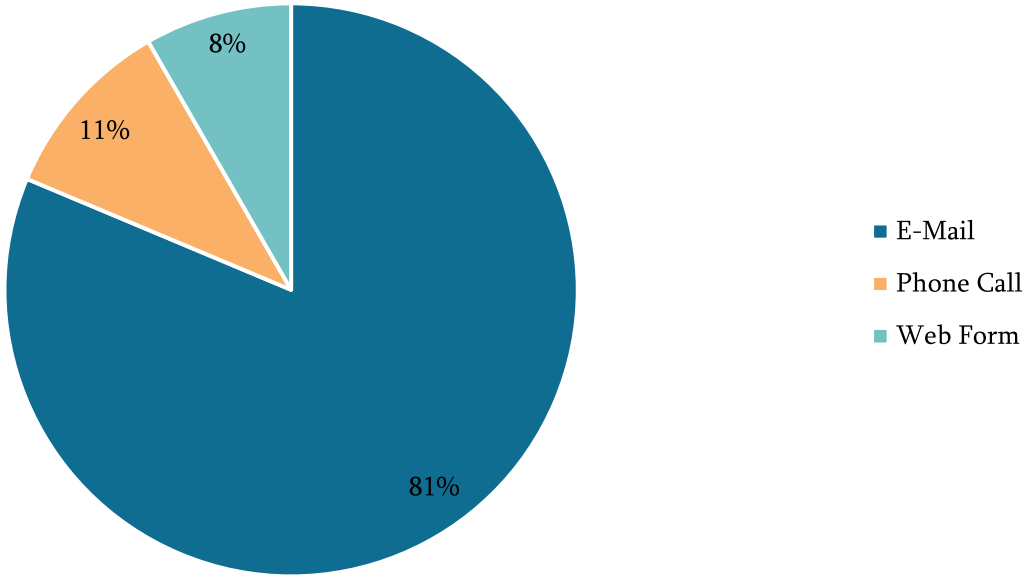
A total of 5,586 incidents/inquiries were registered on the service desk portal last year. The most common requests from NBG staff regarded services and the most popular way of making a request was by sending a message to the service desk's email address.

Diagram 10.1 Types and number of requests



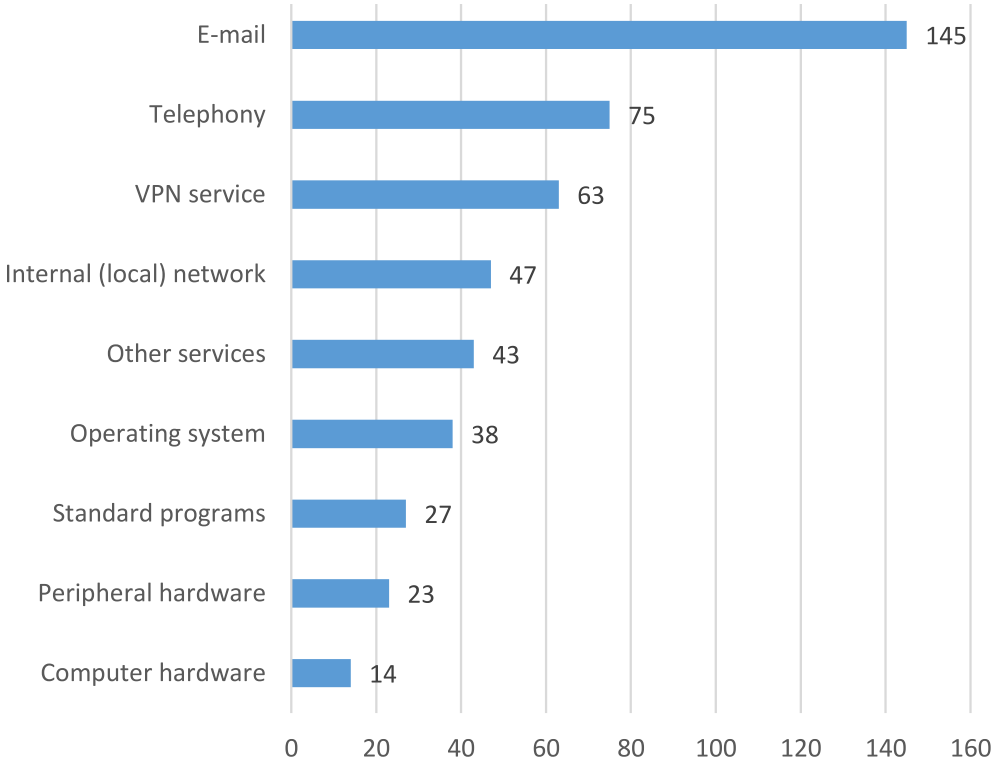
Source: NBG

Diagram 10.2 Number and sources of registration of requests



Source: NBG

Diagram 10.3 Content of requests according to service



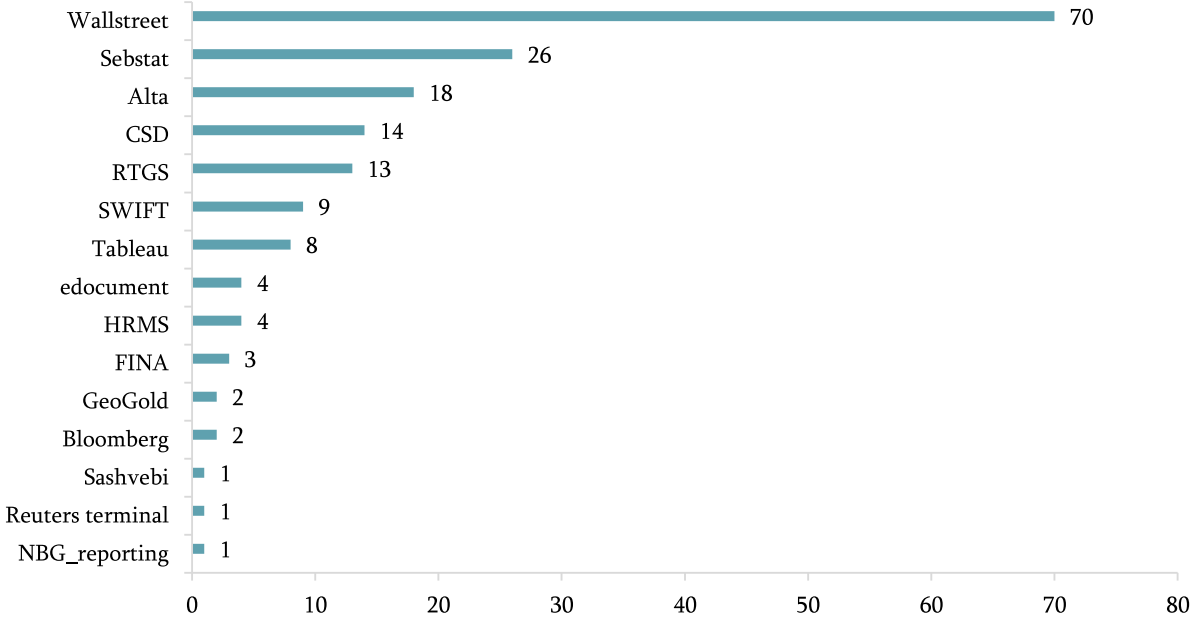
Source: NBG

Some 26% of the reported incidents concerned different business apps (see Diagram 10.4).

As much as 88% of reported incidents were resolved within the established timeframe, while 12% required more time to resolve, largely due to the need for communication with third parties.

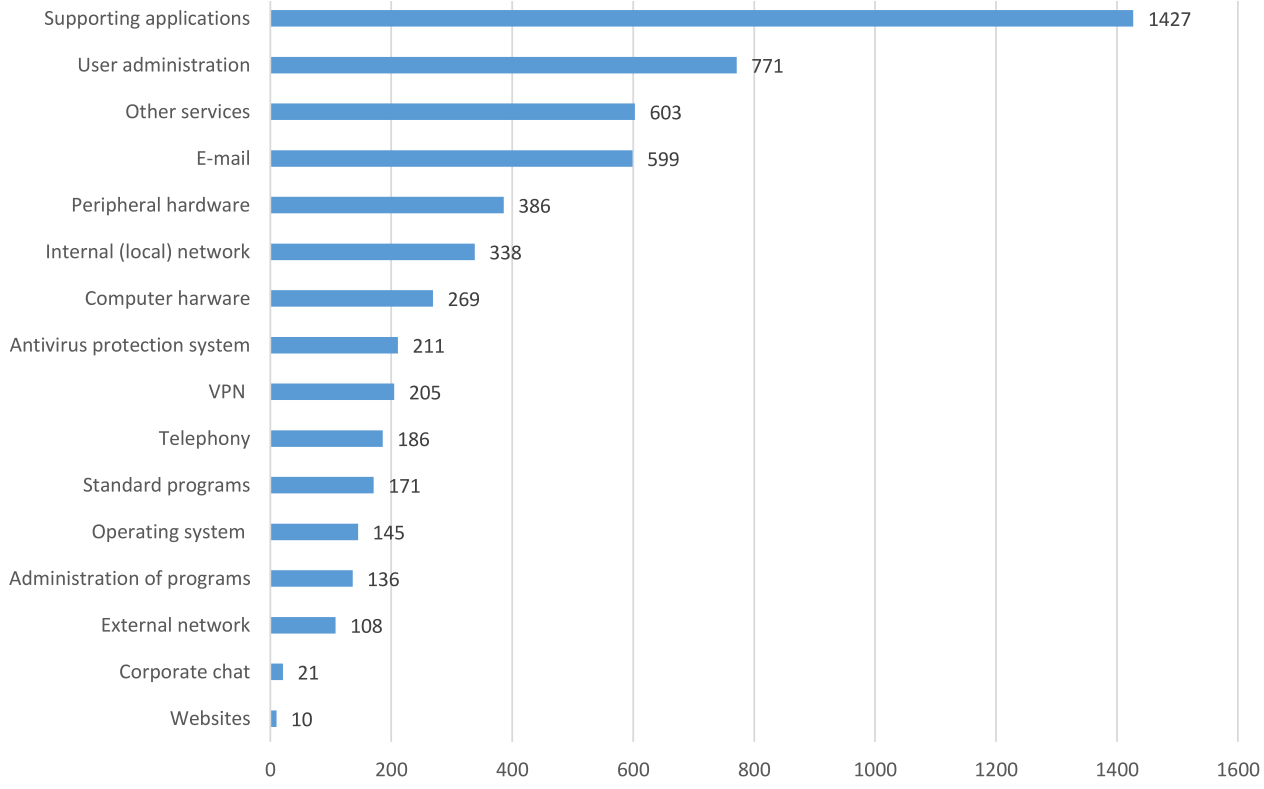
Overall, 2022 was an eventful and fruitful year in terms of the professional growth of employees, the upgrading and improvement of information technology processes, and in the development of services provided by the Information Technology Department to the NBG. The vision of the National Bank of Georgia in this direction remains unchanged: to use information technology to maximize benefits and to improve the quality of information and data processing tools to support business decisions.

Diagram 10.4 Incidents about different business apps



Source: NBG

Diagram 10.5 Most requested IT services (according to the annual report of the service desk)



Source: NBG

Table 10.1 Distribution of incidents and requests between the divisions of the Information Technology Department

IT Department	Information requests	Incidents	Service requests
Services Division	43	360	3144
Apps Administration Division	12	144	769
Infrastructure Management Division	2	33	397
Cyber Security Division	1	116	319
Data Management Division	1	34	211

Source: NBG

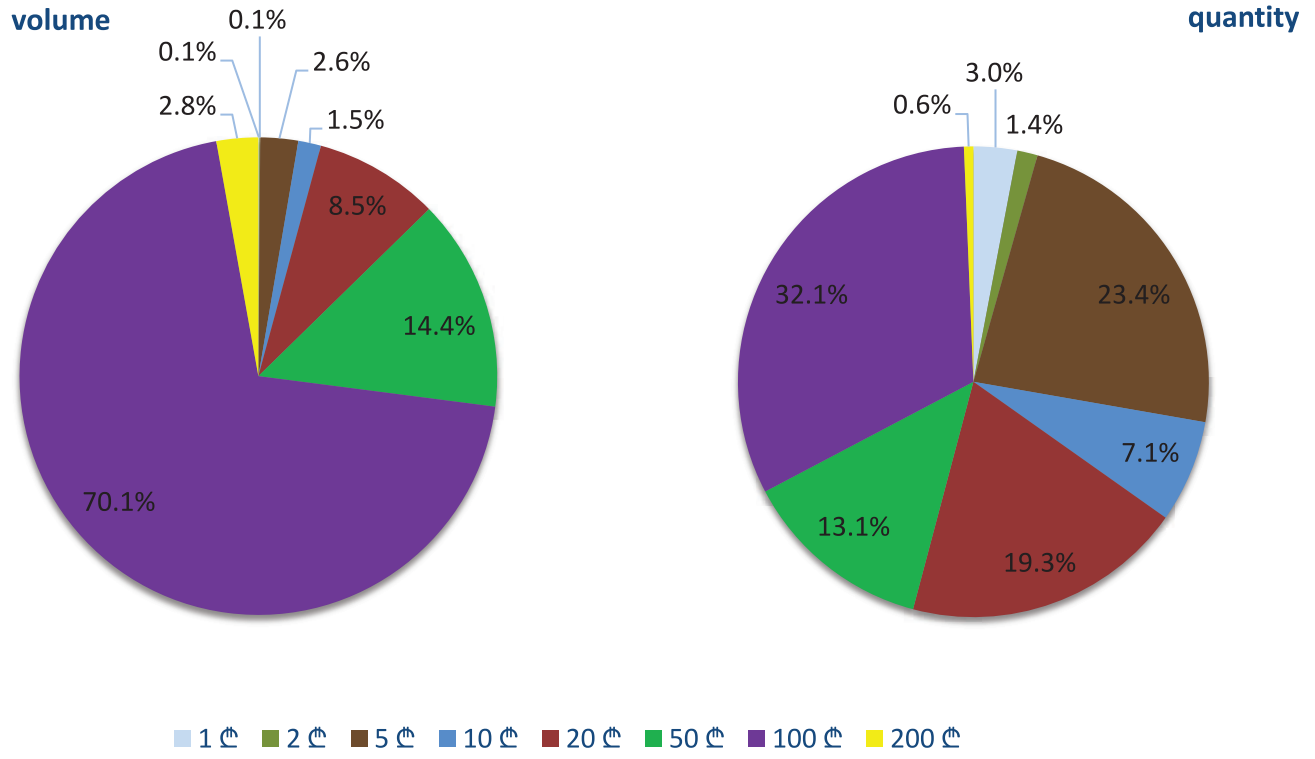
ORGANIZATION OF CASH AND EMISSION ACTIVITIES

11

Providing the national economy with cash, regulation of cash in circulation, fostering favorable conditions for the circulation of the national currency, quality management of the national currency in circulation, promoting the fight against counterfeit money, and promoting the national currency are all important functions of the NBG.

As of 31 December 2022, cash in circulation amounted to GEL 5,040.5 million. Of which, GEL 4,873.7 million was accounted for by banknotes, and GEL 166.8 million by coins (see Diagram 11.1 for the share of banknotes in circulation by individual denomination in amount and quantity).

Diagram 11.1 Share of banknotes in circulation by denomination* (as of 31 December 2022)



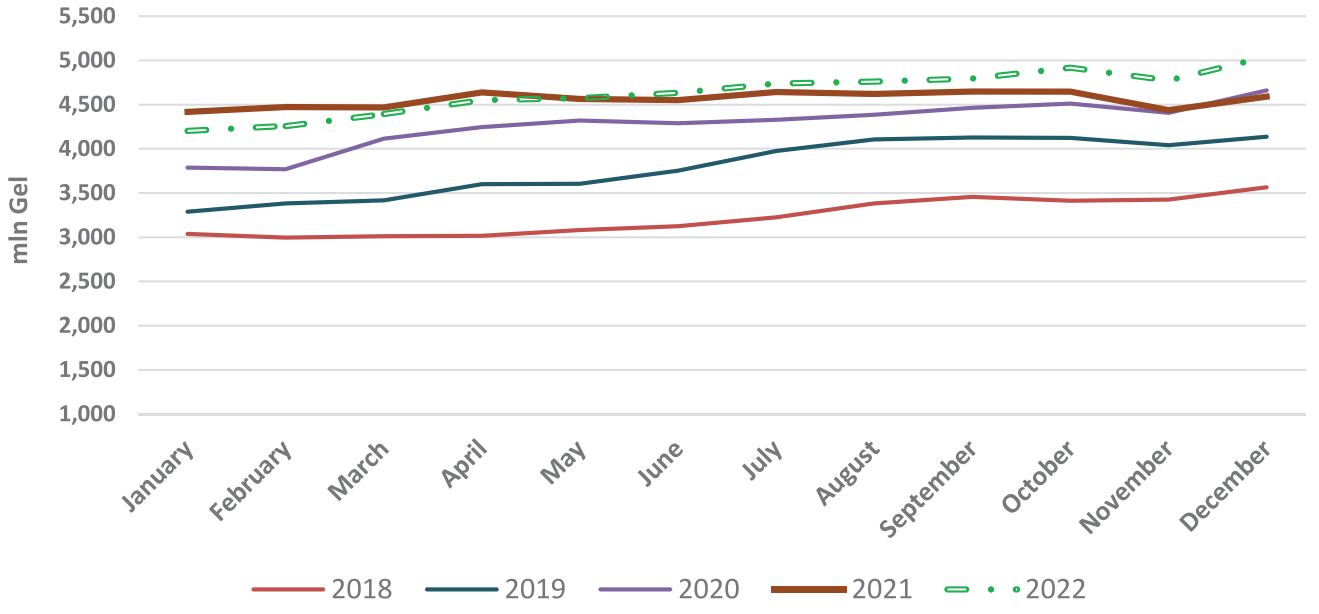
* Including the 1- and 2-lari banknotes in circulation, which ceased to be manufactured after coins of the same denominations were placed in circulation.

Source: NBG

During the reporting period, the volume of cash in circulation increased by GEL 452 million, or by 9.8%, compared to the beginning of the year (see Diagram 11.2 for the dynamics of the national currency in circulation).

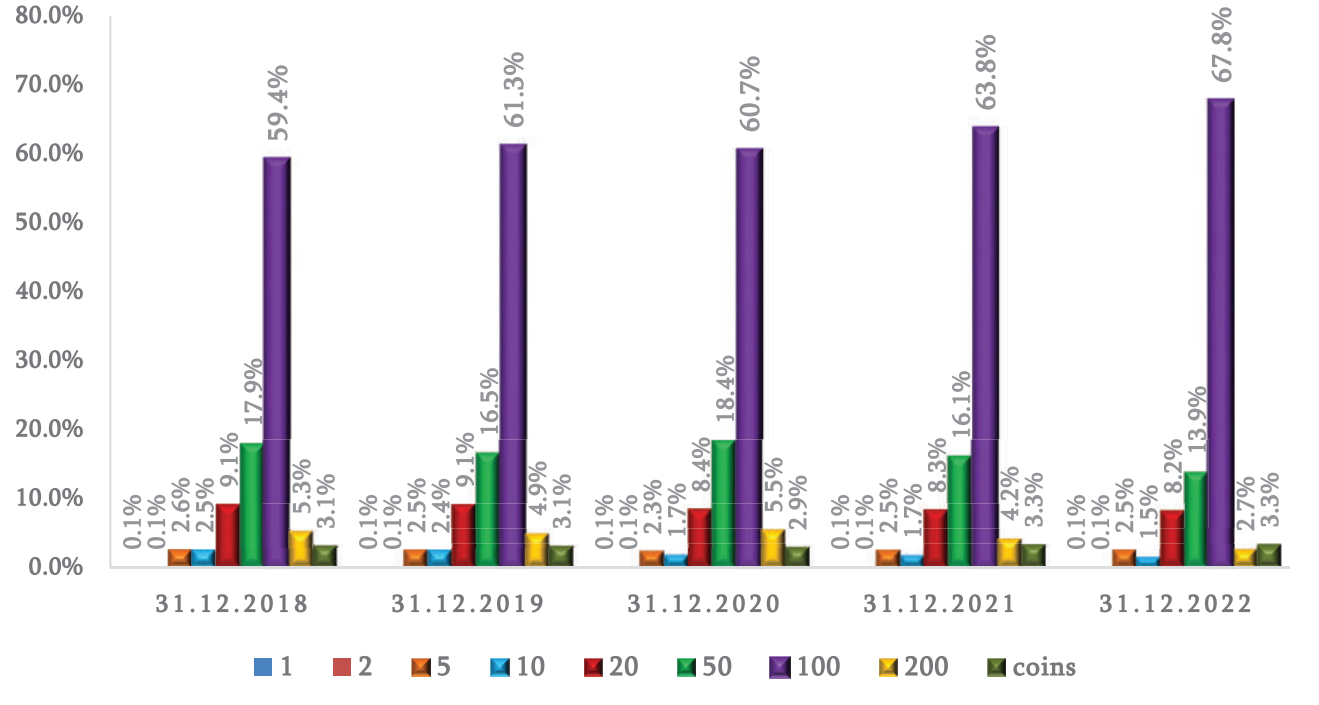
The amount of banknotes in circulation increased by GEL 436.4 million during 2022, accounting for 96.7% of the total amount of money in circulation. The demand for GEL 5, 20 and 100 banknotes increased (by 10.3%, 8%, and 16.7% respectively), while the demand for all other denomination banknotes decreased. Demand for the GEL 10 banknote decreased by 2.5%, by 5.2% for the GEL 50 banknote, and by 28.6% for the GEL 200 banknote. The amount of coins in circulation increased significantly (by 9.9 %) YoY, accounting for 3.3% of the total money in circulation (see Diagram 11.3).

Diagram 11.2 GEL cash in circulation (2018-2022)



Source: NBG

Diagram 11.3 Share of banknotes of individual denominations and coins in circulation (2018-2022)*

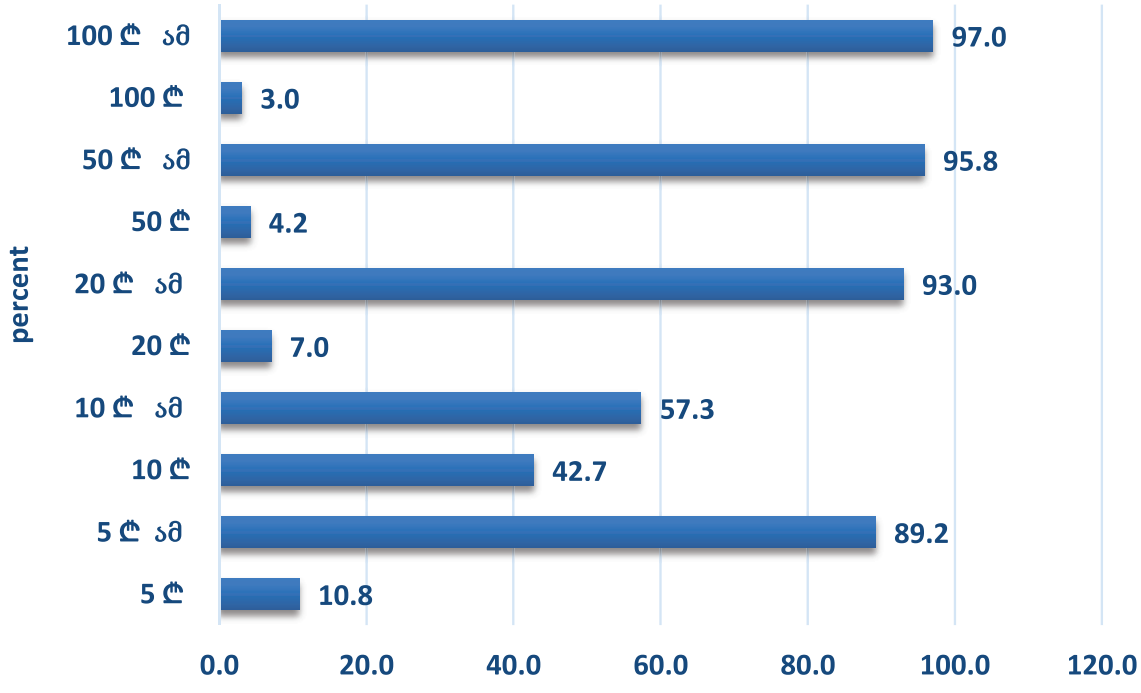


* Including the 1- and 2-lari banknotes in circulation, which ceased to be manufactured after coins of the same denominations were placed in circulation.

Source: NBG

Upgrading the money in circulation, by withdrawing banknotes issued before 2016 and replacing them with the new modifications of GEL 5, 10, 20, 50, and 100 banknotes, was an ongoing process. At the end of 2022, the renewed GEL 5 banknote accounted for 89.2% of the total same denomination banknote in circulation, the renewed GEL 10 banknote accounted for 57.3%, the renewed GEL 20 banknote for 93%, the renewed GEL 50 banknote for 95.8%, the renewed GEL 100 banknote for 97% (see Diagram 11.4).

Diagram 11.4 GEL 5, 10, 20, 50 and 100 denomination banknotes in circulation, according to modification (percentage)



Source: NBG

By the end of 2022, the share of the number of older banknotes (issued before 2016) in relation to the new modification banknotes of the same denominations in circulation was only 8.9%.

The total amount of GEL 1 and 2 coins in circulation increased by 10.5% and amounted to GEL 112.5 million at the end of the year. The rate of withdrawal of GEL 1 and 2 banknotes from circulation was insignificant as they have now been withdrawn from circulation for 15 years and their number remaining in circulation is negligible.

The amount of "tetri" coins in circulation increased by 8.9%.

To ensure the smooth provision of the economy with cash and to replenish the reserve stocks of the NBG, the production of 5-tetri, and GEL 1 and 2 denomination coins for circulation was completed and delivered during the year.

In addition, the recalculation of GEL 20 banknotes of the 2021 issue, as provided by the German company "Giesecke+Devrient Currency Technology", was completed.

The procedures for selecting a partner for the production of investment gold coins were completed. The "State Mint of Baden-Wuerttemberg" was selected as a partner and samples of GEL 10, 25, 100, 300, and 1,000 denomination gold investment coins from the mint were studied and approved. The supply of these coins is planned in the near future.

To promote the national currency and the country, the National Bank of Georgia continued to issue collector coins during the reporting period (for more information, see the Collector Coins section below).

The cash in national currency received by the National Bank of Georgia increased by 3.4% over the previous year and amounted to GEL 8,411.6 million in 2022 YoY. Meanwhile, the funds disbursed from the National Bank of Georgia amounted to GEL 8,864 million, which was 9.9% higher than the same indicator of 2021.

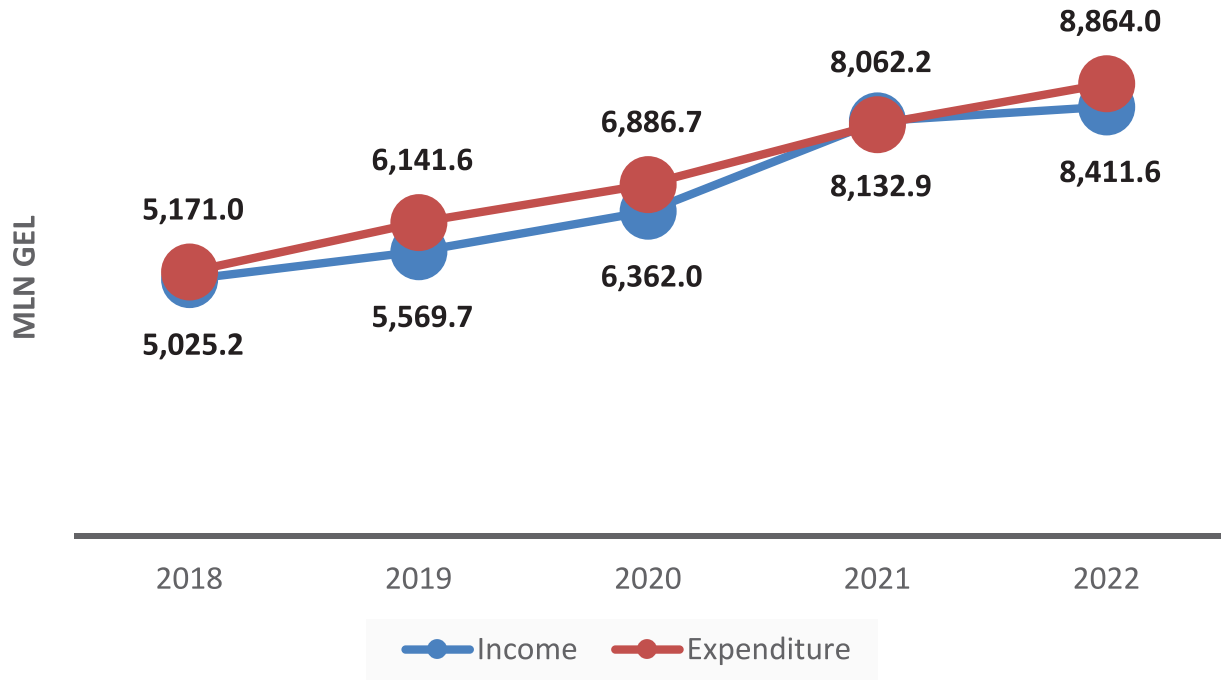
Of the total revenues, for GEL banknotes, 69.1% of revenues were processed domestically at the cash center, and the share of operations carried out through

the external vaults of the cash center amounted to 30.9%. For coins, 54.1% of total revenues were processed domestically in the cash center, and the share of operations carried out through the external vaults of the cash center amounted to 45.9%.

