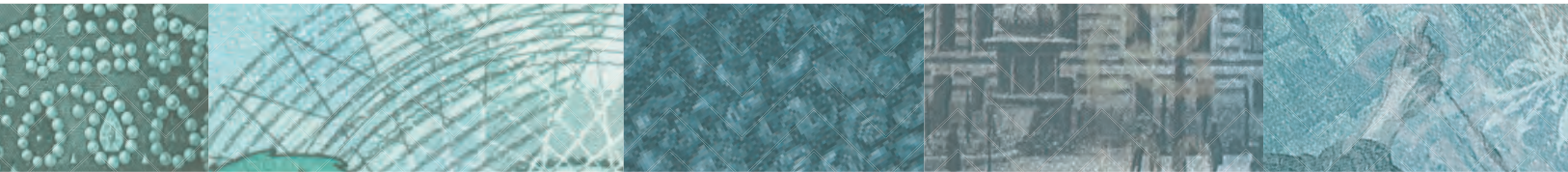




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National Bank of Georgia

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*The Governor of the National Bank of Georgia Koba Gvenetadze
was awarded with the Best Central Banker of
2019 Award by Global Finance*

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ABBREVIATIONS

API - Application Programming Interface	IORWG - International Operational Risk Working Group
ARA - Assessing Reserve Adequacy	ISET - International School of Economics at TSU
BCBS - Basel Committee on Banking Supervision	IT - Information Technology
BI - Business Intelligence	LTV - Loan-to-Value
BIS - Bank of International Settlements	NSFR - Net Stable Funding Ratio
CDC - Creative Development Center	OECD - Organization for Economic Co-operation and Development
CEF - Center of Excellence in Finance	OECD/INFE - OECD International Network on Financial Education
CIF - Cost, Insurance and Freight	O/N - Overnight
CYFI - Child and Youth Finance International	PCPP - Private Computing on Public Platforms
EBRD - European Bank for Reconstruction and Development	PRA - Prudential Regulation Authority
EDA - Export Development Authority	PTI - Payment-to-Income
EFF - Expanded Fund Facility	RDFG - Rural Development for Future Georgia
EFSE DF - Development Facility of the European Fund for Southeast Europe	RTGS - Real Time Gross Settlement
ESG - Environmental, Social and Governance	RWA - Risk-Weighted Assets
ESRB - European Systemic Risk Board	S&P - Standard & Poor's
FA - Financial Account	SBN - Sustainable Banking Network
FOB - Free On Board	SBFIC - Savings Banks Foundation for International Cooperation
FMS - Financial Monitoring Service	SDMX - Statistical Data and Metadata eXchange
GITI - Georgian IT Innovations	SDR - Special Drawing Right
GIZ - German Agency for International Cooperation	SMA - Standardized Measurement Approach
GRAPE - General Risk Assessment Process	SME - Small- and Medium-sized Enterprises
GSSS - Georgian Securities Settlement System	TIBER-EU - European Cyber Resilience framework
IAS - Internal Audit Service	TIBR - Tbilisi Interbank Rate
IFC - International Finance Corporation	USAID - United States Agency for International Development
IFRS - International Financial Reporting Standard	
IMF - International Monetary Fund	
IOPS - International Organization of Pension Supervisors	

INTRODUCTION

Price stability implies maintaining inflation around the target level in the medium term. In the short term, inflation can deviate from the target (in both directions), but in the medium term, the NBG's monetary policy will guide inflation to the target level. A focus on the medium term is key as this ensures price stability, lower long-term interest rates and higher, and more stable economic growth than under any alternative framework.

The conduct of monetary policy based on the approach mentioned above is possible under an inflation-targeting framework, which is widely regarded as the most efficient monetary policy approach. With the development of monetary policy instruments and their transmission mechanisms, the inflation-targeting framework allows price stability to be reached at the lowest possible social cost. The National Bank of Georgia thus strives to increase the efficiency of monetary policy instruments and their transmission mechanisms. The NBG adopted its inflation-targeting framework in 2009. Since (over 2009-2019), the average annual inflation rate has stood at 3.6%. The initial inflation target was set at 6% but has gradually declined over time – moving to 3% from 2018, which corresponds to the long-term target level.

Georgia, as other small open economies, is prone to exogenous shocks (independent from monetary policy). Exogenous factors can cause actual inflation to deviate from the target level. As monetary policy is a tool to affect aggregate demand, it is the central bank's response to demand shocks. However, central banks do not usually react to exogenous cost-push shocks, since doing so would lead to high economic costs and facilitate economic fluctuations, increasing unemployment in the long run. Moreover, research has demonstrated that monetary policy is transmitted to the real economy with a certain time lag. Hence, in the short run, actual inflation can temporarily deviate from the target level. However, if a deviation is so significant that it affects inflation expectations and the inflation forecast, the NBG will adjust its policy response accordingly.

The suspension of air travel to Georgia by the Russian Federation from July 2019 has had a significant impact on Georgia's economy, altering the macroeconomic trends observed in the first half of the year. It was immediately clear that the flight ban would hurt the tourism industry, which had been growing rapidly in recent years and was heavily dependent on travelers from Russia. However, the prospect of additional

sanctions being imposed on exports and remittances only served to further increase uncertainty. Considering the expected decline in external demand and increased uncertainty, the expectations of economic agents also deteriorated significantly, thereby affecting monetary policy decisions in 2019.

Over 2018, the inflation level remained low and averaged around 2.6%. This pattern remained the same in early 2019; however, from March, inflation started to deviate from the target level, mainly as a result of exogenous (independent of monetary policy) factors such as the increase in excise tax on cigarettes and tobacco. An increase in prices for some categories of food also exerted upwards pressure on inflation. A number of supply factors, including the food prices commonly exhibit high volatility. Because of the high weight of food prices in the consumer basket (27.3%), this volatility significantly affects the overall inflation rate. It is noteworthy that core inflation remained low over the same period.

The nature of the factors pushing inflation upwards and the low level of core inflation both indicated that the increase in inflation was only temporary. At the same time, aggregate demand was still lagging behind its potential level and inflationary pressure stemming from the demand side was thus still weak. As a result, in the first quarter of 2019, as the upward risks to the inflation forecast abated, the NBG continued a gradual exit from its moderately tightened monetary policy. According to the decision of the Monetary Policy Committee, the policy rate in January and March declined by 0.25-0.25 percentage points (pp) to 6.5%. It should be noted that based on the information available at the time, with the exhaustion of one-off (exogenous) factors, inflation was expected to decline from the beginning of 2020 and to gradually approach the target level. In addition, in the first half of the year, to encourage larization (de-dollarization), the Monetary Policy Committee decided to increase the minimum reserve requirements for foreign currency funds. To mitigate potential risks to financial stability in the future, the Monetary Policy Committee decided to increase reserve requirements on short-term funds (with a remaining maturity of less than one year) attracted in foreign currency from 20% to 25%. The Monetary Policy Committee also made the decision to cut interest rates earned on required foreign currency funds on correspondent, deposit and reserve accounts of commercial banks.

In the second half of 2019, amid the developments

of July, the macroeconomic outlook deteriorated. Following the flight ban from Russia, the nominal effective exchange rate depreciated significantly. At the same time, uncertainty about possible sanctions and their impact on the economy increased. In particular, additional sanctions on exports or remittances would have reduced aggregate demand and, as a result, exerted downwards pressure on inflation. Given these factors, the monetary policy rate remained unchanged at the July meeting of the Monetary Policy Committee, although a press release noted that appropriate monetary policy measures would be taken if inflationary pressures from the exchange rate persisted. In the following period, it became clear that additional sanctions would not be imposed. In the second half of the year, the pass-through of the exchange rate depreciation on inflation increased, mainly through imported inflation and dollarized loans. The depreciation of the nominal effective exchange rate amplified inflation expectations, increasing core inflation that had remained low in the first half of the year. As a result, inflation equaled 7.0% at the end of the year, averaging 4.9% over 2019 as a whole. Meanwhile, core inflation at the end of the year equaled 3.7% and averaged 2.0% over the year, which was lower than the headline inflation indicator.

In early September, considering the factors mentioned above, the Monetary Policy Committee increased the policy rate by 0.5 pp. In addition, economic activity grew faster than had been expected, weakening the downwards pressure of inflation. As a result, the NBG continued to tighten the monetary policy stance that was aimed at neutralizing the inflationary pressure stemming from the nominal exchange rate depreciation. Overall, from September to December 2019, the refinancing rate was increased from 6.5% to 9.0%. One of the most important monetary policy transmission channels to the real economy is the exchange rate. The increase in GEL interest rates on financial markets leads to increased demand for GEL-dominated assets, positively affecting exchange rate dynamics and thereby weakening exchange rate pressure.

It is noteworthy that as a result of tightened monetary policy, the growth in prices slowed and, at the end of the year, inflation gradually declined. At the same time, to avoid a decrease in lending and a slowdown in the economy amid the tightened monetary policy stance, the National Bank reduced the minimum reserve requirements from 30% to 25% for short-term (with a maturity of up to one year) funds attracted in foreign currency. At the same time, the changes made to the rules of accrual for foreign currency funds on correspondent, deposit and reserve accounts of com-

mercial banks, also had a positive impact on overall lending and thereby on economic growth.

The dollarization trend that began in 2017 continued in the first half of 2019, and was noticeable in the data on loans and deposits issued to both individuals and legal entities. However, in the second half of the year, against the background of the depreciation of the nominal effective exchange rate and increased uncertainty, the pace of de-dollarization of total deposits slowed down and, in December, the dollarization of deposits increased slightly compared to previous months. In 2019 as a whole, the dollarization of deposits (excluding the exchange rate effect) decreased by 0.6 percentage points (pp) and equaled 64.1%. Following the reduction of reserve requirements, lending in foreign currency accelerated and the dollarization of loans thus increased towards the end of the year. Loan dollarization fell by 3.3 pp to 55.1% in December (excluding the exchange rate effect). At the same time, the dollarization level of loans to physical persons fell from 49.4% to 42.8% in 2019.

Active communication with society remains one of the main priorities of the NBG and the National Bank is thus constantly working to improve its communication channels. In 2019, the communication strategy of the National Bank of Georgia was further developed, and new channels and ways to ensure effective communication in the field of monetary and supervisory policy were identified. Particular attention was paid to ensuring that society understood current macroeconomic trends and their expected outcomes, as well as the policies implemented by the National Bank of Georgia and their impact on the economy. Over the year, the National Bank of Georgia continued to work to improve the monetary policy communication framework, which was mainly aimed at building public confidence and managing inflationary expectations.

As in previous years, in 2019 the National Bank published monetary policy reports and short videos in which the President of the National Bank emphasized the most significant aspects of the analyses behind the reports. In addition, over the year, the official website of the National Bank and its social networks featured video presentations of the monetary policy reports, which were attended by analysts, industry experts and media representatives. To ensure maximum transparency and the timely delivery of information about the banking system to society, the National Bank distributed press releases and statistical data, and regularly organized briefings, seminars, presentations and meetings. Public relations were conducted through mass media and other means of communication. Periodic meetings with print and electronic

media representatives were also held regularly. In this regard, based on the practice of other central banks, the National Bank of Georgia tried to make information about trends in the money and foreign exchange markets available through the media – with a particular focus on outlining the vision and motives behind the decisions made. Electronic versions of the NBG’s publications are available on the bank’s official website.

In 2019, despite the elevated external shocks and increased risks, external demand positively contributed to economic growth. Namely, as a result of the Russian ban on air travel to Georgia from July, revenues from international travelers increased at a slower pace compared to the previous period. Revenues from exports of goods and money transfers increased moderately, while imports of goods increased slightly. It is worth noting that throughout the year, the increase in the competitiveness of Georgia had a positive impact on external demand and contributed to the narrowing of the current account deficit. Moreover, the improvement to the economic outlook of several trade partner countries was also noteworthy. As a result, in 2019, the current account deficit amounted to 5.1% of GDP, which was the lowest level since the independence of Georgia. The trade balance deficit improved by 2.3 percentage points of GDP and totaled 21.1% of GDP. In light of lower growth in revenues from international travelers (down by 1.4%), the surplus in trade in services decreased and negatively affected the narrowing of the current account balance. A further improvement in the current account balance was suspended by investment income outflows. It is also worth noting that the volumes of distributed dividends and reinvested earnings were high, which by itself ensures an increase in the current account deficit. As already mentioned, exports of goods increased moderately in 2019. A further increase in exports of goods was somewhat tempered by lower demand from Turkey because of the evolving economic and political difficulties in that country. In the second half of 2019, export growth accelerated and reached 12.2% growth annually. At the same time, imports of goods decreased in the first half of 2019, while subsequently growing slowly. The overall annual growth in imports was 1.9%. Net exports of goods thus increased and positively affected the current account deficit.

In 2019, similar to previous years, the current account deficit was mainly financed by foreign direct investments (FDI). In 2019, total FDI in Georgia amounted to 1.3 billion USD (7.1 % of GDP), which was 0.2 pp higher than in the previous year. The majority of investments were directed to the finance, energy, and hotels and restaurants sectors. Compared to the pre-

vious year, foreign direct investments increased in the hotels and restaurants, energy and healthcare/social work sectors.

Despite the elevated external risks in the second half of 2019, the Georgian economy was characterized by high economic activity and, according to preliminary estimates, annual economic growth reached 5.1%. The rising economic activity was induced by higher credit growth and fiscal stimulus expressed in the direction of infrastructural projects. The largest contribution to overall growth came from services (4.2 pp) and from industry (1.0 pp), while agriculture contributed negatively (-0.1 pp). In terms of individual sectors, construction was the largest driver of economic growth, especially in the second half of the year. Infrastructural projects financed by the government were very active, while civil construction also positively affected economic growth. Overall, the construction sector increased by 4.4%, while its contribution to growth was 0.3 percentage points. At the same time, the agriculture sector declined.

In 2019, similar to previous years, the National Bank of Georgia conducted monetary policy following a floating exchange rate regime, which implies keeping market-based principles for the pricing of the national currency. At the same time, the National Bank of Georgia aims to maintain its international reserves at an adequate level. It is of utmost importance that highly dollarized countries have an adequate level of international reserves as this increases the resilience of the national economy against external shocks and ensures macroeconomic stability in the country. The exchange rate policy conducted by the National Bank of Georgia implies intervening on the interbank FX market in cases such as a temporary inflow or outflow of excess capital, which would result in sharp short-term fluctuations of currency; a need to fill international reserves; a need to balance the state’s external transactions; or to avoid inflationary expectations coming from excessive fluctuations of the exchange rate stemming from non-fundamental, one-off factors.

From 2019, the National Bank of Georgia developed a new monetary policy instrument – currency options. Currency options are financial instruments that give the holder the right (though not the obligation) to exchange currency in a prescribed timeframe. During February-April 2019, the National Bank offered currency options to commercial banks for purchasing GEL. With this option, commercial banks could buy GEL with FX (USD) within a prescribed timeframe, while the NBG had to supply a sufficient amount of GEL. The first half of 2019 saw an appreciation of the GEL due to positive expectations in the economy,

while in the second half of the year, the Russia's ban on air travel, and the negative expectations associated with it, put significant pressure on the exchange rate. Therefore, in the first six months of the year the National Bank of Georgia purchased 216 million USD via FX auctions and currency options, while in the period August-November it sold 92.8 million USD to ease inflationary pressure. Over 2019 as a whole, net purchases in terms of FX auctions amounted to 72.2 million USD, while in terms of FX auctions and currency options, net purchases by the National Bank of Georgia reached 123.5 million USD.

Ensuring financial stability is one of the most important objectives of the National Bank. Hence, to guarantee financial stability, the NBG pursues a macroprudential policy. Through identifying, assessing, and monitoring systemic risks, the National Bank of Georgia develops corresponding policy responses, thereby promoting the sustainability of the financial system. In 2019, significant steps were taken in this direction.

The implementation of a responsible lending framework for individuals, as expected, revealed positive dynamics in reducing the risks to financial stability. In particular, service and value ratios are improving and, as a consequence, loans that create an excessive financial burden, which were the main source of financial problems for society, are declining. At the same time, the share of local currency loans in lending to individuals has increased, reducing FX risks for the population. In addition, the introduction of responsible lending principles has facilitated the redistribution of loans to more productive sectors such as SMEs and other businesses. In terms of the dynamics of lending, since early 2019, as a result of the introduction of the responsible lending framework for individuals, the growth of loans was characterized by an expected slowdown. It should be noted that the credit-to-GDP ratio continued to exceed the long-term trend, reflecting the excess credit growth and the exchange rate effect in recent periods. According to the estimates of the Financial Stability Committee of the National Bank of Georgia, the current trend of credit growth will approach a sustainable level in the medium term.

Despite a significant reduction over the past few years, the risks associated with dollarization remain a major challenge for the financial system. Foreign currency loans are accompanied by both exchange rate and interest rate risks, the latter of which is especially significant given the possible increase in interest rates in the US and the eurozone. Moreover, the sovereign risk premium also needs to be taken into account as it declined significantly following the his-

torically low interest rates after the financial crisis. To mitigate the currency credit risk, the National Bank requires commercial banks to create an additional capital buffer. Furthermore, the National Bank instructs financial institutions to properly assess and take into account risks associated with foreign currency loans.

To ensure the effectiveness and transparency of the macroprudential policy, the National Bank of Georgia developed a macroprudential policy strategy that was published on 18 September 2019. The strategy reflects the core principles of the NBG's macroprudential policy and aims to improve the decision-making process and enhance communication with and accountability to the public. The strategy was developed following the recommendations of the European Systemic Risk Committee (ESRB / 2013/1) as well as best international practice, and it is compatible with the relevant EU directives. In 2019, the National Bank of Georgia also reintroduced its annual Financial Stability Report. The updated version of the report was created in close cooperation with the International Monetary Fund (IMF). The report provides future-oriented macro-financial analysis considering best international practice. It assesses the vulnerability of, and risks to, the financial system over the medium and long term, taking into account the structural characteristics of the financial sector and the aspects of the Georgian economy that are important for financial stability. The report also includes an analysis of the sustainability of the local financial system and describes the measures taken by the NBG to ensure financial stability.

Another important part of the financial stability analysis framework is stress testing. The National Bank of Georgia, with the support of the IMF Technical Mission, has been actively working on the development of a model for stress tests. The main purpose of stress tests is to assess the resilience of banks to negative shocks. This tool allows central banks to determine ways to mitigate shocks, develop policies that ensure the smooth functioning of financial intermediaries in stressful conditions, and promote rapid economic recovery.

A sustainable financial system is important for financial stability. In 2019, one of the most important steps taken by the NBG to develop a sustainable financing framework was the publication of a sustainable funding guide. Georgia's Standing Financing Guide was created in collaboration with the International Finance Corporation (IFC) and the IFC-supported Sustainable Banking Network (SBN). The guide combines all possible measures planned by the National Bank of Georgia for sustainable financing over the

next three to four years. The main goal of the guide is to create a reliable, predictable and stable regulatory framework that will prepare the market for the transition to sustainable financing. In addition, the National Bank of Georgia, in cooperation with the OECD, has developed principles for disclosure and reporting on environmental, social and governance (ESG) issues, which are accompanied by a relevant template for such disclosures. The goal of these principles is to help financial institutions meet the requirements of the corporate code and to promote the consistent and comparable disclosure of ESG issues. On 30 October 2019, the National Bank of Georgia, in cooperation with the International Finance Corporation and the Sustainable Banking Network, hosted a conference on sustainable financing. Based on the recommendations adopted at the conference, the NBG established a Sustainable Financing Working Group at the end of 2019, whose members are representatives of the financial sector. The aim of the working group is to involve stakeholders in the activities outlined in the Sustainable Funding Guidelines at an early stage and, thereby, ensure the successful implementation of the action plan.

For the National Bank of Georgia, 2019 has been an active year in terms of refining the supervisory framework and bringing it closer to international best practice. The NBG continues to bring its legislation closer to that of the EU, as described in the Association Agreement between the EU and Georgia. The NBG is actively working on the analysis and implementation of a framework for the requirements of Capital Adequacy Policy for EU Member States, which is based on Basel III standards.

As of 31 December 2019, 15 commercial banks were operating in the banking sector in Georgia. At the same time, the share of non-resident owners in the assets of banks was 88.3% and their share in equity was 86.6%. At the end of the year, the total credit portfolio of the banking system equaled 32 billion GEL. Excluding the exchange rate effect, the growth in the credit portfolio stood at 16.3%. Deposits increased by 3.2 billion GEL (14.0% or 9.1% if excluding the exchange rate effect) and amounted to 26 billion GEL by December.

An incomplete list of the challenges faced by the banking sector in the current period includes an increased debt burden due to loans issued in foreign currency to non-hedged borrowers; the over indebtedness of a vulnerable part of the population; fierce competition in business and mortgage lending against the backdrop of imperfect product pricing models; cyber risks and major scams across the system; potential growth

in non-regulated financial intermediation based on financial technologies; and potential threats to the region.

By the end of 2019, the Georgian banking system continued to maintain an adequate level of capital under the adequacy framework of capital based on Basel III. In addition, the National Bank of Georgia positively assesses capital growth resources in terms of both shareholder strength and profitability.

As of 31 December 2019, the total credit portfolio of the banking system reached 32 billion GEL. The credit portfolio is diversified in terms of sectors. Over the course of the year, the share of procyclical sectors in the credit portfolio of the banking system increased slightly, driven by the real estate management and real estate development sectors.

At the same time, the sensitivity of the Georgian banking system to FX risk remains high. In the medium term, larization is on the rise, although the share of foreign currency assets remains high. The NBG is able to monitor the formation of interest rate risks in the financial system, and thereby maintains risks at a low level. In 2019, net interest margins and non-interest income in the banking system declined, mainly due to lower interest rates on loans. However, the increase in efficiency because of the growth and improvement of asset quality and the reduction of other unforeseen costs, have had a positive impact on profitability. The second half of the year was marked by large-scale discounts on loans denominated in foreign currency, reducing interest rates to a historic low. The interest rates offered by commercial banks, taking into account the risks, are inadequately low for the markets of the region. The main reason for the significant reduction in interest rates was the intensification of competition in the credit market, which may further shape the market positions of individual banks and push them to take unreasonable risks.

At the same time, the liquidity coverage ratio (LCR) was volatile over 2019. The LCR represents a modern and effective approach to short-term liquidity management (of up to 30 days), and provides a means to improve the identification, assessment, monitoring and control of risks. Implementation of the LCR has significantly improved prudential supervision and has contributed to extending the maturity of liabilities on the market, including the development of certificates of deposit.

To improve long-term liquidity regulations, the Net Stable Funding Ratio (NSFR) was implemented in September 2019. As a result, from 2020, the existing liquidity requirement (of 30% for short-term liabilities)

will be abolished and will only be used for monitoring purposes. As a result, the liquidity risk supervisory framework will be in full compliance with Basel Standards.

To reduce the credit risk caused by currency mismatch, the NBG maintains a prudential approach to non-performing loans issued to non-hedged borrowers through additional capital requirements – and, in the case of individuals, in the form of more conservative credit standards. It should be noted that the ability to use commercial banks' emergency liquidity plans, other mitigation measures, or to enlist the NBG's support to mitigate risks associated with high dollarization instruments is limited in foreign currency. Hence, given the global trends and regional risks, the need for minimal foreign exchange reserves and high liquidity requirements is evident.

One of the main risks in terms of operational risk management is cyber threats and the challenges related to cybersecurity management. In 2019, cybersecurity surveillance requirements were introduced for commercial banks, cooperation continued to improve data quality in the financial system, and several operational risk measures were implemented. The National Bank of Georgia has established a structural risk monitoring unit, the immediate purpose of which is to study and mitigate cyber risk in the financial sector.

The National Bank of Georgia considers raising the quality of data and reporting in the banking sector to be one of its priorities. In 2019, the International Extended Business Reporting Language (XBRL) project, which represents the international standard for data aggregation and reporting, entered an active phase. The use of various statistical models in the process of making decisions in the financial sector is becoming more widespread. The National Bank of Georgia has developed a draft regulation on risk management of data-driven models. The purpose of this is to promote the establishment of a model risk management framework and support effective risk management for the use of models. After the regulation is approved, following its requirements will be mandatory for all financial institutions.

In 2019, with the active participation of the National Bank of Georgia, a working group was set up to promote the introduction of open banking in Georgia. Open banking involves the instantaneous exchange of information and services between different financial organizations using electronic technologies. At the same time, the NBG discusses and evaluates those factors contributing to the emergence of healthy entities on the market, thereby supporting the global

trend of the fintech market and financial innovation to create healthy competitive incentives in the market.

Over the last two years, fundamental legal changes concerning the regulation and supervision of the non-banking sector in Georgia have significantly decreased the risks associated with that sector. These changes covered not only the regulated sector, but also the market segment, which had been providing financial services for years without any supervision. As a result, the changes enhanced financial stability, improved the protection of consumer rights, provided better access to financial services and increased security.

In 2018, within the powers granted by the Organic Law "On the National Bank of Georgia", a regulation was approved regarding the "Registration, termination of registration and regulation of loan issuing entities". According to this, each entity that issues loans to more than 20 individuals must come under the supervision of the National Bank of Georgia starting from 2019. In addition, the requirements set by the rule on "Retail lending", which became effective on 1 January 2019 and applies to all non-banking financial institutions, have promoted the strengthening of responsible lending standards in this sector. Furthermore, based on amendments made to normative acts in 2019, microfinance organizations and loan-issuing entities were prohibited from using any property received as a security on loans issued as a pledge on any type of liabilities taken by them. This was aimed at improving lending standards for better protection of consumer rights.

As of 31 December 2019, the non-banking sector in Georgia was represented by 48 microfinance organizations, 204 loan-issuing entities, 650 currency exchange bureaus and two credit unions. The total assets of the non-banking financial sector amounted to around 2 billion GEL (with the microfinance sector having the largest share of 1.4 billion GEL), and it accounts for almost 4% of the total financial sector. In 2019, notwithstanding the decrease in the number of microfinance organizations and the introduction of new retail lending standards, the loan portfolio of the microfinance sector kept growing at an annual growth rate of 3%.

As in previous years, protecting consumer rights in the financial sector and encouraging financial education among the population are important priorities for the National Bank of Georgia. Over the year, the NBG has actively implemented various projects and activities in this direction, including working to improve the current legislative framework to bring it in line with best international practice.

This also included organizing consultations and workshops for financial sector representatives and practicing judges. The year 2019 was also remarkable for the diverse range of events conducted in the field of financial education: a large-scale repeated study of financial education and the involvement of the Georgian population was conducted; schools started teaching an updated national curriculum that saw financial education topics be integrated into the subject of “Citizenship” for the first time; to increase the capacity of teachers in this subject, a roadmap for a teacher training module was developed and training events were planned. To increase the scale of the financial education program for micro and small entrepreneurs, the National Bank of Georgia started a training cycle for trainers interested in public, private and civil sector organizations. Those trainers, in turn, made the program available to their beneficiaries. As is now a tradition, partner organizations participated in annual awareness-raising events that included Global Money Week, World Savings Day and Innovation Camp. The National Bank also hosted high-level international conferences and workshops that were supported by the Economic Cooperation and Development International Financial Education Network (OECD / INFE), and the Ministry of Finance of the Netherlands provided technical assistance within the framework of a five-year project that aims to promote financial education among Southeast European countries.

As part of the nationwide pension reform, the National Bank of Georgia began to supervise the pension agency that had been formed in 2018. The pension agency started to accumulate and administer the funds obtained from pension scheme participants from 1 January 2019. The investment activities of the pension agency are supervised by an investment board, which consists of five members who were acknowledged by the Parliament of Georgia on 11 May 2019. Through a mandate given by law, the investment board is responsible for investment-related activities. As of 31 December 2019, the total assets of the pension fund reached 507 million GEL. This money was deposited on the current accounts of the National Bank of Georgia and commercial banks. Throughout the year, the interest accumulated amounted to 17 million GEL, which roughly equaled a 7.5% yield rate.

In 2019, the legal framework adopted by the National Bank of Georgia that covers the different aspects of the pension agency’s investment activities was actively discussed by the members of the investment board and market participants. To further elaborate the legal framework and supervisory methodol-

ogy and to ensure that they align with international standards, the National Bank of Georgia became a governing member of the International Organization of Pension Supervisors (IOPS) from December 2019. Membership in the IOPS is a step forward that gives the National Bank of Georgia the opportunity to share experiences with other member countries on the regulation of pension funds.

The accumulation of pensions and other kinds of long-term savings have a significant positive impact on the economic development of a country. Long-term and foreseeable savings support the improvement of the investment environment, encourage productivity growth, and support the development of capital markets in Georgia. Against this background, the pension agency will become an important institutional player and will support the deepening of the financial sector in Georgia in the medium and long run.

One of the directions of the activities of the National Bank of Georgia is the fight against money laundering and terrorism financing. On 1 January 2019, the NBG’s supervisory framework for Combating Money Laundering and Terrorist Financing entered into force. This aims to organize an effective, risk-oriented supervision process, increase the transparency of the NBG’s supervisory approach and create appropriate expectations for supervisory actions. The framework determined levels of supervisory attention and risk-appropriate, effective supervision measures.

Supervisory measures carried out during 2019 included complex, thematic, special and follow-up types of on-site inspections. It should be acknowledged that for the correction of identified violations and to control the implementation of recommendations, the NBG has also carried out off-site (so-called “follow-up”) supervisory control activities. The use of such supervisory measures has contributed to an even more effective redistribution of the resources of the National Bank of Georgia and a gradual increase in monitored entities’ compliance with the relevant legislation.

For the smooth operation of the National Bank of Georgia and the financial system, it is important that payment systems are dynamically developed and become safer and more efficient. With the development of modern technologies, the national payment system is becoming more diversified, and the number of entities participating in it is increasing. Improvement of the legislation governing the payment system and payment services, and the development of the payment infrastructure are thus of great importance for the market, ensuring that it keeps pace with modern trends and supports the introduction of innovative products.

In accordance with the Association Agreement between Georgia and the European Union, the National Bank of Georgia has worked on the implementation of the Second Directive on Payment Services (PSD2 - Directive (EU) 2015/2366 on payment services). In 2019, in cooperation with representatives from the central banks of Poland and Lithuania and supervisors of the financial market, an analysis of the compliance of Georgian tax legislation with the EU directive got underway. Amendments to the Law of Georgia "On Payment Systems and Payment Services" have been prepared that define the rights and obligations of providers, customers and other parties involved in the provision of payment services. These changes will help protect consumer rights, increase transparency and increase the reliability of payment services and payment systems. Work on bringing Georgian legislation closer to that of the EU will continue in 2020.

Over the past year, the NBG has been actively working on improving, expanding and further developing SebStat, the unified statistical information system of the National Bank of Georgia. Because of a need to expand the system and add different types of data clusters, several clusters were developed and launched in a real environment. The system provides the statistical software to obtain, control the quality of, and analyze information from financial institutions, on the basis of which interactive business intelligence (BI) reports are developed. The BI reports allow for the gradual replacement of the statistical tables that are published automatically on the NBG's website with interactive analytical information.

During the reporting period, the National Bank of Georgia has actively been working to ensure the production, import, storage and issuance of cash to ensure its smooth delivery to the country's economy. Work was underway to improve the quality of banknotes and coins in circulation; process banknotes/coins for the issuance of Georgian lari; process money withdrawals in accordance with the established procedure; improve expertise activities; destroy GEL-denominated banknotes as required; and to improve the legal framework.

In addition, to promote the national currency and the country as a whole, the National Bank of Georgia continued to work on the issuance of collectible coins. During the reporting period, the National Bank of Georgia issued five types of collector coins, all of which received a positive response from the public. In particular, the coins were dedicated to the 100th anniversary of the Constituent Assembly (Parliament) of the Democratic Republic of Georgia, the 100th anniversary of the Georgian Post, the 9th World Rugby

Cup that took place in Japan in autumn 2019, the 100th anniversary of the State Bank of Georgia, and, jointly, the 70th anniversary of the Council of Europe and the 20th anniversary of Georgia becoming a member of the Council of Europe.

In May 2019, Georgia hosted, for the first time in the region, "The Europe Cash Circle Seminar" (ICCOS EUROPE). This was held by the organization "Currency Research" with the support and cooperation of the National Bank of Georgia. Within the framework of the event, representatives of various leading organizations from about forty countries visited the NBG.

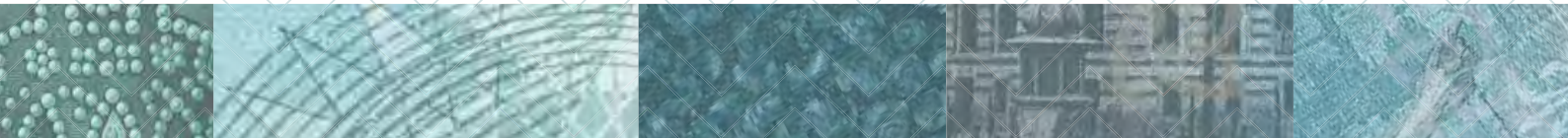
In 2019, the process of developing and improving the normative-legal base of the National Bank of Georgia was actively underway. Important draft laws were developed and enacted by the National Bank of Georgia. In particular, amendments were made to the Organic Law of the National Bank of Georgia, according to which the NBG was awarded a resolution mandate – the legal mechanism for the exercise of operational powers. In addition, appropriate tools and crisis management measures were established that will allow the National Bank of Georgia to maintain the stability of the financial sector in times of crisis in line with the best international practice. Within the framework of these changes, the NBG will be able to maintain the critical functions of commercial banks and better protect the interests of depositors.

Efforts to maintain a stable macroeconomic and financial environment during 2019 were also reflected in the improvement of Georgia's credit ratings by international rating companies. In particular, the international rating company Standard & Poor's (S&P) raised Georgia's sovereign rating to "BB" with a stable outlook. Fitch Ratings, which is the second largest international rating company, increased Georgia's sovereign credit rating from "BB-" to "BB". This was preceded by Moody's increase of Georgia's sovereign credit rating to Ba2 in 2017. Such improvements in these international ratings further strengthen the confidence of international institutions and investors towards Georgia and have a positive impact on the business environment in the country. These improvements were conditioned by the successes that Georgia has recently achieved. In particular, despite the increase in external risks, economic growth was strong and the floating exchange rate continued to be supported, which in turn contributed to a significant improvement in the current account deficit. In particular, the international rating agencies positively assessed the measures the National Bank has taken to accumulate international reserves; these have strengthened the country's foreign buffers and send positive signals to international investors.



1

MACROECONOMIC ENVIRONMENT



1. MACROECONOMIC ENVIRONMENT

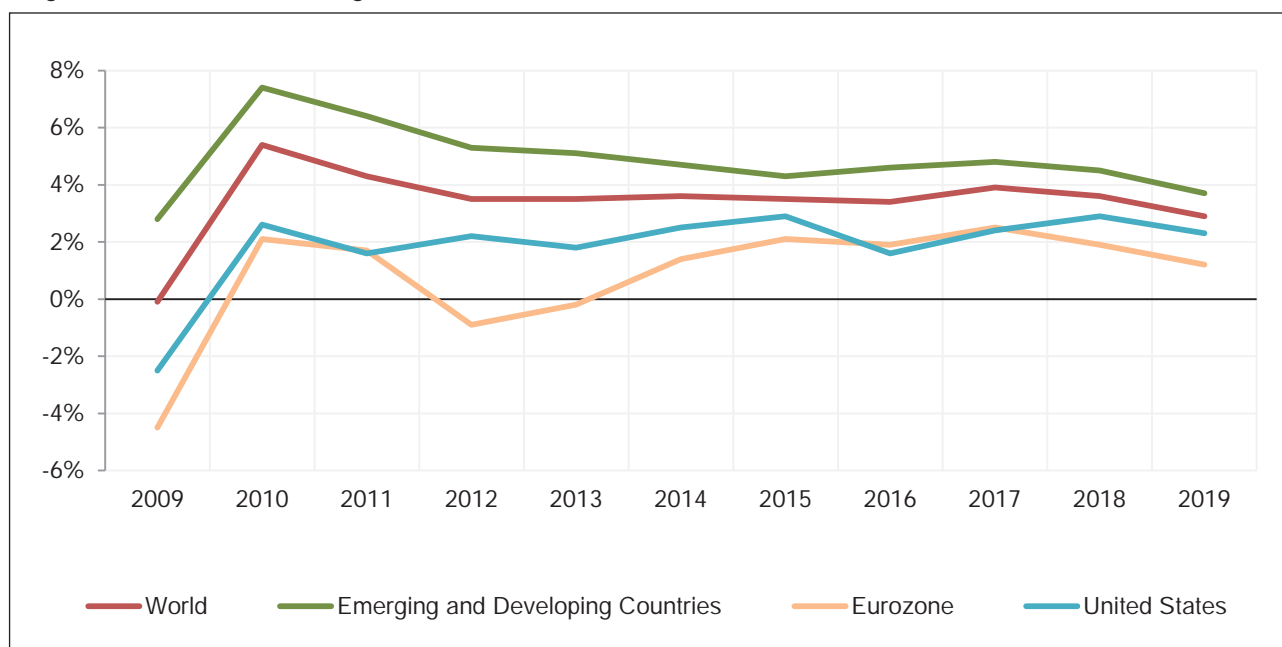
1.1 WORLD ECONOMY

In 2019, global economic growth was weak and, according to the estimates of the International Monetary Fund (IMF)¹, annual growth stood at 2.9%, which is 0.1 percentage point lower than previously forecasted² and represents the lowest indicator since the 2008-09 global financial crisis. Growth decelerated in emerging, developing, and developed countries. This was mostly driven by a deterioration of industrial production, globally weakened trade and reduced business sentiment – all of which significantly reduced the volume of investments and exports. Global funding

financial pressure, central banks started to ease monetary policy. According to the IMF's estimates³, real GDP growth for these countries in 2019 stood at 3.7%, which is 0.2 pp below the previous forecast.⁴

The United States' economic growth deteriorated in 2019, which was mostly due to the decline in exports and investments. Similar to other countries, the US manufacturing sector also deteriorated. However, amid improvements in working conditions, wages sharply increased and unemployment declined. According to the IMF's estimates, real GDP growth in the US stood at 2.3% in 2019, while annual inflation was 1.8%.⁵ In order to stimulate domestic demand, fiscal spending increased over the year and the federal funds rate was reduced three times.

Diagram N 1.1 Global real GDP growth



Source: International Monetary Fund

conditions also worsened. In the eurozone and the UK, economic growth notably slowed. The German industrial sector also reduced alongside a decline in foreign trade and a lower volume of investments – mostly a consequence of the uncertainty surrounding “Brexit”. To encourage domestic demand, the European Central Bank (ECB) resumed a quantitative easing program and made cheap credits available for the banking sector. Economic activity in emerging and developing countries declined more than had been expected as a result of capital flows and export volumes falling significantly amid globally weak trade and a deterioration of manufacturing. Due to the high

A slowdown of economic growth was also observed in the main trading partner countries of Georgia, where consumer and business sentiment deteriorated amid a negative global environment. On the back of trade barriers, the volume of exports and investments also declined. In 2019, the growth rate of eurozone countries slowed substantially. Industrial production deteriorated in Germany, and retail sales, business sentiment and the volume of exports also declined. However, increased fiscal spending from the government has raised positive expectations. Ac-

1 International Monetary Fund. 2020. *World Economic Outlook: The Great Lockdown*. Washington, D.C., April.

2 International Monetary Fund. 2020. *World Economic Outlook Update: Tentative Stabilization, Sluggish Recovery?* Washington, D.C., January

3 International Monetary Fund. 2020. *World Economic Outlook: The Great Lockdown*. Washington, D.C., April.

4 International Monetary Fund. 2019. *World Economic Outlook: Global Manufacturing Downturn, Rising Trade Barriers*. Washington, D.C., October.

5 International Monetary Fund. 2020. *World Economic Outlook: The Great Lockdown*. Washington, D.C., April.

According to the IMF's estimates, real GDP growth in Germany stood at 0.6% in 2019.⁶ Low economic activity was observed in Italy too, where real GDP grew by 0.3% in 2019. Despite global pressure, the French economy showed relatively better activity, which was mostly driven by higher consumer spending and investments, as well as lowering unemployment. The French economy grew by 1.3% in 2019.⁷ Meanwhile, Spain's real GDP grew by 2% amid solid production and increased consumer spending.

Coming in the wake of a currency crisis, 2019 was difficult year for the Turkish economy. Alongside a decline in investments and exports, the balance of payments, industrial production, and private consumption all deteriorated. Moreover, Moody's downgraded the Turkish credit rating to B1. According to the IMF's estimates, real GDP growth in Turkey stood at 0.9% in 2019, while the annual rate of inflation was 15.2%.⁸

In 2019, Russia's economy also slowed, which was mostly driven by a higher level of inflation and weak private consumption. The external sector and manu-

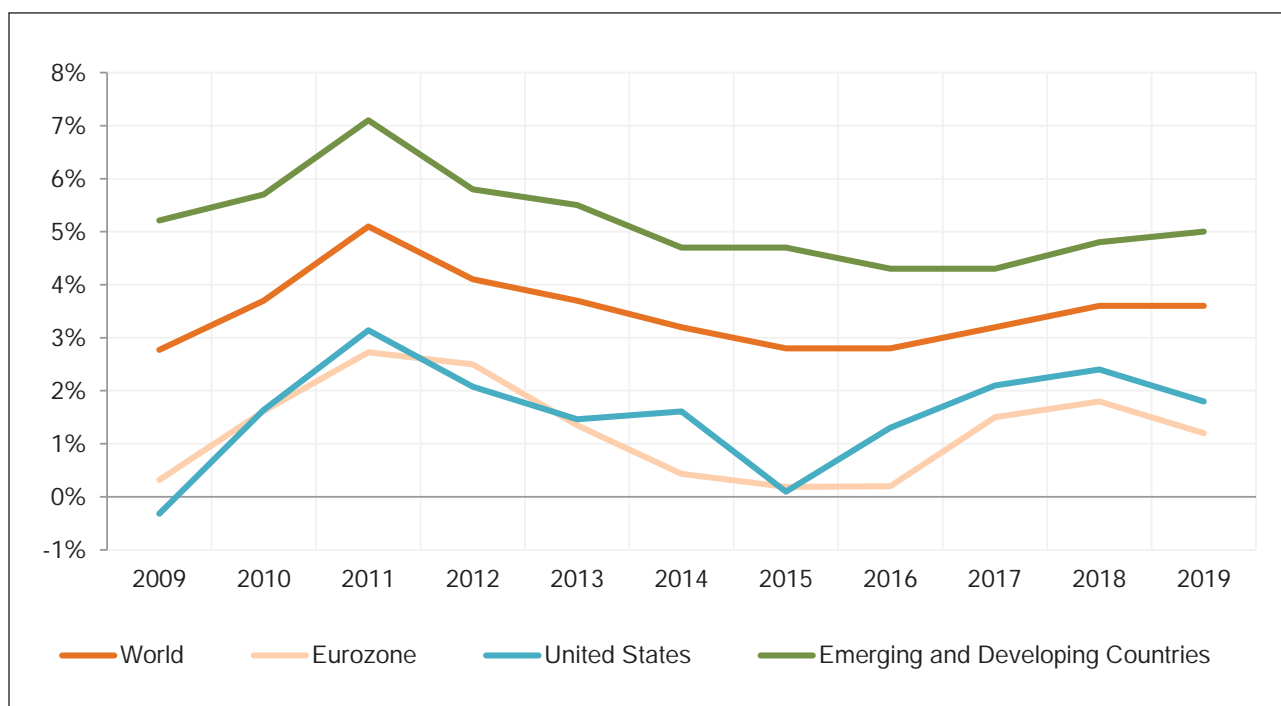
ous year. However, to encourage domestic demand, the Central Bank of Russia lowered the monetary policy rate alongside increased fiscal spending from the government. Real GDP growth in Russia was 1.3% in 2019, and annual inflation stood at 4.5%.⁹

The recovery of Ukraine's economy continued in 2019, with increased aggregate demand and improved working conditions making the largest contribution to this improvement. Consumer and business sentiment increased and the trade balance improved. According to the IMF's estimates, real GDP growth in Ukraine stood at 3.2% in 2019, while annual inflation was 7.9%.¹⁰

The year 2019 was positive for Armenia, which saw high levels of activity in the construction and manufacturing sectors and an improvement of the business environment. Amid higher wages, consumer spending increased. Money transfers were also stable. Real GDP growth in Armenia stood at 7.6% in 2019, and annual inflation was 1.4%.¹¹

The year was also positive for Azerbaijan, where

Diagram N 1.2 Global CPI inflation



Source: International Monetary Fund

facturing production also deteriorated. Compared to 2018, petroleum prices decreased by 12%. In response, Russia and OPEC agreed to cut oil production over 2019, which caused a slight stabilization of prices. In total, revenues from oil exports fell by 7.8 billion dollars, which was 6% below that of the previ-

both the oil and non-oil sectors were highly active. At the same time, higher fiscal spending stimulated the economy. According to the IMF's estimates, real GDP growth in Azerbaijan stood at 2.3% in 2019, while the annual rate of inflation was 2.6%.¹²

In total, the weighted average growth of Georgia's

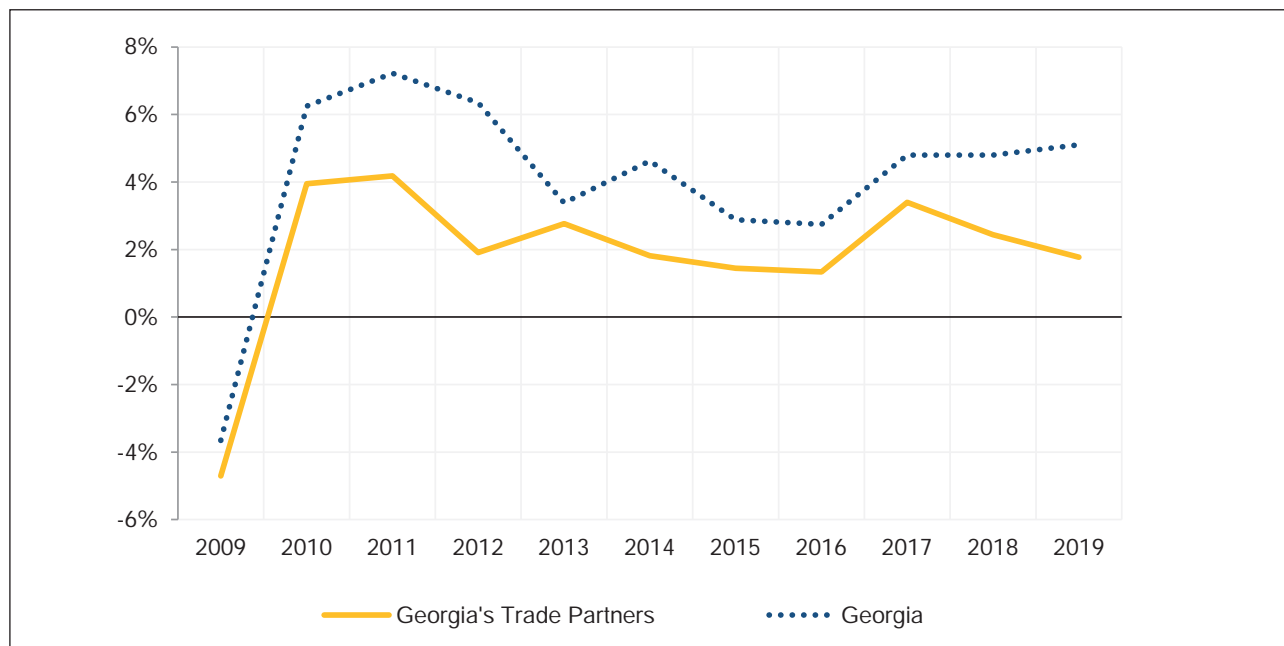
6 International Monetary Fund. 2020. World Economic Outlook: The Great Lockdown. Washington, D.C., April.
 7 Ibid.
 8 Ibid.

9 Ibid.
 10 Ibid.
 11 Ibid.
 12 Ibid.

trading partner countries in 2019 decreased by 0.6 pp, compared to 2018, and stood at 1.8%. Meanwhile, economic growth in Georgia was 5.1% (see Diagram N 1.3).

Throughout the year, the GEL nominal and real effective exchange rate depreciated, which was affected by the events of summer. The change of the GEL real effective exchange rate with respect to the currencies

Diagram N 1.3 Real GDP growth in Georgia and its trading partners



Source: International Monetary Fund

Amid globally weakened economic growth, the central banks of various countries, including those of Georgia's trading partners, reduced their monetary policy rates to encourage domestic demand. The US Federal Reserve also eased its monetary policy and cut the federal funds rate several times in 2019 to 1.5-1.75%. Meanwhile, the European Central Bank kept its policy rate unchanged at 0%, although it resumed a quantitative easing program in November 2019, which is a move that could be seen as monetary policy easing.

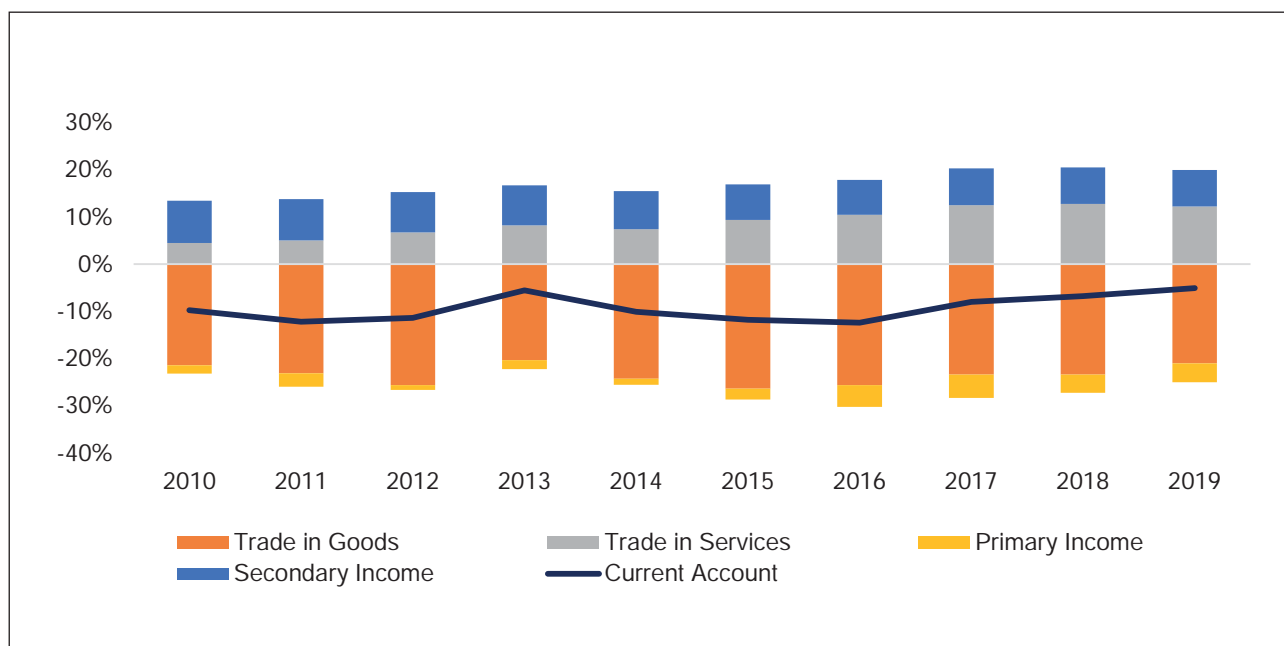
1.2 EXTERNAL SECTOR AND BALANCE OF PAYMENTS

In 2019, the contribution of external demand to economic growth was significant. Despite the fact that the Russian ban on air travel to Georgia in the summer negatively impacted revenues from international travelers, the current account deficit improved considerably throughout the year. Along with other factors, this was supported by a competitive exchange rate being maintained. In 2019, the current account balance of the balance of payments amounted to 5.1% of GDP, which is the lowest level in the history of independent Georgia (see Diagram N 1.4).

of trade partner countries is important in terms of the competitiveness of the Georgian economy. The real appreciation of the exchange rates of trade partner currencies is reflected in higher external demand on the Georgian economy and thus induces a narrowing of the current account deficit. It is worth mentioning that in the first half of 2019, petroleum prices on global markets began to rise, which supported the growth of economic activities in petroleum-exporting trade partner countries that subsequently increased demand on exports from Georgia. However, the existing difficulties in the Turkish economy negatively affected revenues from Georgian exports. Overall, compared to registered imports of goods, exports of goods increased at a higher rate and thus the trade balance deficit decreased. Unlike the high growth in previous years, in 2019 exports of services, especially tourism, showed low growth, which had only a small positive impact on the narrowing of the current account deficit. At the same time, the improvement of economic activities in the EU and several regional countries positively affected the dynamics of money transfer inflows to Georgia and supported the lowering of the current account deficit.

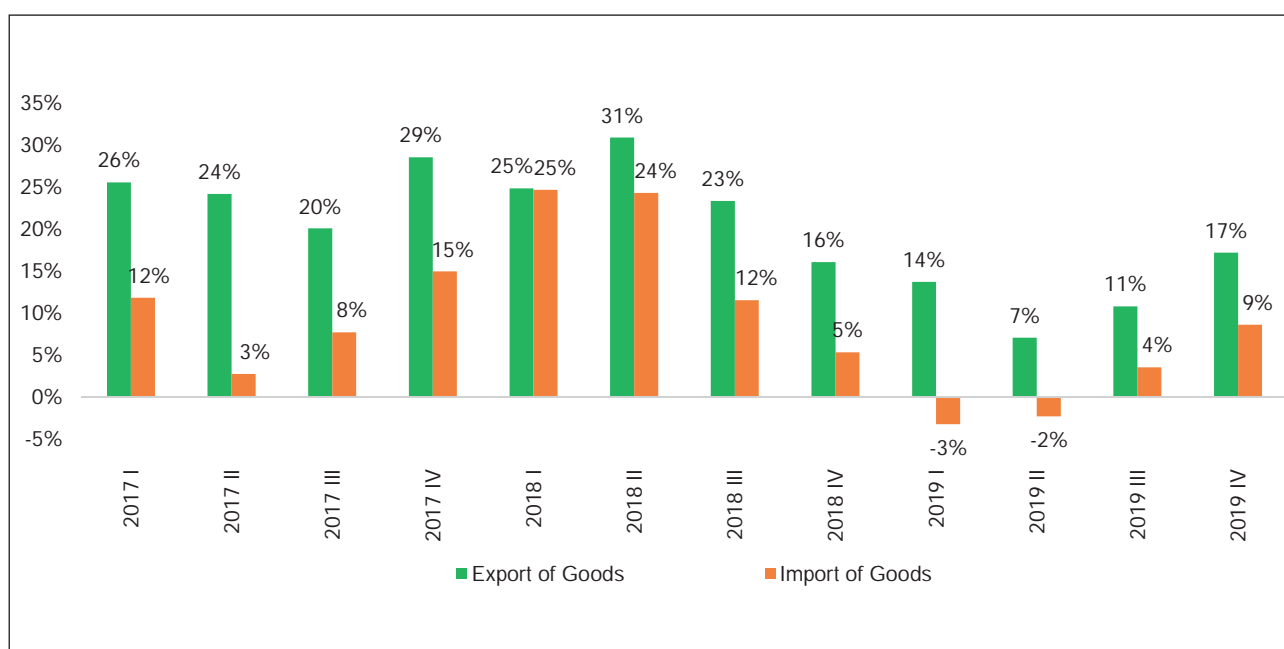
In 2019, the current account deficit reached 5.1% of GDP, which was 1.7 percentage points lower than the same indicator in the previous year. In absolute terms, the current account deficit narrowed by 292.2

Diagram N 1.4 Ratio of current account components to GDP



Source: National Bank of Georgia

Diagram N 1.5 Annual growth rates of exports and imports of goods (2017-2019) ¹⁴



Source: National Bank of Georgia

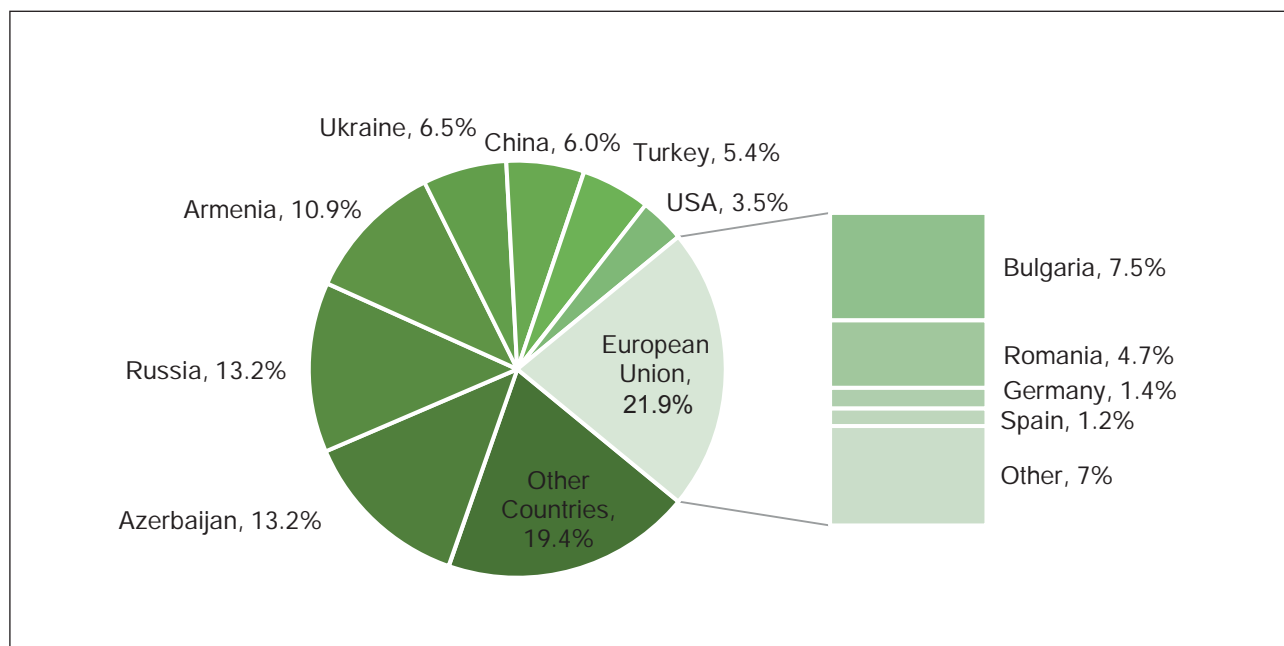
million USD and amounted to 901 million USD. The trade balance in goods improved by 2.3% of GDP (by 378 million USD) and reached 21.1% of GDP. In light of the lower growth (1.4%) of revenues from international travelers, the surplus in trade in services decreased and negatively affected the improvement of the current account balance. In 2019, the narrowing of the current account deficit was hindered by an increase of the primary¹³ income deficit (by 99 mil-

¹³ Primary income is part of the current account balance of payments where the incomes of a country's residents and non-residents associated with production process and property

lion USD), which was due to outflows of investment income. It is also worth noting that the volume of distributed dividends, as well as of reinvested earnings is still high, which by itself ensures an increase in the current account deficit.

(compensation of employees, investment income, etc.) are included. Secondary income is part of the current account balance of payments that shows current transfers (excluding capital transfers) between residents and non-residents (personal transfers, budgetary transfers and grants in the framework of international cooperation, social contributions and benefits, etc.).

Diagram N 1.6 Export structure by country in 2019



Source: National Statistics Office of Georgia

The trade balance remains the most negative component of the current account. However, in 2019 the ratio of trade deficit in goods to GDP improved by 2.3% of GDP and reached 21.1% of GDP. As noted above, exports of goods from Georgia increased moderately throughout the year, but a further growth was somewhat curtailed by the economic and political difficulties facing the Turkish economy – which was reflected in decreased demand for Georgian imports. In the second half of 2019, the growth in exports accelerated and their overall annual growth reached 12.2%. Meanwhile, imports of goods decreased in the first half of the year, but subsequently began to grow so that their overall annual growth amounted to 1.9%. As a result, net exports of goods increased, which supported the improvement of the current account balance (see Diagram N 1.5).

In light of these dynamics, it is interesting to look at the destination countries for Georgian exports. Exports increased to the EU (by 13.0%) and other regional countries. The increase to EU countries was mainly driven by increased exports to Bulgaria (9.8%) and Romania (207.7%); while exports declined to the Netherlands (-38.8%) and Spain (-25.8%). In terms of

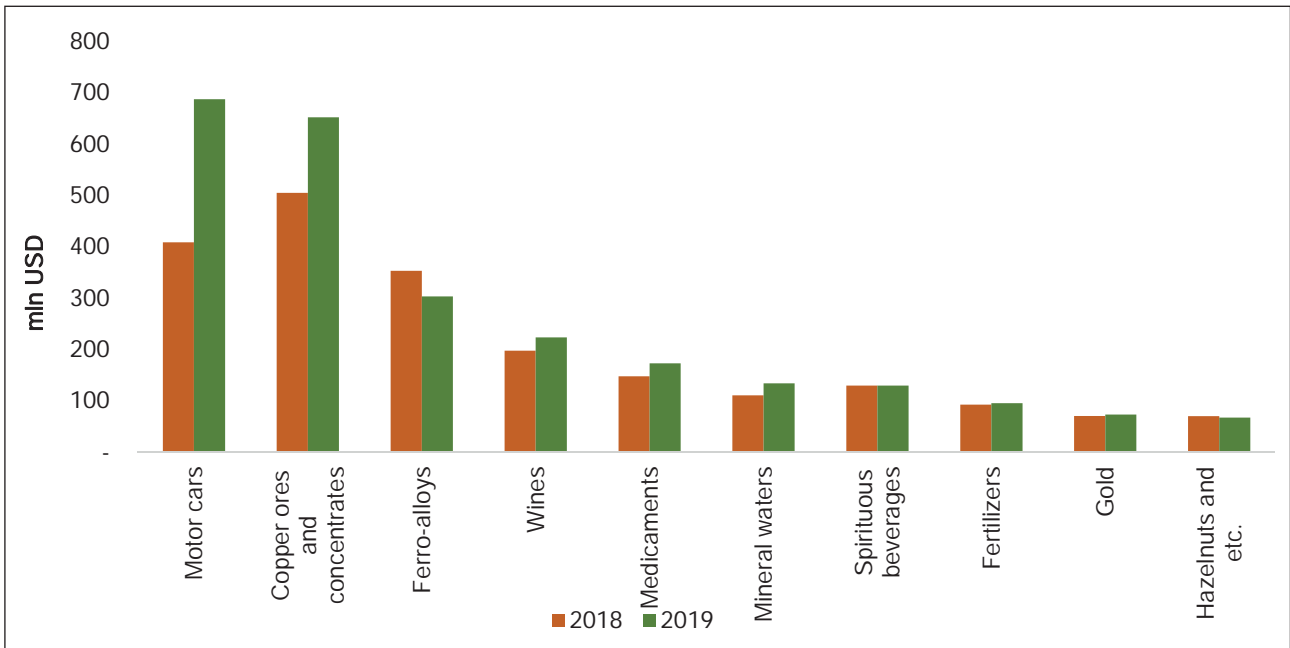
regional countries, there was a high growth of exports to Armenia (47.9%), Ukraine (39.8%) and Kyrgyzstan (153.3%), while exports to Turkey decreased considerably (13.9%). Exports to Russia saw high growth and accounted for a large share in overall exports (an increase by 13.9%). From other countries, exports of goods increased to the United Arab Emirates (43.0%), China (14.9%) and Turkmenistan (51.6%).

In terms of exports, the EU was the largest trade partner of Georgia in 2019, accounting for 21.9% of total exports, the other main trade partners in terms of exports were Azerbaijan (13.2%), Russia (13.2%), Armenia (10.9%) and Ukraine (6.5%) (see Diagram N 1.6). With a 6.0% share in total exports, China was among the top export destinations – with 76% of exports to China being copper ores and concentrates related to re-exports.

In 2019, re-exports of motor cars significantly contributed to the overall increase of exports, comprising 18.2% of overall exports in goods and showing 68.2% annual growth. Re-exports of copper ores and concentrates also increased, rising by 29.2% compared to the previous year and having a 17.3% share in overall exports. It is worth noting that exports of domestically produced commodities, namely wines of fresh grapes and mineral waters, increased significantly in 2019, rising by 13.2% and 21.1% respectively. At the same time, exports of mineral and chemical fertilizers and medicaments increased substantially, the majority of which were directed to re-export. In contrast, exports of hazelnuts and other nuts fell. Moreover, exports of cigarettes and cigarillos, which

14 Exports of goods in the balance of payments (BOP). The external trade data provided by GeoStat and the data on exports/imports by the BOP are different concepts that rely on different methodological frameworks. Foreign trade statistics are based on the principle of crossing a border, whereas the main principle of trade of goods in the BOP is a change of ownership between residents and nonresidents. Moreover, in external trade statistics exports are presented in FOB price, while imports are presented in CIF price. In contrast, in the BOP, export/import of goods are presented in FOB prices.

Diagram N 1.7 Top 10 export commodities in 2018-2019



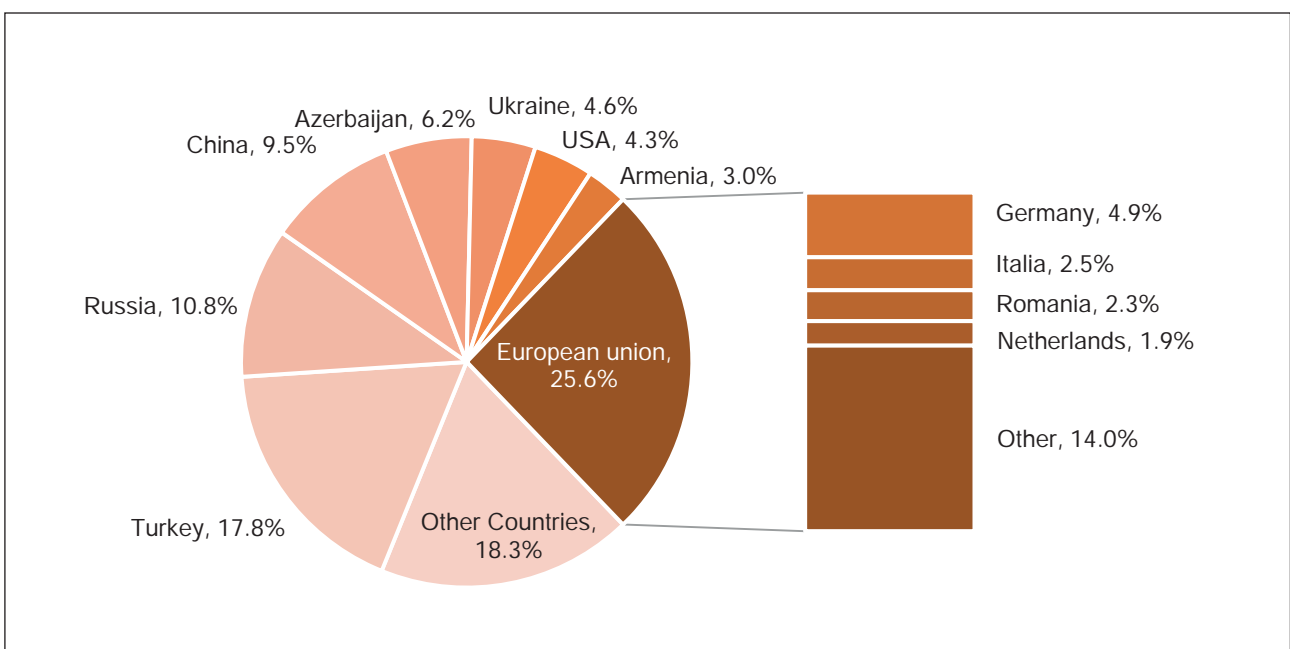
Source: National Statistics Office of Georgia

were predominantly directed to re-export, decreased significantly. In sum, total exports of commodities increased by 12.4%, while exports excluding re-exports increased by 7.4%.

In 2019, imports of consumer and investments goods declined, while imports of intermediate goods increased by 3.1%, mainly due to re-exports of copper ores and concentrates. The largest import commodity, with an 8.4% share in total imports, was again petroleum and petroleum products. The price change

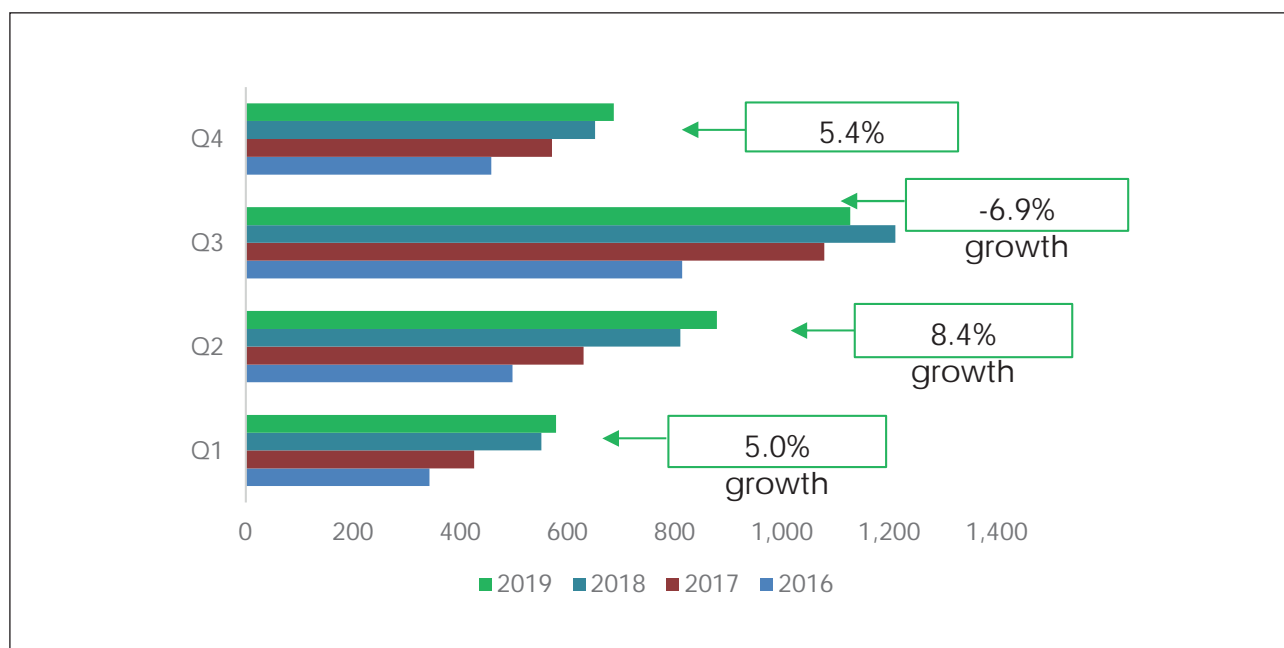
effect was significant throughout the year. In 2019, expenditures on imports of petroleum and petroleum products declined by 12.4%, of which a reduction of 5.2 percentage points came from the effect of reduced oil prices on global markets, while real expenditures on petroleum and petroleum products declined by 7.2%. Compared to the previous year, imports of motor cars and copper ores and concentrates made a significant contribution (of 2.7 percentage points) to the overall growth in imports. Apart from this, imports of petroleum gases increased by 13% (with a 3.6%

Diagram N 1.8 Import structure by country in 2019



Source: National Statistics Office of Georgia

Diagram N 1.9 Revenues from exports of tourism (2016-2019)



Source: National Bank of Georgia

share in total imports). It is worth mentioning that imports, excluding re-exports, declined by 3.7% compared to 2018.

A regional analysis of imports shows that imports decreased from the EU by 19.6%, while rising from other countries by 1.7%. Overall, the annual decrease of registered imports was 0.8%. Imports from Ukraine, Armenia and Azerbaijan were characterized by high rates of decline. From EU countries, the largest share in the overall decline of imports came from France (-1.1 pp) and Bulgaria (-0.6 pp). Apart from these developments, imports from Turkmenistan and Kazakhstan were lower due to a decline in imports of petroleum and petroleum products.

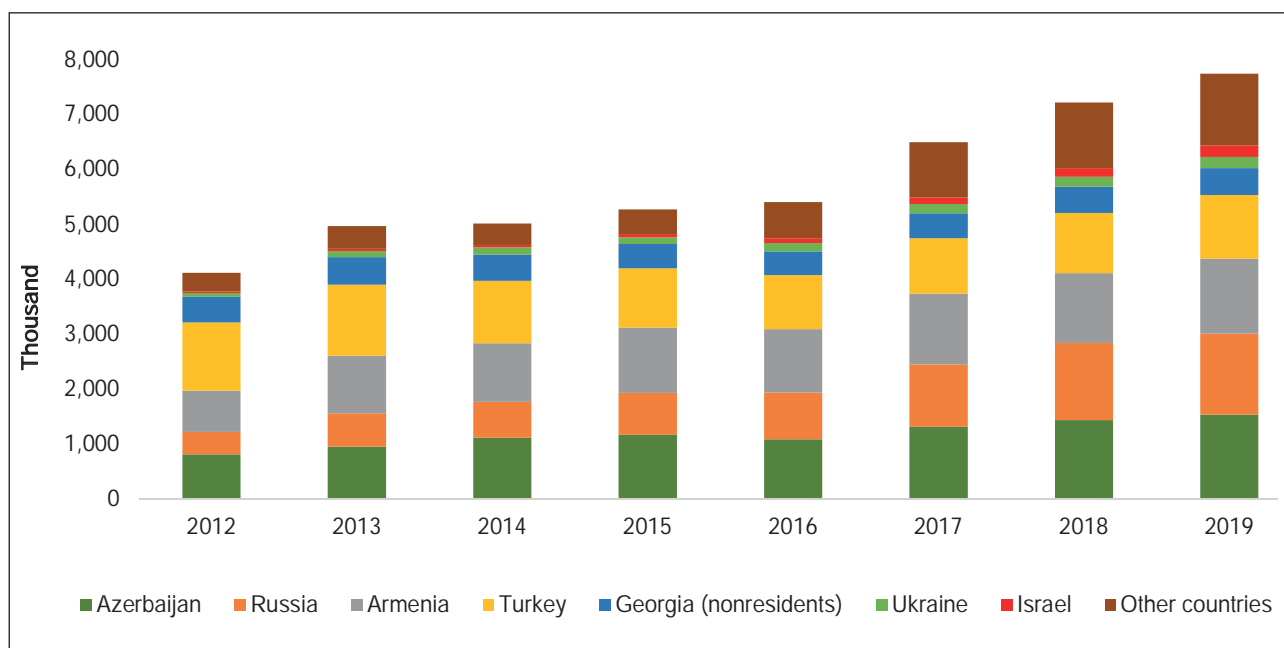
Similar to previous years, aside from the EU, Turkey was the largest source of imports to Georgia. In 2019, imports from Turkey grew by 9.5%. Imports from Russia increased by 4.5% and comprised 11.0% of total imports. Imports from China also continued to increase compared to the previous year (see Diagram N 1.8).

As has already been mentioned, the balance of trade in services affected the current account deficit in a growth direction. The ratio of trade in services to GDP amounted to 12.2%, which was 0.5 percentage points lower than the same indicator from the previous year. In absolute terms, compared to 2018, the balance of trade in services decreased by 75 million USD and reached 2.17 billion USD. Due to the Russian ban on air travel to Georgia revenues from international

travelers fell between July and September, but subsequently began to increase at a slower pace from October. This was a result of an increased numbers of visitors from the EU and other countries. Revenues from international travelers, which comprise the majority of exports in services, amounted to 3.27 billion USD in 2019 – an increase of 1.4% compared to the previous year (see Diagram N 1.9). During recent years, revenues from international travelers have become one of the major sources of financing the trade deficit in goods.

The number of international visitors to Georgia increased by 7.3% in 2019, which was mainly due to increased inflows of tourists from Azerbaijan (7.2%), Armenia (7.6%) and Turkey (5.3%). After June 2019, the number of visitors from Russia declined, but still increased annually by 4.8%. Moreover, there were increased numbers of visitors arriving from Israel, Germany, Belarus, Kazakhstan, the USA and Poland. In addition, international visitors from Saudi Arabia and China grew substantially, by 45% and 51% respectively. Following high inflows during recent years, visitors from Iran declined substantially (by 51%). Thanks to the efforts to promote travel to Georgia on international markets there were also increased numbers of tourists arriving from new countries. Moreover, the number of visitors from Georgia travelling abroad increased as well. The latter is a consequence of both the visa liberalization arrangements for Georgian citizens traveling to Schengen countries that started in 2017 and the availability of additional low-cost airlines connecting Georgia to EU countries.

Diagram N 1.10 Number of international visitors to Georgia by country



Source: National Bank of Georgia

It is worth mentioning that the high growth of tourism revenues during the last few years has seen tourism approach the level of revenues received from exports

amounted to 704 million USD. The high level of the income account deficit was once more mainly driven by the large deficit in investment income, which in-

Diagram N 1.11 The ratio of revenues from exports of goods and services to GDP



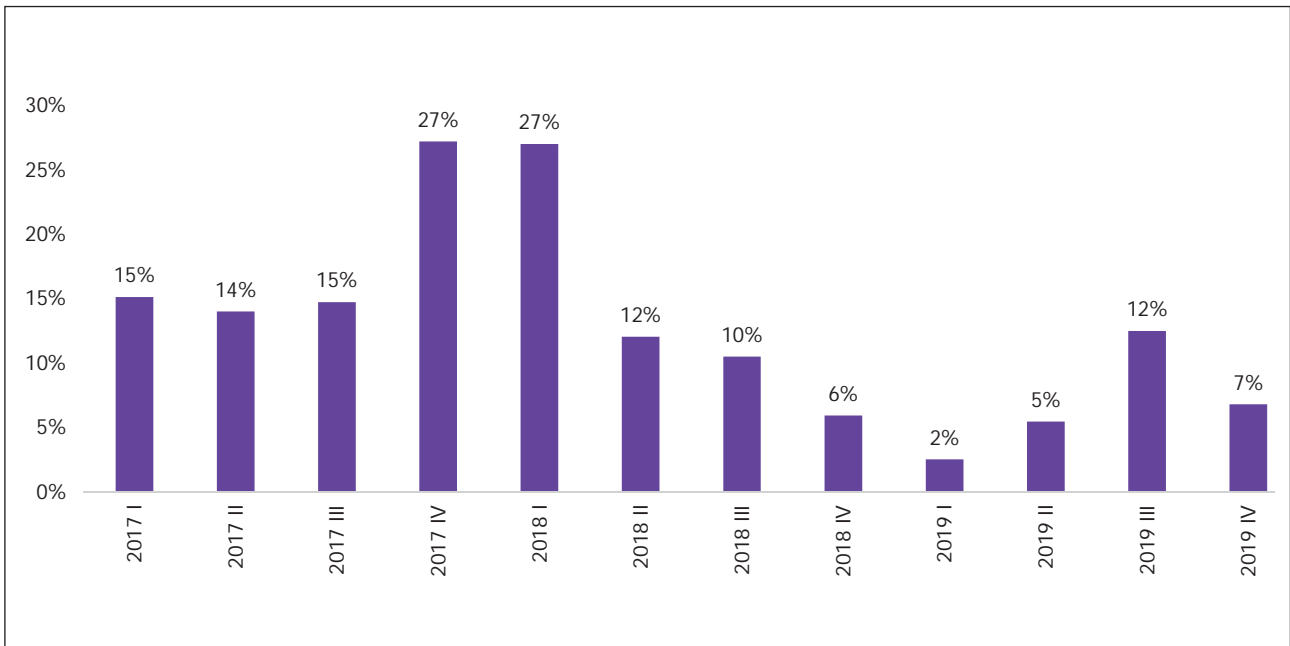
Source: National Bank of Georgia

of goods (see Diagram N 1.11). Considering the size of the trade deficit, the high revenues from tourism significantly contribute to narrowing the current account deficit.

The primary income account deficit in 2019 increased by 19 million USD compared to the previous year and

creased by 129 million USD and totaled 1.5 billion USD. This was induced by a worsening of the investment income account in terms of direct and other investments – specifically the increase of distributed dividends and reinvested earnings. Like the previous year, distributed dividends and reinvested earnings

Diagram N 1.12 Annual growth rate of personal remittances (2017-2019)



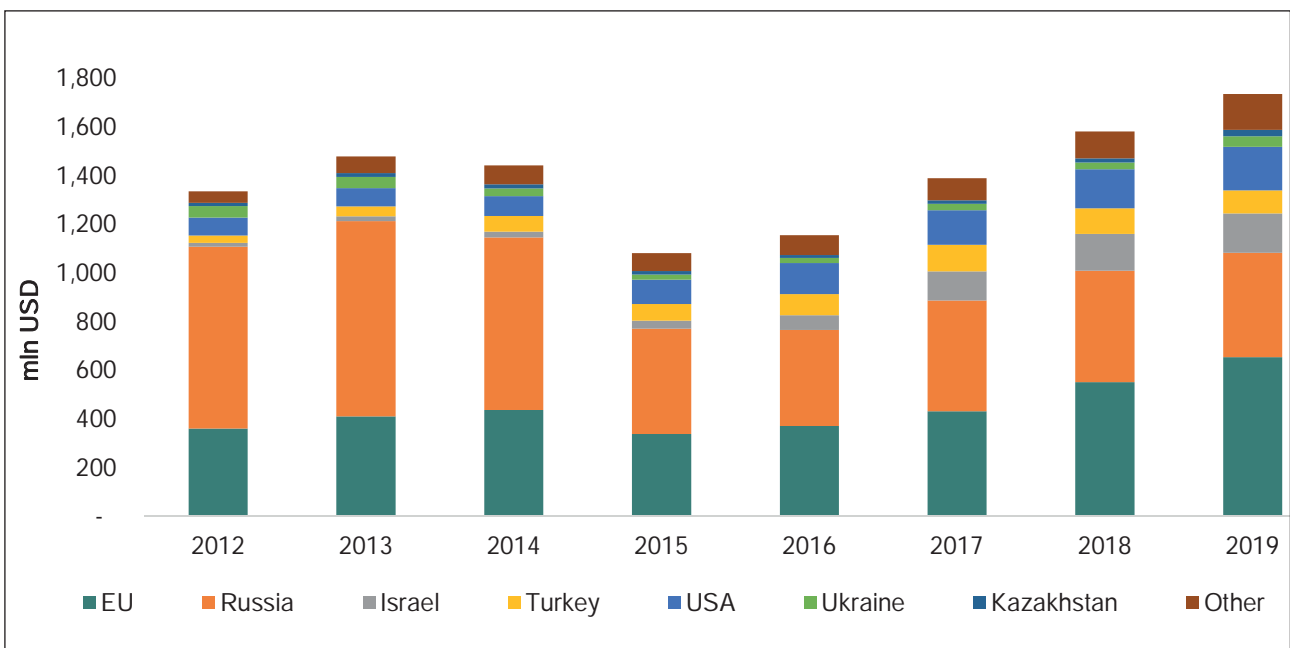
Source: National Bank of Georgia

increased in 2019. Although the latter has a negative impact on the current account balance, it is shown in the financial account as foreign direct investments and thus did not induce capital outflows. Moreover, the balance of compensation of employees increased by 109 million USD to amount to 807 million USD. This increase was mainly due to the revival of economic activities in neighboring countries.

In 2019, secondary income increased by a modest

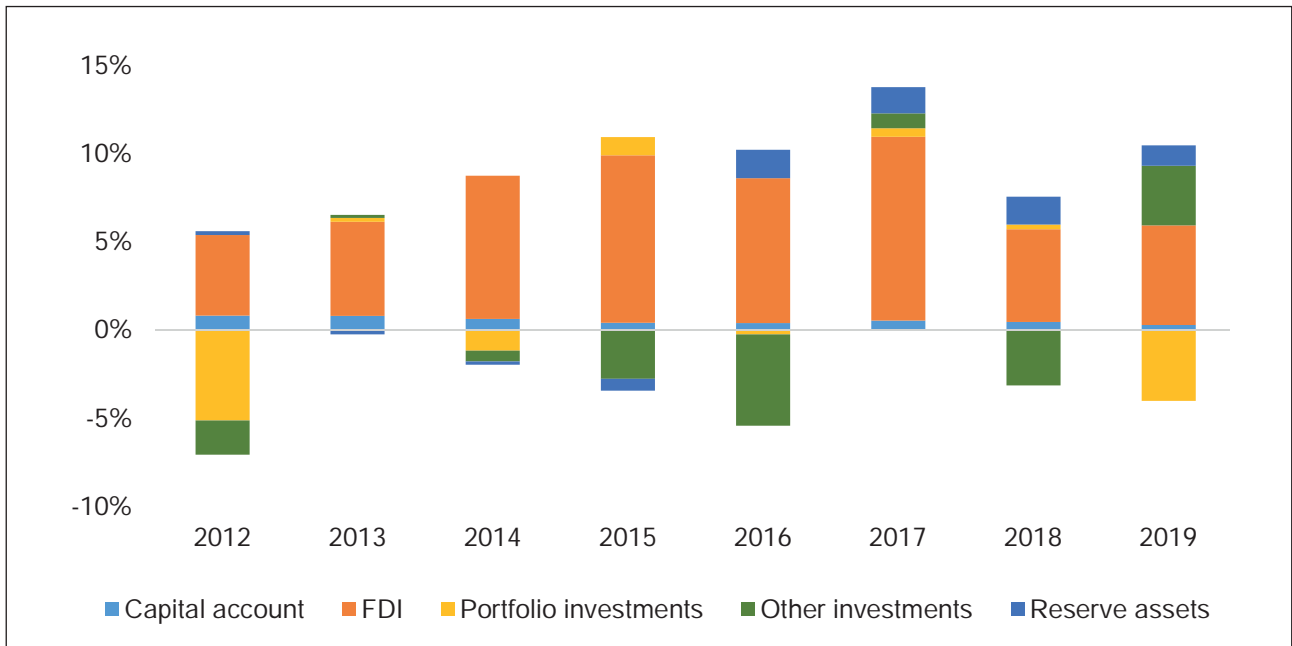
0.7%, which was mostly due to increased remittances from abroad. Personal remittances, which is the largest component of secondary income, grew by 6.8% annually. Personal remittances received from Italy, Israel, Greece and the USA contributed significantly to the overall growth of remittances. Personal remittances from Russia and Turkey declined throughout the year and eventually made negative annual contributions to the overall growth.

Diagram N 1.13 Money transfers by country



Source: National Bank of Georgia

Diagram N 1.14 Financing the current account deficit (in % of GDP)

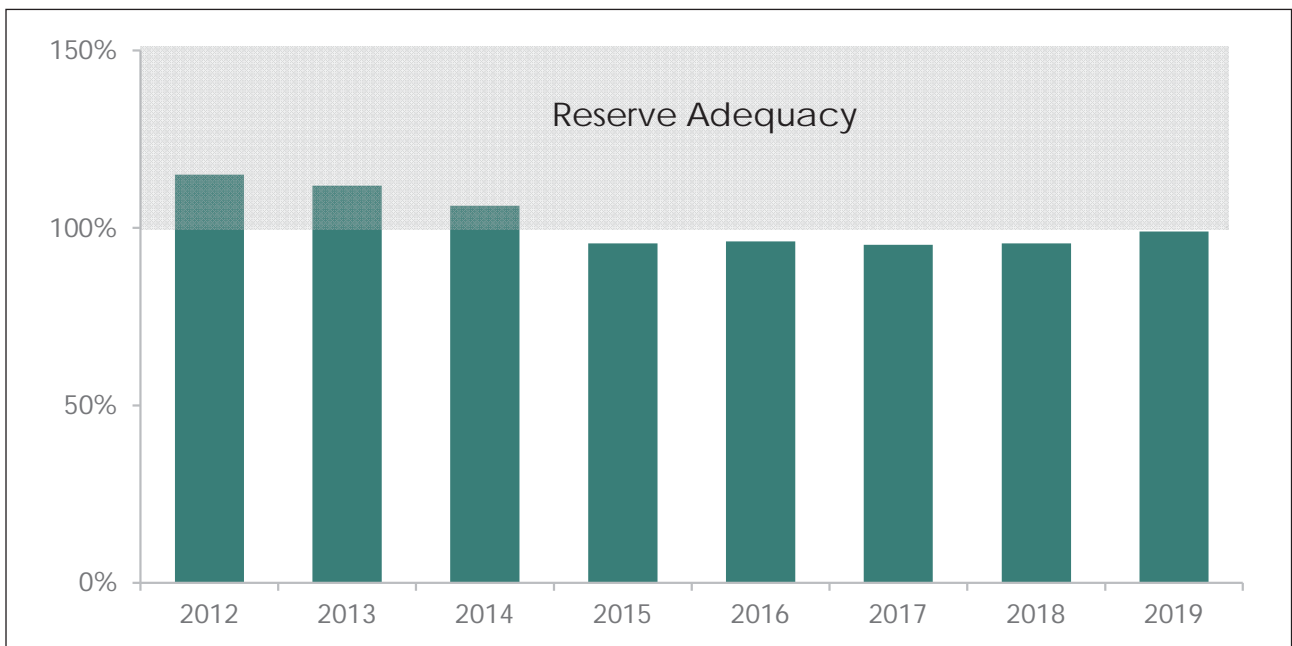


Source: National Bank of Georgia

In 2019, similar to previous years, the current account deficit was mainly financed by foreign direct investments (FDI) (see Diagram N 1.14). FDI in Georgia amounted to 1.3 billion USD in 2019, which was 0.2% higher than the previous year. The majority of investments were directed to the finance, energy, and hotels and restaurants sectors. Compared to the previous year, foreign direct investments increased in the communications, hotels and restaurants, and energy sectors.

Unlike the previous year, other investments played an important role in financing the current account deficit in 2019. In terms of inflows, an essential part of the increase of liabilities came from private (non-bank) sector loans. Apart from those, the public sector received investment and budget support loans of 587 million USD, of which about 95 million EUR was obtained from the French Development Agency, about 60 million EUR was taken from the German Development Bank (KfW) and about 100 million EUR was taken

Diagram N 1.15 Assessment of international reserves adequacy according to IMF methodology (ARA metrics)



Source: National Bank of Georgia

from the European Investment Bank. In addition, in the framework of the extended fund facility, the National Bank of Georgia received an 83 million USD loan (60 million SDR¹⁵) from the IMF.

In 2019, international reserve assets increased by 217 million USD to amount to 3.48 billion USD. The increase of reserves was induced by several factors. Thanks to the NBG's interventions in the foreign exchange market, net purchases from the NBG amounted to 123.5 million USD. The increase in international reserve assets was also backed up by activities with commercial banks, mostly in terms of changes to foreign liabilities reserve requirements. Meanwhile, foreign exchange activities with the government had a negative effect on international reserves. Services on government debt with foreign currency and purchases of goods and services by the government with for-

ign currency amounted to around 737 million USD, which was partially financed by the loans and grants received by the government.

According to the reserve adequacy assessment (based on the IMF's ARA methodology¹⁶), by the end of 2019 the international reserves of Georgia were around 99%, which is close to the lower bound (from 100% to 150%) necessary for ensuring protection against external and liquidity shocks. According to recent estimates, the international reserves, as calculated by the ARA methodology, will continue to hover around the lower bound of the reserve adequacy range. Moreover, by the end of 2019, the ratio of total reserves to months of imports (forecasted imports of 2020) was around 3.5.

Table N 1.1 Balance of payments (2015-2019) (million USD)¹⁷

	2015	2016	2017	2018	2019
Current Account	-1,767	-1,886	-1,308	-1,193	-901
Goods	-3,952	-3,883	-3,809	-4,116	-3,738
Export	3,021	2,865	3,570	4,407	4,944
Import	6,973	6,747	7,379	8,522	8,682
Services	1,404	1,577	2,024	2,244	2,169
Credit	3,087	3,313	3,990	4,490	4,600
o/w: Revenues from Travel	1,868	2,111	2,704	3,222	3,269
Debit	1,683	1,736	1,966	2,246	2,432
Primary income (Net)	-339	-701	-796	-685	-704
o/w: Investment Income	-827	-1,259	-1,418	-1,382	-1,511
o/w: Compensation of Employees	488	558	623	697	807
Secondary income (Net)	1,120	1,121	1,273	1,364	1,373
o/w: General Government	194	234	238	176	135
o/w: Financial corporations, nonfinancial corporations, households, and NPISHs	1,028	999	1,159	1,327	1,402
Capital Account	58	56	83	76	47
Financial Account	-1,781	-1,820	-1,235	-1,155	-904
Direct Investment (Net)	1,420	1,243	1,693	925	986
o/w: Direct Investments in Georgia	1,735	1,656	1,902	1,219	1,269
Portfolio Investments (Net)	-154	41	-77	-48	707
Financial derivatives (other than reserves) and employee stock options: net	-2	-4	0	-1	4
Other Investments (Net)	417	784	-138	558	-591
o/w: General Government	276	276	432	351	342
o/w: Others	136	505	-569	205	-937
Reserve Assets	99	-245	-242	-278	-202
Net Errors and Omissions	-73	10	-11	-39	-50

15 Special Drawing Right – an international reserve asset created by the IMF.

16 For more details on the IMF's ARA methodology, see: <https://www.imf.org/external/np/spr/ara/>

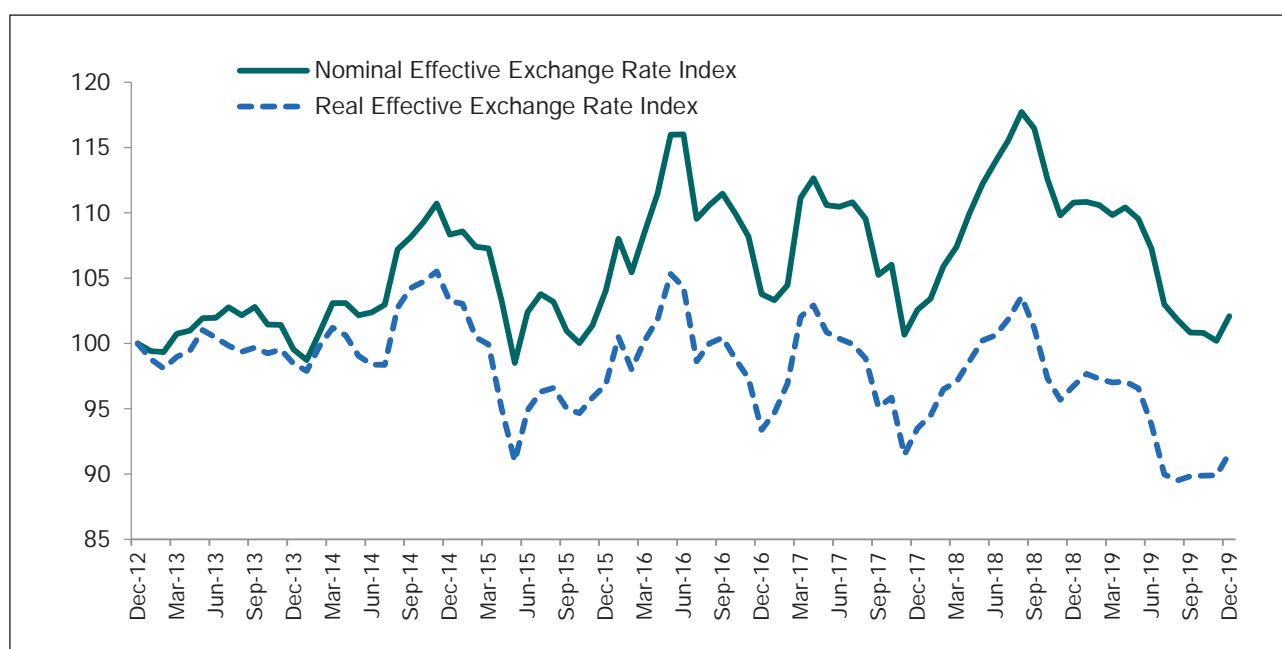
17 According to the IMF's Balance of Payments and International Investment Position Manual (sixth edition).

Important Coefficients					
Reserve Assets in Months of Imports of the Next Year (in Months)	3.6	3.5	3.6	3.5	3.5
Export/Import (G&S)	-71%	-73%	-81%	-83%	-86%
CAB/GDP	-11.8%	-12.5%	-8.0%	-6.8%	-5.1%
FDI/GDP	11.6%	10.9%	11.7%	6.9%	7.2%
Revenues from Travel/GDP	12.5%	13.9%	16.6%	18.3%	18.4%
Personal Transfers/GDP	8.6%	8.7%	9.5%	9.9%	10.5%

Source: National Bank of Georgia

The real effective exchange rate (REER) is a crucial indicator for assessing a country's external competitiveness (see Diagram N 1.16). In 2019, the REER depreciated by 5.3%, while the nominal effective exchange rate depreciated by 7.9%.

Diagram N 1.16 Indices of the Real Effective Exchange Rate and the Nominal Effective Exchange Rate (Dec. 2012=100)



Source: National Bank of Georgia

Table N 1.2 Annual changes in effective exchange rates in 2019

	Change in nominal effective exchange rate, %	Change in real effective exchange rate, %	Share in real effective exchange rate
Effective Exchange Rate	-7.9	-5.3	-5.3
Eurozone	-5.9	-0.6	-0.1
Turkey	1.0	-3.4	-0.6
Ukraine	-21.9	-19.7	-1.4
Armenia	-9.4	-3.7	-0.2
USA	-8.2	-3.9	-0.2
Russian Federation	-14.3	-11.0	-1.5
Azerbaijan	-8.1	-3.9	-0.4
Other	-6.3	-3.8	-0.8

Source: National Bank of Georgia

The efforts taken throughout 2019 to ensure a stable macroeconomic and financial environment were reflected in the sovereign ratings of Georgia by international ratings agencies. The international ratings agency “Standard & Poor’s” raised the sovereign rating of Georgia to “BB” with a stable outlook. Another large international ratings agency, “Fitch Ratings”, also raised the sovereign credit rating of Georgia to “BB” from “BB-”. These revisions came in the wake of Moody’s earlier raising Georgia’s sovereign credit rating to “Ba2” in 2017. These improving international ratings solidify the credibility of the country for international institutions and investors and positively

affect the business environment in Georgia. The improvement of the ratings was induced by the progress that the country attained during recent years. Despite elevated external risks, economic growth in Georgia was robust. Moreover, the floating exchange rate regime was permanently maintained, which has supported a significant narrowing of the current account deficit in recent years. The international rating agencies also positively assessed the activities of the NBG as directed at the accumulation of international reserves – these have strengthened the external buffers of the country and send international investors optimistic signals about Georgia.

Box 1 Georgia’s sovereign credit rating

A country’s sovereign credit rating assesses the credibility of the commitments taken by its national government. In other words, it is the evaluation of credit agencies on the extent to which a country is able to repay its debts according to pre-agreed conditions.

The largest credit agencies in the world are Standard & Poor’s, Moody’s and Fitch Ratings. Their country-grading methodologies involve comprehensive economic, financial, institutional assessment, and risk analysis. After conducting their evaluations, the rating agencies publish analytical reports with detailed explanations of the positive and negative factors affecting a country’s final rating. In the case of Georgia, the

country’s rating is reviewed twice a year on average by each agency.

Given the complexity and reputation of the rating agencies, their ratings are the best determinants of a country’s macroeconomic position and investment environment and are thus of great importance to both international and local investors.

A high credit rating with a favorable investment environment enables a country to attract relatively cheap credit resources and vice versa. The higher the risks, the greater the risk premium economic agents need in exchange, which ultimately increases the price of credit resources.

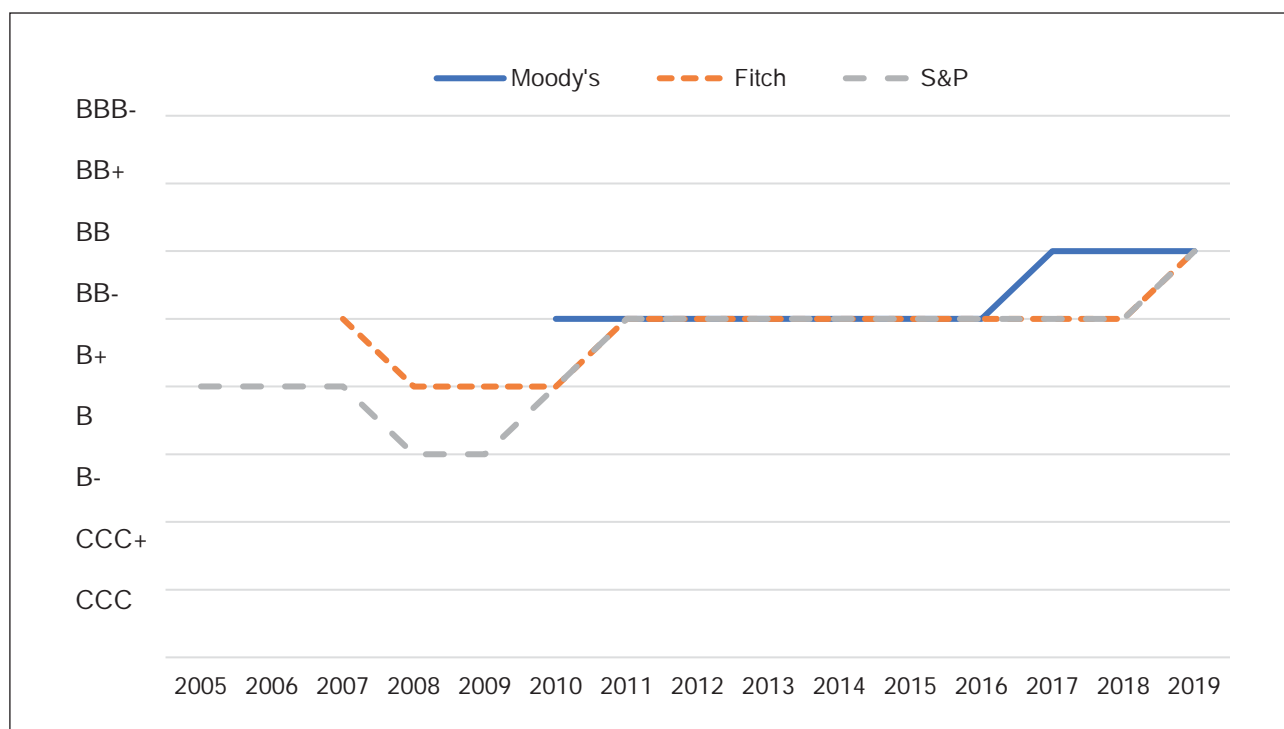
Table N 1.3 Rating grades

	Grade Description	Moody's	S&P	Fitch
Investment Grade	Highest grade, lowest risk	Aaa	AAA	AAA
	Very high credit grade, very low risks	Aa1	AA+	AA+
		Aa2	AA	AA
		Aa3	AA-	AA-
	High credit grade, low risks	A1	A+	A+
		A2	A	A
		A3	A-	A-
	Good credit rating, moderate risks	Baa1	BBB+	BBB+
		Baa2	BBB	BBB
Baa3		BBB-	BBB-	
Non-investment Grade	Speculative credit grade, substantial risks	Ba1	BB+	BB+
		Ba2 Georgia	BB Georgia	BB Georgia
		Ba3	BB-	BB-
	Highly speculative, high risks	B1	B+	B+
		B2	B	B
		B3	B-	B-
	Real possibility of default	Caa1	CCC+	CCC+
		Caa2	CCC	CCC
		Caa3	CCC-	CCC-
	Very high credit risks, close to default	Ca	CC	CC
	Default	C	C	C

Georgia's first sovereign rating assessment was by Standard & Poor's in 2005. Since 2010, all three rating agencies have evaluated Georgia. For several years, their ratings remained unchanged. In 2017, Moody's upgraded its rating to an all-time high of Ba2. This move was followed by a similar assessment from Fitch Ratings, and, in October 2019, Standard & Poor's upgraded Georgia's credit rating to BB (see Diagram N 1.17). Important factors that affected the growth of Georgia's ratings were the National Bank's floating exchange rate policy and the accumulation of international reserves that have significantly contributed to external sustainability.

