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National Bank of Georgia



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2017

Within the frameworks of “Financial Literacy Year” and “Global Money Week” with the initiative of the National Bank of Georgia and with the support of the Ministry of Education and Science of Georgia, 20 sketches and one coin were selected from the open competition of sketches for children on “The future Governor of the National Bank of Georgia”. Selected sketches were displayed in the National Bank of Georgia’s building. Furthermore, the authors were hosted by the National Bank of Georgia in Kvareli Money Museum. As promised, the sketches are printed in the Annual Report of the National Bank of Georgia.

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ABBREVIATIONS

AICPA - American Institute of Certified Professional Accountants

BCBS - Basel Committee on Banking Supervision

BIS - Bank for International Settlements

BISIP - Bank for International Settlements Investment Pool

BP - British Petroleum

EBRD - European Bank for Reconstruction and Development

ECB - European Central Bank

CET1 - Common Equity Tier 1

CFA - Certified Financial Analyst
Clearstream - international central securities depository (ICSD) based in Luxembourg

CRD IV Package – EU Directive 2013/36/EU and the EU Regulation 575/2013

CRO - Chief Risk Officer

CYFI - Child and Youth Finance International

ERM - Enterprise Risk Management

FATF - Financial Action Task Force

FINREP - Financial Reporting

FSAP - Financial Sector Assessment Program

GRAPE - General Risk Assessment Program

GSCI - Goldman Sachs Commodity Index

G-SIB - Global Systemically Important Banks

HHI - Herfindahl-Hirschman Index

ICAAP - Internal Capital Adequacy Assessment Process

ICMA - International Capital Market Association

IFRS - International Financial Reporting Standards

IOSCO - International Organization of Securities Commissions

ISMS - Information Security Management System

LCR - Liquidity Coverage Ratio

LTV - Loan-to-Value

NSFR - Net Stable Funding Ratio

PTI - Payment to Income Ratio

ROE - Return on Equity

RTGS - Real Time Gross Settlement

SBFIC - Savings Banks Foundation for International Cooperation

SBN - Sustainable Banking Network

SWIFT - Society for Worldwide Interbank Financial Telecommunication

OPEC - Organization of the Petroleum Exporting Countries

TIBR - Tbilisi Interbank Rate

USAID - United States Agency for International Development

WEO - World Economic Outlook

XBRL - Extensible Business Reporting Language

INTRODUCTION

The 2017 Annual Report of the National Bank of Georgia (NBG) has been prepared in accordance with Articles 60 and 61 of the Organic Law on the National Bank of Georgia. It comprises an overview of the NBG's monetary, exchange rate and supervisory policies, and audited financial statements. The report presents the priorities of the country's central bank over the 2017 accounting period. It also includes the NBG's assessments of macroeconomic trends in Georgia and abroad that had a significant impact on Georgia's economic environment and the fulfilment of the NBG's objectives during the year.

The primary goal of the NBG is to maintain price stability. The NBG also aims to ensure the stability and transparency of the financial system to promote sustainable economic growth, without compromising its primary objective.

Price stability implies maintaining inflation around the target level in the medium term. Focusing on the medium term is essential as in the short term, inflation can deviate from the target, however in the medium term, NBG's monetary policy actions will guide inflation to the target level. Through this approach the long-term interest rate is maintained at the lowest level, price stability is ensured, and economic growth is high and stable compared to other alternative approaches.

The conduct of monetary policy based on the above mentioned approach is possible under the inflation targeting framework, which is widely regarded as the most efficient monetary policy approach. Moreover, with the development of monetary policy instruments and their transmission mechanisms, under the inflation targeting framework price stability can be reached at the lowest possible social cost. The National Bank of Georgia thus constantly works to increase the efficiency of

the monetary policy instruments and transmission mechanism.

The NBG adopted its inflation targeting framework in 2009 and since (2009-2017) average annual inflation has stood at 3.5%. In 2017, the inflation target was set at 4%; declining to 3% from 2018, which is the long-term target level.

In Georgia, as in other small open economies, exogenous shocks (independent from monetary policy) are imminent. Exogenous factors can deviate actual inflation from the target level. Monetary policy is a tool to impact aggregate demand and is thus the central bank's response to demand shocks. However, central banks do not usually react to supply side exogenous shocks, since doing so would lead to high economic costs and facilitate economic fluctuations increasing unemployment in the long run. Moreover, research 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 impacts inflation expectations and the inflation forecast, the NBG will adjust its policy response accordingly.

Over 2017, as was expected, the temporary factors pushed inflation above the target. During the last year, the increase in inflation was mainly driven by an increase of prices on tobacco products and fuel, which stemmed from the increase of excise tax on those products, and higher prices on world international markets.

Thus, during the first half of 2017, inflation overshoot the target and reached its maximum level in June. However, as temporary factors petered out inflation revealed a declining trend.

At the end of 2017, inflation equalled 6.7%, of which the share of temporary factors amounted to 3.0 percentage points. As was noted earlier, temporary factors had a significant effect on headline inflation. Namely, their contribution to overall inflation varied from 2.2 to 3.1 percentage points. Excluding the effect of temporary factors, inflation mostly hovered below the target level. Hence, the NBG maintained moderately tightened monetary policy over the year. It is worth noting that, in 2017, as in 2016, aggregate demand exerted a downwards pressure on inflation. However, the temporary increase in inflation supported the formation of inflation expectations. Hence, to curb inflation expectations, in the National Bank of Georgia increased the monetary policy rate twice in March and May by 0.25 percentage to 7.0%, which was sufficient to avoid the second round effects. However, the subsequent depreciation of the nominal effective exchange at the end of 2017 put further pressure on inflation. Moreover, economic activity increased more than anticipated easing the demand side downwards pressure on inflation. Considering these factors, in December, the Monetary Policy Committee decided to tighten monetary policy. As a result, the refinancing rate was increased by 0.25 percentage points to 7.25%. The tightening of monetary policy was reflected in an increase of interest rates on loans denominated in GEL – with rates increasing on both mortgage and consumer loans for households.

As in previous years, an increase of larization (that is, a decrease of dollarization) remained one of the top priorities of the National Bank of Georgia. Larization is part of the NBG's long-term policy goals and reforms promoting it are gradually being implemented. The NBG, in cooperation with the government, developed a 10-point larization plan a significant part of which has been implemented. The result of the larization measures were already evident in 2017. Over the course of the year, the dollarization of loans and deposits decreased by eight and five percentage points respectively.

Dollarization of loans for individuals fell by 12 percentage points (excluding the exchange rate effect). In the same period, the dollarization of loans in microfinancial organizations declined from 53% to 26%.

To support larization, the accessibility of long-term GEL resources is of vital importance. The development of the capital market thus remains a key priority for the National Bank. In 2016, the NBG and the Government of Georgia developed a joint strategy for the development of the capital market. Policies directed towards this strategy were implemented over the course of 2017. The development of capital markets will increase the availability of long-term GEL resources and thereby promote de-dollarization. In 2017, new lari-denominated corporate securities appeared on the market, which signaled the gradual activation of the capital market. It is worth noting that, according to the amendments of 2016, corporate bonds issued in lari can be used as collateral. The inclusion of corporate bonds denominated in lari guarantees the liquidity of those securities and promotes the development of capital markets. In 2017, the European Bank for Reconstruction and Development (EBRD) issued 120 million GEL-denominated Eurobonds. It is noteworthy that this was the first instance of an international financial institution issuing Eurobonds denominated in a local currency in a region.

It is worth noting that the assessment and sharing of FX risks is crucial in Georgia. The individuals who have income in GEL tend to take loans denominated in foreign currency, while most of those borrowers are unable to assess and manage FX risks. In order to hedge those borrowers against FX risks, legislative amendments came into force from 15 January 2017. According to the amendments, loans for individuals in sums below 100,000 GEL must only be issued in the local currency.

It is important to note that in Georgia, tangible and intangible assets tend to be priced in foreign

currency hindering larization process. Although the most of the expenses for the real estate developers are dominated in gel, it is a regular practice to price real estate in foreign currency. This practice has restrained market efficiency during the periods of exchange rate fluctuations. To counter such cases, amendments were made to the Organic Law on the National Bank of Georgia. Namely, from 1 July 2017, legal entities (with some exceptions) are obliged to price their goods and services only in GEL.

As previously discussed, the National Bank of Georgia relies on an inflation targeting framework. Under the framework, effective communication is key to guiding market expectations. Moreover, for the efficiency of monetary policy, it is necessary to ensure the transparency and predictability of monetary policy decisions – this is also the basis for increasing the credibility of the National Bank. The importance of communication increases during macroeconomic fluctuations and exogenous shocks. In 2017, the main challenge for monetary policy communication concerned the deviation of the inflation rate from the target level following the increase in excise tax and the surge of oil prices on international markets. Over the course of the year, the National Bank actively communicated with society and explained the deviation of inflation from the target level. Moreover, the NBG formed key policy messages and gave presentations presented to various interest groups. In public presentations (of Monetary Policy Committee decisions, the monetary policy report, annual report and the presentation of the “Main Directions of Monetary and Exchange Rate Policy” to the Parliament of Georgia) and in meetings with local and international investors, emphasis was placed on fact that the deviation of inflation from its target was a result of one-time, temporary supply-side factors. The aim of such proactive communication was to prevent the formation of inflation expectations and a corresponding increase in inflation due to second round effects. Such policy choices ultimately resulted in a positive outcome and, as was

seen at the beginning of 2018, inflation returned to the target level as the effect of the temporary factors began to fade.

Moreover, the NBG continued to directly communicate monetary policy decisions to target audiences. On a quarterly basis, the Governor of the NBG held press conferences to announce Monetary Policy Committee decisions on the monetary policy rate. During these conferences, the governor explains the MPC’s decision and reviews the current macroeconomic outlook, inflation and the factors that affect the price level. It is worth noting that, as of 2017, such press conferences held by the governor are broadcast live on social media. The press conferences also give participants the opportunity to ask questions about the macroeconomic environment and monetary policy decisions. To further enhance its credibility; from 2017 the NBG started holding quarterly press conferences in different regions of Georgia that are followed by meetings with economic analysts, the media, academics and market participants. Furthermore, after the quarterly monetary policy reports are prepared, the Vice-President of the National Bank presents the report to representatives of the financial sector. During these meetings, analysts are encouraged to ask questions and get additional information about current macroeconomic trends. Video footage from such meetings are subsequently uploaded to the NBG’s website. As efficient communication remains one of the key priorities of the NBG, active communication with society will continue in 2018 and will thereby increase the efficiency of monetary policy.

The year 2017 was characterized by positive trends in external economic sectors. As a result, the current account deficit fell significantly and reached 8.7% of GDP. In absolute terms, the current account deficit narrowed by 531 million USD and amounted to 1.3 billion USD. Furthermore, the trade balance improved by 1.6 percentage point of GDP. The trade in services balance increased by 449 million USD decreasing current account defi-

cit. It is worth noting that revenues from tourism increased by 585 million USD (by 27%).

The trade balance remains the negative component of the current account. The ratio of trade deficit in goods to GDP improved by 1.6 percentage points and reached 25.3% of GDP. Exports of goods from Georgia increased substantially due to the improved economic environment in major trading partner countries in 2017. A high level of exports was observed throughout the year, increasing by 23.9% annually. The growth rate of imports of goods was modest over 2017, standing at 9.9%.

In 2017, similar to previous years, the current account deficit was mainly financed by foreign direct investments (FDI). In 2017, FDI totaled 1.9 billion USD, which was 16.2% higher than the previous year. Construction, real estate and energy sectors were the largest recipients of FDI.

In light of the improved external sector, the Georgian economy exhibited higher-than-expected economic growth in 2017. The growth of the Georgian economy equalled 5% over the year. The services sector made the largest contribution to the growth (3.9 percentage points). The industrial sector made a rather modest contribution (1.3 percentage points), while the agricultural sector posted a negative growth rate (-2.7%) and thereby contributed negatively to overall GDP growth (-0.2 percentage points). An analysis of GDP growth by categories of use shows that, unlike 2016, the main driver of growth was the external sector (net exports), which made a 2.6 percentage points contribution to economic growth in 2017. This high rate was achieved due to an improvement of external demand, which stimulated the increase in exports of goods both nominal and real terms. The nominal growth rate of imports stood lower compared exports, while the growth of prices of imported goods was high. According to NBG estimates, imports declined in real terms in 2017. The

growth rate of investments declined compared to the previous year and contributed 1.1 percentage points to GDP growth in 2017, while consumption made a 1.3 percentage points contribution to economic growth.

The total international reserves of the National Bank of Georgia increased by 282 million USD and amounted to 3.04 billion USD as of 31 December 2017. Various factors affected the volume of the NBG's international reserves during the year: the foreign exchange interventions of the NBG, the Georgian's government expenditures and credits, and grants received from international organizations. During the year, the NBG's net purchase of foreign currency via FX auctions amounted to 129.8 million USD. Moreover, in the framework of a loan conversion program, the NBG provided 78.7 million USD to the market. The loans and grants received by the Georgian Government to finance various programs and projects from international financial organizations and donor countries, as well as funds received from the IMF in the framework of the extended fund facility, amounted to 497 million USD in 2017. On the other hand, the government debt amounted to 272 million USD and currency conversions by the government totalled to 230 million USD.

In September 2017, Moody's¹, the international credit rating agency, increased the country rating of Georgia from Ba3 to Ba2. It is worth noting that this is the first time that an international rating agency has improved the country rating of Georgia since 2011. The rating takes into account not only the economic and financial characteristics of the country, but also its fiscal, institutional, social and political developments. Given this, an increase in the rating is generally an acknowledgement of a country's progress, which positively impacts risk mitigation and cost reductions, as well as enhancing the attractiveness of the country for investments.

1. See: <https://www.moody.com/credit-ratings/Georgia-Government-of-credit-rating-806356952>

Financial stability and the corresponding analysis are among the main tasks of the National Bank of Georgia. Following the recommendations of the International Monetary Fund, a Financial Stability Analysis Department was established in September 2017. The aim of this department is to develop a financial stability policy framework in accordance with the best international practice. One of the key components of this framework is the introduction of cyclical macroprudential policy. As a first step, Georgia-specific financial stability complex indicators have been developed for the purpose of making cyclical macroprudential policy decisions. In addition, a countercyclical capital buffer was introduced as a, which is a main macroprudential policy instrument. Its goal is to limit excessive credit growth that could lead to the buildup of systemic risks.

For the efficient implementation of financial stability policy, it is essential to increase transparency and improve communication. For that purpose, the NBG launched a new framework for the Financial Stability Committee (FSC). The main task of the committee's is to evaluate and analyze financial stability risks and to implement corresponding macroprudential policy. Under the new framework, the FSC meets once a quarter according to a preannounced calendar. After each meeting, a press release is published that describes current trends and challenges in the financial system, and the decisions of the committee. Moreover, twice a year committee meeting will be followed by press conferences. In order to increase public awareness about the financial stability policy, the NBG has also updated the financial stability section of its website, which now provides detailed information on that subject.

An important part of the financial stability analysis framework is macro-financial modeling. With the support of the IMF technical mission, the Financial Stability Analysis Department has actively been working on the development of a macro-financial model. The main part of the model was developed

in 2017. The model aims to analyze financial and macroeconomic stability risks and is used to conduct macroeconomic stress tests, which are the cornerstones of appropriate macroprudential policy design.

It should also be noted that the NBG supports the efficient, transparent and consistent implementation of new financial accounting standards (IFRS 9) by financial institutions. To ensure comparability, the Financial Stability Analysis Department regularly publishes macroeconomic and financial forecasts and risk scenarios. Moreover, for financial stability, it is essential to have a sustainable financial system and the NBG has therefore devoted significant effort towards this issue. In September 2017, the NBG joined the Sustainable Banking Network (SBN). In order to increase awareness about green finance, the green, social and sustainable bond principles of the International Capital Market Association (ICMA) are in the process of being translated. To further increase public awareness on these issues, it is planned to launch Green Finance Guidelines.

Throughout 2017, the NBG continued the development of a regulatory framework to support financial stability and improve the resilience of the banking sector. In 2017, the NBG finalized the formalization process of the Pillar 2 elements of the Basel III capital adequacy framework. Changes were also made to the existing Pillar 1 framework so that minimum requirements for capital adequacy are thus in line with the capital framework set by the Basel Committee for Banking Supervision. Apart from the abovementioned changes and the Common Equity Tier 1 capital ratio, banks are also obliged to comply with an additional, so-called combined buffer that includes conservation, countercyclical and systemic buffers. Systemic buffer rates and compliance timeframes were set for systemically important banks that were defined by the NBG. Considering the abovementioned changes, the capital adequacy ratios were compatible

with the other legal requirements set by Basel III by December 2017.

Since 1 September 2017, the minimum requirements of the Basel III-based Liquidity Coverage Ratio (LCR) became effective. This is a modern and effective approach for the management of short-term (up to 30 days) liquidity and provides a comprehensive tool for identifying, assessing, monitoring and controlling these types of risks.

In 2017, regulations on the disclosure requirements for commercial banks within Pillar 3 were approved and became effective, requiring commercial banks to publish qualitative and quantitative information regarding capital elements, risk weighted assets, remuneration of senior management and other material issues.

As was mentioned in previous publications, in 2014, to mitigate banking group-related risks, the National Bank of Georgia restricted commercial banks from operating in non-financial sectors. During 2015, commercial banks exited these sectors through group restructuring and reorganization. In 2017, the NBG continued to monitor commercial banks and other companies in order to check for conflicts of interest and to assess the effects of group structure risks on banks. In addition, according to amendments to the “Law on Activities of Commercial Banks”, commercial banks are restricted by law from owning, either directly or indirectly, shares of any legal entity that is not a financial institution, an ancillary services agency or is related to a bank’s social projects.

In 2017, credit activities increased compared to 2016. A major part of the growth was due to the retail (22.7%) and SME (21.1%) segments. In parallel with the growth in GDP and an increase in the average income of the workforce, the high growth in the retail segment was largely driven by loosened credit standards and aggressive marketing campaigns used by banks in the face of tough competition emerging in the consumer and mortgage

loans markets. During 2017, banks introduced many new products that had less strict requirements than the previously existing standards. To tackle the issue of loose credit standards, the NBG suspended/prohibited various risky products during 2017. To address the increasing risks caused by loosened credit standards, in August 2017, the “Regulation on Assets Classification and the Creation and Use of Reserves for Losses by Commercial Banks” was amended. Limits on payment-to-income (PTI) and loan-to-value (LTV) ratios for “standard” category loans were determined and, in the case of non-compliance with these ratios, banks have to increase the required capital. In the medium term, one of the main challenges in the retail portfolio is the increased use of models for the assessment of a borrower’s creditworthiness. Models that are considered especially risky are those which neglect a borrower’s income and other fundamental factors.

It is worth noting that the National Bank of Georgia has conducted quantitative research on assessing over-indebtedness risks in Georgia. Although the risk of high credit losses for financial institutions, and therefore the direct threat to financial stability, is low at this stage, an analysis of the data indicates elevated risks of household over-indebtedness in the future and higher financial stability concerns. The analysis shows that small loans are concentrated in the low-income population, who have a low ability to pay. Neglecting healthy credit standards for this segment of borrowers contradicts risk management principles. The main reason for the increase in the loan burden of these borrowers is the increase of non-regulated creditors and a rise of low-cost credit supply channels in recent years. It is noteworthy that the development of financial technologies has also contributed to the extension of such credit. Lenders, as a rule, reflect the increased costs of credit in their prices; however, they often do not consider additional costs and accompanying negative events that are a result of an increase in insolvency and the over-indebted workforce in the economy. The NBG’s

analysis indicates that there is a market failure and a clear need to introduce regulations for establishing responsible lending standards. To reduce such risks, future legal changes are already planned.

It is noteworthy that the main reasons behind the improvement of portfolio quality were the increased total loan portfolio and the improved economic environment in neighboring countries. The share of past due loans of 90 or more days in the gross loan portfolio (excluding interbank loans) amount to 2.81%, which is one of the best results among comparable countries.

The sensitivity of the Georgian banking system to FX risk is still high; however, considering the structure of financial market liabilities, the larization of loans has improved significantly.

Throughout 2017, the volume of liquid assets were characterized by minor fluctuations. In addition, banks maintained a comfortable level of liquid assets, corresponding to the risks of liability structure. The implementation of a liquidity coverage ratio significantly improved liquidity risk prudential supervision. During 2017, the volume of deposits increased by 2.8 billion GEL (by 16.6%, or by 18.3% if adjusted for exchange rate effects) and totaled 19.8 billion GEL by December. In terms of depositors' structure, the growth of deposits by individuals and legal entities amounted to 15.8% and 17.5% respectively. The increase in the growth rate in comparison with previous years was primarily a result of the rise of economic activities. During 2017, the share of non-resident deposits in total non-bank deposits decreased and amounted to 16.4% by December. These deposits were well diversified in terms of country of origin, which is a positive factor in terms of risks. In addition, the share of term deposits remains high, which significantly reduces the risk of deposit out-

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

In 2017, the return on average equity² amounted to 20.7%, which was higher than the same indicator from the previous year (18.2%). The profitability of the banking system was positively affected by the growth of assets, the subsequent increase in effectiveness due to economies of scale and the improved quality of assets. Notably, the position of several big loans improved and thus the possible loss on those loans decreased. As a result, bank profitability saw a one-time increase. At the same time, the profitability of the banking system was negatively affected by the fact that, in 2017, the interest rate spread decreased as a result of the proportionately large decrease in interest rates on loans compared to those on funding.

It is significant that, based on international investors' public evaluations, average investment capital costs are 15% on average, considering local financial risks. In order to maintain the interest of investors towards the Georgian banking sector, banks should offer more return on the cost of equity. As a result, for the healthy development of the banking sector, it is expected that profitability will be maintained above the mentioned rate. For sound profitability is also important to maintain profit as the main source of system capitalization and, if needed, to simplify the increase of capital. Throughout 2017, significant resources were allocated to a discussion of banks' profitability forecasts and the analysis of individual institutions' business models and strategies. Particular attention was paid to the scale effect, the existence of market niche and/or other competitive advantages, and the approximate evaluation of predicted loan losses. Supervisors also focused on risk mitigants, including the development of detailed pricing models for banking products.

2. ROE is net income divided by the shareholder's average yearly equity. ROA is net income divided by average yearly total assets. Net income is calculated by taking revenues and subtracting non-interest expenses, loans and other financial assets' loss reserves, after extraordinary revenues and taxes.

Operational loss events were mostly observed in the retail banking business line. Loss events in the commercial banking business line were also recorded, but to a lesser extent. Moreover, given the increased risk of cyber-attacks, the NBG has increased communication with commercial banks regarding the issue. The NBG initiated and conducted several activities concerning cybersecurity, aimed at increasing the awareness of commercial banks in this direction. It should be mentioned that despite the increasing incorporation and use of various technologies by the financial sector, the general level of awareness about the necessity of information system audits still needs improving.

Activities oriented towards the enhancement of micro tests were carried out in coordination with commercial banks. It is noteworthy that in the BCBS stress testing review document³, which outlines international approaches to the topic, the NBG's stress test framework is referred to as a subject of interest to other institutions going through the same structural changes in financial sector data.

One of the NBG's priorities is to comply with international accounting standards. In January 2018, the National Bank of Georgia finalized the format for forecasted macroeconomic scenarios and shared its forecasted macroeconomic and risk scenarios with commercial banks. The banks can use these in preparing financial statements in accordance with IFRS 9. The scenarios are also publicly available on the website of the National Bank of Georgia.⁴ In accordance with IFRS 9, the measurement of expected credit loss requires significant judgement and the usage of assumptions based on a combination of historical experience and forward-looking information. However, as this approach permits interpretation of the same data and expectations in different ways, it can thus hin-

der a comparison of expected credit losses and the underlying assumptions between entities. To solve the issue of comparability, the National Bank of Georgia finalized, and in 2018 published, guidelines on expected credit losses under IFRS 9. The guidelines were created as a result of a combination of the NBG's experience and international publications. During 2017, the NBG continued working on transitioning supervision from the National GAAP to IFRS financial reporting standards. The project entails implementation of the European unified reporting format (FINREP) for commercial banks' periodic reporting of financial information. This has already been actively used in the adoption of common standards for sharing information. These are currently based on the XBRL standard and will be based on FINREP reporting forms in a pilot phase.

As of 31 December 2017, excluding commercial banks, the financial sector was represented by 75 microfinance organizations, 1,127 currency exchange units, 91 money transfer units and eight credit unions.

In the beginning of 2017, the transfer of JSC "Credo", which previously held the biggest share of the microfinance sector, to the banking sector had a great impact on the common indicators of this sector. Had this one-time effect not occurred, there would have been a stable trend of an increase of assets in this sector. At the end of 2017, total assets totaled 1.5 billion GEL. The growth rate of net loan portfolio (without the one-time effect) in 2017 comprised 14%, with a total volume of 1.04 billion GEL.

On 23 December 2017, amendments were made to the Organic Law of Georgia on the National Bank of Georgia, according to which the National Bank of Georgia became entitled to complete

3. BCBS, 2017, "Supervisory and bank stress testing: range of practices"

4. These can be found at: <https://www.nbg.gov.ge/index.php?m=694&lng=eng>

supervision of the work of non-banking financial organizations. As a result of these changes, the requirements for the registration of microfinance organizations became significantly stricter in terms of the appropriateness criteria and capitalization. Additionally, the NBG has set a registration fee alongside a number of other requirements. In order to fulfil its supervisory rights, the NBG is currently working on drafting regulating normative documents for supervised organizations. These will be finalized in the near future.

By the end of 2017, two stock exchanges, one central securities deposit, eight brokerage companies and securities registrars carried out activities on the Georgian securities market. Two out of the eight brokerage companies were not members of the Stock Exchange.

In 2017, within the framework of the capital market development strategy, as established in cooperation with the government, substantial steps were taken regarding capital market development and the supervisory policy. In 2017, the Tax Code was amended in terms of tax benefits for securities. In relation to the recognition of an organized market, the National Bank developed a temporary regulation founded on internationally recognized standards and the fundamental principles required by EU directives.

In 2017, reforms were intensified concerning the securities trading and settlement system. The National Bank of Georgia and Tbilisi Stock Exchange continued to work on a joint project for the reform of the securities trading and settlement system (which was launched in 2016). This process is supposed to be completed by the end of 2018. The project considers the renewal of the National Bank's securities system and the integration of corporate securities within this framework. Moreover, the National Bank initiated cooperation with the European Bank for Reconstruction and Development (EBRD) over the development of the Georgian derivatives' market. The successful

implementation of this project will give investors a chance to hedge financial instruments against currency and interest rate risks, and will support the execution of improved investment strategies and generally lead to increased interest in the securities market.

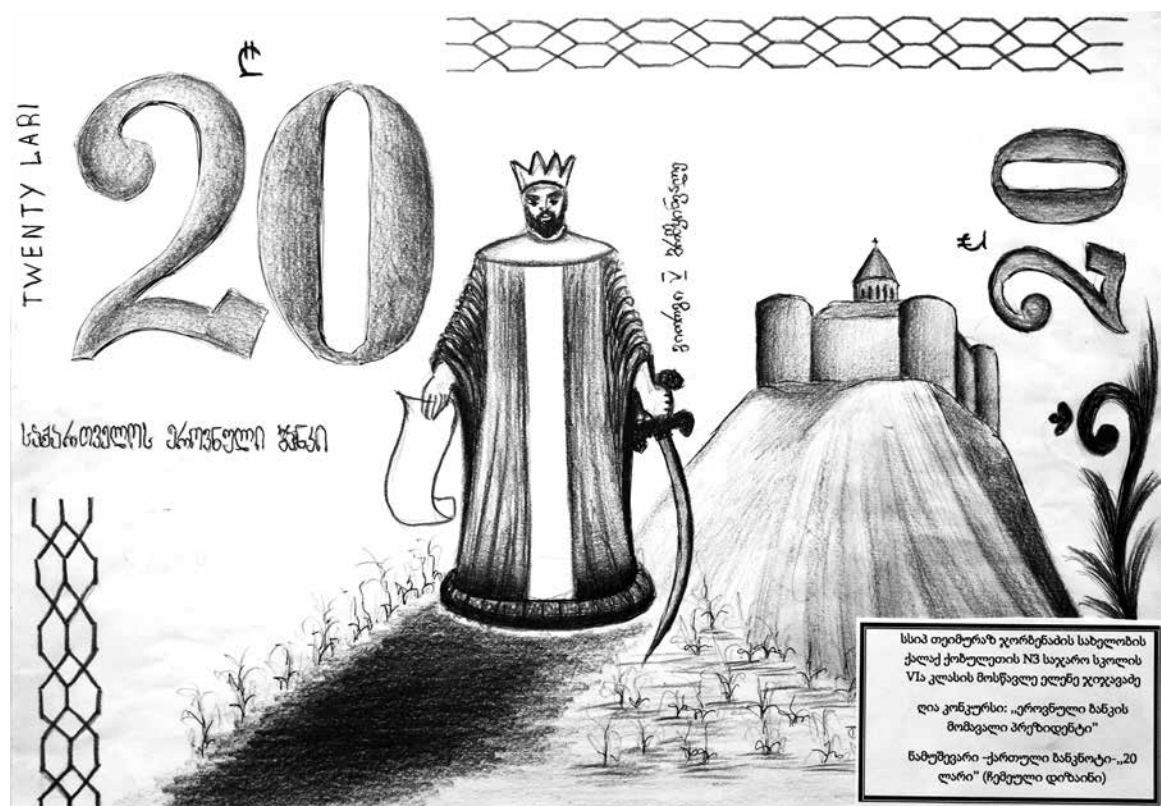
An appropriate supervisory framework that protects the rights of investors and provides high levels of transparency and reliability, is one of the key preconditions for capital market development. The National Bank's strategy aims to improve this framework and to transform it in accordance with international standards. Important steps were taken in that direction in 2017: IOSCO (International Organization of Securities Commissions) self-assessments were launched, the new regulation on prospectuses was improved and legal amendments were initiated.

The protection of consumer rights and supporting financial education in the financial sector and among the population as a whole, are priorities for the National Bank of Georgia. To ensure an appropriate response to the challenges on the financial market, the existing legislative framework needs continuous improvement. Significant changes were thus made in 2017. According to changes in the Civil Code, upper limits for both the effective interest rate and penalties were established. Moreover, in order to protect the rights and interests of financial sector consumers, a rule was enacted on the protection of consumer rights while rendering financial institution services. This regulation is a renewed version of the previous rule that offers many novelties to financial sector consumers. The coverage of the rule has been extended alongside the imposition of further requirements. The new rule is obligatory, not only for commercial banks, but also for microfinance organizations and client legal entities. Financial organizations are obliged to disclose accurate, clear and complete information about financial products, including when making an offer or making changes to the terms of an existing contract.

Furthermore, financial organizations are obliged to develop a code of ethics for loan collection, etc. As a consequence, monitoring activities on these regulations have been intensified.

The year 2017 was also remarkable in terms of financial education, with a separate financial education division being established within the NBG. As part of the framework of the national strategy for financial education, which was developed in 2016, a steering committee was established in early 2017. The committee consists of the Governor of the National Bank of Georgia, representatives from the Ministry of Education and Science of Georgia, the administration of the President of Georgia, private financial sector representatives (commercial banks and microfinance organizations) and the civil sector – including people from universities and non-government organizations. Those representatives are supposed to work on supporting financial education issues and helping to elaborate approaches and recommendations for implementation of the strategy. Moreover, in

order to increase the level of financial education and raise awareness about financial issues, the National Bank initiated an awareness-raising campaign focused on the topics of smart saving, high-risk financial schemes and financial pyramids. Various educational brochures and video clips were distributed concerning these areas. Moreover, in the framework of the SchoolBank pilot project, several public schools and the National Youth and Children's Palace were involved in a range of educational activities. Throughout 2017, the National Bank also continued its cooperation with the Ministry of Education and Science of Georgia to integrate financial education into the national curriculum for the primary stage. Global Money Week and World Savings Day were also both celebrated in Georgia once again. In addition, the Governor of the National Bank declared 2018 to be the "Year of Financial Education" and a number of important financial education projects are planned for implementation in the framework of this initiative. Some activities have already been held and other activities are scheduled for the nearest future.



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1

MACROECONOMIC ENVIRONMENT



1.1 World Economy

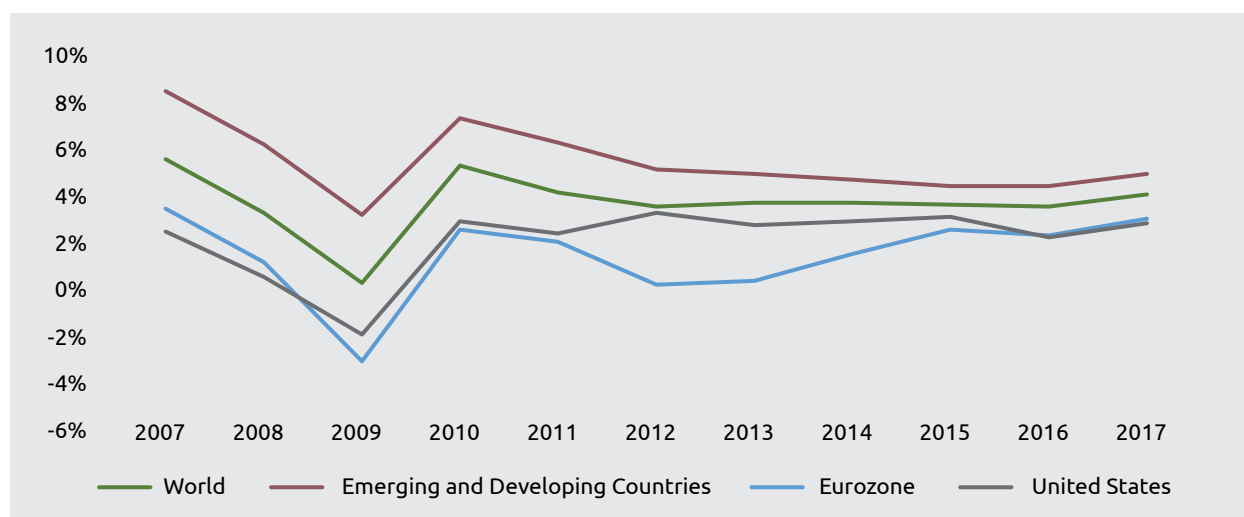
In 2017, signs of the recovery of the global economy were clearly evident. The International Monetary Fund estimates that global economic activity increased by 3.7% over the year⁵, with almost equal contributions coming from developed, emerging and developing countries. International trade has significantly improved due to increased investments and industrial output. Nevertheless, the world economy is still dealing with the severe legacy of the global financial crisis amid the weak growth of investment and productivity. This has been reflected in the high value of debt, the ambiguity of macroeconomic policies and a low increase in wages.⁶

The economic situation in Georgia's trade partner countries has largely improved, albeit with a few exceptions (see Diagram N 1.1). The eurozone economy grew by 2.5% in 2017, which represents

its best performance over the last decade. This growth was supported by the positive global environment, a healthier labour market and benign financial conditions. With the improvement of industrial output, Germany made the most significant contribution to this growth, followed by Spain and France. The growth of the Italian economy was relatively modest, conditioned by the high burden of debt, high taxes and the fragile banking sector impeding efficient economic development. During the year, the inflation rate in the eurozone was below average at 1.5%. This was partially due to the strengthening of the euro (see Figure 1.2).⁷

As a result of growing private investment, the real GDP growth of the US reached 2.3%. Despite the severe climate conditions, positive trends in the energy sector, a weakened US dollar and strong foreign demand all significantly contributed to that growth. At the same time, the unemployment rate decreased further and real salaries went up. CPI inflation was in the range of 2%.

Diagram N 1.1 Global real GDP growth



Source: International Monetary Fund

5. World Economic Outlook Update, January 2018: An Update of Key WEO Projections. International Monetary Fund, Washington, D.C.

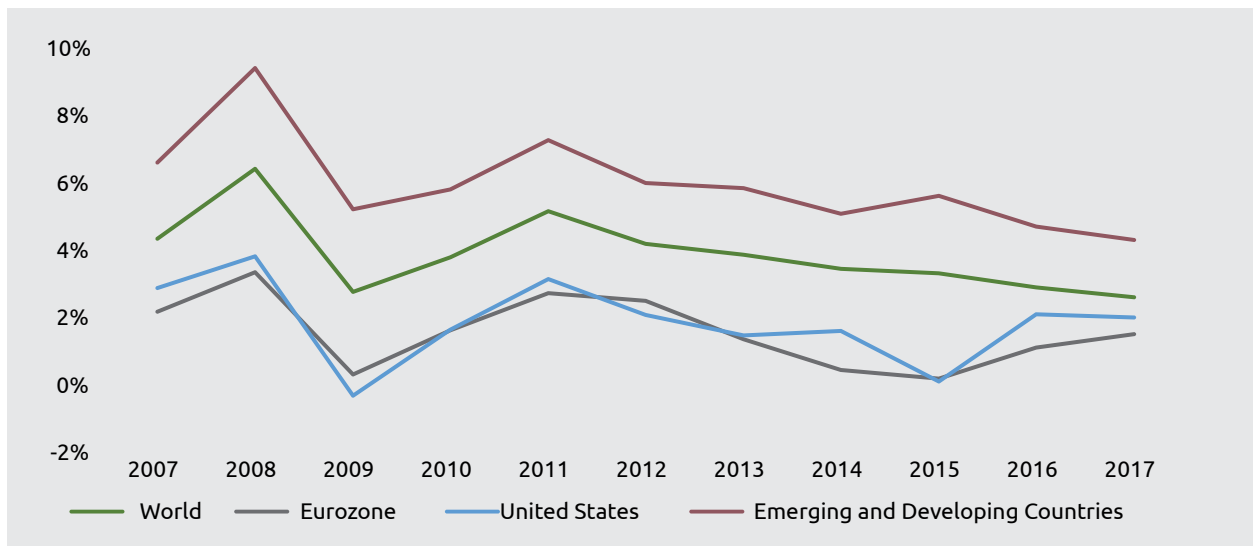
6. World Economic Situation and Prospects. United Nations, New York, 2018.

7. Global Economic Prospects, January 2018: Broad-Based Upturn, but for How Long? Advance edition. Washington, D.C.

The recovery of Ukrainian economic activity was slow in 2017 and was reflected in low growth of about 2.2%. This was mainly caused by the ongoing conflict in the eastern part of the country and the economic blockade of the Donbas industrial region. These issues were accompanied by a weak pace of reforms, which impeded financial support from the IMF, and a poor agricultural harvest. In terms of inflation, following the severe depreciation of the local currency, consumer prices increased at a two-digit pace, reaching 14% year-over-year.

In 2017, based on initial estimates, the Turkish economy grew by a record high 6.7%.⁸ The growth was supported by a number of factors, including fiscal stimulus, an increase in external demand (especially from the eurozone) and the base effect. However, the current account deficit grew and inflation reached 11%. This resulted in worsened investor sentiment and elevated depreciation pressure on the local currency. Given the mixed economic conditions, as shaped by a range of factors, the World Bank expects the Turkish economy to grow by 3.5% in 2018.

Diagram N 1.2 Global CPI inflation



Source: IMF

Over 2017, the Russian economy was gradually, but unevenly, recovering from the imposed sanctions and low oil prices on international markets. The recovery was supported by increasing prices, planned fiscal stimulus and a declining current account deficit. Domestic consumer demand was another driver of growth following improved conditions on the labour market and record low inflation. Based on IMF estimates, real GDP growth in Russia posted 1.8% in 2017.⁹

The recovery of the Russian economy over 2017 positively contributed to the growth of the Armenian economy, mainly through increased remittances and export revenues. The significant growth of Armenia's industrial sector was particularly noteworthy and was driven by increased demand and higher prices on international markets. According to the preliminary estimates of the National Statistics Office of Armenia, real GDP increased by 7.5% in 2017.

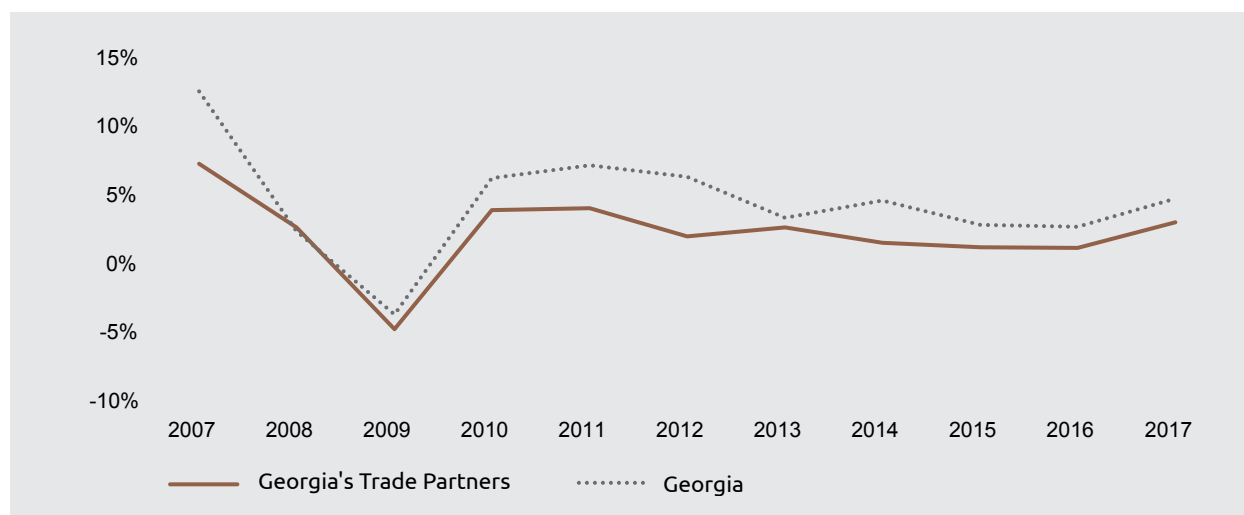
8. Ibid.

9. World Economic Outlook Update, January 2018: An update of key WEO projections. International Monetary Fund, Washington, D.C.

Azerbaijan has been in recession since oil prices started to decline in 2014. Given its weak monetary policy transmission mechanism, the Central Bank of Azerbaijan is unable to constrain inflation expectations. However, positive dynamics were

observed in the non-oil sector and, with the stabilization of prices on commodity markets, the external balance improved. Based on the World Bank's estimates, the economy of Azerbaijan declined by 1.4% in 2017, while inflation stood at 13%.

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



Source: IMF

Over the course of 2017, the central banks of Georgia's main trading partners (where inflationary expectations declined and local currencies depreciated less than expected) eased monetary policy to promote economic recovery. Meanwhile, central banks in developed economies (where output is still lagging behind its potential and consumer prices increased at a slower pace) maintained policy rates at low levels. Notably, in 2018 the European Central Bank (ECB) plans to gradually phase out its quantitative easing program by cutting monthly asset purchases.

1.2 External Sector and Balance of Payments

The year 2017 was characterized by favourable trends in the external sector. In light of this, the current account deficit declined significantly and reached 8.7% of GDP (see Diagram N 1.4).

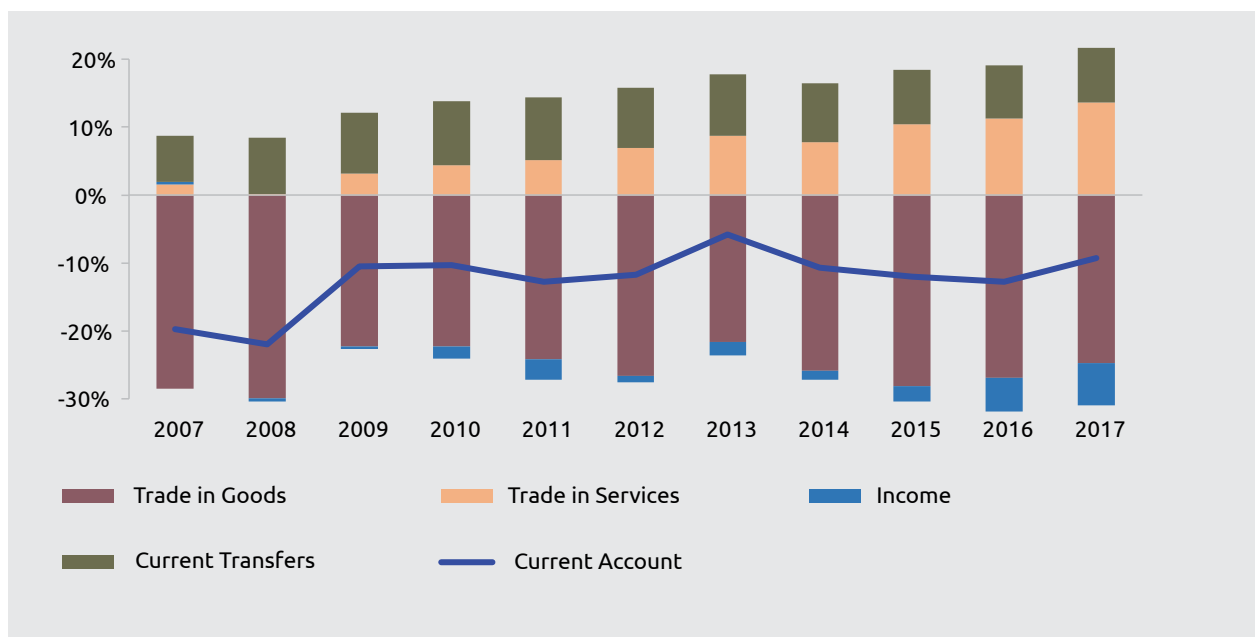
International markets were again expecting the Federal Reserve System to gradually increase its policy rate throughout 2018. Despite the rising policy rate, the USD began to depreciate against other major currencies. The latter trend was mainly due to the change in administration and accompanying political processes. Furthermore, given the global economic recovery and improved geopolitical environment in the region, the depreciation of the national currencies of Georgia's major trading partners slowed down. It is worth mentioning that the appreciation of the euro was a result of both the ECB's decision to move away from the expansionary monetary policy and the recovery of the economic environment in member countries. Moreover, in the second half of 2017, oil price developments signaled a substantial rise in prices and triggered economic activities in major oil exporting countries. As a result, demand on Georgian exports increased in oil exporting countries. Along with higher exports, imports in Geor-

gia grew only moderately improving the trade balance during the year.

The recovery of the Turkish economy had a positive impact on the Georgian economy in terms of increased tourism revenues and foreign direct investment from Turkey. It is worth noting that the increase in exports of services, especially tourism, significantly helped to narrow the current account deficit. At the same time, in light of general improvements in the economic environment, money transfers from Russia and Greece increased, which positively impacted the current account deficit. The increase in external demand, along with recovery in trading partner countries, were supported by the depreciation of the GEL nominal exchange rate (in 2015-2016) – all of which raised Georgian competitiveness even further.

In 2017, the current account deficit reached 8.7% of GDP, which was 4.2 percentage points lower than the same indicator from the previous year. In absolute terms, the current account deficit narrowed by 531 million USD and amounted to 1.3 billion USD. Furthermore, the trade balance improved by 0.7 percentage points or by 28 million USD. Apart from having a positive impact and narrowing down the current account deficit, the trade in services balance increased by 449 million USD. It is worth mentioning that tourism export inflows increased by 585 million USD (by 27%). The narrowing of the current account deficit was suspended by the deterioration of the income account balance (by 96 million USD), which itself was induced by increased profits from direct investments made in Georgia. An increase in reinvested earnings, dividends and distributed profit helped ensure that the current account deficit did not decrease even further.

Diagram N 1.4 Ratio of current account components to GDP



Source: National Bank of Georgia

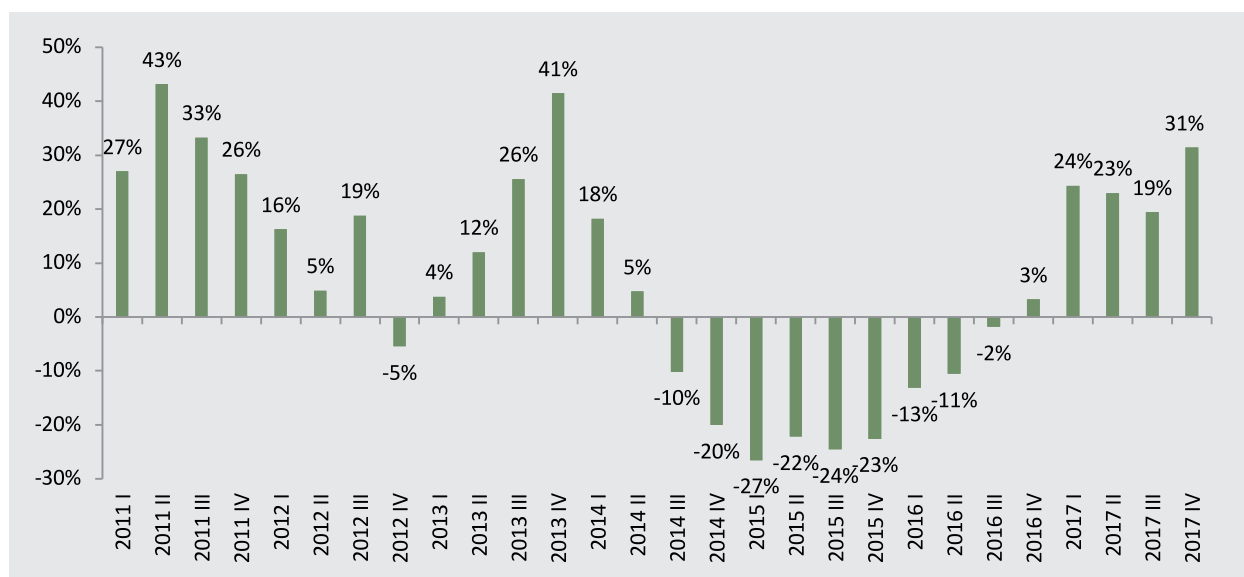
The trade balance remains the most negative component of the current account. The ratio of trade deficit in goods to GDP improved by 1.6 percentage points and reached 25.3% of GDP. As

was noted above, exports of goods from Georgia increased substantially due to the improved economic environment in major trading partner countries. A high level of exports was observed

throughout the year and saw an overall annual increase of 23.9% (see Diagram N 1.5). On the other hand, imports of goods increased unevenly and moderately. In the first quarter of 2017, imports

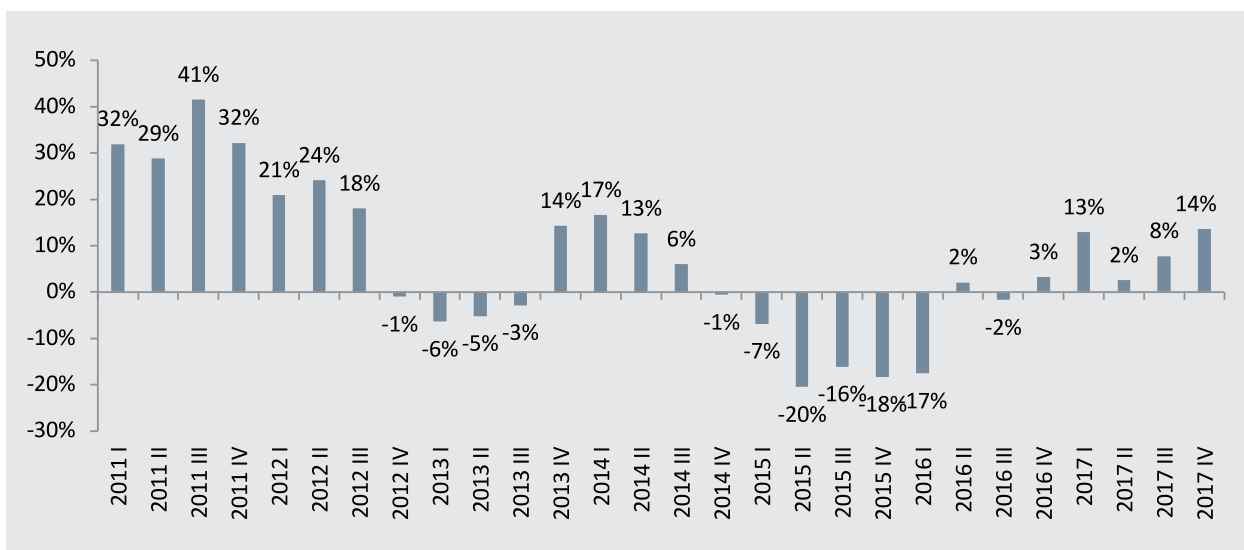
increased at a high rate. They thereafter slowed down before again showing high growth from the fourth quarter. Overall, imports of goods increased by 9.9% in 2017.

Diagram N 1.5 Annual growth rates of exports of goods (2010-2017)¹⁰



Source: National Bank of Georgia

Diagram N 1.6 Annual growth rates of imports of goods (2010-2017)¹¹



Source: National Bank of Georgia

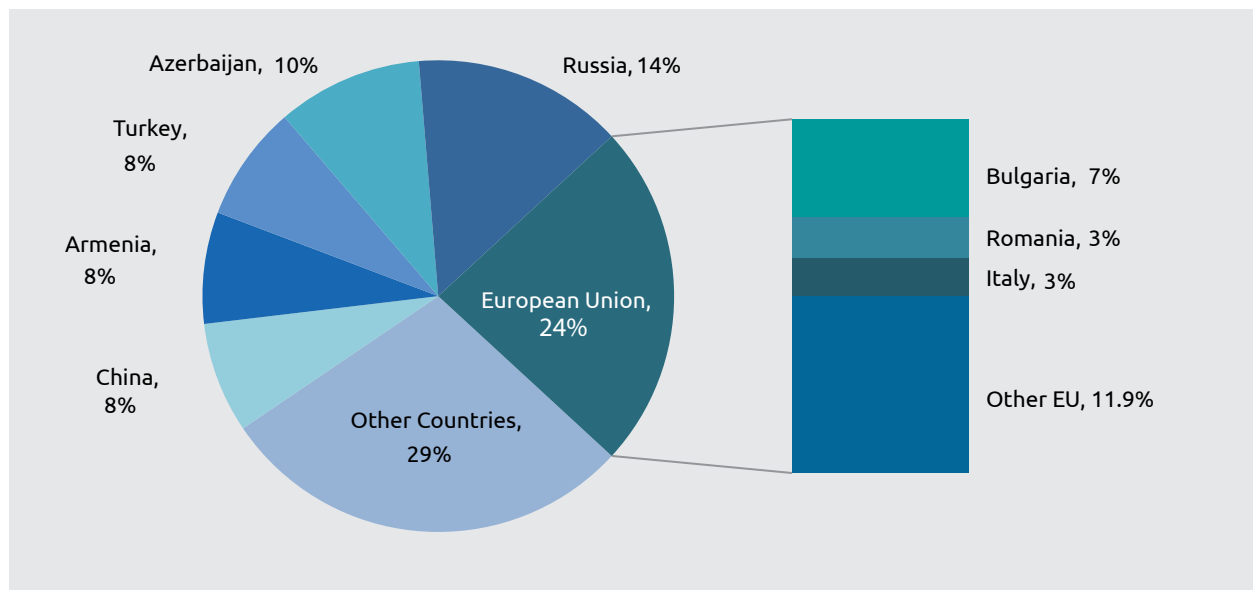
10. Exports of goods in BOP. The external trade data by GeoStat and the data on exports/imports by the BOP are different concepts that rely on different methodological frameworks. Foreign trade statistics are based on the principle of crossing a border, whereas the main principle of trade of goods in 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.

11. Exports of goods in BOP. The external trade data 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.

In light of the increase in exports, it is interesting to look at the destination countries for exports. Exports to EU and CIS countries increased by 13.0% and 60.0% respectively. The increase to EU countries was mainly driven by an increase of exports to Romania (104.3%) and Spain (43.7%); however, exports declined to Germany (-46.9%) and Greece (-66.5%). Moreover, a high growth of exports was observed to regional countries: Russia (91.3%),

Azerbaijan (78.4%) and Armenia (38.4%). After the decline over 2014-2015, exports to Ukraine increased once more in 2017 (by 69.9%). Exports to China and Turkey also increased, rising by 23.4% and 24.7% respectively. From other countries, a greater amount of exports were directed to the USA (78.9%) and Iran (63.8%). On the other hand, exports declined to Canada (94.2%).

Diagram N 1.7 Export structure by country in 2017



Source: National Bank of Georgia

In 2017, in terms of exports, the EU was the largest trade partner for Georgia, where 23.7% of total exports were directed. Apart from the EU, exports increased to neighboring countries: Russia (by 14.5%), Azerbaijan (by 10.0%), Turkey (by 7.9%) and Armenia (7.7%) (see Diagram N 1.7). With a 7.2% share of total exports, for the second time running China was a top export destination country. A total of 82% of exports to China consisted of copper ores and concentrates. As in previous years, the latter were related to re-exports.

The structure of exports has changed substantially over the last few years. More specifically, natural and mineral waters and medicaments became the leading export commodities, while exports of cop-

per and ferrous waste and scrap gradually declined and maintained a modest share in the overall export volume. It is worth mentioning that copper ores and concentrates significantly contributed to the overall increase of exports in 2017, comprising 15.4% of overall exports in goods and showing 34.4% annual growth. Despite a drastic reduction in recent years, with a 9% share in overall exports, motor cars again became a top export commodity. In contrast, due to a poor harvest, the export of hazelnuts and other nuts fell significantly.

In 2017, the growth of imports was mostly a result of the increased imports of intermediate goods (10.3%). The imports of consumer goods increased by 9.0%. In addition, imports of investment goods

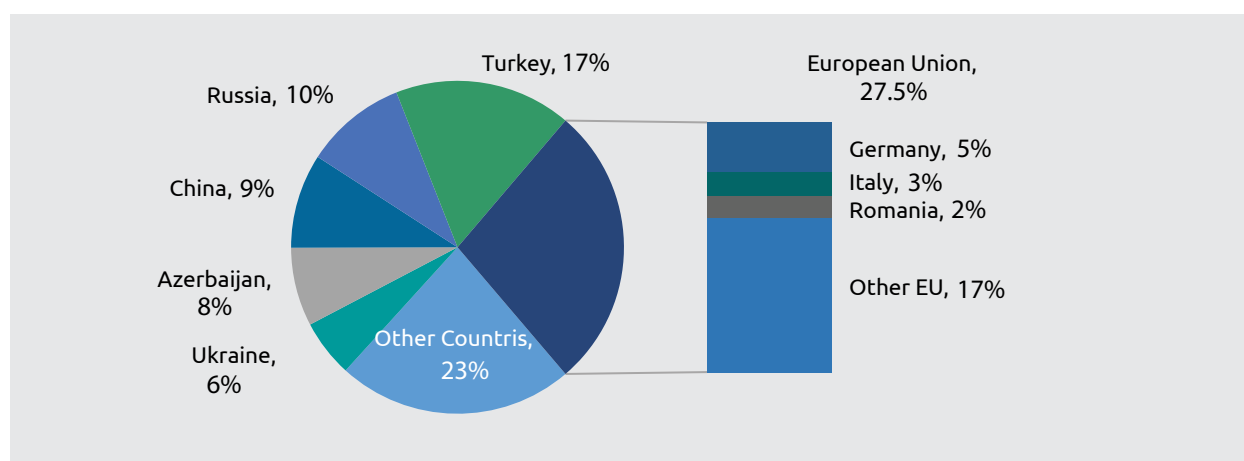
increased by 8.0%; however, this contributed little to the overall growth of total imports. The largest import commodity was again petroleum and petroleum oils, which had a 9% share in total imports. Motorcars and tobacco products did not change substantially (declining by 0.2%). Moreover, it is worth mentioning that imports of copper ores and concentrates showed the growth of 36% in 2017 (a 4.2% share in total imports), which was mainly driven by the recovery of copper re-exports in recent years.

A regional analysis of imports shows that imports from the EU declined modestly (by -0.8%), while imports from other countries increased substantially (by 13.9%). The annual growth of registered imports was 9.4%. Imports from Russia, Arme-

nia and Azerbaijan were characterized by high growth rates. The decrease in imports from the EU was mainly due to a decline of imports from the Netherlands (-28.7%) and Italy (-17.4%). However, external trade intensified with Central Asia with imports from Turkmenistan and Kazakhstan increasing by 56.8% and 32.9% respectively.

Similar to 2016, aside from the EU, the largest source of import was Turkey. In 2017, imports from Turkey grew by 1.5%, whereas imports from Russia increased by 16.8% and comprised 10% of total imports. Imports from China increased substantially (33.7%), which was mainly a result of the import of airlines by an airline company (see Diagram N 1.8).

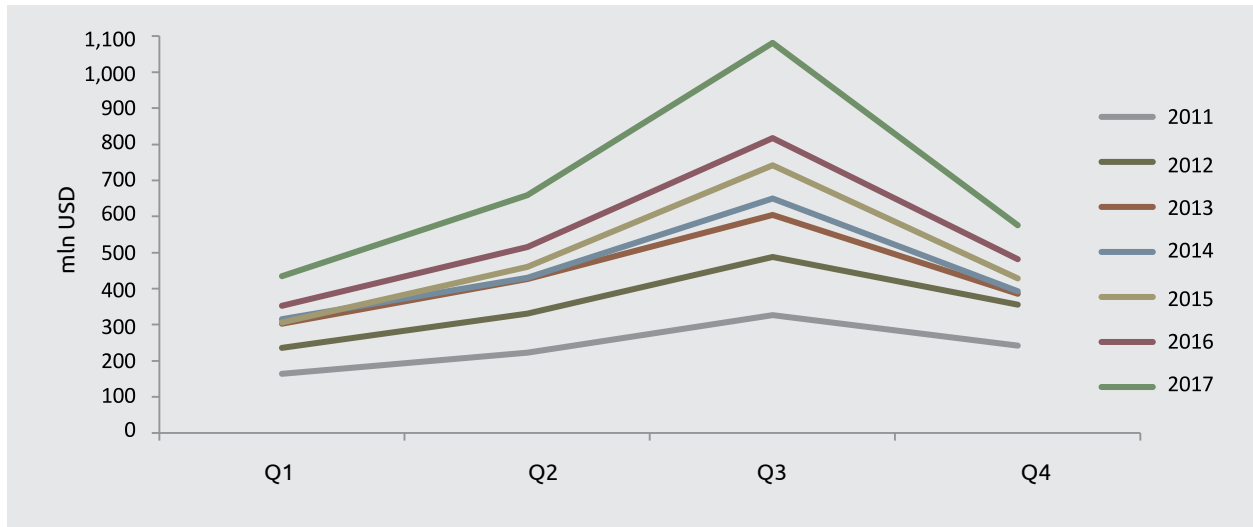
Diagram N 1.8 Import structure by country in 2017



Source: National Statistics Office of Georgia

As has already been mentioned, improvements in the balance of trade in services positively impacted the narrowing of the current account deficit. The ratio of trade surplus in services to GDP amounted to 13.6%, which was 2.4 percentage points higher than the same indicator from the previous year. In absolute terms, the balance of trade in services improved by 449 million USD compared to the previous year and reached 2.1 bil-

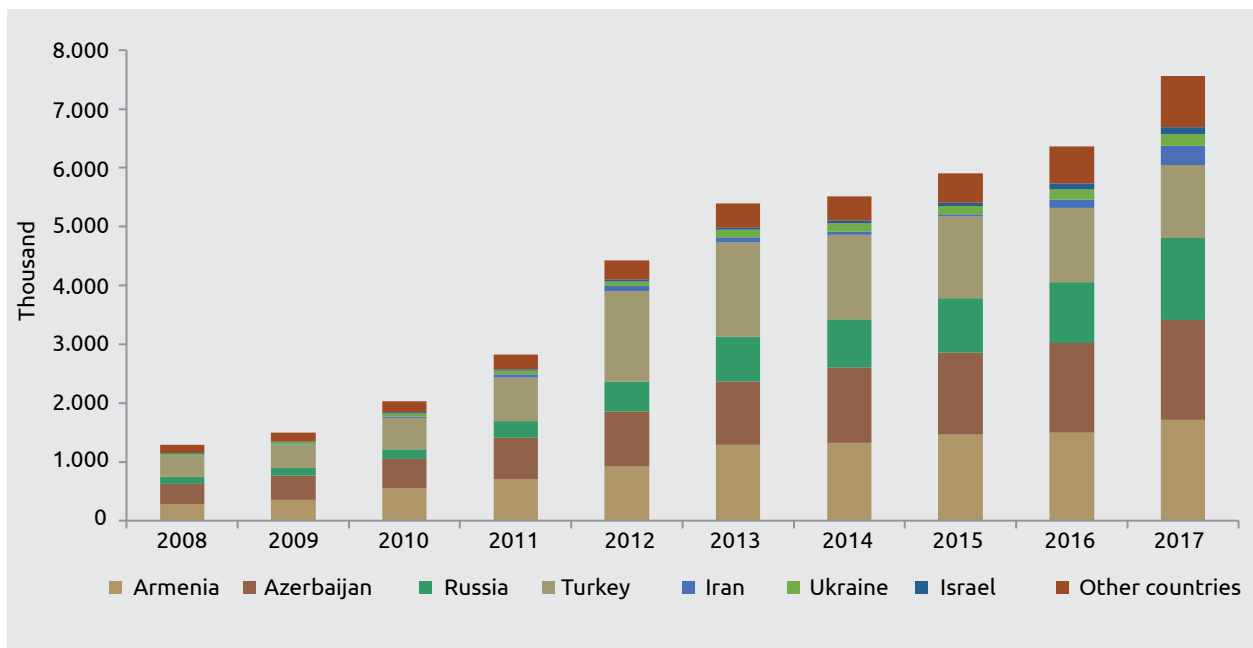
lion USD. The rise in the surplus was mainly due to increased inflows from the tourism sector. Revenues from tourism, which comprise the majority of exports in services, amounted to 2.75 billion USD – an increase of 27.0% compared to the previous year (see Diagram N 1.9). During recent years, revenues from tourism have become a major source of financing the goods trade deficit.

Diagram N 1.9 Revenues from exports of tourism (2011-2017)

Source: National Bank of Georgia

The number of international visitors to Georgia increased by 18.8% in 2017, which was mainly due to increased inflows of tourists from Armenia (14.8%), Azerbaijan (11.2%) and Russia (34.1%). Moreover, increased numbers of visitors arrived from Israel, Germany, Kazakhstan, the USA, Belarus and Poland. In percentage terms, the highest growth (118.3%) was seen in visitors from Iran. In addition, international visitors from Saudi Arabia

and India grew substantially, by 165% and 64% respectively. It is worth mentioning that along with the rise in the number of visitors, increased numbers of tourists were arriving from new countries. Although the number of visitors from Turkey decreased modestly (by -0.8%), visitors from that country still accounted for a sizeable number of the overall number of international visitors.

Diagram N 1.10 Number of international visitors by country (2008-2017)

Source: National Bank of Georgia

It is worth mentioning that during the last few years, the high growth of tourism revenues have approached the revenues received from exports of goods (see Diagram N 1.11). Considering the

size of the trade deficit, such high revenues from tourism contribute to a narrowing of the current account deficit.

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

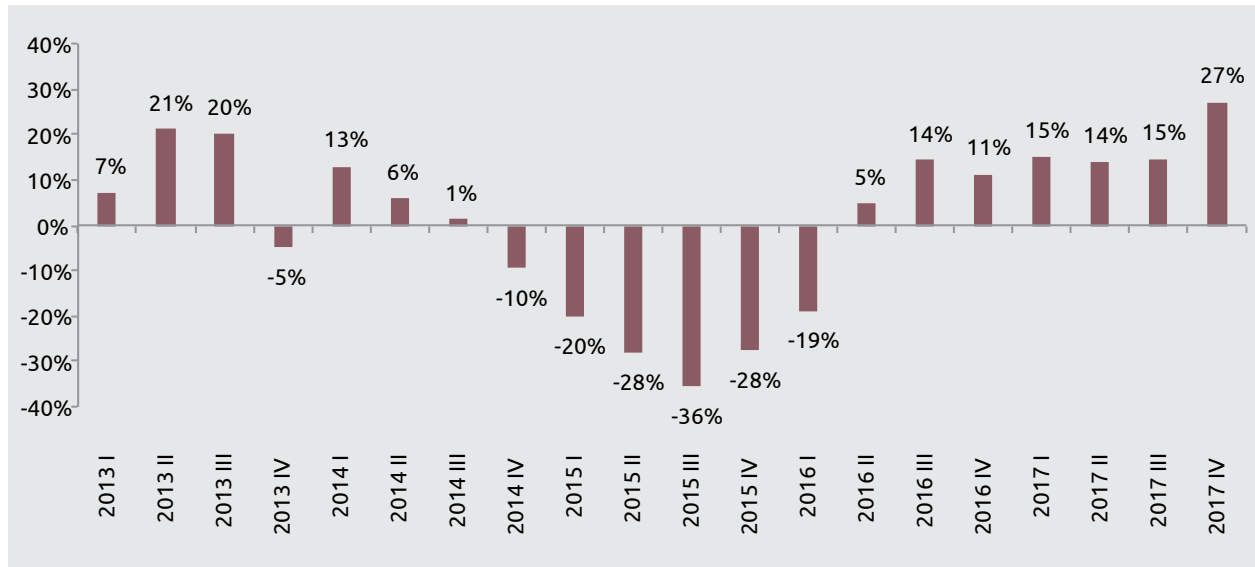


Source: National Bank of Georgia

In overall terms, the income account deficit widened by 96 million USD compared to the previous year and amounted to 816 million USD. The deterioration of the income balance was again mainly driven by the deficit in investment income, which widened sharply by 161 million USD and totaled 1.4 billion USD. This was induced by a worsening of the income account in terms of direct and other investments – specifically the increase of distributed dividends and reinvested earnings. Although

the latter has a negative impact on the current account balance, it is shown in foreign direct investments and thus did not induce capital outflows.

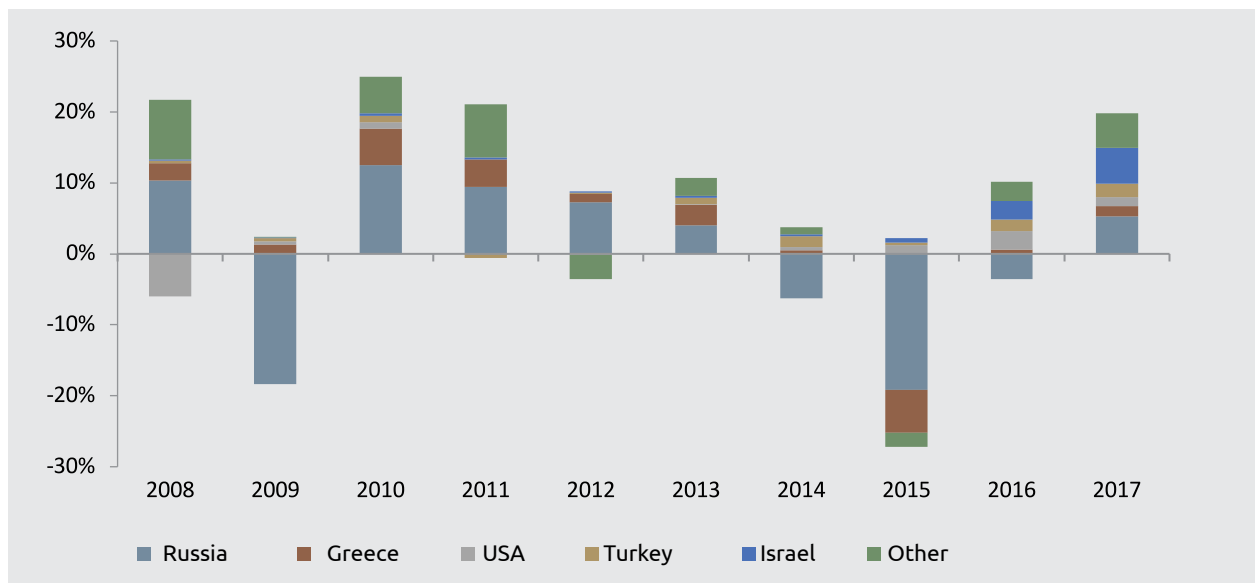
Moreover, the balance of compensation of employees increased by 65 million USD and amounted to 623 million USD. This increase was mainly due to the revival of economic activities in neighboring countries.

Diagram N 1.12 Annual growth rate of money remittances (2013-2017)

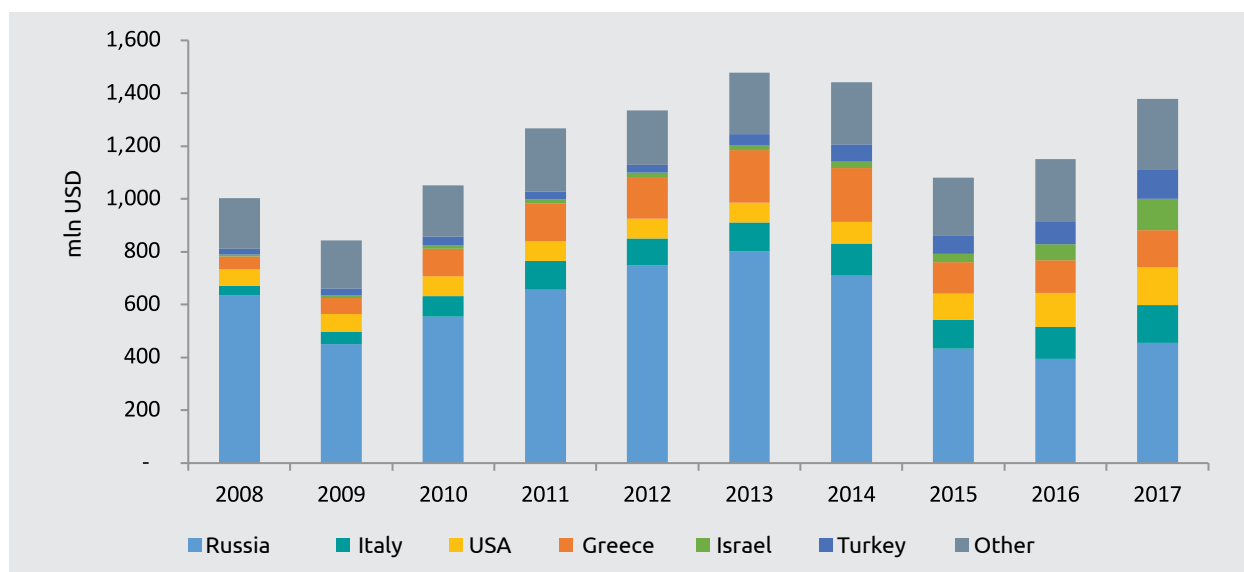
Source: National Bank of Georgia

In 2017, there was an increase (13.3%) in net current transfers, while a decline was seen in transfers directed to the general government (-11.2%). Personal remittances, which usually account for a substantial part of current transfers, grew by 18%

annually. Personal remittances were increasing throughout the year, mostly from Israel, Russia, Greece and Turkey. In contrast, personal remittances from the USA decreased modestly (see Diagram N 1.13).