In 2020, as part of the NBG's COVID-related preventive measures to smoothly supply the economy with cash and to minimize risks, three external vaults of the cash center, each equipped with appropriate security measures and software, were set up in different locations of Tbilisi. Each of these vaults continue to function smoothly. Regional external vaults of the cash center were also added in Kutaisi and Batumi, located in TBC Bank premises. These function in the same manner as those in Tbilisi.

The amount of national currency that went out of the National Bank of Georgia exceeded the amount that came in by GEL 452.4 million. Diagram 11.5 shows the dynamics of GEL banknotes/coins that came in and out of the cash center in 2018-2022.

Diagram 11.5 Banknotes/coins coming into and out of the cash center, 2018-2022



Source: NBG

To achieve the tasks of managing the quality of GEL banknotes and ensuring the proper functioning of the cash counting and processing equipment at the NBG, the equipment verified the correctness of the sorting of money with the frequency established by the law, and reacted adequately.

To optimize the circulation of cash across the country, to raise the quality of GEL banknotes and coins in circulation, and to introduce proper monitoring mechanisms for the process, the Department is working intensively on an optimal cash management model.

For this purpose, international experiences of cash management were researched and a comparative analysis of cash management models was performed and presented to the Board of the National Bank of Georgia.

The Board of the National Bank of Georgia subsequently made the decision to develop a decentralized model of cash management. This implies the following: having in place an appropriate legislative framework for commercial banks; keeping records of the counting/sorting machines they possess; ensuring relevant software updates; and organizing scheduled inspections in commercial banks.

The examination of cash continued during the year. A total of 11,546 units of suspicious cash were examined, having been sent from cash center cash desks, commercial banks, currency exchange bureaus, microfinance institutions, law enforcement agencies, and brought in directly by individuals. The results of the examinations are shown in Table 11.1, below.

Table 11.1 Results of expert examination of suspicious cash in 2022

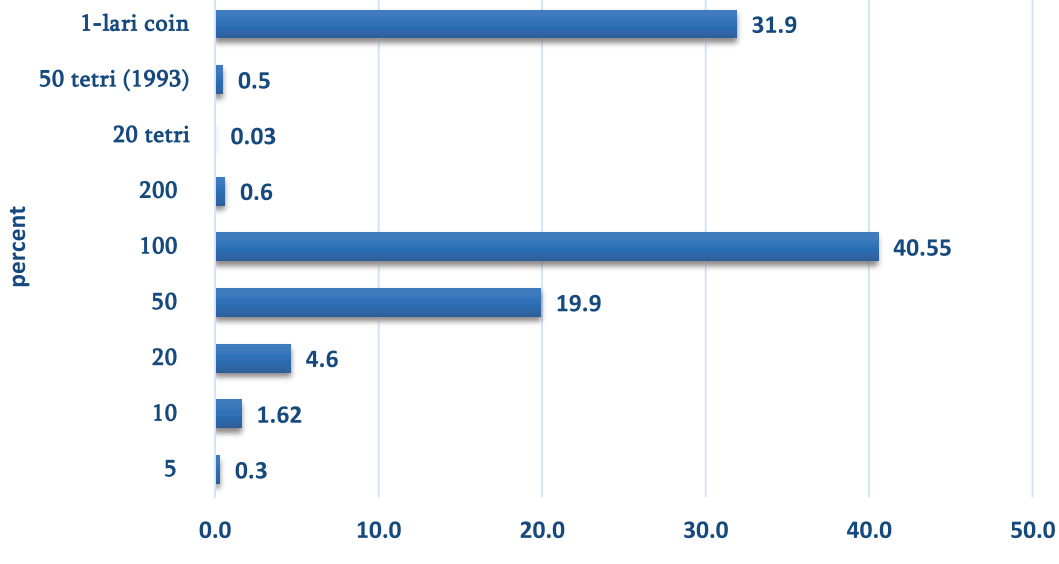
	Suspicious	Counterfeit	Genuine	Unfit
GEL banknotes	5807	3003	1567	1237
GEL coins	3441	378	3063	-
USD	1904	1620	284	_
EUR	273	156	117	_
Other foreign currency	121	107	14	_
Total	11546	5264	5045	1237

Source: NBG

The share of counterfeit GEL banknotes/coins discovered, sorted by denominations, are shown in Diagram 11.6.

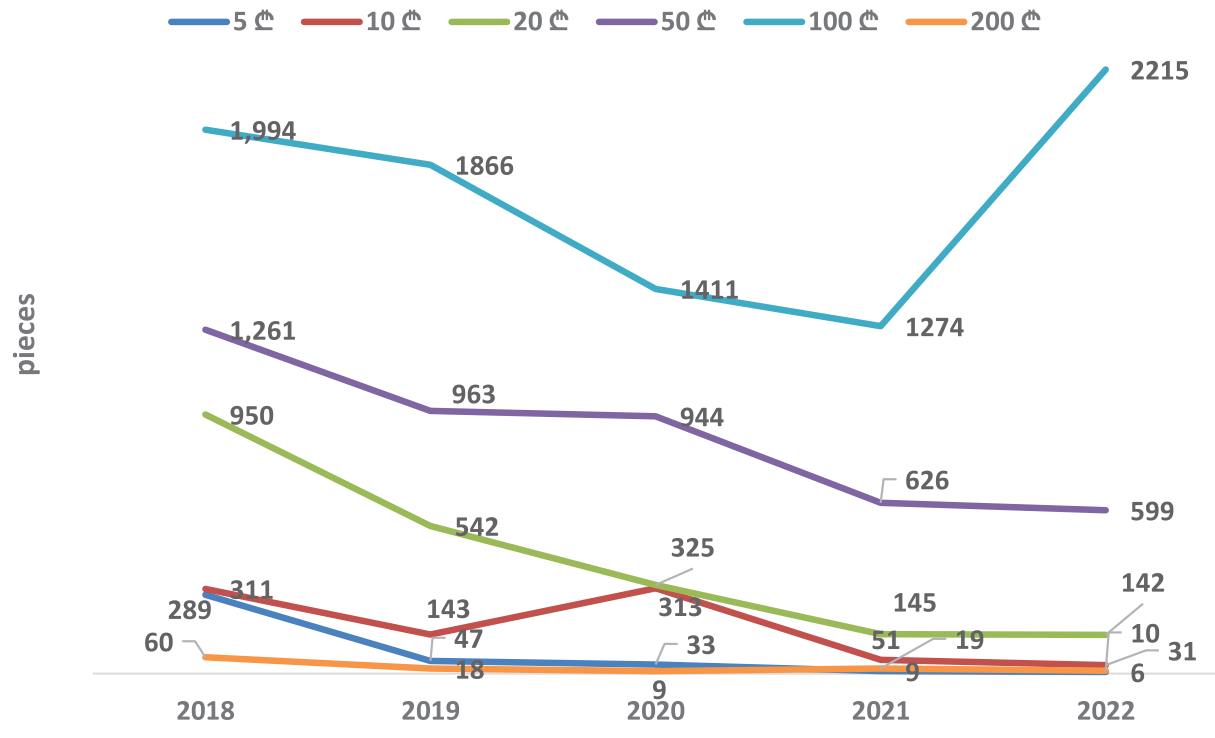
The number of counterfeit GEL banknotes detected in 2022 decreased by 41.4% compared to the previous period (2021), the number of counterfeit USD banknotes increased by 89.5%, and the number of counterfeit EUR banknotes increased 3.1 times. Other counterfeit foreign currency detected rose by 44.6%. The number of counterfeit GEL coins detected has decreased 2.7 times compared to 2021 (see Diagrams 11.7 and 11.8 for the number of counterfeit GEL banknotes and coins identified in the period 2018-2022).

Diagram 11.6 Counterfeit GEL banknotes and coins found in 2022 (percentage)



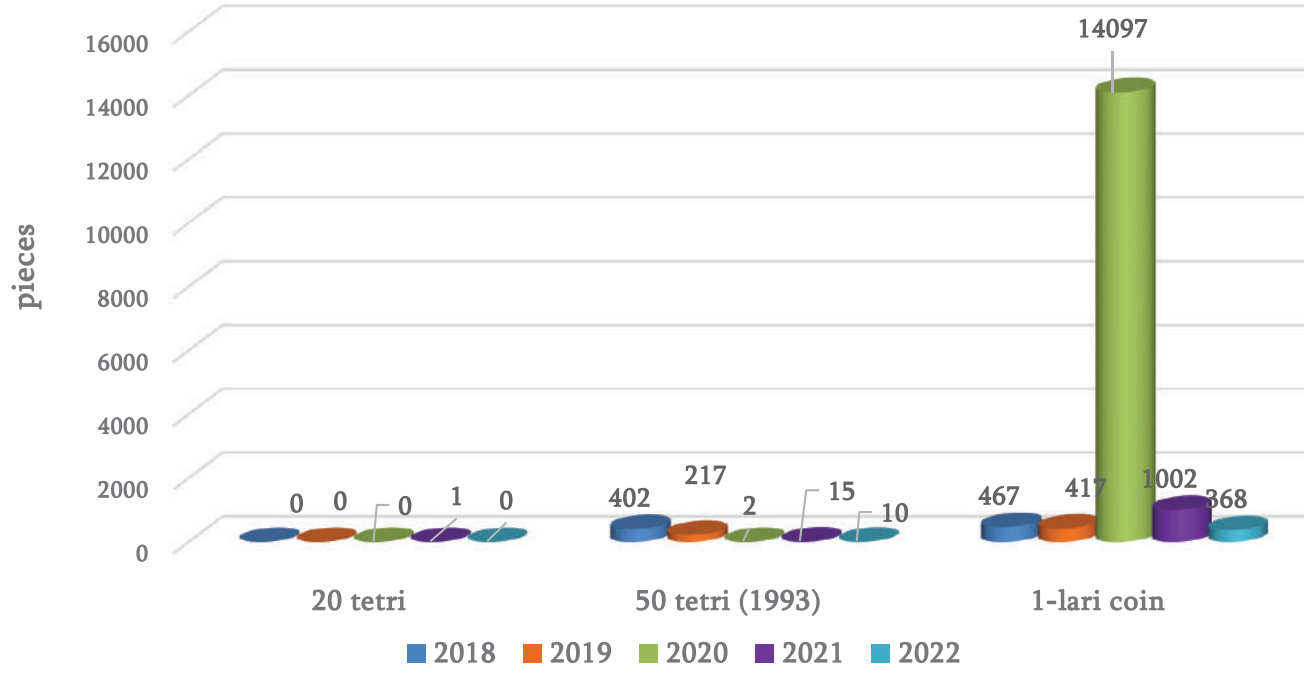
Source: NBG

Diagram 11.7 Number of counterfeit GEL banknotes found in 2018-2022 sorted by denomination



Source: NBG

Diagram 11.8 Counterfeit GEL coins found in 2018-2022 sorted by denomination



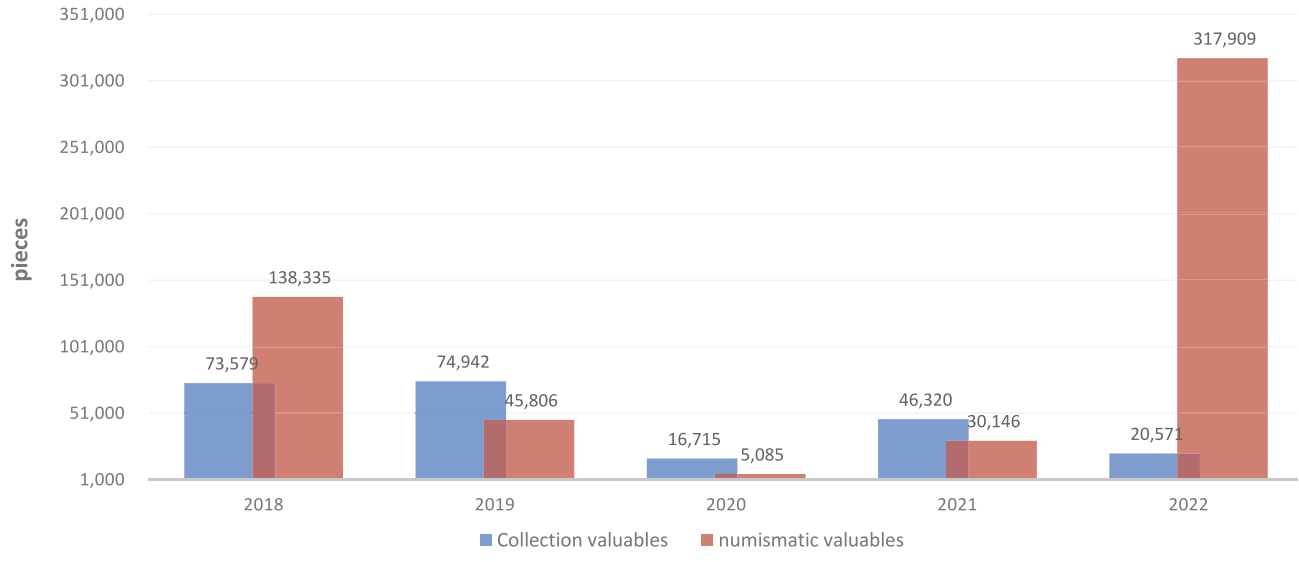
Source: NBG

In 2022, GEL 2.6 million worth (338.5 thousand units) of collector, numismatic and other products were sold, including

- ✓ GEL 1.1 million products purchased with cash.
- ✓ GEL 1.2 million products purchased with plastic cards.
- ✓ GEL 153.7 thousand products purchased through the internet store.
- ✓ GEL 122.4 thousand products purchased by pre-payment.
- ✓ GEL 24.3 thousand products purchased by post-payment.

Income from the sale of collector coins decreased 2.1 times compared to 2021, while income from the sale of numismatic valuables increased 3.1 times (see Diagram 11.9).

Diagram 11.9 Valuables sold in 2018-2022



Source: NBG

In observance of the pandemic-related regulations, the National Bank of Georgia's Money Museum offered educational courses to the public from 2 May to 31 December 2022. The goal of these courses was to promote the history of Georgian money and the development of the National Bank of Georgia as the central bank of the country, and to familiarize visitors with its core functions. During the reporting period, the museum was happy to welcome 3,055 visitors (including 2,897 local and 158 international visitors). In addition, 90 educational tours were held at the Money Museum, which included a review of Georgian numismatics and a view of the exhibits. These courses were attended by 1,246 students and 90 teachers.

The NBG Money Museum hosted an exhibition titled "The History of Georgian Banking and Financial Institutions of the 1900s-1920s" in May 2022 to celebrate both International Museum Day and Georgian Independence Week.

Improvement of the legislative framework

Resolution No. 3 of the Board of the National Bank of Georgia of 30 September 2022 approved a regulation related to the response to the detection of counterfeit money in Georgia. The regulation acts to encourage an immediate response to the detection of each unit of counterfeit and/or suspicious cash whenever these are reported by financial and non-financial sector players. By removing them from circulation and ensuring the timely informing of appropriate authorities, the spread of counterfeit money in Georgia should be substantially limited.

In order to upgrade, optimize, and minimize the risks of selling valuables, the National Bank of Georgia made amendments to Decree No. 184/04 of the Governor of the National Bank of Georgia, dated 28 December 2017, on approval of the procedure

for conducting operations related to cash and other valuables in the National Bank of Georgia. These changes improve the issuing of pre-ordered valuables from the cash register and provide greater control over this process. Issues concerning sales through plastic cards are improved in the document and the procedure for reissuing valuables sold and returned through the online store is now more flexible. In addition, the processes between the carrier of products sold through the online store and the National Bank of Georgia have been upgraded.

Collector Coins

In an effort to promote the national currency and the country, the National Bank of Georgia continued to work on the issue of collector coins during the reporting period. In 2022, the National Bank of Georgia introduced the practice of pre-ordering for collector coins through the NBG's online store in order to increase their availability for numismatists, collectors, and other interested parties.

Pre-orders were accepted for the following coins during the year:

Kings of Georgia series: Giorgi the Brilliant, gold and silver variant coins.

Kings of Georgia series: Bagrat III, gold and silver variant coins.

Kings of Georgia series: Parnavaz I, gold and silver variant coins.

Partners were selected to manufacture and supply these coins, and relevant work was carried out to proceed with their production.

The following collector coins were produced during the reporting period:

EuroBasket 2022

The procedures for selecting a partner for the production of 5,000 pieces of silver Eurobasket 2022 collector coins were completed, and work proceeded with the State Mint of Baden-Württemberg. The coins were produced, delivered, presented to the public, and sold during the reporting period.

The central composition of the obverse of the coin is a stylized image of a basketball hoop and ball. On the right side, the denomination inscription “5 lari” (in Georgian) is made in a stylized form. The inscriptions “Georgian basketball - 100 years” (in Georgian) and “საქართველო. GEORGIA” appear on the edge, with the EuroBasket Cup depicted in between.

Obverse designed by Alexander Verulashvili, reverse designed by Sophio Tsikaridze

The central composition of the reverse of the coin is the EuroBasket 2022 logo in the center with the inscription “Tbilisi Georgia”. In the background, there is the outline image of a basketball. The year of issue “2022” is inscribed in the lower left part of the coin.

In 2022, partner selection procedures for the production of King Vakhtang Gorgasali (Kings of Georgia series) collector coins (1,800 gold and 7,500 silver coins) were completed, and work continued with the Royal Netherlands Mint selected as a partner. Production, presentation, and sale of the gold variant of the coin took place during the reporting period and the full supply of silver coins will be available in the near future.

Vakhtang Gorgasali (Kings of Georgia series)

Design by Elene Gogoreliani

The main composition of the obverse of the coin is the image of the king (with the details of the king's crown gilded on the silver variation of the coin) presented according to the Giorgi Gegechkori painting of the monarch. The coin bears the inscription "Vakhtang I Gorgasali" (in Georgian) and "V" in reference to the century of his reign. In the background is an illustration of the area of Metekhi in Tbilisi.

The main composition of the reverse of the coin is the image of a shield. In front of the shield is a helmet with a wolf's head is depicted on it (in reference to the symbolic title of King Vakhtang Gorgasali). The inscriptions on the coin are "5 lari" (in Georgian), "საქართველო", "2022", and "Georgia".

12 INTERNAL AUDIT AND CENTRALIZED RISK MANAGEMENT

Internal Audit

During the reporting period, the activities of the Internal Audit Service were grounded on the Risk-Based Planning methodology, on the basis of which both the plan of the assurance services for 2022 and the long-term (orientation) plan were developed. Besides, an Information Security Management System audit program and a potential area for Consulting Services were defined. According to a modern approach of Risk-Based Internal Auditing, during the planning process, the results of the organization's "Risk Maturity" assessment were taken into account and appropriate further Strategy for Internal Audit Activities was defined. This strategy considers providing assurance on effectiveness of risk management processes and controls, consultation services on issues aimed on improvement of risk management, and using risk assessments by first and second line management for audit planning purposes. Thus, the development of the plan for the assurance activities of the Internal Audit Service was mainly based on the data of the organization's risk register. In addition, while prioritizing auditees, the three-year audit cycle, the dates of the last audit, the previous audit conclusions/assessments and recommendations provided, as well as the statuses of their implementation, were considered. The above-mentioned working documents were adopted by the decision of the Board of the National Bank and the Audit Committee.

During the year, the Internal Audit Service conducted 28 internal audits and reviews, as stipulated in the approved work plan for 2022. Besides, in accordance with established practice, following the requests of the NBG structural units, the Internal Audit Service also provided consulting services on various issues related to the draft procedures.

Also, the Internal Audit Service participated in the process of the surveillance audit of the certificate of compliance with the ISO 27001 standard of the Information Security Management System of the National Bank.

In addition, the Internal Audit Service conducted an assessment of compliance with the mandatory and recommended controls defined by the SWIFT Customer Security Controls Framework (v2022), taking into account the SWIFT Customer Security Program and the Independent Assessment Framework.

In 2022, the monitoring of the implementation of the recommendations provided during various audits was ongoing via the Audit Management System. Use of this system gives a possibility for auditees to update information, upload sufficient evidence and consolidate the information located in the system. Follow-up audit included recheck of current recommendations provided to auditees and update of the implementation statuses.

In 2022, the International Monetary Fund's Safeguards Assessment mission was carried out. In the process of communication with the mission, the contact party was the Internal Audit Service, which ensured the coordination of organizational issues. Within the framework of the above, working meetings were planned and held, information and documents prepared by the structural units of the National Bank on the areas of assessment were consolidated and presented, and the results of the mission's assessment were discussed.

In the first half of 2022, an agreement was reached with the Central Bank of the Netherlands to conduct an External Quality Assessment of the activities of the Internal Audit Service of the National Bank of Georgia. The independent assessment team included experts certified by the Institute of Internal Auditors. At the first stage, remote work was carried out, which included survey of stakeholders, preparation and provision of information and documentation necessary for the assessment purposes. The on-site visit of the assessment team was carried out in October 2022, during which a series of meetings were held with internal auditors, the management of the National Bank and the heads of various departments, who were selected for interviews by experts. According to the results of the Full External Quality Assessment, after a detailed study and analysis by experts of the working documentation, internal audit processes and procedures, the activities of the Internal Audit Service of the NBG were awarded the highest category – "Generally Conforms with International Professional Practice Framework (IPPF) and the Code of Ethics of the Institute of Internal Auditors (IIA)". At the end of

the external assessment process, the Internal Audit Service received an appropriate certificate.

In accordance with international standards for the professional practice of internal audit, in order to realize the potential for improving the quality of activities, the internal audit service periodically reviews methodological documents. As part of the above, the "Quality Assurance and Improvement Program" of the Internal Audit Service was updated in 2022.

As part of monitoring the goals defined by the Strategy of the Internal Audit Service for 2021-2023, the strategy was reviewed and the steps taken towards achieving the tasks specified by the strategic goals were analyzed.

Non-Financial Risk Management

Risk management in the NBG is arranged using a three lines of defense model, which involves the distribution of functions and responsibilities between its various branches. The structural units (risk owners) are the first line of defense, the Centralized Risk Management Department is the second line, and the Internal Audit Service is the third line of defense.

The NBG has in place a centralized risk management framework that provides a unified and consistent approach to identifying, analyzing, evaluating, monitoring, and responding to non-financial risks (operational and reputational). The Centralized Risk Management Department continued to constantly update the NBG's risk register, based on the probability, impact, controls of risks, and changes related to external and internal events. In order to effectively conduct the risk assessment, the department regularly used the risk and control self-assessment method.

The incident management system, which is another tool of operational risk management, continued to be used in the reporting period. It serves to identify, record, and analyze incidents related to business processes, to identify weaknesses, and to find ways to improve procedures to reduce recurrence.

To promote a risk-aware culture, in 2022 trainings were held for NBG staff on the management of risks and incidents, and on the use of the rules, procedures and systems in place.

The National Bank of Georgia develops internal procedures to properly administer the processes of the NBG, to formalize these processes, and to maintain institutional memory. In 2022, internal procedures were updated and new procedures were developed. This is an effective mechanism for supporting the centralized risk management framework, creating and maintaining an adequate internal control environment.

The NBG's Model Risk Management Framework was developed in 2022 to expand and improve the risk management framework. This document serves to establish a uniform approach and process for inventorying, describing, and evaluating models, and for developing documentation and managing non-financial risks across the NBG.

A Risk Management Committee was also established at the NBG during the year. Taking into account the important role of risk management in the decision-making process, the task of the committee is to promote the establishment and maintenance of best international risk management practices in the National Bank of Georgia, to monitor ongoing activities in terms of risk management, and to make collegial decisions in this area.

The centralized risk management framework includes the definition of acceptable levels of non-financial risks (risk appetite). The risk level is set on an annual basis by the NBG's Board. Overall, the National Bank of Georgia adopts a conservative approach to non-financial risks and the acceptable level is thus set in the low-risk range. To comply with and maintain an acceptable level, the NBG allocates adequate resources, taking care of the continuous improvement of the NBG's internal control environment.

Business Continuity Management

The National Bank of Georgia is part of the critical infrastructure of the country and it recognizes the importance of the resilience and continuity of its services. In this regard, the NBG persistently plans, implements, and monitors various activities to ensure the continuous delivery of critical services and to increase its overall resilience. A series of trainings, tests, and practical exercises were conducted on a regular basis during the year to assess the readiness of the NBG's human, logistical, and technical resources. The NBG's staff were trained to raise their awareness and improve the coordination and management of crisis situations.

The Business Impact Analysis (BIA) looks at the resources needed for the NBG's critical services. It allows determination of all necessary technical, human, and logistical resources for the delivery of critical services, identification of third parties involved in providing critical services, assessment of potential threats that may lead to the interruption or delay in the provision of services, and the identification of the minimum amount of time that service interruption could be tolerated and the amount of time that would be required for technical work to restore that service.

13 PUBLIC RELATIONS AND INTERNATIONAL COOPERATION

In 2022, the National Bank of Georgia maintained active communication with the general public, financial institutions, the media, and other target groups. Such communication has become more dynamic as the public were able to use digital channels to keep up with the decisions and actions of the NBG throughout the year. Along with the publication of the quarterly Monetary Policy Reports, short videos were made in which the Governor of the National Bank of Georgia focused on highlighting important aspects of the reports. Video recordings of the presentation of the reports and short informative videos on the financial stability and monetary policy reports were also regularly published on the official website of the NBG and on its social networks.

The NBG team held various meetings with representatives of different sectors to explain in more detail the decisions and steps taken within the NBG's mandate.

Raising the financial education of citizens is one of the key priorities for the NBG. The social networks of the NBG featured various videos of staff members explaining current issues related to inflation, as well as informative videos on financial stability, consumer rights, sustainable finance, and cyber security. Graphical videos on the priorities of the supervisory strategy were prepared. Videos from Bundesbank and the Bank of England were translated and published. Educational articles and fun quizzes were placed on partner media outlets, and educational lectures were held in universities.

One of the important tasks of the National Bank of Georgia is to protect the rights of consumers in the financial sector. On 15 March, the National Bank of Georgia, partnered with its financial education web portal, www.finedu.gov.ge, to mark the International Day of Consumer Rights with the involvement of the financial and insurance sectors of Georgia. This date has been celebrated in different countries since 1983, and serves to raise awareness of consumer rights. The foundations for the inclusion of the financial sector of Georgia in this campaign were laid last year at the discretion of the National Bank of Georgia.

The National Bank of Georgia is committed to raising the public's awareness of financial education and, similar to previous years, implemented a number of events with this goal in mind.

For the second time, an annual competition for young economists was held in 2022. The "Economy as a profession" event is an educational project of the National Bank of Georgia that aims to discover talented students and offer them internships at the NBG. The competition is also a good opportunity to promote the career development of students. According to the competition's terms, this year's participants had to present papers on monetary policy and financial stability. The winning candidates presented research papers on current economic trends and global challenges. At the event, NBG Governor Koba Gvenetadze spoke to students about the importance of the profession of economists. In his speech, he focused on the functions and structure of the NBG, explaining how decisions affecting the country's economy are made. About 200 students attended the event and the meeting was held in an interactive format. Also, for the first time in the history of the Monetary Policy Committee, the event was attended by young economists who made a parallel decision to the Monetary Policy Committee.

In 2022, cooperation with international media was strengthened and expanded. Central Banking, a reputable international publication, regularly featured news about the NBG's projects and actions. Euromoney recorded an extensive interview with Governor Koba Gvenetadze. Interviews with the governor were also published by Bloomberg, The Banker, and Nikkei.Inc., a lead Japanese publication.

In 2022, Global Finance, the world's leading financial publication, named Koba Gvenetadze, Governor of the National Bank of Georgia, among world's best central bankers for the fifth time in a row. The NBG's Governor was first included in Global Finance's ratings in 2018, and for the fifth year in a row has been named on the list of the best leaders of central banks with A and A- ratings. This assessment of central bank leaders is based on several aspects related to the policies pursued by their banks. The Global Finance Awards are widely recognized in the international financial community and indicate the

high reputation and successful performance of the individuals and banks awarded.

A book on the State Bank of Georgia was compiled to raise awareness about the history of the central bank. The book introduces the hundred-year history of the National Bank of Georgia in detail. As part of the work, the handwritten text of the first manager of the State Bank of Georgia, Iason Lortkipanidze, was restored.

The National Bank of Georgia participated in the Spotlight 2022 event. The NBG announced a competition for this annual event aimed at raising awareness and changing behavior on cyber security issues. Cyber fraud has become increasingly frequent and more diverse in recent years and the NBG is actively involved in raising cyber security awareness. NBG's participation in the Spotlight 2022 event included a competition, launched with the support of the Bank of Georgia JSC, to raise awareness of cyber security issues and change public behavior. Those wishing to participate in the competition submitted social campaigns and the authors of the best campaigns were awarded cash prizes.