To obtain an investment grade rating, Georgia has to overcome a few challenges. In particular, Georgia needs to maintain macroeconomic stability, which implies sustainable economic growth and a low level of inflation. In addition, it is important to maintain a low budget deficit, improve the current account balance and reduce dollarization. This will reduce external vulnerabilities and promote economic sustainability. Reaching an investment grade rating will raise Georgia's attractiveness for international investors and increase long-term investment capital inflows into the country.

Diagram N 1.17 Georgia's credit rating history



Source: Data of rating agencies

Georgia's high economic growth and relatively high institutional strength were other determining factors for its rating assessment, as were the independence of the National Bank, the adequacy of monetary policy, the stability of the banking sector, fiscal sustainability, low levels of corruption, and developed public services.

The weaknesses that are hindering a further improvement of the country's credit rating include the small size of the economy, low GDP per capita, the high current account deficit, and high levels of dollarization. The latter, which concerns the dollarization of the banking sector, also includes the high level of foreign currency denominated loans in the country's liabilities, which makes the country vulnerable to currency fluctuations.

1.3. ECONOMIC GROWTH

In 2019, according to preliminary estimates, the Georgian economy grew by 5.1%. The largest share of that growth, 4.2 percentage points (pp), came from services, 1.0 pp came from industry, while the share of agriculture was negative at -0.1 pp.

The first half of 2019's economic growth was mostly determined by strong external demand, including for tourism services. The increased number of foreign visitors had a particularly positive effect on real estate operations, hotels and restaurants, and transport. The Russian ban on air travel to Georgia has harmed the tourism sector, though this loss was gradually compensated by an increase of visitors from other countries. As a result, the tourism-related sectors of the economy increased, albeit not as much as in previous periods. Overall, there was a 6.1% increase in

real estate operations in 2019, where the participation of non-residents is likely to continue to be significant. Accommodation and food service activities, which account for a large share of the restaurants and hotels sector, increased by 8.9%. The transport sector, where the participation of travel bureaus and agents is important, increased by 7.4%. The contribution of each of the above-mentioned sectors to economic growth totaled 1.3 pp.

Trade, which is the largest branch of the economy,

grew by 8.8% in 2019, contributing 1.1 pp to economic growth. One of the main drivers of economic growth, especially in the second half of the year, was construction. The infrastructural projects funded by the government significantly intensified, although civil construction also had a positive impact on economic growth. Eventually, construction increased by 4.4%, making a 0.3 pp contribution to economic growth. A decline was observed in the agriculture sector (see Table N 1.4).

Table N 1.4 Real GDP growth and sector breakdown

	2019Q1		2019Q2		2019Q3		2019Q4		2019	
	Growth	Contr.	Growth	Contr.	Growth	Contr.	Growth	Contr.	Growth	Contr.
Agriculture, forestry and fishing	-4.7%	-0.3%	1.6%	0.1%	2.1%	0.2%	-5.1%	-0.3%	-1.1%	-0.1%
Mining and quarrying	0.0%	0.0%	-5.7%	-0.1%	-2.2%	0.0%	0.4%	0.0%	-2.0%	0.0%
Manufacturing	-1.7%	-0.1%	-3.4%	-0.3%	4.9%	0.4%	6.3%	0.6%	1.9%	0.2%
Electricity, gas, steam and air conditioning supply	5.8%	0.2%	9.3%	0.2%	2.6%	0.1%	4.2%	0.1%	5.5%	0.1%
Water supply; sewerage, waste management and remediation activities	2.2%	0.0%	1.6%	0.0%	6.8%	0.0%	7.8%	0.0%	4.6%	0.0%
Construction	-11.0%	-0.7%	5.0%	0.4%	17.1%	1.3%	1.4%	0.1%	4.4%	0.3%
Wholesale and retail trade; repair of motor vehicles and motorcycles	5.2%	0.6%	6.7%	0.8%	9.8%	1.2%	12.4%	1.5%	8.8%	1.1%
Transportation and storage	9.3%	0.5%	10.5%	0.6%	2.2%	0.1%	8.3%	0.5%	7.4%	0.4%
Accommodation and food service activities	11.8%	0.5%	7.6%	0.3%	2.5%	0.1%	15.2%	0.6%	8.9%	0.4%
Information and communication	13.9%	0.3%	11.2%	0.3%	18.2%	0.4%	17.0%	0.4%	15.2%	0.4%
Financial and insurance activities	3.1%	0.2%	2.5%	0.1%	-2.2%	-0.1%	-10.3%	-0.5%	-2.1%	-0.1%
Real estate activities	7.3%	0.8%	6.6%	0.6%	3.8%	0.4%	7.0%	0.7%	6.1%	0.6%
Professional, scientific and technical activities	24.3%	0.6%	7.5%	0.2%	9.1%	0.2%	17.2%	0.4%	14.4%	0.3%
Administrative and support service activities	18.3%	0.2%	7.1%	0.1%	5.2%	0.1%	10.3%	0.1%	9.4%	0.1%
Public administration and defense; compulsory social security	-1.1%	-0.1%	-3.1%	-0.2%	-4.0%	-0.2%	-2.6%	-0.2%	-2.7%	-0.2%
Education	12.6%	0.5%	5.4%	0.2%	6.3%	0.2%	11.2%	0.4%	8.8%	0.3%
Human health and social work activities	13.1%	0.5%	7.6%	0.3%	8.1%	0.3%	10.0%	0.3%	9.6%	0.4%
Arts, entertainment and recreation	4.8%	0.1%	5.2%	0.1%	19.9%	0.5%	25.2%	0.7%	14.3%	0.4%
Other service activities	1.0%	0.0%	4.4%	0.0%	7.7%	0.1%	5.1%	0.0%	4.6%	0.0%
Activities of households as employers; undifferentiated goods and services producing activities of household for own use	2.0%	0.0%	3.0%	0.0%	5.0%	0.0%	-5.1%	0.0%	1.1%	0.0%
(+) Taxes on products	9.1%	1.2%	7.1%	0.9%	5.0%	0.7%	-2.1%	-0.3%	4.2%	0.6%
(-) Subsidies on products	2.2%	0.0%	9.4%	-0.1%	7.6%	0.0%	3.1%	0.0%	5.8%	0.0%
GDP		5.0%		4.6%		5.8%		5.1%		5.1%

Source: GeoStat; NBG calculations

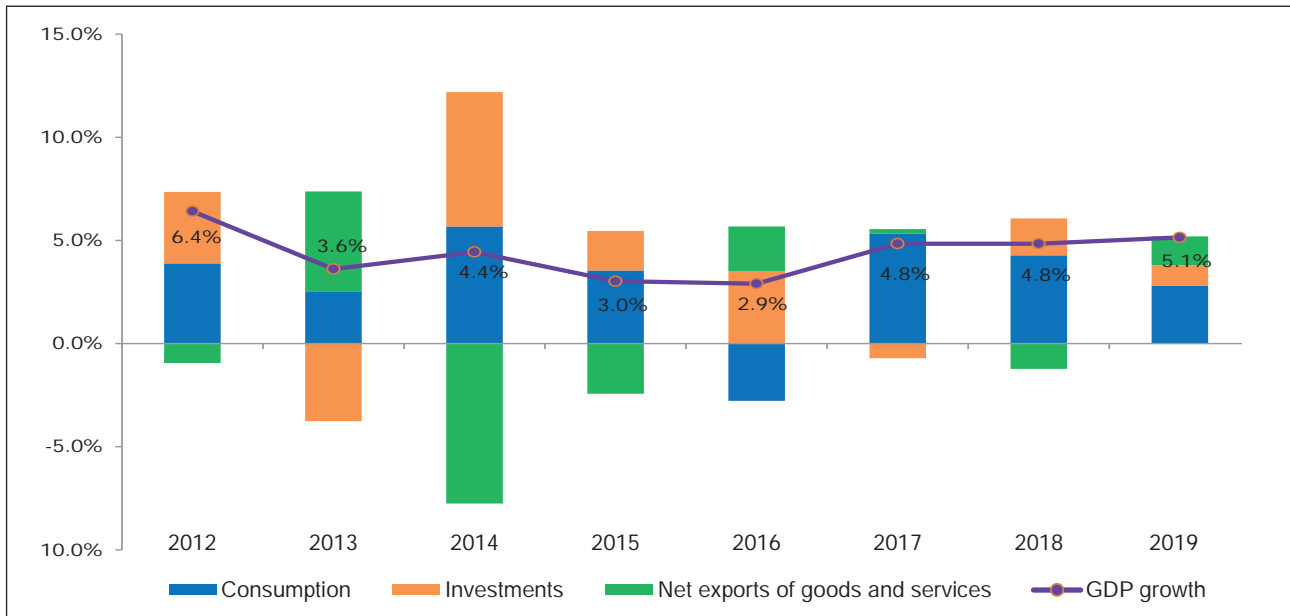
DEMAND

According to the preliminary estimates of the National Bank of Georgia, the main driving force of economic growth by category of use in 2019 was consumption. Of the 5.1% increase in gross domestic product, 2.8 pp came from consumption, 1.4 pp from net exports,

nominal and real terms. Finally, annual growth was observed in tourism revenues.

In 2019, the investments-to-GDP ratio stood at 27%. During recent years, this figure has remained stable and can be considered an adequate level for Georgia's economic development. Maintaining this level

Diagram N 1.18 GDP growth by category of use

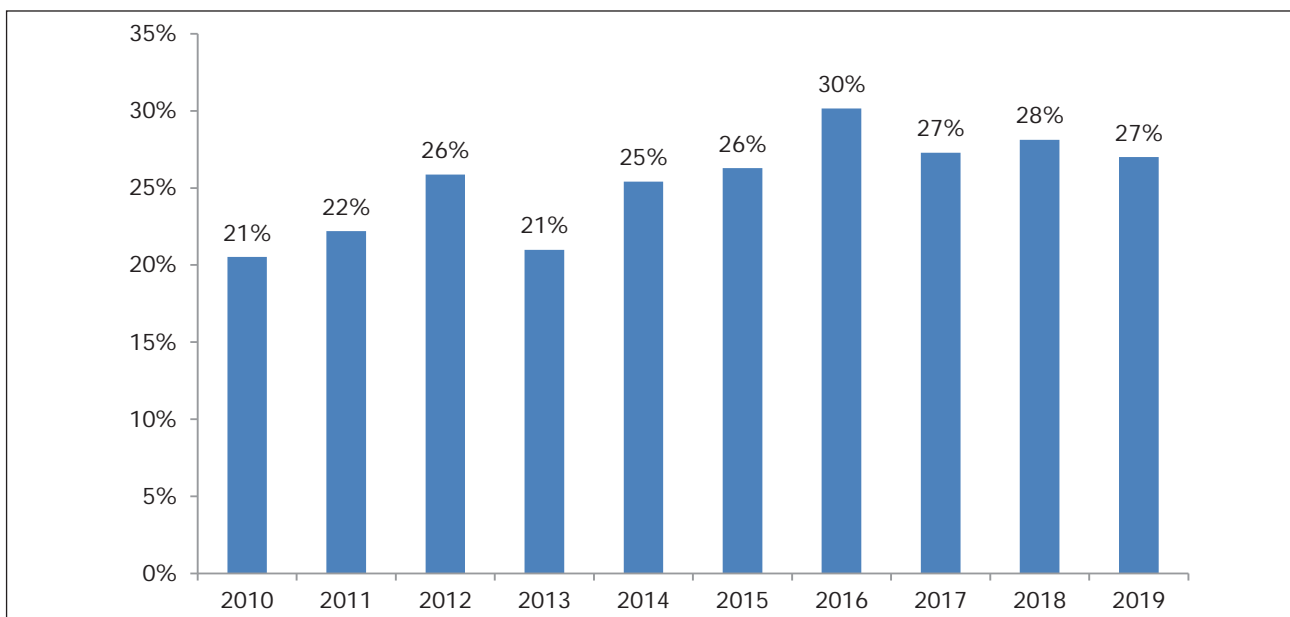


Source: GeoStat; NBG calculations

and 1.0 pp from investments (see Diagram N 1.18). In 2019, foreign demand was strong. According to current estimates, exports of goods increased in both

through capital accumulation will support long-term economic growth (see Diagram N 1.19).

Diagram N 1.19 Investments to GDP



Source: GeoStat; NBG calculations

1.4 INFLATION

As had been the case in the previous year, inflation remained low in early 2019. However, from March inflation exceeded the target, mainly due to rising prices on cigarettes and food. The rise in cigarette prices was linked to an increase in excise taxes, while food prices have traditionally been characterized by high volatility under the influence of yields and other factors of supply. Due to the high weight of food in the consumer basket (27.3%), this volatility of prices significantly affected the overall inflation rate. The contribution of cigarettes to inflation was more or less stable (at 0.6-1.3 pp), while food contributions had a growing trend (from 0.8 to 3.8 pp) and were the main reason for the gradual increase of the inflation rate. It is important to note that core inflation remained low during the same period. In the second half of the year, pressure on prices was driven by the depreciation of the nominal effective exchange rate and inflation eventually reached its highest point of 7.0% in December. The depreciation of the nominal effective exchange rate also affected core inflation, which rose to 3.7% at the end of the year. However, it was significantly lower than headline inflation during the year and averaged 2.0% (see Diagram N 1.20). An analysis of core inflation is significant as it reflects the long-term trend.

As mentioned above, throughout 2019 inflation was significantly affected by rising food and cigarette prices

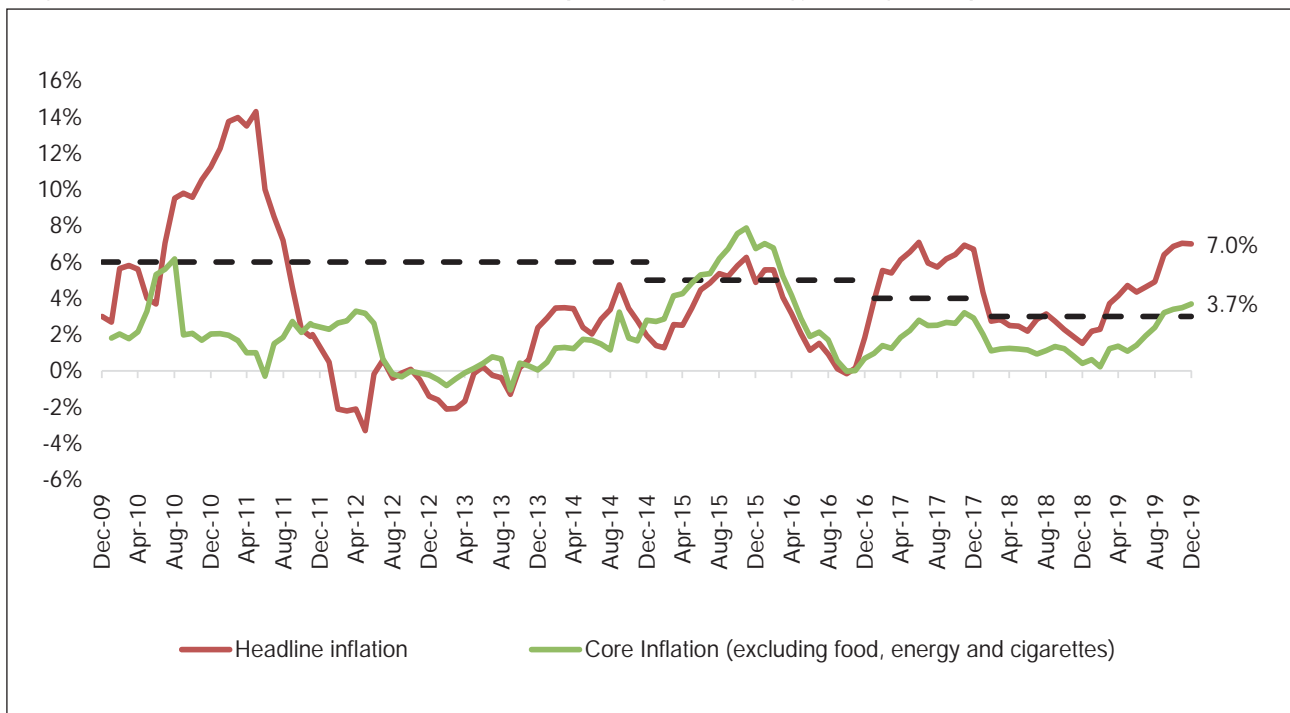
(see Diagram N 1.21). The average inflation rate in 2019 was 4.9%, of which 2.3 pp came from food and 1.0 pp from cigarettes.

Increased prices on meat, dairy products and bread made a significant contribution to inflation. The price of bread rose at the end of 2018. In January 2019, the price of bread was up by 15% annually and this had an average 0.5 pp impact on inflation throughout the year. In addition, a rise in prices of fruits and vegetables importantly contributed to inflation.

The average inflation of imported and locally produced goods during the year was 4.4% and 5.3% respectively. Prices of mixed goods rose by an average of 3.8%. As mentioned above, food inflation was high, which ensured a high inflation rate for locally produced goods. Cigarettes made a significant contribution to the inflation of imported goods; however, especially in the second half of the year, the depreciation of the lari nominal effective exchange rate also affected prices of imported goods.

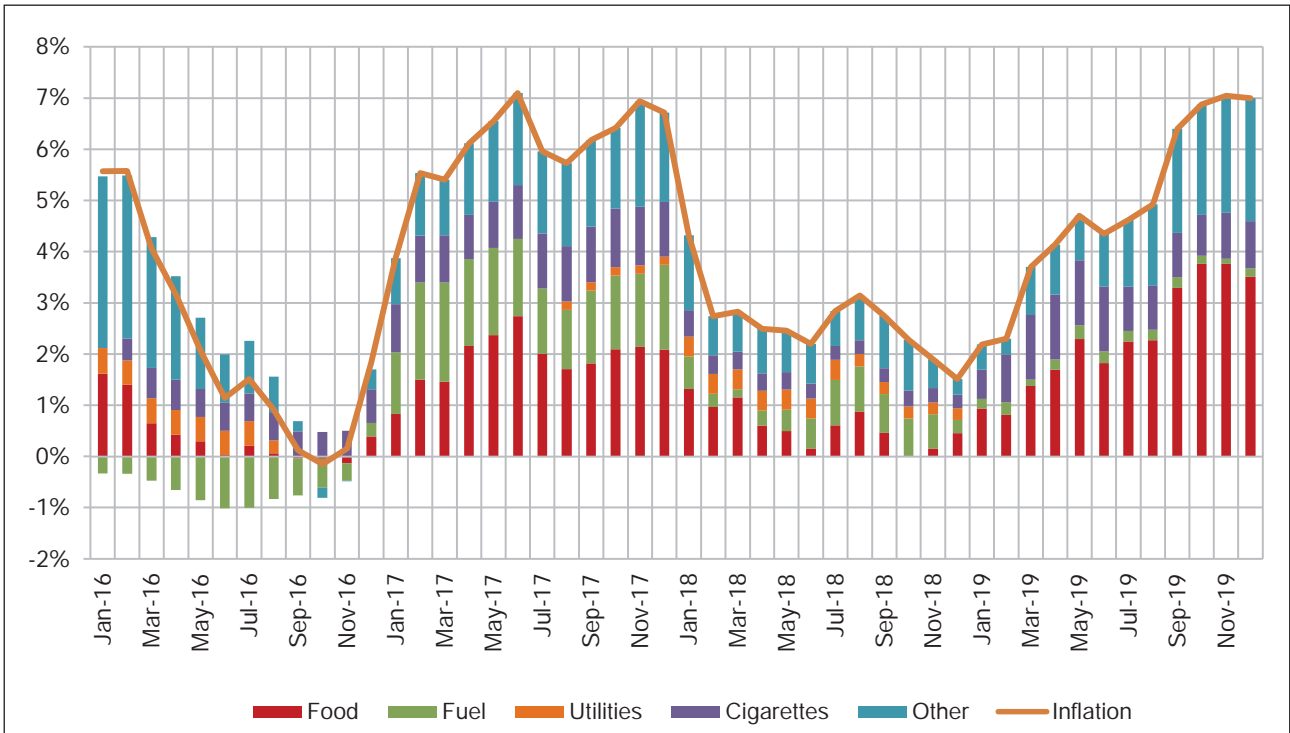
The year also saw a decrease in the prices of goods in the “clothing and footwear” group, which has become a trend in recent years. Between 2010 and 2018, clothing and footwear prices decreased by an average of 4% each year. In 2019, the decline accelerated to 7.2%. Meanwhile, prices in the healthcare group rose by an average of 3.4% over the year (see Table N 1.5).

Diagram N 1.20 Headline inflation and core inflation (excluding food, energy and cigarettes)



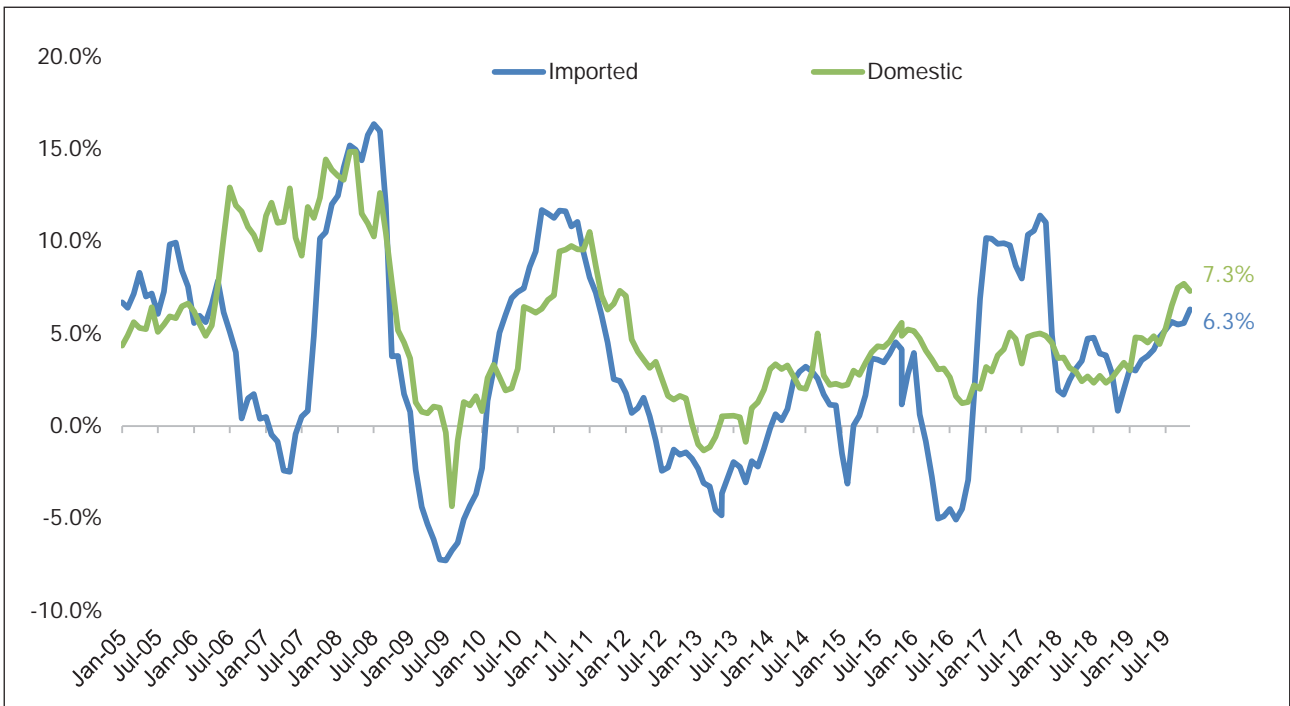
Source: GeoStat

Diagram N 1.21 Contribution of fuel, food, alcoholic drinks, tobacco and utilities to headline inflation



Source: GeoStat; NBG calculations

Diagram N 1.22 Imported and domestic inflation



Source: GeoStat

Table N 1.5 Inflation indicators according to individual components (percentage), their share in the consumer basket (percentage) and contribution to CPI (percentage points)

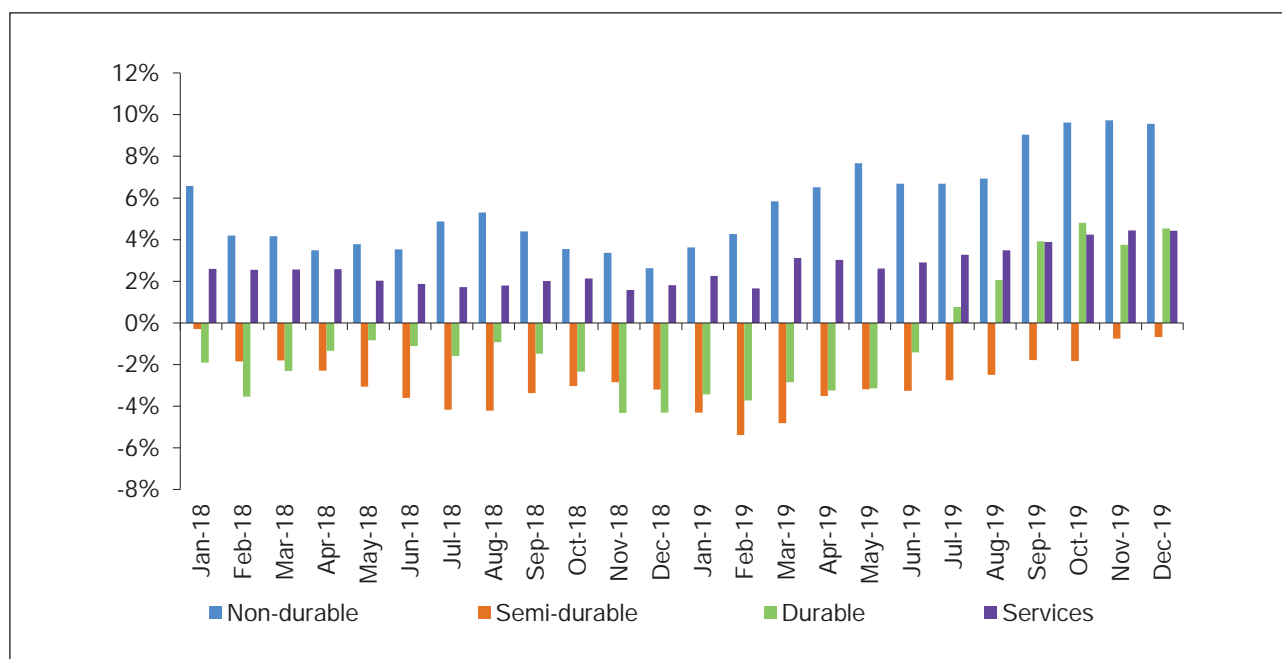
	December 2019 Weights	Dec19/Dec18		Jan19Dec19/ Jan18Dec18	
		Inflation	Contribution	Inflation	Contribution
Total	100.0%	7.0%	7.0%	4.9%	4.9%
Food and Non-Alcoholic Beverages	30.8%	12.3%	3.8%	8.1%	2.5%
Food	27.3%	12.8%	3.5%	8.6%	2.3%
Bread and Bakery	5.5%	6.6%	0.4%	10.9%	0.6%
Meat and Meat Products	6.3%	14.8%	0.9%	8.6%	0.5%
Fish Products	0.5%	14.2%	0.1%	14.2%	0.1%
Milk, Cheese, and Egg	5.6%	13.5%	0.8%	7.4%	0.4%
Oil and Fats	1.8%	4.6%	0.1%	1.4%	0.0%
Fruits, grapes	1.5%	31.9%	0.5%	-3.8%	-0.1%
Vegetables, Melons, Potatoes and other Tubers	3.1%	14.1%	0.4%	14.4%	0.4%
Sugar, Jams, Honey, Syrups, Chocolate, Pastry	2.4%	10.7%	0.3%	5.5%	0.1%
Other Food Products	0.6%	19.2%	0.1%	6.5%	0.0%
Non-alcoholic beverages	3.5%	8.2%	0.3%	4.5%	0.2%
Alcoholic Beverages, Tobacco	6.6%	15.6%	1.0%	16.3%	1.1%
Clothing and Footwear	3.7%	-4.2%	-0.2%	-7.2%	-0.3%
Housing, Water, Electricity, Gas and other Fuels	8.8%	3.7%	0.3%	2.0%	0.2%
Furnishings, household equipment and maintenance	6.4%	3.2%	0.2%	1.4%	0.1%
Healthcare	8.0%	3.5%	0.3%	3.4%	0.3%
Transport	12.1%	2.9%	0.4%	2.9%	0.4%
Communication	3.6%	-1.4%	-0.1%	-2.2%	-0.1%
Recreation and Culture	5.7%	6.9%	0.4%	5.3%	0.3%
Education	5.0%	3.2%	0.2%	2.6%	0.1%
Hotels, Cafes and Restaurants	4.0%	7.9%	0.3%	3.8%	0.2%
Miscellaneous Goods and Services	5.3%	5.8%	0.3%	2.6%	0.1%

Source: GeoStat

Throughout 2019, consumer prices for non-durable goods saw the largest increase of 7.2%. The main reason for this rise was the price increase on food and cigarettes. The average annual inflation for services

was 3.3%. Prices of durable goods slightly increased (by 0.2%), while prices for semi-durable goods fell by 2.9%.

Diagram N 1.23 Change of annual inflation for services and goods of different durability



Source: GeoStat

Box 2 The relationship between inflation and the exchange rate (examples of 2018 and 2019)

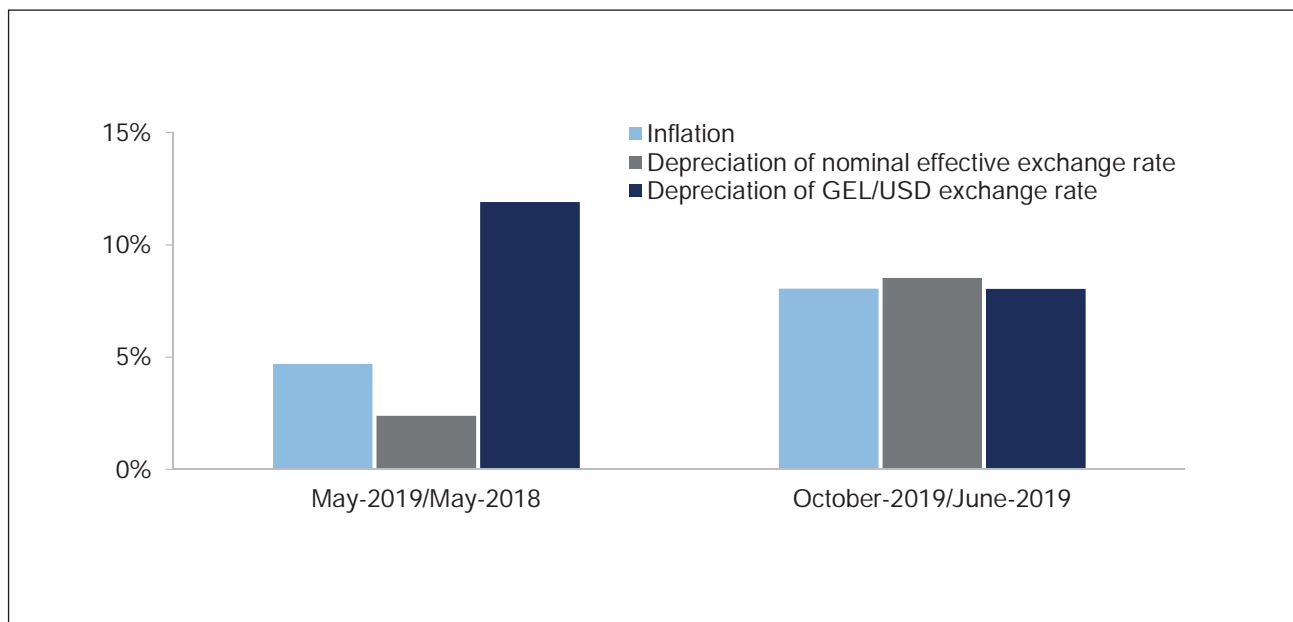
Annual inflation reached 7.0% at the end of 2019. At the beginning of the year, inflation was mainly driven by one-off factors, such as the increase in excise tax on tobacco, and the price hike for certain components of the food category. While in the second half of the year, inflation was driven by the exchange rate depreciation. In that period, the depreciation of the local currency was channeled to inflation through its effect on the prices of imported consumption goods. Liability dollarization also puts pressure on inflation. In 2019, an increase in aggregate demand contributed to higher-than-expected economic growth, which supported the closing of the output gap at the end of the year. As aggregate demand improved, it could no longer offset the upward pressure on inflation. As a result, the NBG began tightening its monetary policy stance to bring inflation down to the 3% target in the medium run.

The GEL bilateral exchange rate against the USD depreciated in 2018 as well, but as inflation did not change significantly at that time the monetary policy reaction was accordingly muted. The question, then, is what factors explain the muted pass-through of the exchange rate depreciation to inflation that occurred in 2018 but not in 2019?

One of the possible explanations for this could be the dynamics of the nominal effective exchange rate (NEER), which measures the GEL exchange rate against a basket of trade partners' currencies. When the exchange rate does not change against a trade partner's currency, it is highly probable that the price of imported goods from that country will not change either. There are thus two main channels for the exchange rate pass-through to inflation: the price of imported goods, and the dollarized debt service burden. The first channel works through the GEL nominal effective exchange rate, while the second depends on the GEL/USD exchange rate.

Consequently, when the lari depreciates against all currencies, inflation is driven by both of these channels. However, when the GEL depreciates only against the USD, the pass-through to inflation is limited, as the first channel is not in effect. For illustrative purposes, we can look at the last two episodes of the depreciation of the lari against the USD: from May 2018 to May 2019, when the GEL/USD depreciated by 11.9%, and from June 2019 to October 2019, when the lari depreciated by an additional 8%. At the same time, the NEER depreciated by 2.4% in the first period, while it fell by 8.5% from June to October 2019. Diagram N 1.24 summarizes the above-mentioned inflation and exchange rate dynamics.

Diagram N 1.24 Inflation and depreciation of the GEL/USD and Nominal Effective Exchange Rates from May 2018 to May 2019 and from June 2019 to October 2019



Source: National Bank of Georgia; GeoStat

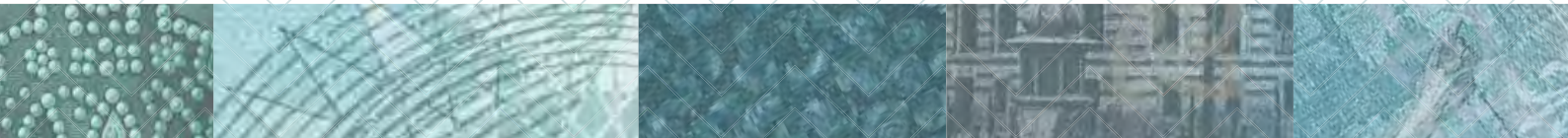
As the figure shows, the exchange rate pass-through to inflation increased in the second period of GEL/USD depreciation, while the depreciation was larger in the first period. That could be explained by the

factors mentioned previously: when the lari depreciates against all trade partners' currencies, the pass-through to inflation is stronger than when it falls only against the USD.



2

MONETARY AND EXCHANGE RATE POLICY



2. MONETARY AND EXCHANGE RATE POLICY

2.1 MONETARY POLICY

According to the Organic Law on the National Bank of Georgia, the primary purpose of the National Bank is to ensure price stability.¹⁸ 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. This regime, which is seen as the most efficient contemporary approach to maintaining price stability, relies on the announcement of an inflation target that is used to guide policy for maintaining inflation at the target level in the medium term.

The main monetary policy instrument of the National Bank of Georgia is the monetary policy rate, which changes according to inflation forecasts. If an inflation forecast exceeds the target rate, the NBG will tighten monetary policy; whereas if the inflation forecast is lower than the target level, the NBG will resort to loosening monetary policy. The inflation-targeting framework guarantees price stability and, compared to other policy frameworks, results in relatively lower long-term interest rates. In line with the development of monetary policy instruments and monetary policy transmission mechanisms, the social costs of achieving price stability will decline. The NBG is thus continuously working on increasing the efficiency of monetary policy instruments and monetary policy transmission mechanisms.

Monetary policy is guided by the Decree of the Parliament of Georgia on the “Main Directions of Monetary and Exchange Rate Policy”.¹⁹ Given Georgia’s current stage of economic development, the inflation target was set at 3% for the period 2019-2021, which is its long-term indicator. It should be noted that developing countries tend to have higher inflation than advanced countries, resulting from the faster growth of productivity (Balassa, 1964²⁰; Samuelson, 1964²¹).

In Georgia, as in other small open economies, exogenous shocks (independent from monetary policy) are

always looming. Exogenous factors can cause actual inflation to deviate from the target level. Monetary policy is a tool to impact aggregate demand and is thus the central bank’s response to demand shocks. The central banks do not usually react to supply side exogenous shocks, since doing so would lead to high economic costs and increase unemployment in the long run. Moreover, Bernanke & Blinder (1992)²² and Bernanke & Gertler (1995)²³ demonstrated that monetary policy is transmitted to the real economy with a certain time lag, hence, in the short run, actual inflation can temporarily deviate from the target level. However, if a deviation is so significant that it affects inflation expectations and the inflation forecast, the NBG will adjust its policy response accordingly.

In early 2019, as a result of one-off factors, such as the rise in excise tax on tobacco products and the increase in the price of oil on international markets, inflation varied around the target level. Meanwhile core inflation, which excludes volatile food, energy and tobacco prices, was substantially lower, signaling that the increase in headline inflation was only temporary. At the same time, it should be noted that aggregate demand was still lagging behind its potential level and hence inflationary pressure from the demand side was still weak. As a result, given the slowdown in external risks, in the first quarter of 2019, the National Bank continued its gradual exit from the moderately tightened monetary policy stance that had begun in July 2018. The Monetary Policy Committee made the decision to cut the policy rate in January and March to 6.5%. At the same time, according to the NBG’s forecast of the time, inflation was expected to decline and approach the target level from the beginning of 2020 after the exhaustion of single (exogenous) factors. However, the significant depreciation of the nominal effective exchange rate in the second half of the year increased the pressure on inflation, strengthening inflationary expectations. At the same time, the improvement in economic activity was expected to weaken the downwards pressure stemming from the demand side. Due to these factors, the need for a monetary policy response was identified. The National Bank of Georgia thus tightened its policy from September to neutralize inflationary pressures following the depreciation of the exchange rate. The refinancing rate rose from 6.5% to 8.5% in September-October 2019 and to 9% in December.

18 Article 1 of the Organic Law on the National Bank of Georgia.

19 Decree of the Parliament of Georgia, “On the Main Directions of the Monetary Policy of Georgia, 2018-2020”, para. 1

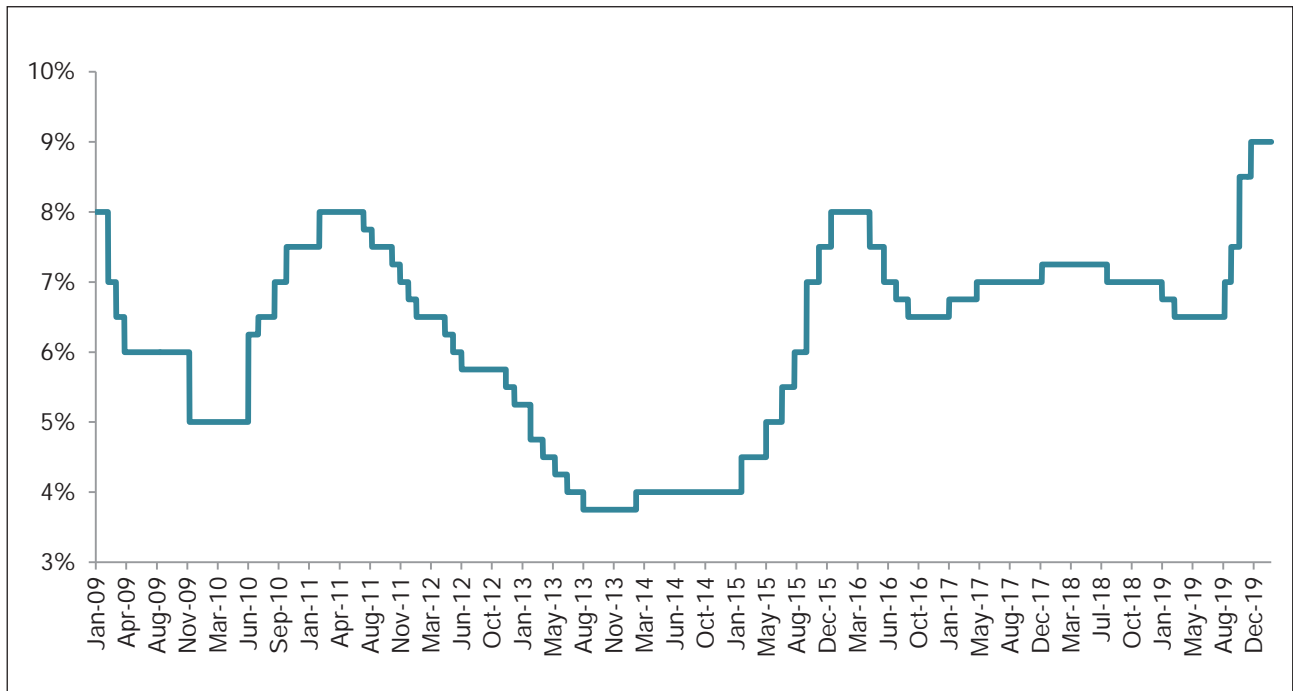
20 Balassa, B. (1964), “The Purchasing Power Parity Doctrine: A Reappraisal”, *Journal of Political Economy*, 72, 584-96.

21 Samuelson, P. (1964), “Theoretical Notes on Trade Problems”, *Review of Economics and Statistics*, 23, 1-60.

22 Bernanke, B. S. & Blinder, A. S. (1992) “The Federal Funds Rate and the Channels of Monetary Transmission”, *American Economic Review*; Vol. 82, Issue 4, 901-21.

23 Bernanke, B. S. & Gertler, M. (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

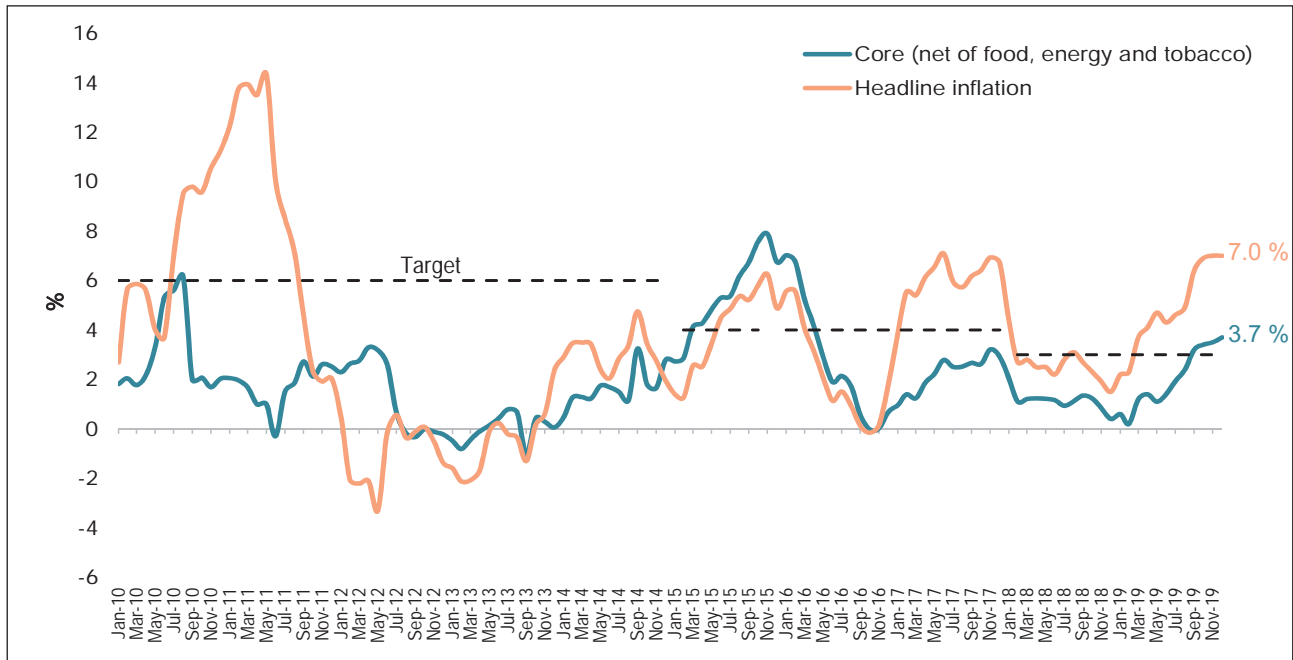
Diagram N 2.1 Monetary policy rate



Source: National Bank of Georgia

Given the factors discussed above, headline inflation was characterized by an increasing trend throughout the year. Inflation equaled 7.0% in December 2019 and averaged 4.8% over the year.

Diagram N 2.2 Annual inflation and inflation excluding the effect of food, energy and tobacco prices



Source: National Bank of Georgia; GeoStat

Considering the elevated external risks in the second half of 2019, the National Bank of Georgia reduced its real GDP growth forecast for 2019 to 4.5%. However, the economy was characterized by high activity in 2019 and, according to preliminary estimates,

real GDP growth stood at 5.2% in 2019. The high economic activity, in turn, was driven by high credit activity and strong fiscal stimulus, including in infrastructure projects. It should be noted that, at the end of the year, the National Statistics Office of Georgia,

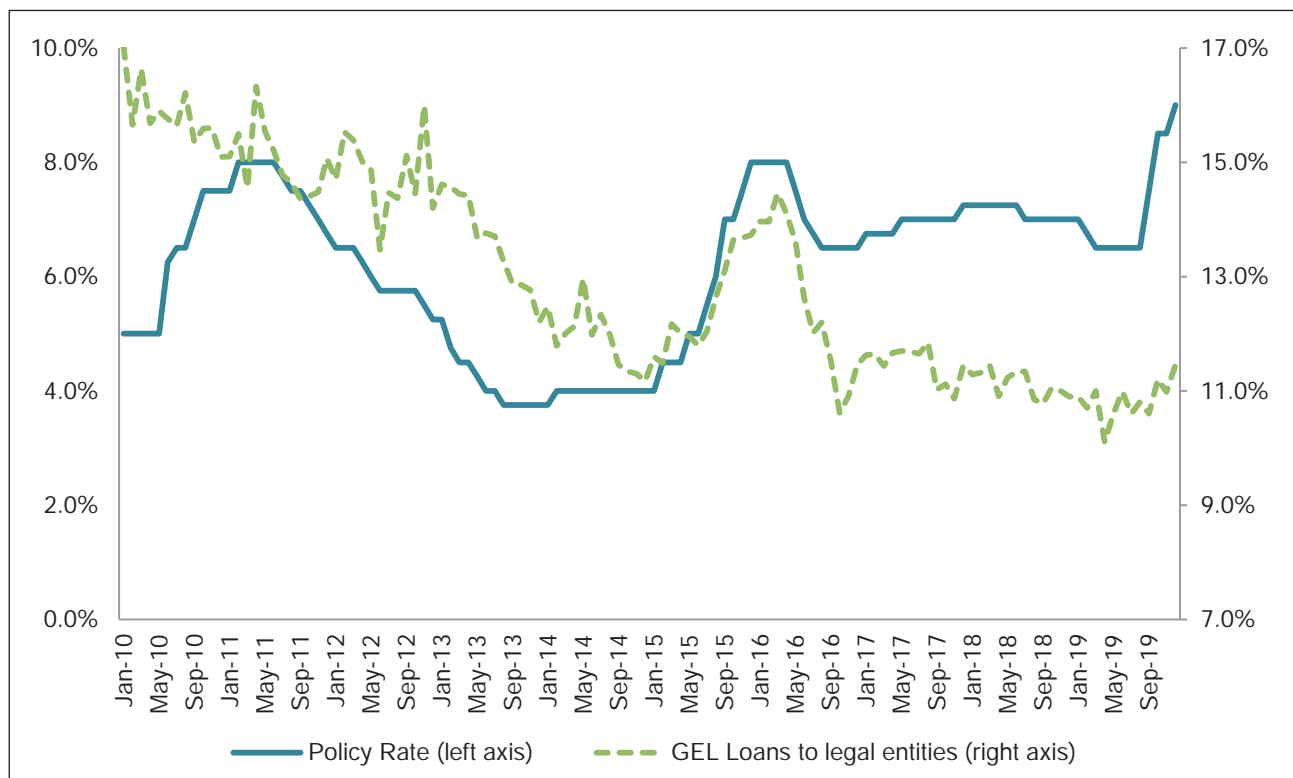
based on the new national accounting system methodology, increased the overall level of GDP and other aggregates in the national accounts, which in turn affected the assessment of the deviation of GDP from its potential level. In particular, the updated data indicated the closure of the GDP gap. Meanwhile, the external sector significantly contributed to economic growth over the year. In the second half of the year, despite the external shock, strong external demand supported the growth of exports of goods and services, as well as of tourism revenues. The volume of remittances also increased significantly, which led to an improvement in domestic demand. At the same time, imports were growing moderately. This dynamic was also reflected in the improvement of the current account deficit in 2019, which fell to a historical minimum of 5% of GDP.

The gradual exit from the relatively tightened monetary policy stance in the first half of 2019 exerted downwards pressure on interest rates for loans to physical persons and legal entities issued in the national currency (see Diagram N 2.3).

ity absorption instruments, the latter include open market operations (refinancing loans and certificates of deposit), minimal reserve requirements and standing facilities. The availability of GEL resources and efficient liquidity management are preconditions for an increase in lari lending and the promotion of larization.

Over the last few years, with the market operating under a liquidity deficit, the need for liquidity absorption lessened. However, the NBG continues to issue certificates of deposit with maturities of three months, supporting the short-term yield curve. Through these operations, the NBG maintained the balance of certificates of deposit at a minimum level. Over 2019, commercial banks relied on refinancing loans for liquidity management. Several factors contributed to the supply of refinancing loans during the year (see Diagram N 2.4). In particular, the demand for cash increased, which increased banks' demand for liquid funds. In addition, government sector operations reduced the liquidity of the banking sector. In turn, the reduction in demand for refinancing loans over the year was

Diagram N 2.3 Monetary policy rate and interest rates on loans

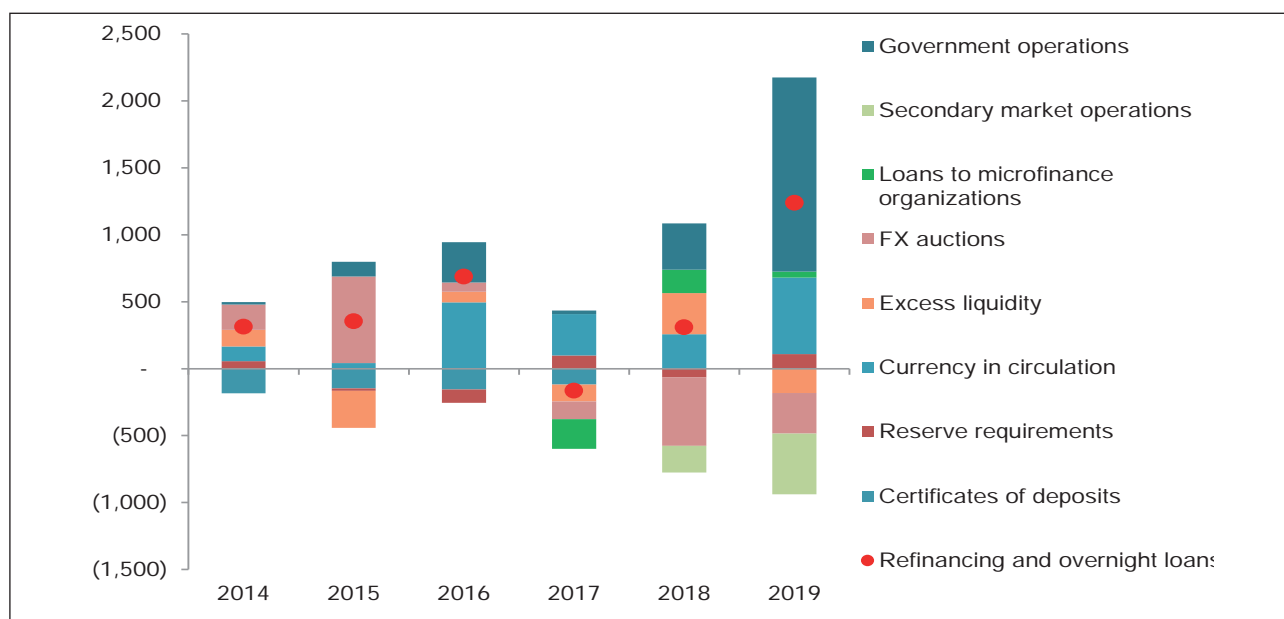


Source: National Bank of Georgia

As discussed above, under the inflation-targeting regime, price stability is guaranteed using the NBG's main policy tool – the short-term interest rate. The management of the short-term interest rate relies on the NBG's liquidity management framework. This framework includes both liquidity provision and liquid-

supported by both the NBG's foreign exchange operations and the acquisition of government securities on the secondary market. In addition, from 2017, the government began placing balances in commercial banks, which has also reduced demand for refinancing loans.

Diagram N 2.4 Factors affecting the change in refinancing



Source: National Bank of Georgia

As noted above, the NBG uses both liquidity provision and absorption instruments for efficient liquidity management. For the efficiency of monetary policy, it is essential that changes in short-term interest rates are transmitted to short- and long-term money market rates so that they can ultimately affect the economy as a whole. The National Bank of Georgia provides short-demand liquidity to the banking sector through refinancing and open market operations, depending on need. Hence, interest rates on the interbank money market move around the monetary policy rate. To further reduce interest rate volatility and boost the efficiency of the interbank market, on 4 September 2019, the National Bank's overnight lending and deposit rates were set at a policy rate of +/-0.75 percentage points, instead of the previous rate of +/-1 percentage point. Hence, interbank money market interest rates vary around the monetary policy rate. As a result of the efficient liquidity management resulting from the use of these instruments, the volatility of interest rates on the market is low (see Diagram N 2.5).

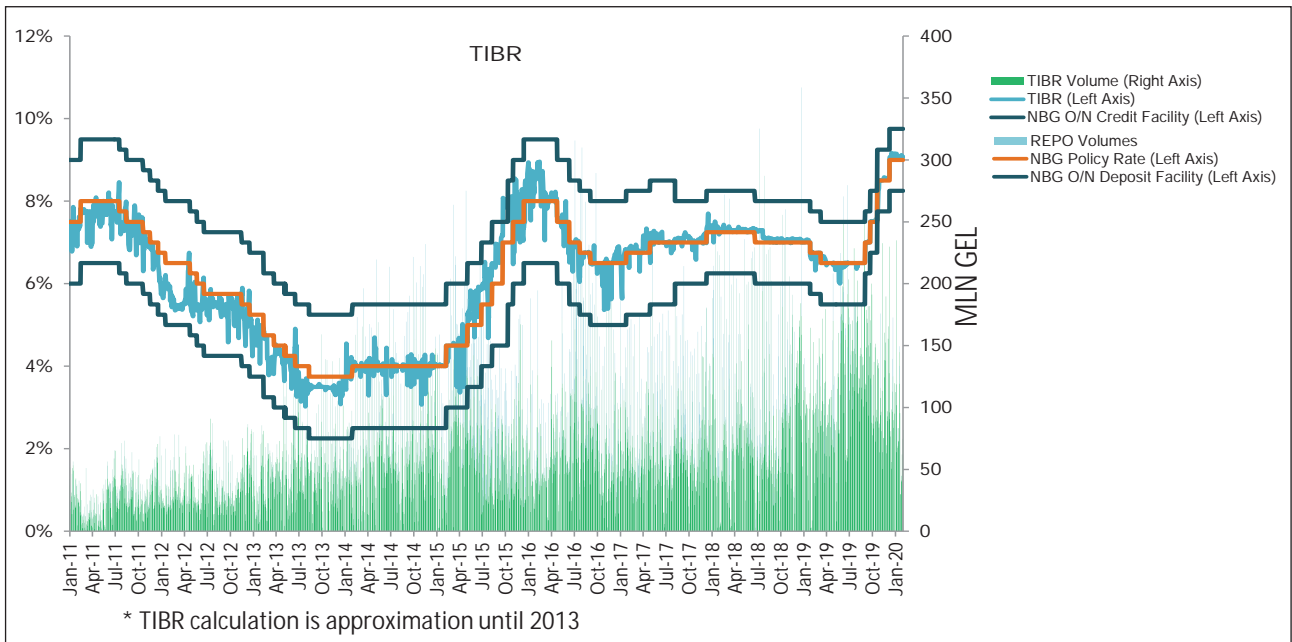
As discussed above, the banking system currently operates under a liquidity deficit and commercial banks obtain additional liquidity through refinancing loans. It is noteworthy that the volume of one-week refinancing loans recently exceeded the amount required to balance short-term liquidity fluctuations. This indicated a need for longer-term liquidity in the banking system. In response, from 2018, the National Bank started providing liquidity to the banking system through purchasing government securities on the secondary market. The purchase of government securities is common practice among central banks.

Central banks in developed countries effectively manage liquidity and thereby control interest rates through open market operations on both primary and secondary markets. Along with primary market operations, secondary market operations allow for the control of interest rates in an indirect way. Open market operations on the secondary market are generally conducted using government securities since they are characterized by high liquidity and lower risk.

It should be noted that in 2019 the International Monetary Fund (IMF) completed the fourth and fifth reviews of the Extended Funding Facility (EFF) program. As a result, the program was extended by one year to 11 April 2021. The International Monetary Fund has highlighted the special importance of exchange rate flexibility, which mitigates the impact of shocks to the economy.

One of the main policy priorities for the National Bank of Georgia is to support larization, as this would decrease macro-financial risks and reduce external vulnerabilities. The NBG has gradually implemented a range of reforms supporting the larization process and made significant steps in this direction over 2019. From 2017 it only became possible for individuals to take loans valued up to 100,000 GEL in the national currency. As of 23 January 2019, this limit was increased to 200,000 GEL and applies to loans issued to both individuals and legal entities. In addition, through macro-production instruments launched in 2019, the National Bank ensures the formation of adequate buffers for non-hedged borrowers. In particular, minimum coefficients for loan service (PTI) and loan assurance (LTV) came into force. It should

Diagram N 2.5 Interbank money market



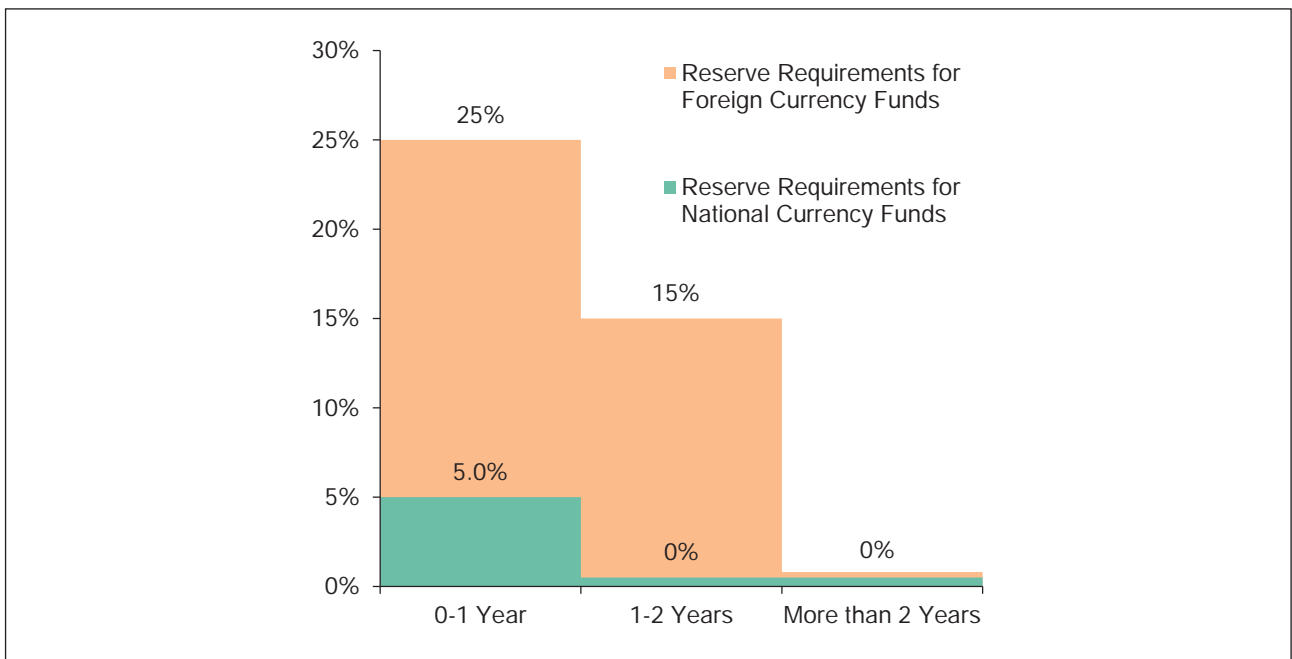
Source: National Bank of Georgia

be noted that the limits on these ratios vary according to loans issued in local and foreign currency, contributing to larization and at the same time ensuring the sustainability of both borrowers and banks. To further support lending in the national currency and increase the attractiveness of GEL resources, in the first half of 2019 the reserve requirements for foreign currency resources were increased from 25% to 30%, while the reserve requirements for foreign currency resources with a maturity from one to two years grew from 10% to 15%.

However, in the second half of the year, to neutral-

ize the inflationary pressure stemming from the depreciation of the nominal effective exchange rate and to mobilize additional liquidity in the banking system, a decision was made at an extraordinary meeting of the Monetary Policy Committee on 25 September 2019 to reduce the reserve requirements on funds attracted in foreign currency to 25%. The easing of reserve requirements gives banks the opportunity to supply more foreign currency to the market, and, at the same time, encourages them to attract foreign currency credit resources from international markets. As a result, the supply of foreign currency in the market will increase, weakening the pressure on the ex-

Diagram N 2.6 Reserve requirements



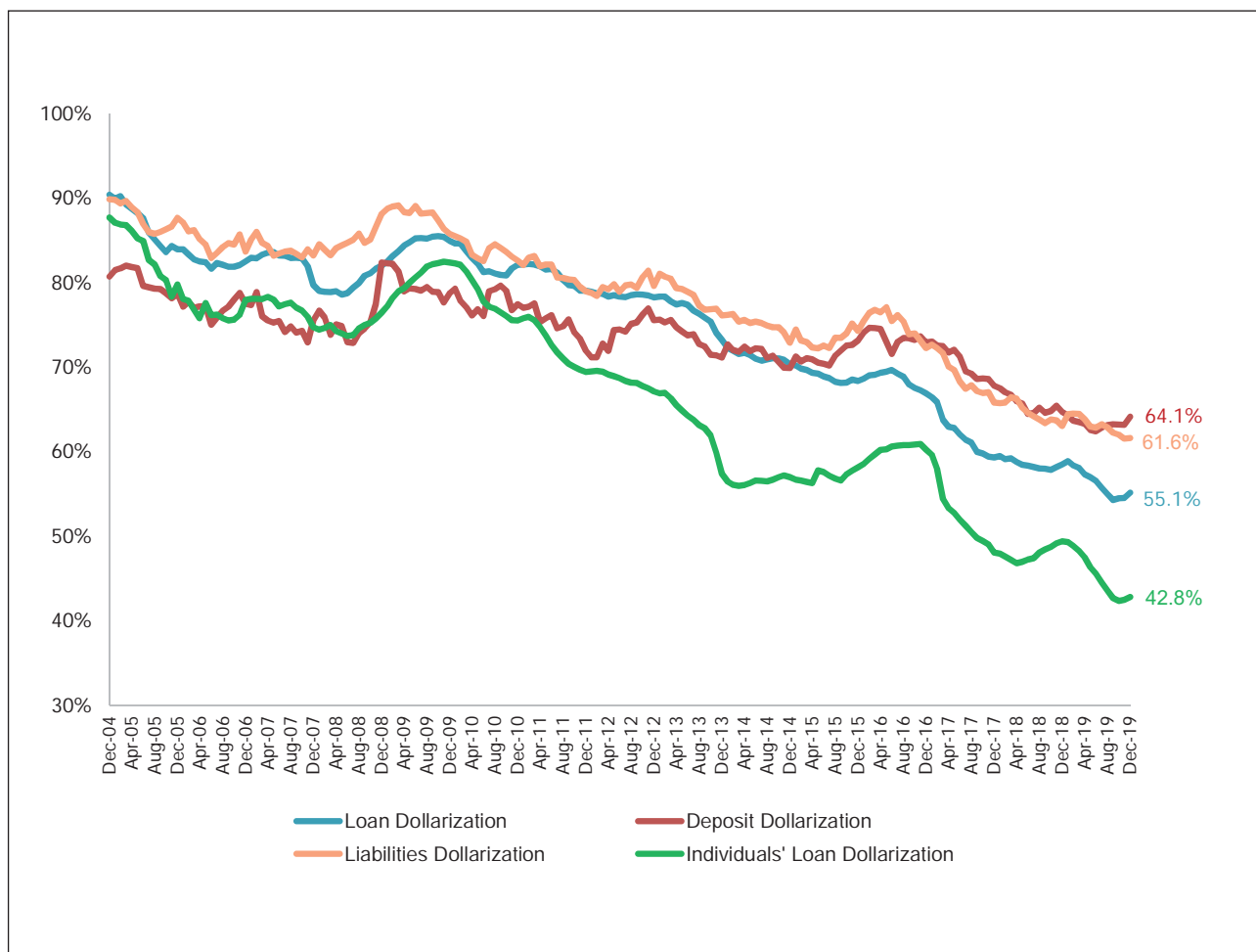
Source: National Bank of Georgia

change rate due to the increased demand for foreign currency.

As a result, the de-dollarization trend observed in both loans to individuals and legal entities, which started in 2017, continued in the first half of 2019. However, in the second half of the year, given the depreciation of the nominal effective exchange rate, the trend of de-dollarization of total loans slowed slightly. Over 2019, the dollarization of loans, excluding the exchange rate effect, decreased by 3.34 pp to 55.1% in December, while the dollarization of deposits decreased by 0.5 pp over the year and amounted to 64.1%. Meanwhile, the dollarization rate of loans to individuals fell from 48.07% at the end of 2017 to 42.8% at the end of 2019.

noteworthy that in 2019, new GEL-denominated corporate securities appeared on the market, signaling the gradual activation of the capital market. It should be noted that based on the changes made to the collateral base in 2016, corporate securities can be used as collateral in monetary operations with the National Bank –this has created an additional incentive for holding securities for liquidity management. As noted above, in 2018 the National Bank started purchasing state securities on the secondary money market. Considering the current level of activity on that market, the NBG’s involvement will contribute to its development, which is also important for the efficiency of monetary policy. Increased activity on the secondary market, where previously issued bonds and stocks are traded, also makes these financial instruments

Diagram N 2.7 Dollarization level in the banking sector (excluding the exchange rate effect)

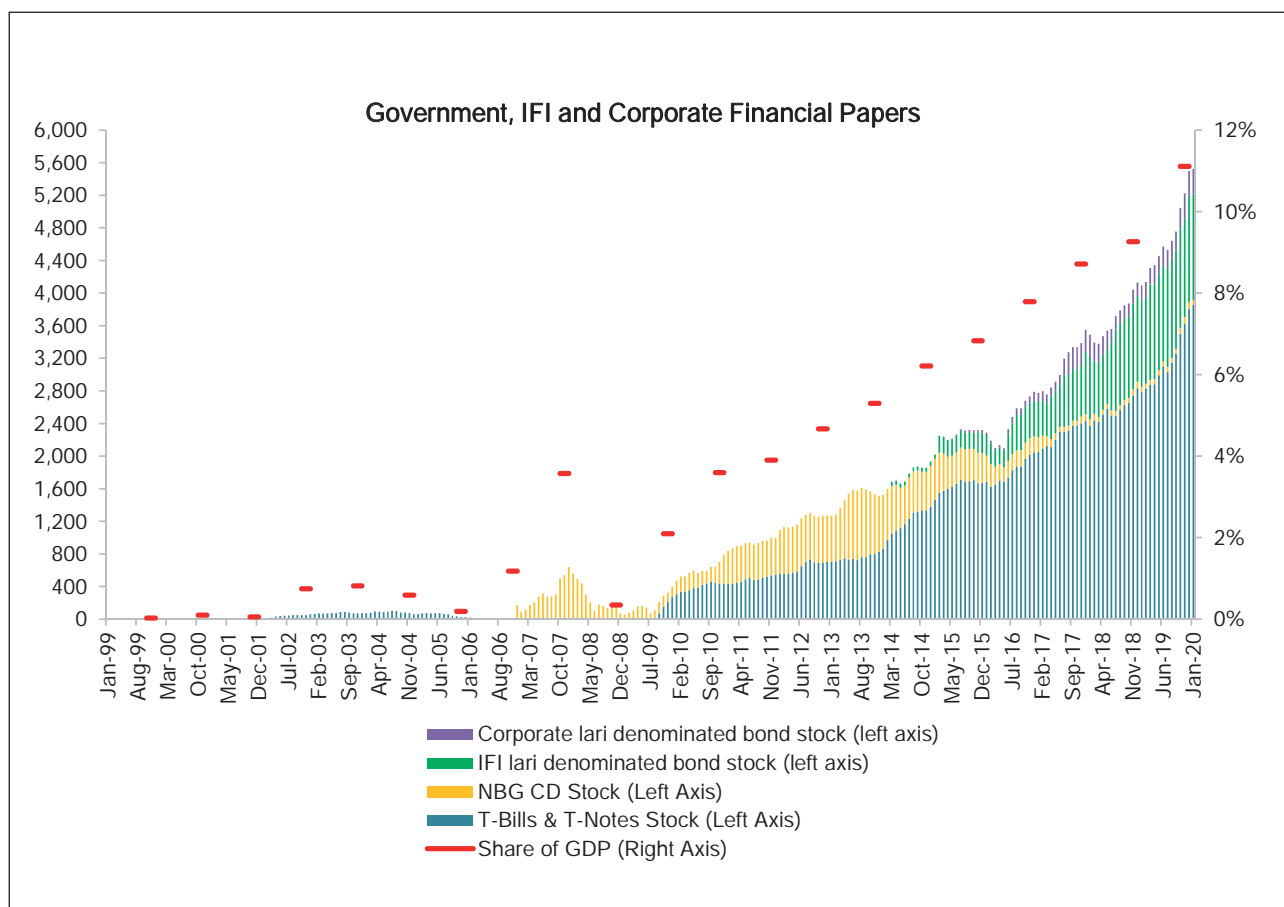


Source: National Bank of Georgia

The promotion of the capital market remains one of the key priorities for the NBG. In 2016, the National Bank of Georgia and the Government of Georgia developed a joint strategy for the development of the capital market, part of which was enacted in 2019. Its development will increase long-term lari resources and, at the same time, will facilitate larization. It is

more attractive in light of increased liquidity. Furthermore, with increased liquidity and an active secondary market, liquidity management is becoming more efficient in the business sector. This will subsequently be reflected in a reduction of interest rates and lower risk premiums on the market.

Diagram N 2.8 Dynamics of treasury securities, certificates of deposit and securities of international financial institutions



Source: National Bank of Georgia

Box 3 How timely was the tightening of monetary policy by the National Bank during the 2019 shock?

External shocks developed during the summer of 2019 had a significant impact on monetary policy decisions. A foreign shock came in the wake of an expected decline of tourist revenues from Russia (following the announcement of a ban on flights from Russia to Georgia) and, as a result, was reflected in the depreciation of the exchange rate. In response to rising inflation and inflation expectations as a result of the depreciation of the lari nominal effective exchange rate, the National Bank began tightening monetary policy in the second half of the year. Given that monetary policy decisions are reflected on the real economy and inflation after a certain period, the inflation rate remained high in the second half of the year and only began to decline in early 2020. As inflation continued to rise above the target level in

the second half of the year, the question arose whether the National Bank was late in making the necessary decisions. To answer this question, it is necessary to analyze in more detail how the foreign shock developed, what challenges monetary policy faced, and what choices the National Bank of Georgia had. It should be noted at the outset that monetary policy decisions are based on an analysis of the data available at the time. New circumstances may emerge in the future and, with hindsight, decisions made in the past might not seem optimal. However, in order to evaluate the validity of a decision, it is necessary to analyze the data available during the decision-making process. Inflation rose in the first half of the year, exceeded the target, and reached 4.3% in June. The higher-than-target inflation was largely driven by one-off, exogenous factors, particularly increased excise taxes on

cigarettes and rising food prices, which had a temporary effect on inflation. Core inflation, which excludes food, energy and cigarette prices, was 1.4%, indicating that the rise of inflation was temporary. At the same time, inflationary pressure from aggregate demand remained weak and there was thus no need to tighten monetary policy at that time.

In the summer of 2019, Russia banned flights to Georgia. Georgia's tourism industry is significantly dependent on visitors from Russia and tourism revenues are one of the main drivers of the economy. In addition, further potential risks emerged that served to further increase uncertainty. In particular, there was concern that additional sanctions might be imposed on exports and remittances. The imposition of additional sanctions by Russia was a real threat, and their possible impact on the economy was difficult to predict. Against the backdrop of the ban on air travel and high levels of uncertainty, there was a risk of a reduction in foreign exchange inflows, which in turn raised expectations of a depreciation of the lari. As a result, the demand for foreign currency increased, while the supply of foreign currency on the market decreased, which gave impetus to the depreciation of the lari.

Prior to the July meeting of the Monetary Policy Committee, the risks of inflation were reflected in terms of both growth (a depreciated nominal effective exchange rate) and a decline (weak demand). Although pressure from the exchange rate on inflation increased in the face of external shocks, in the medium term this pressure was balanced by weakened aggregate demand, which fell below the potential level. At that stage, tightening of monetary policy posed great risks, because a possible extension of sanctions would have further decreased external demand. Under these conditions, an increase in the policy rate would have further weakened already weak demand, which would have resulted in a significant slowdown in economic growth. Thus, against the backdrop of uncertainty, the Monetary Policy Committee of the National Bank of Georgia, at a meeting of 24 July

2019, left the refinancing rate unchanged at 6.5%. However, the press release reporting the Monetary Policy Committee's decision and other channels of communication clearly stated that appropriate monetary policy measures would be taken if the inflationary pressure from the exchange rate continued.

In the subsequent period, it became clear that sanctions would no longer be extended. In addition, the nominal effective exchange rate was maintained at a depreciated level during August. This depreciation increased inflationary pressure and boosted inflation expectations. In response, the National Bank began tightening its policy at its meeting on 4 September. In total, the policy rate in September-December was increased by 2.5 percentage points from 6.5% to 9%. An increase in interest rates is transmitted to the real economy through various channels over a period of time. In Georgia, a change of the monetary policy rate is fully transmitted to the economy over a period of 4-6 quarters. The transmission takes place relatively quickly through the exchange rate channel. In particular, an increase in the policy rate quickly affects interest rates on GEL securities. High interest rates make GEL instruments more attractive, especially for non-resident investors. As a result, the inflow of capital into the country increases, which promotes an appreciation of the exchange rate. It was these processes that took place at the end of 2019 when the exchange rate stopped depreciating and subsequently began to appreciate. At the same time, inflation began to decline in early 2020.

We can therefore say that the monetary policy decisions made in 2019 were appropriate for the existent situation. The National Bank began tightening its policy only after it became clear that the reduction of aggregate demand was not going to be significant. Such an approach makes the National Bank's policy more predictable, reduces the risk to interest rates and, consequently, acts to reduce long-term rates, which contributes to long-term economic growth.

2.2 MONETARY POLICY INSTRUMENTS

The implementation of Monetary Policy Committee (MPC) decisions (tightening, easing, or keeping monetary policy unchanged) is done through monetary operations. The objective of monetary operations is to keep interbank interest rates stable and close to the policy rate 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 trade short-term excess liquidity. The NBG has a vital interest in the market as it plays an important role in the efficiency of the monetary transmission mechanism. The NBG influences interest rates by declaring monetary policy decisions and by using 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 at the same time increases the credibility of the index. The reliability of the index is enhanced by the involvement of the National Bank in the process of collecting information and calculating the index. On 14 March 2019, the National Bank of Georgia started publication of TIBR term indices that are based on the overnight TIBR index and represent a more effective way to manage interest rate risks.

The methodology for calculating the TIBR index and TIBR term rates was developed in close cooperation with participants of 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 am) on the official website of the National Bank of Georgia.

In 2019, the volume of transactions in local currency on the interbank market increased by 57.5% compared to the same period of 2018 and amounted to 28.2 billion GEL. Amid the growth of the monetary policy rate of the National Bank of Georgia, interbank interest rates, which were moving close to the monetary policy interest rate, also increased in 2019. Within the framework of the decisions of the Monetary Policy Committee, and based on the short-term liquidity forecast for the banking system, the National Bank of Georgia determined weekly volumes for refinancing loans and monthly volumes for the one-month open market instrument. The National Bank

managed these processes in such a way that the average interest rates observed at the auctions were maintained close to the monetary policy rate.

2.2.1 REFINANCING LOANS

To ensure short-term liquidity in the banking system, the National Bank of Georgia used the refinancing loan instrument on a weekly basis throughout 2019. Refinancing loans represent a reliable and low-risk source of short-term liquidity and have positively affected the development of the money market and overall financial stability. The refinancing loan instrument is designed to manage short-term interbank interest rates. As the National Bank of Georgia is the sole provider of short-term liquidity in GEL 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 on auctions are based on the NBG's monetary policy rate.

In 2019, the collateral base of monetary operations encompassed certificates of deposits of the National Bank of Georgia, Georgian government securities, loan assets of commercial banks, GEL-denominated securities issued by international financial intuitions and GEL-denominated securities issued by resident and non-resident legal entities. In order to qualify for certain operations, the NBG has defined relevant criteria for each type of collateral. Commercial banks actively used all types of collateral in their operations with the National Bank of Georgia in 2019.

2.2.2 ONE-MONTH OPEN MARKET INSTRUMENT

Like other monetary instruments, the one-month instrument aims to manage short-term interest rates in the interbank market, which is in line with best international practice and the recommendations of the International Monetary Fund's Technical Assistance Mission. Every month, the liquidity forecasting group evaluates the short-term liquidity deficit in the banking system, on the basis of which an auction is announced on the specific volume of the one-month open market instrument to be offered. The minimum interest rate on this instrument at auction equals the monetary policy rate. NBG certificates of deposit, government securities, local currency bonds issued by IFI's, corporate bonds issued in local currency by resident corporates and the loan assets of commercial banks can all be used as collateral.

2.2.3 OVERNIGHT LOANS AND DEPOSITS

In order to support the development of the money market, reduce the volatility of interbank interest rates and increase the activity of the monetary market, the

National Bank of Georgia continued to use the interest rate corridor in the interbank market in 2019. To form the upper and lower bounds of interest rates, the interest rate corridor was defined as an equal deviation from the monetary policy rate. 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. Prior to 5 September 2019, the interest rate corridor was 2% – the monetary policy rate plus/minus 1.0%. From 5 September 2019, the interest rate corridor was changed to 1.5% – the monetary policy rate plus/minus 0.75%. 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.

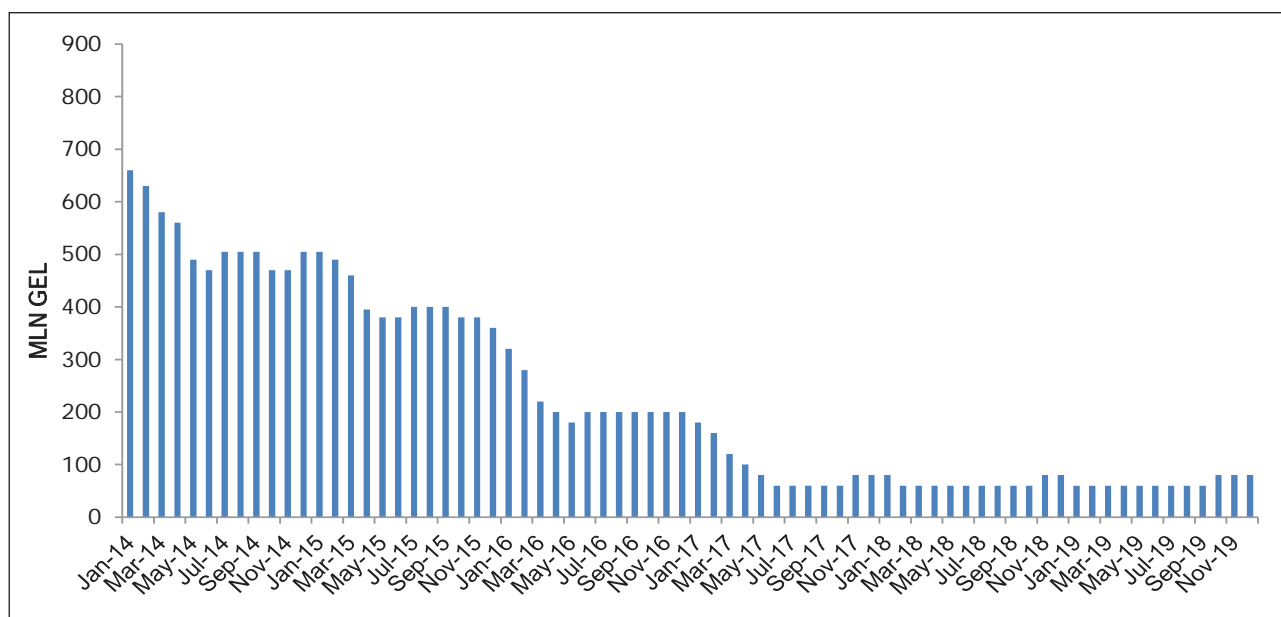
Overnight loans from the National Bank represent the fastest source of liquidity for the banking sector, albeit being offered at a higher price in comparison with the market rate. The collateral base accepted for overnight loans is the same as that for refinancing loans.

Commercial banks can use the O/N deposit instrument to allocate excess liquidity on correspondent accounts at the end of the day at the National Bank of Georgia. At the beginning of the next business day, such deposits will be returned to the commercial banks' correspondent accounts. This tool plays an important role in stabilizing interest rates in the interbank market.

2.2.4 SECURITIES

In 2019, the National Bank of Georgia issued 3-month certificates of deposit (CD), while the Georgian Gov-

Diagram N 2.9 Portfolio of certificates of deposit (2014-2019)



Source: National Bank of Georgia

ernment issued 6-month and 1-, 2-, 5- and 10-year treasury securities. High demand from commercial banks contributed to the establishment of a stable yield curve. This curve provides important information about interest rates of different maturities and financial market participants' expectations.

CERTIFICATES OF DEPOSIT

In 2019, the NBG only issued 3-month CDs, which the banking sector used as the most attractive and effective short-term liquidity management instrument. In each of the 13 auctions announced in 2019, commercial banks purchased the full amount of deposit certificates offered. The nominal amount of the allotment was equal to 260 million GEL, the same amount was also redeemed in 2019. The volume of deposit certificates in circulation at the beginning of 2019 remained unchanged at the end of the year and amounted to 80 million GEL. As of 31 December 2019, six commercial banks had 80 million GEL certificates of deposit on their books.

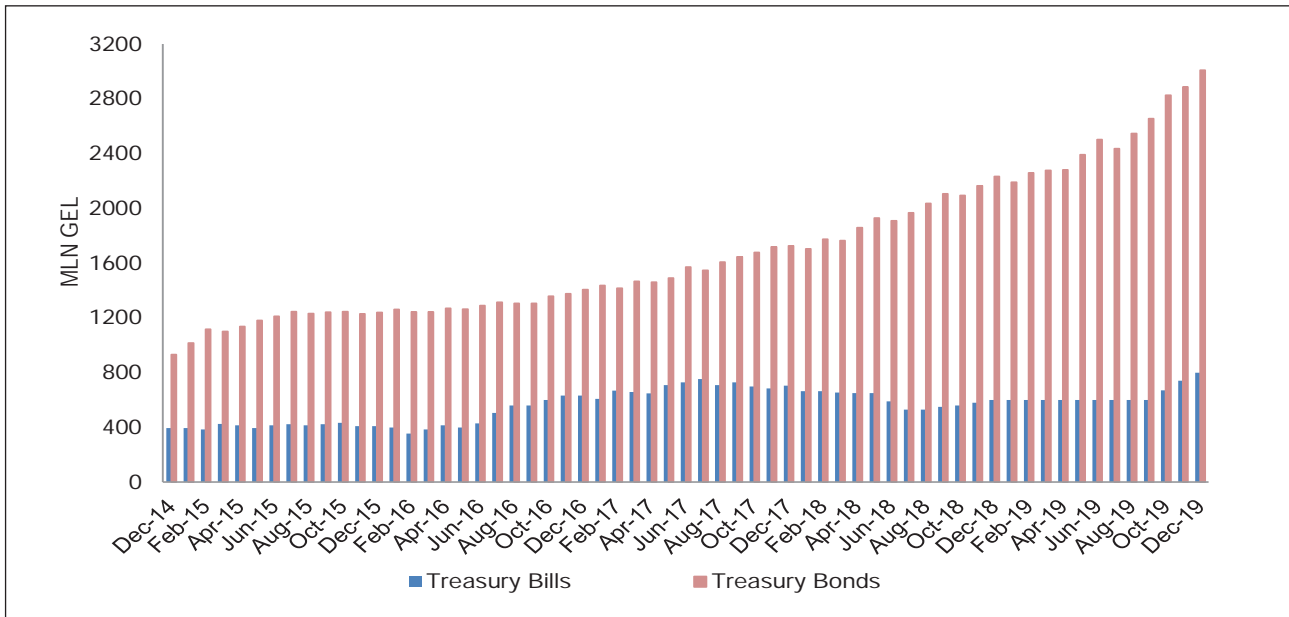
GOVERNMENT BONDS

As of 31 December 2019, the NBG held government bonds with a par value of 152 million GEL. These were not used for open market operations during the year.

TREASURY BILLS AND BONDS

To further develop the GEL money market, it was vital that the Ministry of Finance of Georgia increased the emission of government securities. In 2019, the Ministry of Finance issued 6-month and 1-year discount

Diagram N 2.10 Portfolio of treasury securities (2015-2019)



Source: National Bank of Georgia

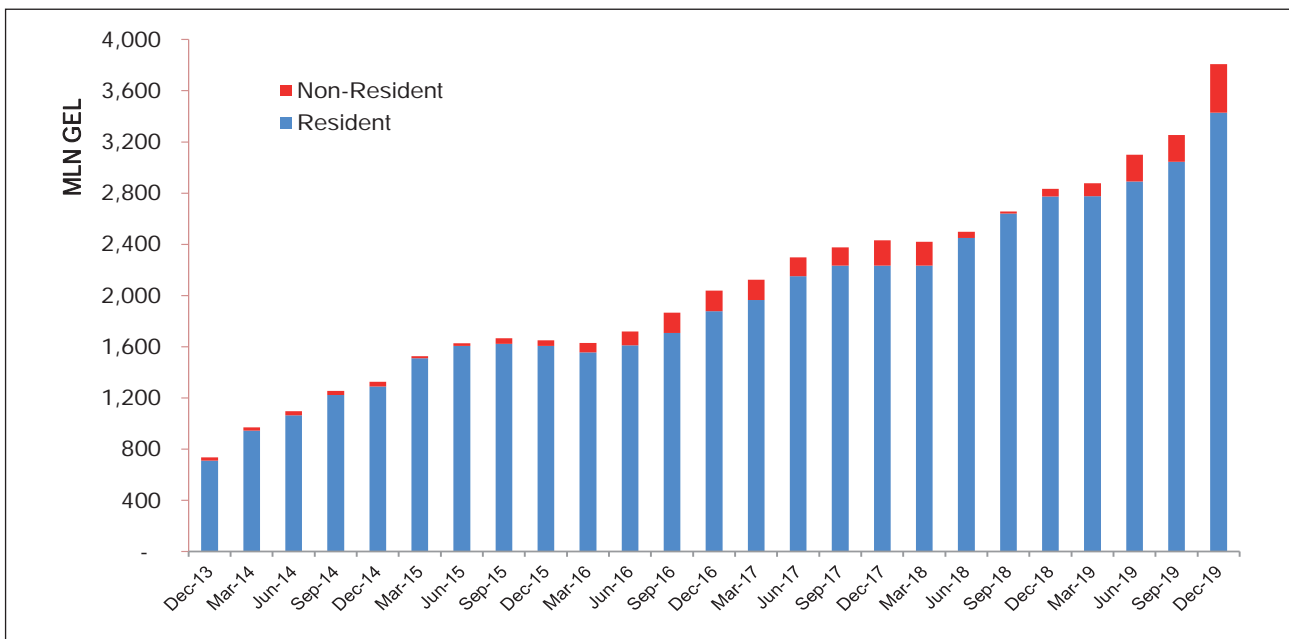
securities and 2-, 5-, and 10-year coupon bonds. These securities are denominated in the national currency in non-materialized form. The nominal value of a security is 1,000 GEL. The placement of treasury bills and bonds are executed through a multiple price auction conducted by the NBG via the Bloomberg trading platform. All commercial banks licensed by the National Bank of Georgia can participate directly in an auction and any legal or individual entities may also participate using a commercial bank as an agent.

In 2019, 53 auctions of treasury bills and notes were conducted, and 2.34 billion GEL worth of securities

were issued and fully allotted on those auctions. As of 31 December 2019, 14 commercial banks and non-banking investors held 3.81 billion GEL worth of securities in circulation. Non-banking investors held treasury securities worth 378.3 million GEL.

It is worth mentioning that 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 Georgian government 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 N 2.11 Dynamics of treasury bills and bonds portfolios (2014-2019)



Source: National Bank of Georgia

Due to the stable macroeconomic environment, attractive interest rates on GEL financial instruments, an acceptable level of financial market development and the combination of modern infrastructure, the interest of non-resident investors in the treasury market has increased. The increased activity of investors is reflected in their involvement in both primary and secondary markets, as a result of which the portfolio of treasury securities owned by them increased 6.3 times during 2019 and amounted to 378.3 million GEL.

In order to promote the activation of the secondary securities market, the National Bank of Georgia continued to support and to ensure the full functioning of the Georgian Securities Settlement System (GSSS) and various inter-integrated systems in accordance with the modern requirements created by its own material and intellectual investments.

It worth mentioning that the interbank repo market, which is based on the repo master agreement, was established in line with best international practice and initiated by the National Bank of Georgia in close cooperation with the Georgian banking community. Banks used the Bloomberg trading platform and the Georgian Securities Settlement System (GSSS) to conduct repo transactions. Using these systems, in 2019 a total of 113 repo transactions were made between commercial banks worth 1.25 billion GEL.

The infrastructure and experience 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.

NATIONAL BANK OPERATIONS IN THE SECONDARY MARKET

The National Bank of Georgia is constantly working on improvement and development of monetary instruments and the liquidity management framework. Buying and selling securities through open market operations is one of the central banks' monetary policy instruments that serves the task of managing liquidity.

The National Bank of Georgia acts as a liquidity provider in conditions of liquidity deficit in the banking system. Accordingly, from May 2018, the NBG started purchasing securities under open market operations. The purpose of these operations is to effectively manage the liquidity of the national currency. It also promotes the development of the securities market.

During 2019, the National Bank of Georgia held 17 auctions in which it purchased 20 securities totaling 737 million GEL. Of these, four securities matured during 2019. Accordingly, the portfolio of securities

purchased as of 31 December 2019 amounted to 653.3 million GEL. At the end of 2018, the volume of this portfolio was 200 million GEL.

2.2.5 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. As of 31 December 2019, the minimum reserve rate for funds attracted in the national currency was 5%, for foreign currency attracted funds it was 25%, for foreign currency borrowings with a residual maturity of 1 to 2 years it was 15%, and for borrowings with a residual maturity of more than 2 years, the interest rate was 0%.

The minimum reserves of commercial banks in the national currency in the National Bank of Georgia during 2019 were remunerated at the monetary policy rate in the relevant period. The National Bank of Georgia remunerated the minimum reserves formed in US dollars at a rate equal to the upper bound of U.S. Federal Reserve System's policy rate minus 50 basis points, and the minimum reserves formed in euros was remunerated at the depo rate of the European Central Bank less 20 basis points.

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 ensured safe and transparent securities transactions for government and NBG-issued securities.

The Georgian Securities Settlement System (GSSS) was launched on 3 December 2018 and has been successfully operating since 2019. Under the new system, both local and international financial market participants are provided 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 system includes modern approaches such as effective liquidity management mechanisms, partial settlement capability, netting of reverse transactions, automatized pledging and intraday liquidity providing mechanisms. All local commercial banks are connected to the GSSS as well as some brokerage companies. The system is integrated with the stock exchange and Bloomberg trading platforms and au-

tomates the entire trading and settlement cycle. As a result, it only takes a few minutes from the time of a transaction to its settlement. With the introduction of the new system, existing procedures and payment rules, which were based on the principles recognized in international best practice, have been renewed. Investors' security holdings will be more securely protected, making it easier and more convenient to convert them into cash (through sales, pledge or repo operations) if needed. This will undoubtedly increase the attractiveness of the Georgian capital market for Georgian and foreign investors.

With the updated GSSS it has become possible to include the Georgian Central Securities Depository in the system, to provide services to all participants in the Georgian securities market, and to register and settle all types of securities in this system in Georgia (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 automated, as well as their pledging to the National Bank of Georgia or professional market participants.

With the updated GSSS the local securities market infrastructure has become more reliable and modern, which will help attract foreign financial institutions and investors to Georgia's financial markets.

2.3 EXCHANGE RATE POLICY AND INTERNATIONAL RESERVES MANAGEMENT

As in previous years, in 2019 the monetary policy of Georgia was based on a floating exchange rate regime, which involves maintaining market pricing principles for the national currency. At the same time, under this policy, the National Bank of Georgia aims to maintain its international reserves at an adequate level. A floating exchange rate mechanism is recognized as the optimal currency regime for countries with small open economies, like Georgia, as it absorbs foreign shocks and promotes the sustainable development of the economy. Under the exchange rate policy regime, the NBG only intervenes on the interbank currency market in certain cases: where there is a temporary inflow or outflow of excess capital that would result in sharp short-term fluctuations of the currency; to fill the international reserves; to balance the state's external transactions; and to prevent the formation of inflationary expectations created by excessive fluctuations of the exchange rate as a result of non-fundamental, one-time factors.

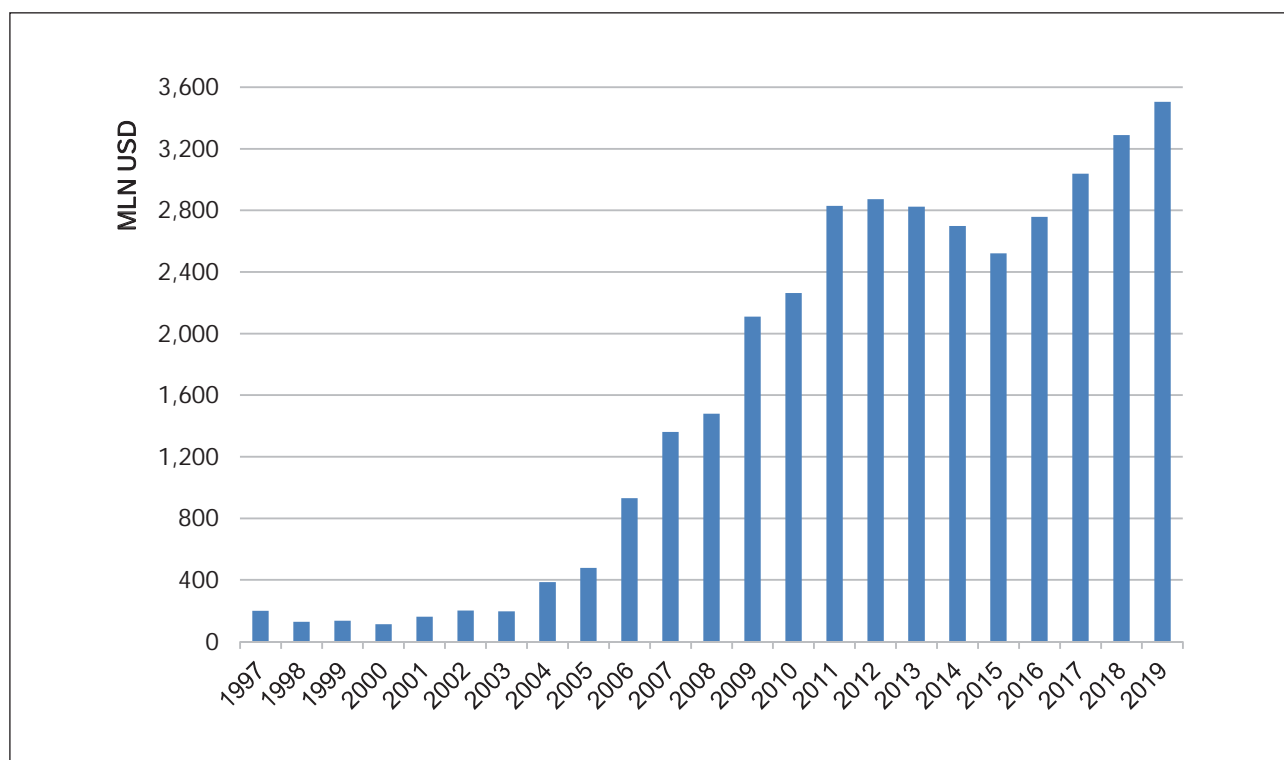
From 2019, the National Bank of Georgia introduced a new instrument – FX options. This financial instrument gives the holder the right (but not obligation) to exchange currency in a predetermined timeframe. In February-April 2019, the National Bank of Georgia offered commercial banks options with the right to purchase lari on an auction basis. The options gave owners the right to acquire GEL (in exchange for USD or EUR) within a predetermined timeframe and bound the NBG with the liability to sell GEL to the options' holders upon execution of the option. The strike price of the auction is the official exchange rate of the day when an option is exercised (i.e. the average exchange rate of the previous day). It ensures that international reserves are filled automatically only when the lari exchange rate has a tendency to strengthen. At the same time, a holder is able to use an option only when the lari exchange rate is stronger than in the previous 20-day average. This restriction prevents the filling of reserves during periods of short-term volatility of the exchange rate. In 2019, the National Bank of Georgia bought 51.3 million USD on the currency market using FX options. In the first half of 2019, due to positive expectations, the lari appreciated in the foreign exchange market; however, the decrease in tourist revenues in the second half of the year, and negative expectations related to this, put pressure on the lari exchange rate. Accordingly, while the NBG had purchased 216 million USD in the foreign exchange market in the first six months of the year, in August-November the NBG sold 92.8 million USD to reduce inflationary pressures. Thus, in the reporting year, net purchases through foreign exchange auctions amounted to 72.2 million USD. In 2019, total net purchases of the National Bank of Georgia amounted to 123.5 million USD by foreign exchange auctions and foreign exchange options.

In the end of 2019, compared to the previous year, the GEL nominal exchange rate depreciated against the US dollar by 7.1% and against the euro by 4.5%. The lari appreciated by 5.0% against the Turkish lira. At the same time, the GEL nominal effective exchange rate depreciated by 7.9% annually. In 2019, the real effective exchange rate depreciated by 5.3% annually. It is noteworthy that the real exchange rate depreciated against all major trading partner currencies.

INTERNATIONAL RESERVES MANAGEMENT

In 2019, the volume of the National Bank of Georgia's international reserves increased by 251 million USD, to total 3.5 billion USD as of 31 December 2019 (see Diagram N 2.12).

Diagram N 2.12 Official FX reserve assets 1997-2019 (million USD, end of year)



Source: National Bank of Georgia

Traditional factors affected the volume of the NBG's international reserves during 2019: the foreign exchange auctions of the NBG, government expenditures and credits, and grants received from international organizations. In 2019, the NBG's net purchase of foreign currency via FX auctions and FX options amounted to 123 million USD. During the year, loans and grants received by the Georgian government to finance various programs and projects from international financial organizations and donor countries amounted to 433 million USD, while funds received from the IMF amounted to 83 million USD. On the other hand, the Georgian government debt service amounted to 443 million USD and currency conversions equaled 294 million USD. It should be noted that the volume of the NBG's international reserves were affected by the change of the minimum reserve requirement rate for foreign currency funds raised by commercial banks. The latter caused the NBG's reserves to increase by approximately 114 million USD.

In 2019, the investment policy of the National Bank of Georgia continued to prioritize safety and liquidity while minimizing credit risk exposure. Reserves

were invested in liquid sovereign, agency and supra-national bonds issued by the US, eurozone member countries, Australia and Canada. Reserves were also deposited in banks with high credit ratings. In 2019, investment returns from reserve management equaled 224 million GEL, which was 63% higher than the returns of 2018.

The National Bank of Georgia continues cooperation with the World Bank, within the framework of the Sovereign Investment Partnership program. The NBG has been part of the program since 2009, which has resulted in experience sharing in the spheres of reserve management, risk management, settlement, accounting, and information technologies.

In 2019, the National Bank of Georgia continued its partnership with the Bank of International Settlements (BIS). The NBG joined the BIS Investment Pool in 2014, which entails the external management of funds pooled by central banks and international financial institutions, as well as experience sharing with the BIS.



3

FINANCIAL STABILITY



3. FINANCIAL STABILITY

3.1 FINANCIAL STABILITY POLICY

Promoting financial stability as a precondition for sustainable economic growth is one of the fundamental goals of the National Bank of Georgia. 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 is the state under which the financial system can provide crucial services to market participants in both good and bad times.

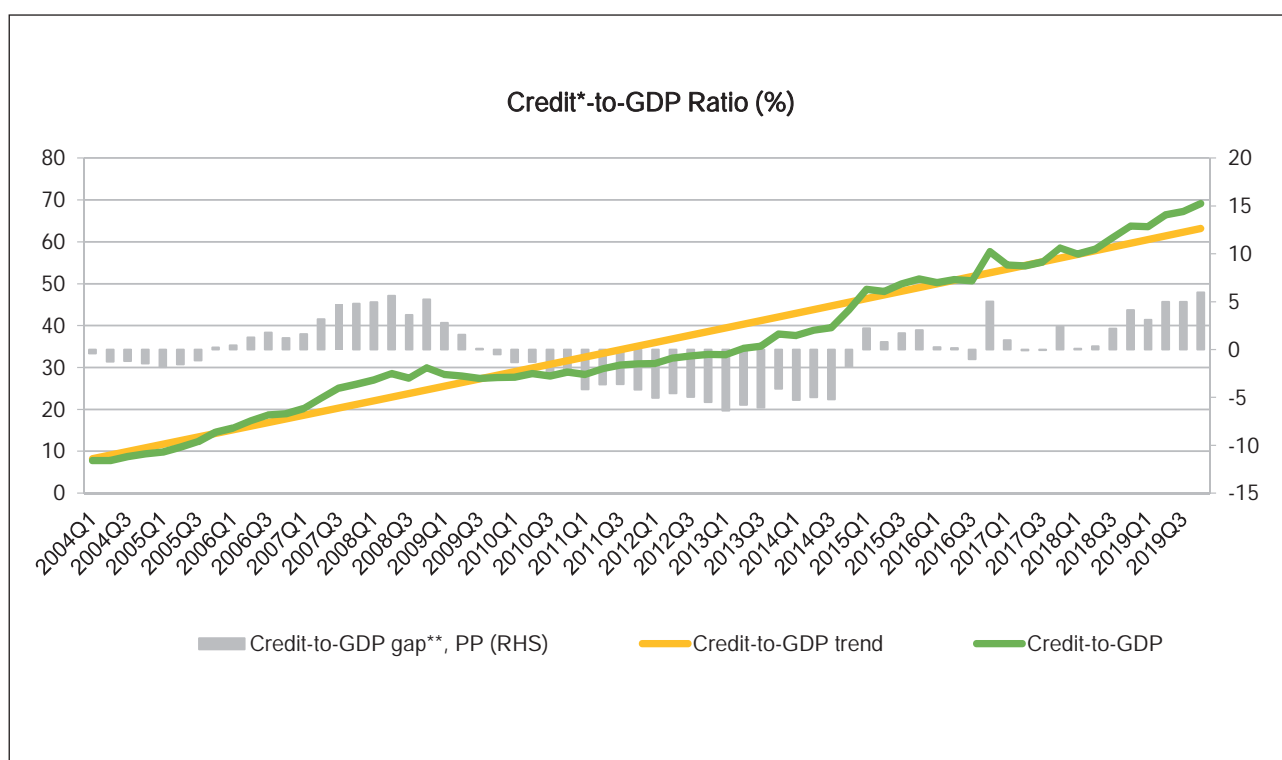
The NBG conducts macroprudential policy with goal of maintaining financial stability. The NBG identifies, evaluates and monitors systemic risks and implements corresponding policies to prevent or mitigate those risks, thereby enhancing the resilience of the financial system. The Financial Stability Committee (FSC) of the NBG, which is chaired by the 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 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 determining the countercyclical capital buffer, an analysis of a number of factors is taken into account, including the credit-to-GDP ratio and indicators describing its deviation from the long-run trend; trends in lending; other indicators of the financial sector's cyclical position; and the characteristics of the country's domestic and external macro-financial environment.