Diagram N 1.13 Contributions to the change in remittances

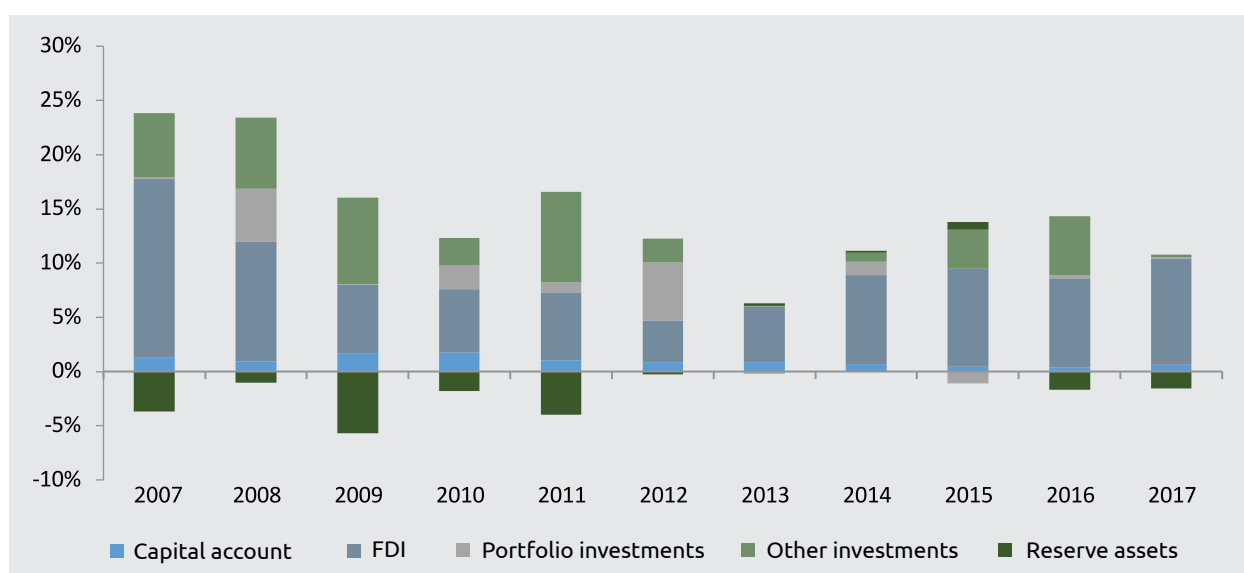
Source: National Bank of Georgia

Diagram N 1.14 Money transfers by country

Source: National Bank of Georgia

In 2017, similar to previous years, the current account deficit was mainly financed by foreign direct investments (see Diagram N 1.15). These reached 1.9 billion USD, which was 16.2% more than the previous year. The majority of investments were

directed at the construction, real estate and energy sectors. Compared to the previous year, foreign direct investments increased to those sectors by 114%, 68% and 61% respectively.

Diagram N 1.15 Financing of current account deficit (in % of GDP)

Source: National Bank of Georgia

It is worth mentioning that one of the important changes in the balance of portfolio investments in 2017 was related to the fact that the Bank of

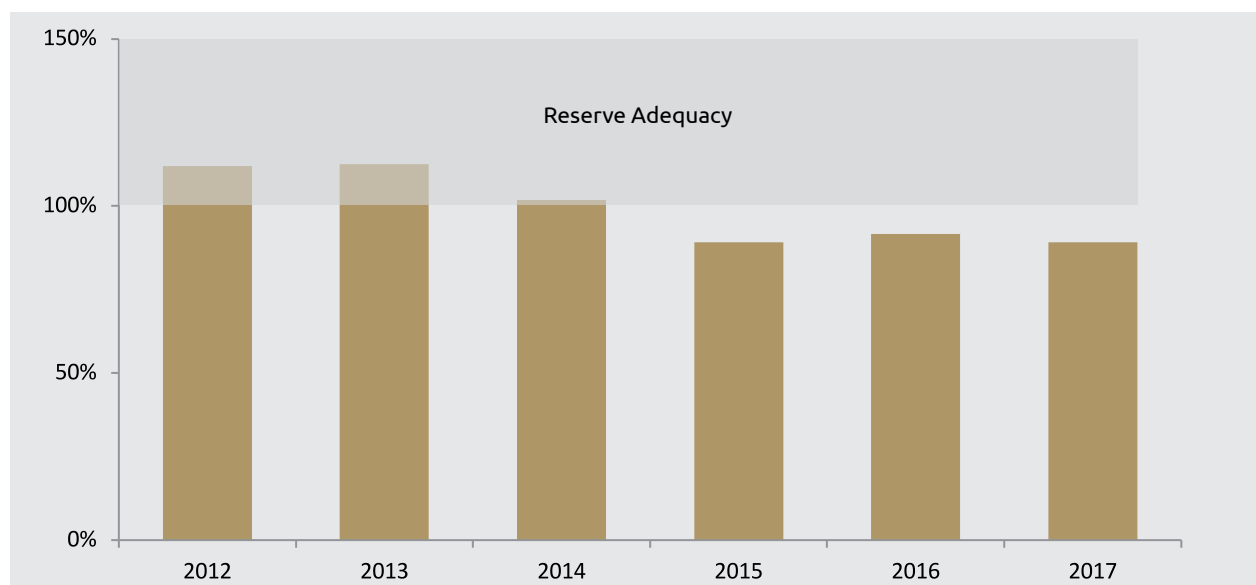
Georgia issued 500 million worth of GEL denominated bonds, which were mainly purchased by non-residents.

Moreover, unlike in the previous year, changes in other investments in financing the current account deficit did not make a contribution. In 2017, net inflows and outflows from other investments were mostly of an equal size. In terms of inflows, the majority of liabilities were related to loans obtained for the general government, as well as for the private (non-bank) sector. Long-term loans directed to the government amounted to 518 million USD, out of which 105 million USD was obtained from the World Bank for supporting the state budget. Apart from this, in the framework of the extended fund facility, Georgia received 84 million USD from the IMF. In terms of changes to assets, trade credits to the private sector declined. Moreover, apart from significant improvements in the current account balance and positive expectations about the economic environment, in line with the reduction of interest rates on foreign currency loans, excessive liquidity in terms of currency and deposits was concentrated in the private and banking sectors.

In 2017, international reserve assets increased by 282.6 million USD and amounted to 3.04 billion USD. Along with foreign currency inflows directed to the government, the increase of reserves was supported by the intervention of the NBG in the foreign exchange market, with net purchases from NBG amounting to 129.8 million USD. It is worth mentioning that the increase in international reserve assets was also backed by the loans and grants received from international financial institutions.

According to the reserve adequacy assessment (the IMF's ARA methodology¹²), by the end of 2017 the international reserves of Georgia are around 90%. According to this methodology, in order to reduce negative impacts from external and liquidity shocks, it is advisable for IMF member countries to have reserves of 100-150%. It is expected that Georgia's international reserves will be closer to the optimal level in coming years. By the end of 2017, the ratio of total reserves to months of imports (forecasted imports of 2018) was around 3.6.

Diagram N 1.16 Assessment of international reserves adequacy, according to IMF methodology (ARA metrics)



Source: National Bank of Georgia

12. The IMF ARA methodology implies the assessment of foreign official reserves against external vulnerability and the negative impacts of shocks. The methodology takes into account the foreign liabilities, broad money and export indicators of a country.

Table 1.1 Balance of payments (2013-2017) (million USD)¹³

Name	2013	2014	2015	2016	2017
Current Account	-958	-1,790	-1,696	-1,847	-1,316
Goods	-3,493	-4,271	-3,935	-3,869	-3,841
Export	4,246	4,073	3,099	2,931	3,630
Import	-7,738	-8,344	-7,034	-6,800	-7,471
Services	1,400	1,286	1,458	1,620	2,069
Credit	2,961	3,019	3,133	3,351	4,026
o/w: Tourism Revenues	1,720	1,787	1,936	2,166	2,751
Debit	-1,561	-1,733	-1,675	-1,731	-1,957
Income (Net)	-317	-230	-338	-720	-816
o/w: Interest Payments	-386	-409	-505	-519	-506
o/w: Income on Equity	-441	-327	-189	-658	-886
o/w: Compensation of Employees	631	663	488	558	623
Current Transfers (Net)	1,451	1,425	1,120	1,122	1,271
o/w: General Government	77	48	109	137	121
o/w: Other Private Transfers and Remittances, credit	1,385	1,397	1,028	999	1,160
Capital Account	134	108	60	58	109
Financial Account	895	1,794	1,760	1,768	1,273
Direct Investment (Net)	901	1,411	1,343	1,196	1,594
o/w: Direct Investments in Georgia	1,021	1,818	1,653	1,603	1,862
Portfolio Investments (Net)	-37	209	-154	41	-71
Financial Derivatives (Net)	-2	8	-2	-4	0
Other Investments (Net)	-12	132	473	779	-8
o/w: General Government	-100	221	276	276	431
o/w: Others (w/o general government)	88	-90	197	503	-439
Reserve Assets	45	33	99	-245	-242
Net errors and Omissions	-71	-112	-125	22	-65
Important Coefficients					
Reserve Assets in Months of Imports of the Next Year (Months)	3.4	3.7	3.6	3.5	3.6
Export/Import (G&S)	-77%	-70%	-72%	-74%	-81.2%
CAB/GDP	-5.9%	-10.8%	-12.1%	-12.8%	-8.7%
FDI/GDP	6.3%	11.0%	11.8%	11.1%	12.3%
Revenues from Tourism/GDP	10.7%	10.8%	13.8%	15.1%	18.1%
Personal Transfers/GDP	10.8%	10.8%	9.2%	9.1%	10.2%

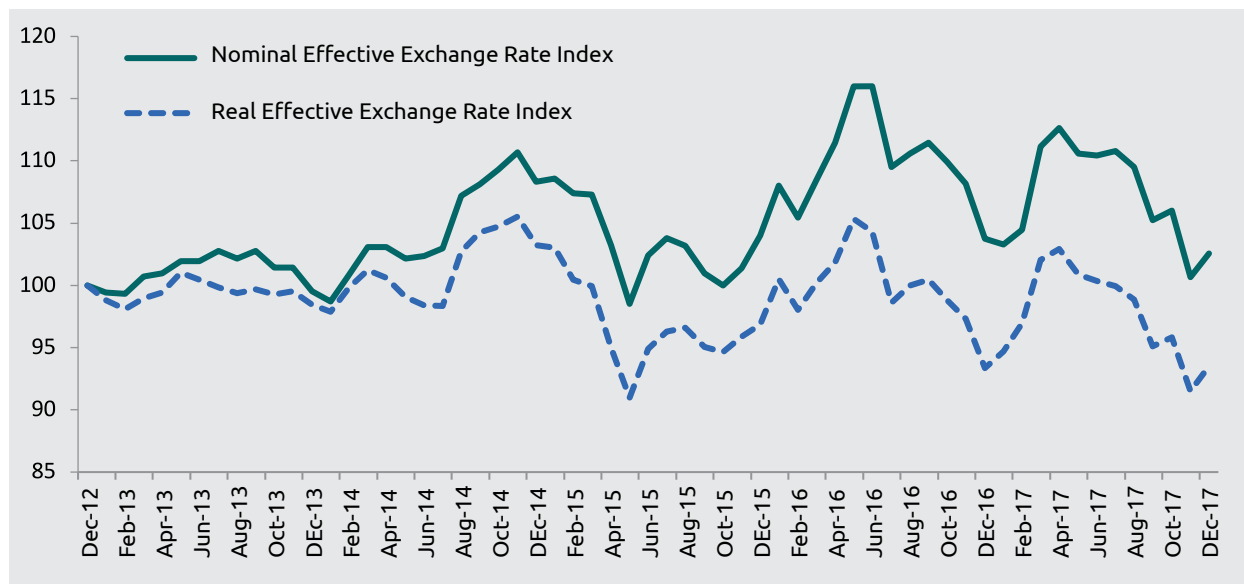
Source: National Bank of Georgia

13. According to the fifth edition of the Balance of Payments Manual, issued in 1993.

The real effective exchange rate (REER) is a crucial indicator for assessing a country's external competitiveness (see Diagram N 1.17). In 2017, the

REER appreciated by only 0.1%, while the nominal effective exchange rate depreciated by 1.1%.

Diagram N 1.17 Indices of the Real Effective Exchange Rate and Nominal Effective Exchange Rate (Dec. 2012=100)



Source: National Bank of Georgia

Table 1.2 Annual changes in effective exchange rates in 2017

	Change in nominal effective exchange rate, %	Change in real effective exchange rate, %	Share in real effective exchange rate
Effective Exchange Rate	-1.1	0.1	0.1
Eurozone	-9.6	-4.8	-1.2
Turkey	11.8	6.6	1.4
Ukraine	6.3	-0.2	0.0
Armenia	1.7	5.7	0.3
The United States	1.5	6.1	0.2
Russia	-4.3	-0.3	0.0
Azerbaijan	-3.9	-4.9	-0.4
Others	-4.6	-0.1	-0.1

1.3 Economic Growth

The Georgian economy exhibited higher-than-expected economic growth in 2017, which stemmed from an improved external sector. On the contrary, domestic demand remained weak. The economic situation improved in the majority of Georgia's trading partners in 2017 and this had a positive effect on external demand.

The growth of the Georgian economy reached 5% in 2017. The services sector made the largest contribution to that growth (3.9 percentage points). The industrial sectors made a rather modest contribution (1.3 percentage points), whilst the agricultural sector posted a negative growth rate (-2.7%) and contributed negatively to GDP growth (-0.2 percentage points).

The construction sector was one of the main driving forces of GDP growth (see Table N 1.3), which posted 11.2% growth (only the hotels and restaurant sector saw higher growth) and contributed 0.8 percentage points to the total. The high growth of the construction sector was due to both government-financed infrastructure projects and private constructions, among which the new BP pipeline project should be noted. The manufacturing sector had a significant share in GDP growth (0.4 percentage points). Increased external demand in the second half of the year had a positive impact on Georgian exports. As most export goods belong to the manufacturing sector, increased exports resulted in the positive growth of manufacturing. The mining and quarry sector posted a high growth rate in 2017, despite slowed growth in the first quarter. The growth of latter sector was based on increased exports of gold. The electricity, gas and water supply sector exhibited slight growth in 2017. The only industrial sector to post a negative growth rate in 2017 was the processing of products by households sector.

The trade sector, the biggest sector in the economy, posted 2.4% real growth in 2016. This growth rate accelerated to 6.6% in 2017 and made the highest overall contribution (1 percentage point) to GDP growth. The growth of the trade sector is very important for the Georgian economy, because this sector employs the largest group of people in the private sector. Unlike in 2016, the transport sector exhibited a positive growth rate in 2017 and contributed 0.5 percentage points to economic growth. After declining in 2016, the communication sector also posted a positive growth rate in 2017; however, its contribution was rather insignificant. The real estate and financial intermediation sectors both maintained stable growth rates and made significant contributions to GDP growth (0.4 and 0.3 percentage points respectively). As in the previous year, increased tourism revenues had a positive impact on the hotels and restaurants sector, which posted the highest growth rate (of 11.2%) among all sectors of GDP in 2017.

Table 1.3 Real GDP growth and sector breakdown

	2015		2016		2017	
	Growth	Contribution	Growth	Contribution	Growth	Contribution
Agriculture, hunting and forestry; fishing	1.5%	0.1%	0.3%	0.0%	-2.7%	-0.2%
Mining and quarrying	22.4%	0.2%	9.5%	0.1%	7.1%	0.1%
Manufacturing	-2.4%	-0.2%	4.3%	0.4%	5.0%	0.4%
Electricity, gas and water supply	3.3%	0.1%	4.9%	0.1%	1.8%	0.0%
Processing of products by households	3.5%	0.1%	4.0%	0.1%	-2.7%	-0.1%
Construction	13.5%	0.8%	10.0%	0.7%	11.2%	0.8%
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	0.2%	0.0%	2.4%	0.4%	6.6%	1.0%
Hotels and restaurants	7.5%	0.2%	12.9%	0.3%	11.2%	0.3%
Transport	3.4%	0.2%	-3.0%	-0.2%	7.2%	0.5%
Communication	4.3%	0.1%	-3.1%	-0.1%	4.2%	0.1%
Financial intermediation	10.2%	0.3%	9.7%	0.3%	9.2%	0.3%
Real estate, renting and business activities	6.0%	0.3%	5.9%	0.3%	6.3%	0.4%

(continue)

	2015		2016		2017	
	Growth	Contribution	Growth	Contribution	Growth	Contribution
Public administration	2.1%	0.2%	1.7%	0.1%	3.4%	0.3%
Education	2.1%	0.1%	3.1%	0.1%	3.6%	0.2%
Health and social work	2.4%	0.1%	1.4%	0.1%	2.8%	0.1%
Other community, social and personal service activities	8.5%	0.3%	1.0%	0.0%	3.1%	0.1%
Private households employing domestic staff and undifferentiated production activities of households for own use	-4.8%	0.0%	-1.0%	0.0%	-1.8%	0.0%
Financial Intermediation Services Indirectly Measured	8.7%	-0.1%	9.1%	-0.1%	6.7%	-0.1%
(+) Taxes on products	1.0%	0.1%	1.3%	0.2%	5.6%	0.8%
(-) Subsidies on products	4.5%	0.0%	3.4%	0.0%	4.8%	0.0%
GDP at market prices		2.9%		2.8%		5.0%

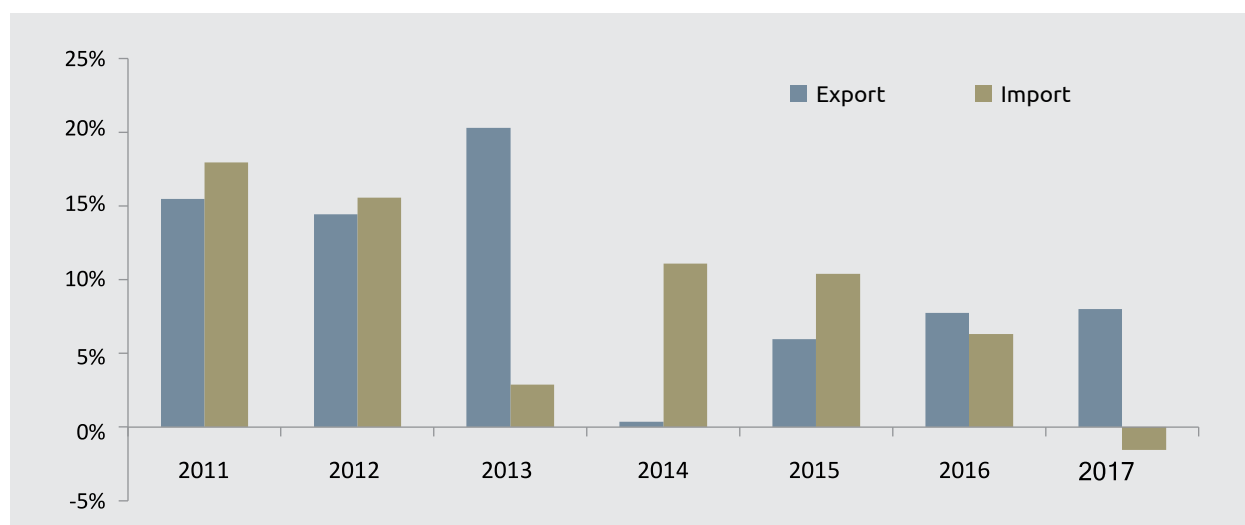
Demand

Economic activity increased in 2017 compared to the previous year. Unlike 2016, the main driving force of growth in 2017 was the external sector (net exports). Meanwhile, internal demand remained weak for the whole year.

The contribution of net exports to economic growth amounted to 2.6 percentage points. This contribution was achieved as a result of the improvement of external demand, which stimulated

the growth of goods exports in both nominal and real terms. The number of visitors to Georgia exhibited a stable growth rate throughout the year and so too did tourism revenues, which supported the growth of services exports. The nominal growth rate of imports was lower than that of exports, while the growth of prices of imported goods was high. According to the NBG's estimates, imports declined in real terms in 2017 (see Diagram N 1.18).

Diagram N 1.18 Real growth rates of goods and services imports and exports

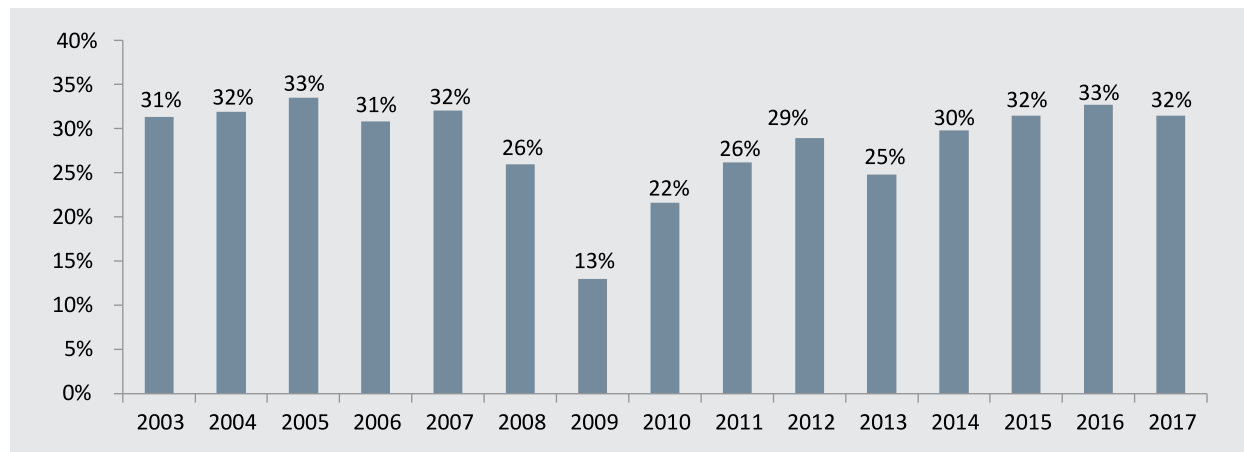


Source: GeoStat; NBG calculations

The growth rate of investments declined compared to the previous year. A deceleration of the growth of investments would have happened at some point because of the high investment to

GDP ratio. Currently, the ratio is 32% and keeping this level by capital accumulation will support long-term economic growth (see Diagram N 1.19).

Diagram N 1.19 Investments to GDP ratio

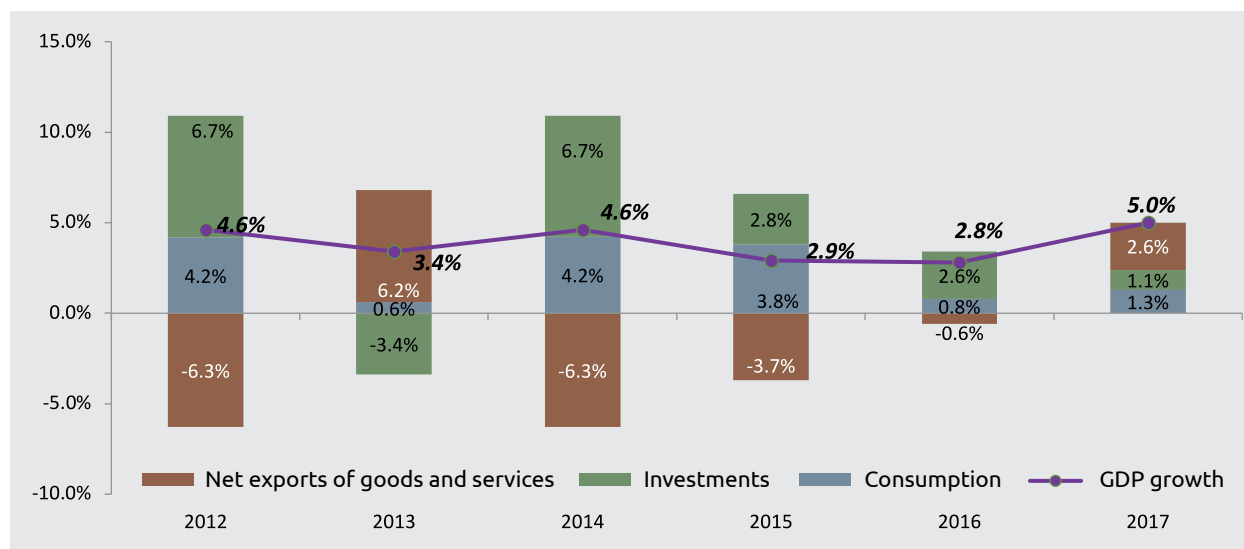


Source: GeoStat; NBG calculations

Consumption made a contribution of 1.3 percentage points to economic growth in 2017. Consumption only posted a high real growth rate in first quarter, while for the rest of the year the nominal growth of consumption was mitigated by inflation. The latter indicates that domestic demand remains weak, despite exhibiting some signs of recovery. Government consumption declined in the first half of the year, but saw positive growth in the second half of 2017.

The consolidated budget deficit for 2017 was planned to amount to 3.3% of GDP. Later, the budget deficit plan was revised to 3.7%, whereas the actual deficit amounted to 3.2% of GDP. It should be noted that the lower-than-planned deficit was achieved by the accumulation of higher-than-planned budget revenues, which stemmed from the higher-than-expected growth of the economy.

Diagram N 1.20 GDP growth by expenditures



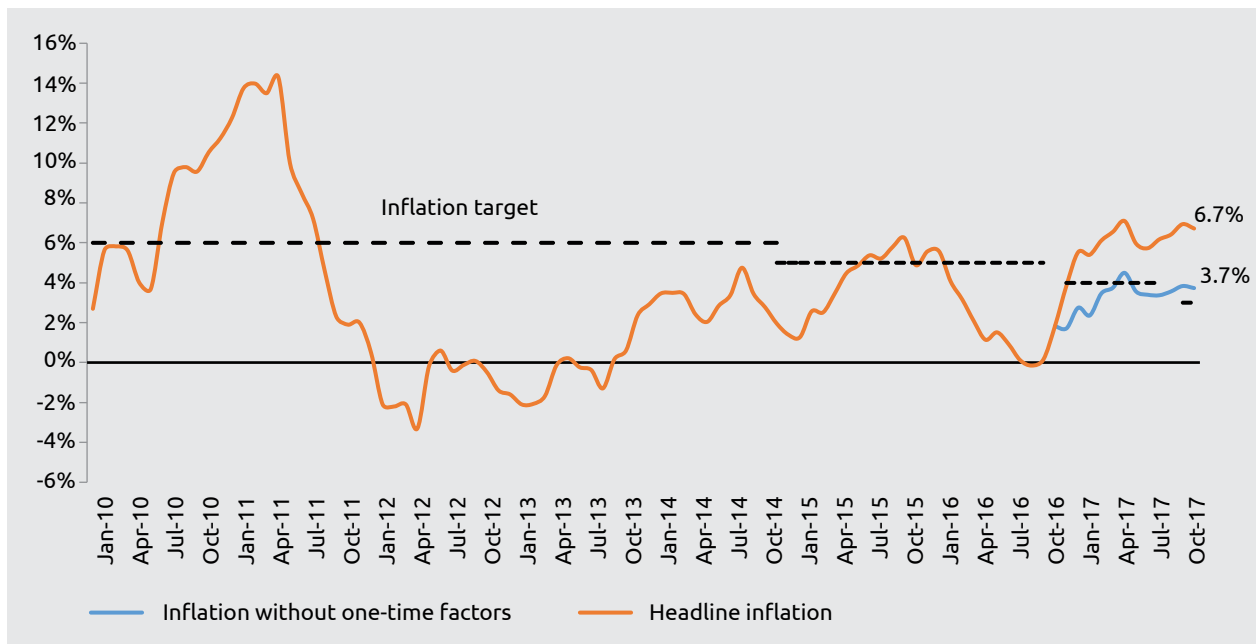
Source: GeoStat; NBG calculations

1.4 Inflation

In 2017, as was expected, inflation increased as a result of one-time factors. From February until the end of the year, inflation overshoot the target level of 4%. The increase was driven by the rise of oil and tobacco prices, which stemmed from the surge of oil prices on international markets and the growth of excise taxes on fuel and tobacco products. Moreover, from August onwards, an increase in the administrative price of natural gas further

pushed inflation above the target. By the end of 2017, annual inflation totaled 6.7%. According to the National Bank's calculations, one-time factors were responsible for a share of 3.0 percentage points (pp) out of total inflation. Throughout the year, inflation stood at 6% on average. In the meantime, the impact of one-time factors ranged from 2.2-3.1 pp. Inflation, excluding the one-time factors, was thus mainly below the target level (see Diagram N 1.21).

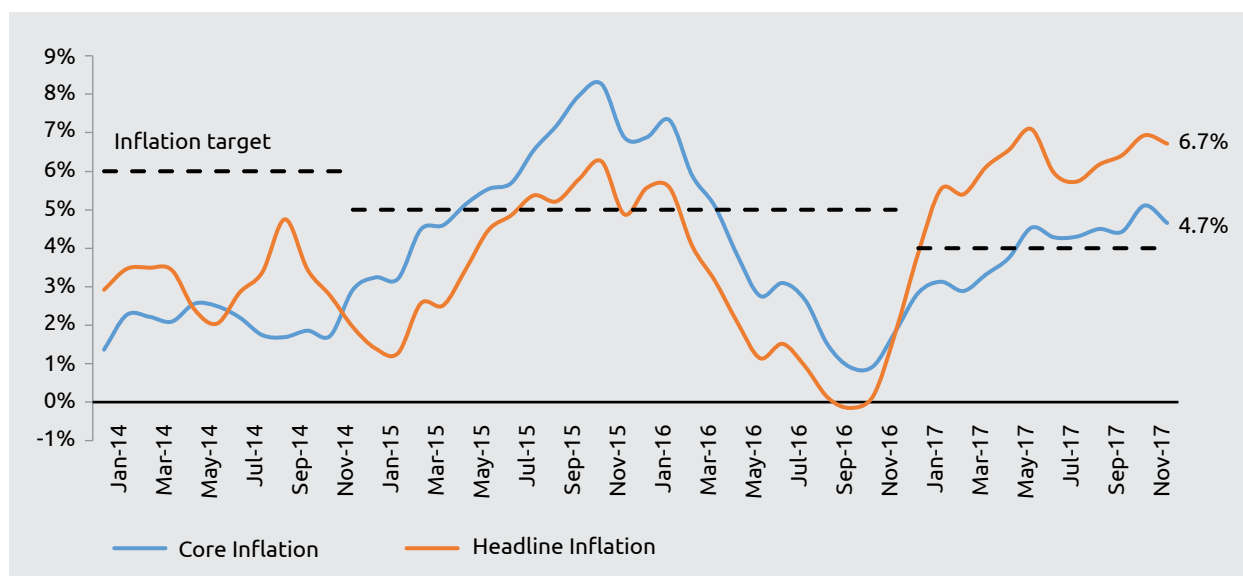
Diagram N 1.21 Headline inflation and inflation without one-time factors



Source: GeoStat; NBG calculations

Meanwhile, core inflation, which excludes volatile food and energy prices (due to the relatively higher prices on those products), was significantly lower than headline inflation over the year. During 2017, core inflation averaged 4% (see Diagram

1.22), whereas the contribution of tobacco products equaled 1.9 pp. The analysis of core inflation is significant as it reflects a long-term trend. Lower core inflation signals a reduction of headline inflation in the future.

Diagram N 1.22 Headline and core inflation

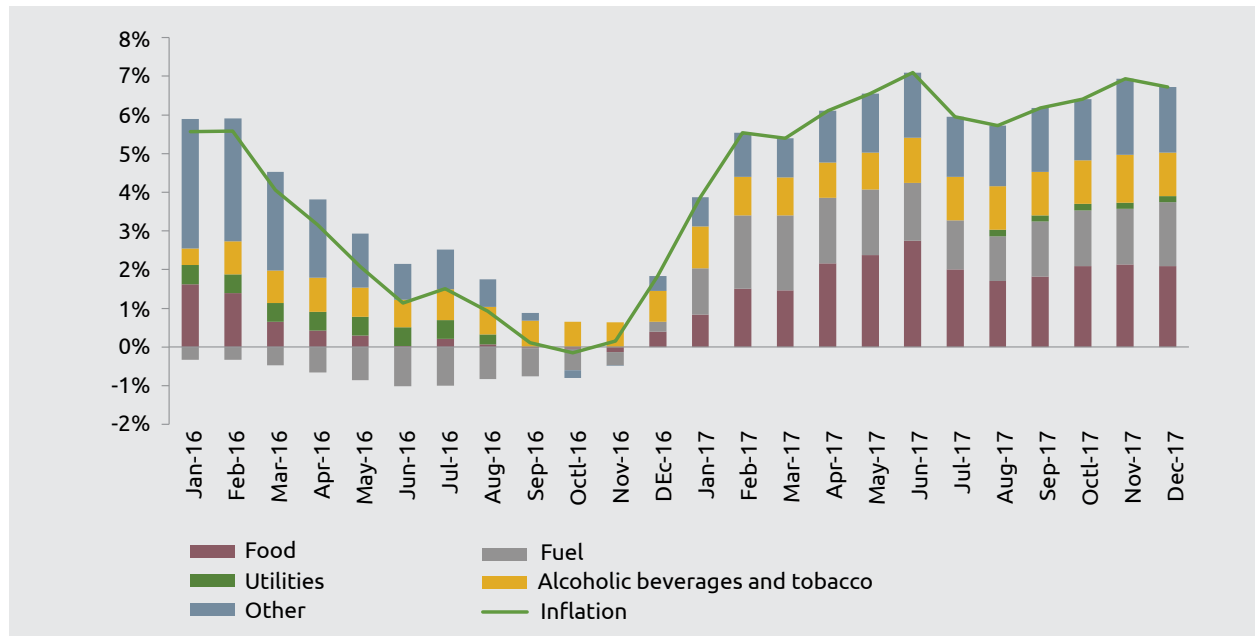
Source: GeoStat

Over the year, inflation in the food group was high (an average of 7.1%) and the contribution to total inflation ranged from 0.8 to 2.7 pp (see Diagram N 1.23). In 2016, the prices of certain sub-groups of food decreased and therefore annual food inflation averaged only 1.3%. Prices in 2017 thus mainly increased due to the base effect. In addition, the price level on meat products increased, which can be attributed to increased exports of beef.

Over 2017, the sugar prices had a declining trend. In 2015-2016, high prices of sugar on the world market made sugar-containing products more ex-

pensive. However, following a reduction of global prices, from the beginning of 2017 the annual price increase of products containing sugar started to decline and in the fourth quarter of the year approached the zero mark. The contribution of the food group to total inflation reached its highest level, 2.7 percentage points, in June; but subsequently fell to 2.1 pp in December.

The healthcare group has an important weight in the consumer basket. Its contribution to headline inflation averaged 0.5 pp, mainly due to a price surge on certain medicines.

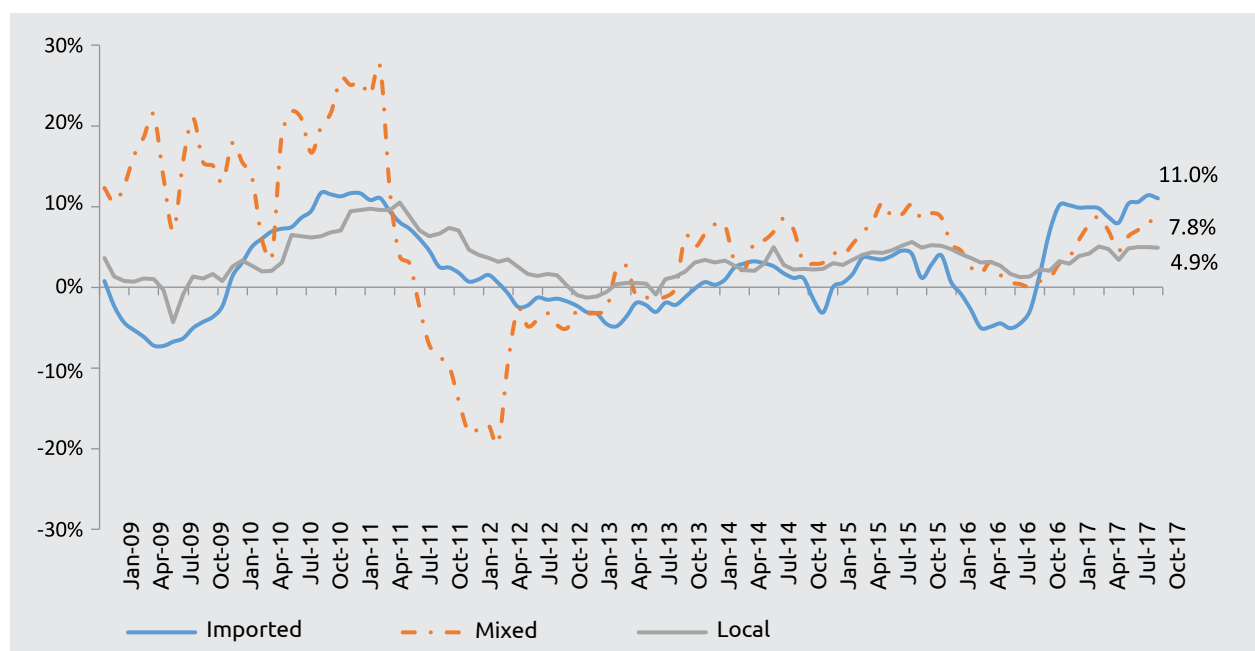
Diagram N 1.23 Contribution of fuel, food, alcohol drinks, tobacco and utilities to headline inflation

Source: GeoStat; NBG calculations

In terms of supply factors, the changing trend on prices of imported products is noteworthy. Over 2017, inflation on imported products was relatively high (9.7% on average). The main reason behind this growth was an increase in fuel and tobacco prices. In the fourth quarter, inflation on imported goods further increased, which was also related to

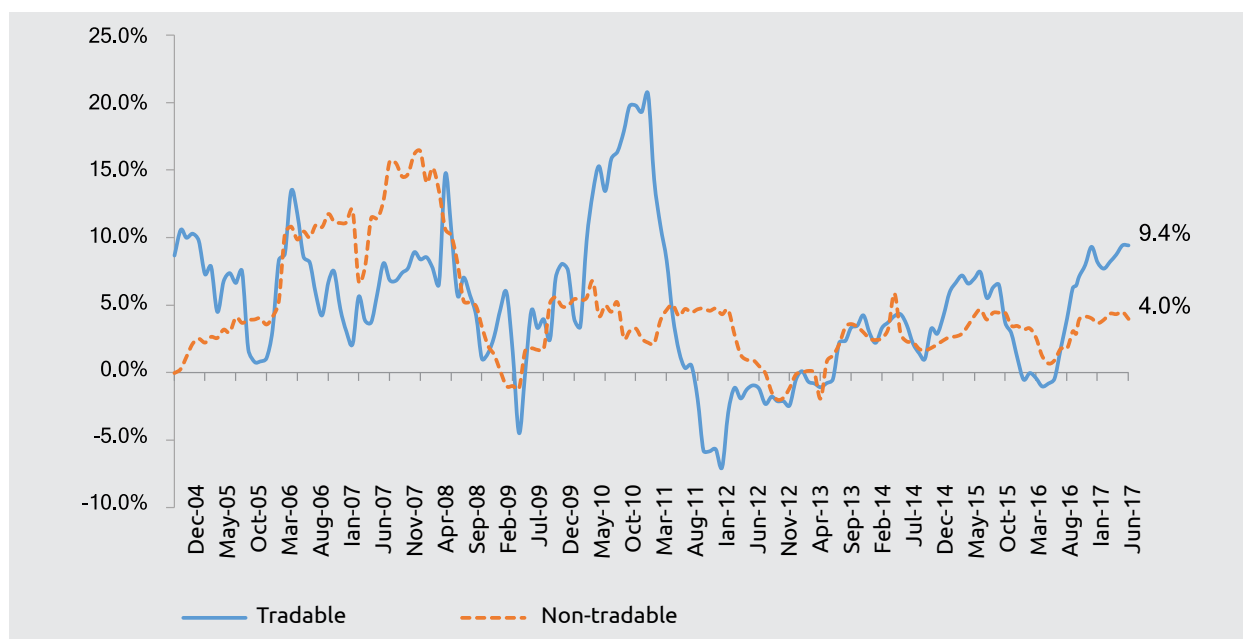
the depreciation of the lari nominal effective exchange rate.

In contrast, inflation on mixed and locally produced goods was comparably low. Their average values stood at 7.8% and 4.9% respectively (see Diagram N 1.24).

Diagram N 1.24 Imported and domestic inflation¹⁴

Source: GeoStat; NBG calculations

14. Imported and domestic inflation are calculated by the NBG based on the indices of different items in the consumer basket provided by GeoStat.

Diagram N 1.25 Inflation of tradable and non-tradable goods

Source: GeoStat; NBG calculations

In terms of imported products, the price decrease on shoes and clothing is particularly noteworthy. The appreciation of the lari against the Turkish lira resulted in cheaper shoes and clothing imports

from that country. Meanwhile, the surge of prices in the transport group is related to the rise in the price of fuel (see Table N 1.4).

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

	2016 December weights	Dec17/Dec16		Jan16 Dec16/Jan17Dec17	
		Inflation	Contribution	Inflation	Contribution
Total	100.0%	6.7%	6.7%	6.0%	6.0%
Food and Non-Alcoholic Beverages	30.1%	7.3%	2.2%	6.8%	2.0%
Food	26.9%	7.7%	2.1%	7.1%	1.9%
Bread and Bakery	5.5%	2.0%	0.1%	1.2%	0.1%
Meat and Meat Products	6.5%	8.8%	0.6%	7.8%	0.5%
Fish Products	0.6%	4.3%	0.0%	4.2%	0.0%
Milk, Cheese, and Egg	5.0%	8.0%	0.4%	8.6%	0.4%
Oil and Fats	1.8%	6.4%	0.1%	6.3%	0.1%
Vegetables, Melons, Potatoes and other Tubers	3.2%	21.3%	0.7%	18.1%	0.6%
Sugar, Jams, Honey, Syrups, Chocolate, Pastry	2.4%	1.7%	0.0%	7.1%	0.2%
Other Food Products	0.7%	3.4%	0.0%	1.3%	0.0%
Non-alcoholic beverages	3.2%	3.8%	0.1%	4.4%	0.1%
Alcoholic Beverages, Tobacco	6.4%	17.5%	1.1%	17.1%	1.1%
Clothing and Footwear	3.4%	-2.0%	-0.1%	-3.1%	-0.1%
Housing, Water, Electricity, Gas and other Fuels	8.4%	2.0%	0.2%	1.6%	0.1%

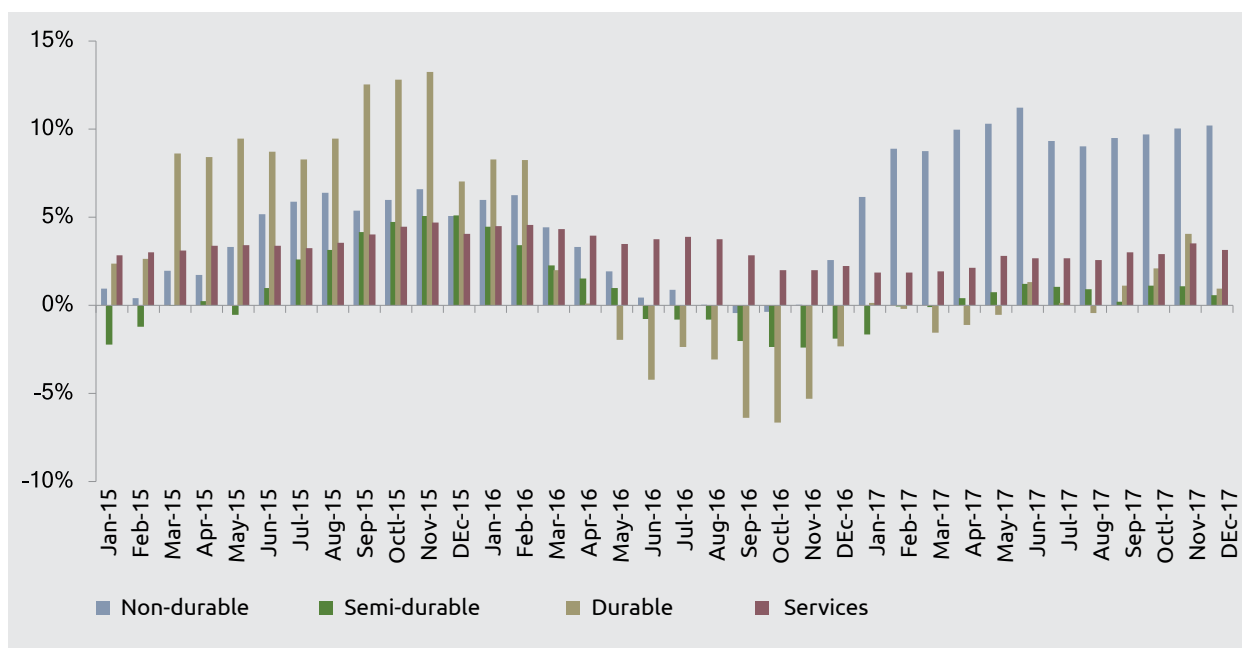
	2016 December weights	Dec17/Dec16		Jan16 Dec16/Jan17Dec17	
		Inflation	Contribution	Inflation	Contribution
Healthcare	8.4%	8.1%	0.7%	6.1%	0.5%
Transport	13.1%	14.9%	1.9%	15.1%	1.9%
Communication	3.7%	-0.7%	0.0%	-0.2%	0.0%
Recreation and Culture	6.4%	1.2%	0.1%	0.3%	0.0%
Education	4.7%	1.3%	0.1%	1.4%	0.1%
Hotels, Cafes and Restaurants	4.1%	3.4%	0.1%	2.7%	0.1%
Miscellaneous Goods and Services	4.9%	3.7%	0.2%	3.4%	0.2%

Source: GeoStat

Throughout 2017, consumer prices increased for non-durable goods. The main reason for this was the price increase on fuel and tobacco products that stemmed from one-time factors and relatively high prices on food. Over the year, the price

increase on non-durable goods averaged 9.4%, while prices on semi-durable and durable goods grew only slightly (by 0.5%). Prices of services rose by 2.6% (see Diagram N 1.26).

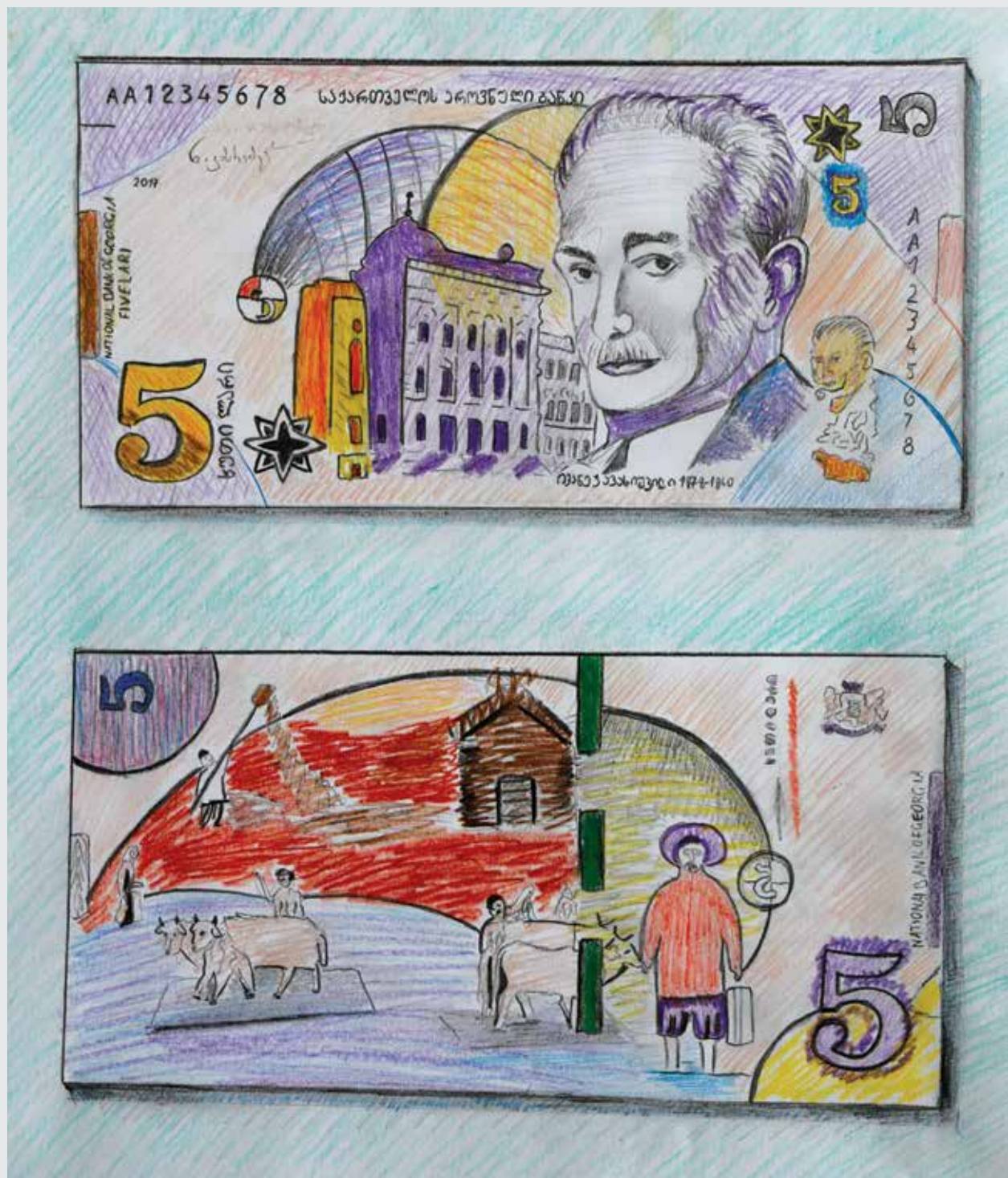
Diagram N 1.26 Change of annual inflation for services and goods of different durability



Source: GeoStat



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Nani Kasradze; Public School #182

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.¹⁵ Price stability implies a level of inflation in 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 to guide policy in maintaining inflation at the target level in the medium term. The main instrument of the monetary policy 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 a scope outlined in the Decree of the Parliament of Georgia on the "Main Directions of Monetary and Exchange Rate Policy".¹⁶ Given Georgia's current stage of economic development, the inflation target was set at 4% for 2017, while for 2018-2020 inflation the target declined was reduced to 3%.

It should be noted that developing countries tend to have higher levels of inflation than advanced countries, resulting from the faster growth of productivity (Balassa, 1964; Samuelson, 1964).¹⁷

In Georgia, as in other small open economies, exogenous shocks (independent from monetary policy) are imminent. Exogenous factors can thus deviate actual inflation to from the target level. Monetary policy is a tool to impact aggregate demand and is thus the central bank's response to demand shocks. However, 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) and Bernanke & Gertler (1995) demonstrate 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 impacts inflation expectations and the inflation forecast, the NBG will adjust its policy response accordingly.

Over the course of 2017, as had been forecasted, temporary factors pushed inflation above the target of 4%. The rise in inflation was driven by both the increase of excise taxes on tobacco and oil and the surge in oil prices on international markets in the second half of the year.

As a result, inflation was increasing over the first half of the year, reaching 7.1% in June; however, once the effects of temporary factors started to dissipate, inflation declined. The growth in inflation in early 2017 can also be attributed to rising inflation expectations and increasing prices on

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

16. Decree of the Parliament of Georgia, "On the Main Directions of the Monetary Policy of Georgia, 2018-2020" – paragraph 1.

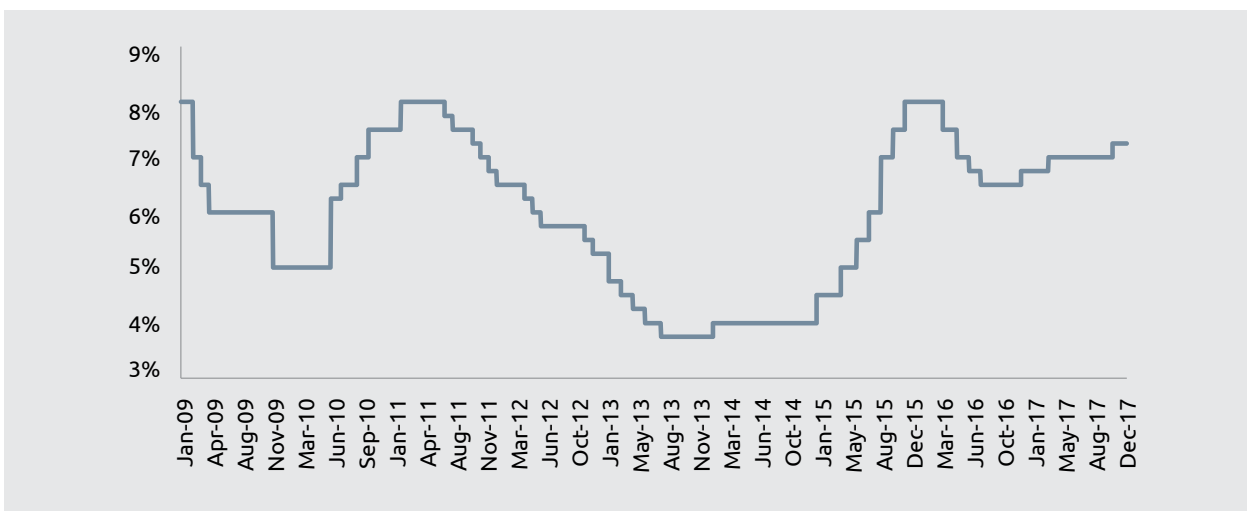
17. Balassa, B. (1964), "The Purchasing Power Parity Doctrine: A Reappraisal", *Journal of Political Economy*, 72, 584-96; Samuelson, P. (1964), "Theoretical Notes on Trade Problems", *Review of Economics and Statistics*, 23, 1-60.

intermediate goods. Considering that, similar to 2016, aggregate demand placed downward pressure on inflation, the NBG maintained a relatively tight monetary policy stance over 2017.

To curb inflation expectations, the National Bank of Georgia gradually increased the policy rate by 0.25 percentage points in January and again in May to 7.0%, which was a sufficient policy response at the time. However, by the end of the year, the nominal effective exchange rate nota-

bly depreciated, increasing the inflation pressure relative to the previous forecast. Moreover, the greater-than-expected improvement in economic activity decreased the downward pressure on inflation generated by aggregate demand. Thus, a further monetary policy response was required to reduce inflation in the medium term. The Monetary Policy Committee thus decided to increase the policy rate by 25 basis points to 7.25% at a meeting in held in December (see Diagram 2.1).

Diagram N 2.1 Monetary policy rate

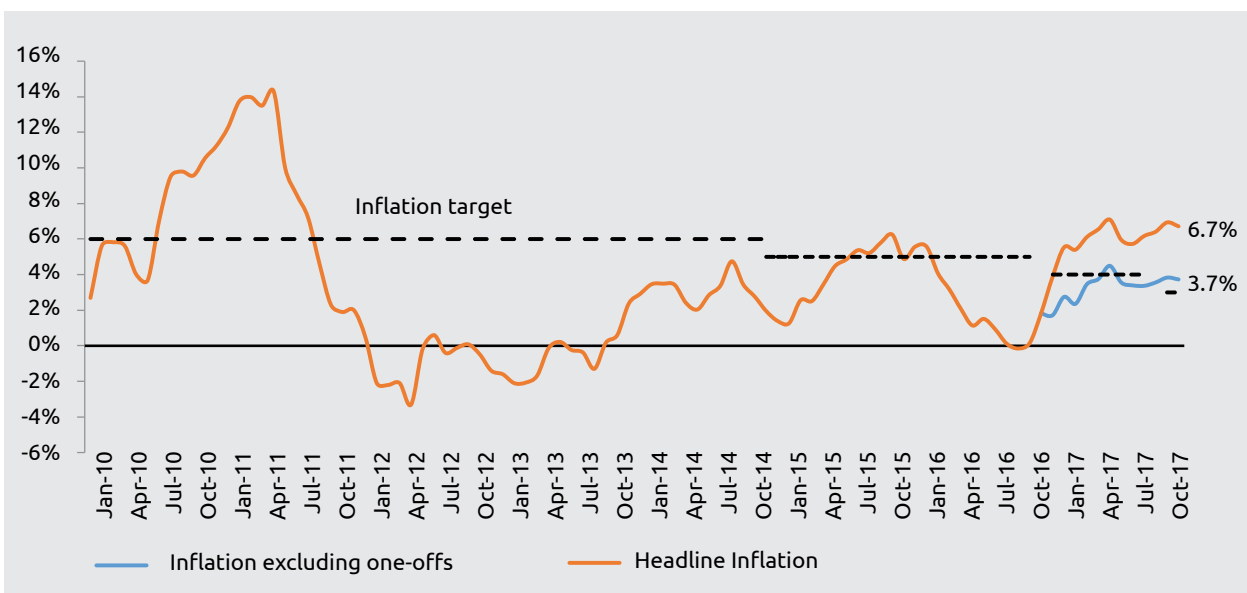


Source: National Bank of Georgia

In December, inflation stood at 6.7% and averaged 6% over the year. The contribution of temporary supply side factors to overall inflation was high

and ranged from 2.2 pp to 3.1 pp. However, if the effects of these temporary factors are excluded, inflation was around the target level.

Diagram N 2.2 Total inflation and the inflation level excluding the effects of one-off factors

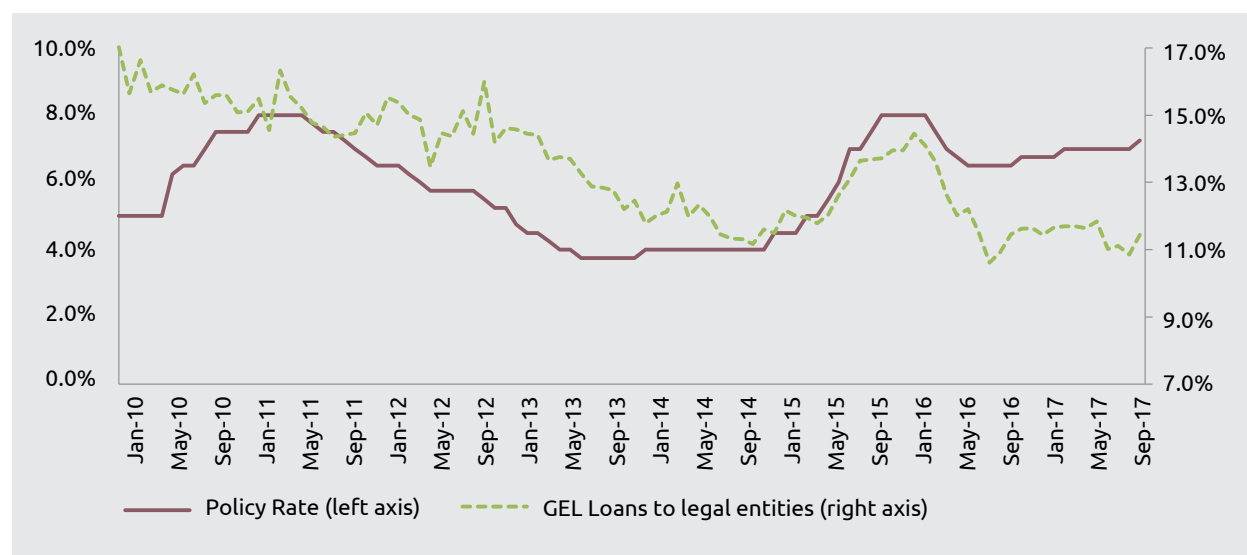


Source: National Bank of Georgia

With a deepening of financial and economic ties with partner countries, the impact of the external sector over the Georgian economy grew. Considering improvements in economic activity, the National Bank revised its GDP growth forecast upwards from 4% to 4.5%. According to preliminary data, economic growth in 2017 was high and stood at 5%. The growth was driven by favourable dynamics in the external sector with exports and tourist revenues growing at high rates. In particular, revenues from tourism grew by 27% over 2017. Remittances and foreign investments also increased significantly, while consumption and imports grew moderately. These dynamics led to

significant improvements in the current account in 2017, with the deficit declining to 8.7% of GDP. However, despite the improvements in economic activity, aggregate demand remains below the potential level – and thus at this stage the demand side does not generate inflationary risk. The tightening of monetary policy was mainly reflected in an increase in interest rates on loans to households, while interest rates for loans to legal entities in the national currency did not change (see Diagram N 2.3). More specifically, interest rates on mortgages and consumer loans grew annually by 2.5% and 4% respectively.

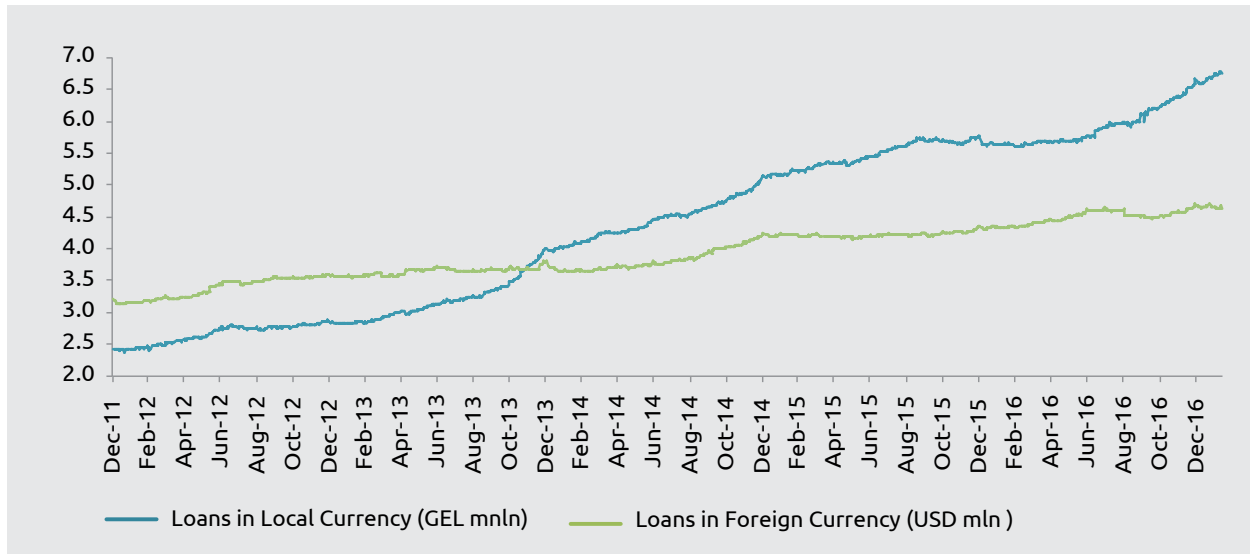
Diagram N 2.3 The monetary policy rate and interest rates on loans to legal entities



Source: National Bank of Georgia

As noted above, under the inflation targeting framework, the main instrument of the National Bank is the short-term interest rate. Thus, it is essential that changes in short-term interest rates are transmitted to the short- and long-term money market rates. For efficiency in liquidity man-

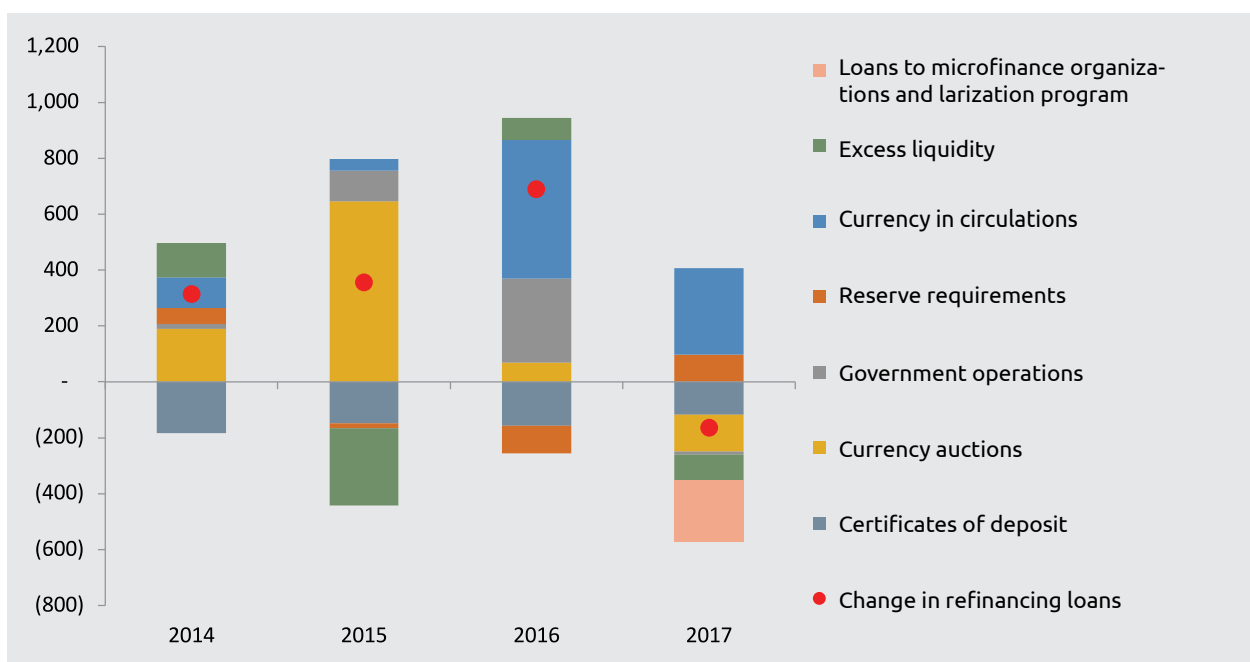
agement, the NBG uses both liquidity provision and absorption instruments. In particular, through refinancing loans, the NBG provides short-term liquidity to the banking sector, while through certificates of deposit, the NBG absorbs excess liquidity on the market.

Diagram N 2.4 The credit portfolio of commercial banks

Source: National Bank of Georgia

With the market operating under a liquidity deficit, in recent years the need for liquidity absorption has declined. In 2017, as in 2016, refinancing loans exceeded the volume of certificates of deposits. However, it should be noted that demand for refinancing loans declined over the year (see Figure 2.5). The change was driven by a combination of several factors. In particular, at the beginning of the year, the NBG purchased foreign currency through FX auctions increasing the liquidity

in the banks, which in other equal conditions reduces demand for refinancing. The decline in the refinancing volume can be also ascribed to the decrease in the portfolio of certificates of deposits. It is worth noting that additional liquidity to commercial banks was provided through the temporary larization program (see Box 2). The reduction in demand for refinancing was further prompted by the government's decision to place net balances in commercial banks.

Diagram N 2.5 Factors affecting the change in demand for refinancing

Source: National Bank of Georgia

To improve liquidity management and following the IMF's recommendations, from December 2016 the National Bank introduced a new monetary policy instrument - the one-month open market instrument. Using the one-month instrument, the banking sector is provided with short-term liquidity. The primary purpose of the instrument is to impact short-term interest rates through liquidity provision/absorption. As a result, the one-month open market tool enhances the liquidity management of the financial sector and increases the efficiency of monetary policy transmission mechanisms.

The NBG also uses three-month open market instruments, which guide market interest rates. Moreover, it is noteworthy that, since 2017, the National Bank of Georgia has stopped issuing certificates of deposits with six months maturity since the Ministry of Finance of Georgia started to issue treasury bills with six months maturity. Hence, the market no longer required the certificates of deposits with six month maturity issued by the NBG. Moreover, interest rates on treasury securities are highly correlated with the monetary policy rate (see Diagram N 2.6).

Diagram N 2.6 Interest rates

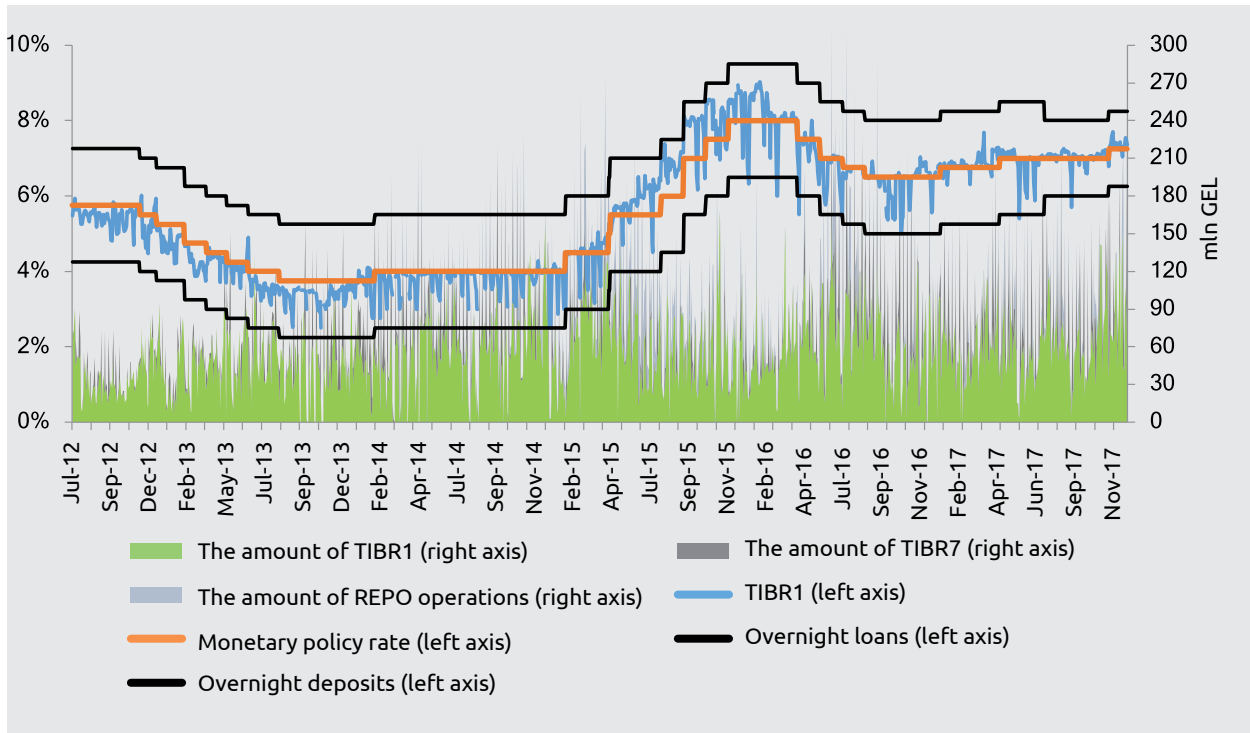


Source: National Bank of Georgia

The interest rate fluctuation is a characteristic of an active money market. However, to decrease the volatility of interbank rates and ensure higher efficiency of the interbank market, from August 2017, the Monetary Policy Committee decided to reduce the interest rate corridor to 2 percentage points.

Hence, interest rates for overnight loans and deposits of the National Bank were defined as the policy rate ± 1 percentage point, instead of the previous rate of the policy rate ± 1.5 percentage points. As a result, interbank money market interest rates move around the monetary policy rate.

Diagram N 2.7 Interbank money market



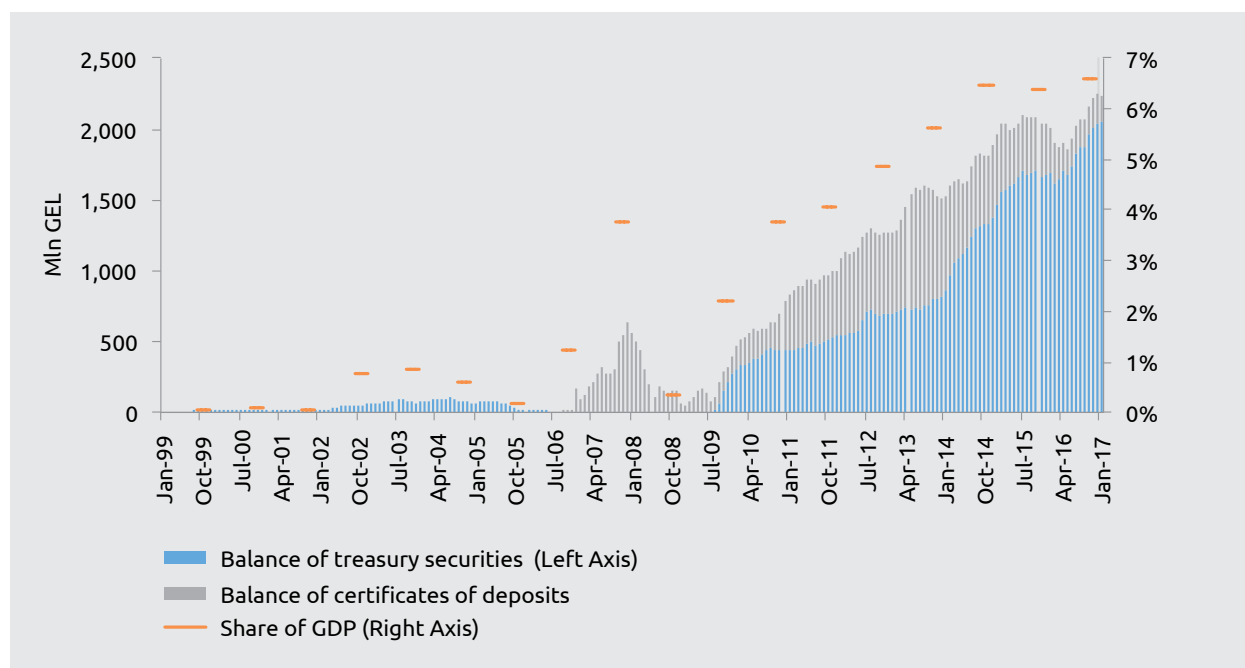
Source: National Bank of Georgia

The development of the capital market remains one of the key priorities of the National Bank. As already mentioned, in 2016, the National Bank and the Government of Georgia developed a joint strategy for the development of the capital market. 2017, the NBG and the government continued to implement policies following the strategy. The development of capital markets will increase the availability of long-term GEL resources promoting de-dollarization.

In 2017, new lari-denominated corporate securities appeared on the market. This signals the gradual activation of the capital market. It is important to consider that, according to amendments made in 2016, corporate bonds issued in lari can now be used as collateral. The inclusion of corporate bonds denominated in lari guarantees the liquidity of those securities and promotes the development of capital markets. In 2017, the European Bank for Reconstruction and Development (EBRD) issued GEL denominated Eurobonds worth of 120

million. It is important that in the region it was the first case when an international financial institution issued Eurobonds denominated in a local currency.

In general, investment decisions are made considering risk and income. Investors are trying to invest in assets where risk assessments are simple and income is more certain. In the last few years, the NBG has minimized its interventions on the FX market, increasing the flexibility of the exchange rate and improving the communication strategy and transparency of the central bank. The policy choices of the NBG have increased the attractiveness of the lari as a financial asset for both domestic and international investors. Hence, Georgian companies have been able to attract lari resources from international markets. In this regard, 2017 was significant as it was the first time that a Georgian company placed securities denominated in GEL on the international market. The Bank of Georgia placed lari-denominated Eurobonds worth 500 million GEL on the Irish Stock Exchange.

Diagram N 2.8 Dynamics of treasury securities and certificates of deposits

Source: National Bank of Georgia

As previously discussed, the National Bank of Georgia relies on an inflation targeting framework. Under the framework, effective communication is key to guiding market expectations. Moreover, to ensure the efficiency of monetary policy, it is necessary to ensure the transparency and predictability of monetary policy decisions, which is a basis for increasing the credibility of the National Bank. The importance of communication increases during periods of macroeconomic fluctuations and exogenous shocks. For example, the main challenge for monetary policy communication over 2017 was the deviation of the inflation rate from the target level following the increase in excise taxes and the surge of oil prices on international markets.

Over 2017, the National Bank actively communicated with society and explained the deviation of inflation from the target level. Moreover, the NBG formed key policy messages and presented to various interest groups. In public presentations (of Monetary Policy Committee decisions, monetary

policy reports, the annual report and of the “Main Directions of Monetary and Exchange Rate Policy” to the Parliament of Georgia) and in meetings with local and international investors, emphasis was placed on fact that the deviation of inflation from its target level was the result of one-time, temporary supply side factors. The aim of this proactive communication was to prevent the formation of inflation expectations and an increase in inflation due to second round effects. Such policy choices ultimately resulted in a positive outcome and, as was seen that at the beginning of 2018, inflation returned to the target level once the effect of the temporary factors faded away.