Transparency is one of the priorities of the NBG. It is for this purpose that the NBG prepares its periodical and thematic publications. During the year, the Monthly Review, Macroeconomic Review and Monthly Balances were published, as well as analytical reports on Financial Sector Indicators and Current Macroeconomic Indicators, and the quarterly Monetary Policy Reports. Relevant statistical data and press releases from the Monetary Policy Committee were promptly published. The 2021 Annual Report was also published. Electronic versions of these publications are available on the NBG's official website: https://nbg.gov.ge/publications.

To introduce members of the NBG's staff to the public, various employee profiles were published on social media, introducing their education and professional experience, successful projects implemented on their initiative, and their involvement at the NBG.

In addition, to mark dates of particular historical and national importance, various interesting posts were published on such varied topics as the history of Georgian money and Nobel laureates in Economic Sciences.

Communication Policy

Communication is an important strategic tool of the National Bank of Georgia. The Public Relations and International Cooperation Department of the Office of the Governor developed and approved the main communication policy document of the National Bank of Georgia, the goal of which is to ensure the transparency, clarity, and consistency of the NBG's communication.

The policy document introduces the main aspects of the communication strategy of the National Bank of Georgia, which has been prepared based on the NBG's core mission, goals, and objectives. The document was developed in accordance with the mandate/functions of the NBG as defined by the Constitution of Georgia and the Organic Law of Georgia on the National Bank of Georgia, and reflects trends identified as a result of qualitative and quantitative research and focus groups composed of the management and employees of the NBG.

The document clearly describes the main tasks of the communication policy of the National Bank of Georgia and outlines the communication goals and methods that the NBG uses to communicate effectively with the general public and the financial sector/market players.

The communication strategy document emphasizes monetary policy communication as an important tool for the implementation of monetary policy. Active communication makes monetary policy decisions more predictable, enhances their impact on the economy through the expectations channel, and ultimately improves their effectiveness – ensuring that price stability is achieved at lower costs.

Increasing transparency and improving communication is one of the key elements of the National Bank of Georgia's financial stability policy framework. Communication is important for both preventing and managing financial crises. Adequate communication largely determines the effectiveness of financial stability policy – it helps raise awareness of financial stability policy and sets appropriate expectations, improves risk perception by market players and the public, and ensures accountability.

The same strategy document also gives attention to improved communication related to the financial sector supervisory policy, consumer rights protection, and financial education.

The communication channels used by the NBG for external and internal communication are also described in the document. It discusses the types of communication and the diverse set of communication channels and tools necessary to satisfy the interests and needs of different target groups.

The communication policy document, which was developed in accordance with the recommendations

of the International Monetary Fund, sets a precedent as it is the first of its kind. The document is available on the NBG's website.

International Cooperation

The National Bank of Georgia was represented at various international conferences and forums during the year, where the NBG Governor and other management representatives shared the successful experience of the National Bank of Georgia with their international colleagues. The first meeting of the Euromoney Central and Eastern European leaders' community was held as a video conference that brought together lead bankers from the region. The main discussion was about defining the mandate of central banks and monitoring systemic risks. The participants of the meeting also talked about environmental and social responsibility as contributors to sustainable development, in which the role of central banks is increasing considerably. Noting that the National Bank of Georgia is a regional leader in this area, at the event Governor Gvenetadze briefly reviewed the sustainable finance report that was published by the NBG in 2021.

The Central Bank of Belgium held a conference for the leaders of the central banks of the IMF's Netherlands, Belgium, and Luxembourg Constituency. The Governor of the National Bank of Georgia was invited as the speaker at the first session. He spoke on "The COVID-19 Pandemic and Recent Geopolitical Challenges: Macroeconomic Implications and Prospects", underscoring the importance of the IMF's Extended Funds Facility in 2017-2021, noting that it had facilitated the economic recovery of Georgia.

The National Bank of Georgia participated in Columbia University's annual conference on "Developing Economies: Inflation, Market Challenges and Responses". In his speech at the event, the Governor of the National Bank of Georgia focused on high inflation as a global challenge and pinpointed the importance of the policies pursued by monetary authorities.

An international conference on Central Bank Digital Currency (CBDC) and Decentralized Finance (DeFi) was held on the initiative of the National Bank of Georgia and the USAID Economic Security Program, and with the involvement of the World Bank. The two-day meeting focused on establishing public-private dialogue on central bank digital currency and decentralized finance. At the event, the Governor of the National Bank of Georgia summarized the NBG's actions to develop the digital GEL.

The Governor and Vice-Governor of the National Bank of Georgia took part in the annual meetings of the International Monetary Fund and the World Bank. In a panel discussion on the "Development of Opportunities", the NBG Governor focused his speech on the NBG's actions, on how the financial sector of Georgia was able to successfully pass through the rather severe phase of the shock caused by the pandemic, and on how the adequate policy of the NBG helped the country face the potential threats arising from the regional situation. Governor Gvenetadze also took part in the symposium held as part of the meetings, which were attended by international investors. He spoke at length about the sound macroeconomic environment of Georgia and its favorable investment climate, and discussed details of the country's investment opportunities.

Monetary policy challenges, the post-pandemic reality, and the economic consequences of Russia's full-scale war in Ukraine were the topics discussed at a conference of central banks held within the framework of the Three Seas Initiative (first launched by Croatia and Poland in 2015, this aims to deepen physical and digital connections between the Baltic, Adriatic, and Black Sea regions).

Organized by the Central Asia Regional Economic Cooperation (CAREC) Program, the "High-Level Policy Dialogue of the Economic and Financial Stability Cluster" event was held under the chairmanship of the Governor of the National Bank of Georgia. In his speech, the NBG Governor noted that the financial sector maintains stability and continues lending to the economy without interruption thanks to the macroprudential measures implemented by the NBG before the pandemic, and those that the financial stability policy subsequently implemented after the beginning of the pandemic and the start of the Russia-Ukraine war. He also pinpointed the global challenges to financial stability caused by Russia's invasion of Ukraine.

The first international conference on competition and consumer rights was held in Georgia during the year, and the NBG was one of five regulatory agencies to organize this. The conference discussed competition law, consumer rights protection mechanisms, and the work accomplished by regulatory agencies. Governor Gvenetadze spoke about the importance of free and fair competition at the event. Representatives of the diplomatic corps and delegations of 20 countries took part in the two-day international conference, including Teresa Moreira, Head of the Competition and Consumer Policies Branch at the United Nations

Conference on Trade and Development (UNCTAD), and other invited international experts.

The National Bank of Georgia chaired the Group of Banking Supervisors of Central and Eastern Europe (BSCEE) in 2022. In this capacity, the National Bank of Georgia hosted the 34th Annual Conference of the BSCEE Group, which was held for the first time in a hybrid format. The National Bank of Georgia first joined this group in 2013 and has been actively involved in the group's work since then. The BSCEE group unites 25 countries of Eastern and Central Europe and works to promote close cooperation between the banking supervisory authorities of the member countries. The group's chair country is elected annually from among its members. Georgia first chaired the Group in 2018, and then again at the BSCEE group annual conference in 2021.

The BSCEE conference held in Tbilisi was devoted to several important topics: the Basel Committee's work program and strategic priorities, the impact of the Russia-Ukraine war on the performance of central banks and the banking sector, and cyber risk management. The NBG Governor opened the conference and thanked the Vice-Governor of the National Bank of Ukraine, Sergey Nikolaychuk, for his participation. The NBG Governor spoke about the reforms carried out in the regulation and supervision of the non-banking sector, capital market, and financial technologies. Along with representatives of the National Bank of Georgia, the event was attended by the Secretary General of the Basel Committee on Banking Supervision, and high-rank representatives of the relevant agencies of Ukraine, Austria, Croatia, Moldova, Estonia and Montenegro as invited speakers.

In order to effectively fulfill its supervisory mandate and strategic priorities during 2022, the National Bank of Georgia cooperated with supervised entities, the Bankers' Association, external auditors, public institutions, the media, supervisory authorities of other countries, and international organizations.

HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

14

Statistical Information on the Number of NBG Staff

As of the end of 2022, the National Bank of Georgia had 538 employees, of which 445 were civil servants. Some 53.8% of the total staff were women and 46.2% were men. The average age of employees was 39.

Professional Development of NBG Staff

The year was not a typical one in terms of the professional development NBG staff. Due to the pandemic, all seminars planned by European central banks and financial institutions were conducted remotely early in the year. Later in the year, both onsite and remote seminars were held. Trainings in both formats were attended by 82 employees of the NBG.

In addition, employees of different departments in the National Bank of Georgia regularly held educational and introductory presentations involving the active involvement of employees, which helped share knowledge within the organization. Some of the trainings held for employees of the NBG in 2022 included the Basics of Project Management, Monetary Policy, Personal Development, Data Science, and Effective Communication and Service.

Professional Development of Financial Sector Employees

The National Bank of Georgia continues to promote the professional development of banking sector employees. For this purpose, in 2022 experts from ATTF-www.attf.lu conducted four trainings remotely for employees of the NBG and commercial banks, involving 52 participants in total. The partners also invited representatives of the National Bank of Georgia and the financial sector to attend e-learning courses, which involved 29 participants in total.

Hybrid Workplace Model and Strengthening Team Spirit

Later in the year, the National Bank of Georgia approved a hybrid workplace model, allowing staff to work in the office for a certain number of days during a month, and then giving them the option to work either from home or in the office for the rest of the time.

The challenge for the Human Resources Management and Development Department accompanying the transition to the hybrid workplace model was to make the process smooth as possible and to adapt employees to the new model. Information letters were thus prepared and meetings were planned for this goal. As a result of this effort, no critical flaw was found with the hybrid workplace model, and the feedback of the employees was positive.

Improving team spirit and strengthening internal communication was one of the main goals of the Human Resources Management and Development Department. A number of remote and more traditional events were planned and implemented over the year, including sporting activities and retreats, events planned in the context of the organization’s social responsibility, and charity events.

Digitization of HR Processes

The HR process digitization project started in 2021 and continued in 2022. As a first stage, the SAP Success Factors employee performance evaluation module was introduced at the NBG, and in early 2022 employee selection and orientation/adaptation modules were fully introduced. The processes became more flexible and effective through these developments.

A total of 510 employees were evaluated through the SAP Success Factors system, 85 vacancies were

announced and closed (involving both simplified and open and closed competitions), 35 new employees were selected, and 25 people were given the opportunity to undergo internships. Importantly, six of the latter were subsequently able to stay at the NBG and continue their work as employees.

The Human Resources Management and Development Department invited all new employees and interns for a three-day orientation/adaptation training event to get to know key elements related to the organizational culture of the NBG, its structure, and the basic procedures and functions of each of its departments.

15 DEVELOPMENT OF THE LEGAL FRAMEWORK

Legislative changes related to Georgia's accession to the Single Euro Payment Area (SEPA)

Payment system and payment service legislation

- ✓ In 2022, the Parliament of Georgia adopted the Law of Georgia on amendments to the Law of Georgia on Payment System and Payment Services and attendant legislative amendments to fulfill most of the commitments under the EU-Georgia Association Agreement, including the updated Directive on Payment Services (EU Directive 2015/2366). The package of legislative changes were connected with Georgia's accession process to the Single Euro Payment Area (SEPA) since convergence with the EU directive (PSD2) is one of the most important mandatory criteria for countries seeking accession to SEPA.
- ✓ Decree No. 122/04 of the Governor of the National Bank of Georgia of 16 September 2022, on the approval of the regulation on determining the technical requirements for performing credit transfers and direct debits denominated in euro, ensures full compliance with the technical requirements for credit transfers and direct debits in euro currency under EU Regulation No. 260/2012.
- ✓ Decree No. 145/04 of the Governor of the National Bank of Georgia of 24 October 2022, on the approval the Regulation on Unified and Secure Open Standards of Communication, was developed according to EU Regulation 2018/389, supplementing the revised EU Directive on Payment Services (PSD2) and fully complies with Chapter 5 of that directive.

Detailed information about these changes is provided in the Payment Systems Oversight section (9.1) of this report.

In addition, independently of the requirements of SEPA, the following legal acts were developed and issued to regulate and improve certain issues related to payment systems and payment services:

- ✓ Decree No. 33/04 of the Governor of the National Bank of Georgia, dated 31 March 2022, on the approval of the regulation on limiting transactions by payment service providers with gambling business companies, related to the amendments made on 22 December 2021 to the Law of Georgia on Payment System and Payment Services. These amendments impose certain obligations on payment service providers that concern their relations with foreign companies in gambling businesses, and also address limiting payments with cards issued by these providers when the payments are in favor of foreign companies conducting gambling business. Accordingly, the decree sets up a mechanism for fulfilling the requirements established by the law. The provider's powers regarding services for gambling business companies are specified in the decree, and the provider's obligations for making payments to foreign gambling business companies are established. The decree also defines issues regarding cooperation with the Revenue Service and the National Bank of Georgia (i.e. the obligation of providers to inform the Revenue Service and the NBG about clients using other parties to make payments in favor of a foreign gambling companies and imposing restrictions on the client or recipient based on the information received from the Revenue Service through the National Bank of Georgia).
- ✓ Decree No. 156/04 of the Governor of the National Bank of Georgia of 7 November 2022, on the approval of instructions for filling out and submitting statistical reporting forms about card instruments by payment service providers, was developed for microfinance organizations and payment service providers registered by the NBG who are involved in issuing and/or acquiring card instruments. The decree lays down the obligation and

appropriate procedure for these entities to submit statistical information to the National Bank of Georgia, at the established frequency and in the appropriate form, related to the issuance of card instruments and operations carried out with these instruments, as well as payment service providers' card devices and operations carried out through them.

Novelties on issuance of a banking license, eligibility criteria for owners of a significant share and administrators of a commercial bank

The amendments made to the Law of Georgia on the Activities of Commercial Banks, and the resulting additional legislative amendments, were to ensure compliance with the requirements for granting a banking license, and the eligibility criteria for purchasers/owners of a significant share of a commercial bank and the administrators of a commercial bank (in line with European Parliament and Council Directive (2013/36/EU) of 26 June 2013 on Access to the Activities of Credit Institutions and Prudential Supervision of Credit Institutions and Investment Companies (CRD Directive 2013/36/EU)). The changes were also made to ensure full compliance with the standards defined by the European Banking Authority. The amendments improve the requirements and provide more clarity in the assessment process. With the legislative changes, the commercial bank licensing regulation, as well as the requirements related to the suitability of its administrators and shareholders, were upgraded and are now clearer. In addition, the procedural aspect of issuing a banking license, as well as for assessing the suitability of shareholders and administrators, is far more complete. This ensures full compliance with the relevant European directive and clearer, more transparent assessment requirements and processes for the parties concerned (commercial banks, significant shareholders, and administrators). In addition, with the package of legislative changes, the provisions for defining the duties of the supervisory boards and directorates of commercial banks were specified. A duty of good faith and care for members of the supervisory boards and directorates, as well as the consequences of their omission, are now defined in accordance with the new Law on Entrepreneurs. The changes also affected the regulations governing the performance of the audit committees of commercial banks, and basic principles for the corporate governance of commercial banks were defined at the level of the law.

Based on the package of legislative amendments described above, the following legal acts were developed and published:

- ✓ Decree No. 151/04 of the Governor of the National Bank of Georgia of 31 October 2022, on approving the Regulation on the Suitability Criteria of Administrators of Commercial Banks, specifies the administrator suitability criteria as defined by the Law of Georgia on the Activities of Commercial Banks, the manner and procedure for evaluating that criteria – including, determining joint suitability issues of directorates and supervisory boards – and the list of information/documentation to be submitted. The decree upgrades the suitability requirements for commercial bank administrators, while providing clear and transparent assessment of the requirements and processes for relevant parties. In accordance with the Law of Georgia on the Activities of Commercial Banks, five criteria for the suitability of administrators were defined: good reputation, reliability and a conscientious attitude to work; appropriate knowledge, skills and experience; independence of judgment; enough time to perform one's duties properly; and limits on the number of simultaneously occupied positions. The decree specifies a list of circumstances in relation to each criterion on which the evaluation of a candidate's suitability should be based. An additional candidate suitability questionnaire was developed as an appendix to the decree, to further simplify the submission of bulk information to candidates.
- ✓ Decree No. 152/04 of the Governor of the National Bank of Georgia dated 31 October 2022, on the approval of the Licensing Regulation for Commercial Banks, acts to regulate in detail the submission of written applications to the National Bank of Georgia by entities interested in obtaining a banking license and lists the information/documentation that must be attached to such written applications. The document establishes better terms for procedural issues related to decision making on the issuance of a banking license: the term for reviewing a license application was increased from 3 to 6

months; the document contains more specific wording related to finding deficiencies and requesting additional information/ documentation; and a total maximum period of 12 months was set for consideration of a license application. In addition, terms for granting conditional licenses by the National Bank of Georgia were specified in order to promote the stability and development of the financial sector, and based on the interests of the banking sector, including the use of essentially new and innovative financial technologies in the local market and to enhance the access of consumers to financial services. The decree contains more specific wording for simplifying the minimum capital requirement for commercial bank licensing under Georgian legislation and the authority to define additional restrictions and requirements during the issuance of a conditional license in order to reduce risk.

- ✓ Decree No. 153/04 of the Governor of the National Bank of Georgia of 31 October 2022, on approving the Regulation on the Acquisition of a Significant Share of a Commercial Bank, specifies the content of the eligibility criteria for shareholders with a significant share, as determined by the Law of Georgia on the Activities of Commercial Banks. It lists the information/documentation to be submitted, the content of separate concepts related to the acquisition of a significant share, and the procedure for determining the indirect acquirer of a significant share. In accordance with the Law of Georgia on the Activities of Commercial Banks, the decree includes five criteria for the suitability of shareholders: the applicant's reputation, which includes their reliability and proper competence; compliance of the person selected by the applicant to be the administrator of the commercial bank (if such authority exists) with the requirements defined by the law and the legal acts of the National Bank of Georgia on the suitability criteria for administrators; the financial strength of the applicant; the compliance of the commercial bank with prudential supervisory requirements after an applicant's acquisition of the share; and the absence of money laundering and terrorism financing risks associated with the applicant/ transaction. The decree specifies the list of circumstances in relation to each of the above criteria on which the assessment of an applicant's suitability should be based. To assess the applicant's suitability in terms of the updated requirements, the decree lists the information/documentation to be submitted in relation to each criterion, as well as the additional information/documentation to be submitted depending on the amount of the share to be purchased.

Regulation of Virtual Asset Services

The development of the Organic Law and resulting legislative changes was prompted by Recommendation No. 15 "New Technologies" of the Financial Action Task Force (FATF) and the interpretive commentary of that recommendation. The recommendation determined that, in order to manage risks related to virtual assets, states should ensure the regulation/ supervision of virtual asset service providers by considering the following directions: facilitating the prevention of money laundering and financing of terrorism; their licensing/registration; the verification of the suitability criteria of significant shareholders/ beneficial owners/managers; and effective monitoring and compliance with the requirements defined by the recommendations of the FATF. The interpretive commentary emphasizes that states must license/ register a locally based virtual asset service provider. It is also indicated that the supervision and monitoring of the virtual asset service provider should be done by a competent state authority adopting a risk-based approach. The competent authority should have appropriate powers for this purpose, including the ability to carry out inspections, request information and impose sanctions (including the power to revoke license/registration).

According to the report of Moneyval, the Council of Europe's Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, the absence of a framework for the regulation and supervision of virtual asset service providers was one of Georgia's main inconsistencies. Taking measures in this regard were thus considered a priority.

Given that services related to virtual assets are, due to their nature (a high degree of anonymity, a high speed of transactions, the difficulty of tracking transactions, etc.), linked with higher risks of money laundering and financing of terrorism or criminal activities, it is important that virtual asset service providers fall within the framework of regulation and

supervision. The decision was thus taken to create a legal framework for the regulation/supervision of virtual asset service providers that would be in line with the FATF recommendations and guidelines.

The regulatory framework determined by the legislative package provides for the supervision of virtual asset service providers in the following areas: mandatory registration with the National Bank of Georgia, verification of the suitability criteria of administrators, and supervision in terms of promoting the prevention of money laundering and terrorism financing. This ensures the timely management of increased risks of money laundering and terrorism financing as related to virtual assets, as well as the elimination of the shortcomings identified by Moneyval. The legislative package includes the right to provide virtual asset services within the limits defined by the special legislation to the following entities subject to the supervision of the National Bank of Georgia: commercial banks, microfinance organizations and brokerage companies.

Other Legislative Changes

Reform of legislation governing holding of dematerialized securities

The draft of the Law of Georgia on Holding Dematerialized Securities, composed by the National Bank of Georgia in cooperation with the Ministry of Economy and Sustainable Development of Georgia, was initiated in 2021. The law and attendant amendments are still being reviewed by the Parliament of Georgia.

The draft law describes relations linked to the ownership and circulation of dematerialized securities. Dematerialized securities only exist as an entry in the securities account and have appeared as a result of the development of modern technologies, thanks to which it is no longer necessary to own securities in a material form or to register them. Given these developments, it became necessary to propose legislation for their supervisory regulation and, more significantly, to clearly establish issues related to ownership rights, confirmation and transfer.

Regulation of this area in accordance with international standards is important to achieve the following goals:

- ✓ Provide legal clarity.
- ✓ Create better guarantees of the protection of property rights.
- ✓ Increase the quality of investor protection.
- ✓ Eliminate gaps in the legislation and regulate all issues related to the possession of dematerialized securities (including government securities) within a single act.
- ✓ Offer general support for the development of the capital market.

Mortgage-covered bonds

The Law of Georgia on Mortgage-Covered Bonds and subsequent legislative amendments were adopted in order to create a long-term, cheap and stable alternative source of funding for commercial banks. The law covers the issuance of mortgage-covered bonds, the supervision of mortgage-covered bond issuers, and legal relations linked to their functioning. The law also regulates obtaining authorization and consent for the issuance of mortgage-covered bonds, guarantees the protection of creditors, the separation of the mortgage-covered bond program, and the management and liquidation of the separated program. The issuance of mortgage-covered bonds by commercial banks is considered an important source of funding for these institutions and a contributing factor to mortgage lending. Alongside deposits and other alternative sources of fundraising, the issuance of mortgage-covered bonds may become one of the ways for credit institutions to access cheap and stable funding, and this is expected to encourage lending to the real economy and foster economic growth.

Normative Acts of the National Bank of Georgia

Consumer Rights

The National Bank of Georgia has developed a Code of Ethics for financial institutions as they recover their loans. This establishes internationally accepted rules and habits for loan recovery. Implementation of this code will help strengthen financial institutions' reputations as reliable partners in the eyes of consumers by protecting their rights and interests as much as possible in the process of loan recovery. The code additionally ensures compliance with the ethical norms and best practices of business relations and is driven by actions based on the principles of honesty, transparency, and fairness for financial institutions when undertaking loan recoveries.

The Code of Ethics provides for the following key issues:

- ✓ Obligations of financial institutions in loan recovery.

- ✓ Establishes concepts of contact persons and third parties related to the customer and regulates the manner of dealing with them.
- ✓ Limits the period of communication with customers and other contact persons from 09:00 a.m. to 08:00 p.m.
- ✓ Makes it mandatory to keep records of communication with customers and other contact persons for at least two months.
- ✓ NBG-supervised entities become responsible for any violations of the requirements of the code.
- ✓ Financial institutions were disallowed from alienating (transferring) an owned loan portfolio and/or loan to persons/entities who are not financial institutions.

Decree No. 16/04 of the Governor of the National Bank of Georgia dated 17 February 2022, on amending Decree No. 32/04 of the Governor of the National Bank of Georgia, dated 9 March 2021, on the Approval of the Regulation on the Protection of Consumer Rights in the Provision of Services by Financial Institutions, was based on the European Parliament and Council Directive 2008/48/EC of 23 April 2008 regarding credit agreements for consumers. The amendment provides greater clarity and accuracy in the definitions of certain terms, including adding the definition "demand deposit" and clarifying the term "customer". The latter now implies both the recipient of a financial product or an individual or legal entity with such intention, as well as an organization provided for by the legislation of Georgia that is not a legal entity. An entry in the header of the loan agreement was added, to be used when a loan had been granted without prior solvency analysis (as determined by Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020 on the approval of the Regulation on Lending to an Individual).

The amendment additionally includes requirements for financial products. One of them concerns the obligation for financial institutions to display information about overdraft usage on ATM screens. Financial institutions now need to separate the information about the overdraft and the own funds of their clients, and are required to inform clients via a short text message if a portion of the overdraft is being used during the execution of a card payment operation. Financial institutions are further obliged to post on their websites (if any) important terms related to loans and deposit products, offering sample contracts and the tariffs of other financial products that have been compiled in accordance with the requirements of the regulation. The decree also establishes financial institutions' obligation to provide on their internet banking facilities (if any) copies of loan and deposit agreements, important terms related to specific financial product agreements, and certain information on other loan and deposit agreements made with the client.

The amendment also sets the rule for calculating the amount of the effective interest rate in cases defined by the Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020 on approving the Regulation on Lending to Individuals and the regulation on calculating the effective interest rate of demand deposits.

The following legal acts were also published concerning consumer rights:

- ✓ Decree No. 50/04 of the Governor of the National Bank of Georgia of 20 May 2022, amending Decree No. 218/04 of the Governor of the National Bank of Georgia of 27 September 2018, on approving the Regulation on Determining, Imposing and Enforcing the Amount of a Monetary Penalty for the Lending Entity; Decree No. 51/04 of the Governor of the National Bank of Georgia of 4 May 2022, amending decree No. 16/04 on approving the Regulation on Determining, Imposing and Enforcing the Amount of a Monetary Penalty for the Microfinance Organization; and Decree No. 53/04 of the Governor of the National Bank of Georgia of 4 May 2022, amending decree No. 242/01 on approving the Regulation on Determining and Imposing the Amount of a Monetary Penalty for the Commercial Banks, including fines for violation of the requirements of Decree No. 14/04 of the Governor of the National Bank of Georgia of 17 February 2022 on approving the Code of Ethics on Loan Recovery, as well as for the late submission of statistical data reports on consumer complaints to the National Bank of Georgia, as contained in Appendix No. 8 of Decree No. 32/04 of the Governor of the National Bank of Georgia on 9 February 2021 on the approval of the Regulation on the Protection of Consumer Rights in the Provision of Services by Financial Institutions.
- ✓ Decree No. 15/04 of the Governor of the National Bank of Georgia, dated 17 February 2022, on amending Decree No. 194/ 04 of

the Governor of the National Bank of Georgia dated 27 August 2018, on approving the Regulation on Defining the Effective Interest Rate for the Purposes of Article 625 of the Civil Code of Georgia, the Calculation of the Current Remaining Principal Amount of the Loan, the Commission, Financial Expense, Penalty and/or any Form of Financial Sanction, specifies the definitions of the terms "credit intermediary" and "variable interest rate". Also, the concepts of borrower, interest rate, fixed interest rate and effective loan interest rate are given more clarity. The decree specifies provisions regulating financial expenses and determines that the fees charged by the lender for services when an account is opened for loan servicing, include account opening and servicing costs. In addition, the commission paid by a borrower to the credit intermediary is added to the list of financial expenses, and, if any, the lender must inform the borrower thereon. The decree also includes the effective interest rate calculation formula. In addition, certain assumptions used to calculate the effective interest rate of a loan are clarified, and the following assumption is included: if there are different means of utilizing the amount with different limits, then it is allowed for the borrower to withdraw the loan amount in full at the first withdrawal opportunity, by observing the limits. The assumption for calculating the effective interest rate of a loan has it that the interest rate of the loan is constant and is equal to the initial interest rate of the loan, both in the case of using an indexed and a variable interest rate. The assumption of an upper limit for a loan is more specific for cases when such a limit is not indicated. The decree states that if different types of interest rates are used for different periods during the validity of the agreement, the effective interest rate is considered, assuming that the amount of the index and/or variable interest rate effective at the time of the conclusion of the agreement is unchanged during the validity of the agreement. The decree also introduces a change to facilitate better compliance with the requirements defined by the Civil Code of Georgia in relation to the interest rate. More precisely, the procedure for calculating the amount of the effective interest rate is set out in the decree (as it is in Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020 on approving Regulation on Lending to Individuals). In specified cases, when a loan is issued without analyzing the borrower's solvency the lender's loan application will be considered satisfied only by implementing appropriate measures (including through the sale and/or repossession of property) as provided by the legislation of Georgia.

Lending to Individuals

The development of Decree No. 31/04 of the Governor of the National Bank of Georgia of 25 March 2022, amending Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020, on approving Regulation on Lending to Individuals, resulted from the Financial Stability Committee of Georgia recalibrating certain requirements related to responsible lending in accordance with the recommendations made by the Financial Sector Assessment Program (FSAP). The initial assessment of the limits of the loan service threshold was based on the statistical data from 2017, but, since then, a number of nominal economic indicators have increased significantly. To compensate for this, according to the decision of the Financial Stability Committee, the monthly net income limit corresponding to the PTI ratio has been increased from GEL 1,000 to GEL 1,500. To calculate the PTI ratio, the decree calculates the monthly payment on indexed interest rate loans at the rate of the indexed interest rate +3%. Most mortgage loans assume an indexed interest rate, which is accompanied by interest rate risk – and the latter becomes particularly significant considering the potential increase in USD and EUR interest rates on global markets. In response to this risk, and to have the necessary buffers in place, lending entities should consider a 3 pp interest rate shock when assessing a borrower's solvency when issuing loans with indexed interest rates. The requirements determined by the decree should be met by the loan service ratio recalculated to consider the aforementioned shock. These changes are in line with the FSAP's recommendations and act to preserve the ability of individual borrowers to absorb shocks and to support financial stability. The decree exempts secured consumer loans with maturities of up to 4 years from the loan-to-value ratio (LTV) requirement. Considering that it is possible to provide unsecured

consumer loans with a maturity of up to 4 years, it is acceptable that there is no LTV requirement for loans secured by real estate of the same maturity and it is possible to issue partially secured loans.