In addition to the countercyclical buffer, the National Bank of Georgia uses other capital buffers consistent

Diagram N 3.1 Comparison of credit and nominal GDP growth rates



Source: NBG; GeoStat

* Credit includes loans directly issued by commercial banks and microfinance institutions as well as bonds issued domestically by the non-financial sector.

** The credit-to-GDP gap is the deviation of the credit-to-GDP ratio from its long-run trend. The trend is estimated using an HP filter in line with the Basel recommendations.

with Basel III standards. These macroprudential instruments include the payment-to-income ratio and loan-to-value ratio, sectoral risk weights and other instruments.

Since the beginning of 2019, as regulations on responsible lending to natural persons have come into force, the growth of loans followed the expected trend. The annual growth rate of the credit portfolio in December 2019 reached 16.2%, excluding the exchange rate effect, which was mainly due to the growth of loans to legal entities. It should be noted that the credit-to-GDP ratio still exceeds its long-run trend, mainly due to the excessive credit growth and exchange rate effect in past periods. According to the FSC's assessment, lending growth will converge to a sustainable level in the medium term. Given the dynamics of lending growth, in November 2019, **the committee made a decision to leave the countercyclical buffer unchanged at 0%.**

The press release that followed the Financial Stability Committee's meeting of 27 November mentioned that the implementation of the responsible lending framework for natural persons reduces financial stability risks. Besides the slowdown of excessive credit growth, as was expected, positive tendencies have also been revealed in lending standards. In particular, the LTV and PTI coefficients have been improving, and as a result, loans with a high credit burden have been decreasing – these had previously been a major source of financial problems for the population. As for lending to natural persons, consumer loans have decreased, while the annual growth rate of mortgage loans was around 15%. The contribution of domestic currency mortgage loans to overall loan growth has been increasing, helping to ensure borrowers' resilience. It should be noted that the adoption of responsible lending principles have increased the funds available for financing more productive sectors of the economy, such as small and medium enterprises (SME) and other business loans. The growth rate of business loans thus increased and exceeded 20%, excluding the exchange rate effect.

It should be noted that decisions to tighten macroprudential policy are often unpopular. In the short run these carry social or economic costs, while the benefits (high and stable growth, high employment and low fiscal expenditure), despite potentially exceeding the costs, often materialize only in the long run. As a result, the need for tightening can often be quite hard to understand.

Despite a significant decline in recent years, dollarization remains one of the main challenges facing the financial system. Banks maintain a closed FX posi-

tion that limits the direct impact of foreign exchange rate fluctuations. However, the banking sector remains quite vulnerable to exchange rate fluctuations, because these increase credit risk (most foreign currency borrowers are not hedged). On the one hand, foreign currency denominated loans are exposed to exchange rate risk. On the other hand, they are accompanied by interest rate risk, which is especially noteworthy given the anticipated increase in both US dollar and euro interest rates on global markets. In addition, the country risk premium should be taken into account as it has been significantly depressed given the historically low interest rates in the aftermath of the global financial crisis. In order to mitigate currency-induced credit risk, the NBG requires that banks maintain an additional capital buffer. In addition, the National Bank of Georgia recommends that financial institutions take proper account of foreign currency-related interest rate risks in their pricing of loans.

Despite the challenges mentioned above, according to the Financial Stability Committee's assessment, the Georgian financial system remains resilient against potential shocks. The banking sector is highly capitalized and liquid, and maintains high profitability indicators, while the share of non-performing loans in total credit remains low.

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 a country's economic development. In recent years, the importance of financial stability and macroprudential policy has increased all over the world. According to best international practice, regular comprehensive and in-depth analyses of financial stability are required. Financial stability analysis does not only encompass an evaluation of risks in the banking system, but also focuses on external factors, which have been a source of significant risk in recent years. Financial stability also assesses the domestic macro-financial environment, including households, companies, and non-banking institutions.

The NBG is continuing to develop a financial stability policy framework in accordance with best international practice. As this requires developing adequate analytical capacity, the first step in this direction was focused on developing complex, Georgia-specific financial stability indicators. These indicators are used to make cyclical macroprudential policy decisions.

Macro-financial modeling is another important part

of the financial stability analysis framework. With the support of the IMF's technical mission, the Financial Stability Department is actively working on the development of a macro-financial model that aims to assess the risks to financial and macroeconomic stability; on constructing and analyzing macro-financial scenarios; and on conducting macroeconomic stress tests, which are the main cornerstones of appropriate macroprudential policy design. In 2018, with support from the IMF's technical mission, this model was extended to better describe the financial sector. In particular, the structure of the model was enriched by adding a mechanism to describe macro-financial linkages, of which the behavior of the financial sector is a key part. In addition, the macroprudential policy modelling features were enhanced. In order to improve the model's performance and its reporting infrastructure, another round of development in collaboration with international institutions is planned for 2020. This will entail recalibration of the model's parameters and several other changes in its structure to allow simulations of relatively large-scale shocks for scenario analysis. Additionally, fine-tuning of the reporting of the model's output is planned.

One of the most important aspects of the financial stability framework is increasing transparency and improving communications. In order to increase public awareness about financial stability policy, the NBG is constantly updating the financial stability section of its website. The website outlines the main tasks of the Financial Stability Committee (FSC) and describes the available macroprudential policy tools; it also provides a calendar of committee meetings, reports on committee statements and decisions, issues related to IFRS 9²⁴ and information regarding the sustainable finance framework.

The NBG supports the efficient implementation of new financial accounting standards (IFRS 9) by financial institutions. To aid the transparent, consistent and efficient implementation of IFRS 9, and ensure comparability among the reports, the NBG regularly publishes macroeconomic and financial forecasts and risk scenarios.²⁵ It is recommended that the estimates provided within these scenarios are 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. It is important to note that the provided scenarios are countercyclical by nature, which helps mitigate the potential impact of financial cycles.

24 International Financial Reporting Standard (IFRS).

25 For more information, see: <https://www.nbg.gov.ge/index.php?m=694&lng=eng>

A sustainable financial system is essential for financial stability. This revolves around the management of social and environmental risks and is one of the main factors contributing to sustainable development. In September 2017, the NBG became a member of the Sustainable Banking Network. Since then, it has been actively working on developing a framework for sustainable finance.

Publication of a sustainable finance roadmap in 2019 was a crucial step for the development of a framework for sustainable finance. The Roadmap for Sustainable Finance in Georgia²⁶ was designed in collaboration with the International Finance Corporation (IFC) and the Sustainable Banking Network (SBN). The roadmap is based on the experience of 36 SBN member countries and best international practice. It is also consistent with the EU Commission's Action Plan. The roadmap was presented at an SBN meeting in Washington D.C. on 10 April 2019. The meeting was attended by central bank governors, vice governors, and financial market participants from various countries. The roadmap summarizes all the actions that the National Bank of Georgia plans to accomplish in the field of sustainable finance within the next 3-4 years. The ultimate goal of this roadmap is to provide a credible, predictable and stable regulatory framework and to prepare the market for a transition to sustainable finance. The action plan outlined in the roadmap consists of the following main pillars: increasing awareness and building the capacity of the market on sustainable finance; embedding environmental, social and governance (ESG) management into risk-assessment frameworks and decision-making processes; and ensuring greater transparency and market discipline, which will facilitate capital flow towards sustainable sectors.

One of the major objectives of the sustainable finance framework is to integrate ESG considerations into the corporate governance code. These aspects have already been covered in the corporate governance code for commercial banks. Incorporation of ESG considerations in the corporate governance codes of other capital market participants is in progress. Such integration entails not only the disclosure of ESG considerations, but also related risk management aspects. In addition, the National Bank of Georgia, in close collaboration with OECD, has created ESG Reporting and Disclosure Principles and developed a corresponding template. These documents are designed to support financial institutions in complying with the requirements outlined in the corporate governance code as well as assisting them with the disclosure of ESG-related information in a consistent and

26 For more information, see: <https://www.nbg.gov.ge/index.php?m=723&lng=eng>

comparable manner.

On 30 October 2019, the National Bank of Georgia, in cooperation with the International Finance Cooperation and the Sustainable Banking Network, hosted a Sustainable Finance workshop. The workshop brought together IFC experts, representatives from SBN member countries and regional central banks, senior representatives from relevant ministries and international institutions, presidents/CEOs and senior leadership representatives from financial institutions, and other stakeholders. The workshop was the second event devoted to sustainable finance that the National Bank of Georgia hosted in cooperation with the IFC. Based on the recommendations made in the workshop, the National Bank of Georgia initiated a working group in late 2019 dedicated to sustainable finance issues. It is composed of representatives from the financial sector. The working group aims to involve relevant stakeholders in the activities outlined in the sustainable finance roadmap at the initial stages and therefore facilitate the successful implementation of the action plan.

Due to these and other important actions undertaken by the NBG, Georgia has made significant progress towards the development of the sustainable finance framework and has advanced two steps in the SBN's 6-step Progression Matrix – moving from the “Commitment” to the “Developing” stage.²⁷ Georgia is one of only seven countries to have achieved such significant progress in 2019.

In order to make macroprudential policy operational, transparent and accountable, the NBG published its Macroprudential Policy Strategy on 18 September 2019.²⁸ The strategy lays down the cornerstones for implementing macroprudential policy in Georgia with a view to aiding the decision-making process and fostering communication with, and accountability to, the general public. The NBG's Macroprudential Policy Strategy closely follows the European Systemic Risk Board's (ESRB/2013/1²⁹) recommendation and best international practice, and is consistent with EU directives. In line with the recommendations of ESRB/2013/1, and taking into account Georgia's specifics, the NBG identified five intermediate objectives of the macroprudential policy:

- Mitigate and prevent excessive credit growth and leverage.

²⁷ For more information, see: <https://www.nbg.gov.ge/index.php?m=340&newsid=3772&lng=eng>

²⁸ For more information, see: <https://www.nbg.gov.ge/index.php?m=738&lng=eng>

²⁹ See: https://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf

- Mitigate and prevent excessive maturity mismatch and market illiquidity.
- Limit direct and indirect exposure concentrations.
- Limit the systemic impact of misaligned incentives with a view to reducing moral hazard.
- Reduce dollarization of the financial system.

These intermediate objectives are mapped into corresponding indicators and macroprudential policy instruments, which are necessary to achieve these objectives. The strategy will therefore support the ultimate objective of macroprudential policy: achieving financial stability in Georgia.

The National Bank of Georgia has renewed issuance of the Financial Stability Report,³⁰ which will be published annually. The renewed edition was designed in close collaboration with the International Monetary Fund (IMF). For this purpose, the National Bank of Georgia hosted IMF missions in October 2018 and April 2019. The report is based on forward-looking macrofinancial analysis and takes into account best international practice. It presents an assessment of vulnerabilities and risks in the financial system, with a focus on the medium- and long-term horizons as well as on the structural features of the financial sector and the Georgian economy that are of importance for financial stability. It also analyses the resilience of the domestic financial system. In addition, the report reviews the policies and measures implemented by the NBG to ensure financial stability. In particular, it details macroprudential measures, focused on the banking system as a whole, as well as microprudential measures, which increase the resilience of individual financial institutions.

Stress tests are another vital component of the financial stability framework. The National Bank of Georgia is actively developing a stress-testing model with the support of the IMF technical mission. The main objective of stress tests is to assess the resilience of banks against sizable adverse shocks. This instrument allows central banks to identify shock mitigation measures and formulate policies that support the continuity of financial intermediation under stress. These measures and policies, in turn, help decrease the duration of the shock and foster rapid economic recovery. In 2019, alongside the IMF technical mission, the stress-testing model was extended in order to allow for more comprehensive risk analysis and the development of satellite models. In particular, satellite models were updated and separated based on domestic and foreign currency exposures, which fa-

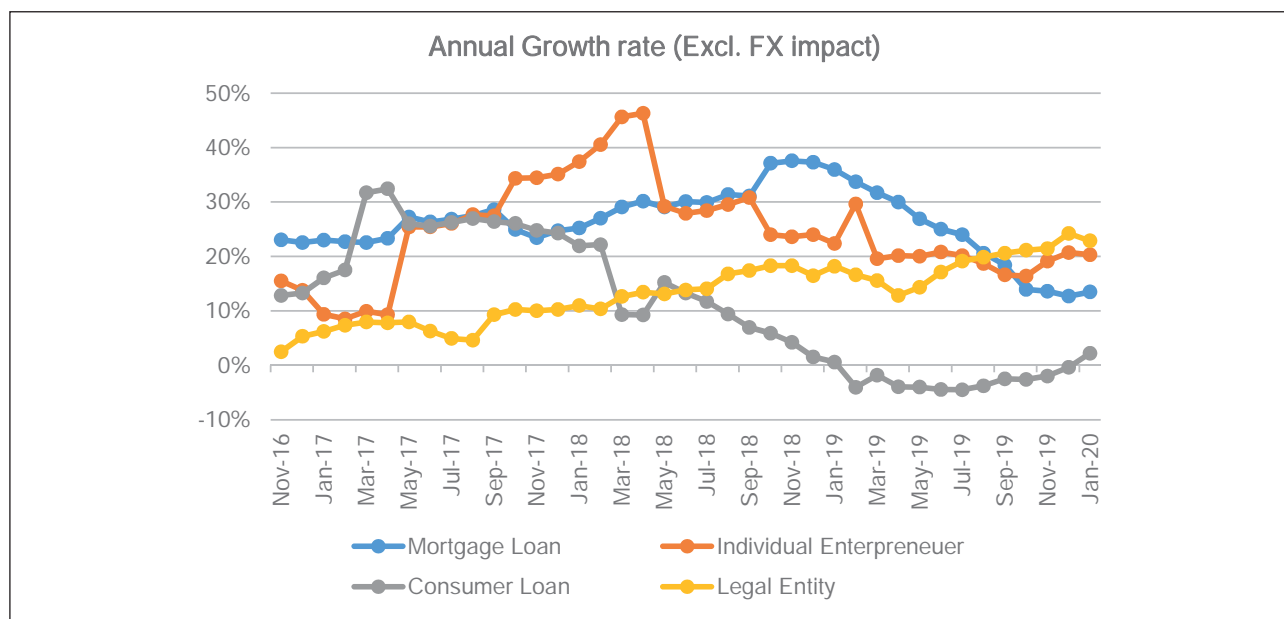
³⁰ See: https://www.nbg.gov.ge/uploads/publications/finstability/finstability_2019_eng_publish_3.pdf

cilitates a more accurate assessment of credit risk. Moreover, the dollarization channel was fully incorporated into the model. The interest rate risk assessment methodology was enhanced, and the structure of the framework was modified to enable detailed monitoring of on- and off-balance sheet exposures. Another round of improvements is planned in cooperation with the IMF for 2020, this will develop the model further by incorporating all sources of risk and enhancing its reporting infrastructure.

Box 4 Assessment of the impact of responsible lending regulation

with the average growth rate of 17.5% in the last three years. However, the structure of the growth of loans has changed. Compared to the previous year, the growth rate of loans to natural persons declined by 8 pp to 9.6%, while the growth rate of loans to legal entities increased by 7.8 pp to 24.3% (see Diagram N 3.2). Considering the fact that business loans generate more value added in the economy than consumer loans, this redirection of new loans to legal entities stimulated economic growth. According to the NBG's estimations, due to the implementation of responsible lending principles, the GDP growth rate increased by 0.6 pp in 2019.

Diagram N 3.2 YoY growth of total loan portfolio (excluding the FX effect)



Source: NBG

In January 2019, the National Bank of Georgia adopted regulation on responsible lending to natural persons, which aimed to support the stability of Georgia's financial system and to promote sustainable credit growth. According to the regulation, which incorporate best international practice while taking into account the country's characteristics, no financial institution should issue a loan without proper analysis of the borrower's ability to repay the debt. In addition, the NBG introduced payment-to-income (PTI) and loan-to-value (LTV) caps. As these limits affect the demand side, they prevent borrowers from building up excessive debt and ensure the sustainability of banks.

As a result of the implementation of responsible lending principles, financial institutions issue more business loans, rather than retail loans, which in turn promotes economic growth. In December 2019, the growth rate of the total loan portfolio (excluding the FX effect) amounted to 16.2%, which is consistent

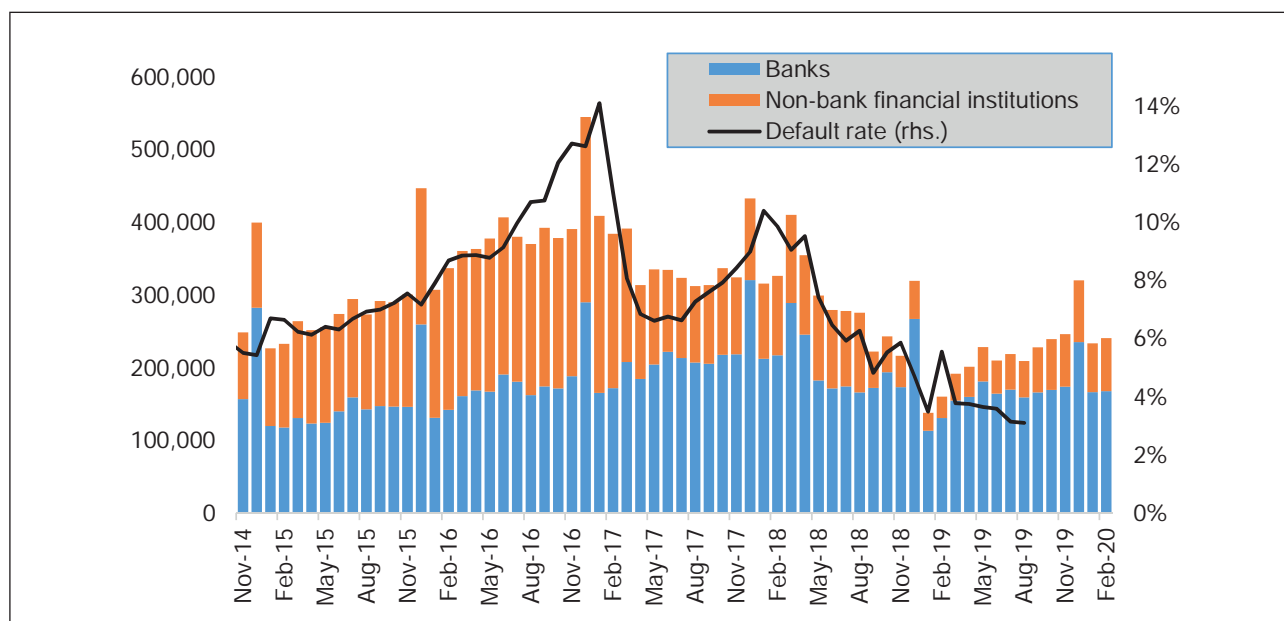
Since the responsible lending regulations entered into force, lending standards and loan portfolio quality have improved. Compared to the previous year, in 2019 the share of risky mortgage loans issued with a PTI of above 50% decreased significantly. At the same time, the ratio of non-performing loans declined by 1 pp. The loan portfolio quality improved not only for mortgage loans, but for consumer and business loans as well. Observing the quantity of retail loans issued over a month (see Diagram N 3.3), it can be concluded that, after the implementation of the new lending principles in 2019, individuals' access to loans have not decreased significantly. Moreover, the existing decline in loan availability was mainly driven by the reduction of "online" and "easy payday" loans, which required excessively high lending rates and, in some cases, saw default rates exceeded 10% – this, in turn, was increasing the financial vulnerabilities of households. Due to the enactment of responsible lending regulation, the default rate has continued to

decline and is currently within an acceptable range. Furthermore, the regulations have caused larization (de-dollarization) to rise significantly, but a partial effect of this increase in larization can be attributed to the restriction on foreign currency borrowing under 200,000 GEL. Larization increased by 2.5 pp in total loans and by 14 pp in mortgage loans (excluding the FX effect). In addition, the regulation promoted a reduction in interest rates, while the effect on loan maturity was insignificant. The average maturity of total loans continues to grow in line with the trend of previous years.

were overdue on a loan payment by the end of 2019, but who had not been by the end of 2018, amounted to 111,014 (this number was mainly based on loans issued in past years). This represents a significant improvement and is the result of a gradual implementation of responsible lending principles.

To conclude, the regulation has improved the protection of borrowers against financial vulnerabilities, reduced the excessive growth of the household debt burden, and improved the quality of banks' loan portfolios. Individuals' access to finance has not decreased significantly and thus this did not have a negative ef-

Diagram N 3.3 The quantity of loans issued during a month and default rate³¹



Source: NBG

In 2019, indicators related to household indebtedness improved significantly. Besides the fact that default rates have declined, as a result of the lending regulations the total number of borrowers who have been overdue on loan payments in past years has also fallen. According to the Credit Bureau, by the end of 2019, 472,013 individuals had a loan overdue by more than 30 days, while this number was 785,267 in 31 December 2018. The main factor behind this change was the loan forgiveness program introduced at the end of 2018, in which 615,164 borrowers participated.²³² The number of individuals who

³¹ The figure shows the quantity of loans issued by banks and non-bank financial institutions to natural persons during a month and the share of defaulted loans (overdue more than 30 days). It is obvious that it requires some time to observe a default occurrence, but, according to estimates, for such loans a significant share of defaults occurs in the first six months after a loan is issued. Therefore, other things being equal, the default data for the period after August 2019 will not change significantly.

³² Because some lending companies refused to participate in the loan forgiveness program, some borrowers with several loans remained on the list of persons who have been overdue

on current lending and economic activities at an aggregate level. In addition, the regulation will promote sustainable economic growth in the medium term.

Box 5 Extraordinary measures of the National Bank of Georgia regarding COVID-19

As part of its mandate, the National Bank of Georgia has taken several important measures to mitigate the impact of COVID-19 (coronavirus) on the economy and the financial sector. Extraordinary steps have been taken in different directions, including ensuring an uninterrupted supply of liquidity to various sectors of the economy, the development of a temporary supervisory plan, the expansion of the International Monetary Fund (IMF) program and the introduction of a new mechanism of FX interventions.

on loan payments. For instance, a borrower holding two loans, one issued by a company that was a participant of the program and the other issued by a company that refused to participate in the program, will remain on the list of people who have been overdue on their loan payment, despite the fact that one loan was written off by the first company. The reason of this is that the second company refused to write off their loan.

LIQUIDITY PROVISION

One of the key functions of the National Bank of Georgia, as well as other central banks, is to supply liquidity to the financial system. It should be noted that during shocks, the need to supply liquidity to the economy becomes even more important as the demand for liquidity in financial markets increases. Under such conditions, an important function for central banks is to supply the additional liquidity. Supplying sufficient liquidity to the financial system is essential as a lack of liquidity in the financial system could constrain lending to the economy and/or worsen access to finance. It should be noted that liquidity is provided by the National Bank only on the basis of required collateral.

SWAP OPERATIONS

As of today, the financial sector has excessive foreign currency liquidity. At the same time, demand for the national currency has increased. The National Bank of Georgia has effective monetary instruments to ensure that liquidity in the national currency is supplied to the financial sector without restrictions. The COVID-19 pandemic and existing logistical constraints have led to a significant increase in demand for cash from private individuals and companies. To finance the costs of responding to the pandemic, the state budget has mobilized funds from commercial bank accounts to the government account at the National Bank. In addition, the National Bank has withdrawn lari from circulation through foreign exchange interventions. Also, commercial banks and most microfinance organizations have offered lenders a three-month moratorium period, which has reduced their inflows and increased demand for liquidity. Considering each of these steps, demand for national currency liquidity in the financial system has significantly increased, which is something that needs to be addressed by the central bank using liquidity management instruments. The National Bank also considers the role of microfinance organizations in providing business and financial services to the regions of Georgia. Hence, in addition to standard refinancing loans to support the demand for liquidity, the National Bank will provide GEL liquidity to commercial banks and microfinance organizations through swap operations. In particular, in order to support liquidity, the National Bank will provide 200-200 million GEL (400 million GEL in total) with USD limit swap operations to commercial banks and microfinance organizations over April-May. The

total amount of the swap will be distributed among the participants of the scheme in proportion to the market share of the financial institution. However, to avoid excessive concentration, a limit of 25% of the total volume will be imposed on each organization, which will increase the availability of resources for small financial institutions. The term for swap operations is set at one month, with the right for a monthly renewal for the next year.

In addition, to reduce liquidity risk, the National Bank will launch a stand-by swap instrument, which will allow banks, if necessary, to receive additional GEL liquidity at a penalty rate. It is noteworthy that by providing liquidity, the central bank serves to offset a possible temporary decrease in cash flows, which is not a source of financing for insolvent financial institutions. As a result, the swap instrument will allow commercial banks and microfinance organizations to meet the increased demand for GEL liquidity without taking additional risks. In addition, in April, the National Bank signed a 200 million USD limit swap agreement with the European Bank for Reconstruction and Development (EBRD), under which it will provide the appropriate amount of GEL liquidity. It is important to note that the EBRD finances many important projects in Georgia.

Funding is provided in foreign currency as well as, in some cases, the national currency. As the EBRD has foreign currency resources, the organization insures against currency risk with other market participants to finance various projects in GEL. Even in this case, in the face of increased uncertainty, the price of currency risk insurance has risen sharply. Swap operations with the National Bank will allow the EBRD to continue financing important projects in the Georgian economy with GEL, which will protect potential beneficiaries against FX risk.

Under both the current circumstances and after the pandemic ends, when the economy returns to normal, the National Bank will continue to ensure an adequate level of liquidity in the financial system and the economy as a whole. Thus, because of the use of monetary policy instruments and buffers accumulated in foreign currency, liquidity will not be a limiting factor for lending, even in the event of a prolongation of the pandemic.

TEMPORARY SUPERVISORY PLAN

To mitigate the negative impact caused by the COVID-19 pandemic and to stimulate the country's economy, the National Bank of Georgia has developed a

temporary supervisory plan and has implemented other monetary policy measures that are in full compliance with the recommendations of International Monetary Fund³³, ECB and other leading financial institutions.

CAPITAL RELATED MEASURES

The National Bank of Georgia has temporarily postponed the increase in primary capital requirements for the banking system that had been planned for March 2020 (for loan portfolio concentration risk and net GRAPE buffer), which would have led to an increase in initial capital requirements by 274 million GEL in absolute terms.

In addition, according to the temporary supervisory plan developed by the National Bank, capital requirements for commercial banks were eased. In particular, the capital conservation buffer (2.5% of risk-weighted assets) and a Pillar 2 buffer portion (unhedged buffer 2) were suspended. Hence, 1.6 billion GEL in capital was released to the banking sector.

The purpose of the easing of capital requirements is to neutralize expected losses and, consequently, to support lending to the economy. Banks are prohibited from using this capital to make dividends, for the redemption of shares, to make equity investments, increasing management bonuses or for making other payments that would reduce a bank's capital.

These capital measures are based on the supervisory plans published by the European Central Bank³⁴ and other leading financial organizations to mitigate the losses incurred by COVID-19. In these documents, they call on the countries under their jurisdiction to ease counter-cyclical buffers (most countries with such buffers have already done so³⁵) and to allow banks to use conservation buffers.

MAJOR RISKS PROVISION POSTPONED

According to the decision of the National Bank, the implementation of the "Regulation on Concentration of Risk Positions and Major Risks", which had been planned for June 2020, has been postponed until

33 IMF policy paper, (16 March 2020) <https://www.imf.org/en/Publications/Policy-Papers/Issues/2020/03/16/Policy-Steps-to-Address-the-Corona-Crisis-49262>

34 European Central Bank, Press release, (March 12, 2020) <https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html>

35 PWC - "Supervisory measures in reaction to the Corona crisis – Minimum capital ratios", (April 17, 2020) <https://blogs.pwc.de/regulatory/aktuelles/supervisory-measures-in-reaction-to-the-corona-crisis-minimum-capital-ratios/4481/>

2021. Banks will therefore be allowed to continue lending within the existing rules. Moreover, banks have the opportunity to keep the limits calculated on supervisory capital in force, instead of the initial capital as specified in the new regulation, which would limit the growth of lending to groups of borrowers close to the set limits.

TEMPORARY CHANGES IN RESERVE POLICY

As the pandemic has had a severe economic impact on the solvency of borrowers, commercial banks introduced a 3-month moratorium on loan repayments and started offering more lenient terms to the majority of borrowers. According to the "Rules for Classification of Assets by Commercial Banks and Establishment and Use of Reserves for Possible Losses", such loans, in case of restructuring, are usually classified negatively and cause reserve losses. Amid the developments in the economy, the National Bank of Georgia decided not to automatically classify such loans as negative loans, and if, in the future, payments continue without any problems, these loans will remain in the standard category. This step has significantly reduced the supervisory burden on banks and builds on the recommendations and changes implemented worldwide.

The European Central Bank³⁶, the European Securities and Exchange Commission³⁷, the Bank of England³⁸ and the International Financial Reporting Standards Organization³⁹ all state that banks should not take a mechanistic approach to loans that fall in the moratorium period on loan repayments and such loans should not be classified as non-performing without careful consideration.

36 European Central Bank, Press release (March 20, 2020) <https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200320~4cddbcbf466.en.html>

37 European Securities and Markets Authority, Public Statement (March 25, 2020) https://www.esma.europa.eu/sites/default/files/library/esma32-63-951_statement_on_ifrs_9_implications_of_covid-19_related_support_measures.pdf

38 Bank of England, Public Letter to Commercial Banks, (March 26, 2020) <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/letter/2020/covid-19-ifrs-9-capital-requirements-and-loan-covenants.pdf?la=en&hash=77F4E1D06F713D2104067EC6642FE95EF2935EBD>

39 IFRS – "Accounting for expected credit losses applying IFRS 9 Financial Instruments in the light of current uncertainty resulting from the covid-19 pandemic." (March 27, 2020) <https://cdn.ifrs.org/-/media/feature/supporting-implementation/ifrs-9/ifrs-9-ecl-and-coronavirus.pdf?la=en>

MORATORIUM ON SUPERVISORY REFORMS AND SANCTIONS

A temporary moratorium has been imposed on the development and imposition of new supervisory requirements to enable banks to maximally mobilize resources in response to existing challenges. If economic limits (coefficients) are violated due to factors caused by the current shock (for example, exchange rate depreciation, reserves/losses), the NBG will not apply penalties. These changes only apply to violations of economic limits and not to other types of legislative violations.

INTERNATIONAL MONETARY FUND PROGRAM

On 1-13 April 2020, the National Bank of Georgia and government officials held discussions with the International Monetary Fund mission. As a result, an agreement was reached to successfully complete the sixth review of the ongoing program in Georgia and to increase the total amount of the program to deal with the pandemic at the mission level.

Increasing funding under the IMF program will help the country implement macroeconomic stabilization measures and, at the same time, accelerate the mobilization of assistance from other international donors. The agreement reached with the IMF Mission envisages an additional 375 million USD increase in funding under the program. The additional funds will be used for macroeconomic stabilization measures and for the socio-economic needs of the economy. Following the approval of the IMF Board of Directors in early May, 200 million USD was immediately made available to the Georgian budget. The rest of the money will be distributed over the rest of the program. In addition to funding the increased financial needs resulting from the pandemic, the funds allocated by the IMF will have a positive impact on Georgia's international reserves. It should be noted that the benefits stemming from the NBG's efforts to accumulate international reserves over recent years have been particularly evident in the current situation. Given the extraordinary circumstances currently facing the economy, the reserves will be used for interventions on the foreign exchange market. The flexibility of the

exchange rate to deal with shocks will still be relevant. However, at the same time, considering the price stability mandate, foreign exchange interventions will be used to mitigate excessive fluctuations of the lari and to provide liquidity to the foreign exchange market.

The NBG interventions will be rule-based and, together with FX auctions, will supply foreign exchange to the market. These interventions on the Bmatch platform will be based on pre-determined rules and will aim at reducing excess fluctuations on the market. When exchange rate fluctuations exceed the pre-set mark, the NBG will engage in trading on the platform and will participate in a transaction with a certain amount. With frequent interventions in small amounts, the NBG will be able to effectively reduce excess fluctuations in the foreign exchange market, which is an important factor for achieving our main mandate of price stability.

Reducing excess volatility, which has increased significantly amid increased market uncertainty, has become particularly relevant in recent times. Despite more active participation in the foreign exchange market, the NBG maintains a floating exchange rate regime, and exchange rate flexibility remains an important tool in dealing with shocks.

In addition to interventions on the BMatch platform, the National Bank will, if necessary, resort to the FX auction mechanism of interventions. As is known, a large part of the assistance received from international donors is reflected in the foreign exchange reserves of the National Bank and has not entered the foreign exchange market. As a result, we have a negative external balance in the private sector and the public sector has a positive balance. The National Bank will thus hold currency auctions to partially balance these differences. The use of international reserves is currently possible as the National Bank has made concerted efforts to accumulate these over recent years. At the same time, the loss of reserves will be offset to some extent by donor-funded resources. Overall, by the end of 2020 it is expected that the reserve level will be close to the lower limit of the International Monetary Fund's benchmark for reserve adequacy (ARA metric).



4

BANKING SUPERVISION



4. BANKING SUPERVISION

4.1 DEVELOPMENT OF THE SUPERVISORY FRAMEWORK

Over the course of 2019, various steps were taken to improve the supervisory framework and for the approximation of domestic rules with international best practices.

At the end of the year, the Parliament of Georgia adopted amendments to the Organic Law on the National Bank of Georgia (NBG) and the Law on the Commercial Banking Activities. These changes equip the NBG with resolution powers and set out a preliminary basis for the recovery and resolution framework. Moreover, based on the relevant EU law, early intervention and supervisory measure frameworks have been improved.

The recovery and resolution frameworks were developed in line with international best practices reflected in the Bank Recovery and Resolution Directive (BRRD)⁴⁰ and the Financial Stability Board's "Key Attributes of Effective Resolution Regimes for Financial Institutions".⁴¹ The amendments authorize the NBG to exercise early intervention measures when a commercial bank is faced with financial difficulties or to apply resolution tools; while whenever early intervention measures are ineffective, the NBG can restructure a problem bank in a manner that does not threaten financial stability.

Resolution is considered an alternative to the commercial bank liquidation procedure and is applied when the latter is believed to pose significantly adverse effects to financial stability. The resolution regime enables maintaining the critical functions of a problem bank and avoid contagion of the financial turmoil on the market. The foundational principle of the regime establishes that resolution proceedings should have a less severe effect on a bank's shareholders and creditors than liquidation. Furthermore, resolution incorporates more rigid protection mechanisms for depositors and creditors since insured deposits are guaranteed while creditor losses are mitigated to a minimum. The resolution tools defined by the legislation are the following: merger with another commercial bank; sale or partial sale of the shares, assets and/or liabilities of a commercial bank; transfer or partial transfer of the shares, assets and/or liabilities of a commercial bank to a bridge bank; the

40 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

41 FSB "Key Attributes of Effective Resolution Regimes for Financial Institutions". Available at: <https://www.fsb.org/work-of-the-fsb/policy-development/effective-resolution-regimes-and-policies/key-attributes-of-effective-resolution-regimes-for-financial-institutions/>.

recapitalization of a commercial bank by issuing new shares; and the recapitalization of a commercial bank by writing off its liabilities or converting the liabilities into the shares (the so-called bail-in tool).

Whenever financial stability necessitates a resolution regime when no other financing sources are available, temporal state funding can be issued. To make state funding viable, the NBG opens an account from the resolution fund where grants, guarantees, credit, and other funds are transferred from the Ministry of Finance and directed to the bank under resolution. For the purpose of compensating the state money, the NBG obliges licensed commercial banks to make respective contributions to the resolution fund. The amount of contributions for each bank is defined by the criteria of objectivity (elements of the risk profile) and is proportional (to the liabilities level).

The resolution framework and relevant legislation were made on the basis of World Bank and IMF recommendations under the financial sector assessment program (FSAP). IMF experts were directly engaged in the work on the legislative package.

Within the framework of the amendments package, the NBG has introduced amendments in the framework for being a lender-of-last-resort, which authorizes the NBG, under exceptional circumstances when the sustainability of the financial system is threatened, to issue a loan to a bank with uncertain solvency. However, in these cases, it is necessary for the collateral to be an unconditional and non-revocable guarantee by the Ministry of Finance.

The NBG continues to process of approximating domestic supervisory legislation with the EU legislation, as prescribed under the Association Agreement between the EU and Georgia. The NBG is actively working on the implementation of the standards and requirements of the supervisory framework on capital adequacy (CRD IV Package)⁴² that is applicable in the EU and is based on Basel III standards. In order to fully comply with the Basel III Tier 2 capital quality standards, the NBG plans to work on defining the requirements for additional Tier 1 and Tier 2 capital instruments. This implies creating write-off or conversion requirements for additional Tier 1 and Tier 2 capital instruments into common Tier 1 equity, either upon the occurrence of predetermined trigger events or at the NBG's request.

In 2019, the NBG prepared and approved the "Rule on the Net Stable Funding Ratio (NSFR)", which is fully aligned with Basel III standards. The NSFR

42 Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.

came into force in September and its implementation will substantially improve the long-term liquidity regulation process.

In 2019, based on Basel III and relevant EU legislation, the NBG adopted a rule on exposures concentration and large exposures in commercial banks, which should have come into effect in June 2020; however, as a result of the supervisory actions taken as a response to COVID-19, the enforcement of this rule has been suspended until 2021.

Moreover, proactive measures have been taken to improve the criteria and requirements for shareholder and administrator suitability and the bank licensing process. These improvements will be based on the standards and requirements enshrined in the EU directive.

Box 6 Suitability criteria for members of management bodies and shareholders

The need to improve the suitability requirements for the members of the management bodies and qualified shareholders of commercial banks stems from the weaknesses in effective bank management that were identified globally during the financial crisis.

Across the European Union, this issue is regulated by a relevant Directive (2013/36/EU) and by the joint guidelines of the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA), which specify the requirements set out in the directive.

Suitability of the members of management bodies

The suitability criteria for members of a commercial bank's management body (both executive and non-executive) as set out in the directive are based on four main requirements, the assessment of which is made according to the principle of proportionality, according to the size, internal organization, risk profile and complexity of the bank. The four requirements are as follows:

1. Good reputation, honesty, and integrity – for the assessment of this criteria, the following aspects are taken into account: ongoing or past convictions, unfulfilled financial obligations and insolvency-related problems in past activities.

2. Knowledge, skills and experience – this includes adequate education and experience related to banking and financial services, experience from a managerial position and appropriate skills proportional with the assigned responsibilities.

3. Independence of mind – this means possessing necessary skills that include the ability to make decisions based on independent and objective judgments, to properly assess the proposed decisions of other members of the management body, and to avoid conflicts of interest.

4. Sufficient time commitment to perform his or her functions and responsibilities – this includes restrictions on holding positions in other financial and non-financial institutions, as well as assessing the ability to commit sufficient time, bearing in mind other activities (including other business, social or political activities).

The assessment of suitability implies both the individual suitability of members of the management body, as well as the collective suitability of management bodies (directorate, supervisory board). This should ensure proper perception of the management body's activities and any related risks to the bank.

Suitability of qualified shareholders

Acquisition of a qualifying holding in a commercial bank means acquiring a share in the bank to such an amount that the direct or indirect participation of the acquirer exceeds 10, 20, 30 or 50% of the bank's capital, or a situation where the bank will become a subsidiary of the acquirer and/or it will be possible to exercise a significant influence over the bank, regardless of the amount of capital or voting shares. The acquirer may be a natural or legal person, or a group of jointly acting partners.

The assessment of the suitability of qualified shareholders of a commercial bank is based on the criteria set out in the EU directive and the application of the proportionality principle:

1. Good reputation – for the assessment of this criteria, the following are taken into account: past or ongoing convictions, unfulfilled financial obligations and insolvency-related problems in past activities.

2. Reputation and experience of potential administrators of the bank – this refers to the suitability of potential administrators who will direct the bank as a result of the acquisition of qualifying holdings.

3. Appropriate financial soundness – this refers to the capacity of the acquirer to finance the acquisition of a qualifying holding and to maintain, for the foreseeable future, a sound financial structure for the bank. Given the proportionality principle, depending on the amount of the share to be acquired, this requirement may be more or less stringent.

4. Compliance of the target commercial bank with prudential requirements, after the proposed acquisition – the transaction of the proposed acquisition should not adversely affect the target bank's compliance with its prudential requirements. When assessing this requirement, not only are the amounts of the share to be acquired taken into account, but also the reputation of the acquirer, its financial soundness and group structure, and the proposed acquirer's declared intentions towards the bank, expressed in its business plan and strategy.

5. Exclusion of risks of money laundering and terrorism financing – this means that the acquirer should not be involved in suspicious transactions in terms of money laundering and terrorism financing and should be able to prove, at any time, the reliability of the sources of the funds that will be used for the proposed acquisition.

Strategy of the NBG

The suitability requirements for administrators and qualified shareholders of commercial banks are laid down in the legislation of Georgia; however, the existing requirements are not fully compliant with the requirements set out in the above mentioned directives and guidelines. The NBG is currently working on improving the relevant legislation. In particular, the rule for assessing the suitability of administrators will be updated, and the requirements for acquisitions of qualifying holdings will be specified in the new rule, which will be fully compliant with the main requirements prescribed in the joint guidelines of the European Banking Authority and the European Securities and Markets Authority developed in 2016.

The National Bank, in cooperation with the State Insurance Supervision Service, continues to work on the development and implementation of a supplementary supervision framework for financial conglomerates. This is in accordance with the EU-Georgia Association Agreement and aims to approximate Georgia's legislation with the EU *acquis* within a stipulated timeframe. The supplementary supervision framework implies prudential supervision with respect to capital adequacy, risk concentration, intra-group transactions and the internal control mechanisms of entities within a financial conglomerate.

Box 7 Supplementary supervisory framework for financial conglomerates

Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings, and investment firms in a financial conglomerate is one of the directives provided by the EU-Georgia Association Agreement. The directive aims to ensure effective supervision of financial conglomerates, financial stability, and consumer protection.

The directive was elaborated as a result of the trend for the consolidation of banking and insurance activities. Accordingly, the main goals of the supplementary framework are to fill in supervisory gaps that may occur during sectoral supervisory fragmentation, and to focus on the potential and real risks that stem from non-regulated enterprises that may have some influence on the risk profile of the members of a financial conglomerate. However, the supplementary supervisory framework for financial conglomerates does not substitute sectoral legislation, it supplements the

sectoral supervisory framework. Furthermore, holding or collecting information regarding non-regulated member enterprises of a financial conglomerate does not necessarily mean an expansion of stand-alone supervision to the members of the financial conglomerate.

According to the directive, a financial conglomerate is a group of financial enterprises that operates on different financial markets (banking, insurance, investment). The directive also sets limits, determining under which means an enterprise should be considered as a financial conglomerate and covered by the supplementary supervisory framework for financial conglomerates:

- The activities of a group mainly occur in the financial sector (meaning the ratio of the balance sheet total of the regulated and non-regulated financial sector entities in the group to the balance sheet total of the group as a whole exceeds 40%).
- The consolidated activities of a group, such as insurance, banking, or brokerage sector entities, should be determined as significant when:
 - The total assets of each financial sector enterprise in the group exceeds 10% of the total assets of the same group.
 - The solvency/capital adequacy requirements for each financial sector enterprise in the group exceeds the total solvency/capital adequacy requirements of the same group.
 - The total assets of the smallest financial sector in the group exceeds 6 billion EUR (equivalent in GEL).

In order to ensure effective implementation of the supplementary supervisory framework for financial conglomerates, supervisory bodies, following relevant procedures and criteria, assign a special body for the coordination and implementation of supplementary supervision. This coordinator, who is in charge of coordinating the entire supervision process, collects related information and submits to the supervisory body. The coordinator also evaluates the financial position of the conglomerate and coordinates relevant supervisory measures for normal and critical business cycles.

Directive 2002/87/EC sets several requirements and standards that can be applied to the members of a financial conglomerate under supervision:

- Capital adequacy requirements: The financial conglomerate must ensure accordance with capital adequacy requirements on the conglomerate level (the scope of requirements are set by the coordinator/relevant supervisory bodies).
- The requirements of risk concentration (risk

exposures) and intra-group transactions that oblige the financial conglomerate to provide the relevant report on the conglomerate level to the coordinator (according to the directive, intra-group transactions should be determined as important if they exceed 5% of total capital adequacy requirements on the conglomerate level).

- Internal control tools and risk management process requirements: The member enterprises of a financial conglomerate should adopt an adequate risk management process and internal control tools on a conglomerate level.
- A coordinator should periodically conduct relevant stress tests for the financial conglomerate.

In addition, the directive defines standards for coordination and information flow between supervisory bodies, imposing appropriate supervisory measures when those requirements are violated.

The strategy of the NBG

It is worth mentioning that the NBG, in coordination with the Insurance State Supervision Service of Georgia, has drafted a draft law in order to implement the directive. The draft law mainly sets the same standards and requirements provided in the directive. Currently, there are no groups that meet the established limits that would fall under the scope of the draft law. Regardless, after the relevant parliamentary procedures have been followed, the NBG will proactively monitor the development and growth of conglomerates in Georgia to apply the tools and powers set by the supervisory framework accordingly.

Furthermore, the NBG is empowered⁴³ to enforce competition policy in the banking system and determine acceptable activity parameters, assessment criteria, and supervisory measures to foster a competitive market environment.⁴⁴ Considering globally emerging trends, the NBG is in the process of examining and analyzing best practices regarding competition, the elements that promote competition and new regulatory requirements in the field of competition.

Box 8 International practices for promoting competition in the financial sector and the NBG's strategy

Financial stability and competition

Promoting competition is a significant element for developing a free market. It can be highly beneficial for customers and, more generally, for society as a whole. Effective competition and a free market, as a rule, encourage price reductions, a wide range of options for customers, better quality of products and services, and innovation. However, considering the long-term nature of financial products and the

43 The Law on Commercial Bank Activities, Article 22.

44 The Organic Law of Georgia on the National Bank of Georgia, Article 47

specific risks facing the financial sector, intensified competition could possibly have a negative impact on financial stability. Today, the financial sector is the world's most regulated economic sector – and the level of that regulation is increasing. The present supervisory framework is quite comprehensive, technical and complex, which has a disproportionate impact on the financial sector. As a rule, regulated financial institutions using available technologies adjust to the supervisory conditions better than do startups offering new products. The leading supervisory authorities thus actively analyze how to reach an ideal balance between financial stability risks and customer protection on the one hand, and innovation and competition on the other. Achieving sound and free competition on the market remains a priority for countries.

The most favorable solution to this challenge requires several sensitive aspects of the financial sector to be carefully analyzed. Several approaches to this are discussed below.

Developing conditions conducive for competition in the banking sector as well as implementing effective policy, is the output of active cooperation between the competition regulatory authorities and supervisory authorities of the relevant sectors. For this process to be effective, it is critically important to clearly separate the roles and powers of the regulatory and supervisory authorities. In the case of multi-mandate supervisory authorities, it is essential that the hierarchy of the mandates are distinctly specified by relevant legislation.

According to the constitutional mandate of the NBG, the National Bank of Georgia conducts monetary policy to ensure price stability and maintain the stable operation of the financial sector.⁴⁵ The Constitution of Georgia does not specify a mandate to facilitate competition, but under the Organic Law of Georgia on "The National Bank of Georgia", the NBG facilitates the financial sustainability and transparency of the financial sector and protects the rights of customers and investors. For this purpose, the NBG is obliged to facilitate the stable and effective functioning of the financial system, to develop competitive conditions, control systemic risk and mitigate potential risks.⁴⁶ According to the Law of Georgia on "Commercial Bank Activities", a competition policy in banking activities is implemented by the National Bank that defines permissible parameters, assessment criteria and measures of enforcement for banking activities in this field.⁴⁷

Hierarchy of objectives - the approach of the

45 The Constitution of Georgia, Article 68 (see the link)

46 See: https://www.nbg.gov.ge/uploads/legalacts/supervision/2020/nbg_law.pdf

47 See: https://www.nbg.gov.ge/uploads/legalacts/supervision/2020/the_banking_law.pdf

Prudential Regulation Authority

Considering the potential conflict of interests between the dual mandates of facilitating competition and ensuring financial stability, it is critical that the hierarchy of objectives be clearly specified. In this regard, it is noteworthy that, according to the Prudential Regulation Authority (PRA) approach, in the case of adequate prudential regulation, there is minimal probability of there being a conflict of interests between mandates and/or the necessity of compromising one mandate for the benefit of another. However, for the purpose of preserving the balance between the mandates, while implementing the primary mandate it remains critical to consider the secondary mandate of facilitating effective competition.⁴⁸

Although experts often debate the issue of the primacy between competition and prudential regulation, they unanimously agree that strengthening the competitive objective in the event of weakened and inefficient prudential regulation induces financial stability risks for the market. This is clearly demonstrated by an analysis of the financial crises of the 1970s that took place in the US, Japan, Scandinavia and other industrialized countries.⁴⁹ Recent studies firmly develop the view that adequate and stringent prudential regulation is essential for preventing the negative effects caused by increased pressure from competition regulations.⁵⁰

The provision regarding the NBG in the Constitution of Georgia, as well as the legal clause that the Competition Law of Georgia and its requirements are not applicable while implementing resolution powers by the NBG,⁵¹ both indicate the primacy of the financial stability objective; however, the NBG acknowledges the critical importance of facilitating free and effective competition. For this purpose, the NBG has already accomplished certain measures and plans to implement several other measures. These are discussed in detail below.

48 PRA Annual Report 2019, <https://www.bankofengland.co.uk/-/media/boe/files/annual-report/2019/pr-2019.pdf?la=en&hash=F97D30F644D9EA6D61B5D96E6D56E400B8DED13F#page=54>

49 See: <https://www.bankingsupervision.europa.eu/press/speeches/date/2016/html/se160704.en.html> (For more details, see: Demirguc-Kunt, A., and Detriagiache, E., "Financial Liberalization and Financial Fragility," in Boris Pleskovic and Joseph E. Stiglitz (eds.), Annual World Bank Conference on Development Economics, 1997. Washington, D.C.: World Bank, 1998).

50 See: <https://www.bankingsupervision.europa.eu/press/speeches/date/2016/html/se160704.en.html> (For more details, please see: Matutes, C., and Vives, X., "Competition for Deposits, Fragility and Insurance," Journal of Financial Economics, 5 (2), 1996; Vives, X., "Strategic Complementarity, Fragility, and Regulation," Review of Financial Studies, 27 (12), 2014; Repullo, R., "Capital Requirements, Market Power, and Risk-Taking in Banking," Journal of Financial Intermediation, 13 (2), 2004).

51 See: <https://matsne.gov.ge/ka/document/view/4742061?publication=0> (in Georgian)

The mandate of facilitating competition was defined as the secondary objective of the Prudential Regulation Authority (PRA) in 2014.⁵² It was followed by significant steps taken by the authority to promote competition in the banking sector. The PRA, together with the Financial Conduct Authority (FCA)⁵³, actively assist individuals interested in obtaining a banking license, including providing consultations, organizing training on licensing issues, etc.

Promoting entry into the financial market

The complexity of regulations is a barrier for many new companies seeking to enter the financial market, which is why many supervisors are trying to maximize the transparency of their frameworks.

A number of benefits in terms of capital adequacy and liquidity requirements are often provided for new banks entering the market. Instead of the capital requirements set out under the stress tests within Pillar 2, capital requirements set at the amount of so-called "wind-down costs" are prescribed for banks, which results in the removal of additional pressure on newly licensed banks and creates conditions for rapid growth in the market. At the same time, it should be noted that simplification of the prerequisites for entering the market may be unfair to existing participants, it could initiate unhealthy strategic behavior, and become a source of the accumulation of financial risks. It should be noted that such barriers exist precisely to limit risk. Consequently, this process is usually tied to certain additional criteria. The innovation criterion is widely used today, which involves the active use of a number of approaches to encourage new products and innovative technology-focused business models to enter the market. Examples of this approach can be seen in the framework for licensing digital banks and the regulatory sandbox.

Digital banks

A digital bank is a business model for a bank that delivers financial services through electronic channels and uses essentially new and innovative financial technologies in the local market. The digital bank model serves to increase financial inclusion and is integrated into the digital ecosystem developing around the customer. Leading supervisors who stress the importance of developing similar business models have created various special licensing frameworks to encourage this approach and to turn it into a sustainable business model (e.g., in the UK, Hong Kong, Singapore and Israel).

Regulatory sandbox

A regulatory laboratory, often called a "sandbox", allows adapting and developing regulations in parallel with the development of innovation. Regulatory laboratories allow innovators in the financial sector to

52 This is the so-called secondary competition objective.

53 See: <https://www.fca.org.uk/>

test new technological services and models in a live environment. Appropriate limitations and supervisory mechanisms make the testing environment and any attendant risks controllable. The regulatory laboratory is especially interesting for fintech startups and other technology firms trying to enter the financial services sector.

The principle of proportionality

The principle of proportionality is important for existing participants in the market and it is an important prerequisite for promoting effective competition.

According to a document⁵⁴ published by the Basel Committee on Banking Supervision, it is necessary for the supervisory body to take into account the principle of proportionality when determining requirements. This is reflected in both quantitative and qualitative criteria, including the size and risk profile of the bank, the complexity of its activities and other indicators.

The European Central Bank (ECB) also points out the importance of proportionality, according to which the prudential and regulatory burden should be risk sensitive (less risky banks subject to relatively light prudential requirements and vice versa). This is an important factor to create adequate incentives for competition in the market; however, the interests of financial stability and the sustainable and healthy functioning of each bank must naturally be taken into account.⁵⁵

An initiative of the Swiss supervisory authority to create a pilot proportional regime for non-systemic banks is noteworthy. This was launched in 2020 and eliminates (the requirement of risk-weighted assets and the net stable funding ratio) or simplifies (capital planning, corporate governance, and management of operational risks) a number of requirements for relatively small banks. However, in order to ensure that the simplified regime does not have a negative impact on the financial sector, banks are required to comply with the requirements of the leverage ratio (8%) and the liquidity coverage ratio (120%).

Open banking

The Competition and Markets Authority (CMA)⁵⁶ of the UK has been working, together with the Financial Conduct Authority (FCA), to introduce an open banking model since 2016. This was defined by the Payment Services Directive (PSD 2)⁵⁷ in 2015 and prescribes an obligation to open up data to fintech firms and other financial institutions that promote the development of innovative firms and free competition.

⁵⁴ See: <https://www.bis.org/fsi/publ/insights1.pdf>

⁵⁵ See: <https://www.bankingsupervision.europa.eu/press/speeches/date/2017/html/ssm.sp170622.en.html>

⁵⁶ See: <https://www.bankingsupervision.europa.eu/press/speeches/date/2017/html/ssm.sp170622.en.html>

⁵⁷ See: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2366>

According to available data, 202 providers regulated by the FCA are involved in the open banking model.⁵⁸

Open banking simplifies the barriers fintech firms face when entering the financial sector. Several leading supervisory bodies have written about the role of fintech firms in promoting free competition. Among them is the Authority for Consumers and Markets (ACM) of the Netherlands, which mentions the fintech sector and innovative financial entities as important driving forces for competition, while also addressing the risks associated with them.⁵⁹

It should be noted that open banking promotes the establishment of main banking services as part of a “White Label” banking model that sees its separation from other services of the digital ecosystem. Similar approaches are common in those sectors where, due to the economies of scale, there are concentration problems. For example, a similar approach in the telecommunications sector is known as the mobile virtual network operator framework (MVNO).⁶⁰

Ring-fencing requirements

Since 2019, English banks holding over 25 billion GBP in retail deposits are required to separate core retail services from investment banking.⁶¹ This requirement is noteworthy not only because it solidifies financial stability, but also because it facilitates the maintenance of buffers (so-called Chinese walls) that prevent the leakage of inappropriate information between various arms of banks.

Similar obligations were stipulated by the Glass Steagall Act of the US Congress that was in force during 1933-1999. Although there was an intention to reintroduce these restrictions after the 2007-2008 global financial crisis through the Dodd-Frank Wall Street reform, this initiative failed.

Israel is an example of a country where there is a requirement concerning the separation of activities. Following the recommendations of a special committee composed of the Israeli Ministry of Finance, the Israeli Central Bank, and the Israeli Ministry of Justice, ring-fencing laws were enacted. These rules aimed at ensuring the unhindered development of a competitive fintech market and resulted in the divestment of credit card operations for

⁵⁸ See: <https://www.openbanking.org.uk/customers/regulated-providers/>

⁵⁹ See: https://www.acm.nl/sites/default/files/old_publication/publicaties/15926_fintech-call-for-input-final-version-EN.pdf

⁶⁰ The mentioned framework is being implemented in Georgia on the initiative of the Georgian National Communications Commission. See: <http://gncc.ge/ge/regulation/sakonsultaciadokumentebi/erovnul-roumingze-da-mobilur-virtualur-qselis-operatorze-wvdomis-pirobebis-rekomendaciebi.page>

⁶¹ Britton, K., Dawkes, L., Debbage, S. and Idris, T., “Ring-Fencing: What is It and How Will It Affect Banks and Their Customers?” (December 16, 2016). Bank of England Quarterly Bulletin 2016 Q4. Available at SSRN: <https://ssrn.com/abstract=2898735>.

two of the biggest banks, while a further three banks were forced to constrain their attempts at establishing affiliated peer-to-peer platforms.⁶²

Concentration control

Unequal growth and rising profitability for a bank are acceptable if occurring organically in a system where competition-related regulatory norms are balanced and proportionally applied.⁶³ Conversely, every leading country controls the inorganic growth of banks – involving an increase of the concentration level through mergers, asset purchases, and participation in a bank's executive body. The main elements of merger laws are similar in both the EU and in the US, though respective differences still exist.

According to the general principle of concentration control, only types of market concentration that are compatible with the competitive environment are acceptable, while those that significantly limit competition are impermissible.

Various methods have been developed to estimate concentration levels, however, the HHI index remains ubiquitous as it best captures the necessary aspects of concentration measurements such as completeness, consistency and precision.⁶⁴ In terms of HHI size, non-concentrated, moderately concentrated, and highly concentrated markets are differentiated, while through the index delta, the rate of concentration increase occurring via mergers is determined. The following variables can determine concentration

assessing:

1. Demand-side substitutability – The analysis is used to determine whether market structure precludes consumers from switching suppliers in case of a price increase or whenever there is a change in service accessibility, service quality, or certain indicators accounting for price calculations (these are usually estimated in the 5-10% range).

2. Supply-side substitutability – The analysis is used to determine whether suppliers can timely substitute each other in a cost-efficient manner by providing alternative services/products when demand, prices, or other market variables change.

Market concentration is assessed by analyzing coordinated and non-coordinated effects. The former relates to the risk of a price increase, product quality deterioration, and reduced variability. Moreover, besides other factors, coordinated effects account for decreased incentives to invest in innovation, the difficulty of market entry/exit, and enterprise risks. Conversely, facilitated coordination, either on prices or other aspects, belongs to the coordinated effects. Concentration should be assessed by analyzing market entry and expansion possibilities, evaluating benefits stemming from increased concentration (the existence of which should be substantiated), and the financial conditions of the enterprises that are part of the concentration. Concentration is acceptable if it can be documented that an enterprise that is part

EU	UK	US	Georgia (EU + 250)
Market is non - concentrated when HHI:	<1000 Non-concentrated	<1500 Non-concentrated	<1250
<1000	> 2000 Highly concentrated	HHI 1500 – 2000 Moderately concentrated	[250 – 2250 and HHI delta < 250]
1000 – 2000 and HHI delta < 250		>2500 Highly concentrated	>2250 and HHI delta < 150, unless additional factors are present, such as:
> 2000 and HHI delta < 150		HHI delta > Market power will grow	<ul style="list-style-type: none"> • A merger party is an innovator which cannot be reflected in the price • Pre – merger market share of a party is over 50%
Unless additional factors are present, such as:			
<ul style="list-style-type: none"> • A merger party is an innovator which cannot be reflected in the price • Pre-merger market share of a party equals or is above 50%. 			

levels in countries:

Concentration estimation is conducted through two stages of substitutability analysis, composed by

62 See: <https://www.maalot.co.il/Publications/SR20190807111349.pdf>.

63 See: <https://www.fca.org.uk/publication/corporate/our-approach-competition-final-report-feedback-statement.pdf>

64 See: <https://ojs.journals.cz/index.php/CBUIC/article/download/966/pdf/0>.

of the concentration will likely exit the market when faced with significant financial difficulties.

It is important to mention that the Competition Agency has established a set of rules⁶⁵ regulating the submission of a concentration notice, its review and the relevant methodological guidelines for

65 For details, please see: <https://matsne.gov.ge/document/view/2523208?publication=0>

market analysis.⁶⁶ The agency rules stipulate similar standards that are enshrined in the EU merger law, while in some cases the approaches are identical.⁶⁷

The strategy of the NBG with regard to competition

It is worth mentioning that the NBG's legislation already contains significant requirements that prohibit unlawful restrictions on free and fair competition (see Article 22 of the Law of Georgia on "Commercial Bank Activities") – this matter is also regulated by the Code of Ethics⁶⁸ and the Standards of Professional Conduct for Commercial Banks that were both adopted in 2018.

Commercial banks fully fall under the scope of the requirements and standards set by the Law of Georgia on "Competition", therefore any violation of the above-mentioned standards and requirements is defined as providing the legal basis for using appropriate supervisory measures or applying sanctions. These legal amendments were prepared by the NBG and adopted by the Parliament of Georgia in December 2019.⁶⁹ This underlines the high importance of commercial banks, including their administrators and shareholders, abiding to competition requirements and standards.

The NBG has already defined a list of documents to be presented if a consolidation of a commercial bank occurs. The NBG continues to review the adoption of guidebooks and standards based on international best practice to ensure a deeper assessment of market concentration. This approach corresponds to the legislative amendments of the Law of Georgia on "Competition". According to these amendments, subordinate normative acts issued by the competition agency, based on the law on regulated fields of economics (including the banking sector), are defined by the relevant legislation. If the current legislative amendments are adopted by Parliament, the NBG will be entitled to regulate and assess market concentration in-depth.

In addition, the NBG intensively works to develop capital markets, which will be a crucial element for promoting competition.

The NBG also works on the implementation of requirements of the Payment Services Directive (PSD2)⁷⁰, which also covers the definition of the open banking model. This will allow various financial entities and fintech companies to access consumer

⁶⁶ For details, please see: <https://matsne.gov.ge/ka/document/view/2523226?publication=0>

⁶⁷ See: <https://ec.europa.eu/competition/mergers/legislation/legislation.html>

⁶⁸ For more details, please see: https://www.nbg.gov.ge/uploads/legalacts/fts/sabanko/etikis_principibi.pdf

⁶⁹ For more details, please see: <https://matsne.gov.ge/ka/document/view/4753713?publication=0>

⁷⁰ For more details, please see: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2366>

databases and use that information to offer different types of products.

Likewise, the NBG reviews promotional efforts to bolster healthy new entities entering the market. This is in line with the worldwide trend to promote the fintech market and financial innovations, which will also boost fair competition. Several other developments need to be mentioned:

- The creation of an Office of Financial Innovations⁷¹ by the NBG that will be used to communicate between the financial innovator community and the NBG. This office offers fintech startups and technology companies interested in the financial sector effortless feedback on supervisory topics under the NBG's mandate. The office aims to promote responsible innovations in the financial sector and aid fintech organizations/startups to better understand the NBG's regulations and approaches concerning its supervisory mandate.
- The NBG is developing a regulatory laboratory (sandbox)⁷² framework, which will allow, under the NBG, regulated members of the financial sector to test new innovative products and services in real-time under the supervision of authorized bodies. The main objective of this is to check the compatibility of new innovative services and products with the supervisory requirements of NBG; to reveal the urgency for new prudential regulations; and to implement and promote new innovative approaches on the market. This will also promote free and fair competition. The NBG made the draft rule concerning the creation and implementation of the regulatory laboratory (sandbox) publicly available in February 2020.⁷³
- The NBG also considers the creation of a framework concerning the authorization of digital banks. According to fundamental considerations, the NBG regards a business model as a digital bank if it implements new and innovative financial technologies on the local market and mainly uses digital types of services that promote growth of financial inclusion. New members on the market, like digital banks, promote diversity, the development of digital ecosystems and innovative business models, and increase fair competition on the local market.

At the same time, developing digital ecosystems creates room for approaches that keep a balance between revealing the whole potential of ecosystems

⁷¹ For more details, please see: <https://www.nbg.gov.ge/index.php?m=742>

⁷² For more details, please see: https://www.nbg.gov.ge/uploads/publications/annualreport/2019/annual_2018.pdf, pp.84-85

⁷³ For more details, please see: <https://www.nbg.gov.ge/index.php?m=340&newsid=3860>

and the restriction of non-fair competition. According to research, commercial banks are intensively considering entering digital ecosystem markets and plan to create additional assets as a result.⁷⁴ To meet this challenge, the NBG is intensively considering an expansion of the principles of open banking and the implementation of banking service providers within core banking services. This is still a new approach and it demands a new understanding of supervisory functions, including banking group and consolidated supervisory principles. A few steps have been taken and the NBG is consistently developing this approach.

The National Bank actively continues to work on the consolidated supervision framework, which will be finalized by the end of 2020. As a result of amendments made to the Organic Law on the National Bank of Georgia at the end of 2017, the National Bank of Georgia has been empowered with a mandate to execute supervision of banking groups (so-called consolidated supervision).

4.2 CORPORATE GOVERNANCE AND GROUP STRUCTURE RISK

Assessment of the corporate governance and group structure risk of commercial banks is part of the National Bank of Georgia's General Risk Assessment Program (GRAPE). Assessment of group structure risk involves the evaluation of risks related to banks' ownership structures, transactions with members of the banking group as well as banks' investments and investment activities. Within the framework of the assessment, the National Bank is actively involved in the monitoring of developments in the home countries of the international banking groups represented in Georgia and in the evaluation of significant shareholders.

As of 31 December 2019, 15 commercial banks were operating on the Georgian banking sector. By the end of 2019, 88.3% of bank assets and 86.6% of stockholder equity was held by non-resident beneficial owners.

In 2018, the National Bank of Georgia approved the "Corporate Governance Code for Commercial Banks" and ensured that banks complied with its requirements throughout 2019. Among the requirements of the code, particular importance is directed towards the composition of a bank's supervisory board and its committees, ensuring the inclusion of independent members, and taking into account gender balance. Furthermore, the National Bank has elaborated policies and procedures regarding the remuneration of banks' employees.

⁷⁴ See: <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/six-digital-growth-strategies-for-banks>

As part of the obligations stipulated by the EU-Georgia Association Agreement, the National Bank, in cooperation with the State Insurance Supervision Service, continues to work on elaboration and implementation of a supplementary supervision framework for financial conglomerates, with a focus on approximating the legislation to the agreed acts and international legal instruments within a specific timeframe. This supervisory framework implies supplementary prudential supervision with respect to capital adequacy, risk concentration, intra-group transactions, internal control mechanisms and risk management processes for entities within financial conglomerates.

The National Bank actively continues to work on the consolidated supervision framework, which will be finalized by the end of 2020. As a result of amendments made to the Organic Law on the National Bank of Georgia at the end of 2017, the National Bank of Georgia has been empowered with a mandate to execute supervision of banking groups (so-called consolidated supervision).

4.3 CAPITAL ADEQUACY

At the end of 2019, the Georgian banking system continued to maintain an adequate level of capital under the Basel III capital adequacy framework.

On 31 December 2018, a systemic buffer was activated that was set up on total regulatory, Tier 1, and Common Equity Tier (CET) 1 capital. In December 2019, the requirements of the systemic buffer for systematically important banks was activated according to a predetermined schedule (see Table N 4.1).

Table N 4.1 Systemic buffer phase-in dates

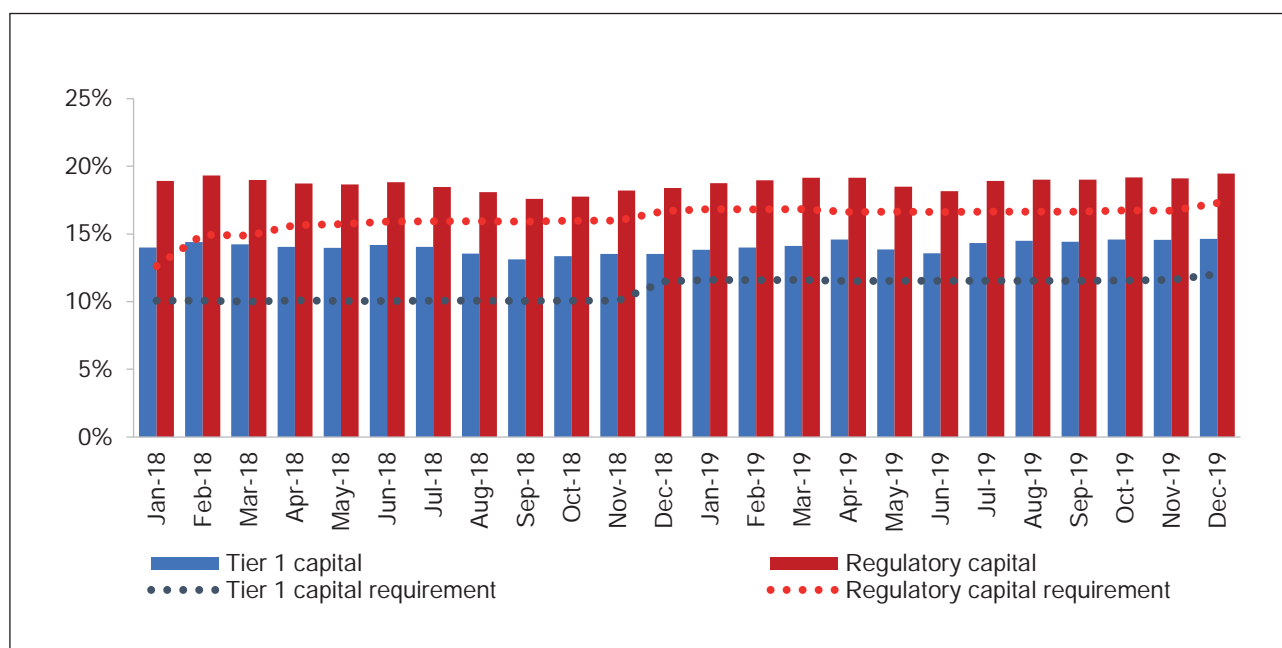
Bank	2017	2018	2019	2020	2021
JSC „TBC Bank“	0.0%	1.0%	1.5%	2.0%	2.5%
JSC „Bank of Georgia“	0.0%	1.0%	1.5%	2.0%	2.5%
JSC „Liberty Bank“	0.0%	0.6%	0.9%	1.2%	1.5%

At the end of 2019, under the capital adequacy framework the CET 1 ratio was 14.62% and total regulatory capital ratio was 19.45%. Those ratios exceeded their minimum requirements (Pillar 1 minimum requirements plus combined buffer and Pillar 3 requirements) by 2.59 pp and 2.15 pp respectively.

The leverage ratio (capital over assets) was also high. As of 31 December 2019, the leverage ratio amounted to 11.68% and exceeded its minimum requirement by 6.68 pp.

In addition, the capital growth resources related to shareholders' strengths and profitability are rated positively by the National Bank of Georgia.

Diagram N 4.1 Basel III capital ratios



Source: National Bank of Georgia

During 2019, banks have been calculating Pillar 2 buffers. The Pillar 2 framework determines capital buffer requirements for credit portfolio concentration risk (including name concentration and sectoral concentration risks), the unhedged currency induced credit risk buffer, the net stress test buffer determined through supervisory stress tests and the net GRAPE buffer determined by the National Bank of Georgia through an analysis of the results of an assessment of the risk categories under the GRAPE (General Risk Assessment Process) framework.

It should be noted that the capital buffers imposed under the Pillar 2 requirements should be met with

the same proportion of regulatory capital as in the minimum requirements (CET 1 capital of 4.5%, Tier 1 capital of 6%, and total regulatory capital of 8%). Accordingly, the required capital under Pillar 2 should be met with CET 1 capital of 56% and Tier 1 capital of 75%. Commercial banks have been given a relevant timeframe to comply with these requirements. In 2019, according to the predetermined phase-in dates, banks were required to comply with the requirements found in Table N 4.2. However, as a result of the supervisory actions related to the COVID-19 pandemic, the National Bank of Georgia temporarily suspended the rise in requirements for CET 1 and additional Tier 1 under the Pillar 2 framework. Accordingly, concentration and net GRAPE buffers are imposed 100% on supervisory capital, 20% on Tier 1 and 15% on CET 1.

Table N 4.2 Concentration and net GRAPE buffer phase-in dates before COVID-19 related supervisory actions

Concentration (name and sectoral) and net GRAPE buffers	Until 30/12/2018	31/12/2018	31/03/2020	31/03/2021	After 31/03/2022
CET 1	0%	15%	30%	45%	56%
Tier 1	0%	20%	40%	60%	75%
Total regulatory capital	100%	100%	100%	100%	100%

In accordance with the changes in capital adequacy, when a commercial bank cannot meet total regulatory requirements, it is first assumed that the combined capital buffer has been breached. According to the changes in the “Regulation on Capital Adequacy Requirements”, when the combined buffer is breached,

a bank is restricted in the distribution of capital, including the distribution of dividends.

From October 2020, a net stress test buffer will be implemented based on supervisory stress testing. During 2019, the National Bank of Georgia actively

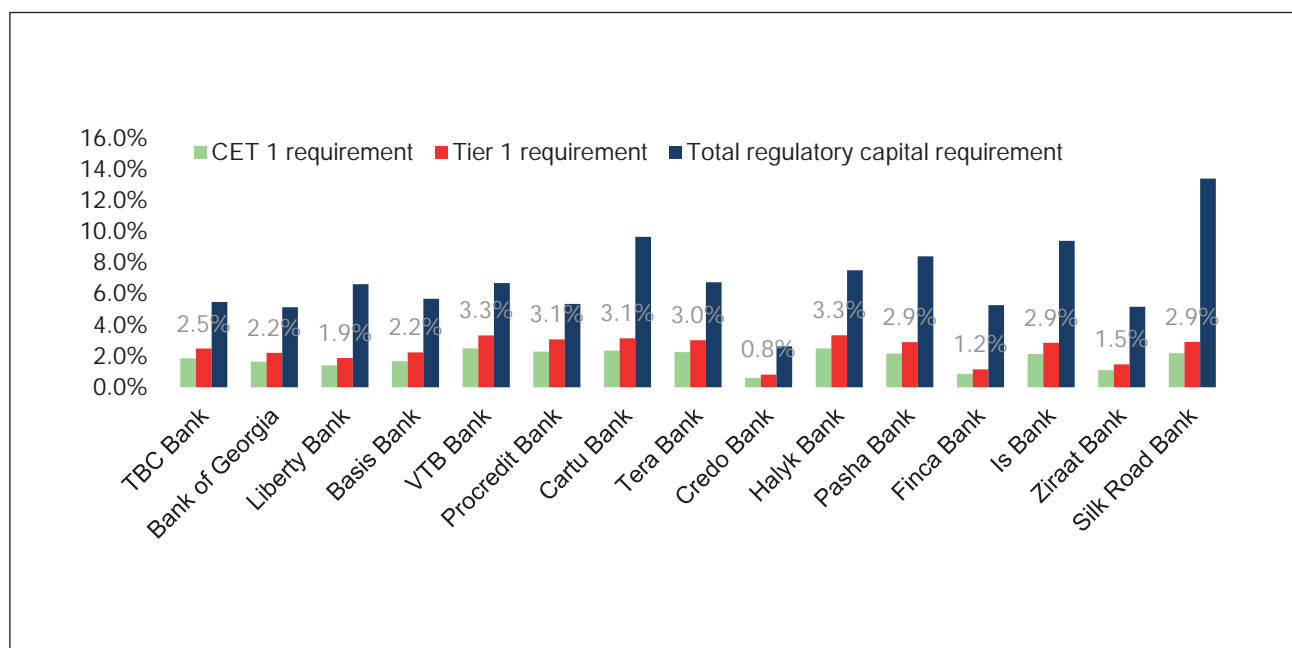
worked on the calibration of this buffer. In addition, during 2020, the NBG plans to formalize and standardize the stress testing framework in cooperation with commercial banks in order to fully integrate the stress test buffer in the Pillar 2 requirements. Enterprise-level stress tests help assess the effect of systemic and sectoral economic shocks and idiosyncratic events on banks and help determine relevant capital requirements. With the integration of the net stress test buffer in the Pillar 2 requirements, it is important to avoid double capital requirements. Accordingly, the stress test buffer requires capital in an amount that exceeds the sum of the conservation and countercyclical buffers.

During 2018, the net GRAPE buffer became effective. This is determined within the risk-based supervision framework that aims to assess and evaluate the risk profile of each commercial bank. In 2019, the individual GRAPE buffer became effective, which ranges between 1.4% and 9.7% of risk-weighted assets.

countercyclical buffer increases when credit activity is increased (the credit-to-GDP gap is the most common variable to assess credit growth tendencies) and decreases when there is stagnation or crisis in the economy to allow banks to continue to operate normally under severe conditions.

The Basel Committee on Banking Supervision (BCBS) has been working to develop a sectoral countercyclical buffer since 2017. The sectoral countercyclical capital buffer (SCCyB) may be a useful complement to both the Basel III CCyB and existing targeted instruments in the macroprudential toolkit. While a bank's additional capital requirements following the activation of the CCyB depend on its total Risk-Weighted Assets RWA, the SCCyB is a more targeted measure: it allows national authorities to temporarily impose additional capital requirements that directly address the build-up of risks in a specific sector. As such, the impact of the SCCyB depends on sectoral credit RWA and, hence, on how exposed a bank is to the targeted credit segment. For example,

Diagram N 4.2 Pillar 2 requirements for commercial banks as of 31 December 2019



Box 9 Future changes in the capital adequacy framework

SECTORAL COUNTERCYCLICAL BUFFER

Within the Basel III capital adequacy framework, banks are obliged to comply with different capital buffers, one of which is the countercyclical capital buffer. Based on the NBG's decision, this buffer is currently set to 0%. The countercyclical buffer acts as a protective mechanism in periods when there is excessive lending in the economy, which can cause systemic risks and other difficulties in the financial system. The

a sectoral CCyB could be set on residential real estate loans if we notice that risks are increased in that particular segment.

Analyses carried out by the Basel Committee's working groups consider sectoral macroprudential tools to be a useful complement to the existing macroprudential toolkit when systemic risk is confined to specific credit segments. Historical episodes of financial crises show that imbalances on credit and asset markets are often confined to a specific market segment that can give rise to systemic risks. In addition,

corporate and household credit cycles are often not well synchronized, indicating the benefits of having separate tools for addressing these segments. In an environment of confined imbalances, targeted tools are (i) more effective as they help build up resilience early and in a targeted manner; (ii) more efficient in terms of minimizing unintended side effects (i.e. they have a better cost-effectiveness ratio); and (iii) easier to execute than broader-based tools.

Indeed, several strands of literature and examples of different countries suggest that it would be useful to analyze the total credit-to-GDP ratio in a disaggregated manner. Observations of about forty developed and developing countries over the period 1990–2006 suggest that household credit is statistically significant and economically important in affecting the likelihood of a banking crisis.⁷⁵ Business credit is also found to matter, but the effect is weaker and less robust. Further research, in which authors used OECD countries' data over the period 1975–2014, concludes that there are significant gains in predicting banking crises by using the total credit-to-GDP ratio in a disaggregated manner.⁷⁶

Because of these reasons the BCBS notes that sectoral countercyclical buffers should be set to banks, because the buffer will better eliminate sectoral imbalances and give timely signals to the banks about various sectoral risks.⁷⁷ Besides, a sectoral CCyB could indeed be a useful complement to alternative sectoral macroprudential measures, including “borrower-based” measures such as LTV and PTI.

In 2020, the National Bank of Georgia plans to introduce a sectoral countercyclical buffer, which will be considered in the requirements of Pillar 1 and will be added to the combined buffer requirements. The characteristics of this buffer will be similar to the countercyclical buffer, and therefore the sectoral countercyclical buffer will be deducted from the net stress-test buffer calculation.

STANDARDIZED MEASUREMENT APPROACH (SMA) FOR ESTIMATION OF OPERATIONAL RISK CAPITAL

In 2017, within the new Basel III framework, the BCBS introduced the Standardized Measurement Approach (SMA) for estimation of operational risk capital. This

75 Büyükkarabacak, B. and Valev, N.T. (2010): “The role of household and business credit in banking crises”.

76 Anundsen, A. K., Gerdrup, K., Hansen, F. and Kragh-Sørensen, K. (2016): “Bubbles and crises: The role of house prices and credit”; Basel 2018, “Towards a sectoral application of the countercyclical capital buffer: A literature review”

77 Basel 2018, “Towards a sectoral application of the countercyclical capital buffer: A literature review”

will fully replace existing operational risk methodologies such as the Basic Indicator Approach (BIA), the Standardized Approach (SA) and the Advanced Measurement Approach (AMA).

The main reason behind developing the SMA approach was the inherent complexity of the AMA and the lack of comparability arising from a wide range of internal modelling practices. Hence, operational risk capital was different even when two similar banks were compared. Meanwhile, BIA and SA are simple and do not include historical operational losses in their calculations, which is insufficient for assessing operational risk reliably.

The Standardized Measurement Approach is a combination of a simple standardized measure of operational risk and bank-specific loss data which provides a sufficiently risk sensitive measure of operational risk. It is expected that the SMA will promote comparability of risk-based capital measures and reduce the complexity of estimation.

The SMA includes a business indicator (BI) and internal operational loss component (LC). The business indicator is similar to the Basic Indicator Approach, but is enhanced and has certain advantages. Although the BI is stable and comparable across banks, business volume is only one factor that influences exposure to operational risk. Therefore, significant differences in the risk profile of medium to large banks cannot be fully accounted for by an approach that relies only on financial statement proxies. For that reason, the committee supports the introduction of historical loss experience as a relevant risk indicator of future operational risk loss exposure. The introduction of the loss component into the framework not only enhances the SMA's risk sensitivity, but also provides incentives for banks to improve operational risk management. Banks with more effective risk management and low operational risk losses will be required to hold a comparatively lower operational risk regulatory capital charge. Calculations for operational risk capital under SMA are given in Table N 4.3. In 2020, the National Bank of Georgia will actively work on the integration of the SMA into the Georgian banking system. The NBG plans to communicate with commercial banks and conduct a quantitative study. From 2021, the SMA will fully replace the Business Indicator Approach.

In addition, the National Bank of Georgia continues to develop its stress testing framework. It is expected that the scenarios employed within the framework will include all the risks and relevant capital requirements of Pillar 2. As a result, the net GRAPE buffer can be

Table N 4.3 Calculation of operational risk capital under SMA

		Business Indicator Component (BIC)		Internal Loss Multiplier (ILM)													
		Business Indicator (BI)		A bank's internal operational risk loss experience affects the calculation of operational risk capital													
Operational Risk Capital	=	Interest, Leases and Dividend Component (ILDC) = Min [Abs (Interest Income - Interest Expense); 2.25% * Interest Earning Assets] + Dividend Income	Marginal BI Coefficients (α) (α) is multiplied by BI based on three buckets to derive BIC	Loss Component (LC) = 15 * average annual operational risk losses incurred over the past ten years													
		+ Service Component (SC) = Max [Other Operating Income; Other Operating Expense] + Max [Fee Income; Fee Expense] This solution still enhances the risk sensitivity of the SMA in respect to the current simple approaches because the "Fee" and "Other Operating" components are not nested.		<table border="1"> <thead> <tr> <th>BI bucket</th> <th>BI range</th> <th>Marginal BI Coefficient (α)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>First €1 billion</td> <td>0.12</td> </tr> <tr> <td>2</td> <td>Next €1 billion to €30 billion</td> <td>0.15</td> </tr> <tr> <td>3</td> <td>Above €30 billion</td> <td>0.18</td> </tr> </tbody> </table>	BI bucket	BI range	Marginal BI Coefficient (α)	1	First €1 billion	0.12	2	Next €1 billion to €30 billion	0.15	3	Above €30 billion	0.18	Internal Loss Multiplier = $ILM = Ln \left(\exp(1) - 1 + \left(\frac{LC}{BIC} \right)^{1.8} \right)$
		BI bucket		BI range	Marginal BI Coefficient (α)												
1	First €1 billion	0.12															
2	Next €1 billion to €30 billion	0.15															
3	Above €30 billion	0.18															
Financial Component (FC) = Abs (Net P&L Trading Book) + Abs (Net P&L Banking Book)	<table border="1"> <tbody> <tr> <td>LC < BIC</td> <td>ILM < 1, lower operational risk capital required</td> </tr> <tr> <td>LC = BIC</td> <td>ILM = 1, operational risk capital is equal to BIC</td> </tr> <tr> <td>LC > BIC</td> <td>ILM > 1, higher operational risk capital required as internal losses are incorporated into the calculation methodology</td> </tr> </tbody> </table>	LC < BIC	ILM < 1, lower operational risk capital required	LC = BIC	ILM = 1, operational risk capital is equal to BIC	LC > BIC	ILM > 1, higher operational risk capital required as internal losses are incorporated into the calculation methodology										
LC < BIC	ILM < 1, lower operational risk capital required																
LC = BIC	ILM = 1, operational risk capital is equal to BIC																
LC > BIC	ILM > 1, higher operational risk capital required as internal losses are incorporated into the calculation methodology																

equal to zero after implementing the net stress test buffer.

In addition, during 2020, the National Bank of Georgia will continue to align its capital adequacy standards with the European Union's regulations.

4.4 FINANCIAL REPORTING AND TRANSPARENCY

Enhancing the transparency of the financial sector is one of the main objectives of the National Bank of Georgia. Enhancing transparency reduces information asymmetry, increases trust in the financial sector and protects the rights of investors and users. The NBG continues to implement relevant reforms towards that end.

Financial reports of commercial banks and other participants of the financial sector are one of the most important components for the transparency of the financial industry. These reports are prepared in compliance with International Financial Reporting Standards (IFRS), which are periodically updated. For the purpose of ensuring financial sector transparency and for reducing the gap between the explanations given in the EU Directive "Banks and other financial institutions yearly individual and consolidated financial statements" 86/635/EEC, of 26 December 2018, the regulation on "Commercial banks consolidated financial statements mandatory audit checks and disclosing information in explanatory notes" was adopted on 1 January 2019. This regulation defined the obligations of commercial banks and audit firms, the minimum requirements for appointing audit firms and rules for disclosures in audited financial statements.

The National Bank of Georgia monitors the implementation of these requirements in practice by commercial banks.

In addition to the financial statements prepared under the IFRS, banks are required to publish quarterly and annual Pillar 3 reports in accordance with "Regulation on Disclosure Requirements for Commercial Banks within Pillar III". These reports provide key information to market participants about the main risks banks face as well as their supervisory capital components, corporate governance and risk management practices. The requirements of the regulation are in compliance with principles of the Pillar III documentation issued by the Basel Committee on Banking Supervision.

Fostering the implementation of periodic updates in IFRS, which mainly aim at enhancing transparency and increasing comparison in global terms, is one of the main components for ensuring the transparency of the financial sector. Consequently, the National Bank of Georgia pays special attention to any renewals or amendments made to IFRS. In 2019, the standards that were most actively discussed were the newest standards, which concerned leasing (IFRS 16) and financial instruments (IFRS 9).

According to IFRS 16, when leasing a property, the lessee has to recognize the assets and liabilities of leases in the statement of their financial position (leases with a right to purchase or without that right). For the purpose of reflecting IFRS 16 in supervisory reports, the National Bank of Georgia created relevant accounts in collaboration with commercial banks.

IFRS 9 became effective from 1 January 2018. During 2019, the NBG continued to monitor accounting treatments of this standard by financial institutes and analyzed the effects of IFRS 9 implementation on their financial reports.

IFRS 9 means recognition of credit losses expected to be incurred in the future. This is based on forward-looking information where expectations related to macroeconomic factors must be also considered. Obtaining such information may be too costly for market participants on their own. The NBG has extensive experience in undertaking macroeconomic research and preparing forecasts, as well as having access to the necessary statistical information for doing so. For this purpose, the NBG periodically publishes macroeconomic and financial forecasts and risk scenarios to help facilitate the implementation of IFRS 9. The objective of doing so is to ensure consistency, transparency and efficiency when different financial institutions are preparing their financial statements.

The National Bank of Georgia is actively working on transitioning commercial banks to IFRS for supervisory purposes. Close cooperation with the sector is important for the successful implementation of the project. Accordingly, the NBG plans to form a joint working group consisting of representatives from commercial banks and the NBG. With the help of the working group, the main work on the project for transitioning commercial banks' reporting to IFRS will be carried out in 2020. First of all, this means bringing charts of accounts into full compliance with the IFRS.

The project for transitioning commercial banks to the IFRS also includes the transfer of commercial banks' supervisory reporting forms to the European unified and IFRS-compliant reporting form (FINREP). In parallel with the transition to these reports, the NBG plans to retain certain supervisory filters that are currently in place to continue exercising risk-based supervision without interruption. It should be noted that the FINREP format is based on consolidated supervision, while the current supervisory reporting takes place on individual entities. Applying the current prudential filters to the consolidated figures is thus an important task for ensuring the efficiency of the whole process. This is an area that the NBG is actively working on in conjunction with international experts and consultants.

Commercial banks were required to submit their first drafts of FINREP forms to the NBG during 2018. From 2019, commercial banks have been submitting FINREP forms to the NBG that are filled in at the individual and consolidated levels, in parallel with the existing supervisory forms. Currently, banks are re-

porting FINREP forms on a quarterly basis, although it is planned to transfer them to a monthly frequency.

The NBG is actively engaged in cooperation with the Service for Accounting, Reporting and Audit Supervision (SARAS) on issues related to the quality of financial statements and audits. The activities of SARAS include ensuring the reform of accounting and financial reporting and auditing legislation in the country to gradually bring it closer to EU legislation. The NBG participates in consultations with professional organizations of accountants and auditors, as well as in the development of new legislation related to the fields of accounting, reporting and auditing.

In order to improve the efficiency of the IFRS transition process, increase transparency and improve the quality of audits, the NBG plans to deepen cooperation with the audit firms conducting mandatory audits of commercial banks. For this purpose, in 2020, the NBG will develop a guideline for cooperation with audit firms, which will be based on the relevant document of the European Banking Authority (EBA) (see Box 10).

It should be noted that in order to facilitate the conduct of independent audits of commercial banks and to share the practice introduced by most European countries, the NBG is working on mandatory rotation requirements of audit firms for commercial banks. In the process of working on this policy, the NBG will take into account the views of audit firms, representatives of commercial banks and international experience.

Box 10 Guidelines on communication with external auditors

European Parliament and Commission Regulation (EU) No. 537/20141 "On specific requirements regarding statutory audit of public-interest entities" (the Audit Regulation), issued on 6 April 2014, includes the requirement that an effective dialogue shall be established between the competent authorities supervising credit institutions, on the one hand, and the statutory auditor(s) and audit firm(s) carrying out the statutory audit of those institutions, on the other. This communication shall enhance the supervisory process and aid the financial sector's healthy functioning and resilience.

In order to facilitate these tasks, the European Banking Authority (EBA) issued a guideline on communication between competent authorities and auditors. The guidelines include the general framework, principles and main elements of effective communication, and are divided into two subparts:

1. Communication related to an individual credit in-

stitution, in which institution-specific information should be shared.

2. Communication related to the credit institution's industry, in which industry-specific information relevant to statutory audits of more than one credit institution should be shared.

The guidelines should be applied in accordance with the proportionality principle. Communication between competent authorities and auditors (the scope of information shared, form of communication, participants in the communication, the frequency and timing of communication, and communication with auditors collectively) should be commensurate with the credit institution's size and internal organization, and the nature, scope and complexity of its activities in order to efficiently meet the objectives of these guidelines.

GENERAL FRAMEWORK OF COMMUNICATION

In Accordance with EBA general framework

1. Competent authorities and auditors are both responsible for establishing effective communication between each other.
2. Communication established between competent authorities and auditors should be open and constructive, as well as being adaptable to unexpected future developments.
3. Competent authorities and auditors should establish adequate processes and be aware of them in order to build and ensure effective communication.
4. Competent authorities and auditors should contribute to developing a mutual understanding of their respective roles and responsibilities and contribute to the proper functioning of those roles.
5. The parties should discharge their respective responsibilities and one party should not use the work of the other as a substitute for its own work.

The principles of communication presented in the guidelines are applicable to the following topics:

- Scope of the information shared.
- Form of communication.
- Participants in the communication.
- Frequency and timing of communications.

COMMUNICATION PRINCIPLES

Principle 1: The information shared should be relevant to the tasks of both parties considering the materiality of the information.

Principle 2: Competent authorities should request that auditors share information on any issues that are relevant to the supervision of the credit institution.

Principle 3: Competent authorities should share infor-

mation with auditors on issues which are relevant to the statutory audit of the credit institution.

Principle 4: Effective communication between competent authorities and auditors should be established through appropriate communication channels.

Principle 5: The participants in the communication should include knowledgeable, informed and empowered individuals from both parties.

Principle 6: Communication between competent authorities and auditors should be as frequent as necessary to ensure the timely sharing of relevant information.

Principle 7: Communication between competent authorities and auditors collectively should be as frequent as necessary to ensure timely sharing of information on issues that are relevant to the supervisory tasks and the statutory audit of credit institutions.

NATIONAL BANK OF GEORGIA STRATEGY

The National Bank of Georgia is in the process of developing guidelines on the communication between competent authorities and auditors based on the EBA publication. The goal of the project is to establish formal communication standards with the statutory auditors undertaking audits of commercial banks, which will enhance the supervisory process. A draft guideline is planned to be distributed to stakeholders for comments in 2020. Following an analysis of their feedback, the NBG will issue final guidelines on communication with external auditors.

4.5 CREDIT RISK

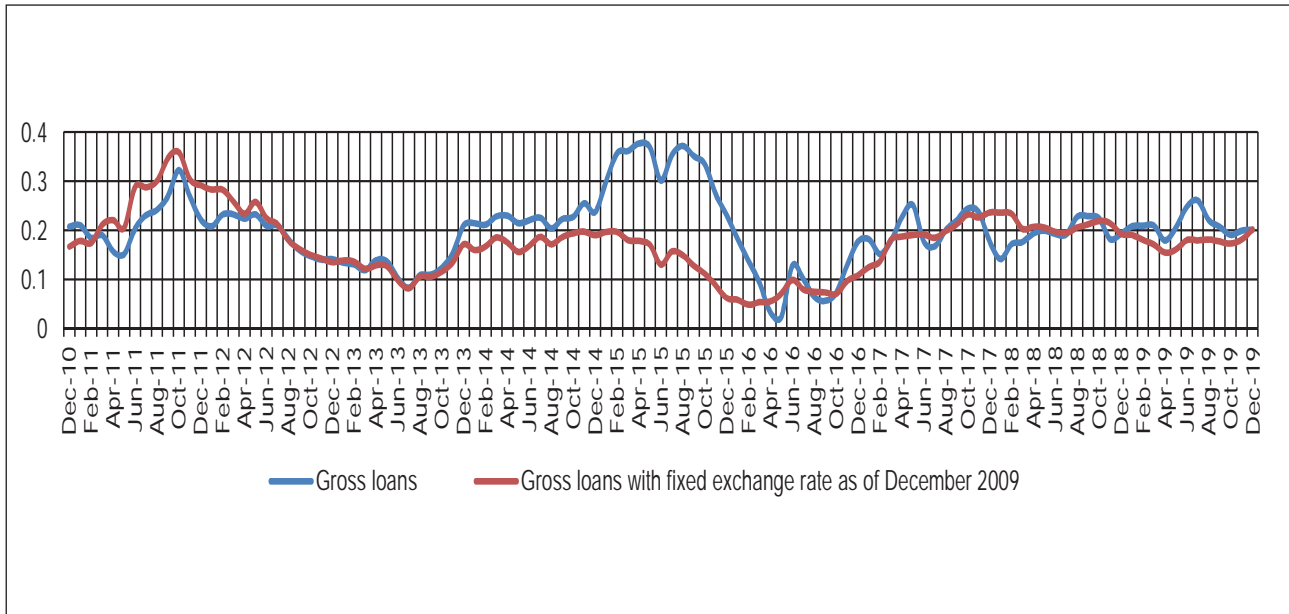
The total loan portfolio of the banking system reached 32 billion GEL at the end of 2019 – an increase of 16.3%, excluding the foreign exchange rate effect.

During 2019, the composition of the loan portfolio (excluding interbank loans) changed slightly, reflecting a decrease in the share of the retail segment and an increase in the share of corporate loans.

The main reason for the decline in the retail segment was the regulation that entered into force on 1 January 2019, according to which the disbursement of loans without conducting solvency analysis was limited. This has led to a significant reduction of the high-risk retail portfolio.

Meanwhile, the growth in the activity of commercial banks in financing business loans, which was accompanied by a decrease in interest rates on loans issued in foreign currency, led to a significant increase in corporate loans.

Diagram N 4.3 YoY percentage change in gross loans



Source: National Bank of Georgia

Table N 4.4 Composition of the loan portfolio (excluding interbank loans) by segment (adjusted for exchange rate effect, the exchange rate as of the end of 2018)

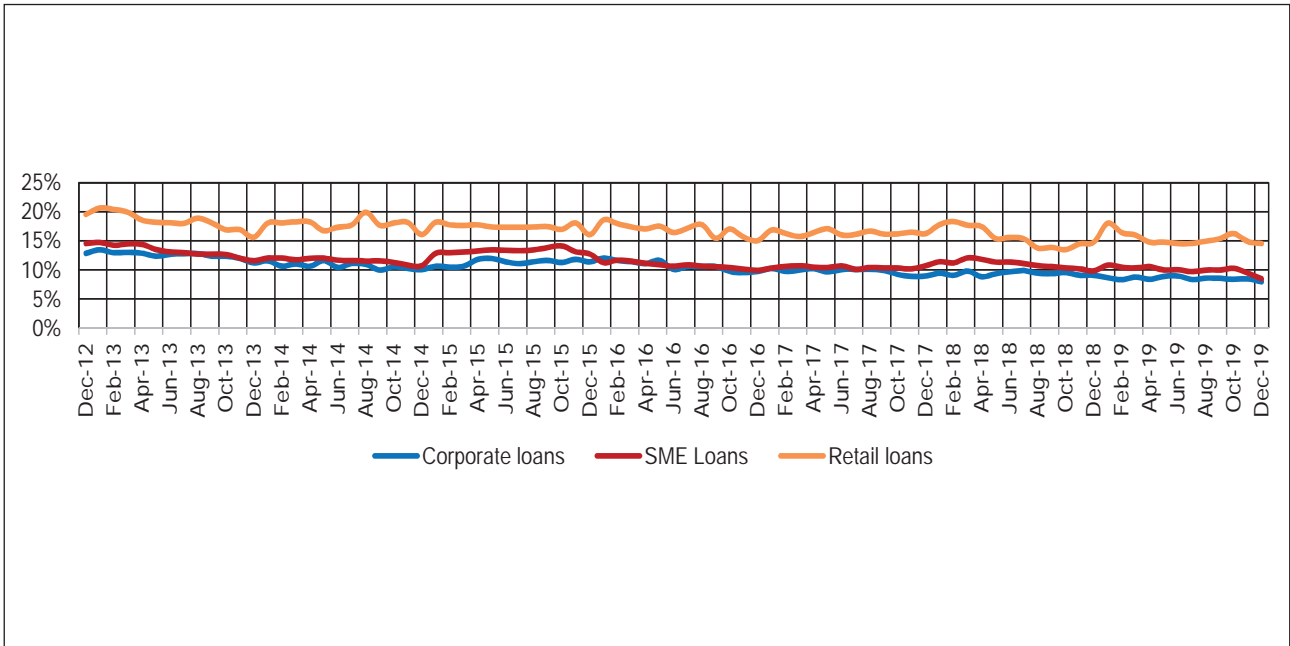
	Dec-18		Dec-19		YoY change %
	LP (mIn GEL)	%	LP (mIn GEL)	%	
Corporate	8,067	30%	10,492	34%	30.1%
SME	6,620	25%	7,859	25%	18.7%
Retail	11,910	45%	12,541	41%	5.3%
Total:	26,597	100%	30,892	100%	16.1%

Source: National Bank of Georgia

A few different types of reclassifications occurred during the year, including technical reclassifications, that changed the nominal growth rates of the portfolio segments. According to the NBG's estimations, during 2019 the retail, SME and corporate portfolios increased by 5.4%, 24.6% and 25.1% respectively (with the assumption of a fixed currency rate and without the above-mentioned corrections). There was also an increase in the portfolio of corporate bonds bought by commercial banks. According to the NBG's estimations, the increase in the corporate loan portfolio was 26.1%.

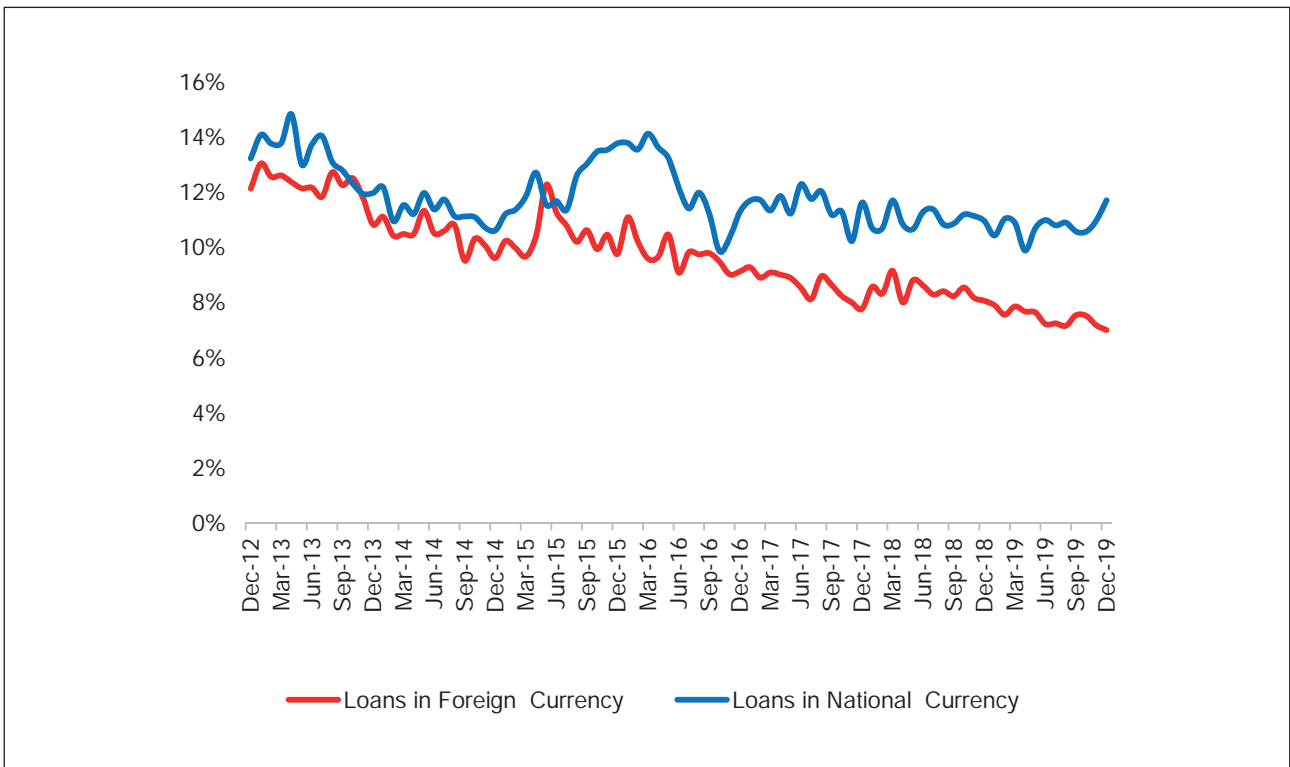
In 2019, compared to 2018, there was a decrease in interest rates on corporate, small- and medium-sized loans, although the trend of declining interest rates was mainly observed in loans issued in foreign currency. Interest rates were also declining for the retail segment. Through the beginning of the year this decline was driven by local currency loans, but in the last quarter the decline was a result of a reduction of interest rates on foreign currency loans – although the increase in monetary policy since the beginning of September halted further interest rate cuts for retail loans.