The NBG has continued to publish its forward monetary policy path – a practice that was first introduced in 2016. The forward monetary policy path helps economic agents to form rational expectations. However, it should be noted that the monetary policy rate forecast is not a promise from the National Bank of Georgia regarding future decisions. It only reflects the expected trajectory of

the policy rate, assuming that all exogenous factors incorporated into the forecast materialize as expected. To increase transparency further, the National Bank publishes risks to the forecasts and alternative forecast scenarios.

In 2017, the NBG continued the tradition started in 2016 and held meetings with different target groups after the Monetary Policy Committee (MPC) meetings. Moreover, on a quarterly basis, the Governor of the NBG started holding press conferences to announce the MPC's decision regarding the monetary policy rate. During these conferences, the governor explained the MPC's decision and reviewed the current macroeconomic stance, inflation and the factors that affect the price level. It is worth noting that the governor's press conferences in 2017 were also broadcast live on social media. During the press conferences, par-

ticipants were given the opportunity to ask questions about the macroeconomic environment and monetary policy decisions. Moreover, to further enhance its credibility, the NBG also started holding quarterly press conferences in the different regions of Georgia that were followed by meetings with economic analysts, the media, academics and market participants. Furthermore, after the production of quarterly monetary policy reports, the Vice-President of the National Bank presents the reports to representatives of the financial sector. At such meetings, analysts are encouraged to ask questions and obtain additional information about current macroeconomic trends. Video footage from the meetings are later uploaded to the NBG's website. As efficient communication is one of the key priorities, the NBG will continue to actively communicate with society, which in turn will increase the efficiency of monetary policy in 2018.

Box 1. The 10-point larization plan

Larization is one of the top priorities of the National Bank of Georgia (NBG) as it is a precondition for the reduction of macro-financial risks and shielding against external vulnerabilities (Gulde et al., 2002).¹⁸ Larization is the NBG's long-term policy goals and reforms promoting it are being gradually implemented. In 2017, the NBG, in cooperation with the government, elaborated a 10-point larization plan. An important element of the plan has already been fulfilled and the rest is in the process of implementation. The plan consists of three directions: 1) increased access to long-term lari loans; 2) adequate sharing of FX risks; and 3) pricing in lari.

Increased access to long-term lari loans

1. During recent years, the base of eligible collateral for NBG operations has widened. Corporate securities denominated in national currency and the loan assets of commercial banks have been added to the list of securities issued by the NBG, the Government of Georgia (GoG) and international financial organizations. Furthermore, since the prohibition of foreign currency loans below 100,000 lari for individuals, FX deposits of microfinance organizations in the NBG, made via commercial banks, have been temporarily added to the list of eligible collateral. This decision has widened access to lari resources for microfinance organizations, which were given appropriate time for the conversion of liabilities into lari.

2. From September 2017, according to the IMF's recommendation, the NBG introduced the Liquidity Coverage Ratio (LCR) under Basel III, with the national currency treated preferentially. The

18. Gulde, A., Masson, P., Hoelscher, D., Ize, A., Marston, D., & De Nicoló, G. (2004). Financial Stability in Dollarized Economies. International Monetary Fund Occasional Paper No. 230.

norms for foreign currency are stricter, which gives an advantage to lending in lari and therefore promotes larization.

3. For the promotion of the capital market, the NBG and GoG have developed a common strategy. The implementation of the action plan comprises of number of steps, that will eventually lead to the desired result in the medium term. Further reforms will focus on supervision of the financial market, infrastructural improvement and legislative amendments.

4. The NBG and GoG continue to cooperate for the further development of the government securities market, which is a necessary precondition for the development of the capital market. In 2018, the Ministry of Finance started to issue highly liquid securities (so-called “benchmark” bonds), the main characteristic of which is predictability and high liquidity (at this stage, the calendar for their emission has been announced). In the future, a “primary dealers” institute will be introduced, which means that the banks participating in the primary auctions of government securities will be required to ensure the liquidity of the secondary market for every participant on the market.

5. The implementation of pension reforms are planned in 2018. On the one hand, these will improve social security provisions and, on the other, they will ensure the growth of long-term lari resources and increase demand for long-term instruments, which will play a positive role in the formation of the capital market.

Adequate sharing of FX risks – restriction of FX use

6. In order to hedge the borrowers against FX risks, according to amendments made in the legislation, from 15 January 2017 loans for individuals valued at below 100,000 lari can only be issued in local currency. This move reduces FX risks for individuals, because their incomes are mostly in the national currency. In addition, such individuals tend to be amongst the borrowers least informed about the risks.

7. The GoG, working together with the NBG, developed a one-time social measure for those borrowers who were most hit by the national currency depreciation. In January-March 2017, such individuals were offered the opportunity to have household loans issued before 1 January 2015 in US dollars converted into the national currency (see Box 2 for more information).

8. The NBG will use macro-prudential instruments to ensure the availability of adequate buffers in cases of FX lending to unhedged borrowers. In particular, since December 2017, an amendment entered into force regarding a rule for the classification of commercial banks’ assets, which determines the minimum coefficients for loan service (PTI) and loan provision (LTV). In cases of exceeding the norms, additional capital will be required from a commercial bank. For FX loans the norms are stricter. These measures promote lending in lari.

Market failure – pricing in lari

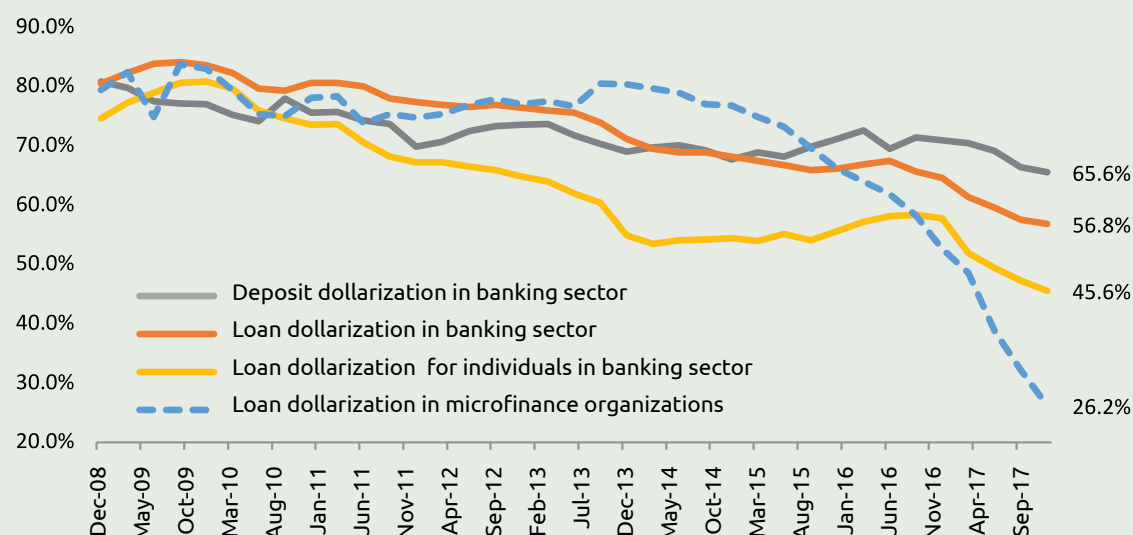
9. The amendments to the Organic Law on the National Bank of Georgia entered into force from 1 July 2017. According to these changes, it is mandatory to price all goods and services for legal entities only in lari. The objective of this amendment is to reduce FX risks in pricing. At the same time,

the NBG regulations admits exclusions in cases when offerings are aimed at non-residents (for example, in the tourism and energy sectors).

10. An “escrow” service, which aims at avoiding risks and reducing the cost of real estate transactions in lari for both sellers and buyers, entered into force from 1 July 2017.

These larization measures already had positive outcomes in 2017. Over the year, dollarization of loan and deposit decreased by 8% and 5% respectively. Dollarization of loans for individuals shrank by 12% (excluding the exchange rate effect, see Diagram N 2.9). In the same period, the dollarization of loans in microfinance organizations fell from 53% to 26%.

Diagram N 2.9 Dollarization of banking sector and microfinance organizations (excluding exchange rate effect)



Source: NBG

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

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.¹⁹

The interbank deposit/loan market is the money market where banks trade short-term excess liquidity. The NBG has a vital interest in the mar-

19. See the decree of the Parliament of Georgia on the monetary and exchange rate policy for 2018-2020 - https://www.nbg.gov.ge/uploads/mpc/2018/decreed_of_the_parliament_of_georgia_geo.pdf.

ket as it has an important role in the efficiency of monetary transmission mechanism.²⁰ The NBG influences interest rates by declaring monetary policy decisions and by using monetary policy instruments. To monitor the interbank money market, on a daily basis the NBG calculates and publishes the previous day's interest rate statistics – TIBR-1 and TIBR-7.²¹

The volume of transactions carried out in the national currency in 2017 rose modestly compared to 2016 and equaled to 19.7 billion GEL. The NBG monetary policy rate increased gradually in 2017 from 6.5% to 7.25%. As a result, interbank rates also decreased. The fluctuations of interbank rates were relatively mild and did not deviate from the NBG's rate too much. In order to keep the weighted average interest rate close to the policy rate at auction, the NBG determined the weekly volumes of the refinance facility and the one-month open market instrument.

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 2017. This instrument was first introduced in 2008. Refinancing loans represent a reliable and low-risk source of short-term liquidity that has 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. As mentioned in Clinton et al. (2017), it is important for central banks

to manage short-term interest rates to influence inflation and keep it to the medium trend.²² The interest rate for refinancing loans on auctions is based on the NBG's monetary policy rate.

In 2017, the collateral base of monetary operations encompassed the 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 2017.

2.2.2 One-month open market instrument

Following the recommendations of the IMF's technical assistance mission to Georgia, in December 2016, the National Bank of Georgia introduced a new monetary policy instrument: the one-month open market instrument. Using this policy instrument, the National Bank of Georgia supplies short-term liquidity to the country's banking system every month via auctions. Similar to other open market operations, the goal of the one-month open market instrument is to manage short-term interest rates on the interbank money market, which is in line with international best practice. On a monthly basis, the liquidity forecast group estimates the short-run liquidity deficit in the banking system. Based on those forecasts, the NBG announces an auction for a specific amount of one-month open market instruments. The minimum interest rate at auction is equal to the policy rate and only local commercial banks are permitted to participate in the auctions. NBG certificates

20. Baiashvili, T. (2015) "Monetary Policy Transmission Mechanism". Economy and Banking. National Bank of Georgia, No. 3.

21. TIBR-1 is the weighted average interest rate on overnight interbank loans. TIBR-7 is the weighted average interest rate on interbank loans with a maturity of up to seven days.

22. Clinton, K., Hlédik, T., Holub, T., Laxton, D. & Wang, H. (2017). "Czech Magic: Implementing Inflation-Forecast Targeting at the CNB". International Monetary Fund Working Paper. WP/17/21.

of deposit, government securities, local currency denominated bonds issued by international financial institutions, local currency denominated securities issued by resident and non-resident legal entities, commercial banks' own loan assets in the national currency, and FX deposits placed at the NBG can all be used as collateral.

2.2.3 Overnight loans and deposits

Similar to previous years, in 2017 the NBG continued to use standing facilities like overnight deposits and overnight loans in monetary policy operations. At the beginning of 2017, the interest rate corridor was equal to 3% – the monetary policy rate plus or minus 1.5 percentage points. However, in order to reduce the short-term volatility of interest rates even further, from August 2017 the interest rate corridor was narrowed to 2 percentage points – the monetary policy rate plus or minus 1.0 percentage point. The use of an interest rate corridor reduces sharp interest rate fluctuations on the interbank market and promotes a convergence of interbank interest rates with the monetary policy rate.

Overnight loans from the National Bank represent the fastest source of liquidity for the banking sector, albeit 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.

The instrument of overnight deposits, which has been in place since April 2010, continued to be used in 2017. By using overnight deposits, commercial banks have an opportunity to transfer excess GEL from correspondent accounts for overnight deposit with the NBG at the end of each day. The amount deposited will be returned to the cor-

respondent account at the beginning of the next workday.

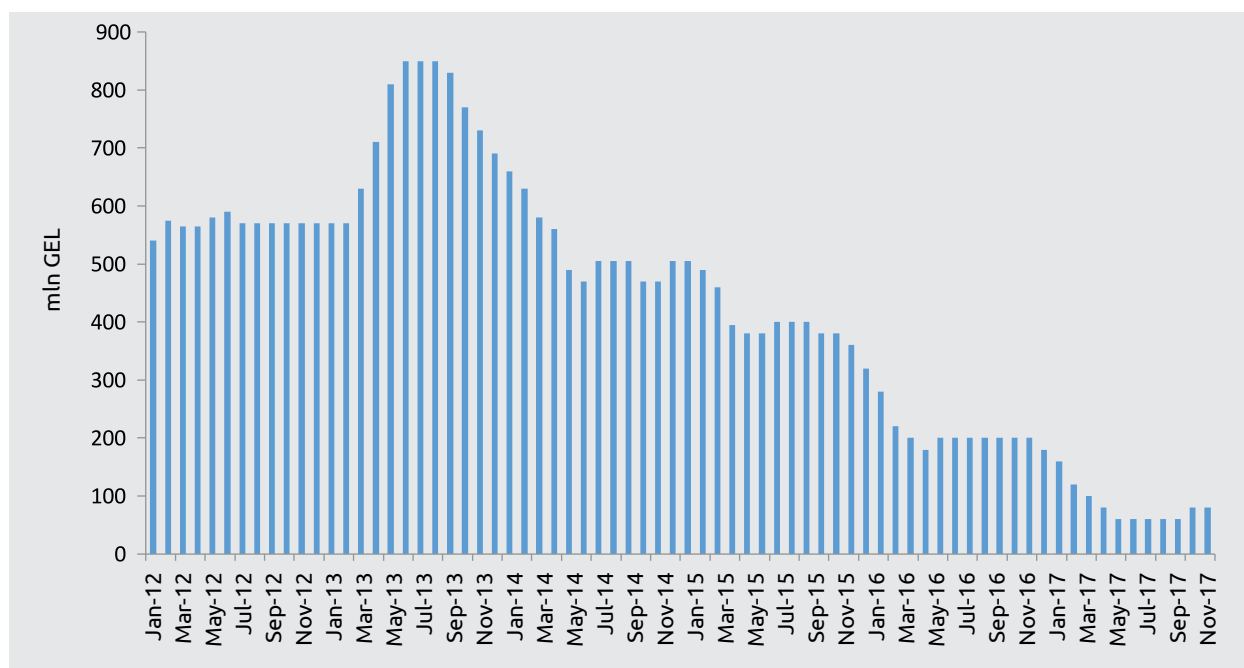
2.2.4 Securities

Certificates of deposit

In 2017, the NBG continued to issue its own certificates of deposit (CD) securities. Together with treasury bills and bonds issued by the Ministry of Finance, certificates of deposit enjoyed a high level of demand from commercial banks. CDs are on the short side of the term structure, trading for 3-month maturities, while government securities trade for 6-month and 1-, 2-, 5- and 10-year maturities. These securities have contributed to the formation of a stable yield curve. The yield curve provides important information regarding the term structure of interest rates, and is indicative of the expectations of financial market participants. According to the yield curve, the spread between long- and short-term interest rates decreased during the year, indicating an increase in market efficiency and a decrease of expectations regarding long-term interest rates.

In 2017, the NBG issued 3-month CDs, which the banking sector used as the most attractive and effective short-term liquidity management instrument.

Over the course of the year, commercial banks purchased CDs in all 13 auctions conducted by the NBG. The nominal amount of allotment was equal to GEL 260 million GEL, and 360 million GEL was redeemed in 2017. The stock of the NBG's CD decreased from 180 million GEL at the start of the year to 80 million GEL at the end of the year. As of 31 December 2017, seven commercial banks held CDs worth 80 million GEL.

Diagram N 2.10 Portfolio of certificates of deposit (2012-2017)

Source: National Bank of Georgia

Government bonds

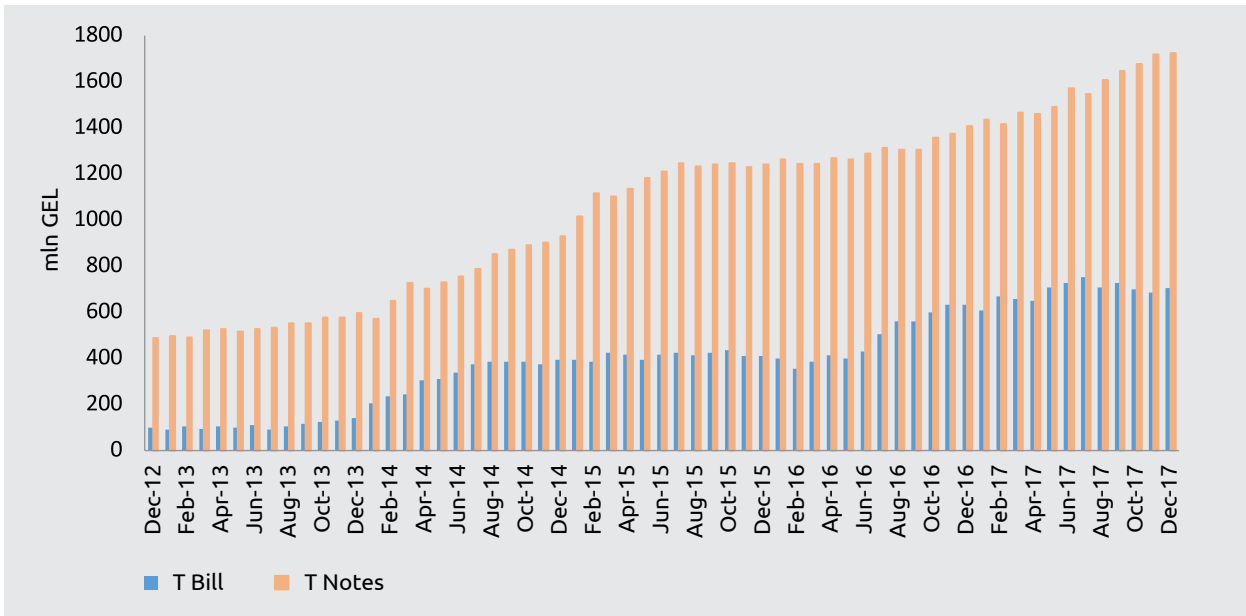
As of 31 December 2017, the NBG held government bonds with a par value of 147 million GEL. These were not used for open market operations during the year.

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 2017, the Ministry of Finance issued 6-month and 1-year discount 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 is executed through a multiple price auction conducted by the NBG via the Bloomberg trading platform. All com-

mercial banks licensed by the NBG have the right to participate in the auctions and any individual or legal entity can use a bank as its representative. A security may have a nominal owner – a market intermediary – to whom the owner grants authority, through written contract, to register treasury securities in the registry under his/her name and to manage, buy, sell and collateralize them.

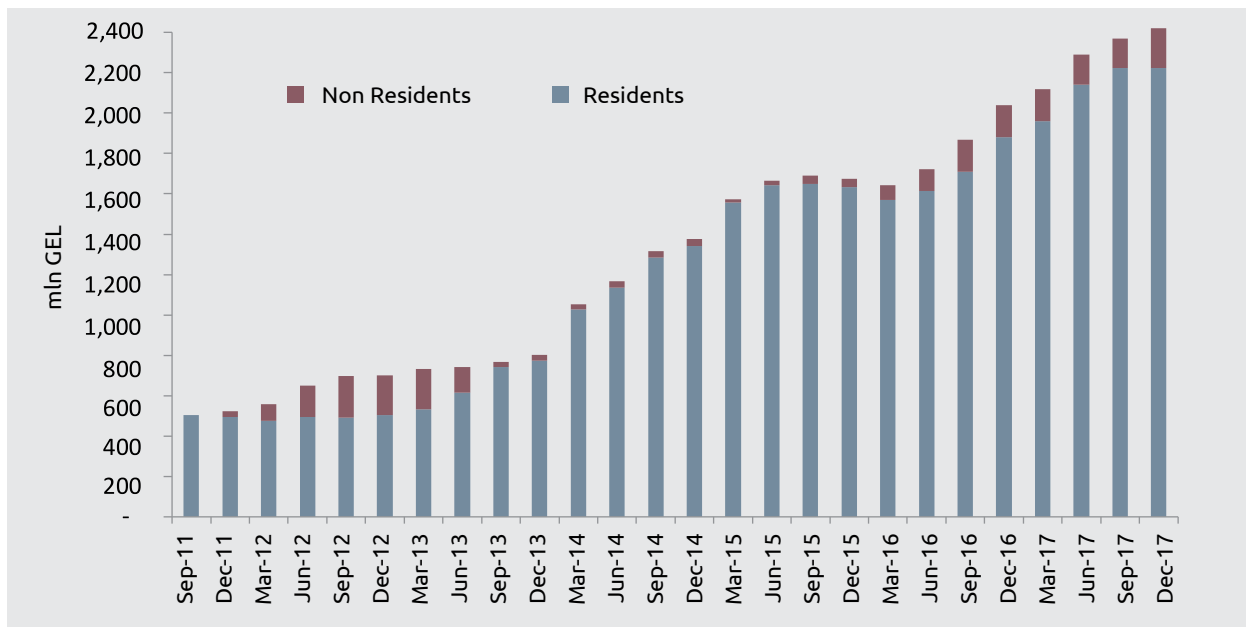
In 2017, 54 auctions of treasury bills and notes were conducted, and 1.5 billion GEL worth of securities were issued and fully allotted on those auctions. As of 31 December 2017, there were 14 commercial banks and non-banking investors (see Diagrams N 2.11 and N 2.12) that held 2.4 billion GEL (6.7% of GDP) worth of securities in circulation. Non-banking investors held treasury securities worth 206 million GEL.

Diagram N 2.11 Portfolio of treasury securities (2014-2017)

Source: National Bank of Georgia

It is worth noting that the size of treasury securities in circulation remains small relative to the size of the economy (6.4% of GDP). To increase market liquidity, starting to issue benchmark bonds from

2018 and increasing the emission of treasury securities it is of the utmost importance. This will help reduce the exchange rate risk associated with external loan acquisition.

Diagram N 2.12 Treasury securities by holder

Source: National Bank of Georgia

The existence of a liquid secondary market for securities plays an important role in the efficiency of the monetary policy transmission mechanism. To increase operations on the secondary market, the NBG continued to support the effective functioning of the modern Central Securities Depository (CSD) system. Starting from 2014, the development of the interbank repo market was actively intensified. The market is based on the internationally adopted repo master agreement, which was created at the initiative of the NBG with the consent of commercial banks. Commercial banks use the Bloomberg trading system and the Central Securities Depository to conduct repo deals. Using these systems, in 2017 a total of 153 repo transactions were conducted between commercial banks involving government securities with a total nominal amount of 1.8 billion GEL.

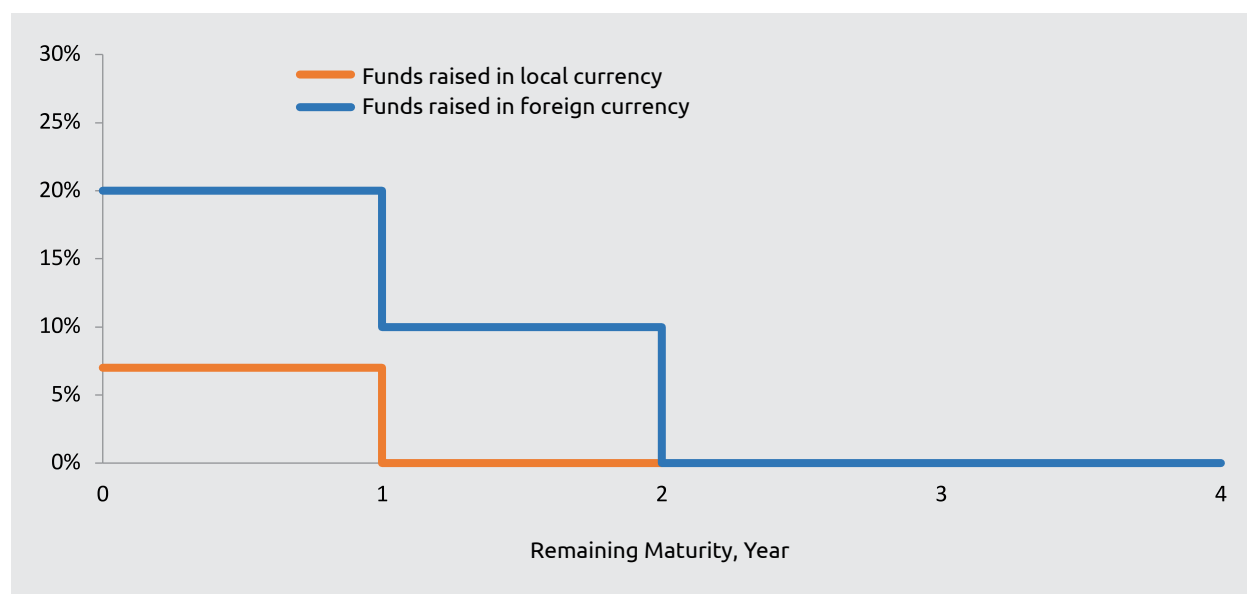
The infrastructure and operations on the securities market provides a good basis for intensifying activities on the secondary market for securities. This will induce an increase of liquidity on the secondary market.

2.2.5 Minimum reserve requirements

Through use of the minimum reserve requirements instrument, the NBG has the opportunity to influence the money multiplier and create pre-conditions for the efficient use of other monetary instruments. The minimum reserve requirement rate for funds denominated in the national currency was 7%, while for foreign currency denominated funds the rate was 20%. Moreover, the reserve requirement for funds in national currency with a residual maturity of more than one year equals 0%, as well as for FX funds with a residual maturity of more than 2 years. In 2017, commercial banks could earn interest equal to the NBG's monetary policy rate on minimum reserve balances placed in GEL correspondent accounts.²³

The required reserves denominated in USD are remunerated at a rate equal to the upper bound of the US Federal Reserve System's policy rate minus 0.5 percentage points. Interest rates on euro reserves are equal to the European Central Bank's deposit rate minus 0.2 percentage points.

Diagram N 2.13 Minimum reserve requirements



Source: National Bank of Georgia

23. For more details, see: <https://www.nbg.gov.ge/index.php?m=558>.

Development of the Securities Settlement System in Georgia

First implemented by the NBG in 2010, the Securities Settlement System is a modern, high-tech, robust and secure electronic system used for the management and operations of securities. It provides the following operations for securities issued by the Ministry of Finance and the NBG: securities issue, redemption, coupon payments, purchase, sale and repo operation automatic settlement, maintaining registration and pledging securities. Integration with the Real Time Gross Settlement (RTGS) system allows delivery versus payment principles to be used during purchase/sale operations and mitigates settlement risk.

At the initiative of the NBG, and in cooperation with the Tbilisi/Georgian Stock Exchange, the reform of the Securities Settlement System was started. Its reform is part of the capital market development strategy and considers the further development of the NBG Central Securities Depository (CSD). In order to develop this system, a triparty agreement was signed between the NBG, the Georgian Stock Exchange and the Montran Corporation on 13 January 2017.

The renewed system will service all participants of the Georgian securities market; it will support the registration and settlement of all types of securities, including securities and stocks issued by private enterprises in Georgia. The system will support fully automatized settlement operations of privately issued securities registered in the system, including securities issue, redemption, coupon and dividend payments, purchase/sale and repo operations, and will support registration and pledging operations with either the NBG or with system participant professional users. Integration with the Bloomberg and Stock Exchange trading systems will allow a fully automatic securities trade and settlement process.

This modern and robust system will be beneficial for international investors too, giving them simple

and transparent access to local financial markets. The project will be implemented in close cooperation with the ECB, EBRD and Clearstream. It is planned to be implemented by the end of 2018.

2.3 Exchange Rate Policy and International Reserves Management

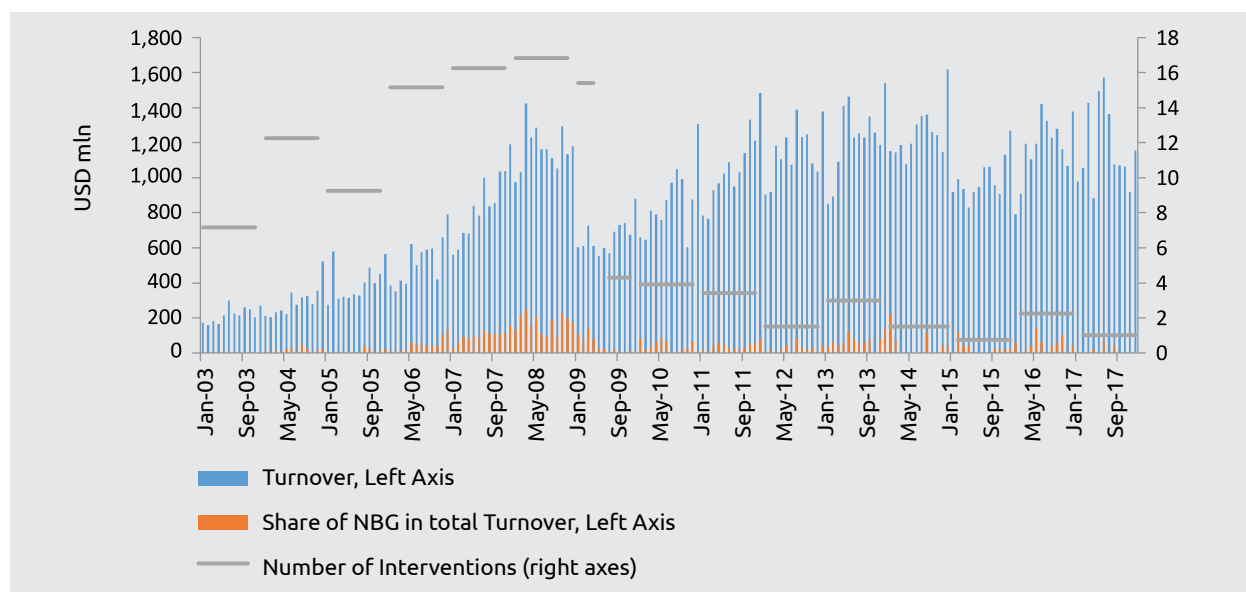
In Georgia, the floating exchange rate policy ensures exchange rate formation based on market principles. However, at the same time, the National Bank of Georgia aims to maintain its international reserves at an adequate level.

It is worth mentioning that the main advantage of a floating exchange rate regime is that it softens the impact of external shocks and acts as an automatic stabilizer for the economy. It is well established that for small, open economies, like Georgia, a floating exchange rate regime is considered optimal.²⁴ This approach was proved to be appropriate in 2014-2015, when the exchange rate acted to soften external shocks and supported the competitiveness of the country.

The NBG only considers making foreign exchange interventions through auctions when the economy is facing a temporary inflow/outflow of excess capital, which causes sharp, short-term currency fluctuations, when there is a need to fill international reserves, or to balance the state's foreign operations.

The National Bank of Georgia uses an auction mechanism to perform foreign currency interventions. Throughout 2017, the NBG made limited interventions, fewer in terms of both size and number compared to the previous year. Considering the market climate, interventions were mainly made to fill international reserves. Net purchases by the NBG amounted to 129.8 million USD (see Diagram 2.14).

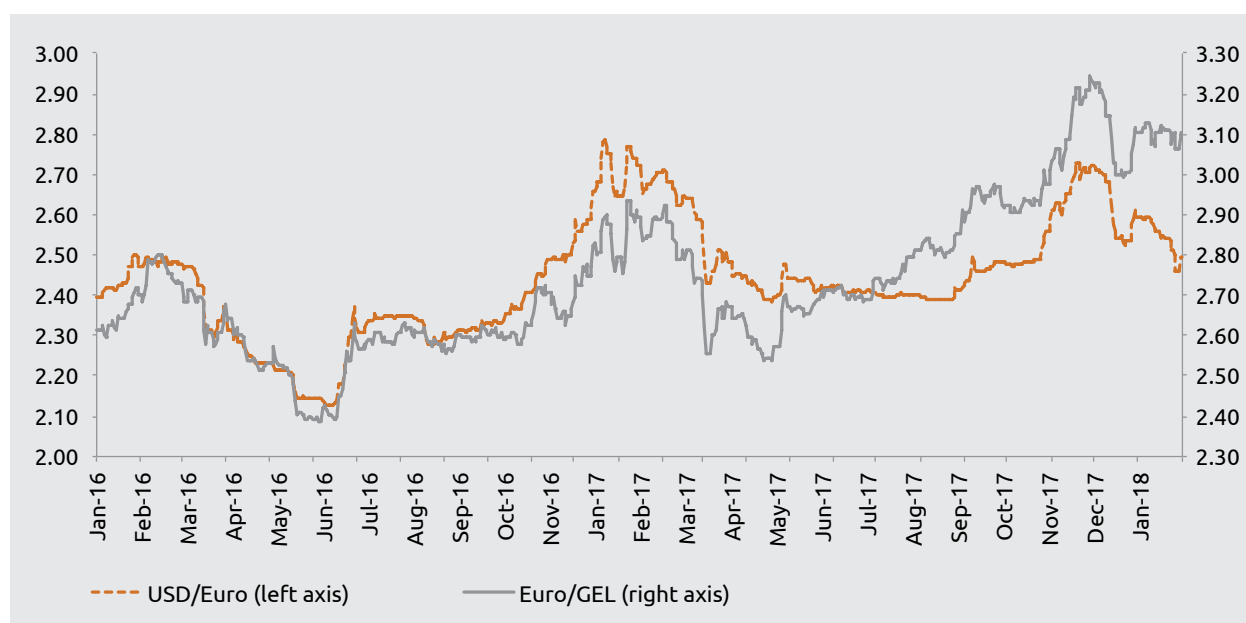
24. Levy-Yeyati, E. & Sturzenegger, F. (2003). To Float or to Fix: Evidence on the Impact of Exchange Rate. The American Economic Review. Vol. 93. (No. 4), pp. 1173-1193.

Diagram N 2.14 Currency market dynamics (2003-2017)

Source: National Bank of Georgia

In 2017, the economic environment in trading partner countries improved substantially, which induced increased demand on Georgian exports. Exports in goods and services increased. Moreover, revenues from tourism and money transfers rose substantially. As a result, pressure on the exchange rate coming from external shocks (in 2014-2015) and negative expectations both decreased. The nominal effective exchange rate be-

gan to appreciate, which encouraged the NBG to partly fill its international reserves. Despite the improved economic fundamentals, at the end of the year depreciation pressure on the exchange rate increased, but this was only temporary. With the neutralization of negative expectations, the nominal effective exchange rate subsequently appreciated.

Diagram N 2.15 Lari nominal exchange rate with respect to USD and euro

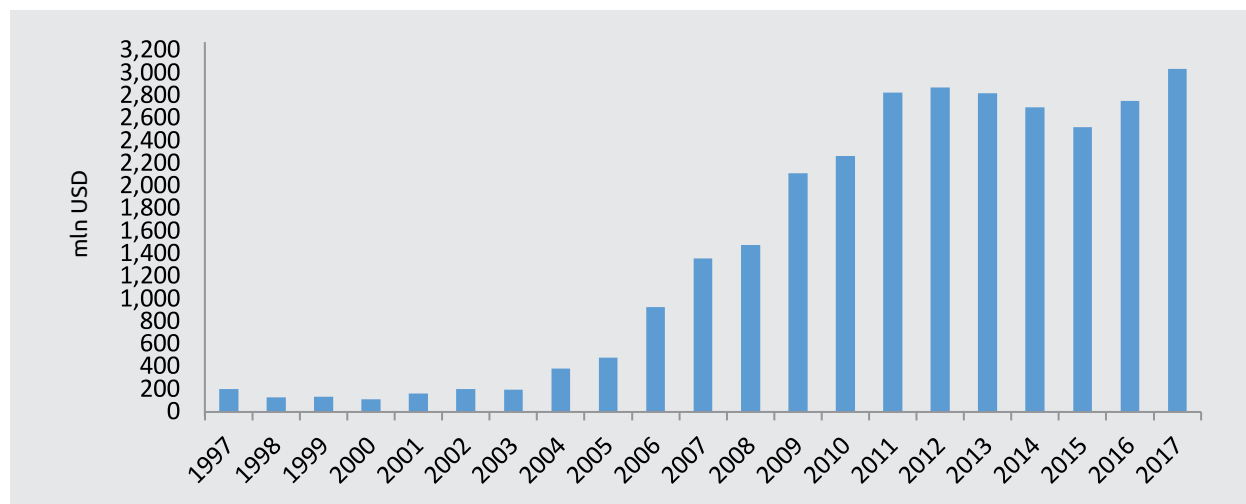
Source: National Bank of Georgia

Management of International Reserves

The total international reserves of the National Bank of Georgia increased by 282 million USD to total 3.04 billion USD as of 31 December 2017

(which includes funds managed externally by the World Bank and the Bank for International Settlements) (see Diagram 2.16).

Diagram N 2.16 Official FX reserves (million USD, end of year)



Source: National Bank of Georgia

Traditional factors affected the volume of the NBG's international reserves during 2017: the foreign exchange interventions of the NBG, the Georgian's government expenditures and credits, and grants received from international organizations. During the year, the NBG's net purchase of foreign currency via FX auctions amounted to 129.8 million USD. Moreover, in the framework of a loan conversion program, the NBG provided 78.7 million USD to the market. The loans and grants received by the Georgian government to finance various programs and projects from international financial organizations and donor countries, as well as funds received from the IMF in the framework of the extended fund facility, amounted to 497 million USD in 2017. On the other hand, the Georgian government debt service amounted to 272 million USD and currency conversions by the government amounted to 230 million USD.

During 2017, financial activities on financial markets were normalized, notwithstanding the fact that the impact of the financial crisis in 2008 was still felt. This was reflected in US Treasury note

yields. Although economic growth in the USA was characterized by positive trends, pre-crisis levels have not yet been attained. Preliminary data show that economic growth in the USA was around 3%. The main driving force was again the labor market, which saw an improved situation over previous years. The unemployment rate decreased to 4.1%, which was the lowest level during the last 17 years. According to the data from December 2017, around 2.5 million jobs were created, which was a higher figure than at the same time in the previous year (2.2 million jobs).

Against the background of improved economic activities in the USA, the Federal Open Market Committee gradually increased the target interest rate, which reached 1.25-1.50% at the end of 2017. In line with an increase of the refinancing rate, the yield on treasury securities also increased. Namely, the yield on 2-year US Treasury notes moved from 1.48% to 1.9% by 42 basis points. Moreover, without the pressure of inflation, the yield on 10-year US Treasury notes increased by 17 basis points.

The European Central Bank's (ECB) monetary policy was the opposite of what the FED was doing in the USA. The ECB started a new major asset purchase program, which included buying eurozone government obligations, asset-backed securities and corporate bonds. Compared to the period 2011-2015, an improvement of the economic environment and expectations in the real sector were induced by the economic recovery of major eurozone countries, especially Greece, as well as by the prudent fiscal policies adopted in Portugal, Spain, Italy and France. In 2017, labor market activities were stabilized in eurozone countries, which resulted in the unemployment rate falling into single digits – 8.93% (the lowest level over the last decade).

The ECB continued its negative interest rate practice and all main official rates were kept constant (the main refinancing rate was 0.00%, the deposit facility discount rate was -0.40%, and the Lombard rate was +0.25%). With the negative interest rate, the ECB tried to support investments in the region and thus stimulate economic growth. The yields on eurozone government securities of up to 7 years maturity remained in negative territory in 2017 – which is why the NBG did not invest the EUR portion of its international reserves into securities.

Throughout 2017, energy prices were characterized by high volatility. At the beginning of the year, oil prices were declining, but these began to revert to the normal trend in the second half of the year. Oil prices ultimately showed a 12.5% increase compared the previous year. Moreover, Standard & Poor's "GSCI", which incorporates five sectors (energy, industrial metals, precious metals, agriculture, and livestock) moved in a similar manner to the oil price and increased by 11.1%. The oil-price-increase was supported by economic improvements in consumer countries and also by the decision of OPEC to keep quotas on production until the end of 2018. It was a surprise for the markets that the quotas also related to oil produc-

tion in Nigeria and Libya, which had previously produced oil without exceptions. The trend of increasing oil prices continued and a single barrel of oil was sold for around 60 USD at the end of the year.

Throughout 2017, the NBG's investment policy remained conservative and was oriented toward the reduction of credit risk. The NBG's international reserves were allocated in highly liquid government, agency and supranational securities of the United States, eurozone countries, Australia and Canada, and in international banking institutions with high credit ratings. During 2017, the income generated from the management of international reserves amounted to 69.9 million GEL, which was 75.3% more than in 2016.

From the end 2016, the NBG actively searched for a clearing brokerage service, which is essential for trade in derivatives. In May 2017, an agreement was made with an agent and, as a result, the National Bank and the external manager have renewed trade in futures.

In 2017, the NBG continued its cooperation with the World Bank within the framework of the Sovereign Investments Partnership Program, which it became a member of in 2009. The program aims at providing technical assistance for the further development of international reserve management, the creation of proper infrastructure and the accumulation of knowledge. The program entails sharing the World Bank's experience in the fields of portfolio and risk management, settlements, accounting, legal affairs and IT.

The NBG continued cooperating with the Bank for International Settlements (BIS) in 2017. It did so as part of the BIS Investment Pool (BISIP) program, which the NBG joined at the end of 2014. The BISIP program implies the management of funds from different central banks and international financial institutions in a single portfolio. The program also facilitates assistance and experience sharing in other aspects of reserves management.

Box 2. Conversion program of foreign currency loans into lari

In 2016, the Government of Georgia (GoG) and the National Bank of Georgia (NBG) jointly elaborated a 10-point larization plan. The plan sets three directions: 1) increased access to long-term lari loans; 2) adequate sharing of FX risks; and 3) pricing in lari.

The conversion program of foreign currency loans into lari was one of the components of the 10-point plan. The GoG, working together with the NBG, developed a one-time social measure for borrowers who were hit hardest by the national currency depreciation. They encouraged the conversion of household loans, issued before 1 January 2015 in US dollars, into national currency. The program aimed at the voluntary conversion into lari of individuals' US dollar loans collateralized by real estate on the basis of an agreement between a bank and a client. Within the framework of the program, the GoG subsidized expenses related to the conversion of the loans with a preferential exchange rate and the NBG supplied commercial banks with appropriate US dollar and lari liquidity.

The banks were to inform all eligible borrowers and offer their conditions. The borrowers had the opportunity to choose the best offer and convert a loan in the opted bank. On the prescription of the NBG, commission fees for loan prepayment were canceled in order to not hinder the conversion of a loan from one bank to another.

The conversion program covered Georgian citizens (including individual entrepreneurs) who had current loans, that originated before 1 January 2015 and were fully or partially collateralized by real estate, with a 40,000 US dollar limit. If a loan exceeded that amount, the subsidy covered only 40,000 US dollars of those loans. The remaining sum of a loan, according to the borrower's decision, could remain in foreign currency or be converted into national currency without being subsidized.

The subsidy did not cover those individuals whose principal sum of all loans on 28 November 2016, (the date when the program was announced) at the banks participating in the conversion exceeded 100 thousand US dollars.. The subsidy also did not cover those individuals whose annual income in 2015 exceeded 100,000 GEL. The commercial banks lent the converted loans at the market interest rate. At that time, the average floating interest rate on mortgage loans was around 10%. The loans were converted at subsidized exchange rates: the official exchange rate at the conversion date minus 20 tetri. For example, if the lari to US dollar exchange rate was 2.50, the loan was converted at 2.30 and the difference was financed from the state budget.

The program started on 17 January 2017 and lasted until 23 March. During the program 5,617 loans were converted, totaling 78.7 million USD (183.7 million GEL). US dollar loans were converted into lari at average exchange rate of 2.3355. The total subsidies of the GoG amounted to 15.7 million GEL.

The low level of larization in the economy is substantial challenge for financial system stability, the efficiency of monetary policy and therefore for the sustainable development of the economy. Those who have income in the national currency and loans in a foreign currency are at risk of facing unexpected expenses in the future. Their solvency might thus be weakened, which increases risks in the financial system. The goal of the conversion program was the reduction of such risks.



Nikoloz Bregvadze

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Barbare Kalandaze

12 years old; Village Khevi, Municipality of Chokhatauri

3

FINANCIAL STABILITY



Financial stability and its corresponding analysis are among the main tasks of the National Bank of Georgia. Following the recommendations of the International Monetary Fund, a Financial Stability Analysis Department was established in September 2017. Its aim is to develop a financial stability policy framework in accordance with best international practice.

The development of financial stability framework is part of a financial stability mandate, while financial stability is one of the key factors for country's economic development. Financial stability is a condition where the financial system ensures long-run, sustainable economic development. For this purpose, financial intermediation and market infrastructure (payment systems) need to be efficient, the financial system should be resilient to shocks, and systematic risks need to be mitigated. A stable financial system also assumes the development and deepening of financial markets.

It is noteworthy that in recent years the importance of financial stability and macroprudential policy has grown all over the world. According to the best international practice, a comprehensive and in-depth analysis of financial stability is required. Financial stability analysis does not mean only involve the assessment of the banking sector's risks, but it also focuses on the country's external factors, which have been a source of significant risks in recent years. Financial stability also assesses the domestic macro-financial environment, households, companies and non-banking institutions.

The NBG has established and developed a financial stability policy framework in accordance with the best practices of the world's central banks. In 2017, the NBG introduced the cyclical macroprudential policy. As a first step, Georgia-specific financial stability complex indicators were developed for the purpose of making cyclical macroprudential policy decisions. In addition, a countercyclical

capital buffer was introduced, which is a main macroprudential policy instrument. Its goal is to limit excessive credit growth, which could lead to a buildup of systemic risks.

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 Analysis Department is actively working on the development of a macro-financial model. The model aims to analyze the risks of financial and macroeconomic stability and is used to conduct macroeconomic stress tests, which are the main cornerstones of appropriate macroprudential policy design. The main elements of this model were developed in 2017.

One of the most important aspects of the financial stability framework is to increase transparency and improve communication. In order to increase public awareness about financial stability policy, the National Bank of Georgia has updated the financial stability section of its website, which now provides detailed information regarding this subject. More precisely, it outlines the main tasks of the Financial Stability Committee and the available macroprudential policy tools. Starting from 2018, the website will be updated by publishing information such as the calendar of committee meetings, committee statements and decisions, and IFRS 9-related issues.

In order to increase the transparency and effectiveness of financial stability policy, starting from 2018 the Financial Stability Committee (FSC) moved onto a new framework. The committee evaluates and analyzes financial stability risks, designs macroprudential policy and makes decisions regarding corresponding policy actions. This involves the identification, assessment, and continuous monitoring of systematic risks and implementation of corresponding policies to mitigate those risks. The FSC meets once a quarter according to a preannounced calendar. After each meeting, a

press release is published that describes current trends and challenges in the financial system, and the decisions of the committee. Moreover, twice a year committee meeting will be followed by a press conference.

It should also be noted that the NBG supports the efficient implementation of new financial accounting standards, IFRS 9, by financial institutions. This will facilitate timely recognition of credit risks and will therefore have a positive impact on financial stability. Under IFRS 9, loan-loss provisions are mainly driven to dampen the procyclical behavior of financial institutions. Buffers are replenished during good times that can then be used during bad times. The NBG has developed IFRS 9 guidelines based on international experience and provides application guidance for financial institutions. To aid the transparent, consistent and efficient implementation of IFRS 9 by financial institutions, and also ensure comparability among them, the NBG regularly publishes macroeconomic and financial forecasts and risk scenarios. The estimates provided within these scenarios can be used for calculating expected credit losses. The first report of macroeconomic forecasting scenarios for IFRS 9 has already been prepared, conveyed to commercial banks and will be published on the NBG's website in the near future.

A sustainable financial system is essential for financial stability. This evolves around the management of social and environmental risks and is one of the main factors contributing to sustainable development. In September 2017, the NBG joined the Sustainable Banking Network (SBN), which is a voluntary union of financial sector regulatory agencies and banking associations from emerging markets. The purpose of this community is to promote the exchange of experience between members and to develop policies and initiatives that will ensure the development of a sustainable financial system. In order to increase awareness about green finance, the green, social and sustainable bond principles of the International Capital Market Association (ICMA) are being translated. To further increase public awareness on these issues, it is planned to launch Green Finance Guidelines.

One of the main priorities of the NBG is to prepare and publish financial stability reports, which are an important component of the financial stability framework. The development of these reports will start in 2018, with technical assistance from the International Monetary Fund. These will be based on forward-looking macro-financial analysis and will be prepared in accordance with best international practice.

4

BANKING SUPERVISION



4.1 Development of the Supervisory Framework

Throughout 2017, the NBG continued the development of the supervisory regulatory framework and the approximation of current standards with international practices and principles.

During 2017, the Parliament of Georgia reviewed a package of legislative amendments (on the Organic Law on the National Bank of Georgia and the “Law on the Activities of Commercial Banks”). These were initiated in order to execute recommendations made through the Financial Sector Assessment Program (FSAP), which was undertaken by a joint International Monetary Fund and World Bank mission in 2014, and to satisfy directives under the EU-Georgia Association Agreement. The package of legislative initiatives was approved at the end of 2017 and became effective on 11 January 2018. Qualitative amendments made to various legislative acts significantly improved the supervisory framework of NBG, and aligned it with best international practice. These amendments further strengthened the National Bank’s authority to regulate banking groups on a consolidated level, to appoint temporary administration and to exercise risk-based supervision more effectively, including the process of licensing and purchasing significant shares of commercial banks. The legislative amendments define the main objectives of the supervision of the activities of banking groups as being the promotion of financial sector stability and ensuring the sound performance of the bank(s) within the banking groups.

Additionally, within the abovementioned legislative amendments, the NBG’s authority regarding the supervision of banking groups was defined and will be completely aligned to the “Core Principles of Effective Banking Supervision” of the Basel Committee on Banking Supervision. Property ownership rights, asset ownership and group struc-

ture restriction regimes are now reflected in legislation. In particular, within the restriction policy on non-profile investments of commercial banks, banks are currently legally prohibited from owning, directly or indirectly, any share of the capital of a legal person that is not a financial institution, an ancillary services agency or that is connected to the social projects of the banks.

The NBG had already implemented actions regarding the abovementioned issues (see the Annual Reports of 2015 and 2016 and the section on Group Structure within this report). It should be taken into account that restrictions were enacted on the commercial lease of properties owned by commercial banks. The NBG will continue monitoring further practice and determine whether it is necessary to consider imposing additional restrictions and requirements through corresponding supervisory tools.

It is notable that, according to the amendments of the “Law of Georgia on Activities of Commercial Banks”, additional restrictions/requirements were imposed on the prohibited agreements and working methods for shareholders, controlling persons and administrators of commercial banks.

Specifically, the controlling person/administrator of a commercial bank shall be prohibited from performing any action that results in granting them, independently or together with other persons, undue advantage, dominant positions or results through the restriction, prevention and/or prohibition of competition. For the purpose of further clarification and regulation of these issues, the NBG plans to incorporate these issues into the “Code of Ethics and Professional Conduct Standards for Commercial Banks” that aims to establish internationally recognized ethical and professional standards of banking profession for the Georgian banking sector.

During the reporting period, the National Bank of Georgia also launched an initiative for publishing draft versions of supervision-related normative acts on the NBG's website. The goal of doing so was enhancing the transparency of the financial sector. The initiative enables all interested parties to become familiarized with draft normative acts before their adoption and to submit recommendations and comments to the NBG. The latter authority was stipulated in legislative amendments made to the Organic Law on the National Bank of Georgia, which state that the NBG is entitled to publish draft versions of supervision-related normative acts with the intention of receiving comments and recommendations from stakeholders. The "Code of Ethics and Professional Conduct Standards for Commercial Banks" was the first draft version published on this initiative and is currently undergoing legislative processing in line with comments received from the banking sector and other interested parties. After that process is complete, and a final version is developed, the act will be adopted.

In 2017, the "Regulation on Disclosure Requirements for Commercial Banks within Pillar 3" was approved and became effective. This requires commercial banks to publish qualitative and quantitative information regarding capital elements, risk weighted assets, remuneration of senior management and other material issues. This regulation replaced the "Regulation on Transparency of Financial Conditions of Commercial Banks" that was approved in 2006. It is noteworthy that the requirements of this regulation are in line with the updated Pillar 3 framework of Basel Committee (as finalized in 2017) and the principles of corresponding European directives. The quarterly reports published by commercial banks within the Pillar 3 framework, containing quantitative information, are available on the websites of the NBG and the corresponding commercial banks. Annual reports, containing qualitative and quantitative information, were published in May, 2018.

In 2017, the NBG continued working on the alignment with the capital standards of Basel III. This implies amendments to legal acts related to capital adequacy requirements. In particular, amendments were made to the "Regulation on Capital Adequacy Requirements for Commercial Banks" and new regulations were introduced to the "Additional Capital Buffer Requirements within Pillar 2 for Commercial Banks", the "Rule of Defining the Countercyclical Capital Buffer Rate", and the "Rule on Defining Systemically Important Commercial Banks and Imposing a Systemic Risk Buffer". These updates aim to enhance the Basel III framework and ensure they comply with international standards through improvement of the quality of regulatory capital.

Within the framework of Pillar 2, additional capital requirements are imposed on commercial banks according to the General Risk Assessment Program (GRAPE). The NBG has drafted special guidelines regarding GRAPE, which aim to provide information about the supervisory approaches of the NBG to commercial banks, investors, depositors and other stakeholders in order to support the formation of accurate expectations towards the financial sector and prevent procyclical behavior. The document defines the supervisory actions and principles to be observed by each employee involved in carrying out the supervisory function. The document describes the risk categories and their assessment criteria within GRAPE, as well as addressing resource allocation during the assessment process and the organizational structure of the NBG.

In 2017, the NBG updated the "Law Defining Minimum Capital Requirements for Commercial Banks" that first came into force on 23 May 2006 (Decree N144). According to the updated version of the law, existing commercial banks and legal persons seeking a banking license must comply with a minimum capital requirement of 50 million GEL. Existing banks that do not currently comply

with this requirement will be given a three-stage transitional period. According to this, a bank's minimum regulatory capital must amount to at least 30 million GEL by 31 December 2017, rising to no less than 40 million GEL by 30 June 2018 and to no less than 50 million GEL by 31 December 2018. The purpose of this new requirement is to restrict excessive risk-taking in low capitalized banks and to ensure financial stability. It worth mentioning that the previously applied minimum capital requirements were amongst the lowest in the world and did not correspond to the level of development of either the country or its financial sector. It is important to note that that, as a result of these changes, two banks, which were non-compliant with the new minimum regulatory capital requirements, increased their regulatory capital levels by raising share capital and profit accumulation.

With the development of a risk-based supervision framework and the encouragement of sound lending standards, the NBG amended the "Regulation on Capital Adequacy Requirements for Commercial Banks", which is based on the Basel III framework. In addition, the "Regulation on Asset Classification and the Creation and Use of Reserves for Losses for Commercial Banks" was updated. These changes imply the growth of exposure limits for groups of connected counterparties from 350,000 GEL to 2 million GEL to be assigned to the retail exposure class that will allow banks to include loans given to micro, small and medium businesses in the retail class (which implies an easing of the supervisory burden on these types of loans). On the other hand, the "Regulation on Asset Classification and the Creation and Use of Reserves for Losses for Commercial Banks" defined the minimum requirements for loans to be classified in the standard category distributed to natural persons with Payment to Income (PTI) and Loan to Value (LTV) coefficients. In the event of breaching the limits defined within the updated regula-

tion, the regulatory burden significantly increases with regard to capital adequacy requirements. The abovementioned updates will encourage the improvement of lending standards in the banking sector, decrease motivation to distribute retail loans without checking borrowers' income, and, consequently, improve the quality of commercial banks' credit portfolios and encourage socially responsible credit relationships.

Since 1 September 2017, the minimum requirements of the Basel III-based Liquidity Coverage Ratio (LCR) became effective. This is a modern and effective approach for short-term (up to 30 days) liquidity management and provides a comprehensive tool for identifying, assessing, monitoring and controlling these types of risks. Furthermore, in order to improve the management of long-term liquidity, the implementation of the Net Stable Funding Ratio (NSFR) is planned. Following the introduction of the latter, the existing liquidity requirement (of 30% of short-term liabilities) will be made void. Once this has happened, the liquidity risk supervisory framework will come into full compliance with Basel III standards.

The National Bank of Georgia also plans to implement the Basel III leverage ratio. The leverage ratio is a simple and transparent figure that acts as a supplementary measure of risk-based capital adequacy requirements. The ratio is defined as Tier 1 capital divided by a bank's total risk exposures. 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.

4.2 Corporate Governance and Group Structure Risk

Assessment of risks related to the group structures and the corporate governance of commercial banks is part of the National Bank of Georgia's General Risk Assessment Program (GRAPE). Although certain issues related to the corporate governance of banks are reflected in different laws and subordinate normative acts and their fulfillment is obligatory for all commercial banks operating in Georgia, the existing legislative framework is insufficient and does not allow regulation of corporate governance-related issues according to best practices. It is, therefore, necessary to adopt separate comprehensive regulations in order to develop a unified approach regarding corporate governance. The abovementioned process is strongly encouraged within the package of legislative amendments, according to which the criteria for an independent member of the supervisory board was defined. Entries in the "Law on Activities of Commercial Banks" that were non-compliant with international practice were recalibrated and the NBG's authority to designate the criteria of independence for supervisory board members were defined. In addition, a previous inconsistency between supervisory board and management functions – under which a director could simultaneously be a member of the supervisory board – was eliminated. According to the updated version, board members are prohibited from carrying out executive functions.

It is significant that the NBG has started working on a separate comprehensive regulation regarding corporate governance, which will be in full compliance with international best practice. The regulation concerns the following issues regarding the supervisory board and its committee(s): the number of members, independence, qualifications, responsibilities and delegation of authority. In addition, the regulation defines issues related

to the composition and qualifications of the management board, risk management and internal control functions, and the remuneration principles for senior management and material risk takers. Additionally, the NBG plans to impose standards and principles of ethics and professional conduct for commercial banks, which aim to integrate internationally accepted standards into the banking sector. These will facilitate an enhancement of public trust, including amongst investors, towards the banking sector. It will also significantly support the banking sector in operating in a stable and efficient manner. The principles and standards established by the latter document will be based on the framework of ethical principles and standards of professional conduct developed by the Certified Financial Analysts (CFA) Institute – one of the most commonly recognized and respected manuals in the financial market.

Besides general ethical principles, the document defines professional conduct principles in detail and regulates several standards, including professionalism, integrity of financial markets, the integrity of the banking sector, duties to clients, duties to employers, principles of professional behavior, conflicts of interests, and the responsibilities of subjects in the scope of the code. In addition, the code establishes the obligations of commercial banks for the purpose of complying with the standards and requirements of the code as well as the issues concerning identification of violations of the code, decision making and appeal procedures.

Group structure risk assessment entails the evaluation of risks related to banks' ownership structures, transactions carried out with banking group members, and those related to banks' investments and investment activities. Within the framework of group structure risk assessments, the National Bank is actively involved in monitoring processes developing in the home countries of the international banking groups represented in Georgia, and in the assessment of significant shareholders.

In 2017, a banking license was granted to JSC “Credo Bank”. This had previously been operating on the Georgian market since 2007 as a microfinance organization (JSC “Microfinance Organization Credo”). Since 2014, Credo has been owned by a consortium of investors, which provide microfinance and other financial services on international markets, specifically in several European, Asian, South American and African countries. The company itself aims to provide financial services for micro, small and medium business enterprises and to facilitate small and micro business development in Georgia.

In 2017, JSC “TBC Bank” fully merged JSC “Bank Republic” and successfully finalized the 100% acquisition process that was started in 2016.

As a result of these changes, by 31 December 2017, 16 commercial banks were operating on the Georgian banking sector. At that time, 86% of bank assets and 84% of stockholder equity was beneficially owned by foreign investors.

In 2014, for the purpose of mitigating banking group-related risk, the National Bank of Georgia restricted commercial banks from operating in non-financial sectors. During 2015, commercial banks exited these sectors through group restructuring and reorganization. However, the NBG continues monitoring commercial banks and other companies to check for conflicts of interest and to assess the effects of group structure risks on

banks. In addition, according to the amendments of the “Law on Activities of Commercial Banks”, commercial banks are restricted from owning, directly or indirectly, any share of a legal company that is not a financial institution, an ancillary services agency or related to the banks’ social projects.

The National Bank, in cooperation with the State Insurance Supervision Service, continues working on the development and implementation of a supplementary supervision framework for financial conglomerates. This, in accordance with the EU-Georgia Association Agreement, is to approximate the legislation to the EU acquis within a stipulated timeframe. The supplementary supervision framework, which implies prudent supervision with respect to capital adequacy, risk concentration, intra-group transactions and the internal control mechanisms of entities within a financial conglomerate, is itself tightly interconnected to the consolidated supervision of banking groups. The aforementioned legislative amendments to the law of “Activities of Commercial Banks” and the Organic Law on the National Bank of Georgia, which explicitly grant authority to the NBG to supervise banking groups on a consolidated basis, are significant steps towards the implementation of the supplementary supervision framework. However, the latter also aims to cover groups that typically combine commercial banks, insurance institutions and investment firms.

Box 3. An overview of the corporate governance principles of commercial banks

Sound practice of corporate governance encourages early identification and mitigation of risks. According to Lundqvist and Vilhelmsson (2016) – who investigated the relationship between enterprise risk management (ERM) implementation and default risk for 78 of the world's largest banks – ERM implementation is negatively related to the credit default swap (CDS) spread of a bank.²⁵

According to Pathan (2009), who examined a sample of 212 US bank holding companies from 1997 to 2004, there is a negative relationship between boards comprising independent members and riskiness.²⁶ Likewise, according to Faleye and Krishnan (2010), the existence of an independent board reduces the probability of granting risky loans.²⁷

In addition, cases of excessive risk taking are often related to poor corporate governance. Examples of this include the cases of J.P Morgan²⁸, Barclays Bank²⁹, the Royal Bank of Scotland³⁰ and Barings Bank³¹, some of which defaulted because of fraud and excessive risk taking and others suffered serious scandals.

It is worth noting that corporate governance practice is one of the main criteria that investors take into account when making decisions. Strong corporate governance increases the ability to obtain capital at low costs. Corporate governance becomes extremely important in developing countries, where investor rights are not protected properly – unlike in developed countries. According to Brown and Caylor (2004), sound corporate governance practice is key to a company's success. Their empirical study of 2,327 firms showed that firms with good corporate governance have better financial performance.³²

According to international best practice, the following issues are important regarding corporate governance:

Supervisory board

The supervisory board is considered responsible for corporate governance standards at the bank level. According to best practice³³, the supervisory board should define the risk strategy and risk appetite of the bank. The board should actively monitor executive management. The education, experience, qualifications and number of board members should be commensurate with the size

25. Lundqvist, S. A., & Vilhelmsson, A. (2016) Enterprise Risk Management and Default Risk: Evidence from the Banking Industry. *Journal of Risk and Insurance*, 127-157.

26. Pathan, S. (2009). Strong boards, CEO power and bank risk-taking. *Journal of Banking and Finance*, 33(7), 1340–1350, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1336309##.

27. Faleye O. & Krishnan K. (2010), *Risky lending: Does bank corporate governance matter?*

28. As One JP Morgan Trader Sold Risky Contracts, Another One Bought Them, *NY Times*, May 2012, <https://dealbook.nytimes.com/2012/05/15/as-one-jpmorgan-trader-sold-risky-contracts-another-one-bought-them/>.

29. Barclays fined a record £290m, *Financial Times*, June 2012, <https://www.ft.com/content/2a4479f8-c030-11e1-9867-00144feabdc0>.

30. RBS fined £56m over 'unacceptable' computer failure, BBC, November 2014, <http://www.bbc.com/news/business-30125728>.

31. Hogan, W.P. (2002), *Corporate Governance: Lessons from Barings*, <https://onlinelibrary.wiley.com/doi/pdf/10.1111/1467-6281.00002>.

32. Brown, L.D. & Caylor, M.L. (2004) *Corporate Governance and Firm Performance*.

33. Basel Committee on Banking Supervision, *Corporate Governance Principles for Banks*, 2015.

and complexity of the bank's activity. In addition, in order to make informed decisions, the board should have the ability to independently hire experienced and qualified consultants. According to international practice, the majority (two-thirds, according to some countries with leading best practice) of board members should be independent. Moreover, the head of the supervisory board, as well as board committees, should be independent. Independent members of the board should have the ability to hold a meeting, or to meet with senior management or structural units responsible for risk governance, without non-independent members of the board.

The following factors are considered while determining the criteria for independence³⁴:

- Any financial or other obligation an individual may have to the institution or its directors.
- Whether the individual is, or ever has been, employed by the institution or a group entity in the past and the post(s) so held.
- Whether the individual is, or has been, a provider of professional services to the institution in the recent past.
- Whether the individual represents a significant shareholder (or owner of significant shares).
- Circumstances where the individual has acted as an independent non-executive director of the institution for extended periods.
- Any additional remuneration received in addition to the director's fee, related directorships or shareholdings in the institution.
- Any close business or personal relationship with any of the institution's directors or senior employees.

The existence of formal processes for the appointment of board members is important. According to best practice, every member shall be appointed each year. While appointments for more than one year is acceptable, it is important that all members are not reappointed simultaneously and any contracts should thus be terminated at different periods.³⁵

In addition, the board's annual evaluation of its own performance is important. This should be conducted in the form of self-assessment, or an external assessor should evaluate the board's (and its committees') performance.

Senior management

Senior management is responsible for the day-to-day governance of the bank within the framework of the board-approved business strategy and risk appetite. Senior management plays a crucial role in the consistency and effectiveness of the risk management system. While assessing the fitness and propriety of senior management – as well as the supervisory board – it is important to evaluate the individual and collective suitability of members given the size and complexity of the bank's operations. According to best practice, the Chief Risk Officer (CRO), responsible for risk issues, should be represented in senior management. The same practice imposes additional requirements regarding the CRO, which implies independence, unlimited access to the board and supervisory authority, and offering appropriate compensation.

34. Central Bank of Ireland, *Corporate Governance Requirements for Credit Institutions*, 2015.

35. This is known as a staggered board.

Risk management and internal control

According to Basel and other international practice, the existence of an independent, risk management-oriented structural unit is essential. This should be maintained with a sufficient number of employees and offer adequate remuneration to ensure independence. A strong risk management system should ensure the existence of the four-eye principle in the decision-making process, an organized framework addressing conflict of interests, the presence of risk-related reporting and communication at the level of both senior management and the supervisory board. In addition, an internal audit function that is structured and functions according to best practice³⁶ is an integral component of internal control.

Remuneration

The remuneration and motivation system should be aligned with the risk appetite of the bank. For this purpose, according to Basel and other international practice, the participation of the risk committee, along with the supervisory board (and, if appropriate, the remuneration committee), when determining the compensation of senior management is highly recommended. This is important in order not to create incentives for excessive risk taking. It is crucial that a major part of material risk takers' remuneration should be variable and linked to the achievement of pre-defined key performance indicators. In addition, as risks may be realized over a longer period than remuneration is awarded, it is essential that part of the remuneration is deferred and made subject to adjustments (including the potential for total cancelation). In general, the remuneration of independent functions should ensure the maintenance of qualified and adequate resources.

Ethics

The development of sound corporate governance practice is significantly encouraged by the introduction of internationally acknowledged standards of ethics in the banking profession. This serves to strengthen the trust of investors and enable the stable and efficient functioning of the banking sector. Although issues related to ethics should be formed as a separate legal act, it remains part of the corporate governance framework. In order to integrate internationally recognized principles of ethics, the National Bank drafted the "Code of Ethics and Standards of Professional Conduct", which is based on the framework of the principles of ethics and professional conduct as defined by the Institute of Chartered Financial Analysts (CFA).

According to the code, commercial banks, their shareholders, administrators and employees should observe the following ethical principles:

- Act with integrity, competence, diligence, respect, and in an ethical manner with the public, clients, prospective clients, employers, employees, the banking sector, and other participants in financial markets.
- Place the integrity of the banking profession and the interests of clients above their own personal interests.
- Use reasonable care and exercise independent professional judgment when conducting professional activities.
- Practice and encourage others to practice in a professional and ethical manner that will credit themselves and the banking profession.

36. Basel Committee on Banking Supervision, *The internal audit function in banks*, June 2012.

- Promote the integrity and viability of the banking sector and the financial market for the ultimate benefit of society.
- Maintain and improve their professional competence and strive to maintain and improve the competence of other professionals.

In addition, the code outlines in detail standards of professional conduct in terms of the following issues:

- Professionalism
- Integrity of financial markets
- Integrity of the banking sector
- Duties to clients
- Duties to employers
- Principles of professional conduct
- Conflicts of interest
- Responsibilities of persons under the scope of the code.

Other Issues

It should be noted that strong corporate governance is a continuous process. The challenges related to corporate governance can increase over time. Social responsibility is linked to corporate governance. Therefore, good corporate governance is associated with developing a better reputation and public image. In this regard, it is worth paying attention to the experience of other countries that have placed important issues such as gender equality within the requirements of corporate governance. In 2006, Norway imposed a 40% female participation quota for companies, including financial organizations. This law became effective from 2008. An analogous law was adopted by Parliament of France, requiring French companies to increase female representation in management boards up to minimum of 40% by 2016. In Germany, since 2015, 108 firms listed on the stock market have been required to have a 30% female quota in supervisory boards. The European Union and the United Kingdom are working on similar regulations. In the Georgian banking sector, by the end of December 2017, the average level of representation of females in supervisory boards was 9%, while there was 16% representation in senior management.

A document from the Toronto Centre (2017)³⁷ reviews female representation in supervisory boards and the relationship between gender diversity and riskiness/company performance indicators. The document cites works that state that female representation in a board is linked to better profit indicators³⁸. In addition to better profit ratios, according to various studies, women, on average, are more risk averse than men. According to research conducted by Leeds University Business School, the probability of default in companies with at least one woman on the board decreases by 20%. Additionally, such companies are less leveraged than those without a woman on the board.

37. Jennifer Reynolds on behalf of Toronto Centre, The Business Case for Promoting Improved Gender Balance in Financial Institutions.

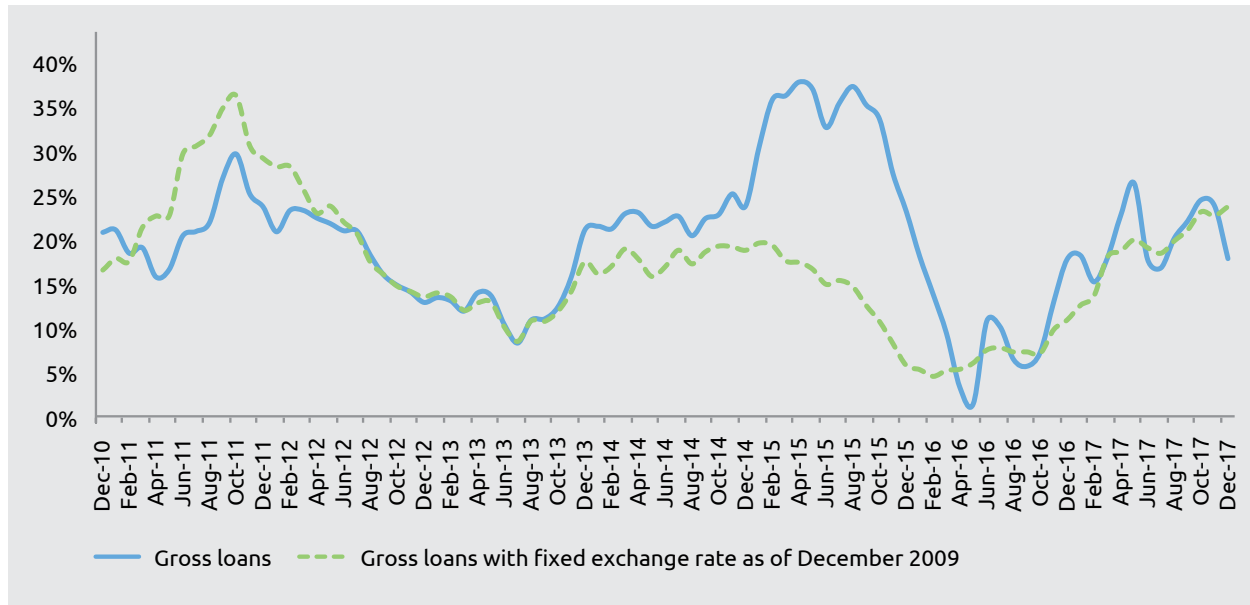
38. Credit Suisse Research Institute, Gender Diversity and Corporate Performance (2012) - According to the results, comparing companies with a female member in a board, shows 4 percentage points higher than the average ROE of companies with no female board representation and price/book value (P/BV)—a third higher.

4.3 Credit risk

The total loan portfolio for the banking system reached 22.3 billion GEL at the end of 2017 – an increase of 19.2%, excluding the foreign exchange

rate effect. Credit activities increased during 2017 compared to the previous year.

Diagram N 4.1 YoY percentage change in gross loans



Source: National Bank of Georgia

During 2017, due to the increase in the share of retail and SME segments, the consistency of the

credit portfolio in the banking system (excluding interbank loans) changed slightly.

Table 4.1 Composition of the loan portfolio (excluding interbank loans) by segment (adjusted for exchange rate effect, the exchange rate as of the end of 2016)

	Dec-16		Dec-17		YoY % change
	LP	%	LP	%	
Corporate	6,508	34%	6,934	31%	7%
SME	3,992	21%	5,246	23%	31%
Retail	8,402	44%	10,370	46%	23%
Total	18,902	100%	22,550	100%	19%

Source: National Bank of Georgia

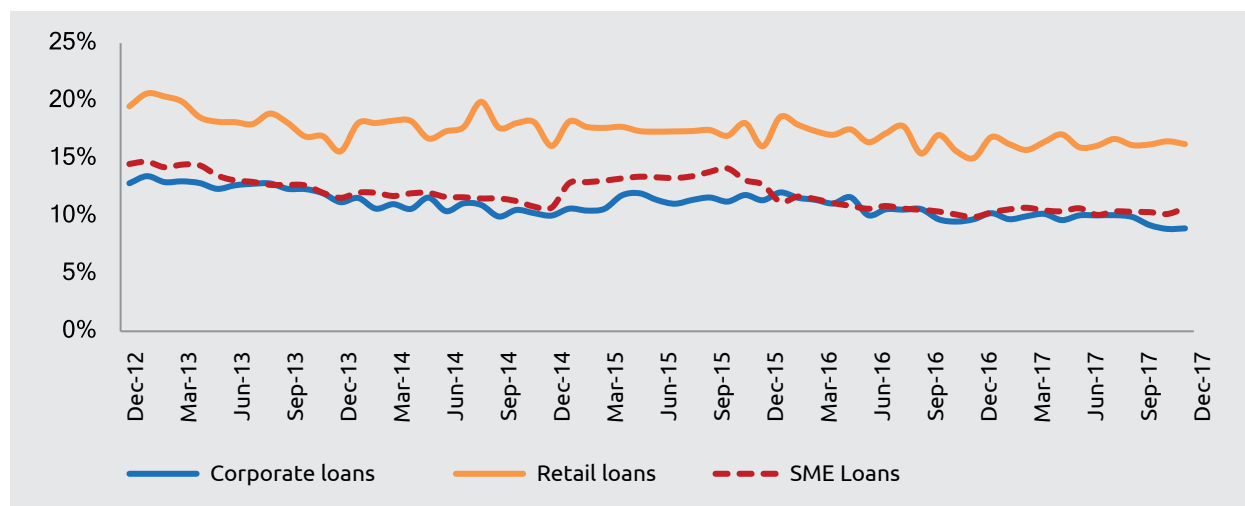
A few different types of reclassifications occurred during the year, which had an effect on the nominal growth rate by segment. The reclassifications included a technical reclassification from retail to the SME segment, the addition of JSC "Credo Bank", previously an MFO, to the banking system, and banks' practice of buying corporate debt secu-

rities. According to the NBG's estimations, taking into account the previously mentioned changes, the retail, SME and corporate portfolio increased by 22.7%, 21.1% and 10.5% respectively (with the assumption of a fixed currency). The increase in the corporate loan portfolio, excluding the bonds portfolio, was 8.6%.