Decree No. 96/04 of the Governor of the National Bank of Georgia dated 4 August 2022 on amending Decree No. 44/04 of the Governor of the National Bank of Georgia dated 13 March 2020, on approving Regulation on Lending to Individuals, reduces the maximum term of unsecured consumer loans from 4 to 3 years to reduce the pressure of an excess growth of consumer loans on inflation.

Regulation of the supervisory framework and resolution of commercial banks

Important innovations took place for regulating the activities of commercial banks in 2022.

Decree No. 104/04 of the Governor of the National Bank of Georgia dated 24 August, 2022, amending Decree No. 215/04 of the Governor of the National Bank of Georgia of 26 September 2018 on the Approval of the Code of Corporate Governance of Commercial Banks, promotes gender equality in the supervisory boards and directorates of commercial banks and increases gender quotas to ensure diversity. It establishes that, by no later than 1 June 2023, the share of the opposite (minority) sex in the supervisory boards of commercial banks should be at least 33%, and be at least 40% no later than 1 June 2025. In addition, a recommendation was added to the code regarding the composition of the directorates of commercial banks. It states that a share of at least 33% of the opposite (minority) sex is desirable in directorates. This change is aimed at increasing demand for gender diversity, incorporating latest international practices and trends, and improving the corporate culture in commercial banks. The increased quota for the composition of supervisory boards is in line with international trends and the requirements set by financial sector regulators.

An amendment was made to Decree No. 176/04 of the Governor of the National Bank of Georgia of 18 December 2017 on approving regulation on determining capital buffers for commercial banks within the framework of Pillar 2. This was necessary due to the need to change the methodology for calculating the buffer of unhedged currency credit risk, as decided by the Financial Stability Committee. The method of calculating the foreign exchange credit risk buffer (CICR) has become dependent on the level of dollarization of a commercial bank's loan portfolio in order to motivate banks to have their loan portfolios in GEL.

The National Bank of Georgia approved the regulation on classifying and reporting loans according to the sustainable finance taxonomy. The regulation introduces a classification system of loans according to the taxonomy of sustainable finance as developed by the National Bank of Georgia. Commercial banks are instructed to determine and categorize green loans according to the regulation on the sustainable finance taxonomy. Commercial banks must submit monthly statements of green loans to the National Bank of Georgia. They are also obliged to act in accordance with this regulation when defining green, social, and sustainable loans in the Environmental, Social and Governance (ESG) reporting and disclosure form submitted within the framework of Pillar 3 annual reporting. This ensures the availability of a common definition of green, social and sustainable loans in the financial sector and the collection of data on green loans.

An amendment was made to Decree No. 92/04 of the Governor of the National Bank of Georgia dated 22 June 2017 on the approval of the Regulation on Disclosure of Information by Commercial Banks within Pillar 3. With this change, banks disclosing their loans as green, social or sustainable are obliged to be guided by Decree No. 93/04 of the Governor of the National Bank of Georgia of 3 August 2022, on the Regulation on Classifying and Reporting Loans According to the Sustainable Finance Taxonomy, and Decree No. 242/01 of the Governor of the National Bank of Georgia of 25 December 2009, on Approval of the Regulation on Determining and Imposing Monetary Fines to Commercial Banks and Their Administrators. With the amendment, banks are subject to a monetary fine if they violate the regulation on classifying and reporting loans according to the sustainable finance taxonomy (as approved by Decree No. 93/04), fail to report to the National Bank of Georgia in the prescribed form and/or within the prescribed period, or are late in submitting monthly statements on green loans.

It is important to note the change made to Decree No. 228/04 of the Governor of the National Bank of Georgia of 21 November 2019, on the approval of the Regulation on the Concentration of Risk Exposures and Major Risks in Commercial Banks, which provides for the establishment of uniform principles for commercial banks, to guide them when counting related borrowers as a single group. A detailed instruction was developed following the

change that will help commercial banks to identify types of relationships between different borrowers, potentially resulting in a financial problem of one potentially having an adverse material impact on another. That kind of dependence arises from a control relationship between borrowers or economic interdependence between them. Interdependence between borrowers creates one overall risk for the bank; therefore, in order for a bank to have a correct view of such potential risks, it is necessary to record related borrowers as a single group. The principles of group formation have been developed based on best international practices and incorporate specific factors related to the local context. A standardized approach to this matter provides better management of concentration risk at the level of the banking system.

Based on the above, an amendment was also made to Decree No. 176/04 of the Governor of the National Bank of Georgia of 18 December 2017, regarding the regulation for determining capital buffers for commercial banks within the framework of Pillar 2, where direct reference was made regarding groups of interconnected borrowers (i.e. those stipulated under the regulation on concentration of risk exposures in commercial banks and large risks, as approved by Decree No. 228/0 4 of the Governor of the National Bank of Georgia of 21 November 2019), and the term defining a group of interconnected borrowers and relevant clauses derived from this definition were removed.

Amendments were made to Decree No. 56/04 of the Governor of the National Bank of Georgia dated 22 March 2019, on the approval of the Cyber Security Management Framework of Commercial Banks, in order for the NBG to improve the current standards and practices of the IT audit and cyber security management framework in commercial banks and bring them closer to best international practices. The Guidelines for the Audit of Information Systems and Cyber Security Management Framework in Commercial Banks were added as an appendix to the cyber security management framework, based on which commercial banks should conduct an annual independent audit of their information systems and cyber security management framework. The guidelines set out the requirements for the audit process of the information systems and cyber security management framework of commercial banks; for the audit report; and for the competence, impartiality, and operations of the team of auditors participating in the audit. To obtain fully-fledged, impartial, and reliable audit results, the purpose and scope of the audit were specified and requirements were developed for persons authorized to conduct audits, including the minimum competencies of the members of the audit team. The characteristics of the audit program, process, audit report, and assessment system were developed to ensure equal treatment and opportunities for all commercial banks.

To improve the operational and cyber risk management in commercial banks, to align these with the operational risk management framework (including the methodology of the Basel Committee on Banking Supervision), and to adopt best international practice, Decree No. 52/04 of the Governor of the National Bank of Georgia of 4 May 2022 approved the Regulation on Exchanging Information on Operational Risk Events. This decree serves to ensure the timely and centralized exchange of information about operational risk events between the National Bank of Georgia and commercial banks through the information sharing and analysis portal, which includes the NBG sharing local and international operational risk events with commercial banks, as well as the NBG preventing large operational risk events, including cyber-risks and systemic spillover risks.

Decree No. 89/04 of the Governor of the National Bank of Georgia of 22 July 2022, approved the Regulation on the Use of the XBRL Information System. The XBRL information system of the National Bank of Georgia was thereby put into operation for use by commercial banks to present required reports, information, and documentation. The collection and processing of information is of fundamental importance for the effective implementation of the functions and tasks of the National Bank of Georgia. The introduction of a common standard for data exchange is important for the collection of different forms of information, as it will significantly improve the quality of data and the supervisory reporting process. The XBRL information system supports Georgia's efforts to develop an effective supervisory reporting framework for Georgian financial institutions in compliance with the EU Capital Requirements Regulation.

In order to be in conformity with the requirements of the regulation on prudential requirements for credit institutions and investment firms (CRR - 575/2013), an amendment was made to Decree No. 100/04 of the Governor of the National Bank of Georgia of 28 October 2013, on approving Regulation on Capital Adequacy Requirements for Commercial Banks. As a result of the change, retail loans now include

those that can be repaid using life-long monetary payments, such as government pensions, government compensation, and any other payment issued by the Social Services Agency in agreement with the NBG. These loans, so long as they meet the criteria set out in the regulation, are subject to preferential risk weighting for the purposes of calculating capital adequacy ratios.

An amendment was made to Decree No. 7/04 of the Governor of the National Bank of Georgia dated 18 January 2019, on setting the procedure for commercial banks granting loans/bank credits of up to GEL 200,000. According to the amendment, calculation of the borrower's total obligations to the same lender no longer consider cash-secured liabilities. This change serves to prevent the practice of circumventing the regulations currently in force on the market.

In order to specify the terms of the reporting process, an amendment was made to Decree No. 92/04 of the Governor of the National Bank of Georgia dated 22 June 2017, on approval of the regulation on commercial bank disclosure of information within Pillar 3. The timeline defined by the regulation will now apply to both the publication of the statements and the filing of the statements to the National Bank of Georgia. This will give the National Bank of Georgia the opportunity to better control deadlines.

Decree No. 91/04 of the Governor of the National Bank of Georgia dated 26 July 2022 amended an earlier decree, No. 20/04 of the Governor of the National Bank of Georgia dated 17 February 2017, concerning the approval of the Procedure for Commercial Banks to Set Up Branches, Representative Offices and Other Similar Divisions. The amendment canceled the commercial banks' obligation to notify the NBG of a decision to set up a branch or other similar division in Georgia before its operation. The notification requirement is no longer active due to the fact that such information is already submitted to the National Bank of Georgia in the form of an appropriate report and there is no need to duplicate the same information in another form. However, the reporting obligations to the NBG provided for by this decree in relation to opening a branch or similar division outside of Georgia remain unchanged.

The development of Decree No. 46/04 of the Governor of the National Bank of Georgia of 2 May 2022 on amending Decree No. 151/04 of the Governor of the National Bank of Georgia dated 17 August 2020, on the approval of the Regulation of Risk Management of Data-based Statistical, Artificial Intelligence and Machine Learning Models, was prompted by the increased use of data-driven models in the decision-making process of the financial sector. Demand for the safe and ethical use of such models are increasing. Thus, based on the current practices, trends, challenges, and modern international supervisory experience in the financial sector of Georgia, as well as on the opinions of representatives of the sector, it was considered appropriate to implement changes. In accordance with the decree, changes were made in three main areas: firstly, in order to observe ethical principles when using a model, an appropriate framework was developed that defined those principles to be considered in the process of development, implementation, and use of a model and ways to mitigate possible unethical use. The change also affected the development of a methodology for ranking/grouping models according to risk when using a risk-based approach. In addition, an obligation was established to ensure the robustness and interpretability of a model by means of a statistical method used by the entities using the model.

Decree No. 192/04 of the Governor of the National Bank of Georgia of 29 December 2022, on the approval of the Regulation on Determining the Risk Categories of Financial Instruments and the Expected Credit Loss, was published to approximate the supervisory strategy of the National Bank of Georgia for 2020-2022 to international standards, to the principles of accounting and financial reporting for supervisory purposes, and to ensure compliance with International Financial Reporting Standards (IFRS). The decree ensures comparability of the approaches used by commercial banks for calculating expected credit losses on financial instruments and aims to facilitate the financial reporting process. The decree establishes three levels of credit risk categories for financial instruments and mandatory criteria for determining the corresponding categories. Commercial banks must ensure compliance with the contamination principle provided by the decree. In the case of borrowers in retail and micro portfolios, this implies a significant increase/impairment of the credit risk on one financial instrument leading to a significant increase/impairment of the credit risk of the other financial instruments of the same borrower. The order also defines the factors to be considered in the collective assessment of expected credit losses. So long as a failure to meet any of the requirements stipulated by the decree does not lead to a violation of IFRS requirements, commercial banks have the right

to calculate the expected credit loss for the purposes of audited financial statements using a method different from that stipulated in the decree. In this case, commercial banks are obliged to disclose the effect on capital adequacy of the difference between the decree and the provisioning approach developed for financial reporting purposes. Also, commercial banks have the opportunity to use methods different from the decree for supervisory purposes, subject to the substantiation of said methods and agreement obtained with the National Bank of Georgia.

Based on the above decree, to ensure compliance with changes caused by the transition to International Financial Reporting Standards (IFRS), including those related to terminology, the following legal acts were published:

- ✓ Decree No. 193/04 of the Governor of the National Bank of Georgia of 29 December 2022, amending Decree No. 44/04 of the Governor of the National Bank of Georgia of 13 March 2020 on the approval of the Regulation on Lending to Individuals.
- ✓ Decree No. 194/04 of the Governor of the National Bank of Georgia dated 29 December 2022, regarding the amendment to Decree No. 26/04 of the Governor of the National Bank of Georgia of 10 March 2015 on approval of the Regulation on Managing Conflict of Interest.
- ✓ Decree No. 195/04 of the Governor of the National Bank of Georgia dated 29 December 2022, amending Decree No. 100/04 of the Governor of the National Bank of Georgia dated 28 October 2013 on the approval of the Regulation on Capital Adequacy Requirements of Commercial Banks.
- ✓ Decree No. 196/04 of the Governor of the National Bank of Georgia dated 29 December, amending Decree No. 92/04 of the Governor of the National Bank of Georgia dated 22 June 2017 on approval of the Regulation on Disclosure of Information by Commercial Banks within Pillar 3.
- ✓ Decree No. 197/04 of the Governor of the National Bank of Georgia of 29 December 2022, amending Decree No. 117/04 of the Governor of the National Bank of Georgia dated 10 August 2017 on approval of the Regulation on the Classification of Assets and the Setting Up and Use of Loan Loss Reserves.
- ✓ Decree No. 198/04 of the Governor of the National Bank of Georgia dated 29 December 2022, amending Decree No. 176/04 of the Governor of the National Bank of Georgia dated 18 December 2017 on approval of the Regulation on Determining Capital Buffers for Commercial Banks within the framework of Pillar 2.
- ✓ An amendment was made to Decree No. 129/04 of the Governor of the National Bank of Georgia of 29 June 2020 on the approval of the Regulation on Determining and Evaluating the Critical Functions of a Commercial Bank. With this amendment, wholesale funding was added to the list of critical functions, alongside a corresponding definition aligned to Annex No. 1 of the document, which was also amended.
- ✓ In order to align it with the recommendations of the Financial Sector Assessment Program (FSAP), an amendment was made to Decree No. 243/04 of the Governor of the National Bank of Georgia dated 29 December 2020 on the Appointment of a Special Administrator and Approval of the Rules of Operation. The amendment clearly defined that a special administrator must be an independent third party, a person, and in exceptional cases can be an employee of the NBG. The eligibility criteria for a special administrator were additionally clarified.

In order to ensure compliance with the respective technical standards/regulatory acts of the European Banking Authority (EBA), an amendment was introduced to Decree No. 131/04 of the Governor of the National Bank of Georgia dated 29 June 2020, on the approval of the Regulation on the Development and Evaluation of the Recovery Plan of a Commercial Bank. A clarification was added stating that, in such recovery plans, the indicator threshold should be set at a detachment from the minimum regulatory requirements. This will allow the managing body of a commercial bank to respond in time and to initiate appropriate actions effectively.

Regulation of the Credit Information Bureau

Decree No. 120/04 of the Governor of the National Bank of Georgia of 13 September 2022 on amendments to Decree No. 193/04 of the Governor of the National Bank of Georgia dated 27 August 2018, on the Approval of the Regulation on Registration, Deregistration and Regulation of the

Credit Information Bureau at the National Bank of Georgia, provides the possibility for the operation of the bureau in the form of a platform and identifies the principles for its registration and regulation by the National Bank of Georgia. The Credit Information Bureau platform only collects, processes and issues credit information about a person. Accordingly, one of the main features of the platform is that it will not store credit information, and lending institutions will not necessarily provide it with information. The platform is allowed, within its authority, to receive credit, non-credit information and/or other relevant data about a person (data subject) from the Credit Information Bureau, and to process and transfer such information to a third party. Based on the above, in accordance with the decree, simplified/ different registration requirements were defined for the platform. In addition, the requirements of Decree No. 195/04 of the Governor of the National Bank of Georgia dated 27 August 2018 – regarding the provision of information to the Credit Information Bureau in Georgia, registration of information in the database of the bureau, and approval of access rules – do not apply to the work of the platform. The National Bank of Georgia is authorized to request a review of products submitted by the platform based on the requirements as stipulated under Decree No. 110/04 of the Governor of the National Bank of Georgia of 25 May 2020, regarding the regulation on the creation and use of the regulatory sandbox framework of the National Bank of Georgia. If a product presented by the platform has not successfully passed the stages of testing defined by the regulation, the National Bank of Georgia has the right to cancel the registration of the platform. In addition, the decree includes the obligation to have at least one independent member in the supervisory board of the Credit Information Bureau, it defines the concept for such an independent member and regulates issues of conflict of interest.

Decree No. 195/04 of the Governor of the National Bank of Georgia of 27 August 2018, on approval of the regulation on the provision of information to the Credit Information Bureau in Georgia and approval of the procedure for recording and accessing information in the database of the Credit Information Bureau, was amended by Decree No. 121/04 of the Governor of the National Bank of Georgia on 13 September 2022. The amendment increases the limit of the total volume of initial amounts of underlying liabilities to be delivered to the Credit Information Bureau from GEL 3 million to GEL 10 million. Accordingly, lending institutions must provide the bureau with accurate and detailed information at their disposal about all loans, off-balance sheet liabilities (letters of credit, guarantees, etc.) whose amount of the initial sums of the current liabilities do not exceed GEL 10,000,000 at the exchange rate active at the time of issuance. The decree defines the minimum balance of unsanctioned liability, in the case of which lending institutions are entitled not to provide information to the Credit Information Bureau. This is set at the amount of GEL 100 or its equivalent in foreign currency (initial amount of liability). In addition, the requirements for electronic consent are specified. The amendment also specifies the obligation of the lending institution to provide information about cashed remittances to the Credit Information Bureau. The bureau is then obliged to reflect information about cashed remittances in a report that is independent of credit or other types of accounts and to which only lending entities will have access, subject to client consent. In accordance with the decree, information was added/specified in the list of mandatory information to be provided to the Credit Information Bureau to help lending institutions to obtain complete information when granting loans. The decree also provides clarification on a number of issues identified in practice and upgrades various regulations, including those related to access to information in databases by the staff of the Credit Information Bureau. Certain issues related consumer complaint investigations have also been made more specific.

In November 2022, another change was made to Decree No. 195/04 of the Governor of the National Bank of Georgia dated 27 August 2018 on the Provision of Information to the Credit Information Bureau in Georgia, the Registration of Information in the database of the Credit Information Bureau, and the Approval of the Rule of Access. The change authorizes the Credit Information Bureau to act as an intermediary between government agencies and lending entities to share information needed to analyze solvency. In accordance with the law and the agreement, this may include information obtained from the unified database of socially vulnerable families administered by the Social Service Agency. The purpose of the change is to specify the rights of the Credit Information Bureau in terms of receiving and sharing such information, which will help lending entities in performing solvency analysis. A further goal of the change is to promote observance of the principles of the responsible lending framework, as established by the National Bank of Georgia's regulations on lending to individuals, and to give

lending institutions the opportunity to make more informed decisions in the lending process. The change allows the Credit Information Bureau to be a channel for information that can help lenders steer consumers away from over-indebtedness.

Submission of reports to the National Bank of Georgia

To ensure that individual reports submitted to the National Bank of Georgia, which are currently sent via e-mail, are instead submitted through the NBFI remote supervision portal, an amendment was made to Decree No. 69/04 of the Governor of the National Bank of Georgia, dated 13 April 2020, on approval of the Regulation on Using the NBFI Remote Supervision Portal, and to Decree No. 37/04 of the Governor of the National Bank of Georgia of 28 February 2018, on approval of the Regulation on Registration and Regulation of Currency Exchange Bureaus. As a result of these changes, lending entities and microfinance organizations will perform their reporting in accordance with the Regulation on the Protection of Consumer Rights in the Provision of Services by Financial Institutions (Decree No. 32/04 of the Governor of the National Bank of Georgia of 9 March 2021). Currency exchange bureaus will submit their consolidated quarterly reports as provided for by Decree No. 37/04 of the Governor of the National Bank of Georgia, dated 28 February 2018, on approval of the Regulation on Registration and Regulation of Currency Exchange Bureaus. These reports will be submitted electronically through the NBFI remote supervision portal. An amendment was also introduced to Decree No. 32/04 of the Governor of the National Bank of Georgia, dated 9 March 2021, on the approval of the Regulation the Protection of Consumer Rights in the Provision of Services by Financial Institutions. The change includes the uploading of monthly claims reports by lending entities and microfinance organizations through the NBFI remote supervision portal. This will allow organizations to avoid technical errors and help the National Bank of Georgia undertake quick and quality monitoring.

Methodology for calculating the value of pension assets

In accordance with Paragraph 4 of Article 25 of the Law of Georgia on Accumulated Pensions and Paragraph 2 of Article 1 and Paragraph 1 of Article 5 of Decree No. 258/04 of the Governor of the National Bank of Georgia of 30 November 2018, on approving the Regulation on Requirements on the Methodology for Calculating the Minimum Credit Rating of the Investment Financial Instruments of the Cumulative Pension Scheme and the Value of the Assets of the Cumulative Pension Scheme, Decree No. 22/04 of the Governor of the National Bank of Georgia of 11 March 2022 approved the methodology for defining general principles for calculating and evaluating the value of pension assets. More specifically, the valuation approaches for all asset classes (term deposits, certificates of deposit, current accounts, investment funds, etc.) are described, along with the approach of the Pension Agency for valuing assets with/without an active market and how assets are valued using data not identifiable in the market. It also specifies how the net value of pension assets is calculated and describes the approach to errors made in the assessment.

Facilitating the prevention of money laundering and terrorism financing

In 2022, the legal framework was also improved in terms of tackling money laundering. Decree No. 8/04 of the Governor of the National Bank of Georgia of 22 January 2015, which was amended by Decree No. 62/04 of the Governor of the National Bank of Georgia, dated 13 June 2022, on approval for the Procedure for the Execution of the Payment, ensures compliance with the Law of Georgia on Facilitating the Prevention of Money Laundering and Financing of Terrorism. This establishes the obligation to use enhanced preventive measures against a client belonging to a high-risk level category. According to the same law, an obliged entity is authorized to implement simplified preventive measures against a client belonging to a low-risk level, including reducing the frequency and volume of studying transactions when monitoring business relations within reasonable monetary limits. The document states that a commercial bank's request for additional copies of documents confirming the basis of a transfer will depend on the monetary limit determined in accordance with the client's risk level, which is in line with the requirements established by the Law of Georgia on Facilitating the Prevention of Money Laundering and Financing of Terrorism.

In February 2022, a series of sanctions were imposed on the Russian Federation and the Republic of Belarus by the United States, the United Kingdom, and the European Union. In order to ensure the compliance of the financial sector of Georgia with these international financial sanctions, on 26 February 2022 representatives of the financial sector operating

in Georgia were instructed by the NBG to comply with the requirements of those sanctions and to ensure the introduction/development of effective internal control mechanisms in this area. To ensure proper implementation of the instructions of the National Bank of Georgia and compliance with the sanctions, changes were made to a number of legal acts. These amendments also set out a legal basis for imposing fines on the financial sector – including commercial banks, microfinance organizations, payment service providers, currency exchange bureaus, lending entities, brokerages, and securities registrars – for violation of these requirements.

An important innovation in countering money laundering is the regulation on determining, imposing, and enforcing the amount of monetary fines issued against investment funds and members of their governing bodies for violations of Georgian legislation. The purpose of this regulation is to ensure the effective supervision of investment funds and the determination of monetary fines, through imposition and enforcement, in the event that the NBG finds that an investment fund has violated the anti-money laundering legislation and/or other requirements determined by the NBG and the Financial Monitoring Service of Georgia.

An amendment was also made to Decree No. 48/04 of the Governor of the National Bank of Georgia, dated 30 March 2021, on approval of the Regulation on the Electronic Implementation of Preventive Measures by an Obliged Entity. This amendment serves to improve the process in terms of electronic identification/verification.

Response to the detection of counterfeit money in Georgia

Taking into account the cooperation with law enforcement bodies, as well as the experience of central banks of other countries, the National Bank of Georgia approved a regulation on responses to the detection of counterfeit money in Georgia. The development of the project was conditioned by Article 39, Paragraph 3 of the Organic Law of Georgia on the National Bank of Georgia, which states that the NBG Board is responsible for establishing the procedure for responding to counterfeit money being revealed on the territory of Georgia.

The regulation aims to involve not only the financial sector, but also non-financial sector entities that carry out operations related to cash. The regulation acts to encourage an immediate response to the detection of each unit of counterfeit and/or suspicious cash whenever these are reported by financial and non-financial sector players. By removing them from circulation and informing the appropriate authorities in a timely fashion, the spread of counterfeit money in Georgia should be substantially limited. The regulation describes in detail the rights and responsibilities of persons upon the detection of counterfeit or suspicious money, outlines the NBG treatment towards counterfeit money so detected, as well as terms of cooperation between the NBG and law enforcement authorities.

The unified financial and statistical information system of the National Bank of Georgia

A change was made in the Decree of the Governor of the National Bank of Georgia on the use of NBGStat, the unified financial and statistical information system of the National Bank of Georgia. This amendment relates to the expansion of the statistical information system of the National Bank of Georgia and introduces another statistical data family for NBGStat – statistics of unauthorized operations/incidents performed with a card instrument, card device and other remote channels. This change significantly expands the statistical database at the disposal of the NBG.

Confidentiality Policy

Considering the growing public interest in banking data, and based on the goal of promoting trust and stability in the financial sector, an amendment was made to Resolution No. 4 of the Board of the National Bank of Georgia of 1 November 2021 on Considering Information as Confidential, the Manner of its Sharing, and Approval of the List of Confidential Information. As part of this amendment, the main financial indicators provided to the National Bank of Georgia each month by commercial banks were made public, including those gathered in the monthly financial statements compiled by the banks (such as balance sheets, profit-and-loss, and key indicators).

STATISTICAL ACTIVITY 16

The statistical activity of the National Bank of Georgia over the course of 2022, similar to previous years, was distinguished by several ongoing projects concerning monetary and financial statistics and their alignment with trends introduced by advanced international statistical organizations. In addition, some projects that had been initiated in previous years were successfully completed and work was planned for the expansion of databases and the collection of more detailed data.

The National Bank of Georgia continues to take care of the quality and reliability of the data collected in the SebStat system, which obtains, processes, stores and distributes financial and statistical data. A plan to set up a unified database of active legal entities registered in Georgia was first developed toward the end of 2021. This database sorts legal entities registered in Georgia by categories, such as institutional sector, type of economic activity, residency, and size – such categories have been established in accordance with international standards. This project used the data available in the SebStat system, the data provided by the Georgian Statistics Service, the Ministry of Finance of Georgia and other government agencies. The attendant Regulation on Defining and Assigning Characteristics to Legal Entities was developed based on the financial and monetary statistics methodology of the International Monetary Fund. In August 2022, the preparations for the unified database were successfully completed, and it is now edited and updated on a monthly basis. With the operation of the new system, institutional sectors were given more clarity and, as a result of the updated methodological approach, the quality of the collected data was significantly improved in the context of the business loans. Volumes of business loans were reclassified according to the updated size categories of legal entities.

In 2022, the National Bank of Georgia successfully moved to the second edition of the classification of types of economic activity (NACE Rev.2), as developed by the European Union to increase the level of compatibility and harmonization of official statistics produced in different countries. The updated edition of the classifier is more detailed and better adapted to current processes in the economy so as to reflect new and ongoing economic activities. This change allowed more accurate collection of data in terms of economic activity and better analysis of the processes related to it.

The National Bank of Georgia takes care to produce reports tailored to the interests of customers. The Money Transfer report is important in this regard and is published on the NBG website in both the form of a table and as an interactive dashboard. Later in 2022 was planned to expand the relevant data family in order to improve the detailed analysis and forecasting of money transfer flows. Daily statistical data from commercial banks and other financial organizations will be collected every month. In addition, aggregated data about the parties participating in a transaction will be available. It will be possible to group the data both by age groups and by the municipalities where the money transfer was cashed. Within the framework of the project, working meetings were held with representatives of commercial banks and microfinance institutions and a further action plan was developed. It is planned to modernize the current data structure on money transfers and maintain the technical infrastructure. Overall, the expansion of the money transfers data family is an important step in analyzing and making decisions about the origin and destination of money transfers, the currencies, and the parties involved in the transaction.

Along with the expansion of the money transfers' data family, another important project was planned, which involves the expansion of the data family of operations performed in foreign currency. Complete information related to foreign currency transactions by commercial banks will be collected. More specifically, the existing database will be completed with the addition of detailed daily data on forwards, swaps, and spot operations. To set up a unified database, the Macroeconomics and Statistics Department worked with the Financial Markets Department to plan joint work with the commercial banks that carry out these transactions. Several meetings were held where the data structure was introduced to the commercial banks and working groups were formed. The database provides a complete understanding of foreign currency

operations in the country's financial markets. Financial institutions and academics interested in collecting and analyzing this data will be able to gain insight into the trends, risks, and opportunities related to foreign exchange transactions. This information can be used to make informed decisions about monetary policy and financial sector regulation and risk management.