Diagram N 4.4 Monthly weighted average interest rates on loans per segment



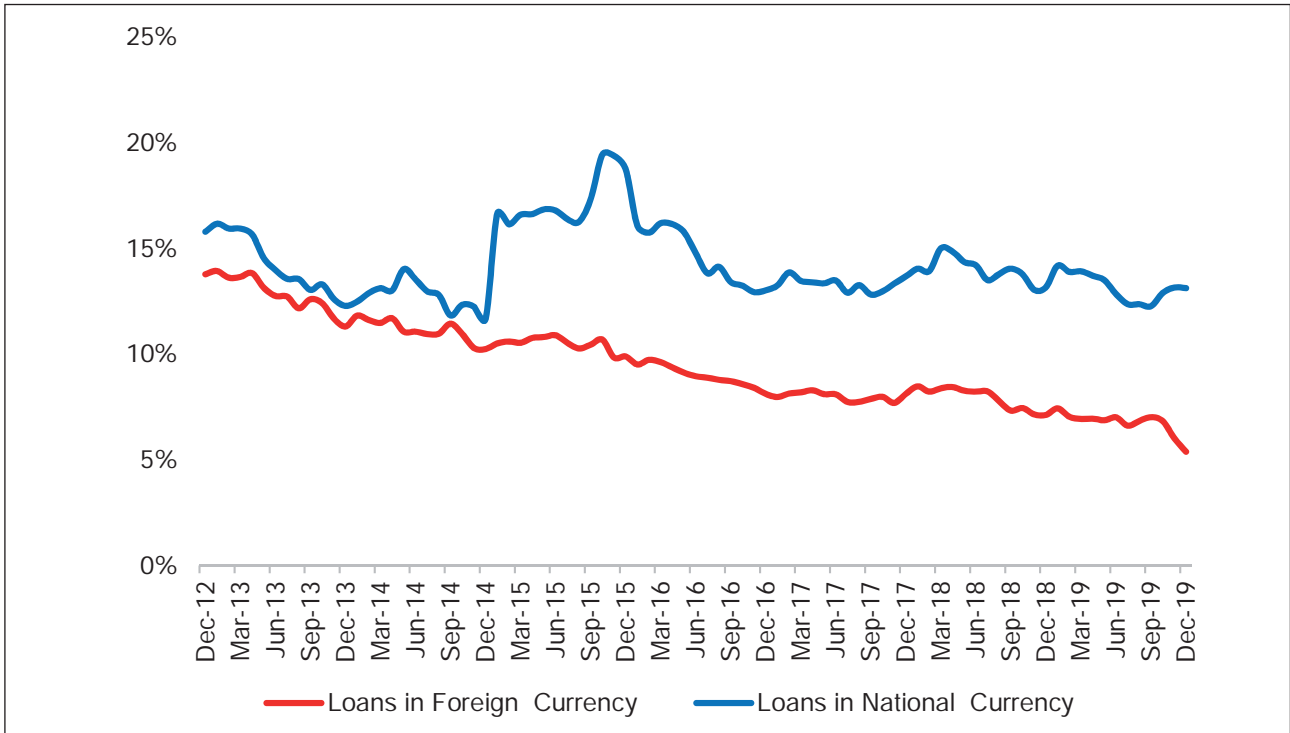
Source: National Bank of Georgia

Diagram N 4.5 Monthly weighted average interest rates on loans for the corporate segment



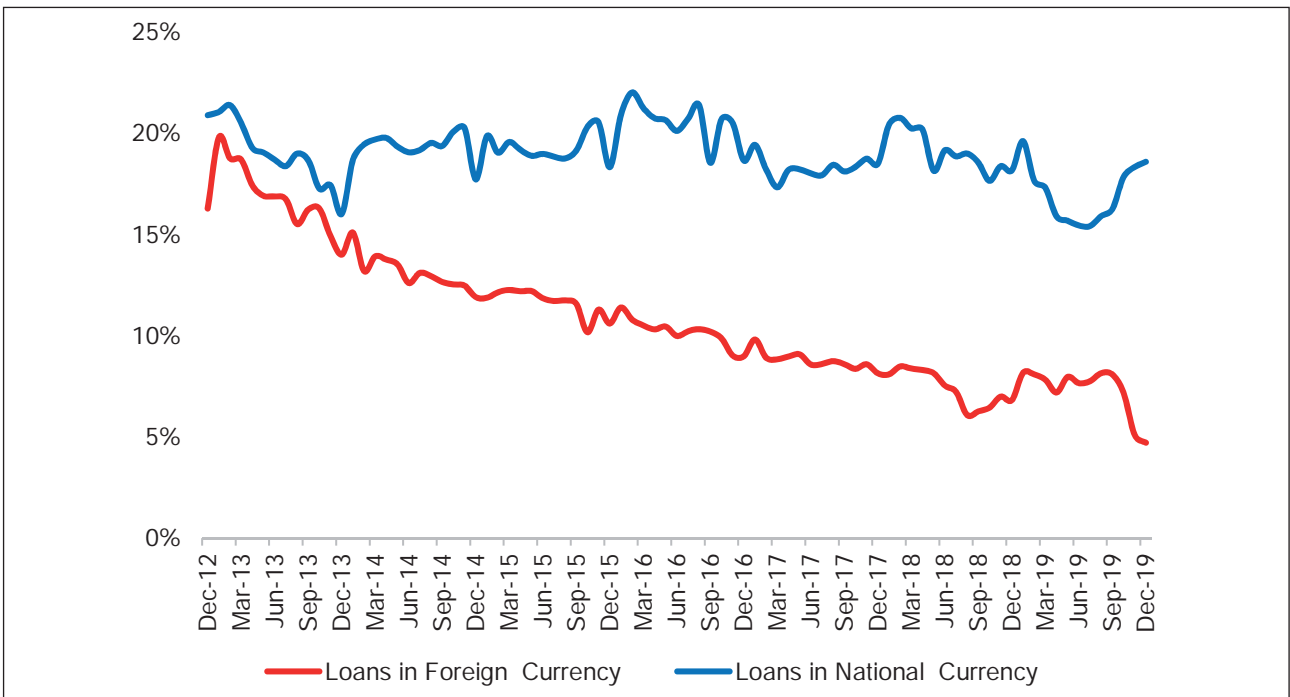
Source: National Bank of Georgia

Diagram N 4.6 Monthly weighted average interest rates on loans for the SME segment



Source: National Bank of Georgia

Diagram N 4.7 Monthly weighted average interest rates on loans for the retail segment



Source: National Bank of Georgia

The sectoral distribution of the loan portfolio is diversified. Throughout 2019, the share of procyclical sectors⁷⁸ (real estate development, real estate management, production and trade of construction materials, production and trade of durable goods, and

⁷⁸ Sectors that are characterized by a high positive correlation with economic growth.

automobile dealers) in the banking sector's loan portfolio increased slightly (see Diagram N 4.8). The high volume of loan loss reserves in some sectors was largely caused by idiosyncratic⁷⁹ events (see Table N 4.5).

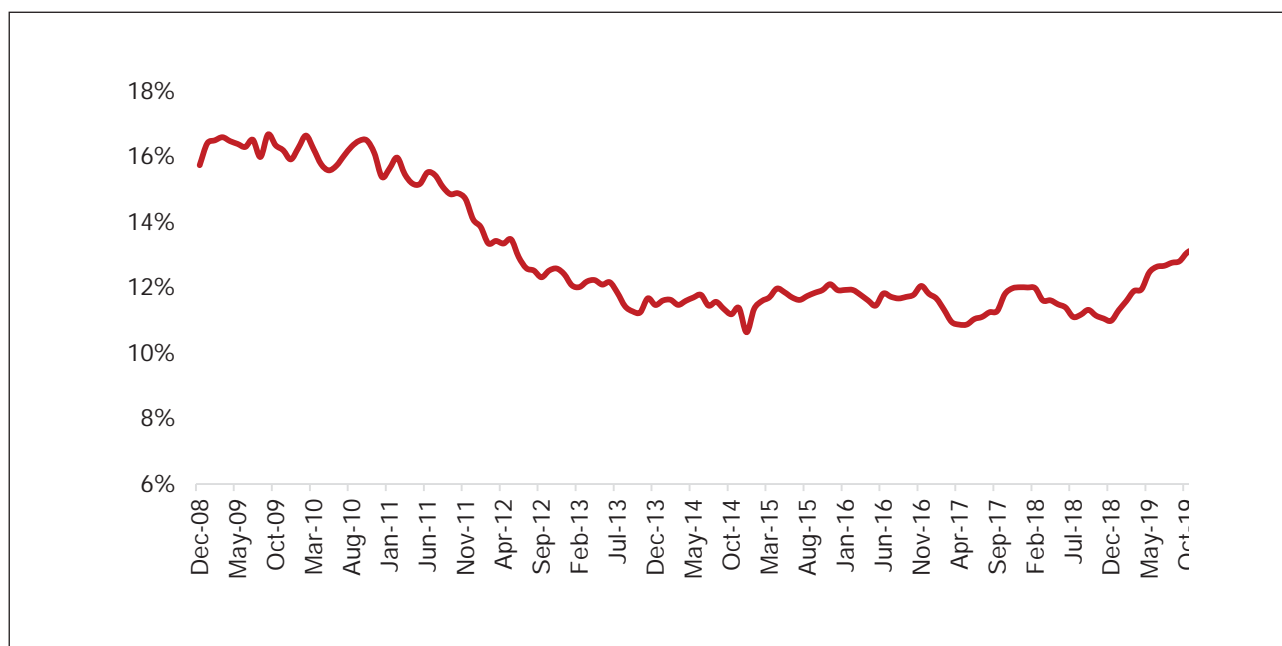
⁷⁹ Individual events characteristic of the sector that are not of a systemic nature.

Table N 4.5 Gross loan portfolio according to risk sector

Sector, excluding interbank loans (million GEL)	Share in Gross Portfolio	Loan Balance	Loan Reserve	Reserve to Portfolio
State	0.2%	77	2	2.1%
Financial Institutions	1.9%	604	13	2.1%
Pawn-shop Loans	1.4%	459	20	4.5%
Construction Development, Land Development and other Land Loans	3.1%	993	57	5.8%
Real Estate Management	5.9%	1,897	74	3.9%
Construction Companies	1.6%	497	19	3.8%
Production and Trade of Construction Materials	2.9%	920	32	3.4%
Trade of Consumer Foods and Goods	3.6%	1,150	41	3.6%
Production of Consumer Foods and Goods	4.4%	1,399	81	5.8%
Production and Trade of Durable Goods	0.7%	224	8	3.4%
Production and Trade of Clothes, Shoes and Textiles	0.7%	209	8	4.0%
Trade (Other)	4.2%	1,335	63	4.7%
Other Production	1.4%	433	20	4.6%
Hotels, Tourism	6.5%	2,089	61	2.9%
Restaurants	1.4%	449	18	4.0%
Industry	1.7%	529	27	5.2%
Loans to Oil Importers and Retailers	1.1%	354	19	5.3%
Energy	4.2%	1,326	41	3.1%
Auto Dealers	0.6%	193	19	9.7%
Health Care	2.0%	633	17	2.7%
Pharmacy	0.5%	149	7	4.8%
Telecommunication	0.9%	279	6	2.2%
Service	4.7%	1,487	65	4.4%
Agro	5.7%	1,808	89	4.9%
Other (Including Scrap-metal)	1.4%	443	17	3.8%
Retail	37.5%	11,976	522	4.4%
Car Loans	0.3%	105	3	3.3%
Consumer Loans	13.1%	4,184	211	5.0%
Installments	0.6%	193	26	13.4%
Payrolls (Overdrafts)	0.2%	57	6	11.0%
Credit Cards	1.4%	458	26	5.8%
Housing Renovations	1.6%	513	17	3.3%
Mortgages	20.3%	6,466	231	3.6%
Total Credit Portfolio (Deducted Interbank Loans)	100.0%	31,915	1,346	4.2%

Source: National Bank of Georgia

Diagram N 4.8 Share of pro-cyclical sectors in the gross loan portfolio



Source: National Bank of Georgia

The growth rate of retail products in 2019 significantly decreased. In the case of installments, credit cards and overdrafts, an annual decline was observed, while the growth rate of consumer loans significantly dropped. Mortgage loans are the main driver of growth in retail products. These changes were expected be-

cause on 1 January 2019, the “Decree on Measures for Responsible Lending to Physical Persons” came into force, which significantly limited the issuance of loans without a thorough prior study of income – this practice had been established before the regulation was officially enacted.

Table N 4.6 Growth of retail products adjusted for the exchange rate effect (exchange rate as of the end of 2018)

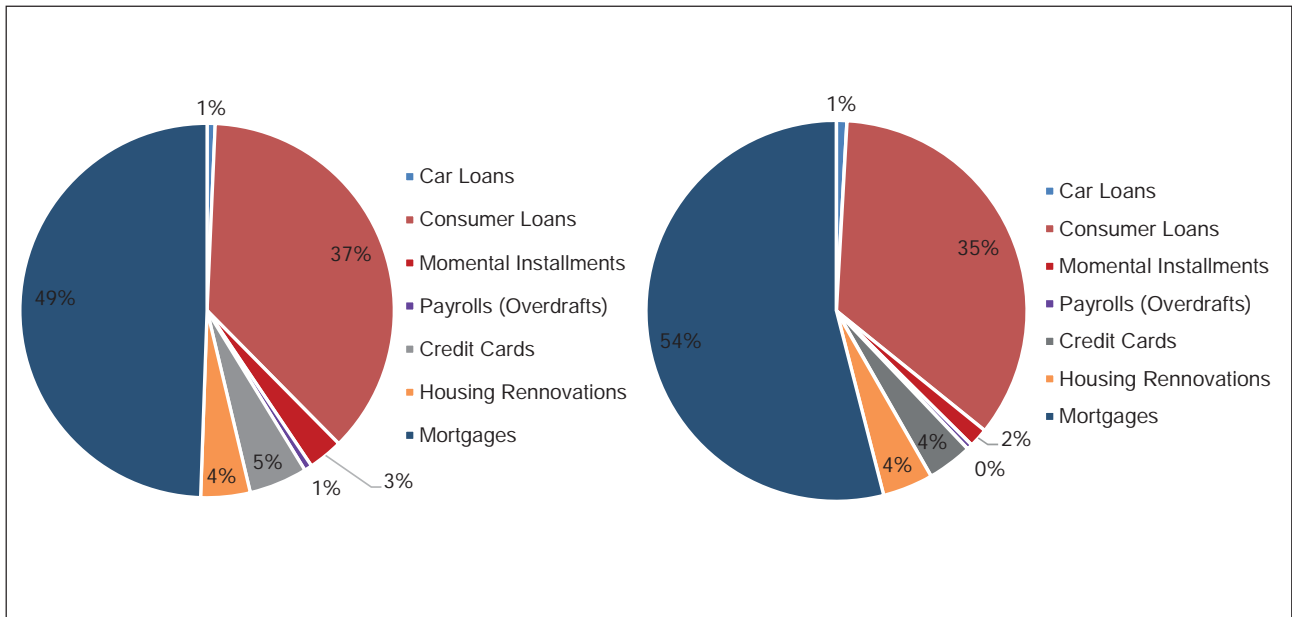
Product	Dec-18		Dec-19		Change, %	Change, million GEL	Change % (Adjusted for exchange rate and reclassification effects)
	million GEL	Share, %	million GEL	Share, %			
Retail Products	11,010	100%	11,673	100%	6.0%	663	6.0%
Car Loans	76	1%	102	1%	33.8%	26	33.8%
Consumer Loans	4,062	37%	4,142	35%	2.0%	80	2.0%
Installments	329	3%	193	2%	-41.4%	-136	-41.4%
Payrolls (Overdrafts)	74	1%	57	0%	-22.8%	-17	-22.8%
Credit Cards	554	5%	458	4%	-17.4%	-97	-17.4%
Housing Renovations	470	4%	500	4%	6.5%	30	6.5%
Mortgages	5,444	49%	6,221	53%	14.3%	777	13.8%

Source: National Bank of Georgia

The structure of the retail products portfolio also changed in comparison with the previous year. The

share of mortgage loans in the portfolio increased significantly and the share of consumer loans was reduced.

Diagram N 4.9 Retail products distribution, December 2018-2019



Source: National Bank of Georgia

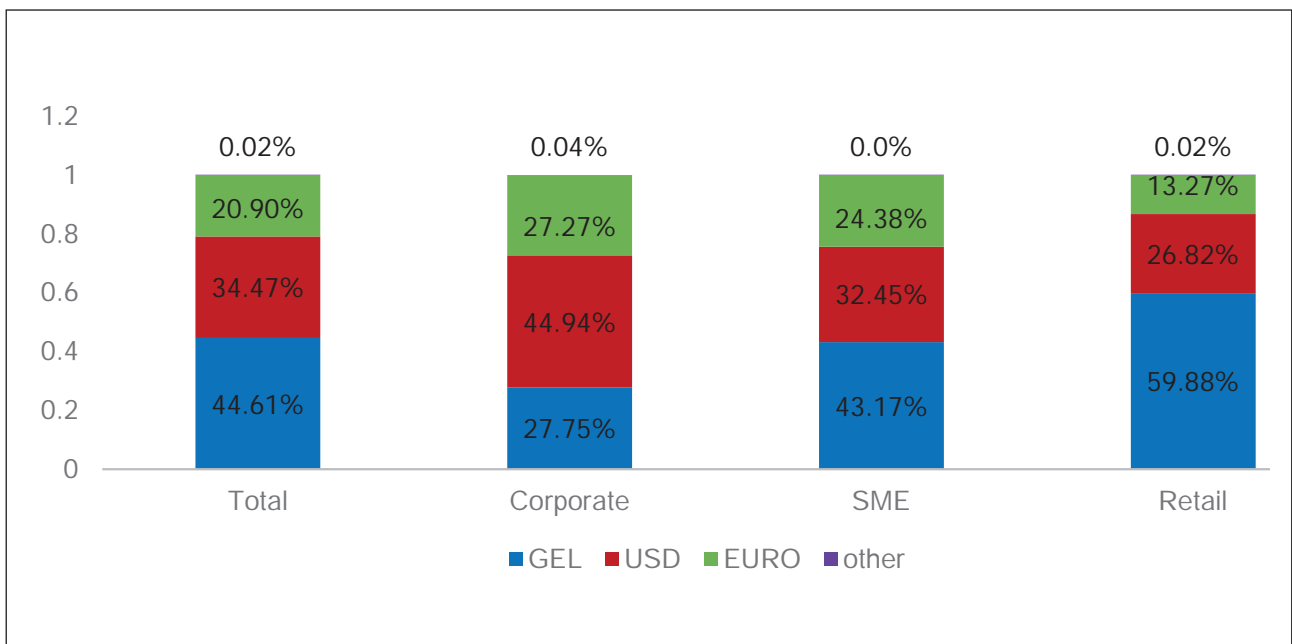
Certain amendments to the “Decree on Measures for Responsible Lending to Physical Persons” are planned for the beginning of 2020. The main purpose of these is to move from a rule-based approach to a more principles-based one, and to increase and improve the role of risk management in banks. The major changes include:

- In addition to the mandatory income assessment, more emphasis will be placed on determining income based on the internal policies of the lending institution.
- Corporate governance requirements will be established for commercial banks and microfinance organizations.

- The number of persons to whom restrictions do not apply will increase.
- The number of income groups will be reduced from four to two, and for some groups more loans will be affordable.
- In some cases, the maximum mortgage loan term will increase from 15 to 20 years.
- LTV requirements on mortgage loans will be alleviated for those people who get income from abroad.

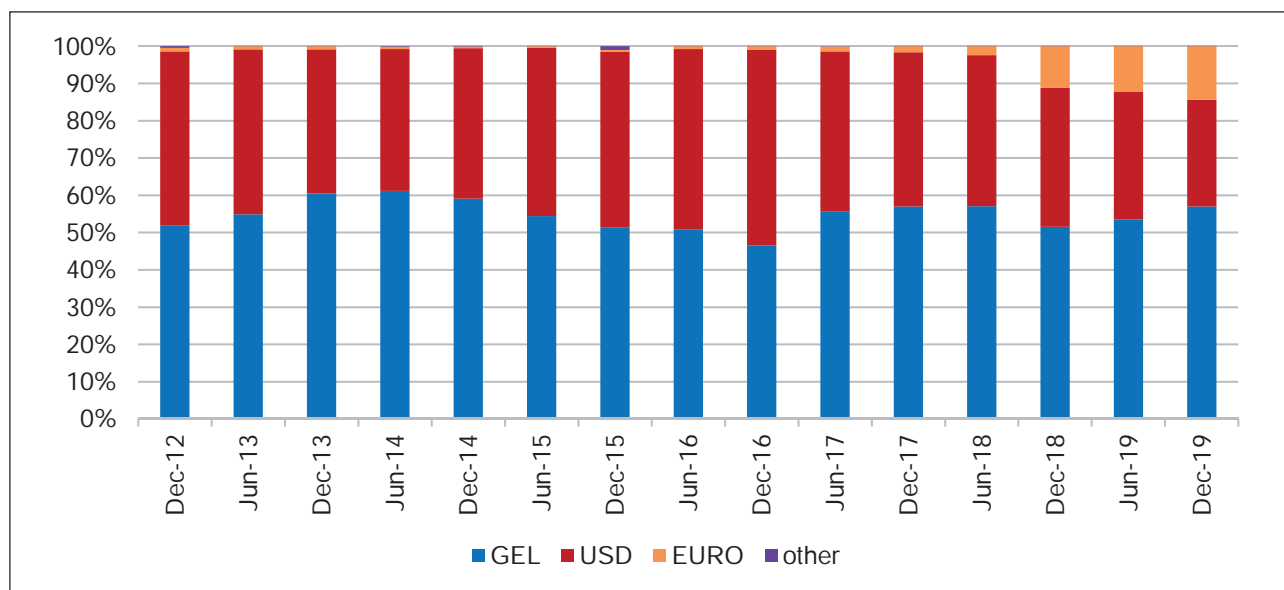
These changes will enable financial institutions to refine and develop the retail risk management process. The National Bank of Georgia will closely monitor progress in this direction.

Diagram N 4.10 Loan segments by currency (excluding interbank loans), December 2019



Source: National Bank of Georgia

Diagram N 4.11 Retail portfolio composition by currency (excluding interbank loans)



Source: National Bank of Georgia

By the end of 2019, the quality of the loan portfolio was satisfactory.

Table N 4.7 Gross loan portfolio by risk classification

Risk category (excluding interbank loans)	Amount (million GEL)	Share %	Reserve
Standard	29,417	92.2%	2%
<i>Negative Loans</i>	2,498	7.8%	29%
Watch	1,084	3.4%	10%
<i>Non-performing</i>	1,414	4.4%	44%
Substandard	808	2.5%	30%
Doubtful	266	0.8%	46%
Loss	339	1.1%	74%
Total:	31,915	100%	4%

Source: National Bank of Georgia

The quality of the portfolio varies significantly by segment. Historically, losses of the corporate segment have been noticeably higher than SME and retail portfolio losses. Comparing the qualitative parameters according to segment shows this clearly (see Table N 4.8). The main reasons behind the improvements to portfolio quality were the increased total

loan portfolio and the improved situation in neighboring countries. In the case of the corporate loan portfolio, improvements related to idiosyncratic cases were also observed. More specifically, the financial situation of several important corporate clients improved. This was followed by a decrease in the provision of their loans, which led to a one-time increase in banks' income.

Table N 4.8 Portfolio quality by segment

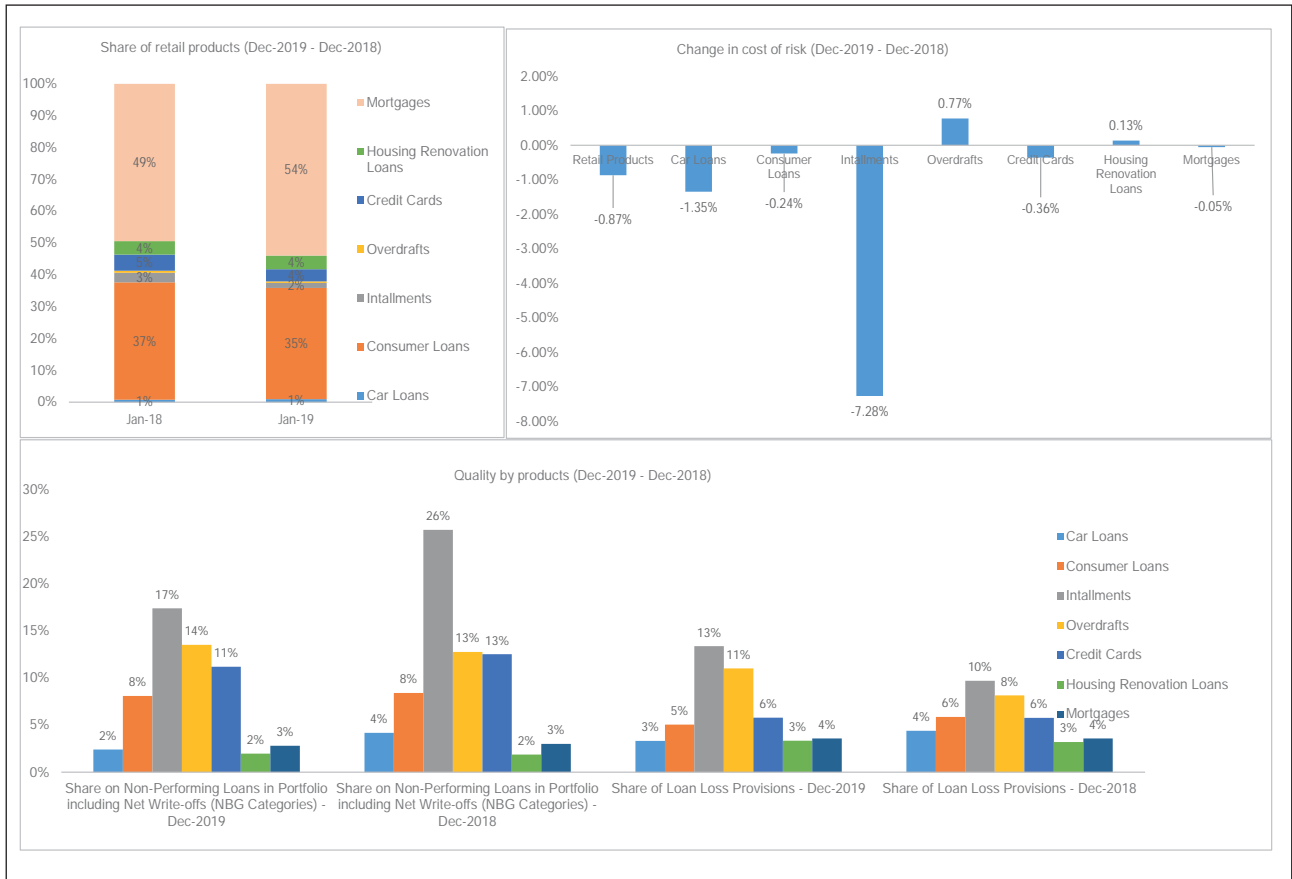
Segment	Negative Loans	Non-performing Loans	Average reserve
Corporate	9.14%	4.81%	4.04%
SME	8.11%	4.93%	4.34%
Retail	6.53%	3.80%	4.29%

Source: National Bank of Georgia

As a result of the change in the regulations regarding the retail portfolio, the quality indicators of the retail portfolio significantly improved and the share of negative loans decreased. This improvement is largely due

to the setting of "payment to income ratio" ranges and the obligation for conducting in-depth assessments of a borrower's income.

Diagram N 4.12 Retail products distribution, cost of risk and quality by product



Source: National Bank of Georgia

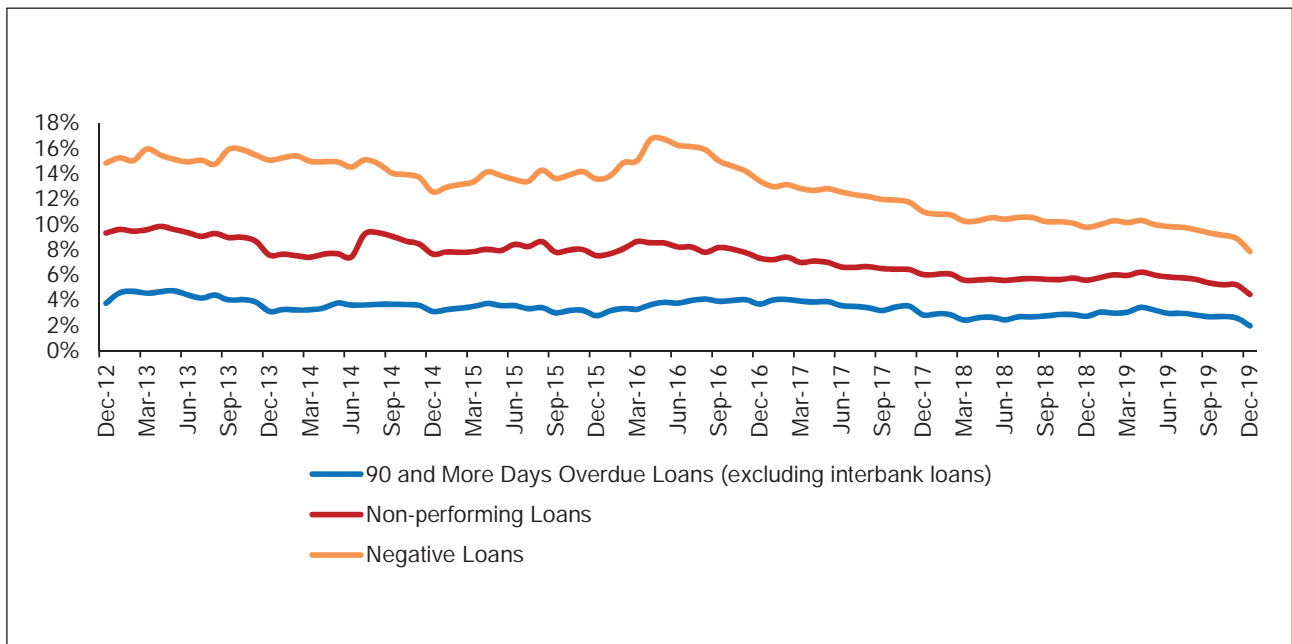
The share of high-risk products, which banks regularly used to issue without a full analysis of income, has decreased. Consequently, the rate of issuing low-risk loans, mortgages and loans secured by real estate has increased.

dividuals with different incomes has further increased the financial health of borrowers. As a result, the cost of risk has decreased.

Establishing “payment to income ratio” ranges for in-

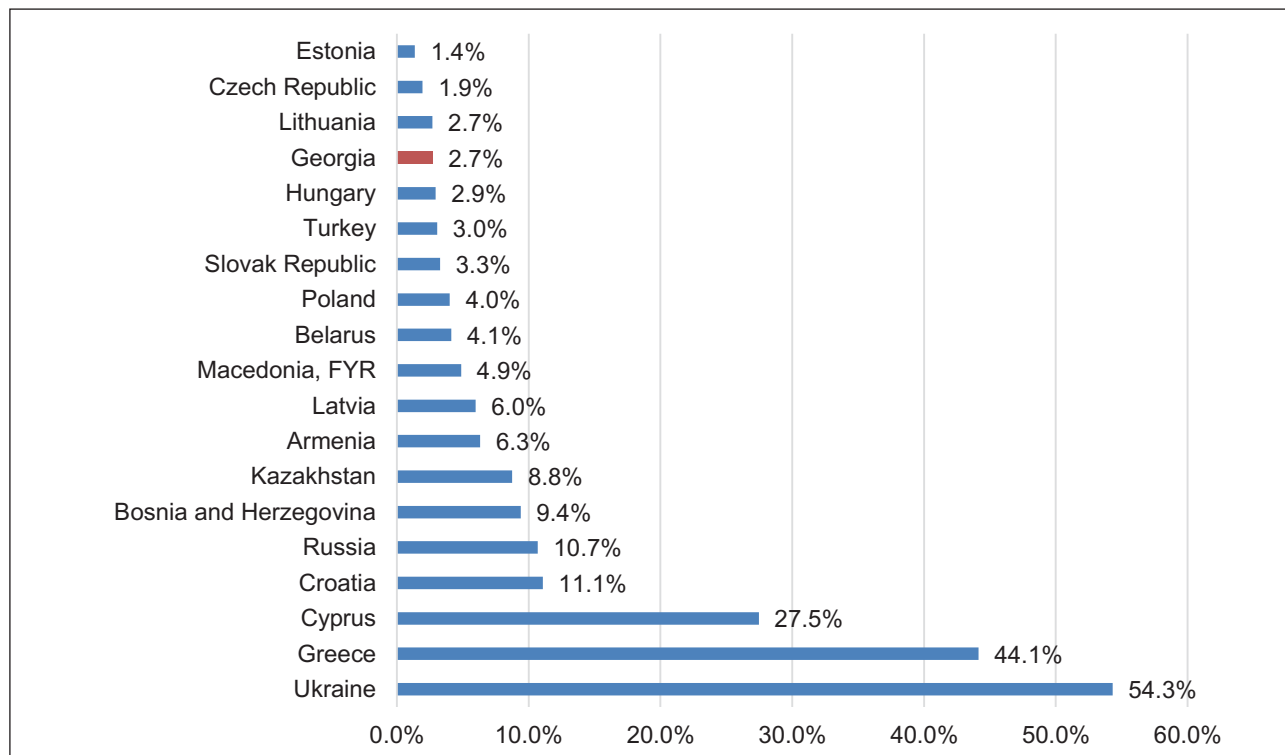
The share of loans past due for 90 or more days in

Diagram N 4.13 Loan portfolio composition by qualitative indicators (excluding interbank loans)



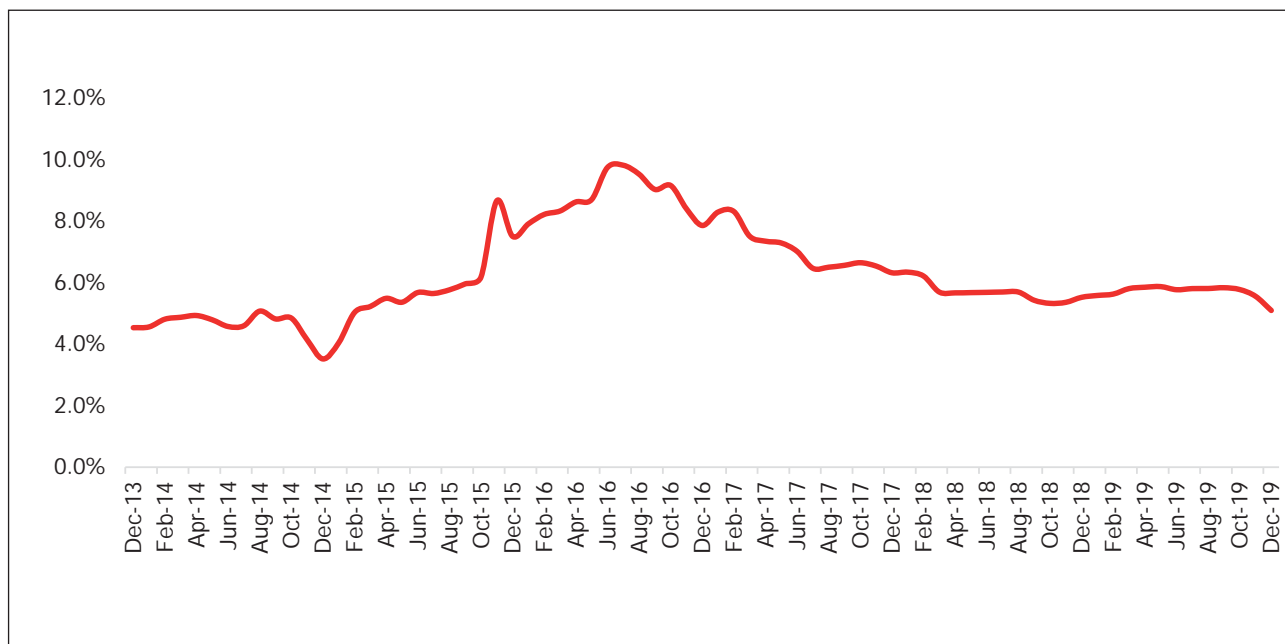
Source: National Bank of Georgia

Diagram N 4.14 Overdue loans of 90 days or more*68



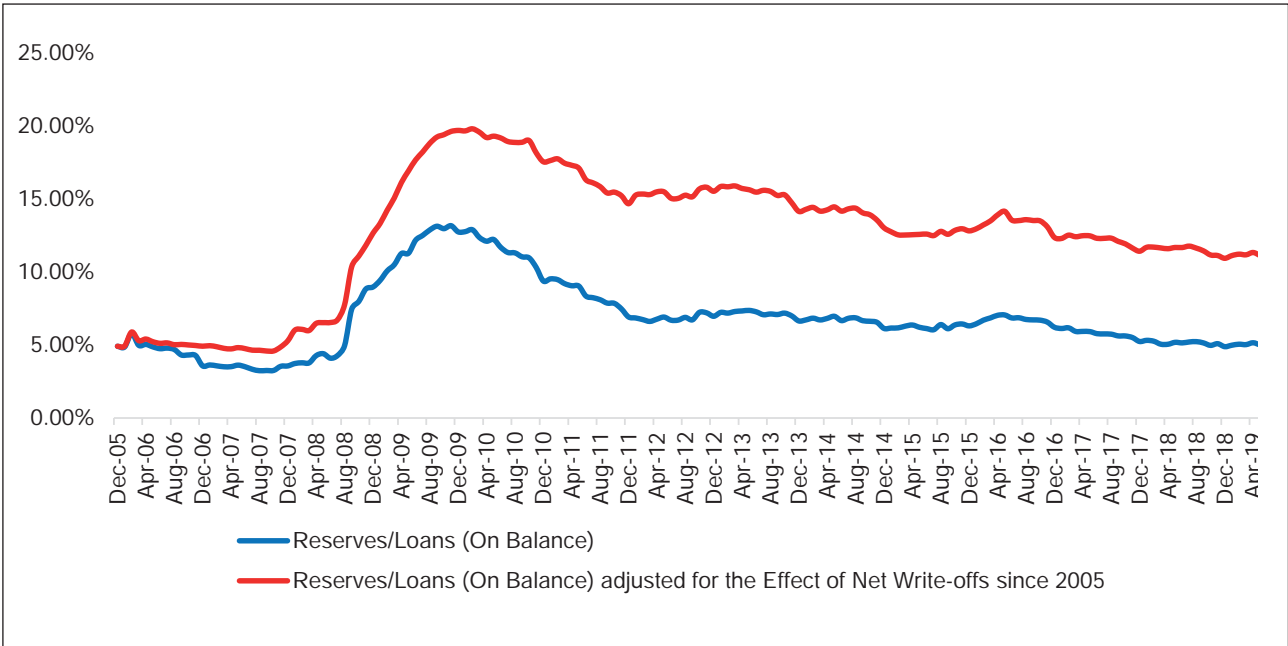
Source: National Bank of Georgia; International Monetary Fund

Diagram N 4.15 The share of restructured loans in the gross loan portfolio



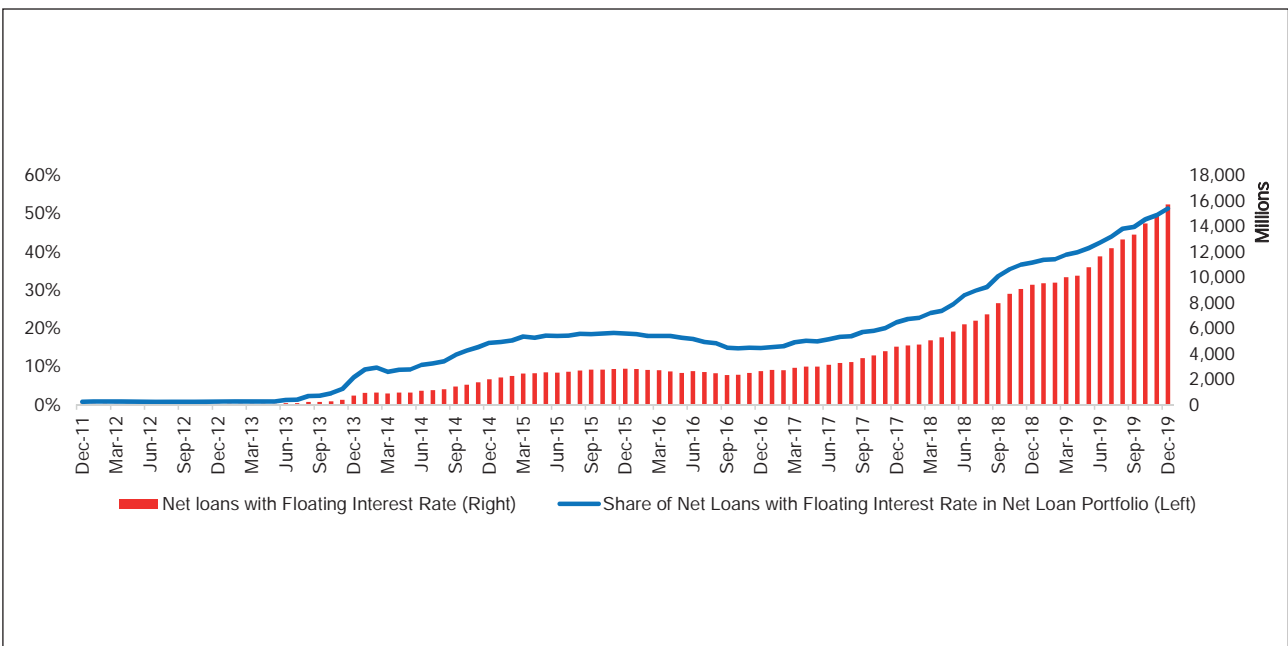
Source: National Bank of Georgia

Diagram N 4.16 The ratio of loan loss reserves to gross portfolio



Source: National Bank of Georgia

Diagram N 4.17 Volume and share of net floating interest rate loans in the net loan portfolio ⁶⁸

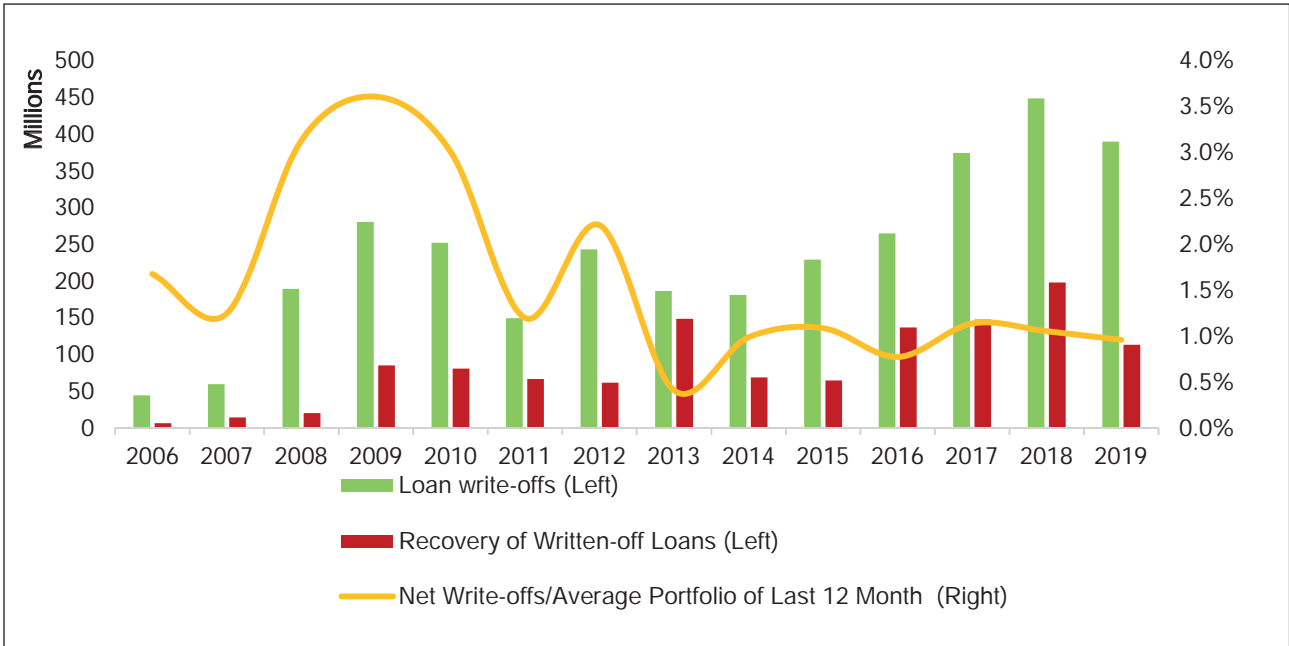


Source: National Bank of Georgia

the gross loan portfolio (excluding interbank loans) amounted to 1.96%, which is one of the best results

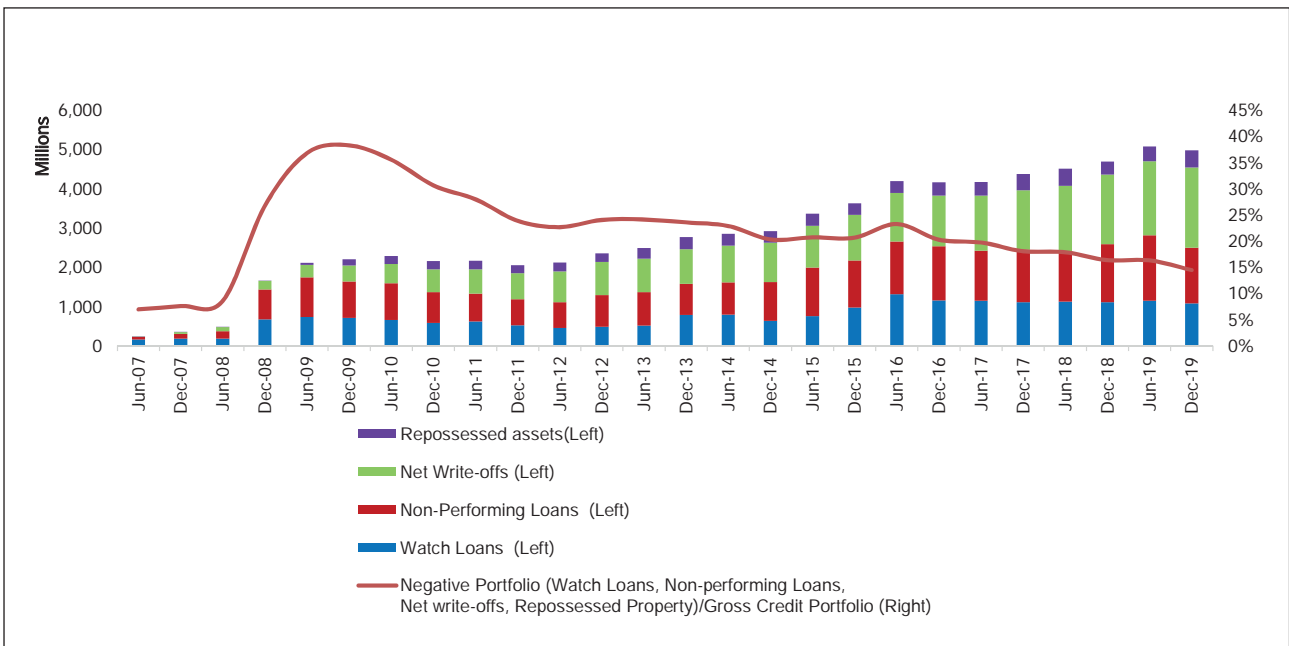
among comparable countries. However, it should be noted that these numbers do not take into consider

Diagram N 4.18 Write-offs and the recovery of loans



Source: National Bank of Georgia

Diagram N 4.19 Problem assets



Source: National Bank of Georgia

ation the different standards for registering restructuring/refinancing that countries may use.

In 2019, the net value of written-off loans increased

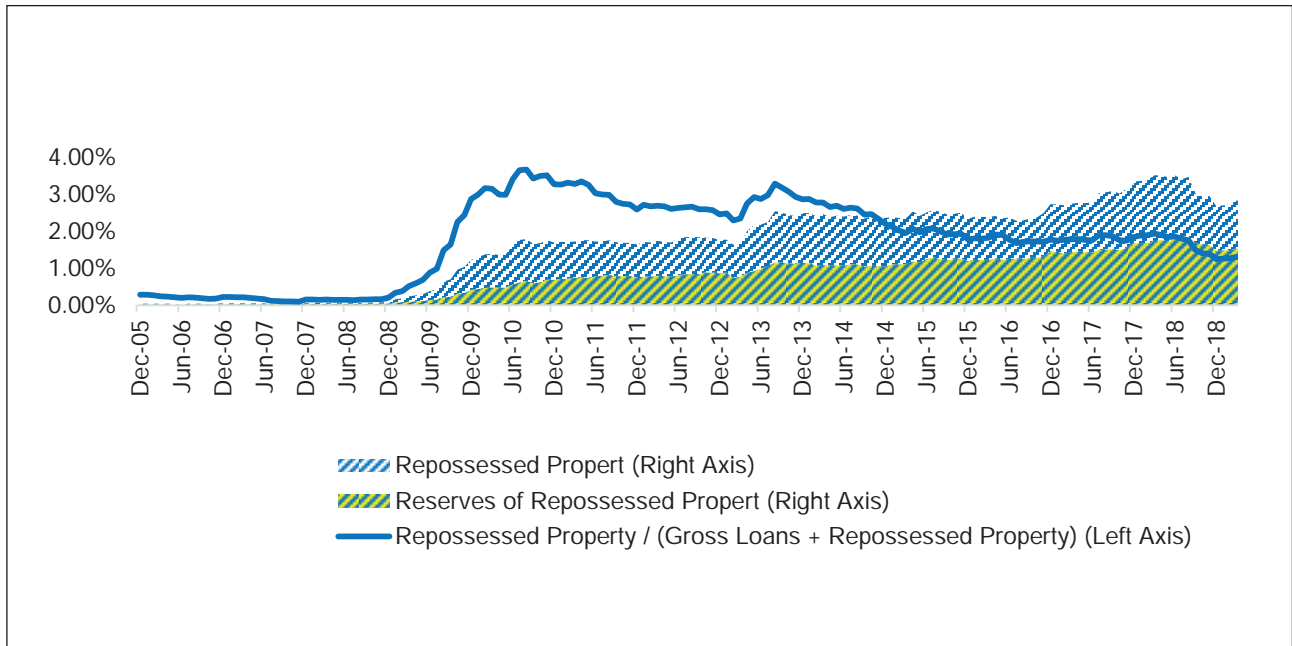
80 Data from the end of 2018. Although the latest available data are used, several months' difference may be observed.

81 Net Loans – the volume of loans net of the loan loss reserve.

by 10.3% compared to the corresponding figure from 2018. Decreases were observed in both write-offs and the recovery of written-off assets, although the latter declined considerably more than the former.

In 2019, the ratio of repossessed assets to the sum of loans and repossessed assets slightly decreased compared to 2018.

Diagram N 4.20 Repossessed property



Source: National Bank of Georgia

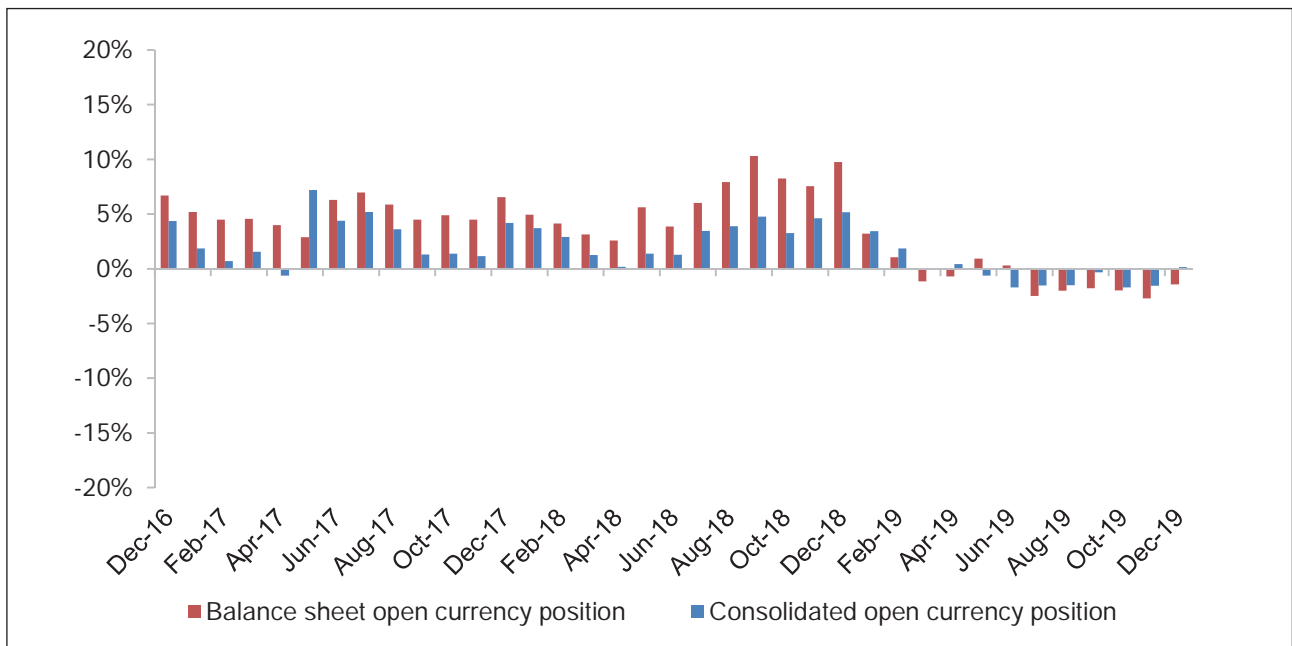
4.6 MARKET RISK

4.6.1 Foreign Currency Risk

The sensitivity of the Georgian banking system to FX risk is still high. Although larization has been increasing in the medium term, the share of foreign currency denominated assets and liabilities remains high. The NBG continues to direct its supervisory efforts towards improving existing approaches to foreign ex-

change risk management. The NBG also continues to improve the approach for the revaluation of foreign exchange asset loss reserves in an open currency position. A schedule for such reforms has been set. Particular attention has been paid to assessing risks related to the structural position, as well as to refining the internal models of market risk. This process has gained even more importance due to the increased currency volatility in the countries of the region.

Diagram N 4.21 Balance sheet and consolidated open currency positions to regulatory capital



Source: National Bank of Georgia

If we look at the open currency position calculated with the existing methodology, it is quite balanced on the systemic level. However, because gross loans (and not net loans) are factored in as assets when calculating the abovementioned position, and since loan loss reserves are formed in lari, banks' actual positions are short.⁸² As a result, considering the revaluation of reserves, commercial banks are at a loss during periods of currency depreciation. Furthermore, because the share capital is denominated in lari, the revaluation of risk-weighted assets due to lari depreciation significantly reduces commercial banks' capital adequacy ratios, which further increases their vulnerability towards risk. Currency-induced credit risk is a separate matter that remains a major challenge for the financial sector (this is discussed in detail in the Credit Risk section of this report).

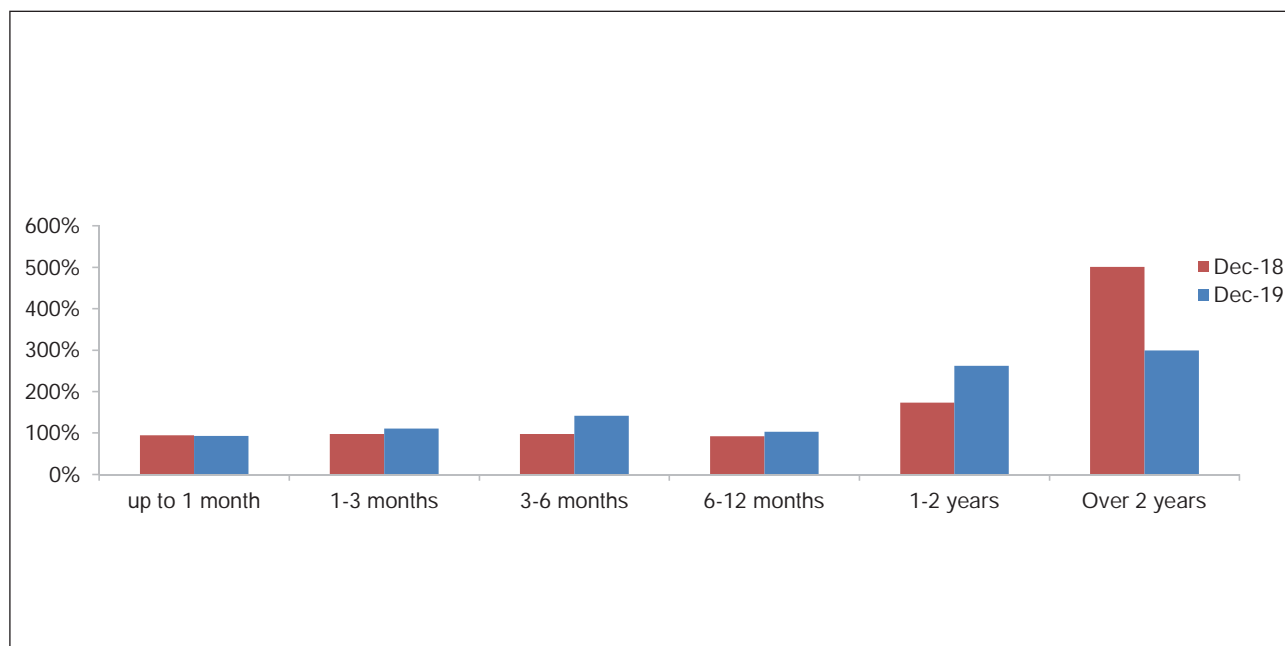
4.6.2 Interest Rate Risk

Similar to previous years, Georgian banks held almost no trading securities in 2019. In light of this, for supervisory purposes the banking book approach was used for the entire balance sheet. Nevertheless, the NBG requires that banks with trading books develop relevant procedures and report to the National Bank. When significant growth opportunities are identified

and a calculation form prepared. These aim to identify, evaluate and manage interest rate risks arising from the banking book and to ensure financial sector stability and sound functioning by setting relevant requirements. The IRRBB regulations are planned to enter in force in 2020.

Interest rate risk concerns a bank's exposure to adverse movements in interest rates. IRRBB, more specifically, refers to the current or prospective risk to a bank's capital and earnings from adverse movements in interest rates that affect the institution's banking book positions. When interest rates change, the present value and timing of future cash flows change. This in turn changes the underlying value of the bank's assets, liabilities and off-balance sheet instruments and, hence, its economic value of equity (EVE). Changes in interest rates also affect a bank's earnings by altering interest-sensitive income and expenses, affecting its net interest income (NII). This risk is inherent to the banking business and its successful management can have an important impact on profitability and shareholder value. Indeed, excessive interest rate risk can pose a significant threat to a bank's current capital base and/or future earnings if not managed appropriately.

Diagram N 4.22 Interest-bearing assets' coverage of liabilities



Source: National Bank of Georgia

as a result of monitoring, regulations for the management of trading books will be enforced.

In 2019, the NBG started working on a regulation about Interest Rate Risk in the Banking Book (IRRBB). The IRRBB regulation has been developed

⁸² In the event of a short currency position, foreign liabilities exceed foreign currency assets.

EVE interest rate risk is measured by six scenarios, while the NII measurement is based only on two scenarios (Parallel Up and Parallel Down).

The NBG monitors both of the measures (EVE and NII), however regulatory actions towards banks are only planned when the interest rate risk is high and

the decrease of economic value based on different interest rate shocks is more than the 15% of Tier 1 capital. Despite these standards, for individual cases based on the expected tendencies and risks, when supervisors consider that a bank does not have appropriate interest rate risk capital, they can take supervisory measures, which means increasing capital or decreasing risk exposures by banks.

Before the regulation enters into force, the NBG will continue to monitor the calculation forms, which according to the results are significantly less than the 15% limit and are no more than 10%. The NBG will continue to constantly monitor and closely cooperate with the banks in order to improve the reporting of the IRRBB.

There are positive dynamics in interest-bearing assets' coverage of liabilities (see Diagram N 4.22). The assets and liabilities of short- and medium-term gaps (of up to two years) have improved, which is related to both the increase in the share of floating-rate assets and the liabilities becoming long term.

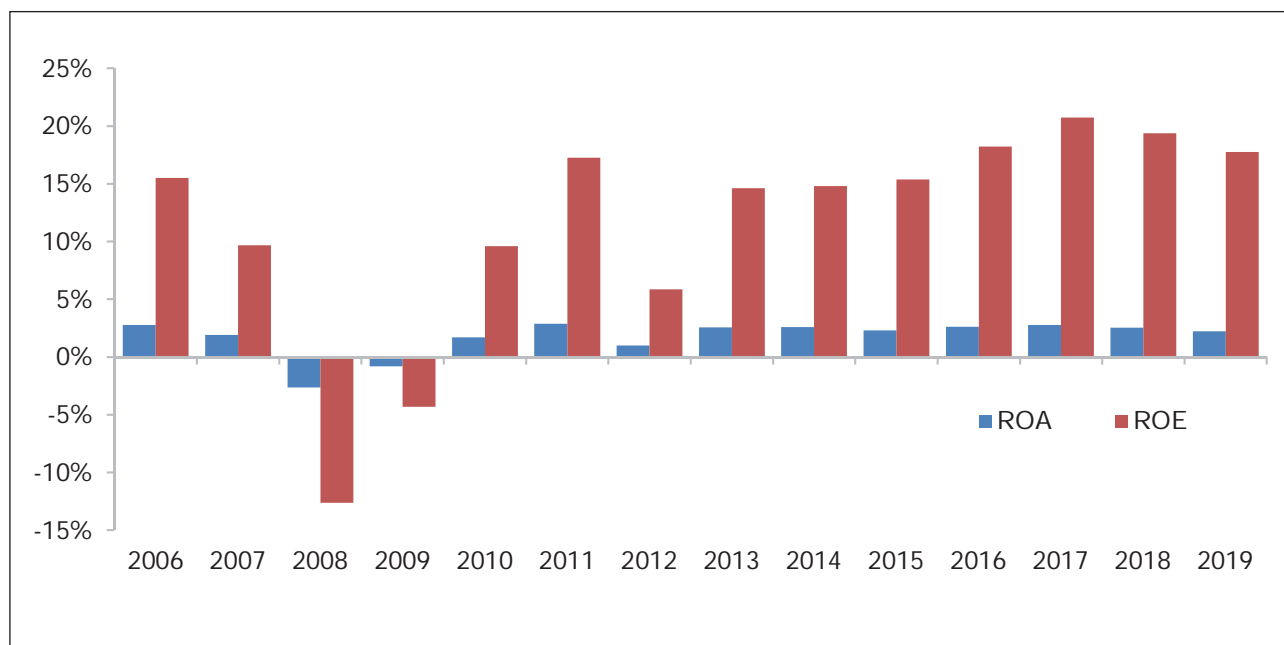
4.7 PROFITABILITY RISK

In 2019, the return on average assets and equity⁸³ amounted to 2.2% and 17.7% respectively, which

were lower than the same indicators from the previous year (2.5% and 19.4% respectively). However, the rate of banking system profitability has remained stable in recent years and in 2019 approached the required return on equity of shareholders.

The net interest margin and non-interest income of the banking system declined during 2019. The net interest margin decreased mainly due to lowered interest rates on loans. However, the profitability of the banking system was positively affected by the growth of assets; meanwhile, the subsequent increase in effectiveness due to the economies of scale also improved the quality of assets and reduced extraordinary expenses. Considering the 18.9% growth of total assets and the 20.1% growth of total loans (including the exchange rate effect), non-interest expenses increased by only 11%. The increase of efficiency was reflected in the cost-to-assets ratio, which decreased to 3.2%. Regardless of the growth of the loan book, loan loss provisions shrank by 2.8% compared to the previous year. The growth of leverage also made a positive contribution to the improved profitability.

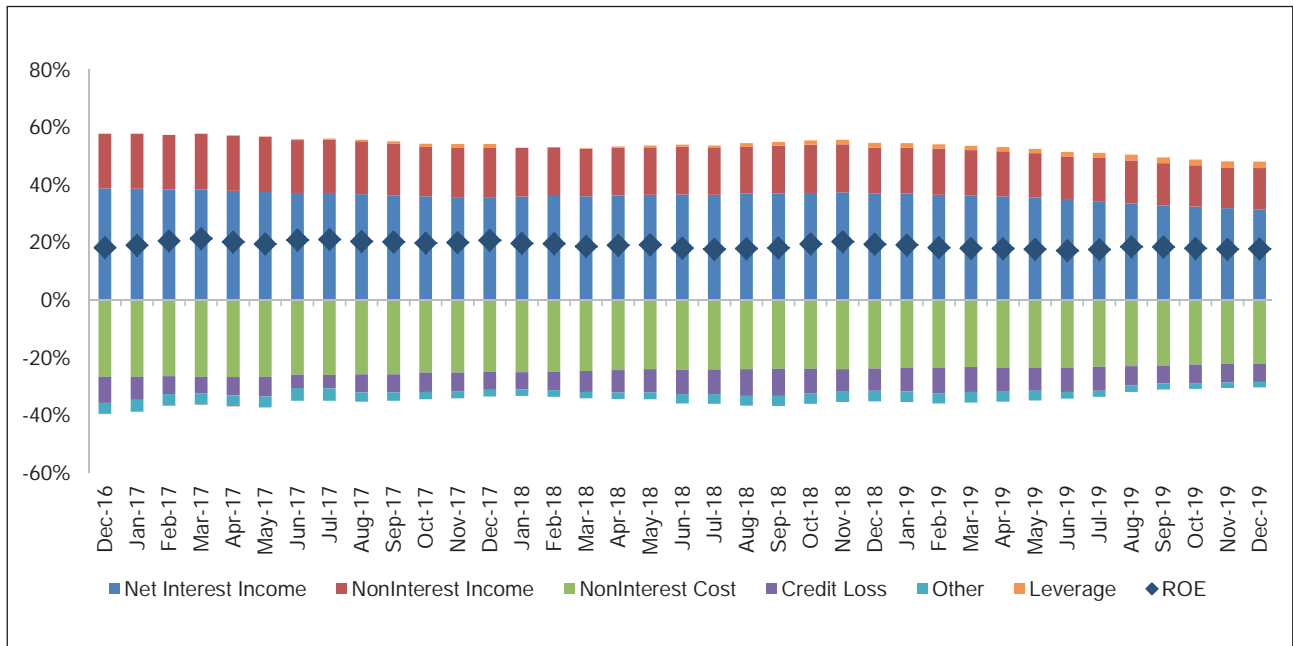
Diagram N 4.23 Return on assets and equity



Source: National Bank of Georgia

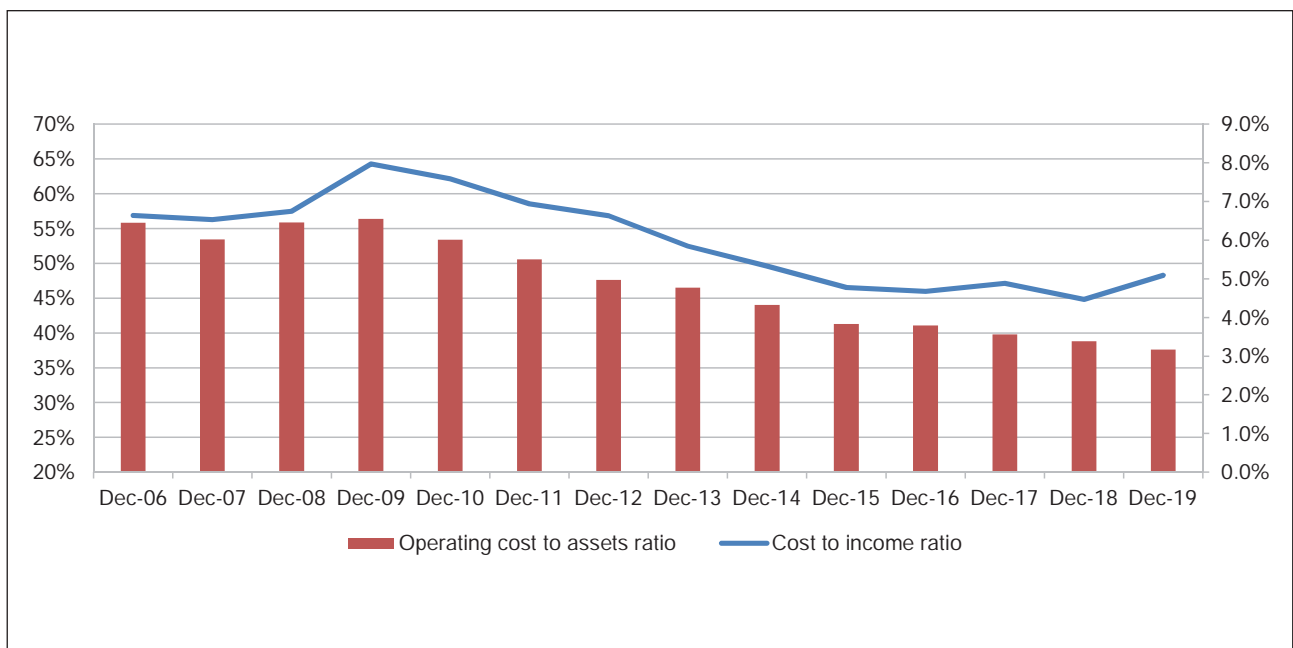
⁸³ Return on equity (ROE) – net income divided by the average yearly shareholders' equity. Return on assets (ROA) – net income divided by average yearly total assets. Net income is calculated by taking net interest and non-interest income and subtracting provisions of loans and other financial assets, after extraordinary revenues and taxes.

Diagram N 4.24 Decomposition of profitability growth



Source: National Bank of Georgia

Diagram N 4.25 Cost-to-income and cost-to-assets ratios



Source: National Bank of Georgia

It must be pointed out that the second half of 2019 was distinguished by massive offers of foreign-denominated loans and the respective interest rates fell to their lowest level, which, considering the credit, interest and other risks, is inadequately low for the region. The main reason for this trend was the acute competition in the banking system, which may encourage individual banks to take excessive risks and may weaken their market positions in the future. Therefore, considering the risk-based supervi-

sory principles, throughout 2019 significant resources were allocated to the discussion of commercial banks' profitability forecasts and an analysis of individual institutions' business models and strategies. Particular attention was paid to the scale effect, the existence of market niche or other competitive advantages, and the approximate evaluation of predicted loan losses. Greater focus was placed on risk mitigants (measures for reducing risks), including the development of a detailed pricing model for banking products.

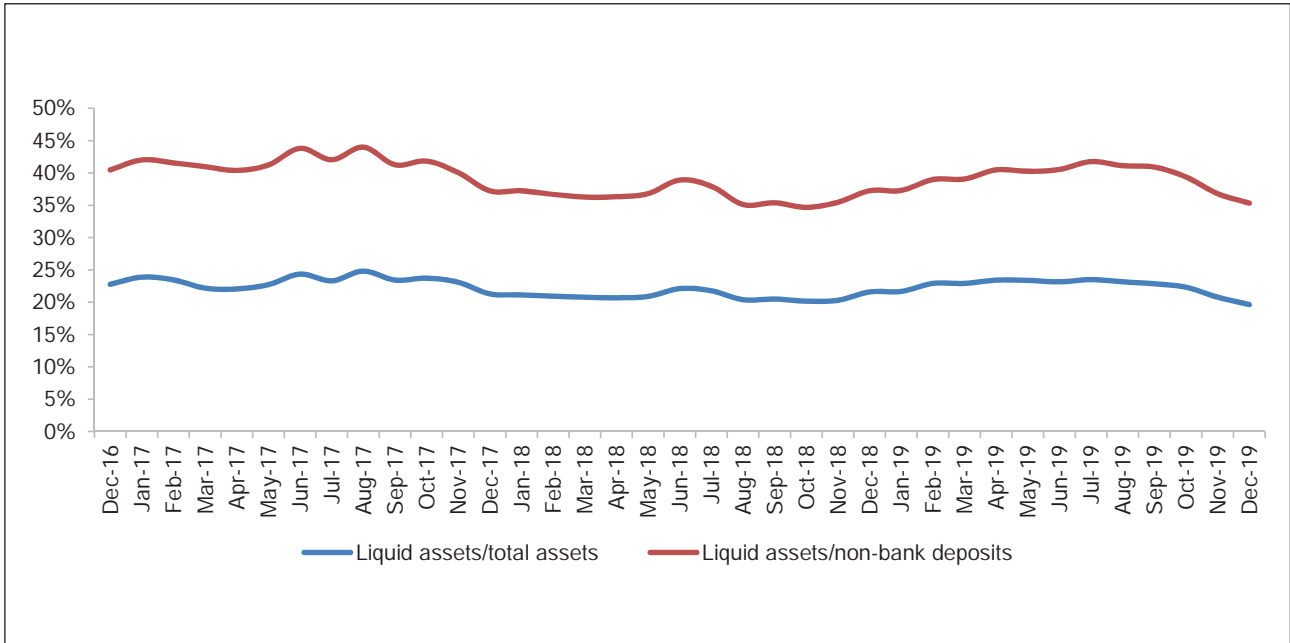
4.8 LIQUIDITY RISK

4.8.1 Structure of Liquid Assets

Throughout 2019, the volume of liquid assets was high and was characterized by minor fluctuations. Liquid assets reach 20% of total assets, which is sufficient to cover 35% of customer deposits.

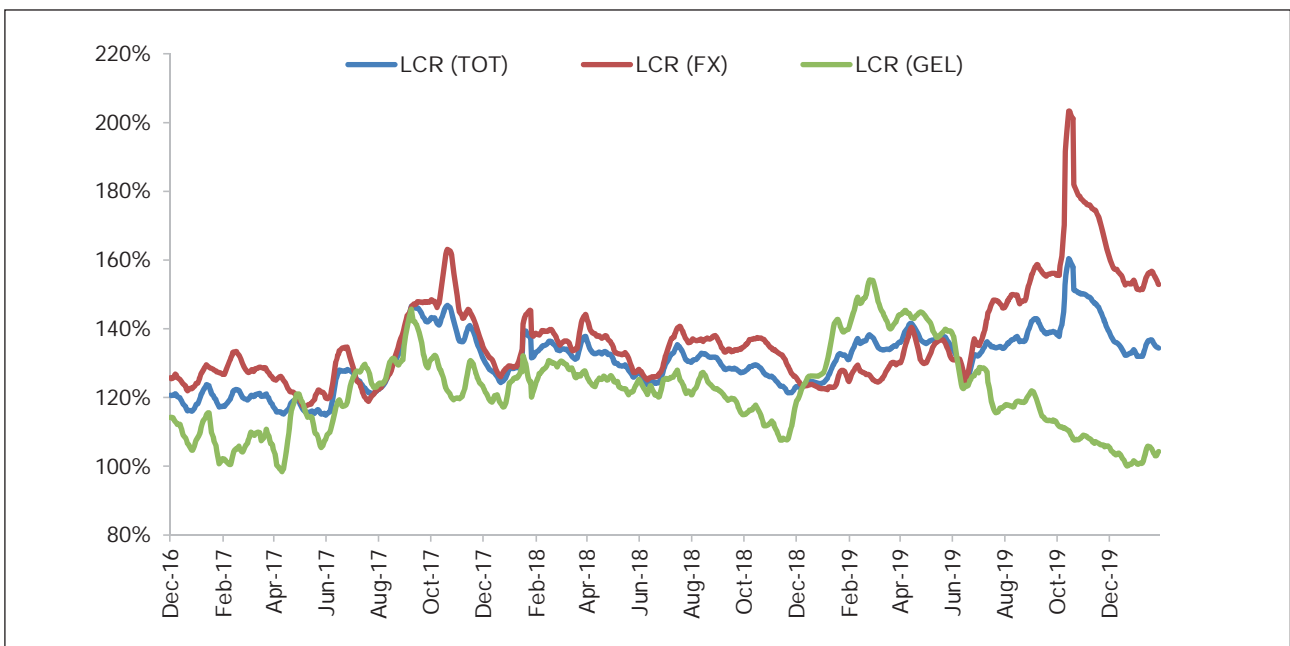
Throughout 2019, the Liquidity Coverage Ratio (LCR) was characterized by some fluctuations. The LCR represents a modern and effective approach to short-term liquidity management (of up to 30 days) and provides the means to improve the identification, assessment, monitoring and control of risks. Implementation of the LCR has significantly improved prudential supervision and has contributed to making liabilities

Diagram N 4.26 Level of liquid assets



Source: National Bank of Georgia

Diagram N 4.27 Dynamics of the Liquidity Coverage Ratio (LCR)



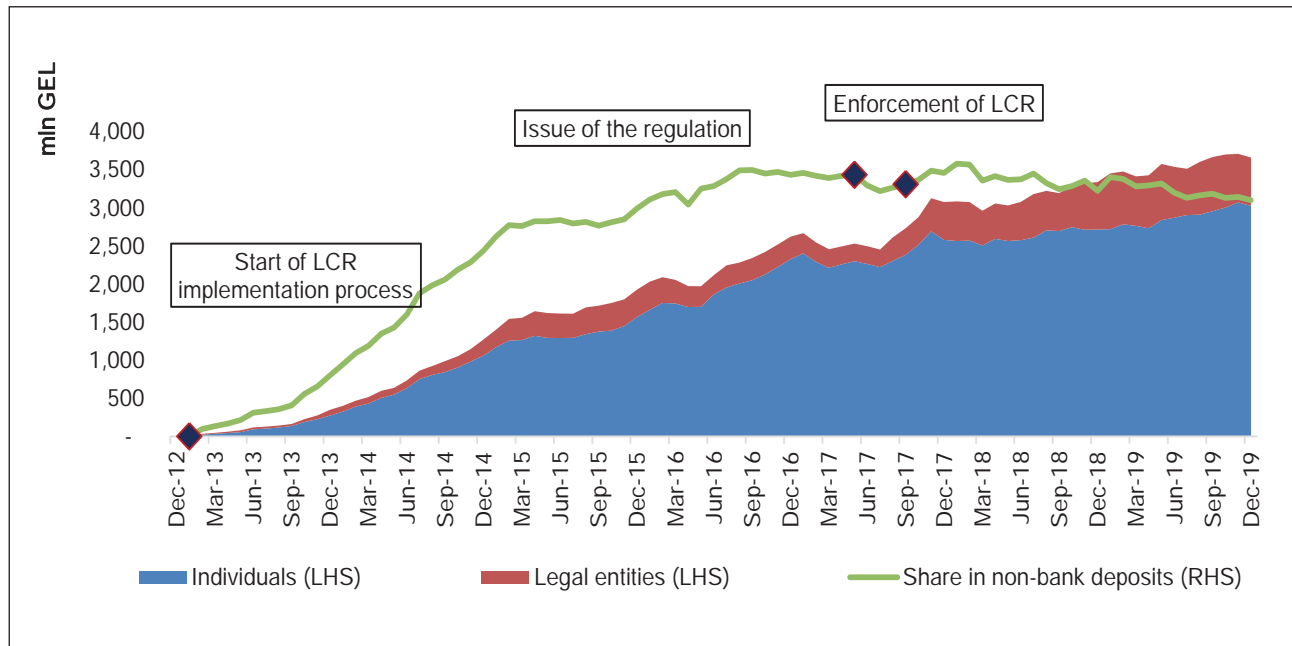
Source: National Bank of Georgia

long term, including the development of certificates of deposit. In October 2019, a sharp increase in the foreign currency LCR was driven by a change in the approach to the calculation of liquid assets by the NBG.⁸⁴ The LCR reverted to the old level in the fourth quarter of 2019 due to the increase of foreign currency denominated loans. The drop of the LCR in the

national currency as of the second quarter of 2019 was related to the high growth of loans in the national currency, which resulted in the absorption of the excess liquidity accumulated from the end of 2018 due to weakened demand.

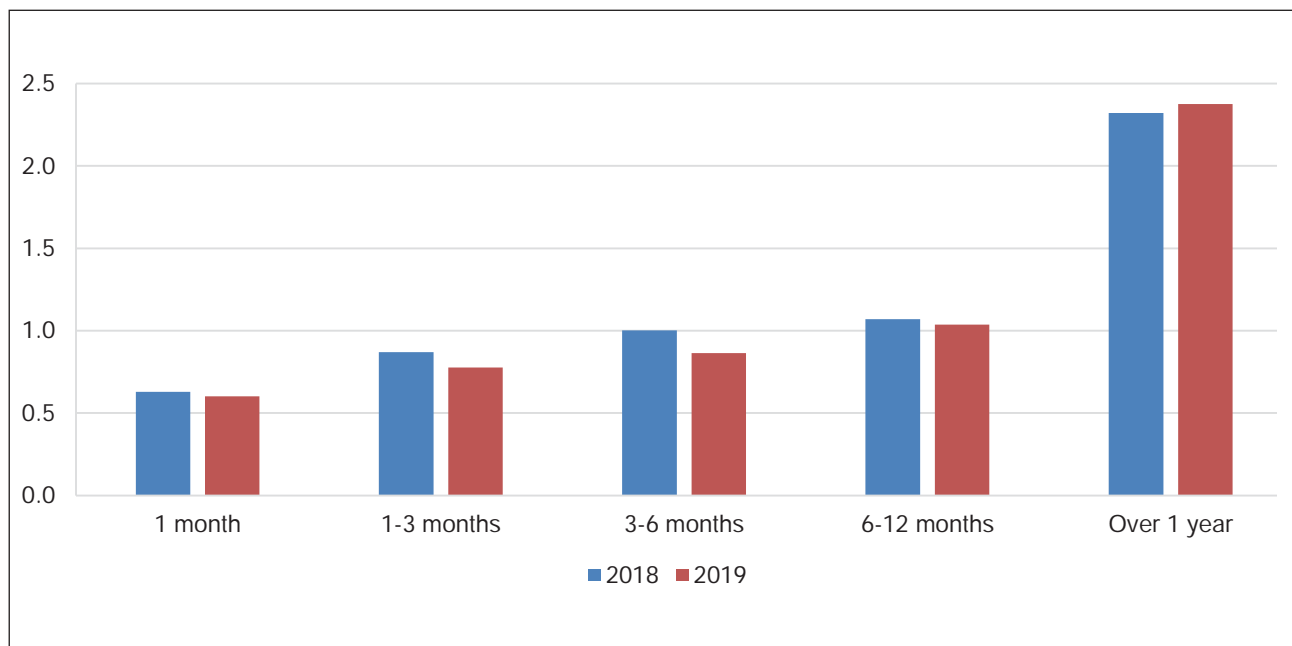
Throughout 2019, the structure of the liquid asset gap remains stable.

Diagram N 4.28 Certificates of deposits and their share in non-bank deposits



Source: National Bank of Georgia

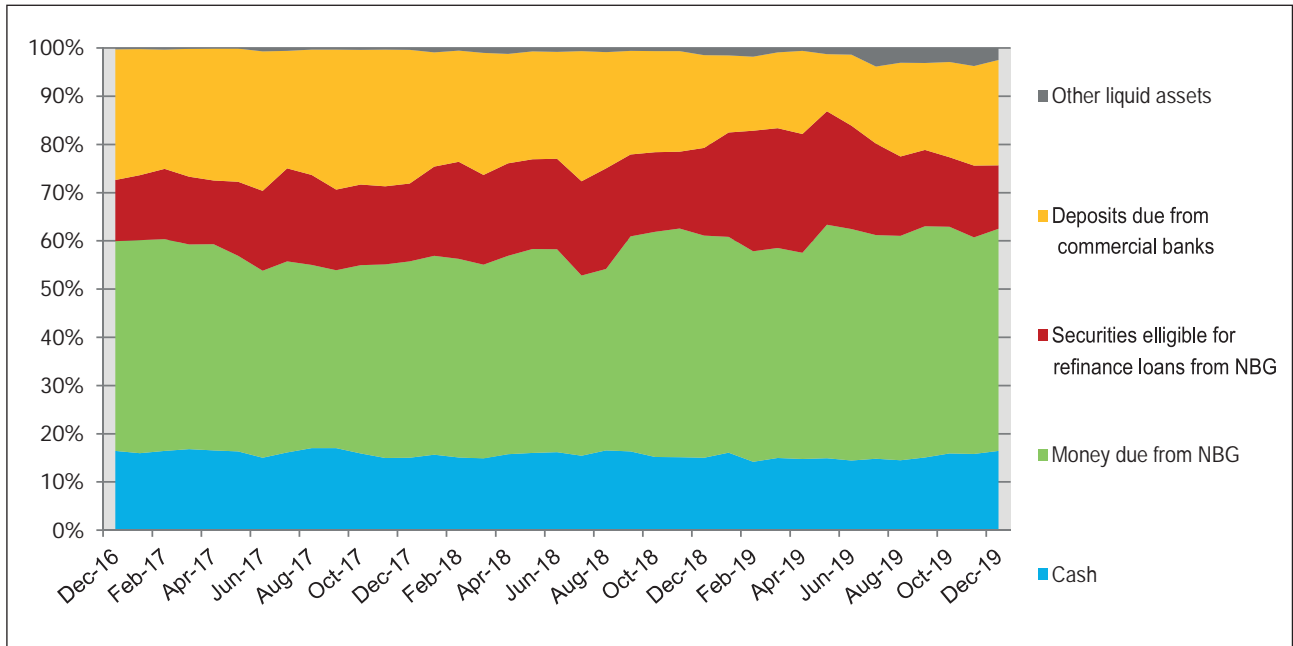
Diagram N 4.29 Liquidity gap – assets to liabilities



Source: National Bank of Georgia

⁸⁴ As of October 2019, mandatory reserves deposited in the NBG are fully included in liquid assets, instead of only 75% of such reserves.

Diagram N 4.30 Volume and structure of liquid assets



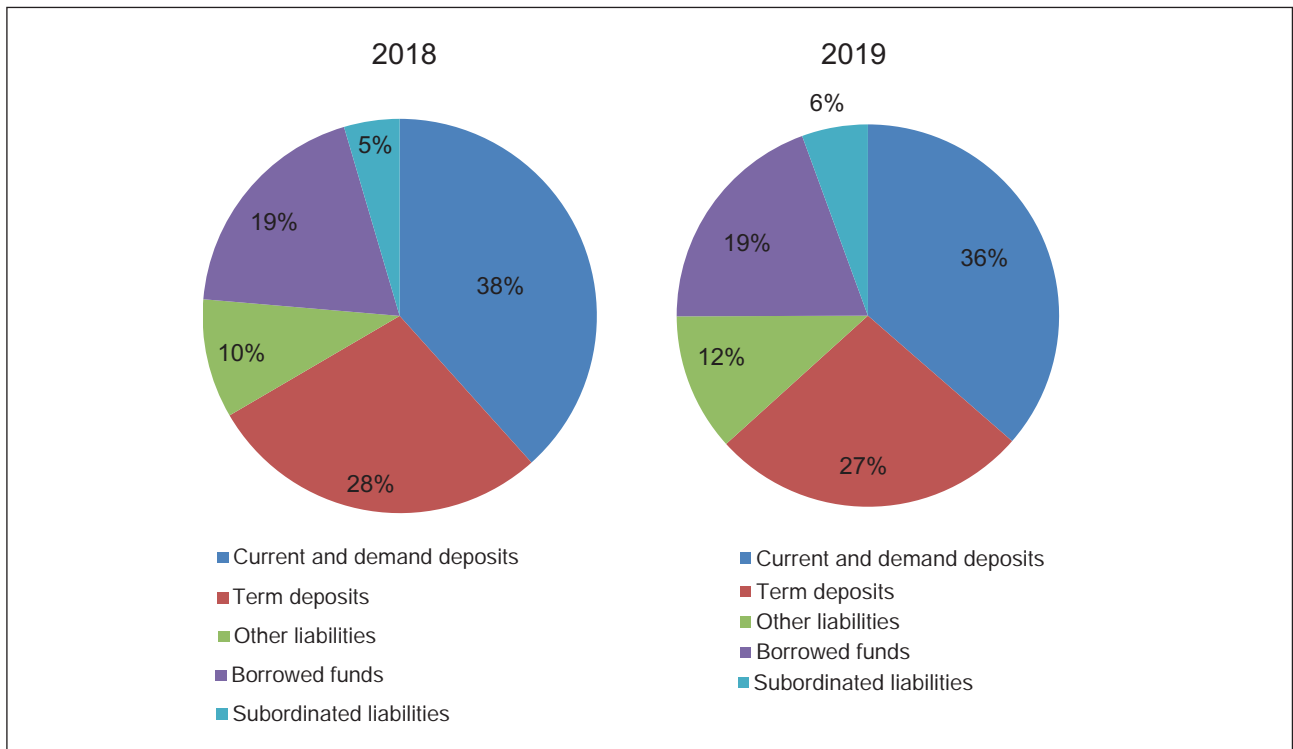
Source: National Bank of Georgia

4.8.2 Structure of Liabilities

The share of deposits in the structure of liabilities decreased insignificantly, while the share of subor-

dated loans and other liabilities slightly increased. In addition, banks maintained a comfortable level of liquid assets corresponding to liability structure risk.

Diagram N 4.31 Structure of liabilities



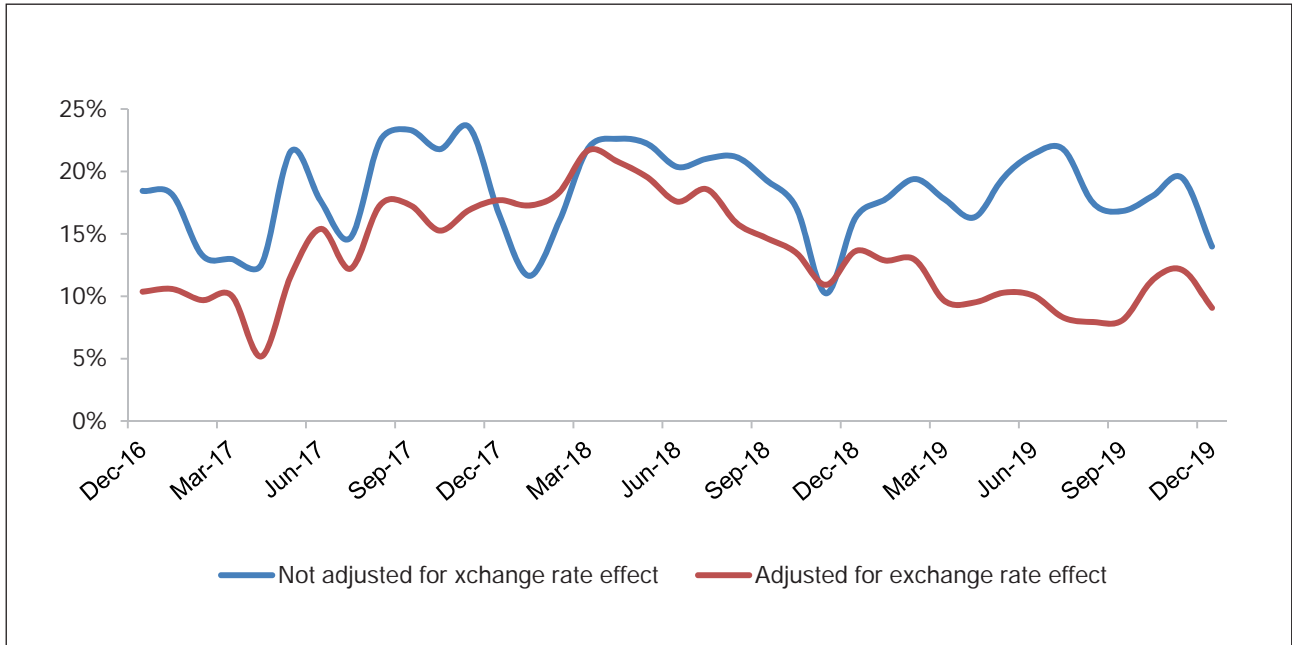
Source: National Bank of Georgia

4.8.3 Retail Funding

During 2019, the volume of deposits increased by 3.2 billion GEL (by 14.0% or by 9.1% if adjusted for exchange rate effects) and amounted to 26.2 billion GEL by the end of the year. In terms of the structure

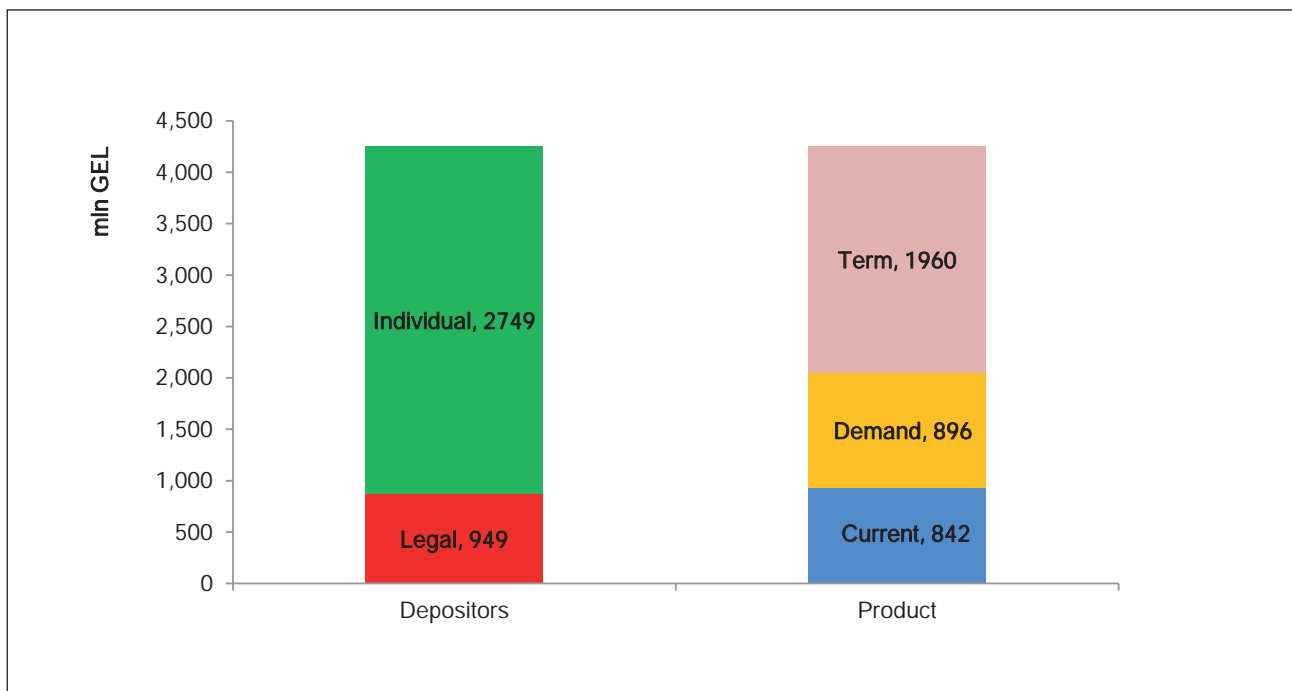
of deposits, the growth of deposits by individuals and legal entities stood at 20.5% and 6.3% respectively (14.4% and 2.7% respectively if adjusted for the exchange rate effect). In 2019, the larization of deposits decreased insignificantly and reached 35.9% by December.

Diagram N 4.32 Annual growth of non-bank deposits



Source: National Bank of Georgia

Diagram N 4.33 Share of non-resident deposits

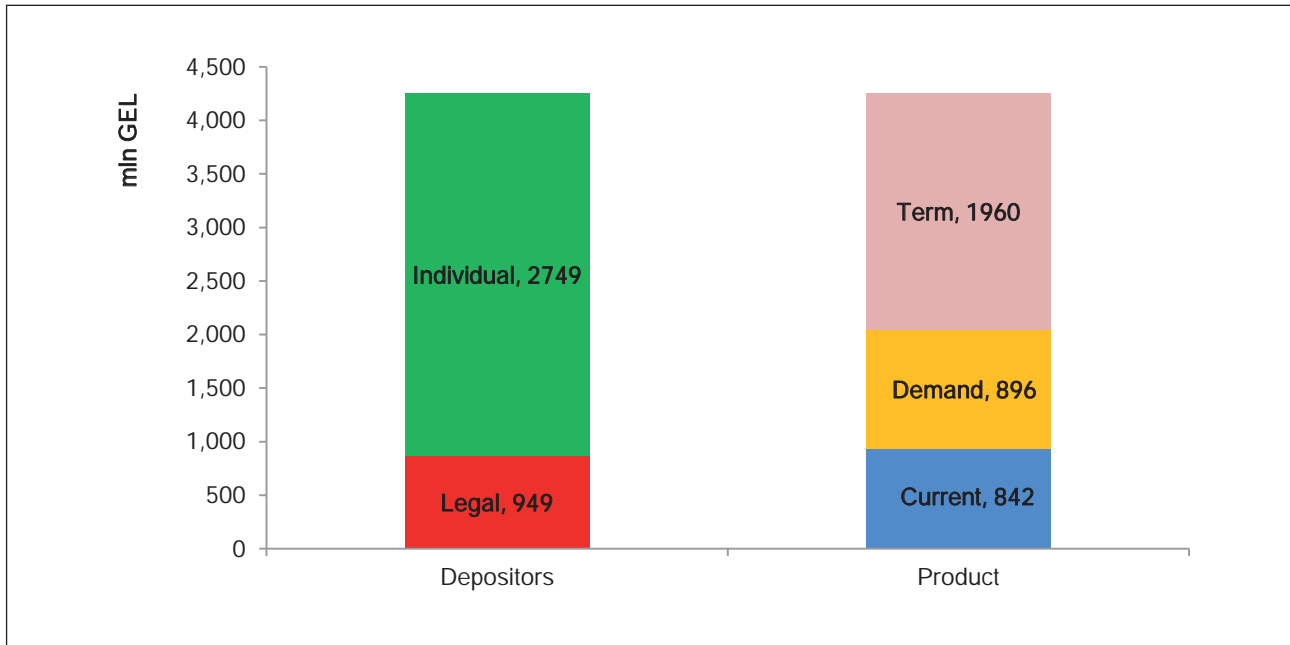


Source: National Bank of Georgia

The share of non-resident deposits in total non-bank deposits remained almost unchanged during 2019 and stood at 16.2% by December. These deposits are well diversified in terms of country of origin, which is a positive factor in terms of risks. In addition, the share

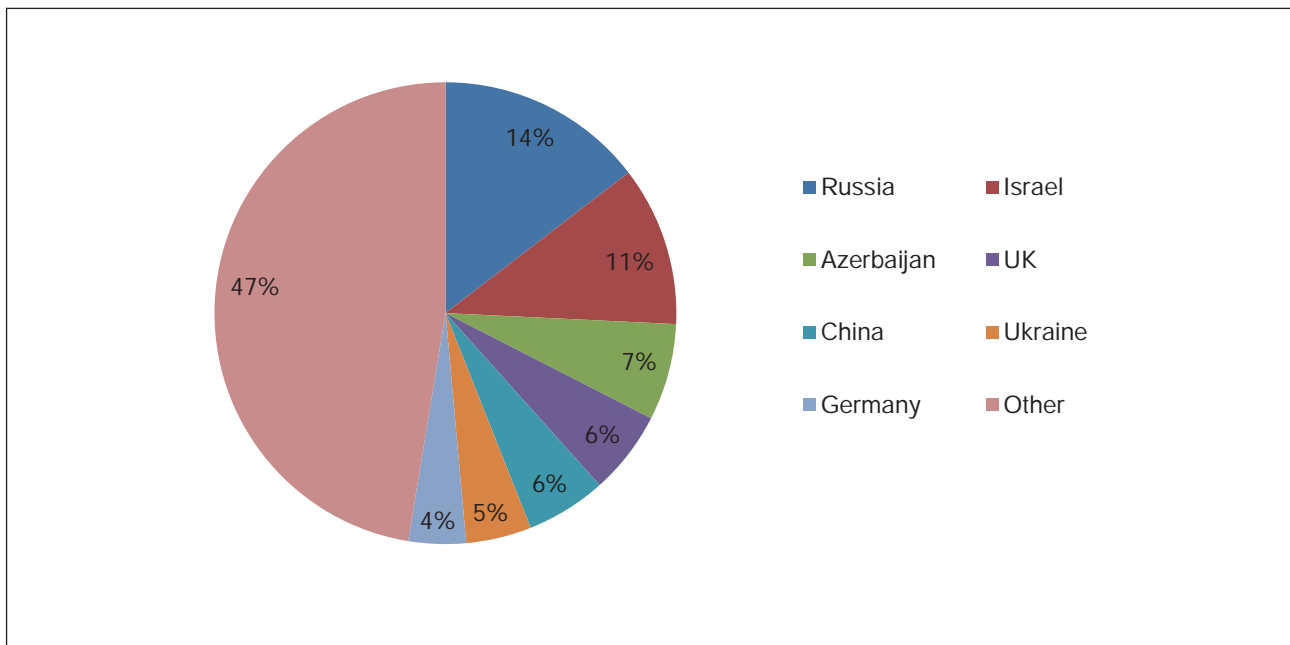
calibrating this requirement, it was taken into account that some non-resident customers are Georgians with foreign passports, or are Georgia-based companies registered abroad. The necessity for additional liquidity in banks with a high share of non-resident

Diagram N 4.34 Structure of non-resident deposits (December 2019)



Source: National Bank of Georgia

Diagram N 4.35 Non-resident deposits by country (December 2019)



Source: National Bank of Georgia

of term deposits remains high, which significantly reduces the risk of outflows.

In order to prevent excessive dependence on this type of funding, the NBS maintains an additional liquidity requirement for non-resident deposits.⁸⁵ When

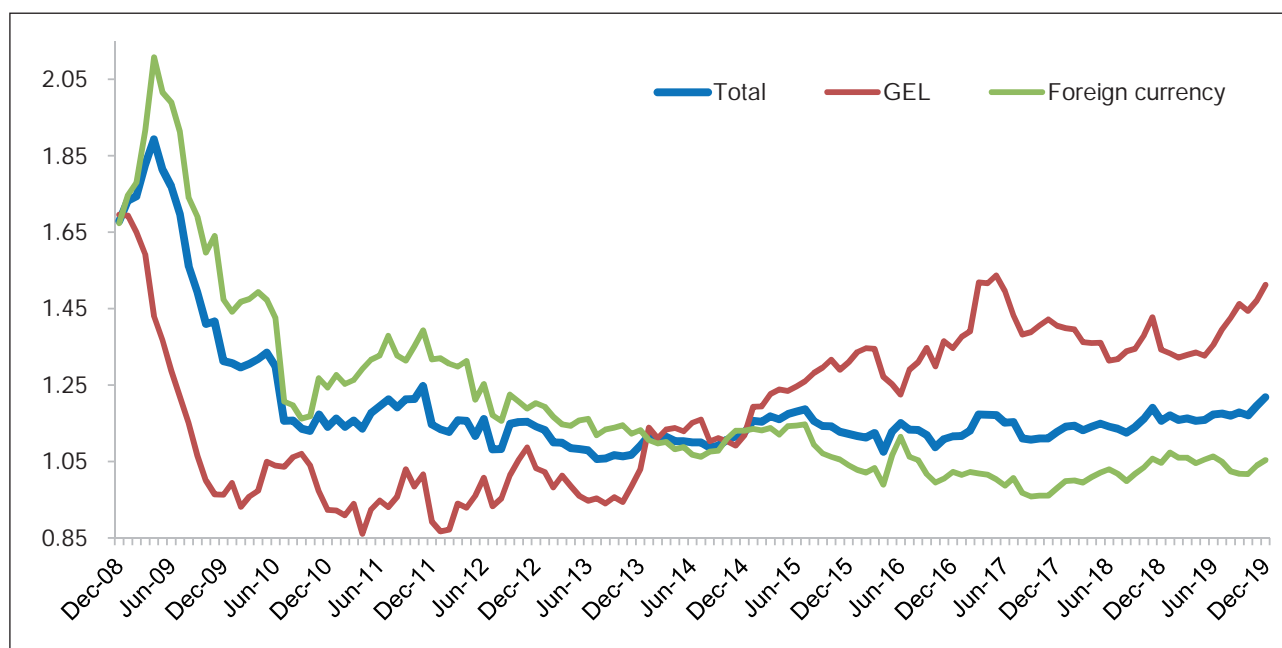
⁸⁵ For the purposes of the calculation of the LCR, non-resident

customers reduces the incentives for banks to attract this type of deposit portfolio. The latter fact has been reflected in the stabilization of the share of non-resident deposits in recent years.

deposits have higher outflow rates than resident deposits.