Interest rates in the corporate segment are still decreasing. Meanwhile, interest rates in the SME and retail segments during 2017 slightly increased compared to 2016. The main drivers of this in-

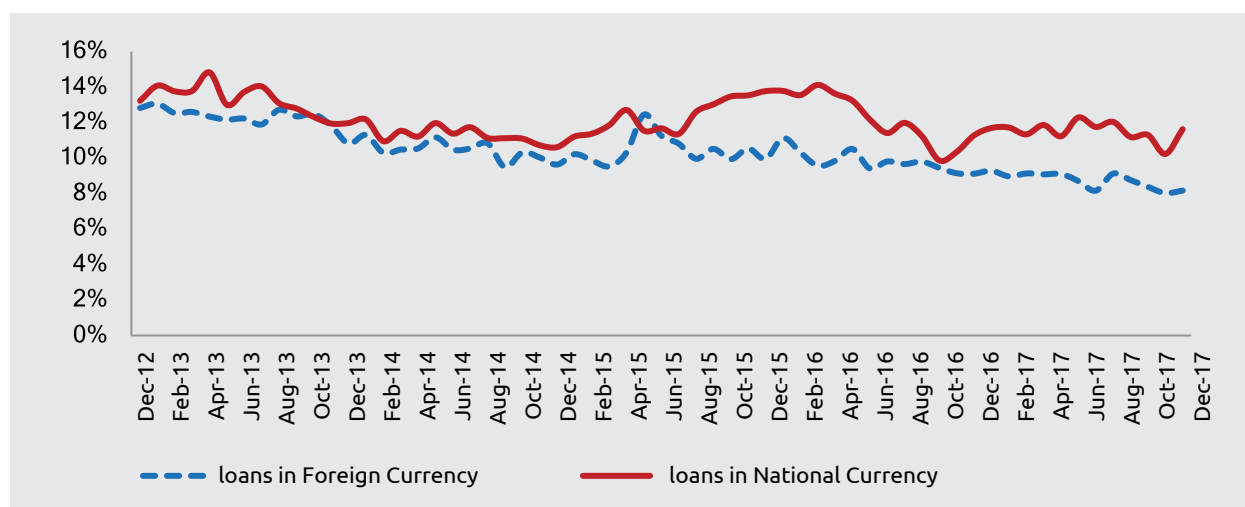
crease were the slight increase in interest rates for lari loans, the increased share of lari loans in the total portfolio, and a decrease in the disbursement of foreign currency loans.

Diagram N 4.2 Monthly weighted average interest rates on loans per segment

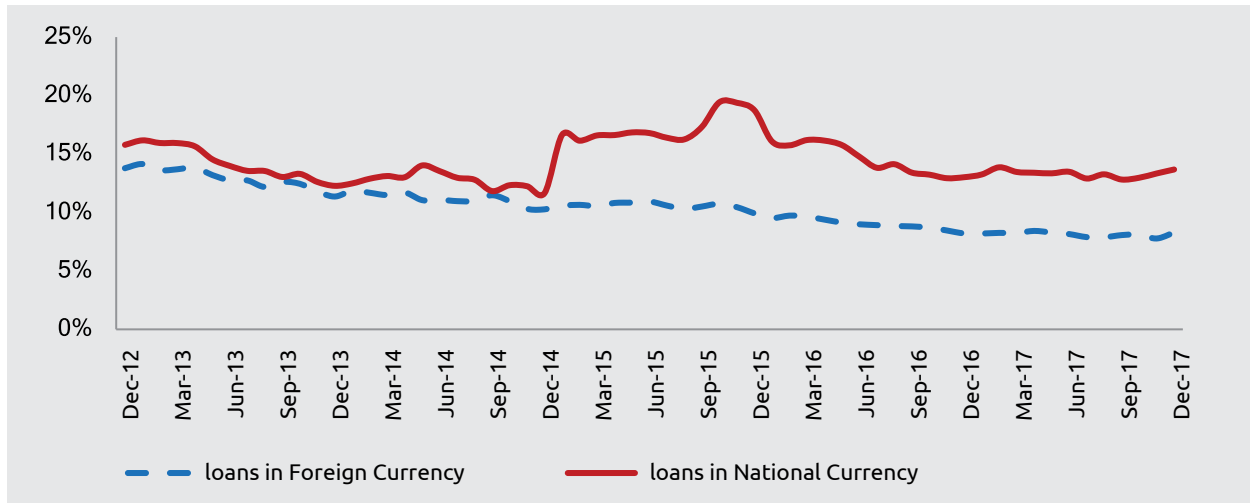


Source: National Bank of Georgia

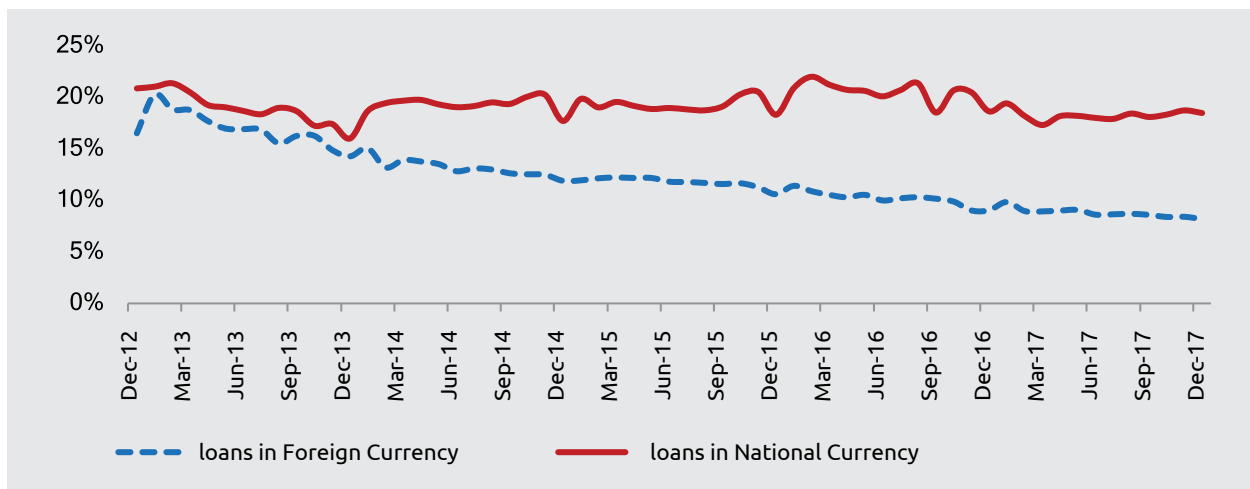
Diagram N 4.3 Monthly weighted average interest rates on loans for the corporate segment



Source: National Bank of Georgia

Diagram N 4.4 Monthly weighted average interest rates on loans for the SME segment

Source: National Bank of Georgia

Diagram N 4.5 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 2017, the share of procyclical sectors (real estate development, real estate management, production and trade of construction materials, production and trade of dura-

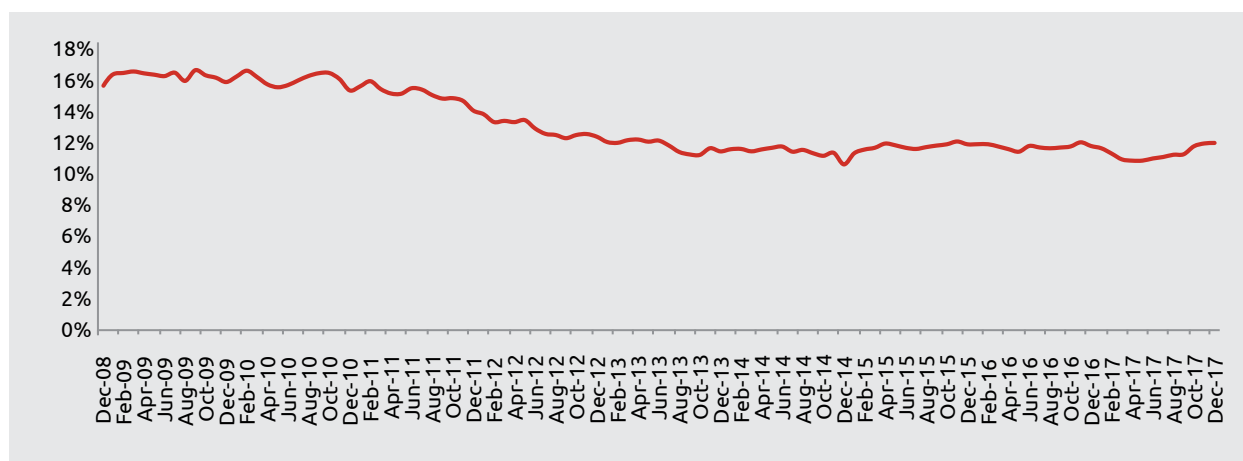
ble goods, and automobile dealers) in the banking sector's loan portfolio remained moderate and stable (see Diagram 4.6). The high volume of loan loss reserves in some sectors was largely caused by idiosyncratic events (see Table 4.2).

Table 4.2 Gross loan portfolio according to risk sector

Sector, excluding interbank loans (million GEL)	Share in Gross Portfolio	Loan Balance	Loan Reserve	Loan Reserve to Portfolio
State Organizations	0.0%	1	0	2%
Financial Institutions	1.1%	246	6	2.5%
Pawn-shop Loans	2.4%	532	33	6.2%
Real Estate Development	2.6%	577	48	8.2%
Real Estate Management	5.0%	1,107	44	4.0%
Construction Companies (non-developers)	1.7%	382	45	11.9%
Production and Trade of Construction Materials	2.8%	613	24	3.9%
Trade of Consumer Goods	4.3%	959	44	4.6%
Production of Consumer Goods	2.8%	631	52	8.2%
Production and Trade of Durable Goods	1.0%	230	10	4.4%
Production and Trade of Clothes, Shoes and Textiles	0.6%	127	5	4.0%
Trade (other)	4.4%	973	55	5.6%
Production (other)	1.9%	428	20	4.8%
Hotels and Tourism	3.2%	708	34	4.8%
Restaurants, Bars, Cafes and Fast Food Outlets	1.4%	302	17	5.5%
Heavy Industry	1.7%	370	24	6.5%
Oil Importers and Retailers	1.1%	253	11	4.3%
Energy	4.1%	917	28	3.0%
Automobile Dealers	0.7%	148	36	24.1%
Healthcare	2.0%	450	13	2.9%
Pharmaceutical	0.5%	105	8	7.5%
Telecommunication	0.7%	161	6	3.9%
Service	4.5%	1,011	45	4.4%
Agriculture	5.1%	1,134	54	4.7%
Other (including scrap metals)	2.0%	451	30	6.6%
Retail Products	42.5%	9,464	479	5.1%
Car Loans	0.4%	79	3	4.4%
Consumer Loans	17.7%	3,934	217	5.5%
Instant Installments	2.7%	591	56	9.5%
Payrolls (overdrafts)	0.3%	67	7	11.1%
Credit Cards	2.6%	578	34	5.8%
Loans for House Renovations	1.7%	379	12	3.3%
Mortgage Loans	17.2%	3,838	149	3.9%
Total	100.0%	22,282	1,169	5.2%

Source: National Bank of Georgia

Diagram N 4.6 Share of pro-cyclical sectors in the gross loan portfolio



Source: National Bank of Georgia

The main drivers of the growth of retail loan products were mortgages and consumer loans. During the last year, an increase was observed in all retail products, although the increase in overdrafts and car loans was relatively insignificant.

In parallel with the growth of GDP and the increase of the average income of the workforce, the high growth in the retail segment was largely driven by loosened credit standards and the aggressive marketing campaigns used by banks in the competitive consumer and mortgage loans market. During 2017, banks introduced many new products that had less strict requirements compared to previous lending standards. To address this rise of loose credit standards, the NBG suspended/prohibited various risky products during 2017.

To address the increasing risks caused by loosened credit standards, in August 2017, the “Regulation on Assets Classification and the Creation and Use of Reserves for Losses by Commercial Banks” was amended. Limits on the PTI and LTV ratios for

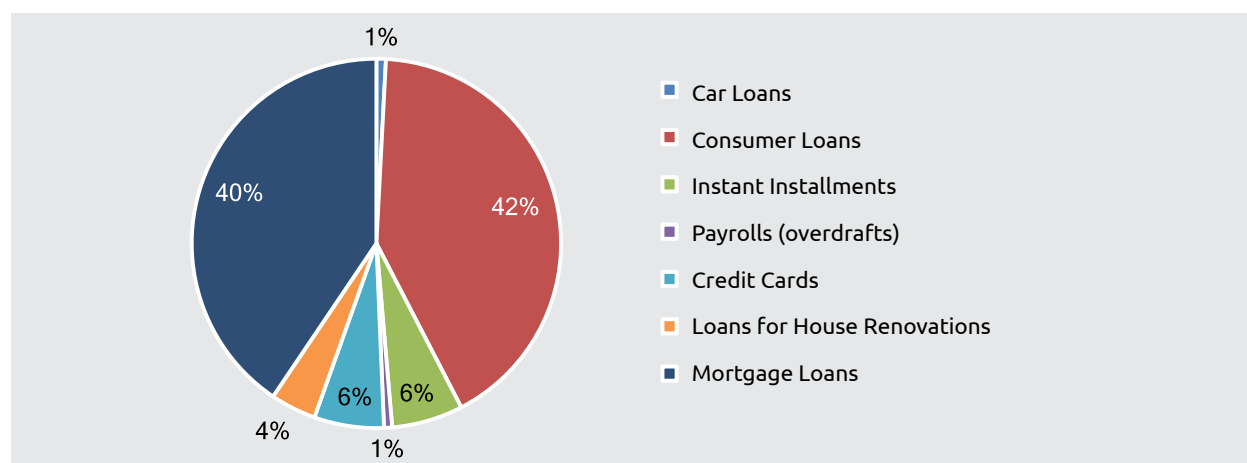
“standard” category loans were determined. In the event of non-compliance with these ratios, banks have to increase the required capital. According to these changes, the risk weight was doubled for non-collateralized retail loans that are not in compliance with the set ratios. According to the NBG written instruction issued in October 2017, collateralized loans disbursed without an in-depth analysis of a borrower’s creditworthiness – where decisions are largely based on the value of the collateral – were capped at 15% of the bank’s supervisory capital. At the same time, the NBG is working on retail loan guidelines that will improve the quality of the total loan portfolio and help solve the problem of over indebtedness.

In the medium term, one of the main challenges in the retail portfolio is the increased use of models for the assessment of borrowers’ creditworthiness. This practice is related to high model risks. The models considered especially risky are those that neglect a borrower’s income and other fundamental factors.

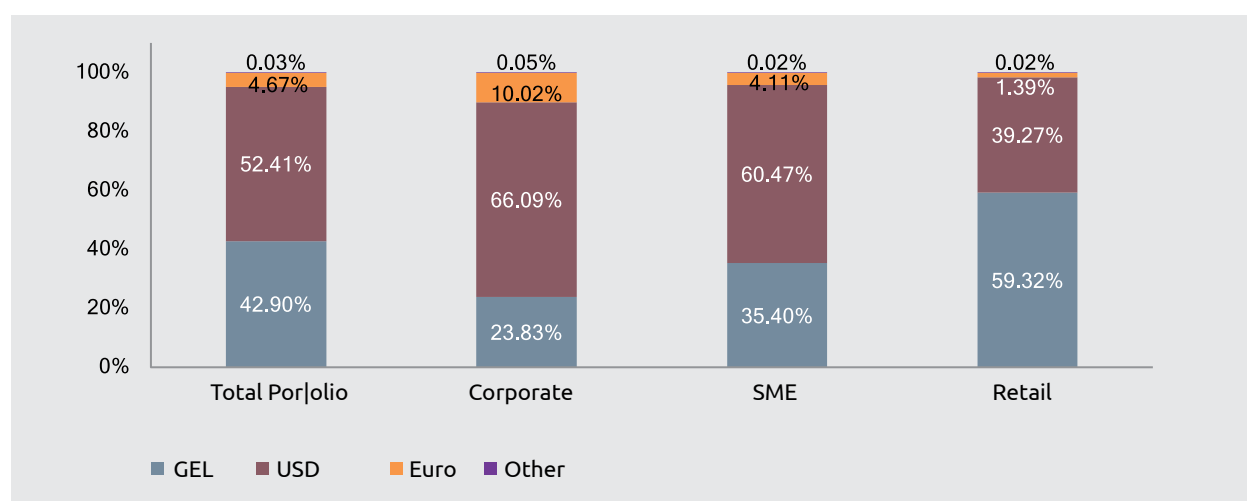
Table 4.3 Growth of retail products adjusted for the exchange rate effect (exchange rate as of the end of 2016)

Product	Dec-16		Dec-17		Change %	Change mln GEL	Change % (Adjusted for exchange rate and reclassification effects)
	mln GEL	Share, %	mln GEL	Share,			
Retail products	7 770	100%	9 550	100%	23%	1 780	24%
Car Loans	77	1%	80	1%	3%	2	3%
Consumer Loans	3 320	43%	3 949	41%	19%	629	22%
Instant Installments	405	5%	591	6%	46%	185	43%
Payrolls (overdrafts)	62	1%	67	1%	8%	5	8%
Credit Cards	490	6%	578	6%	18%	88	18%
Loans for House Renovations	317	4%	384	4%	21%	67	21%
Mortgage Loans	3 099	40%	3 903	41%	26%	803	27%

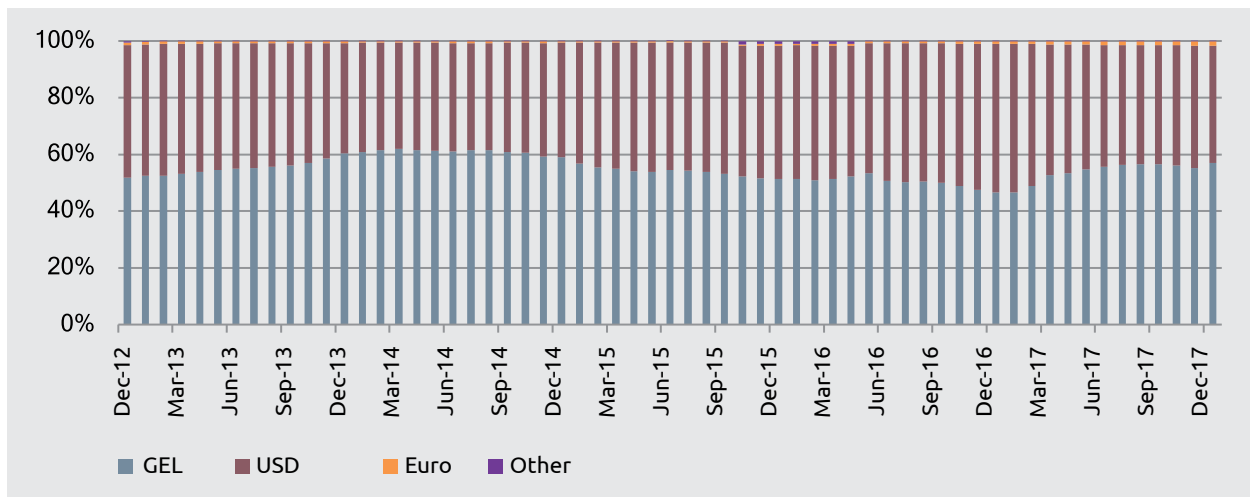
Source: National Bank of Georgia

Diagram 4.7 Retail products distribution, December 2017

Source: National Bank of Georgia

Diagram 4.8 Segments by currency (excluding interbank loans), December 2017

Source: National Bank of Georgia

Diagram 4.9 Retail portfolio composition by currency (excluding interbank loans)

Source: National Bank of Georgia

By the end of 2017, the quality of the loan portfolio was satisfactory.

Table 4.4 Gross loan portfolio risk classification

Risk category (excluding interbank loans)	Amount (mln GEL)	Share	Reserve
Standard	19,830	89.0%	2%
Negative Loans	2,446	11.0%	30%
Watch	1,108	5.0%	10%
Non-performing	1,337	6.0%	47%
Substandard	757	3.4%	30%
Doubtful	271	1.2%	50%
Loss	310	1.4%	88%
Total	22,276	100%	5%

Source: National Bank of Georgia

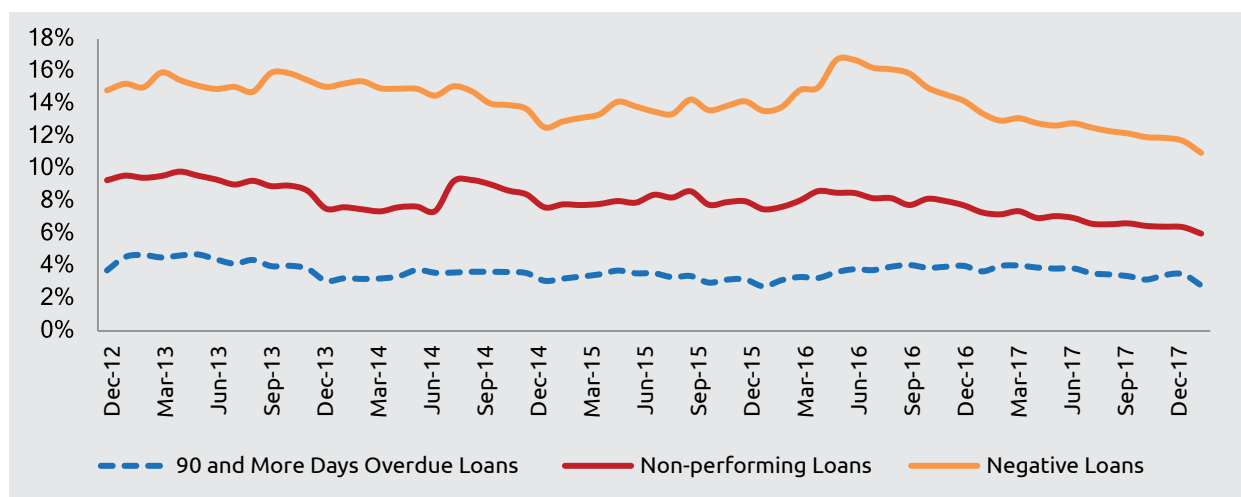
The quality of the portfolio varies significantly by segment. Historically, losses of the corporate loans segment have been considerably higher than SME and retail loan portfolio losses. Comparing the qualitative parameters according to segment shows this clearly (see Table N 4.5). The main reasons behind the improving portfolio quality were the increased total loan portfolio and the

improved situation in neighboring countries. In the case of the corporate loans 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 the banks' income.

Table 4.5 Portfolio quality by segment

Segment	Negative Loans	Non-performing Loans	Average reserve
Corporate	19.89%	10.37%	6.57%
SME	7.65%	4.27%	4.20%
Retail	6.74%	3.97%	4.89%

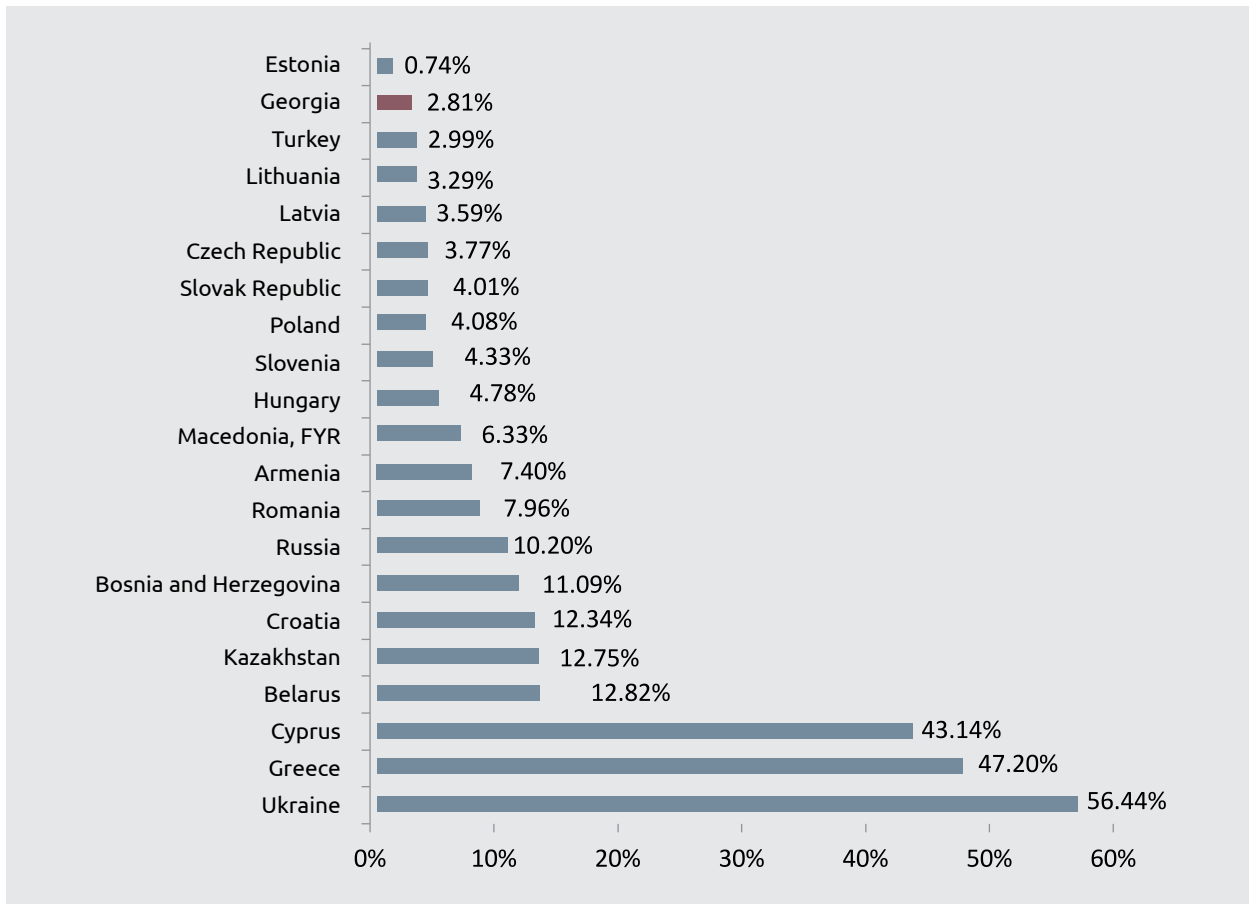
Source: National Bank of Georgia

Diagram 4.10 Loan portfolio composition by qualitative indicators (excluding interbank loans)

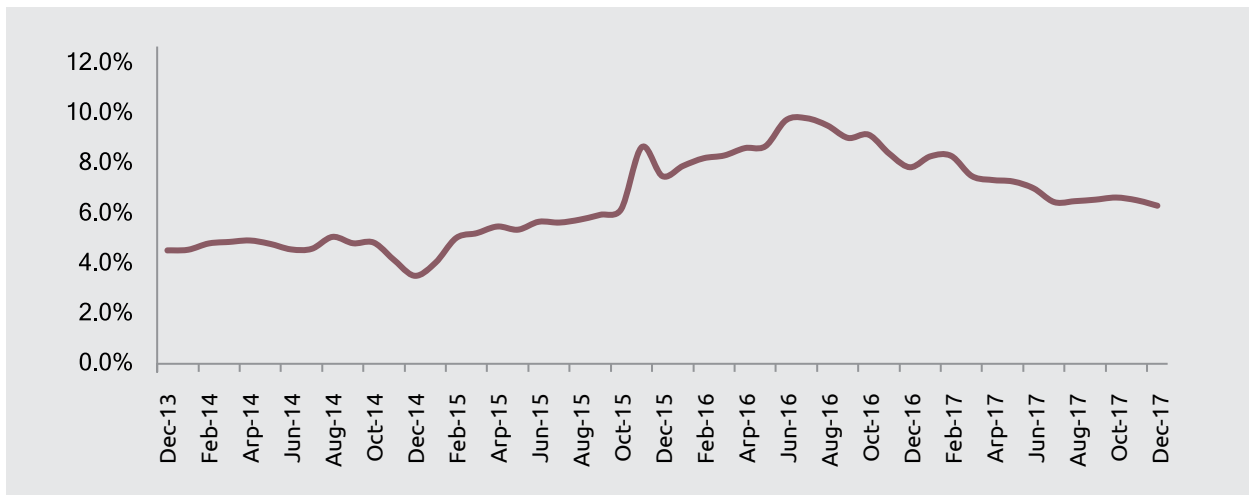
Source: National Bank of Georgia

The share of loans past due for 90 or more days in the gross loan portfolio (excluding interbank loans) amounted to 2.81%, which is one of the best results among comparable countries. However,

it should be noted that these numbers do not take into consideration the different standards of registering restructures/refinances that different countries may use.

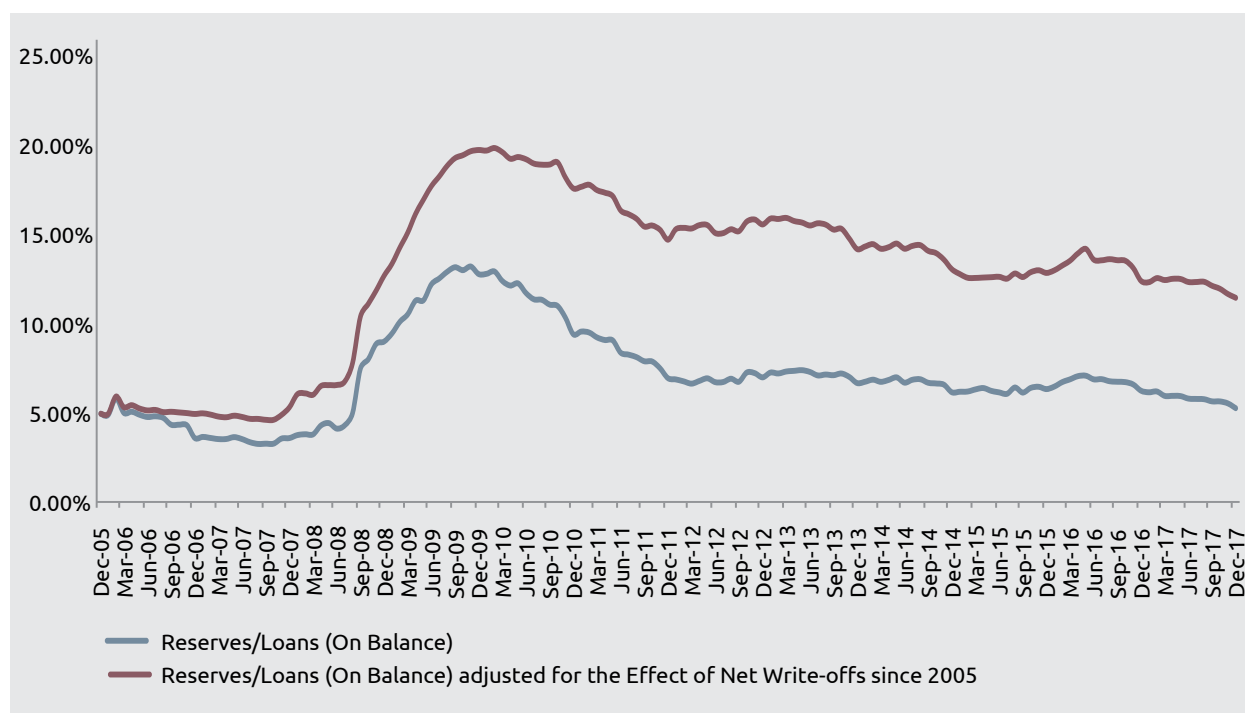
Diagram 4.11 Overdue loans of 90 days and more³⁹

Source: National Bank of Georgia

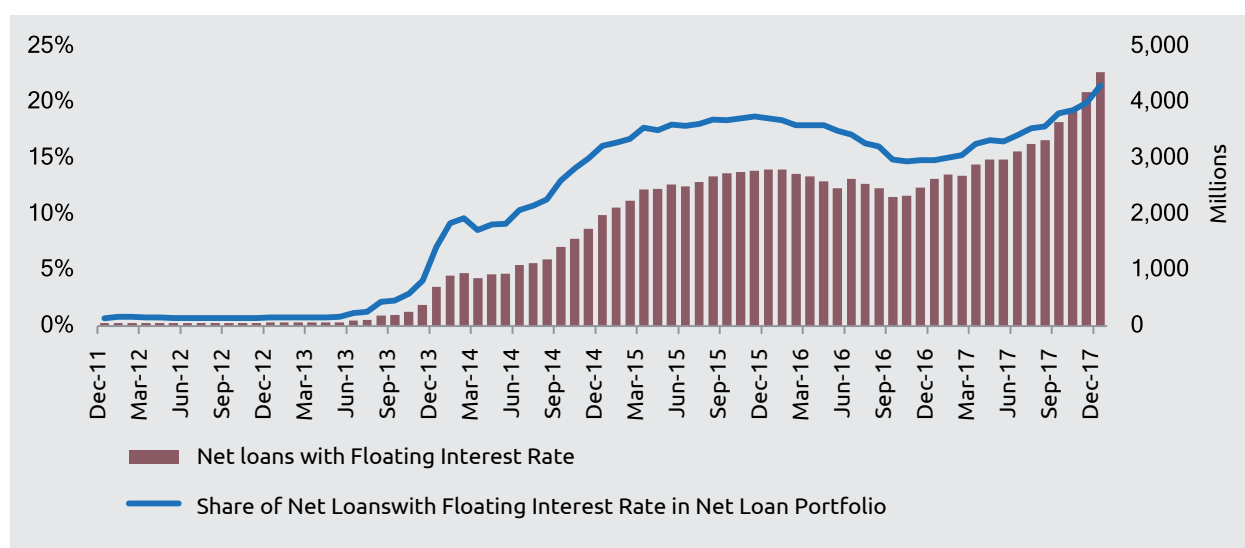
Diagram 4.12 The share of restructured loans in the gross loan portfolio

Source: National Bank of Georgia

39. Data from the end of 2017. Although the latest available data are used, several months' difference may be observed.

Diagram 4.13 The ratio of loan loss reserves to gross portfolio

Source: National Bank of Georgia

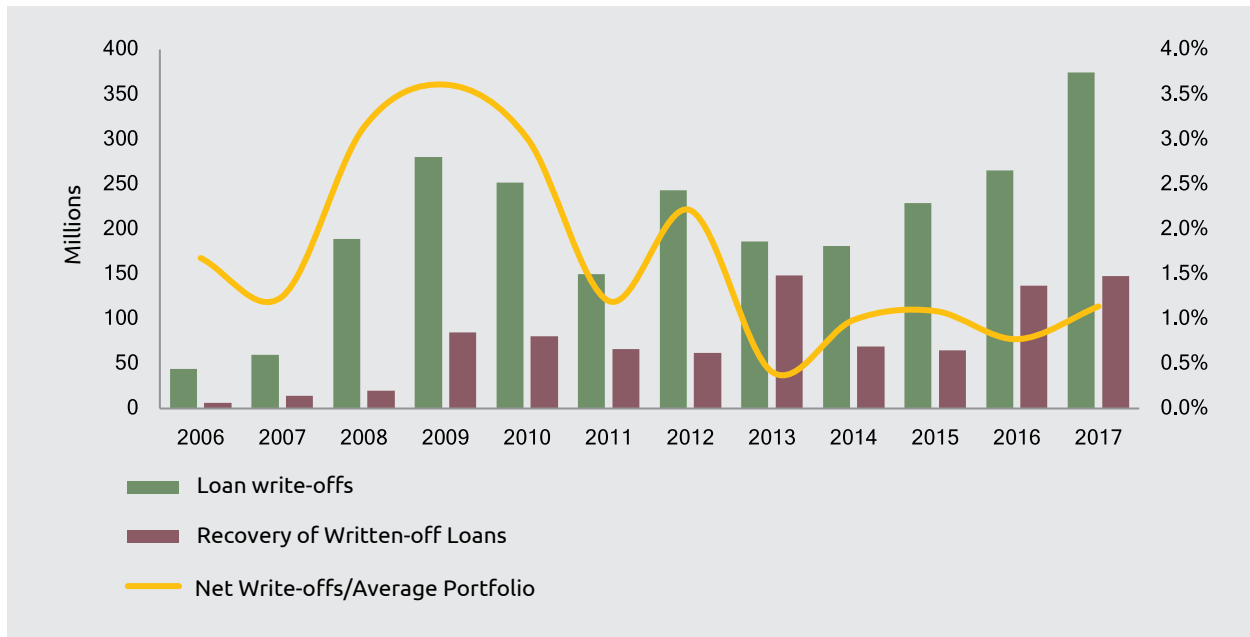
Diagram 4.14 Volume and share of net floating interest rate loans in the net loan portfolio⁴⁰

Source: National Bank of Georgia

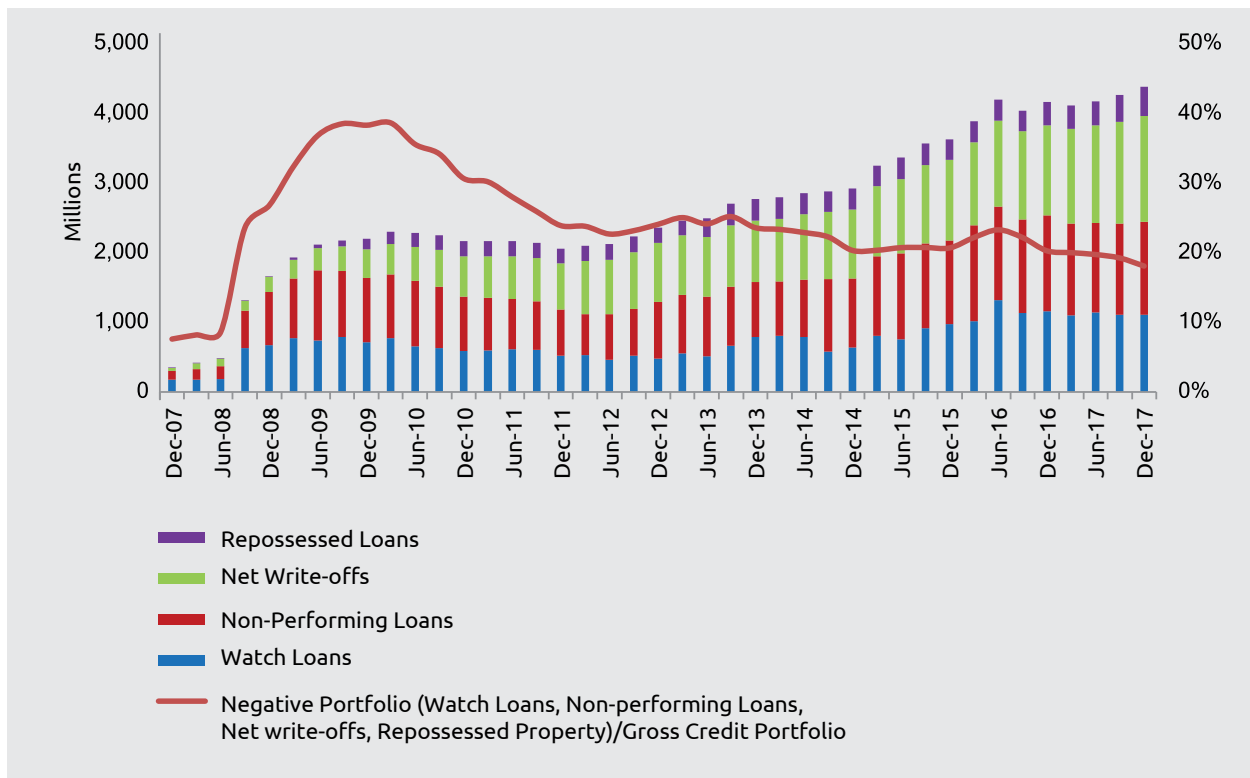
In 2017, the net value of written-off loans increased by 77% compared to the corresponding figure from 2016. An increase was observed in

both write-offs and the recovery of written-off assets, but the latter was considerably less than the increase in write-offs.

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

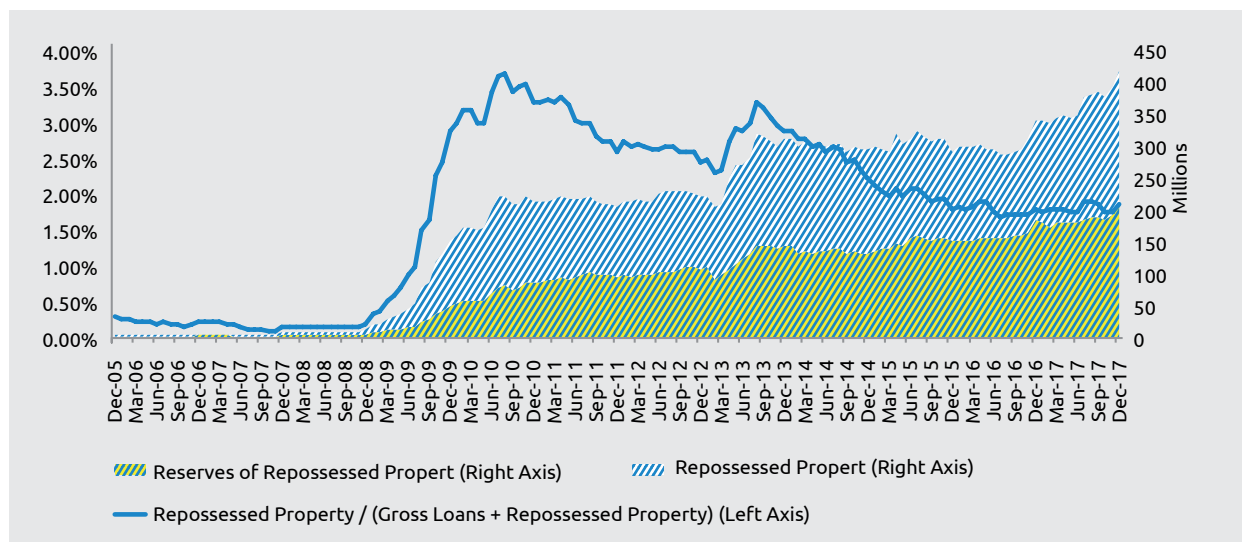
Diagram 4.15 Write-offs and the recovery of loans

Source: National Bank of Georgia

Diagram 4.16 Problem assets

Source: National Bank of Georgia

In 2017, the ratio of repossessed assets to the sum of loans and repossessed assets did not change significantly compared to 2016.

Diagram 4.17 Repossessed property

Source: National Bank of Georgia

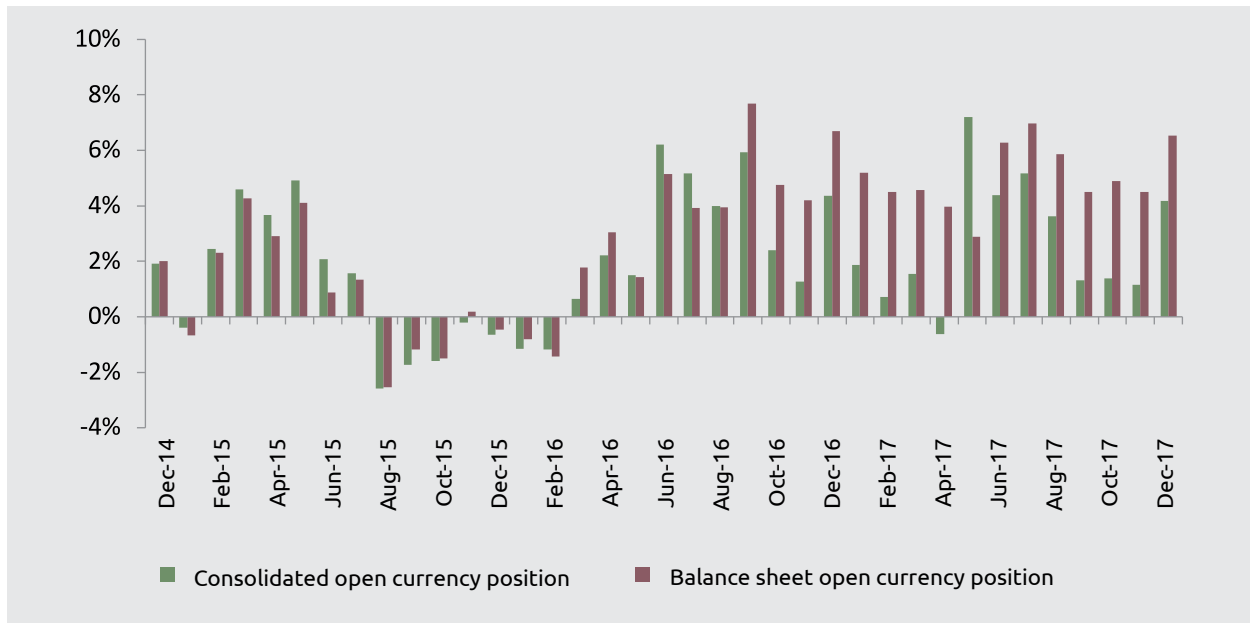
4.4 Market Risk

4.4.1. Foreign Currency Risk

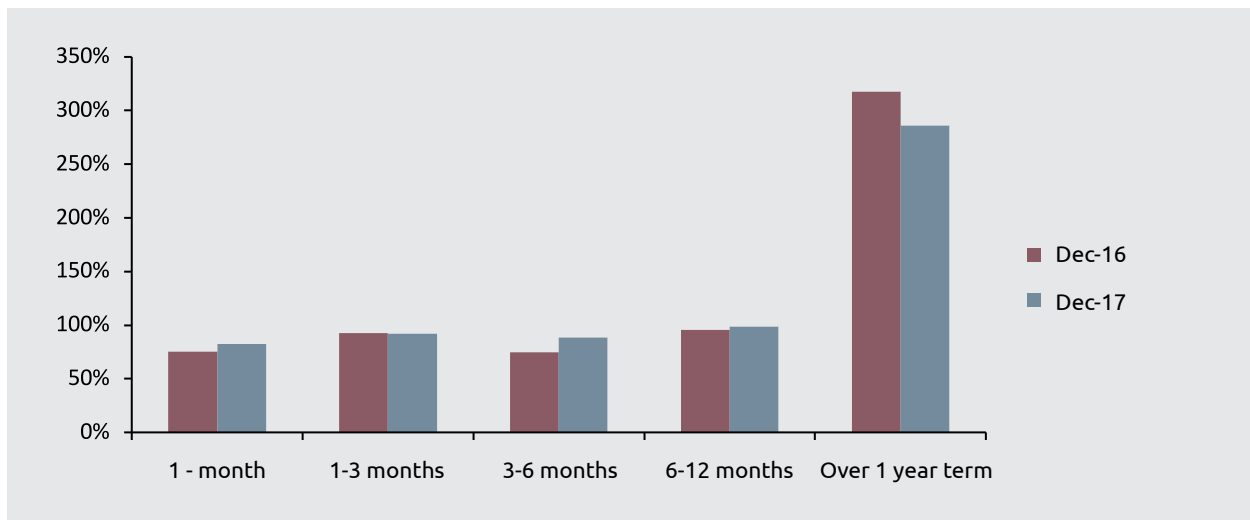
The sensitivity of the Georgian banking system to FX risk is still high; however, considering the structure of financial market liabilities, the larization of loans has improved significantly (lari loans comprise over 57% of loans to individuals and 43% of total loans). The NBG continues to direct its supervisory efforts towards improving existing approaches to foreign exchange risk management. Particular attention is paid to the revaluation of foreign exchange asset loss reserves, the assessment of risks related to structural position, and improving banks' internal models. This process has gained even more importance due to the increased currency volatility in countries of the region.

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.⁴¹ As a result, considering the revaluation of reserves, commercial banks face losses during periods of currency depreciation. Furthermore, because the share capital is denominated in lari, the revaluation of risk-weighted assets due to the depreciation of the lari significantly reduces banks' capital adequacy ratios, which further increases the vulnerability of banks towards the risk. Currency Induced Credit Risk CICR is a separate matter and is discussed in detail in the Credit Risk section of this report.

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

Diagram 4.18 Balance sheet and consolidated open currency positions to regulatory capital

Source: National Bank of Georgia

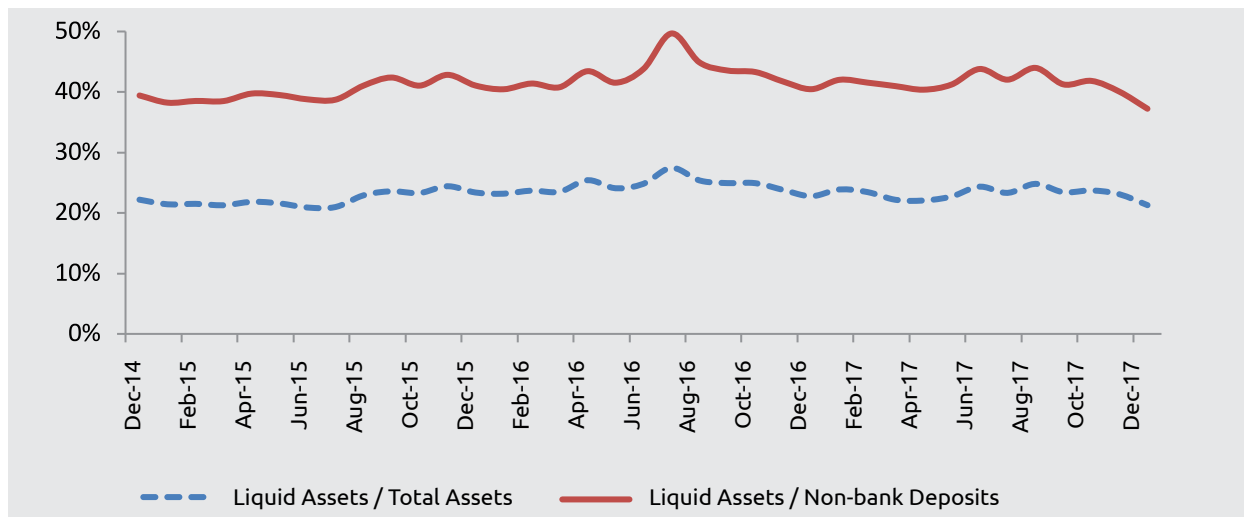
Diagram 4.19 Interest bearing assets' coverage of liabilities

Source: National Bank of Georgia

4.5 Liquidity Risk

4.5.1 Structure of Liquid Assets

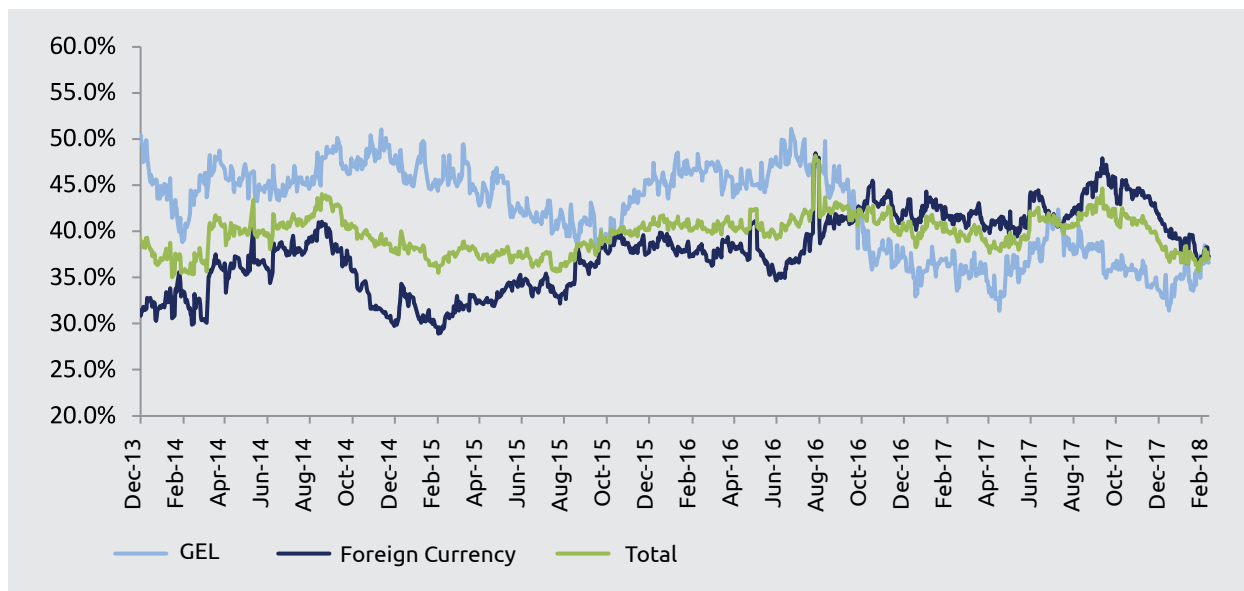
Throughout 2017, the volume of liquid assets was high and was characterized by minor fluctuations. Liquid assets constituted over 21% of total assets, which was sufficient to cover 37% of customer deposits.

Diagram 4.20 Level of liquid assets

Source: National Bank of Georgia

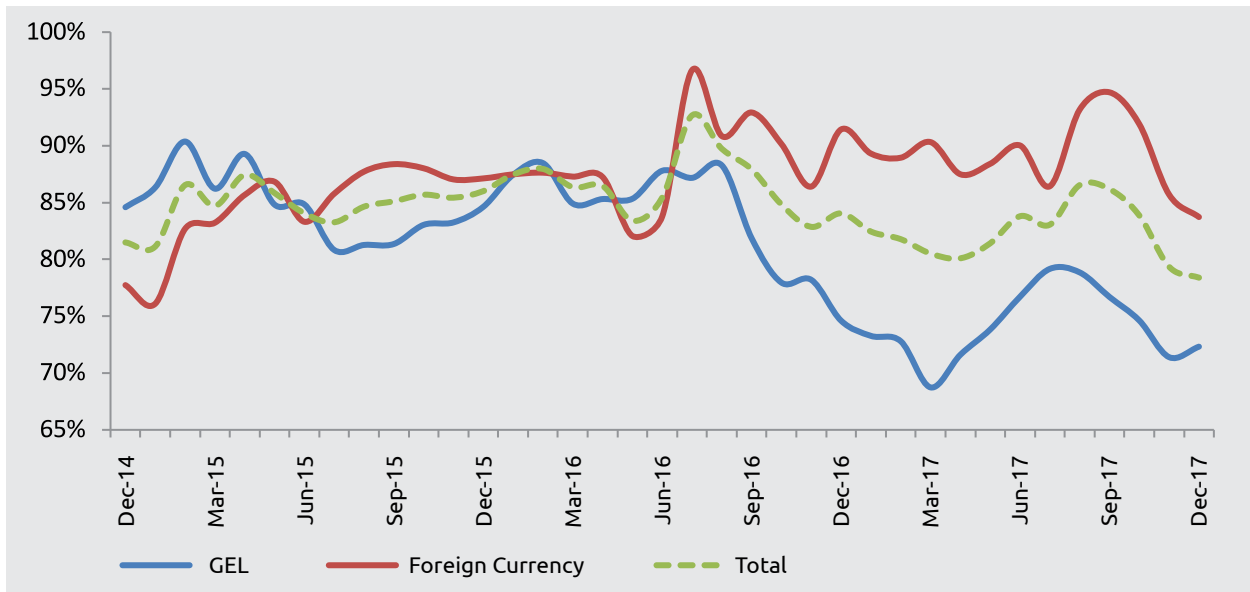
The total liquid ratio was not characterized by significant fluctuations. The foreign currency liquidity ratio remains high as a result of lower demand for foreign currency loans and increased minimum reserve requirements on foreign exchange liabilities.

ties. These dynamics were also reflected on the maturity gap of less than one month. The structure of liquid assets remains stable. Throughout 2017, as in previous years, the National Bank continued to monitor liquidity risk by currency.

Diagram 4.21 Liquidity ratio by currency

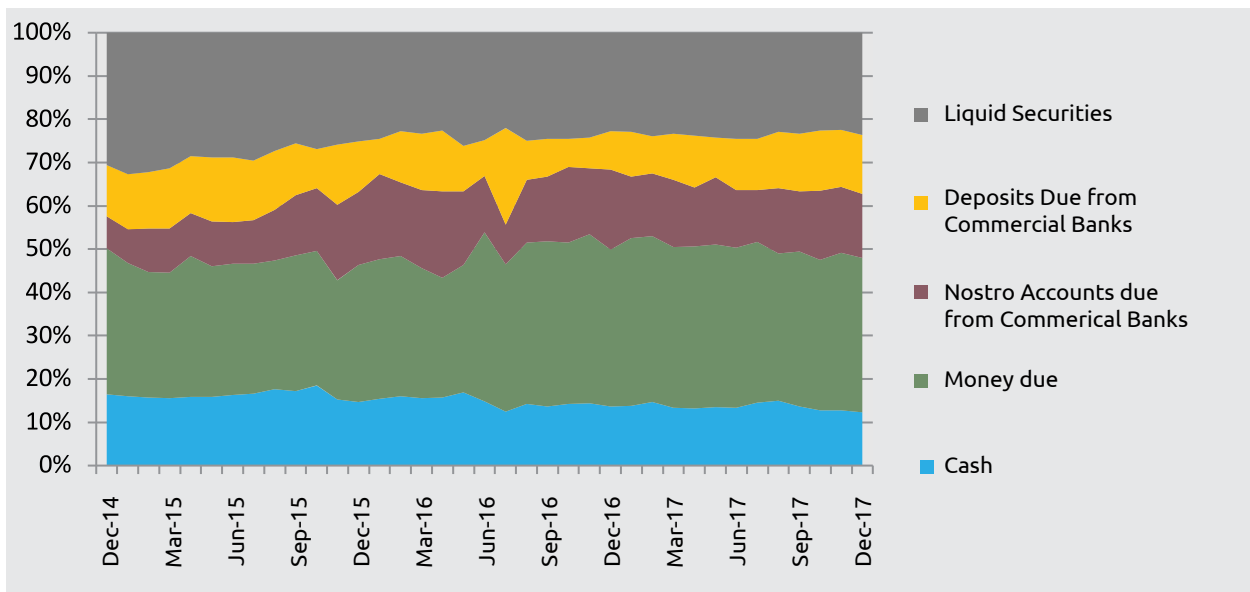
Source: National Bank of Georgia

Diagram 4.22 Liquidity gap: assets with a maturity of less than one month to liabilities with a maturity of less than one month



Source: National Bank of Georgia

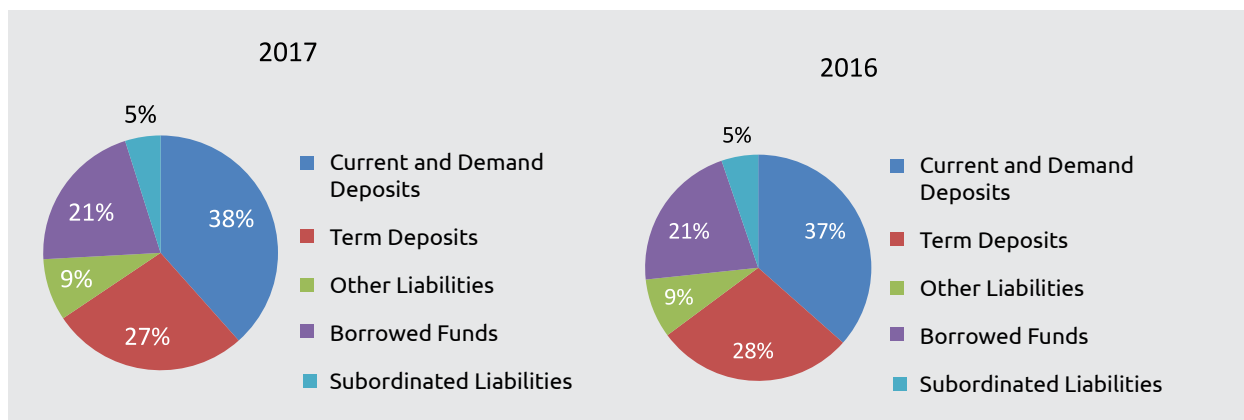
Diagram 4.23 Structure of liquid assets



Source: National Bank of Georgia

4.5.2 Structure of Liabilities

The share of current and demand deposits in the structure of liabilities increased slightly. In addition, banks maintained a comfortable level of liquid assets that corresponded to the risks of liability structure.

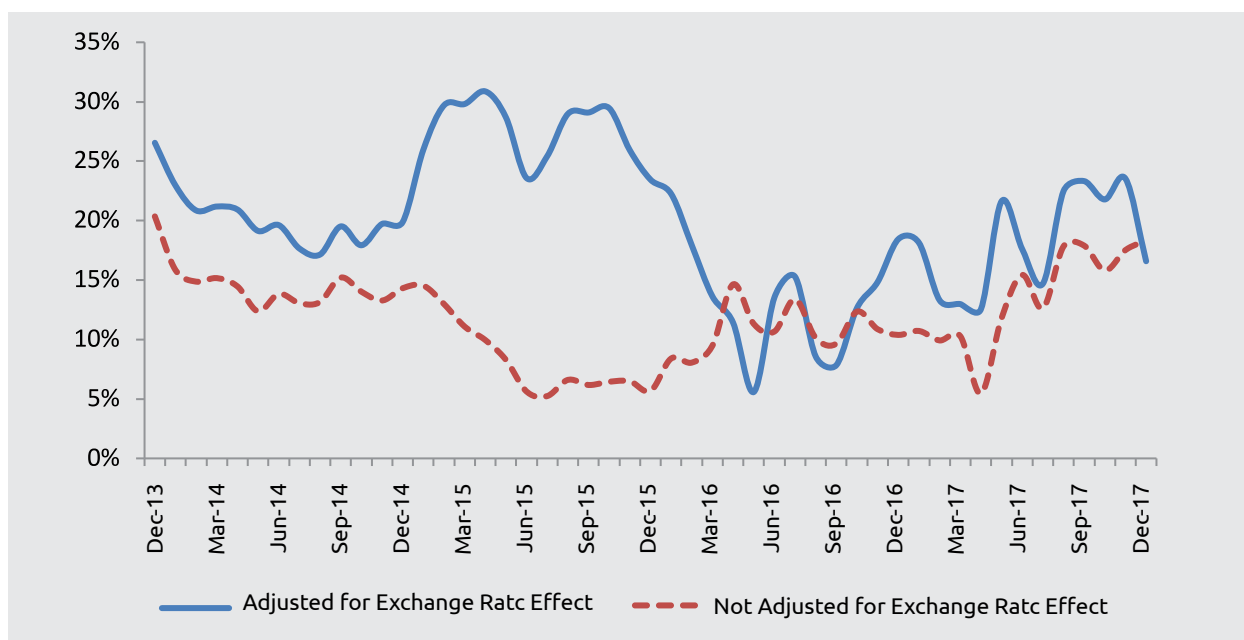
Diagram 4.24 Liability structure

Source: National Bank of Georgia

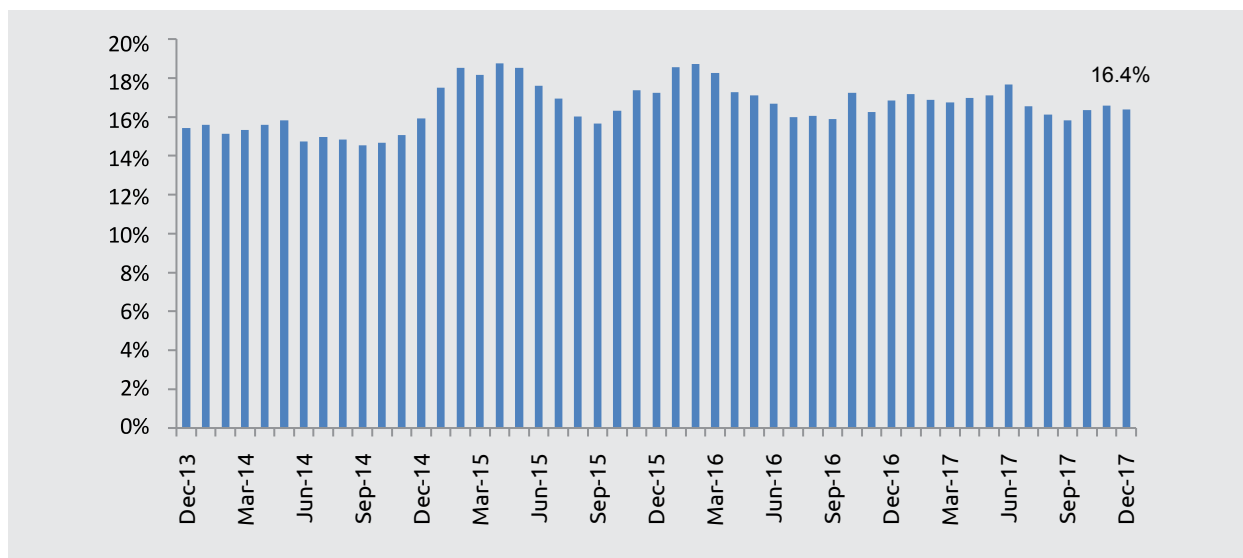
4.5.3 Retail Funding

During 2017, the volume of deposits increased by 2.8 billion GEL (by 16.6%, or by 18.3% if adjusted for exchange rate effects) and totaled 19.8 billion GEL by December. In terms of depositors' structure, the growth of deposits by individuals and legal entities amounted to 15.8% and 17.5% respectively (or by 17.8% and 19.0%, when adjusted for

exchange rate effects). In comparison to previous years, the increase in the growth rate was primarily caused by an increase of economic activities. Moreover, in light of lower expectations of an exchange rate depreciation, the dollarization of deposits decreased in the second half of 2017 and reached 66% by December.

Diagram 4.25 Annual growth of non-bank deposits

Source: National Bank of Georgia

Diagram 4.26 Share of non-resident deposits

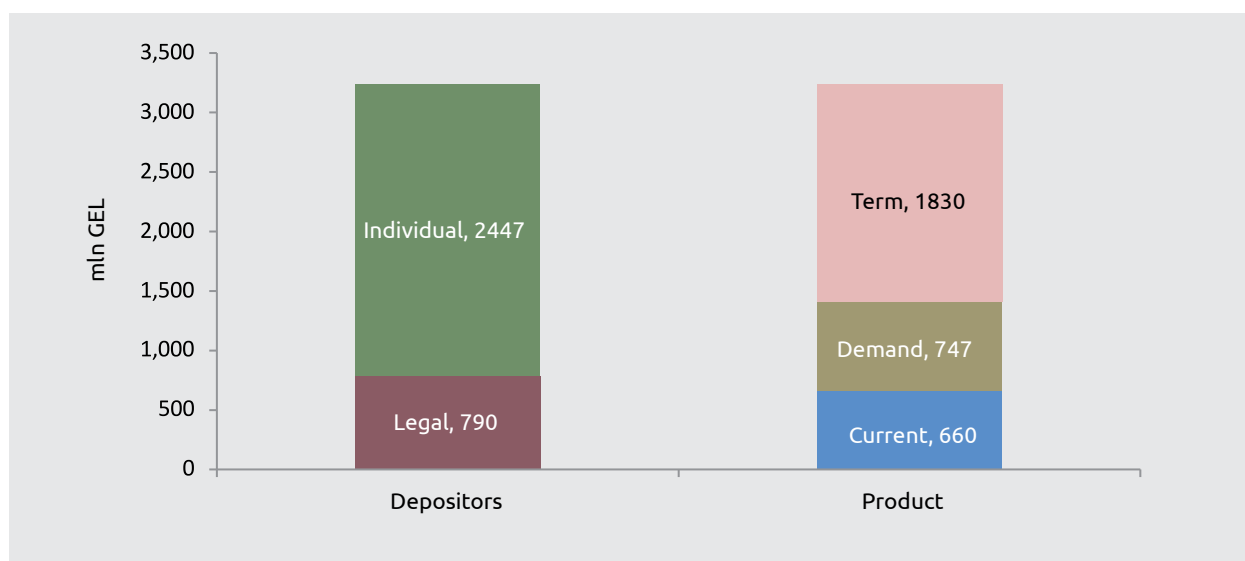
Source: National Bank of Georgia

The share of non-resident deposits in total non-bank deposits decreased in 2017 and amounted to 16.4% by December. These deposits were well diversified in terms of country of origin, which is a positive factor in terms of risks. In addition, the share of term deposits remains high, which significantly reduces the risk of outflows.

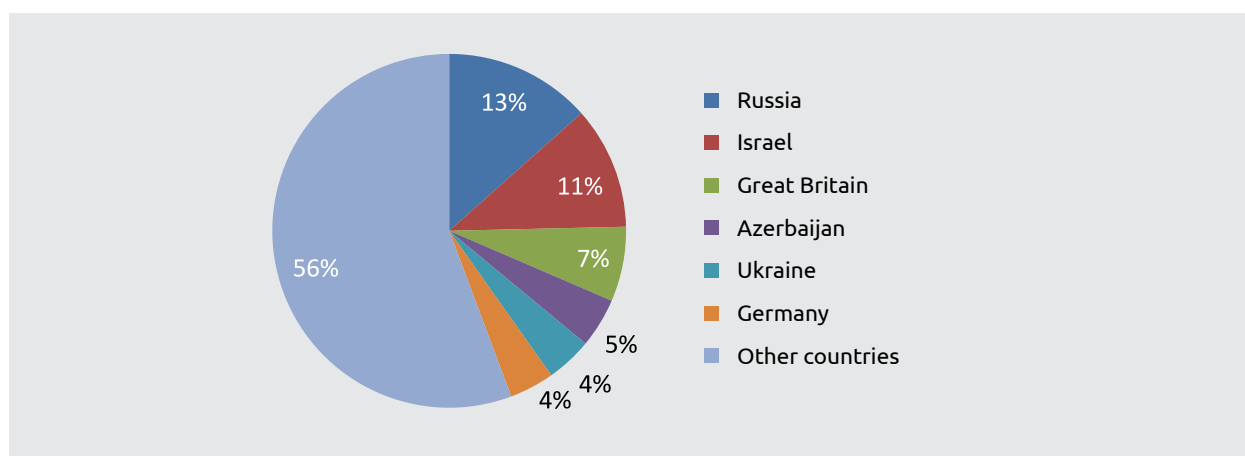
In order to prevent excessive dependence on this type of funding, the NBG maintains an additional liquidity requirement for banks whose share of

non-resident deposits in total non-bank deposits exceeds 10%.⁴² When calibrating this requirement, the fact that some non-resident customers are Georgians with foreign passports or are Georgia-based companies registered abroad was taken into consideration. The necessity for additional liquidity in banks with a high share of non-residents reduces 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.

42. The liquidity requirement for non-resident deposits increases by as many percentage points as the share of non-resident deposits in total non-bank deposits exceeds 10%.

Diagram 4.27 Structure of non-resident deposits (December 2017)

Source: National Bank of Georgia

Diagram 4.28 Non-resident deposits by country (2017)

Source: National Bank of Georgia

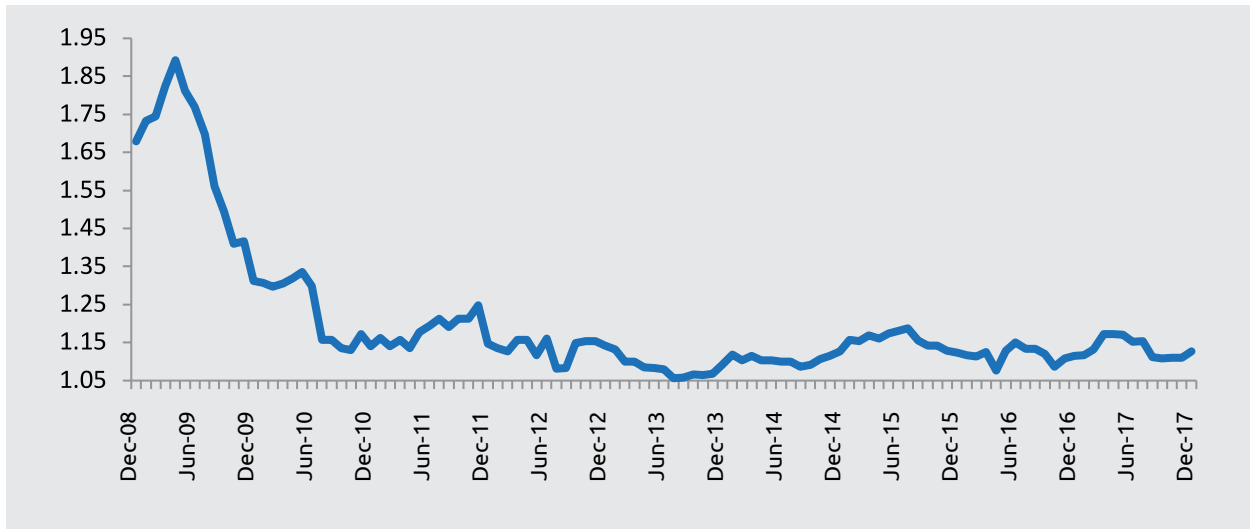
4.5.4 Wholesale Funding

Throughout 2017, the ratio of loans to deposits remained stable.

Wholesale funding is diversified in terms of both lender type and residual maturity. The residual maturity of 48% of wholesale funding exceeds two years, which reduces the funding risk for the system.

A total of 49% of wholesale funding was attributed to international financial institutions, 19% 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 covenants⁴³ were regularly monitored and their effects were reflected in the new framework of stress tests.