In 2022, the migration of the Financial Stability Indicators (FSI) tables, which was initiated by the International Monetary Fund's Statistics Department, was completed. The migration process, which entailed methodological changes and modifications of current tables, was done in the shortest possible time. The existing 2006 methodology was replaced by the latest 2019 methodology generated by the International Monetary Fund. In the process of data migration, the methodology for calculating indicators of the financial stability of the deposit-taking sector was fundamentally revised, and additional data were collected to calculate new indicators. As a result of this work, FSI indicators of the deposit-taking sector were completely updated. Starting from February 2022, monthly data have been submitted to the International Monetary Fund. The work to calculate the FSI indicators of representatives of other sub-sectors of the financial sector is still ongoing.

Later in 2022, the NBG updated the outdated version of the Tableau BI data visualization and analysis platform. Many new features were added to the updated version, which is expected to significantly improve reporting and server management functions. It is already possible to process the data using Python, R and other analytical tools. The improved performance of the interactive dashboard is available to accelerate large-volume reports. Updating the Tableau BI platform is an important step in realizing the set goals and managing the business process productively. The technical infrastructure equipped with applications for machine learning was also improved. Based on this tool, the NBG plans to develop algorithms and models that will be used to quickly and efficiently process large volumes of data. It is expected that these will simplify data verification and forecasting, allowing informed decisions and the implementation of strategic actions based on accurate and reliable data.

Based on the interests of a wide range of users of the interactive statistics section of the NBG website, the interactive reporting of official exchange rates was generalized by adding nominal and real effective exchange rate indices. This report was undergoing testing during 2022 and it is planned to be published on the website in the next year. Different reports generated for publication on the website will be made available to users in the second quarter of 2023. Using the so-called ETL mechanism tool for data processing and transformation, the reports published on the website in tabular format were transformed into the format of the Tableau BI platform and parts of them were published on the website. This work continues and it is planned to completely replace the reports in tabular format using the Tableau BI platform. The advantage of this approach lies in the minimization of the human factor and attendant risks when preparing scheduled reports. It is possible to filter the data using links and to extract the data from the interactive statistics portal sorted as desired. The National Bank of Georgia remains committed to finding and implementing innovative and modern practices in its statistical activity.

FINANCIAL STATEMENTS 17

NATIONAL BANK OF GEORGIA

Financial Statements

For the Year Ended

31 December 2022

NATIONAL BANK OF GEORGIA

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NATIONAL BANK OF GEORGIA

**STATEMENT OF MANAGEMENT RESPOSIBILITIES
FOR THE PREPARATION AND APPROVAL OF THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2022**

Management is responsible for the preparation of the financial statements that present fairly the financial position of the National Bank of Georgia (the "Bank") at 31 December 2022, the results of its operations, cash flows and changes in equity for the year then ended, in accordance with International Financial Reporting Standards ("IFRS").

In preparing the financial statements, management is responsible for:

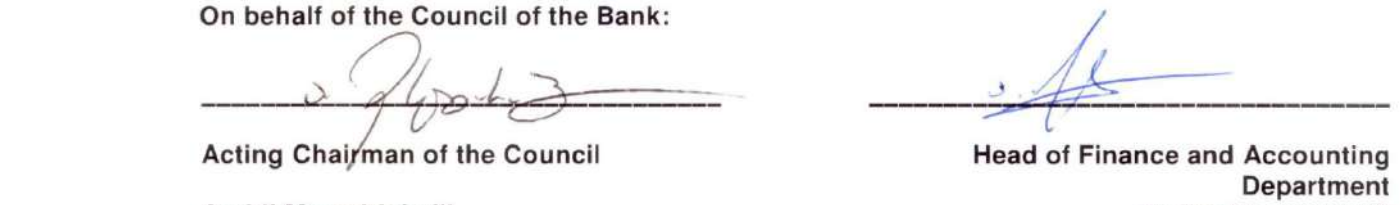
- Properly selecting and applying accounting policies;
- Presenting information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- Providing additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Bank's financial position and financial performance; and
- Making an assessment of the Bank's ability to continue as a going concern.

Management is also responsible for:

- Designing, implementing and maintaining an effective and sound system of internal controls, throughout the Bank;
- Maintaining adequate accounting records that are sufficient to show and explain the Bank's transactions and disclose with reasonable accuracy at any time the financial position of the Bank, and which enable them to ensure that the financial statements of the Bank comply with IFRS;
- Maintaining statutory accounting records in compliance with legislation and accounting standards adopted in Georgia which are IFRS;
- Taking such steps that are reasonably available to them to safeguard the assets of the Bank; and
- Preventing and detecting fraud and other irregularities.

The financial statements for the year ended 31 December 2022 were authorized for issue on 21 April 2023 by the Council of the Bank.

On behalf of the Council of the Bank:



Acting Chairman of the Council
Archil Mestvirishvili

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Andria Manelashvili

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Independent Auditors' Report

To the Council of the National Bank of Georgia

Opinion

We have audited the financial statements of the National Bank of Georgia (the "Bank"), which comprise the statement of financial position as at 31 December 2022, the statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Bank as at 31 December 2022, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Bank in accordance with the International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) *(IESBA Code)* together with the ethical requirements that are relevant to our audit of the financial statements in Georgia, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and our auditors' report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Bank's ability

KPMG Georgia LLC, a company incorporated under the Laws of Georgia and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Bank's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner on the audit resulting in this independent auditors' report is:

Vakhtang Kezheradze

KPMG Georgia
Georgia, Tbilisi
21 April 2023

NATIONAL BANK OF GEORGIA
STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2022
(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-22	Year ended 31-Dec-21
Interest income from international reserves			
Cash and cash equivalents		20,413	1,014
Investments measured at fair value through other comprehensive income ("FVOCI")		105,079	65,088
Other		15,305	535
		140,797	**66,637**
Interest income from monetary policy operations			
Due from resident financial institutions		356,846	275,850
Investments measured at fair value through other comprehensive income		157,006	110,004
Negative interest on financial liabilities		5,209	17,478
		519,061	**403,332**
Other interest income			
Investments measured at amortised cost		11,844	13,906
Negative interest on financial liabilities		110	300
Other		3	20
		11,957	**14,226**
Total interest income calculated using the effective interest rate method		**671,815**	**484,195**
Interest expense from monetary policy operations			
Debt securities issued		(6,628)	(5,639)
Due to resident financial institutions		(74,318)	(53,026)
		(80,946)	**(58,665)**
Other interest expenses			
Due to the International Monetary Fund		(46,347)	(19,857)
Due to customers		(562)	-
Interest expense on lease liabilities		(117)	(58)
Negative interest on financial assets (International reserves)		(1,204)	(4,240)
		(48,230)	**(24,155)**
Total interest expense		**(129,176)**	**(82,820)**
NET INTEREST INCOME		**542,639**	**401,375**
Impairment (charge)/recovery	28	(8)	202
NET INTEREST INCOME AFTER IMPAIRMENT PROVISION		**542,631**	**401,577**
Net gains/(losses) from foreign currencies:			
Translation losses		(475,157)	(259,086)
Dealing gains		147,720	68,336
Fee and commission income	4	4,981	3,439
Fee and commission expense	4	(3,717)	(3,067)
Net realized (losses)/gains on instruments measured at fair value through other comprehensive income		(24,490)	7,607
Net realized gains on financial instruments measured at fair value through profit or loss		47,698	13,694
Net unrealised gains on financial instruments measured at fair value through profit or loss		34,647	14,036
Other income	5	3,452	6,317
NON-INTEREST EXPENSE, NET		**(264,866)**	**(148,724)**

The statement of profit or loss and other comprehensive income is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2022 (CONTINUED)

(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-22	Year ended 31-Dec-21
Personnel expenses	6	(32,955)	(31,155)
General and administrative expenses	6	(13,269)	(12,580)
Money printing expenses		(12,076)	(25,128)
Depreciation and amortization	6	(8,210)	(7,657)
Other expenses	5	(4,176)	(5,004)
NON-INTEREST EXPENSES		**(70,686)**	**(81,524)**
PROFIT FOR THE YEAR		**207,079**	**171,329**
Other comprehensive income			
Items that are or may be reclassified subsequently to profit or loss:			
Net unrealized losses on revaluation of investments measured at fair value through other comprehensive income		(156,546)	(117,890)
Net realized loss on investments measured at fair value through other comprehensive income reclassified to profit or loss		24,490	(7,607)
Total other comprehensive loss		**(132,056)**	**(125,497)**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**75,023**	**45,832**

The financial statements as set out on pages 12 to 53 were approved by management on 21 April 2023 and were signed on behalf of the Council of the Bank by:

Acting Chairman of the Council
Archil Mestvirishvili

Head of Finance and Accounting Department
Andria Manelashvili

The statement of profit or loss and other comprehensive income is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 2022
(in thousands of Georgian Lari)

	Notes	31-Dec-22	31-Dec-21
ASSETS:			
Foreign currency assets			
International reserves			
Cash and cash equivalents	7	3,867,452	3,623,929
Special Drawing Rights holdings with the International Monetary Fund	9	1,249,154	1,506,927
Assets related to derivative instruments	10	45,653	14,235
Investments measured at fair value through profit or loss	11	272,372	329,975
Investments measured at fair value through other comprehensive income	12	7,809,221	7,759,488
Other foreign currency assets			
Other assets	17	657	8
		13,244,509	**13,234,562**
National currency assets			
Monetary policy instruments			
Due from resident financial institutions	8	3,456,584	3,147,015
Assets related to derivative instruments	10	734	3,864
Investments measured at fair value through other comprehensive income	12	2,272,589	1,649,777
Other national currency assets			
Investments measured at amortised cost	13	121,390	161,461
Right-of-use assets	14	1,537	387
Property and equipment	15	54,127	57,297
Intangible assets	16	5,312	5,446
Other assets	17	4,744	4,586
		5,917,017	**5,029,833**
TOTAL ASSETS		**19,161,526**	**18,264,395**

The statement of financial position is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 2022 (CONTINUED)
(in thousands of Georgian Lari)

	Notes	31-Dec-22	31-Dec-21
LIABILITIES AND EQUITY:			
LIABILITIES:			
Foreign currency liabilities			
Monetary policy instruments			
Due to resident financial institutions	18	5,499,478	5,120,817
Other foreign currency liabilities			
Due to resident financial institutions	18	217,265	224,018
Due to the Ministry of Finance of Georgia	19	623,860	788,312
Due to the International Monetary Fund	9	2,408,008	2,945,597
Other liabilities	17	8,621	3,485
		8,757,232	**9,082,229**
National currency liabilities			
Money issued in circulation	21	5,040,547	4,589,034
Monetary policy instruments			
Debt securities issued	22	59,135	59,124
Due to resident financial institutions	18	1,225,303	444,053
Liabilities related to derivative instruments	10	1,649	-
Other national currency liabilities			
Due to the Ministry of Finance of Georgia	19	1,155,878	894,785
Due to customers	20	7,187	605
Due to the International Monetary Fund	9	2,175	2,620
Other liabilities	17	475,183	366,951
		7,967,057	**6,357,172**
TOTAL LIABILITIES		**16,724,289**	**15,439,401**
EQUITY:			
Capital	23	15,000	15,000
Reserve fund	23	939,559	754,750
Foreign currency revaluation reserve	23	1,620,491	2,095,648
Other revaluation reserve	23	48,683	14,036
Revaluation reserve of investments measured at fair value through other comprehensive income	23	(186,496)	(54,440)
Retained earnings	23	-	-
TOTAL EQUITY		**2,437,237**	**2,824,994**
TOTAL LIABILITIES AND EQUITY		**19,161,526**	**18,264,395**

The financial statements as set out on pages 12 to 53 were approved by management on 21 April 2023 and were signed on behalf of the Council of the Bank by:

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Andria Manelashvili

The statement of financial position is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2022
(in thousands of Georgian Lari)

	Capital	Reserve fund	Foreign currency revaluation reserve	Other revaluation reserve	Revaluation reserve of investments measured at FVOCI	Retained earnings	Total equity
1-Jan-21	**15,000**	**475,292**	**2,354,734**	**-**	**71,057**	**359,139**	**3,275,222**
Total comprehensive income							
Profit for the year	-	-	-	-	-	171,329	171,329
Other comprehensive income							
Items that are or may be reclassified subsequently to profit or loss:	-						
Net unrealized losses on revaluation of investments measured at fair value through other comprehensive income during the year	-				(117,890)		(117,890)
Net realized losses on investments measured at fair value through other comprehensive income reclassified to profit or loss	-				(7,607)		(7,607)
Total other comprehensive loss	-				(125,497)		(125,497)
Total comprehensive income for the year	**-**	**-**	**-**	**-**	**(125,497)**	**171,329**	**45,832**
Transactions recorded directly in equity	-						
Transfer to the Ministry of Finance from 2020 profit under the Law* (Note 23)	-	-	-	-	-	(140,000)	(140,000)
Distribution to the Ministry of Finance from 2021 profit under the Law* (Note 23)						(356,060)	(356,060)
Transfer to reserve fund from 2020 profit under the Law* (Note 23)		219,139				(219,139)	-
Transfer to reserve fund from 2021 profit under the Law* (Note 23)		60,319				(60,319)	-
Transfer from foreign currency revaluation reserve under the Law* (Note 23)	-	-	(259,086)	-	-	259,086	-
Transfer to other revaluation reserve under the Law* (ηote 23)	-	-	-	14,036	-	(14,036)	-
Total transactions recorded directly in equity	**-**	**279,458**	**(259,086)**	**14,036**	**-**	**(530,468)**	**(496,060)**
31-Dec-21	**15,000**	**754,750**	**2,095,648**	**14,036**	**(54,440)**	**-**	**2,824,994**
Total comprehensive income							
Profit for the year	-	-	-	-	-	207,079	207,079
Other comprehensive income							
Items that are or may be reclassified subsequently to profit or loss:							
Net unrealized losses on revaluation of investments measured at fair value through other comprehensive income during the year					(156,546)	-	(156,546)
Net realized losses on investments measured at fair value through other comprehensive income reclassified to profit or loss					24,490	-	24,490
Total other comprehensive loss					(132,056)	-	(132,056)
Total comprehensive income for the year					**(132,056)**	**207,079**	**75,023**
Transactions recorded directly in equity							
Transfer to the Ministry of Finance (Note 23) from 2022 profit under the Law*						(462,780)	(462,780)
Transfer to reserve fund (Note 23) from 2022 profit under the Law*		184,809				(184,809)	-
Transfer from foreign currency revaluation reserve under the Law* (Note 23)			(475,157)			475,157	-
Transfer to other revaluation reserve under the Law* (ηote 23)				34,647		(34,647)	-
Total transactions recorded directly in equity	**-**	**184,809**	**(475,157)**	**34,647**	**-**	**(207,079)**	**(462,780)**
31-Dec-22	**15,000**	**939,559**	**1,620,491**	**48,683**	**(186,496)**	**-**	**2,437,237**

*** Organic Law of Georgia on the National Bank of Georgia**

The financial statements as set out on pages 12 to 53 were approved by management on 21 April 2023 and were signed on behalf of the Council of the Bank by:

Acting Chairman of the Council
Archil Mestvirishvili

Head of Finance and Accounting Department
Andria Manelashvili

The statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 DECEMBER 2022
(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-2022	Year ended 31-Dec-2021
CASH FLOWS FROM OPERATING ACTIVITIES:			
Interest received		663,498	565,337
Interest paid		(118,239)	(81,854)
Fees and commissions received		4,981	3,439
Fees and commissions paid		(3,717)	(3,067)
Net realized gains on financial instruments at fair value through profit or loss		47,698	13,694
Net realized gains from dealing in foreign currencies		147,720	68,336
Other income received		3,442	4,080
Personnel expenses paid		(32,955)	(31,155)
Cash paid for printing money		(9,633)	(25,128)
Other general and administrative expenses paid		(14,083)	(12,803)
Net cash inflow from operating activities before changes in operating assets and liabilities		**688,712**	**500,879**
Net (increase)/decrease in operating assets:			
Due from resident financial institutions		(308,699)	68,929
Special Drawing Rights holdings with the International Monetary Fund		(4,421)	(883,497)
Assets related to derivative instruments		1,644	10,698
Investments measured at fair value through profit or loss		(7,727)	(174,052)
Other assets		(348)	7,523
Net increase/(decrease) in operating liabilities:			
Money issued in circulation		451,513	(72,394)
Due to resident financial institutions		1,903,599	95,462
Due to the Ministry of Finance of Georgia		200,721	316,291
Due to customers		6,582	(790)
Liabilities related to derivative instruments		1,649	-
Other liabilities		1,945	(469)
Net cash inflow/(outflow) from operating activities		**2,935,170**	**(131,420)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment		(3,617)	(7,208)
Purchase of intangible assets		(1,884)	(2,557)
Purchase of investments measured at fair value through other comprehensive income		(13,267,050)	(13,220,941)
Proceeds from redemption and sale of investments measured at fair value through other comprehensive income		11,485,798	12,630,788
Net cash used in investing activities		**(1,786,753)**	**(599,918)**
CASH FLOWS FROM FINANCING ACTIVITIES:			
Transfer to the Ministry of Finance of Georgia	23	(356,060)	(140,000)
Debt securities issued		253,383	254,212
Debt securities redeemed		(253,968)	(254,912)
Proceeds from the International Monetary Fund	9, 27	-	1,273,308
Repayments to the International Monetary Fund		(46,991)	(10,962)
Net cash (used in)/from financing activities		**(403,636)**	**1,121,646**
Effect of exchange rates changes on cash and cash equivalents		(501,258)	(368,866)
Net increase in cash and cash equivalents		243,523	21,442
CASH AND CASH EQUIVALENTS, at the beginning of the year	7	**3,623,929**	**3,602,487**
CASH AND CASH EQUIVALENTS, at the end of the year	7	**3,867,452**	**3,623,929**

The financial statements as set out on pages 12 to 53 were approved by management on 21 April 2023 and were signed on behalf of the Council of the Bank by:

Acting Chairman of the Council
Archil Mestvirishvili

Head of Finance and Accounting Department
Andria Manelashvili

The statement of cash flows is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS
AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022
(in thousands of Georgian Lari)

1. ORGANIZATION

The National Bank of Georgia (the "Bank") is the central bank of Georgia and the banker and fiscal agent of the Government of Georgia. The Bank was founded on 2 August 1991 based on the law of Republic of Georgia "On the National Bank of Republic of Georgia". Currently the Bank acts in accordance with the Organic Law of Georgia "On the National Bank of Georgia" enacted effective from 1 December 2009 (the "Law").

The responsibilities of the Bank focus on the goals of price stability, financial system stability and efficiency, national currency issuance, and efficient management of international reserves. These responsibilities are carried out as part of the broad functions described below.

Monetary policy

The main objective of the monetary policy of the Bank is to maintain price stability. Price stability implies the existence of a moderate and predictable rate of inflation, which is a necessary precondition for long run economic growth. Furthermore, the Bank supports financial system stability and promotes the country's economic growth as long as the latter objectives do not contradict its main goal – maintaining price stability. Monetary and exchange rate policies serve the objective of preserving the purchasing power of the national currency, raising the growth potential of gross domestic product, and improving the investment climate.

Supervision and financial stability

The main objective of the Bank is to ensure the stability and efficiency of Georgia's financial system. In achieving those objectives, the Bank is responsible for the supervision and regulation of separate participants on the financial market – commercial banks, banking groups, non-bank depository institutions, micro-finance organisations, independent securities registrars, brokerage companies (except for insurance brokerage companies), the stock exchange, central depository, specialised depository, asset management companies, publicly accountable enterprises, foreign currency exchange offices, investment funds, payment system operators, payment service providers, credit information bureaus, loan issuing institutions, virtual asset service providers and the Pension Agency of Georgia (with respect to its investment activities).

Within the relevant regulatory framework, the National Bank of Georgia supports the protection of consumer and investor rights. Moreover, the Bank, with the involvement of different stakeholders from the Government institutions, the private financial sector, and civil society has developed the National Strategy of Financial Education as a complement to financial consumer protection and inclusion efforts, with a view to supporting financial stability and financial well-being of individuals.

Currency issuance

The Bank is the only body in the country authorized to issue Georgian Lari banknotes and coins on the territory of Georgia. The Bank determines the design, composition and other features of the Georgian Lari banknotes and coins, printed and minted by leading international suppliers.

International reserve management

The Bank maintains a portfolio of foreign currency reserves for policy and operational purposes, for instance to protect the country from external vulnerability by maintaining sufficient liquidity to absorb shocks during a financial crisis and to support day-to-day foreign currency payment needs of the Georgian Government and those of the Bank.

Payment systems

The Bank operates the largest payment system in the country – the Real Time Gross Settlement (RTGS), which processes and settles interbank and Government payments in the national currency.

Governance

As at 31 December 2022 and 2021, the members of the Council of the Bank ("the Council") were as follows:

Position	Name (2022)	Name (2021)
Chairman	Mr. Koba Gvenetadze (Governor)	Mr. Koba Gvenetadze (Governor)
Member	Mr. Archil Mestvirishvili (Vice-governor)	Mr. Archil Mestvirishvili (Vice-governor)
Member	Mr. Papuna Lezhava (Vice-governor)	Mr. Papuna Lezhava (Vice-governor)
Member	Mr. Nikoloz Gagua (Vice-governor)	Mr. Nikoloz Gagua (Vice-governor)
Member	Mr. Robert H.Singletary	Mr. Robert H.Singletary
Member	Ms. Ekaterine Galdava	Ms. Ekaterine Galdava
Member	Ms. Ekaterine Mikabadze	Ms. Ekaterine Mikabadze
Member	Ms. Natela Turnava	-

The Council is defined to consist of 9 members. As at 31 December 2022, position of 1 member of the Council was vacant (2021: 2 positions).

Mr. Koba Gvenetadze's term expired effective March 2023. Mr. Archil Mestvirishvili is acting as Governor and head of the Council as of the date of issuance of these financial statements.

The Bank's main office is located at 1, Zviad Gamsakhurdia Embankment, 0114, Tbilisi, Georgia. As at 31 December 2022 and 2021, the Bank operates one cash service center. The Bank employed 538 and 552 personnel as at 31 December 2022 and 2021, respectively.

2. BASIS OF PREPARATION OF FINANCIAL STATEMENTS

Statement of compliance

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

Presentation of these financial statements is framed within an economic and accounting framework that fairly reflects the financial position of the Bank, and at the same time, contributes to the economic analysis of the Bank's operations. Assets and liabilities within the statement of financial position are segregated as captions of foreign and national currencies, which better reflects economics and risks underpinning the Bank's operations. The Bank's assets in foreign currencies are mainly related to its international reserve management function. At the same time, the Bank's assets and liabilities in national currency are mainly recognised as a result of operations related to the conduct of monetary policy, issue of money in circulation and other functions of the Bank, as defined under the Law. For these reasons, the economic concepts of international reserves and monetary policy are additionally grouped under the sub-captions "international reserves" and "monetary policy instruments", respectively. Statement of Profit or Loss and Other Comprehensive Income separately presents interest income/expenses and non-interest income/expenses by functional operations of the Bank. Statement of cash flows is presented using the direct method.

Basis of measurement

These financial statements are prepared on the historical cost basis, except for financial instruments measured at fair value through profit or loss and investments measured at fair value through other comprehensive income.

Functional and presentation currency

The Bank's main objective is to maintain price stability, which implies that open-market operations play a significant role in the development of the monetary policy, accordingly, its main activity is the issuance of banknotes and coins in Georgian Lari, which is the national currency of Georgia and which has been defined as the functional and presentation currency for the purpose of preparing these financial statements. Consequently, all balances and transactions denominated in currencies, other than the Georgian Lari are considered as denominated in "foreign currency".

These financial statements are presented in thousands of Georgian Lari ("GEL"), unless otherwise indicated.

Financial information presented in GEL is rounded to the nearest thousand, except when otherwise indicated.

3. SIGNIFICANT ACCOUNTING POLICIES

The Bank has consistently applied the following accounting policies to all periods presented in these financial statements.

Financial Instruments

A financial instrument is defined as any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.

The Bank's portfolio of financial instruments comprise Georgian Lari securities, foreign government, supranational or agency securities, interest rate futures and options, holdings in the International Monetary Fund (IMF), cash and cash equivalents, due from financial institutions, due to commercial banks, Ministry of Finance of Georgia, IMF and other financial assets and liabilities. The Bank accounts for its financial instruments in accordance with IFRS 9–*Financial Instruments* and reports these instruments under IFRS 7–*Financial Instruments: Disclosures* and IFRS 13–*Fair Value Measurement*.

Classification

The Bank classifies its financial assets in the following categories: measured at amortised cost (AC), measured at fair value though other comprehensive income (FVOCI) and measured at fair value through profit or loss (FVTPL). The classification depends on business model under which the financial assets are managed and their cash flow characteristics. The Bank classifies its financial liabilities as subsequently measured at amortized cost except for derivatives liabilities, which are measured at fair value through profit or loss. Classification of the financial assets and the financial liabilities is determined at initial recognition.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

– the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and
– the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument is measured at FVOCI only if it meets both of the following conditions and is not designated as at FVTPL:

– the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
– the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For debt instruments measured at FVOCI, gains and losses are recognised in other comprehensive income, except for the following, which are recognised in profit or loss in the same manner as for financial assets measured at amortised cost:

– Interest income using the effective interest method;
– Expected credit losses (further referred to as "ECL") and reversals; and
– Foreign exchange gains and losses.

When a debt financial asset measured at FVOCI is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss.

All other financial assets are classified as measured at FVTPL.

On initial recognition, the Bank may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Business model assessment

The Bank makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- Objectives of holding a portfolio;
- Frequency, value and timing of sales (both past and future);
- How the performance of the business model and financial assets are evaluated and reported to the Bank's key management personnel;
- The risks that affect the performance of the business model, in particular, the way in which those risks are managed (to meet the objectives); and
- Whether collection of contractual cash flows (e.g. interest income received) represents significant part of the portfolios returns.

Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of assessment whether the contractual cash flows are solely payments of principal and interest, the 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Bank considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, the Bank considers:

- contingent events that would change the amount and timing of cash flows;
- leverage features;
- prepayment and extension terms;
- terms that limit the Bank's claim to cash flows from specified assets (e.g. non-recourse asset arrangements); and
- features that modify consideration of the time value of money – e.g. periodical reset of interest rates.

Initial recognition of financial assets and liabilities

The Bank recognises financial assets and liabilities in its statement of financial position when it becomes a party to the contractual obligations of the instrument. Regular way purchases and sales of financial assets and liabilities are recognised using settlement date accounting.

Financial assets and liabilities are initially recognised at fair value plus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss. The accounting policies for subsequent re-measurement of these items are disclosed in the respective accounting policies set out below.

Derecognition of financial assets and liabilities

Financial assets

The Bank derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred to another party or in which the Bank neither transfers nor retains substantially all the risks and rewards of ownership and it does not retain control of the financial asset. If the Bank neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Bank recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Bank retains substantially all the risks and rewards of ownership of a transferred financial asset, the Bank continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

On derecognition of a financial asset other than in its entirety (e.g. when the Bank retains an option to repurchase part of a transferred asset), the Bank allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in profit or loss. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

Financial liabilities

The Bank derecognises financial liabilities when, and only when, the Bank's obligations are discharged, cancelled or they expire. Where an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification, is treated as a derecognition of the original liability and the recognition of a new liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit and loss.

Measurement principles

Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal, or in its absence, the most advantageous market to which the Bank has access at that date. The fair value of a liability reflects its non-performance risk.

When available, the Bank measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active, if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

When there is no quoted price in an active market, the Bank uses valuation techniques that maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The chosen valuation technique incorporates all the factors that market participants would take into account in these circumstances.

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price, i.e., the fair value of the consideration given or received. If the Bank determines that the fair value at initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique that uses only data from observable markets, the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value at initial recognition and the transaction price. Subsequently, that difference is recognised in profit or loss on an appropriate basis over the life of the instrument, but no later than when the valuation is supported wholly by observable market data or the transaction is closed out.

The Bank uses quoted market prices to determine fair value of the Bank's investment securities. The quoted market prices for international securities are provided daily by Bloomberg and are based on current bid prices. In Management's opinion, such prices reflect reasonably the value of investments in international securities, considering the current market information and the accounting policies established by the Bank's Management.

If the market for investments is not active, the Bank establishes fair value by using discounted cash flow analysis and other relevant valuation techniques. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, reference to the current fair value of another instrument that is substantially the same and discounted cash flow analysis, making maximum use of market inputs and relying as little as possible on entity-specific inputs.

Amortised cost

The amortised cost of a financial asset or liability is the amount at which the financial asset or liability is measured at initial recognition, minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between the initial amount recognised and the maturity amount, minus any reduction for impairment. Premiums and discounts, including initial transaction costs, are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument.

Financial assets

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand in foreign currency, unrestricted balances on correspondent accounts and amounts due from financial institutions, including time deposit accounts and overnight deposits, that mature within ninety days from the date of origination.. Cash and cash equivalents are subsequently measured at amortised cost.