4.8.4 Wholesale Funding

Diagram N 4.36 Gross loans to non-bank deposits by currency



Source: National Bank of Georgia

Throughout 2019, the ratio of loans to deposits remained stable. It is noteworthy that the same coefficient calculated for lari loans and deposits remains high and has exceeded the ratio of loans and deposits calculated in foreign currency since 2015. This was partially caused by the high growth of lari loans due to foreign exchange risks and the larization measures undertaken. All else being equal, this makes funding risks more manageable.

Wholesale funding is diversified in terms of both lender type and residual maturity. The residual maturity of

60% of wholesale funding exceeds two years, which reduces the funding risk for the system. In the same period, banks attracted more than 200 million USD of the additional Tier 1 instrument, which is another positive factor for the stability of long-term funding.

A total of 58% of wholesale funding was attributed to international financial institutions, 11% to parent/related companies and 32% to other private institutions. The high share held by international financial institutions and the long-term repayment schedules can be assessed as being low risk. Lender covenants⁸⁶ were regularly monitored and their effects were reflected in the new framework of stress tests.

Table N 4.9 External sources of wholesale funding and their schedules as of 31 December 2019

Month	<1	1–3	3–6	6–12	12–24	24–36	36–60	>60	Sum
Total	4.12%	3.34%	5.88%	8.69%	16.67%	13.12%	30.59%	17.58%	100.00%
International financial institutions	0.86%	1.98%	2.69%	4.71%	12.11%	8.42%	12.33%	14.51%	57.61%
Related/parent institutions	1.26%	0.52%	0.27%	1.00%	0.73%	2.63%	1.74%	2.64%	10.79%
Other private funding	2.00%	0.84%	2.92%	2.98%	3.84%	2.07%	16.53%	0.43%	31.60%

Source: National Bank of Georgia

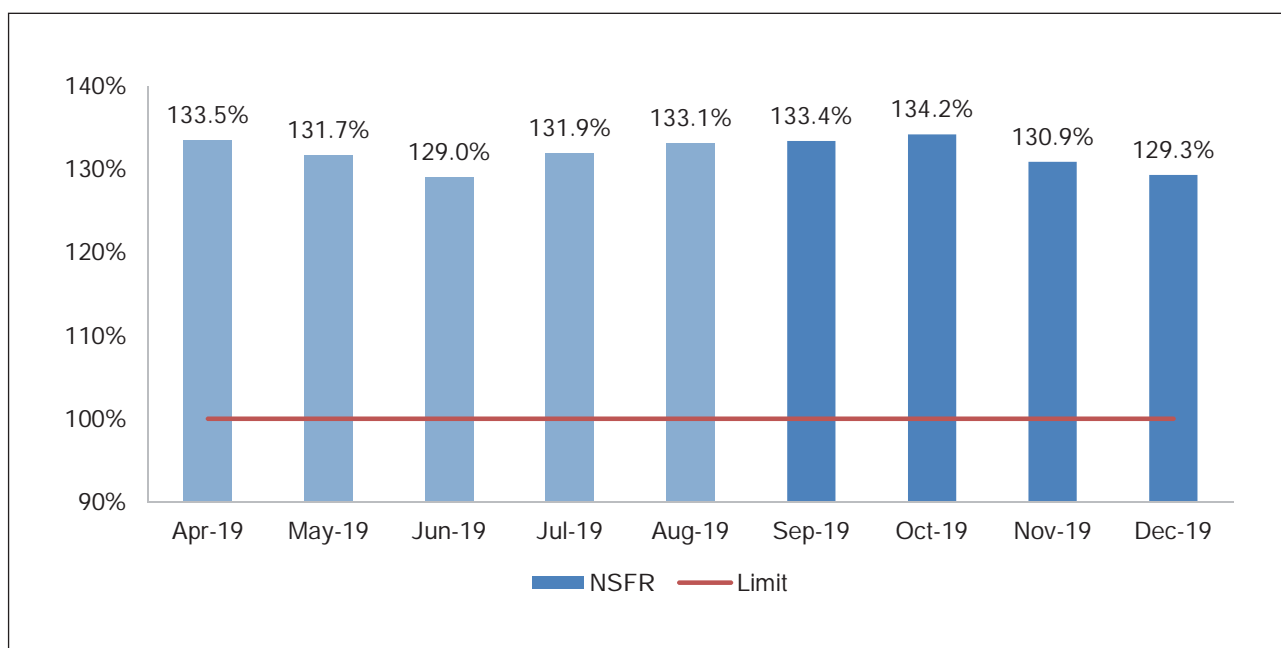
⁸⁶ Restrictions imposed by the loan agreement.

4.8.5 Regulation of Liquidity Risk

During 2019, changes in the monitoring of liquidity risk continued. In order to improve long-term liquidity regulations, the NBG implemented the Net Stable Funding Ratio (NSFR) in September 2019. Following the NSFR regulation, the current liquidity ratio (30% of short-term liabilities) is no longer a requirement and will only stay in place for monitoring purposes. As a result, the supervisory framework for liquidity risk will be fully compliant with Basel standards.

A stable funding structure decreases the solvency risk of a commercial bank. The NSFR reduces the dependence on short-term funding and stimulates a better assessment of funding risk. The NSFR is calculated as the available stable funding of a commercial bank to the required stable funding, and it must be at least 100%. During 2019, Georgian banks were characterized by a stable and high-level ratio.

Diagram N 4.37 Net Stable Funding Ratio (NSFR)



Source: National Bank of Georgia

4.9 Operational risk

Operational risk refers to the risk of loss resulting from inadequate or failed internal processes, people, systems or from external events. Operational risk is of growing importance for various sectors of the economy, particularly where there is increasing dependence on electronic information systems. This stems from the digital transformation of financial institutions, the introduction of new financial technologies and the introduction of more complex operations and financial services. As a result, cyber risks and the modern challenges related to cybersecurity manage-

ment are some of the main concerns for operational risk management.

The year 2019 was a turning point for the National Bank of Georgia in this direction: cybersecurity supervisory requirements were introduced for commercial banks, the NBG continued working on the improvement of quality of data in the financial system, and several projects related to operational risk were carried out. At the same time, due to growing global concerns about cyber-risk, the National Bank of Georgia established a cyber-risk supervisory structural unit, within the context of a supervisory framework of operational risk. The primary objective of the newly created unit is to assess and mitigate cyber-risk in the financial sector.

4.9.1 Operational Risk in the Georgian Banking Sector

The banking system of Georgia is characterized by a relatively low complexity of banking products and services, but there is constant development and transformation in the banking sector: new banking products and services are being introduced at fast pace and they are increasingly based on information systems. These developments increase the operational risks associated with the financial sector.

Total operational risk-related gross losses of the banking system amounted to 22.4 million GEL in 2019, a decrease of 2% compared to the previous

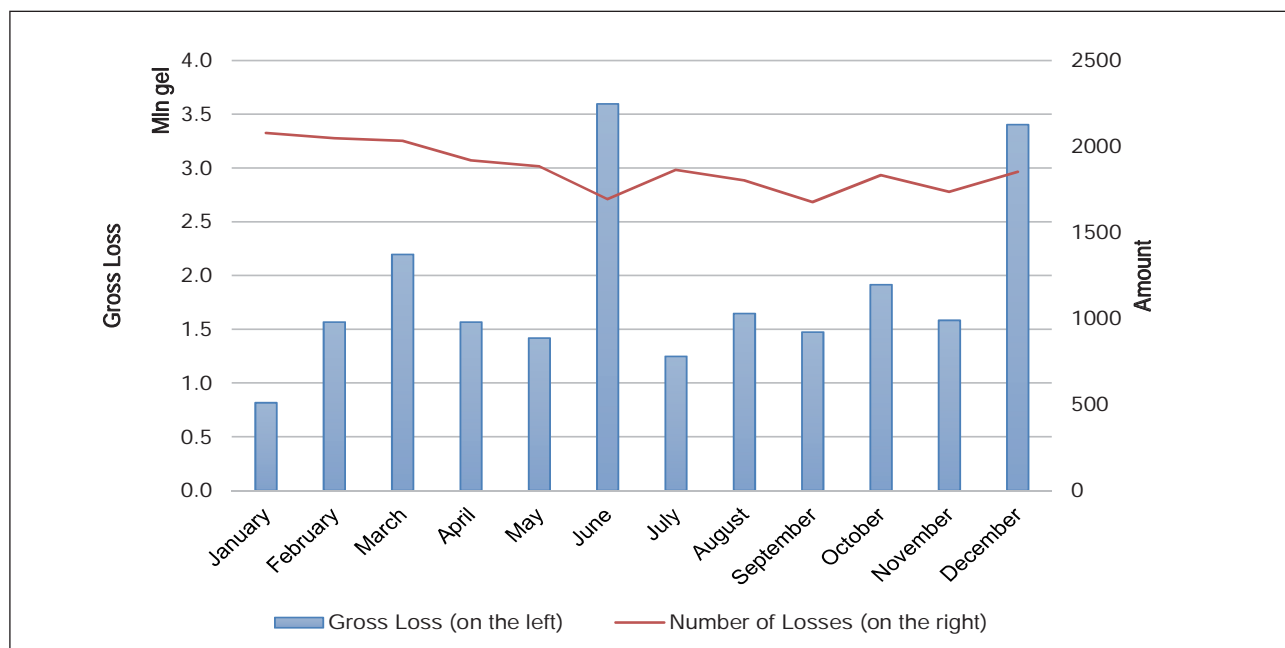
year. Gross losses are related to the initial amount of the operational event, before recoveries of any type.

A total of 22,422 operational loss events were recorded in 2019, which was a decrease of 4% compared to the previous year. It is noteworthy that commercial banks have to report all operational loss events with a gross value that equals or exceeds 10 GEL to the National Bank of Georgia. The average operational loss in 2019 was 1,000 GEL. Diagram N 4.38 depicts the time series of total monthly operational losses for 2019.

Diagram N 4.39 shows the dynamics of total operational losses over the last five years (2015-2019). Additionally, Diagram N 4.40 illustrates the proportional distribution of the total amount of operational risks losses over the last five years (2015-2019).

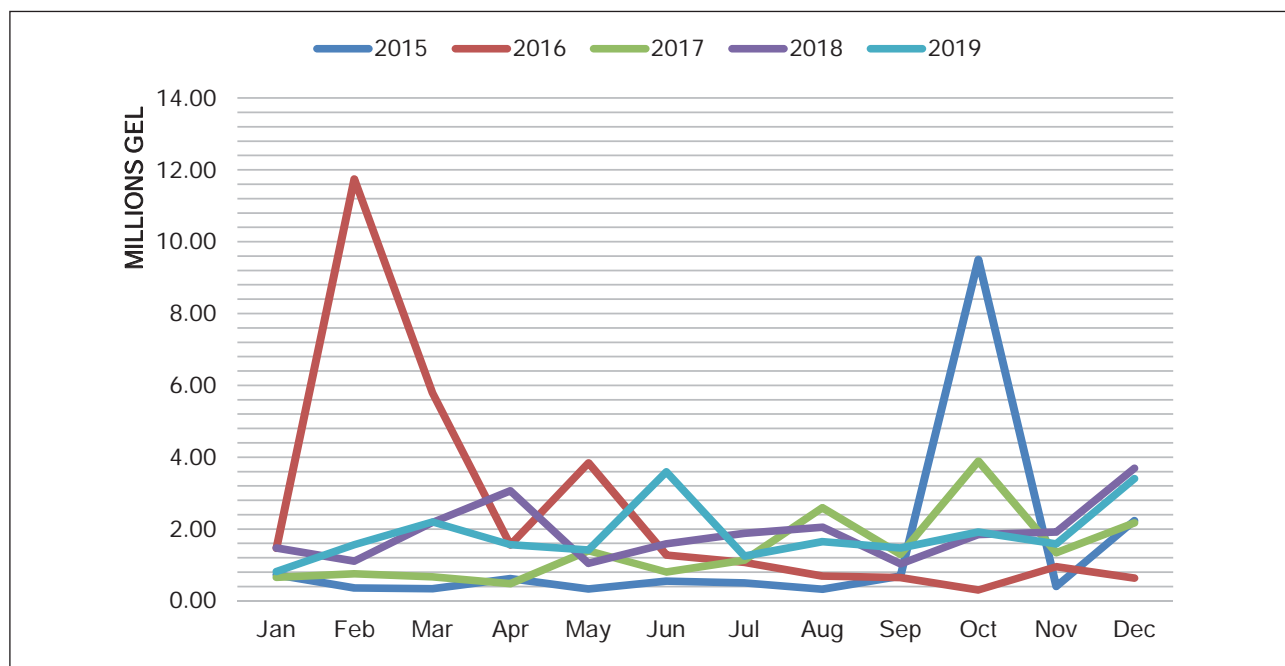
One of the best measures to determine the level of operational risk within the financial system is the operational risk loss indicator. The indicator is calculated by dividing gross operational losses by gross income. The annual gross loss indicator divided by gross income, as measured using the Basel II methodology,

Diagram N 4.38 Total monthly operational losses for the banking sector, 2019



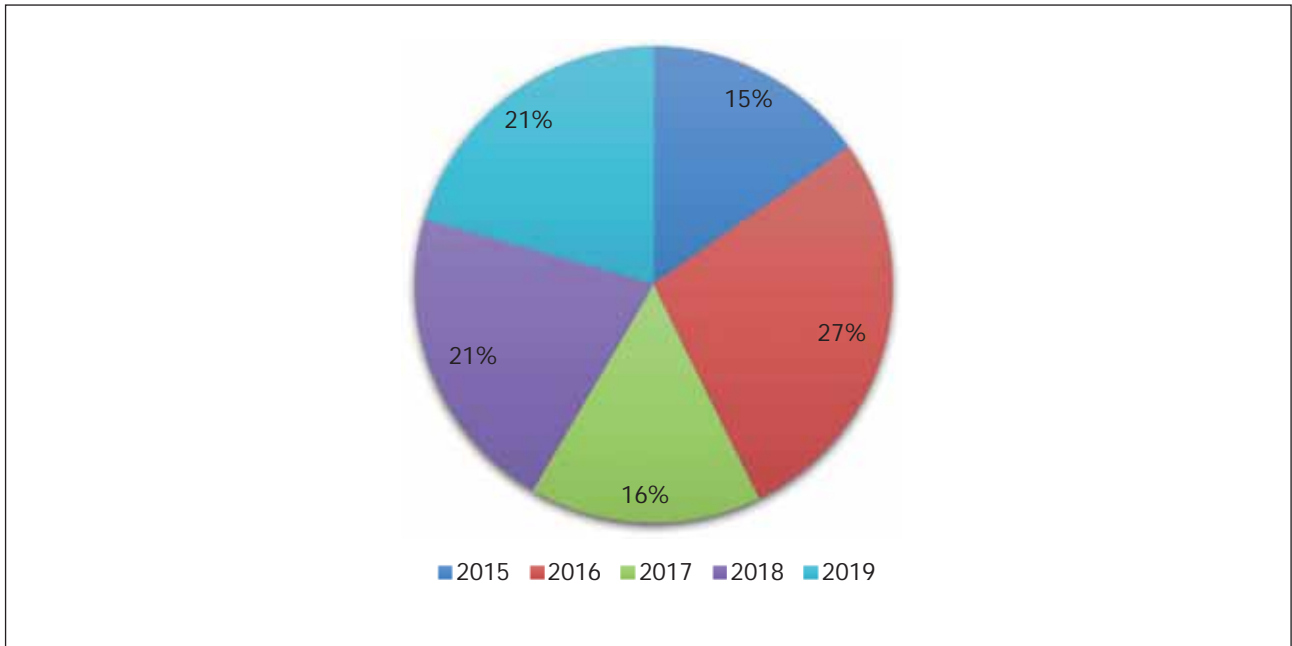
Source: National Bank of Georgia

Diagram N 4.39 Dynamics of monthly operational losses (2015-2019)



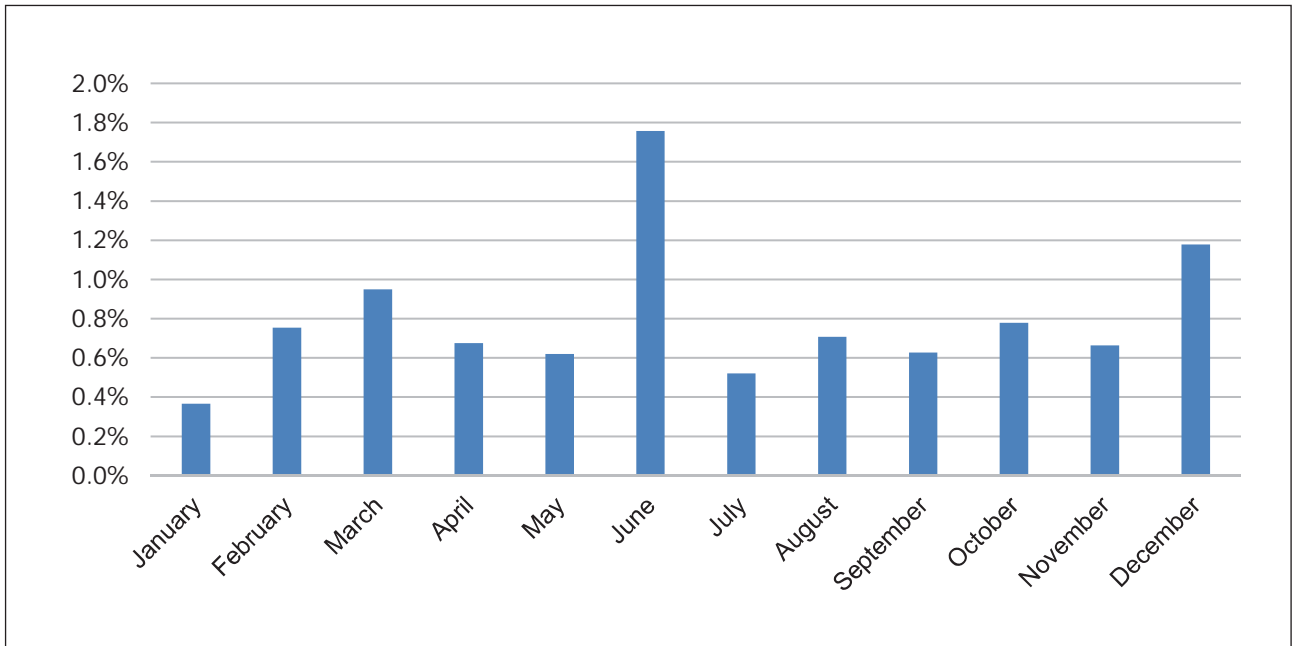
Source: National Bank of Georgia

Diagram N 4.40 Proportional distribution of gross operational losses (2015-2019)



Source: National Bank of Georgia

Diagram N 4.41 Dynamics of the operational loss indicator by month, 2019



Source: National Bank of Georgia

stood at 0.71% in 2019. Diagram N 4.41 depicts the monthly dynamics of the operational loss indicator of the Georgian banking sector. It should be noted that commercial banks operating in Georgia use operational risk insurance and other methods of risk mitigation. Accordingly, the abovementioned gross loss ratio reflects the ratio of the initial financial loss of the event divided by the gross income (and not the net loss, which incorporates reimbursements/recoveries of the amount related to the operational event).

According to data from 2019, operational loss events were mostly observed in the retail banking business line and, to a lesser extent, in the commercial banking business line. The retail banking business line includes payment card-related operational losses, along with traditional retail banking losses. The fact that most operational loss events were observed in the retail and commercial banking business lines is because they represent the primary sources of banking activity in the Georgian banking system. The other six business lines defined by Basel II are not actively

present in Georgia.⁸⁷

4.10 Data Quality Management and Accuracy Risk

Data quality management is one of the main priorities of the National Bank of Georgia. Work is currently underway regarding the establishment of regulatory guidelines on risk data aggregation. The current draft supervisory document is based on the principles for effective risk data aggregation and risk reporting (the Basel Committee Standard, BCBS 239). Furthermore, the NBG also initiated a project for the adoption and use of the Extensible Business Reporting Language (XBRL) for financial and supervisory reporting.

The National Bank of Georgia also evaluates the accuracy, integrity and quality of financial data in the banking system. As part of ongoing cooperation between the National Bank of Georgia and the LEPL Deposit Insurance Agency, commercial banks were assessed jointly in accordance with the instruction on the “Calculation of the base of regular insurance premium to be paid by commercial banks and the procedures for payment of regular insurance premium”. In the context of data quality management, special emphasis is placed on the efficiency and effectiveness of the business process related to reporting. In order to improve the reporting process, it is the NBG’s stance that a high level of automation of commercial banks’ information systems is crucial for effective reporting. A high level of automation can also lead to a reduced level of complexity of information systems.

4.11 Cybersecurity Supervision

One of the main threats that the financial system faces today is directly related to cyber-risks. Cyber-risk poses a significant threat to financial stability and is one of the main sub-categories of operational risk.

According to the 2016 Worldwide Threat Assessment of the United States, cyber-risk is a top threat facing the world today. Threats to data integrity are assessed as being a primary cybersecurity threat. Integrity risk is associated with the unauthorized modification of data, information and processes. The National Bank of Georgia actively monitors and places special importance on the cybersecurity of the banking system. As already mentioned, the NBG has introduced a cybersecurity supervisory framework for commercial banks that covers the topics of incident

⁸⁷ A detailed description of Basel’s business lines is provided in Annex 8 of the Basel II document on International Convergence of Capital Measurement and Capital Standards (link: <http://www.bis.org/publ/bcbs128.pdf>). According to Basel’s classification, business lines for corporate finance, financial instrument trading and sales, payment and settlement, custodial/agency services, asset management and retail brokerage services are not actively developed in Georgia.

response, penetration testing and information systems audit requirements. These requirements also cover the regular assessment of cybersecurity controls. Furthermore, penetration testing is a topic that merits special attention as one of the components of the supervisory framework that the NBG emphasizes. In the event of a potentially significant cyber-incident, it is also important to have effective business continuity and recovery plans in place.

Payment cards represent an additional avenue for fraud and cyber-risk that are globally relevant. The National Bank of Georgia works closely with commercial banks in order to emphasize the importance of adequate control mechanisms and the implementation of information systems that will help banks prevent fraud associated with payment cards. In this respect, it is important to implement the types of preventive and proactive controls that will deter unauthorized transactions stemming from both local and foreign payment cards.

Phishing and phishing attempts offer unauthorized parties the potential ability to penetrate organizations’ and individuals’ electronic information systems and execute financial transactions. Georgia, like many other nations around the world, has and likely will continue to experience events associated with unauthorized transactions stemming from phishing attacks. Therefore, it is vital for financial institutions to create a type of environment that will deter such events by using comprehensive and adequate controls and by raising the level of awareness of consumers to reduce the risk of successful phishing attempts.

4.11.1 Dependence on other sectors

The Georgian banking system is critically dependent on other sectors of the economy. As a result, effective communication with other sectors and associated regulatory agencies is vital. Without effective communication and coordination between different sectors of the economy, managing risks arising from such dependencies becomes a considerable challenge.

The National Bank of Georgia is planning on expanding its supervisory framework in the future. This will include the development of a broader set of regulatory tools and instruments that will cover both the operational and cyber-risk management frameworks of financial institutions. In parallel, the NBG will continue its partnership and coordination with various international organizations in the area of operational and cyber risks.

4.12 Macroeprudential Risks

The NBG continues the close monitoring of systemic

risk indicators that may have a material impact on the banking system. Information on these risks is provided in the different sections of this report. An incomplete list of the main challenges currently facing the banking system includes the following: increased debt burdens of unhedged borrowers due to the depreciation of the Georgian lari against the US dollar; acute competition in business lending against deficiencies in pricing models for banking products; a spike of interest rates on global markets; large-scale fraud on a system-wide level; an increase in unregulated non-bank financial intermediation; and current threats in the region.

During the risk assessment process, trends in individual sectors are taken into consideration in addition to general macroeconomic parameters. In this regard, the NBG closely monitors growth dynamics in the purchase of real estate for rental purposes and in the construction of hotels. In the event of a reduction in tourist inflows, this may lead to excess supply and low occupancy rates, which, as a result, may have a negative effect on the real estate market. Although the financing of this sector by commercial banks is limited, if a negative scenario were to materialize it would have a significant negative effect on the profitability of commercial banks. Within the framework of the forward-looking supervisory approach, periodic reviews of the main parameters of stress tests and discussions of these with commercial banks are conducted.

Supervisory stress test results were discussed in 2019 and, according to the results, the banking sector has a sufficient capital buffer to absorb economic shocks and continue credit activities in the contraction phase of the business cycle. The stress-test methodology was updated and improved based on the current issues. Moreover, a detailed approach was determined and a unified calculation form was created to ensure increased efficiency when completing the form and validating the results. Banks are also encouraged to develop and improve their internal models.

There is no danger to the sustainability of the system or to any bank's solvency. Such a result also stems from the fact that the increased credit losses sustained during periods of stress are substantially compensated by the operational income over the same period. The existing ownership structure also provides a good opportunity to refill capital if needed. The scenario analysis included, amongst other things, spillover risks from other countries in the region. In this regard, banks are not directly exposed to such risks and indirect exposure, in the form of loans disbursed by banks to companies exporting to these countries, accounts for only a very small portion of their total loan portfolio.

For credit risk induced by currency mismatches, the National Bank maintains a conservative approach in the form of imposing additional capital requirements for foreign currency loans disbursed to unhedged borrowers. Moreover, in order to mitigate risks associated with high dollarization, only 75% of minimum reserves are counted as liquid assets for the purpose of the liquidity coverage ratio. Banks will have to maintain additional foreign currency liquidity and, as a result, will be less dependent on the reserves held at the National Bank. In the event of deposit outflows during periods of financial stress, this will mitigate liquidity risk to some extent. It is noteworthy that banks' liquidity contingency funding plans, other mitigation measures and the NBG's support instruments are all restricted in foreign currency. Current global tendencies and risks in the region underline the necessity of having minimum foreign currency reserves and high liquidity requirements.

4.13 FINANCIAL AND SUPERVISORY TECHNOLOGY DEVELOPMENT

4.13.1 Supporting Financial Innovation

The National Bank of Georgia constantly strives to develop the financial market. The speed of innovation in the financial sector is increasing, which brings new opportunities as well as new risks. The financial sector remains the most regulated economic sector in the world, and its 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 whilst at the same time supporting the transformation of these ideas into sustainable financial models. In response, the NBG has set up a Financial Innovation Office and started developing a Regulatory Laboratory.

The Financial Innovation Office⁸⁸

The Financial Innovation Office is an effective platform for the NBG to communicate with financial innovators. The office is designed for those who are involved, or intend to become involved, in the financial technology market and who may be affected by the NBG's supervisory framework either directly or indirectly.

The NBG's supervisory approach to risk is technologically neutral, which means that the final result is what is important to us, not which technology will achieve that result. We believe that every innovator should

⁸⁸ Information about the Financial Innovation Office can be found on the Financial Stability section of the NBG's website: <https://www.nbg.gov.ge/index.php?m=742>

have an equal opportunity to show their value, gain recognition and make our financial market better. Accordingly, the role of the Financial Innovation Office is to help innovators better understand the rules and principles of the financial market.

The Regulatory Laboratory

As part of the NBG's support for technology development, in 2019 work began on the preparation of new standards and a framework for the Regulatory Laboratory.⁸⁹ The laboratory allows testing of innovative products or services in a real environment. The framework is scheduled approval in 2020, after public consultations.

The NBG is working to increase the visibility of local Fintech companies and the whole financial sector worldwide. For this purpose, the NBG has joined the Global Financial Innovation Network (GFIN), which is a leading platform for collaboration between innovative supervisors.⁹⁰ One of the main groups of the GFIN is working on joint testing of financial technology and the creation of an international Regulatory Laboratory/Sandbox in several jurisdictions. Cooperation with the GFIN offers an additional and effective opportunity for Georgian financial institutions and Fintech companies to present their technology at the international level.

4.13.2 Model Risk

The use of various statistical models for business decision making has become widespread in the financial sector. Such models are widely used in lending, financial accounting, and risk management. There has been especially large growth in the use of mathematical-statistical models in the arena of retail credit products. Recently, models based on machine learning and artificial intelligence algorithms have started to be used more frequently. Although these increase the efficiency of models, they can complicate analysis and risk assessment.

In response to this challenge, the National Bank of Georgia has developed a draft of a regulation on Risk Management of Data-Driven Models. The purpose of the regulation is to promote the establishment of a model risk management framework and to ensure effective risk management of the models. This regulation defines the basic principles of model building, validation and application. The principles and standards related to model risk management are based on current best practices, challenges, and the experiences of advanced financial supervisors. This framework will help the wider and more efficient use of models in the financial sector.

⁸⁹ This is the same as a regulatory sandbox. See: <https://www.nbg.gov.ge/index.php?m=340&newsid=3860>

⁹⁰ Additional information is available at the following website: <https://www.thegfin.com/>

4.13.3 Credit Information Bureau

Based on the amendments to the Organic Law of Georgia on the National Bank of Georgia in 2018, the NBG has been given the function of regulating and supervising the activities of the Credit Information Bureau.

As of 31 December 2019, 263 lending organizations (85% of the market) cooperated with the Credit Bureau. The remaining lending organizations could not join in 2019 for technical reasons and the joining process will thus continue in 2020.

As a supervisor, the NBG pays special attention to the accuracy of the data recorded in the Credit Information Bureau database and the elimination of claims made by consumers/data subjects. Monitoring in this direction is constantly exercised and, in cooperation with the Consumer Protection Department, 12 organizations, including three commercial banks, were inspected in 2019.

At the end of 2019, draft amendments to the "Rules for providing information to the Credit Information Bureau on the territory of Georgia, registration and access to information in the database of the Credit Information Bureau" were developed, which came into force in March 2020. These amendments were prepared based on experience and observed practice. The main purpose of the changes were to facilitate the effectiveness of the Credit Information Bureau's and financial institutions' activities, increase the volume of information and clarify some technical details.

After starting the supervision of the Credit Information Bureau, in 2019 the NBG started working on creating a Credit Registry. The purpose of the Credit Registry is to facilitate the NBG's supervision of the financial sector and to improve credit risk management. In 2020, consultations are planned with the banking sector and the World Bank. Additionally, preparations are under way to establish technical processes and an information system at the NBG in order to support the Credit Registry in operating smoothly.

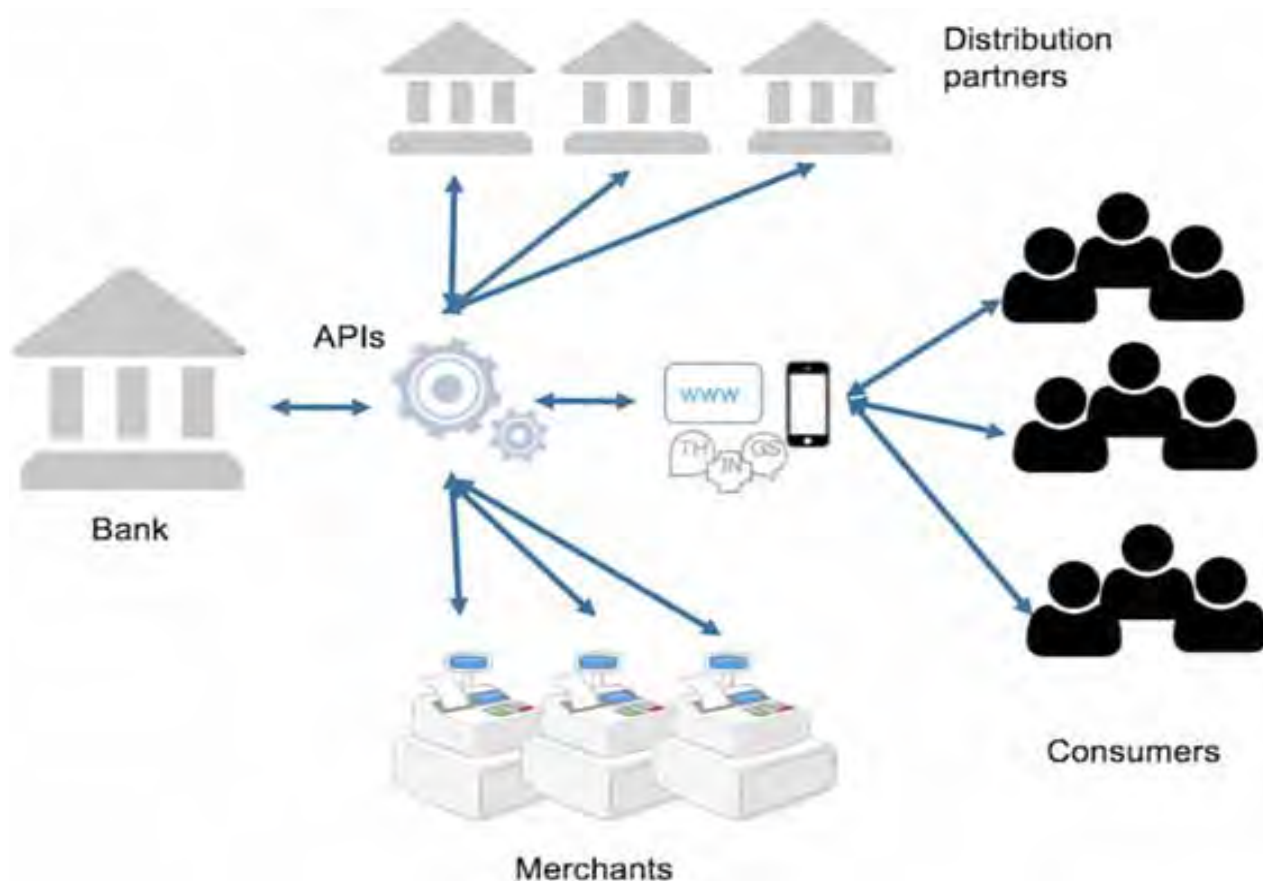
4.13.4 Open Banking

Open banking, which means the instantaneous exchange of information and services between different financial organizations using electronic technologies, is crucial for the development of the financial technology ecosystem. For the exchange of information, an open Application Programming Interface (so-called Open API) is used. It should be noted that the exchange of such information is carried out at the consumer's initiative. Open banking creates productive conditions for the efficient use of new technologies, increases access to finance, improves competition and helps develop new Fintech business models.

In 2019, with the active participation of the NBG, a working group was set up to promote the implementation of open banking in Georgia. The working group, which started work in July 2019, includes representatives of all commercial banks operating in Georgia. The Georgian Banking Association coordinates the work of the group.

automatically, is actively used in the open banking process. Users of this software may be banks, payment service providers or other Fintech companies.

The main focus of the industry is towards the so-called Open API, however, there are three broad types of APIs:



In December 2019, the NBG hosted a two-day workshop on open banking, which was held within the framework of a joint European Union-World Bank project on financial involvement and accountability. The workshop was led by the representatives of the World Bank together with invited experts who were directly involved in the process of the implementation of open banking in different countries. The event allowed Georgian banks to learn more regarding the open banking implementation process, particularly through examining the experiences of the UK, the EU and Australia.

It should be noted that the work on the implementation of open banking in Georgia within a private-public partnership framework has actively continued. From 2020, commercial banks plan to establish Open API standards and take effective steps to develop a common infrastructure.

Box 11 Application Programming Interface – the technological basis of open banking

The Application Programming Interface (API), a technology that allows different software to communicate

- Open API – an interface that provides a means of accessing data based on a public standard.
- Internal/Closed API – an interface that provides a means of accessing data based on a private standard.
- Partner API – an interface created for one or two strategic partners who will create applications, add-ons, or integrations with the API.

The API standard refers to a set of rules and specifications that could be used by multiple banks and third parties to communicate using the same set of communication protocols, security profiles and data dictionaries.

There is currently no globally adopted API standard; however, local and regional API standards are being developed. API standardization is important to make it easier for third parties to access data.

It should be noted that in some countries it is mandatory to share customer data using protected methods, which implies the use of Open API. In Europe, for example, an updated Payment Services Directive (PSD2) came into force in January 2018. The direc-

tive requires banks to share customer data based on customer consent, while the third parties who wish to access these data are required to register with the relevant supervisory authority.

In contrast to Europe, Singapore and Hong Kong have chosen to encourage information exchange, instead of requiring mandatory exchange of information, and, in order to facilitate the development and widespread introduction of APIs in the banking sector, they have developed guidelines instead of regulations.⁹¹

The API standards developed by the International Banking Architecture Network (BIAN)⁹² are also worth noting. These standards aim to promote banks' arrangement of IT infrastructure as an independent module. According to the standards, an independent business process must have an independent and original IT module. In addition to the fact that this approach facilitates the integration of Fintech companies into the information systems of a bank, it also significantly reduces risks due to the complexity of information systems. In addition, the modular arrangement also facilitates the effective implementation of a bank's recovery and resolution plan.

Banks, as well as third parties, usually prefer a more secure method of data sharing, such as an API that relies on proven authentication by token (electronic proof of possession of the item). In some countries, the use of this method of information exchange is required by law.

The process of developing and using an Open API involves several interrelated steps. Initially, the bank develops a standard and makes the Open API public. As a result, any third party is allowed to contact the bank with the appropriate authorization. Normally, at the initial test stage, the bank will place the third-party application in a training environment (a so-called sandbox) and, if it works properly, the communication will move to real mode. Communication via an Open API occurs as follows: when a third-party application user requests a specific service from his/her own service bank (for example, to show an account balance or to make a payment from an account), this request is sent from the application to the bank via API. In response to a request from the bank, the system automatically sends the requested data or proof of payment to the application.

Examples of banks' Open APIs include the Barclays or Revolut Open APIs.⁹³ An example of an Open API

91 Available online at the following websites: <https://www.mas.gov.sg/-/media/MAS/Smart-Financial-Centre/API/ABSMASAPIPlaybook.pdf>; <https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2018/20180718e5a2.pdf>

92 Available on the BIAN website: <https://www.bian.org/participate/bian-webinars/bian-apis-future-banking-api-standards/>

93 The documentation is available at the following websites: <https://developer.barclays.com/apis>; <https://revolut-engineering.github.io/oba/#get-account-transactions>

in Georgia is fintech.ge, although this currently only works in sandbox mode.

4.13.3 Data processing and supervisory technologies

The National Bank of Georgia aims to implement an international standard for data exchange (the Extensible Business Reporting Language (XBRL)) to improve the data quality of its financial and supervisory reports (see the NBG Annual Report of 2017). Parallel to this process, the National Bank of Georgia continued working on the project to fully transfer reporting to IFRS. In order to support this, during the first phase of the project, the NBG began receiving financial statements following the standard accepted by the European Union (FINREP).

The Dutch Central Bank and the National Bank of Poland are cooperating closely with the National Bank of Georgia within the framework of an EU twinning mission. With their help and recommendations, the National Bank has developed functional requirements and options for the project.

In the spring of 2019, on the initiative of the National Bank of Georgia and the Dutch Central Bank, a working meeting titled "Tbilisi XBRL Expo 2019" was held in Tbilisi. The event brought together participants from Georgian commercial banks international software companies that develop XBRL-related software. The purpose of the meeting was to introduce new standard software to Georgian commercial banks, establish contacts with vendors and gain a better understanding of the software that is available for XBRL reporting, which would provide commercial banks with a new standard of supervisory reporting at the National Bank of Georgia (FINREP, COREP).

In 2020, the National Bank of Georgia intends to introduce a report portal compiled according to the XBRL standard. Through the portal, banks will be able to submit required supervisory reports and get the results of their validation in real time. The information provided will be stored in a database and will be available for analysis for banking supervision. By the end of 2019, commercial banks were tasked with financial reporting via FINREP submissions using the XBRL standard in trial mode. It is planned to receive actual FINREP reporting from banks in XBRL format in 2020.

For the further development of supervisory technologies, fine-tuning of the currently valid supervisory analytical information software is also planned. Through this tool, the banking sector supervisor processes the information needed for supervisory activities. These changes will increase the accuracy of supervisory information, simplify the reporting process and facilitate effective supervisory analysis.



5

CONSUMER RIGHTS PROTECTION AND FINANCIAL EDUCATION



5. CONSUMER RIGHTS PROTECTION AND FINANCIAL EDUCATION

5.1 CONSUMER RIGHTS PROTECTION

Consumer rights protection in the financial sector is one of the priority areas for the National Bank of Georgia. In this regard, as in previous years, significant activities were held in 2019.

RENEWED NORMATIVE BASE

The Rule on the Protection of Consumer Rights

With the purpose of approximating existing regulations to the relevant EU directives (within the framework of the EU/Georgia Association Agreement), the National Bank of Georgia has prepared a comparative analysis of EU directives and the current normative base. On the basis of this, corresponding draft amendments were made to the rule on the “Protection of Consumer Rights while Rendering Services by Financial Institutions”, which were enacted on 1 June 2017. These have been sent to the financial sector for review and are planned to be approved/enacted in 2020.

In addition, the NBG continued to work on the amendments initiated in 2018 that seek to increase public confidence in the financial sector, maximize consumer rights protection and ensure the transparency of information regarding financial products on the market.

Credit Information Bureau

During 2019, claims related to the Credit Information Bureau increased significantly. Based on a review of consumer complaints, a number of significant errors were identified, and the bureau subsequently planned appropriate actions to eliminate those. The mechanism of registering and handling complaints is an important tool for identifying and preventing potential problems in the activities of entities subject to the supervision of the National Bank of Georgia.

Draft Amendments on the Debt Collection Code of Ethics

Amendments made in 2018 to the rule on the “Protection of Consumer Rights while Rendering Services by Financial Institutions” establishes the obligation of financial organizations to develop a code of ethics for the loan collection process. During 2019, the necessity to further detail and realize this obligation arose. As a result, the National Bank of Georgia developed a draft version of a “Debt Collection Code of Ethics”, which is based on best international practices while

taking into account the peculiarities of the local market. The draft was published so that anyone could review it and provide their own comments and opinions. At the same time, different financial organizations were actively consulted regarding the document. The draft covers important topics such as the obligation of providing accurate and unmistakable information; following the principles of reliability, transparency and mutual respect while dealing with customers; a commitment to adhere to the best practices and norms of business relations; standards for providing information to the contact person, including the timing and format of communication; obligations for financial organizations to maintain documentation reflecting their communication with consumers; and terms of termination of communication with customers.

The approval and enactment of this document is planned for 2020.

Civil Code

Changes concerning consumer rights protection were made to the Civil Code in 2019. Specifically, changes were made to the restrictions on loans in foreign currency. The established rule, according to which lending of up to 100,000 GEL was only allowed in the national currency, was changed so that the upper limit was increased to 200,000 GEL. At the same time, this restriction was extended to also cover leasing and installment sales agreements.

At the same time, upper limits for the annual effective interest rate (with a maximum annual rate of 50%) and penalties (with a maximum daily penalty of 0.27%), as determined by the Civil Code, were also extended to leasing and installment sales agreements. Moreover, the requirements of the Civil Code (Sections 5 and 8 of Article 625), which covers commission fees, financial expenses, fines and penalties and imposition of any other financial sanctions, have been extended to also apply to leasing and installment sales agreements. For this purpose, the calculation rule of effective interest rates, commissions, financial expenses, fines and penalties and any other financial sanctions was established by an appropriate normative act of the National Bank of Georgia in February 2019.

Consumer rights protection on-site and off-site inspections of the financial sector

In order to improve consumer rights protection practices and the current market situation, and also to

check compliance with the requirements of the financial consumer protection legislation framework, in 2019 the NBG conducted on-site inspections of several organizations under its supervision. At the same time, the NBG actively continued to conduct off-site inspections. In response to violations revealed by those inspections, the NBG took relevant supervisory actions. As a consequence, six microfinance organizations and three commercial banks were fined a total of 79,000 GEL by the NBG for violations of the consumer protection regulatory framework.

Consultations regarding amendments to consumer protection legislation

In 2019, the NBG continued providing consultations and recommendations to financial sector representatives and other stakeholders concerning the consumer rights legal protection framework.

According to the Rule on “Registration, cancellation of registration and regulation of the loan issuing entities”, from 1 January to 20 April 2019, all entities to which more than 20 individuals had a loan or credit obligation, or which intended to issue new liabilities, had to be registered with the National Bank of Georgia. According to the requirements of the same rule, any such financial organization is obliged to comply with the consumer protection requirements. To ensure loan-issuing entities’ compliance with these requirements and to raise awareness on the market, the National Bank of Georgia continued to provide consultations and recommendations to interested parties in 2019. During the consultations, participants received detailed explanations of the requirements of the consumer rights protection rules. The meetings covered issues such as ensuring that the format and content of credit agreements complied with the existing legislation.

In addition, upon the initiative of National Bank of Georgia, and with support from the GIZ Legal Program and the High School of Justice, international experts developed and conducted a three-day training module for common court judges and for representatives of the High School of Justice on the topic of consumer rights protection. The module focused on issues related to consumer rights protection, including the Rule on “Protection of Consumer Rights while Rendering Services by Financial Organizations”. The module reviewed both the local normative base and EU legislation. During a training of trainers, 23 practicing common court judges were trained. The participating judges were selected by the High School of Justice. The retraining of acting judges is important insofar as it will help raise awareness of judges about legal acts in the field of consumer protection and will

also help them better understand the specifics of consumer protection mechanisms in the financial sector. Considering the importance of this issue, the NBG and the High School of Justice plan to continue offering training that will further contribute to a raising of awareness.

Mystery shopper study

In 2019, the NBG and the Savings Banks Foundation for International Cooperation (SBFIC) conducted a “mystery shopper” study. The study aimed at assessing the compliance of the consumer protection practices of commercial banks and microfinance organizations with the rule on the “Protection of Consumer Rights while Rendering Services by Financial Institutions”. The object was to identify existing problems and to discover ways to solve them. The study was conducted in Tbilisi and in the regions of Georgia and covered six commercial banks and two microfinance organizations. The detailed results of this study are planned for publication in 2020.

Consumer claims

During 2019, the Consumer Protection Division of the NBG received 6,088 claims from consumers, which was an increase of approximately 37% over the previous year. The majority of those claims (4,270 or 70.1%) were made over the phone. The number of claims received via other means is as follows: 440 complaints were made in writing (7.2%); 416 were expressed over social media (6.8%); 579 consumers (9.51%) addressed the NBG over email, and 383 (6.3%) visited the NBG personally.

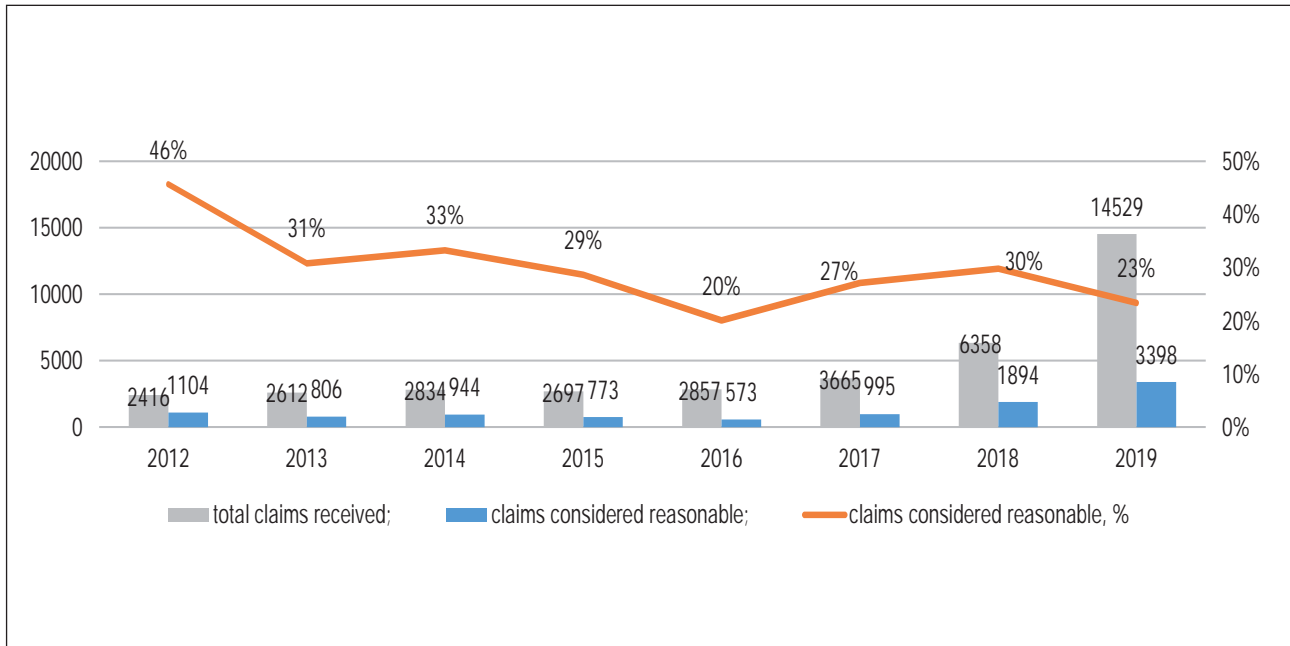
In terms of content, the majority of complaints were related to credit restructuring requests; administrative/services issues; the terms and conditions of contracts; and requests for general information. In terms of products, the majority of complaints were related to consumer and mortgage loans. Claims related to problem loans were also frequent.

Besides the NBG, customers also applied to financial organizations (commercial banks and microfinance organizations) for information or claims. During 2019, commercial banks received 14,529 complaints from consumers – an increase of 128.5% over the previous year. If we look at the dynamics of all complaints made at commercial banks since 2012, there has been a growing trend. This should be considered as a positive trend, resulting from the increased awareness of consumers about the mechanisms of consumer rights protection. The increased number of claims in 2019 primarily stemmed from the legislative amendments made to the Civil Code and the exten-

sion of consumer protection regulation requirements. The methodology for handling complaints was also improved. Specifically, until 2019, certain types of transactions were not included in commercial banks' claim reporting forms; however, from 2019, based on the request of the National Bank of Georgia, claims related to almost all types of transactions are now included in the reporting forms.

"phishing"). This refers to obtaining such data that would allow third parties to access a user's money and to make online payments. Such data include the card number and its three-digit security code (marked on the reverse of the card), as well as the name, password and security code of the Internet bank, mobile bank or e-wallet user. By capturing this data, fraudsters can make unauthorized transfers. The Na-

Diagram N 5.1 Claims made at commercial banks

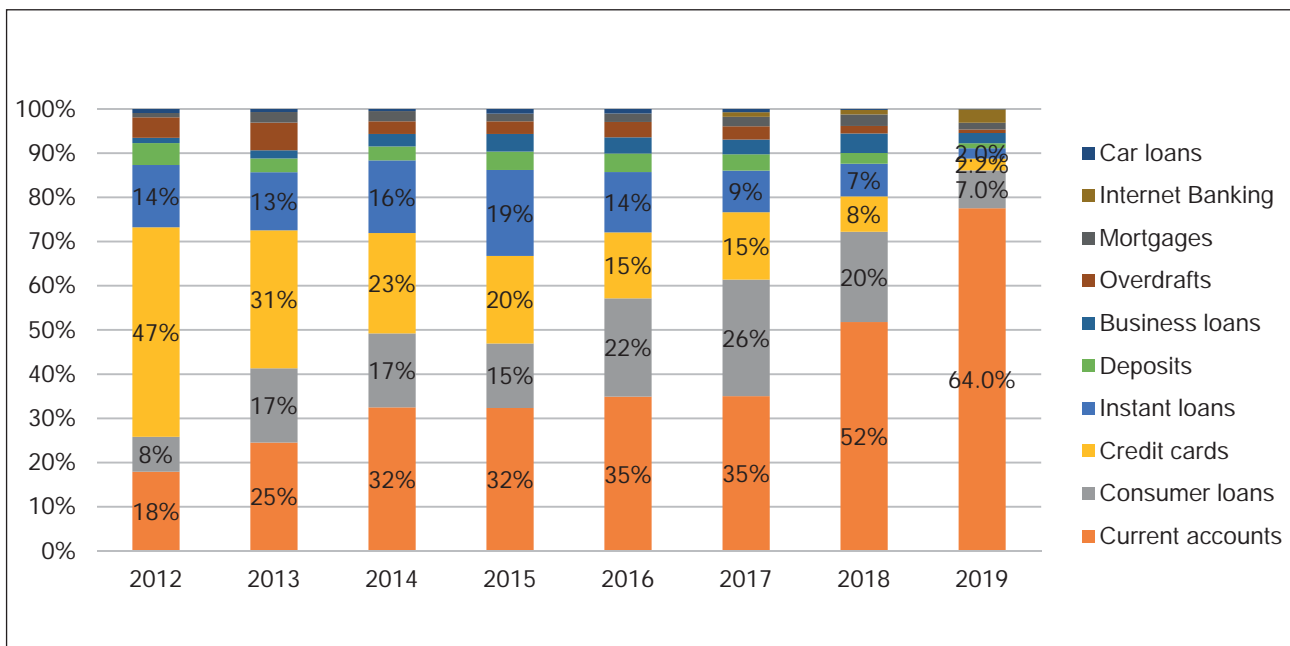


Source: National Bank of Georgia

In addition, 2019 saw an increase in the number of cases in which financial consumers' personal data had been stolen through fake websites (so-called

tional Bank of Georgia has published a warning and provided recommendations concerning this issue. Moreover, with the involvement of the Association of

Diagram N 5.2 Distribution of claims made at commercial banks by product type



Source: National Bank of Georgia

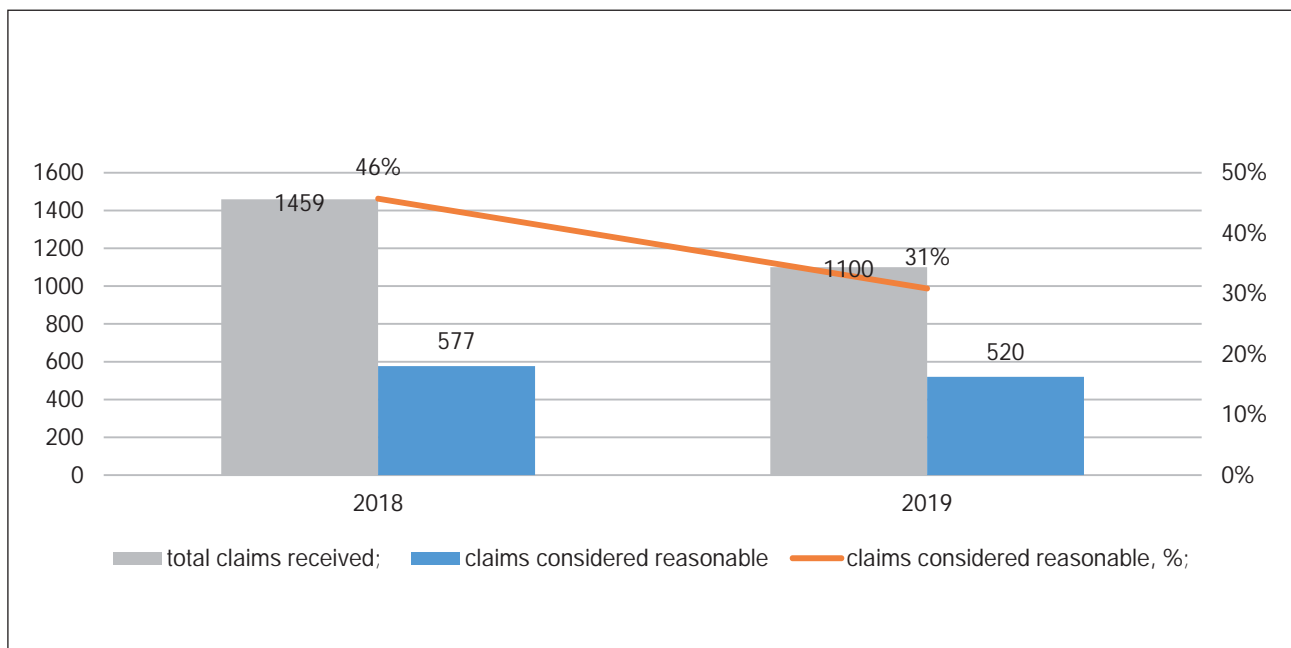
Banks and Commercial Banks, the National Bank of Georgia developed an educational video on the topic of phishing, which once again reminded the population of the importance of paying attention and being cautious when using financial and personal data on the internet.

Complaints most frequently related to the following banking products: 1) current accounts; 2) consumer loans; 3) credit cards; and 4) instant loans. This distribution shows little change from year to year, which should be expected given that the majority of claims relate to the most frequently used products.

Microfinance organizations started registering complaints received from consumers in 2017; however, the NBG has only published this data from 2018. During 2019, microfinance organizations received 1,100 complaints from consumers, which was a decrease of approximately 24.6% over the previous year. This

the population. Projects that had started in previous years were scaled up and new projects commenced, the latter included a new financial education website that will bring together all educational resources and topics concerning financial literacy. An action plan for implementing the National Strategy for Financial Education was developed, which determines priority activities and programs to be initiated both immediately and in the medium term, and sets out the actions to implement them. The action plan was approved by the steering committee on the National Strategy for Financial Education. Within the frames of the action plan, numerous financial education activities were conducted during the year. Training sessions, workshops, competitions, and games were held for priority target groups, including entrepreneurs, children and the youth. International and local partner organizations focusing on financial education were also involved in the events.

Diagram N 5.3 Claims made at microfinance organizations



Source: National Bank of Georgia

decrease is mainly a consequence of a decline in the number of microfinance organizations.

A total of 66.4% of complaints received in 2019 were related to consumer loans – this should be expected as consumer loans are the main product of microfinance organizations. In terms of the content of the complaints, the majority were related to administrative/service issues, fines, penalties for overdue payments, and transactions

5.2 FINANCIAL EDUCATION

In 2019, the National Bank of Georgia took significant steps towards improving the financial literacy of

Within the frames of the financial education program for micro and small entrepreneurs, the National Bank of Georgia has started trainings of trainers from interested public, private and civil sector organizations. These trainers subsequently distributed the program among 1,200 beneficiaries. Furthermore, the National Bank of Georgia has started the development of a brochure and training module specifically for micro and small entrepreneurs working in the agricultural sector.

The National Bank of Georgia continued actively working on implementing financial literacy in schools.

Starting from the 2019-2020 school year, in cooperation with the Ministry of Education, Science, Sports and Culture of Georgia, the teaching of financial literacy topics started in all schools in the country. Financial literacy topics have been integrated into the “Citizenship” subject. Moreover, to scale up the SchoolBank project developed for schoolchildren of 7th-9th grades, the National Bank of Georgia continued conducting trainings for schoolteachers.

As has become a tradition, various annual awareness-raising events – Global Money Week, World Savings Day and Innovation Camp – were celebrated with the involvement of numerous stakeholders, including financial organizations.

The National Bank of Georgia continued its cooperation with the OECD International Network for Financial Education (OECD/INFE) and the Ministry of Finance of the Netherlands. Within the frames of the Technical Assistance Project, a countrywide Financial Literacy and Inclusion study was conducted, the final results of which will be announced in 2020. In addition, the National Bank of Georgia hosted a high-level international conference and technical workshops during which the experiences, achievements and challenges in the field of financial literacy in Southeast Europe were discussed.

In order to share its experience in improving financial literacy in the country, the National Bank of Georgia was invited to an international conference organized by Aflatoun International – an NGO focusing on children’s financial and social education – in Amsterdam. At this conference, representatives of the National Bank shared Georgia’s experience in implementing the SchoolBank project. Furthermore, the National Bank of Georgia and Child and Youth Finance International (CYFI) published a case study on implementing the SchoolBank project in Georgia. This will help guide stakeholders worldwide – especially financial system supervisors, ministries of education and commercial banks – to successfully implement similar projects.

In order to further share Georgia’s experience, the National Bank of Georgia hosted an international delegation. This meeting was attended by local and international representatives of the Savings Banks Foundation for International Cooperation (SBFIC), and high-level managers from the Ministry of Finance of Thailand, the Government Savings Bank of Thailand and the Central Bank of Bhutan. As a part of the meeting, representatives of the NBG shared information about implemented projects, including the development of the National Strategy for Financial Education and the steps taken to integrate financial literacy into the national curriculum.

FINANCIAL EDUCATION PROJECTS

Financial education program for micro and small enterprises

In 2018, the National Bank of Georgia, with support from the Development Facility of the European Fund for Southeast Europe (EFSE DF) and with the involvement of the Export Development Association, developed a financial education program for micro and small entrepreneurs. The program aims to equip current and future micro and small business owners with the essential knowledge and skills necessary for making sound financial decisions based on their own business needs and capacities. As part of the program, a “Guidebook for Micro and Small Enterprises: Interacting with Financial Organizations and Financial Decision-Making”, a relevant training module, a loan calculator and templates for financial statements were all developed and made available for free on the NBG’s website.

Within the frames of the project, in order to improve the financial literacy of entrepreneurs and to build the capacity of stakeholders working to support enterprises in the country, the National Bank of Georgia continued the training of trainers and entrepreneurs. At the beginning of the year, an informational meeting with representatives of commercial banks and microfinance organizations was held in the NBG, where the guidebook for micro and small enterprises was presented to them. For the purpose of scaling up the project, the participants of the meeting discussed ways of future cooperation and the potential role of commercial banks and microfinance organizations in the financial education of entrepreneurs. Participants of the meeting agreed that the National Bank of Georgia would train representatives from commercial banks and microfinance organizations, who, in turn, will distribute the training module among their business clients.

Various activities planned as the part of the program were held during the year: three trainings of trainers were conducted in which 46 trainers from public, private and civil sector organizations were trained. The trainees were representatives of the Academy of Ministry of Finance, Business Accelerator Spark, the Creative Development Center, BasisBank, VTB Bank, TBC Bank, Credo Bank, Liberty Bank, the Bank of Georgia, Tera Bank, Finca Bank Georgia, MFO MBC, MFO Crystal and MFO Georgian Credit. The trainees can now independently conduct further training sessions about interacting with financial organizations and financial decision making for micro and small entrepreneurs; discuss key topics with beneficiaries using real-life examples and practical cases; help en-

trepreneurs assess their businesses' financial situations using key assessment indicators and tools like the loan calculator and financial statement templates.

The SchoolBank Project

In order to improve the financial literacy of children and the youth, the National Bank of Georgia continued its training of teachers from public and private schools in 2019. These trainings are part of the SchoolBank Project, a joint project of the NBG and leading international organization Child and Youth Finance International (CYFI), for the financial education for younger generations. The project includes a 15-lesson educational module for pupils in 7th-9th grades. The aim of the trainings was to deliver knowledge and materials to teachers that will help them to conduct free SchoolBank lessons in their respective schools.

The SchoolBank project, which is currently being implemented in around 10 countries, aims at improving financial literacy and financial inclusion among the youth, which implies both providing them with the knowledge of financial literacy topics in the format of school lessons and involving commercial banks in the development of youth-friendly financial products.

The SchoolBank concept was developed by CYFI on the basis of an OECD recommendation in 2005 that advised all countries to make financial literacy part of school education from an early age. The NBG has been implementing the project since 2017 with the involvement of various stakeholders, including the Ministry of Education, Science, Culture and Sport of Georgia, the National Youth and Children's Palace (NYCP) and the Bank of Georgia. Any teacher can participate in the training, regardless of their previous financial knowledge. In order to participate, it is sufficient for a participant to merely have an interest in the topic, as well as the motivation to pass the knowledge received onto the youth and help them develop the skills and attitudes needed to make responsible financial decision throughout their lives.

Within the frames of the SchoolBank project, the NBG hosted a teacher-training event on 28-29 September 2019 in Tbilisi at the National Bank's head office, and another event on 5-6 October 2019 at the Georgian-American School "Progress" in Kutaisi. It should be noted that the Civic Education Teachers' Forum was also involved in organizing the latter training. Teachers from 23 public and nine private schools, as well as those from the NYCPs of Kutaisi and Dedoplistskaro, participated in the trainings.

As a result of these initiatives, SchoolBank lessons

became available for an additional 200 pupils in 2019, and this number will increase in upcoming years.

In order to share the experience of implementing the SchoolBank project in Georgia, the National Bank of Georgia and CYFI issued a joint publication based on a case study of the Georgian model of the SchoolBank. For more information on this, please see the section "Local and International Cooperation".

School Olympics winners' camp on financial literacy

With the involvement of the National Bank of Georgia and with the support from SBFIC, in 2019 KINGS Georgia hosted a summer camp in Anaklia dedicated to financial literacy for the winners of the spring Olympics.

Participants of the camp discussed the importance of financial education and other topics of interest. Furthermore, eight teams, each formed of eight participants, worked with Alexander Lortkipanidze, screenwriter and host of the TV show "Book Shelf", to present interesting and entertaining videos about money, savings, personal finance management, reasonable spending, borrowing and the importance of banks. These videos were created by their own vision and were delivered in child-friendly language. The three best videos, selected by a competent jury, were later professionally recorded and shared on social media. In addition, participants of the camp attended an interactive seminar delivered by Irakli Kakabadze, host of the TV show "Simple Logic", about the impact of advertising, savings and decision making. They then competed with each other following the format of "Simple Logic" in a game about financial terms.

Financial literacy training for youth

A further activity for improving the financial literacy of children and youth that should be mentioned is the February 2019 training of 13-17 year-olds that the National Bank of Georgia held in Gori for beneficiaries of the non-government organization "Biliki".

The training was conducted within the frames of the project "Youth Employability and Business Skills Trainings" as supported by the Peace Corps Partnership Program. The project included a 13-week training module that helped the youth gain skills necessary for career planning and job seeking. Two sessions of the module focused specifically on financial literacy.

During the training, a specialist of the National Bank of Georgia discussed important financial issues with participants, including money management, sound financial decision making, saving, financial products and financial security, interacting with financial or-

ganizations, reasonable borrowing, consumer rights and responsibilities.

A further training on financial literacy topics was held in the village of Tserovani in 2019 that served to improve the financial literacy levels of young people. Through interactive group games, the participants gained useful information about personal financial management, saving, reasonable borrowing, consumer rights and responsibilities, and protection from financial fraud. The training was part of the project “EU for Youth: Better Skills for a Better Future” led by the international organization Save the Children in Georgia.

As part of the events dedicated to the 100th anniversary of the establishment of the first central bank in Georgia, pupils of Buckswood Summer Science School attended an interesting lecture on financial literacy at the National Bank’s office and played “Financial Football”, with the winning teams awarded special educational materials on financial literacy.

Financial literacy training for participants of the regional youth entrepreneurship program “Become a Young Entrepreneur”

In 2019, the Governor of the National Bank of Georgia, Koba Gvenetadze, and the Chairman of the Association of Rural Development for Future Georgia (RDFG), Ivane Grigolashvili, signed a memorandum of understanding aimed at raising awareness about financial literacy among the youth.

The first project supported by the National Bank of Georgia within the frames of the Memorandum of Understanding was a joint Regional Youth Entrepreneurship Project conducted by RDFG and USAID that aims at empowering youth living in rural areas in Georgia. The project implies the involvement of up to 500 young adults aged 18-29 in entrepreneurial training. The participants came were from nine municipalities of Georgia (Zugdidi, Borjomi, Aspindza, Adigeni, Ninotsminda, Marneuli, Bolnisi, Kaspi and Gori). The project includes three stages: Stages I and II were completed in the summer and autumn of 2019, and the third stage will be implemented in the spring of 2020. In August, during the first stage, the National Bank of Georgia conducted financial literacy training for those participants in the project whose entrepreneurial ideas had been selected as the most promising.

During the training, participants gained information about financial organizations and financial products, discussed important issues for making correct financial decisions in the process of seeking funding, and gained awareness of their rights and responsibilities.

Video about internet fraud

In order to help protect the population from internet fraud, the National Bank of Georgia, with the involvement of the Association of Banks and commercial banks, launched an educational video on phishing. The video explains in simple language the most common schemes internet fraudsters use to misappropriate consumers’ money and it provides tips on how to avoid these threats. With this video, the National Bank of Georgia reminded the population once again to pay attention and be cautious when using financial and personal data on the internet.

AWARENESS-RAISING EVENTS

Throughout 2019, the National Bank of Georgia was actively involved in annual activities dedicated to raising public awareness about financial literacy.

Global Money Week

Global Money Week (GMW), which took place in coordination with the National Bank of Georgia, was celebrated for the sixth time in Georgia in 2019. The event was dedicated to the 100th anniversary of the National Bank of Georgia and was notable for the active involvement of the private sector and civil society.

GMW is celebrated annually in more than 160 countries around the world every March, and its main goal is to help spread financial, economic and entrepreneurial literacy among children and the youth. The slogan for the 2019 event was “Learn. Save. Earn.”

As part of the GMW celebrations, the NBG, with the involvement of Ministry of Education, Science, Sport and Culture, organized a country-wide creativity competition for schoolchildren on the topic of Georgian money. The competition was titled the “National Bank of Georgia 100”. Schoolchildren from nine regions of Georgia participated in the competition. Participants were required to create a 100 GEL denomination banknote or coin with their own, original design. The winning artworks were exhibited in the National Bank of Georgia’s head office. The NBG also organized an educational field trip to the Money Museum in Kvareli for the 20 winners of the competition. As part of that trip, the winners talked about their artworks and listened to a lecture about the National Bank of Georgia and the history of Georgian money. The winners were awarded special certificates, branded items and educational materials from the NBG.

As part of the GMW celebrations, the National Bank of Georgia and International Payment System Visa organized a special “Financial Football” activity at the National Youth and Children’s Palace (NYCP), where

children had an opportunity to play, test and raise their financial knowledge throughout the day. Financial Football is a dynamic and interactive video game, where players need to answer financial literacy questions in order to move forward and score a goal. The Georgian version of the game and accompanying educational modules were developed by the NBG and Visa in 2018. As part of the event, representatives of the National Bank of Georgia held an interactive lecture for NYCP students on the history of Georgian money and the National Bank of Georgia. At the end of the event, participants received symbolic gifts.

During the GMW, the non-government organization Junior Achievement Georgia (JAG), with the involvement of the National Bank of Georgia, held a seminar on “How to manage money and start investing” at the University of Georgia for high schoolers and students from various universities. Furthermore, within the frames of USAID’s project “Supporting Entrepreneurial Education in Europe and Eurasia”, an exhibition of the mini companies participating in the entrepreneurial educational program was organized, where the products of the 25 best companies participating in the program were presented and sold. At the end of the event, a jury revealed the best teams in different categories.

Other interesting activities were carried out during the GMW, including an interactive seminar for pupils in Tsnori held by representatives of the NBG on financial literacy topics. Participants of the seminar enjoyed group games and discussed topics including personal finance management, saving, borrowing, consumer rights, and protection from financial fraud. The meeting was held within the frames of a joint Knowledge Café and Save the Children in Georgia initiative: “EU for Youth: Better Skills for Better Future”. Moreover, the National Bank of Georgia hosted pupils of Buckswood school in the NBG’s cash center. The pupils had a guided tour of the cash center and took part in an interesting discussion about the importance of financial literacy and personal financial management.

With coordination from the National Bank of Georgia, representatives of the financial sector and other organizations were actively involved in events dedicated to GMW. The Financial Education Center of Ilia State University conducted training for young people on banking products, during which participants discussed financial products, personal money management and saving. Meanwhile, the National Youth and Children’s palace celebrated the annual international event “Aflatoun Day”, which is dedicated to financial literacy and was initiated by international organization Aflatoun International.

The Bank of Georgia hosted pupils at its headquarters. Guests had a tour and listened to an interesting lecture on banking products, bank functions, personal finance management, saving and money. Finca Bank Georgia developed a brochure for pupils on saving and hosted them in bank branches in six cities - Zugdidi, Kutaisi, Telavi, Tbilisi, Samtredia and Gori – where the youth got acquainted with the functions and specifics of a bank’s operation. The microfinance organization Crystal held a seminar at its headquarters for young people on financial literacy, saving and investing, where they learned about the organization’s work, discussed topics of saving and borrowing, and played “Financial Football”. Credo Bank hosted a two-day training for 9-14 year-olds on saving in its branches. Liberty Bank held meetings for 5th-6th grade pupils in Shida Kartli and Kakheti. Microfinance Organization MBC held a five-day educational event on financial literacy topics in the village of Bershueti, near the occupation line. Basis Bank distributed financial literacy brochures through its service centers in Tbilisi and the regions. TBC Bank hosted a meeting with civic education teacher Lado Aphkhazava, where pupils discussed, among other topics, the importance of personal finance management and sound financial decision making.

World Savings Day

Every year, on 31 October, World Savings Day (WSD) is celebrated. In 2019, Georgia recognized the event for the eighth time. Activities dedicated to WSD were organized by the National Bank of Georgia and the Savings Banks Foundation for International Cooperation. The WSD celebrations lasted a week, from 28 October to 3 November and took place in both Tbilisi and the regions.

The National Bank of Georgia, with support from the Ministry of Education, Science, Culture and Sport of Georgia, held a Savings Day campaign in schools. As part of this campaign, employees of the NBG, serving as ambassadors of financial education, visited various private and public schools in Tbilisi and the regions. Koba Gvenetadze, the Governor of the NBG, also took part in the Savings Day event, visiting Public School No.11 in Tbilisi. He introduced the main functions of the National Bank to children and talked about the importance of regular saving and about the history of money. Ambassadors from the NBG conducted lessons for about 450 pupils in 4th-6th grades. Seven commercial banks – Finca Bank Georgia, TBC Bank, Bank of Georgia, Liberty Bank, Credo Bank, BasisBank and Tera Bank – also participated in activities dedicated to WSD. During the week, the participating commercial banks shared in-

formation about World Savings Day and the importance of saving through their branches, websites and social networks, as well as through electronic media. In addition, banks carried out a number of interesting activities in different regions of Georgia, including excursions in bank branches, interactive presentations and lectures at schools, drawing competitions and a campaign to encourage opening bank deposits.

In addition, with support from the SBFIC, pupils from 20 schools in six cities participated in the “Savings Game”, which aimed at improving the financial literacy levels of high-schoolers and promoting saving.

Project innovations camp on financial literacy

On 17 November, Ilia State University hosted a youth innovations camp on financial literacy that was organized by the National Bank of Georgia and Junior Achievement Georgia. In 2019, the event was held for the third time. It involved more than 110 young people between the ages of 15 and 18 from different regions of Georgia.

The innovations camp was implemented within the framework of the USAID project “Supporting Entrepreneurship Education in Georgia”. In 2019, the event was held with the co-financing of four commercial banks – Bank of Georgia, Liberty Bank, Finca Bank Georgia and TBC Bank – and in partnership with the microfinance organization Crystal.

The innovations camp on financial literacy was a 12-hour event focused on the generation of ideas. Participants had to work in teams to generate and present effective and innovative ideas in response to a challenge in the field of financial literacy and financial inclusion. During the event, participants discussed the essence and importance of financial literacy and worked in teams on a case. A jury selected winners following participants’ presentations and both the winners and other participants received symbolic gifts and certificates from the project’s sponsors.

LOCAL AND INTERNATIONAL COOPERATION

Activities of the Steering Committee on the National Strategy for Financial Education

The Steering Committee of the National Strategy for Financial Education, which was established in 2017, meets periodically to develop recommendations for implementing and improving individual financial education programs. In 2019, two committee meetings were conducted that were headed by the NBG’s Governor.

On 31 May, the NBG hosted the fourth meeting of the Steering Committee where the activities carried out

within the frames of the Financial Literacy Year and the main goals for 2019 were discussed. The committee approved an action plan for 2018-2020 that identifies priority target groups and outlines the key activities that will be implemented in upcoming years.

Three strategic documents that had been developed in 2017-2018 to support steering committee activities were also approved at the meeting: “Monitoring and evaluation guidelines for financial literacy programs”, “High-level principles for certifying financial literacy programs”, and “Core competences framework for financial literacy”. The meeting was attended by committee members and invited guests from the Ministry of Education, Science, Sports and Culture, SBFIC, Finance in Motion, Ilia State University, commercial banks and microfinance organizations. In addition, representatives of Tbilisi State University’s International School of Economics and Junior Achievement Georgia attended and presented two projects to the committee focused on promoting financial and entrepreneurial education among the youth.

On 19 December, the NBG hosted the fifth meeting of the Steering Committee, at which the participants summarized the notable financial literacy events of 2019 and focused on challenges and opportunities. At the meeting, committee members were presented with the certification process for the financial education programs and educational resources that the NBG has developed.

At the meeting, committee members discussed the implementation of the activities defined by the strategy and approved an updated action plan for 2018-2021. The meeting was attended by representatives of the Ministry of Education, Science, Sports and Culture, SBFIC, Finance in Motion, Ilia State University, TBC Bank, Bank of Georgia, Finca Bank Georgia, Liberty Bank and MFO Crystal. It should be mentioned that in 2019 the Insurance State Supervision Service of Georgia joined the Steering Committee. The meeting was also attended by representatives of the NGO Democracy Lab, who presented a new project on financial literacy to the committee.

Cooperation with the Ministry of Education, Science, Sports and Culture: Integration of financial literacy topics into the national curriculum

In 2018, new national school curriculum was approved, according to which, on the initiative of the NBG, a financial education module was integrated into the civics education subject “Citizenship”. According to the new curriculum, teaching started for pupils in the 7th grade in autumn 2019. Teaching of financial literacy topics will start in spring 2020.

In May 2019, for the purpose of providing capacity building for teachers, the NBG participated in an annual conference/exhibition organized by the Civics Education Teacher Forum. At this event, a seminar was dedicated to financial literacy, at which representatives of the NBG provided information to about 50 civic education teachers on the importance of financial education and the main financial literacy topics integrated into the curriculum.

Furthermore, with the active involvement of the NBG, the SBFIC developed a guidebook for teachers and, in partnership with the Civics Education Teachers Forum, a training module was developed. The training of trainers and civics education teachers is planned for February 2020. This will help teachers to develop professionally in the field of economic and financial education, and aid them in planning and conducting interactive lessons relevant to the age groups of their pupils.

Cooperation with OECD/INFE and the Ministry of Finance of the Netherlands

In 2018, Georgia became involved in a five-year Technical Assistance project of the OECD/INFE and the Ministry of Finance of the Netherlands concerning financial education. In addition to Georgia, six other countries from Southeast Europe are involved in the project: Bulgaria, North Macedonia, Moldova, Montenegro, Romania and Croatia. The project aims at supporting central banks and other relevant stakeholders in improving the financial literacy levels of their populations.

As part of the project, a Financial Literacy and Financial Inclusion Survey of the Georgian population was conducted in 2019. The objectives of the study were to analyze the levels of financial literacy and inclusion in the country by evaluating the financial knowledge, behavior and attitudes of the population and, in so doing, to derive financial literacy scores; to measure the level of product awareness and use; and to research respondents' approaches to money management. The same study was conducted in other participant countries. The final report of the study, which will be completed in 2020, will present a comparative analysis of the financial literacy and inclusion levels of participant countries.

The technical assistance project also implies annual meetings with participant countries and experience sharing. This initiative was implemented for the first time in Georgia. On 7-8 November, the National Bank

of Georgia hosted a high-level international conference and technical workshops. These were organized by the NBG and OECD/INFE, with financial support from the Ministry of Finance of the Netherlands and the technical experience of the Money Wise Platform. The event was attended by high-level representatives of various countries, including practicing specialists and experts, whose responsibility is to develop and implement national initiatives for financial education in their respective countries. Participants discussed practical examples, the challenges of financial literacy and several ways to implement appropriate policies for different target groups, including the younger generation, people living in rural areas, and micro, small and medium enterprises.

Case Study of the SchoolBank project using the Georgian model

In December 2019, the National Bank of Georgia and Child and Youth Finance International published "National SchoolBank Project: The Country Case of Georgia. From idea to implementation".⁹⁴ This was the first case study of the project's implementation using the Georgian example. The publication aims to share the Georgian experience of the implementation of the SchoolBank project to stakeholders worldwide, including financial system supervisors, ministries of education and commercial banks. The publication is written in simple language and offers practical information that will help interested parties successfully implement the project in local markets. In addition, it describes the first results of an assessment of the project that was carried out by the ISET Policy Institute.

ONGOING PROJECTS

During 2019, the National Bank of Georgia initiated two important projects that will be presented to the public in 2020.

The first project is a practical guide for farmers – "Improve Your Financing Decisions". The guidebook was developed by the National Bank of Georgia with support from EFSE DF and the involvement of the Civil Development Agency (CIDA) NGO. The guidebook was developed to equip micro and small entrepreneurs from the agricultural sector with information about various financial products and the sources of financing that will help farmers choose appropriate financial products and make sound financial decisions based on their own business needs and capacities.

⁹⁴ See: https://issuu.com/childfinanceinternational/docs/national_schoolbank_project_georgia

Along with the guidebook, a trainer's manual and a presentation for the training module were developed. The official presentation of the project is scheduled for the first half of 2020. Within the frames of this project, both training of trainers and a pilot training for agricultural entrepreneurs will be conducted.

The second project that the NBG started working on in 2019 is a financial education website. The project aims at gathering all educational resources and information about financial literacy to provide them to the

public in easy-to-understand language. The website will provide information on personal finance management, saving, borrowing, major life events, financial security, consumer rights, investing, insurance and other topics relevant to entrepreneurs. In addition, the website will provide financial calculators, quizzes, a blog, and multimedia resources. During 2019, the website brand and concept was developed and the creation of its content has started. The website will be launched and presented to the public in 2020.



6

NON-BANKING SUPERVISION



6. NON-BANKING SUPERVISION

6.1 SIGNIFICANT CHANGES IN THE SUPERVISORY FRAMEWORK

Over the last two years, the fundamental legal changes made to the regulation and supervision of the non-banking sector in Georgia have significantly decreased risks associated with this sector. These changes covered not only the regulated sector but also the market segment, which had been providing financial services for years without any supervision. As a result, the changes served financial stability, improved protection of consumer rights, provided better access to financial services, and increased security. In 2018, within the powers granted by the Organic Law on the National Bank of Georgia, a regulation was approved regarding the “Registration, termination of registration and regulation of loan issuing entities”. Based on this, starting from 2019, each entity that issues loans to more than 20 individuals has to come under the supervision of the National Bank of Georgia. The loan-issuing entities, as representatives of the financial sector, in addition to other registration requirements, are now obliged to satisfy the compliance criteria for administrators and significant shareholders. To avoid material volatility in the financial sector and for the smooth integration of loan-issuing entities with the regulated sector, the National Bank of Georgia had been conducting active communication and consultations with these entities.

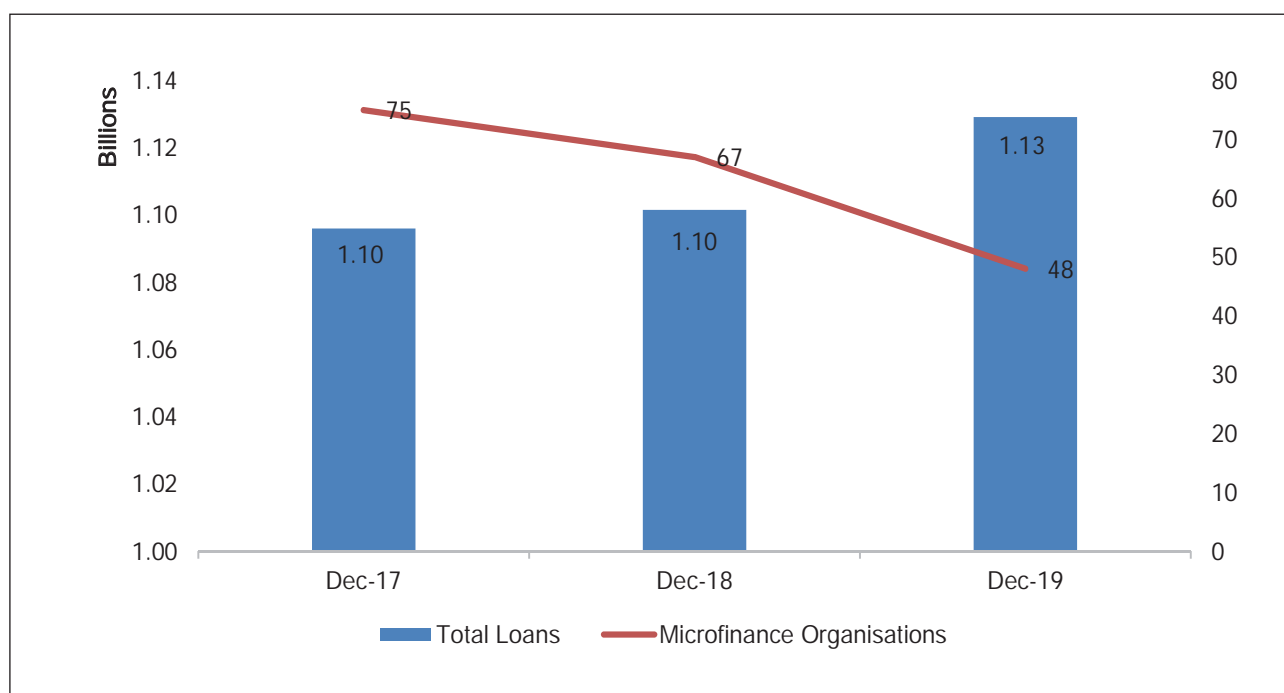
In 2019, based on the amendments to normative

acts, microfinance organizations and loan-issuing entities were prohibited from using any property that has been received as a security on loans as their pledge on any types of liabilities. This change was aimed at improving lending standards for better protection of consumer rights, since the repledging of property was materially increasing the risks of loss of this pledge as well as lengthening the process of property return after the loan was paid off. Becoming effective from 1 January 2019, the requirements set by the rule on “Retail lending” was applied to all non-banking financial institutions, which promoted the strengthening of responsible lending standards in this sector. The recent changes in the regulation of the non-banking sector have created the necessity for a gradual development of a supervisory framework. As a result, improvements were seen in reporting standards, as well as in the off-site and on-site supervision processes – all of which creates greater opportunity to identify and assess indicators of potential risks.

6.2 NON-BANKING FINANCIAL INSTITUTIONS

As of 31 December 2019, the non-banking sector in Georgia was represented by 48 microfinance organizations, 847 currency exchange bureaus (650 head offices and 197 branches), 378 loan-issuing entities (204 head offices and 174 branches) and two credit unions. The impact of the decline in the number of microfinance organizations on capital and liquidity has been compensated for by the inflow of resources required as a result of new regulations. The total assets of the non-banking financial sector amount to around 2 billion GEL (with the microfinance sector having the

Diagram N 6.1 Credit portfolio and number of microfinance organizations



Source: National Bank of Georgia

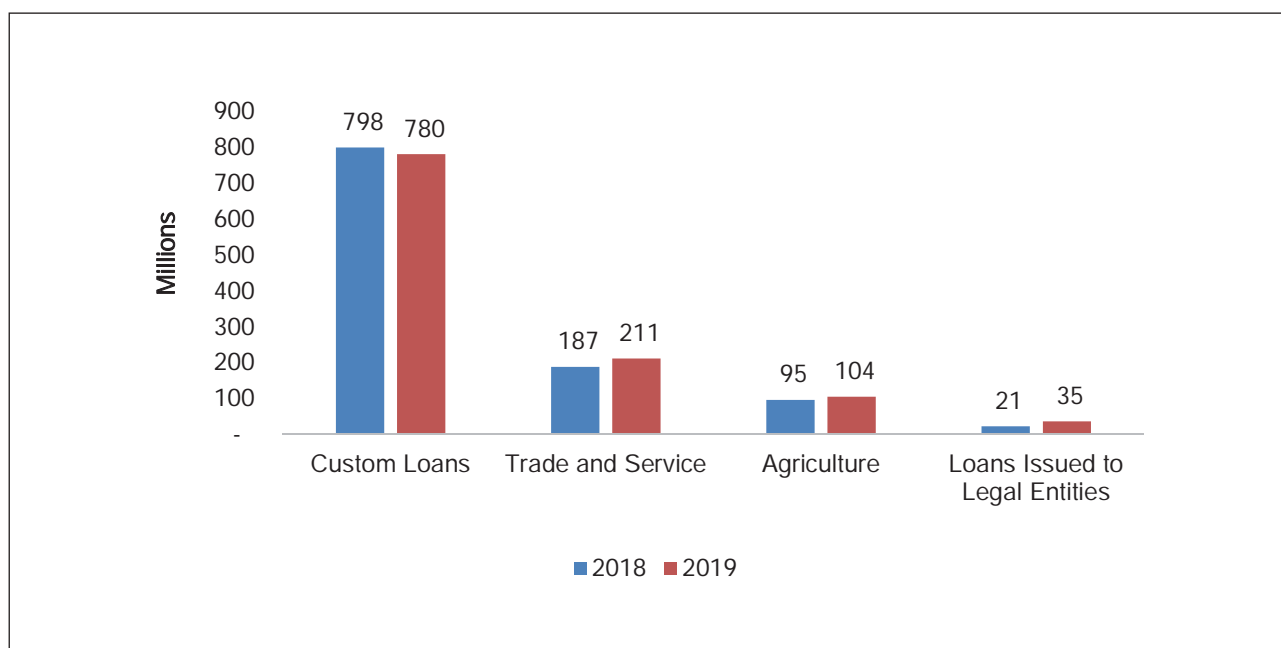
largest share of 1.4 billion GEL) and represents almost 4% of the total financial sector.

6.2.1 Microfinance Organizations

In 2019, notwithstanding the decrease in the number of microfinance organizations and the introduction of new retail lending standards, the credit portfolio of the microfinance sector has kept growing at an annual rate of 3%. The total credit portfolio of the sector is 1.13 billion GEL, of which 97% are retail loans.

The credit portfolio is largely represented by consumer loans issued to individuals (consumer loans, online loans, pawnshops, deferred loans and others), which account for 69% of the total credit portfolio with a value of 780 million GEL. Only 28% of the total credit portfolio (around 314 million GEL) covers agricultural and trade and services loans. However, it should be noted that this amount has increased compared to the previous year.

Diagram N 6.2 The structure of the total loan portfolio



Source: National Bank of Georgia

Almost 90% of loans in the agriculture and trade and services sectors were issued by four microfinance organizations. In 2019, the share of consumer loans in retail lending has decreased. This was due to the exit of a number of online lenders as well as being a result of the shrinkage of online loans in the portfolios of microfinance organizations and, in some instances, of the transfer of such loans to other financial institutions. As a result, these factors have contributed to an improvement in the quality of the credit portfolio. In particular, the share of non-performing loans in the total portfolio has decreased (from 9.2% to 8.3%) and the share of overdue loans has fallen (from 13%

to 10%). Moreover, improvements were seen in the portfolio structure in terms of the type of security. In particular, the share of blank loans declined from 18% to 11%.

The largest (29%) sum of reserves is formed of on-line loans. However, due to the small share of these products, their impact on the quality of the total credit portfolio is not significant.

As a result of the legal changes to Article 625 of the Civil Code in 2017, which prohibited loans of less than 100,000 GEL from being issued in a foreign currency, the rate of dollarization of the credit portfolios of microfinance organizations has decreased.

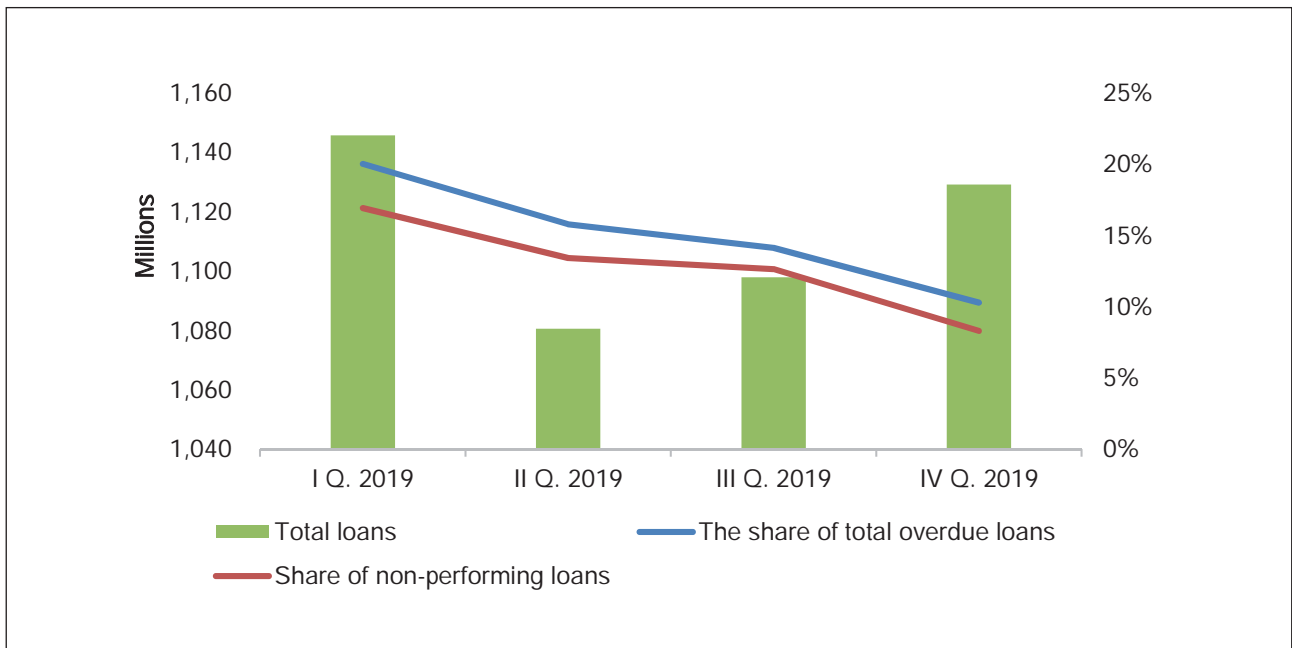
Compared to the previous year, the share of attracted funds for asset financing decreased from 63% to 58% (by 109 million GEL), which was mainly caused by regulatory changes and the obligations to increase capital and to convert funds from shareholders into

capital (by 1 July 2019, the minimum capital should be 1,000,000 GEL).

Compared to 2018, the share of non-residents in the structure of borrowed funds has not changed significantly and was 43%.

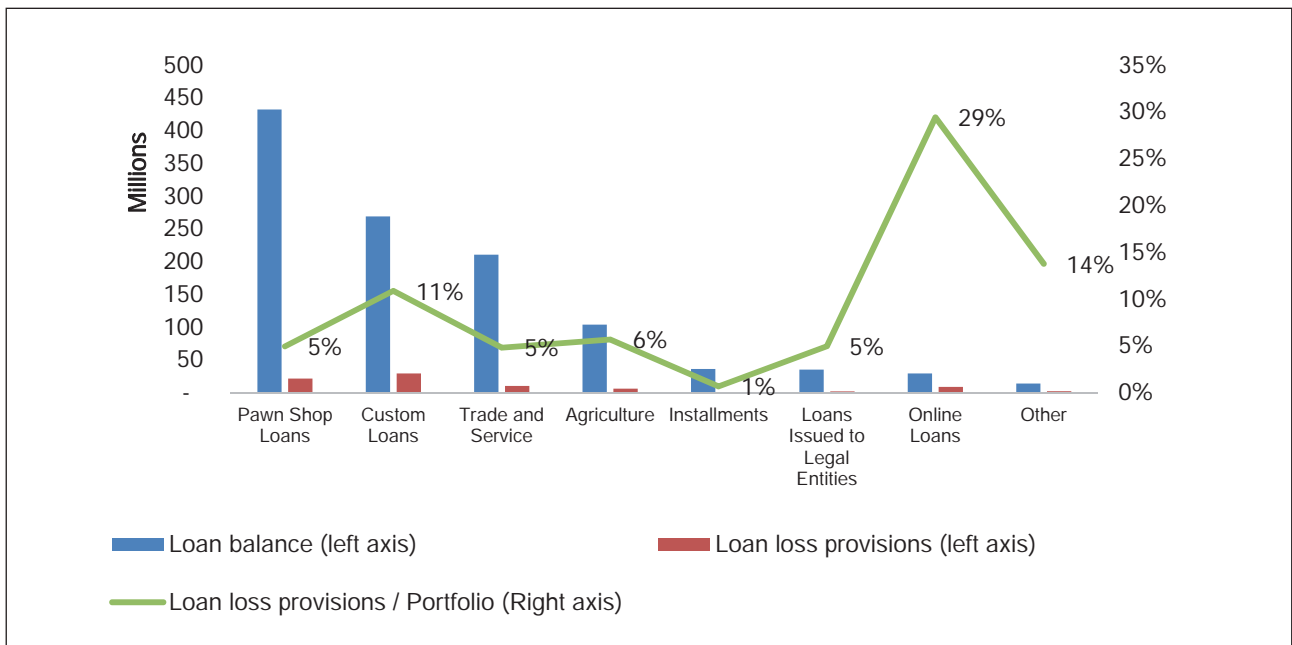
During 2019, there were no sharp changes in the liabilities of microfinance organizations. The decline in funds received from banks has been partially compensated by the increase of borrowing from other financial institutions.