43. Restrictions imposed by a loan agreement.

Diagram 4.29 Gross loans to non-bank deposits

Source: National Bank of Georgia

Table 4.6 External sources of wholesale funding and their schedules as of 31 December 2017

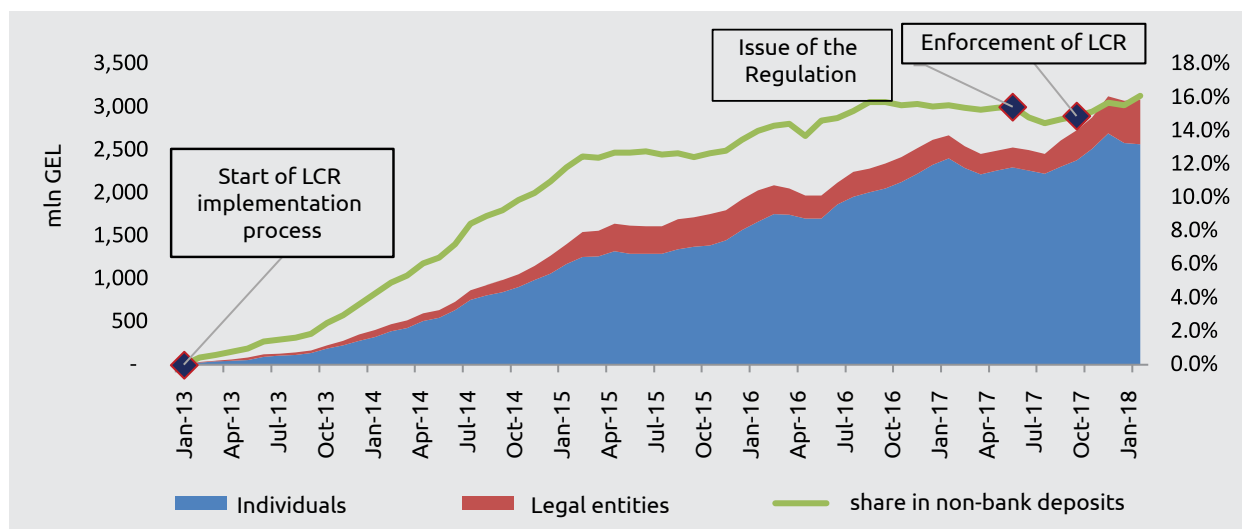
Month	<1	1–3	3–6	6–12	12–24	24–36	36–60	>60	Total
Total	4.04%	5.72%	6.73%	17.23%	18.37%	13.64%	16.83%	17.45%	100.00%
International Institutions	1.67%	2.66%	3.49%	5.54%	9.03%	6.87%	8.59%	10.98%	48.84%
Related/Parent Institutions	0.73%	1.83%	1.13%	3.81%	4.76%	1.47%	3.09%	2.34%	19.16%
Other Private Financing	1.63%	1.23%	2.10%	7.87%	4.59%	5.30%	5.15%	4.13%	32.01%

Source: National Bank of Georgia

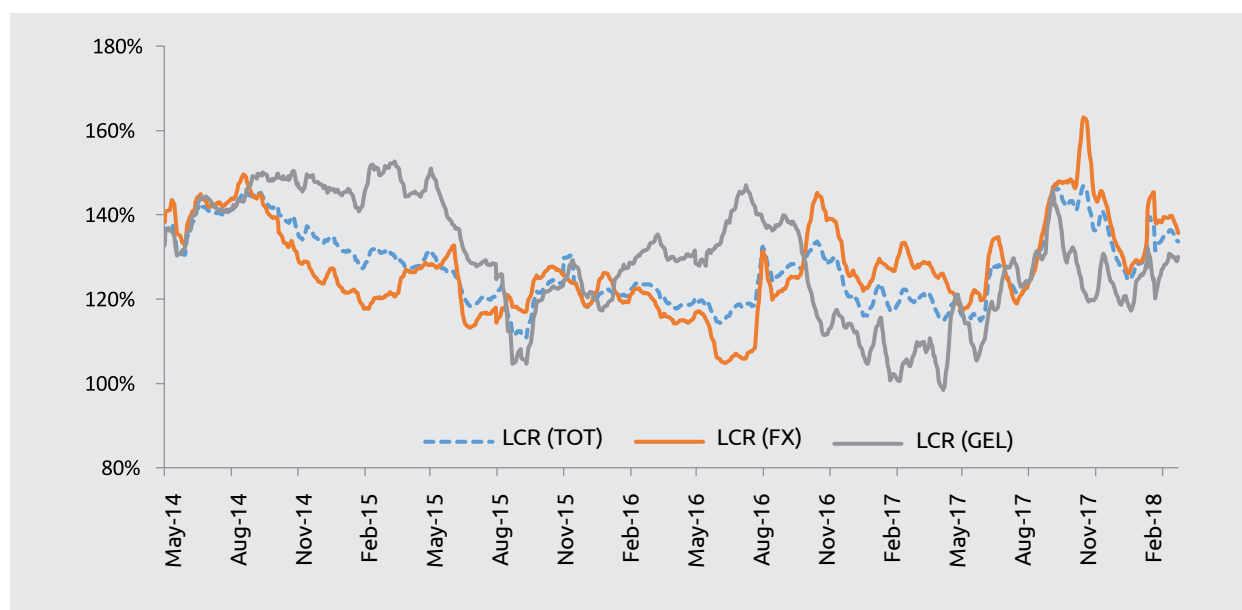
4.5.5 Regulation of liquidity risk

Throughout 2017, several amendments were introduced regarding liquidity supervisory requirements and a detailed analytical form for separate categories of liquid assets and short-term liabilities was implemented.

On 1 September 2017, the Basel III liquidity coverage ratio (LCR) came into force. This 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. The implementation of the LCR significantly improved prudential supervision.

Diagram 4.30 Certificates of deposit and their share in non-bank deposits

Source: National Bank of Georgia

Diagram 4.31 Dynamics of the Liquidity Coverage Ratio (LCR)

Source: National Bank of Georgia

However, it should be taken into consideration that the LCR does not include the indivisible aspects of the liquidity risk regulation – such as concentration of the residual maturity of liabilities, funding contingency plans and other related issues, which are then considered during liquidity risk assessments. In addition, in order to improve long-term liquidity regulations, the implementation of the Net Stable Funding Ratio (NSFR) was started. After the introduction of this coefficient, the exist-

ing liquidity requirement (of 30% for short-term liabilities) will be abolished and will thereafter only be used for monitoring purposes. As a result, the liquidity risk supervisory framework will be in full compliance with Basel standards.

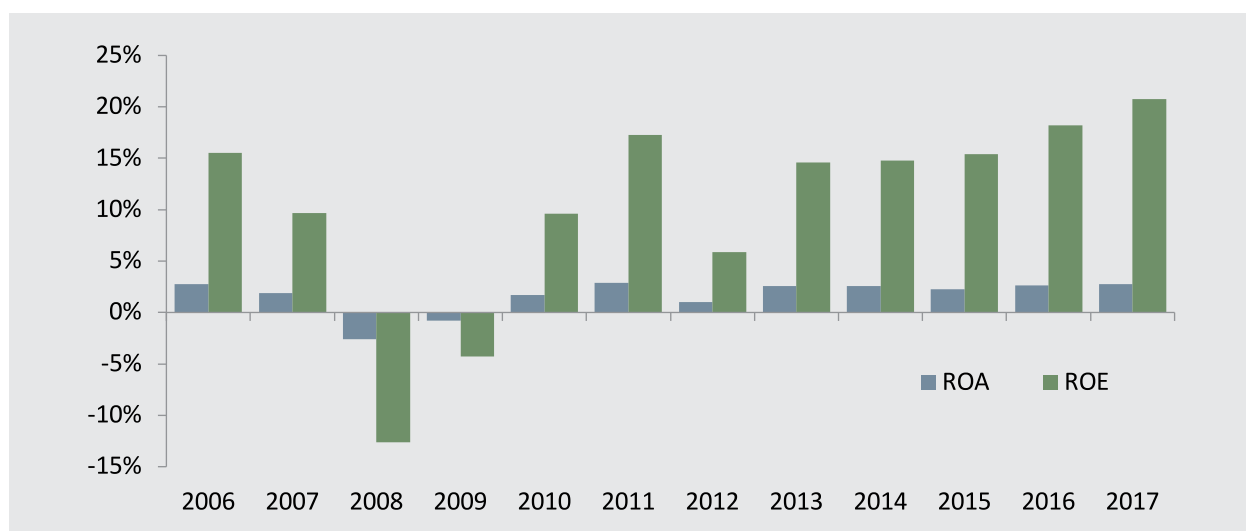
In addition, in order to reduce foreign currency liquidity risk and to encourage a lengthening of the terms of liabilities, minimum reserve requirements give preferential treatment to long-term

certificates of deposit. These certificates of deposit are non-callable and the development of this instrument will significantly reduce the immediate flow of liabilities during periods of financial stress.

4.6 Profitability Risk

In 2017, the return on average assets and equity⁴⁴ amounted to 2.8% and 20.7% respectively. These figures were higher than the same indicators from the previous year (2.6% and 18.2% respectively). The rate of banking system profitability has remained stable in recent years and, in total, has approached the required return on equity for shareholders.

Diagram 4.32 Return on assets and equity



Source: National Bank of Georgia

The profitability of the banking system was positively affected by the growth of assets, the subsequent increase in effectiveness due to economies of scale and the improved quality of assets. Considering the growth of total assets by 14.7% and total loans by 17.8%⁴⁵, non-interest expenses increased by only 12.9%. The increase of efficiency was reflected in both the cost to income ratio, which amounted to 47.1%, and in the drop of the operational costs to average assets ratio from 3.56% to 3.44% compared to the previous year. In addition, the liquid asset yield increased as a result of the increase in interest income from inter-

bank accounts and deposits, certificate of deposits and the higher profitability of treasury bills. It is also noteworthy that the interest rate spread decreased in 2017 as a result of the relatively large decrease in interest rates on loans compared to those on funding. On the other hand, there was insufficient growth of non-interest income compared to assets. These patterns all indicate an increase of competition in the financial sector.

It is significant that, based on the public evaluation of international investors, average investment capital costs are 15% on average considering

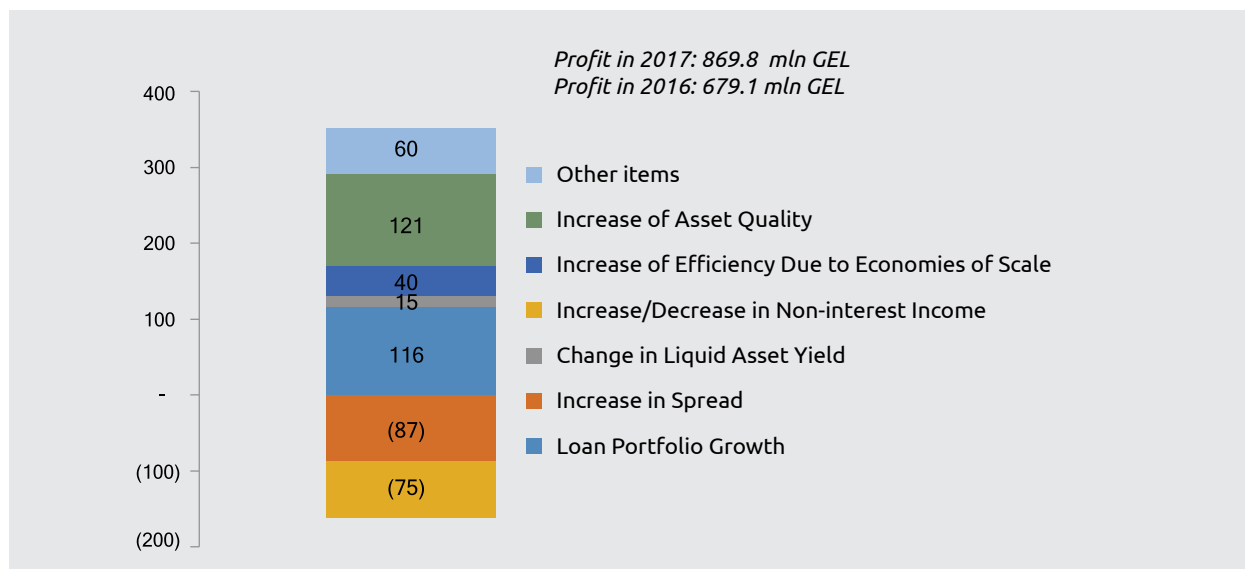
44. ROE is net income divided by the average yearly shareholder's equity. ROA is net income divided by average yearly total assets. Net income is calculated by taking revenues and subtracting non-interest expenses, loans and other financial assets' loss reserves, after extraordinary revenues and taxes.

45. Including the exchange rate effect.

local financial risks. Therefore, to maintain the interest of investors towards the Georgian banking sector, banks should offer more return on the cost of equity. As a result, it is expected that, with the healthy development of the banking sector, prof-

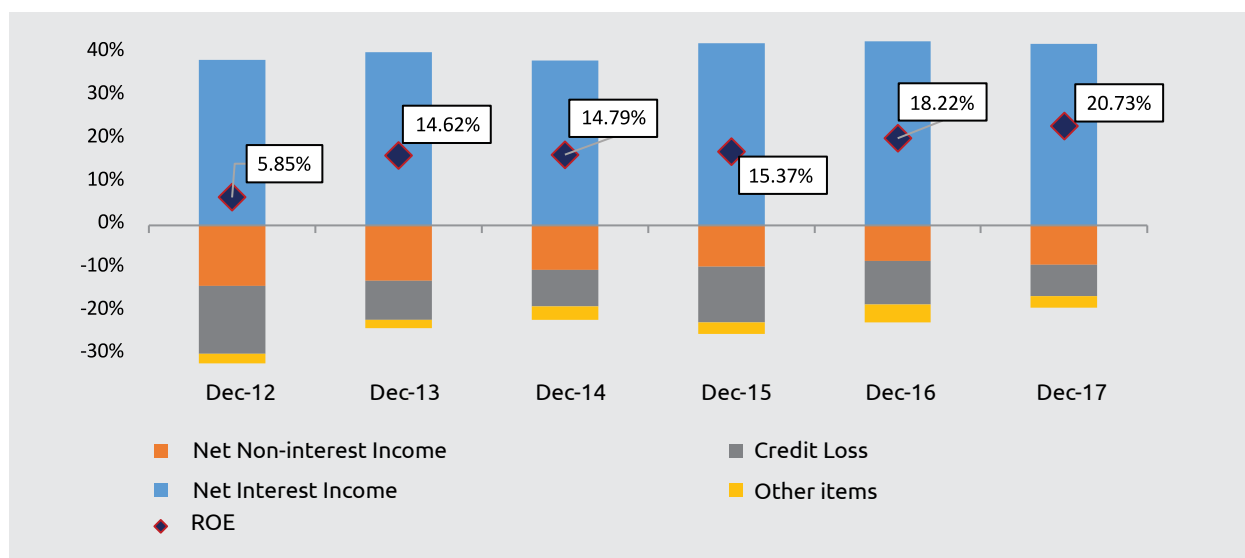
itability will be maintained above the mentioned rate. Ensuring sound profitability is also important in order to maintain profits as the main source of system capitalization and, if necessary, to simplify the increase of capital.

Diagram 4.33 Decomposition of profitability growth

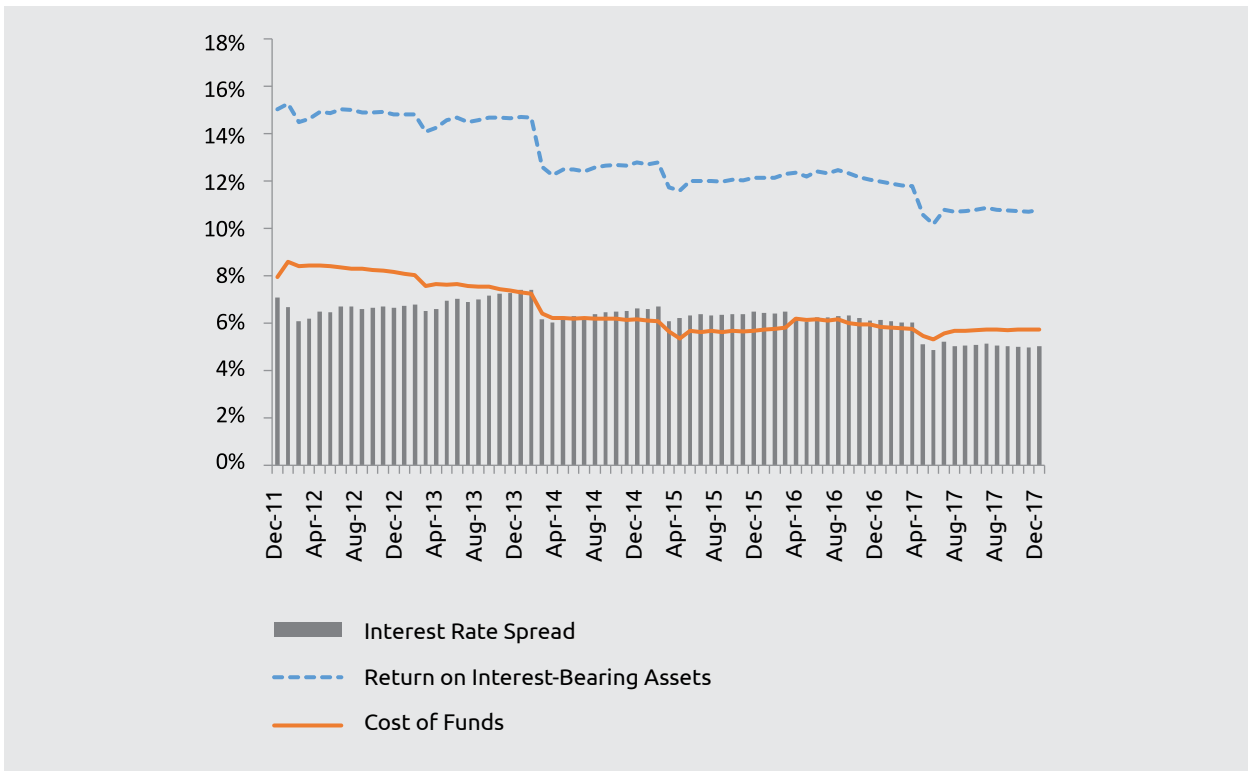


Source: National Bank of Georgia

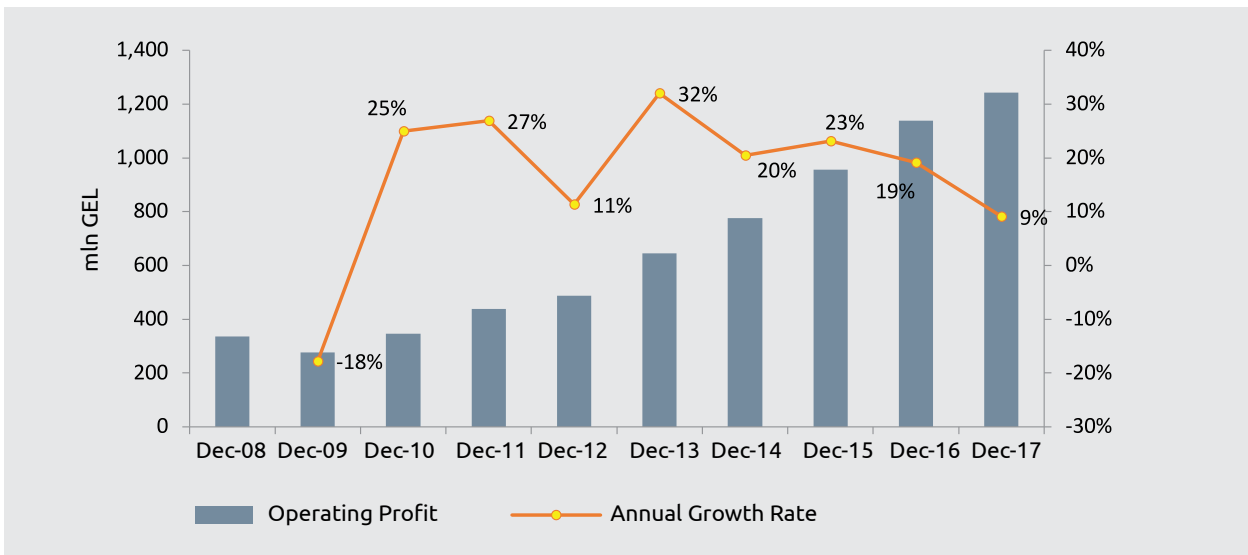
Diagram 4.34 Decomposition of ROE



Source: National Bank of Georgia

Diagram 4.35 Interest spread and factors affecting it

Source: National Bank of Georgia

Diagram 4.36 Banking system net profit from operations and annual growth⁴⁶

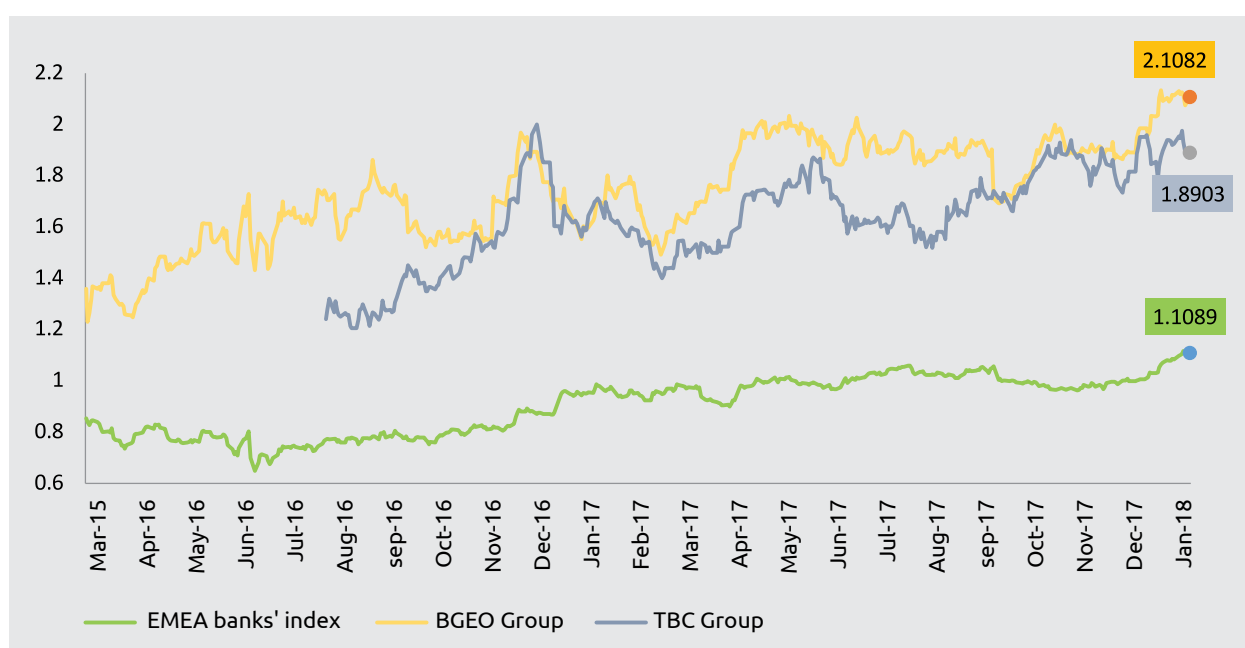
Source: National Bank of Georgia

46. Earnings before provision and non-recurring income/expense.

Despite the sound return on equity in recent years, considering the existing ownership structure of the banking system, non-resident shareholders faced some losses due to the revaluation of investments made in GEL. Because the hedging market for the Georgian lari is virtually nonexistent, it is impossible to insure these assets against exchange rate fluctuations. This factor was also reflected on the dynamics of the shares of Georgian banks listed on international markets. However,

it should be recognized that demand for these assets continues to remain high. For instance, despite recent corrections, the price to book ratio of leading Georgian banks is higher than those of institutions from peer countries (EMEA Banks Index). This, alongside other indices, indicates that market participants evaluate the Georgian financial sector as being healthier compared to those of peer countries.

Diagram 4.37 Comparison of the BGEO and TBC Groups' price to book ratio coefficient with the corresponding Bloomberg EMEA banks' index coefficient



Source: National Bank of Georgia

It should be pointed out that, despite historically high losses from the business portfolio and the high level of credit risk stemming from a possible currency depreciation, interest rates on corporate loans have remained at historically low levels. The main reason for this is acute competition in the banking system. This may weaken individual banks' market positions in the future or encourage those banks to take excessive risks. As a result, and in consideration of the principles of risk-based supervision, throughout 2017, significant resources

were allocated to discussing commercial banks' profitability forecasts and the analysis of individual institutions' business models and strategies. Particular attention was paid to the scale effect, the existence of market niche and/or other competitive advantages, and the approximate evaluation of predicted loan losses. Supervisors also focused on risk mitigants, including the development of detailed pricing models for banking products.

4.7 Operational Risks

Data quality management is a key operational risk topic that was the subject of review throughout 2017. Within the framework of a joint project conducted by the National Bank of Georgia and the Dutch Central Bank, an international conference on Risk Data Aggregation and Risk Reporting was held in Tbilisi from 19-21 June. Representatives of the central banks and financial supervisory agencies of 11 countries from Europe and the Caucasus region attended the conference. Representatives came from the Netherlands, Austria, Hungary, Latvia, Macedonia, Moldova, Turkey, Albania, Armenia, Azerbaijan, and Bosnia and Herzegovina. The event placed considerable emphasis on the different approaches used by central banks and financial supervisory authorities. The conference also addressed other key topics such as business continuity management and operational risk-related subjects.

Throughout the year, the National Bank of Georgia participated in several other events addressing operational risk within the financial system. Between 24-30 April, the National Bank of Georgia attended joint simulation exercises on cybercrime and financial investigations in an event or-

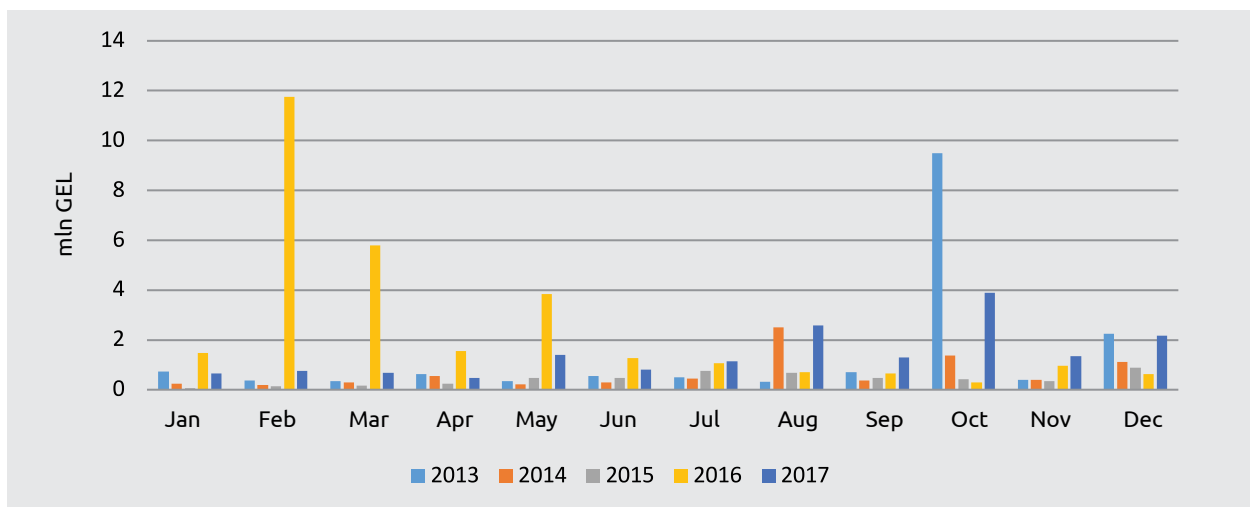
ganized by the Council of Europe and the Data Exchange Agency (a legal entity that operates under the Ministry of Justice of Georgia). Furthermore, the National Bank of Georgia organized several events on cybersecurity to increase the level of awareness of commercial banks about these issues. It should also be mentioned that a new supervisory requirement on penetration testing was introduced for commercial banks in 2017 (see section 4.7.4 on information systems audits for more information).

4.7.1 Operational loss events

The banking system's gross operational losses stood at 17.2 million GEL in 2017, which is a reduction of 40% compared to 2016. The total annual operational loss indicator (gross loss divided by gross income) was 0.73%. Gross operational loss represents a loss amount associated with a specific operational event prior to any recoveries or reimbursements.

A total of 20,606 operational loss events were recorded in 2017. It is worth noting that commercial banks have to report all operational loss events with a gross value that equals or exceeds 10 GEL. The average operational loss in 2017 was 830 GEL. The same indicator in 2016 stood at 1,663 GEL.

Diagram 4.38 Gross operational losses (2013-2017)

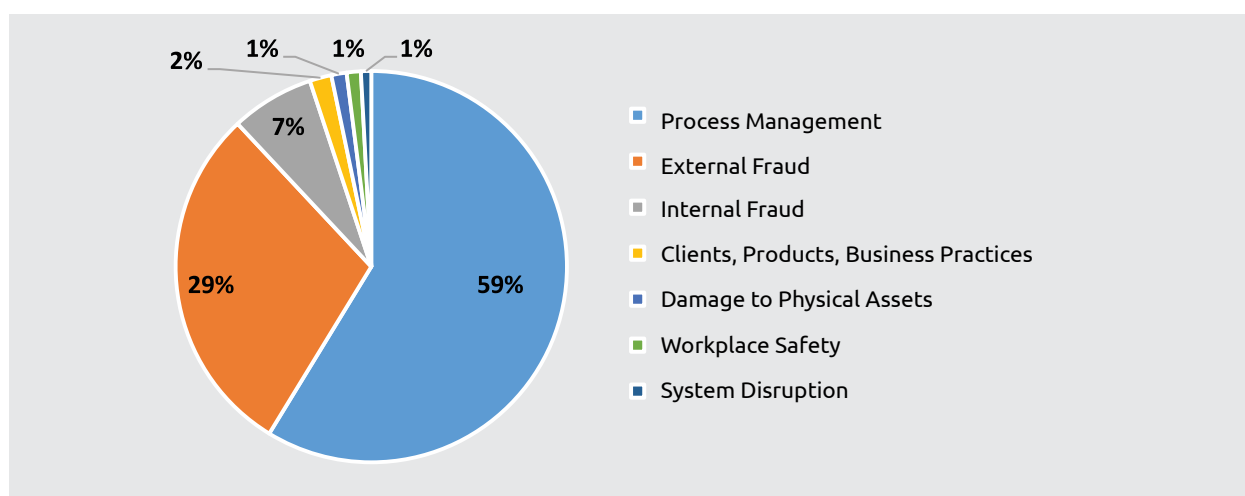


Source: National Bank of Georgia

Operational loss events were mostly observed in the retail banking business line, which includes payment card-related operational losses. Loss events in the commercial banking business line occurred to a lesser extent. The fact that most operational loss events were observed in the retail banking and commercial banking business lines is due to the fact that those business lines are the primary sources of banking activity in the Georgian banking system.

When breaking down operational risk events based on loss event categories, the greatest share of operational losses (59% of total gross losses) were related to execution, delivery and process management. The second largest loss category was external fraud, which had a 29% share of total losses. The third largest loss category was internal fraud, which accounted for 7% of total losses. The distribution of gross operational losses is depicted in Diagram N 4.39.

Diagram 4.39 Distribution of gross losses based on loss event category



Source: National Bank of Georgia

4.7.2 Outsourcing

According to the NBG's "Regulation on the Management of Operational Risk by Commercial Banks", all outsourcing activities related to a commercial bank's primary banking activities or associated information systems, need NBG approval. The National Bank of Georgia pays special attention to the existence of risk assessment processes when it comes to outsourcing. It is worth noting that risk assessments should be made before any outsourcing agreement is signed.

4.7.3 Data quality management and the single data exchange standard

One of the NBG's top priorities is to study and assess the quality and accuracy of commercial banks' data. Integrity risk is an especially impor-

tant topic, since financial institutions' data must be secure and free from unauthorized modifications. In 2017, the National Bank of Georgia examined the liquidity coverage ratio (LCR) reports of several banks. The NBG also assessed commercial banks' compliance in relation to the Government of Georgia's program for the conversion of foreign currency loans to the domestic currency.

It must also be noted that, within the framework of data quality management, the NBG places emphasis on the adequacy of the reporting process and its effectiveness. It is important for commercial banks to implement and maintain a sufficient level of information systems automation and to reduce the complexity of information systems.

Box 4. The need for implementation of the single data exchange standard and XBRL

Organizations frequently exchange information with each other and with the regulatory agencies. The process of information exchange has grown in scale compared to the situation 10-15 years ago. A certain portion of information is transaction-based (for example, financial transactions, including payment operations, purchases, logistical data, and invoices) while the rest of the information is directly linked to an organization's environment (financial conditions, risk data, compliance, etc.).

When an organization does not possess a mechanism to account for data in a unified format, it is often forced to store data in different information systems that use dissimilar formats. Doing so increases the risk of inaccuracy and decreases the quality of data. Considering the fact that the amount of financial transactions increased globally in the 1990s – both within organizations, as well as among external parties, including regulators – a need to develop a single, unified standard for data exchange emerged. The data exchange standard would have to be significantly agile and would need the ability to present data using a single format.

XBRL

In 1998, the American Institute of Certified Public Accountants (AICPA) developed a new data exchange standard in order to standardize financial and accounting-related data exchange processes. The single data exchange standard that was developed by AICPA is known as the Extensible Business Reporting Language (XBRL), which is itself based on the Extensible Markup Language (XML). From 2003 onwards, various central banks and other regulatory authorities began to actively adopt XBRL, mostly for the exchange of financial/supervisory data. Today, in addition to the regulatory authorities in the United States, the European Central Bank as well as numerous other regulatory authorities around the world have adopted the standard. In Europe, the reporting of supervisory and financial data in XBRL format has become mandatory in many nations. The development and management of the XBRL standard is governed by XBRL International – an international noncommercial consortium, which consists of around 650 companies, organizations and governmental agencies.

What is XBRL?

XBRL (Extensible Business Reporting Language) is a free electronic data exchange standard. The standard simplifies, amongst other things, the preparation, sharing, dissemination, and analysis of financial reports. XBRL is based on so-called taxonomies that comprise well-defined hierarchies of data dictionaries. This enables the exchange of different forms of data between information systems in a single electronic format. Reporting requirements are converted into electronic format in XBRL, which is then used to create an initial XBRL document. Definitions, based on which the XBRL document is created, are initially described in the taxonomy as concepts. Instance documents are what reporting files are known as. An instance document contains facts and is linked to the taxonomy in order to give meaning to the data that is being reported. Individual facts are linked to specific concepts using the taxonomies.

Like other central banks and regulatory organizations, the National Bank of Georgia plans on transitioning to XBRL in the medium term. This will entail the reception of financial and supervisory reports using the XBRL standard.

4.7.4 Information systems audit

An information systems audit is extremely important within the context of the risk management process of contemporary commercial banks. The audit also incorporates cybersecurity-related aspects. It should be mentioned that the operational risk regulations of the NBG require commercial banks to conduct regular information systems audits. From the perspective of cybersecurity, starting from 2017, commercial banks were also required to conduct penetration tests. These are a good mechanism to detect potential cyber-risks and vulnerabilities that might be present within an organization.

4.7.5 Dependence of the banking system on other sectors

The different sectors of the economy are closely linked to each other. As the banking system is dependent on other sectors of the economy, the NBG thus closely monitors risks that might stem from, for instance, the energy, information technology or transportation sectors. In order for the supervisory framework to be more efficient in this respect, the establishment of close cooperation between the various supervisory agencies of each sector is recommended.

The risks of cyber-attacks have increased globally. In particular, as was mentioned in the 2016 Annual Report of the NBG, ransomware attacks have increased worldwide, which are used by criminal organizations to extort money from various organizations. In 2017, several notable cyber-attacks were observed globally, with Distributed Denial-of-Service (DDoS) attacks also being quite prominent. In order to mitigate the effects of, or to entirely prevent, DDoS attacks, it is crucial to have effective public-private coordination mechanisms. Considering the fact that the financial sector is an attractive target for criminals and that cyber-attacks are often actively deployed against this

specific sector, it is important to develop a unified approach with different stakeholders from different sectors of the economy in order to effectively deter such events.

4.7.6 International cooperation

The NBG's Operational Risk and Information Processing Division is in constant contact with international financial institutions as well as other central banks and regulatory agencies. During 2017, several international visits by members of foreign central banks were made to the NBG, the aim of these was to provide an introduction to the NBG's operational risk supervisory framework.

Additionally, the National Bank of Georgia participated in a project focused on the National Bank of the Kyrgyz Republic's (NBKR) transition towards a risk-based supervision approach. Within the scope of this project, the NBG held meetings and consultations with representatives of the NBKR on the formation and implementation of an operational risk supervisory framework. This project was part of a joint technical assistance initiative from the World Bank, the International Monetary Fund and the State Secretariat for Economic Affairs of Switzerland. This technical assistance will continue into 2018.

4.7.7 Awareness-raising initiatives

The National Bank of Georgia is actively involved in the banking sector in order to increase operational risk-related awareness in the system. Confronted with a global environment characterized by increasing cyber-incidents, the NBG has increased communication with commercial banks regarding the cyber-arena. It should be mentioned that, despite the financial sector's increasing use and incorporation of various technologies, the general level of awareness around the necessity for information systems audits needs improving. The NBG will thus continue work in this direction throughout 2018.

4.8 Macprudential 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 more detail in different sections of this report, but an incomplete list of the main challenges currently facing the banking system includes the increased debt burdens of unhedged borrowers due to the depreciation of the Georgian lari against the US dollar; a slowdown of economic growth and the negative impact of balance sheet effects on business activities; 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 facing the region.

During the risk assessment process, in addition to general macroeconomic parameters, trends in individual sectors are taken into consideration. In this regard, real estate market dynamics – where exchange rate fluctuations and economic slowdowns theoretically have a negative effect on demand – require particular attention. Residential apartment rental and sale prices, when expressed in USD, the main transactional currency, have dropped significantly in recent years; however, when expressed in GEL, prices are relatively stable. At the same time, residential apartment buy-sell transactions increased, which, to some extent, was the result of the high growth of mortgage lending. Moreover, as a result of an increase in the number of permits given for the construction of residential apartments, there is the risk of price adjustments, which might affect the collateralized real estate portfolio. In addition, the NBG closely monitors growth dynamics in the construction of high-end hotels, which, in the event of a reduction in tourist inflows, may lead to excess supply

and low occupancy rates. Although the financing of the hotel sector by commercial banks is limited, should a negative scenario materialize it will 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 were conducted and discussions of these were held with commercial banks. Activities oriented towards the enhancement of micro tests were carried out in coordination with commercial banks. It is also of note that within the BCBS stress-testing review document, which outlines international approaches, the NBG's stress-test framework is cited as being of interest for other institutions going through similar structural changes in financial sector data.⁴⁸

According to the analysis of various plausible stress scenarios, the banking system as a whole remains adequately capitalized, with a capital adequacy level close to the regulatory minimum. In addition, based on existing ownership structures and the expected support from international financial development institutions, and given the potential for operational profitability and restructuring, the capacity for banks to recover their capital position is substantial. The analysis of stress scenarios included, amongst other things, spillover risks from other countries in the region. In this regard, Georgian commercial banks do not have direct loans or exposure to other risks from these countries. Meanwhile, in terms of their indirect exposure to risks, the loans disbursed by banks to companies exporting to those countries account for only a very small portion of their total loan portfolios.

In terms of credit risk induced by currency mismatches, the National Bank maintains a conservative approach by imposing additional capital requirements for foreign currency loans disbursed to unhedged borrowers.

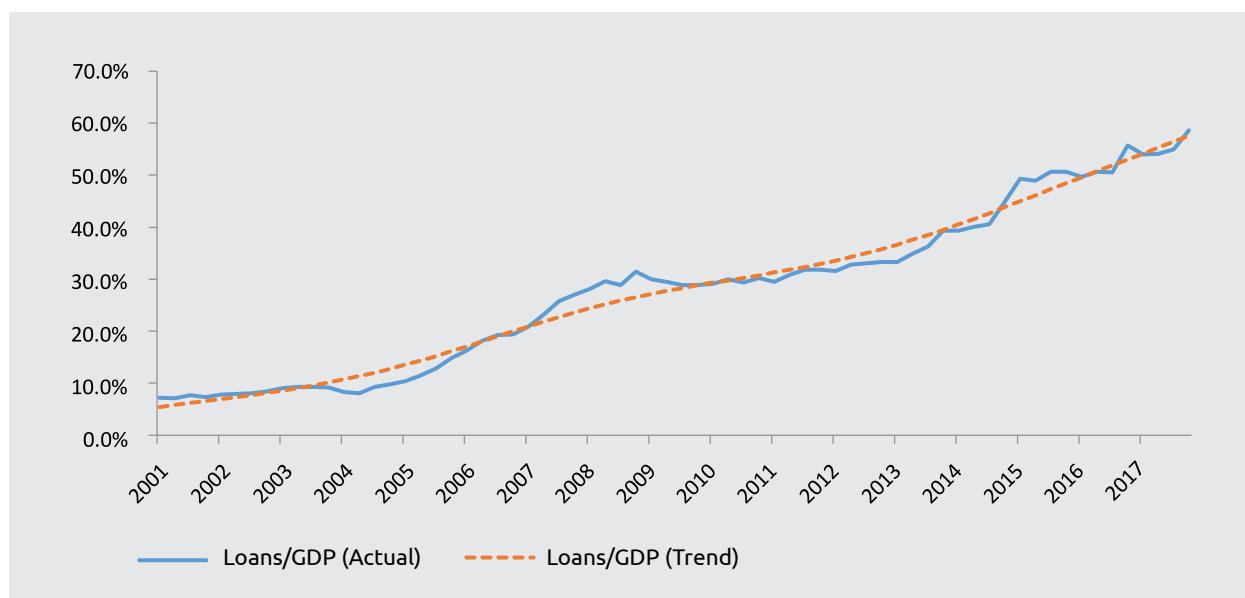
48. BCBS, 2017, "Supervisory and bank stress testing: range of practices".

In order to mitigate risks associated with high dollarization through the use of macroprudential tools, 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 so that they are 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 also noteworthy that commercial banks' liquidity contingency funding plans, other mitigation measures and the NBG's support instruments are all constrained in foreign currency.

A further macroprudential instrument, in the form of an additional capital buffer, was implemented for systematically important banks in 2017. Its use will reduce the probability of large banks becoming bankrupt and will thereby strengthen overall financial stability.

In order to monitor credit cycles, the NBG continues to review the loan-to-GDP gap, which is calculated using the Basel methodology. Statistically, this indicator well describes bank activities and provides the correct warning signals.⁴⁹ Based on this and other financial sector indicators, there have been no significant changes to the credit cycle. Consequently, at this point, a countercyclical buffer has not been determined for the banking sector.

Diagram 4.40 Loans to GDP ratio gap



Source: National Bank of Georgia

49. However, it becomes less useful when there are exchange rate fluctuations in dollarized economies.

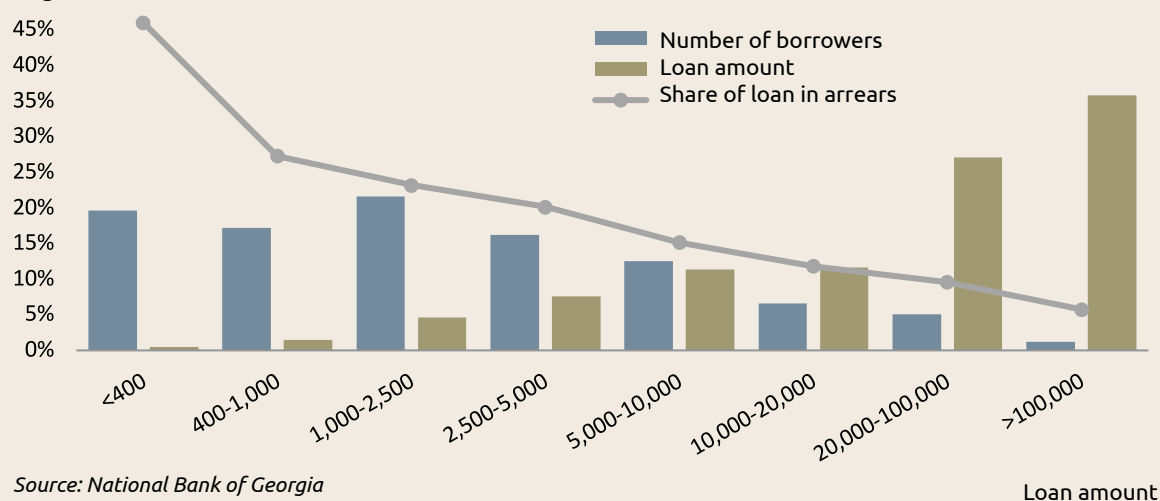
Box 5. Risk of over-indebtedness

During recent years, the share of loans to individuals in total lending has increased. This potentially increases risks of over-indebtedness. In order to analyze this situation, micro data on individual borrowers have been collected from commercial banks and five large microfinance organizations. In addition, the income and credit history of borrowers have been studied.

Although the risk of high credit losses for financial institutions – and, therefore, the direct threat to financial stability – is low at this stage, an analysis of the data indicates elevated risks of household over-indebtedness in the future and higher financial stability concerns. Of particular concern is a common tendency to issue loans without studying a borrower's solvency. It is particularly significant that about half a million borrowers do not appear to have income⁵⁷ from employment or other sources and 45% of such borrowers have overdue liabilities.

The majority of these loans are for small amounts. The distribution of credit amounts (Diagram N 4.41) shows that the majority of borrowers' loans are for less than 2,500 GEL, but the sum of the loan portfolio mainly consists of loans for more than 2,500 GEL. As shown in the diagram, critically overdue loans tend to be for small amounts; however, the situation is aggravated by the fact that these overdue loans relate to a large segment of borrowers. At this point, the risk of high credit losses for financial institutions, and, consequently, the direct threat to financial stability is low.⁵⁰ However, it is evident that a growing mass⁵¹ of people with financial problems is forming. This is a group that mostly comprises those with restricted access to bank accounts and diminished motivation⁵² to engage in formal economic activity. This negatively affects the welfare of this part of the population and, ultimately, impedes long-term economic growth. All this is exacerbated by competition and the desire amongst financial institutions to issue more loans to borrowers (including to high-income ones) than they can service without financial difficulties. Without taking adequate and timely action, these trends will endanger financial stability.

Diagram 4.41 Distribution of individual loans⁵³



50. It should be taken into consideration that overdue loans are already recognized as losses on the balance sheet and at the same time, these amounts are not complete losses as their material portion is gradually recovered. In addition, credit losses are partially compensated by high interest rates.

51. At this point, according to the Credit Information Bureau, over half a million people have overdue loans. The proportion of overdue loans has increased as a result of the introduction of payday loans since 2014 and this indicator continues to increase.

52. It is noteworthy that, as is the case with other countries, the share of overdue loans for young borrowers is significantly higher than for older age groups, which further intensifies the problem.

53. For example, in terms of quantity, 16% of borrowers have loans of 2,500-5,000 GEL; while, in terms of amount, such loans account for 8% of the portfolios of those financial institutions that took part in the survey.

The analysis shows that small loans are mostly concentrated in the low-income population that has a low ability to pay. Neglecting healthy credit standards for this segment of borrowers contradicts the principles of risk management. The main reason for the increasing loan burden of these borrowers is the increase of non-regulated creditors and low-cost credit supply channels in recent years. The development of financial technologies has also contributed to the extension of such credit.

As a rule, lenders reflect increased credit costs in their prices; however, they rarely consider the additional costs and accompanying negative events that result from an increase in insolvency and an over-indebted workforce in the economy. The NBG analysis indicates that there is a market failure and a need to introduce regulations to establish responsible lending standards.

So far there was a significant risk that, by setting requirements to only banks and microfinance organizations, they would be replaced by non-regulated market actors that provide, for instance, fast/online loans, among which the irresponsible lending practices are the highest.⁵⁴

However, according to legislative amendments made in January 2018, the NBG has received authority to regulate all loan issuers that have more than 20 borrowers.⁵⁵ As a result, responsible lending standards will be equally distributed to all creditors. A working version of this regulation has been created and consultations with interested parties are already underway. The legislation is based on the EU practice⁵⁶ of consumer lending regulations. According to the basic principles of the legislation, before issuing a loan, a creditor should assess whether borrowers can pay their liabilities in contractual terms without facing financial difficulties.

Georgia has recently increased its dependence on consumer loans. This has been caused by aggressive marketing and the possibility of easy access to such loans. In this regard, it is important to implement adequate measures in a timely fashion so as not to deepen the over-indebtedness problem. It is also necessary to take into account the possibility that a radical tightening of regulations may result in a shift of lending towards the shadow economy. Considering this, regulatory measures need to be implemented rapidly, but in a consistent and gradual manner.

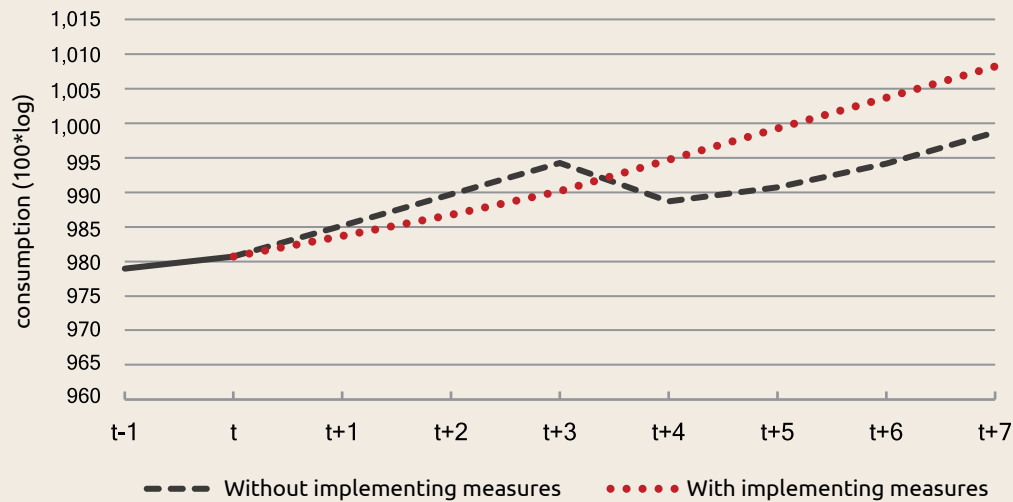
The NBG estimates that although this regulation may have a slight negative impact in the short term, its long-term result will clearly be positive and will mitigate financial stability risks, which creates the problem of over-indebtedness if the timely prevention of the latter does not happen. As a result of the establishment of responsible lending standards, restrictions on consumer loans to individuals may have a decreasing effect on short-term economic growth (but not more than 0.6% of GDP). However, the impact may be less problematic depending on the following factors: a) what the replacement amount of those loans that do not meet responsible lending standards with high credit standards and/or business loans will be; and b) how fast the shadow real economy will move into the formal economy. For illustration, Diagram 4.42 presents joint consumption projection dynamics in the case of responsible lending.⁵⁷

54. For illustration purposes, overdue loans to such entities exceed the same indicator for banks by several times.

55. This requirement will enter into force on 1 January 2019.

56. Consumer Credit Directive (2008/48/EC); Mortgage Credit Directive (2014/17/EU); EBA Guidelines on Creditworthiness Assessment (2015).

57. The diagram is illustrative and based on the experience of other countries. It shows a theoretical assessment of the negative consequences caused by the problem of over-indebtedness on economic growth, and, consequently, on joint consumption.

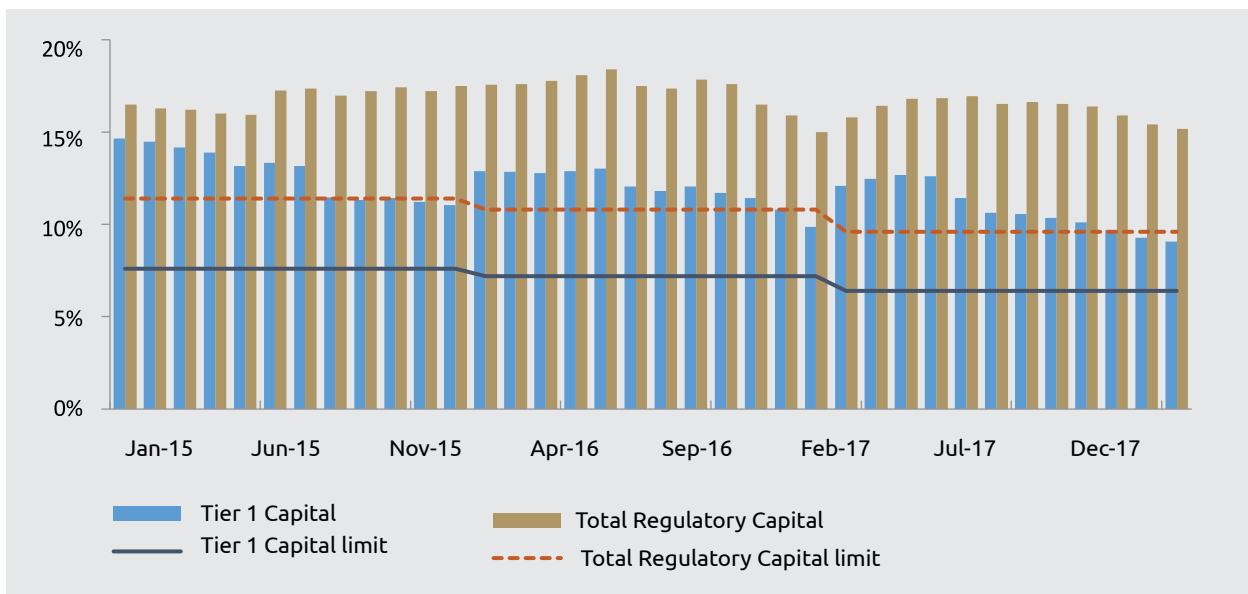
Diagram 4.42 Aggregate consumption projection dynamics

Source: National Bank of Georgia's assessment

4.9 Capital Adequacy

Throughout 2017, the Georgian banking system maintained adequate capitalization in terms of the capital adequacy framework based on both Basel I and Basel III. The Tier I capital ratio, cal-

culated with Basel I, was 9% and the regulatory capital ratio was more than 15% – exceeding the NBG's minimum capital adequacy requirements by 2.6 and 5.4 percentage points respectively (see Diagram N 4.43).

Diagram 4.43 Capital adequacy ratios under the Basel I framework

Source: National Bank of Georgia

It is noteworthy that in 2017 commercial banks were required to meet 80% of the Tier I and total regulatory capital adequacy requirements within the Basel I framework, which equals 6.4% and 9.6% respectively. However, as of January 2018, both the Tier 1 and total regulatory capital requirements based on Basel I were abolished and were fully replaced by the Basel III framework.

In 2017, the NBG finalized the formalization process of the Pillar 2 of the Basel III capital adequacy framework. In addition, amendments were made to the existing Pillar 1 framework so that minimum capital adequacy requirements became compatible with the framework established by the Basel Committee of Banking Supervision. In particular, the conservation buffer of 2.5% which used to be merged with minimum requirements was separated from the minimum capital requirements (which were 7% for Common Equity Tier 1, 8.5% for Tier 1 and 10.5% for Total Regulatory capital). As a result of the change, the updated minimum capital requirements are 4.5%, 6% and 8% for Common Equity Tier 1, Tier 1 and Total Regulatory capital respectively.

Alongside the abovementioned changes, banks are required to hold an additional so-called combined buffer through Common Equity Tier 1. The combined buffer consists of the conservation, countercyclical and systemic buffers. The rate for the conservation buffer has been set at 2.5% of risk weighted assets. A rate of 0% has been set for the

countercyclical buffer, but this can vary within the range of 0-2.5% and will be periodically reviewed based on the financial and macroeconomic environment. A systemic buffer has been introduced for systematically important commercial banks. The Financial Stability Committee of the National Bank of Georgia has discussed the methodology for identification of systematically important banks and for determining additional capital requirements for them. As a consequence, a decree of the Governor of the National Bank of Georgia approved a normative act for the "Identification of Systematically Important Banks and Determining Systemic Buffers". Systemic buffer rates and compliance timeframes have subsequently been set for those banks deemed systemically important banks by the NBG (see Table N 4.7).

The systemic buffer is an international practice that aims to:

- Increase financial sector resilience.
- Reduce the probability of the failure in large banks and avoiding accompanying systemic problems.
- Reduce moral hazard in systemic banks.
- Reduce the potential burden for taxpayers in the event of a government bailout.
- Decrease concentration and, consequently, encourage competitiveness.

Each of these factors have become more important in the Georgian banking system due to the high level of concentration.

Diagram 4.7 Timeframes for imposing the systemic buffer

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%

Source: National Bank of Georgia

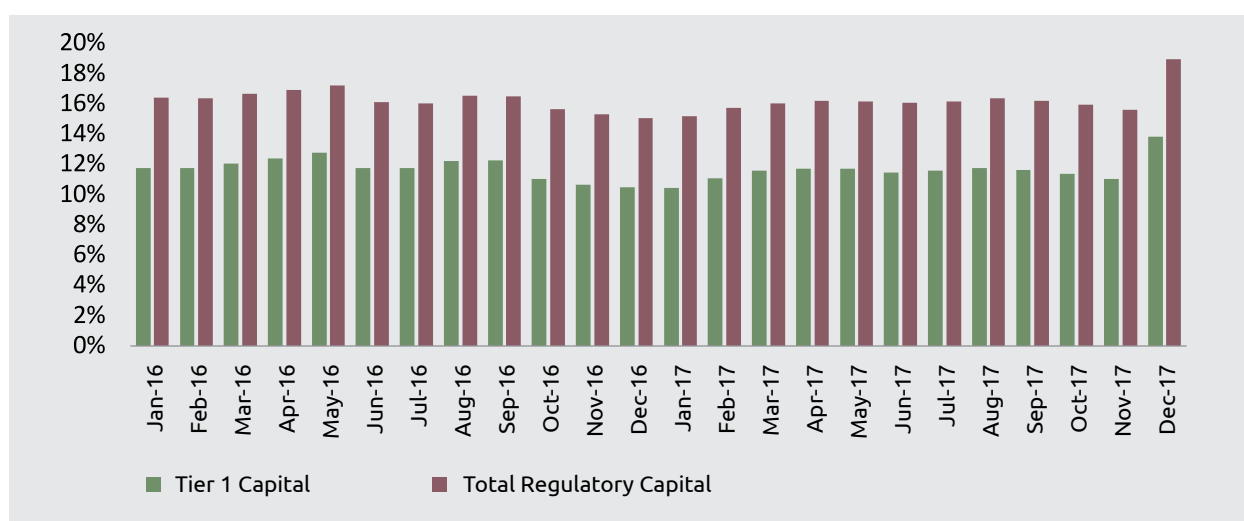
In 2017, the NBG finalized the formalization process for Pillar 2 elements based on the Basel III capital adequacy framework.

In accordance with the Basel III framework, within the framework of Pillar 2, commercial banks should hold capital adequacy buffers for those risks that are not sufficiently covered under Pillar 1. According to the “Rule on Additional Capital Buffer Requirements for Commercial Banks within Pillar 2”, the Pillar 2 capital requirements include an unhedged currency induced credit risk buffer, which was previously integrated in Pillar 1. The unhedged currency risk buffer serves as a macroprudential buffer against systemic risks caused by dollarization. The introduction of this buffer once again emphasizes the intention of the National

Bank of Georgia to gradually decrease banking system dollarization, which will result in a more resilient banking system capable of withstanding external shocks.

Considering the abovementioned changes, by 31 December 2017, the Tier I capital ratio, within the frames of Basel III, amounted to 13.8%; while the regulatory capital ratio amounted to 18.9%, which exceeds the NBG’s minimum capital adequacy requirements by 3.3 and 5.0 percentage points respectively (see Diagram N 4.44). The simple leverage indicator (capital/assets) was also high, reaching 12.8%; while the ratio of net loans to equity equaled 4.77. Capital growth resources were positively assessed by the NBG in terms of both shareholder strength and profitability.

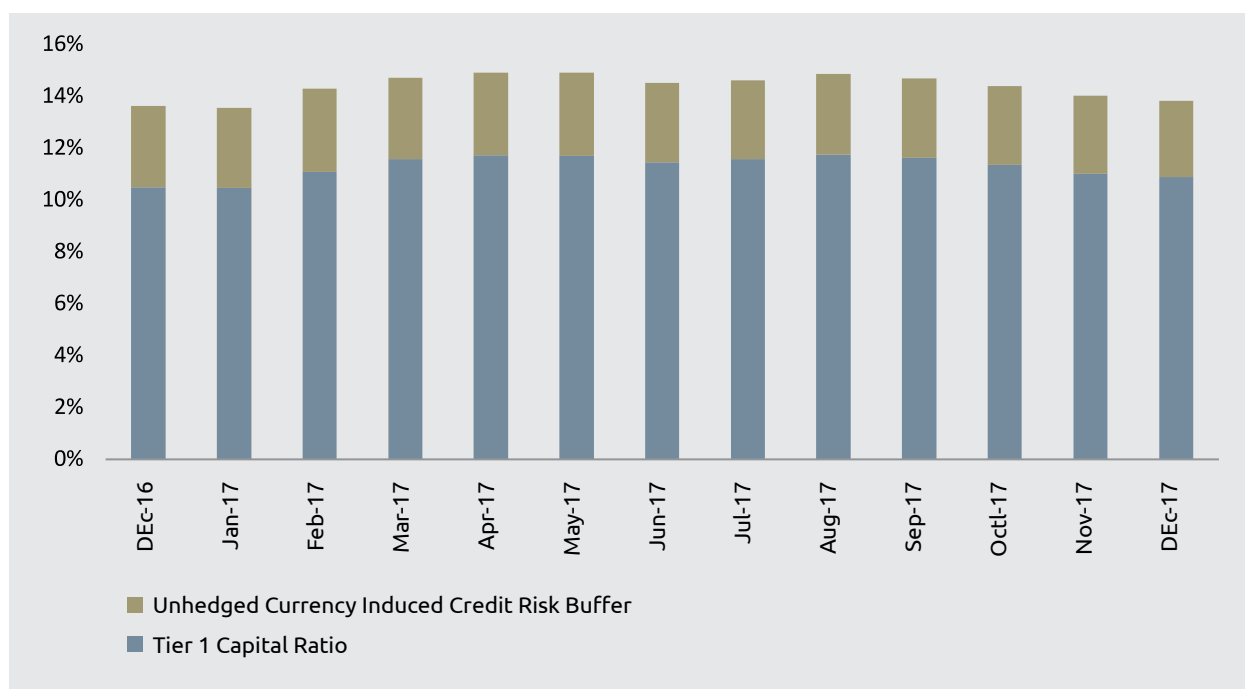
Diagram 4.44 Capital adequacy ratios under the Basel III framework



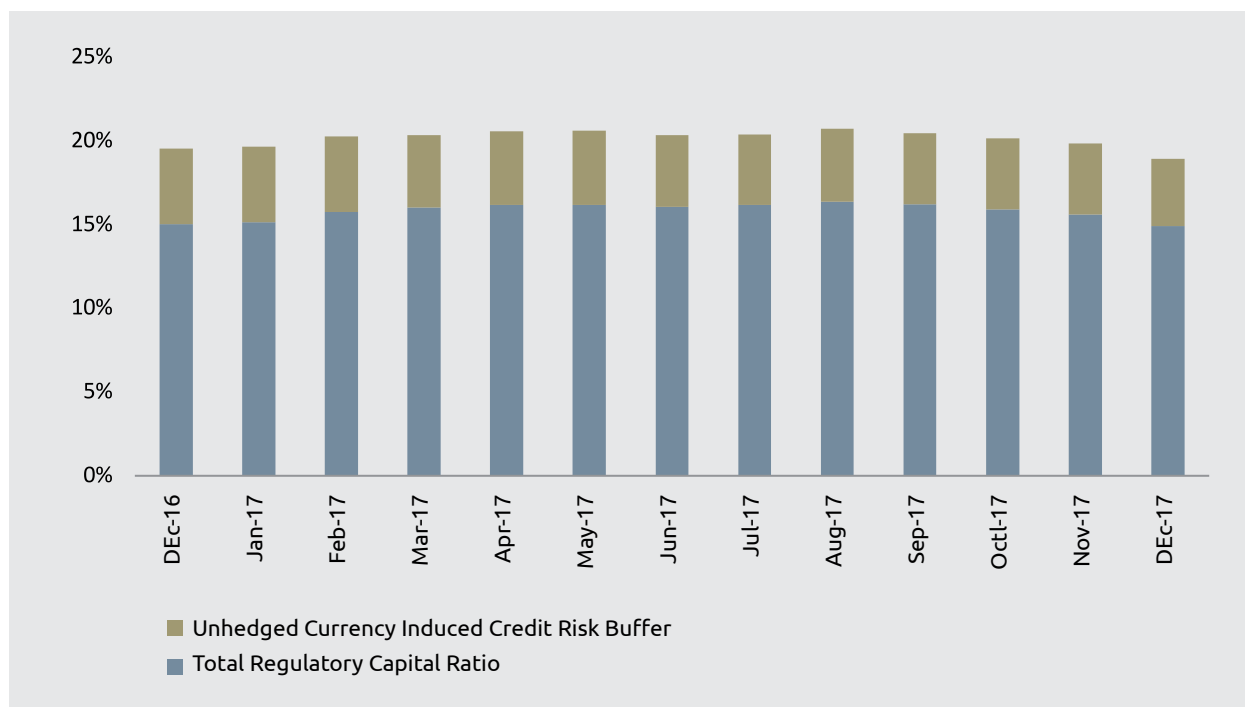
Source: National Bank of Georgia

It is noteworthy that, due to the shift of unhedged currency induced credit risk weighted assets from Pillar 1 to the Pillar 2 buffer, the amount of risk weighted assets decreased. Consequently, as of December 2017, capital coefficients significantly increased compared to the respective indicators in previous months (see Diagram N 4.44). Diagrams

N 4.45 and N 4.46 show the Tier 1 and total regulatory capital ratios, where the coefficients for previous months are calculated in the same manner as for December 2017. These diagrams give a clearer picture for comparing the capital adequacy ratios of the end of 2017 with previous periods.

Diagram 4.45 Capital adequacy ratios under the Basel III framework⁵⁸

Source: National Bank of Georgia

Diagram 4.46 Capital adequacy ratios under the Basel III framework⁵⁹

Source: National Bank of Georgia

58. The coefficients for all periods are calculated according to the Basel III framework enforced in December 2017.

59. The coefficients for all periods are calculated according to the Basel III framework enforced in December 2017.

It is worth noting that not only did the capital adequacy ratios increase in December 2017, but so did capital requirements once the Pillar 2 unhedged currency induced credit risk buffer became effective.

In addition to the abovementioned buffers, the Pillar 2 framework determines the capital buffer for credit portfolio concentration risk (for name as well as for sectoral concentration risk), the net stress test buffer based on supervisory stress test results, and the net General Risk Assessment Program (GRAPE) buffer as determined through the NBS supervisory process.

It is important to note that the capital buffers under Pillar 2 should be proportionately incorporated into capital requirements (Common Equity Tier 1 at 4.5%, Tier 1 capital at 6%, and Total Regulatory Capital at 8%). Therefore, 56% of capital required under Pillar 2 should be held through Common Equity Tier 1, while 75% should be held through Tier 1 capital instruments. Commercial banks have been given appropriate timeframes to comply with these requirements.

As a result of the amendments to capital adequacy requirements, when a commercial bank breaches a new total capital requirement it will be considered that the combined buffer requirement has been breached first. In such a case, in accordance with the updated "Regulation on Capital Adequacy Requirements for Commercial Banks", the distribution of a bank's own equity instruments, including distributions of dividends, is prohibited.

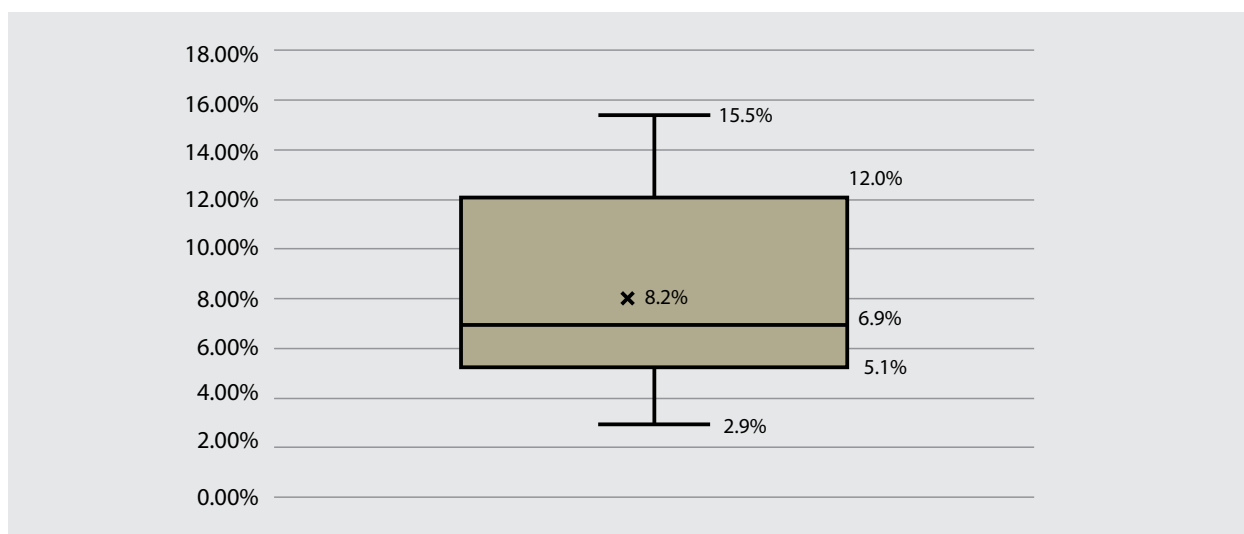
Furthermore, the total capital requirements determined under Pillar 2 can be temporarily re-

duced, for a maximum of one year, as a result of an unexpected devaluation of currency that causes a mechanical increase in risk weighted assets. The specific amount of capital by which a capital requirement can be reduced must be calculated in accordance with the methodology of the bank with the approval of the NBS. The commercial bank must ensure that it calculates the amount of capital in accordance with this methodology. If a commercial bank's capital is reduced more than as defined under the methodology, the bank will be in violation of the requirements of the combined buffer and will be subject to dividend distribution and other restrictions.

Of the abovementioned Pillar 2 buffers, the unhedged currency induced credit risk buffer became effective immediately alongside the approval of the regulation. Consequently, by December 2017, this buffer was already included in the minimum capital requirements. In addition, the National Bank finalized the calibration process of the capital buffer for credit portfolio concentration risk and the maintenance of that buffer will become obligatory from 1 April 2018.

In 2018, the net GRAPE buffer comes into force. The buffer is determined through the continuous supervisory process cycle, which aims to assess the risks of commercial banks. Based on GRAPE, the risk profile for every commercial bank is determined. In 2017, the NBS finished the individual assessment of the banks and, from 2018, bank-specific net GRAPE buffers will become effective. Considering each of the abovementioned updates, the 2018 capital requirements for commercial banks within Pillar 2 are given on Diagram 4.47.

Diagram 4.47 Total regulatory capital Pillar 2 buffers for the banking sector for 2018 (minimum, maximum, mean, standard deviation and median)



Source: National Bank of Georgia

In the future, it is anticipated that additional capital requirements will be determined based on supervisory stress tests. In 2017, the NBG continued the calibration process for such a buffer. The NBG plans to formalize the framework for determination and calculation of the buffer in coordination with commercial banks so that supervisory stress tests are fully integrated into the Pillar 2 capital adequacy framework in 2018. Enterprise-level stress tests allow assessment of the impact of

systemic and sectoral economic shocks and idiosyncratic events on a bank and can determine the adequate amount of capital required for the relevant scenario. Along with the integration of supervisory stress tests, it is necessary to eradicate double requirements of capital for the same risk. Accordingly, the amount of capital requirements within supervisory stress tests are determined as an excess to the sum of the conservation and countercyclical buffers.

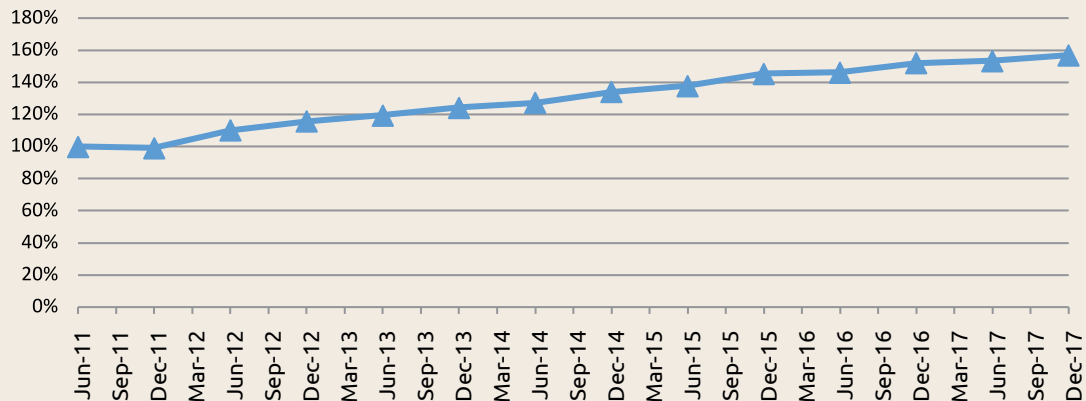
Box 6. An overview of international practice and research

The Global Financial Crisis of 2007-08 revealed the insufficiency of banks' capital. Consequently, in 2010, in response to weaknesses in the international supervisory framework and risk management practice, the Basel Committee on Banking Supervision (BCBS) strengthened capital requirements and established new regulations.⁶⁰ Banks were obliged to raise the capital adequacy ratio, and it is expected that this same tendency will continue. The situation is illustrated Diagrams 4.48, 4.49 and 4.50, which display the increasing tendency of the international banking sector's capital adequacy ratio after the implementation of the Basel III framework in 2011.⁶¹ Under these conditions, determining the optimal capital adequacy ratio has gained significant importance. Regarding this subject, the literature is mostly focused on the costs and benefits related to an increase in the capital adequacy ratio. According to the literature, benefits are commonly related to the reduction of the probability of banking crises, whereas increased costs are related to an increase in intermediary prices.

60. Basel Committee on Banking Supervision. (2010). Basel III: A global regulatory framework for more resilient banks and banking systems. Bank for International Settlements.

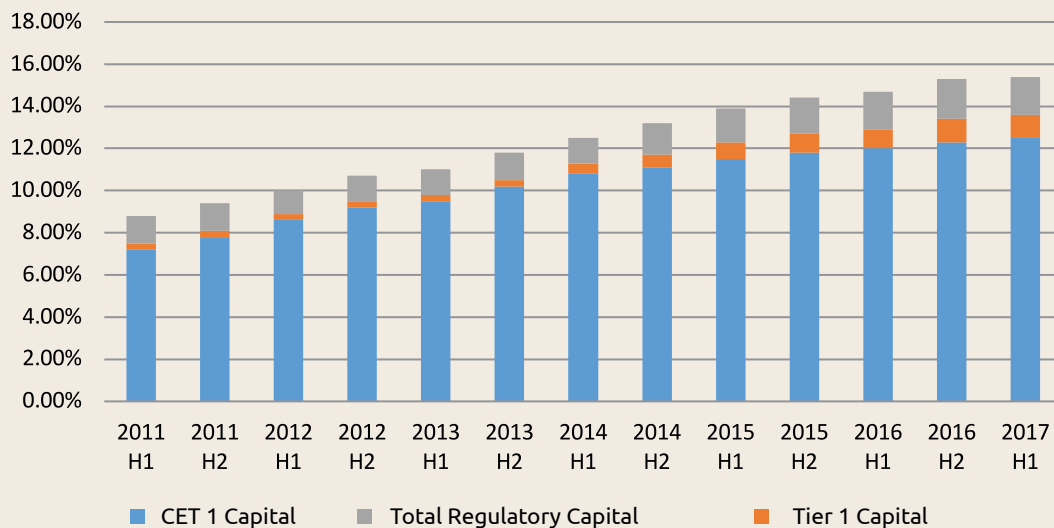
61. Basel Committee on Banking Supervision, Basel III Monitoring Report March 2018, <https://www.bis.org/bcbs/publ/d433.htm>.