Membership in the International Monetary Fund (the "IMF") and other international financial institutions

Based on the provision of Article 5 of the Law, being the representative of Georgia, the Bank may undertake obligations and carry out operations related to participation of Georgia in the activities of international organizations (i.e. the IMF, World Bank), including payment of membership fees to such organizations.

Financial assets measured at amortised cost

In the normal course of business, the Bank maintains loans, deposit, current accounts, and other receivables for various periods with financial institutions. Objective of the business model under which these assets are managed is achieved by collecting contractual cash flows. Contractual terms of these assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Amounts due from financial institutions and other financial assets are considered in this category. The Bank's investments measured at amortised cost also include Georgian Government bonds.

Any premium or discount of the instruments representative of debt measured at amortised cost is recognised with the calculation of the amortised cost by applying the effective interest rate method, recognising the accrued interest in respective caption of the statement of profit or loss and other comprehensive income. The effective interest method uses the rate inherent in a financial instrument that discounts the estimated future cash flows over the expected life of the financial instrument so as to recognise interest on a constant-yield basis.

Investments measured at fair value through profit or loss

The Bank's investments measured at FVTPL comprise part of international reserves managed by the Bank for International Settlements ("BIS") which represent investments placed in the Bank for International Settlements Investment Pool (BISIP CNY). The objective of the business model under which the investment is managed is achieved by collecting contractual cash flows. However, contractual terms do not give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Derivative financial instruments

The Bank uses interest rate futures and options contracts on overseas exchanges to manage interest rate risk on its portfolio of foreign securities. Exchange traded interest rate futures are futures contracts with an underlying instrument that pays interest, which allows the Bank to lock in the price of an interest-bearing asset for a future date. An interest rate option on exchange traded interest rate futures is a financial derivative that allows the holder to benefit from changes in interest rates. The Bank also uses foreign currency derivative instruments to manage currency risk for some of its foreign currency investments.

Interest rate futures and options positions are classified as at fair value through profit or loss (FVTPL). Derivatives are initially recognised at fair value at the date a derivative contract is entered into and are subsequently re-measured to their fair value at each reporting date. The positions are marked to market on the reporting date at the relevant bid price provided by Bloomberg and valuation gains and losses taken to net unrealized gains/losses in the statement of profit or loss and other comprehensive income. Derivatives are carried as assets when their fair value is positive and as liabilities when it is negative.

Investments measured at fair value through other comprehensive income

The Bank's investments measured at FVOCI comprise debt securities issued by Georgian and foreign governments, international financial institutions and agencies. The securities are either part of the Bank's international reserve portfolio or represent monetary policy instruments. The objective of the business model under which the debt securities are managed is achieved by both collecting contractual cash flows and selling financial assets. The debt securities are classified as investments measured at FVOCI given that their contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Expected credit losses

The Bank recognises loss allowances for expected credit losses (ECL) on debt financial instruments that are measured at amortised cost or FVOCI.

The Bank measures loss allowances at an amount equal to lifetime ECL, except for the following, for which they are measured as 12-month ECL:

- debt investment securities that are determined to have low credit risk at the reporting date; and
- other financial instruments on which credit risk has not increased significantly since their initial recognition

The Bank considers debt investment securities to have low credit risk when their credit risk rating is equivalent to the globally accepted definition of 'investment grade'. Considering the Bank's strict investment guidelines, which propose holding of top credit-rated investments, financial instruments held as international reserves are considered to have low credit risk. In addition, the Bank considers exposure to the Georgian Government, which is denominated in Georgian Lari, to bear low credit risk. Such approach reflects the general assumption that sovereign debt denominated in national currency is considered to have a minimal risk of default (usually referred to as "risk-free" from market participant perspective) as well as the fact that due to the unique link between the Bank and the Government of Georgia, the Bank maintains the main current account of the Ministry of Finance of Georgia. The Bank does not apply the low credit risk exemption to any other financial instruments.

ECL calculation

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of the financial instrument. 12-month ECL are the portion of ECL that result from default events on a financial instrument that are possible within the 12 months after the reporting date.

ECL are a probability-weighted estimate of credit losses. They are measured as follows:

- financial assets that are not credit-impaired at the reporting date: as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Bank in accordance with the contract and the cash flows that the Bank expects to receive). Shortfalls are estimated based on historical corporate and sovereign default and recovery rates;
- financial assets that are credit-impaired at the reporting date: as the difference between the gross carrying amount and the present value of estimated future cash flows;

Credit-impaired financial assets

At each reporting date, the Bank assesses whether financial assets carried at amortised cost and debt financial assets carried at FVOCI are credit-impaired financial assets. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or past due event;
- the restructuring of a loan or advance by the Bank on terms that the Bank would not consider otherwise;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

All financial assets measured at amortised cost or FVOCI, which are overdue for 90 days or more, are considered to be in default except for exposure to the Government of Georgia which would be considered to be in default if overdue for more 180 days. This represents a rebuttal of the presumption under IFRS 9 that the default does not occur later than when the financial asset is 90 days past due. However, it reflects the circumstances of the Government's budgetary approval processes and the Bank's unique relationship with the Government as it acts as the banker and fiscal agent of the Government.

Presentation of allowance for ECL in the statement of financial position

Loss allowances for ECL are presented in the statement of financial position as follows:

- financial assets measured at amortised cost: as a deduction from the gross carrying amount of the assets;
- debt instruments measured at FVOCI: no loss allowance is recognised in the respective caption of the statement of financial position because the carrying amount of these assets is their fair value. However, the loss allowance is disclosed and is recognised in the revaluation reserve of investments measured at fair value through other comprehensive income.

Write-offs

Financial assets measured at amortised cost or FVOCI are written off (either partially or in full) when there is no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. This is generally the case when the Bank determines that the borrower does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. This assessment is carried out at the individual asset level.

Recoveries of amounts previously written off are included in the caption for impairment (recovery)/charge in the statement of profit or loss and other comprehensive income.

Financial liabilities measured at amortised cost

Issued financial instruments or their components are classified as liabilities, where the substance of the contractual arrangement results in the Bank having an obligation either to deliver cash or another financial asset to the holder. Such instruments include amounts due to the Government, amounts due to resident financial institutions, amounts due to customers, debt securities issued, liabilities to the International Monetary Fund and other financial liabilities. These are initially recognised at fair value of the consideration received less directly attributable transaction costs. After initial recognition, these financial instruments are subsequently measured at amortised cost using the effective interest method.

Money issued in circulation

Money issued in circulation represents banknotes and coins issued by the Bank in accordance with the Law and its function as the central bank. Banknotes and coins in circulation are recorded in the statement of financial position at their nominal value net of cash in the Bank's cash desks.

The expenses for the production of notes and coins are expensed as incurred.

When notes and coins are returned to the Bank by the commercial banks, they are removed from money in circulation and depending on their condition or legal tender status, are either sent for destruction or held by the Bank as cash in vaults outside of the statement of financial position.

Provisions (included in other liabilities)

Provisions are recognised when the Bank has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate of the obligation can be made.

Non-monetary gold and other precious metals (included in other assets)

Gold investment coins and gold bars are recognised and subsequently measured in accordance with the requirements of IAS 2-*Inventories*. Gold investment coins and gold bars are initially measured at cost, including expenses on minting, transportation and other direct costs, subsequently measured at the lower of cost and net realizable value. When investment coins and bars are sold, respective income and expense is recorded in the statement of profit or loss and other comprehensive income. Expenses on other commemorative coins and bars are recognised as current expenses when produced and reflected in the statement of profit or loss and other comprehensive income.

Property and equipment

Property and equipment are carried at historical cost less accumulated depreciation and recognised impairment loss, if any. Land is not depreciated.

Where an item of property and equipment comprises major components having different useful lives, they are accounted for as separate items of property and equipment.

Depreciation is charged on the historical cost of property and equipment and is designed to write off assets over their useful economic lives. Depreciation commences on the date of acquisition or, in respect of internally constructed assets, from the time an asset is completed and ready for use. Depreciation is charged to profit or loss on a straight-line basis at the following annual prescribed rates:

	%
Buildings	2
Computers, office equipment and fixtures	10-20
Vehicles and other	20

Expenses related to repairs and maintenance are charged when incurred and included in other expenses unless they qualify for capitalization.

The carrying amounts of property and equipment are reviewed at each reporting date to assess whether they are recorded in excess of their recoverable amounts. The recoverable amount is the higher of fair value less costs to sell and value in use. Where carrying values exceed the estimated recoverable amount, assets are written down to their recoverable amount; impairment is recognised in the respective period in the statement of profit or loss and other comprehensive income. After the recognition of an impairment loss the depreciation charge for property and equipment is adjusted in future periods to allocate the assets' revised carrying value, less its residual value (if any), on a systematic basis over its remaining useful life.

Intangible assets

Intangible assets include computer software and licenses.

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. Amortization periods and methods for intangible assets with finite useful lives are reviewed at least at each financial year-end.

Leases

From time to time, the Bank may lease particular assets for its administrative purposes.

The Bank recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove any improvements made.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Bank's incremental borrowing rate. Generally, incremental borrowing rate is used as the discount rate.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments or in assessment of whether the Bank will exercise extension or termination option. A corresponding adjustment is made to the carrying amount of the right-of-use asset, or the amount is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to nil.

The Bank presents right-of-use assets as separate line-item and lease liabilities in 'other liabilities' in the statement of financial position.

The Bank has elected not to recognise right-of-use assets and lease liabilities for leases of low-value items and short-term leases. The Bank recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Taxation

According to the Law, assets, property and income of the Bank, as well as its activities and operations are exempt from all taxes and other levies.

Contingencies

Contingent liabilities are not recognised in the statement of financial position but are disclosed unless the possibility of any outflow in settlement is remote. A contingent asset is not recognised in the statement of financial position but disclosed when an inflow of economic benefits is probable.

Recognition of income and expense

Revenue is recognised when the Bank satisfies a performance obligation by transferring a promised good or service (i.e. an asset) to counterparties. An asset is transferred when (or as) the counterparties obtain control of that asset.

Interest and similar income and expense

For all financial instruments that are measured at amortised cost or fair value through other comprehensive income interest income or expense is recorded at the effective interest rate, which is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or a shorter period, where appropriate, to the gross carrying amount of the financial asset or the amortised cost of financial liability. The calculation takes into account all contractual terms of the financial instrument (for example, prepayment options) and includes any fees or incremental costs that are directly attributable to the instrument and are an integral part of the effective interest rate, but not future credit losses. The gross carrying amount of the financial asset or the amortised cost of financial liability is adjusted if the Bank revises its estimates of payments or receipts. The adjusted carrying amount is calculated based on the original effective interest rate and the change in carrying amount is recorded as interest income or expense.

Interest income recognition base

The original effective interest rate is applied to the gross carrying amount (carrying amount without reduction by expected credit loss allowance) of financial assets for which:

– credit risk has not increased significantly since initial recognition;
– credit risk has increased significantly since initial recognition, but which are not credit-impaired

For financial assets which are credit-impaired, the original effective interest rate is applied to the net carrying amount (carrying amount after reduction by expected credit loss allowance)

Presentation of negative interest on financial assets and liabilities

Negative interest on financial assets is considered as expense and is presented under interest expenses as a separate line-item. Similarly, negative interest on financial liabilities is considered as income and is presented under interest income as a separate line-item.

Fee and commission income and expense

The Bank earns fee and commission income from a diverse range of services it provides to its counterparties. Fee and commission income includes cash operations fees and fund transfer fees, which are recognised as the services are provided. Fee and commission expense consists of cash operations, settlement fees and fees paid to the external manager, which are recognised as expense as the services are rendered.

Foreign currency translation

The financial statements are presented in Georgian Lari, which is the Bank's functional and presentation currency. Transactions in foreign currencies are initially recorded in the nominal currency converted into the functional currency rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the end of reporting date. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Gains and losses resulting from the translation of foreign currency transactions are recognised in the statement of profit or loss and other comprehensive income as net gains (losses) from foreign currencies - translation differences.

Differences between the contractual exchange rate of a transaction in a foreign currency and the Bank's exchange rate on the date of the transaction are included in net gains (losses) from dealing in foreign currencies.

Rates of exchange

The exchange rates used by the Bank in the preparation of the financial statements as at year-end are as follows:

	31-Dec-22	31-Dec-21
GEL/1 US Dollar (USD)	2.7020	3.0976
GEL/1 Euro (EUR)	2.8844	3.5040
GEL/100 Japanese Yen (JPY)	2.0495	2.6901
GEL/1 Canadian Dollar (CAD)	1.9959	2.4208
GEL/1 Special Drawing Right (SDR)	3.5959	4.3354

Offset of financial assets and liabilities

Financial assets and liabilities are offset and reported net in the statement of financial position when the Bank has a legally enforceable right to set off the recognised amounts and the Bank intends either to settle on a net basis or to realise the asset and settle the liability simultaneously. In accounting for a transfer of a financial asset that does not qualify for de-recognition, the Bank does not offset the transferred asset and the associated liability. No offset of financial assets and liabilities have been made as of and during the reporting periods ended 31 December 2022 and 2021.

Reclassification of financial assets

Financial assets are not reclassified subsequent to their initial recognition, except in the period after the Bank changes its business model for managing financial assets.

Areas of significant management judgment and sources of estimation uncertainty

The preparation of the Bank's financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities at the reporting date and the reported amount of income and expenses during the period ended. Management evaluates its estimates and judgments on an ongoing basis. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Significant areas of critical judgments and estimates are described in the following notes:

- Classification of financial assets: assessment of the business model within which the assets are held and assessment of whether the contractual terms of the financial assets are solely payments of principal and interest on the principal amount outstanding – Note 3
- Application of low credit risk exemption and rebuttal of the presumption that the default does not occur later that when the financial asset is 90 days past due – Note 3
- Fair valuation of financial instruments - Note 27

Application of new and revised International Financial Reporting Standards (IFRS)

New and revised standards:

The following are effective from 1 January 2022:

– Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)
– Annual Improvements to IFRS Standards 2018 – 2020 (Amendments to IFRS 1 First-time Adoption of International Financial Reporting Standards, IFRS 9 Financial Instruments, IFRS 16 Leases and IAS 41 Agriculture);
– Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
– Reference to Conceptual Framework (Amendments to IFRS 3);

The amendments mentioned above did not have significant effect on the Bank's financial statements.

The following new and amended standards are not expected to have a significant impact on the Bank's financial statements. The pronouncements are effective for annual periods beginning after 1 January 2022 and earlier application permitted:

– IFRS 17 Insurance Contracts and amendments to IFRS 17 Insurance Contracts;
– Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2) ;
– Definition of Accounting Estimates (Amendments to IAS 8);

4. FEE AND COMMISSION INCOME AND EXPENSE

Fee and commission income and expense comprise:

	Year ended 31-Dec-22	Year ended 31-Dec-21
Fee and commission income:		
Funds transfer	3,765	2,927
Cash operations	1,193	488
Other	23	24
Total fee and commission income	**4,981**	**3,439**
Fee and commission expense:		
Fees paid to external manager	(1,635)	(1,646)
Custodian and settlement fees	(959)	(1,067)
Cash operations	(1,123)	(354)
Total fee and commission expense	**(3,717)**	**(3,067)**

The Bank owns and manages a real-time gross settlement system, which is an interbank payment system for national currency settlement operations. Funds transfer fee represents billing charges paid by the participants for settlement transactions.

5. OTHER INCOME

Other income comprises:

	Year ended 31-Dec-22	Year ended 31-Dec-21
Income from sale of commemorative coins	2,435	6,232
Revenue from fines	32	19
Other	985	66
Other income	**3,452**	**6,317**

Other expenses comprise:

	Year ended 31-Dec-22	Year ended 31-Dec-21
Expense related to commemorative coins	(3,108)	(3,911)
Other	(1,068)	(1,093)
Other expenses	**(4,176)**	**(5,004)**

6. OPERATING EXPENSES

Operating expenses comprise:

	Year ended 31-Dec-22	Year ended 31-Dec-21
Salaries and bonuses	30,446	29,395
Paid vacation and sick leave	2,509	1,760
Total personnel expenses	**32,955**	**31,155**
Software maintenance fees	2,822	2,553
Subscription to information services	2,734	2,967
Social benefits expenses	2,297	2,290
Utilities	1,729	1,739
Business travel and related expenses	530	163
Security	527	522
Legal and consultancy	332	180
Fuel expenses	223	187
Repairs and maintenance	210	668
Other	1,865	1,311
Total general and administrative expenses	**13,269**	**12,580**
Depreciation charge (Note 15)	6,186	5,819
Amortization charge (Note 16)	2,024	1,838
Total depreciation and amortization charges	**8,210**	**7,657**

7. CASH AND CASH EQUIVALENTS

Cash and cash equivalents as at 31 December 2022 and 2021 comprise:

	31-Dec-22	31-Dec-21
Cash on hand in foreign currencies	351,428	1,221,357
Current accounts	2,064,016	1,603,024
Time deposits with credit institutions	1,452,008	799,548
Total cash and cash equivalents	**3,867,452**	**3,623,929**

As at 31 December 2022 and 2021, GEL 3,042,432 thousand and GEL 2,278,849 thousand, respectively, were placed in current accounts and time deposits up to ninety days with seven (31 December 2021: six) internationally recognised banks and central banks from the Organization of Economic Co-operation and Development member countries (OECD).

As at 31 December 2022 and 2021, annual interest rate range of time deposits with credit institutions varied from 4.15% to 4.47% and 0.11% to 0.23%, respectively.

8. DUE FROM RESIDENT FINANCIAL INSTITUTIONS

Due from resident financial institutions as at 31 December 2022 and 2021 comprise:

	31-Dec-22	31-Dec-21
Due from resident financial institutions under monetary policy instruments		
Refinancing loans	2,442,215	2,071,194
One-month open market instruments	401,219	401,049
Fixed rate loans	372,995	633,539
Overnight loans	240,155	41,233
Total due from resident financial institutions under monetary policy instruments	**3,456,584**	**3,147,015**

Refinancing loans are the Bank's Monetary Policy instruments that are issued to Georgian commercial banks for liquidity purposes and have 7 days of maturity. Similar to refinancing loans, through one-month open market instruments, overnight loans and fixed rate loans the Bank supplies short-term liquidity to the national banking system.

As at 31 December 2022 and 2021, respectively, the Bank had a concentration of refinancing loans of GEL 2,066,874 thousand due from two resident commercial banks at annual interest rates of 11% - 11.1020%, and GEL 1,892,090 thousand due from three resident commercial banks at annual interest rates of 10.5%-10.62%, respectively.

As at 31 December 2022 and 2021, the concentration of one-month open market instruments was GEL 328,698 thousand due from three resident commercial banks at an annual interest rates of 11.067% - 11.23%, and GEL 295,773 thousand due from two resident commercial banks at an annual interest rates of 10.59% - 10.71%%, respectively.

As at 31 December 2022 and 2021, the concentration of fixed rate loans was GEL 301,479 thousand due from two resident commercial banks at an annual interest rate of 11.0402% and GEL 512,937 thousand from two resident commercial banks at an annual interest rate of 10.1984%, respectively.

As at 31 December 2022 and 2021, the Bank had a concentration of overnight loans of GEL 240,154 thousand due from one resident commercial bank at annual interest rate of 11.75% and GEL 40,012 thousand due from one resident commercial bank at annual interest rate of 11.25%, respectively.

For none of the exposures due from resident financial institutions has credit risk increased significantly since initial recognition. For credit risk disclosure, see also Note 28.

Collateral and other credit enhancements

The eligible type of collateral and criteria for each type of collateral is defined by the Council of the Bank.

The accepted types of collateral are: a) debt securities issued by the Bank and by the Government of Georgia, denominated in Georgian Lari; b) debt securities issued by international financial institutions, denominated in Georgian Lari; c) debt securities issued in accordance with the "Law of Georgia on Securities Market" by resident and non-resident legal entities and securities issued as a private placement till 1 January 2018, denominated in Georgian Lari, but excluding debt securities issued by the commercial banks operating in Georgia; d) claims to eligible loan assets of commercial banks; e) foreign currency deposits in the Bank; In special cases, the Council of the Bank may determine other type of assets for loan collateral; haircuts to each type of collateral are periodically defined by the Monetary Policy Committee (MPC) of the Bank to the nominal amount of eligible assets. The Bank has the first lien on borrowers' assets according to the Law.

As at 31 December 2022 and 2021, types and fair values of financial assets pledged for amounts due from resident financial institutions were as follows:

	31-Dec-22	31-Dec-21
Loan portfolio of commercial banks	2,320,899	2,282,228
Government securities (treasury bills/notes)	1,386,426	1,196,058
Bonds issued by International Financial Institutions and development banks, denominated in GEL:		
Netherlands Development Finance Company	93,279	61,230
International Finance Corporation (IFC)	86,954	-
European Bank for Reconstruction and Development (EBRD)	83,446	-
Bonds issued by the private sector	37,808	21,025
	4,008,812	**3,560,541**

The Bank monitors the value of collateral, requests additional collateral in accordance with the underlying agreement, and monitors the value of collateral obtained during its review of the adequacy of the allowance for expected credit losses. As at 31 December 2022 and 2021 none of the financial instruments issued by the Bank were pledged as collateral.

9. SPECIAL DRAWING RIGHTS HOLDINGS WITH THE INTERNATIONAL MONETARY FUND

Balances with the International Monetary Fund (the "IMF") comprise:

	31-Dec-22	31-Dec-21
Assets:		
Special Drawing Rights (SDR) holdings	**1,249,154**	**1,506,927**
Liabilities:		
IMF current accounts		
Current account # 1	2,163	2,606
Current account # 2	12	14
	2,175	**2,620**
Borrowings from the IMF		
Extended Fund Facility (EFF)	1,159,590	1,447,066
General SDR allocation	1,130,877	1,357,442
Special SDR allocation	117,541	141,089
	2,408,008	**2,945,597**
Total due to the IMF	**2,410,183**	**2,948,217**
Off-balance sheet balances:		
IMF Quota	865,409	1,042,446
Security held in custody by the Bank in respect of IMF quota and as collateral of IMF granted facilities	(2,792,228)	(3,425,367)

SDR Holdings

SDR holdings represent the account of the Bank with the IMF used for borrowings and settlements with the IMF. SDR holdings are primarily obtained from the SDR allocations provided by the IMF under its Articles of Agreement. Interest accrued in respect of SDR holdings is calculated using the rate set by the IMF weekly on the basis of short-term market rates in major money markets. The annual nominal interest rate range on the SDR holding in 2022 and 2021 was 0.050%-2.916% and 0.050%-0.115%, respectively.

IMF current accounts

The Bank is required to maintain two separate accounts: IMF current account number 1 and IMF current account number 2. IMF current account number 1 is for settlement of the IMF's operational transactions, whereas IMF current account number 2 is used for operational expenses incurred by the IMF in Georgian Lari.

IMF granted facilities

Facilities received from the IMF include the Extended Fund Facility (EFF) loan with a carrying amount of GEL 1,159,590 thousand as at 31 December 2022 (31 December 2021: GEL 1,447,066 thousand). The EFF loan provides assistance to Georgian authorities in support of their comprehensive program to preserve macro and financial stability and advance structural reforms to bolster growth. The 36-month Extended Fund Facility (EFF) was approved on 12th of April 2017 with access to SDR 210.4 million (100 percent of quota). On 14th of April 2020, an augmentation of access to 130 percent of quota was approved, bringing total access under the EFF to SDR 484 million (230 percent of quota). No Funds were utilized under the facility by the Bank during 2022 (2021: SDR 78 million). Repayments started in 2021 and the loan is scheduled to be fully repaid by 2031. The lending rate is tied to the IMF's market-related interest rate, known as the basic rate of charge linked to the Special Drawing Rights (SDR) interest rate, which amounted to 3.916% as at 31 December 2022 (31 December 2021: 1.077%).

All facilities received from the IMF are denominated in SDRs.

SDR allocations

The SDR allocation is an unsecured, interest-bearing distribution of SDRs by the IMF through general and special allocations. The general allocation is made by the IMF according to the Articles of Agreement to all participants in its SDR Department in proportion to countries' quotas in the IMF. General allocations to Georgia were made in 2009 (SDRs 111,419 thousand) and 2021 (SDR 201,658 thousand). In 2009, the Fourth Amendment to the IMF Articles of Agreement providing for a special one-time allocation of SDRs entered into force, according to which Special SDR allocation of SDR 32,540 thousand was made to Georgia. Members and prescribed holders may use their SDR holdings to conduct transactions with the IMF. The Bank treats the allocation as a foreign currency liability to the IMF.

Georgia, as a member country of the IMF and a recipient of the allocations, is obliged to pay to the IMF an amount equal to its net cumulative allocation and any other amounts that may be due and payable because of the membership termination or liquidation of the IMF's SDR Department.

The annual interest rate range on the SDR allocations in 2022 and 2021 varied within the ranges of 0.050%-2.9160% and 0.050%-0.1150%, respectively.

IMF Quota

The IMF Quota of Special Drawing Rights (SDRs) of 210,400 thousand, represents the membership subscription of Georgia with the IMF which is non-interest bearing and is effective from 26 January 2016 as a result of the 14th General Review of Quotas by the Board of Governors of the IMF, the Fund's highest decision-making body. The IMF receives its resources from its member countries. Each member country of the IMF is assigned a quota, based broadly on its relative position in the world economy. A member's quota delineates basic aspects of its financial and organizational relationship with the IMF. As the Bank is a fiscal agent between the Government of Georgia and the IMF, this instrument is not presented in the statement of financial position.

Security held in custody by the Bank in respect of the IMF Quota and as collateral of the IMF granted facilities

As at 31 December 2022 security held in custody comprises GEL 865,409 thousand in respect of the IMF Quota and GEL 1,926,819 thousand held as collateral for the IMF granted facilities (GEL 2,792,228 thousand).

As at 31 December 2021 security held in custody comprises GEL 1,042,446 thousand in respect of the IMF Quota and GEL 2,382,901 thousand held as collateral for the IMF granted facilities (GEL 3,425,367 thousand in total).

The security was issued by the Government of Georgia in 1992 in settlement of the IMF Quota. The security used as collateral includes the total nominal value of the IMF granted facilities to Georgia: to the Bank and to the Government. As this security is held by the Bank in custody, it is accounted for as an off-balance sheet item and presented at nominal value.

10. ASSETS AND LIABILITIES RELATED TO DERIVATIVE INSTRUMENTS

	Book value	Notional principal	Book value	Notional principal
	31-Dec-22	31-Dec-22	31-Dec-21	31-Dec-21
Assets related to derivative instruments under international reserve management				
Interest rate futures				
Futures margin	**10,282**		**10,994**	
FX-Forward				
FX-Forward assets	2,702		380	
Amount receivable	-	488,381	-	614,161
Amount payable	-	(519,320)	-	(605,891)
Net FX-Forward	**2,702**	**(30,939)**	**380**	**8,270**
Net interest futures				
Interest rate futures assets	32,669	16,000	2,861	213,734
Interest rate futures liabilities	-	(1,691,900)	-	(5,983,634)
Net interest futures position	**32,669**	**(1,675,900)**	**2,861**	**(5,769,900)**
Net assets related to derivative instruments under international reserve management	**45,653**	**(1,706,839)**	**14,235**	**(5,761,630)**
Assets related to derivative instruments under monetary policy operations				
FX SWAPs				
FX SWAP assets	734		3,864	
FX-SWAP liabilities	(1,649)		-	
Amount receivable	-	385,822	-	431,333
Amount payable	-	(386,737)	-	(427,469)
Net FX SWAPs	**(915)**	**(915)**	**3,864**	**3,864**
Net assets related to derivative instruments under monetary policy operations	**(915)**	**(915)**	**3,864**	**3,864**

At their inception, derivatives often involve only a mutual exchange of promises with little or no transfer of consideration. However, these instruments frequently involve a high degree of leverage and are very volatile. A relatively small movement in the value of the asset, rate, or index underlying a derivative contract may have a significant impact on the profit or loss of the Bank.

The futures contracts are contractual agreements to buy or sell a specified financial instrument at a specific price and date in the future. The futures contracts are transacted in standardised amounts on regulated exchanges and are subject to daily cash margin requirements. The credit risk related to future contracts is considered minimal because the cash margin requirements of the exchange help ensure that these contracts are always honored and are settled on a net basis.

The Bank has been trading Eurodollar Futures since March 2012, as part of active portfolio management. This financial instrument is listed on CME (Chicago Mercantile Exchange & Chicago Board of Trade), hence it is exchange traded and standardized. Eurodollar Futures remain the most liquid and actively traded money market derivatives contracts. Each Eurodollar contract's underlying is a 3-month Eurodollar time deposit with notional amount of USD 1 million. When trading Eurodollar futures, the Bank is facing the credit risk only of the clearing house, where purchases and sales of Eurodollar futures offset one another.

The Bank is taking positions in Eurodollars for hedging purposes, by means of buying/selling US Treasuries or Spread Products (Agency and Supranational Securities) and entering opposite positions of corresponding amounts of Eurodollar Futures, matching the risk (duration and curve). The main purpose of such strategies is to reduce the portfolio's exposure to interest rate risks and to benefit from credit spreads.