Diagram N 6.3 Quality of the credit portfolio



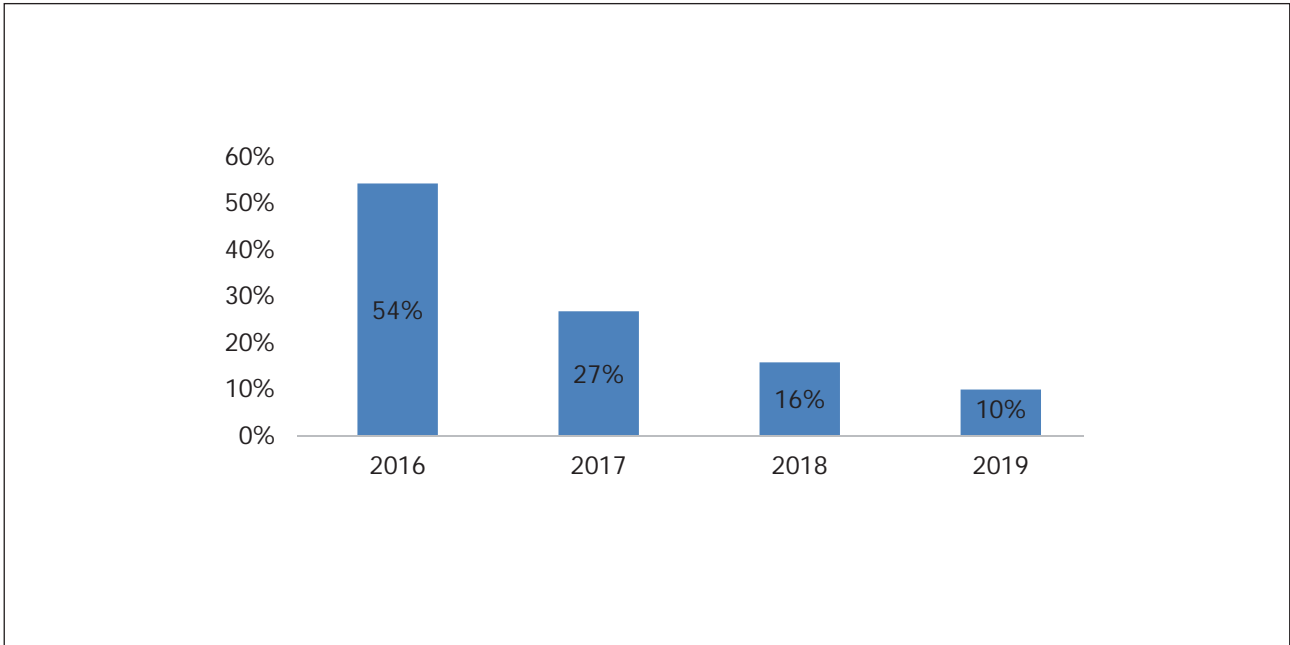
Source: National Bank of Georgia

Diagram N 6.4 Total loan loss provisions by product



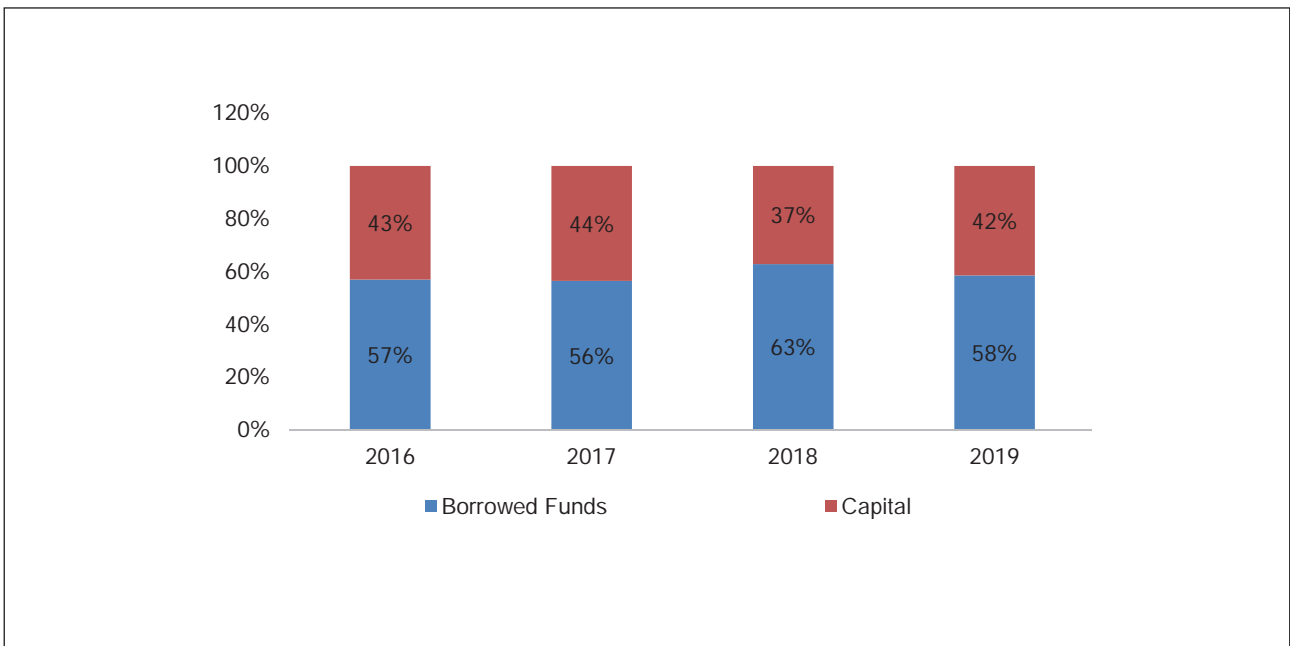
Source: National Bank of Georgia

Diagram N 6.5 Dollarization of the credit portfolio



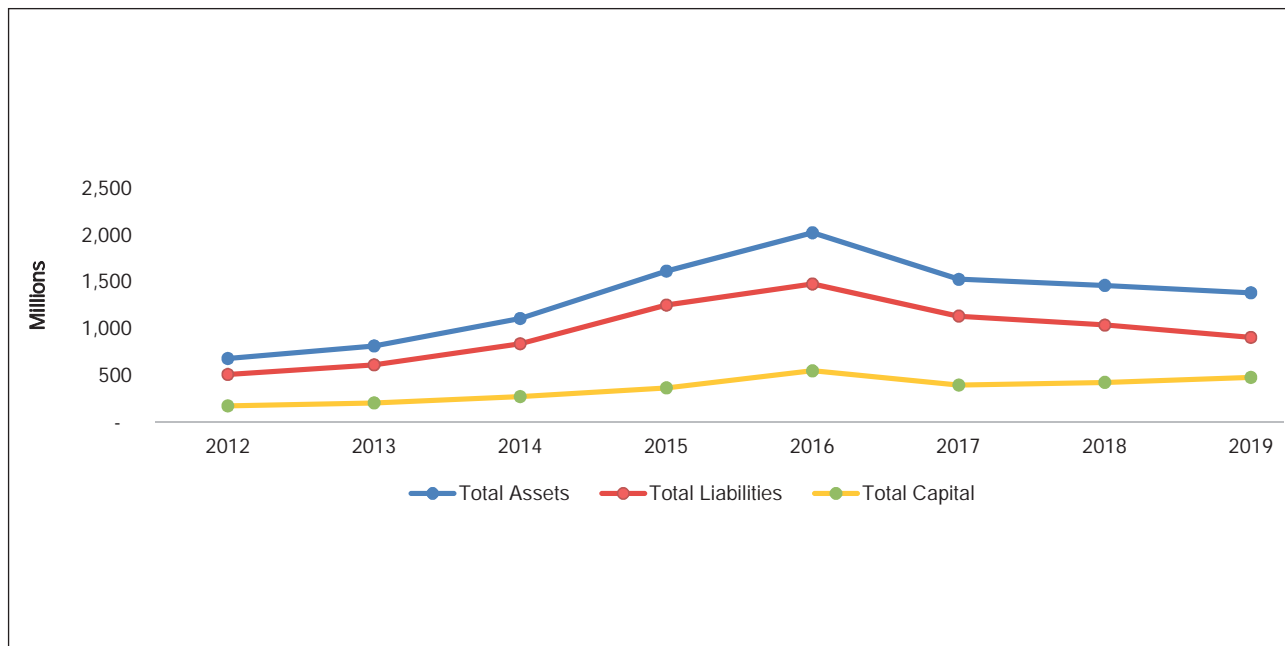
Source: National Bank of Georgia

Diagram N 6.6 Source of funding



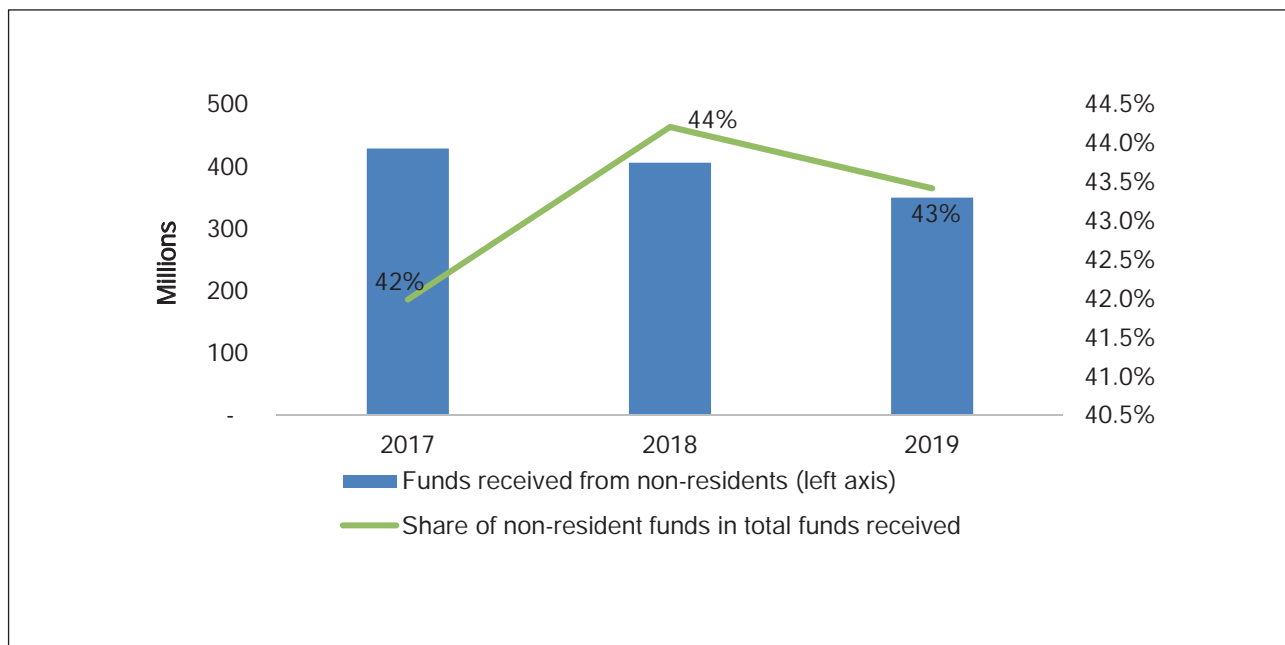
Source: National Bank of Georgia

Diagram N 6.7 The dynamics of assets, liabilities and equity



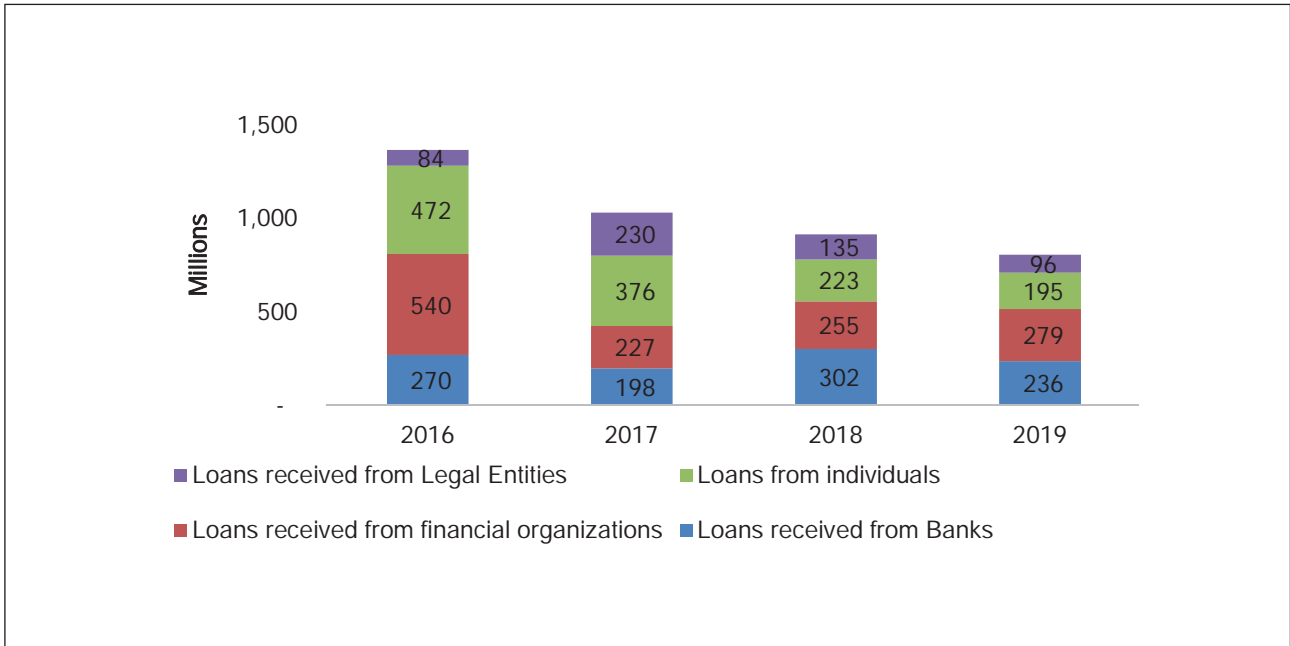
Source: National Bank of Georgia

Diagram N 6.8 Funds received from non-residents



Source: National Bank of Georgia

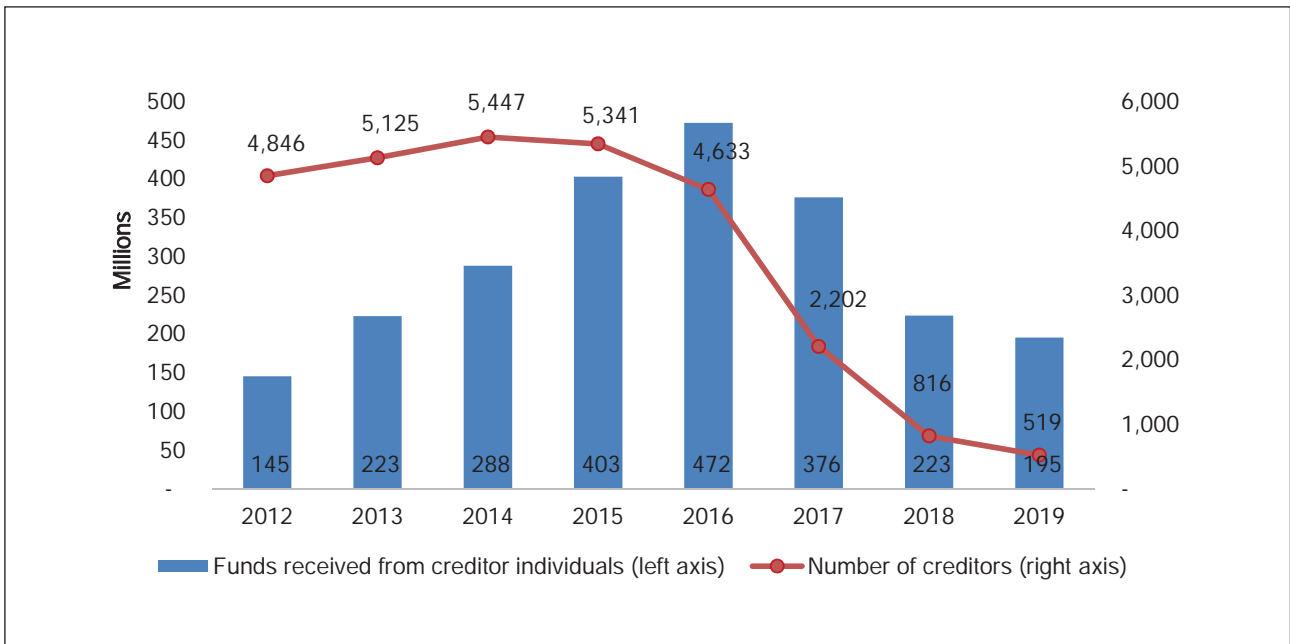
Diagram N 6.9 The structure of funds received



Source: National Bank of Georgia

Borrowings from private and legal persons decreased by 19% (by 67 million GEL) and amounted 24% of total borrowings. Additionally, the quantity of private individual creditors also decreased significantly.

Diagram N 6.10 Funds attracted from individuals and number of creditors

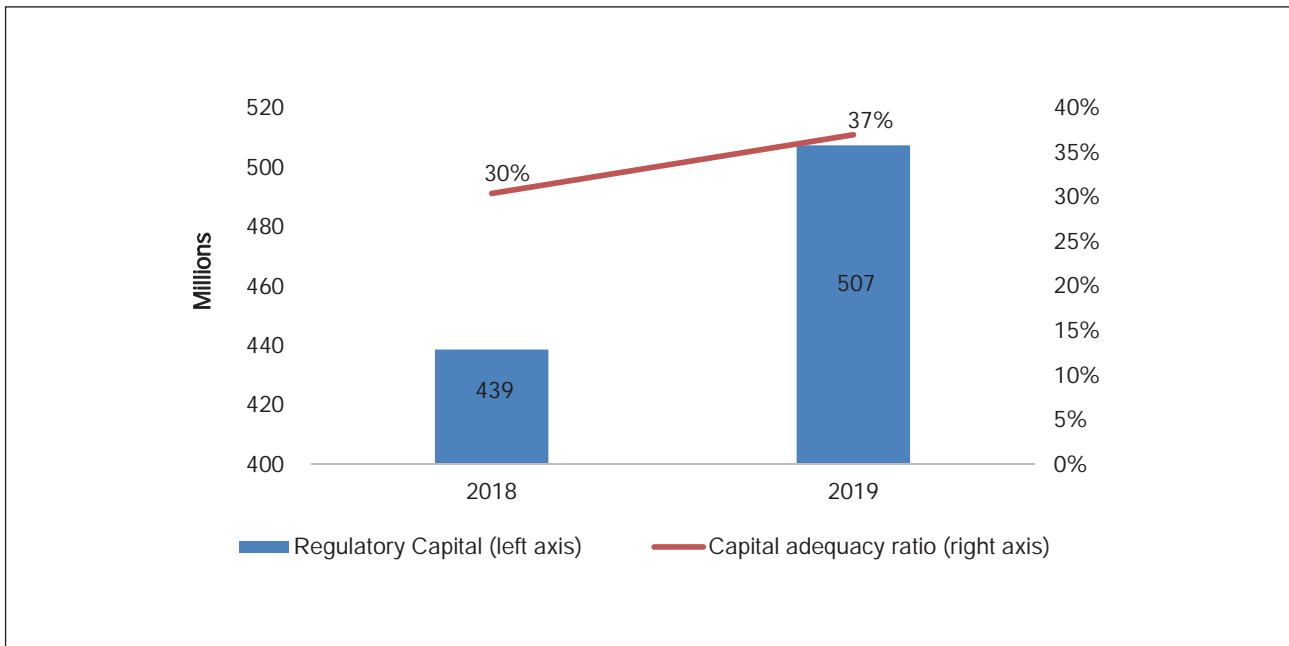


Source: National Bank of Georgia

Based on the Rule of Supervision and Regulation, microfinance organizations are required to maintain minimum levels of supervisory capital and to keep capital adequacy ratios within set limits. These requirements were introduced gradually starting from 30 June 2019 until 31 December 2019. As a result, there was a sharp increase in the share capital (by 39% or 61 million GEL), as well as in subordinated loans (by 15% or 6 million GEL).

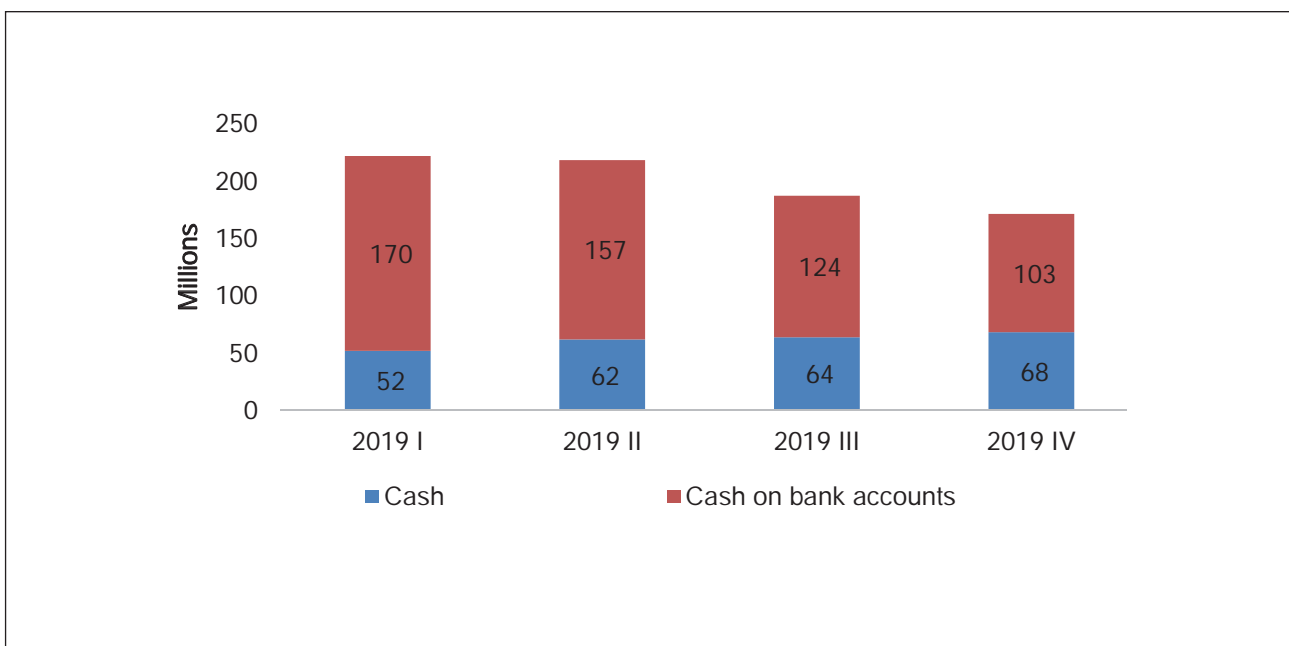
During 2019, against the background of a decreasing number of microfinance organizations and lower borrowings, systemic liquidity was still maintained. This was mostly due to the regulatory requirements that were introduced in 2018 regarding liquidity limits, which have been gradually increased.

Diagram N 6.11 Regulatory capital



Source: National Bank of Georgia

Diagram N 6.12 Liquid assets



Source: National Bank of Georgia

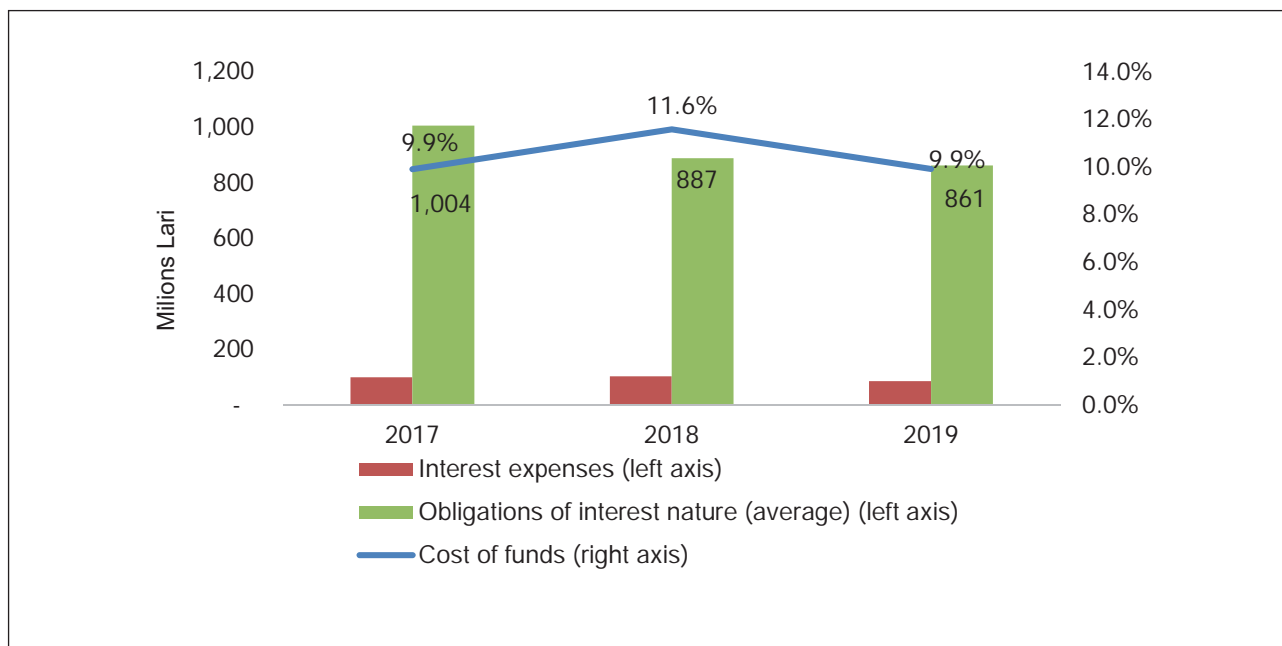
Compared to 2018, the net profit before the asset loss reserve was materially decreased amounted to 52 million GEL. The main reason for this trend, apart from the exit of several microfinance organizations from the market, was the maximum cap placed on effective interest rates, which has significantly reduced the profitability parameters of this sector.

Table N 6.1 Profitability indicators of microfinance organizations

	2018	2019
Margin	19%	16%
Spread	25%	17%

The net profit of the total system was 112,000 GEL. Besides the factors stated above, another reason for the low rate of profitability is related to the loss incurred by one organization. If the effect of this organization is ignored, the net profit of the system in 2019 would have been 42 million GEL. Alongside the decrease of total interest income, the microfinance sector has also experienced a decrease in the cost of borrowing, which resulted from covering expensive liabilities towards private and legal persons.

Diagram N 6.13 Cost of funds



Source: National Bank of Georgia

Liquidation

Since the introduction of regulations regarding the liquidation of microfinance organizations, 27 MFIs

have undergone the liquidation process, of which 13 have been finalized. It should be noted that in six cases, organizations changed their type of business and registered as loan-issuing entities. In 2019, the liquidation process was started for 19 microfinance organizations and was finished in 12 cases.

Those microfinance organizations that exited the market after evaluating the regulatory burden have decided to continue their operations as loan-issuing entities, which are comparatively softly regulated. On the other hand, loan-issuing entities are limited in their activities as they do not have access to borrowings from private individuals. They also have a lower impact on risks related to financial stability.

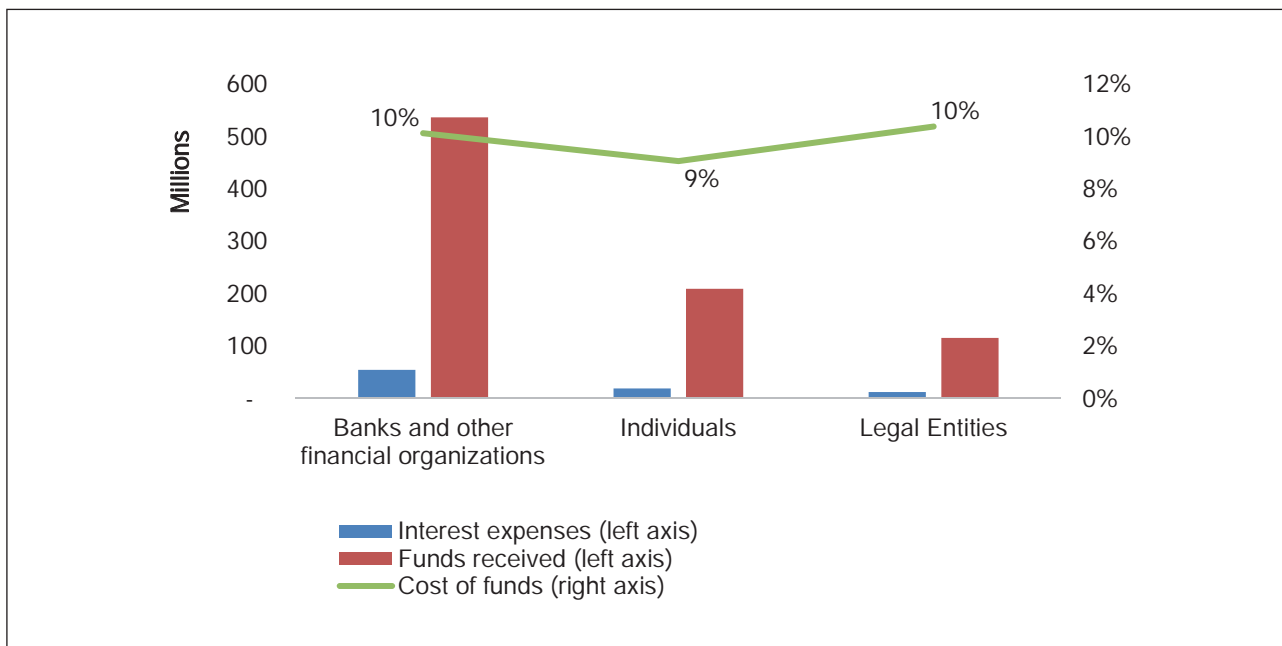
In 2019, the liquidation process of five credit unions, which had been initiated in previous years, were also finalized.

6.2.2 Currency exchange bureaus

In 2019, the decline in the number of currency exchange bureaus continued. This was mainly related to the toughening of registration and supervisory requirements with the aim of protecting of consumer

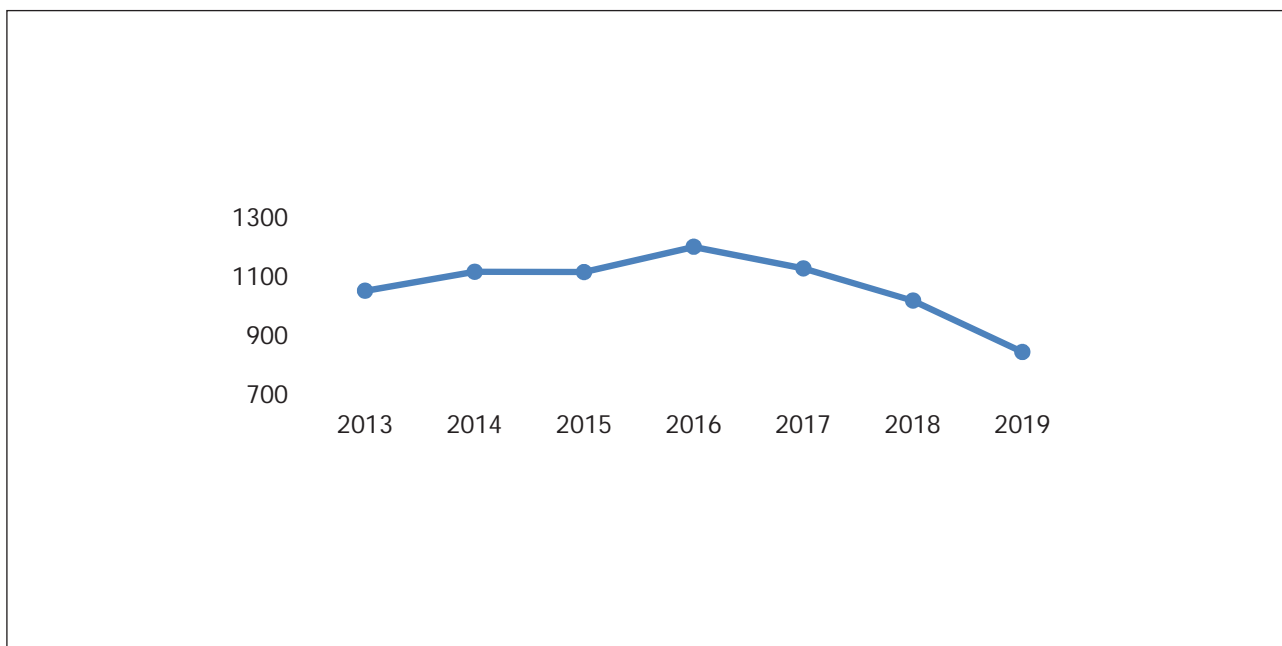
rights and improving service quality in this sector. As of 31 December 2019, 650 currency exchange bureaus were registered (a total number of 847, including subordinate branches at different locations).

Diagram N 6.14 The composition of the cost of funds



Source: National Bank of Georgia

Diagram N 6.15 Number of currency exchange bureaus



Source: National Bank of Georgia

6.2.3 Credit Unions

As of 31 December 2019, there were two credit unions operating on the market with total assets of 1.5 million GEL.

According to the 23 December 2017 amendments to the “Law of Non-Banking Depository institutions –

Credit Unions”, one of the main principles of Credit Union activity was defined as the unification of individuals living in the same administrative unit of the same self-governing community. Furthermore, the maximum number of union members was set at 200. The main purpose of these changes was to encourage the creation of such entities based on shared goals and necessity, rather than for the purpose of

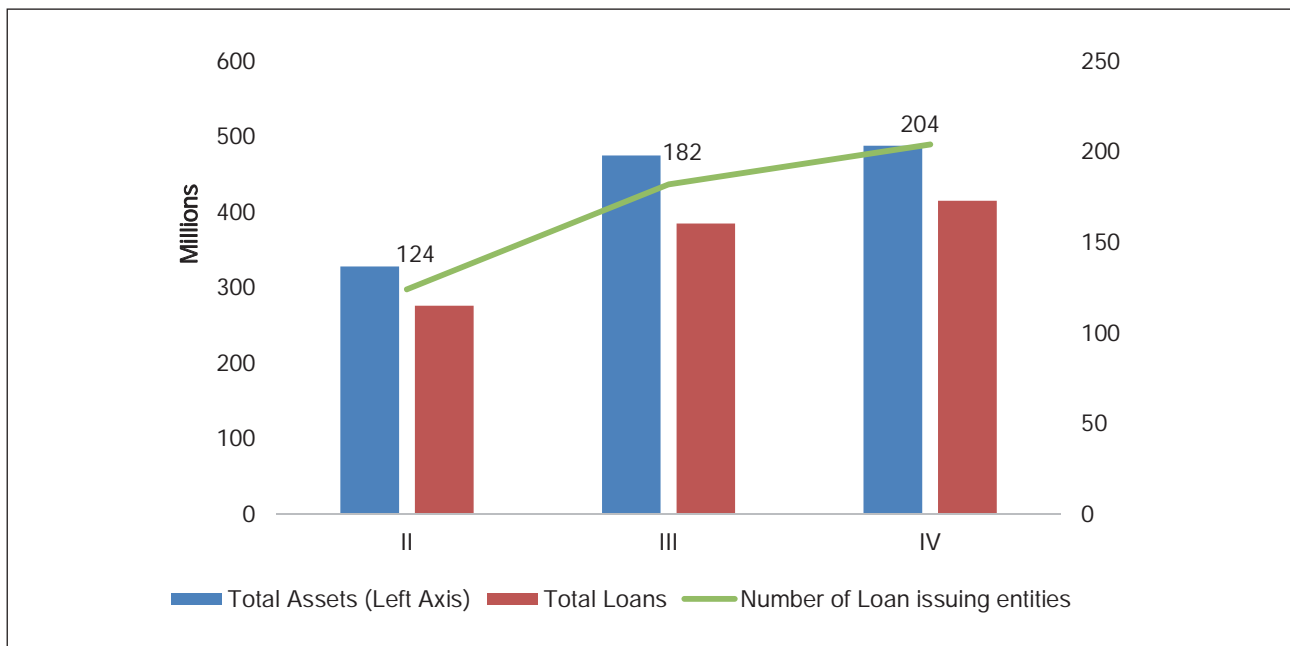
attracting deposits from members. These changes somewhat influenced events in this sector during the last two years. In particular, five of the eight previously licensed credit unions had their registration terminated and liquidation processes were begun upon their written request. In another case, a credit union was liquidated as a result of the NBG's supervisory engagements.

6.2.4 Loan-Issuing Entities

As a result of the amendments made on 23 December 2017 to the Organic Law on the National Bank

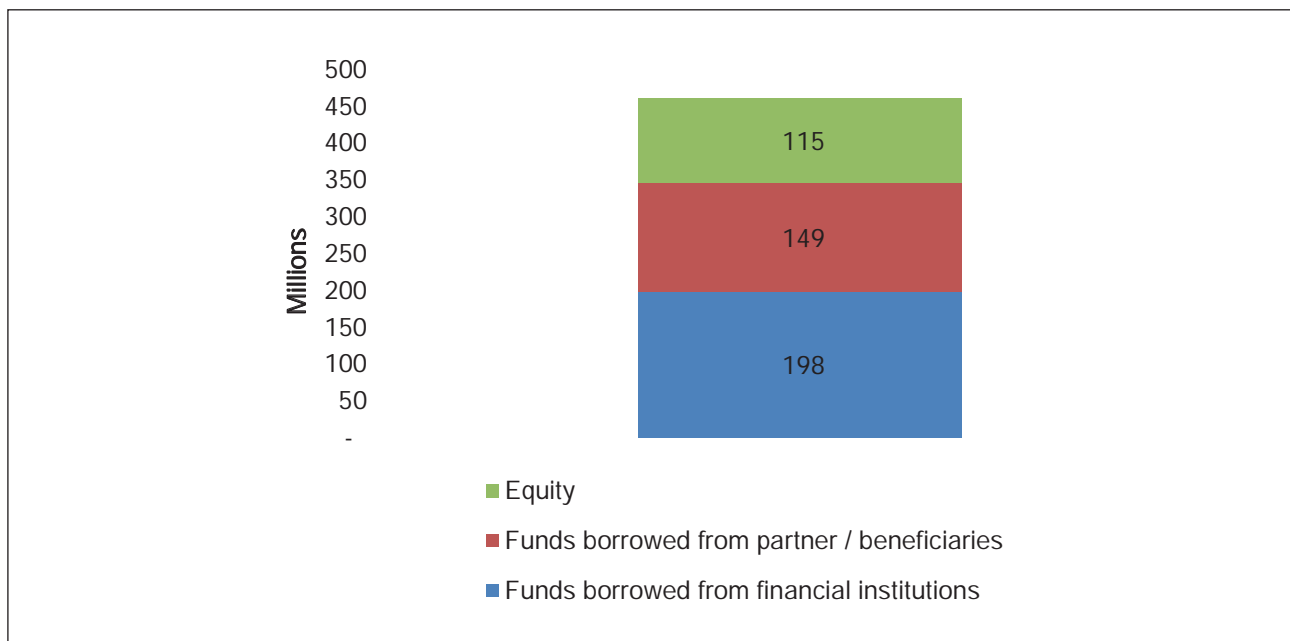
of Georgia, the NBG is authorized to supervise loan-issuing entities, which includes the powers of registration, termination of registration, regulation, and the issuance of written directives, requests, restrictions and sanctions. On 27 September 2018, according to Order N217/04 of the President of the National Bank of Georgia, the "Rule of Registration, Termination of Registration and Regulation of Loan-Issuing Entities" was approved. The registration of such organizations started on 20 December 2018 and a deadline for entities that are subject to registration was set for 30 April 2019.

Diagram N 6.16 Number of loan-issuing entities, total assets and credit portfolio



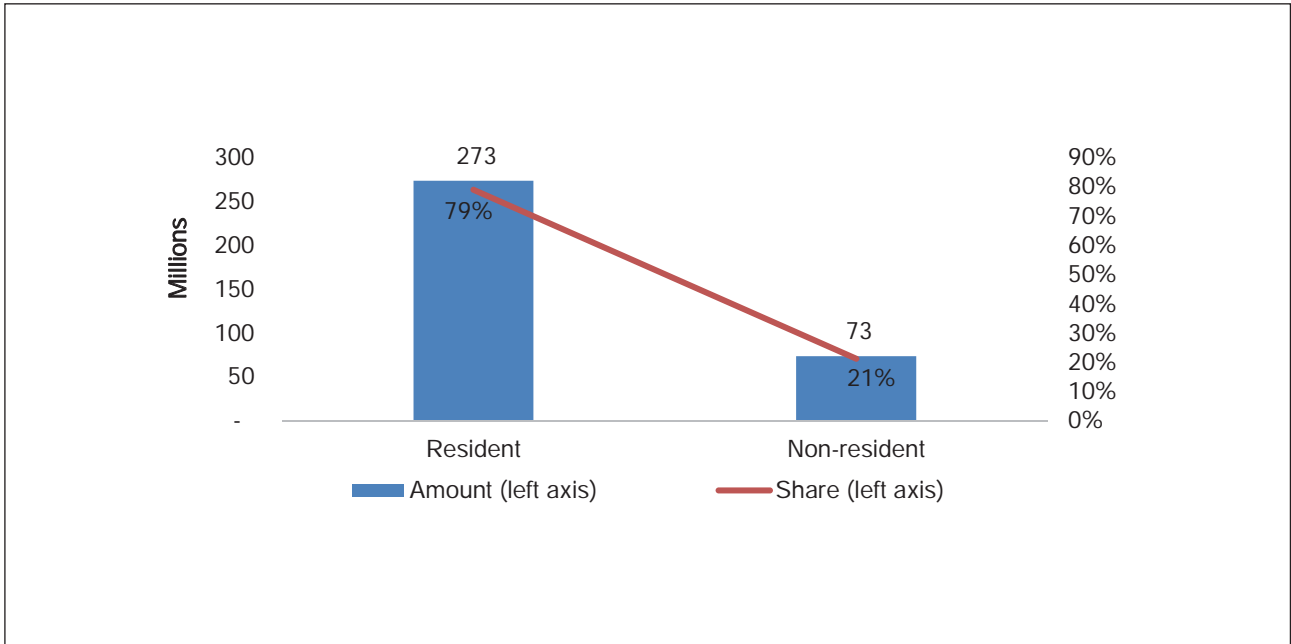
Source: National Bank of Georgia

Diagram N 6.17 Sources of funding



Source: National Bank of Georgia

Diagram N 6.18 The structure of funds received



Source: National Bank of Georgia

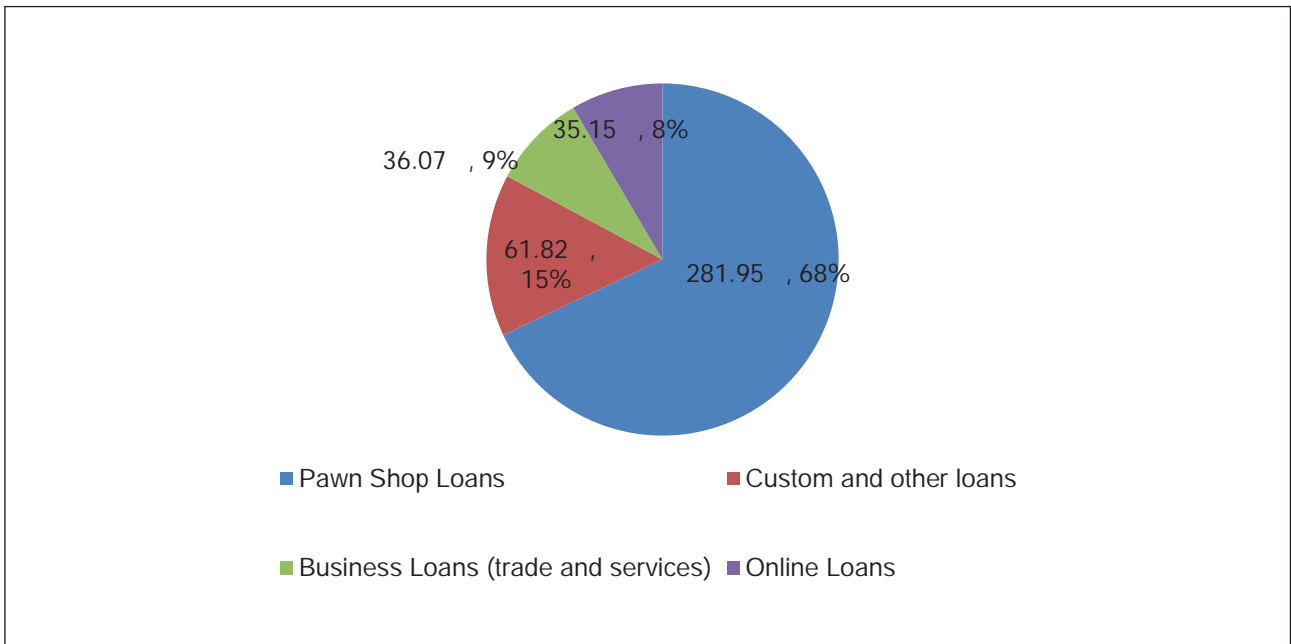
As of 31 December 2019, there are 204 registered loan-issuing entities on the market (378 including branches at different locations).

The total assets of loan-issuing entities, of 488 million GEL, are financed by shareholders and financial institutions.

The largest share of borrowed funds is from residents.

A total of 68% (182 million GEL) of the total credit portfolio of loan-issuing entities is made up of pawn loans. Loans in agriculture, trade and services, and business, account for only 9% (36 million GEL) of the total credit portfolio.

Diagram N 6.19 Credit portfolio structure



Source: National Bank of Georgia



7

SECURITIES MARKET



7. SECURITIES MARKET

7.1 SECURITIES MARKET INDICATORS

Throughout the past few years, local debt securities market activity has expanded significantly. Over the past five years, the government and corporate debt securities market increased by approximately 14 times, amounting to annual growth of 31% and 69% respectively. Sequential steps have been made to improve the Georgian capital market environment. The recent reform of the state pension fund, representing a source of long-term financing of unprecedented scale, is expected to further deepen the domestic capital market. In addition, NBG and the Government of Georgia are currently working on a reform to transform the relevant legal and regulatory requirements. Through this reform, the investment funds and securi-

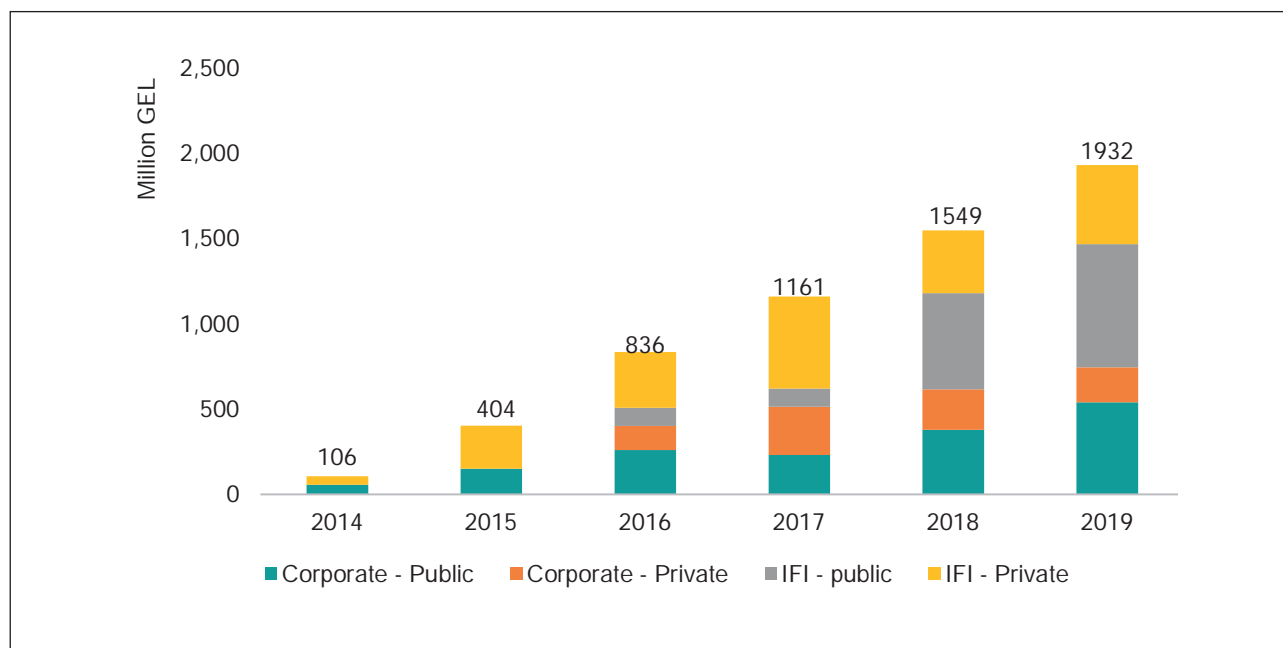
ties market legislation projects, which were finalized in 2019, shall guarantee the approximation of Georgian regulatory principles to those of the European Union.

Bond market

In 2019, the local commercial bonds market increased by 25% and amounted to 4.02% of GDP (the corporate bonds market growth was 21% and corporate bonds/GDP was 1.55%). A total of 63% of commercial bonds were GEL-denominated bonds issued by financial institutions, including microfinance organizations.

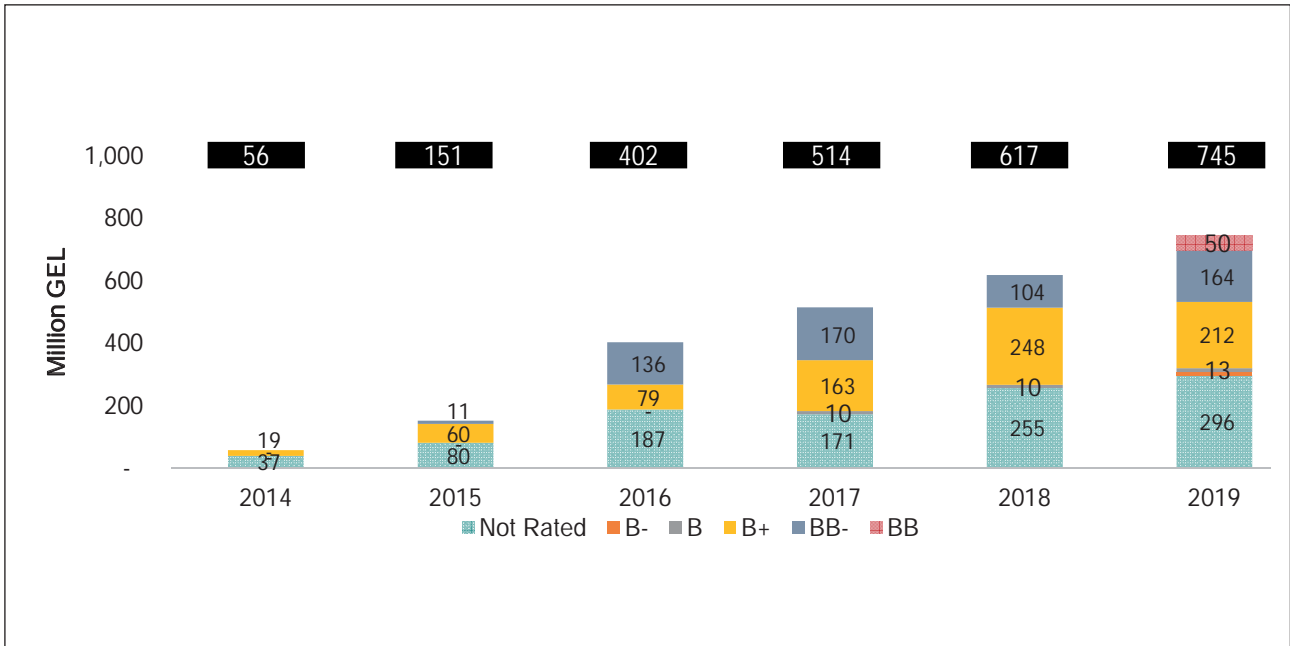
During 2019, BB/BB- rated company issuances doubled. Approximately 60% of the companies issuing corporate bonds have earned internationally accredited credit ratings (Fitch, Scope).

Diagram N 7.1 Outstanding commercial debt securities (2014-2019)



Source: National Bank of Georgia; Bloomberg

Diagram N 7.2 Dynamics of outstanding corporate bonds by international credit ratings, 2014-2019 ⁹⁵

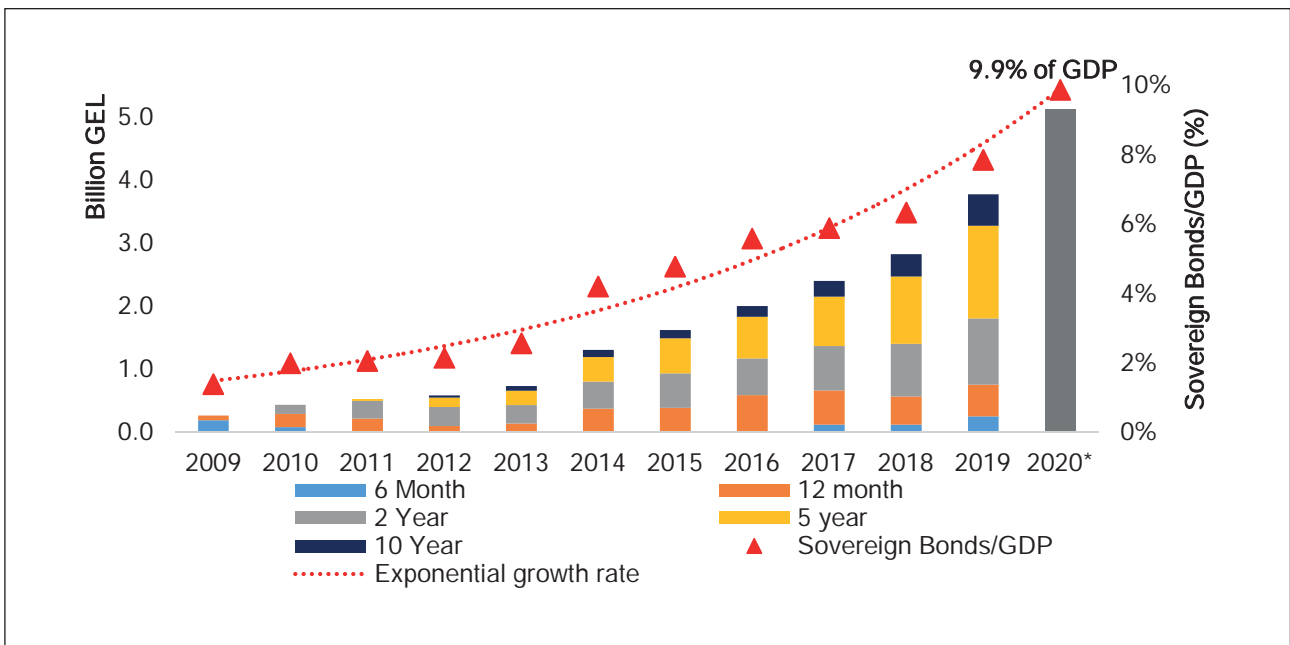


Source: National Bank of Georgia

Treasury bills, which play a major role in the development of the GEL-denominated bonds market, in-

creased significantly in 2019 and amounted to 7.8% of GDP (see Diagrams N 7.3 and N 7.4).

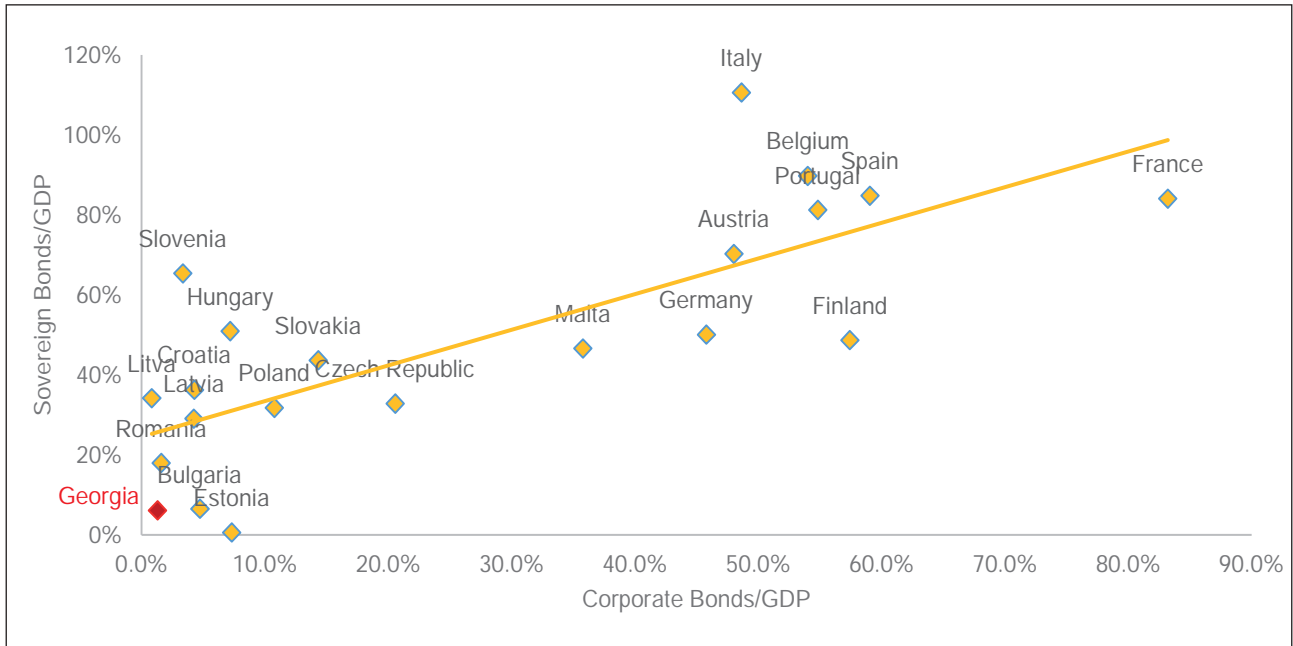
Diagram N 7.3 Outstanding treasury debt securities by maturity



Source: Ministry of Finance; GeoStat

⁹⁵ In 2019, credit ratings slightly changed (as a result of the suspension of one issuer and the accreditation of another). In addition, the credit rating of a specific bond was downgraded, although it did not impact that of the issuer.

Diagram N 7.4 Treasury and commercial debt securities as a % of GDP in selected European countries

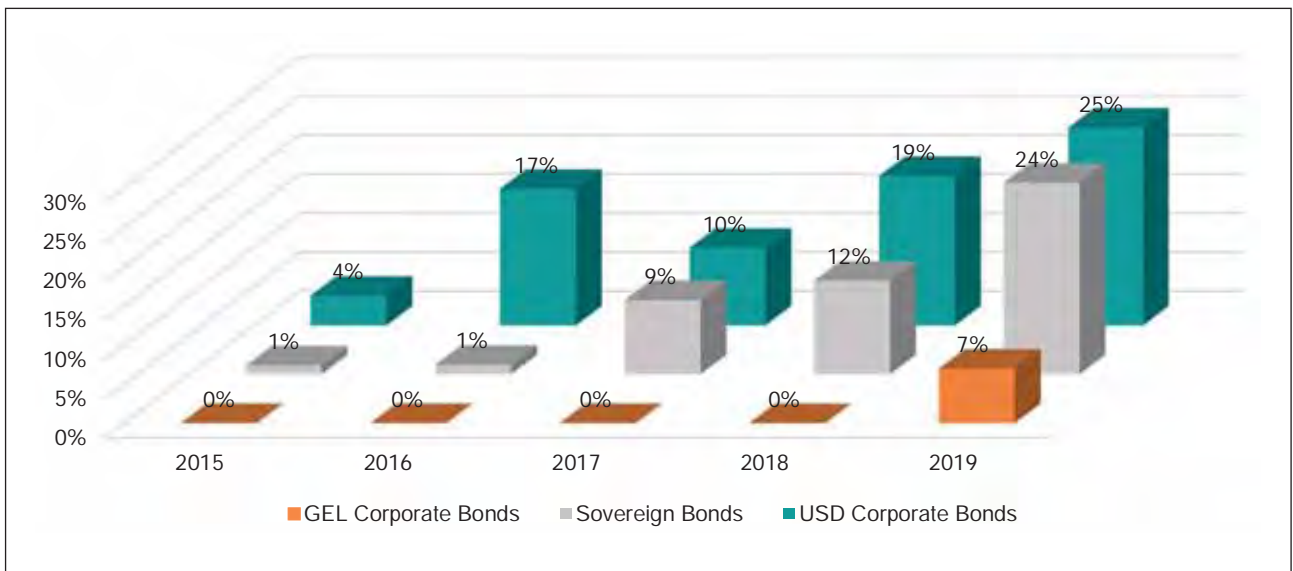


Source: National Bank of Georgia; Regulatory Authorities and Stock Exchanges of selected countries

In 2019, the overall liquidity indices of the domestic market improved; however, there is variation among different market segments. Secondary market activity for corporate bonds denominated in foreign currency was considerably higher than that of GEL-denominated bonds. As for treasury bonds, the volume of sec-

ondary market transactions increased significantly in 2019, which is largely related to the NBG's open market operations; however, along with higher interest rates, non-resident holdings also increased (see Diagrams N 7.5 and N 7.6).

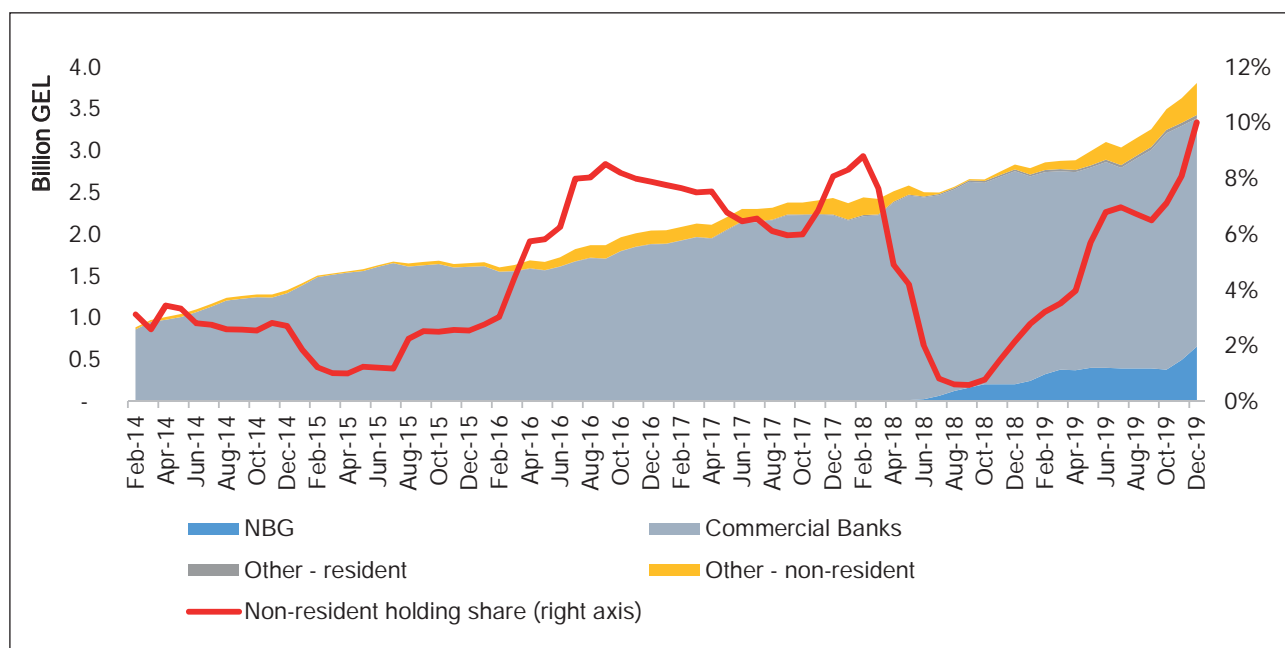
Diagram N 7.5 Secondary market activity of debt securities issued in Georgia⁹⁶



Source: National Bank of Georgia; Georgian Stock Exchange

⁹⁶ The graph illustrates annual secondary market activity, calculated as secondary market trading volume divided by the average of outstanding bonds.

Diagram N 7.6 Secondary market activity of debt securities issued in Georgia⁹⁷



Source: National Bank of Georgia; Georgian Stock Exchange

7.2 SECURITIES MARKET PARTICIPANTS

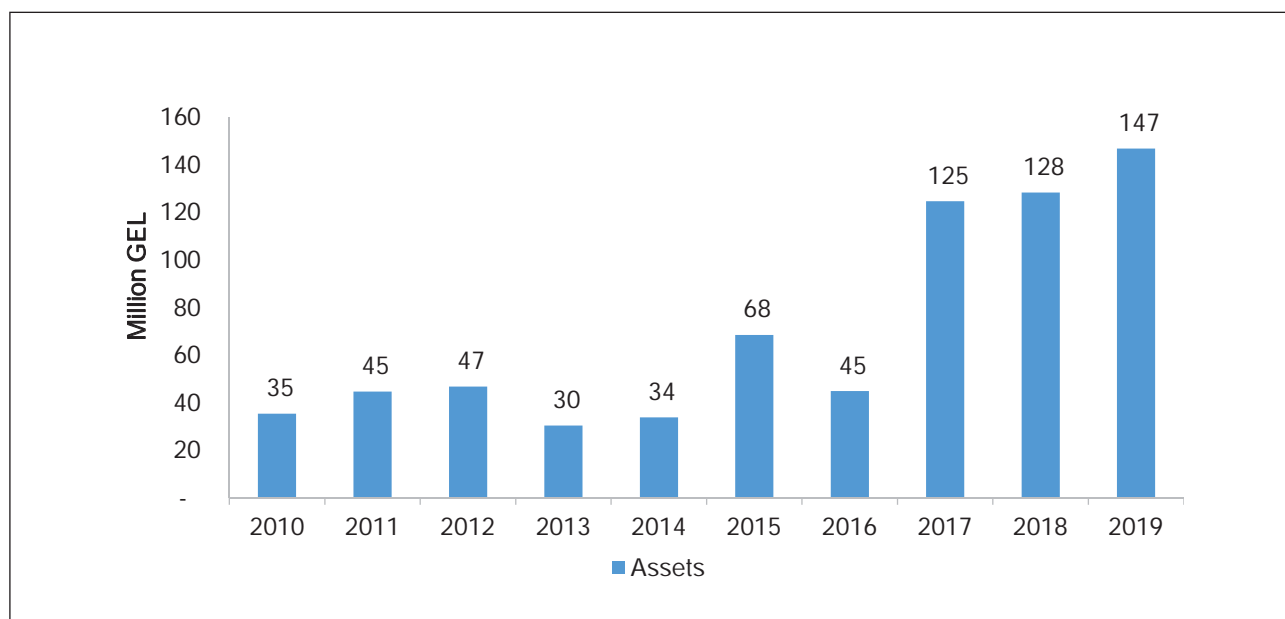
By 2019, the Georgian capital markets comprised two stock exchanges, a central securities depository, 10 brokerage companies (including commercial banks), and four independent securities registrars. Four out of 10 brokerage companies were not members of the stock exchange.

Brokerage companies

The activity of market intermediaries was also positively affected by the increased activity on the debt securities market. By 31 December 2019, the total assets of brokerage companies amounted to 146.7 million GEL.

By the end of 2019, there were 6,012 clients of brokerage companies, of which 82% were resident individuals.

Diagram N 7.7 Dynamics of total brokerage assets (2010-2019)



Source: National Bank of Georgia

⁹⁷ The graph illustrates annual secondary market activity, calculated as secondary market trading volume divided by the average of outstanding bonds.

Table N 7.1 Breakdown of clients of brokerage companies

	<i>Residents</i>	<i>Non-Residents</i>
Individuals	4,909	793
Legal Entities	173	137
Total	5,082	930

By the end of 2019, brokerage companies had 2.32 billion securities in client accounts that amounted to 4.39 billion GEL, out of which 51% were domestic securities owned by legal entities.

The total value of exchange and OTC transactions executed by brokerage companies on the Georgian Stock Exchange was 113.77 million GEL (1,534.71 million securities). Only 0.06 million GEL of deals (1.65 million securities) were executed on the stock exchange and 113.71 million GEL of deals (1,533.06 million securities) were executed outside the stock exchange.

Table N 7.2 Total value of securities recorded on the securities accounts of brokerage companies (GEL)

	<i>Residents</i>	<i>Non-Residents</i>
Domestic securities owned by individuals	228,254,743.12	203,334,919.86
Domestic securities owned by legal entities	1,762,203,633.35	411,837,499.20
Foreign securities owned by individuals	462,929,330.96	365,304,253.49
Foreign securities owned by legal entities	163,740,179.21	640,913,629.92
Total	2,617,127,886.65	1,621,390,302.47

Table N 7.3 Major trade indicators of brokerage companies

<i>Brokerage Company</i>	<i>Number of deals (units)</i>	<i>Number of securities (units)</i>	<i>Value (GEL)</i>
LLC TBC Capital	20	50,432	17,279,568
JSC Galt & Taggart	166	726,386,906	77,673,405
JSC Caucasus Capital Group	67	1,685,813	1,793,091
JSC Heritage Securities	62	806,596,748	17,027,789
Total	315	1,534,719,899	113,773,853

Stock Exchange

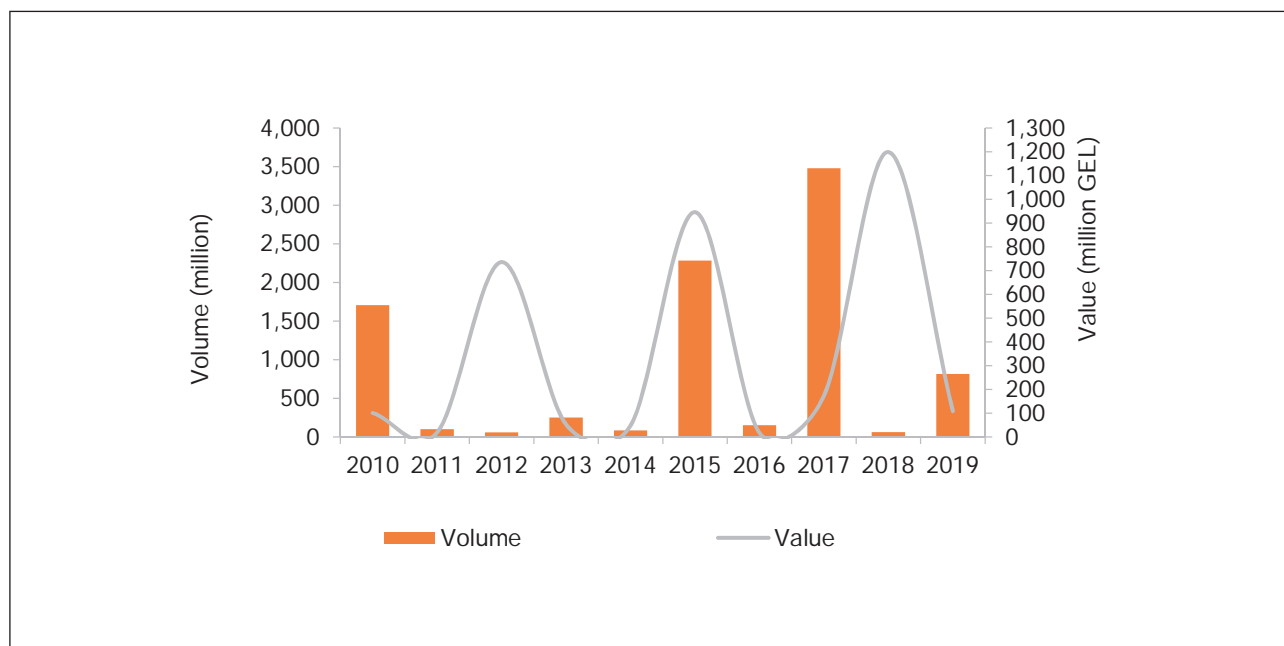
According to the 31 December 2019 data, securities of 35 issuers were admitted to the trading system of the Georgian Stock Exchange. The value of total deals executed throughout trading sessions and fixing amounted to 109.19 million GEL (815.96 million

securities). A total of 0.05 million GEL transactions were made on trading sessions and those executed on fixing totaled 109.14 million GEL. Fixing trades include transactions executed not only by brokerage companies but also by securities registrars, the latter made deals for 100,824 securities amounting to 9.2 million GEL.

Table N 7.4 Aggregate information on transactions carried out on the Georgian Stock Exchange, 2018-2019

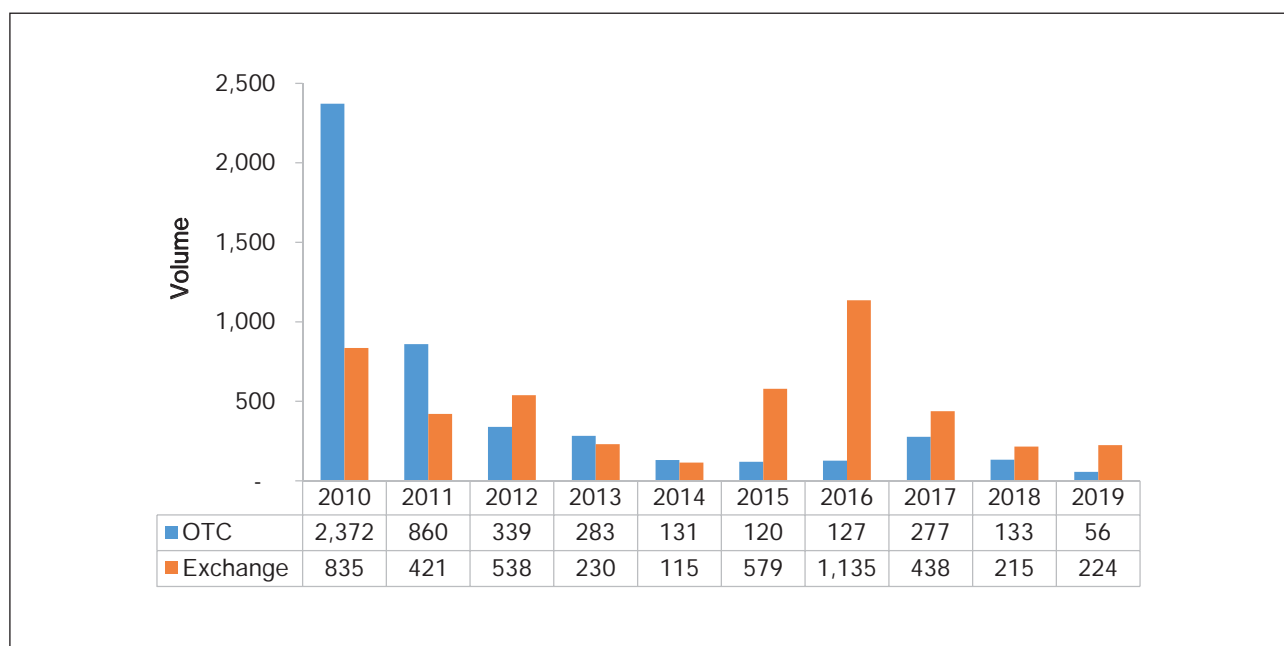
Year	Number of trades		Quantity of securities traded		Value of securities traded (GEL)	
	2019	2018	2019	2018	2019	2018
Trading Sessions	56	133	1,185,044	2,851,935	45,717	1,425,925
Fixing	224	215	814,772,528	60,375,060	109,141,165	1,197,286,628
Total	280	348	815,957,572	63,226,995	109,186,882	1,198,712,553

Diagram N 7.8 Major trade indicators for transactions carried out on the Georgian Stock Exchange, 2010 -2019



Source: National Bank of Georgia

Diagram N 7.9 Number of transactions executed throughout trading sessions and fixing on Georgian Stock Exchange, 2010 – 2019



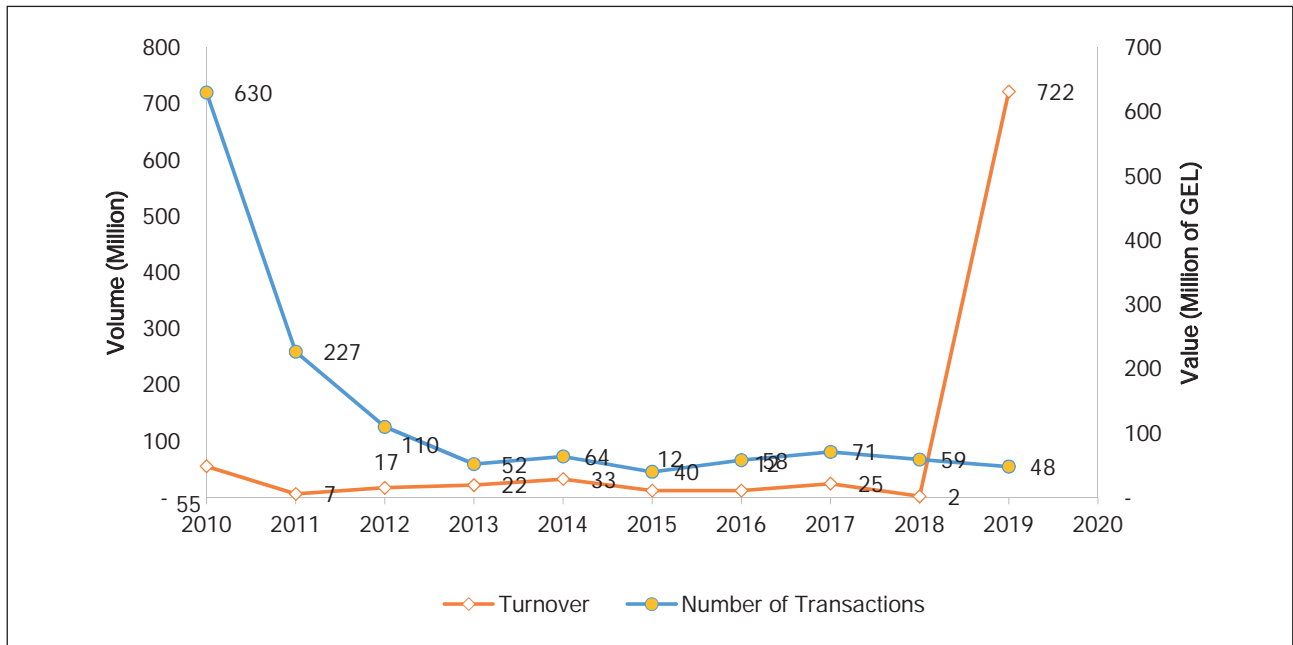
Source: National Bank of Georgia

The Central Securities Depository

A total of 721.6 million securities, amounting to 0.96 million GEL in value, were deposited in the Georgian Central Securities Depository (CSD) in 2019. In terms of funds deposited, 57% of transactions and 90% of the total amount were executed by the JSC Bank of

Georgia. Compared to the previous year, the number of securities transactions deposited in the Central Securities Depository decreased by 18.6%, while the number of securities increased by 719.3 as a result of a single deposit transaction through the securities of an issuer whose shares account for 99% of the total securities deposited.

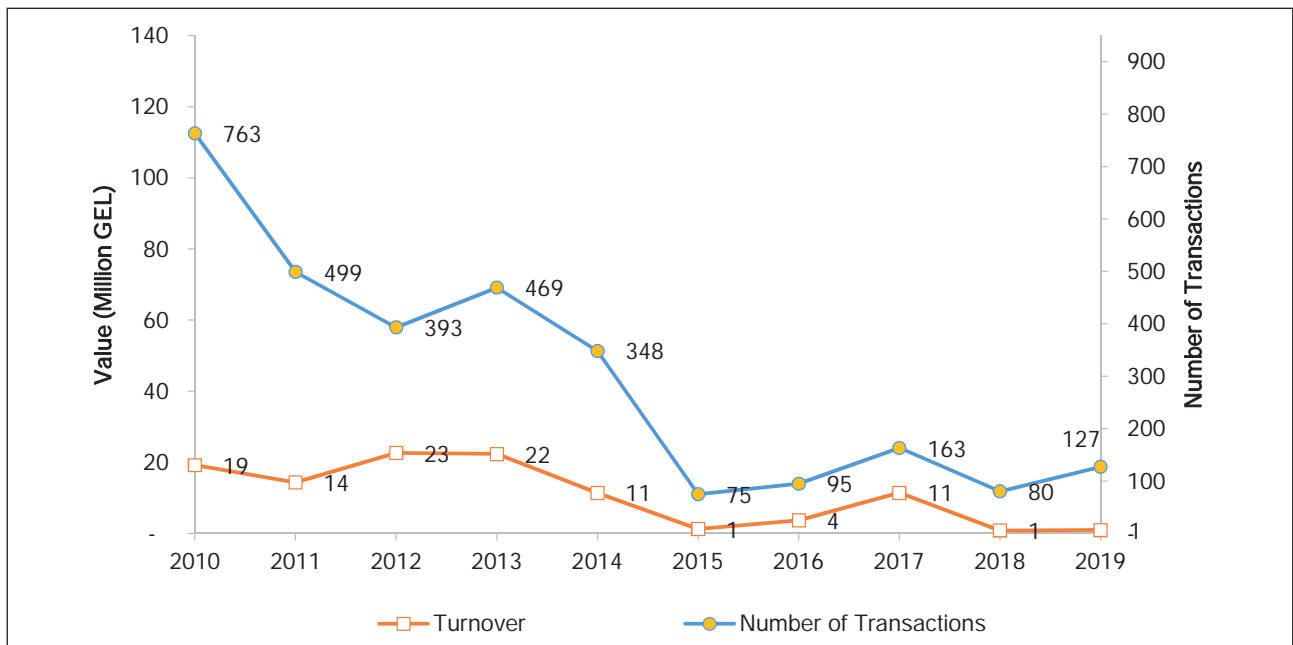
Diagram N 7.10 Securities deposited in the Central Securities Depository, 2010-2019



Source: National Bank of Georgia

Throughout the year, the turnover of funds deposited in the CSD increased by 0.11 million GEL; however, the number of fund deposit transactions increased by 59% compared to the previous year.

Diagram N 7.11 Funds deposited in the Central Securities Depository, 2010-2019



Source: National Bank of Georgia

7.3 PENSION FUND SCHEME

After implementation of the pension fund reform in 2018, the Pension Agency commenced collection and administration of pension scheme participants' funds on 1 January 2019.

The Investment Board of the Pension Agency is composed of five members who were approved by the Parliament of Georgia on 11 May 2019 and is responsible for the Pension Agency's investment activity. Under their mandate, the Investment Board is responsible for determining the fund's investment policy (in-

cluding its investment strategy and risk framework), for appointing the Chief Investment Officer, selecting specialized depositaries and asset management companies and ensuring that investment activities adhere to the investment policy.

On 31 December 2019, the size of the pension fund reached 507 million GEL, which was accumulated on the Pension Agency's current accounts in commercial banks and at the National Bank of Georgia. The total accrued interest amounted to 17 million GEL, which equates to approximately a 7.5% time-weighted annual return.

In February 2020, the Pension Agency commenced investment activities in accordance with the temporary Investment Policy Document for Cash and Cash-like Instruments as approved on 22 January 2020. Throughout 2019, substantial efforts were undertaken to facilitate selection of the fund's specialized depositary, which will contribute significantly to the efficient functioning of the pension scheme. In accordance with the Law of Georgia on Funded Pensions and the regulatory requirements of the National Bank of Georgia, the specialized depositary is an independent party that is responsible for receiving, safe-keeping, registering, and validating ownership rights on pension scheme assets (cash, securities and other assets), and for following the Pension Agency's instructions to ensure monitoring of the requirements set out by the investment policy and the law.

Specialized depositary services are relatively new for financial institutions and financial market participants in Georgia. The National Bank of Georgia thus organized and held meetings and workshops on the role and functions of the specialized depositary for market participants in 2019. Representatives from the World Bank and the leading multinational financial services company "State Street" actively participated in these

discussions and shared their experience.

Throughout 2019, the National Bank of Georgia's regulatory framework and its supervisory scope with regard to the pension fund's investment activity was discussed with the Investment Board members of the Pension Agency and market participants. As the National Bank of Georgia plans to improve both its supervisory approach and the pension fund's regulatory framework, in 2019 it became a governing member of the International Organization of Pension Supervisors (IOPS). Sharing international best practice will enable the NBG to elaborate appropriate proposals for further regulatory policy and refine specific governance approaches for the development of the domestic market.

Box 12 Pension Fund Reform: International Experience

Amid ongoing global demographic changes, pension policy has gained particular prominence in recent years. Countries encountering an increase in life expectancy and a decrease in birth rate face an increased urge to alter the trajectories of their pension systems in order to reduce fiscal pressure and ensure a steady flow of income after retirement. As states develop their own pension reform schemes in consideration of their own nation-specific economic positions, characteristics and challenges, no uniformity exists in existing pension systems. However, despite this inherent diversity among countries, different pension policies can be measured and compared by a universal three-pillar system designed by the World Bank.⁹⁸

While the three-pillar system has long been enshrined in developed countries, pension reform was introduced to most developing countries in the 1980s. The largest wave of pension system reforms in Eastern European countries occurred between 1998 and 2006 (see Table N 7.5).

Table N 7.5 Mandatory pension schemes in Eastern European countries

Country	Date of Implementation	Contributions paid as a percentage of income to the pension fund (%)	
		Upon commencement	by 2008
Hungary	Jan-98	6.0	8.0
Poland	Jan-99	7.3	7.3
Latvia	Jul-01	2.0	8.0
Bulgaria	May-02	2.0	5.0
Croatia	Jan-04	5.0	5.0
Estonia	Jul-02	6.0	6.0
Lithuania	Jan-04	2.5	5.5
Slovakia	Apr-05	9.0	9.0

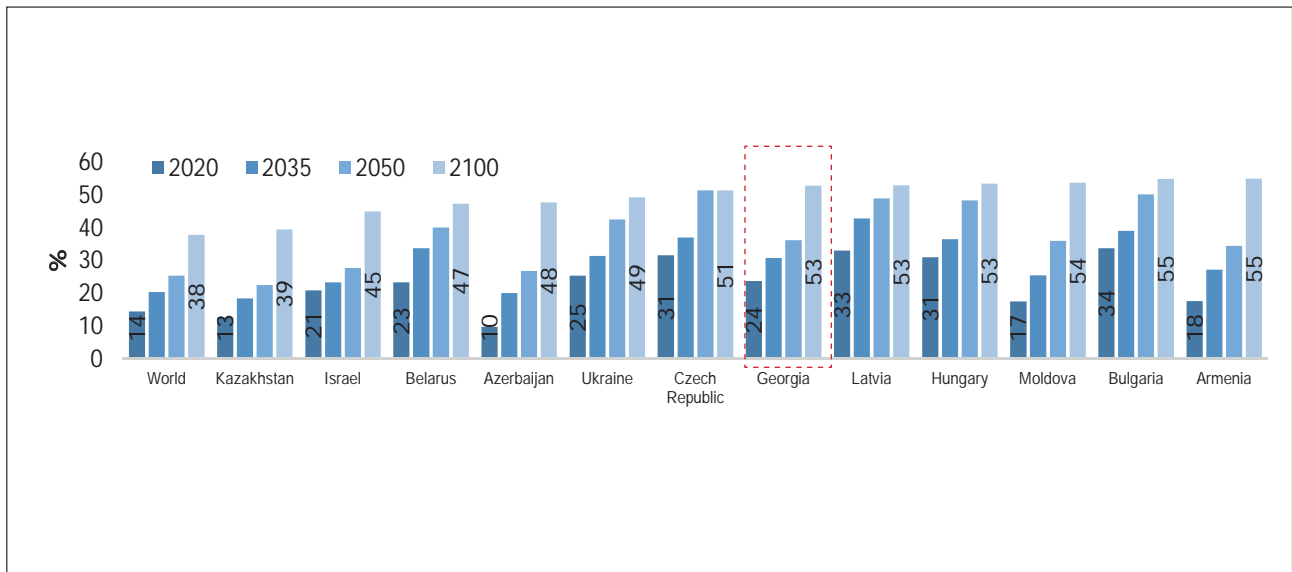
Source: National supervisory authorities

⁹⁸ In the three-pillar pensions system, Pillar 1 refers to state pensions (pay as you go); Pillar 2 refers to occupational retirement planning and can be either mandatory or voluntary, and involves individual savings accounts (e.g. defined contribution plan); and Pillar 3 helps to sustain an accustomed standard of living after retirement (e.g. private retirement savings schemes, employee schemes, defined benefit or defined contribution schemes), this approach is highly flexible and discretionary compared to the two other pillars.

Before the reform, Georgia had a social pension system according to which the stream of payouts was entirely funded from the state budget. The volume of private pension savings was almost nonexistent. Georgia faces major demographic challenges, including an increasingly aging population and a falling working-age labor force. According to a demographic study conducted by the United Nations, the old-age dependency ratio in Georgia stands at 24% in 2020 and is likely to reach 53% by 2100, considering the average birth rate (i.e., approximately 1 out of 3 citizens will be a retiree – aged 65 or above) (see Diagram N 7.12).

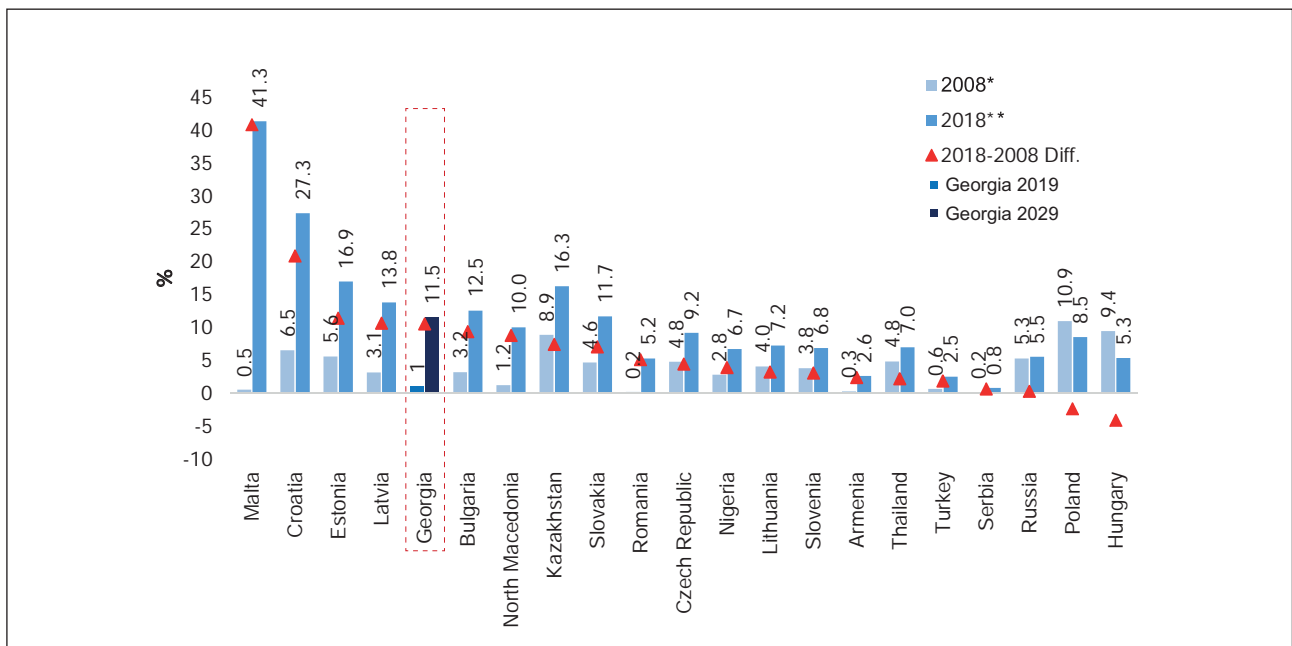
Under such conditions, a solely social pension system (e.g. Pillar 1) cannot effectively address the ongoing demographic changes or guarantee sufficient regular income throughout retirement. Thus, the 2019 mandatory pension fund system is an important step forward that automatically enrolls employees under the age of 60(men)/55(women) into the program; however, self-employed individuals and employees who turned 60(men)/55(women) before the law was enacted can participate voluntarily and employees aged 40 or older could opt out of the plan during the first three months. Under the system, the employee, employer and the government each contribute a fixed

Diagram N 7.12 Old-age dependency ratio – historical and forecasted levels



Source: UN: "World Population Prospects 2019"

Diagram N 7.13 Pension assets to GDP (%)



* Data for 2008 or the first available year;
 ** data for the year 2018 or the last available data;
 Source: OECD "Pension Markets in Focus-2019"; Pension Agency; NBG

2% of the employee's untaxed salary to the participant's individual account. Self-employed individuals provide 4% of their income plus a 2% contribution by the state.

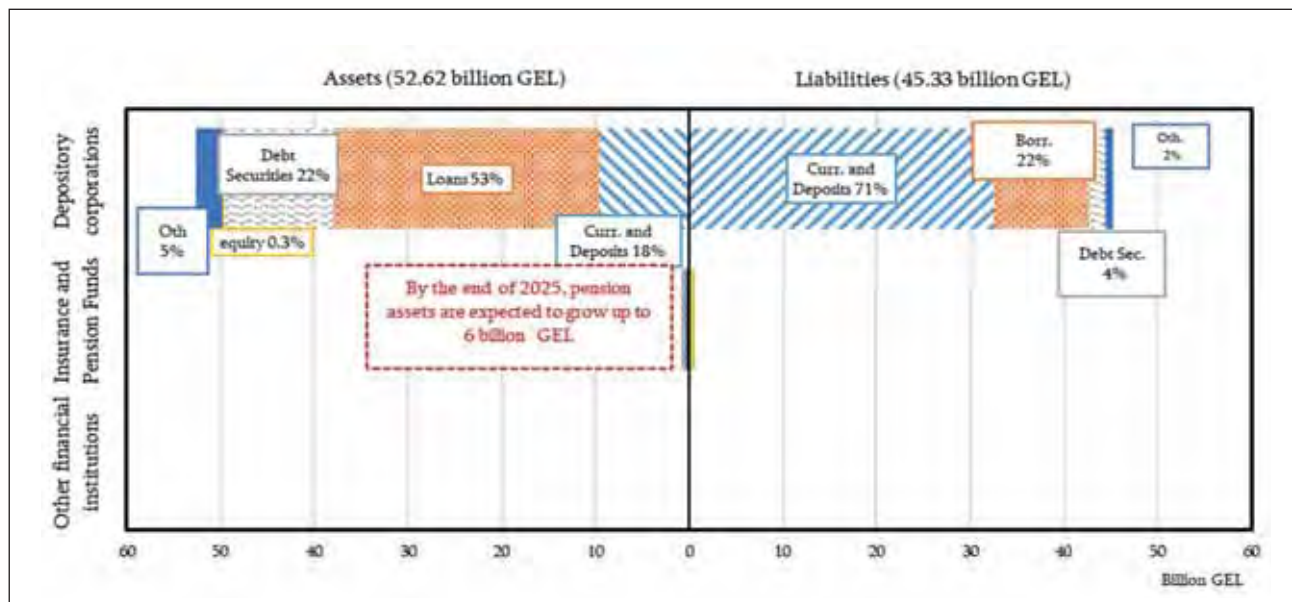
By the end of 2019, the assets accumulated through pension fund represented 1.03% of GDP. This metric is likely to reach 11.5% of GDP by 2029, taking into account the expected future cash flow and an implied annual return rate of 7%. If the tendency of the growth rate remains the same, Georgia's Pillar 2 pension system will be approximate to that of countries with similar systems.

The appropriate accumulation of the pension fund and long-term savings will contribute to the country's further sustainable economic development. Anticipated long-term savings help enhance the efficiency of

capital markets, improve the investment climate and boost productivity. Hence, the Pension Agency, as an institutional player, will act as a catalyst in the medium/long term and will strengthen the financial sector in Georgia (see Diagrams N 7.14 and N 7.15).

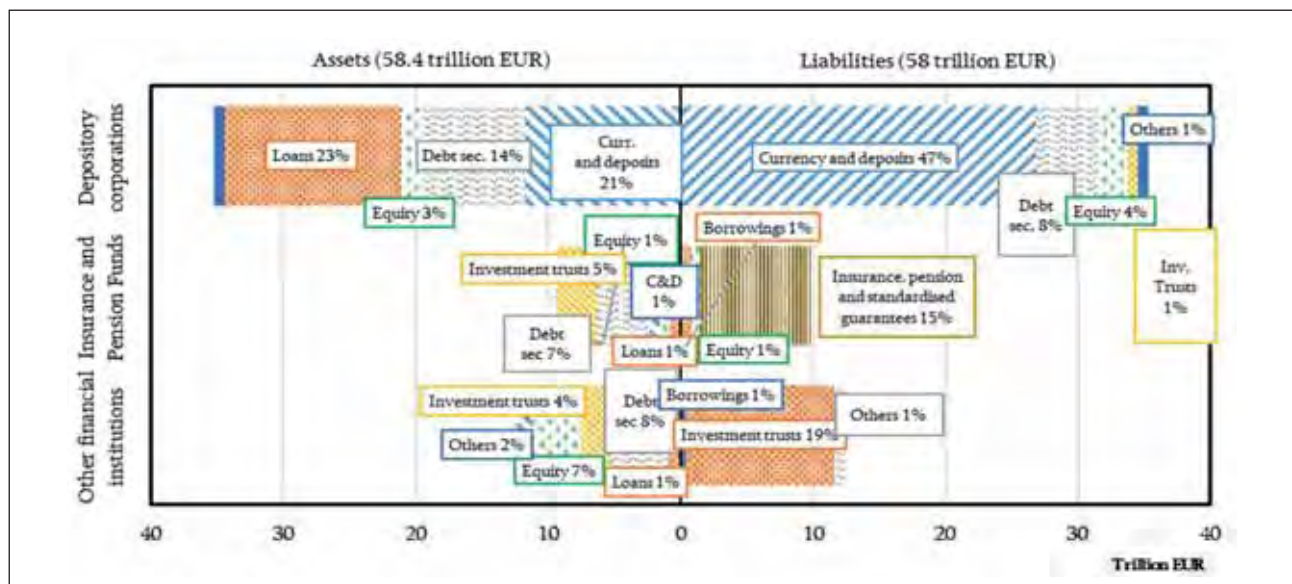
Among a wide range of factors, adequacy, availability and sustainability are major influences on the success and effectiveness of pension reforms. An adequate pension system guarantees a stream of regular and sufficient payments to retirees and reduces poverty. In addition, an optimal level of fiscal spending can be maintained through broader availability as a larger population has wider access to the pension plan. Sustainability ensures the long-term financial viability of the pension system and its resilience to economic, demographic or political trends and shocks. Current

Diagram N 7.14 Financial assets and liabilities of financial institutions – Georgia



Source: National Bank of Georgia; State Insurance Supervision Service

Diagram N 7.15 Financial assets and liabilities of financial institutions – eurozone



Source: ECB

demographic changes and low interest rates pose a myriad of challenges to the efficiency of existing pension systems globally.

The net replacement rate is a widely used indicator to reflect the efficiency and sustainability of pension systems. This figure represents the ratio of the expected monthly pension payment to the level of monthly income (excluding taxes) by the time a per-

son retires. Estimating the net replacement ratio involves assumptions and projections about expected salary, amount of pension contributions, real GDP growth, inflation, rate of return on pension plan assets and the years remaining before retirement. Considering longevity, the sensitivity of this metric is high to pension plan provisions and assumptions regarding contributions and return rates.

backdrop and are based on assumptions that are more relevant for Georgia.

The main distinguishing feature of Scenarios 2 and 3 is the return rate on pension assets:

Scenario	Rate of Return on Pension Fund Assets
Scenario 2	7%
Scenario 3	9%

Diagram N 7.16 Net replacement rate for selected countries

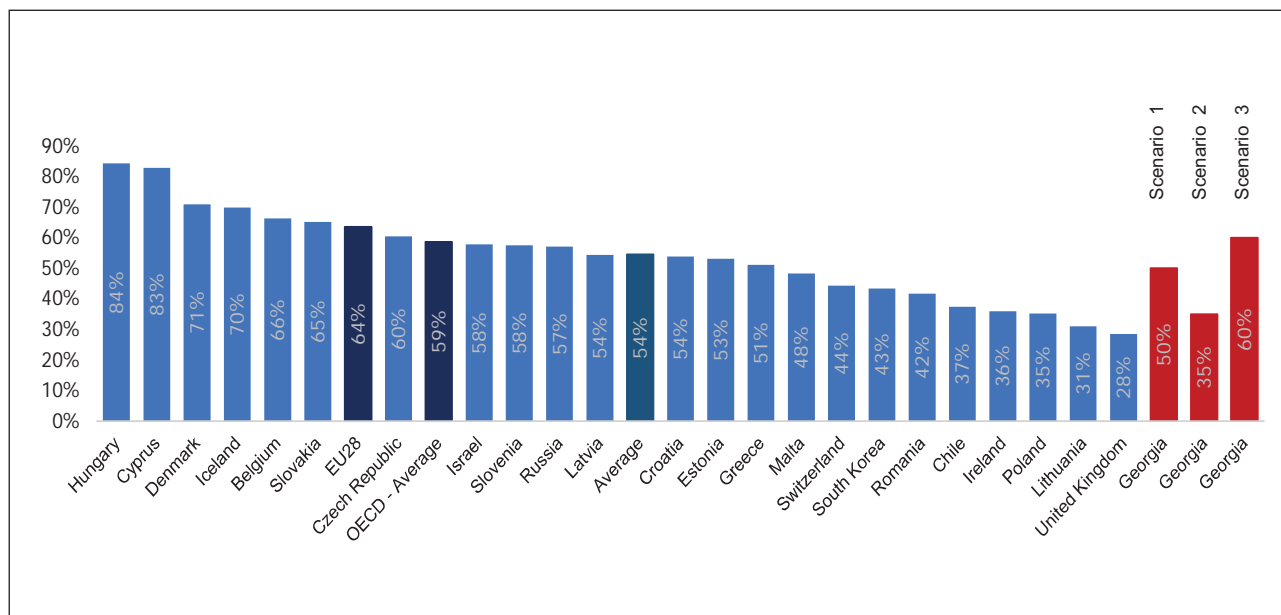


Diagram N 7.16 illustrates the net replacement rate by country for 2058-59⁹⁹, where three potential Georgian scenarios are shown. Considering the current level of contributions, Georgia's coefficient is close to the average of other countries, which amounts to a replacement rate of 50% for participants in the accumulative pension scheme (taking into account different scenarios).

Three potential scenarios have been deduced for the Georgian net replacement rate coefficient. Scenario 1 is based on OECD methodological assumptions, while Scenarios 2 and 3 consider the local economic

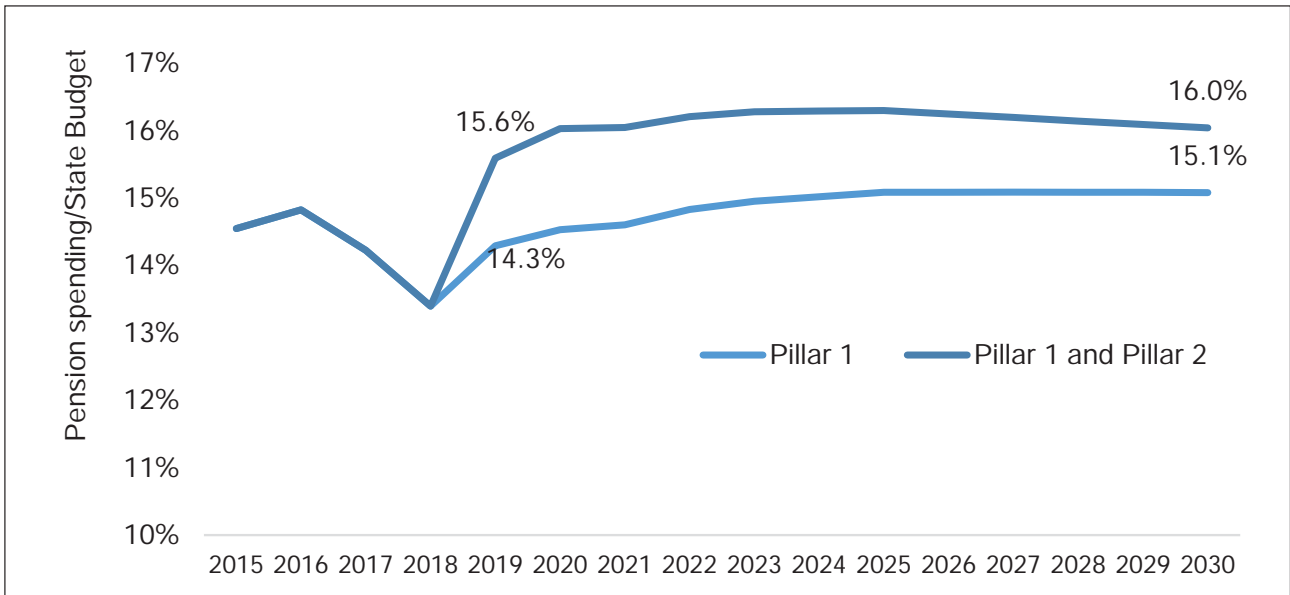
The wage growths evaluated in Scenarios 2 and 3 are based on expected inflation (3%) and economic growth (5%). The life expectancy of a retiree is estimated at 15 years.

The first scenario considers a set of assumptions made by the OECD methodology where inflation is 2%, economic growth is 1.25%, and the real rate of return on pension assets is 3%. The estimates for comparable countries are based on similar assumptions.

The current pension reform keeps the Pillar 1 system for individuals involved in the accumulated pension scheme as well as for non-participants. Consequently, fiscal costs combine the state costs of both pension pillars. Diagram N 7.17 shows fiscal expenditures on pensions as a share of total budget expenditures by 2030. Considering the provisional demographic changes, the expected estimate indicates upward fis-

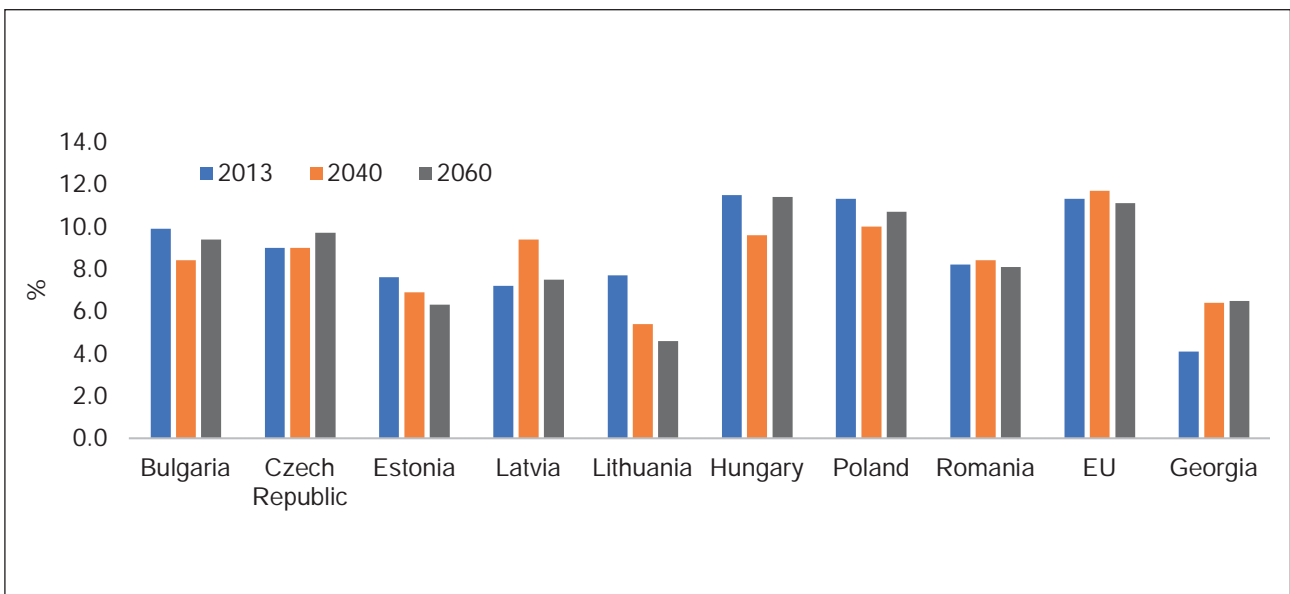
⁹⁹ The diagram considers 2059 for Georgia and 2058 for other countries.

Diagram N 7.17 Pension fund spending to state budget¹⁰⁰



Source: Ministry of Finance of Georgia; Pension Agency; NBG; UN

Diagram N 7.18 Pension scheme public expenditures for selected countries – existing and forecasted levels (% of GDP)



Source: The 2015 Ageing Report: Economic and budgetary projections for the EU28 Member States (2013-2060); European Commission.

cal pressure.

In summary, the 2019 pension reform is an important step forward to combat social imbalances and reduce fiscal pressure in the medium/long term.

¹⁰⁰ Estimates of the provisional total fiscal spending and Pillar 1 pension growth rate are based on the Ministry of Finance's projections of the expected growth of the first five years, while the estimates for the remaining future years are calculated based on an average nominal growth rate of 7%. The number of retirees is assessed from the United Nations' measurement of population growth trends. The estimate of the Pillar 2 pension scheme considers a 5% annual increase in labor income.

However, the effectiveness of pension policy should be assessed systematically, considering factors such as demographic changes, expected fiscal costs and the inequality gap between the participants of Pillar 1 and Pillar 2. This analysis will help further improve the pension policy and determine any need for additional mechanisms.



8

INSPECTION AND SUPERVISION OF MONEY LAUNDERING



8. INSPECTION AND SUPERVISION OF MONEY LAUNDERING

On 1 January 2019, the supervisory framework for Combating Money Laundering and Terrorist Financing of the National Bank of Georgia entered into force. This aims to organize an effective, risk-oriented supervision process, increase the transparency of the National Bank's supervisory approach, and create appropriate expectations for supervisory actions. The framework determined the levels of supervisory attention and risk-appropriate, effective supervision measures.