Diagram 4.48 Common equity Tier 1 ratio of the European banking sector, 2011-2017 (base period is December 2011)



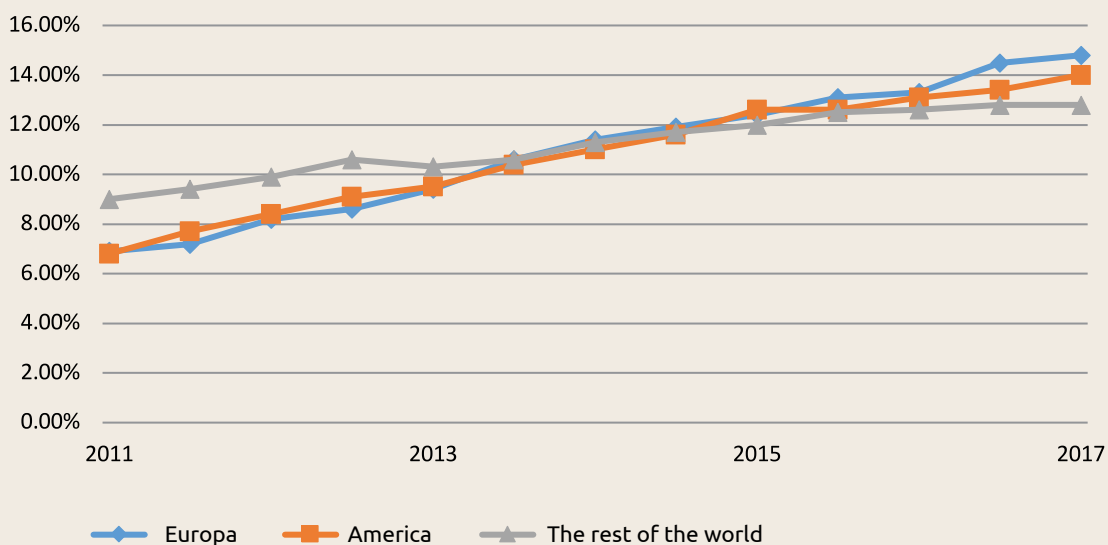
Source: European Banking Authority (EBA)

Diagram 4.49 The capital adequacy ratios of the world's 106 largest banks according to Basel III (2011-2017)



Source: BCBS

Diagram 4.50 The capital adequacy ratios of the world's 106 largest banks, 2011-2017 (banks classified according to region)



Source: BCBS

In 2010, the BCBS published research regarding the expected outcome of higher capital adequacy ratios.⁶² The research included a cost-benefit analysis of the impact of a higher capital adequacy ratio on GDP. According to the research, the optimal capital adequacy ratio is 10-13%. To determine the optimal capital level, the literature uses, like the BCBS research, Common Equity Tier 1. Based on the methodology used by the BCBS, Schanz et al. (2011) concluded that insurance against systemic banking crises (in the form of higher capital ratios) appears to be comparatively cheap in steady state than a banking crisis itself. As a result, the authors claimed that the optimal capital ratio for the United Kingdom is 10-15%.⁶³

Miles et al. (2012), based on a analysis of 200 years of GDP data for several countries, determined the optimal capital adequacy ratio as being 16-20%. Of particular interest is a cost-benefit analysis for the United Kingdom undertaken by De-Ramon et al. (2012).⁶⁴ This study was based on an aggregation of changes in individual banks' balance sheets caused by higher capital requirements. According to this analysis, increasing the capital adequacy ratio to 22% has net benefits in the long run. Meanwhile, according to Brook (2015), even in typical risk conditions, a higher capital adequacy ratio has net benefits. He claimed that the optimal capital adequacy ratio is 10-14%.⁶⁵ Based on the methodology of Miles et al. and the BCBS, Kragh-Sorensen (2013) have stated that the optimal capital adequacy ratio for Norway is 13-23%.⁶⁶ Meanwhile, the research by Junge and Kugler (2012) and Rochet (2014), which are based on cost-benefit analysis, showed that even in the event of doubling the Basel III capital adequacy requirements, the benefits of a higher capital adequacy ratio could exceed the costs.⁶⁷

Further recent research by Admati (2016) stated one of the strictest optimal capital adequacy ratio in her research. According to her research, the optimal capital adequacy ratio should be 30%, but could be lowered to 20% when the conservation buffer is between 20-30%.⁶⁸ Miller and Barth (2017) analyzed the marginal costs and benefits of a higher leverage ratio for the United Kingdom based on the methodology of Miles et al. (2012). According to their research, taking into account the permanent effect of the banking crisis, the benefits related to a higher capital adequacy ratio increase faster than the costs. The authors stated that the average optimal capital adequacy ratio should be 23%.⁶⁹

Additionally, more radical views regarding the optimal capital adequacy ratio exist in recent literature. One such study is by Cochrane (2014), who states that the optimal capital adequacy ratio for the banking sector should be 100% of risk-weighted assets.⁷⁰ This kind of consideration is partly realized in practice – a good example of which is the implementation of the bail-in framework⁷¹ in supervisory practice.

62. Basel Committee on Banking Supervision. (2010). An assessment of the long-term economic impact of stronger capital and liquidity requirements. Bank for International Settlements.

63. Schanz, J., Aikman, D., Collazos, P., Farag, M., Gregory, D., & Kapadia, S. (2011) The long-term economic impact of higher capital levels. BIS Papers, No. 60, pp. 73-81.

64. De-Ramon, S., Iscenko, Z., Osborne, M., Straughan, M., & Andrews, P. (2012). Measuring the impact of prudential policy on the macroeconomy. Financial Services Authority.

65. Brooke, M., Bush, O., Edwards, R., Ellis, J., Francis, B., Harimohan, R., & Siegert, C. (2015, December). Measuring the macroeconomic costs and benefits of higher UK bank capital requirements. Financial Stability Report, No. 35.

66. Kragh-Sørensen, K. (2012). Optimal capital adequacy ratios for Norwegian banks. Staff Memo, No. 29.

67. Junge, G., & Kugler, P. (2012). Quantifying the impact of higher capital requirements on the Swiss economy (Working Paper). University of Basel; Rochet, J.C. (2014). The Extra Cost of Swiss Banking Regulation. Zurich: Swiss Finance Institute.

68. Admati, A. R. (2016, February). The missed opportunity and challenge of capital. National Institute Economic Review, No. 235.

69. Barth, J., & Miller, S. (2017). Benefits and Costs of a Higher Bank Leverage Ratio.

70. Cochrane, J.H. (2014). Toward a Run-free Financial System.

71. Such a framework implies creditors and debtors preventing the fall of a financial institution. This is accomplished by writing off the loans of banks or by moving loans to equity.

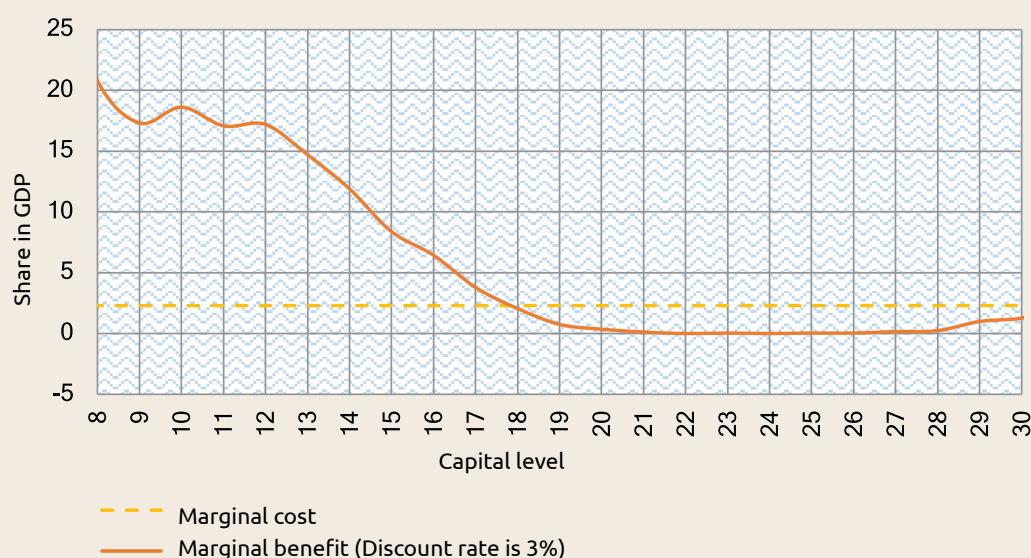
Georgia

In order to evaluate the optimal capital adequacy ratio for Georgia, the benefits and costs of changes in capital requirements have been estimated for the Georgian economy. The benefits of a higher capital adequacy ratio are related to a decreased probability of banking crises, which in itself reduces the expected losses related to a crisis. The benefits of higher capital requirements can be exceeded by an increase in interest rates caused by higher capital costs. Additionally, higher capital requirements can hinder investments and have a negative effect on long-run economic growth. The estimation of the optimal capital adequacy ratio for Georgian commercial banks is based on the methodology of Miles et al. (2012).

According to the main assumption of Miles et al., the value of a bank's assets depend on the incomes of lenders, which themselves depend on changes in GDP. Based on modeling the distribution of GDP changes, the probability of a crisis can be determined for each capital level. The optimal capital adequacy ratio is determined when the graphs of marginal costs and benefits cross each other. The marginal benefit of a one-unit increase in capital requirements is a reduction of the expected costs of a crisis. Here it is assumed that marginal costs are considered constant.

In order to determine the optimal capital adequacy ratio for commercial banks in Georgia, baseline and alternative scenarios were analyzed. In the baseline scenario, the average economic growth rate is 4%. The discount rate is taken as 3% and it is assumed that the Modigliani/Miller Theorem⁷² does not work, while the distribution of GDP is similar to the parameters used by Miles et al. According to the results, the optimal capital adequacy ratio for the Georgian banking sector is 17.9% (see Diagram N 4.51). Four alternative scenarios are reviewed in the sensitivity analysis and the optimal capital adequacy ratio varies from 16.9-18.8%.

Diagram 4.51 Determining the optimal capital adequacy ratio based on the baseline scenario



Source: European Banking Authority (EBA)

72. According to the Modigliani/Miller theorem, an increase in the capital adequacy ratio for commercial banks does not increase their capital costs. A higher capital level lowers the risk of default. As a result, investors require a lower rate of return. Therefore, when capital requirements increase, the costs for banks do not increase proportionally and only partially burden the firms.

The average economic growth rate has an effect on the distribution of GDP change. If a country has a high average growth rate then it needs less time and, respectively, less capital to offset the negative shocks. In the first alternative scenario, the average economic growth rate is 5% and the corresponding optimal capital adequacy ratio is 16.9%.

The discount rate determines attitudes towards the future and has an impact on the estimation of costs and benefits. In the case of a high discount rate, the value of a future crisis is low and, respectively, the optimal capital adequacy ratio is lower. This is clarified in the second alternative scenario, where the discount rate is increased up to 3.5%. As a result, the optimal capital adequacy ratio is decreased by 0.2 percentage points and becomes 17.7%.

According to the Modigliani/Miller theorem, an increase in the capital adequacy ratio for commercial banks does not increase their capital costs. A higher capital level lowers the risk of a bank defaulting. As a result, investors require a lower rate of return. Therefore, when capital requirements increase, the costs for banks do not increase proportionally and only partially burden the firms. In the third alternative scenario, it is assumed that the Modigliani/Miller theorem works by 50%. As a result, the optimal capital adequacy ratio is increased up to 18.8%.

Georgia is a small, open economy with a high level of dollarization. As a result, relative to developed countries, Georgia is more vulnerable to both domestic and external shocks. Because of this, in the fourth alternative scenario the parameters are specific to Georgia. According to this scenario, the capital adequacy ratio should be 18.8% (see Table N 4.8).

Table 4.8 Alternative scenarios

	Optimal capital adequacy ratio
Alternative scenario 1 (Average economic growth rate is 5%)	16.9%
Alternative scenario 2 (Discount rate is 3.5%)	17.7%
Alternative scenario 3 (Modigliani-Miller Theorem works by 50%)	18.8%
Alternative scenario 4 (Negative and symmetric shocks takes the values of $-b=50\%$, $c=\pm 25\%$ respectively)	18.8%

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- De-Ramon, S., Iscenko, Z., Osborne, M., Straughan, M., & Andrews, P. (2012). *Measuring the impact of prudential policy on the macroeconomy*. Financial Services Authority.
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- Rochet, J.C. (2014). *The Extra Cost of Swiss Banking Regulation*. Zurich: Swiss Finance Institute.
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Box 7. Review of the finalized Basel III framework

Since 2011, the Basel Committee on Banking Supervision (BCBS) has been actively advancing the development of the Basel III Capital Adequacy Framework approved in 2010. As a result of this process, the committee launched the final version of the framework in 2017.⁷³ The document issued in 2010 has provided further risk-oriented capital instrument criteria than the relevant framework standards of Basel II. The risk-weighted assets that heretofore have been incorporated in Basel II have been subject to substantial revisions by the committee, with that review process completed in 2017. As a result of the finalization of the Basel III framework, existing methods of calculating risk-weighted assets have been thoroughly revised:

- The standardized approach for calculating credit and operational risk capital requirements has become more flexible and risk-sensitive.
- The capacity for calculating capital requirements using internal models elaborated by banks has been limited by incorporating rigidly defined limits to the models.
- In addition to the existing requirement of a 3% minimum leverage ratio, an additional buffer requirement for the leverage ratio was defined solely for Global Systemically Important Banks (G-SIBs).
- The minimum capital floor (output floor) embodied in Basel II, that in itself comprised 80% of the capital required under Basel I, has been repealed. The revised document defines the minimum threshold on capital requirements calculated using a standardized approach. Correspondingly, total risk-weighted assets, as calculated using the standardized approach and the methodology based on the internal models of a bank, must not comprise less than 72.5% of risk-weighted assets calculated using the standardized approach alone.

Considering the Georgian regulatory and supervisory framework, advancements in the standardized approach for the calculation of credit and operational risk capital requirements are essential.

Standardized approach – Credit risk

The revisions accomplished by the Basel Committee on Banking Supervision have had a substantial effect on the standardized approach defined by Basel II. The standardized approach of calculating credit risk capital requirements has become more risk-sensitive, whereas risk weights now provide more flexibility. Specifically:

- Regarding unrated exposures to banks and corporations, the risk weights prescribed have become more granular. The amendment also has an effect for those countries that do not permit the usage of credit ratings.
- With respect to corporate clients, risk exposures for small and medium enterprises have been separated into the risk exposure classes carrying different risk weights. The updated framework of the standardized approach defines different risk weights for project, object and commodities finance.

73. Basel Committee on Banking Supervision, Basel III: Finalizing post-crisis reforms, 2017.

	Corporations with credit rating					Unrated Corporations
	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	
Current Standardised approach	20%	50%	100%		150%	100%
Revised standardised approach - Usage of credit ratings is permitted	20%	50%	75%	100%	150%	Corporate SME: 85% Other: 100%
Revised standardised approach - Usage of credit ratings is not permitted	Investment grade : 65% Corporate SME: 85% Other: 100%					

Principal amendments have been completed regarding the class of residential real estate risk exposures. Specifically, the 35% risk weight defined by Basel II has been replaced by a comprehensive approach classifying risk weights in line with the Loan-To-Value (LTV) ratio.

Residential Real estate Exposures								
LTV	Below 50%	50% to 60%	60% to 70%	70% to 80%	80% to 90%	90% to 100%	Above 100%	Criteria not met
Current Standardised approach	35%							
Revised Standardised approach - whole loan approach (not income-producing)	20%	25%	30%	40%	50%	70%	Counterparty RW	
Revised Standardised approach - whole loan approach (income-producing)	30%	35%	45%	60%	75%	105%	150%	

For retail exposures, the existing approach has been revised and the result is a more granular treatment that applies to different types of retail exposures, distinguishing between revolving facilities⁷⁴ and transactors⁷⁵.

	Retail		Other retail
	Transactors	Other regulatory retail	
Current Standardised approach	75%		100%
Revised standardised approach	45%	75%	100%

74. Where credit is typically drawn upon.

75. Where the facility is used to facilitate transactions rather than a source of credit.

Similar to the class of residential real estate risk exposures, for commercial real estate exposures, the fixed risk weight has been replaced by more risk-sensitive and granular risk weights. Additionally, credit conversion factors for off-balance sheet exposures have also been changed. For low-risk categorized off-balance sheet exposures the credit conversion factor has increased from 0% to 10%.

The analysis of operational risk methodology

The committee has replaced the existing approach for calculating operational risk capital requirements, which were based on banks' internal models. In addition, the three existing standardized approaches have been replaced with a single standardized approach for operational risk. This defines a bank's operational risk capital requirements based on two components:

- a) The measure of a bank's income.
- b) The measure of a bank's historical losses.

Conceptually, the new standardized approach makes the following two assumptions:

- a) Operational risk increases in the event of a bank's income increasing.
- b) Banks that have historically experienced greater operational risk losses are considered to be more predisposed to more operational risk losses in the future.

According to the revised standardized approach, operational risk capital requirements are calculated as follows:

$$\text{Operational risk capital} = \text{BIC} \times \text{ILM}$$

Where:

$$\text{Business Indicator Component (BIC)} = \sum(\alpha_i \times \text{BI}_i)$$

BI (Business Indicator) is the sum of three components: interest components; lease and dividend components; the services and financial component.

α_i is a set of marginal coefficients that vary between 12-18% due to the measure of banks' incomes.

ILM (the Internal Loss Multiplier) is a function of the Loss Component (LC) and Business Indicator Component (BIC), whereas for the calculation of the latter, banks need to provide high-quality historical loss data for a minimum of 10 years.

The ILM coefficient might be less than 1 in the event of the actual Loss Component being less than the ratio defined by the Business Indicator Component, but could be more than 1 in the case of the average ratio of Loss Component exceeding the ratio defined by the Business Indicator Component.

The revised methodology connects a bank's income and historical losses ratio in such manner that enables further risk sensitivity.

The committee has set a transitional period of 10 years for member states to comply with the revised standards. It is also noteworthy that a revision of the EU supervisory policy framework for capital requirements (CRD IV Package) is planned for the near future in line with the committee's proposed amendments.

The National Bank of Georgia is actively working on a thorough analysis of best international practices in banking supervision, seeking to effectively integrate these into its banking supervisory and regulatory platform. It is planned to revise the existing capital requirements framework by integration of the abovementioned approaches in the scope of the committee's proposed amendments.

4.10 Financial Reporting and Transparency

Enhancing the transparency of the financial sector remains one of the top priorities for the National Bank of Georgia, and relevant reforms continue to be implemented towards that end. Enhancing transparency aids the reduction of information asymmetry, increases trust in the financial sector and protects investors' rights. An especially important factor for the transparency of the financial sector is the quality of the annual financial statements of commercial banks and other representatives of the financial sector. These financial statements are prepared in accordance with International Financial Reporting Standards (IFRS), which are characterized by periodic updates. At the current stage, IFRS 9 is of special importance. This is the new standard related to the accounting of financial instruments that became effective from 1 January 2018. The main aspect of this standard is the expected credit loss (ECL) model, which implies recognition of credit losses expected to be incurred in the future. According to this standard, the loss model should take into account forward-looking information, which includes, but is not limited to, expectations related to macroeconomic factors. Given that the NBG has extensive experience in undertaking macroeconomic research and preparing forecasts, as well as having access to the statistical information necessary for doing so, the NBG decided to publish periodic forecasts of macroeconomic indicators to facilitate the implementation of IFRS 9. Usage of a single source of macroeconomic forecasts will also facilitate comparisons among different financial sector representatives. Comparability is a means of enhancing the qualitative characteristics of financial information (the Financial Reporting Conceptual Framework).

In January 2018, the National Bank of Georgia finalized the format for macroeconomic forecast scenarios. The macroeconomic and risk scenario forecasts were shared with commercial banks,

which can use them in the preparation of financial statements in accordance with IFRS 9. The scenarios have also been made publicly available on the National Bank of Georgia's website.⁷⁶ The forecast horizon is three years and the scenarios are updated twice a year. It should be noted that the use of these macroeconomic scenarios is recommended but is not mandatory, although using alternative scenarios has been proven to be relevant.

In accordance with IFRS 9, measurement of expected credit loss requires significant judgement and usage of assumptions based on a combination of historical experience and forward-looking information. However, taking this approach permits interpretation of the same data and expectations in different ways and can thus hinder the comparison of expected credit losses and underlying assumptions between entities.

To solve this issue of comparability, in 2018 the National Bank of Georgia finalized and published "Guidelines on Expected Credit Losses under IFRS 9". This was created by combining the NBG's experience and international publications on the subject. Prior to publication, the NBG took into consideration feedback from both commercial banks and audit companies. It should be noted that although satisfying the requirements set out in the guidelines are not mandatory for commercial banks, their use of different approaches will require justification. The guidelines are available on the website of the National Bank of Georgia⁷⁷ and may be subject to revision in order to put them in line with updates from the standard-setting body (IASB).

During 2017, the NBG continued working on transitioning supervision from the national GAAP to the IFRS financial reporting standards. This entails the implementation of the European unified reporting format (FINREP) for commercial banks' periodic reporting of financial information. This will help increase transparency and effectiveness. Moreover, considering that reporting is going to be based on International Financial Reporting Standards,

76. See: <https://www.nbg.gov.ge/index.php?m=694&lng=eng>

77. See: <https://www.nbg.gov.ge/index.php?m=693>

the burden of dual reporting would be eliminated. However, the NBG plans to retain all the supervisory filters currently in place in order to continue exercising risk-based supervision without interruption.

In 2017, the decision was made to implement the FINREP reporting forms without any adjustments to the content implemented in the European Union. The FINREP forms were subsequently updated as a result of IFRS 9, which became effective in the EU at the beginning of 2018. In line with the advancement of the project, the NBG organized presentations for commercial banks to introduce the FINREP reporting specifications and the technical standards associated with it (XBRL). The FINREP reporting forms will be fully implemented from 2019, although existing supervisory reporting forms will be retained for a period during a parallel run.

From 2017, the NBG has been represented on the committee of the Service of Accounting, Financial Reporting and Audit Supervision. This enables more active participation in the development of the reporting framework and improves transparency in the country. In addition, from 2017, the NBG has been represented on the translations committee, which undertakes the precise translation of International Financial Reporting Standards (IFRS) and International Standards on Auditing (ISA) into the Georgian language and ensures the establishment of sector-specific terminology in the country. The translation of IFRS and ISA standards into the Georgian language will aid transparency in the real sector, which is important for attracting loans and direct foreign investments to the country as well as for the development of capital markets.

Besides publishing financial statements in accordance with the IFRS, commercial banks are required to publish Pillar 3 reports in accordance with “Decree №92/04 of the Governor of the National Bank of Georgia On approving the Regulation on Disclosure Requirements for Commercial Banks within Pillar 3”. Pillar 3 reports enable market participants to obtain information regarding risks, capital requirements, corporate governance and risk management practices in a bank.

In order to cover a wider sphere of stakeholders, Pillar 3 reports are published in physical form. They are also published in English in order to provide information to foreign investors.

The quarterly Pillar 3 reports that banks are required to publish contain quantitative information pertaining to a bank’s main coefficients of the balance sheet, profitability and ownership structure. This information was previously covered by the “Regulation on Transparency of a Commercial Bank’s Financial Condition”. In addition, the quarterly reports contain information on capital elements prepared in accordance with the Basel III framework, as well as risk weighted assets, credit risk, credit risk mitigation and liquidity coverage ratios.

The annual Pillar 3 reports contain both qualitative and quantitative information about the main risks that banks are exposed to, risk management practices and internal control mechanisms. Furthermore, they cover details about corporate governance, including information about a bank’s supervisory board, committees connected with the supervisory board and the functions and responsibilities of the directors – including information about their qualifications, criteria for assessing their independence, the responsibility delegation system and policies for the appointment of directors. The annual report should also contain information on the remuneration of top management and other persons with decision-making powers; the organizational unit responsible for setting remunerations; the breakdown of remuneration into fixed and variable components and a discussion of their characteristics; and on the existing and expected risks that may have an effect on remunerations.

It is worth noting that Pillar 3 is part of the Basel III framework update as finalized by the Basel Committee of Banking Supervision over 2015-2017. The National Bank of Georgia has analyzed the new requirements within this framework and “Decree №92/04 of the Governor of the National Bank of Georgia on Approving the Regulation on Disclosure Requirements for Commercial Banks within Pillar 3” is thus fully compliant with both the updated Pillar 3 and applicable EU directives.



Ana Tsutskiridze

11 years old; LEPL Tchiatura Public School #1



Maia Martiashvili
7th Grade, JLC Bolnisi Private School "Davitiani Marina Goroshkova"

5

CONSUMER PROTECTION



Legislative amendments

Consumer protection is a priority area for the National Bank of Georgia. For this purpose, and to develop an appropriate response to the challenges of the financial market, the existing legislative framework needs continuous improvement. In this regard, significant changes were made in 2017.

In order to protect the rights and interests of consumers in the financial sector, a rule on the “Protection of Consumer Rights while Rendering Services by Financial Institutions” was enacted from 1 June 2017. This regulation is the renewed version of the rule on “Disclosing Essential Information to Consumers when Providing Services by Commercial Banks”, which was adopted by the National Bank of Georgia in 2011. It offers many novelties for financial sector consumers:

- The coverage of the rule was extended. While the previous rule only obliged commercial banks to adhere to special rules regarding their relations with customers, the new rule also applies to microfinance organizations and non-bank deposit institutions – credit unions and qualified credit institutions.⁷⁸
- While the previous regulation only implied the accumulation of all necessary information in the “header” of contracts concluded with private individuals and concerned credits within the range of 300-50,000 GEL and deposits up to 50,000 GEL, the updated rule is also extended to legal entities and the maximum limit has been raised to 200,000 GEL.
- The obligations of financial organizations to disclose accurate, clear and complete information about financial products, including when making an offer, were expanded and became more specific. Rules for the preparation of advertising materials were developed; a minimal font size for contracts (size 12 for headers and 10 for basic terms) was determined to make contracts more easily understandable and to eliminate additional issues that could arise while reading them. Financial organizations are obliged to provide information about contracts already signed (products already sold to customers), which implies periodically providing consumers with account statements, copies of contracts and a number of other documents related to the contract or upon demand and free of charge. Moreover, financial organizations are obliged to offer customers at least one individual communication channel free of charge in order to inform them about any changes made to the terms of the contract. In addition, only placing information about changes to the terms of a contract in the public domain (for example, on a website and/or in branches) is not considered to be an adequate provision of information.
- In order to better inform consumers, commercial banks are obliged to provide customers who have access to banks’ products with at least one individual communication channel for free of charge (e.g. via the internet or mobile connection).
- In the event of late payment and the termination of services on the initiative of a financial institution, financial organizations are obliged to inform the customer, co-borrower or guarantor (if applicable), immediately but not later than five working days after late payment or the termination of a service. Before the changes to the regulation, relaying such information on time was solely at the discretion of the financial organization, which could become a reason for the additional financial hardship of consumers, especially for third parties (guarantors and property owners).

78. The notion of a Qualified Credit Institution was abolished in January 2018 with legislative amendments made to the Organic Law of the National Bank of Georgia.

- A procedure for the discontinuation of accruing service fees on inactive financial products was determined. Within the scope of this rule, financial organizations have no right to charge fees on products that have not been used by consumers for more than 12 months.
- Amendments were made to the procedure and rate for the early repayment of credit. In particular, the penalty amount for early repayment was determined by consideration of the remaining period of the agreement. At the same time, the maximum rate was set at 2% of the outstanding principal and, in some cases, the rate is equal to 0%. In addition, in the event of partial early repayment, financial organizations are obliged to offer customers at least two alternative new schedules: either the re-allocation of the outstanding principal for the same period by reducing the installment amount or a reduction of the loan period with the same monthly installments.
- Financial organizations are obliged to develop a code of ethics for loan collection and must observe moral norms and best business practice, and act in accordance with the principles of good faith, transparency and fairness in relation to their customers.

Legislative changes to the Civil Code from 15 January 2017 have imposed significant restrictions on loans. According to those changes, upper limits for effective interest rates and penalties were established, which equal the annual effective interest rate of 100% and the annual rate of 150% respectively. By consideration of the amendments, the National Bank of Georgia defined the annual effective interest rate and the financial costs, and approved a rule for the calculation of the effective interest rate for the purposes of Article 625

of the Civil Code. In addition, amendments were made to the rules on “Defining and Imposing Monetary Penalties Against Commercial Banks” and on “Determining, Enforcing and Executing Monetary Penalties for Microfinance Organizations, Currency Exchange Bureaus and Money Transfer Organizations”, where, together with other violations, special penalties for violations of Article 625 of the Civil Code and of the “Protection of Consumer Rights while Rendering Services by Financial Institutions” were considered.

Consultations regarding amendments to legislation in respect to consumer protection

During 2017, the volume of legislative amendments related to consumer protection issues caused reasonable challenges in terms of their adequate implementation. This was especially noticeable for representatives of the non-banking sector, as they were subject to the lighter supervision regime of the NBG. Given the challenges, providing consultations and recommendations to financial organizations regarding the various amendments were an important part of the NBG’s work. These included making recommendations regarding legislative compliance with the content and format of the agreements, including their headers (the significant terms of the agreement).

Representatives of the National Bank of Georgia consulted financial sector representatives about the amendments to the Civil Code of Georgia concerning consumer protection. Specifically, the guidelines and corresponding examples of Article 625 of the Civil Code of Georgia were elaborated for entities under the supervision of the NBG and were placed on the website by the Consumer Protection Unit.⁷⁹

79. See: <http://nbg.gov.ge/cp/index.php?m=613>

Onsite and offsite inspections of financial sector representatives regarding consumer protection

During 2017, the consumer protection division was investigating the causes of consumer complaints received and errors revealed on the systemic level. As a result, financial sector representatives received recommendations and instructions regarding a range of issues: redesign of product conditions and processes; specifying and disclosing terms and conditions for informational and contractual documents; compensating losses to consumers within the scope of the NBG's mandate; making changes in advertisements and offerings to consumers according to appropriate standards, etc.

In 2017, in order to check compliance with the requirements of the financial consumer protection legislation, the NBG started onsite inspections of the organizations under its supervision. In response to any violation of the rules, as revealed by onsite and offsite inspections, the NBG conducted a number of supervisory measures with regard to consumer protection. Six microfinance organization and one commercial bank were fined tens of thousands of lari by the NBG as a result of revealed violations.

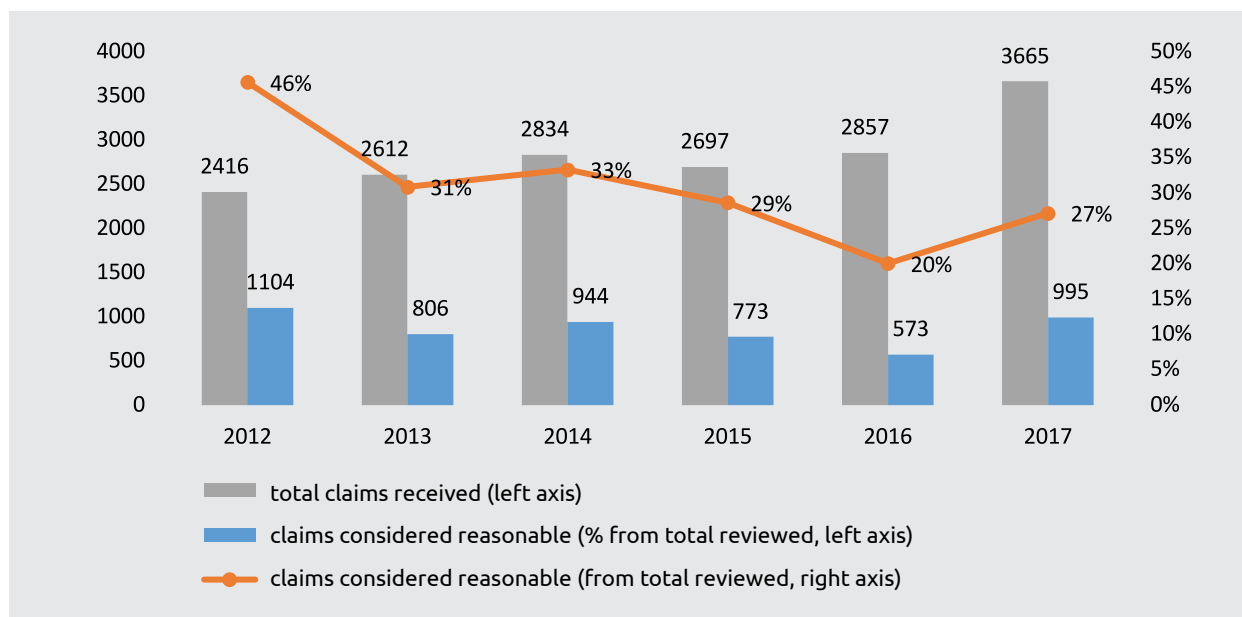
Consumer claims made to the National Bank of Georgia

During 2017, the consumer protection division of the NBG received 3,269 claims from consumers, which was an increase of approximately 140% over the previous year. The majority of claims, 2,329 (71%), were made over the phone. The number of claims received via other means also increased: 218 complaints were made in writing (6.7%); 200 were

expressed over social media (6.1 %); 341 consumers (10.4%) addressed the NBG over email, and 181 (5.5%) visited the NBG personally. In terms of content, the majority of complaints were related to credit restructuring requests and the prepayment process; the write-off of accrued penalties; the terms and conditions of contracts; and the foreign currency denominated "FX bank loan conversion to lari" program. In addition, there was a significant increase in the interest of consumers towards explanations of various legislative changes. The increased number of claims in 2017 primarily stemmed from the legislative amendments and the joint "FX bank loan conversion to lari" program that was implemented by the Government of Georgia and the NBG.

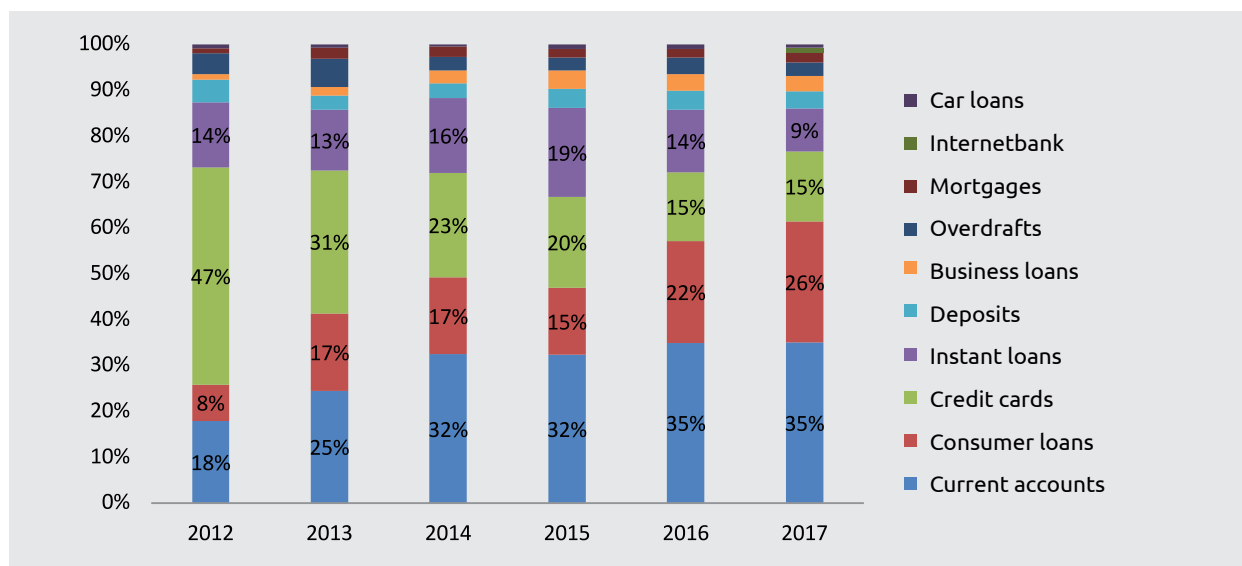
Consumer claims made in commercial banks

During 2017, commercial banks received 3,665 complaints from consumers – an increase of 28.3% over the previous year. If we look at the dynamics of all complaints received since 2012, there has been a growing trend in the number of complaints received. This has been caused by increased awareness among consumers about the mechanisms of consumer rights protection. At the same time, the number of complaints received from consumers that were subsequently considered reasonable has been decreasing annually. However, 2017 saw growth in the share of complaints considered reasonable, reaching 27% of the total reviewed. This change was mostly caused by the complex legislative amendments that were implemented during 2017. It is possible that in some cases employees of commercial banks were not informed, or at least were not properly informed, about the legislative amendments related to consumer rights.

Diagram 5.1 Total claims received and considered reasonable by commercial banks (2012-2017)

The majority of consumer claims received, according to type of banking product, concerned, in order, 1. current accounts, 2. consumer loans, 3. credit cards and 4. instant installments. This distribution

has remained practically unchanged over the years, as the most significant share of claims tend to be about the most common/frequently used products.

Diagram 5.2 Distribution of claims received by commercial banks by product type (2012-2017)

It should be noted that the implementation of legislative amendments in 2017 revealed some errors in the conduct of microfinance organizations, including registration of complaints received from consumers. These infractions led to some of the

organizations being fined. With the elimination of such defects and a standardization of the process, which in turn implies more reliable statistical data about consumer complaints, the NBG is planning to publish this data from 2018.

Financial education

Financial education is a priority area for the National Bank of Georgia. In 2017, for the purpose of improving the effectiveness of the National Bank's financial education efforts, a separate Financial Education Division was established within the Consumer Protection and Financial Education Department of the National Bank. In addition, the Governor of the National Bank has declared 2018 the "Year of Financial Education". The implementation of a number of important financial education projects related to this initiative have been planned.

Throughout 2017, the National Bank took a number of important steps towards enhancing the financial literacy levels of the population. Based on the progress that the National Bank made in the sphere of youth financial education and financial inclusion, the National Bank was nominated as a regional finalist in the "Country Award" category in the 2017 Global Inclusion Awards, which were held in Berlin in May 2017. Furthermore, in April 2017, the National Bank was visited by representatives of the National Bank of the Republic of Macedonia with the intention of sharing its experience in the direction of financial education – in particular, regarding the topics of the National Strategy for Financial Education, and the Financial Literacy and Financial Inclusion Study.

The National Strategy for Financial Education

The National Strategy for Financial Education was developed in 2016 and constitutes an important part of the consumer protection framework. In early 2017, a steering committee was established to propose approaches and make recommendations for the development and the implementation of the strategy, and to address the financial education challenges facing the country.

The Governor of the National Bank is the chair of the steering committee. The members of the committee include representatives from public, private, financial and civil sector organizations; specifically, they come from the Ministry of Education and Science of Georgia, the administration of the President of Georgia, the Bank of Georgia, FINCA Bank Georgia, Liberty Bank, TBC Bank, the microfinance organization Crystal, the Business and Technology University (BTU), Ilia State University, Finance in Motion GmbH, and the Savings Banks Foundation for International Cooperation (SBFIC). Two meetings of the steering committee, and four meetings of the working group of the steering committee were held during 2017. During these meetings, the committee established the priority directions for upcoming years, and initiated discussions regarding projects to be implemented in 2018. In addition, the committee developed the following documents to guide the activities of the steering committee: Monitoring and Evaluation Guidelines for Financial Education Programs; a Core Competences Framework for Financial Literacy; High-Level Principles for the Certification of Financial Education Programs; and the 2018-2020 Roadmap for the Implementation of the Strategy.

Educational resources

Throughout 2017, the National Bank initiated an awareness-raising campaign on the topics of smart saving, high-risk financial schemes and financial pyramids. The campaign consisted of print brochures, developed in cooperation with the SBFIC, as well as two educational videos regarding smart saving and financial pyramids.

The video on smart saving: This was developed in cooperation with the SBFIC and was presented to the public in June 2017, being broadcasted on a number of TV channels throughout the year.⁸⁰ To enhance the reach and effectiveness of the

80. This can be viewed online at: <https://www.youtube.com/watch?v=BN8XeByjjJI>

educational video, a special internet-banner was also developed that aimed at attracting the target audience's attention with a creative message. By clicking on the banner, users were directed to the National Bank's website where they had an opportunity to learn more about financial pyramids and high-risk investment schemes.

The video on financial pyramids: The presentation of the educational video on financial pyramids was held at Rooms Hotel, Tbilisi, in October 2017. Representatives from the public, private and civil sectors, including representatives from the Parliament of Georgia and international donor organizations, attended the event. The video instructs the audience about how financial pyramids operate and how they can be identified.⁸¹

In October 2017, with support from the Development Facility of the European Fund for Southeast Europe (EFSE DF), the National Bank developed an educational video on mortgage loans, which offers key information and advice to those persons deliberating getting a mortgage to finance the purchase or a construction of a home. In addition to the video, the NBG also developed a number of internet banners, which were placed on real estate web-portals, that transfer consumers to the National Bank's website. On that website, as well as on the NBG's YouTube channel, interested parties can watch the educational video and read a brochure about mortgage loans for future homeowners, which the National Bank and EFSE DF developed in 2016.⁸²

Other awareness-raising activities

Throughout 2017, the National Bank continued the tradition of getting involved in financial education awareness-raising campaigns.

In March 2017, on the initiative of CYFI (Child and Youth Finance International) and with the coordi-

nation of the National Bank, Global Money Week (GMW) was celebrated in Georgia for the fourth time. This saw the involvement of the National Youth and Children's Palace, the Bank of Georgia, FINCA Bank Georgia, the microfinance organization Crystal, Tech Park Georgia, as well as a number of public schools and universities. Within the scope of GMW, which is celebrated annually across the globe, children and youth became involved in discussions about finance, children's rights and entrepreneurship. The theme of Global Money Week 2017 was "Learn. Save. Earn." During GMW, the National Bank and the National Youth and Children's Palace organized a youth drawing, photography and essay competition on financial and entrepreneurial topics. The National Bank invited the creators of the best works to the Money Museum in Kvareli, Georgia, where a lecture was organized on the history and functions of the National Bank, the history of money, and Global Money Week.

Furthermore, during GMW, the Governor of the National Bank welcomed students from the National Youth and Children's Palace and St. George's British-Georgian School to the Cash Center of the National Bank. The students discussed questions regarding youth financial literacy and financial inclusion with the governor. Moreover, two commercial banks – the Bank of Georgia and FINCA Bank Georgia – as well as microfinance organization Crystal and the Business and Technology University of Georgia also offered a number of entertaining educational activities for young people. In total, up to 5,000 children and youth participated in GMW in 2017.

In October 2017, on the initiative of the National Bank and the SBFIC, and with the involvement of seven Georgian commercial banks (the Bank of Georgia, Basisbank, Credo Bank, FINCA Bank Georgia, Liberty Bank, TBC Bank and VTB Bank Georgia), World Savings Day was celebrated for the sixth

81. This can be viewed online at: <https://www.youtube.com/watch?v=vNmWQFHbgyE>

82. This can be viewed online at: https://www.youtube.com/watch?v=i_5OQZr-4Fk&t=21s

time in Georgia. The objective of World Savings Day is to encourage a discussion of the benefits of saving and to promote saving among the Georgian population. As part of World Savings Day, a video featuring Grovia, the Georgian mascot for World Savings Day, circulated in the branches, ATMs, websites and social media accounts of commercial banks, and print financial education resources were distributed among the youth. In addition, a social media competition on the topic of saving was organized, with the 24 winners of the competition, aged between 9 and 13, being invited to the Ilia Chavchavadze Kvareli State Museum and the National Bank's Money Museum in Kvareli, where they had the chance to play the "Savings Game" board game. Commercial banks also opened deposit accounts for the winners, so that they can continue saving for their goals.

Cooperation with the Ministry of Education and Science of Georgia

Throughout 2017, the National Bank continued its cooperation with the Ministry of Education and Science of Georgia for the purpose of integrating financial education in the national curriculum at the primary stage.

Project SchoolBank

Throughout 2017, the National Bank, in cooperation with CYFI, continued working on the development and implementation of the SchoolBank project. This aims at promoting financial literacy and the financial inclusion of the youth. Within the scope of the project, a common guidebook was developed for children between the ages of 12 and 15. This covers the fundamentals of financial literacy, such as saving, spending and budgeting; borrowing and debt management; consumer rights and responsibilities; and fraud and financial security. The guidebook uses active learning methods and is written in youth-friendly language.

Moreover, in July 2017, the National Bank hosted a 2-day youth-friendly product development work-

shop, which was led by CYFI experts and included the participation of seven commercial banks of Georgia. During the workshop, participants discussed the importance of youth financial literacy and inclusion, as well as the benefits of developing youth-friendly financial products from the commercial banks' perspective. The workshop also discussed best international practices for developing financial products that address the needs of the youth and that could potentially be developed in Georgia.

Within the scope of the Memorandum of Understanding signed between the National Bank and the National Youth and Children's Palace in July 2017, the National Bank conducted a 3-day training program for teachers from the National Youth and Children's Palace in April 2017. Later, in October 2017, a separate class dedicated to SchoolBank was created at the National Youth and Children's Palace.

Furthermore, with support from the Ministry of Education and Science of Georgia, in September 2017, the National Bank provided teacher training for schoolteachers from Tbilisi, Mtkheta and Rustavi. As a result, a pilot of the SchoolBank program was implemented in 11 public schools of Georgia. Based on the results of this pilot project, the National Bank plans to discuss the possibilities of scaling up the project with the Ministry of Education and Science. The NBG is also holding discussions with commercial banks regarding their involvement in the project.

Training sessions, workshops and other projects

During the period January-April 2017, in cooperation with the administration of the President of Georgia and the Business and Technology University, the National Bank hosted interactive lectures on the topics of financial literacy and consumer protection for up to 1,000 high school students.

Within the scope of the Memorandum of Under-

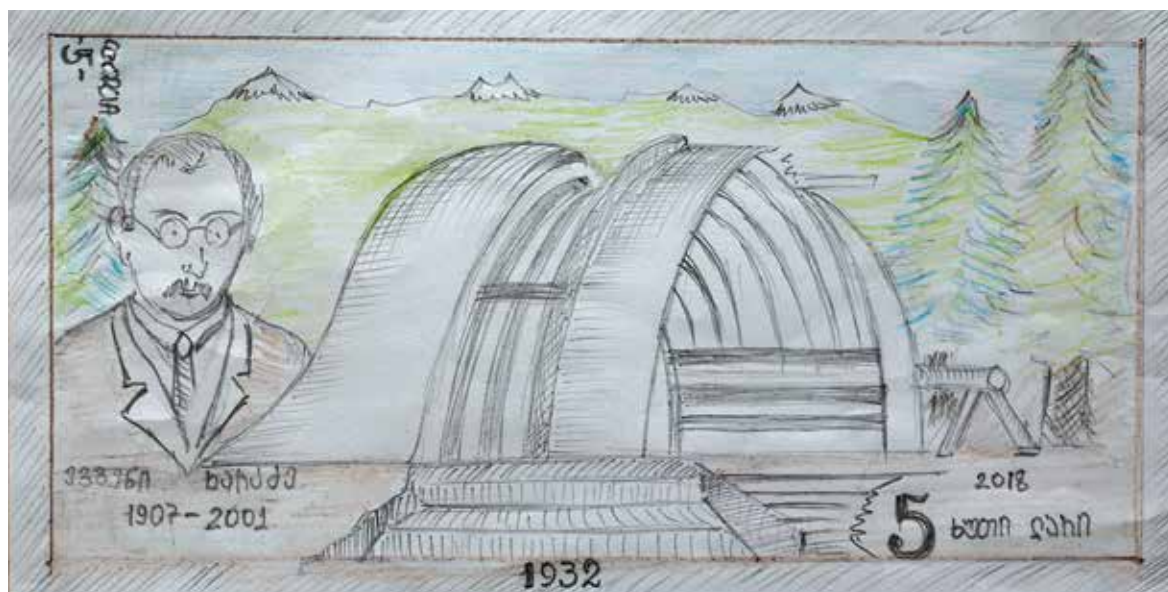
standing signed between the National Bank, the Ministry of Defense of Georgia and the SBFIC, the project “Financial Literacy in the Armed Forces” was initiated in June 2017. The project aims at providing financial education to the armed forces and increasing the capacities of employees of the Ministry of Defense through the training of trainers. The project was implemented on military bases in Kojori, Vaziani, Gori and Senaki and, in total, over 70 military personnel and Ministry of Defense staff participated. The beneficiaries of the project received knowledge about the key aspects of financial education, which will ultimately help support their financial security and financial well-being.

In June 2017, the National Bank hosted a World Bank workshop on the topics of financial literacy, consumer protection, responsible finance, and financial inclusion. Stakeholders from the public, private and civil sectors participated in the workshop.

In December 2017, the National Bank and Junior Achievement Georgia hosted a youth innovations camp that dealt with the topics of financial literacy and youth-friendly financial products in Gori State Teaching University. The initiative was implemented within the framework of the USAID project “Supporting Entrepreneurship Education in Georgia”. Five commercial banks – the Bank of Georgia,

FINCA Bank Georgia, Liberty Bank, TBC Bank, and VTB Bank – and the microfinance organization Crystal were involved in the project. More than 120 young people, aged between 15 and 18 from the Gori and Kareli municipalities, Zugdidi and Tbilisi participated in the camp. The innovations camp is an intense, 12-hour-long idea-generating event that sees youth participants, supported by experts from the banking sector, work in teams to resolve business challenges in the field of financial literacy and financial inclusion by using innovative methods. A jury consisting of representatives from the National Bank, the Ministry of Education and Science of Georgia, SBFIC and the Georgian Employers Association, chose the winning team.

In 2017, the National Bank and SBFIC, in partnership with Kings Georgia, started a project to implement the “Savings Game” in schools across Georgia. The “Savings Game” is an interactive and dynamic board game, played in teams, which aims at improving levels of financial literacy and developing a savings culture amongst the youth. In the process of playing the “Savings Game”, players analyze typical financial situations faced by regular households, and receive essential knowledge and skills that will help them effectively manage their own finances and make sound financial decisions in real life. The NBG plans to continue its partnership with SBFIC and Kings Georgia concerning this project.



David Vardidze

13 years old; Municipality of Adigeni, Village Arali



Nino Narimanidze

10 years old; #145 Tbilisi Public School

Dali Aghniashvili

#1 David Elizbarashvili State School; Municipality of Kvareli, Village Shilda

6

NON-BANKING SUPERVISION



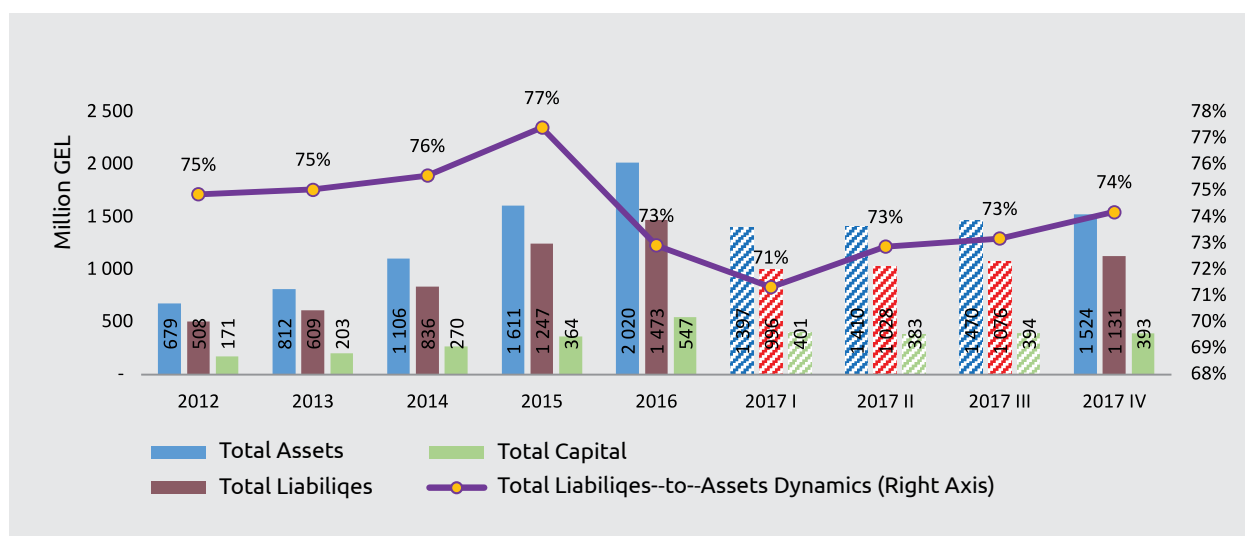
6.1 Non-Banking Financial Institutions

As of 31 December 2017, excluding commercial banks, the financial sector was represented by 75 microfinance organizations, 1,127 currency exchange units, 91 money transfer units and eight credit unions.

6.1.1 Microfinance Organizations

In the beginning of 2017, the transfer of JSC “Credo”, which had previously held the largest share of the microfinance sector, to the banking sector greatly impacted the common indicators of this sector. Had this one-time effect not occurred, a stable increase of assets in this sector would have been observed. At the end of 2017, the total assets of the sector totaled 1.5 billion GEL.

Diagram 6.1 Total assets, liabilities, capital and total liabilities-to-assets dynamics

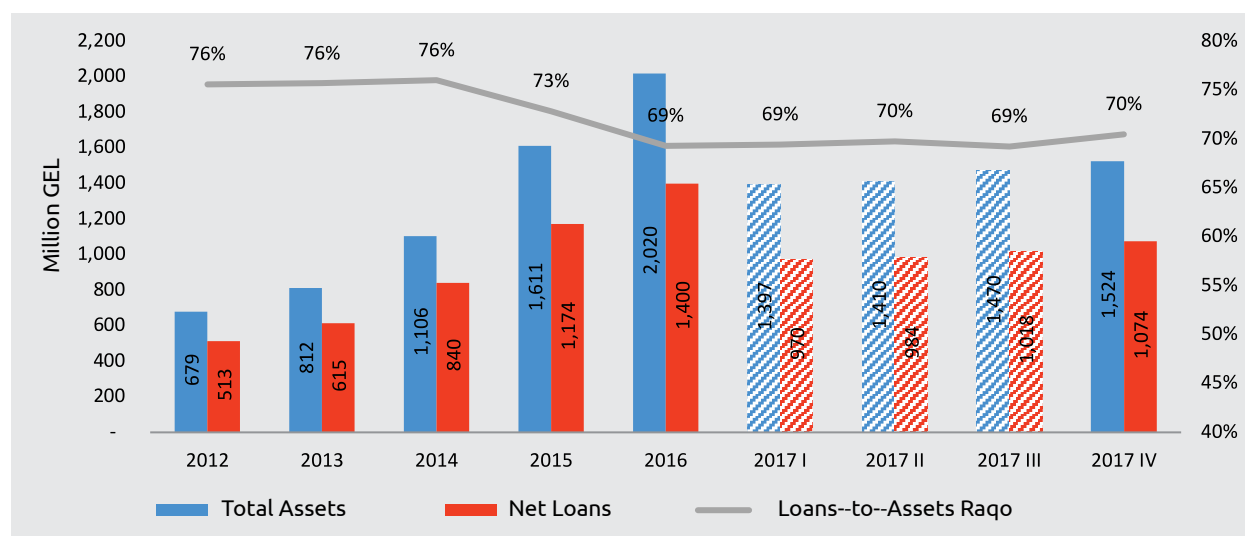


Source: National Bank of Georgia

In 2017, the growth rate of the net loan portfolio (without the one-time effect) comprised 14%, with a total volume of 1.04 billion GEL. The ratio of net

loans to total assets did not change significantly and was equal to 70.5%.

Diagram 6.2 Net loans-to-assets dynamics

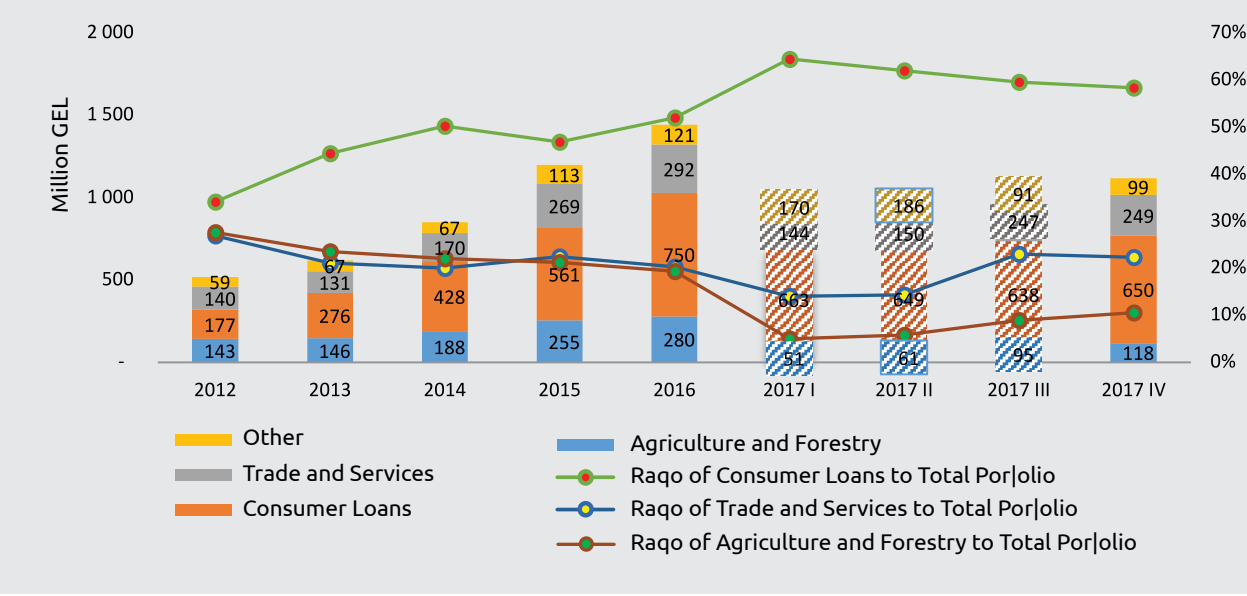


Source: National Bank of Georgia

The gross credit portfolio of the microfinance sector is represented by three main sectors: (i) trade and services, with 249 million GEL (22% of the port-

folio); (ii) agriculture and forestry, with 118 million GEL (11% of the portfolio); and (iii) consumer loans, with 650 million GEL (58% of the portfolio).

Diagram 6.3 Structure of the gross loan portfolio



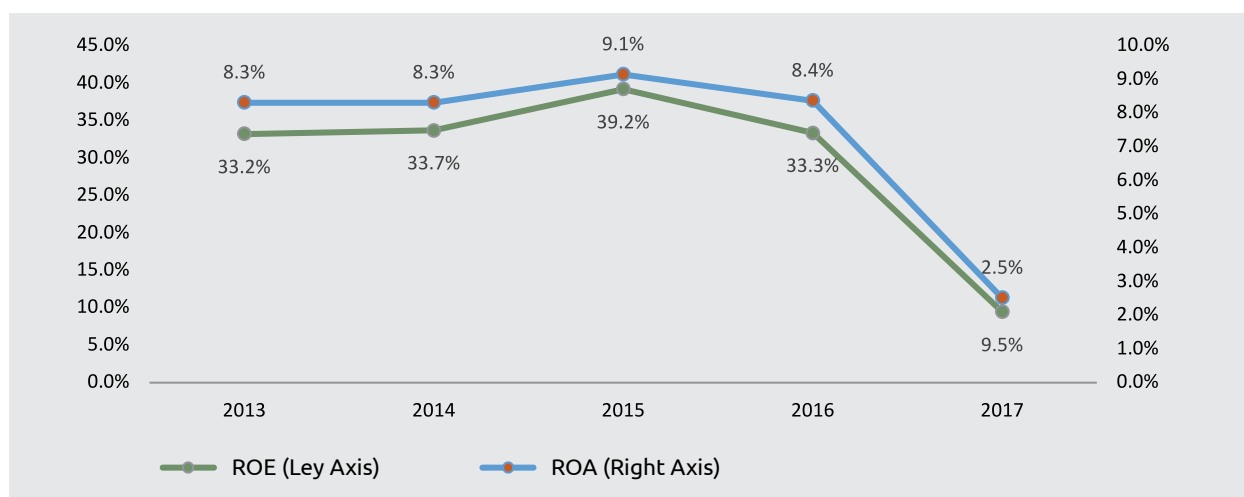
Source: National Bank of Georgia

The exit of JSC "Credo" from the microfinance sector has directly impacted the loan structure. In particular, the share of agriculture loans decreased from 19% to 5%. Nevertheless, the growth rate of agriculture loans remained positive and, by the end of the year, exceeded 11% of the portfolio. It is also worth mentioning that throughout the year there was a significant increase in trade/services loans.

Profitability

According to the results of 2017, the indicators of profitability have noticeably decreased (ROE=9.5%, ROA=2.5%). This decrease was mainly caused by

the unprofitable functioning of large microfinance organizations, which provide online loans, as well as by the significant losses that resulted from the reevaluation of currency funds. The latter, unlike the indicators of 2016, were a consequence of the increase of the short and open foreign exchange position of the microfinance sector that was connected to the increased larization of assets in foreign currency funding conditions. Additionally, it is worth noting that the net interest rate margin in this sector decreased from 25% to 19% throughout 2017, which further negatively affected the profitability of the sector.

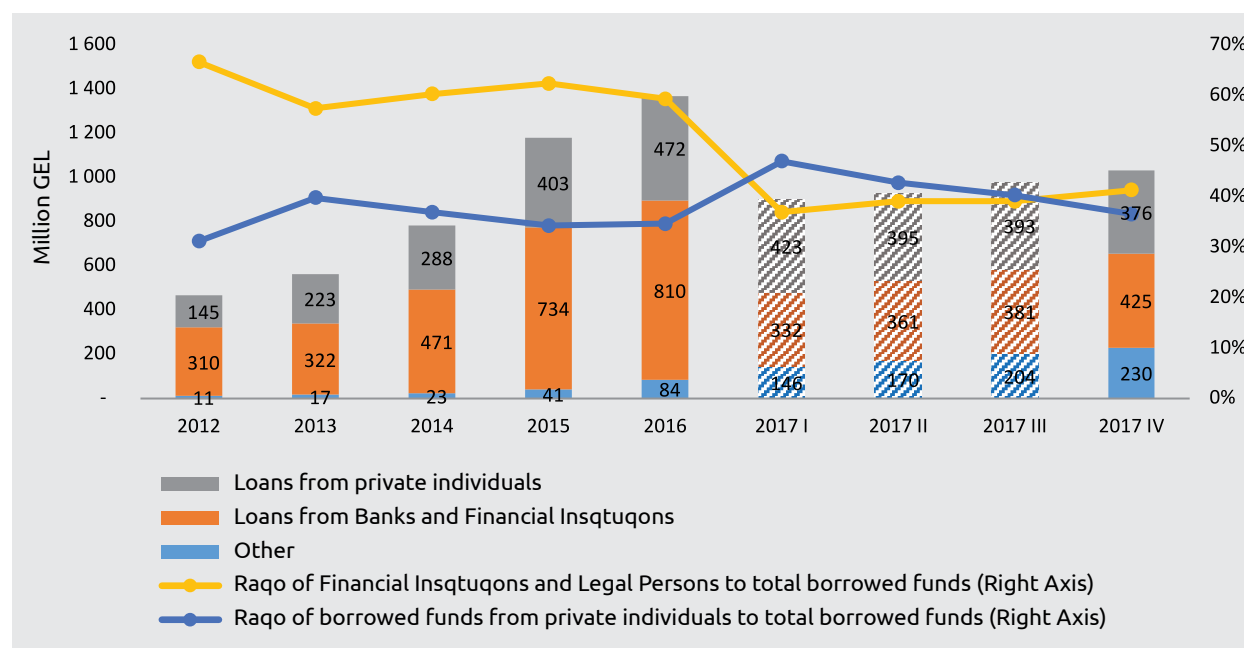
Diagram 6.4 Indicators of profitability

Source: National Bank of Georgia

The Structure of Liabilities

Similar to previous years, the main source of financ-

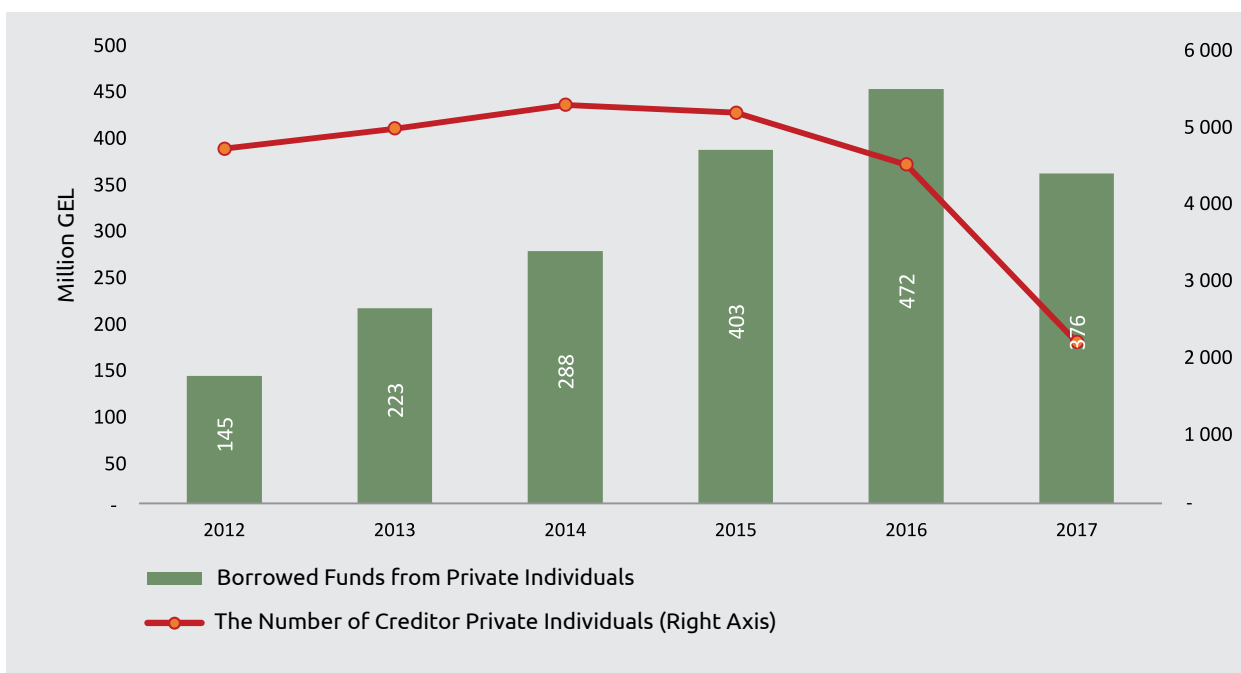
ing for the assets of microfinance organizations was borrowed funds (67% on average).

Diagram 6.5 Structure of borrowed funds; dynamics of borrowed funds from non-resident organizations and private individuals

Source: National Bank of Georgia

Throughout 2017, the structure of liabilities in microfinance organizations changed dramatically. In particular, compared to 2016, the share of borrowed funds from private individuals in relation to total liabilities decreased from 53% to 36% and the total number of private individual creditors fell from 4,633 to 2,202. This is mainly connected to the amendments made to the Civil Code of Georgia on

15 January 2017. According to these amendments, entrepreneurs, including microfinance organizations, or a mutually related group of entrepreneurs, are prohibited from receiving repayable funds, in any form, from more than 20 private individuals if the borrowed funds from each individual are less than 100,000 GEL.

Diagram 6.6 Borrowed funds from resident private individuals and number of private individual creditors

Source: National Bank of Georgia

In addition, the restriction on lending up to only 100,000 GEL in foreign currency to private individuals was central for the activities of microfinance organizations. As a result of this change, the rate of dollarization in the credit portfolio of microfinance organizations decreased significantly (from 54% to 27%).

6.2 Regulation and supervision of the non-banking sector

On 23 December 2017, amendments were made to the Organic Law of Georgia on the National Bank of Georgia, according to which an entrepreneur or a group of related entrepreneurs are not allowed to lend repayable funds (including loans) to more than 20 private individuals and/or engage in advertising the lending of repayable funds to the wider public, without first registering as a microfinance organization at the National Bank of Georgia and without holding a license for conducting depository/creditor or banking activities. Moreover, according to these amendments, the National Bank of Georgia became entitled to complete supervision of the work of non-banking organizations. The NBG is currently working on drafting regulating normative

documents for supervised organizations, which will be finalized in the near future.

As a result of these changes, the requirements for the registration of microfinance organizations has become significantly stricter in terms of the appropriateness criteria and capitalization. The capital requirement has been increased from 250,000 GEL to 1 million GEL, and the NBG has set a registration fee. Currently active microfinance organizations became obliged to fulfill the new capitalization requirement in two stages: they must have more than/equal to 500,000 GEL by 1 September 2018 and have more than/equal to 1 million GEL by 1 July 2019.

In terms of currency exchange units (CEU), the National Bank of Georgia became entitled to determine rules concerning the manner in which they provide information to customers in the process of currency exchange as well as the rules for the cancellation of a currency exchange operation. Earlier, the absence of such rules were creating huge problems for CEU customers. According to the new regulations regarding the supervision of these or-

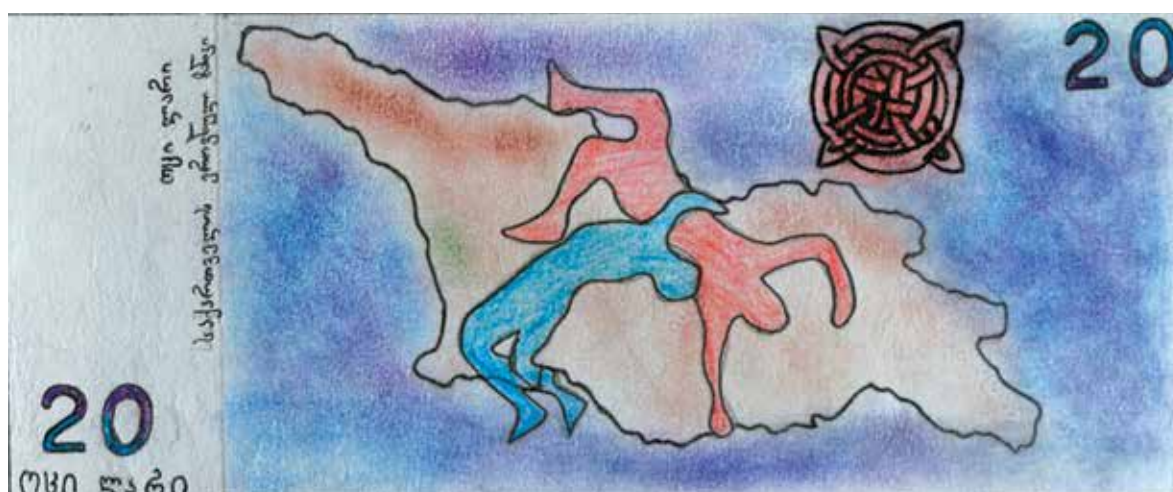
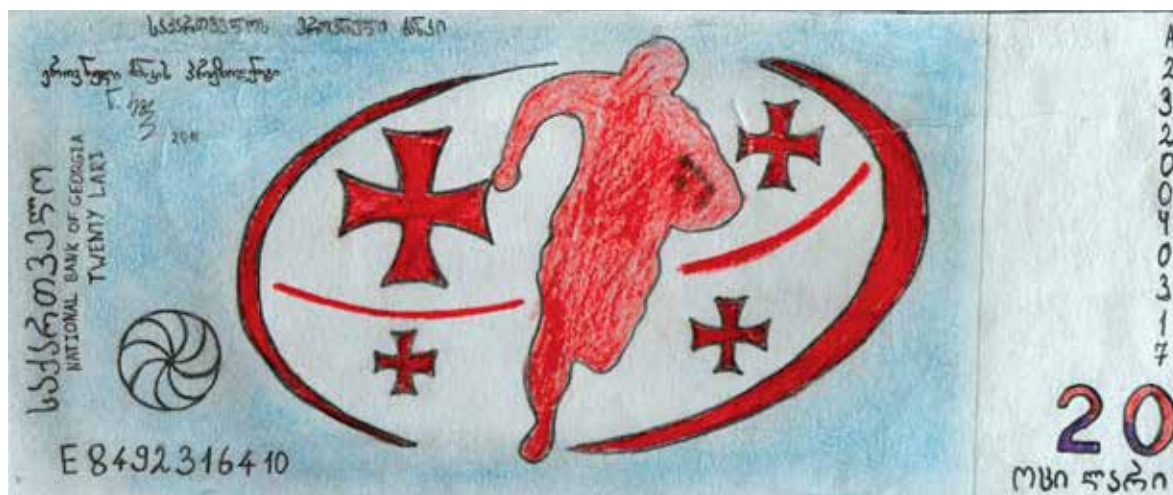
ganizations, as of 1 March 2018, if a transaction amount does not exceed 5,000 GEL or its equivalent in foreign currency, CEUs are obliged, upon the request of the customer, to cancel the operation and refund the exchanged amount within 30 minutes of the exchange operation and to provide a receipt of the operation. In addition to this, registration requirements, in terms of appropriateness criteria and setting up an operating space, have become stricter.

It is also important to note that under the above-mentioned legal amendments, the National Bank of Georgia is entitled to supervise the activities of those organizations engaged in issuing loans when the supervised subject is an entrepreneur who, at any one time, has more than 20 private individuals with loan/credit liabilities. Loan issuing organizations are obliged to register at the National Bank of Georgia by 1 January 2019 and to meet all the requirements set. Supervision from the NBG will cover the registration/termination of loan-issuing subjects, their inspection and regulation in order to protect consumer rights, the issuance of written notices, and setting requirements, limitations and sanctions.

6.3 Communication with the microfinance sector

For the purpose of enabling a transparent process for drafting legal amendments, as well as for engaging with sector participants, the management of the NBG held regular meetings with representatives of the microfinance sector, who were informed, in detail, about the legal amendments and the new regulations. The most widely discussed issues during these meetings concerned the stricter supervisory requirements regarding capitalization, the increase of liquidity and the creation of potential credit loss reserves. Emphasis was placed on activities intended to create a more transparent sector and more trustworthy financial reports, and on the importance of external audits and sound operating systems.

The National Bank of Georgia will continue to have active communication with representatives of this sector in the framework of its supervisory strategy, seeking the stable functioning of the sector and the maximum protection of consumer interests.



Nika Megrelishvili
13 years old; Poti



Nikita Chitishvili

10 years old; #1 Manglisi Public School. 5th Grade

7

SECURITIES MARKET



In 2017, within the framework of the strategy established in cooperation with the government, substantial steps were taken regarding capital market development and supervisory policy.

7.1 Capital Market Development

Tax policy

In 2017, the Tax Code was amended in terms of tax benefits for securities. According to the amendments, tax benefits apply to operations involving securities that are issued by resident legal entities through a public offering in Georgia and subsequently admitted for trading on an organized market recognized by the National Bank.

Regarding the recognition of an organized market, the National Bank developed a temporary regulation that is founded on internationally recognized standards and the fundamental principles required by EU directives. According to the regulation, in order to gain approval from the National Bank for the use of tax benefits, an organized market should satisfy minimal organizational, systemic, and transparency criteria, as well as meeting management requirements.

At this stage, considering the current situation, recognized market status was only granted to the segments of the Georgian Stock Exchange (GSE) listed as category "A" and "B". Concurrently, the Georgian Stock Exchange has a definite timeframe within which it is obliged to fully satisfy the requirements set by the regulation. After fulfilling the aforementioned requirements, the GSE will take a step towards internationally recognized standards.

Securities trading and settlement system reform

In 2016, the National Bank of Georgia and the Tbilisi Stock Exchange launched a joint project for the reform of the Securities Trading and Settlement System. The project considers a renewal of the National Bank's securities system and the integra-

tion of corporate securities within this framework. Upon the completion of the project, settlement of any type of securities issued in Georgia will become possible within a single system.

Simultaneously, the stock exchange is implementing a new trading platform that will enable market participants to use a system based on internationally recognized requirements. The completion of this project is scheduled for the end of 2018.

The derivatives market

The National Bank initiated cooperation with the European Bank for Reconstruction and Development (EBRD) over a project for the development of the Georgian derivatives market. The project, initiated in compliance with international standards and experience, aims to create a supportive legal and business environment for the development of the money market. Draft legislation will be elaborated within the framework of the project that will regulate the circulation of derivatives and associated interactions.

The successful implementation of the project will give investors a chance to hedge financial instruments against currency and interest rate related risks; it will support the execution of improved investment strategies and lead to greater interest in the securities market.