Eurodollar futures held in the Bank's portfolio are not held for trading purposes, i.e. the Bank does not aim to generate profits from favorable movements in their prices.

From April 2020, in addition to standard refinancing loans, the Bank provides liquidity support to the market through FX SWAP operations. FX SWAP operations are monetary policy instruments aimed at delivering liquidity to the market. Through the FX SWAP transactions, the Bank buys foreign currency with the national currency for a period of one month at a spot rate, provided that it is sold back at the predetermined forward rate.

11. INVESTMENTS MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS

As at 31 December 2022 and 2021, investments measured at fair value through profit or loss comprised funds managed by the BIS (Bank for International Settlements). It refers to the investment placed in the Bank for International Settlements Investment Pool (BISIP CNY), a fund comprising Chinese government bonds (CGBs), managed for the investment of international reserves of central banks, with the main objective of transferring know-how and providing consulting services to the Bank. The quota holders of the fund may request partial or complete withdrawal of their investments at any time.

As at 31 December 2022, total amount of funds managed by BIS amounted to GEL 272,372 thousand (31 December 2021: 329,975 thousand).

12. INVESTMENTS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

As at 31 December investment securities measured at fair value through other comprehensive income comprised:

	31-Dec-22	31-Dec-21
Government securities		
US Department of Treasury, Washington	5,485,360	4,628,393
Government of Canada, Ottawa	343,123	338,487
Bank of Japan, Tokyo	172,194	-
Government of Sweden	-	43,282
Government of Denmark	-	30,907
	6,000,677	**5,041,069**
Supranational securities		
European Investment Bank, Luxembourg	264,265	202,220
Asian Development Bank, Manila	112,173	257,546
European Stability Mechanism	104,878	184,537
Bank for International Settlements, Basle	94,291	46,084
Inter-American Development Bank, Washington D.C.	69,571	-
African Development Bank, Abidjan	67,211	48,652
International Bank for Reconstruction & Development, Washington	25,946	47,364
New Development Bank, Shanghai	5,685	9,813
Inter-American Investment Corporation	-	34,288
Nordic Investment Bank	-	53,436
	744,020	**883,940**

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS
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(in thousands of Georgian Lari)

	31-Dec-22	31-Dec-21
Agency and other securities		
Kommuninvest I Sverige AB, Orebro	105,977	201,781
CPPIB Capital Inc, Toronto	86,104	98,554
Kreditanstalt fuer Wiederaufbau, Frankfurt	84,065	117,742
Erste Abwicklungsanstalt, Dusseldorf	78,323	89,114
Svensk Exportkredit AB, Stocholm	75,254	48,418
Japan Bank for International Cooperation, Otemachi	74,666	-
Nederlandse Waterschapsbank N.V.	68,789	21,073
Korean Development Bank	61,687	71,204
Province of Alberta Canada	48,282	58,604
North Rhine-Westphalia	43,968	21,845
Bank Nederlandse Gemeenten, Den Haag	41,868	93,786
OMERS Finance Trust	38,466	41,029
Oesterreichische Kontrollbank AG, Vienna	36,417	45,088
Province of Ontario Canada, Toronto	36,167	93,817
Province of Quebec Canada, Quebec	31,673	93,573
Landeskreditbank Baden-Wuerttemberg Foerderbank	28,925	119,108
CDP Financial In, Montreal	28,770	176,821
Other	95,123	442,922
	1,064,524	**1,834,479**
Total investments measured at fair value through other comprehensive income in foreign currency	**7,809,221**	**7,759,488**
Marketable government securities in national currency		
Georgian government bonds	2,272,589	1,649,777
Total investments measured at fair value through other comprehensive income in national currency	**2,272,589**	**1,649,777**

Analysis of interest rates (coupon) and maturities on investments measured at fair value through other comprehensive income comprise:

	31-Dec-22		31-Dec-21	
In foreign currency:	**Interest rate p.a.**	**Maturity**	**Interest rate p.a.**	**Maturity**
Government securities	0.125%-2.875%	2023-2026	0.125%-2.50%	2022-2026
Supranational securities	0.25%-4.125%	2023-2027	0.25%-3%	2022-2025
Agency and other securities	0.25%-4.75%	2023-2027	0.25%-5%	2022-2026
In national currency:				
Government bonds	7%-11.6%	2023-2028	7%-12.3%	2022-2028

Investments measured at fair value through other comprehensive income include funds managed under the RAMP program, which corresponds to the outsourcing of the management of a portion of the international reserves to the World Bank treasury specialized in portfolio management (external manager), with the main objective of transferring know-how and providing consulting services to the Bank. The manager receives a management fee, established in the contract, and is evaluated based on the net asset value of the transferred funds. The assets within the external manager portfolio are held on behalf of the Bank, under the responsibility of a global custodian selected for the purpose of investing in and reinvesting the securities. The Bank may, from time to time, by notice to the external manager, make additions to, or reductions of, the investment amount. As at 31 December 2022, fair value of funds managed under the RAMP was GEL 597,133 thousand (31 December 2021: GEL 684,561 thousand).

For none of the financial assets measured at fair value through other comprehensive income has credit risk increased significantly since initial recognition, see also Note 28.

13. INVESTMENTS MEASURED AT AMORTISED COST

	31-Dec-22		31-Dec-21	
	Carrying value	Nominal value	Carrying value	Nominal value
Georgian Government securities				
Georgia government bonds	121,390	120,846	161,461	160,846
Total investments measured at amortised cost in national currency	**121,390**	**120,846**	**161,461**	**160,846**

Analysis of interest rate (coupon) and maturity of investments measured at amortised cost:

	31-Dec-22		31-Dec-21	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Georgian government bonds	9.549%	2023-2025	8.109%	2022-2025

Georgian government bonds denominated in the national currency represent interest-bearing securities issued by the Ministry of Finance of Georgia according to the agreement formed between the Government of Georgia and the Bank in March, 2006 to convert, without cash settlement, borrowings of the Government of Georgia into debt securities. The security was issued exclusively for the Bank and is a non-transferable, a non-tradable instrument. Therefore, the investment is carried at amortised cost. The government bonds are repaid by issuance of new bond instrument in the amount of GEL 40,000 thousand annually, which are classified as investments measured at fair value through other comprehensive income. Interest rate of the bond is subject to annual repricing considering market rates.

For none of the financial assets measured at amortised cost has credit risk increased significantly since initial recognition, see also Note 28.

14. RIGHT-OF-USE ASSET

The Bank leases premises for administrative purposes for part of its personnel and recognises respective right-of-use asset and lease liability.

Change in the outstanding balance of the related right-of-use asset is provided below:

	2022	2021
Balance as at 1 January	**387**	**1,232**
Increase in right-of-use asset	2,108	-
Depreciation charge for the year	(958)	(845)
Balance as at 31 December	**1,537**	**387**

Change in outstanding balance of lease liability is provided below:

	2022	2021
Balance as at 1 January	**373**	**1,152**
Remeasurement of lease liability	2,108	-
Interest expense for the year	117	58
Repayments for the year	(1,020)	(837)
Balance as at 31 December	**1,576**	**373**

15. PROPERTY AND EQUIPMENT

	Land and buildings	Computers, office equipment and fixtures	Vehicles and other	Assets under construction	Total
At initial cost:					
1-Jan-21	**52,652**	**18,764**	**20,591**	**64**	**92,071**
Additions	196	319	7,102	-	7,617
Disposals	-	(432)	(1,417)	(28)	(1,877)
31-Dec-21	**52,848**	**18,651**	**26,276**	**36**	**97,811**
Additions	-	2,293	795	-	3,088
Disposals	-	(434)	(451)	-	(885)
31-Dec-22	**52,848**	**20,510**	**26,620**	**36**	**100,014**
Accumulated depreciation:					
1-Jan-21	**(8,337)**	**(10,242)**	**(17,963)**	**-**	**(36,542)**
Depreciation charge	(1,050)	(2,820)	(1,949)	-	(5,819)
Disposals	-	430	1,417	-	1,847
31-Dec-21	**(9,387)**	**(12,632)**	**(18,495)**	**-**	**(40,514)**
Depreciation charge	(1,054)	(2,644)	(2,489)	-	(6,187)
Disposals	-	407	407	-	814
31-Dec-21\2	**(10,441)**	**(14,869)**	**(20,577)**	**-**	**(45,887)**
Carrying amounts:					
As at 31 December 2022	**42,407**	**5,641**	**6,043**	**36**	**54,127**
As at 31 December 2021	**43,461**	**6,019**	**7,781**	**36**	**57,297**

16. INTANGIBLE ASSETS

	Software and other
At cost:	
1-Jan-21	**15,192**
Additions	2,429
Disposals	(61)
31-Dec-21	**17,560**
Additions	1,906
Disposals	(299)
31-Dec-22	**19,167**
Accumulated amortization:	
1-Jan-21	**(10,336)**
Charge for the year	(1,838)
Disposals	60
31-Dec-21	**(12,114)**
Charge for the year	(2,023)
Disposals	282
31-Dec-22	**(13,855)**
Carrying amounts:	
As at 31 December 2022	**5,312**
As at 31 December 2021	**5,446**

17. OTHER ASSETS AND LIABILITIES

	31-Dec-22	31-Dec-21
Other assets in foreign currency:		
Prepayments	485	-
Other debtors	172	8
Total other assets in foreign currency	**657**	**8**
Other assets in national currency:		
Prepayments	3,919	3,528
Inventory	487	575
Commemorative gold coins and gold bars	138	307
Loans to employees	99	149
Other debtors	155	101
	4,798	**4,660**
Allowance for expected credit losses on other assets	(54)	(74)
Total other assets in national currency	**4,744**	**4,586**

As at 31 December 2022 and 2021, other financial assets, net of loss allowance, amounted to GEL 831 thousand and GEL 183 thousand, respectively.

Allowance for expected credit losses on other assets represents allowance for expected credit losses on loans to employees. The movements in allowance for expected credit losses are presented in Note 28.

Other liabilities comprise:

	31-Dec-22	31-Dec-21
Other liabilities in foreign currency:		
Amounts due to suppliers	8,083	2,886
Other liabilities	538	599
Total other liabilities in foreign currency	**8,621**	**3,485**
Other liabilities in national currency:		
Profit payable to the Ministry of Finance of Georgia	462,780	356,060
Amount due to suppliers	4,116	4,921
Deferred income	3,119	2,015
Liability for realized banknotes and coins	1,935	1,893
Lease liability (Note 14)	1,576	373
Other liabilities	1,657	1,689
Total other liabilities in national currency	**475,183**	**366,951**
Total other liabilities	**483,804**	**370,436**

As at 31 December 2022, other financial liabilities amount to GEL 17,905 thousand (31 December 2021: 12,361 thousand).

18. DUE TO RESIDENT FINANCIAL INSTITUTIONS

Due to resident financial institutions comprise:

	31-Dec-22	31-Dec-21
Due to resident financial institutions under monetary policy instruments		
Correspondent accounts in national currency	1,013,149	362,853
Overnight deposits in national currency	212,154	81,200
Total due to resident financial institutions under monetary policy instruments in national currency	**1,225,303**	**444,053**
Obligatory reserves of banks in foreign currency	5,499,478	5,120,817
Total due to resident financial institutions under monetary policy instruments	**6,724,781**	**5,564,870**
Due to resident financial institutions, other		
Correspondent accounts in foreign currency	217,265	181,271
Special deposits of commercial banks in foreign currency	-	42,747
Total due to resident financial institutions, other	**217,265**	**224,018**
Total due to resident financial institutions	**6,942,046**	**5,788,888**

As at 31 December 2022 and 2021, included in due to resident financial institutions are balances with the three largest local commercial banks of GEL 5,415,423 thousand and GEL 4,288,445 thousand, respectively, that represent 78.01% and 74.08% of the total balances due to resident financial institutions, respectively.

Resident commercial banks are required to maintain obligatory reserves with the Bank. As at 31 December 2022, the obligatory reserves are calculated as 5% of their eligible liabilities denominated in national currencies (31 December 2021: 5%), and from 10% to 25% of their eligible liabilities denominated in foreign currencies, which depend on the deposit dollarization rate of a particular commercial bank (31 December 2021: from 10% to 25%).

For foreign currency borrowed funds with a remaining maturity of 1-2 years, the reserve requirement amounts vary from 10% to 15%, depending on the deposit dollarization rate of a particular commercial bank (31 December 2021: 10% to 15%). As at 31 December 2022 and 2021, the annual interest rate on GEL denominated obligatory reserves was 11.0% and 10.5%, respectively. As at 31 December 2022 and 2021, annual interest rate on USD/EUR denominated obligatory reserves were 0.0%/0.0% and -0.25%/-0.70% respectively. Borrowings with remaining maturities of over one year in the national currency and over two years in a foreign currency are exempt from reserve requirements.

19. DUE TO THE MINISTRY OF FINANCE

	31-Dec-22	31-Dec-21
Due to the Ministry of Finance of Georgia		
Current accounts in foreign currency	623,860	788,312
Current account in national currency	1,155,878	894,785
Total due to the Ministry of Finance of Georgia	**1,779,738**	**1,683,097**

20. DUE TO CUSTOMERS

	31-Dec-22	31-Dec-21
Due to customers in national currency		
Due to the Deposit Insurance Agency	3,729	-
Due to international organizations	3,458	605
Total due to customers in national currency	**7,187**	**605**

21. MONEY ISSUED IN CIRCULATION

Money issued in circulation represents the amount of national currency of Georgia issued by the Bank. Movements during the year ended 31 December 2022 and 2021 were as follows:

	2022	2021
Balance as at 1 January	**4,589,034**	**4,661,427**
Banknotes issued into circulation	8,808,704	8,190,450
Coins issued into circulation	99,188	85,740
Banknotes withdrawn from circulation	(8,372,258)	(8,279,816)
Coins withdrawn from circulation	(84,121)	(68,767)
Balance as at 31 December	**5,040,547**	**4,589,034**

22. DEBT SECURITIES ISSUED

	Interest rate p.a.	Maturity	Nominal value	Carrying value
Certificates of deposit as at 31-Dec-22	9.96%-10.11%	26 Jan - 23 Mar, 2023	60,000	59,135
Certificates of deposit as at 31-Dec-21	9.45%-10.39%	28 Jan - 25 Mar, 2022	60,000	59,124

23. EQUITY

As stated in the Law, the Bank's capital is comprised of its subscribed and fully paid-up capital and reserve fund.

Authorised capital

The authorised and fully paid-up capital of the Bank is GEL 15,000 thousand as at 31 December 2022 and 2021.

Capital management

The Bank defines capital as its total equity measured in accordance with IFRS. Pursuant to Article 24 of the Law, net income of the Bank for each financial year is calculated as the sum of net operational profit or loss and unrealised gain or loss from revaluation. Net operational profit or loss shall be calculated after deducting from revenues of the reporting year all operating expenditures intended for the core activities. Retained earnings are transferred to different reserves based on the requirements of the Law after approval of the Council. Following approval of the annual report of the Bank by the Council, the remaining portion of the retained earnings is transferred to the State budget within six months after the end of financial year.

Reserve fund

According to the amended Article 25 of the Law, the Reserve Fund should make up 15% of the reserve money, which comprises the national currency in cash put into circulation by the Bank together with the correspondent accounts of commercial banks in national currency and is established by allocations from the realised profit for the year, which comprises net profit for the year excluding net foreign currency translation and other revaluation gains and losses. The Council is entitled to determine the establishment of the Reserve Fund of less than 15% of the reserve money.

The Reserve Fund may only be used to offset losses of the Bank. Following the transfers to the Reserve Fund, the residual balance of realised profit of the Bank shall be transferred to the State Budget of Georgia.

In 2022, the Bank transferred to reserve fund GEL 184,809 thousand from realized profit of 2022. In 2021, the Bank transferred to reserve fund GEL 60,319 thousand from realized profit of 2021 and GEL 219,139 thousand from realized profit of 2020, (which was included in Retained Earnings as at 31 December 2020) respectively.

In accordance with Article 25(c) of the Law, residual amount of GEL 462,780 thousand from realized profit of 2022 is distributed to the Ministry of Finance and will be paid within 6 months after reporting period end. Residual amount of GEL 356,060 thousand was distributed to Ministry of Finance from realized profit of 2021 and was transferred in 2022.

Foreign currency and other revaluation reserves

According to the Article 25(a) of the Law, the Bank transfers net unrealized gains from foreign currency revaluation to the foreign currency revaluation reserve and net unrealized gains arising from changes of the FVTPL financial assets' market prices are transferred to the revaluation reserve created for this purpose. These special reserves shall be used for counteracting (compensating) future losses.

During 2022, net unrealized losses on translation of foreign currencies of GEL 475,157 thousand were transferred from Foreign Currency Revaluation Reserve to Retained Earnings (2021: unrealized loss of GEL 259,086 thousand). During 2022, other revaluation gains of GEL 34,647 thousand were transferred from retained earnings to Other Revaluation Reserve (2021: revaluation gain of GEL 14,036 thousand).

Revaluation reserve for investments measured at FVOCI

This reserve records fair value changes of investments measured at FVOCI.

24. COMMITMENTS AND CONTINGENCIES

In the normal course of operations, the Bank is a party to financial instruments with off-balance sheet commitments. The Bank uses the same risk management policies in undertaking off-balance sheet commitments as it does for on-balance operations.

Capital commitments

No material capital commitments were outstanding as at 31 December 2022 and 2021.

Operating environment

As an emerging market, Georgia does not possess a well-developed infrastructure that would generally exist in a more mature market economy. Therefore, especially sharp changes of operating environment (including global environment) could affect the Bank's results of operations and financial position in a manner not currently determinable.

Over the last few years the Government of Georgia and the Bank have made a number of developments that positively affect the overall investment climate in Georgia, specifically implementing the reforms necessary for creating efficient banking, judicial, taxation and regulatory systems, as well as, using various measures to fulfill the liquidity needs of the economy and to stabilize the exchange rate of the national currency. This has resulted in a stable macroeconomic environment with higher real growth rates and inflow of foreign investments. The existing tendency aimed at the overall improvement of the economy is expected to persist.

However, future development of the economy of Georgia is largely dependent upon these reforms and developments, and the effectiveness of economic, financial and monetary measures undertaken by the Government and the Bank. Management believes that all the necessary measures are implemented to support the Bank's role in maintaining macroeconomic and financial stability.

Legal proceedings

The Bank is subject to legal actions and complaints. Management believes that the ultimate liability, if any, arising from such actions or complaints will not have a material effect on the financial position or the results of operations of the Bank. Management is of the opinion that no material unaccrued losses will be incurred and, accordingly, no provision has been made in these financial statements.

Credit commitments and contingent liabilities

As at 31 December 2022 and 2021, the Bank has no material credit commitments and contingent liabilities.

25. RELATED PARTY TRANSACTIONS

The Bank, as a state entity, is related to the Government of Georgia entities. To achieve its policy objectives, the Bank maintains a position of structural and functional independence from the Government of Georgia through its ability to fund its own operations without external assistance and through its management and governance.

Under key management personnel are regarded those persons having authority and responsibility for planning, directing and controlling the activities of the Bank, directly or indirectly. Key management personnel comprise the members of the Council, Chief Executive Officer and heads of departments.

In the normal course of its operations, the Bank enters into transactions with related parties, and material transactions and balances are presented in these financial statements, based on substance of the relationship, and not merely the legal form.

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(in thousands of Georgian Lari)

The Bank had the following transactions and outstanding balances with related parties:

	Year ended 31 December 2022		Year ended 31 December 2021	
	Related party transactions	Total category as per statement of profit or loss and other comprehensive income	Related party transactions	Total category as per statement of profit or loss and other comprehensive income
Key management personnel compensation:				
– *short-term employee benefits*	(4,459)	(32,955)	(4,254)	(31,155)

		31-Dec-22		31-Dec-21	
	Notes	Related party balances	Total category as per statement of financial position	Related party balances	Total category as per statement of financial position
Statement of financial position					
Assets:					
Investments measured at fair value through other comprehensive income in national currency- *Government of Georgia*	12	2,272,589	2,272,589	1,649,777	1,649,777
Investments measured at amortised cost in national currency- *Government of Georgia*	13	121,390	121,390	161,461	161,461
Loans to employees-key management personnel	17	43	99	74	149
Liabilities:					
Due to the Ministry of Finance	19	1,779,738	1,779,738	1,683,097	1,683,097
Statement of profit or loss and other comprehensive income					
Interest income		168,851	671,815	123,928	484,195
- Government of Georgia		*168,850*		*123,910*	
- Key management personnel		*1*		*18*	

In 2022, unrealized fair value losses on government securities measured at fair value through other comprehensive income amounted to GEL 5,863 thousand (2021: loss of GEL 33,433 thousand).

26. LIABILITIES RELATED TO FINANCING ACTIVITIES

Table below shows reconciliation of movements of liabilities to cash flows arising from financing activities:

		Cash movements			Non-cash movements			
	Note	1-Jan-2022	Interest paid	Net proceeds from financing activities	Accrued interest	Translation differences	Distribution to the Ministry of Finance from 2022 profit	31-Dec-2022
Liabilities arising from financing activities:								
Debt securities issued	22	59,124	(6,032)	(585)	6,628	-	-	59,135
Due to the International Monetary Fund	9	2,948,217	(35,853)	(46,991)	46,347	(501,537)	-	2,410,183
Other liabilities	23	356,060	-	(356,060)	-	-	462,780	462,780

		Cash movements			Non-cash movements				
	Note	1-Jan-2021	Interest paid	Net proceeds from financing activities	Accrued interest	Translation differences	Distribution to the Ministry of Finance from 2020 profit	Distribution to the Ministry of Finance from 2021 profit	31-Dec-2021
Liabilities arising from financing activities:									
Debt securities issued	22	59,273	(5,088)	(700)	5,639	-	-	-	59,124
Due to the International Monetary Fund	9	1,900,788	(19,997)	1,262,346	19,857	(214,777)	-	-	2,948,217
Other liabilities	23	-	-	(140,000)	-	-	140,000	356,060	356,060

27. FAIR VALUE OF FINANCIAL INSTRUMENTS

IFRS defines fair value as the price that would be received to sell an asset or paid to transfer a liability in orderly transactions between market participants at the measurement date.

Fair value of the Bank's financial instruments measured at fair value on a recurring basis

Some of the Bank's financial instruments are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets are determined (in particular, the valuation techniques and inputs used).

Financial instruments measured at fair value are broken down for disclosure purposes into a three level fair value hierarchy based on the observability of inputs:

- Quoted prices in an active market (**Level 1**) – Valuations based on quoted prices in active markets that the Bank has the ability to access for identical assets or liabilities. Valuation adjustments and block discounts are not applied to these financial instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuations of these products do not require a significant amount of judgment. This level entails financial instruments under international reserve portfolio which are classified as derivative financial instruments, investments measured at fair value through profit or loss and investments measured at fair value through other comprehensive income. The instruments are valued on a daily basis, based on the bid prices obtained from Bloomberg at the closing of the markets of the current day.
- Valuation techniques using observable inputs (**Level 2**) – Valuations based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include the following:

  a) quoted prices for similar assets or liabilities in active markets;
  b) quoted prices for identical or similar assets or liabilities in markets that are not active;
  c) inputs other than quoted prices that are observable for the asset or liability, for example:

    - interest rates and yield curves observable at commonly quoted intervals;
    - implied volatilities and
    - credit spreads;

  d) market-corroborated inputs

  Georgian government securities, measured at fair value through other comprehensive income, are measured using observable inputs under Level 2, in particular market yields on similar securities issued by the Georgian government. For fair value assessment, a discounted cash flow model is used based on a current interest rate yield curve appropriate for the remaining term to maturity.

- Valuation techniques incorporating information other than observable market data (**Level 3**) – Valuations based on inputs that are unobservable and significant to the overall fair value measurement. The Bank does not have any financial instruments valued based on unobservable inputs.

The Bank considers that the accounting estimate related to valuation of financial instruments where quoted markets prices or other observable inputs are not available is a key source of estimation uncertainty because: (i) it is highly susceptible to change from period to period because it requires management to make assumptions about interest rates, volatility, exchange rates, the credit rating of the counterparty, valuation adjustments and specific feature of the transactions and (ii) the impact that recognising a change in the valuations would have on the assets reported in the statement of financial position as well as its profit or loss could be material.

The table below analyses financial instruments measured at fair value at 31 December 2022 and 2021, by the level in the fair value hierarchy into which the fair value measurement is categorised. The amounts are based on the values recognised in the statement of financial position:

	Note	Fair value as at		Fair value hierarchy	Valuation techniques and key inputs	Significant unobservable inputs
		31-Dec-22	31-Dec-21			
Financial Assets						
International reserves						
Derivative financial assets	10	45,653	14,235	Level 1	Quoted bid prices in an active market	N/A
Investments measured at fair value through profit or loss	11	272,372	329,975	Level 1*	Quoted bid prices in an active market	N/A
Investments measured at fair value through other comprehensive income	12	7,809,221	7,759,488	Level 1	Quoted bid prices in an active market	N/A
Monetary policy instruments						
Investments measured at fair value through other comprehensive income	12	2,272,589	1,649,777	Level 2	Market interest rate for similar instruments	N/A
Derivative financial assets	10	734	3,864	Level 1	Quoted bid prices in an active market	N/A
Financial liabilities						
Derivative financial liabilities		1,649	-	Level 1	Quoted bid prices in an active market	N/A

** The Bank's investments measured at fair value through profit or loss comprise part of international reserves managed by the Bank for International Settlements ("BIS"), which represents investments placed in the Bank for International Settlements Investment Pool (BISIP CNY). The investments represent instruments which, have quoted prices in active markets that the Bank has the ability to access for identical assets or liabilities. Therefore, the investment's fair valuation is considered to be Level 1 within fair value hierarchy.*

There were no transfers between Level 1, 2 and 3 during the years ended 31 December 2022 and 2021.

Gains and losses included in other comprehensive income relate to investments measured at fair value through other comprehensive income and are reported as changes in revaluation reserve of investments measured at FVOCI.

Net unrealized gain/(loss) from securities and derivatives included in profit or loss relates to derivative financial assets and investments measured at fair value through profit or loss as changes in fair value during the reporting period.

Fair value of financial assets and financial liabilities that are not measured at fair value on a recurring basis (but fair value disclosures are required)

For fixed interest-bearing financial assets and liabilities that have a short-term maturity, it is assumed that the carrying amounts approximate their fair value. This assumption is also applied to demand deposits and savings accounts without maturity.

For variable interest-bearing financial assets (Georgian government bond classified as investments measured at amortized cost) and liabilities (borrowings from the IMF), it is assumed that the carrying amounts approximate their fair value. Moreover, management of the Bank believes that due to their specific nature, borrowings from the IMF represent a separate segment of borrowings from international financial organizations to support developing countries. As a result, these borrowings were considered to have been received in an "arm's length" transaction.

28. RISK MANAGEMENT

Introduction

The activities of the Bank are exposed to various types of risks. These include financial risks in the form of market, credit, and liquidity risks. The Bank's activities are also exposed to a diverse range of non-financial risks. Due to its unique role and functions, the Bank's risk management and control is not only based on the institutional risk and return considerations, but also takes into account the national interest, in line with its statutory responsibilities prescribed in relevant legislation. The Bank views risk management as an integral part of overall management process and an essential element of good corporate governance. The Council of the Bank is ultimately responsible for the oversight of the risk management framework, overseeing the management of the key risks and reviewing its risk management policies and procedures.

To support the effective and efficient risk management system the Bank established a three lines of defense model. The model allocates clear roles and responsibilities for business departments, risk management, and internal audit.

First line of defense: Departmental management

The first line of defense (the Bank's departments) is responsible to identify, assess, and manage the risks in their respective departments by designing, implementing and maintaining an adequate and effective systems of control.

Second line of defense: Centralized risk management function

The second line of defense (Centralized Risk Management Department) is responsible to define and implement an effective non-financial risk management framework that is consistent with standards and approaches of best international practices. The Centralized Risk Management Department provides independent forward-looking assessment of the risks, facilitates, risk management processes and provides business continuity support. The department is accountable to the Governor of the Bank.

Third line of defense: Internal audit

Internal Audit represents the third line of defense, which ensures the effectiveness, and appropriateness of the risk management and internal control systems. Internal audit examines both the adequacy of internal controls and the Bank's compliance with the procedures on a regular basis and reports its findings and recommendations to the Chairman of the Council.

Organization of risk management department

Nature of risk	Management	Guidelines policies issued by	Supervision
Financial risks	At department level	Monetary policy committee International reserve management committee	Board
Non-financial risks	At department level	Centralized risk management department	Internal Audit, Audit Committee

Financial risks

The Bank uses financial instruments as a means of achieving its monetary policy objectives and for managing international reserves. These two portfolios have different risk policies and characteristics, both of them are managed by the financial market department. The description of financial risks below presents the main risks to which these two portfolios of financial instruments are exposed, as well as the management policy of these risks.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

The table below shows the maximum exposure to credit risk for financial instruments of the Bank for which impairment requirements are not applied:

Foreign currency assets	Notes	Maximum exposure 31-Dec-22	Maximum exposure 31-Dec-21
International reserves			
Assets related to derivative instruments	10	45,653	14,235
Investments measured at fair value through profit or loss	11	272,372	329,975
National currency assets			
Monetary policy instruments			
Assets related to derivative instruments		734	3,864
Total credit risk exposure		**318,759**	**348,074**

Exposure to credit risk for instruments where impairment requirements are applied are represented by carrying amounts of the respective assets in the statement of financial position.