The determination of the levels of supervisory attention by the National Bank of Georgia is based on a continuous process of identifying and assessing risks to both on-site and off-site bases. During 2019, for the purposes of combating money laundering and terrorism financing, the National Bank of Georgia has received and processed relevant reports from each and every monitored entity (apart from currency exchange bureaus), twice. For currency exchange bureaus, off-site supervision was introduced in 2018 and thus the Money Laundering Inspection and Supervision Department received and processed their reports for the first time in 2019.

Supervisory measures carried out during 2019 included both complex and thematic, special and follow-up type on-site inspections. It should be acknowledged that for the correction of identified violations and to control the implementation of recommendations, off-site (so-called "follow-up") supervisory control has been carried out by the National Bank of Georgia. The use of this type of supervisory measure has contributed to an even more effective redistribution of the resources of the National Bank of Georgia and to a gradual increase in monitoring entities' compliance with the legislation.

In 2019, in accordance with the threats and vulnerabilities identified, on-site inspections were focused on the study of the following topics:

In the case of commercial banks:

- The process of classification of clients per risk and the implementation of appropriate preventive measures.
- The process of identifying and verifying the beneficial owners of companies with complex ownership structures.
- The effectiveness of the risk management process related to correspondent relationships.

- The effectiveness of the e-commerce risk management process.
- Knowledge of the organization about international transactions (including offshores and watch zones).
- Effectiveness of the process of detecting suspicious/unusual transactions (including measures taken to implement UN resolutions and concerning the adequacy of software).

In case of payment service providers:

- The process of classification of clients (especially contractors and high-net-worth individuals) per risk and the implementation of appropriate preventive measures.
- The risks associated with products offered and the effectiveness of mitigation measures.
- The effectiveness of the process of detecting suspicious/unusual transactions (including measures taken to implement UN resolutions and concerning the adequacy of software).

In case of brokerage companies:

- The process of classification of clients per risk and the implementation of appropriate preventive measures.
- Knowledge of the brokerage company about intermediaries and the adequacy of the process of monitoring transactions carried out through them.
- Effectiveness of the process of detecting suspicious/unusual transactions (including measures taken to implement UN resolutions and concerning the adequacy of software).

In case of microfinance organizations:

- The process of classification of clients per risks and the implementation of appropriate preventive measures.
- Adequacy of preventive measures carried out by the organization to determine the origin of funds.
- Knowledge of the organization about international transactions (including offshores and watch zones).
- The effectiveness of the process of detecting suspicious/unusual transactions (including mea-

asures taken to implement UN resolutions and concerning the adequacy of software).

- In case of currency exchange bureaus:
- Adequacy of procedures for the classification of legal entities and non-resident natural persons per risk and the identification/verification process.
- The effectiveness of the process of detecting suspicious/unusual transactions (including measures taken to implement UN resolutions and concerning the adequacy of software).

It should be noted that, during 2019, the thematic inspection of non-banking institutions with non-resident ownership and governance structures was prioritized.

During 2019, 61 representatives of the financial sector were inspected, including nine payment service providers whose inspections began in 2018 and were finalized in 2019. The total volume of fines subsequently issued totaled 1,698,800 GEL.

Diagram N 8.1 Volume of Fines, 2019

Financial sector	Volume of fines (GEL)
Commercial banks	726,000
Microfinance organizations	539,300
Payment service providers	256,400
Currency exchange bureaus	177,100

In 2019, changes were made to the “Rules for the Determination and Imposition of Fines on Commercial Banks and their Administrators”, which significantly increased the effectiveness of the sanctions regime. Under these amendments, violations were divided into the categories of particularly severe, severe, and less severe, and for each category of violation, appropriate sanctions were determined, as well as the penalties for systemic or repeated violations.

Information on the sanctions imposed by the National Bank of Georgia on representatives of the financial sector due to violations of the requirements for preventing money laundering and terrorism financing has been published on the official website of the National Bank of Georgia since 1 November 2019.

The implementation of preventive supervisory measures is essential for the National Bank of Georgia, which ensures informing representatives of the financial sector about supervisory expectations and raising their level of compliance.

In order to increase the culture of compliance in the sectors under the supervision of the National Bank

of Georgia, during 2019 the following methodological guidelines were improved/updated:

Guideline on Illicit Income Legalization and Terrorism Financing Risk Assessment. The aim of this document is to assist representatives of the financial sector in properly identifying and assessing risks. To this end, it defines the factors that financial sector representatives should take into consideration while assessing risks at both the organizational and group level, as well as the risks of money laundering and terrorist financing related to customer transactions and business relationships.

Guideline on Preventive Measures. This document defines the type of information/ documentation that a financial institution should obtain when on-boarding a new client and monitoring existing business relationships.

Guideline on Organizational and Group-wide Risk Assessment and Risk Management. This guideline aims to provide assistance to representatives of the financial sector in creating a system to analyze risks related to illicit income and terrorism financing on an organizational and group-wide level. To this end, it provides an incomplete list of the factors that financial institutions should take into consideration.

Guidance on Identification and Verification of Beneficial Ownership. The purpose of the document is to support representatives of the financial sector in developing and implementing adequate mechanisms/ procedures for identifying and verifying beneficial ownership of their customers.

Guidance on Correspondent Relationships. This document aims to support the representatives of the financial sector in taking adequate measures to control and monitor risks associated with correspondent relationships.

It should be noted that the representatives of the financial sector were actively involved in the development of these guidelines. This involvement allowed the supervisor to take into account the experience of the relevant sectors in terms of identified risks and problematic issues.

During 2019, the National Bank of Georgia organized trainings on the identification and verification of beneficial owners and risk assessment, with a focus primarily on the updated guidelines. The trainings were attended by representatives of payment service providers, microfinance organizations, credit unions, securities registrars, brokerage companies and currency exchange bureaus. It should also be noted that training on using the AML remote portal and on filling

out reports was also provided for representatives of currency exchange bureaus.

In addition, meetings were actively held during the year with representatives of the financial sector to share information about the threats and vulnerabilities identified and to introduce supervisory expectations. In order to improve the risk awareness process, group meetings were held with each financial sector. These meetings were dedicated to a discussion and sharing of information about the risks and vulnerabilities identified in the sectoral and draft country risk assessment documents. At the same time, it should be noted that the National Bank of Georgia was actively involved in development of the “2019 Report

on Money Laundering and Terrorism Financing Risk Assessment in Georgia”. Apart from risks related to the banking and non-banking sectors, the report covers risk assessment and analysis related to innovative services and delivery channels. Determination of the topics and categories to be studied over the next year is mostly based on the results of the sectoral and country risk assessment documents.

It should also be noted that during the year, the National Bank of Georgia, including the Money Laundering Inspection and Supervision Department, carried out extensive work to prepare for the assessment mission of the Council of Europe Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism (Moneyval).



9

PAYMENT SYSTEMS



9. PAYMENT SYSTEMS

Payment systems in Georgia are dynamically developing and becoming safer and more efficient. The national payment system, together with the development of modern technology, is becoming more diverse and the number of entities participating in it is growing. Improving the legislation regulating payment systems and payment services and the development of payment infrastructure have great importance for the market to ensure it keeps pace with modern trends and supports the introduction of innovative products.

According to the association agreement between Georgia and the European Union, the National Bank of Georgia is working on the implementation of Directive (EU) 2015/2366 on payment services (PSD2). In 2019, in cooperation with the Central Bank of Poland, the Financial Supervision Commission (KNF) of Poland, and the Central Bank of Lithuania, an analysis of the Georgian payment services legislation's compliance with PSD2 has taken place. Amendments to the law on "Payment Systems and Payment Services" were also prepared. These amendments define the rights and obligations of payment service providers, customers and other entities participating in the process of payment service. These changes will foster the protection of the rights of customers and increase the transparency, reliability and soundness of payment systems and payment services. The process of the approximation of Georgian legislation with EU legislation will continue in 2020.

In 2019, work on the project to develop the "Rule on Strong Customer Authentication" took place. The purpose of this rule is to ensure the safe authentication for the customer when initiating a payment operation or accessing payment accounts, as well as protecting the privacy and integrity of customer's personalized security credentials, and reducing the risks of fraud and other illegal activities. This project was actively discussed with market representatives. Additionally, within the framework of a twinning project, the experience of EU member states in implementing similar regulations was shared. Due to the specifics of the market, a schedule for the gradual activation of the rule was arranged. The rule is planned to be adopted in 2020.

In 2019, intensive work started on introducing common and secure open standards of communication that will allow customers to receive more flexible payment services through an application programming interface (API). The aim of this project is to ensure secure communication when providing account infor-

mation and payment initiation services, as well as to promote the development and introduction of innovative products. Currently, intensive communication is taking place with market representatives and the adoption of a corresponding rule is planned for 2020.

Work also continued on introducing an instant payment system, through which it will be possible to transfer funds from a payer's account to a payee's account within seconds of payment initiation, anytime of the day, all year round. Commercial banks and other payment service providers will be able to use this system.

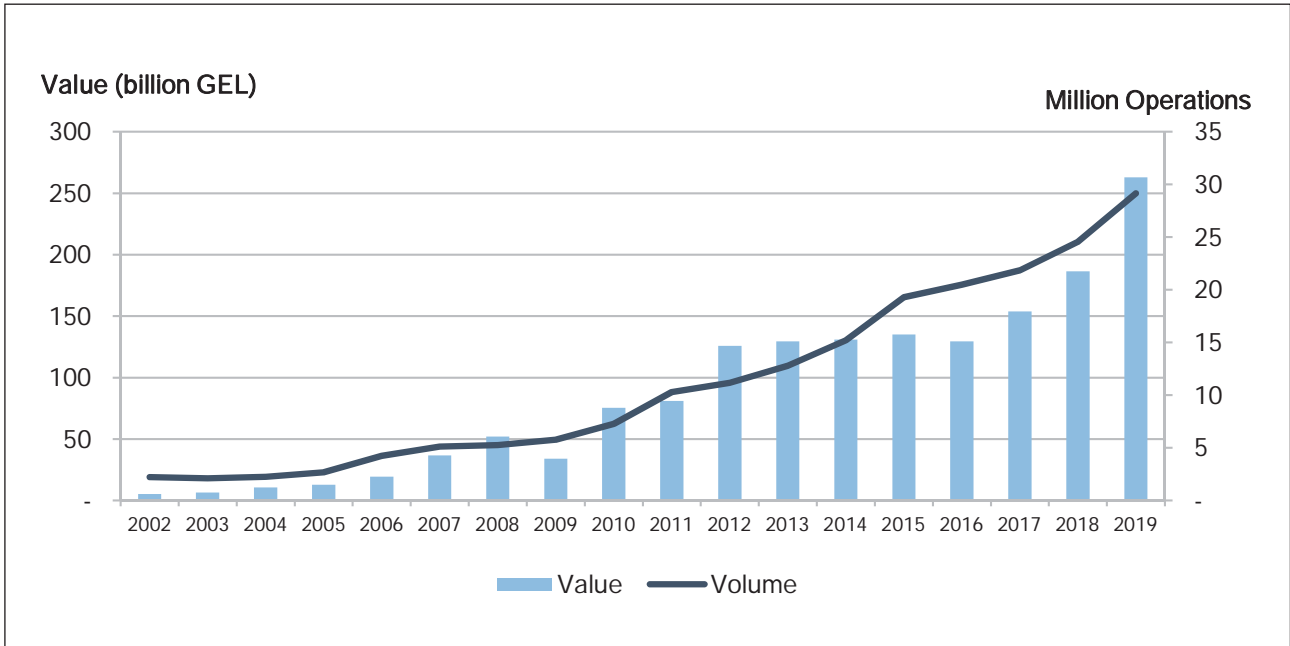
RTGS Statistics

The Real Time Gross Settlement (RTGS) system operated by the National Bank of Georgia represents a key mechanism for interbank settlements in the national currency. The smooth operation of the RTGS system is thus a key precondition for the frictionless functioning of the financial sector and the whole economy. The participants of the RTGS system comprise 15 commercial banks licensed in Georgia, the National Bank of Georgia and the Treasury Service of the Ministry of Finance. In 2019, as in previous years, the system's continuity was ensured at a high level, with the availability ratio for RTGS participants standing at 99.9% – which is also significant considering the role that the RTGS system plays as a settlement agent for other systems. The system also has a business continuity plan that has been designed in accordance with the best international practice. This plan is regularly tested according to pre-designed scenarios.

Throughout 2019, 29.2 million payment operations were processed through the RTGS system, amounting to 263 billion GEL. This exceeded the corresponding figures of 2018 by 18.7% and 41.1% respectively. The main share of the high growth of the value of operations (32 pp) was a result of the increased value of transfers between commercial banks and the NBG (85% growth over the previous year). It should also be noted that the value of payments between commercial banks increased by 14.9%. In terms of the volume of operations, as in previous years, the rise was caused by both growth in the volume of payments between commercial banks (23% growth over 2018) and growth of the volume of transactions between commercial banks and the Treasury Service of the Ministry of Finance (15% growth compared to the previous year).

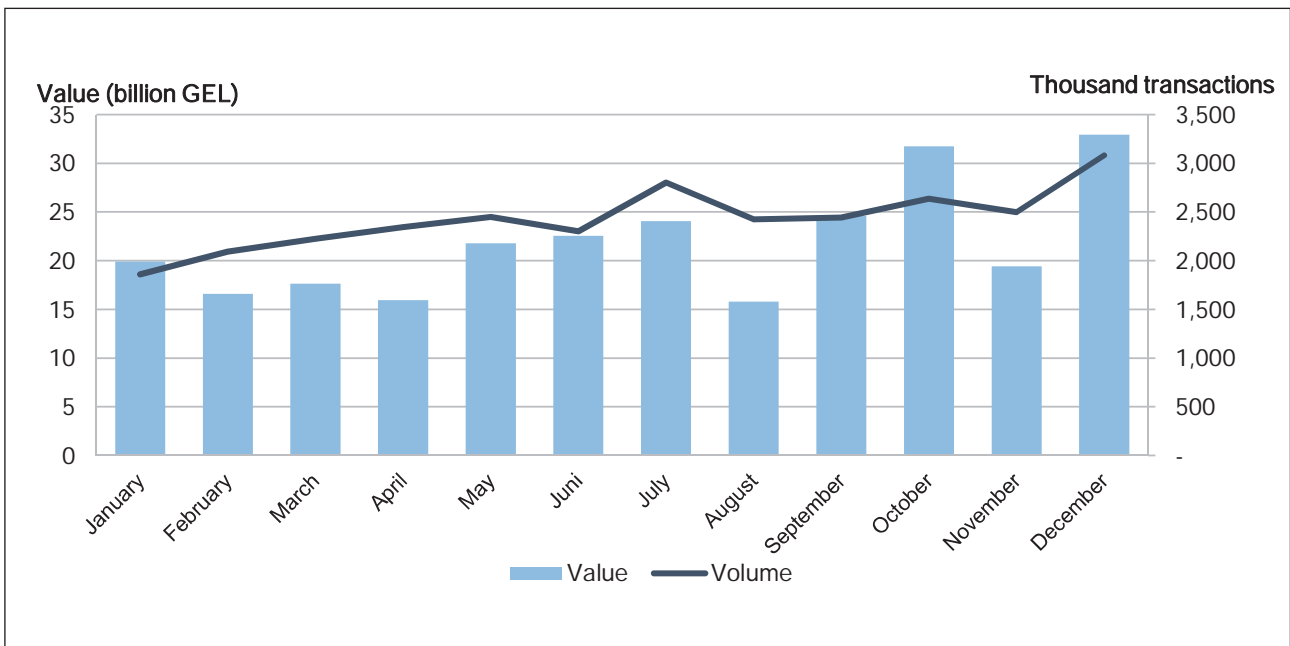
The dynamics of the volume and value of RTGS transactions can be found on Diagrams N 9.1 – 9.4 below.

Diagram N 9.1 RTGS operations (2002-2019)



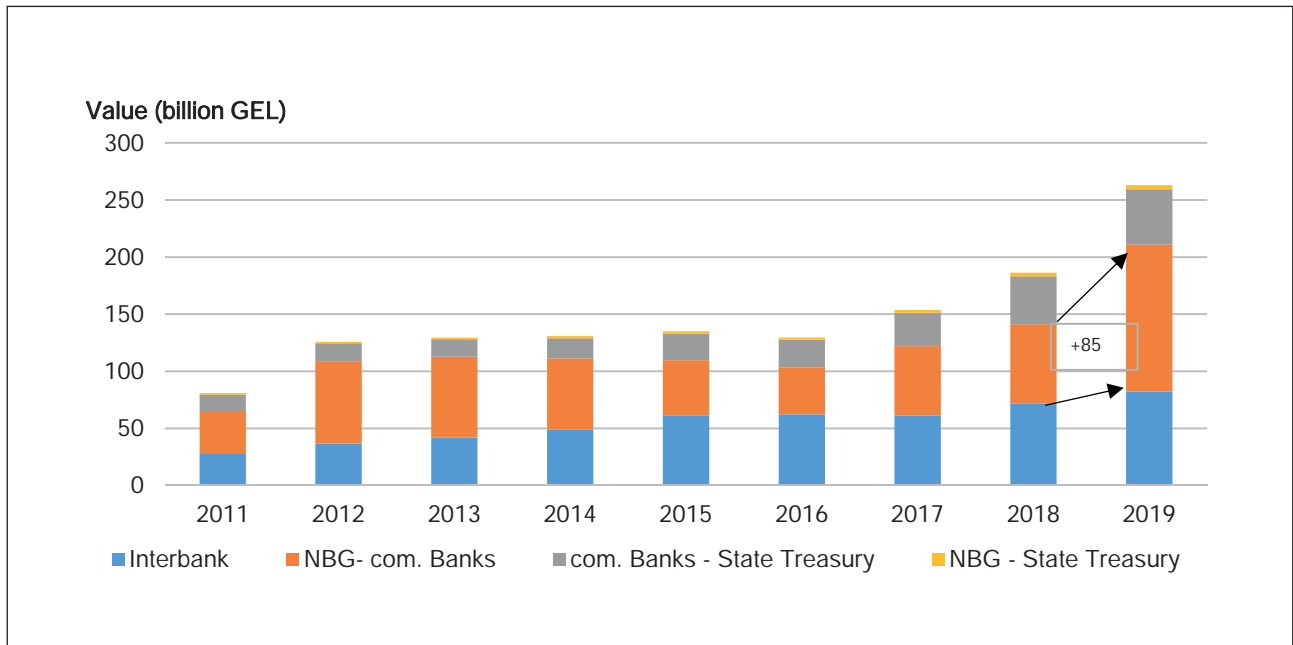
Source: National Bank of Georgia

Diagram N 9.2 RTGS operations (2019)



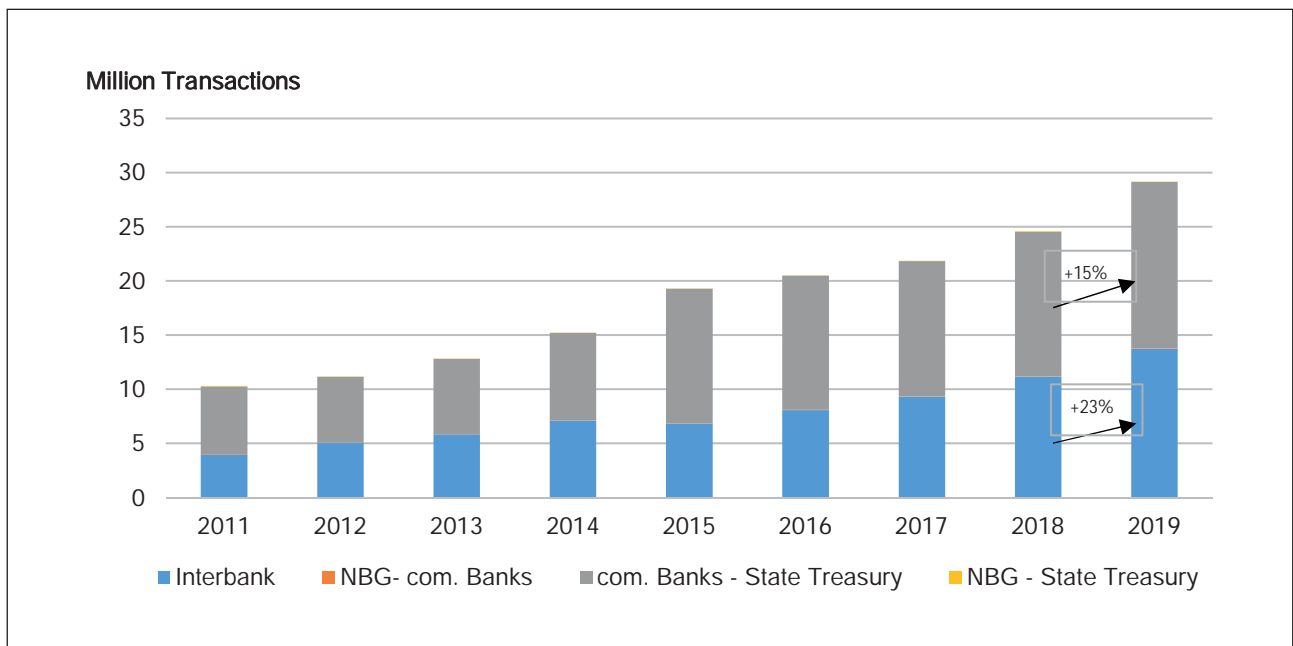
Source: National Bank of Georgia

Diagram N 9.3 Value of the transfers processed through the RTGS system according to participants (2011-2019)



Source: National Bank of Georgia

Diagram N 9.4 Volume of RTGS operations by participants (2011-2019)

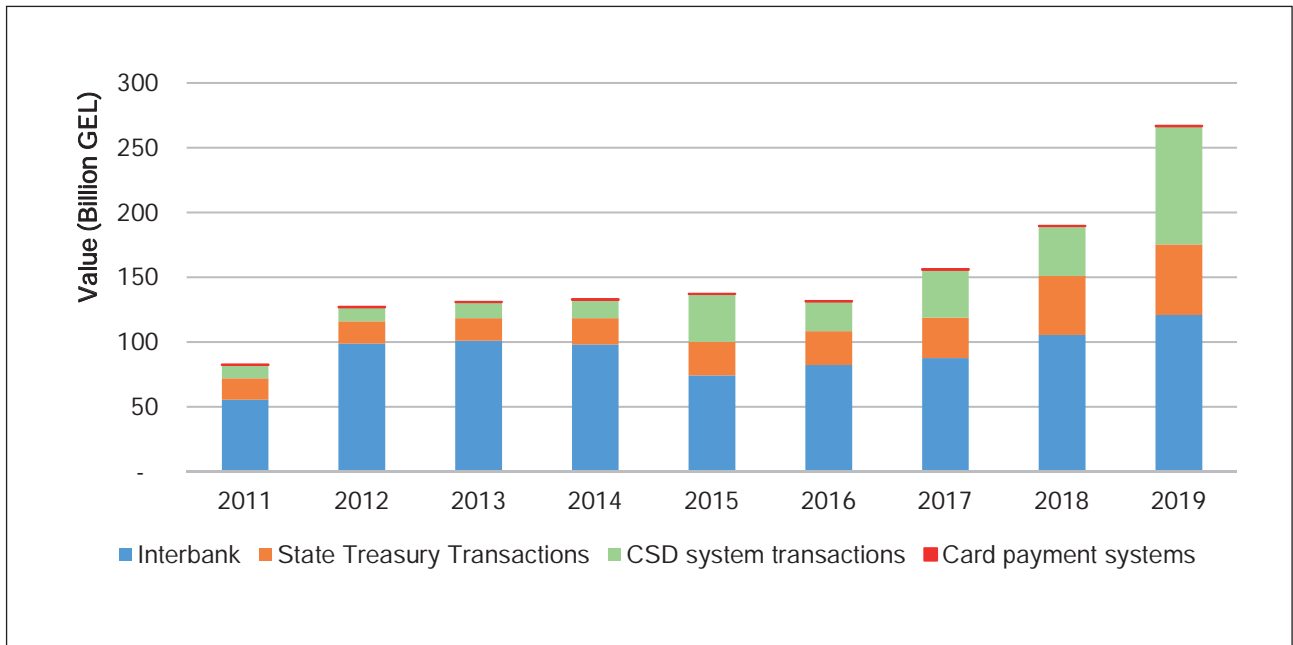


Source: National Bank of Georgia

The dynamics of the Real Time Gross Settlement system in 2011-2019 also reveal the rising importance the system has as a settlement agent for other

systems. In particular, the value of final settlement operations for other systems increased 8.6 times over the period and reached to 35.3% of the overall turnover of the RTGS (see Diagram N 9.5).

Diagram N 9.5 Value of RTGS operations (2011-2019)

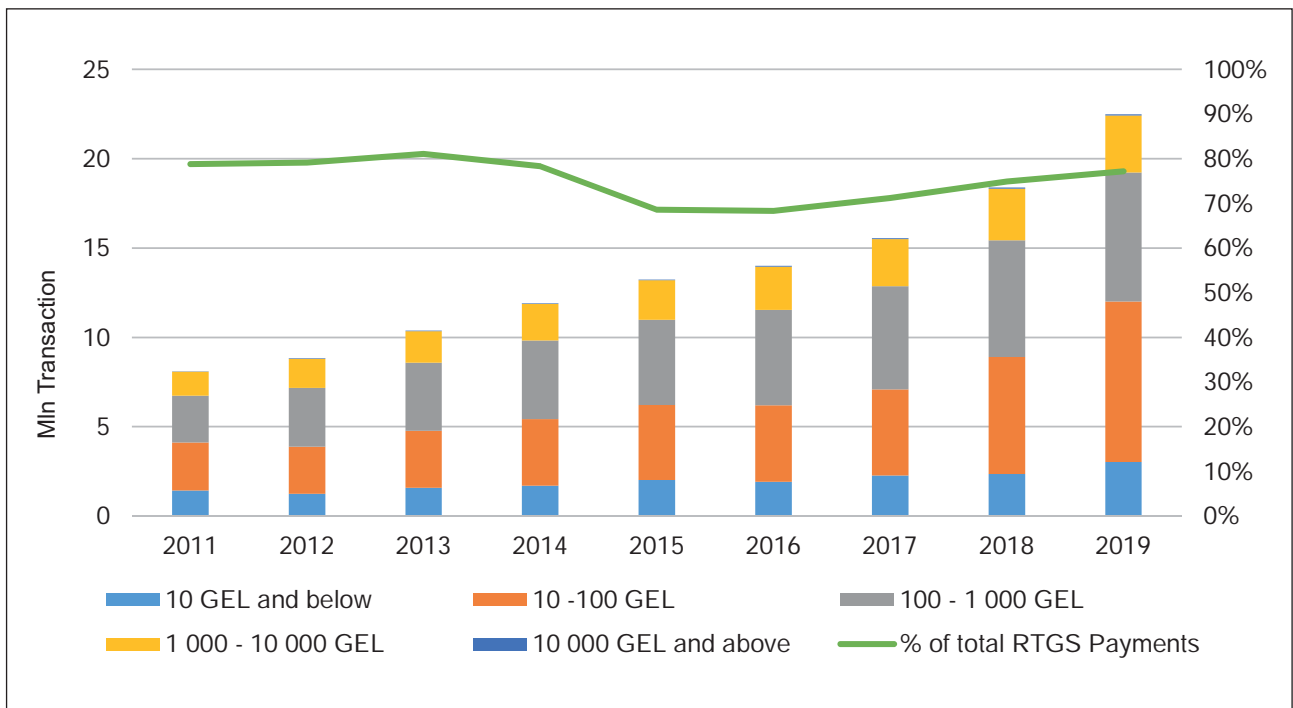


Source: National Bank of Georgia

The Real Time Gross Settlement system also plays an important role in terms of retail payments. Out of total RTGS payments in 2019, the share of banks' customer payments amounted to 25% of value and 77% of volume. It is noteworthy that the distribution

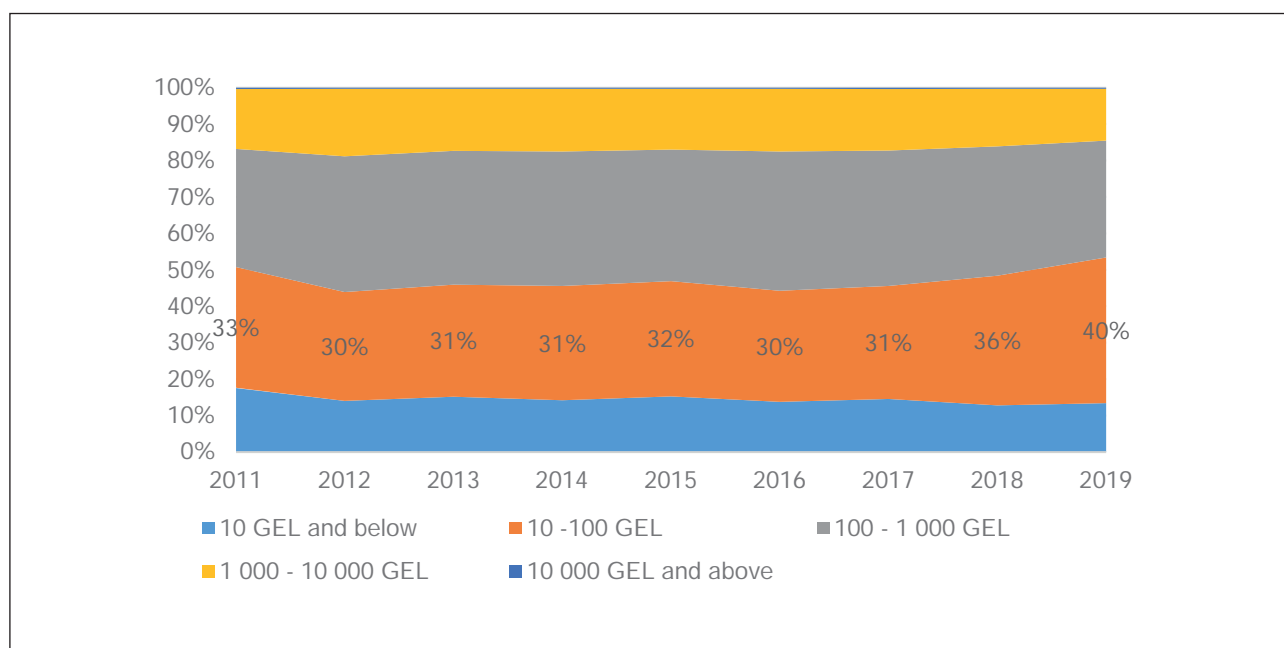
of the volume of retail payments according to amount intervals has been relatively stable over the period 2011-2019 and in recent years only a small increase in the share of payments from 10 to 100 GEL has been observed (see Diagrams N 9.6 and N 9.7).

Diagram N 9.6 Number of retail payments by amount (2011-2019)



Source: National Bank of Georgia

Diagram N 9.7 Distribution of retail payments by amount (2011-2019)



Source: National Bank of Georgia

Electronic means of payment

Of the various electronic means of payment, payment cards are the most important. The share of card payments' volume in the total volume of cashless payments has steadily been growing and in 2019 amounted to 84%, exceeding the corresponding indicator from 2018 by 5 pp. However, payment card payments play a relatively insignificant role in terms of value. In particular, in 2019, the share of card payments in the total value of cashless payments initiated by electronic means amounted to 5%.

In terms of the means of payment used by customers, internet banking and mobile banking are also especially important. Since 2017, the usage of mobile banking has increased significantly in terms of both volume and value. The number of payments initiated through internet banking has changed insignificantly for the last three years, whereas the number of payments made through mobile banking increased 5 times over the same period and accounted for 37% of total transactions through internet and mobile banking (the share of internet banking transactions amounted to 63% respectively). To put this in perspective, in 2016, mobile banking accounted for 5% and internet banking for 95% of total transactions. According to the data of 2019, the average amount of a single payment made through internet banking was 11 times higher than the average payment through mobile banking. We can thus conclude that custom-

ers (including legal entities) use internet banking more often for relatively large payments.

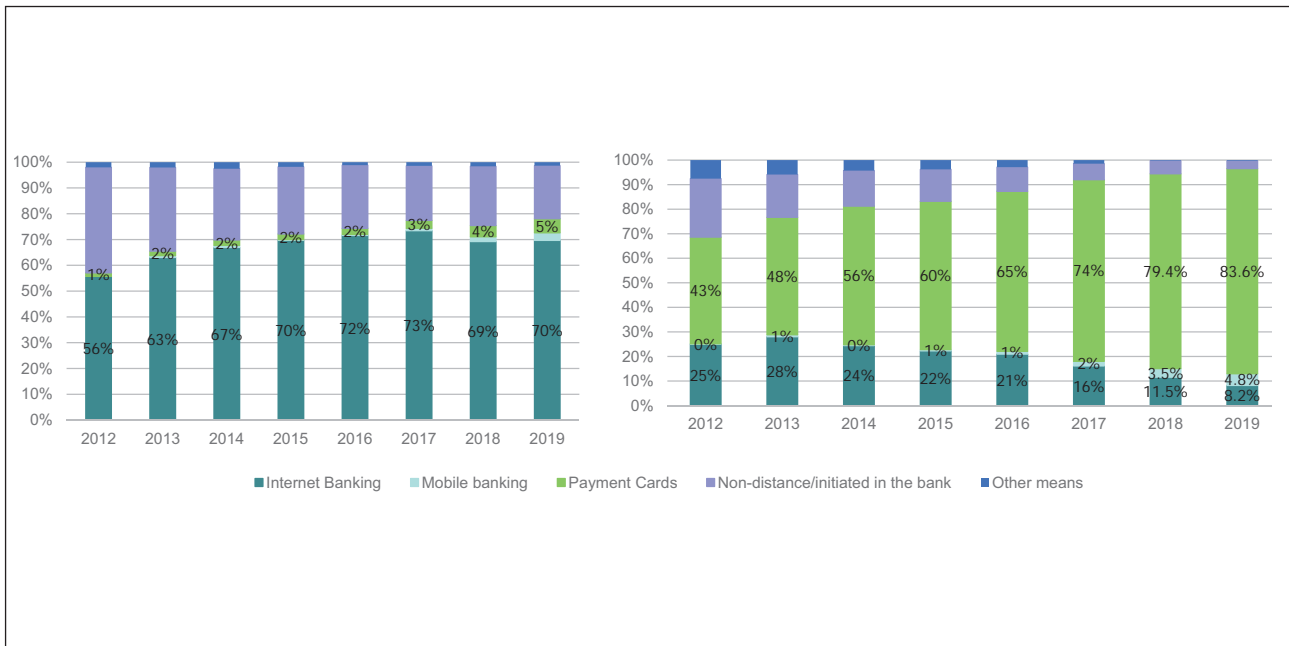
In 2019, the share of the volume of internet banking payments in the total volume of cashless payments decreased by 3 pp compared to the previous year and amounted to 8%, whereas the share of mobile banking payments increased by 1.3 pp and amounted to 5%.

According to the data on value, the share of credit payment orders initiated through internet banking amounted to 70% of total cashless payments, which is 1 pp higher than in the previous year. Mobile banking accounted for 3% of the total value of cashless payments. It is noteworthy that the value of credit payment orders initiated by customers through commercial banks' service centers were 3.3 times lower than payments through electronic means, and accounted for 21% of total cashless payments.

This distribution of the value of cashless payments is largely determined by the fact that the average value of a single payment operation executed with a payment card, as a retail payment instrument, varied between 30 and 36 GEL in 2019, while the average values of credit payment orders initiated through an internet bank and through commercial banks' service centers by a customer were 4,200 and 3,150 GEL respectively.

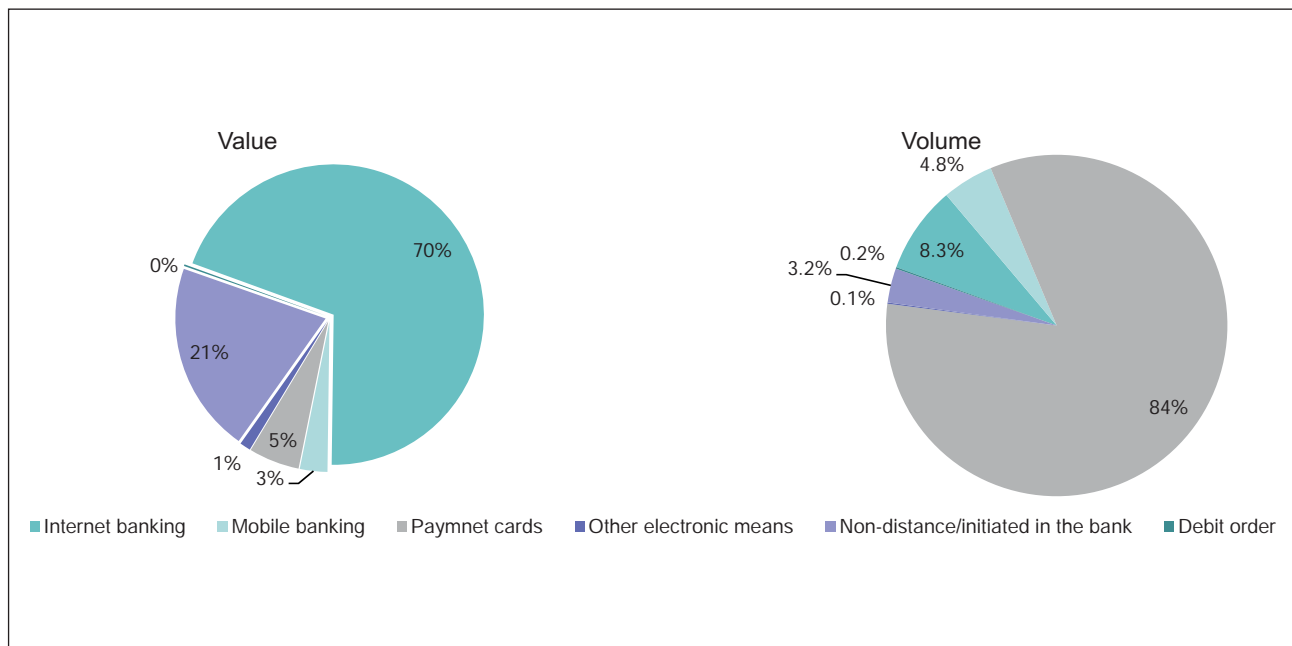
The statistical data for non-cash payments by means of initiation are shown on Diagrams N 9.8 and N 9.9.

Diagram N 9.8 Cashless payments by means of initiation, 2012-2019



Source: National Bank of Georgia

Diagram N 9.9 Distribution of non-cash payments by method of payment order initiation (2019)



Source: National Bank of Georgia

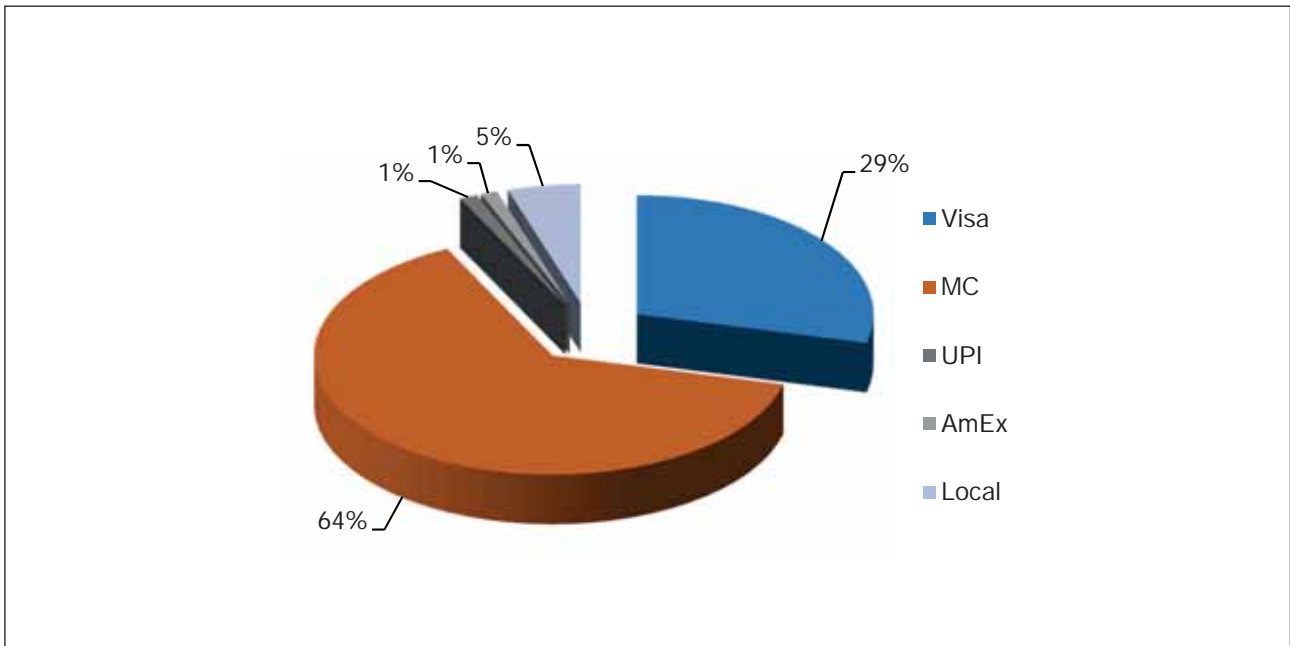
Payment Cards

Payment cards play an important role in terms of initiating payment operations for Georgian citizens and businesses on a daily basis. In recent years, the attitude of the Georgian population towards using this payment instrument has significantly changed, as demonstrated by the increasing intensity of the use of

payment cards at merchant outlets.

Local and international payment cards are present on the Georgian market. According to the data of December 2019, 6.7 million payment cards have been issued, of which 95% are international cards. The cards issued by commercial banks according to payment scheme are shown on Diagram N 9.10.

Diagram N 9.10 Cards issued by payment scheme (December, 2019)



Source: National Bank of Georgia

Most of the cards issued (91%) are debit cards. It should be noted that commercial banks have removed a number of inactive cards from circulation in recent years, which has resulted in a reduction of the total number of cards issued.

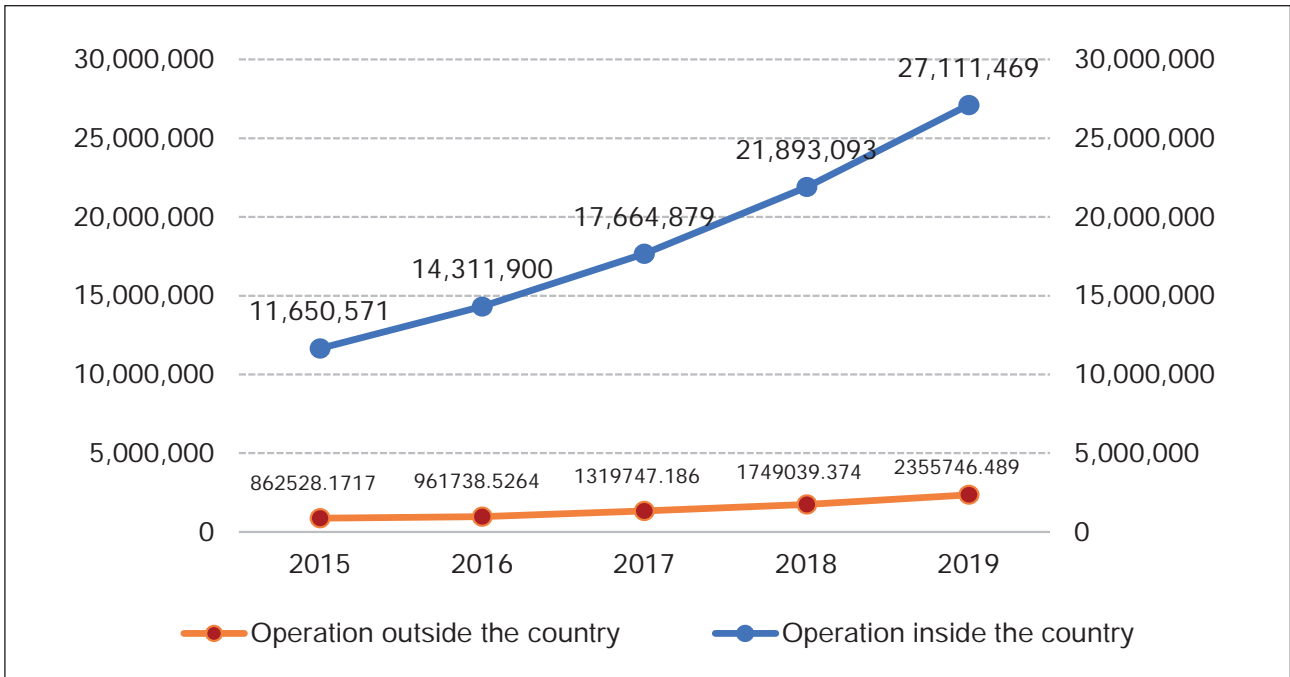
The share of payment operations inside the country initiated through payment cards issued in Georgia amounts to 94% in terms of volume and 92% in terms of value of total payment card operations. In 2019, a total of 343 million operations were executed through payment cards, amounting to 29 billion GEL in terms of value – this figure is 42% higher in terms of volume and 25% higher in terms of value compared to the payment card operations executed in 2018. The dynamics of transactions performed inside and outside the country with payment cards issued in Georgia is shown on Diagram N 9.11

In recent years, card payments at merchant outlets have significantly increased. According to the data of 2019, the number of card payment transactions for purchasing goods and services at merchant outlets amounted to 78% in terms of volume and 34% in terms of value out of total card transactions. This shows 5 pp growth in terms of both volume and value compared to the corresponding data of the previous year. In 2019, the average monthly payment for a single payment card amounted to 1,013 GEL. The growth of payment card usage was complemented by

the well-developed infrastructure of contactless payments, which also had great influence on the growth of mobile payments. During 2019, 89 million payments were executed through a mobile application, amounting to 2.8 billion GEL – which is 33% in terms of the volume and 28% in terms of the value of total card payments. Customers also enjoy a variety of accessories that can be used for card payments (watches, bracelets, etc.) and can also use so-called “stickers”. Electronic commerce operations performed with cards issued in Georgia amounted to 20% in terms of volume and 35% in terms of value of total payment transactions at merchant outlets.

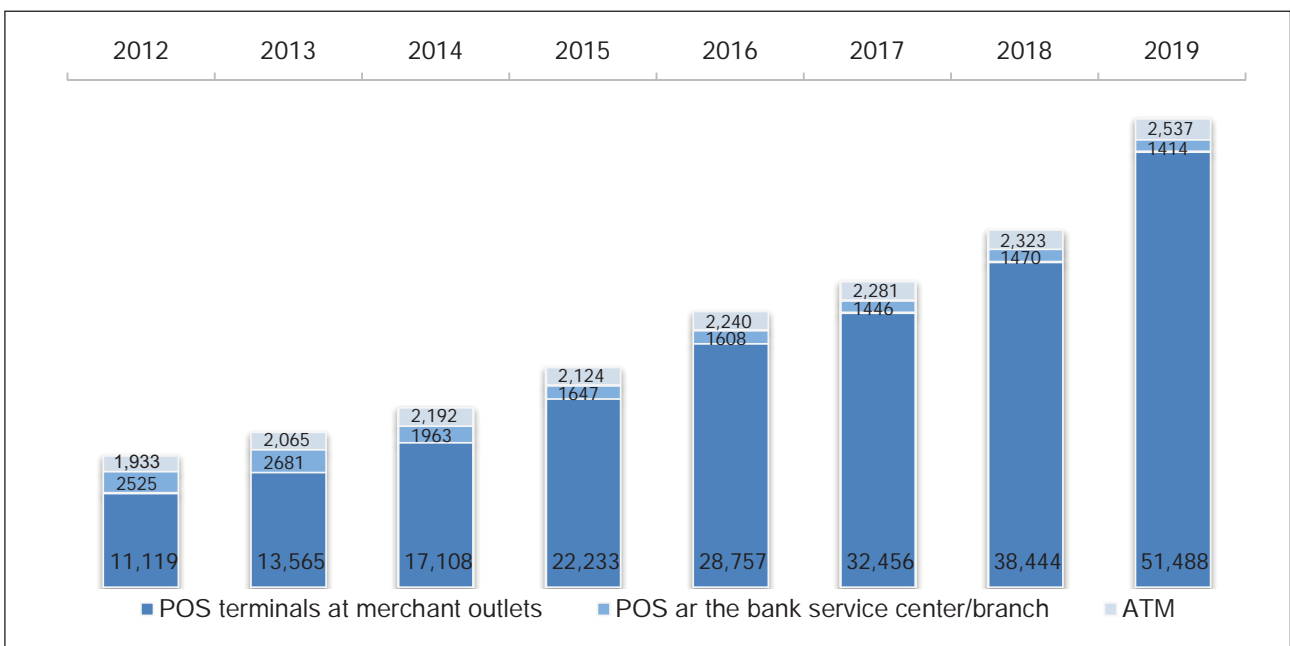
The development of innovative products and payments has promoted the development of the card acceptance device infrastructure and facilitated compatibility with new solutions. By the end of 2019, the card infrastructure in Georgia included 51,488 POS terminals, which was 34% higher than the previous year. The number of ATMs increased by 9% as well. Almost 3,000 self-service kiosks are equipped with card-readers, offering a wide range of payment options to customers. Special software (an app) was also introduced through which a mobile phone can be equipped with a POS terminal function that allows users to make a contactless payment with a card or mobile phone payment application. It should also be mentioned that about 5,000 e-commerce terminals allow internet payments.

Diagram N 9.11 Value of transactions performed inside and outside the country with cards issued in Georgia, thousand GEL



Source: National Bank of Georgia

Diagram N 9.12 The dynamics of POS terminals and ATMs located in Georgia



Source: National Bank of Georgia

In 2019, an average of 2,476 transactions amounting to 645,000 GEL were executed through a single ATM. An average of 333 transactions were executed

through POS terminals, amounting to 68,000 GEL. In addition to commercial banks, payment service providers registered in Georgia also issue prepaid electronic money instrument cards.

PAYMENT SERVICE PROVIDERS

Transactions performed by payment service providers (excluding electronic money transactions)

In 2019, a total of 159.7 million transactions were performed by payment service providers, amounting to 5.3 billion GEL. Compared to 2018, the total number of payments decreased by 3%, but their value increased by 17%. Self-service kiosks, through which it is possible to initiate electronic payments with cash, were the most common method of making payments. The share of self-service kiosks' payments out of total payments amounted to 92.3% in terms of volume and 93.4% in terms of value, which is 5.6 pp and 3 pp higher respectively than the corresponding data of 2018. The absolute majority of payments initiated through kiosks were performed with cash, while the share of payment card payments received through kiosks was negligible and did not exceed 0.1%. It is noteworthy that 7.5% of these payments in terms of value and 5.6% in terms of volume were performed through the providers' service centers.

Usage of providers' websites was another common means of initiating payments. A total of 2.4 million payments, amounting to 83.9 million GEL, were initiated through providers' websites, which amounts to 1.5% and 1.6% respectively of the total payments made. Of these, 78.7% in terms of value and 82.7% in terms of volume were performed through payment cards.

The share of payments through agents in total payment service providers' payments amounted to 48.6% in terms of volume and 25.8% in terms of value. Pay-

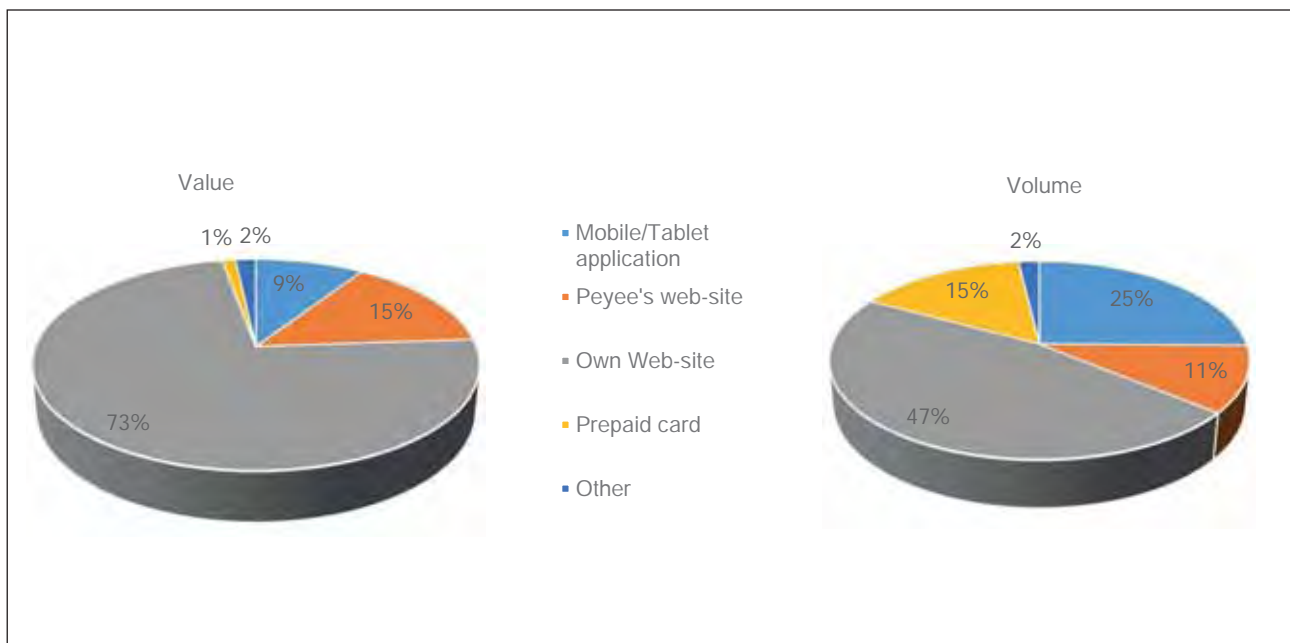
ments through agents increased by 1% in terms of value, while the value of payments directly received by providers increased by 24%. In terms of volume, payments through agents decreased by 2.2%, while payments received directly by providers decreased by 3.2%.

Payments with electronic money

In 2019, as in the previous year, the share of public transport prepaid card payments in total e-money payments was significant. The average amount of a single payment through these prepaid cards amounted to 0.45 GEL, which is drastically different from the payments made through other electronic money instruments. It is noteworthy that transport cards are actively used to pay for city public transport. The number of payments made through these cards is thus significantly higher than the number of other electronic money payments. The share of such payments amounted to 99.5% of the volume and 30% of the value of total e-money payments. Considering the mentioned specifics, the analysis of the electronic money payments market that follows will exclude the data on transport cards.

In 2019, providers performed 764,000 payments amounting to 150.7 million GEL, of which 73.3% in terms of volume and 46.9% in terms of value were initiated through the websites of e-money issuers. A significant share of e-money payments (25.2% in terms of volume and 9.2% in terms of value) was initiated through mobile phone/tablet applications (see Diagram N 9.13).

Diagram N 9.13 E-money payments (excluding transport card payments, 2019)



Source: National Bank of Georgia

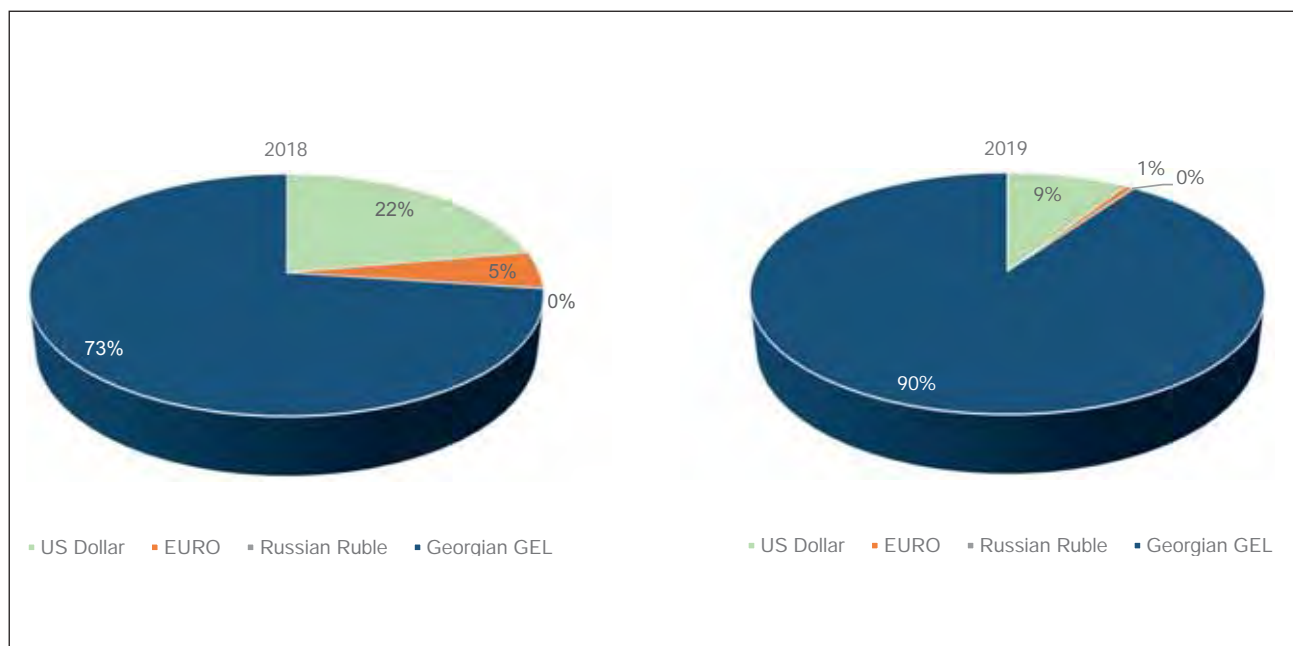
As of 31 December 2019, a total of 106,300 electronic wallets were active at payment service providers, within which funds with a nominal value of 2.1 million GEL were placed. At the same time, 90% of the nominal value of the e-money existing in these e-wallets was in GEL, which is 17 pp higher than the corresponding data of the previous year (see Diagram N 9.14).

Payments between providers

In order to make their activities more efficient, pro-

viders often use intermediary providers when providing payment services. According to the data of 2019, 36.5% of the value of payment orders received from a payer through intermediaries were performed through intermediary providers, which is 1 pp less than in the previous year. As for the funds transferred to a payee, 98.5% of the payments made by providers were through resident banks of Georgia, which is 2 pp lower compared to 2018.

Diagram N 9.14 Funds existing in electronic wallets according to currency as of 31 December 2018 and 2019



Source: National Bank of Georgia



10

**INFORMATION
TECHNOLOGY -
DEVELOPMENT**



10. INFORMATION TECHNOLOGY - DEVELOPMENT

In 2019, the modernization process of the National Bank's server infrastructure was completed. Within the framework of the project, one of the most advanced technologies – hyper-converged infrastructure – was implemented in the two main datacenters of the National Bank of Georgia. All online banking services were successfully migrated to this infrastructure, which has enabled the bank to provide higher-quality IT services, as well as increasing protection and efficiency. The hyper-converged system is a combination of server, network, and database systems on a single platform run by centralized software. Moreover, within the scope of the project, increase of computing resources has significantly improved infrastructure performance and availability.

The hyper-converged system deployment project was awarded a prize for “Best Infrastructure Decision” at the GITI (Georgian IT Innovations) event in 2019.

In the reporting year, the databases of the National Bank's central database system were optimized, which improved the performance and stability of the systems.

The National Bank uses a reservation system to ensure business continuity and data protection. Through this, according to a formalized reservation policy, all business applications and systems of the bank are divided into categories according to level of criticality, and, based on these categories, systems and data are reserved (backed up) and stored for some time. In order to produce backup copies, the centralized backup software was updated in 2019. The National Bank purchased and subsequently successfully introduced new software that significantly improved the reservation process.

During 2019, work was also underway to improve, expand and further develop the “SebStat” software of the Unified Statistical Information System of the National Bank of Georgia. Several data families were developed and launched in a real environment, due to the need to expand the system and add different types of data. This system provides statistical software for obtaining, controlling the quality of and processing information from financial institutions, on the basis of which interactive BI¹⁰¹ reports have been launched. This allows a gradual replacement of the statistical tables that are published on the National Bank's website with more interactive, analytical information.

¹⁰¹ A data visualization and analysis platform.

In 2019, the National Bank's virtualization environment in the reserve data center was also upgraded, resulting in increased compatibility between the reserve center and the two active data centers. All business-critical services have been replicated to the reserve data center, which enables the restoration of data in real time within a few hours in critical cases. It also laid the groundwork for the technology infrastructure of the reserve data center to be further refined, which in turn will improve the business continuity plan.

In 2019, the network infrastructure of the National Bank's cash center was renewed. Most of the network switches were replaced with higher-performance devices, and information from security and video monitoring systems has been migrated to the virtual infrastructure.

During the year, the bank's wireless network modernization project has also been completed. Older wireless access points have been replaced with more powerful and higher-performance devices, which has significantly increased the stability and accessibility of the network. The wireless network system has also moved to a higher frequency, ensuring reduced risk of radio interference and an increased number of channels.

After the information technology infrastructure changes of last year, it was important to determine the minimum time that would be required to fully restore critical services in case of a power outage or other interruption to the data center. For this purpose, one of the planned scenarios was tested according to the business continuity plan. Such scenarios simulate a situation when the work of one of the data centers of the National Bank of Georgia is interrupted, for example as a result of a fire, a malfunction of the cooling system or any other technical problem. The testing sought the restoration of services provided by critical systems within the maximum acceptable period of discontinuation (2 hours). The test results were extremely successful. All business-critical services were switched between server centers and were restored in less time than planned.

In 2019, the National Bank strengthened its work in the field of cybersecurity by working with qualified and experienced personnel who are actively involved in raising employee awareness and implementing proactive measures. New employees of the National Bank of Georgia are being trained in cybersecurity to

help them to understand the situation, correctly identify potential threats and protect against them.

In 2019, the National Bank of Georgia's IT systems were tested with the purpose of detecting targets and weak points. An external attack was then simulated via exploiting such weaknesses (a so-called penetration test). Appropriate work has been carried out based on the results of this test and activities have been planned to strengthen and develop in this direction.

Automated critical application logging management methods have been introduced, making possible the proactive analysis of critical application systems incidents and their resolution. As a result of the work carried out, the number of critical applications incidents have decreased and service access time has improved.

The work on the incident management process improvement also continued in 2019. The incident management process is carried out through the Service Desk portal, which is a unified system for responding to information technology service incidents and the service requirements of the National Bank of Georgia. Through the portal all employees have an opportunity to send information about issues and service requests to one central point and receive appropriate

services. The Service Desk portal has been updated for incidents, problems, configuration changes and contracts. A contract management process has also been introduced and a unified IT contract registry has been created.

In 2019, work on the business service catalog was completed. All services are currently registered. The service catalog will be updated according to changes made in the bank and the creation of new products.

During the year, employees of the National Bank took part in various trainings, conferences and events in both Georgia and abroad. The participation of the National Bank in these events has brought appropriate benefits to the development of the IT and services of the National Bank as a whole, as well as to the qualifications and motivation of specific employees. It is noteworthy that in order to improve their skills, employees underwent appropriate training in the foreign currency reserve management system, as a result of which they obtained the relevant knowledge and became certified specialists in using the system.

The National Bank is constantly striving for excellence in the introduction and development of modern technologies, which is recognized as one of the most important factors for achieving the main goals and objectives of the bank.

ORGANIZATION OF CASH AND EMISSION ACTIVITIES



11. ORGANIZATION OF CASH AND EMISSION ACTIVITIES

During the reporting period, the NBG carried out work to meet the economy's demand for cash. This included organizing activities related to currency production, delivery, storage and emission.

Activities undertaken during the year were related to the enhancement of the quality of banknotes and coins in circulation, sorting newly produced banknotes and coins and those received from circulation in accordance with established rules, the improvement of currency expertise procedures, the destruction of unfit banknotes and the improvement of the legal framework.

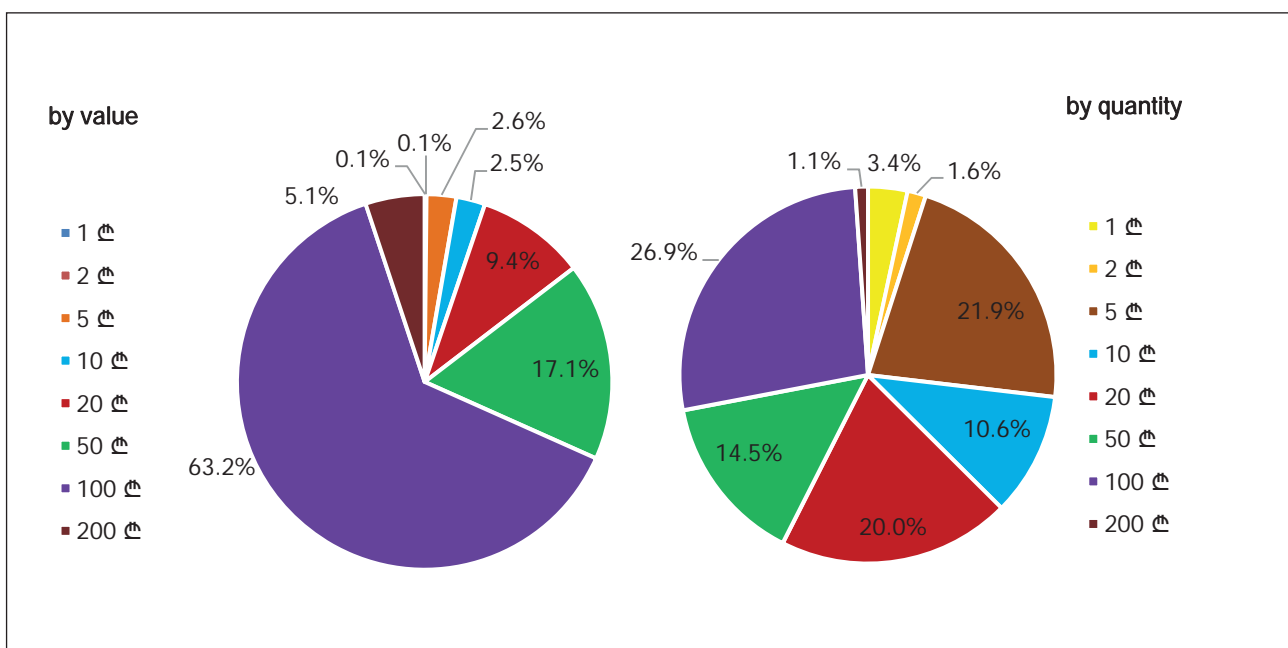
As of 31 December 2019, the volume of cash in circulation amounted to 4,137 million GEL, of which banknotes accounted for 4,009.8 million GEL and coins for 127.2 million GEL (the share of each denomination of banknote in circulation in terms of value and quantity, as of 31 December 2019, is given in Diagram N 11.1).

During the reporting period, the amount of cash in circulation increased by 571.5 million GEL, respectively by 16%, in comparison to the beginning of the year (the dynamics of the national currency in circulation in 2015-2019 are given in Diagram N 11.2).

During 2019, the volume of banknotes in circulation increased by 554.7 million GEL and accounted for 96.9% of the total volume of cash in circulation. Demand increased for banknotes of low denominations – 5, 10 and 20 lari (rising by 13.2%, 11.6% and 16% respectively) – as well as of high denominations – 50, 100 and 200 lari (respectively growing by 7%, 19.8% and 9%). However, it should be noted that in light of such an increase in the total volume of turnover during the reporting period, the share of banknotes of denominations other than 20 GEL and 100 GEL decreased slightly compared to 2018. During this period, the total share of coins in circulation did not change, and remained at 3.1% (see Diagram N 11.3).

The upgraded versions of 5-, 20-, 50- and 100-lari banknotes have been successfully spread. At the end of the reporting period, the upgraded 5-lari banknote had a 85.2% share of the total volume of all 5-lari banknotes in circulation; the upgraded 20-lari banknote had a 81.7% share of all 20-lari banknotes in circulation; the upgraded 50-lari banknote had a 81.5% share of all 50-lari banknotes in circulation; and the upgraded 100-lari banknote had a 78.3% share of all 100-lari banknotes in circulation. In case of the upgraded 10-lari banknote, despite being put into circulation on 1 October 2019, it made up 50.8% share of all 10-lari banknotes in circulation.

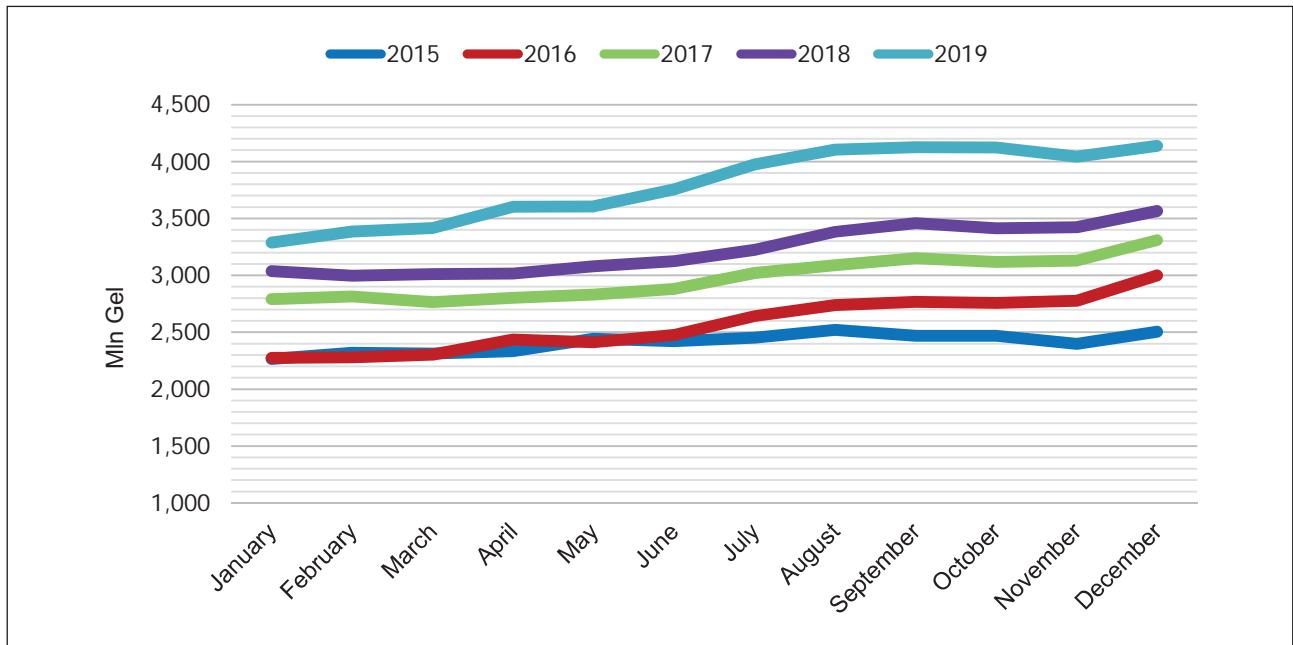
Diagram N 11.1 Share of banknotes in circulation according to denomination*



*Including the 1- and 2-lari banknotes in circulation, which ceased to be manufactured after coins of the same denomination were placed in circulation.

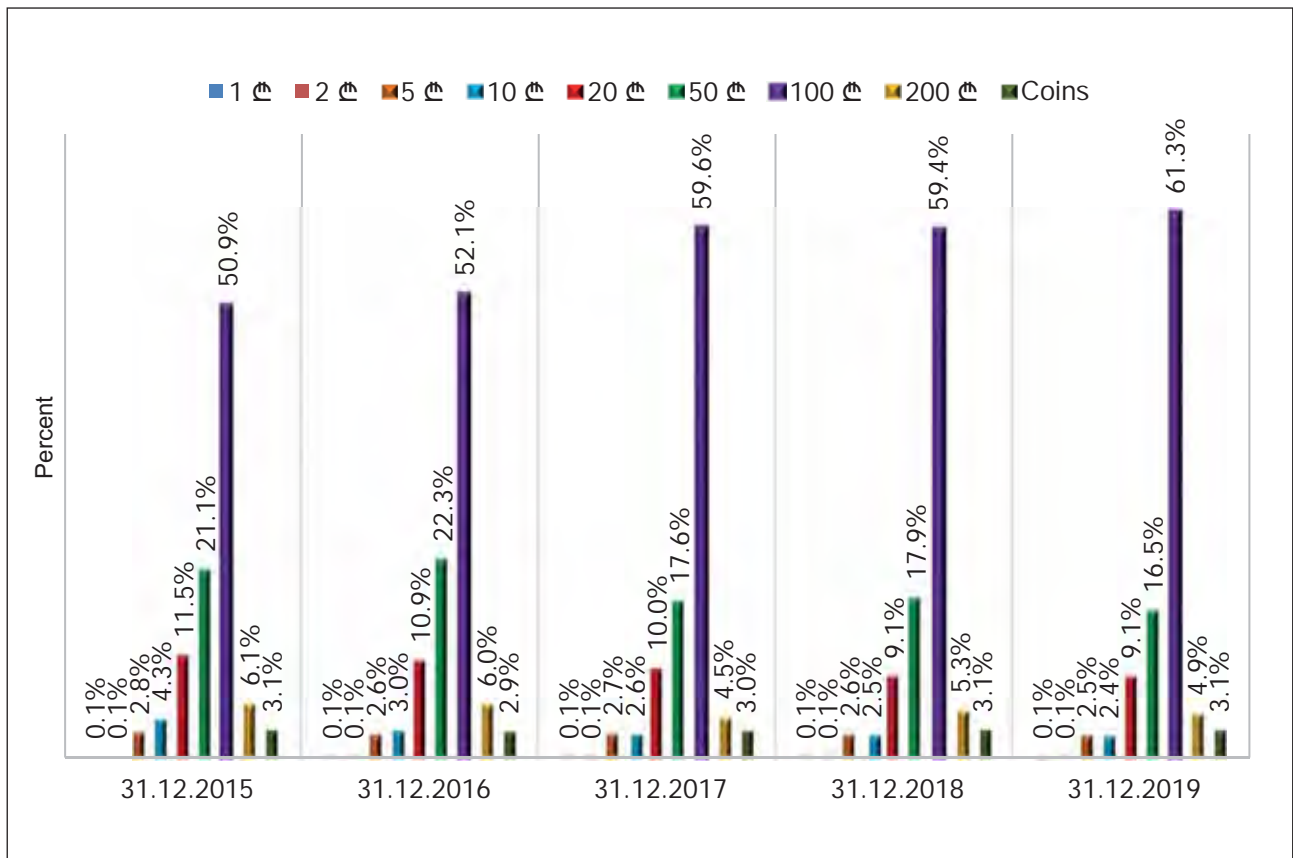
Source: National Bank of Georgia

Diagram N 11.2 Cash in circulation (2015-2019)



Source: National Bank of Georgia

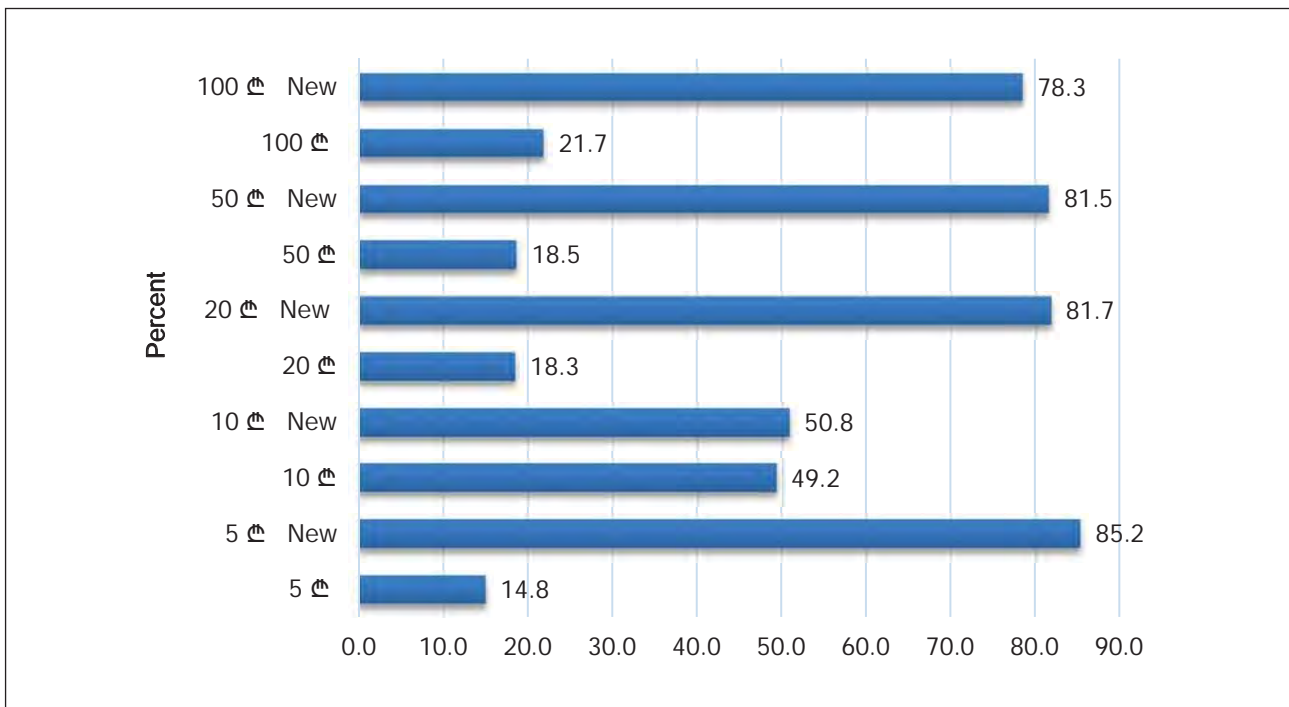
Diagram N 11.3 Share of banknotes of individual denominations and coins in circulation (2015-2019)*



*Including the 1- and 2-lari banknotes in circulation, which ceased to be manufactured after coins of the same denomination were placed in circulation.

Source: National Bank of Georgia

Diagram N 11.4 5-, 10-, 20-, 50- and 100-lari denomination banknotes in circulation, according to modifications (percentage)



Source: National Bank of Georgia

During the reporting period, the volume of 1- and 2-lari coins in circulation increased by 16.9 % and amounted to 84.8 million GEL at the end of the year. Compared to 2018, the volume of tetri coins in circulation increased by 11.9%.

During the year, in order to ensure an uninterrupted supply of cash to the economy and to replenish relevant reserve stocks, the NBG continued working on the production of lari banknotes and coins, on putting them into circulation and on the performance of obligations envisaged under the contracts concluded regarding their production.

For the popularization of Georgian currency and of the country as a whole, the NBG also continued working on the issuance of collector coins. In 2019, five types of collector coins were produced (see below for more detailed information).

In addition, 10-lari (1/10 oz), 25-lari (1/4 oz), 100-lari (1 oz) and 1,000-lari (10 oz) gold bullion investment coins were produced during the reporting period.

Cash inflows in the Georgian currency at the NBG increased during 2019 and amounted to 5.6 billion GEL, which was 10.8% higher than the relevant figure of 2018 year. Cash outflows in the Georgian currency from the NBG amounted to 6.1 billion GEL, which was an increase of 18.8% over relevant figure of the previous year.

In order to ensure the smooth and proper functioning of the technical means for counting and sorting

banknotes, appropriate checks were regularly conducted in line with rules for determining the sorting level of GEL banknotes.

During the reporting period, two BPS-M7s and two BPS-1080 money processing machines at the Cash Centre underwent annual scheduled inspections and overhauls. Also, quarterly checks were carried out on cash sorting machines to check the appropriateness of the established level for sorting fit banknotes.

In order to prevent the entry of defective and sub-standard banknotes into circulation, a process for the counting and sorting of cash was conducted. During the reporting period, the counting process was completed for the new 10-lari denomination banknote, as produced by German manufacturer “Giesecke + Devrient Currency Technology”, for the 5- and 20-tetri coins, as produced by the French mint “Monnaie de Paris”, and for the 1-lari denomination coins produced by Spanish mint “Real Casa de la Moneda”.

In 2019, 10 new “CashMAX CMX20” coin counting machines and “Musashi PA-30”, “VAMA” and “CMI-CO-568” banknote packaging machines were purchased. Each were adapted and put into operation.

Currency expert activities were also carried out. NBG experts examined a total of 7,116 suspicious banknotes and coins submitted by commercial banks, cash exchange and microfinance offices, as well as by law-enforcement authorities and individuals. The results of mentioned examinations are provided below.

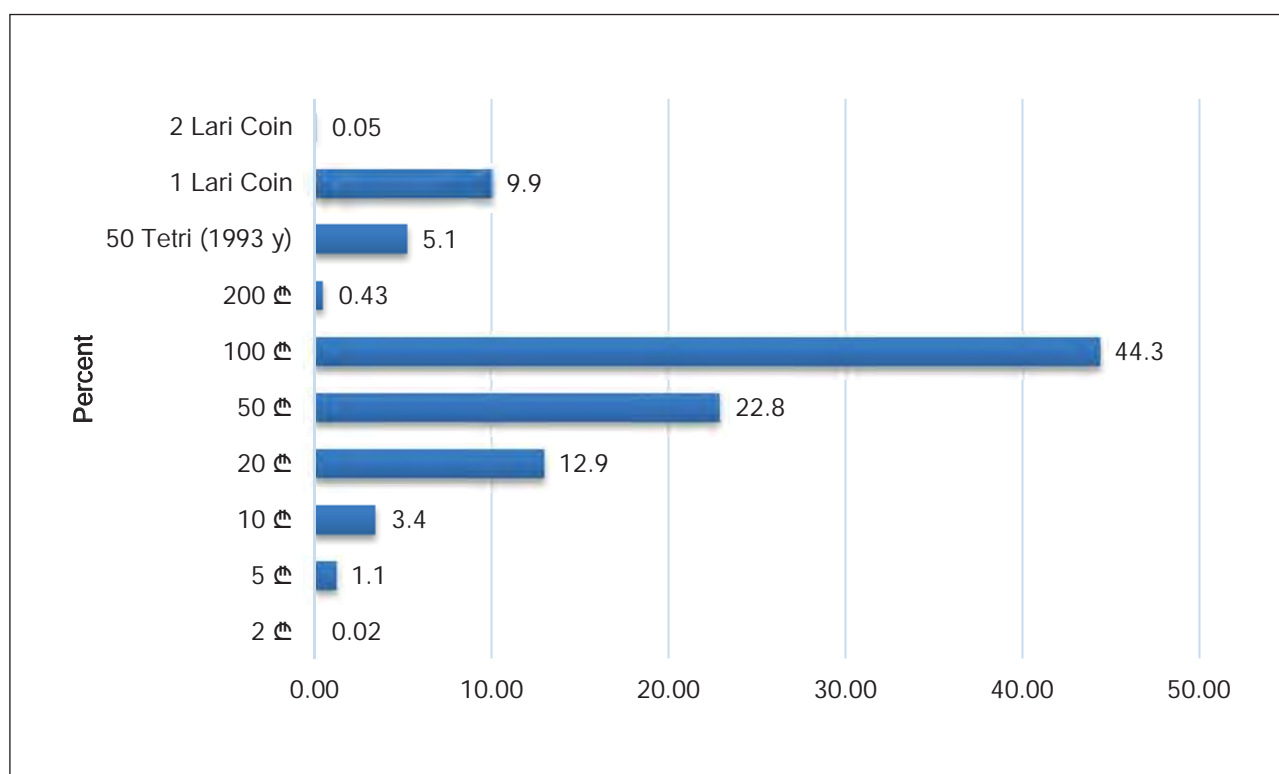
Table N 11.1 Results of the examination of suspicious banknotes and coins received in 2019

	Suspicious	Counterfeit	Genuine	Faulty
Lari banknotes	4,947	3,580	976	391
Lari coins	757	636	121	-
USD notes	957	695	262	-
Euro notes	225	159	66	-
Other foreign currency notes	230	210	20	-
In total	7,116	5,280	1,445	391

Source: National Bank of Georgia

The ratio of counterfeit lari banknotes and coins detected in 2019 are shown in Diagram N 11.5.

Diagram N 11.5 Counterfeit notes and coins detected in 2019 (percentage)

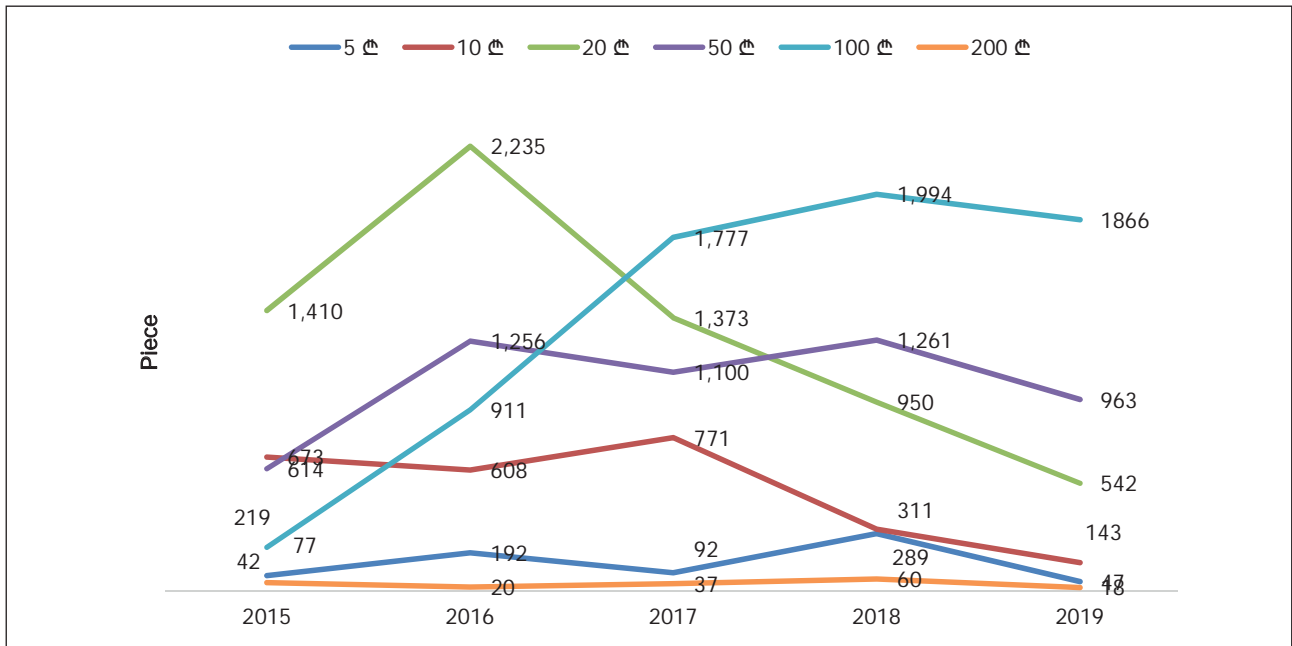


Source: National Bank of Georgia

The number of counterfeit lari banknotes detected in 2019 decreased by 26.4% compared to the previous year and the number of counterfeit lari coins decreased by 26.9%. The number of counterfeit euro banknotes detected also decreased by 20.2%. At the

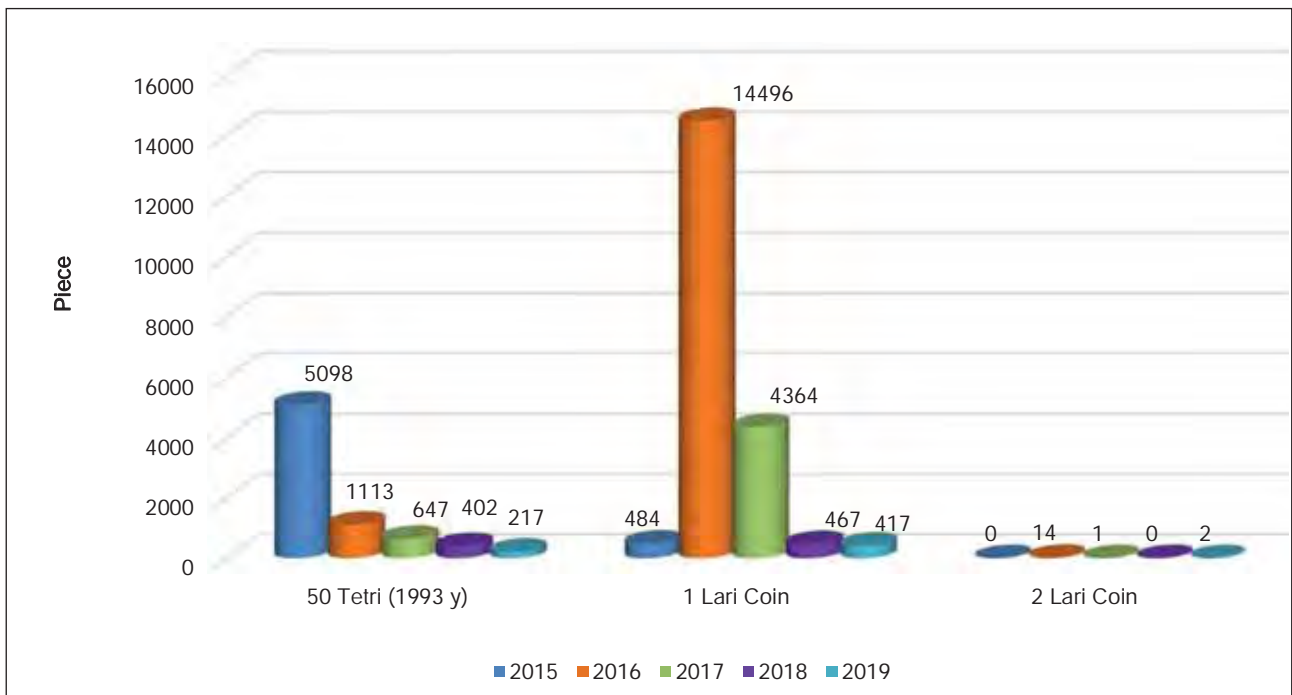
same time, the number of counterfeit USD notes increased by 14.3%, while the number of other counterfeit foreign currencies banknotes increased by 7.1% (Diagrams N 11.6 and N 11.7 illustrate the number of counterfeit lari banknotes and coins per denomination detected in 2015-2019).

Diagram N 11.6 Number of counterfeit lari banknotes detected in 2015-2019



Source: National Bank of Georgia

Diagram N 11.7 Number of counterfeit lari coins detected in 2015-2019



Source: National Bank of Georgia

In 2019, 165 concerned persons were trained in determining the fitness of currency units and in general cash handling procedures.

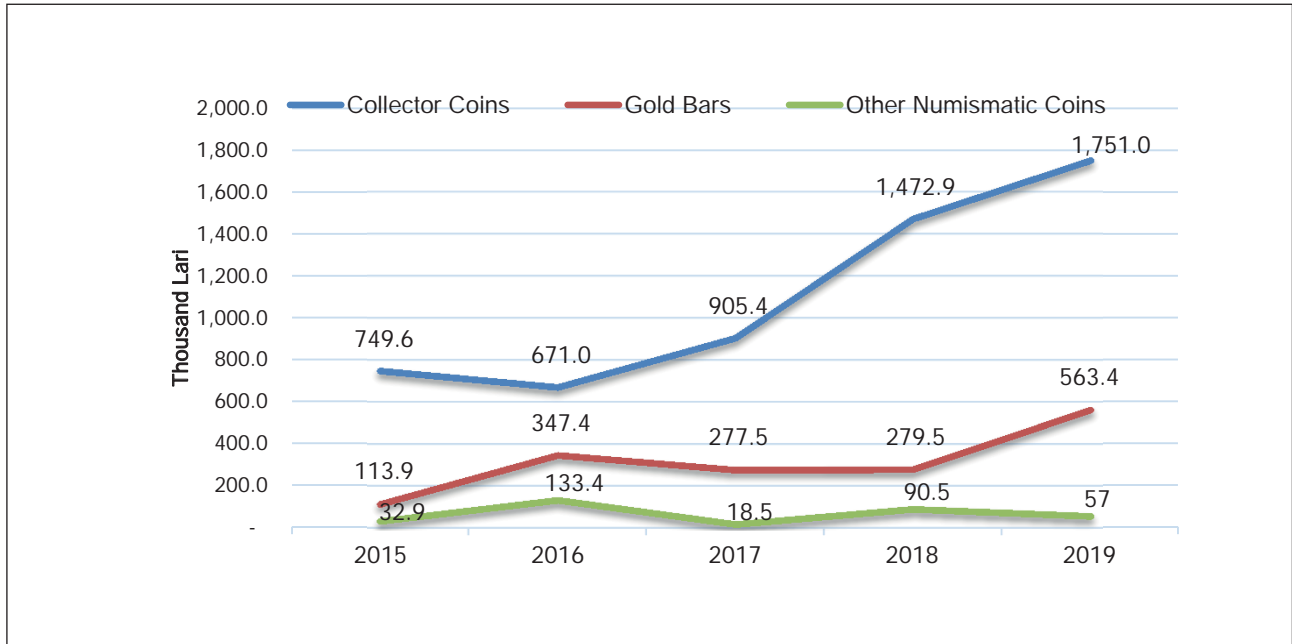
The NBG continued to sell collector coins and gold bars, as well as other numismatic products during the reporting period. The sales of various kinds of products amounted to 121,200 pieces, worth a total of 2.4

million GEL. The income from the sale of collector coins increased by 18.9% compared to 2018, the income from the sale of gold bars increased twofold, and the income from the sale of other numismatic items decreased by 37%. In total, the revenue received over this period increased by 28.7% (528,500 GEL). The following quantities of products were sold in 2019:

- 469 pieces from the Kvareli museum, worth 27,000 GEL in total.
- 116,200 pieces from the cash service desk of the Cash Center, worth 2 million GEL in total.
- 4,500 pieces through the online shop, worth 371,800 GEL in total.

The dynamics of products sold in 2015-2019 per type are illustrated in Diagram N 11.8.

Diagram N 11.8 Products sold in 2015-2019



Source: National Bank of Georgia

The NBG Money Museum continued to offer educational activities to the public during the year. Within the reporting period, the museum received a total of 2,911 visitors. During 2019, 68 educational tours (excursions) were arranged to the museum. These included an overview of Georgian numismatics and the viewing of exhibits. In total, 818 schoolchildren and 103 teachers attended lectures at the museum. In addition, four lectures were held on the theme of “The history of Georgian currency, the NBG’s tasks and obligations”, in which 89 students participated.

In March 2019, as part of the events dedicated to the 100th anniversary of establishment of the first National Bank of Georgia, the Money Museum hosted winners of the International Money Week competition. In May 2019, a group of students from Kvareli No.1 Public School visited the Money Museum and attended a lecture on “The Economic Reforms of Erekle II”.

Completion of lari banknotes upgrade

During the reporting period, the process of upgrading the lari banknotes was completed. The concept of the

upgrade was based on the principle of a single family for the 5-, 10-, 20-, 50- and 100-GEL banknotes. The National Bank started issuing upgraded banknotes on 1 February 2016 with notes of 20- and 50-lari denomination, then on 1 November 2016 with the 100-lari banknotes and from 1 September 2017 with the 5-lari banknotes.

From 1 October 2019, a new 10-lari denomination banknote was added to circulation, completing the re-

newed lari series by the time of the 25th anniversary of the introduction of the lari.

On the front of the upgraded 10-lari banknote, there is a different portrait of Akaki Tsereteli of improved quality and size, as well as an excerpt from his poem “Spring” with his autograph, a blooming branch and a swallow.

On the back is a depiction of “Imereti – My Mother”, a famous work of Georgian painter and graphic artist Davit Kakabadze, presented in a variety of colors combined with the dominant color of the banknote.

It is notable that the themes of the newly modified banknotes retained the same topics and depictions of the same prominent Georgian figures as the original designs. However, this time different portraits have been used and separate elements of the corresponding themes were updated or added. At the same time, in this regard, the design of the upgraded 5- and 100-lari banknotes respectively reflected the main themes as had been depicted on the discontinued 1- and 2-lari denomination banknotes. The banknotes thus



continue to represent the important cultural and historical heritage of Georgia, but do so with more precision, diversity and a modernized appearance.

The same predominant colors of the previous banknotes, except for the 100-lari note, were used for the same denominations of the upgraded banknotes. However, the range and intensity of colors was changed to harmoniously match the dominant and contrasting colors of the main themes.

The Georgian coat of arms, the lari symbol, serial numbers and the signature of the President of the National Bank of Georgia is also depicted on each of

the upgraded banknotes.

Detailed information about the upgraded banknotes is provided on a specially designed website: www.ganakhlebulilari.ge.

Collector coins

For the popularization of Georgian currency and of the country as a whole, the NBG continued working on the issuance of collector coins. During the reporting period, the NBG issued five kinds of collector coins, all of which gained appreciation and a positive response from the public.

The NBG issued a 5-lari denomination silver collector coin dedicated to the 100th anniversary of the Georgian Constituent Assembly (Parliament). The main composition on the obverse of the coin is uneven rings with centrifugal rays in the colors of the first flag of independent Georgia, which symbolize the number of parliamentarians elected by the first democratic elections. The central part of the coin contains the denomination value in figures with the lari symbol; the inscription “1919-2019”, reflecting the period from the establishment of the Georgian Parliament to today; and the inscription: “საქართველოს დამფუძნებელი კრება” (Constituent Assembly of Georgia). The main composition of the reverse of the coin is a graphical illustration of the building where the first session of the constituent assembly was held. The following inscriptions also appear: “საქართველო” (Georgia), “ხუთი ლარი” (Five Lari), and “Georgia”.





Designer: Nita Gongadze

Another coin issued was a 5-lari silver collector coin dedicated to the 100th anniversary of the issuance of the first Georgian national postage stamp. The main composition of the obverse of the coin is the layout of the first Georgian national postage stamp in the denomination of 10 kopek, as well as fragments of postage stamps of four other denominations from this series (40k, 50k, 60k and 70k).

The main composition of the reverse of the coin is a sealed envelope, reflecting a letter from Georgia to anywhere in the world, and the world map stylized in dots. The number of the denomination with the lari symbol is featured on the seal. The following inscriptions are also applied on the coin: “საქართველო”, “Georgia”, “1919 – 2019”, and “5 ლარი”.



Designer: Nita Gongadze

In the autumn of 2019, the 9th Rugby World Cup was held in Japan. To commemorate the participation of the Georgian national rugby team in that event, the National Bank of Georgia issued two 5-lari gold and silver collection coins.

These collector coins are oval and represent the shape of a rugby ball. The coins were minted at the Lithuanian Mint and their design is identical, except that color is used on the silver coin. The main composition of the obverse of the coins depicts a rugby player with a ball, the “Borjghali”, the logo of the Georgian National Rugby Union team; the caption of the Rugby World Cup in Japanese and English, and the inscriptions “2019” and “5 ლარი”. The reverse demonstrates the beginning of the «Leloburti» – an ancient traditional Georgian game – showing a ball thrown in the air and hands striving to catch it; and inscriptions “Lelo” and “Georgia” in both English and Georgian.



Designers: Mamuka Gongadze and Nita Gongadze

December 31 of 2019 was the 100th anniversary of the establishment of the first State Bank of Georgia. On 31 December 1919, the Constituent Assembly of the Democratic Republic of Georgia adopted the Law on the Establishment of the State Bank, which established the legal framework for the regulation of the country’s banking system and the implementation of national monetary policy. The National Bank of Georgia is the legal successor of the State Bank of Georgia. To mark this anniversary, the National Bank of Georgia issued a 5-lari denomination silver collector coin.

The main composition on the obverse of the coin is a logo and a stylized image of the building in which the National Bank of Georgia is located today. The following inscriptions are also made: “საქართველოს ეროვნული ბანკი” and “5B”. The coin is decorated with Swarovski crystal. The main composition on the reverse of the coin is the building in which the first State Bank of Georgia (today, the first building of the public library) was founded in 1919. The inscriptions on the coin are: “5 ლარი”, “საქართველო”, “1919. 2019”, and “Georgia”.



Designer: Nita Gongadze

In 2019, 70 years had passed since the establishment of the Council of Europe, and 20 years since Georgia became a member of the Council of Europe. Although

the idea of creating a united Europe dates back more than 70 years, it was only after World War II that it became possible to unite countries around a common goal to create an organization that would avoid totalitarianism and ensure the protection of human rights, fundamental freedoms, peace and democracy. Today, the Council of Europe unites 47 member states and aims to harmonize national legislation on the basis of common principles such as the rule of law, human rights and democracy.

In 1999, 50 years after the establishment of the Council of Europe, Georgia became the 41st member state of the organization and regained its place on the political map of Europe. The name of Zurab Zhvania, the then Prime Minister of Georgia, is forever connected with this very significant event for Georgia. "I am Georgian, and therefore I am European" stated the Georgian politician to the Parliamentary Assembly of the Council of Europe 20 years ago. These words signified Georgia opening the door to its European family. Twenty years after this event, Zhvania's famous phrase was placed on a star in front of the Council of Europe Palace in Strasbourg, next to the stars of other famous political figures who have made a special contribution to the development of a united and diverse Europe.

The National Bank of Georgia has dedicated a 5-lari silver coin to this important event. The obverse of the coin is symmetrically divided into two equal parts and is encircled by pictograms illustrating 47 humans holding hands to symbolize the 47 member States of the Council of Europe. The 70th anniversary logo of the Council of Europe is depicted on the right-hand side of the coin, while the following Georgian and English inscriptions are placed on the left-hand side: "ჩვენი უფლებები, ჩვენი თავისუფლებები, ჩვენი ევროპა"; "Our Rights, Our Freedoms, Our Europe"; and "5 ლარი".

The reverse of the coin, similarly to the obverse, is divided into two equal parts and surrounded by

pictograms illustrating 47 humans holding hands. One pictogram is colored in red, symbolizing Georgia. The left-hand side of the coin features the flag of Georgia and the following inscriptions: "საქართველო"; "Georgia"; "20" (indicating 20 years of the accession of Georgia to the Council of Europe); and "1999 2019". The map of Georgia and the following inscriptions (in Georgian and English): "მე ვარ ქართველი და, მაშასადამე, ვარ ევროპელი", "I am Georgian, and therefore I am European" are placed on the right-hand side of the coin.



Designer: Nita Gongadze

In May 2019, with the support and co-organization of the National Bank of Georgia, for the first time in the region, Georgia hosted "The Europe Cash Circle Seminar" (ICCOS EUROPE) held by "Currency Research". Within the framework of the event, representatives of various central banks, currency-producer enterprises and cash management organizations from about forty countries visited Tbilisi.

The delegates discussed both European models of cash management as well as global trends. Best practices regarding processing cash circulation, the role of central banks in different countries, the challenges in the Eastern Europe region and other important issues were shared.

Within the framework of the event, an exhibition of modern technologies was also held, where companies representing Georgian banking and other commercial sectors were given an opportunity to get acquainted with the latest products and services in the cash management industry.



12

**INTERNAL AUDIT
AND CENTRALIZED
RISK MANAGEMENT**



12. INTERNAL AUDIT AND CENTRALIZED RISK MANAGEMENT

INTERNAL AUDIT

The updated Risk-Based Internal Auditing methodology and the results of the attendant Organization's Risk Maturity Assessment served as the basis for planning the activities of the Internal Audit Service in 2019. For the purpose of planning assurance services, data from the Organizational Risk Register were used, in accordance with which risk ratings were determined for each auditee included in the audit universe. When prioritizing audits, various factors were considered, including the date of the last audit, the three-year audit cycle, and the conclusions based on the results of previous audits. A short-term dynamic audit plan for assurance services and a medium-term orientation plan were thus developed, which were subsequently approved by the Audit Committee.

A total of 26 audit engagements and reviews were conducted by the Internal Audit Service during 2019. In addition, three follow-up audits were conducted, as a result of which the recommendations provided by the IAS to different structural units of the NBG were rechecked, all activities of the auditees were analyzed, and the statuses of the recommendations were updated accordingly. It should be noted that these follow-up audits were carried out using the automated Internal Audit and Risk Management system.