Investment funds

Investment funds hold an important position in international financial markets. There are currently no investment funds registered in Georgia; however, considering the size of the Georgian economy, there is great potential for their development. The primary reason for the lack of these funds is the faulty legal base. However, considering existing levels of interest and expectations expressed on the market, the government has initiated work on a new law, with the National Bank taking a leading role in its formation. In 2017, intensive progress was made in developing the law and in defining the

directions of sectoral development that would best suit the local market.

Supervisory policy direction

An appropriate supervisory framework that protects the rights of investors and provides high-quality transparency and reliability, is one of the key preconditions for capital market development. The National Bank's strategy aims to improve this framework and transform it in accordance with international standards. Important steps were taken in this direction in 2017.

IOSCO⁸³ self-assessment

In terms of the supervision of the securities market, it is of key importance that the National Bank assesses the impending supervisory reforms and their compliance with internationally recognized standards.

In 2017, a self-assessment project for compliance with the principles of IOSCO was launched. Within the context of the project, Georgian securities market regulated entities, the NBG regulatory framework and supervisory practice were all compared with IOSCO-established principles to identify any problems. The primary assessment identified the main areas that need to adhere to international standards. The amendments will affect stock exchange and OTC transactions, market intermediaries, and the development of the supervisory framework for public securities issuers.

Regulations for new prospectuses

During 2017, the corporate bonds market became notably more active, with the majority of issues made through public offerings. As a result, there is increased need for a comprehensive and detailed regulatory framework for this area.

In connection with this, developments were started to regulate the issue of prospectuses in line with the European Union's prospectus directive and regulations. The legislation incorporates disclosure requirements for all essential information in relation to issuers, so that potential investors will be capable of adequately evaluating the risk levels of specific financial instruments.

In order to ensure the disclosure of risks related to financial instruments to investors, the National Bank published several warnings urging investors to be cautious when operating on the securities market, advising them to examine prospectuses thoroughly prior to making any decision to invest.

The need for an intermediary for transactions with public securities

In order to ensure a higher level of protection for investors, legislative amendments have been made to ensure that transactions related to public securities will only be allowed through securities market intermediaries.

Alongside those amendments, the process of working on a new rule that considers the best practice of EU directives has continued. This rule will relate to the connection between the investment recommendations intermediaries give to their clients and the clients' actual knowledge, experience, financial situations and investment goals. The rule obliges intermediaries to become acquainted with the knowledge and experience of their clients in relation to the financial instruments, their financial situations and investment objectives. The aim is to ensure that the investment recommendations offered correspond to their clients' characteristics and requirements.

83. The International Organization of Securities Commissions (IOSCO) is one of the most important organizations that unifies the securities market regulators of different countries. IOSCO's securities market regulation principles, goals and implementation methodology are based on international experience of market regulation and supervision. Its purpose is the efficient, transparent and fair functioning of the securities market and to ensure higher protection for investors.

The Forex platform

Given consideration of existing challenges on the market, in order to protect investors' interests, legislative amendments have been introduced regarding the organization of a foreign currency trading platform. According to the amendments, subjects are obliged to obtain a brokerage license and satisfy the minimal licensing requirements in order to be able to carry out activities.

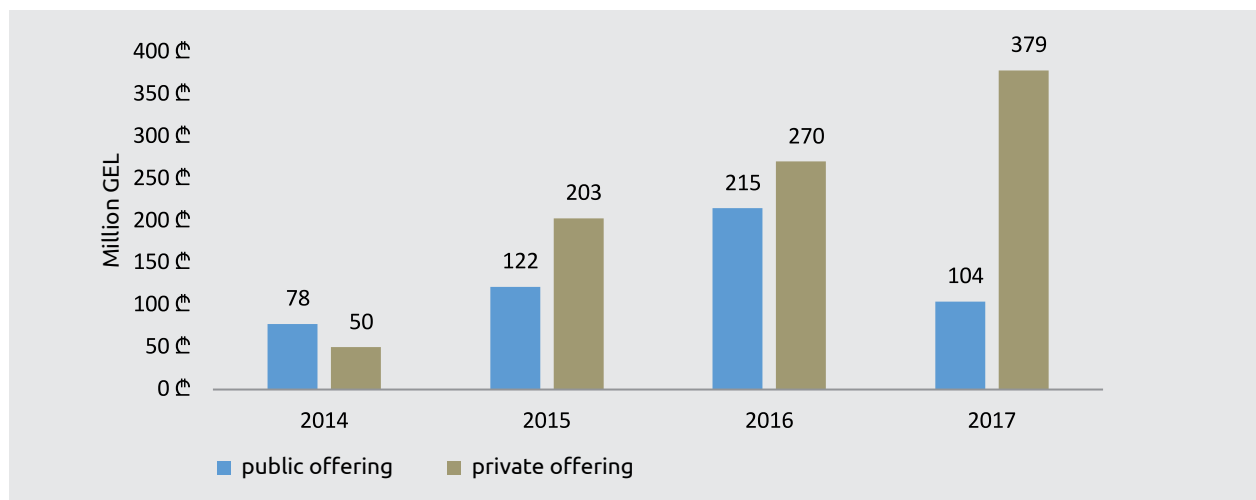
7.2 Securities Market Indicators and Core Participants

The bond market

In 2017, the bond market became particularly active. A total of 11 companies issued bonds amounting to a total of 482 million GEL. Of these, six bonds were issued through public offerings and the remaining five were made through private offerings.⁸⁴

It is worth noting that the majority of private offerings were made by international institutions, reaching 243 million GEL in 2017.

Diagram 7.1 The volume of bonds placed through public and private offerings by year (2014-2017)

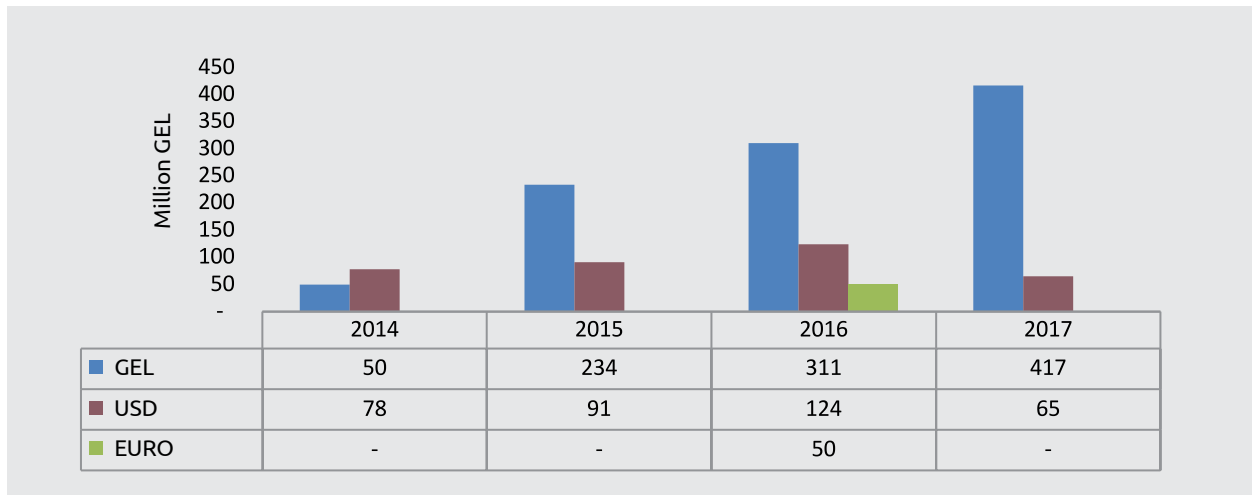


Source: National Bank of Georgia

In 2017, the volume of the debt securities denominated in GEL also increased and made up about 80% of outstanding bonds.

84. Here are meant securities issued by private offerings that have been granted an ISIN (international identification number) by the National Bank of Georgia.

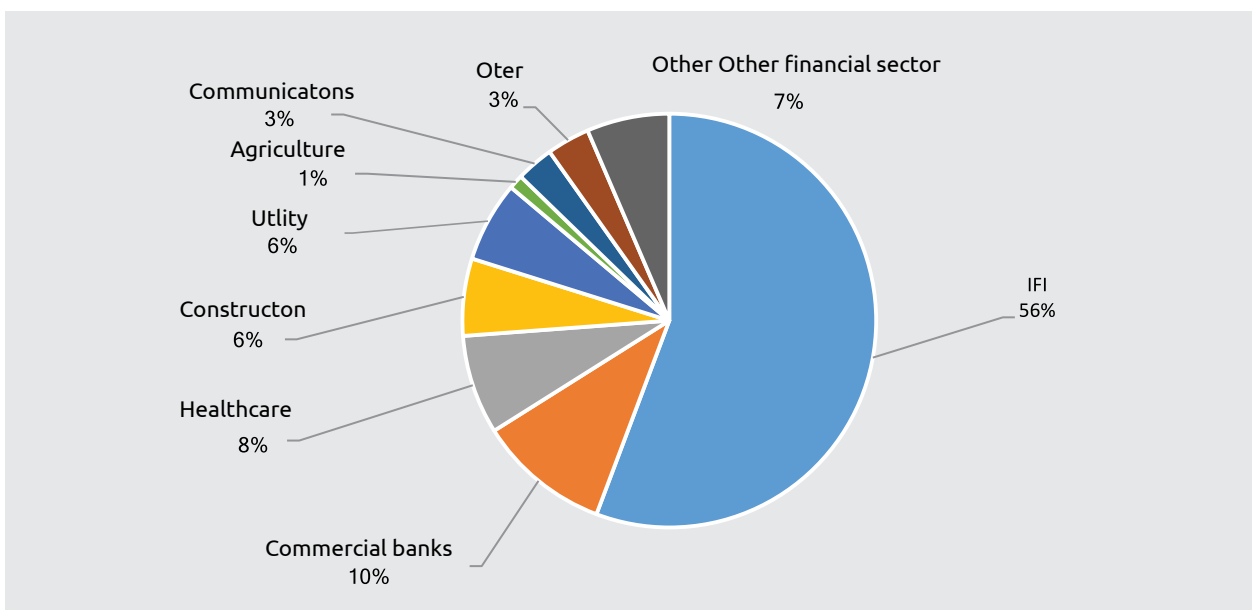
Diagram 7.2 The volume of bonds issued in various currencies by year (2014-2017)



Source: National Bank of Georgia

In Georgia, the majority (73%) of bonds were issued from the financial sector.

Diagram 7.3 The percentage share of bonds according to sector (bonds active in 2017)



Source: National Bank of Georgia

The shares market

In comparison with the bond market, there was less progress in terms of the public issuing of shares. In 2017, JSC "VTB Bank Georgia" and JSC "Nikora" both issued shares through public offerings, the total value of which amounted to 19.9 million GEL.

In order to identify major problems with both supply and demand for shares, the National Bank intends

to perform market research in 2018. In this regard, improvement of the supervisory environment, increased transparency of issuers and implementation of high corporate standards will all become important factors for raising the interest of investors.

Overview of market participants

By the end of 2017, two stock exchanges, one central securities deposit, eight brokerage companies,

and securities registrars carried out activities on the Georgian securities market. Two out of the eight brokerage companies were not members of the Stock Exchange.

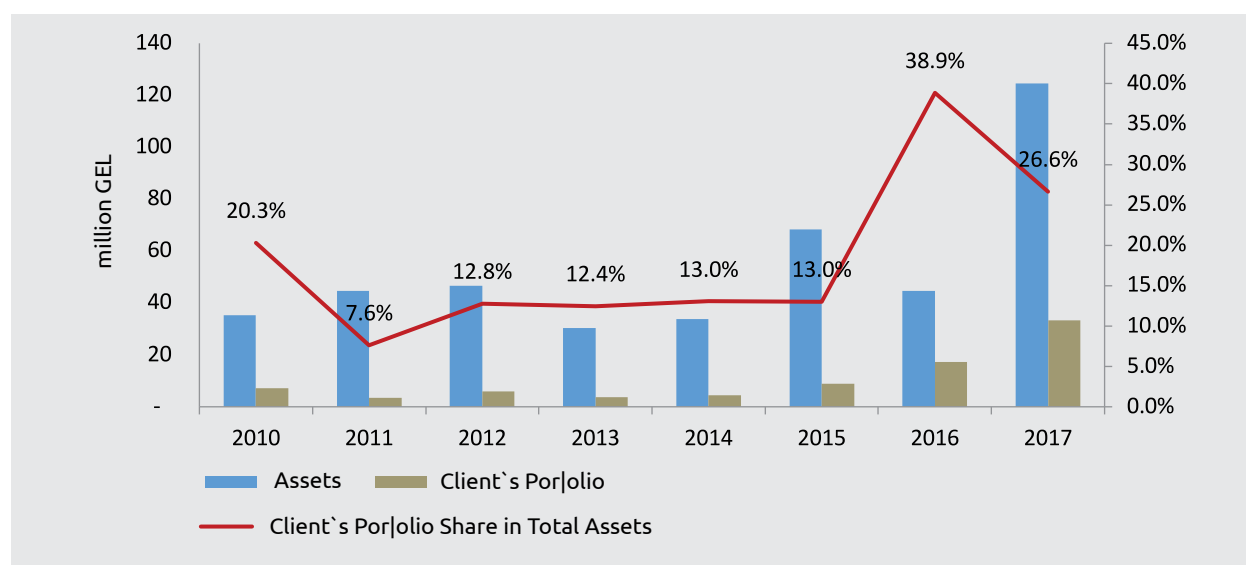
Brokerage companies

The activation of the debt securities market affected the growth of market intermediaries. By 31 Decem-

ber 2017⁸⁵, the total volume of assets of 104 operating companies amounted to 124.6 million GEL.

According to data from 2017, the client portfolio (funds and securities) amounted to 26.6% of the total assets of brokerage companies and totaled 33.2 million GEL. It should be noted that, in comparison with the comparable data of the previous year, the clients' portfolio has almost doubled.

Diagram 7.4 Dynamics of the total assets of brokerage companies, clients' portfolio and the clients' portfolio percentage share in assets by year (2010-2017)



Source: National Bank of Georgia

The value of stock exchange and over-the-counter (OTC) transactions by brokerage companies amounted to 76 million GEL (148 million securities). Out of which, transactions made at the stock exchange

amounted to 26.6 million GEL (9.8 million securities) and OTC transactions amounted to 49.6 million GEL (138.26 million securities).

Table 7.1 Brokerage companies trading data (2017)

Brokerage Company	Volume (number of securities)	Value (GEL)
JSC Galt and Taggart	119,872,672	74,601,734
LLC TBC Capital	438,254	1,070,658
LLS Heritage Securities	26,838,840	435,341
JSC Caucasus Capital Group	691,985	79,089
LLS Cartu Broker	280,278	10,500
Total	148,122,029	76,197,322

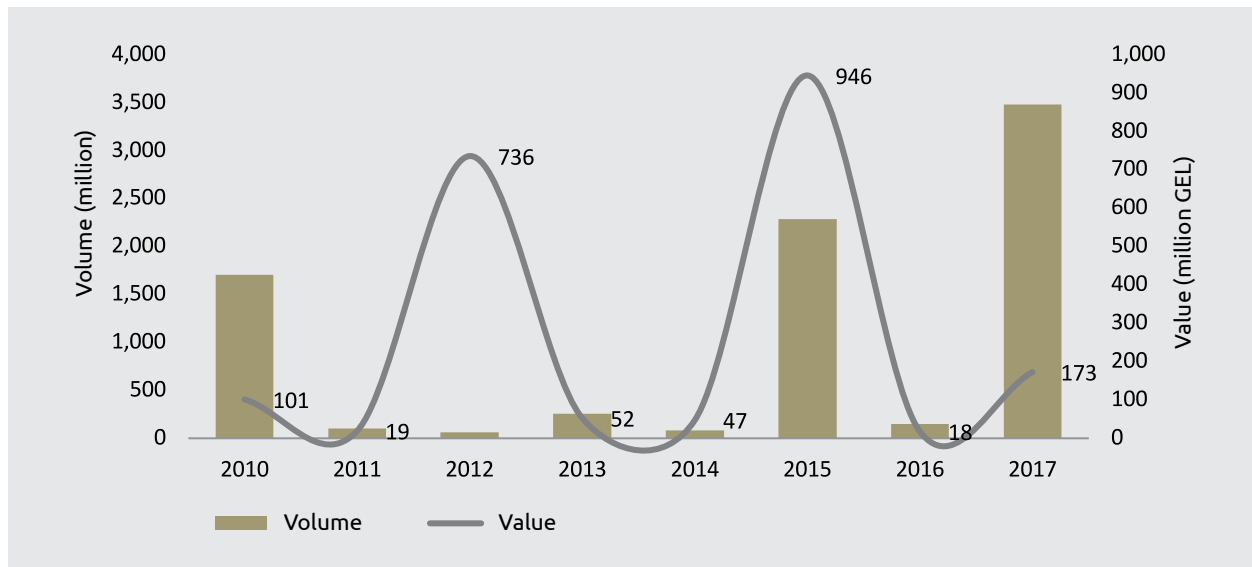
85. The data available for 31 December 2017 has not been audited.

The Stock Exchange

According to the data, as of 31 December 2017, the Georgian Stock Exchange trading system allowed securities of 106 issuers. During the reporting period, the number of transactions made on trading sessions and the stock exchange amounted to 172.7 million GEL (3.5 million securities), out of which transactions amounting to 26.6 million GEL were executed in Stock Exchange trading sessions, while transactions

amounting to 146.2 million GEL were fixed at the Stock Exchange. In addition, the registrars recorded transactions that were not required to be fixed on the Stock Exchange under current legislation (legacy transfers, donations, etc.). During 2017, 2,371 such transactions were made on 2,425,292 separate securities. The total value of those transactions amounted to 158.4 million GEL.

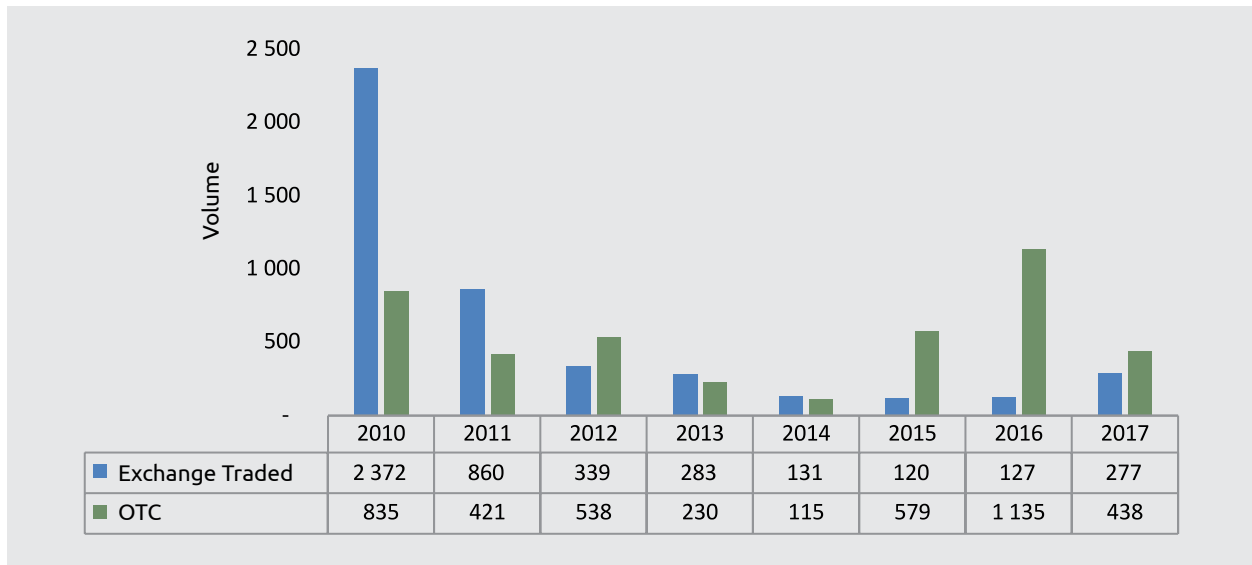
Diagram 7.5 Major trade indicators traded on trading sessions and the Stock Exchange (2010-2017)



Source: National Bank of Georgia

Table 7.2 Total data on transactions made during trading sessions and fixing (2016-2017)

Year	Number of Deals		Volume of securities (Number)		Value of securities (GEL)	
	2017	2016	2017	2016	2017	2016
Trading sessions	277	127	7,312,239	3,607,946	26,558,750	5,803,477
Fixing	438	1,135	3,470,735,399	148,170,076	146,161,813	37,534,720
Total	715	1,262	3,478,047,638	151,778,022	172,720,563	945,623,382

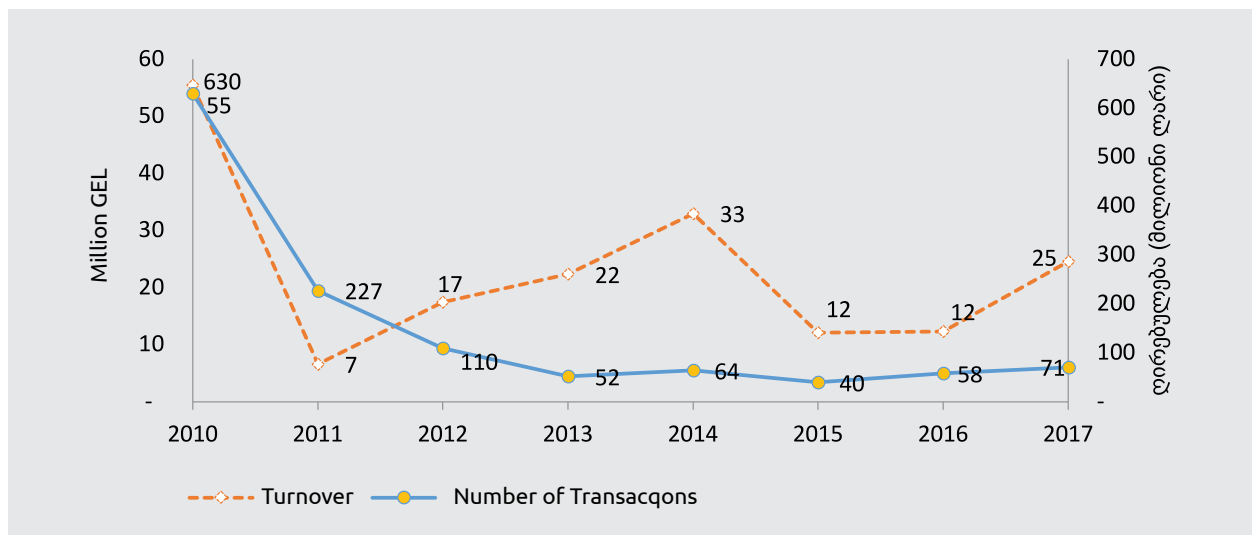
Diagram 7.6 Quantity of transactions on trading sessions and the Stock Exchange by year (2010-2017)

Source: National Bank of Georgia

Central Depository

In 2017, 24.6 million securities worth 11.4 million GEL were deposited to the central depository. Out of which, 85.9% of transactions and 99.2% of total funds were made with the participation of JSC

“Bank of Georgia”. In comparison with comparable data from the previous year, the number of securities transactions deposited into the central depository increased by 22% and turnover has increased by 99%.

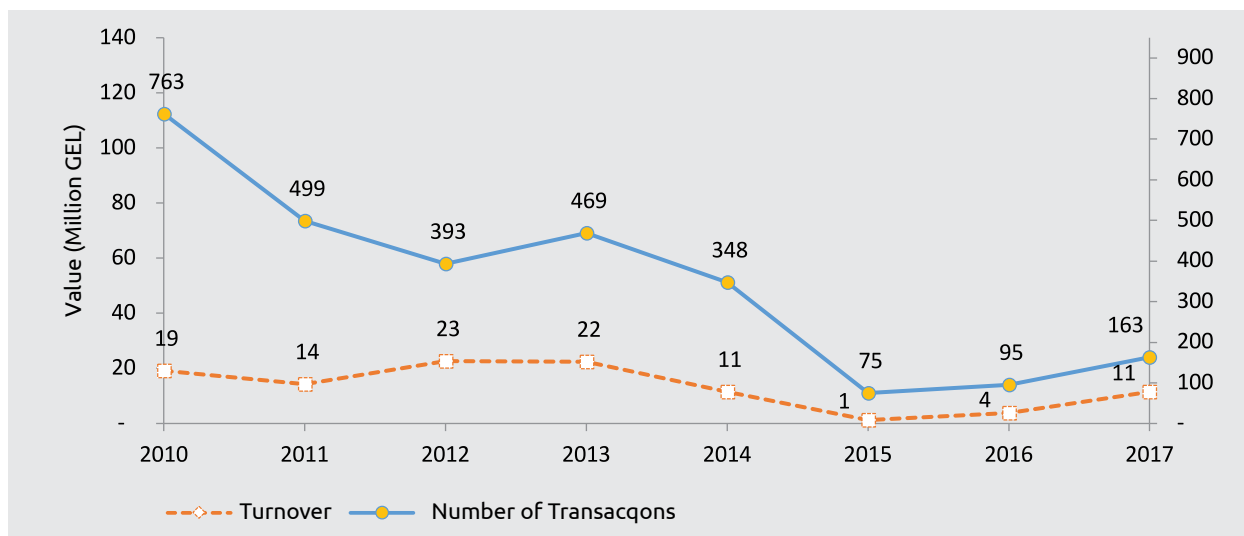
Diagram 7.7 Securities deposited in the Central Depository by year (2010-2017)

Source: National Bank of Georgia

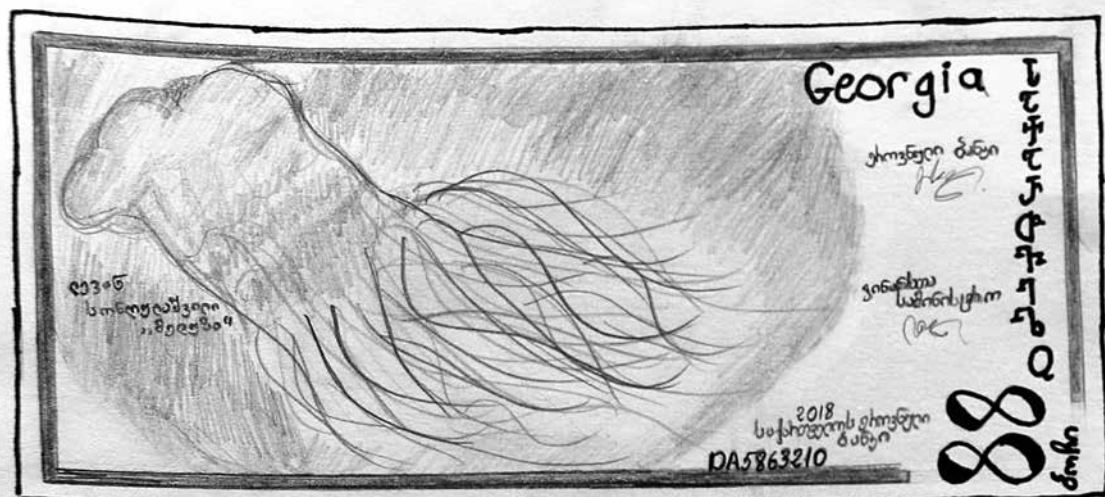
During the reporting year, the turnover of funds in the Central Depository increased by 7.7 million GEL.

The number of transactions of funds saw an annual increase of 72%.

Diagram 7.8 Funds deposited in the Central Depository by year (2010-2017)



Source: National Bank of Georgia



Leila-Ana Beselia

#97 Tbilisi Public School



Zura Atoshvili

11 years old; LEPL #1 Akhaltsikhe Public School



Ilia Doindjashvili
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8

MONEY LAUNDERING INSPECTION AND SUPERVISION



In 2017, the NBG's Money Laundering Inspection and Supervision Department adopted risk-based supervision with regards to payment service providers. It did so with the aim of ensuring the effective management of the supervisory process. Such an approach includes the identification of problematic institutions and the detection of existing risks inside the institutions via off-site supervisory tools, and then applying measures commensurate with the risks identified.

Furthermore, a new on-site inspection methodology has been developed with regards to securities registrars and brokerage firms. This sets out inspection planning processes, purposes, types, themes and other important issues under the risk-based approach.

During 2017, with the aim of enforcing the dissuasive effect of sanctions, amendments were made for the determination, imposition and enforcement of penalty amounts prescribed for non-banking financial institutions (except for credit unions). Furthermore, provisions for the determination, imposition and enforcement of penalty amounts prescribed for payment service providers came into force.

In 2017, based on consolidated data analysis, a risk assessment of obliged entities was conducted, covering the period from 2014 to the first quarter of 2017. The results of the assessment will be reflected in the National Risk Assessment (NRA) document.

According to the principles of the new methodology, thematic inspections have been conducted covering the following core issues: the classification of clients according to their risk level, due diligence measures conducted regarding clients, and financial institutions' knowledge of performed transactions.

According to the risk-based approach, two commercial banks were inspected. The total amount of sanctions imposed on them equaled 1.9 million GEL.

During the reporting period, on-site inspections were performed of 96 currency exchange offices, 32 money transfer service providers and seven payment service providers. The total amount of sanctions imposed on non-banking financial institutions was 712,750 GEL. Furthermore, registrations were revoked for six payment service providers, 63 currency exchange offices and one money transfer service provider.

During the on-site inspections of non-banking financial institutions, instances of systemic legislative violations were identified, including the insufficient performance of processes regarding the identification/verification of client and beneficial owners; the non-reporting of information about transactions subject to reporting to the Financial Monitoring Service of Georgia; and the non-existence of, or non-compliance with, procedures of internal control.

During 2017, meetings were arranged with representatives of financial institutions, with the aim of sharing supervisory expectations and information about sector-related threats and vulnerabilities.

9

PAYMENT SYSTEMS



The effective and continuous functioning of payment systems is one of the key factors in the development of the country's economy. The RTGS (the Real Time Gross Settlement system) is the most significant payment system in Georgia. In 2017, as in previous years, the system's functioning availability ratio was 99.9%. According to best international practice, the RTGS business continuity plan is tested on an annual basis. This allows the examination of business continuity measures in a real environment and allows the timely identification of a potential lack of crisis management procedures and the resolution of such disorders. The regular testing of business continuity plans in a real environment is a necessary condition to improving the reliability and soundness of the system.

The year 2017 was very important for the development of a legal basis for Payment systems. On 23 December 2017, the Parliament of Georgia adopted amendments to the law on "Payment System and Payment Services", which entered into force on 11 January 2018. According to the amendments, provisions for the protection of payment systems (such as payment and settlement finality) were extended to all payment systems. Payment service providers became obliged to provide financial reports according IFRS standards, and important payment service providers⁸⁶ are obliged to publish audited annual financial statements on their websites. In addition, it was determined that the functions related to the liquidation of a payment service provider will be executed by a person appointed by the National Bank.

The "Rule on Registration and Regulation of Payment Service Providers" entered into force on 1 March 2017. This rule also determined the requirements for the placement and protection of customer funds, the terms of outsourcing a provider's operating functions and the usage of agents, as

well as the rules for accepting and reviewing customer complaints.

The quality of information received from providers regarding payment services has significantly improved and the nature of the information requested has become more multifaceted. On 10 July 2017, the rule on "Payment Services Reporting Forms and its Filling Instructions" entered into force. These define the monthly and quarterly information that should be submitted by providers to the National Bank. In accordance with these rules, providers should provide detailed information concerning the payment services executed by them, daily information about customer funds, as well as information about agents and intermediate providers. In 2017, significant work was also carried out in order to improve the quality and channels of receiving statistical information about payment cards. In particular, the content of existing reporting forms was expanded and integrated into the unified systematic database (SebStat) of the National Bank of Georgia, which ensures the automation of the processing of information.

The goal of on-sight inspections is to examine payment market participants' fulfillment of the requirements of the legislative requirements. In 2017, the practice of on-sight inspections for payment service providers was implemented and eight providers were inspected over the year. Seven of those providers subsequently lost their registration due to problems and violations identified during the inspections, the remaining provider was given recommendations and a reasonable period of time to eliminate the identified shortcomings. Work in this direction will become even more intense in 2018 and beyond. Furthermore, on 14 June 2017, the "Rule for Determining Penalties for Payment Service Providers" entered into force and this will also contribute to increasing the effectiveness of supervision.

86. The criteria for the assignment of the status of an important provider are determined by the National Bank.

RTGS statistics

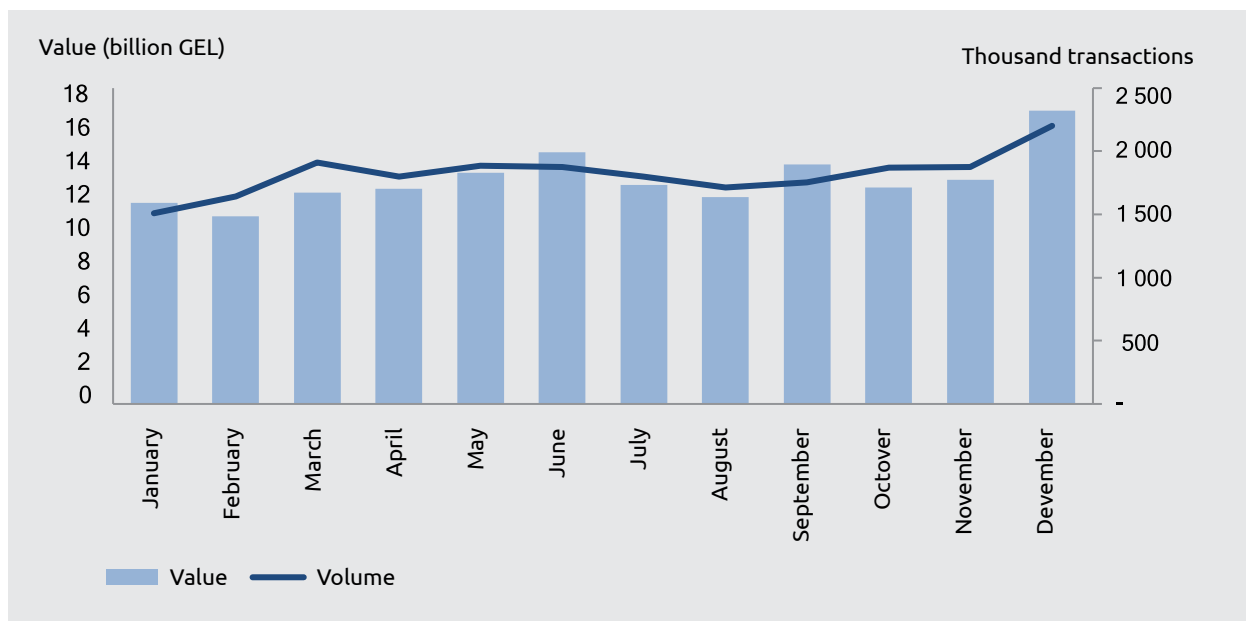
Throughout 2017, 21.8 million payment operations were processed through the Real Time Gross Settlement (RTGS) system (the average daily number of transactions was 87,700 operations), amounting to 153.7 billion GEL (the average daily value was 617.4 million GEL). Compared to 2016, the number of transfers through the RTGS system rose by 1.4 million (by 6.6%), while the value increased by 24 billion GEL (by 18.7%). It should be noted that the significant growth in value was a result of the increased value of commercial banks' transfers to the National Bank. In particular, compared to previous years, in 2017 the value of such turnover increased by 48% and amounted to 60.7 billion GEL.⁸⁷ The launch of temporary liquidity instruments to support the larization process also

played a key role in 2017. The value of transfer turnovers between commercial banks decreased by 15%, amounting to 30 billion GEL, whereas the transfer turnovers of banks' clients increased by 16.4% compared to 2016, amounting to 31.4 billion GEL. In 2017, the turnover between commercial banks and the Treasury Department of the Ministry of Finance increased by 20.3% and amounted to 29.3 billion GEL.

In 2017, the maximum number of transactions processed daily was 217,760 (compared to 207,763 in 2016), and the maximum amount was 1.77 billion GEL (1.479 billion GEL in 2016).

Statistical data for the RTGS system can be found on Diagrams 9.1 and 9.2 below.

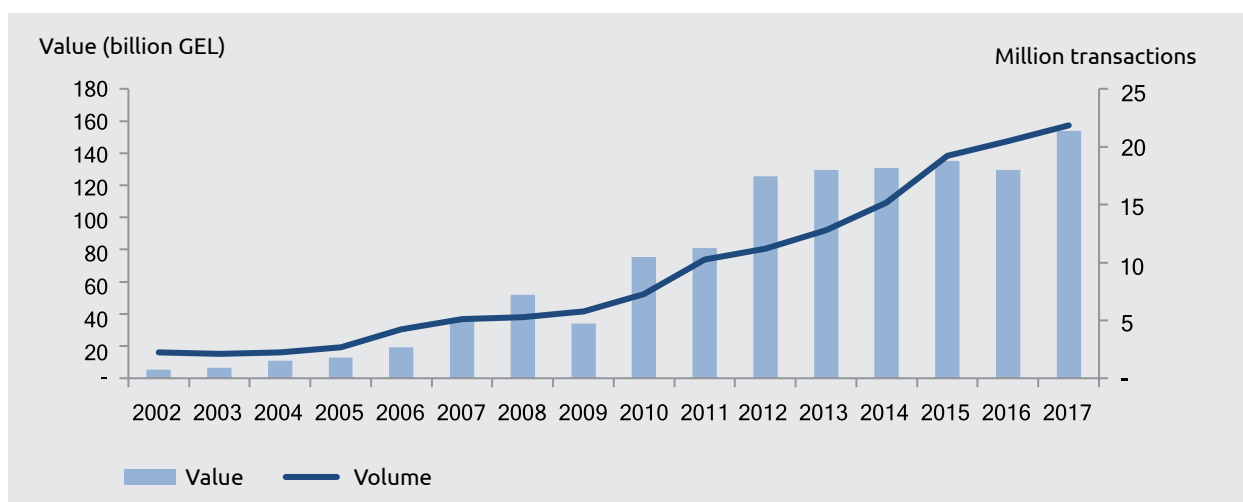
Diagram 9.1 Transfers processed through the RTGS system (2017)



Source: National Bank of Georgia

87. The above-mentioned turnover is not directly linked to the value of transactions between commercial banks and the NBG, as settlement with the NBG is provided on the base of net positions (clearing).

Diagram 9.2 Transfers processed through the RTGS system (2002-2017)

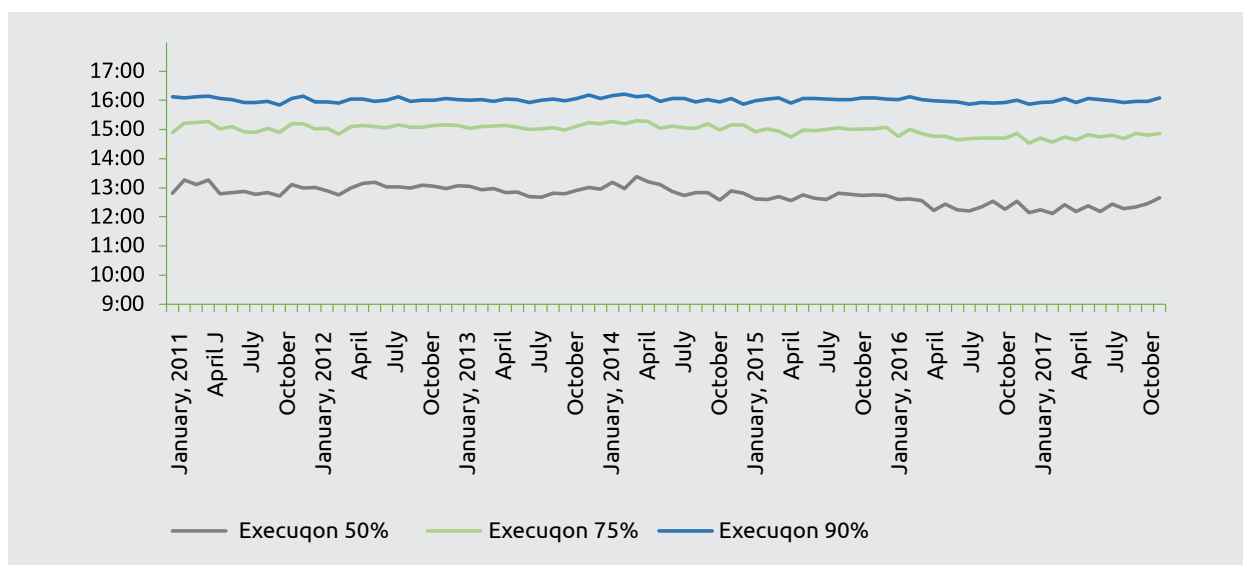


Source: National Bank of Georgia

Throughout 2017, as in previous years, the RTGS system continued to play a key role in Georgian payment systems in terms of both large- and low-value (retail) payment transactions. The share of transactions processed through the NBG's RTGS system in the total turnover of cashless transactions carried out in Georgia (by value) in 2017 was 70% (in 2016, this figure amounted to 67%), which significantly exceeds any other non-cash payment system/means⁸⁸ used in the country. The RTGS system thus remains the most important element for

the smooth flow of financial resources. It should be noted that the current RTGS system has been functioning for seven years and the volume of RTGS transactions processed in 2017 increased by almost 113% over the corresponding data from 2011. However, this did not have any noteworthy impact on the intraday settlement process. More than 50% of daily transactions were performed before 13:00, while 90% were completed by 16:00, much earlier than by the close of business⁸⁹ (see Diagram 9.3).

Diagram 9.3 Timing of RTGS transfers during a day



Source: National Bank of Georgia

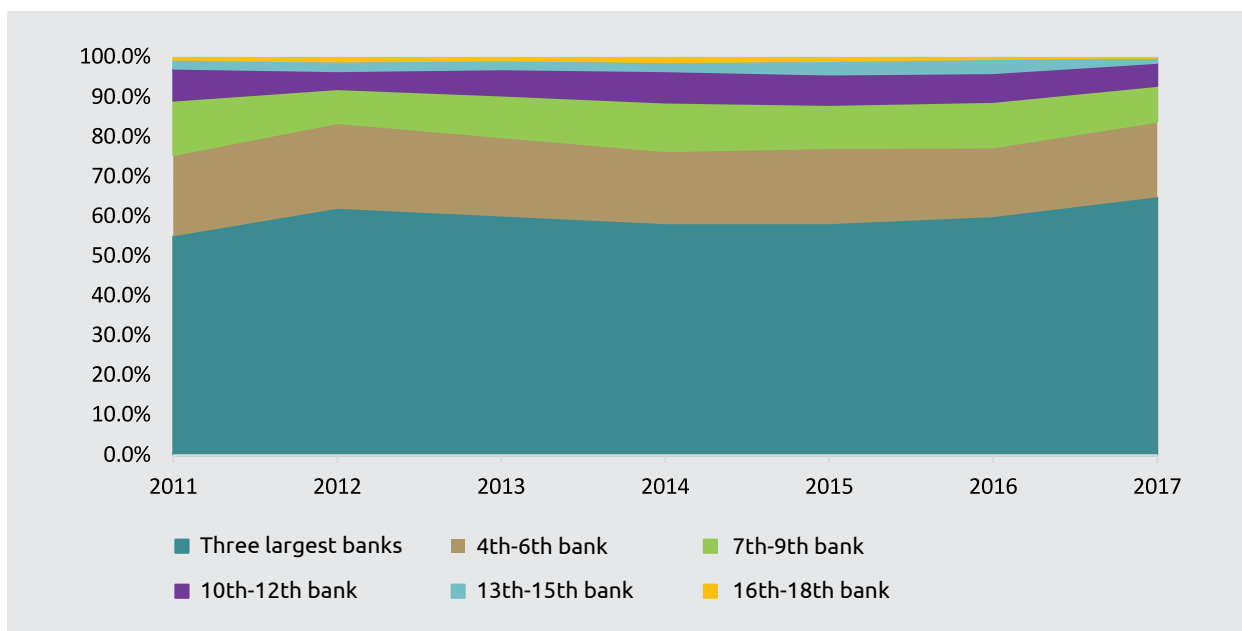
88. Aside from the payment systems existing inside the country, banks also use direct correspondent relations for the settlement of national and foreign currency transactions.

89. According to the RTGS system rules, a second cut-off is carried out at 18:00, after which participants are no longer able to make payments from their settlement account.

According to the data from 2017, the share of the turnover of the three largest banks in the total interbank turnover⁹⁰ (excluding NBG transfers) amounted to 64.8%, which exceeded the 2016 indicator by

5 percentage points (59.9%). Despite this fact, as Diagram N 9.4 shows, the concentration of interbank transfers during 2012-2017 has only changed slightly.

Diagram 9.4 Interbank transfer concentration in the RTGS system (2012-2017)



Source: National Bank of Georgia

Electronic payment instruments

Similar to 2017, consumer attitudes towards electronic means of payment (payment cards, online banking, etc.) maintained a positive trend. Consumers' use of payment cards has stably been growing during the past five years. In 2017, the share of card payments in the total volume of cashless payments increased 6.2 times compared to the corresponding data in 2012 and amounted to 76% (in 2012, this indicator was 41.6% and has been increasing every year since). In the same period, the number of internet-banking transactions doubled and amounted to 14.3% of total non-cash transactions (23% in 2012).⁹¹

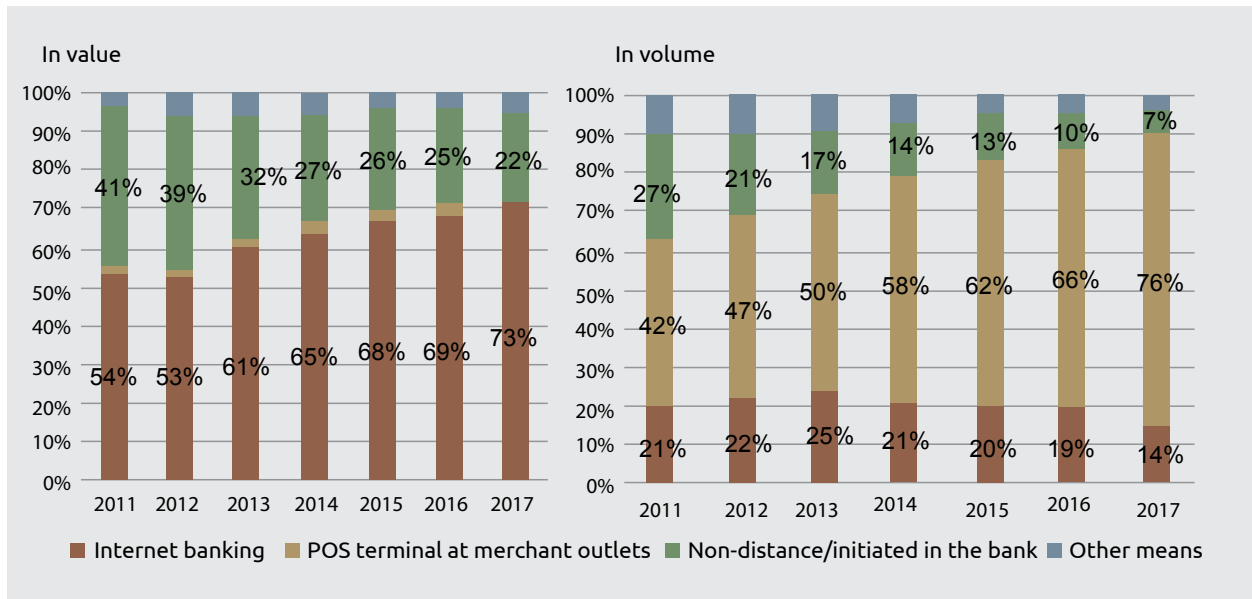
In 2017, the value of internet banking transactions remained the largest share of non-cash payments and amounted to 72.5%. It should be noted that the share of credit payment orders initiated by customers directly from the bank's service center has steadily been decreasing over the past six years, in terms of both volume and value. In 2017, its share in total cashless payment transactions amounted to 6.5% in volume and 21.9% in value (in 2012, these shares amounted to 21.4% and 39.4% respectively).

The statistics of cashless payments by means of initiation are shown in Diagrams N 9.5 and N 9.6.

90. Except for securities settlements.

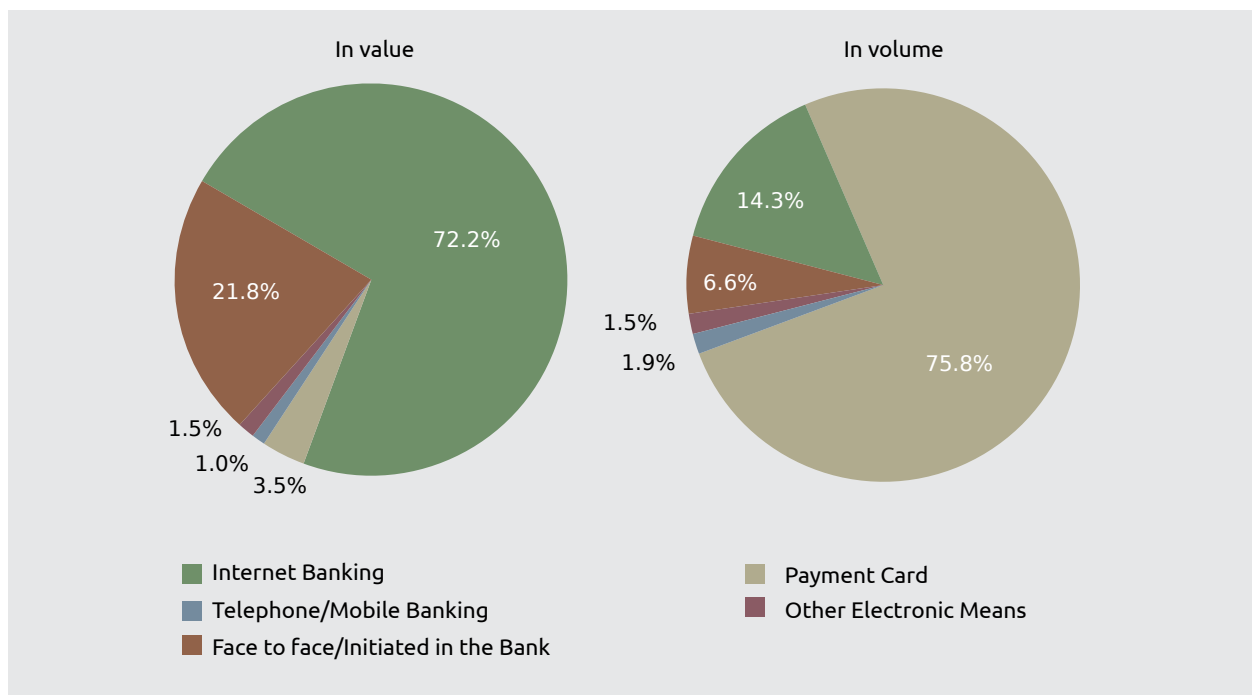
91. Compared to 2012, the reduction in the share of payments carried out through internet banking was due to a significant increase in card payments.

Diagram 9.5 Cashless payments by means of initiation (2011-2017)



Source: National Bank of Georgia

Diagram 9.6 Distribution of non-cash payments by means of payment order initiation (2017)



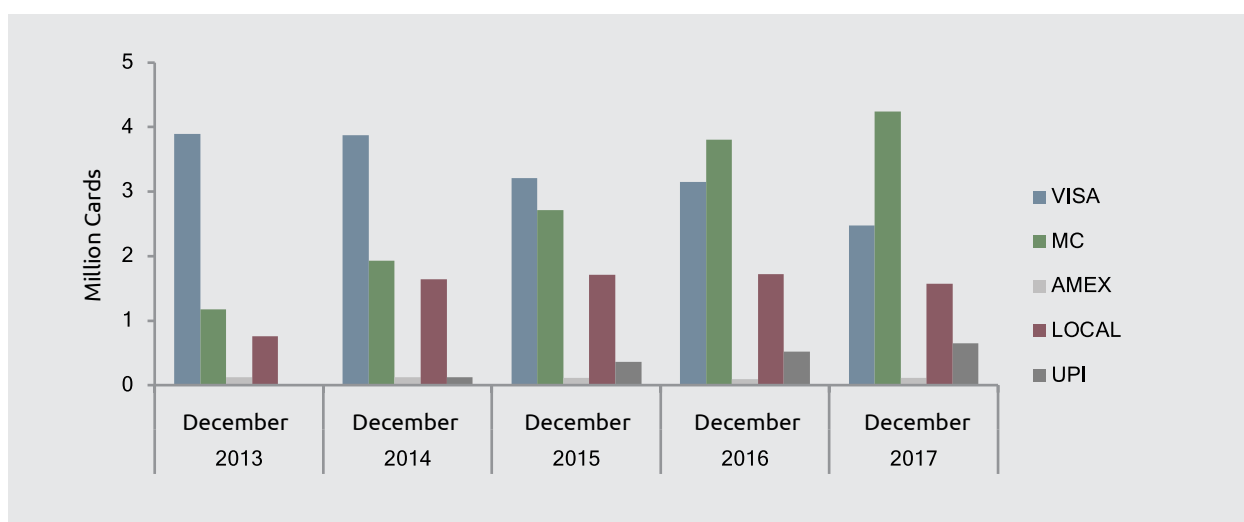
Source: National Bank of Georgia

Payment cards

In 2017, Payment cards remained the key retail payment instrument in Georgia. At the end of 2017, the number of payment cards issued amounted to 9.1 million, out of which the majority (92%) were debit cards, and 8% were credit cards (as in previous year). Most of the cards issued, 83%, were international cards (Visa, 28%, MasterCard 47%, AmEx 1%, UPI 7%) and the remaining 17% were local cards. It should be noted that the number of the payment cards issued

in Georgia decreased by 3% compared to December 2016. The number of Visa cards issued decreased by 21%, and local cards issued fell by 9%, while the number of MasterCard cards issued increased by 11%, AmEx cards rose by 21% and UPI cards by 25%. The country's three largest banks issued 96% of the cards. By the end of 2017, 24 cards were issued per every ten inhabitants in Georgia. The dynamics of the number of payment cards issued by card scheme are shown in Diagram 9.7.

Diagram 9.7 Dynamics of payment cards issued by card scheme

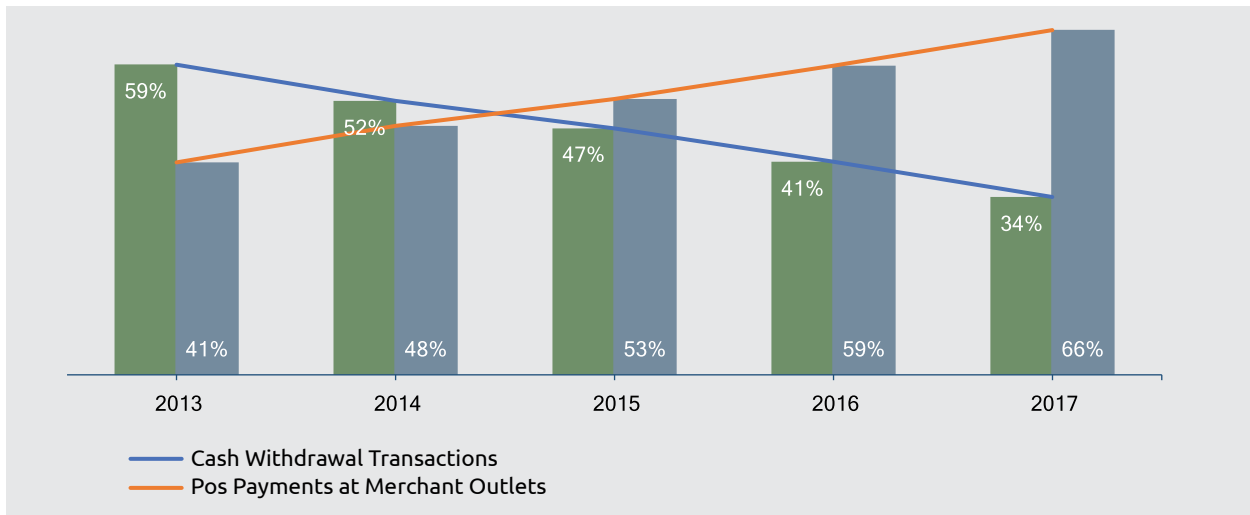


Source: National Bank of Georgia

A total of 179 million transactions were performed by cards issued in Georgia in 2017. These had a total value of 19.0 billion GEL, which was an increase of 32% in terms of volume and 24% in terms of value over the previous year. The number of transactions performed in Georgia amounted to 96% in terms of volume and 93% in terms of value, while transactions performed outside the country amounted to 4% in terms of volume and 7% in terms of value.

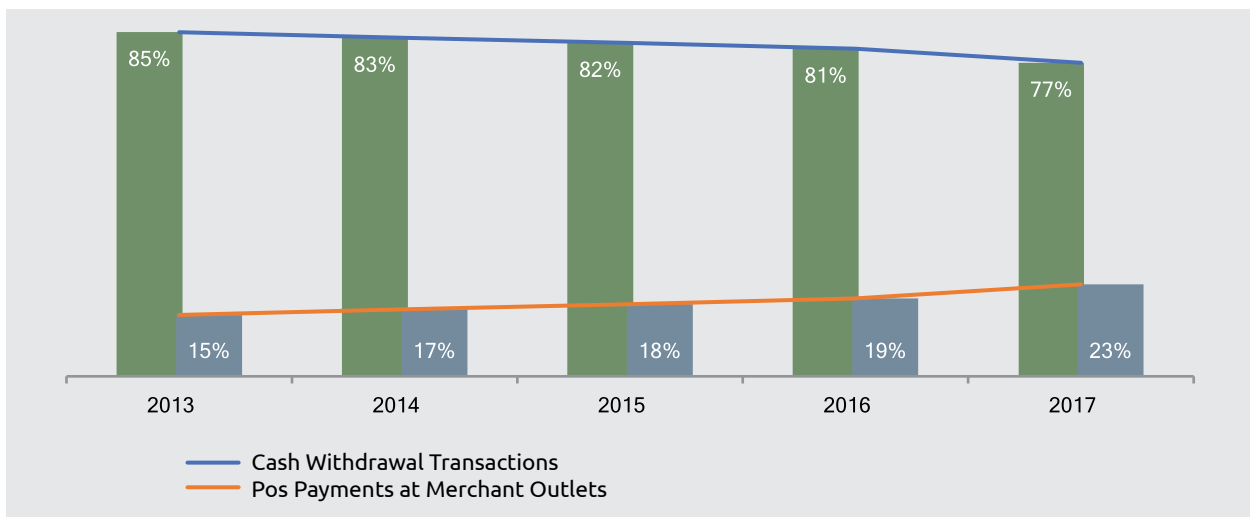
In 2017, the share of POS transactions at merchant outlets in total transactions performed by cards issued in Georgia increased to 66%. The number of cash withdrawal operations amounted to 34%. In terms of value, the share of POS payments at merchant outlets in total card payments was 23%, and the share of cash withdrawal operations was 77%. The share of POS payments at merchant outlets increased by 7 percentage points in terms of volume and by 4 percentage points in terms of value compared to the previous year. Internet payments increased by 51% in terms of both volume and value compared to 2016.

Diagram 9.8 The share of the volume of cash withdrawal operations and POS payments at merchant outlets (2013-2017)



Source: National Bank of Georgia

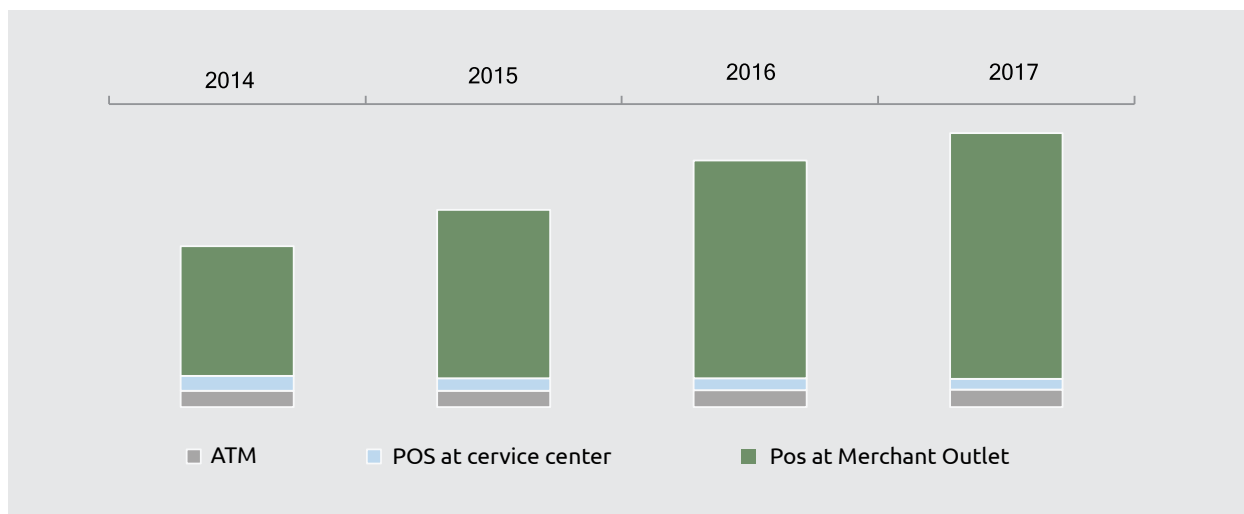
Diagram 9.9 The share of the value of cash withdrawal operations and POS payments at merchant outlets (2013-2017)



Source: National Bank of Georgia

According to the data of December 2017, there were 2,281 ATMs located in Georgia, 32,456 POS terminals at merchant outlets, and 1,446 terminals located in bank branches and service centers. Compared to the previous year, the number

of POS terminals at merchant outlets increased by 13%, while the number of ATMs increased by 2%. The dynamics of card-accepting devices are shown in Diagram 9.10.

Diagram 9.10 Dynamics of card-accepting devices (2014-2017)

Source: National Bank of Georgia

A total of 96% of the total volume of transactions carried out by card-accepting devices located in Georgia, and 90% of transactions in terms of value, were performed by cards issued in Georgia during 2017. The remaining volume of transactions were carried out by cards issued abroad. It should be noted that the total number of transactions performed by foreign cards increased by 18% in terms of volume and by 27% in terms of value compared to 2016. POS transactions at merchant outlets increased by 16% in terms of volume and by 20% in terms of value. Moreover, cash withdrawal operations increased by 25% in terms of volume and by 40% in terms of value.

In 2017, an average of 2,384 cash withdrawal transactions were performed at each ATM located in Georgia each month, amounting to an average of 572,000 GEL. The average POS terminal at a merchant outlet performed 313 monthly payment transactions, amounting to 12,000 GEL in value.

Payment service providers

Payment service providers offer a variety of payment services to consumers, such as the acceptance of payments through self-service kiosks, the issuance of payment cards and electronic money, and the execution of payments through these instruments. By 31 December 2017, 38 payment service providers

were registered in the National Bank of Georgia, out of which 22 were first registered in the year. In the same period, 22 providers lost their registration. Of the latter, six providers cancelled their registration at their own written request, 10 providers lost their registration after off-site inspections revealed violations of legal requirements, and the registration of another six providers were cancelled after on-site inspections.

As mentioned above, new forms of reporting on payment services were introduced on 10 July 2017. These make it possible to establish more detailed analytics of payment services provided.

In 2017, the share of non-electronic money payments in total payments performed by payment service providers amounted to 59% in terms of volume and 86% in terms of value. At the same time, the share of cash transactions provided through kiosks in total non-electronic money payments were 64% in terms of volume and 71% in terms of value; whereas the share of card payments through kiosks in total electronic money payments amounted to 26% and 3% respectively. It is noteworthy that the share of payments through agents in total non-electronic money payments amounted to 35% in terms of volume and 31% in terms of value.

In 2017, 47% of total e-money payments were performed through pre-paid cards, while 44% were e-money payments initiated through e-money providers' websites. Payments made through mobile phone/tablet applications were also important and took a 9% share of total e-money payments in terms of value. In terms of volume, payments performed in public transportation through pre-paid cards amounted to 99% of total e-money payments.

As of December 2017, 5 million e-wallets were issued, excluding pre-paid public transport cards. The value of electronic money stored on those wallets was equivalent to 5.65 million GEL. Although the share of active e-money wallets⁹² amounted to 1.2% on average (58,300 wallets), by the end of 2017 90% of the value of electronic money issued was stored on those wallets.

92. Defined as a wallet through which at least one payment transaction was made during a calendar month.



Mariam Kevlishvili
7th Grade; #6 Borjomi Public School



Dachi Gigauri
12 years old; Tianeti

10

IMPROVEMENTS OF INFORMATION TECHNOLOGY



During 2017, the National Bank of Georgia continued its IT improvement process. Specifically, implementation operations for a third backup data center were completed. In course of the project, one of the first hyper-converged infrastructure systems was deployed in Georgia. The system comprises numerous server nodes, software defined storage and supporting network infrastructure. This system supports a Business Continuity Management scenario under which the National Bank's IT services are enabled by a third backup data center.

As is the case with other national banks and organizations, the NBG considers the corporate network security system as a vital component of the IT security infrastructure. During 2017, the NBG substantially upgraded its infrastructure by implementing a state-of-the-art protection system. In course of doing so, the NBG implemented a next-generation firewall and an intrusion prevention system. This system is of central importance considering the rising trend in the number of cybersecurity incidents occurring worldwide.

A further IT improvement saw the network bandwidth between servers within both Tbilisi data centers be increased up to 10 Gb/s. As part of this process, technical specifications were elaborated, a tender was announced, and a contract was signed with the chosen vendor. Accomplishing this project ensures the ability to meet the increased demand placed on the server infrastructure from all IT projects. Moreover, it decreases the risk of overload during peak times, cuts the time necessary for backups and restores, and boosts the performance of servers.

In 2017, the NBG significantly modernized its server infrastructure with further servers and greater storage added. The increase in computation resources substantially improved the capacity and sustainability of the virtual server infrastructure. The virtualization system was also updated. Further updates and optimizations included those to critical operational

systems, test instances, database server operational systems and database management systems.

During the reporting period, the NBG purchased a web application delivery and security system for web applications and has started the implementation of this. This system provides the ability to safely publish, protect and balance external services over the internet and considerably enhances the security and sustainability of the National Bank's website.

In 2017, the NBG completely licensed its Microsoft products. Before the licensing, several activities were held concerning software product centralization, optimization and customization of versions and editions. This effort has brought major savings for the NBG.

In response to the frequent cyberattacks seen throughout the world, the National Bank performed specific actions to improve its cybersecurity. Anti-virus parameters were changed to limit a potential spread in the event of the infection of a single computer; the antivirus update frequency was increased; authentication parameters were strengthened to improve authorization processes on the local network; and greater segmentation of the server network improved the security of inter-server communication.

By the end of 2017, the National Bank renewed and expanded its existing two-factor authentication system, which is used to control access to critical systems. The renovated system significantly improved and simplified the management process. These technical modifications aim to reinforce security, preventing unauthorized access to critical systems. In accordance with the National Bank's Information Security Management System (ISMS) policy, a data leakage prevention system was implemented in 2017. Proper services were integrated within the bank's infrastructure and several changes were made within network and server infrastructure to enable a real-time data leakage monitoring system,

which is yet another step towards improving the National Bank's security level.

During 2017, significant work was carried out on the selection and deployment of business intelligence software. Numerous solutions offered by different vendors were thoroughly reviewed and some activities were undertaken by concerned departments to test predefined tasks and functionalities. At the same time, the Enterprise Data Warehousing (EDW) project was initiated to support the analytical requirements of the business intelligence system. The EDW is a central repository for the integrated data received from several disparate internal and external sources that will improve the quality of business intelligence and reporting systems.

The National Bank also launched a new document management system in 2017 that significantly improved the quality of the document movement process. It is no longer necessary to print and physically deliver official documents for internal use. This leads to savings of paper and other materials. It will also decrease the size of the archive.

During 2017, the National Bank of Georgia carried out work to implement a software solution for identifying illegally obtained money, money laundering and terrorist financing risks in financial institutions.

The software will receive information from financial institutions and then analyze the data in motion to quickly identify problems and remotely define risks within the supervised sector. Further improvements are planned in the nearest future to upgrade the system to process in real time.

During the reporting period, significant work was carried out on the improvement, expansion and further development of the National Bank of Georgia's financial, macroeconomic and statistical information system, "SebStat." Several datasets for payment card, cash and bank transfer statistics, were prepared in this process. Moreover, the system was universalized due to its expansion over numerous departments and the addition of the datasets.

In response to recurring cyber incidents, SWIFT has elaborated a customer security control framework for its users and systems. The framework describes the major technical and procedural control mechanisms necessary for every organization on the network. The National Bank of Georgia performed several activities to meet these SWIFT requirements. More specifically, the NBG has migrated its servers to an isolated, protected network; administrative rights to access the servers have been maximally limited; and the password management policy and system availability have both been improved.

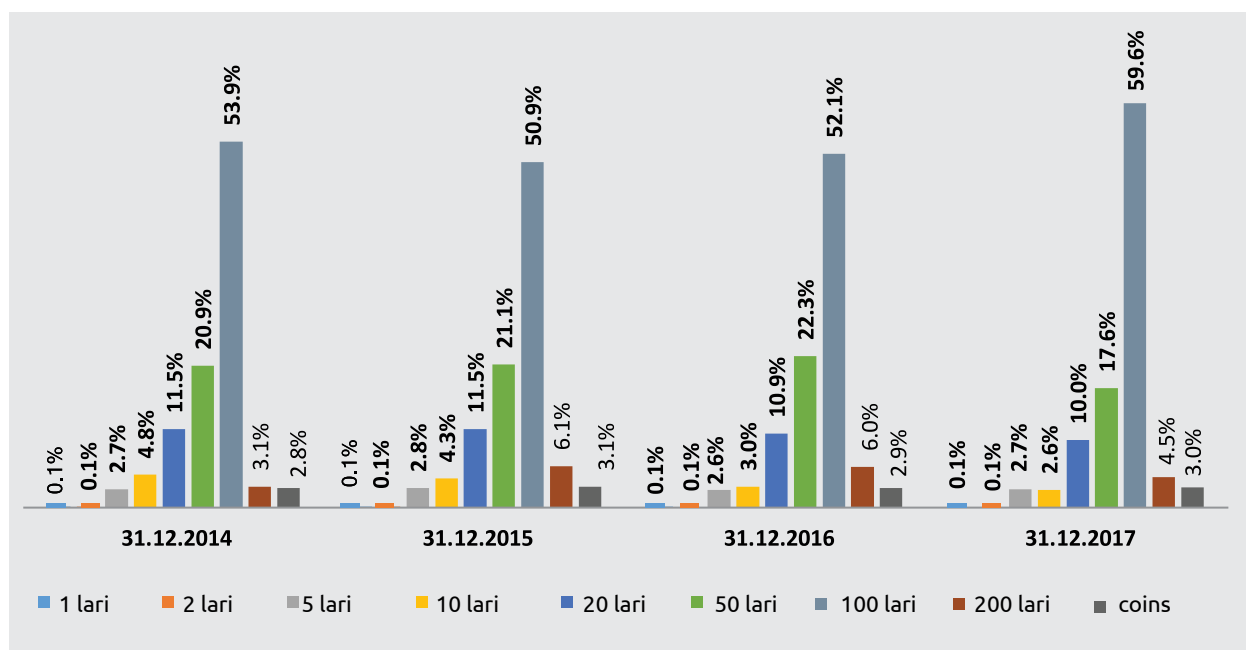
ORGANIZATION OF CASH AND EMISSION ACTIVITIES



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; the enhancement of the quality of banknotes and coins in circulation; sorting newly produced banknotes/coins and those received from circulation in accordance with established rules; the destruction of unfit banknotes; and the improvement of currency expert procedures and legal acts.

As of 31 December 2017, the value of cash in circulation amounted to 3,308.7 million GEL, of which banknotes accounted for 3,209.4 million GEL and coins 99.3 million GEL. The share of banknotes per denomination as well as the coins in circulation by value as of 31 December for 2014-2017 are given in Diagram 11.1.

Diagram 11.1 Share of each denomination in circulation (2014-2017)

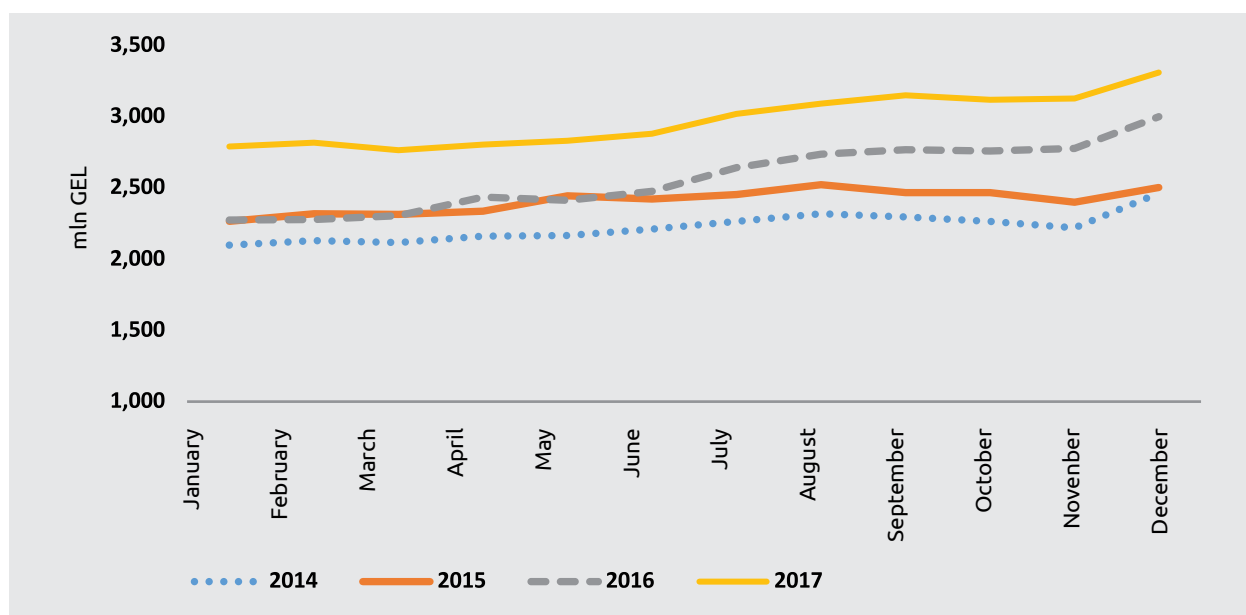


Source: National Bank of Georgia

As compared to the beginning of the year, the volume of cash in circulation increased by 10.3% or by 309.4 million GEL during the reporting period. The

dynamics of Georgian currency in circulation for 2014-2017 are given in Diagram N 11.2.