International reserve portfolio

According to the Law, the Bank is eligible to hold and manage an international reserve portfolio. The Bank maintains a portfolio to support its monetary and exchange policies and normal functioning of domestic and foreign payments. Reserves are also employed to protect the country from external vulnerability by maintaining sufficient liquidity to absorb shocks during a financial crisis. Therefore, the multiple objectives of holding international reserves feature safety, liquidity, and profitability. Hence, assets under the international reserve portfolio are invested on a conservative basis to facilitate these objectives, with an emphasis on liquidity and capital preservation. For instance, the Bank's Investment Guidelines prioritizes the preservation of capital and a high level of liquidity of reserves. Once these conditions are met, return is to be maximized.

The portfolio is managed in line with investment guidelines approved by the Council. The Reserve Management Committee (the "Committee") of the Bank is responsible for monitoring and implementation of risk mitigation measures prescribed in the investment guidelines and making sure that the Bank operates within the established risk parameters. Typical activities of the Committee are reviewing the monthly reports, approving the list of eligible counterparties, approving changes to the strategy before submitting them to the Council and occasionally making important tactical decisions on asset allocation. The Risk Management and Control Division (the "Division") of the Bank is responsible for the overall day-to-day risk management and compliance functions, ensuring the implementation of common principles and methods for identifying, measuring, managing, and reporting risks.

Monetary policy portfolio

The monetary policy is executed mainly through financial instruments such as Georgian government securities, loans to commercial banks, certificates of deposit, minimum reserve requirements for commercial banks and derivative financial instruments. The monetary policy committee is responsible for monitoring and implementation of risk mitigation tools, such as collateral requirements for refinancing loans.

a) Financial instruments under the international reserves portfolio – internationally rated

In order to control the credit risk of the financial instruments used in the international reserves operations, the strategic asset allocation limits the exposures to credit risk of countries, counterparties and issuers, by setting concentration limits and minimum long-term credit rating, established by the international rating agencies (Standard & Poor's, Moody's and Fitch). For instance, investment guidelines clearly define the minimum level of the credit rating for investing in any debt Instruments (Bonds, Bills) as well as for bank deposits and other financial instruments as A-. However, minimum credit rating of BBB is acceptable for counterparties used only for Nostro accounts.

Additionally, the investment guidelines limit the concentration into non-benchmark financial instruments and the portfolio is diversified into various money market instruments, as well as fixed income and floating rate securities (Government Bonds, Agencies including Regional Governments and Supranational Securities) and other liquid, highly secure instruments.

While selecting the Bank's counterparties, the counterparty's credit rating, the country of its residence, the volume of its assets and capital, the experience of working in international markets and with corporate clients and the spectrum of the services and instruments offered to its clients are taken into consideration. In case of downgrade of the long-term credit rating of the Bank's counterparty by the above-mentioned rating agencies, the counterparty will be withdrawn from the list of eligible counterparties.

When different credit ratings are designated by the rating agencies (Standard & Poor's, Moody's and Fitch) for the assets, the second-best credit rating is used for credit risk assessment.

Credit quality analysis

The table below shows, by class of financial instruments, gross carrying amount of assets within the international reserve portfolio for which impairment requirements are applied according to second-best credit rating based on international ratings:

	31 December 2022				31 December 2021			
Second-best credit rating (credit ratings range)	**12-month ECL**	**Lifetime ECL not credit-impaired**	**Lifetime ECL credit-impaired**	**Total**	**12-month ECL**	**Lifetime ECL not credit-impaired**	**Lifetime ECL credit-impaired**	**Total**
Cash and cash equivalents (excluding cash on hand)								
AAA *(from AA+ to AAA)*	2,001,824	-	-	2,001,824	1,595,101	-	-	1,595,101
AA *(from A+ to AA+)*	479,552	-	-	479,552	170,100	-	-	170,100
A *(from BBB+ to AA-)*	1,034,648	-	-	1,034,648	637,371	-	-	637,371
Gross carrying amount	**3,516,024**	**-**	**-**	**3,516,024**	**2,402,572**	**-**	**-**	**2,402,572**
Loss allowance	-	-	-	-	-	-	-	-
Net carrying amount	**3,516,024**	**-**	**-**	**3,516,024**	**2,402,572**	**-**	**-**	**2,402,572**
Special Drawing Rights holdings with the International Monetary Fund								
AAA	1,249,154	-	-	1,249,154	1,506,927	-	-	1,506,927
Gross carrying amount	**1,249,154**	**-**	**-**	**1,249,154**	**1,506,927**	**-**	**-**	**1,506,927**
Loss allowance	-	-	-	-	-	-	-	-
Net carrying amount	**1,249,154**	**-**	**-**	**1,249,154**	**1,506,927**	**-**	**-**	**1,506,927**
Investments measured at fair value through other comprehensive income								
AAA *(from AA+ to AAA)*	7,023,663	-	-	7,023,663	6,803,394	-	-	6,803,394
AA *(from A+ to AAA)*	534,904	-	-	534,904	947,006	-	-	947,006
A *(from A to A+)*	250,654	-	-	250,654	9,088	-	-	9,088
Net carrying amount - fair value	**7,809,221**	**-**	**-**	**7,809,221**	**7,759,488**	**-**	**-**	**7,759,488**
Loss allowance (recognised in other comprehensive income)	(236)	-	-	(236)	(218)	-	-	(218)

b) Financial instruments under the monetary policy portfolio – internally rated

Credit risk is associated with open-market operations and facilities that inject liquidity to the financial system. The Bank's securities portfolio is comprised exclusively of securities issued by the Government of Georgia, considered as assets with low credit risk. To mitigate the risk associated with loans to banking institutions, the Bank requires collaterals eligible according to their credit quality, which are valued at market prices at the time of their receipt and subject to the application of discounts or haircuts according to the instrument specific characteristics.

The Bank classifies its financial assets other than international reserves based on internally developed ratings as follows:

AAA grade – borrowers with excellent financial performance, having no changes in the terms and conditions of loan agreements and no overdue in principal and interest.

AA grade – borrowers with stable financial performance, having no changes in the terms and conditions of loan agreements and no overdue in principal and interest.

A grade – borrowers with satisfactory financial performance, having changes in the terms and conditions of loan agreements and no overdue in principal and interest.

B grade – loans issued to borrowers with satisfactory financial performance, having changes in the terms and conditions of loan agreements and overdue in principal and interest.

It is the Bank's policy to maintain accurate and consistent risk ratings across the credit portfolio. The attributed risk ratings are assessed and updated regularly.

The table below shows, by classes of financial instruments, gross carrying amounts of monetary policy and other financial assets, for which impairment requirements are applied, based on The Bank's internal credit rating system:

	31 December 2022			31 December 2021		
	12-month ECL	Lifetime ECL credit-impaired	Total	12-month ECL	Lifetime ECL credit-impaired	Total
Foreign currency assets						
Other financial assets						
AAA grade	485	-	485	-	-	-
A grade	166	-	166	-	-	-
B grade	6	-	6	8	-	8
Gross carrying amount	**657**	**-**	**657**	**8**	**-**	**8**
Loss allowance	-	-	-	-	-	-
Net carrying amount	**657**	**-**	**657**	**8**	**-**	**8**
National currency assets						
Monetary policy instruments						
Due from resident financial institutions						
AAA grade	3,456,584	-	3,456,584	3,147,015	-	3,147,015
Gross carrying amount	**3,456,584**	**-**	**3,456,584**	**3,147,015**	**-**	**3,147,015**
Loss allowance	-	-	-	-	-	-
Net carrying amount	**3,456,584**	**-**	**3,456,584**	**3,147,015**	**-**	**3,147,015**
Investments measured at fair value through other comprehensive income						
AAA grade	2,272,589	-	2,272,589	1,649,777	-	1,649,777
Carrying amount - fair value	**2,272,589**	**-**	**2,272,589**	**1,649,777**	**-**	**1,649,777**
Other national currency assets						
Investments measured at amortized cost						
AAA Grade	121,390	-	121,390	161,461	-	161,461
Gross carrying amount	**121,390**	**-**	**121,390**	**161,461**	**-**	**161,461**
Loss allowance	-	-	-	-	-	-
Net carrying amount	**121,390**	**-**	**121,390**	**161,461**	**-**	**161,461**
Other financial assets						
A Grade	200	-	200	101	-	101
B Grade	-	54	54	-	149	149
Gross carrying amount	**200**	**54**	**254**	**101**	**149**	**250**
Loss allowance	-	(54)	(54)	-	(74)	(74)
Net carrying amount	**200**	**-**	**200**	**101**	**75**	**176**

The following table shows reconciliation of opening and closing balances of the loss allowance by classes of those financial instruments for which expected credit losses are recognised:

	2022			2021		
	12-month ECL	Lifetime ECL credit-impaired	Total	12-month ECL	Lifetime ECL credit-impaired	Total
Foreign currency assets						
International reserves						
Investments measured at FVOCI						
Balance at 1 January	**218**	**-**	**218**	**337**	**-**	**337**
New financial assets recognised	147	-	147	116	-	116
Remeasurement of loss allowance	(71)	-	(71)	(74)	-	(74)
Foreign exchange and other movements	(13)	-	(13)	(6)	-	(6)
Financial assets that have been derecognized - repayment	(45)	-	(45)	(155)	-	(155)
Balance at 31 December	**236**	**-**	**236**	**218**	**-**	**218**
National currency assets						
Other national currency assets						
Other assets						
Balance at 1 January	**-**	**74**	**74**	**-**	**156**	**156**
New financial assets recognized	-	-	-	-	-	-
Remeasurement of loss allowance	-	-	-	-	(56)	(56)
Financial assets that have been derecognized (including repayment)	-	(20)	(20)	-	(26)	(26)
Balance at 31 December	**-**	**54**	**54**	**-**	**74**	**74**
Total balance at 1 January	**218**	**74**	**292**	**337**	**156**	**493**
Total balance at 31 December	**236**	**54**	**290**	**218**	**74**	**292**

Excessive risk concentration

Concentrations arise when a number of counterparties are engaged in similar business activities, or activities in the same geographic region, or have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic, political or other conditions. Concentrations indicate the relative sensitivity of the Bank's performance to developments affecting a particular industry or geographical location.

In order to minimize excessive concentrations of risks, the Bank's policies and procedures include specific guidelines to focus on maintaining a low credit risk profile. The concentration risks by counterparties and asset quality are disclosed in relevant notes to the financial statements.

Geographical concentration

The Bank's financial assets and liabilities are generally concentrated in Georgia, except for the international reserve portfolio and borrowings from the IMF. The below table provides information on geographical concentration for these financial assets and liabilities outside of Georgia:

As at 31 December 2022	Notes	US	EU*	Australia	Canada	International	Other	Total
Assets:								
International reserves								
Cash and cash equivalents (excluding cash on hand)	7	287,623	2,650,812	1	122	-	577,466	3,516,024
Special Drawing Rights holdings with the IMF	9	-	-	-	-	1,249,154		1,249,154
Assets related to derivative instruments	10	-	-	-	-	-	45,653	45,653
Investments measured at fair value through profit or loss	11	-	-	-	-	272,372	-	272,372
Investments measured at fair value through other comprehensive income	12	5,485,359	562,906	19,284	642,509	744,020	355,143	7,809,221
		5,772,982	**3,213,718**	**19,285**	**642,631**	**2,265,546**	**978,262**	**12,892,424**
Liabilities:								
Due to the IMF	9	-	-	-	-	2,410,183	-	2,410,183
Net position		**5,772,982**	**3,213,718**	**19,285**	**642,631**	**(144,637)**	**978,262**	**10,482,241**

As at 31 December 2021	Notes	US	EU*	Australia	Canada	International	Other	Total
Assets:								
International reserves								
Cash and cash equivalents (excluding cash on hand)	7	117,659	1,816,828	8	1,901	-	466,176	2,402,572
Special Drawing Rights holdings with the IMF	9	-	-	-	-	1,506,927	-	1,506,927
Assets related to derivative instruments	10	-	-	-	-	-	14,235	14,235
Investments measured at fair value through profit or loss	11	-	-	-	-	329,975	-	329,975
Investments measured at fair value through other comprehensive income	12	4,628,393	1,113,351	62,567	1,003,701	837,856	113,620	7,759,488
		4,746,052	**2,930,179**	**62,575**	**1,005,602**	**2,674,758**	**594,031**	**12,013,197**
Liabilities:								
Due to the IMF	9	-	-	-	-	2,948,217	-	2,948,217
Net position		**4,746,052**	**2,930,179**	**62,575**	**1,005,602**	**(273,459)**	**594,031**	**9,064,980**

**EU-including Norwegian* agency *securities.*

Liquidity risk

Liquidity risk considers the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

a) Financial instruments under the international reserve portfolio

The purpose of the management of the liquidity risk is to ensure that the Bank fulfills all the financial commitments that it has assumed. Accordingly, the Bank diversifies maturities and also establishes limits aiming to ensure that the securities purchased may be traded in the secondary market without causing abrupt changes in the prices of the assets. Due to these guidelines, even securities with longer maturities have immediate liquidity.

The Bank's Monetary Policy and International Reserves Management Committees set limits on the minimum proportion of maturing funds available to cover cash outflows. The liquidity management policy of the Bank requires:

- Projecting cash flows by major currencies and considering the level of liquid assets necessary in relation thereto;
- Maintaining a diverse range of funding sources;
- Managing the concentration and profile of debts;
- Maintaining a portfolio of highly marketable assets that can easily be liquidated as protection against any interruption to cash flow; and
- Maintaining liquidity and funding contingency plans.

The Financial Markets Department receives information from business units regarding the liquidity profile of their financial assets and liabilities and details of other projected cash flows arising from projected future operations. The Bank's liquidity risk relates to foreign currency cash flows.

The table below summarizes the maturity profile of the Bank's financial liabilities in foreign currency as at 31 December 2022 and 2021 based on contractual undiscounted repayment obligations. The financial assets in foreign currencies are presented in "less than 3 months" category on the basis that the Bank can realize them within the period not exceeding 3 months to meet the liquidity requirements:

As at 31 December 2022	Notes	Less than 3 months	3 to 12 months	1 to 5 years	Over 5 years	Total
Foreign currency assets						
International Reserves						
Cash and cash equivalents (excluding cash on hand)	7	3,516,024	-	-	-	3,516,024
Special Drawing Rights holdings with the IMF	9	1,249,154	-	-	-	1,249,154
Assets related to derivative instruments	10	45,653	-	-	-	45,653
Investments measured at fair value through profit or loss	11	272,372	-	-	-	272,372
Investments measure at fair value through other comprehensive income	12	7,809,221	-	-	-	7,809,221
Other foreign currency assets						
Other financial assets	17	172	-	485	-	657
Total foreign currency assets		**12,892,596**	**-**	**485**	**-**	**12,893,081**
Foreign currency liabilities						
Due to resident financial institutions	18	5,716,743	-	-	-	5,716,743
Due to the Ministry of Finance	19	623,860	-	-	-	623,860
Due to the IMF	9	1,260,572	268,578	662,156	422,807	2,614,113
Other liabilities	17	3,978	870	-	-	4,848
Total foreign currency liabilities		**7,605,153**	**269,448**	**662,156**	**422,807**	**8,959,564**
Net position		**5,287,443**	**(269,448)**	**(661,671)**	**(422,807)**	**3,933,517**

As at 31 December 2021	Notes	Less than 3 months	3 to 12 months	1 to 5 years	Over 5 years	Total
Foreign currency assets						
International Reserves						
Cash and cash equivalents (excluding cash on hand)	7	2,402,572	-	-	-	2,402,572
Special Drawing Rights holdings with the IMF	9	1,506,927	-	-	-	1,506,927
Assets related to derivative instruments	10	14,235	-	-	-	14,235
Investments measured at fair value through profit or loss	11	329,975	-	-	-	329,975
Investments measure at fair value through other comprehensive income	12	7,759,488	-	-	-	7,759,488
Other foreign currency assets						
Other financial assets	17	8	-	-	-	8
Total foreign currency assets		**12,013,205**	**-**		**-**	**12,013,205**
Foreign currency liabilities						
Due to resident financial institutions	18	5,344,835	-	-	-	5,344,835
Due to the Ministry of Finance	19	788,312	-	-	-	788,312
Due to the IMF	9	1,503,790	69,556	744,590	725,797	3,043,732
Other liabilities	17	1,159	2,325	-	-	3,485
Total foreign currency liabilities		**7,638,096**	**71,881**	**744,590**	**725,797**	**9,180,364**
Net position		**4,375,109**	**(71,881)**	**(744,590)**	**(725,797)**	**2,832,841**

b) Financial instruments under the monetary policy portfolio

Considering the inherent characteristics of a monetary authority, which includes controlling the liquidity of the financial system, the Bank is not exposed to the limitations resulting from a mismatch between assets and liabilities in national currency. All monetary policy instruments, except for obligatory reserves, are short term.

Market risk

Market risk is the risk that the value of financial instruments will fluctuate due to changes in market variables such as interest rates and foreign exchanges rates. Market risks comprise currency risk, interest rate risk and other price risk. Market risk arises from open positions in interest rate and currencies, which are exposed to general and specific market movements and changes in the level of volatility of market prices.

a) Financial instruments under the international reserve portfolio

Market risk implies possible losses due to variations in the prices of investments.

The Strategic Asset Allocation (SAA) process limits the market risk based on the risk tolerance of the Bank. Strategic benchmarks are defined for individual portfolios to maximize returns, after assessing various interest rate scenarios, while staying within the market risk limit. Currency exposures are defined based on the analysis of the foreign debt and diversification effects are also considered to decrease overall currency risk (refer to note on currency risk below).

All portfolios, except for the Working Capital, EUR Investment portfolio (since 15 December 2015) and AUD investment portfolio (since February 2021), are actively managed versus strategic benchmarks. Active market risk versus benchmarks is defined during the risk budgeting process and active market risk limits are established for each portfolio through limiting ex-ante tracking error and duration deviation. Regular stress testing is conducted to assess resilience of active portfolios to market shocks.

Strategic Benchmark Durations and Active Market Risk Limits for the international reserve portfolio are as follows:

	2022		2021	
Tranches	**Benchmark Duration (Duration Deviation Limits)**	**Ex-Ante Tracking Error Limits**	**Benchmark Duration (Duration Deviation Limits)**	**Ex-Ante Tracking Error Limits**
Liquidity Portfolio in USD	6 months (+/-3 Months)	15 Basis Point	6 months (+/-3 Months)	15 Basis Point
Investment Portfolio in USD*	9 months (+/-3 Months)	30 Basis Point	9 months (+/-3 Months)	30 Basis Point
Investment Portfolio in CAD	9 months (+/-3 Months)	30 Basis Point	9 months (+/-3 Months)	30 Basis Point

** Due to the annual SAA decision, the Benchmark Durations for the Liquidity Portfolio in USD and Investment Portfolios in USD and CAD have been decreased from March 2021.*
** Since March 2021, Investment Portfolio in USD includes supranational sub-portfolio with 9 months benchmark duration and 15 bps TE limit.*

Market risk is monitored through daily measurement of the duration and composition of currencies, and by the follow-up of ex-ante tracking error. The international reserve management daily report, prepared by the Financial Markets Department, includes measurements of performance and risk in an absolute manner and as compared to a benchmark, and presents an evaluation of the implemented investment strategy.

The Bank's exposure to fair value interest rate risk arises principally through its investments in International Reserves portfolio, which are exposed to fluctuations because of changes in market interest rates.

Interest rate risk for Foreign Currency Reserves is the risk of changes in fair value of financial instruments due to changes in market interest rates.

The Bank's internally managed Foreign Currency Reserve's portfolio is divided into tranches and the Bank measures interest rate risk for its tranches, in all currencies, based on a 1% change in interest rates that indicates a change in the fair market value of financial instruments per 1% change in market yields. The fair market values of tranches held by the Bank are exposed to fluctuations, however these variations would not affect the ability of the Bank to fulfil its obligations.

Market yield sensitivity of the Bank's International Reserve tranches

The table shows the sensitivity of reserve tranches to a 1% increase or decrease in market yields to the asset values (figures are provided in thousands of USD):

	2022		2021	
Currency	**Increase in market yield**	**Impact on equity**	**Increase in market yield**	**Impact on equity**
Investment Tranche in USD	1%	(13,872)	1%	(13,079)
Investment Tranche in CAD	1%	(836)	1%	(1,428)
Liquidity Tranche in USD	1%	(3,121)	1%	(3,449)
Investment Tranche in CNY External (BIS)	1%	(2,945)	1%	(3,171)
Working Capital Tranche in USD	1%	(1,127)	1%	(17)

	2022		2021	
Currency	**Decrease in market yield**	**Impact on equity**	**Decrease in market yield**	**Impact on equity**
Investment Tranche in USD	1%	14,114	1%	13,366
Investment Tranche in CAD	1%	850	1%	1,457
Liquidity Tranche in USD	1%	3,172	1%	3,517
Investment Tranche in CNY External (BIS)	1%	3,106	1%	3,341
Working Capital Tranche in USD	1%	1,142	1%	36

b) Financial instruments under the monetary policy portfolio

For open-market operations, this risk is mainly associated with changes in the market value of Georgian government bonds, and the change in value of collaterals received in liquidity injection transactions. For collaterals the risk of value loss is mitigated by using margins and haircuts that write-down their value and allow the effective amount lent to be lower than the collateral received.

Market yield sensitivity of the Bank's financial assets

Interest rate risk arises from the possibility that changes in interest rates will affect future cash flows or the fair value of financial instruments. The following table demonstrates the net effect of 1% change in interest rates, with all other variables held constant, on the Bank's statement of profit or loss and other comprehensive income, taking into account the effect of derivatives.

The sensitivity of equity is calculated by revaluing fixed-rate investments measured at fair value through other comprehensive income at 31 December 2022 and 2021 for 1% change in market interest rates:

	2022		2021	
	Increase in market yield	Impact on equity	Increase in market yield	Impact on equity
Georgian Government bonds	1%	(42,195)	1%	(34,449)

	2022		2021	
	Decrease in Market Yield	Impact on equity	Decrease in Market Yield	Impact on equity
Georgian Government bonds	1%	43,913	1%	36,108

Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign currency exchange rates. Subject to the currency profile of assets, the value of assets of the Bank is exposed to the risk of changes in exchange rates of major foreign currencies. Within the overall exposure and to a limited extent, foreign currency risk can be partially mitigated by holding assets across a diversified portfolio of currencies. Since 14 December 2015, the target currency composition is 80% USD, 10% EUR, 10% Other (Canadian dollars, Chinese yuan and other currencies up to 10%). Under SAA, +/–10% is allowed for the U.S. dollar, the Euro, and other currencies' target currency composition.

Sensitivity to foreign currency

The table below provides the concentration of the Bank's financial assets and liabilities by major currencies and analyses of the effect of a 1%, 5%, 10% and 15% movement of the currency rate against Georgian Lari, with all other variables held constant, on the statement of profit or loss and other comprehensive income. A negative amount in the table reflects a potential net reduction in the statement of profit or loss and other comprehensive income, while a positive amount reflects a net potential increase.

As at 31 December 2022	USD	EUR	SDR	JPY	CAD	Other	Total
Foreign currency assets	8,901,630	1,895,533	1,249,639	522,071	402,426	273,210	**13,244,509**
Foreign currency liabilities	(4,735,934)	(1,604,371)	(2,408,008)	-	-	(8,919)	**(8,757,232)**
Net position	**4,165,696**	**291,162**	**(1,158,369)**	**522,071**	**402,426**	**264,291**	**4,487,277**

As at 31 December 2021	USD	EUR	SDR	JPY	CAD	Other	Total
Foreign currency assets	8,346,127	2,309,178	1,506,927	255,764	486,068	330,498	**13,234,562**
Foreign currency liabilities	(4,554,046)	(1,581,096)	(2,945,597)	-	-	(1,490)	**(9,082,229)**
Net position	**3,792,081**	**728,082**	**(1,438,670)**	**255,764**	**486,068**	**329,008**	**4,152,333**

	Effect on total comprehensive income and equity						
	2022						
	USD	EUR	SDR	JPY	CAD	Other	Total
Increase in currency rate of 1%	41,657	2,912	(11,584)	5,221	4,024	2,643	**44,873**
Increase in currency rate of 5%	208,285	14,558	(57,918)	26,104	20,121	13,215	**224,365**
Increase in currency rate of 10%	416,570	29,116	(115,837)	52,207	40,243	26,429	**448,728**
Increase in currency rate of 15%	624,854	43,674	(173,755)	78,311	60,364	39,644	**673,092**
Decrease in currency rate of 1%	(41,657)	(2,912)	11,584	(5,221)	(4,024)	(2,643)	**(44,873)**
Decrease in currency rate of 5%	(208,285)	(14,558)	57,918	(26,104)	(20,121)	(13,214)	**(224,364)**
Decrease in currency rate of 10%	(416,570)	(29,116)	115,837	(52,207)	(40,243)	(26,429)	**(448,728)**
Decrease in currency rate of 15%	(624,854)	(43,674)	173,755	(78,311)	(60,364)	(39,644)	**(673,092)**

	Effect on total comprehensive income and equity						
	2021						
	USD	EUR	SDR	JPY	CAD	Other	Total
Increase in currency rate of 1%	37,921	7,281	(14,387)	2,558	4,861	3,290	**41,524**
Increase in currency rate of 5%	189,604	36,404	(71,933)	12,788	24,303	16,450	**207,616**
Increase in currency rate of 10%	379,208	72,808	(143,867)	25,576	48,607	32,901	**415,233**
Increase in currency rate of 15%	568,812	109,212	(215,801)	38,365	72,910	49,351	**622,849**
Decrease in currency rate of 1%	(37,921)	(7,281)	14,387	(2,558)	(4,861)	(3,289)	**(41,523)**
Decrease in currency rate of 5%	(189,604)	(36,404)	71,933	(12,788)	(24,303)	(16,451)	**(207,617)**
Decrease in currency rate of 10%	(379,208)	(72,808)	143,867	(25,576)	(48,607)	(32,901)	**(415,233)**
Decrease in currency rate of 15%	(568,812)	(109,212)	215,801	(38,365)	(72,910)	(49,351)	**(622,849)**

Other risks

Settlement risk

Settlement risk (i.e., the risk that the counterparty may not be able to complete a transaction) is mitigated in a number of ways. The Bank will only transfer funds after sufficient collateral has been secured. For outright transactions in securities, settlement risk is eliminated through the use of systems that are based on delivery versus payment, that is, the simultaneous exchange of securities and cash. Additionally, the settlement of the cash component is performed through the payment system referred to as Real Time Gross Settlement, which is owned and managed by the Bank, which determines the position of each participant in real time on an individual payment-to-payment basis. This automatically avoids overdrafts and as it simultaneously uses accounts in the Bank as settlement asset, it mitigates credit risk.

Non-financial risks

Non-financial risks to which the Bank is exposed are: reputational and operational risks. Operational risks originate from inadequate or failed internal processes, people and systems or external events. The Bank is exposed to the following sub-categories of operational risks: legal, information technology, human resources, security (physical and information), third-party, business continuity, fraud and compliance risks. Realization of non-financial risks may result in financial loss, damage to reputation or failure in achieving the Bank's business objectives. Hence, the Bank developed Centralized Risk Management (CRM) system in order to minimize the impact of non-financial risks and ensure solid internal control system.

CRM framework is comprised of non-financial risks management, incident management and business continuity systems and is supported by internal control system of procedures. Non-financial risk assessment is based on qualitative method (5-scale) and includes all bank-wide processes, where risks could jeopardize the achievement of the objectives. Incident Management system captures and analyzes incidents in order to avoid the repetitive occurrence of incidents. To expand and improve operational risk assessment, the Bank selected and accepted quantification method - Standardised Measurement Approach (SMA). In order to finalize the implementation, the Bank will continue working on financial loss data, consequent processes and procedure development. The Bank applies model risk management framework to register, describe and assess the models used by the Bank, which supports to create unified documentation for each model and non-financial risk assessment process. Business continuity management system continuously improves the resilience of the Bank's critical processes and provides adequate procedures, regular testing and expansion of scenarios. Throughout 2022, the Bank continued its activities, including critical services, through hybrid working model, which became part of the Bank's HR policy. Additional technical resources, processes and procedures were introduced, staff trainings were provided to support the continuity of the Bank services and functions.

The Bank defined the aggregate level (Risk Appetite) of non-financial risks the Bank is willing to assume within its risk capacity to achieve its strategic objectives and goals. Overall, the Bank has conservative approach to operational and reputational risks and operates within low-risk appetite and tolerance levels. Hence, the Bank makes resources available and sets effective governance processes to control and maintain non-financial risks at low risk level. Risk appetite statement is reviewed and approved annually by the Council of the Bank.

29. EVENTS AFTER THE REPORTING PERIOD

Up to the date these financial statements were authorized for issue, no significant subsequent events have occurred that require adjustment of, or disclosure in, these financial statements.