In accordance with existing practice, the IAS provided services, as considered within the framework of consulting activities, to various structural units of the NBG.

During the reporting period, the Internal Audit and Risk Management software was updated, which increased the level of automation of a significant part of internal audit activities. This, in turn, imposed the necessity for updating internal audit procedures. Several procedures were thus elaborated, including on "Audit Scheduling", "Audit Creating", "Working in Audit Program", "Audit Report Generating", "Audit Completing", "Dynamic Follow-up of Audit Recommendations", and "Time Management". At the same time, work continued on the development of components for a new direction of real-time audits.

In 2019, significant steps were taken towards the professional development of the internal audit staff. The Internal Audit Professional Certification Process started. In addition, the IAS participated in the project "Training and certification of internal auditors in the public sector", which was launched in collaboration

with the Central Harmonization Division of the Ministry of Finance of Georgia, the German Society for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)) and the Center of Excellence in Finance (CEF).

Last year, within the framework of cooperation between the National Bank of Georgia and De Nederlandsche Bank, the Internal Audit Service organized a seminar on the Information Technology Audit. The seminar was oriented on topics interesting for a Georgian audience and aimed at promoting the improving the qualifications of internal auditors in the public sector and commercial banks.

In addition, the IAS participated in the "Ideagens Horizons User Conference" organized by the international company IDEAGEN. IAS representatives provided a presentation to conference participants and shared the NBG's experience in the effective implementation and use of internal audit software.

NON-FINANCIAL RISK MANAGEMENT

The Non-Financial Risk Management Framework is implemented and performed at the National Bank of Georgia to ensure a common, consistent approach towards non-financial operational and reputational risk identification, assessment, treatment and monitoring. The framework is forward-looking, comprising of three components: incident management, non-financial risk management and business continuity management systems. Furthermore, the framework is supported by the NBG's internal procedures system in order to achieve maximum transparency of the bank's processes.

Annually, the board approves the Non-Financial Risk Appetite Statement. Overall, the bank has conservative approach and operates within the "low-risk range". To comply with the acceptable declared level of risks, the bank allocates adequate resources and continuously improves the internal control environment.

In order to advance the Centralized Risk Management Framework, important steps were taken during the reporting period. In particular, a model risk framework has been introduced, integrating model governance-related operational risks into the entire framework. The latter includes the steps of registering, tiering, documenting and assessing the operational risks of existing models.

Moreover, a quantitative measurement approach for

non-financial risk was implemented in order to enhance the existing qualitative assessment method for operational risks. Basel's Standardized Measurement Approach (SMA) for operational risks was selected for this purpose. After a successful trial of this approach, its implementation is planned.

During the reporting period, a centralized system for processes and procedures was created. This system significantly improves the practice of internal procedures and ensures maximum transparency of the bank's internal processes.

It should also be noted that the bank remains actively involved in the International Operational Risk Working Group to share experiences with other central banks.

BUSINESS CONTINUITY MANAGEMENT

As the National Bank of Georgia is among the critical institutions of the country, it recognizes the impor-

tance of the resilience and continuity of its services. In this regard, the bank constantly plans, implements and monitors various activities.

During the reporting period, in order to test and assess the readiness of the NBG's resources (human, logistical and technical), a series of trainings, testing and practical exercises were conducted on a regular basis. In addition, the Business Impact Analysis methodology was updated, with special attention placed on cybersecurity issues.

Overall, the bank's business continuity management system aims to reduce the impact of internal or external threats (considering near-miss events), which is achieved through effective resource allocation, coordination and staff awareness programs.



13

PUBLIC RELATIONS AND INTERNATIONAL COOPERATION



13. PUBLIC RELATIONS AND INTERNATIONAL COOPERATION

PUBLIC RELATIONS

The year 2019 was a special year for the National Bank of Georgia. Numerous events were held dedicated to the 100th anniversary of the establishment of the first Central Bank of Georgia – including public lectures, competitions, and exhibitions. Partner organizations congratulated the National Bank on the anniversary; the NBG released a silver collector's coin to celebrate the anniversary; and, upon the initiative and support of the NBG, a book entitled *The State Bank of Georgia 1919-1921* was published. The book was authored by Roland Spanderashvili, an employee of the Kvareli Money Museum. In addition, a new logo was designed dedicated to the special occasion.



In 2019, the communication strategy of the National Bank of Georgia was further developed, new channels and means of communication were defined to ensure effective communication concerning monetary policy and supervision. When planning communication activities in 2019, particular attention was devoted to ensuring that the public understands current economic processes and their expected results, as well as the policies implemented by the National Bank of Georgia and their impact on the economy. To that end, the National Bank of Georgia's monetary policy communication activities became more dynamic throughout the year.

Similarly to previous years, in 2019 the NBG continued publishing quarterly monetary policy reports and continued the tradition of releasing short videos from the Governor of the National Bank emphasizing important aspects of those reports. The reports were also presented to analysts, specialists and media representatives and these events were recorded and published on the official website and the social networks of the National Bank of Georgia.

In order to guarantee maximum transparency and to inform society about current processes in the banking sector in a timely manner, the National Bank of Georgia promptly disseminated press releases and statistical data, and conducted press conferences, presentations, briefings, conferences, seminars, and

meetings. Public relations were carried out through mass media and other means of communication, and regular meetings took place with representatives of both print and electronic media. In this regard, in line with the conventional practice adopted by central banks of developed countries, the National Bank of Georgia made efforts to ensure the accessibility of information regarding current trends on the money and FX markets, to express its vision regarding these issues, and to explain its motives behind particular decisions.

During the year, the National Bank of Georgia published its "Monthly Review", the quarterly "Monetary Policy Report", the quarterly analytical "Indicators of Financial Sector" and "Indicators of Current Macroeconomic Tendencies", as well as various statistical data and Monetary Policy Committee press releases. The NBG also prepared and printed the "Annual Report of the National Bank of Georgia, 2018" and resumed publication of the "Financial Stability Report".



The latter presents an assessment of the vulnerabilities and risks in the financial system, with a focus on the long-term, structural features of the financial sector and the Georgian economy that are of importance for financial stability. Additionally, the NBG published an issue of the scientific-analytical magazine *Economics and Banking*, offering papers and articles on various topical issues. Electronic versions of the National Bank of Georgia's publications are available on the bank's official website: <https://www.nbg.gov.ge/index.php?m=308>

INTERNATIONAL COOPERATION

The year 2019 was also a significant year with regard to international cooperation. During the reporting pe-



riod, the National Bank hosted several high-level international meetings.

During 19-21 May, the Managing Director of International Monetary Fund (IMF), Christine Lagarde, visited Georgia. Throughout the visit, the IMF Managing Director met with the President of Georgia, the Prime Minister of Georgia, the Governor of the National Bank of Georgia and representatives of the economic group. In addition, the Managing Director met with students from different leading universities in Georgia. Christine Lagarde discussed inclusive growth and positively assessed the reforms implemented in the financial sector.



As had been the case in 2018, the world's leading financial editorial, *Global Finance*, named Koba Gvenetadze among the Best Central Bankers of 2019 for the second consecutive time. In 2018, influential international financial magazine *Global Finance* first entered the Governor of the National Bank of Georgia in its "Central Banker Report Cards" and under their criteria he received the grade of "A-". This year, the Governor once again received an "A-" grade and thus cemented his membership in the elite club of central bankers whose ratings are "A" and "A-". The *Global Finance* awards are acknowledged worldwide and the Central Banker Report Cards are published annu-



ally. In total, 98 central bankers were graded in 2019's *Global Finance's* Central Banker Report Cards, and the final report was published in October.

In April 2019, the Governor of the National Bank of Georgia participated in the Governor Talks organized by the IMF. Such discussions are held with representatives of five regions of the world during the annual and spring meetings of the International Monetary Fund and the World Bank Group in order to share successful experiences in specific economic directions. IMF Regional Directors serve as moderators of these meetings. The 2019 discussions were held with the Minister of Finance of the Netherlands (representing the euro area), the Governor of Central Bank of Paraguay (representing the Western Hemisphere), with the Governor of Reserve Bank of India (representing Asia and the Pacific) and with the Minister of Economy and Finance of Benin (representing Africa).

The Governor Talks of 2019 were opened with the speech of Koba Gvenetadze. The main topic of discussion was "The NBG's experience with implementing inflation targeting". Mr. Jihad Azour, Director of Middle East and Central Asia Department of the IMF, served as the moderator of the discussion. Mr. Azour stressed the successful practice and experience of the National Bank of Georgia in the implementation of an inflation-targeting regime with a floating exchange rate. The impressive progress in larization was also mentioned as an important factor for reducing the vulnerability of the financial sector.

In October 2019, the National Bank of Georgia, in cooperation with the International Finance Corporation (IFC), a member of the World Bank Group, and the IFC-supported Sustainable Banking Network (SBN), hosted the Sustainable Finance Conference in Tbilisi. The conference brought together IFC experts, representatives from SBN member countries and regional central banks, senior representatives from relevant ministries, Presidents/CEOs and senior leadership



representatives of financial institutions, international organizations and other stakeholders.

The conference was the second event hosted by the NBG in cooperation with the IFC on sustainable finance. Since the first workshop in September 2018, the NBG has made significant progress towards the development of a sustainable finance framework in Georgia. A key achievement was the launch of the NBG's Roadmap for Sustainable Finance in Georgia in April 2019.

In November 2019, the National Bank of Georgia, along with the Central Bank of Netherlands, organized an international workshop on "Cyber-risk and Cyber-flexibility for Financial Regulators". During the meeting, attendees discussed the EU Cyber Security Framework (TIBER-EU), cyber-risk focused approaches to financial supervision in the United States, and cybersecurity in Georgia. Financial supervisory bodies and representatives of 11 countries from Europe and the Caucasus region participated in the meeting: the Netherlands, Poland, Israel, Northern Macedonia, Bosnia and Herzegovina, Croatia, Bulgaria, Romania, Azerbaijan, Armenia, and Montenegro.



The National Bank of Georgia also hosted a high-level international meeting on Financial Education in cooperation with the Ministry of Finance of the Kingdom of the Netherlands and the Organization for Economic Co-operation and Development (OECD / INFE). The event was organized within the framework of a 5-year (2018-2022) project of technical support for education, organized by OECD / INFE, in which, along with Georgia, six Eastern European countries – Bulgaria, Northern Macedonia, Moldova, Montenegro, Romania and Croatia – participated. The aim of the meeting was to increase financial education and to provide support to central banks and other stakeholders. The conference "Financial Education and Literacy: Promoting Financial Education in Southeast Europe" was opened by the Governor of the National Bank of Georgia, Koba Gvenetadze. The conference participants discussed conceptual and institutional issues related to the process of introducing the National Financial Education Strategy.

In 2020, the Georgian lari will celebrate its 25-year anniversary. The National Bank is planning various events throughout the year to mark the anniversary.



14

HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT



14. HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT

STATISTICAL INFORMATION ON THE NUMBER OF EMPLOYEES

As a result of a number of legislative changes implemented in 2019, the functions and responsibilities within the mandate of the National Bank of Georgia have significantly expanded. Consequently, in order to ensure that the NBG effectively fulfills its objectives as a central bank, changes to bank's organizational culture and the creation of new subdivisions were put on the agenda.

By the end of 2019, the National Bank of Georgia employed 512 individuals, of whom 362 are public servants. The average age of employees is 38. Of the total number of employees, 50.4% are female and 49.6% are male.

COOPERATION WITH HIGHER EDUCATION INSTITUTIONS

Every year, the National Bank of Georgia gives students opportunities to become familiar with the National Bank by becoming interns and developing practical skills that will help them in their future careers. In line with a memorandum of cooperation, the National Bank of Georgia took on 44 interns in 2019, of whom seven subsequently became employees of the National Bank of Georgia. At the same time, the central bank provides summer internship opportunities for Georgian students studying abroad. The objective of this initiative is to increase the interest of such students towards the National Bank of Georgia, so that after graduating they might decide to return and apply their knowledge to Georgia. During 2019, six such students enrolled in the internship program.

EMPLOYEES' PROFESSIONAL DEVELOPMENT

Throughout 2019, the National Bank of Georgia continued to provide professional development for its employees. A total of 235 employees visited the following institutions to increase their effectiveness:

the Deutsche Bundesbank, the Central Bank of Italy, the Central Bank of France, the Central Bank of the Netherlands, the National Bank of Poland, the Swiss National Bank, the Czech National Bank, the National Bank of Austria, the Central Bank of Armenia, the Central Bank of the Republic of Turkey, the Asian Development Bank, the World Bank, the IMF, and the central banks of various other countries. In addition, 59 specialists from the National Bank of Georgia successfully underwent training in Georgian educational institutions. A certified course in "Monetary Policy" was held in 2019, which was attended by 20 employees of the NBG who received certificates on the basis of testing.

An invited trainer conducted the following trainings throughout the year: "Presentation Skills", "Time Management", "Training of Trainers", "Conducting Negotiations and Effective Communication Skills", "Coaching for High-performance Activities", "Business Analysis Training" and "Project Management". A total of 199 employees attended these sessions.

In 2019, 12 employees employed in managerial positions at the National Bank of Georgia attended training on "Modern Methods of Management" at the Management Academy.

In addition, employees from different departments of the National Bank of Georgia systematically conducted presentations with the aim of increasing and sharing knowledge within the organization.

PROFESSIONAL DEVELOPMENT OF FINANCIAL SECTOR EMPLOYEES

The National Bank of Georgia also supports the professional development of banking sector employees. To that end, in 2019, experts from the Luxembourg Financial Technology Transfer Agency conducted four seminars at the National Bank of Georgia that were attended by 94 individuals from the National Bank of Georgia and commercial banks.



15

DEVELOPMENT OF THE LEGAL FRAMEWORK



15. DEVELOPMENT OF THE LEGAL FRAMEWORK

Throughout 2019, the Legal Department of the National Bank of Georgia has been conducting its activities in accordance with the functions and main directions as defined by the Statute of the National Bank of Georgia. In 2019, active progress has been made on the ongoing development and improvement of the legal framework.

The National Bank of Georgia was the author of numerous significant laws that entered into force in 2019. In particular, amendments were made to the Organic Law of Georgia on the National Bank of Georgia, according to which, the National Bank of Georgia has been given a resolution mandate; legal mechanisms and tools for exercising resolution powers have been created, and measures for crisis management have been developed. This will enable the National Bank of Georgia to maintain the stability of the financial system in the event of a crisis, by ensuring the continuity of critical functions and better protection of depositors in line with international best practice. Corresponding amendments have been made to the Law of Georgia on Commercial Bank Activities, which specifically defines the supervisory measures of the National Bank and the legal basis for their use, resolution tools, early intervention measures, requirements related to the recovery plans to be drawn up by commercial banks, and requirements related to resolution plans to be prepared by the supervisory authority. The development of the recovery and resolution framework is aimed at ensuring the continuity of critical functions, the effective and stable functioning of the financial system, and the protection of budgetary and public funds, as well as insured depositors and client funds and assets. Moreover, corresponding amendments were made to a number of legal acts, including the Law of Georgia on Competition, the Law of Georgia on Licenses and Permits, the Law of Georgia on Entrepreneurs, the Law of Georgia on Payment Systems and Payment Services, and the Law of Georgia on the Securities Market.

In addition, it is noteworthy that the National Bank of Georgia participated in drafting the Law of Georgia on Financial Collateral Arrangements, Netting and Derivatives. This law created significant legal guarantees for the use of financial collateral arrangements, netting and derivatives. The law aims to facilitate enforcement of international financial contracts, which is a precondition for the proper development of financial markets. Moreover, important guarantees were

introduced for the protection of the rights of parties to derivatives and financial collateral. Furthermore, the law gave the NBG the power to regulate corresponding matters through a normative legal act. Related changes were made in the Organic Law of Georgia on the National Bank of Georgia, which clarified terminological and editorial issues in line with the Law of Georgia on Financial Collateral Arrangements, Netting and Derivatives. Additionally, corresponding changes were made to the Law of Georgia on Insolvency Proceedings, the Law of Georgia on Insurance, the Law of Georgia on Private International Law, the Law of Georgia on Securities Market, the Law of Georgia on Commercial Bank Activities, the Law of Georgia on Enforcement Proceedings, etc.

An important amendment was also made to Article 35 of the Organic Law of Georgia on the National Bank of Georgia, according to which, the Board of the National Bank shall define the design and other characteristics of lari banknotes and coins in accordance with the normative legal act issued by the board itself.

It is important to note that the National Bank of Georgia was involved in the drafting process of the Law of Georgia on Facilitating the Suppression of Money Laundering and Terrorism Financing and related legal amendments, including amendments to the Organic Law of Georgia on the National Bank of Georgia. Pursuant to these amendments, the Organic Law of Georgia on the National Bank of Georgia has been brought in line with the Law of Georgia on Facilitating the Suppression of Money Laundering and Terrorism Financing. Moreover, based on the Law of Georgia on Facilitating the Suppression of Money Laundering and Terrorism Financing, Decree №240/04 of the Governor of the National Bank of Georgia of 18 December 2019 was adopted on “Approval of the List of High-risk Jurisdictions for the Purposes of the Law of Georgia on Facilitating the Suppression of Money Laundering and Terrorism Financing”.

Throughout 2019, 66 drafts of normative acts were prepared to bring the legal framework in line with existing laws or regulated new relationships. Each of these legal acts were officially published on the website of the Legislative Herald of Georgia.

Decree №18/04 of the Governor of the National Bank of Georgia of 5 February 2019 was approved on “Rules for Calculating the Annual Effective Interest Rate of a Lease, the Fee, Financial Expense, Penalty

and/or Any Type of Financial Sanction for the Purposes of Article 576(6) of the Civil Code of Georgia”. This establishes the procedure for calculating the annual effective interest rate of a lease, fee, financial expense, penalty and/or any type of financial sanction for the purposes of Article 576(6) of the Civil Code of Georgia.

Decree №45/05 of the Governor of the National Bank of Georgia of 26 February 2019 was also approved. This amended the Decree of the Governor of the National Bank of Georgia №242/01 of 25 December 2009 on “Determining and Imposing Financial Penalties for Commercial Banks and its Administrators”, and imposes penalties in a separate article for violations of Georgian legislation on facilitating the prevention of illicit income legalization, of legal acts of the National Bank adopted on the basis of this legislation, of written instructions of the National Bank of Georgia, of obligations imposed as a result of inspection/supervision and for non-compliance with the instructions of the FMS.

On 22 March 2019, Decree №56/04 of the Governor of the National Bank of Georgia on “Approval of Cybersecurity Management Framework of Commercial Banks” was adopted. In addition, the Decree of the Governor of the National Bank of Georgia №71/04 of 22 April 2019 on the “Regulation on the Net-Stable Financing Ratio” was adopted, which regulates the net stable financing ratio and aims to facilitate the appropriate financing structure of commercial banks’ assets and off-balance sheet operations.

Other decrees adopted in the reporting period included the following: Decree №75/04 of the Governor of the National Bank of Georgia of 24 April 2019

on “Approval of Additional/Different Criteria on Leasing of Immovable Property to Commercial Banks”; Decree №228/04 of the Governor of the National Bank of Georgia of 21 November 2019 on “Approval of the Rule on Credit Concentration and Large Risks in Commercial Banks”; and Decree №74/04 of the Governor of the National Bank of Georgia of 24 April 2019 on “Approval of the Instruction on the Requirements of Commercial Banks Pricing Models”. In addition, Decree №153/04 of the Governor of the National Bank of Georgia of 20 August 2019 amended Decree №37/04 of the Governor of the National Bank of Georgia of 28 February 2018 on “Approval of the Rules for Registration and Regulation of Currency Exchange Bureaus”, in order to allow and regulate the execution of currency exchange operations through electronic devices.

Based on the amendments to the Organic Law of Georgia on the National Bank of Georgia regarding powers related to the management of human resources, Decree №103/04 of the Governor of the National Bank of Georgia of 30 June 2019 entered into force on “Establishing Rules and Conditions for Conducting Selection Process for the Employees of the National Bank of Georgia, Establishment of a Selection Commission and its Activities”. This defines the rules and conditions for holding open, closed and simplified public competitions for employment in the National Bank of Georgia. Likewise, Decree №102/04 of the Governor of the National Bank of Georgia of 20 June 2019 on “Establishing Rules for Transfer and Promotion of Employees of the National Bank of Georgia” was approved. This defines the procedures and legal grounds for transferring and promoting employees of the National Bank of Georgia.



16

PROJECT MANAGEMENT



16. PROJECT MANAGEMENT

The last few years have seen organizational growth and development as well as a multiplication of the functions of the National Bank of Georgia. Such developments require increased resources and a coordinated effort.

To respond to these challenges, after discussions with stakeholders, a project portfolio management framework was developed based on best international practice and methodologies (COBIT, PMBOK®, and the Stage-Gate® Model). The framework uses a business-case approach, which enables us to predefine the benefits of every new initiative with objectively verifiable indicators. It also enables us to identify and assess operational as well as business-case related risks and to develop optimal strategies to fully realize benefits and manage risks. The project portfolio management framework details the requirements for the full business cycle as well as the rights and responsibilities of the stakeholders involved. In addition, a model and criteria for defining priority projects and initiatives have been developed that will enable the management of the National Bank to take informed decisions based on an objective assessment of project implementation. The following project portfolio-related investment categories have been defined for the smooth functioning of the model's priority definition:

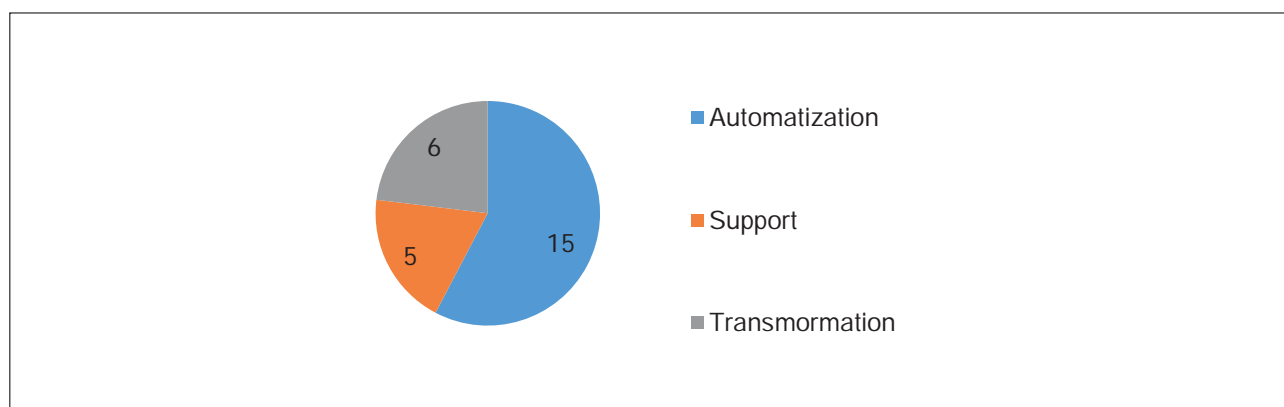
new business processes or the improvement of existing business processes.

By 31 December 2019, the National Bank of Georgia has 26 medium- and large-scale projects in its portfolio, of which six are transformational.

It is noteworthy that by the end of 2018 a large number of projects in the National Bank's portfolio were in the initial phases and their successful implementation was largely dependent on the optimal use of the human resources involved. By the end of 2019, the number of projects in the initial phase has reduced dramatically (from 12 to four) and the number of completed projects increased (from two to seven).

Coordination and effective mechanisms for joint management are paramount for the successful implementation of projects. This, in turn, requires the creation of a centralized database in order to adequately analyze and control the availability and workloads of human resources, to monitor and evaluate the work completed, and provide relevant information to stakeholders. In order to conduct this function adequately, the National Bank of Georgia uses the MS Project Server and MS SharePoint Server products, which represent some of the best instruments for managing the project portfolio and organizing the monitoring and assessment system.

Diagram N 16.1 Current projects in the National Bank of Georgia by category

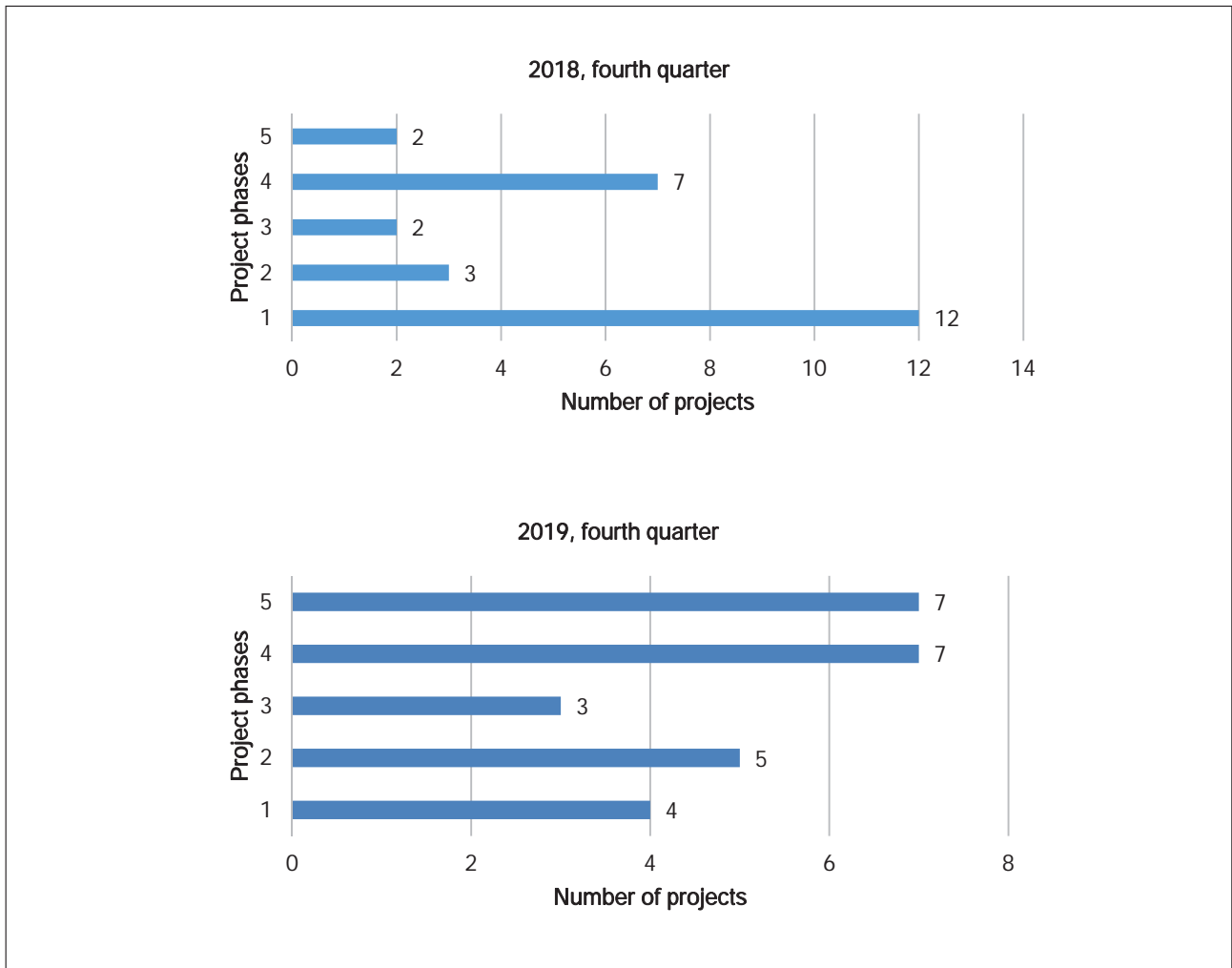


Source: National Bank of Georgia

- Necessary investment for **business functioning** (for retaining existing operations).
- Necessary investment for **additional automatization** of business processes.
- Necessary investment for **transforming** business processes, which comprises the introduction of

The National Bank of Georgia pays a great deal of attention to the creation of a knowledge base for project and portfolio management. For this purpose, in 2019, NBG staff received intensive training in project management, which was aimed at equipping personnel with basic knowledge and skills in the sphere of project management.

Diagram N 16.2 Current projects in the National Bank of Georgia by phase

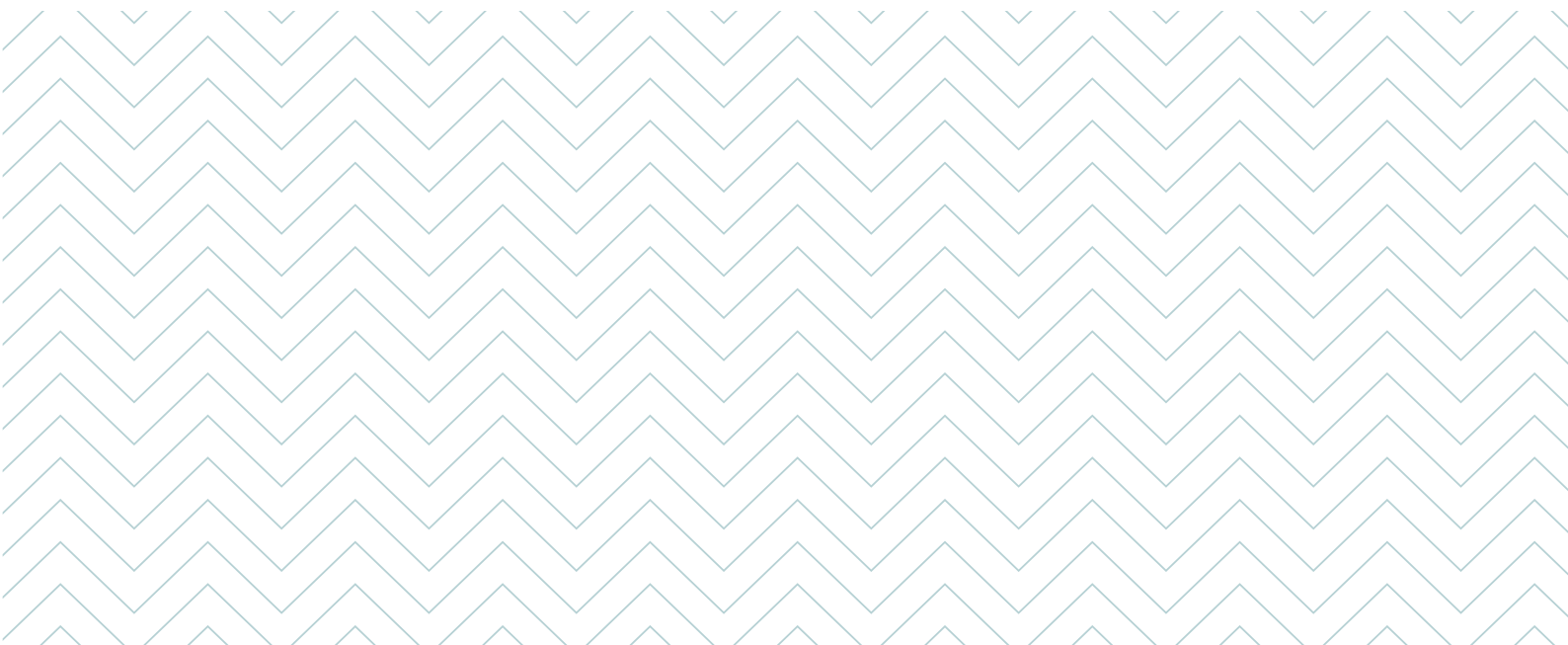


Source: National Bank of Georgia



17

STATISTICAL ACTIVITIES



17. STATISTICAL ACTIVITIES

The National Bank of Georgia's statistical activities have been significantly upgraded compared to previous years. From 2019, the National Bank of Georgia has started providing interactive visual reports on its website in addition to the traditional reports presented in a numeric format. This was achieved following the implementation of the Business Intelligence (BI) data visualization and analysis platform. This useful tool gives users the opportunity to analyze statistical data in several ways. By using interactive reports, users can observe qualitative or relative values in data, not only in a visual way. Users can also filter data according to a particular need and obtain their desired results in a visual or table format.

During 2019, various interesting reports were created based on a wide spectrum of users' needs and were added to interactive statistics section of the National Bank of Georgia's website. Along with the interactive reports on loans and deposits published last year, interactive reports about financial markets, the external sector and monetary and financial statistics, offered with diverse filtration instruments, have already been made available on the NBG's website. These reports are based on daily and monthly financial and monetary data that are periodically collected from the financial and non-financial sectors of the national economy. Interactive analytical reports on the foreign exchange market, money transfers, official exchange rates, liquidity and depository corporations' analytical surveys describe the current and past trends of the financial sector. At the end of the year, a report on the external trade of Georgia was also added to the National Bank of Georgia's interactive statistics section, which provides an opportunity for miscellaneous analyses of import-export data. After adjusting the desired filters and conditions, the report allows users to analyze what goods are exported or imported to/from a particular country. Information can be shown using desired time range, weight or volume indicators. In addition, users can analyze import/export data on the world map.

The NBG plans to add new reports to the interactive reports section of its website and to improve the functionality of existing reports in the coming year. In particular, an official interactive report of exchange rates will be generalized by adding nominal and real effective exchange rate indices. Systematic work is also being undertaken to create an interactive report about financial stability indicators. Additionally, various reports about external sector activities and financial and monetary statistics will become available in 2020.

The National Bank of Georgia is planning to implement the modern Statistical Data and Metadata eXchange (SDMX) format. This format describes statistical data and metadata according to the ISO standard and thus ensures effective data exchange among statistics producers and similar organizations. In addition, this format facilitates an improvement of data quality and ensures the harmonization and standardization of metadata among statistical organizations, which in turn accelerates business processes. Regarding this topic, representatives of the National Bank of Georgia participated in the 7th global SDMX conference, which took place in Budapest in September 2019. This conference discussed modern challenges regarding the SDMX format, international experience and technical details regarding its implementation.

In 2020, as a first step, the NBG plans to elaborate a mechanism to transfer the statistical data that will be submitted to international financial institutions in SDMX format, while the next step will be a complete migration of the data and metadata of the National Bank of Georgia's statistical information system (SebStat) to this format.

Interactive reports for the validation of the monthly financial data received from commercial banks were elaborated in the reporting year. For each commercial bank, an individual website was created in the BI environment, where it is possible to conduct data validation processes in a real-time regime, which has significantly accelerated business process. Implementation of this validation method represents both a mechanism for data quality improvement as well as a tool for fast communication with commercial banks' reporting offices regarding particular technical issues. On the other hand, the National Bank of Georgia has created several interactive reports for commercial banks that provides the opportunity to analyze loans, deposits and money transfers dynamics of a desired time range and granularity.

In 2019, the generalization of monthly financial data collected from commercial banks was successfully implemented. In particular, the quality of data on reporting period transactions was significantly improved and the granularity of aggregated data was extended. These improvements caused an improvement of the quality of the reports produced by the National Bank of Georgia, such as financial corporations' sectoral balance sheets. Moreover, the improvement of data quality created a solid basis to prepare the financial sector's financial account not only for stocks, but also for reporting period flows. Corresponding preparatory work has thus already been undertaken in this direction and the preparation of complete financial accounts for loan and deposit financial instruments are planned in 2020.



საქართველოს ეროვნული ბანკი
National Bank of Georgia

NATIONAL BANK OF GEORGIA

**FINANCIAL STATEMENTS FOR THE YEAR ENDED
31 DECEMBER 2019**

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NATIONAL BANK OF GEORGIA

STATEMENT OF MANAGEMENT RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

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 2019, 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 IFRSs 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 IFRSs;
- 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 2019 were authorized for issue on 14 April 2020 by the Council of the Bank.

On behalf of the Council of the Bank:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Andria Manelashvili



KPMG Georgia LLC
GMT Plaza
5th Floor, 4, Liberty Square
Tbilisi, Georgia 0105
Telephone +995 322 93 5713
Internet www.kpmg.ge

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 2019, 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 2019, 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 Code of Ethics for Professional Accountants (including International Independence Standards) 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 International Code of Ethics.. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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 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.

KPMG Georgia LLC, a company incorporated under the Laws of Georgia, a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.



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:

Karen Safaryan

KPMG Georgia LLC
Tbilisi, Georgia
14 April 2020

NATIONAL BANK OF GEORGIA

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2019 (in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-19	Year ended 31-Dec-18
Interest income from international reserves			
Cash and cash equivalents		13,333	13,077
Investments measured at fair value through other comprehensive income ("FVOCI")		190,775	127,870
Other		5,558	4,840
		209,666	145,787
Interest income from monetary policy operations			
Due from resident financial institutions		131,090	108,185
Investments measured at fair value through other comprehensive income		40,087	20,742
		171,177	128,927
Other interest income			
Investments measured at amortised cost		17,730	21,006
Due from resident financial institutions		498	11,065
Other		6	6
		18,234	32,077
Total interest income		399,077	306,791
Interest expense from monetary policy operations			
Debt securities issued		(4,440)	(4,626)
Due to resident financial institutions		(52,102)	(40,865)
		(56,542)	(45,491)
Other interest expenses			
Due to resident financial institutions		(320)	(598)
Due to International Monetary Fund		(14,440)	(10,893)
Due to customers		(9,181)	-
Interest expense on lease liabilities		(161)	-
		(24,102)	(11,491)
Total interest expense		(80,644)	(56,982)
NET INTEREST INCOME		318,433	249,809
Impairment (charges)/recovery	29	31	(105)
NET INTEREST INCOME AFTER IMPAIRMENT PROVISION		318,464	249,704
Net gains/(losses) from foreign currencies:			
- translation differences		339,677	54,186
- dealing		2,919	543
Fee and commission income	4	2,501	2,125
Fee and commission expense	4	(4,057)	(1,800)
Net gain/loss on realised instruments measured at fair value through other comprehensive income		12,924	(8,538)
Net gain/loss on realised financial instruments measured at fair value through profit or loss		(4,220)	2,590
Net unrealised gain/(loss) on financial instruments measured at fair value through profit or loss		2,512	(2,667)
Other income	5	1,259	5,852
NON-INTEREST INCOME/(EXPENSE)		353,515	52,291

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.

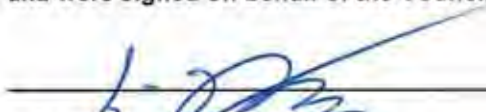
NATIONAL BANK OF GEORGIA

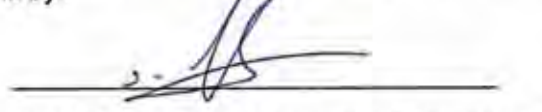
STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2019 (CONTINUED)

(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-19	Year ended 31-Dec-18
Personnel expenses	6	(25,378)	(21,286)
General and administrative expenses	6	(10,550)	(9,810)
Money printing expenses		-	(10,931)
Depreciation and amortization	6	(5,582)	(3,888)
Loss on disposal of property and equipment		(1)	(3)
Other expenses		(1,059)	(38)
NON-INTEREST EXPENSES		(42,570)	(45,956)
PROFIT FOR THE YEAR		629,409	256,039
Other comprehensive income/(loss)			
<i>Items that are or may be reclassified subsequently to profit or loss:</i>			
Net unrealized gain/(loss) on revaluation of investments measured at fair value through other comprehensive income during the year		34,958	3,730
Net realized gain/(loss) on investments measured at fair value through other comprehensive income reclassified to profit or loss		(3,624)	4,962
Total other comprehensive income/(loss)		31,334	8,692
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		660,743	264,731

The financial statements as set out on pages 4 to 51 were approved by management on 14 April 2020 and were signed on behalf of the Council of the Bank by:


 Chairman of the Council
 Koba Gvenetadze


 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 2019 (in thousands of Georgian Lari)

	Notes	31-Dec-19	31-Dec-18
ASSETS:			
Foreign currency assets			
International reserves			
Cash and cash equivalents	7	1,713,548	1,278,475
Special Drawing Rights holdings with the International Monetary Fund	9	572,233	537,249
Assets related to derivative instruments	10	5,362	1,523
Investments measured at fair value through profit or loss	11	152,395	138,094
Investments measured at fair value through other comprehensive income	12	7,610,388	6,847,456
Other foreign currency assets			
Other assets	17	253	8
		10,054,179	8,802,805
National currency assets			
Monetary policy instruments			
Due from resident financial institutions	8	3,142,134	1,901,477
Investments measured at fair value through other comprehensive income	12	809,443	364,653
Other national currency assets			
Due from resident financial institutions	8	-	46,272
Investments measured at amortised cost	13	241,616	281,808
Right-of-use assets under lease	14	2,077	-
Property and equipment	15	57,819	54,518
Intangible assets	16	4,980	5,061
Other assets	17	4,639	8,521
		4,262,708	2,662,310
TOTAL ASSETS		14,316,887	11,465,115

The statement of financial position is to be read in conjunction with the notes to, and forming part of, the financial statements.

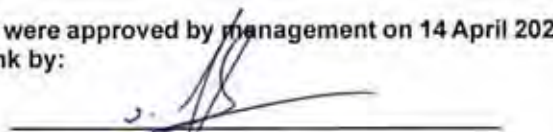
NATIONAL BANK OF GEORGIA

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2019 (CONTINUED) (in thousands of Georgian Lari)

	Notes	31-Dec-19	31-Dec-18
LIABILITIES AND EQUITY:			
LIABILITIES:			
Foreign currency liabilities			
Monetary policy instruments			
Due to resident financial institutions	18	4,231,029	3,642,799
Other foreign currency liabilities			
Due to resident financial institutions	18	73,437	8,122
Due to the Ministry of Finance of Georgia	19	616,518	414,917
Due to the International Monetary Fund	9	1,282,884	983,435
Other liabilities	17	1,247	2,776
		6,205,115	5,052,049
National currency liabilities			
Money issued in circulation	21	4,137,012	3,565,496
Monetary policy instruments			
Debt securities issued	22	79,149	79,310
Due to resident financial institutions	18	471,453	669,726
Other national currency liabilities			
Due to the Ministry of Finance of Georgia	19	838,104	362,445
Due to customers	20	267,604	666
Due to the International Monetary Fund	9	1,979	1,872
Other liabilities	17	9,932	7,711
		5,805,233	4,687,226
TOTAL LIABILITIES		12,010,348	9,739,275
EQUITY:			
Capital	23	15,000	15,000
Reserve fund	23	475,296	288,120
Retained earnings	23	100,000	80,000
Foreign currency revaluation reserve	23	1,673,986	1,334,309
Revaluation reserve of investments measured at fair value through other comprehensive income	23	39,745	8,411
Other revaluation reserve	23	2,512	-
TOTAL EQUITY		2,306,539	1,725,840
TOTAL LIABILITIES AND EQUITY		14,316,887	11,465,115

The financial statements as set out on pages 4 to 51 were approved by management on 14 April 2020 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Andria Manelashvili

The statement of financial position is to be read in conjunction with the notes to, and forming part of, the financial statements.

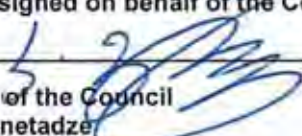
NATIONAL BANK OF GEORGIA

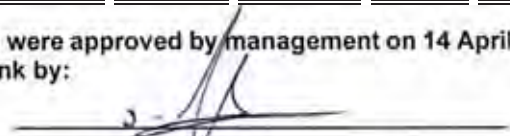
STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2019

(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-18	15,000	165,180	1,280,123	1,208	(281)	69,879	1,531,109
Total comprehensive income							
Profit for the year	-	-	-	-	-	256,039	256,039
Other comprehensive income							
<i>Items that are or may be reclassified subsequently to profit or loss:</i>							
Net unrealized gain on revaluation of investments measured at fair value through other comprehensive income during the year	-	-	-	-	3,730	-	3,730
Net realized gain on investments measured at fair value through other comprehensive income reclassified to profit or loss	-	-	-	-	4,962	-	4,962
Total other comprehensive income	-	-	-	-	8,692	-	8,692
Total comprehensive income for the year	-	-	-	-	8,692	256,039	264,731
Transactions recorded directly in equity							
Transfer to the Ministry of Finance of Georgia (Note 23)	-	-	-	-	-	(70,000)	(70,000)
Transfer to reserve fund (Note 23)	-	122,940	-	-	-	(122,940)	-
Transfer to foreign currency revaluation reserve (Note 23)	-	-	54,186	-	-	(54,186)	-
Transfer to other revaluation reserve (Note 23)	-	-	-	(1,208)	-	1,208	-
Total transactions recorded directly in equity	-	122,940	54,186	(1,208)	-	(245,918)	(70,000)
31-Dec-18	15,000	288,120	1,334,309	-	8,411	80,000	1,725,840
Adjustment on initial application of IFRS 16, (see Note 3)	-	-	-	-	-	(44)	(44)
1-Jan-19	15,000	288,120	1,334,309	-	8,411	79,956	1,725,796
Total comprehensive income							
Profit for the year	-	-	-	-	-	629,409	629,409
Other comprehensive income							
<i>Items that are or may be reclassified subsequently to profit or loss:</i>							
Net unrealized gain on revaluation of investments measured at fair value through other comprehensive income during the year	-	-	-	-	34,958	-	34,958
Net realized gain/(loss) on investments measured at fair value through other comprehensive income reclassified to profit or loss	-	-	-	-	(3,624)	-	(3,624)
Total other comprehensive income	-	-	-	-	31,334	-	31,334
Total comprehensive income for the year	-	-	-	-	31,334	629,409	660,743
Transactions recorded directly in equity							
Transfer to the Ministry of Finance of Georgia (Note 23)	-	-	-	-	-	(80,000)	(80,000)
Transfer to reserve fund (Note 23)	-	187,176	-	-	-	(187,176)	-
Transfer to foreign currency revaluation reserve (Note 23)	-	-	339,677	-	-	(339,677)	-
Transfer to other revaluation reserve (Note 23)	-	-	-	2,512	-	(2,512)	-
Total transactions recorded directly in equity	-	187,176	339,677	2,512	-	(609,365)	(80,000)
31-Dec-19	15,000	475,296	1,673,986	2,512	39,745	100,000	2,306,539

The financial statements as set out on pages 4 to 51 were approved by management on 14 April 2020 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


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 2019

(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-2019	Year ended 31-Dec-2018
CASH FLOWS FROM OPERATING ACTIVITIES:			
Interest received		350,834	275,566
Interest paid		(75,869)	(51,464)
Fees and commissions received		2,501	2,125
Fees and commissions paid		(4,057)	(1,800)
Net (loss)/gain on financial instruments at fair value through profit or loss		(4,220)	2,590
Net realized gain from dealing in foreign currencies		2,919	543
Other income received		1,487	2,167
Personnel expenses paid		(25,378)	(21,286)
Cash paid for printing money		-	(10,931)
Other general and administrative expenses paid		(11,607)	(9,810)
Net cash inflow from operating activities before changes in operating assets and liabilities		236,610	187,700
<i>Net (increase)/decrease in operating assets:</i>			
Due from resident financial institutions		(1,191,728)	(135,963)
Special Drawing Rights holdings with the International Monetary Fund		181	4,148
Assets related to derivative instruments		(855)	(785)
Investments measured at fair value through profit or loss		(4,363)	(2,259)
Other assets		(888)	(278)
<i>Net increase/(decrease) in operating liabilities:</i>			
Money issued in circulation		571,516	256,627
Due to resident financial institutions		137,728	659,955
Due to the Ministry of Finance		670,091	(203,288)
Due to customers		266,939	(705)
Other liabilities		(1,313)	(295)
Net cash inflow from operating activities		683,918	764,857
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from disposal of investment property		3,057	3,703
Purchase of property and equipment		(6,312)	(4,555)
Purchase of intangible assets		(1,193)	(3,502)
Purchase of investments measured at fair value through other comprehensive income		(10,040,444)	(9,378,175)
Proceeds from redemption of investments measured at fair value through other comprehensive income		9,566,336	8,163,045
Net cash used in investing activities		(478,556)	(1,219,484)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Transfer to the Ministry of Finance	23	(80,000)	(70,000)
Debt securities issued		255,400	255,400
Debt securities redeemed		(256,390)	(256,081)
Proceeds from the International Monetary Fund	27	234,773	214,454
Net cash from in financing activities		153,783	143,773
Effect of exchange rates changes on cash and cash equivalents		75,928	(327)
Net increase/(decrease) in cash and cash equivalents		435,073	(311,181)
CASH AND CASH EQUIVALENTS, at the beginning of the year	7	1,278,475	1,589,656
CASH AND CASH EQUIVALENTS, at the end of the year	7	1,713,548	1,278,475

The financial statements as set out on pages 4 to 50 were approved by management on 14 April 2020 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


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 2019 *(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. It 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 emission, and the 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 with 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 and the Pension Agency of Georgia (with respect to its investment activities).

The National Bank of Georgia within the relevant regulatory framework supports the protection of consumer and investor rights. Moreover, the Bank, with the involvement of different stakeholders from the Government structures, 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 of supporting financial stability and individuals’ financial well-being.

Currency

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 in leading European mints.

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 requirements 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 national currency.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2019 (in thousands of Georgian Lari)

Governance

As at 31 December 2019 and 2018, the members of the Council of the Bank were:

Position	Name (2019)	Name (2018)
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
Member	Mr. Robert H.Singletary	Mr. Robert H.Singletary
Member	Mr. Nikoloz Kavelashvili	Mr. Nikoloz Gongliashvili
Member	<i>Vacant</i>	Mr. Vazha Jankarashvili
Member	<i>Vacant</i>	Mr. Nikoloz Kavelashvili

The Bank's main office is located at 2 Sanapiro, Tbilisi, 0114, Georgia. As at 31 December 2019 and 2018 the Bank has one cash service center. The Bank has 512 and 467 personnel as at 31 December 2019 and 2018, 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").

The 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 local currencies, which better reflects economics and risks behind the Bank's operations. The Bank's assets in foreign currency are mainly related to its international reserve management function. At the same time, the Bank's assets and liabilities in local currency are mainly recognized as a result to operations related to conduct of monetary policy, issue of money in circulation and other functions of the Bank as defined by the Law. For these reasons, the economic concepts of international reserves and monetary policy are additionally grouped under the sub-captions international reserve 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 flow is presented using direct method.

Basis of measurement

These financial statements are prepared on the historical cost basis except that financial instruments measured at fair value through profit or loss and investments measured at fair value through other comprehensive income that are stated at fair value.

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 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.

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 financial instruments are its 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 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 through 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 are 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 financial assets 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 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2019 (in thousands of Georgian Lari)

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 the 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);
- How managers of the business are compensated; e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; 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 derecognizes 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 recognizes its retained interest in the asset and an

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2019 *(in thousands of Georgian Lari)*

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 recognized in other comprehensive income and accumulated in equity is recognized 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 recognized 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 derecognized and the consideration paid and payable is recognized 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2019 *(in thousands of Georgian Lari)*

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 and are free from contractual encumbrances. 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, the Bank acts as an intermediary of the Government of Georgia on transactions related to the membership of Georgia in international financial 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 recognized with the calculation of the amortised cost by applying the effective interest rate method, recognizing 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 K). 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 investor 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 the changes in interest rates.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2019 (in thousands of Georgian Lari)

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 gain/loss from securities and derivatives 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 Georgian and foreign governments', international financial institutions' and agency debt securities. 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 the 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 understood definition of 'investment grade'. Considering the Bank's strict investment guidelines, which propose holding of extremely high 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 have low credit risk. Such approach reflects the general assumption that sovereign debt denominated in local currency is considered to have an extremely low 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);
- 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. 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.

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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 of 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 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 caption for impairment losses on financial instruments 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, or to satisfy the obligation other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of own equity instruments. 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.

Securities lending agreements

Securities lent under automatic securities lending agreements continue to be recognized in the Bank's statement of financial position with other securities that are not involved in these transactions and are valued in accordance with the accounting policies applicable to assets measured at FVOCI.

Securities lending transactions are collateralized with securities that should not be reported as assets and liabilities in the statement of financial position, since the Bank does not have the ability to pledge or sell these securities unless the borrower defaults. Only cash collateral placed on the account of the Bank is recognized in the statement of financial position.

Income originated from these operations is recognized in the statement of profit or loss as interest income.

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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 offices.

The expenses for the production of notes and coins are expensed as incurred.

When notes 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.

Precious metals (included in other assets)

Gold investment coins and gold bars are recognized and subsequently measured according to IAS 2-*Inventories* requirements. Gold investment coins and gold bars initially are measured at cost, including expenses on minting, transportation and other direct costs, subsequently measured at the lower of costs and net realizable value. When investment coins and bars are sold, gain or loss 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.

Investment property

Investment properties (including property under construction for such purposes) are properties held to earn rental income and/or for capital appreciation but not for sale in normal course of business, or for the use in production or supply of goods or services or for administrative purposes. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment property is carried at historical cost net of accumulated depreciation and recognized impairment loss. Depreciation is calculated on a straight line basis over the useful life of the assets.

Property and equipment

Property and equipment are carried at historical cost less accumulated depreciation and any 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 renewals are charged when incurred and included in operating expenses unless they qualify for capitalization.

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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 of five years 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.

Right-of-use assets under lease

From time to time, the Bank may lease particular assets for its administrative purposes. The Bank has applied IFRS 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4.

Policy applicable before 1 January 2019

Operating leases are not recognised in the Bank's statement of financial position. Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease.

Policy applicable from 1 January 2019

The Bank recognises a right-of-use asset and a lease liability at a 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 zero.

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 assets 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.

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Taxation

According to the Organic Law of Georgia “On the National Bank of Georgia”, 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 recognized when the Bank satisfies a performance obligation by transferring a promised good or service (ie 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 net carrying amount of the financial asset or 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 carrying amount of the financial asset or 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)

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 operation, settlement fees and fees paid to the external manager, which are recognized 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.

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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:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
GEL/1 US Dollar (USD)	2.8677	2.6766
GEL/1 Euro (EUR)	3.2095	3.0701
GEL/1 Australian Dollar (AUD)	2.0057	1.8894
GEL/1 Canadian Dollar (CAD)	2.1939	1.9674
GEL/1 Special Drawing Right (SDR)	3.9655	3.7226

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 reporting period.

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 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 asset are solely payments of principal and interest on the principal amount outstanding – Note 3
- Application of low credit risk exemption – Note 3
- Fair valuation of financial instruments - Note 28

Application of new and revised International Financial Reporting Standards (IFRSs)

Transition to IFRS 16 Leases

IFRS 16 introduced a single, on-balance sheet lease accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases. In addition, the nature of expenses related to leases changes because IFRS 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities.

IFRS 16 replaces existing leases guidance, including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

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(in thousands of Georgian Lari)

Impact on financial statements

On transition to IFRS 16, the Bank recognized additional right-of-use assets and additional lease liabilities, derecognized part of Other Assets comprising lease payments before lease commencement date and recognized the difference in retained earnings. The impact on transition is summarised below:

	<u>1-Jan-19</u>
Right-of-use assets recognized	2,922
Other Assets derecognized	(413)
Lease liabilities recognized	2,553
Impact on retained earnings	(44)

Incremental borrowing rate applied to the lease liability at the date of initial application is 7.29%.

For information disclosed under the standard's requirement please refer to Note 14.

Other New and revised standards:

The following are effective from 1 January 2019:

- amendments to IFRS 9 Financial Instruments—Prepayment Features with Negative Compensation;
- amendments to IAS 28 Investment in Associates and Joint Ventures—Long-term interests in Associates and Joint Ventures;
- amendments to IAS 19 Employee Benefits—Plan Amendment, Curtailment or Settlement;
- Annual Improvements to IFRS Standards 2015–2017 Cycle;
- IFRIC 23 Uncertainty over Income Tax Treatment

The amendments mentioned above did not have effect on the Bank's financial statements.

Standards issued but not yet effective

The following pronouncements are effective for periods beginning after 1 January 2019:

- Revised version of the Conceptual Framework for Financial Reporting (Conceptual Framework), issued in March 2018 (together with number of references in IFRS Standards to the revised Conceptual Framework);
- Definition of a Business—amendments to IFRS 3 Business Combinations;
- Definition of Material—amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors;
- Interest Rate Benchmark Reform—amendments to IFRS 9 Financial Instruments, IAS 39 Financial Instruments: Recognition and Measurement and IFRS 7 Financial Instruments: Disclosures.

The amendments mentioned above are not expected to have significant effect on the Bank's financial statements

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4. FEE AND COMMISSION INCOME AND EXPENSE

Fee and commission income and expense comprise:

	Year ended 31-Dec-19	Year ended 31-Dec-18
Fee and commission income:		
Funds transfer	2,479	2,107
Other	22	18
Total fee and commission income	2,501	2,125
Fee and commission expense:		
Fees paid to external manager	(1,167)	(1,032)
Custodian and settlement fees	(1,942)	(649)
Cash operations	(948)	(119)
Total fee and commission expense	(4,057)	(1,800)

The Bank owns and manages a real-time gross settlement system, which is an interbank payment system for national currency settlement operations. Funds transfer represents the billing fees paid by the participants for settlement transactions.

5. OTHER INCOME

Other income comprises:

	Year ended 31-Dec-19	Year ended 31-Dec-18
Gain from the sale of investment property	-	4,243
Other	1,259	1,609
Other income	1,259	5,852

6. OPERATING EXPENSES

Operating expenses comprise:

	Year ended 31-Dec-19	Year ended 31-Dec-18
Salaries and bonuses	23,409	19,793
Paid vacation and sick leave	1,969	1,493
Total personnel expenses	25,378	21,286
Subscription to information services	2,325	1,877
Social benefit expenses	1,840	1,063
Software maintenance fees	1,368	976
Utilities	1,182	991
Personnel training	595	491
Business travel and related expenses	504	475
Security	460	371
Repairs and maintenance	321	663
Fuel expenses	286	279
Legal and consultancy	238	197
Other	1,431	2,427
Total general and administrative expenses	10,550	9,810
Depreciation charge (Note 15)	4,307	3,331
Amortization charge (Note 16)	1,275	557
Total depreciation and amortization	5,582	3,888

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7. CASH AND CASH EQUIVALENTS

Cash and cash equivalents as at 31 December 2019 and 2018 comprise:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Cash on hand in foreign currencies	882,526	76,209
Current accounts	608,795	623,925
Time deposits with credit institutions up to 90 days	<u>222,227</u>	<u>578,341</u>
Total cash and cash equivalents	<u>1,713,548</u>	<u>1,278,475</u>

As at 31 December 2019 and 2018, GEL 779,063 thousand and GEL 1,157,893 thousand, respectively, were placed in current accounts and time deposits up to ninety days with five (four in 2018) internationally recognised banks and central banks from the Organization of Economic Co-operation and Development member countries (OECD).

As at 31 December 2019 and 2018, annual interest rate range of time deposits with financial institutions up to 90 days was 1.25%-2.07% and 2.52%-3.04%, respectively.

8. DUE FROM RESIDENT FINANCIAL INSTITUTIONS

Due from resident financial institutions as at 31 December 2019 and 2018 comprise:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Due from resident financial institutions under monetary policy instruments		
Refinancing loans	2,273,402	1,501,166
Overnight loans	468,126	-
One-month open market instruments	<u>400,606</u>	<u>400,311</u>
Total due from resident financial institutions under monetary policy instruments	<u>3,142,134</u>	<u>1,901,477</u>
Due from resident financial institutions, other		
Loans issued under the Larisation program	-	46,272
Total due from resident financial institutions, other	<u>-</u>	<u>46,272</u>

Refinancing loans are the Bank's Monetary Policy instruments that are issued to Georgian commercial banks for liquidity purposes and have 7 days maturity. Similar to refinancing loans, through one-month open market instruments and overnight loans the Bank supplies short-term liquidity to Georgia's banking system.

Loans issued under the Larisation program represented funds provided by the National Bank of Georgia to resident commercial banks in order to provide support to them for an increased demand for national currency loans from the public caused by the Larisation program approved by the Government of Georgia in January 2017. Loans issued under the Larisation program were fully repaid during 2019.

As at 31 December 2019 and 2018, respectively, the Bank had a concentration of refinancing loans of GEL 2,143,205 thousand due from three resident commercial banks at annual interest rates of 9%-9.2%, and GEL 1,478,148 thousand due from three resident commercial banks at annual interest rates of 7.06%-7.13%, respectively.

As at 31 December 2019 the Bank had a concentration of overnight loans of GEL 440,118 thousand due from one resident commercial bank at annual interest rate of 9.75%. No overnight loans were outstanding as at 31 December 2018.

As at 31 December 2019 and 2018 the concentration of one-month open market operations was GEL 400,606 thousand due from one resident commercial bank at an annual interest rate of 9.22%, and GEL 350,272 thousand due from one resident commercial bank at annual interest rates of 7.09%, respectively.

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As at 31 December 2019 there were no outstanding loans issued under the Larisation program. As at 31 December 2018 the concentration of loans issued under the Larisation program was GEL 42,152 thousand due from two resident commercial banks at an annual interest rate of 7%.

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 Lari; b) debt securities issued by the international financial institutions, denominated in Lari; c) debt securities issued in accordance with the "Law of Georgia on Securities Market" by the resident and non-resident legal entities and securities issued as a private placement till 1 January 2018, denominated in 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 2019 and 2018 types and fair values of financial assets pledged for amounts due from resident financial institutions are:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Government securities (treasury bills/notes)	1,257,885	418,479
Loan portfolio of commercial banks	1,172,794	588,598
Bonds issued by International Financial Institutions and development banks, denominated in GEL:		
European Bank for Reconstruction and Development (EBRD)	516,804	477,100
Black Sea Trade and Development Bank (BSTDB)	254,093	229,572
Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden NV	226,446	259,467
International Finance Corporation (IFC)	33,247	90,274
Asian Development Bank (ADB)	30,442	65,198
	<u>3,491,711</u>	<u>2,128,688</u>
Deposits and loan portfolio of commercial banks pledged for loans issued under the Larisation program	-	57,843
	<u>3,491,711</u>	<u>2,186,531</u>

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 loan impairment.

As described in the table above the Bank receives collateral in the form of financial instruments in respect to the instruments due from resident financial institutions. Similar arrangements, if considered as master netting arrangements, do not meet the criteria for offsetting in the statement of financial position. This is because the Bank obtains a right of set-off of recognised amounts that is enforceable only following an event of default, insolvency or bankruptcy of the counterparties. The Bank and its counterparties do not intend to settle on a net basis or to realise the assets and settle the liabilities simultaneously.

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9. SPECIAL DRAWING RIGHTS HOLDINGS WITH THE INTERNATIONAL MONETARY FUND

Balances with the International Monetary Fund ("IMF") comprise:

	31-Dec-19	31-Dec-18
Assets:		
Special Drawing Rights (SDR) holdings	572,233	537,249
Liabilities:		
IMF current accounts		
Current account # 1	1,968	1,862
Current account # 2	11	10
	1,979	1,872
Borrowings from the IMF		
Extended Fund Facility (EFF)	711,254	446,560
General SDR allocation	442,527	415,621
Special SDR allocation	129,103	121,254
	1,282,884	983,435
Total due to the IMF	1,284,863	985,307
Off-balance sheet balances:		
IMF Quota	787,425	744,831
Security held in custody in respect of IMF quota and as collateral of IMF granted facilities	(1,459,028)	(1,291,603)

SDR Holdings

SDR holdings represent the current account of the Bank with the IMF used for borrowings and settlements with the IMF. SDR holdings are primarily obtained from the general and special 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 2019 and 2018 is 0.740%-1.153% and 0.764%-1.121%, 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 711,254 thousand as at 31 December 2019 (2018: GEL 446,560 thousand). The EFF 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) approved on 12th of April 2017 with access of SDR 210.4 million (100 percent of quota) and during 2019 SDR 60 million was used out of it by the Bank (2018: SDR 60 million). Repayments are projected to start in 2021 and the loan is projected to be fully covered by 2029. 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 1.740% at 31 December 2019 (2018: 1.103%).

All facilities received from the IMF are denominated in SDR.

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. On 10 August 2009, the Fourth Amendment to the IMF Articles of Agreement providing for a special one-time allocation of SDRs entered into force to boost global liquidity. According to the amendment dated 9 September 2009, the special allocation was made to the IMF members, which includes Georgia. Members and prescribed holders may

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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 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 allocation in 2019 and 2018 is 0.740%-1.153% and 0.764%-1.121%, respectively.

IMF Quota

The IMF Quota of Special Drawing Rights (SDR) 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 on the statement of financial position.

Security held in custody in respect of the IMF Quota and as collateral of the IMF granted facilities

Security held in custody comprises GEL 787,425 thousand in respect of the IMF Quota and GEL 671,603 thousand held as collateral for the IMF granted facilities (totally GEL 1,459,028 thousand). 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. Nominal value of the security is changed annually according to the revaluation and at the time of facility receipt from the IMF General Resources Account by the facility amount. 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 RELATED TO DERIVATIVE INSTRUMENTS

	Book value	Notional principal	Book value	Notional principal
	31-Dec-19	31-Dec-19	31-Dec-18	31-Dec-18
Interest rate futures				
Futures margin	5,743		4,187	
FX-Forward				
FX-Forward assets	456		-	
Amount receivable		321,242		-
Amount Payable		(320,950)		-
Net FX-Forward	456	292	-	-
Interest futures assets	-	-	64	219,481
Interest futures liabilities	(974)	(1,629,427)	(2,689)	(2,339,348)
Net interest futures position	(974)	(1,629,427)	(2,625)	(2,119,867)
Options on futures				
Put option assets	77	143,385	-	401,490
Put option liabilities			-	(802,980)
Call option assets	60	200,739	-	267,660
Call option liabilities			(39)	(535,320)
Net options on futures	137	344,124	(39)	(669,150)
Net assets related to derivative instruments	5,362	(1,285,011)	1,523	(2,789,017)

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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 a 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. In 2017, the Bank began to purchase put options for futures contracts in order to hedge against adverse movements of futures contracts.

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 express a view on credit spreads.

Eurodollar futures held in the Bank's portfolio are not held for trading purposes, i.e. the Bank does not aim to make profits from favorable movements in their prices.

11. INVESTMENTS MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS

Investments measured at fair value through profit or loss comprise funds managed by the Bank for International Settlements (BIS). It refers to the investment placed in the Bank for International Settlements Investment Pool (BISIP K), a fund (comprising US treasury and European Agency bonds) 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 the partial or complete withdrawal of their investments at any time. As at 31 December 2019 total amount of funds managed by BIS was GEL 152,395 thousand (2018: GEL 138,094 thousand).

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12. INVESTMENTS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

As at 31 December 2019 investment securities measured at fair value through other comprehensive income comprise:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Government securities		
US Department of the Treasury, Washington	4,648,290	4,152,313
Australian Government, Canberra	539,163	489,679
Canada, Ottawa	172,355	204,765
Republic of Finland, Helsinki	-	26,671
	<u>5,359,808</u>	<u>4,873,428</u>
Supranational securities		
Bank for International Settlements, Basle	86,020	53,312
African Development Bank, Abidjan	74,171	41,018
European Investment Bank, Luxembourg	65,143	76,309
Inter-American Development Bank, Washington D.C.	44,854	81,149
EUROFIMA, Basel	43,142	99,980
International Finance Corporation, Washington D.C.	31,567	29,489
Asian Development Bank, Manila	6,697	6,205
International Bank for Reconstruction & Development, Washington	2,027	-
European Stability Mechanism, Luxembourg	-	5,413
	<u>353,621</u>	<u>392,875</u>
Agency and other securities		
Bank Nederlandse Gemeenten, Den Haag	242,556	169,267
Svensk Exportkredit AB, Stockholm	144,585	176,926
Kommunalbanken AS, Oslo	144,148	192,997
NRW Bank, Duesseldorf	100,635	206,407
Agence Francaise de Developpement, Paris	91,581	17,131
Landeskreditbank Baden-Wuerttemberg Foerderbank	86,736	97,129
Province of Ontario Canada, Toronto	86,683	84,640
Kreditanstalt fuer Wiederaufbau, Frankfurt	84,072	22,563
Erste Abwicklungsanstalt, Dusseldorf	83,952	53,059
Kommuninvest I Sverige AB, Orebro	83,147	158,408
Japan Bank for International Cooperation, Otemachi	79,389	-
Province of Quebec Canada, Quebec	74,562	53,663
Municipality Finance PLC, Helsinki	66,967	50,741
Royal Bank of Canada	64,777	-
SNCF Reseau EPIC	59,937	7,683
Other	403,232	290,539
	<u>1,896,959</u>	<u>1,581,153</u>
Total investments measured at fair value through other comprehensive income in foreign currency	<u>7,610,388</u>	<u>6,847,456</u>
Marketable government securities in national currency		
Georgian Government Bonds	809,443	364,653
Total investments measured at fair value through other comprehensive income in national currency	<u>809,443</u>	<u>364,653</u>

Analysis of interest rates (coupon) and maturities on investment measured at fair value through other comprehensive income comprise:

	<u>31-Dec-19</u>		<u>31-Dec-18</u>	
	<u>Interest rate</u>	<u>Maturity</u>	<u>Interest rate</u>	<u>Maturity</u>
In foreign currency:	<u>p.a.</u>		<u>p.a.</u>	
Government securities	0.5%-5.75%	2020-2022	0.125%-5.75%	2019-2022
Supranational securities	1.375%-3%	2020-2024	2.375%-6.25%	2019-2023
Agency and other securities	1%-4.5%	2020-2024	1%-6.25%	2019-2023
In national currency:				
Government Bonds	7.25%-14.375%	2020-2024	7.3%-14.375%	2019-2022

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

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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 2019 total amount of funds managed under the RAMP was GEL 613,698 thousand (2018: GEL 558,125 thousand).

For none of the financial assets measured at fair value through other comprehensive income has credit risk increased significantly since initial recognition.

13. INVESTMENTS MEASURED AT AMORTISED COST

	31-Dec-19		31-Dec-18	
	Carrying value	Nominal value	Carrying value	Nominal value
Georgian Government securities				
Georgia Government Bonds	241,616	240,846	281,808	280,846
Total investments measured at amortised cost in national currency	241,616	240,846	281,808	280,846

Analysis of interest rate (coupon) and maturity of investments measured at amortised cost:

	31-Dec-19		31-Dec-18	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Georgian Government Bonds	7.100%	2020-2025	7.259%	2019-2025

Georgian Government Bonds in 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 borrowings of the Government of Georgia into debt securities. The Government Bonds are repaid by issuance of new bond instrument in the amount of GEL 40,000 thousand annually, that 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.

14. RIGHT-OF-USE ASSET UNDER LEASE

The Bank leases premise for administrative purposes for part of its personnel and recognizes respective right-of-use asset and lease liability.

Change in the outstanding balance of the related right-of-use asset is provided below:

Balance as at 1 January 2019	2,922
Depreciation charge for the year	(845)
Balance as at 31 December 2019	2,077

Change in outstanding balance of lease liability is provided below:

Balance as at 1 January 2019	2,553
Interest expense for the year	161
Repayments for the year	(837)
Balance as at 31 December 2019	1,877

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15. PROPERTY AND EQUIPMENT

	Land and buildings	Computers, office equipment and fixtures	Vehicles and other	Assets under construction	Total
At initial cost:					
1-Jan-18	51,907	9,447	18,278	-	79,632
Additions	81	2,934	1,297	245	4,557
Disposals	-	(1,578)	(34)	-	(1,612)
31-Dec-18	51,988	10,803	19,541	245	82,577
Additions	668	6,138	991	494	8,291
Disposals	(4)	(403)	(162)	(676)	(1,245)
31-Dec-19	52,652	16,538	20,370	63	89,623
Accumulated depreciation:					
1-Jan-18	(5,212)	(6,118)	(15,011)	-	(26,341)
Depreciation charge	(1,036)	(1,291)	(997)	-	(3,324)
Disposals	-	1,573	33	-	1,606
31-Dec-18	(6,248)	(5,836)	(15,975)	-	(28,059)
Depreciation charge	(1,039)	(2,264)	(1,004)	-	(4,307)
Disposals	-	400	162	-	562
31-Dec-19	(7,287)	(7,700)	(16,817)	-	(31,804)
Net book value:					
As at 31 December 2018	45,740	4,967	3,566	245	54,518
As at 31 December 2019	45,365	8,838	3,553	63	57,819

16. INTANGIBLE ASSETS

	Software	Licenses	Total
At cost:			
1-Jan-18	8,041	1,345	9,386
Additions	1,531	1,971	3,502
Disposals	(45)	-	(45)
31-Dec-18	9,527	3,316	12,843
Additions	753	441	1,194
Disposals	-	-	-
31-Dec-19	10,280	3,757	14,037
Accumulated amortization:			
1-Jan-18	(6,991)	(279)	(7,270)
Charge for the year	(284)	(273)	(557)
Disposals	45	-	45
31-Dec-18	(7,230)	(552)	(7,782)
Charge for the year	(566)	(709)	(1,275)
Disposals	-	-	-
31-Dec-19	(7,796)	(1,261)	(9,057)
Net book value:			
31-Dec-18	2,297	2,764	5,061
31-Dec-19	2,484	2,496	4,980

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17. OTHER ASSETS AND LIABILITIES

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Other assets in foreign currency:		
Prepayments	123	-
Other debtors	130	8
Total other assets in foreign currency	<u><u>253</u></u>	<u><u>8</u></u>
Other assets in national currency:		
Commemorative gold coins and gold bars	3,762	2,961
Loans to employees	166	206
Inventory	579	429
Prepayments	186	2,481
Other debtors	107	2,676
	<u>4,800</u>	<u>8,753</u>
Allowance for impairment of other assets	(161)	(232)
Total other assets in national currency	<u><u>4,639</u></u>	<u><u>8,521</u></u>

As at 31 December 2019 and 2018, other financial assets, net of allowance, amount to GEL 365 thousand and GEL 2,658 thousand, respectively.

Allowance for expected credit losses on other assets represents allowance for expected credit losses on loans to employees and other debtors. The movements in allowance for expected credit losses are presented in Note 29.

Other liabilities comprise:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Other liabilities in foreign currency:		
Amounts due to suppliers	1,247	2,776
Total other liabilities in foreign currency	<u><u>1,247</u></u>	<u><u>2,776</u></u>
Other liabilities in national currency:		
Amount due to suppliers	6,002	5,749
Lease liability	1,877	-
Liability for realized banknotes and coins	1,742	1,669
Pension scheme liabilities	30	36
Other liabilities	281	257
	<u>9,932</u>	<u>7,711</u>
Total other liabilities in national currency	<u><u>9,932</u></u>	<u><u>7,711</u></u>
Total other liabilities	<u><u>11,179</u></u>	<u><u>10,487</u></u>

As at 31 December 2019 and 2018, other financial liabilities amount to GEL 11,179 thousand and GEL 10,485 thousand, respectively.

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18. DUE TO RESIDENT FINANCIAL INSTITUTIONS

Due to resident financial institutions comprise:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Due to resident financial institutions under monetary policy instruments		
Correspondent accounts in national currency	463,053	395,565
Overnight deposits in national currency	8,400	274,161
Total due to resident financial institutions under monetary policy instruments in national currency	471,453	669,726
Obligatory reserves of banks in foreign currency	4,231,029	3,642,799
Total due to resident financial institutions under monetary policy instruments	4,702,482	4,312,525
Due to resident financial institutions, other		
Correspondent accounts in foreign currency	73,437	7,135
Special Deposits pledged as collateral under the Larisation program	-	987
Total due to resident financial institutions, other	73,437	8,122
Total due to resident financial institutions	4,775,919	4,320,647

As at 31 December 2019 and 2018 included in due to resident financial institutions are balances with the three largest local commercial banks of GEL 3,653,198 thousand and GEL 3,209,325 thousand, respectively, that represent 76.49% and 74.28% of the total balance due to resident financial institutions.

Resident commercial banks are required to maintain obligatory reserves with the Bank. As at 31 December 2019 the obligatory reserves are calculated as 5% of their eligible liabilities denominated in national currencies (2018: 5%), and 25% of their eligible liabilities denominated in foreign currencies (2018: 25%). For foreign currency liabilities with a remaining maturity of 1-2 years the reserve requirement amounts to 15% (2018: 10%). As at 31 December 2019 and 2018 the annual interest rate on GEL denominated obligatory reserves is 9% and 7%, respectively. As at 31 December 2019 and 2018 the annual interest rate on USD/EUR denominated obligatory reserves are 1.25%/0.7% and 0.5%/0.6% respectively. Borrowings with a remaining maturity of over one year in national currency and over two years in a foreign currency are exempt from reserve requirements.

19. DUE TO THE MINISTRY OF FINANCE

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Due to the Ministry of Finance		
Current accounts in foreign currency	616,518	414,917
Current account in national currency	838,104	362,445
Total due to the Ministry of Finance of Georgia	1,454,622	777,362

20. DUE TO CUSTOMERS

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Due to customers in national currency		
Due to the Pension Agency	266,644	-
Due to International organizations	960	666
Total due to customers in national currency	267,604	666

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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 2019 and 2018 are as follows:

	<u>2019</u>	<u>2018</u>
Balance as at 1 January	3,565,495	3,308,869
Banknotes issued into circulation	6,156,260	5,134,500
Coins issued into circulation	100,185	82,113
Banknotes withdrawn from circulation	(5,601,513)	(4,889,018)
Coins withdrawn from circulation	(83,415)	(70,968)
Balance as at 31 December	4,137,012	3,565,496

22. DEBT SECURITIES ISSUED

	<u>Interest rate p.a.</u>	<u>Maturity</u>	<u>Nominal value</u>	<u>Carrying value</u>
Certificates of deposit as at 31-Dec-19	7.60%-9.09%	3 Jan-26 March 2020	80,000	79,149
Certificates of deposit as at 31-Dec-18	7.10%-7.15%	3 Jan-28 March 2019	80,000	79,310

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 2019 and 2018.

Capital management

The Bank defines capital as its total equity measured in accordance with IFRS. According to Article 24 of the Law dated 1 December 2009 (N2186) the 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 main activity. Retained earnings are transferred to different reserves based on the requirements of the Law and after approval of the Council. Following approval of the annual report of the Bank by the Council the remaining part 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 gain. 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. With the specific objective of maintaining stability of the financial system, as well as fostering sustainable economic growth in the country, the Council is entitled to take a decision on the distribution of the Reserve Fund. 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.

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In 2019 and 2018 the Bank transferred GEL 187,176 thousand and GEL 122,940 thousand, respectively, to the Reserve Fund.

In accordance with Article 25(c) of the Law, in 2019, following the transfers to the Reserve Fund, the Bank transferred GEL 80,000 thousand to the Ministry of Finance from retained earnings (2018: GEL 70,000 thousand). As at 31 December 2019 the remaining balance of the retained earnings of GEL 100,000 thousand can be transferred to the Ministry of Finance within six months after the reporting date subject to the approval of the Council.

Foreign currency and other revaluation reserves

According to the Article 25(a) of the Law, the Bank transfers the 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.

During 2019 the entire amount of unrealized gain on foreign currencies translation of GEL 339,677 thousand was transferred to the foreign currency revaluation reserve (2018: gain of GEL 54,186 thousand). During 2019 GEL 2,512 thousand was transferred from retained earnings to other revaluation reserve created for this purpose and in 2018 the full amount of other revaluation reserve comprising GEL 1,208 thousand at 31 December 2017 was transferred from other revaluation reserve to retained earnings.

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 2019.

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 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.

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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 2019 and 2018, the Bank has no material credit commitments and contingent liabilities.

Insurance

The insurance industry in Georgia is in a developing state and many forms of insurance protection common in other parts of the world are not yet generally available. The Bank does not have full coverage for its operations interruption or third-party liability in respect of environmental damage arising from accidents on its operations or arising from errors or omissions. Until the Bank obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have adverse effect on operations and financial position.

25. SECURITIES LENDING PROGRAMME

Generally the Bank participates in the automatic securities lending programme, where securities held by the Bank are lent against other securities' collateral. This programme is managed on behalf of the Bank by a specialized agent. The Bank's agent administers the securities lending programme and monitors the eligibility of the securities lending and related collateral against requirements agreed with the Bank. Securities lending transactions provide additional income without any material impact on investment liquidity as the securities lent are readily available to the Bank.

As at 31 December 2019 there were no securities lent under the securities lending program. As at 31 December 2018, the fair value of the securities lent was GEL 1,207,490 thousand.

As at 31 December 2019 and 2018, the fair value of collateral provided in securities lending transactions was as follows:

	<u>31-Dec-19</u>	<u>31-Dec-18</u>
Debt securities of foreign governments	-	1,111,884
Debt securities of foreign financial institutions	-	157,506
Debt securities of foreign non-financial corporations	-	-
	<u>-</u>	<u>1,269,390</u>

26. 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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The Bank had the following transactions outstanding with related parties:

	Year ended 31 December 2019		Year ended 31 December 2018	
	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	(3,847)	(25,378)	(3,361)	(21,286)

Notes	31-Dec-19		31-Dec-18		
	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	809,443	809,443	364,653	364,653
Investments measured at amortised cost in national currency- Government of Georgia	13	241,616	241,616	281,808	281,808
Loans to employees-Key management personnel	17	-	-	13	206
Liabilities:					
Due to the Ministry of Finance	19	1,454,622	1,454,622	777,362	777,362
Statement of profit or loss and other comprehensive income					
Interest income		57,818	399,076	41,749	306,791
- Government of Georgia		57,817		41,748	
- Key management personnel		1		1	

27. LIABILITIES RELATED TO FINANCING ACTIVITIES

Table below shows reconciliation of movements of liabilities to cash flows arising from financing activities:

Note	Cash			Non-Cash				
	1-Jan-2019	Interest Paid	Net Proceeds from financing activities	Accrued Interest	Translation Differences	Other	31-Dec-2019	
Liabilities arising from financing activities:								
Debt securities issued	22	79,310	(3,611)	(990)	4,440	-	-	79,149
Due to the International Monetary Fund	9	985,307	(15,783)	234,773	14,440	66,027	99	1,284,863

Note	Cash			Non-Cash				
	1-Jan-2018	Interest Paid	Net Proceeds from financing activities	Accrued Interest	Translation Differences	Other	31-Dec-2018	
Liabilities arising from financing activities:								
Debt securities issued	22	79,284	(3,919)	(681)	4,626	-	-	79,310
Due to the International Monetary Fund	9	754,816	(9,648)	214,454	10,771	15,334	(420)	985,307

28. 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 recognizing 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.

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The table below analyses financial instruments measured at fair value at 31 December 2019 and 2018, 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-19	31-Dec-18			
Financial Assets						
International reserves						
Derivative financial assets	10	5,362	1,523	Level 1	Quoted bid prices in an active market	N/A
Investments measured at fair value through profit or loss	11	152,395	138,094	Level 1	Quoted bid prices in an active market	N/A
Investments measure at fair value through other comprehensive income	12	7,610,388	6,847,456	Level 1	Quoted bid prices in an active market	N/A
Monetary policy instruments						
Investments measure at fair value through other comprehensive income	12	809,443	364,653	Level 2	Market interest rate for similar instruments	N/A

There were no transfers between Level 1, 2 and 3 during the year ended 31 December 2019 and 2018.

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 year ended 31 December 2019.

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 to their fair value. This assumption is also applied to demand deposits and savings accounts without a maturity.

For variable interest bearing financial assets (Georgian Government bond classified as investments measured at amortized costs) and liabilities (borrowings from the IMF), it is assumed that the carrying amounts approximate to 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 received in an “arm’s length” transaction.

29. 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.

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First line of defense: Departmental management

The first line of defense (NBG 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 to 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 risk	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 also 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:

	Notes	Maximum exposure 31-Dec-19	Maximum exposure 31-Dec-18
Foreign currency assets			
International Reserves			
Assets related to derivative instruments	10	5,362	1,523
Investments measured at fair value through profit or loss	11	152,395	138,094
Total credit risk exposure		157,757	139,617

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

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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.

The International Reserve Portfolio is divided into three major tranches based on their objectives:

- **Working Capital Tranche** - to meet short term cash needs for payments, short-term obligations and possible foreign exchange interventions;
- **Liquidity Tranche** - to provide a buffer in case of a significant increase of liquidity needs due to external shocks or depletion of the working capital tranche;
- **Investment Tranche** - to maximize return over a longer investment horizon while limiting the level of market risk;

Monetary policy portfolio

The monetary policy is executed mainly through financial instruments such as Georgian government securities, loans to commercial banks, deposit of certificates and minimum reserve requirements for commercial banks. 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*

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, Agency including Regional Governments and Supranational Securities) and other liquid, highly secure instrument types.

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.

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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:

	31 December 2019				31 December 2018			
	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
<u>Cash and cash equivalents (excluding cash on hand)</u>								
AAA	535,971	-	-	535,971	548,411	-	-	548,411
AA	252,128	-	-	252,128	112,757	-	-	112,757
AA-	-	-	-	-	538,821	-	-	538,821
A+	-	-	-	-	939	-	-	939
A	42,639	-	-	42,639	1,294	-	-	1,294
A-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	44	-	-	44
BBB	284	-	-	284	-	-	-	-
BBB-	-	-	-	-	0	-	-	0
Gross carrying amount	831,022	-	-	831,022	1,202,266	-	-	1,202,266
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	831,022	-	-	831,022	1,202,266	-	-	1,202,266
<u>Special Drawing Rights holdings with the International Monetary Fund</u>								
AAA	572,233	-	-	572,233	537,249	-	-	537,249
Gross carrying amount	572,233	-	-	572,233	537,249	-	-	537,249
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	572,233	-	-	572,233	537,249	-	-	537,249
<u>Investments measured at fair value through other comprehensive income</u>								
AAA	6,573,776	-	-	6,573,776	5,911,004	-	-	5,911,004
AA+	-	-	-	-	581,212	-	-	581,212
AA	957,223	-	-	957,223	206,203	-	-	206,203
AA-	-	-	-	-	149,037	-	-	149,037
A	79,389	-	-	79,389	-	-	-	-
Net Carrying amount - Fair Value	7,610,388	-	-	7,610,388	6,847,456	-	-	6,847,457
<i>Loss Allowance (recognized in other comprehensive income)</i>	(301)	-	-	(301)	(261)	-	-	(261)

b) Financial instruments under the monetary policy portfolio

Credit risk is associated to 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 to 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 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.

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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 class of financial instruments, gross carrying amount of monetary policy and other financial assets for which impairment requirements are applied, based on the banks internal credit rating system:

	31 December 2019				31 December 2018			
	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
Foreign currency assets								
<u>Other financial assets</u>								
B grade	7	-	-	7	7	-	-	7
Gross carrying amount	7	-	-	7	7	-	-	7
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	7	-	-	7	7	-	-	7
National currency assets								
Monetary policy instruments								
<u>Due from financial institutions</u>								
AAA grade	3,142,134	-	-	3,142,134	1,901,477	-	-	1,901,477
Gross carrying amount	3,142,134	-	-	3,142,134	1,901,477	-	-	1,901,477
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	3,142,134	-	-	3,142,134	1,901,477	-	-	1,901,477
<u>Investments measured at fair value through other comprehensive income</u>								
AAA grade	809,443	-	-	809,443	364,653	-	-	364,653
Carrying Amount - Fair Value	809,443	-	-	809,443	364,653	-	-	364,653
Other national currency assets								
<u>Due from financial institutions</u>								
AAA Grade	-	-	-	-	46,272	-	-	46,272
Gross carrying amount	-	-	-	-	46,272	-	-	46,272
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	-	-	-	-	46,272	-	-	46,272
<u>Investments measured at amortized cost</u>								
AAA Grade	241,616	-	-	241,616	281,808	-	-	281,808
Gross carrying amount	241,616	-	-	241,616	281,808	-	-	281,808
<i>Loss Allowance</i>	-	-	-	-	-	-	-	-
Net carrying amount	241,616	-	-	241,616	281,808	-	-	281,808
<u>Other financial assets</u>								
A Grade	109	-	-	109	2,688	-	-	2,688
B Grade	-	-	164	164	-	-	191	191
Gross Carrying Amount	109	-	164	273	2,688	-	191	2,879
<i>Loss Allowance</i>	-	-	(161)	(161)	(41)	-	(191)	(232)
Net carrying amount	109	-	3	112	2,647	-	-	2,647

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The following table shows reconciliation of opening and closing balances of the loss allowance by class of those financial instruments for which expected credit losses are recognized:

	2019				2018			
	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
Foreign currency assets								
International reserves								
Investments measured at FVOCI								
Balance at 1 January	261	-	-	261	121	-	-	121
New financial assets recognized	199	-	-	199	230	-	-	230
Remeasurement of loss allowance	(80)	-	-	(80)	(44)	-	-	(44)
Foreign exchange and other movements	7	-	-	7	1	-	-	1
Financial assets that have been derecognized	(86)	-	-	(86)	(47)	-	-	(47)
Balance at 31 December	301	-	-	301	261	-	-	261
National currency assets								
Other national currency assets								
Other Assets								
Balance at 1 January	41	-	191	232	-	-	282	282
New financial assets recognised	-	-	-	-	41	-	-	41
Remeasurement of loss allowance	-	-	-	-	-	-	(75)	(75)
Financial assets that have been derecognized	(41)	-	(30)	(71)	-	-	(16)	(16)
Balance at 31 December	-	-	161	161	41	-	191	232
Total balance at 1 January	302	-	191	493	121	-	282	403
Total balance at 31 December	301	-	161	462	302	-	191	493

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.

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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 by issuer for these financial assets and liabilities outside of Georgia:

As at 31 December 2019		Notes	US	EU	Australia	Canada	International	Other	Total
Assets:									
International reserves									
		7	97,089	618,299	105	57,463	-	58,066	831,022
	Cash and cash equivalents (excluding cash on hand)		-	-	-	-	-	-	572,233
	Special Drawing Rights holdings with the IMF	9	-	-	-	-	572,233	-	572,233
	Assets related to derivative instruments	10	-	-	-	-	-	5,362	5,362
	Investments measured at fair value through profit or loss	11	-	-	-	-	152,395	-	152,395
	Investments measured at fair value through other comprehensive income	12	4,648,290	1,448,222	585,569	581,317	267,600	79,390	7,610,388
			4,745,379	2,066,521	585,674	638,780	992,228	142,818	9,171,400
Liabilities:									
	Due to the International Monetary Fund	9	-	-	-	-	1,284,863	-	1,284,863
	Net position		4,745,379	2,066,521	585,674	638,780	(292,635)	142,818	7,886,537
As at 31 December 2018									
Assets:									
International reserves									
		7	41,561	620,757	216	384,395	-	155,337	1,202,266
	Cash and cash equivalents (excluding cash on hand)	9	-	-	-	-	537,249	-	537,249
	Special Drawing Rights holdings with the IMF	10	-	-	-	-	-	1,523	1,523
	Assets related to derivative instruments	11	-	-	-	-	138,094	-	138,094
	Investments measured at fair value through profit or loss	12	4,152,313	1,384,584	501,783	415,903	392,873	-	6,847,456
	Investments measured at fair value through other comprehensive income		4,193,874	2,005,341	501,999	800,298	1,068,216	156,860	8,726,588
Liabilities:									
	Due to the International Monetary Fund	9	-	-	-	-	985,307	-	985,307
	Net position		4,193,874	2,005,341	501,999	800,298	82,909	156,860	7,741,281

* EU-including Norwegian agency securities.

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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, 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 2019 and 2018 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 2019	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	831,022	-	-	-	831,022
Special Drawing Rights holdings with the International Monetary Fund	9	572,233	-	-	-	572,233
Assets related to derivative instruments	10	5,362	-	-	-	5,362
Investments measured at fair value through profit or loss	11	152,395	-	-	-	152,395
Investments measure at fair value through other comprehensive income	12	7,610,388	-	-	-	7,610,388
Other foreign currency assets	17	130	-	123	-	253
Total foreign currency assets		9,171,530	-	123	-	9,171,653
Foreign currency liabilities						
Due to resident financial institutions	18	4,304,466	-	-	-	4,304,466
Due to the Ministry of Finance	19	616,518	-	-	-	616,518
Due to the International Monetary Fund	9	574,579	9,314	312,980	464,469	1,361,342
Other liabilities	17	1,247	-	-	-	1,247
Total foreign currency liabilities		5,496,810	9,314	312,980	464,469	6,283,573
Net Position		3,674,720	(9,314)	(312,857)	(464,469)	2,888,080

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As at 31 December 2018	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	1,202,266	-	-	-	1,202,266
Special Drawing Rights holdings with the International Monetary Fund	9	537,249	-	-	-	537,249
Assets related to derivative instruments	10	1,523	-	-	-	1,523
Investments measured at fair value through profit or loss	11	138,094	-	-	-	138,094
Investments measure at fair value through other comprehensive income	12	6,847,456	-	-	-	6,847,456
Other foreign currency assets						
Other financial assets	17	7	-	-	-	7
Total foreign currency assets		8,726,595	-	-	-	8,726,595
Foreign currency liabilities						
Due to resident financial institutions	18	3,650,921	-	-	-	3,650,921
Due to the Ministry of Finance	19	414,917	-	-	-	414,917
Due to the International Monetary Fund	9	538,907	7,043	166,180	333,356	1,045,486
Other liabilities	17	2,776	-	-	-	2,776
Total foreign currency liabilities		4,607,521	7,043	166,180	333,356	5,114,100
Net Position		4,119,074	(7,043)	(166,180)	(333,356)	3,612,495

b) *Financial instruments under the monetary policy portfolio*

Considering the characteristics of a monetary authority, which include controlling the liquidity of the financial system, the Bank is not subject to the limitations resulting from a mismatch between assets and liabilities in local currency.

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, currency and equity financial instruments, 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 price 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 about currency risk below).

All portfolios except the Working Capital and EUR Investment portfolio (since 15 December 2015) 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.

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Strategic Benchmark Durations and Active Market Risk Limits for the international reserve portfolio are as follows:

Tranches	2019		2018	
	Benchmark Duration (Duration Deviation Limits)	Ex-Ante Tracking Error Limits	Benchmark Duration (Duration Deviation Limits)	Ex-Ante Tracking Error Limits
Liquidity Portfolio in USD*	1 year (+/-3 Months)	10 Basis Point	6 Months (+/-3 Month)	10 Basis Point
Investment Portfolio in USD*	1,5 year (+/-3 Months)	15 Basis Point	1 year (+/-3 Months)	15 Basis Point
Investment Portfolio in EUR**	1 year (+/-3 Months)	15 Basis Point	1 year (+/-3 Months)	15 Basis Point*
Investment Portfolio in AUD	1,5 year (+/-3 Months)	15 Basis Point	1,5 year (+/-3 Months)	15 Basis Point
Investment Portfolio in CAD	1,5 year (+/-3 Months)	15 Basis Point	1,5 year (+/-3 Months)	15 Basis Point

* Due to the annual SAA decision, the Benchmark Durations for the Liquidity Portfolio in USD and Investment Portfolio in USD was increased from February 2019.

** The EUR Investment Portfolio ceased to be managed versus Benchmark since 15 December 2015

Market risk is monitored through the 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 Market Department, includes the 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 investment 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.

The 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 (the figures are provided in thousands of USD):

Currency	2019		2018	
	Increase in Market Yield	Sensitivity of asset value	Increase in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	(28,294)	1%	(21,098)
Investment Tranche in EUR	1%	-	1%	-
Investment Tranche in AUD	1%	(3,694)	1%	(3,630)
Investment Tranche in CAD	1%	(1,385)	1%	(1,275)
Liquidity Tranche in USD	1%	(5,102)	1%	(3,097)
Working Capital Tranche in USD	1%	(81)	1%	(6)

Currency	2019		2018	
	Decrease in Market Yield	Sensitivity of asset value	Decrease in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	29,136	1%	21,667
Investment Tranche in EUR	1%	-	1%	-
Investment Tranche in AUD	1%	3,823	1%	3,748
Investment Tranche in CAD	1%	1,429	1%	1,314
Liquidity Tranche in USD	1%	5,223	1%	3,156
Working Capital Tranche in USD	1%	82	1%	6

* Investment Tranche in USD* does not include interest rate exposure of assets managed by Bank for International Settlement (BISIP_K);

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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.

The interest rate sensitivity of the Bank's financial assets and liabilities

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, of the Bank's statement of profit or loss taking into account the effect of derivatives.

Currency	2019		2018	
	Increase in interest rate	Sensitivity of net interest income	Increase in interest rate	Sensitivity of net interest income
USD	1%	34,562	1%	37,776
SDR	1%	(7,107)	1%	(4,462)
EUR	1%	(191)	1%	(171)
AUD	1%	5,981	1%	5,487
CAD	1%	2,579	1%	2,271
GEL	1%	33,721	1%	18,433
Other	1%	16	1%	21

Currency	2019		2018	
	Decrease in interest rate	Sensitivity of net interest income	Decrease in interest rate	Sensitivity of net interest income
USD	1%	(34,562)	1%	(37,776)
SDR	1%	7,107	1%	4,462
EUR	1%	191	1%	171
AUD	1%	(5,981)	1%	(5,487)
CAD	1%	(2,579)	1%	(2,271)
GEL	1%	(33,721)	1%	(18,433)
Other	1%	(16)	1%	(21)

The sensitivity of equity is calculated by revaluing fixed rate investments measured at fair value through other comprehensive income at 31 December 2019 and 2018 for 1% change in interest rates.

Currency	2019		2018	
	Increase in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	67,812	1%	60,719
EUR	1%	-	1%	-
AUD	1%	5,970	1%	5,485
CAD	1%	2,322	1%	2,270
GEL	1%	8,094	1%	3,647

Currency	2019		2018	
	Decrease in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	(67,812)	1%	(60,719)
EUR	1%	-	1%	-
AUD	1%	(5,970)	1%	(5,485)
CAD	1%	(2,322)	1%	(2,270)
GEL	1%	(8,094)	1%	(3,647)

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 structure of assets, the value of assets of the Bank is exposed to the risk of changes in exchange rates of main foreign currencies. Within the overall exposure

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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, Australian dollars and other currencies up to 10%). Under SAA, a deviation from target currency composition for the Canadian dollar and the Australian dollar +/- 5% is allowed, and a deviation +/-10% is allowed for the U.S. dollar and the Euro's 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% and 10% movement of the currency rate against Georgian Lari, with all other variables held constant, on the statement of comprehensive income. A negative amount in the table reflects a potential net reduction in the statement of comprehensive income, while a positive amount reflects a net potential increase.

As at 31 December 2019	USD	EUR	SDR	AUD	CAD	Other	Total
Foreign currency assets	7,172,396	1,451,831	572,356	598,092	257,863	1,641	10,054,179
Foreign currency liabilities	(3,888,656)	(1,029,881)	(1,282,884)	-	-	(3,694)	(6,205,115)
Net position	3,283,740	421,950	(710,528)	598,092	257,863	(2,053)	3,849,064
As at 31 December 2018	USD	EUR	SDR	AUD	CAD	Other	Total
Foreign currency assets	6,923,121	564,498	537,249	548,725	227,110	2,101	8,802,804
Foreign currency liabilities	(3,299,000)	(768,948)	(983,435)	-	-	(669)	(5,052,052)
Net position	3,624,121	(204,450)	(446,186)	548,725	227,110	1,432	3,750,752

Effect on statement of total comprehensive income

	31-Dec-19							
	USD	EUR	SDR	AUD	CAD	Other	Total	
Increase in currency rate of 1%		32,837	4,219	(7,105)	5,981	2,579	(21)	38,490
Increase in currency rate of 5%		164,187	21,097	(35,526)	29,905	12,893	(103)	192,453
Increase in currency rate of 10%		328,374	42,195	(71,053)	59,809	25,786	(205)	384,906
Decrease in currency rate of 1%		(32,837)	(4,219)	7,105	(5,981)	(2,579)	21	(38,490)
Decrease in currency rate of 5%		(164,187)	(21,097)	35,526	(29,905)	(12,893)	103	(192,453)
Decrease in currency rate of 10%		(328,374)	(42,195)	71,053	(59,809)	(25,786)	205	(384,906)

Effect on statement of total comprehensive income

	31-Dec-18							
	USD	EUR	SDR	AUD	CAD	Other	Total	
Increase in currency rate of 1%		36,241	(2,044)	(4,462)	5,487	2,271	14	37,508
Increase in currency rate of 5%		181,206	(10,223)	(22,309)	27,436	11,356	72	187,538
Increase in currency rate of 10%		362,412	(20,445)	(44,619)	54,873	22,711	143	375,075
Decrease in currency rate of 1%		(36,241)	2,044	4,462	(5,487)	(2,271)	(14)	(37,508)
Decrease in currency rate of 5%		(181,206)	10,223	22,309	(27,436)	(11,356)	(72)	(187,538)
Decrease in currency rate of 10%		(362,412)	20,445	44,619	(54,873)	(22,711)	(143)	(375,075)

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.

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Non-Financial Risks

Non-financial risks to which bank is exposed are: Reputational and Operational risks. Operational Risks itself are originated 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), Project, Third-party and Business continuity risks. Realizing the Non-Financial risks may generate financial loss, damage to reputation or failure in achieving the bank's business objectives. Hence, the bank developed Centralized Risk management system in order to minimize the impact of non-financial risks and ensure solid internal control system.

Centralized risk management (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) method and includes all bank-wide processes where risks could jeopardize the achievement of the objectives. Incident Management system captures and analysis the incidents in order to avoid the repetitive occurrence of incidents. Business Continuity management system continuously improves the resilience of the Bank's critical processes and provides adequate procedures, regular testing and expansion of scenarios. 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 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 the effective governance process 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.

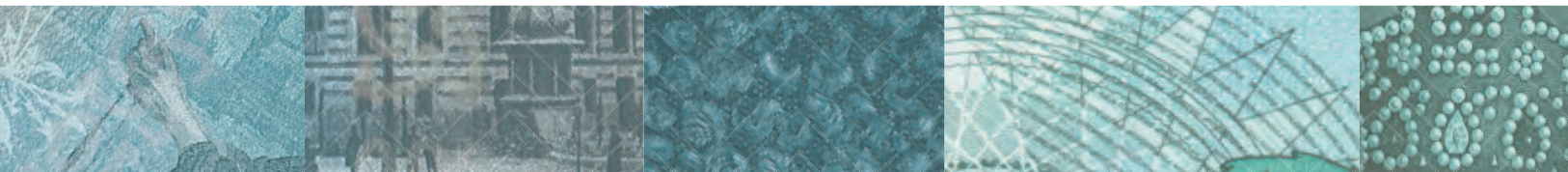
30. EVENTS AFTER THE REPORTING PERIOD

On 11 March, 2020 the World Health Organization declared new coronavirus (COVID 19) pandemic. The first case in Georgia was officially reported on 26 February, 2020. As measures against spreading of the virus, Government of Georgia imposed various restrictions over activities within the country. The restrictions include ban on all cross-border travel, restriction over all travel within the country during specific hours, closing of all public transport, stopping all commercial activity except those which can be done distantly from home as well as except specific business (groceries, pharmacies, commercial banks, gas stations, post offices etc.).

The restrictions imposed by Government of Georgia do not apply to any of the Bank's operations. Reduction of economic activity within the country as well as downturn in global financial markets did not have significant effect on the banks financial position and financial results. Bank continues work in usual manner, however personnel is working remotely from home as much as possible.

As response to the existing crisis, the Bank took particular actions. In order to stabilize sudden increase in foreign exchange rates (GEL/USD peak rate of 3.4842 was recorded on 27 March, 2020), the Bank sold USD 100 million on local market during March. The Bank softened regulatory requirements for commercial banks and coordinated their initiative to provide voluntary grace period of three months to most of commercial banks' retail and small business borrowers within the country. In parallel to slightly amplified drawdowns of deposits for household cash needs, this initiative has further stressed the GEL liquidity in the financial sector. To address it, the Bank started to offer FX swaps to commercial banks and microfinance organizations, up to USD 200 million for each sector.

It is expected that the Bank's international reserves, consisting of high rated securities and short-term bank deposits, will not be materially affected by deterioration of market conditions. Fair value of securities in the Bank's portfolio is expected to increase due to declining interest rates in major reserve currencies. The Georgian authorities are seeking donors' consolidated assistance, which will help maintain adequate level of international reserves. Depending on the results of the negotiation, these funds might form the part of the statement of financial position of the Bank. Domestic lending operations will continue against appropriate collateral. The Bank intends to use FX collateral, where domestic securities are not sufficient. Hence, credit quality of domestic assets is not expected to decline either.



2, Sanapiro St. 0114, Tbilisi, Georgia

Tel: (995 32) 2 406 406

E-Mail: info@nbg.gov.ge

Website: www.nbg.gov.ge