Diagram 11.2 Cash in circulation (2014-2017)

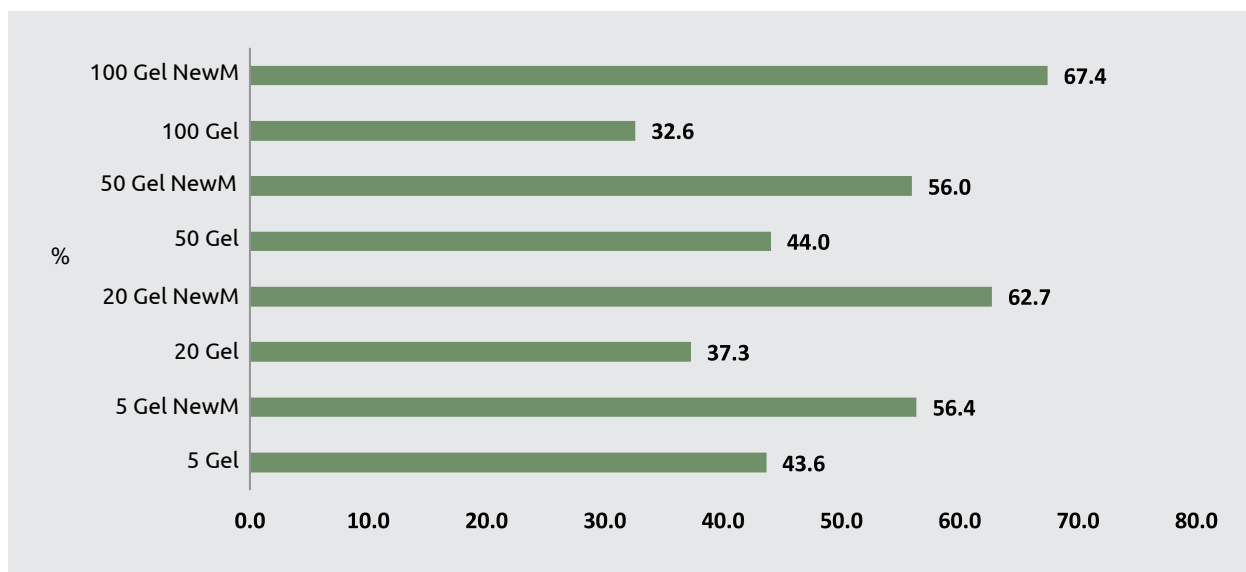


Source: National Bank of Georgia

In 2017, the volume of banknotes in circulation increased by 297.8 million GEL and amounted to 97.0% of the total volume of cash in circulation. The demand for banknotes of high denominations (50, 100 and 200 lari) increased by 11.9%. The demand for 5 and 20 lari banknotes also increased, by 13.7% and 1.4% respectively, whilst demand fell by 4.7% for 10 lari banknotes. The upgraded 5, 20, 50 and 100 lari banknotes have been successfully spread. At the end of the reporting period, the upgraded 20 lari

banknotes had a 62.7% share of the total volume of all 20 lari banknotes in circulation; the upgraded 50 lari banknotes had a 56 % share of the total volume of all 50 lari banknotes in circulation; the upgraded 100 lari banknotes had a 67.4% share of the total volume of all 100 lari banknotes in circulation; and the upgraded 5 lari banknotes (which were issued on 1 September 2017) had a 56.4% share of the total volume of all 5 lari banknotes in circulation (see Diagram 11.3).

Diagram 11.3 5, 20, 50 and 100 lari banknotes in circulation per modification (%)



Source: National Bank of Georgia

During the reporting period, the volume of 1 and 2 lari coins in circulation increased by 14.2% and amounted to a total of 65.2 million GEL at the end of the year. The volume of tetri coins in circulation increased by 11.4% compared to the same figure in 2016.

In order to ensure an uninterrupted supply of cash to the economy and to replenish relevant reserve stocks, within the reporting period the NBG continued to work on the production of lari banknotes and coins, putting them into circulation, and on the performance of obligations envisaged under contracts concluded in previous years. Furthermore, work continued on the issuance of collector coins. This included the following processes:

- Activities were carried out in the reporting period for the issuance of silver 5-lari collector coins dedicated to Georgian wine. The grounds for the issuance of the coins was the international wine exhibition held in July-August 2017 at the Center of Wine Civilization in Bordeaux, France, where Georgia was invited as a guest of honor. The coins, dedicated to Georgian wine and issued by the NBG, earned great approval – as evidenced by the fact that they were sold out within two months of their issuance. It is worth mentioning that a number of the coins were purchased by the Wine Civilization Center of Bordeaux.



Obverse



Reverse

- In the reporting period, the NBG also issued 2,000 pieces of a new booklet on the subject of coins in circulation. Each booklet includes 1-, 2-, 5-, 20-, and 50-tetri coins as well as 1- and 2-lari coins and contains information about the history of coins in Georgia. The booklet is an excellent souvenir for tourists and interested persons.
- Activities were started for the issuance of 5-lari collector coins dedicated to the centenary of the founding of Ivane Javakhishvili Tbilisi State University and 10-lari collector coins dedicated to the centenary of the resto-



ration of the independence of Georgia. During the reporting period, a competition was carried out to obtain sketches for their design and winners were chosen. Partner selection procedures were then performed and a contract was concluded with the selected mint for their productionminting.

Cash inflows in the Georgian currency at the NBG increased during 2017 and amounted to 4.6 billion GEL, which was 4.5% higher than the relevant figure of the previous year. Cash outflows in the Georgian currency from the NBG amounted to 4.9 billion GEL, which was nearly the same figure as in the previous year.

It is also worth mentioning that, in 2018, Georgia will be presented as a guest of honor at the Frankfurt Book Fair. At this significant event, Georgia will introduce the international significance of Georgian literature and culture to the world. The NBG decided to respond to such a great opportunity by starting work on the issuance of 5-lari collector coins on the theme of Georgian book. A competition was thus carried out for obtaining designs for the coin, and winners were chosen. The partner selection process was subsequently implemented and a contract was concluded with the selected mint for their production.

In the reporting period, the automated cash management system was enhanced at the NBG. Appropriate tasks were developed and the cash management module of the core banking system (B6) was launched in a real-time regime.

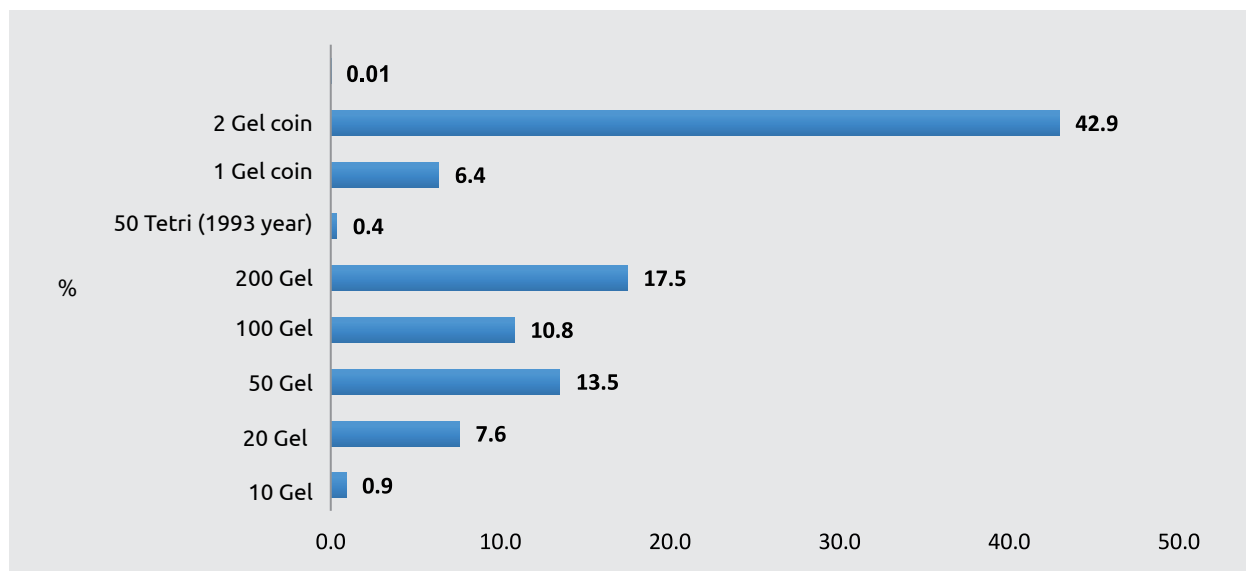
Currency-expertizing activities were also carried out. Specifically, during the reporting period, NBG experts examined a total of 13,353 suspicious banknotes and coins submitted by the NBG cash desks, commercial banks, cash exchange and microfinance offices, as well as by individuals. Table 11.1 shows the results of the examinations.

Table 11.1 Examination results of suspicious banknotes and coins in 2017

	Suspicious	Counterfeit	Genuine	Non-redeemable
Lari notes	5,994	5,150	629	215
Lari coins	6,056	5,012	1,044	–
USD	823	629	194	–
EUR	261	188	73	–
Other foreign currency	219	185	34	–
Total	13,353	11,164	1,974	215

Source: National Bank of Georgia

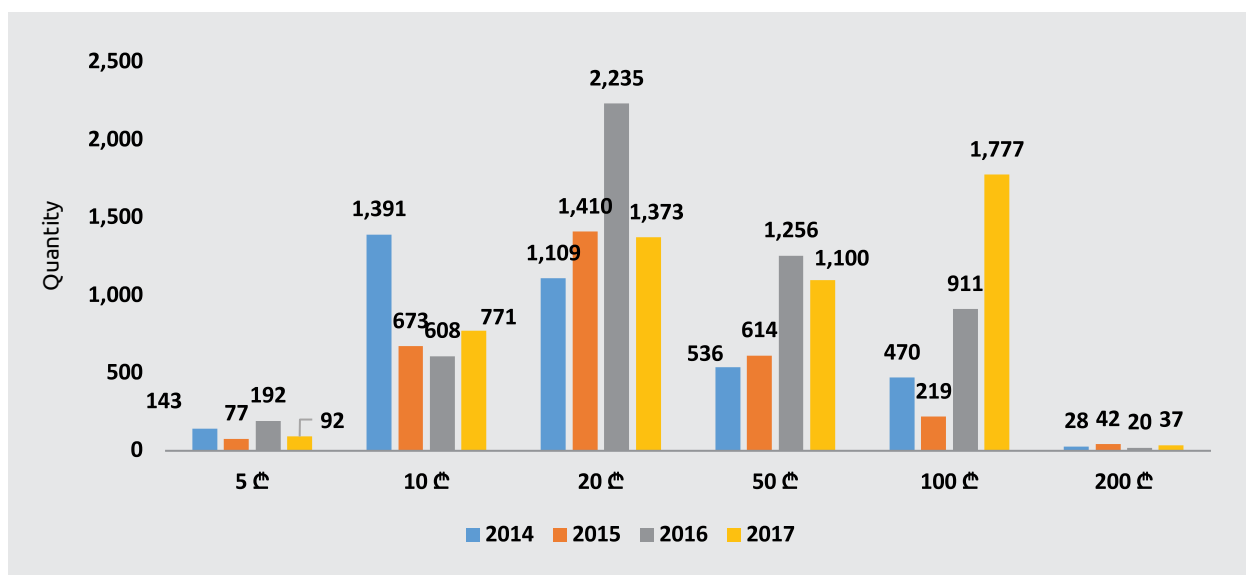
The ratio of counterfeit lari banknotes and coins removed from circulation in 2017 are shown in Diagram 11.4.

Diagram 11.4 Counterfeit lari banknotes and coins detected in 2017 (%)

Source: National Bank of Georgia

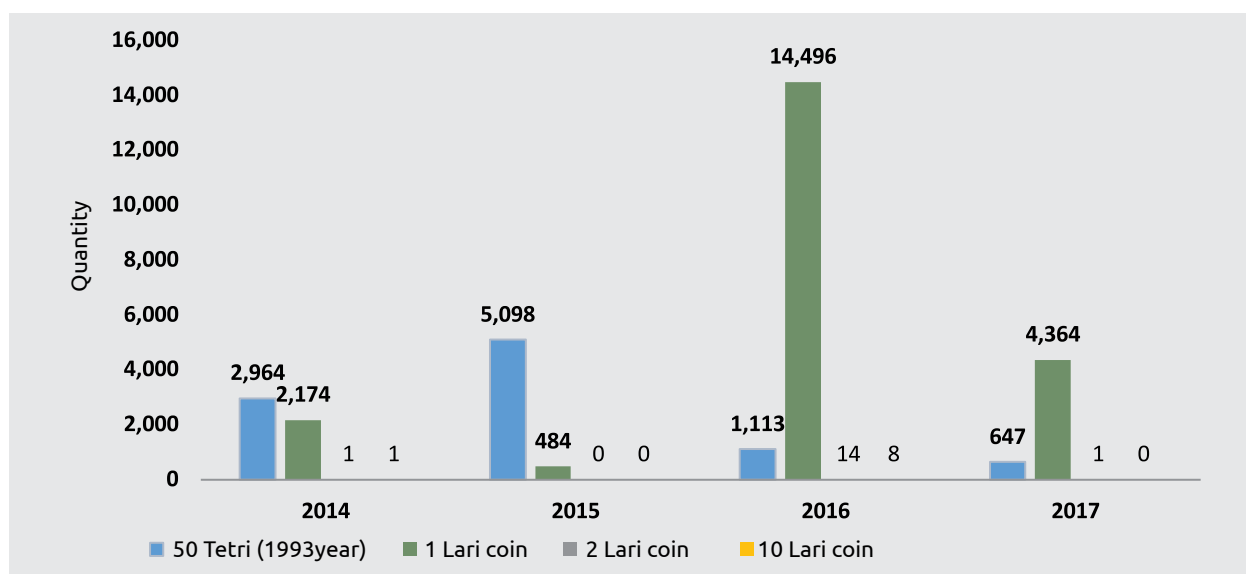
The number of counterfeit lari banknotes detected in 2017 decreased by 1.4% compared to the previous year. In terms of foreign currency, the number of counterfeit US dollar notes detected fell by 11%, whilst the number of counterfeit euro banknotes increased by 62.1%. Other counterfeit foreign currency notes detected increased

by 45.7% overall. As regards coins, the number of counterfeit 50-tetri coins detected decreased by 41.9%, while the number of 1-lari coins decreased by 69.9% compared to the previous year. Diagrams 11.5 and 11.6 illustrate the number of counterfeit lari banknotes and coins per denominations revealed in 2014-2017.

Diagram 11.5 Number of counterfeit lari banknotes detected (2014-2017)

Source: National Bank of Georgia

Diagram 11.6 Number of counterfeit lari coins detected (2014-2017)



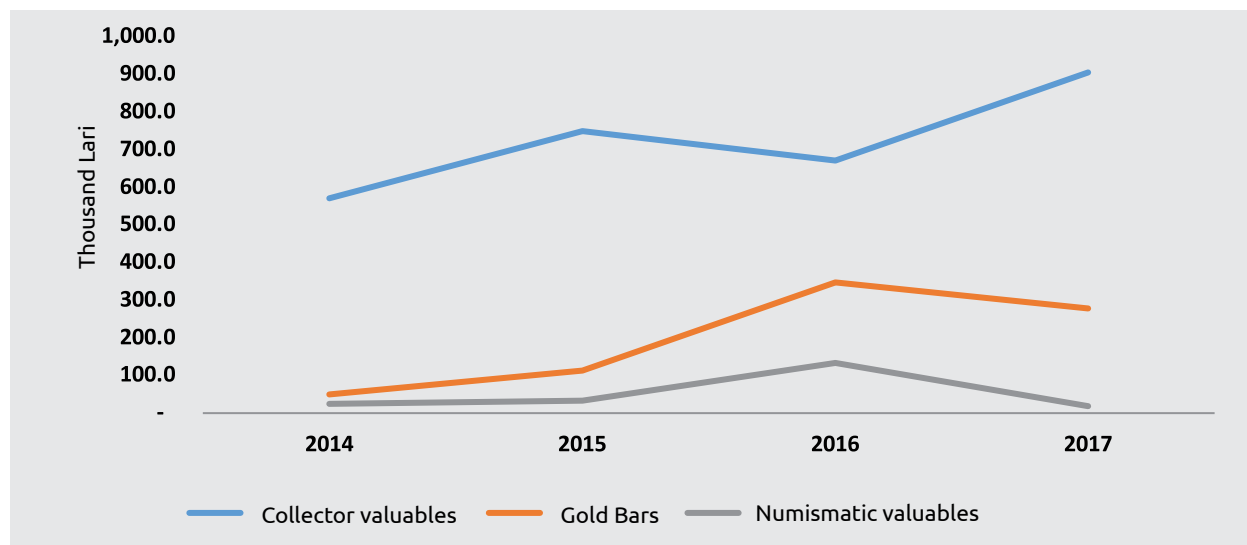
Source: National Bank of Georgia

During 2017, the NBG provided methodological support to commercial banks, currency exchange bureaus, other legal entities, and individuals regarding the enhancement of qualifications related to performing cash activities. In total, 320 people were trained in currency security features, understanding their authenticity and fitness criterion, as well in general cash handling procedures.

The NBG continued to successfully 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 40,200 pieces worth a total of 1.2 million GEL, which was a 7.2% increase in revenues received over the previous year. The following amounts of products were sold:

- 466 pieces, worth 12,900 GEL in total, from the Kvareli museum.
- 38,900 pieces, worth 1.1 million GEL in total, from the cash service desk of the cash center.
- 803 pieces, worth 64,400 GEL through the on-line shop.

Diagram 11.7 The dynamics of products sold (2014-2017)

Source: National Bank of Georgia

In order to raise public awareness about the history of Georgian money and the developments and main activities of the NBG, the NBG Money Museum actively provided educational activities and initiatives to the public. Within the course of 2017, the museum received 3,635 visitors in total.

During the reporting period, 95 educational excursions were carried out at the museum. These included an overview of Georgian numismatics and the viewing of exhibits. In total, 1,121 students and 102 teachers participated in lectures at the museum.

12

INTERNAL AUDIT AND CENTRALIZED RISK MANAGEMENT



Internal audit

The Internal Audit Service updated its medium-term plan for three-year activities at the beginning of the reporting year. According to the risk based internal audit new approach, the consolidated risk map of the National Bank of Georgia was considered for planning purposes. Throughout the preparation of the plan, the results of audits conducted in 2016, the experienced gained during the first audit cycle, as well as the risk maturity level of the organization were all taken into account. When prioritizing auditees, internal auditors' assessment results and the evaluations provided within the risk register were both considered.

Based on the updated medium-term plan, the annual plan for the assurance and consulting services of the Internal Audit Service was developed. The annual plan for 2017 was approved by the Audit Committee and the Board of the NBG, according to which the Internal Audit Service conducted 31 audit engagements during the reporting year.

The Internal Audit Service provided its consulting services on centralized risk management procedures during the year in order to facilitate the development of the "three lines of defense" model within the NBG. Meanwhile, consulting services were also provided on certain issues and procedures to various structural units of the NBG, in accordance with common practice.

The "Reporting Policy and Procedures on the Results of Audit Engagements" were updated during the reporting period. This made it possible to better represent audit outcomes by the use of a four-grade scale to rate the conclusions and also by improving the quality of visualization of audit recommendations.

According to the strategy of the Internal Audit Service, a risk-based internal audit manual was elaborated at the end of 2017. The new approach given in this document considers a greater concentration on the risks and areas that are significant for the whole organization. Because the processes are continuously evolving, the dynamic planning of Internal Audit activities is required.

The implementation of Internal Audit and Risk Management software was a significant step forward in the reporting period. This was aimed at the automatization of Internal Audit and Centralized Risk Management processes. Accordingly, from the second half of the year, standard procedures for audit activities were conducted via the Internal Audit and Risk Management software. It should be emphasized that, as a result of the implementation of this software, it became possible not only to automate internal audit processes, but also the processes of centralized risk management and incident management. This all serves to increase the efficiency of the "three lines of defense" model throughout the organization.

Within the framework of international cooperation between the NBG and De Nederlandsche Bank, the Internal Audit Service organized an international seminar: "Modern Internal Audit: New Approaches" – in May 2017. Representatives of the central banks from fifteen different countries, as well as internal auditors from nine ministries of Georgia, participated in the workshop.

Non-financial risk management

For the purpose of non-financial risks management, the National Bank of Georgia has developed a Centralized Risk Management Framework, which comprises risk and incident management systems.

Centralized risk management is an integrated, continuous development process, which includes risk assessment (identification, analysis, and measurement), response, monitoring and reporting steps. Considering international best practices, and to achieve the maximum effectiveness of centralized risk management, the National Bank has established a “three lines of defense” model, in which the first line is structural units, the second line is the Centralized Risk Management Department, and the third line is the Internal Audit Service. The Centralized Risk Management Department is responsible for the effective functioning of the centralized risk management system and its continuous development.

In 2017, business processes related to non-financial risks and assessments of Key Risk Indicator-applicable incidents, preventive action planning and monitoring were continuously conducted. Assessments, which are based on a qualitative approach, showed that in the reporting period the residual level of non-financial risks were within an acceptable level. This was achieved as a result of effective preventive and detective control measures.

It should be mentioned that, during the reporting period, Internal Audit and Risk Management software was implemented. This helped to improve processes through automation and established an integrated approach toward risk perception, analysis and response, which positively affected the risk culture of the organization.

In the reporting year, to improve the business processes of the NBG and to increase the effectiveness of controls, the Centralized Risk Manage-

ment Department continued to support the update of internal procedures and processes.

Business continuity management

Considering international best practices and the experience of other central banks, Business Continuity Risk Management is integrated with the Centralized Risk Management Framework of the National Bank. Ensuring the continuity of critical services is of the utmost importance for the bank and significant resources have thus been allocated towards this process. To continue the development of the Business Continuity Management System and improve employee awareness, the Centralized Risk Management Department conducts regular training sessions and ensures that testing is coordinated with different scenarios.

In 2017, the scope of the business continuity management process was expanded by integrating a cyber-attack simulation scenario. The National Bank of Georgia conducted cyber-attack simulation testing in cooperation with the World Bank. The simulation assessed effective decision making and the ability to effect quick communication with stakeholders.

During the reporting period, to extend and improve the Business Continuity Management System, SWIFT’s product “Alliance Lifeline” was implemented, which supports an alternative connection to the SWIFT system. This product is a cloud-based service that supports access to the system through the internet alone. Use of this product significantly improves the continuity of the SWIFT system.

13

**PUBLIC RELATIONS AND
INTERNATIONAL COOPERATION**



Public relations

Public relations, in both general terms and concerning certain activities, became more diverse in 2017. When planning communication activities, 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, in 2017, the National Bank of Georgia successfully implemented a more active and dynamic communication strategy regarding its monetary policy.



In 2017, every other meeting of the Monetary Policy Committee was held in a different region of Georgia. Within the reporting period, meetings of the Monetary Policy Committee were held in Imereti, Kakheti and Adjara. The Governor of the National Bank of Georgia, along with representatives from the bank, also held briefings to clarify the decisions of the Monetary Policy Committee. The NBG responded to all questions regarding monetary policy in general, its instruments and the decisions. These briefings were broadcast live on social networks. Within the framework of the regional meetings, the Governor of the NBG, Koba Gvenetadze, also met with the representatives of the business sector and financial institutions, where he personally presented the committee's decision and provided information regarding macroeconomic trends.

With the publication of the monetary policy reports, the National Bank of Georgia also released short videos of the Governor emphasizing important aspects of the reports. In addition, the National Bank of Georgia presented its monetary policy reports to analysts, specialists and media representatives; with these presentations being recorded and published on the official NBG website and on social networks.

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, conducted press conferences, presentations, briefings, conferences and seminars, and held numerous meetings on relevant subjects. Public relations were carried out through the mass media and other means of communication, and regular meetings took place with representatives of both the 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. This was done through both electronic and print publications as well as via other forms of mass media.

The National Bank of Georgia publishes a “Monthly Review”, a quarterly “Monetary Policy Report”, quarterly analytical reports on “Indicators of the Financial Sector” and “Indicators of Current Macroeconomic Tendencies”, as well as releasing various statistical data and Monetary Policy Committee press releases. The National Bank of Georgia



also prepared and printed the “Annual Report of the National Bank of Georgia, 2016” during the year. One issue of the scientific-analytical magazine *Economics and Banking* was published, which offered papers and articles on various topics. Electronic versions of the National Bank of Georgia’s publications are available on the bank’s official website.⁹³

For the purpose of informing the public, the National Bank of Georgia prepared relevant statements warning individuals to take utmost care when managing their own savings and to make reasonable decisions when placing savings in institutions unregulated by the National Bank. Additionally, warnings were published regarding investing in corporate bonds and virtual currencies. In 2017, the National Bank of Georgia created a

special “Warning” section on its official website to inform and alert the public to such risks.

International cooperation

The year 2017 was remarkable from the perspective of international cooperation, with the National Bank of Georgia hosting several high-level international meetings.

In June 2017, the National Bank of Georgia hosted the first international conference concerning data quality supervision. The main purpose of the “Supervision of Data Quality in Risk Data Aggregation and Reporting” conference was to review data on financial risks and the principles of accounts based on those risks. Representatives of central banks and financial supervisory organizations from 11 European and Caucasus countries took part in the conference. The effectiveness of supervising financial institutions was discussed and participants shared their own experiences of supervising data quality.

It is also noteworthy that the Basel Committee published a document (“Supervisory and Bank Stress Testing: Range of Practices”) that summarizes international practices regarding the process of bank stress testing. The document discusses numerous regulatory approaches and highlights the practices of various countries that could potentially be used as exemplary models. It is significant that within this document’s list of countries with successful practices (Brazil, Japan, South Korea, Mexico, Turkey and the United Kingdom) the National Bank of Georgia’s stress testing framework is also mentioned. The document draws attention to the NBG’s introduction of the GRAPE (General Risk Assessment Process) supervisory approach,

93. See: www.nbg.gov.ge/index.php?m=308

where micro and macro prudential regulations are unified within one process. The document also notes that the stress testing approach of the National Bank of Georgia might be an appealing for countries where, due to structural changes in the economy, long-term credible data of the financial sector is not accessible and where statistical modeling is associated with high risk.

During the reporting period, an international conference “Modern Internal Audit: New Approaches” was held as a result of a partnership between the National Bank of Georgia and the Central Bank of the Netherlands. The main goal of the conference was to review the role of modern internal audits from the perspective of improving business processes in the organization. The conference participants also discussed and shared experiences about the challenges, risks and perspectives of internal audits.



14

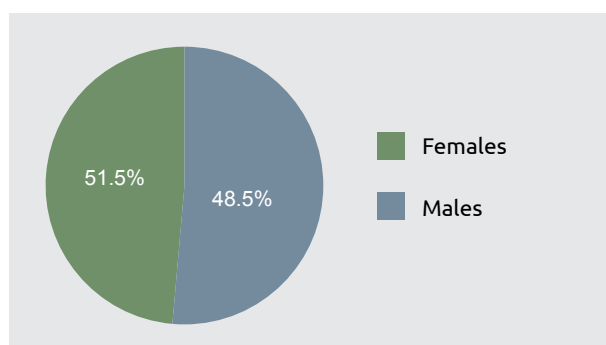
HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT



Statistical information on the number of employees

By the end of 2017, the National Bank of Georgia employed 396 individuals, 46 contractors, 50 subsidiary and 300 public servants. The average age of employees is 39.7 and 91.4% of employees have a higher education degree; of the total number of employees, 48.5% are female and 51.5% are male.

Diagram 14.1 Employees by gender



Source: National Bank of Georgia

Structural reorganization and optimization

In 2017, the National Bank of Georgia went through a structural reorganization in order to effectively fulfill the objectives of the central bank. The "Consumer Protection Department" was transformed into the "Consumer Protection and Financial Education Department"; additionally, the "Financial Stability Analysis Department" was created and the "Capital Market Supervision Division" became an independent structural unit. Structural changes also took place in the legal department. To support the efficient implementation of legal processes in line with the European Union Association Agreement directives, the National Bank of Georgia created the "EU Directives Implementation and Legal Support Division".

Cooperation with higher education institutions

Every year, the National Bank of Georgia gives

students an opportunity 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 34 interns in 2017, of whom five subsequently became National Bank of Georgia employees.

At the same time, the central bank provides summer internship opportunities for Georgian students studying abroad. The objective being to increase the interest of such students towards the National Bank of Georgia, so that after graduating they might decide to return to Georgia and apply their knowledge. During 2017, six such students enrolled in the internship program.

A total of 20 students from the Georgian Business Academy visited the National Bank for an information tour. This included five meetings with high-level representatives from the central bank, who offered presentations on a range of interesting and important topics. The representatives of the bank responded to the students' questions and provided detailed explanations on topics of interest.

Employees' professional development

Throughout 2017, the National Bank of Georgia continued to take care of its employees' professional development. A total of 178 employees visited the following institutions for training purposes: the IMF, the Joint Vienna Institute, Deutsche Bundesbank, the Bank of France, the 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, and the central banks of various other countries. In addition, 37 employees of the National Bank of

Georgia successfully underwent training in Georgian educational institutions.

An English language course was held at the National Bank of Georgia in 2017 that was attended by 49 employees, and a French language course was attended by 14 employees. Furthermore, a certified course on “Monetary Policy” was attended by 34 employees, each of whom passed tests and received certificates. Employees of the National Bank of Georgia also had the chance to attend a course on the Tax Code of Georgia, receiving certificates upon passing a test.

In 2017, six employees of the National Bank of Georgia, who had each recently been appointed to

managerial positions, attended training in “Modern Methods of Management” at the Management Academy. Furthermore, those employees who frequently have communication with the media attended a media communication training course.

Professional development of financial sector employees

The National Bank of Georgia also supports the professional development of banking sector employees. To that end, in 2017, experts from the Luxembourg Financial Technology Transfer Agency conducted four seminars at the National Bank of Georgia, which were attended by 97 individuals from the National Bank of Georgia and commercial banks.

15

DEVELOPMENT OF THE LEGAL FRAMEWORK



The NBG developed and updated its legal framework throughout 2017.

During the reporting period, important amendments were adopted in 19 laws with the participation of the NBG. These laws include the Organic Law of Georgia on the National Bank of Georgia, the Law of Georgia on Commercial Bank Activities, the Law of Georgia on Non-Bank Depository Institutions – Credit Unions, the Law of Georgia on Microfinance Organizations, the Law of Georgia on Payment Systems and Payment Services, the Law of Georgia on the Securities Market, the Law of Georgia on Facilitating the Prevention of Illicit Income Legalization, the Civil Code of Georgia, and the Tax Code of Georgia.

The aim of the amendments to the Organic Law of Georgia on the National Bank of Georgia was to increase and reinforce the supervisory functions of the NBG; to adopt new regulations necessary for efficient supervision; to enhance consumer protection; and to implement the recommendations of the Financial Sector Assessment Program and the safeguard assessments of the IMF.

Important legislative changes were introduced in terms of increasing and strengthening the supervisory functions of the NBG. In particular, the NBG will supervise and regulate “entities issuing loans” (defined as any business entity towards which more than 20 persons have credit obligations).

According to the Organic Law of Georgia on the National Bank of Georgia, in order to protect borrowers’ rights, starting from 1 January 2019, “entities issuing loans” will be obliged to register with the NBG and meet its requirements. At the same time, the NBG will be authorized to sanction (and inter alia impose fines against) lenders in the

event of a violation of the law and/or of other legal acts and requirements issued by the NBG.

Credit bureaus will be supervised by the NBG, which means that in order to ensure financial stability, consumer protection, information security and business continuity, the NBG will have the power to inspect and regulate the bureaus, to give them written instructions, impose certain (including financial and operational) requirements, and place restrictions (including on service fees) and sanctions. A legal entity that plans to function as a credit bureau will be obliged to register with the NBG and satisfy its requirements.

In the framework of the initiative to increase the supervisory functions of the NBG, attracting refundable cash funds will be restricted. In particular, a legal entity or a group of related parties will not be allowed to attract refundable cash funds (including borrowings) from more than 20 persons and/or advertise such a service without registering as a microfinance organization or licensing as a non-bank depository institution, a credit union or a commercial bank. This restriction does not apply to some exceptions as defined by the Organic Law. An important novelty introduced by the legislative amendments is the power of the NBG to regulate banking groups. This includes the authority of the NBG to ask for information for banking group supervision purposes; the assessment of banking group risk profiles, as well as their risk management framework and internal control mechanisms, in order to evaluate their impact on commercial banks; the adoption of minimum capital requirements, liquidity requirements and requirements applicable for large risks; and the imposition of requirements related to information disclosure, corporate governance, financial reporting and auditing, and fit and proper criteria.

Important progress was also made in the area of consumer protection. Since 11 January 2018, the NBG has greater supervisory power on currency exchange points and can exercise full supervision of these. In addition, a legal act of the NBG now regulates rules on the return of exchanged currency and the NBG has been given authority to impose requirements on representatives of the financial sector related to providing necessary information to consumers.

The amendments to the Law of Georgia on Commercial Bank Activities provided a detailed list of all information and documentation required for obtaining a banking license. Provisions related to the acquisition of significant shares became more precise. The NBG now takes into consideration the reputation and financial condition of the declarant while approving the acquisition, the potential effect of the changes in the ownership/group structure on the effective supervision, and the transparency of the ownership/group structure after the acquisition. The NBG also takes into consideration the risks of terrorism financing and/or of legalizing illicit income related to a transaction. The legislative amendments imposed restrictions on commercial banks when carrying out non-banking business activities. In particular, banks are prohibited from holding, directly or indirectly, any amount of capital in a legal entity that is not a financial institution or the activities of which are not related to the banking activities or social projects of the bank.

Additionally, the Law of Georgia on Commercial Bank Activities prohibits the use of insider information by the administrator/controlling person of the bank for personal purposes in order to obtain a dominant position in relation to other business entities. The legislative amendments provide ad-

ditional regulations related to the investments of the banks. The changes also include new rules on the liquidation of commercial banks.

The legislative amendments made to the Law of Georgia on Microfinance Organizations broaden and strengthen the supervisory powers of the NBG on microfinance reorganizations. The minimum capital requirement for microfinance organizations was increased to 1,000,000 GEL. The amendments provided fit and proper criteria for the administrators of microfinance organizations. It is also noteworthy that the law introduced the concept of liquidation for microfinance organizations. The process of liquidation will be managed by a person appointed by the NBG and is governed by the rules adopted by the NBG.

In the framework of these legislative changes, certain amendments were introduced to the payment services and securities market legislation. One noteworthy change is the elimination of the concept of money remittance service providers. Those entities now have to register as a payment service provider or conclude an agency agreement with a payment service provider (that may be a commercial bank and microfinance organization) within six months from the amendments coming into force. In addition, the amendments introduce the concept of liquidation for a payment service provider. Accordingly, after 1 January 2019, in the event of registration being withdrawn, a payment service provider will be liquidated in conformity with the rules adopted by the NBG.

As for amendments in the securities market legislation, it is worth mentioning that foreign currency trading platforms will now require a license. Only brokerage companies licensed by the NBG will be authorized to carry out such activities.

Throughout 2017, the NBG prepared 61 drafts of normative acts to ensure their compliance with existing laws. These normative acts were published electronically on the website of the Legislative Herald of Georgia.

It is also significant that the NBG, in cooperation with the EBRD, continued its project related to the development of the derivatives market in Georgia. The project aims to create a relevant legal and business environment for the development of money markets. One of the objectives of the project is to ensure the full compliance of current legislation with internationally recognized standards. The initiative of the NBG, the Ministry of Finance and the Ministry of Economy and Sustainable Development to reform the taxation of agreements on financial instruments was ongoing throughout the reporting period. This project is being implemented with the assistance of the IMF. Its objective is to implement a transparent tax policy for financial instruments in Georgia that will comply with international best practices. Some of the

changes envisaged by the project have already been adopted in the Tax Code of Georgia.

In 2017, the NBG was also focused on implementing the legislative reform of capital markets under obligations envisaged by the EU-Georgia Association Agreement. After the conclusion of this project, legal provisions will be in compliance with the EU directives. This project is being implemented with the assistance of the Asian Development Bank (ADB).

In order to fulfil the obligations of the EU-Georgia Association Agreement, in accordance with EU Regulation 2015/847, the NBG prepared a draft decree on information accompanying the transfer of funds. Furthermore, to implement another obligation derived from the EU-Georgia Association Agreement, in compliance with the 2002/87/EC directive, the NBG prepared a new draft law on the supplementary supervision of financial conglomerates.

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STATISTICAL ACTIVITY



During 2017, the NBG has continued its activities to implement new statistical products.

After the implementation of the new “SebStat” statistical information system, data quality and the timeliness of reporting increased significantly. In 2017, up to 12 million records were entered into the database, which is almost 10 times more than the amount of records received annually before the implementation of the statistical information system. Consequently, more than 10,000 time series were processed every month. A significant part of these time series have been published on the NBG website, while other parts were provided to international organizations, representatives of academia, the business sector, and other data users.

During the reference period, data users’ interest towards the NBG’s statistical information has significantly increased – the interested parties include the central banks of other countries and various think tanks.

Activities for enhancing and completing the statistical business process continued during the year in cooperation with the interested departments of the NBG. The focus has been on developing a data warehouse and automatizing the process of data collection, processing, quality control and dissemination. In particular, in 2017 methodological and practical work was undertaken for enhancing payment card statistics and for a fundamental reform for cash flow and bank transfer statistics. Based on this, commercial banks continue to enhance and improve their statistical systems.

During the reference period, significant work was undertaken for the further development of financial statistics. In particular, revaluation accounts (for deposits and loans) for the central bank, other depository corporations and other financial corporations were elaborated, and a trial version of a balance sheet for all financial instruments and sectors by currency was developed. During this period, a financial account (stocks, revaluations, flows) for the financial sector was also developed. According to the evaluation of the International Monetary Fund mission, this account is complete and the NBG can make it accessible for all data users.

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FINANCIAL STATEMENTS

FOR THE YEAR ENDED
31 DECEMBER 2017



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NATIONAL BANK OF GEORGIA

STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

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 2017, 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 of Georgia;
- 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 2017 were authorized for issue on 16 April 2018 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



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Independent Auditors' Report

To the Council of the National Bank of Georgia

Opinion

We have audited the financial statements of National Bank of Georgia (the "Bank"), which comprise the statement of financial position as at 31 December 2017, 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 2017, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Bank in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Georgia, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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.



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
16 April 2018

NATIONAL BANK OF GEORGIA

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-17	Year ended 31-Dec-16
Interest income from international reserves			
Cash and cash equivalents		12,944	4,445
Trading securities		5,708	3,357
Investments available-for-sale		49,067	28,707
Other		2,657	400
		<u>70,376</u>	<u>36,909</u>
Interest income from monetary policy operations			
Due from resident financial institutions		123,045	63,716
Investments available-for-sale		15,177	13,269
		<u>138,222</u>	<u>76,985</u>
Other interest income			
Investments held-to-maturity		27,116	37,982
Due from resident financial institutions		169	-
Other		15	28
		<u>27,300</u>	<u>38,010</u>
Total interest income		<u>235,898</u>	<u>151,904</u>
Interest expense from monetary policy operations			
Debt securities issued		(6,544)	(18,283)
Due to resident financial institutions		(32,488)	(15,362)
		<u>(39,032)</u>	<u>(33,645)</u>
Other interest expenses			
Due to resident financial institutions		(471)	-
Due to International Monetary Fund		(4,103)	(605)
Total interest expense		<u>(43,606)</u>	<u>(34,250)</u>
NET INTEREST INCOME		<u>192,292</u>	<u>117,654</u>
Recovery of impairment on other assets	17	104	80
NET INTEREST INCOME AFTER IMPAIRMENT PROVISION		<u>192,396</u>	<u>117,734</u>
Net (losses)/gains from foreign currencies:			
-translation differences		(30,653)	380,937
-dealing		643	(457)
Fee and commission income	4	1,839	1,651
Fee and commission expense	4	(1,816)	(1,492)
Net (loss)/gain on realised available-for-sale financial assets		(1,456)	3,875
Net gain/(loss) on financial instruments at fair value through profit or loss		330	(2,888)
Net unrealized (loss)/gain on financial instruments at fair value through profit or loss		(256)	1,464
Other income	5	1,918	1,321
NON-INTEREST (EXPENSE)/INCOME		<u>(29,451)</u>	<u>384,411</u>

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 2017 (CONTINUED)

(in thousands of Georgian Lari)

		Year ended	Year ended
	Notes	31-Dec-17	31-Dec-16
Personnel expenses	6	(18,004)	(15,057)
General and administrative expenses	6	(7,098)	(6,488)
Money printing expenses		(6,213)	(3,782)
Depreciation and amortization	6	(3,993)	(4,550)
Loss on disposal of property and equipment		-	(49)
Other expenses		(14)	(112)
NON-INTEREST EXPENSES		(35,322)	(30,038)
PROFIT FOR THE YEAR		127,623	472,107
Other comprehensive income			
<i>Items that are or may be reclassified subsequently to profit or loss:</i>			
Net unrealized (loss)/gain on revaluation of available-for-sale investments during the year		(6,302)	1,179
Net realized gain on available-for-sale investments reclassified to profit or loss		1,094	16,938
Total other comprehensive (loss)/income		(5,208)	18,117
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		122,415	490,224

The financial statements as set out on pages 206 to 253 were approved by management on 16 April 2018 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 2017

(in thousands of Georgian Lari)

	Notes	31-Dec-17	31-Dec-16
ASSETS:			
Foreign currency assets			
International reserves			
Cash and cash equivalents	7	1,589,656	1,543,384
Special Drawing Rights holdings with the International Monetary Fund	9	534,253	512,592
Assets related to derivative instruments	10	657	-
Trading securities	11	655,807	671,242
Investments available-for-sale	12	5,097,929	4,568,521
Other foreign currency assets			
Other assets	17	6	205
		7,878,308	7,295,944
National currency assets			
Monetary policy instruments			
Due from resident financial institutions	8	1,590,936	1,756,140
Investments available-for-sale	12	155,198	143,660
Other national currency assets			
Due from resident financial institutions	8	221,303	-
Investments held-to-maturity	13	321,952	362,804
Investment property	14	2,042	2,500
Property and equipment	15	53,291	52,320
Intangible assets	16	2,116	437
Other assets	17	6,521	6,433
		2,353,359	2,324,294
TOTAL ASSETS		10,231,667	9,620,238

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 2017 (CONTINUED) (in thousands of Georgian Lari)

	Notes	31-Dec-17	31-Dec-16
LIABILITIES AND EQUITY:			
LIABILITIES:			
Foreign currency liabilities			
Monetary policy instruments			
Due to resident financial institutions	18	2,818,536	2,766,331
Other foreign currency liabilities			
Due to resident financial institutions	18	312,177	133,603
Due to the Ministry of Finance	19	434,263	250,708
Due to the International Monetary Fund	9	753,021	527,299
Other liabilities	17	2,744	1,954
		4,320,741	3,679,895
National currency liabilities			
Money issued in circulation	20	3,308,869	2,999,323
Monetary policy instruments			
Debt securities issued	21	79,284	197,240
Due to resident financial institutions	18	438,778	510,973
Other national currency liabilities			
Due to the Ministry of Finance	19	541,489	747,074
Due to customers		1,371	2,711
Due to the International Monetary Fund	9	1,795	1,695
Other liabilities	17	8,231	7,633
		4,379,817	4,466,649
TOTAL LIABILITIES		8,700,558	8,146,544
EQUITY:			
Capital	22	15,000	15,000
Reserve fund	22	165,180	141,648
Retained earnings	22	70,000	-
Foreign currency revaluation reserve	22	1,280,123	1,310,776
Revaluation reserve of investments available-for-sale	22	(402)	4,806
Other revaluation reserve	22	1,208	1,464
TOTAL EQUITY		1,531,109	1,473,694
TOTAL LIABILITIES AND EQUITY		10,231,667	9,620,238

The financial statements as set out on pages 206 to 253 were approved by management on 16 April 2018 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 2017

(in thousands of Georgian Lari)

	Capital	Reserve fund	Foreign currency revaluation reserve	Other revaluation reserve	Revaluation reserve of investments available-for-sale	Retained earnings	Total equity
1-Jan-16	15,000	51,942	929,839	-	(13,311)	-	983,470
Total comprehensive income							
Profit for the year	-	-	-	-	-	472,107	472,107
Other comprehensive income							
<i>Items that are or may be reclassified subsequently to profit or loss:</i>							
Net unrealized gain on revaluation of available-for-sale investments during the year	-	-	-	-	1,179	-	1,179
Net realized gain on available-for-sale investments reclassified to profit or loss	-	-	-	-	16,938	-	16,938
Total other comprehensive income	-	-	-	-	18,117	-	18,117
Total comprehensive income for the year	-	-	-	-	18,117	472,107	490,224
Transactions recorded directly in equity							
Transfer to reserve fund (Note 22)	-	89,706	-	-	-	(89,706)	-
Transfer to foreign currency revaluation reserve (Note 22)	-	-	380,937	-	-	(380,937)	-
Transfer to other revaluation reserve (Note 22)	-	-	-	1,464	-	(1,464)	-
Total transactions recorded directly in equity	-	89,706	380,937	1,464	-	(472,107)	-
31-Dec-16	15,000	141,648	1,310,776	1,464	4,806	-	1,473,694
Total comprehensive income							
Profit for the year	-	-	-	-	-	127,623	127,623
Other comprehensive income							
<i>Items that are or may be reclassified subsequently to profit or loss:</i>							
Net unrealized loss on revaluation of available-for-sale investments during the year	-	-	-	-	(6,302)	-	(6,302)
Net realized gain on available-for-sale investments reclassified to profit or loss	-	-	-	-	1,094	-	1,094
Total other comprehensive loss	-	-	-	-	(5,208)	-	(5,208)
Total comprehensive income for the year	-	-	-	-	(5,208)	127,623	122,415
Transactions recorded directly in equity							
Transfer to the Ministry of Finance of Georgia (Note 22)	-	(65,000)	-	-	-	-	(65,000)
Transfer to reserve fund (Note 22)	-	88,532	-	-	-	(88,532)	-
Transfer to foreign currency revaluation reserve (Note 22)	-	-	(30,653)	-	-	30,653	-
Transfer to other revaluation reserve (Note 22)	-	-	-	(256)	-	256	-
Total transactions recorded directly in equity	-	23,532	(30,653)	(256)	-	(57,623)	(65,000)
31-Dec-17	15,000	165,180	1,280,123	1,208	(402)	70,000	1,531,109

The financial statements as set out on pages 206 to 253 were approved by management on 16 April 2018 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 2017 (in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-2017	Year ended 31-Dec-2016
CASH FLOWS FROM OPERATING ACTIVITIES:			
Interest received		242,904	166,573
Interest paid		(40,655)	(31,375)
Fees and commissions received		1,839	1,651
Fees and commissions paid		(1,816)	(1,492)
Net (loss)/gain on financial instruments at fair value through profit or loss		(330)	2,888
Net realized gain/(loss) from dealing in foreign currencies		643	(457)
Other income received		2,581	1,271
Personnel expenses paid		(18,004)	(15,057)
Cash paid for printing money		(6,213)	(3,782)
Other general and administrative expenses paid		(7,370)	(6,859)
Net cash inflow from operating activities before changes in operating assets and liabilities		173,579	113,361
<i>Net (increase)/decrease in operating assets:</i>			
Due from resident financial institutions		(56,215)	(687,996)
Special Drawing Rights holdings with the International Monetary Fund		(2,267)	(642)
Assets related to derivative instruments		(657)	3,204
Trading securities		2,402	(31,007)
Other assets		(382)	531
<i>Net increase/(decrease) in operating liabilities:</i>			
Money issued in circulation		312,811	495,591
Due to resident financial institutions		177,374	610,715
Due to the Ministry of Finance		(11,765)	117,001
Due to customers		(1,340)	1,934
Other liabilities		1,354	(295)
Net cash inflow from operating activities		594,894	622,397
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment		(4,608)	(1,155)
Purchase of intangible assets		(1,675)	(81)
Purchase of investments available-for-sale		(8,450,337)	(7,447,250)
Proceeds from redemption of investments available-for-sale		7,878,920	6,819,506
Net cash used in investing activities		(577,700)	(628,980)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Transfer to the Ministry of Finance from the reserve fund		(65,000)	-
Debt securities issued	7	255,499	505,560
Debt securities redeemed	7	(374,145)	(664,145)
Net proceeds from/(payments to) International Monetary Fund	7	200,011	(31,770)
Net cash from/(used) in financing activities		16,365	(190,355)
Effect of exchange rates changes on cash and cash equivalents		12,713	199,161
Net increase in cash and cash equivalents		46,272	2,223
CASH AND CASH EQUIVALENTS, at the beginning of the year	7	1,543,384	1,541,161
CASH AND CASH EQUIVALENTS, at the end of the year	7	1,589,656	1,543,384

The financial statements as set out on pages 206 to 253 were approved by management on 16 April 2018 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

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS

AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017

(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”), which fully replaced the previous law dated 24 October 1995.

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, credit unions, microfinance organizations, money remittance units, payment service providers and payment system operators and currency exchange bureaus and the securities market.

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.

Governance

As at 31 December 2017 and 2016, the members of the Council of the Bank are:

Position	Name
Chairman	Mr. Koba Gvenetadze (Governor)
Member	Mr. Archil Mestvirishvili
Member	Mr. Murtaz Kikoria
Member	Mr. Robert H. Singletary
Member	Mr. Nikoloz Gongliashvili
Member	Mr. Vazha Jankarashvili
Member	Mr. Nikoloz Kavelashvili

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The Bank's main office is located at 2 Sanapiro, Tbilisi, 0114, Georgia. As at 31 December 2017 and 2016 the Bank has one cash service center. The Bank has 398 and 364 personnel as at 31 December 2017 and 2016, 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. For this reason, the economic concepts of international reserves and monetary policy are shown under the captions international reserve and Monetary policy instruments, respectively.

Basis of measurement

These financial statements are prepared on the historical cost basis except that financial instruments at fair value through profit or loss and available-for-sale financial assets 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 has been defined as the functional and presentation currency for the 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 accounting policies set out below are applied consistently to all periods presented in these financial statements, and are applied consistently by the Bank.

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 and Ministry of Finance of Georgia and other financial assets and liabilities. The Bank accounts for its financial instruments in accordance with IAS 39—*Financial Instruments: Recognition and Measurement* and reports these instruments under IFRS 7—*Financial Instruments: Disclosures* and IFRS 13—*Fair Value Measurement*.

The Bank classifies its financial assets in the following categories: at fair value through profit or loss (FVTPL), held-to-maturity (HTM), loans and receivables and available-for-sale (AFS). The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of financial assets at initial recognition.

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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 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.

Fair value measurement principles

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.

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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.

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 amortized 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.

Loans and receivables

In the normal course of business, the Bank maintains loans and deposits for various periods of time with financial institutions. Amounts due from financial institutions and other financial assets are considered in this category. Loans and receivables are non-derivative financial instruments that are not quoted in an active market. They are not entered into with the intention of immediate or short-term resale and are not classified as trading securities or designated as available-for-sale investments. Loans and receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method. Amounts of loans and receivables are carried net of any allowance for impairment losses. Gains and losses are recognised in the statement of profit or loss and other comprehensive income when the loans and receivables are derecognised or impaired, as well as through the amortization process.

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Trading securities

Financial assets at fair value through profit and loss (FVTPL) are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Derivatives are also categorised as held for trading unless they are designated as hedges. The trading portfolio includes part of international reserves managed by external managers – the World Bank and the Bank for International Settlements (“BIS”).

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on re-measurement recognised in profit or loss presented in the net unrealized gain/loss on financial instruments at fair value through profit or loss line item in the statement of profit or loss and other comprehensive income. Fair value is determined in the manner described in Note 26.

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.

Interest rate futures and options positions are classified under IAS 39 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 available-for-sale

Investments available for sale are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. The Bank’s available-for-sale financial assets comprised of Georgian and foreign government, international financial institutions and agency debt securities.

Investments available-for-sale are initially recorded at fair value and subsequently measured at fair value, with such re-measurement recognised in other comprehensive income. Impairment losses, foreign exchange gains or losses on debt financial instruments available-for-sale and interest income accrued using the effective interest method are recognised in the profit or loss.

When the instrument is sold, gains or losses previously recognized as part of the equity are realized, and are transferred to the profit and loss, excluding the effects of the exchange rate difference, which is recorded as stated in the paragraph above.

The Bank uses quoted market prices to determine fair value of the Bank’s investments available-for-sale. The quoted market prices for international securities are provided daily by Bloomberg and are based on current bid prices. In Management’s opinion, such prices reflect reasonably the value of investments in international securities, considering the current market information and the accounting policies established by the Bank’s Management.

If the market for investments is not active, the Bank establishes fair value by using discounted cash flow analysis and other relevant valuation techniques. Valuation techniques include using recent arm’s length market transactions between knowledgeable, willing parties, reference to the current fair value of another instrument that is substantially the same and discounted cash flow analysis, making maximum use of market inputs and relying as little as possible on entity-specific inputs.

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Investments held-to-maturity

Investments held-to-maturity (HTM) are debt securities with determinable or fixed payments and fixed maturity, and that the Bank has a positive intent and ability to hold them to maturity. Such securities are carried at amortised cost using the effective interest method, less any allowance for impairment

Any premium or discount of the instruments representative of debt classified as held-to-maturity investments is recognized with the calculation of the amortized cost by applying the effective interest rate method, recognizing the accrued interest in the "Investment held-to-maturity" 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. Georgian Government bonds are classified as HTM.

Allowance for impairment losses on financial assets

At the end each reporting date, the Bank assesses whether any objective evidence of impairment for its financial assets exists and estimates the impact on related future cash flows, in order to determine whether the financial assets are impaired.

(a) Financial assets carried at amortised cost

The Bank assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. A financial asset is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that have occurred after the initial recognition of the asset (a loss event) and that loss event has an impact on the estimated future cash flows of the financial asset, that can be estimated reliably. The factors the Bank evaluates in determining the presence of objective evidence of occurrence of an impairment loss include:

- information on credit rating of the debtor or issuer;
- liquidity of the debtor or issuer;
- solvency of the debtor or issuer;
- business risks and financial risks;
- levels and tendencies of default on obligations on similar financial assets;
- national and local economic tendencies and conditions; and
- fair value of the security and guarantees.

These and other factors individually or in the aggregate represent, to a great extent, objective evidence of recognition of the impairment loss on the financial asset or group of financial assets. If there is objective evidence that an impairment loss has been incurred on financial assets measured at amortized cost, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the original effective interest rate of the financial asset.

The carrying amount of the asset is reduced and the amount of the loss is recognised in profit or loss. If a loan or receivable has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, such as improved credit rating, the previously recognised impairment loss is reversed and is recognized in profit or loss.

(b) Financial assets carried at fair value

For available-for-sale financial assets, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the assets are impaired. If any objective evidence of impairment exists, the cumulative loss, measured as the difference between the acquisition cost and current fair value, less any impairment loss on the financial asset previously recognised in profit or loss, is removed from other comprehensive income and recognised in profit or loss. If, in subsequent periods, the fair value

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of a debt instrument classified as available-for sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed through profit or loss. However, any subsequent recovery in the fair value of an impaired available-for-sale security is recognised in other comprehensive income.

Financial liabilities

Financial liabilities measured at amortized costs

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 agreement

Securities lent under automatic securities lending agreement 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 available-for-sale.

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.

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 commemorative coins and gold bars are recognized and subsequently measured according to IAS 2-*Inventories* requirements. Gold commemorative 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 commemorative 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

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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.

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.

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 exempted from all taxes and other levies.

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Contingencies

Contingent liabilities are not recognised in the statement of financial position but are disclosed unless the possibility of any outflow in settlement is remote. A contingent asset is not recognised in the statement of financial position but disclosed when an inflow of economic benefits is probable.

Recognition of income and expense

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Bank and the revenue can be reliably measured.

Interest and similar income and expense

For all financial instruments measured at amortised cost and interest bearing securities classified as trading and available for sale, interest income or expense is recorded at the effective interest rate, which is the rate that exactly discounts estimated future cash payments or receipts 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.

If the recorded value of a financial asset or a group of similar financial assets has been reduced due to an impairment loss, interest income continues to be recognised using the original effective interest rate applied to the new carrying amount.

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 revenue 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.

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.

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Rates of exchange

The exchange rates used by the Bank in the preparation of the financial statements as at year-end are as follows:

	31-Dec-17	31-Dec-16
GEL/1 US Dollar	2.5922	2.6468
GEL/1 Euro	3.1044	2.7940
GEL/1 Australian Dollar	2.0266	1.9128
GEL/1 Canadian Dollar	2.0683	1.9636
GEL/1 Special Drawing Right	3.6916	3.5582

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

If a non-derivative financial asset classified as held for trading is no longer held for the purpose of selling in the near term, it may be reclassified out of the fair value through profit or loss category in one of the following cases:

- a financial asset that would have met the definition of loans and receivables above may be reclassified to loans and receivables category if the Bank has the intention and ability to hold it for the foreseeable future or until maturity;
- other financial assets may be reclassified to available-for-sale or held-to-maturity categories only in rare circumstances.

A financial asset classified as available-for-sale that would have met the definition of loans and receivables may be reclassified to loans and receivables category if the Bank has the intention and ability to hold it for the foreseeable future or until maturity.

Financial assets are reclassified at their fair value on the date of reclassification. Any gain or loss already recognised in profit or loss is not reversed. The fair value of the financial asset on the date of reclassification becomes its new cost or amortised cost, as applicable. No reclassification of financial assets has been made as of reporting period.

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 estimation uncertainty and critical judgments regarding fair valuation of financial instruments is described in the Note 26.

Application of new and revised International Financial Reporting Standards (IFRSs)

IFRS 9 Financial instruments

IFRS 9 *Financial instruments*, published in July 2014, replaces the existing guidance in IAS 39 *Financial Instruments: Recognition and Measurement*, and includes requirements for classification and measurement of financial instruments, impairment of financial assets and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.

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In October 2017, the International Accounting Standards Board (IASB) issued *Prepayment Features with Negative Compensation (Amendments to IFRS 9)*. The amendments are effective for annual periods beginning on or after 1 January 2019, with early adoption permitted.

The Bank will apply IFRS 9 as issued in July 2014 initially on 1 January 2018 and will early adopt the amendments to IFRS 9 on the same date.

Based on assessments undertaken to date, the bank has assessed the impact of IFRS 9 on the bank's financial statements as follows:

(i) **Classification and measurement**

IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. The standard eliminates the existing IAS 39 categories of held-to-maturity, loans and receivables and available-for-sale. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are not separated. Instead, the whole hybrid instrument is assessed for classification. Equity investments are measured at fair value.

IFRS 9 largely retains the existing requirements in IAS 39 for the classification of financial liabilities.

Impact assessment

The standard will affect the classification and measurement of financial assets held as at 1 January 2018 as follows:

Classification:

International reserves:

International reserves of the Bank consist of funds managed under the World Bank RAMP held on behalf of the Bank that as at 31 December 2017 are classified as trading securities and funds managed internally that as at 31 December 2017 are classified as available-for-sale investments. At the reporting date the Bank is in the process of finalizing analysis regarding classification of the international reserves according to IFRS 9. The Bank estimates that change of classification of the international reserves according to IFRS 9 will not have material impact on value of assets or equity of the Bank.

Monetary policy instruments:

Lending to commercial banks are classified as loans and receivables as at 31 December 2017. Based on the Bank's estimation, the business model for this type of instruments is to collect the contractual cash flows from the credit facility and not sell the financial assets. Assets, which fall into this business model, will be accounted at amortized cost, provided that cash flows relating to the assets comprise SPPI. Accordingly, these financial assets will be subsequently measured at amortized cost upon the application of IFRS 9.

Marketable government securities are classified as investments available-for-sale as at 31 December 2017. Based on the Bank's estimation, the business model for this type of instruments is to collect the contractual cash flows from the credit facility and sell the financial assets. Assets, which fall into this business model, will be accounted at FVOCI, provided the cash flows relating to the assets comprise SPPI. Accordingly, these financial assets will be subsequently measured at FVOCI upon the application of IFRS 9.

Other Financial Assets:

Non-marketable government bonds are classified as investments held-to-maturity as at 31 December 2017. The instrument meets the amortized cost accounting definition, provided the cash flows relating to the assets comprise SPPI. Thus, non-marketable government bonds will be subsequently measured at amortised cost upon the application of IFRS 9.

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Other financial assets are measured at amortized cost as at 31 December 2017. These financial assets include trade receivables and loans to employees, which represent non-tradeable financial assets objective of which is to collect the contractual cash flows, comprising principal and interests, and hold the assets up to maturity. The classification criteria meets the amortized cost accounting definition, which is the same as the current accounting treatment.

Measurement:

For all financial assets classified at FVOCI, a gain or loss on a financial asset will be recognised in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses, until the financial asset is derecognised or reclassified. When the financial asset is derecognised the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment. For financial assets classified at FVPL, all gains or losses will be recognised in profit or loss, unless other classification requirements are applied. All other financial assets will be carried at Amortised Cost with gains or losses recognized in profit or loss when the financial asset is derecognised.

(ii) Impairment

IFRS 9 replaces the 'incurred loss' model in IAS 39 with an 'expected credit loss' model. The new impairment model applies to financial assets measured at amortised cost and FVOCI, lease receivables, certain loan commitments and financial guarantee contracts. The new impairment model generally requires to recognise expected credit losses in profit or loss for all financial assets, even those that are newly originated or acquired. Under IFRS 9, impairment is measured as either expected credit losses resulting from default events on the financial instrument that are possible within the next 12 months ('12-month ECL') or expected credit losses resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL'). The initial amount of expected credit losses recognized for a financial asset is equal to 12-month ECL (except for certain trade and lease receivables, and contract assets, or purchased or originated credit-impaired financial assets). If the credit risk on the financial instrument has increased significantly since initial recognition, the loss allowance is measured at an amount equal to lifetime ECL.

Financial assets for which 12-month ECL is recognized are considered to be in stage 1; financial assets that have experienced a significant increase in credit risk since initial recognition, but are not credit-impaired are considered to be in stage 2; and financial assets that are credit-impaired are considered to be in stage 3.

Measurement of expected credit losses is required to be unbiased and probability-weighted, should reflect the time value of money and incorporate reasonable and supportable information that is available without undue cost or effort about past events, current conditions and forecasts of future economic conditions. Under IFRS 9, credit losses are recognised earlier than under IAS 39. In general, the impairment model under IFRS 9 will result in an increased impairment allowance, since all financial assets will be assessed for at least 12-month ECL and at the same time, the population of financial assets to which lifetime ECL applies is likely to be larger than the population with objective evidence of impairment identified under IAS 39.

Impact assessment

With regards to the financial assets managed under international reserves, which will be subject to impairment assessment under IFRS 9, the Bank considers that they have low credit risk given their strong external credit rating and the Bank's strict investment guidelines, hence, the practical expedient option will be used for assessing a significant increase in credit risk and therefore the Bank will recognise the 12-month expected credit loss on these assets based on provision matrix used for measuring ECL as allowed by IFRS 9 under the practical expedient option. In relation to financial instruments under monetary policy operations, the Bank does not anticipate using the practical expedient option.

In general, the Bank anticipates that application of the expected credit loss model of IFRS 9 will result in earlier recognition of credit losses for the respective items and will increase the amount of loss allowance recognized for these items.

Transition to the expected credit loss model as per IFRS 9 is not expected to have a material effect on the Bank's financial statements. The Bank does not expect to recognise expected credit losses exceeding 0.02% of total assets, based on the assessments of financial assets as at 31 December 2017.

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(iii) Hedge accounting

The Bank does not anticipate that the application of IFRS 9 hedge accounting requirements will have a material impact on its financial statements.

(iv) Transition

The classification and measurement and impairment requirements are generally applied retrospectively (with some exemptions) by adjusting the opening retained earnings and reserves at the date of initial application, with no requirement to restate comparative periods.

IFRS 9 is effective for annual reporting periods beginning on or after 1 January 2018. Early adoption of the standard is permitted. The Bank has not adopted the standard earlier. The Bank will apply the new rules retrospectively from 1 January 2018, with the practical expedients permitted under the standard. Comparatives for 2017 will not be restated.

Other pronouncements

Various *Improvements to IFRS* are dealt with on a standard-by-standard basis.

All amendments, which result in accounting changes for presentation, recognition or measurement purposes, will come into effect not earlier than 1 January 2018 except for amendments in IAS 7 – *Statement of Cash Flows* and IAS 12- *Income Taxes* which are effective for annual periods beginning on or after 1 January 2017.

IAS 7-*Statement of Cash flows* clarify that entities shall provide disclosures that enable users of financial statements to evaluate changes in liabilities from financial activities. To satisfy the new disclosure requirements, Bank has presented reconciliation between the opening and closing balances for liabilities with changes arising from financing activities in the note 7 below.

IAS 12- *Income Taxes* is not applicable for the Bank as its activities and operations are exempted from all taxes and other levies according to the Law.

For other pronouncements, which come into effect starting from 1 January 2018 or hereinafter, Bank has not yet analysed the likely impact of the improvements on its financial position or performance.

4. FEE AND COMMISSION INCOME AND EXPENSE

Fee and commission income and expense comprise:

	Year ended 31-Dec-17	Year ended 31-Dec-16
Fee and commission income:		
Funds transfer	1,826	1,641
Other	13	10
Total fee and commission income	1,839	1,651
Fee and commission expense:		
Fees paid to external manager	(1,018)	(964)
Custodian and Settlement Fees	(467)	(495)
Cash operations	(331)	(33)
Total fee and commission expense	(1,816)	(1,492)

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

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5. OTHER INCOME

Other income comprises:

	Year ended 31-Dec-17	Year ended 31-Dec-16
Gain from the sale of investment property	1,016	-
Revenue from grant received	9	624
Other	893	697
Other income	1,918	1,321

6. OPERATING EXPENSES

Operating expenses comprise:

	Year ended 31-Dec-17	Year ended 31-Dec-16
Salaries and bonuses	16,803	14,131
Paid vacation and sick leave	1,201	926
Total personnel expenses	18,004	15,057
Subscription to information services	1,634	1,515
Software maintenance fees	906	766
Social benefit expenses	844	636
Utilities	766	736
Repairs and maintenance	368	324
Personnel training	319	197
Business travel and related expenses	298	356
Security	293	305
Legal and consultancy	225	317
Fuel expenses	227	177
Other	1,218	1,159
Total general and administrative expenses	7,098	6,488
Depreciation charge (Notes 14, 15)	3,703	3,658
Amortization charge (Note 16)	290	892
Total depreciation and amortization	3,993	4,550

7. CASH AND CASH EQUIVALENTS

Cash and cash equivalents as at 31 December 2017 and 2016 comprise:

	31-Dec-17	31-Dec-16
Cash on hand in foreign currencies	76,270	364,876
Current accounts	231,498	270,290
Time deposits with credit institutions up to 90 days	1,281,888	908,218
Total cash and cash equivalents	1,589,656	1,543,384

No cash and cash equivalents are impaired or past due.

As at 31 December 2017 and 2016, GEL 1,490,893 thousand and GEL 1,171,173 thousand, respectively, were placed in current accounts and time deposits up to ninety days with eleven (nine in 2016) internationally recognised banks and central banks from the Organization of Economic Co-operation and Development member countries (OECD).

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As at 31 December 2017 and 2016, annual interest rate range of time deposits with financial institutions up to 90 days was 0.09%-2.10% and 0.73%-1.75%, respectively.

Reconciliation of movements of liabilities to cash flows arising from financing activities:

	Note	31-Dec-2016	Interest Paid	Cash	Non-Cash			31-Dec-2017
				Net Proceeds from financing activities	Accrued Interest	Translation Differences	Other	
Liabilities arising from financing activities:								
Debt securities issued	21	197,240	(5,854)	(118,646)	6,544	-	-	79,284
Due to the International Monetary Fund	9	528,994	(4,012)	200,011	4,103	25,814	(94)	754,816

8. DUE FROM RESIDENT FINANCIAL INSTITUTIONS

Due from resident financial institutions as at 31 December 2017 and 2016 comprise:

	31-Dec-17	31-Dec-16
Due from resident financial institutions under monetary policy instruments		
Refinancing loans	1,000,608	1,300,472
One-month open market instruments	400,242	400,655
Overnight loans	190,086	55,013
Total due from resident financial institutions under monetary policy instruments	1,590,936	1,756,140
Due from resident financial institutions, other		
Loans issued under the Larisation program	221,303	-
Total Due to resident financial institutions, other	221,303	-

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 the Bank supplies short-term liquidity to Georgia's banking system when needed.

Loans issued under the Larisation program represent 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.

As at 31 December 2017 and 2016, the Bank had a concentration of refinancing loans of GEL 963,585 thousand due from three resident commercial banks at annual interest rates of 7.38%-7.43%, and GEL 1,240,450 thousand due from three resident commercial banks at annual interest rates of 6.57%-6.65%, respectively.

As at 31 December 2017 and 2016 the concentration of one-month open market operations was GEL 367,222 thousand due from three resident commercial banks at annual interest rates of 7.34%-7.37%, and GEL 385,630 thousand due from three resident commercial banks at annual interest rates of 6.57%-6.71%, respectively.

As at 31 December 2017 the concentration of loans issued under the Larisation program was GEL 220 513

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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 January 1, 2018, denominated in Lari, but excluding debt securities issued by the commercial banks operating in Georgia and debt securities issued by the legal entities related to those commercial banks and held by the latter; 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. In special cases defined by the Law, the Council of the Bank can grant the last resort loan without collateral. The Bank has the first lien on borrowers' assets according to the Law.

As at 31 December 2017 and 2016 types and fair values of financial assets pledged for amounts due from resident financial institutions are:

	<u>31-Dec-17</u>	<u>31-Dec-16</u>
Government securities (treasury bills/notes)	526,432	1,282,975
Loan portfolio of commercial banks	514,883	298,309
Debt securities issued by the Bank (certificates of deposits)	-	15,284
Bonds issued by International Financial Institutions, denominated in GEL:		
European Bank for Reconstruction and Development (EBRD)	385,000	132,000
Black Sea Trade and Development Bank (BSTDB)	108,000	108,000
Asian Development Bank (ADB)	135,500	64,000
International Finance Corporation (IFC)	108,340	27,700
Corporate bonds	3,800	4,450
	<u>1,781,955</u>	<u>1,932,718</u>
Deposits and loan portfolio of commercial banks pledged for loans issued under the Larisation program	275,058	-
	<u>2,057,013</u>	<u>1,932,718</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-17	31-Dec-16
Assets:		
Special Drawing Rights (SDR) holdings	534,253	512,592
Liabilities:		
IMF current accounts		
Current account # 1	1,785	1,663
Current account # 2	10	32
	1,795	1,695
Borrowings from the IMF		
Extended Fund Facility (EFF)	220,951	-
Poverty Reduction and Growth Facility (PRGF)	-	14,882
General SDR allocation	411,901	396,687
Special SDR allocation	120,169	115,730
	753,021	527,299
Total due to the IMF	754,816	528,994
Off-balance sheet balances:		
IMF Quota	713,975	665,269
Security held in custody in respect of IMF quota and as collateral of IMF granted facilities	(1,170,228)	(916,528)

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 allocation in 2017 and 2016 is 0.244%-0.747% and 0.050%-0.273%, 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 220,951 thousand as at 31 December 2017. 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 2017 SDR 60 million was used out of it by the Bank. Repayments are projected to start in 2021 and the loan is projected to be fully covered by 2027. 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 0.743% at 31 December 2017.

All facilities received from the IMF are denominated in SDR.

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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 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 2017 and 2016 is 0.244%-0.747% and 0.050%-0.273%, 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 January 26, 2016 as a result of the 14'th 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 713,975 thousand in respect of the IMF Quota and GEL 456,253 thousand held as collateral for the IMF granted facilities (totally GEL 1,170,228 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-17	31-Dec-17	31-Dec-16	31-Dec-16
Interest rate futures				
Futures margin	646	-	-	-
Interest futures assets	-	23,848	-	-
Interest futures liabilities	(2)	(178,862)	-	-
Net interest futures position	(2)	(155,014)	-	-
Options on futures				
Put option assets	13	259,220	-	-
Put option liabilities	-	(259,220)	-	-
Net options on futures	13	-	-	-
Net assets related to derivative instruments	657	(155,014)	-	-

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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.

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11. TRADING SECURITIES

Trading securities comprise:

	31-Dec-17	31-Dec-16
Funds managed under the World Bank RAMP* program		
Government securities		
US Treasury Notes	282,389	233,255
State of Saxony-Anhalt, Magdeburg, Germany	11,468	-
State of North Rhine-Westphalia, Duesseldorf, Germany	10,387	-
Province of Quebec Canada, Quebec, Canada	4,151	-
	308,395	233,255
Supranational securities		
Asian Development Bank, Manila, Philippines	10,386	10,606
African Development Bank, Abidjan, Ivory Coast	5,197	5,300
Eurofirma, Basel, Switzerland	4,421	-
European Investment Bank, Luxembourg	-	16,186
	20,004	32,092
Agency securities		
Kreditanstalt fuer Wiederaufbau, Frankfurt, Germany	38,844	24,126
Caisse D'Amortissement de la Dette Sociale, Paris, France	24,681	19,650
Kommunalbanken AS, Oslo, Norway	20,788	21,192
FMS Wertmanagement, Munich, Germany	15,583	24,914
Neder Waterschapsbank, The Hague, The Netherlands	14,278	10,614
Bank Nederlandse Gemeenten, The Hague, The Netherlands	12,924	19,892
Landeskreditbank Baden-Wuerttemberg Foerderbank, Germany	11,744	25,285
Toronto, Province of Ontario Canada	10,430	-
NRW Bank, Duesseldorf, Germany	10,259	15,978
Kommuninvest I Sverige AB, Orebro, Sweden	8,296	5,305
Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden NV, The Hague, The Netherlands	5,220	5,563
Svensk Exportkredit AB, Stokholm, Sweden	5,219	21,508
Caisse Des Depots et Consignations, Paris, France	5,209	21,310
Nordic Investment Bank, Helsinki, Finland	5,198	5,302
Municipality Finance PLC, Helsinki, Finland	5,183	7,429
Erste Abwicklungsanstalt, Dusseldorf, Germany	2,079	12,742
Landwirtschaftliche Rentenbank, Frankfurt, Germany	-	12,065
Kommunekredit, Copenhagen, Denmark	-	10,677
British Columbia, Canada	-	3,715
State of North Rhine-Westphalia, Duesseldorf, Germany	-	5,291
	195,935	272,558
Total funds managed under the World Bank RAMP program	524,334	537,905
Funds managed by BIS**		
BISIP_K	131,473	133,337
Total trading securities	655,807	671,242

* Funds managed under the RAMP program corresponds to the outsourcing of the management of a portion of the international reserves to the World Bank treasury specialized in portfolio management (external manager), with the main objective of transferring know-how and providing consulting services to the Bank. The manager receives a management fee, established in the contract, and is evaluated based on the net asset value of the transferred funds. The assets within the external manager portfolio are held on behalf of the Bank, under the responsibility of a global custodian selected for the purpose of investing in and reinvesting the trading securities. The Bank may, from time to time, by notice to the external manager, make additions to, or reductions of, the investment amount.

** The fund managed by the Bank for International Settlements (BIS) 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

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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.

Analysis of interest rates (coupon) and maturities on trading securities:

	31-Dec-17		31-Dec-16	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Government securities	0.125%-1.77%	2018-2020	0.5%-1.0%	2017
Supranational securities	1.41%-1.54%	2018-2019	0.875%-1.625%	2017-2018
Agency securities	0.875%-4.63%	2018-2020	0.625%-5.125%	2017-2020

No financial assets at fair value through profit or loss are past due or impaired.

12. INVESTMENTS AVAILABLE-FOR-SALE

	31-Dec-17	31-Dec-16
Investments available-for-sale in foreign currency:		
Government securities		
US Treasury Notes	3,379,696	3,114,646
Australian Treasury Bills	525,543	493,658
Canada Government Bond	208,371	187,850
Province of Quebec, Canada	57,949	-
French Treasury Note	20,347	18,483
Finland Government Bond	-	2,852
Austria Government Bond	-	4,389
	4,191,906	3,821,878
Supranational securities		
European Investment Bank	76,130	26,497
EUROFIMA, Basel, Switzerland	44,213	-
IBRD World Bank, Washington, US	31,172	-
International Finance Corporation	28,516	28,985
African Development Bank	-	69,052
Inter-American Development Bank	-	48,568
	180,031	173,102
Agency securities		
NRW Bank, Duesseldorf, Germany	178,010	60,885
Bank Nederlandse Gemeenten, The Hague, The Netherlands	163,781	66,332
Neder Waterschapsbank, The Hague, The Netherlands	80,790	61,074
Erste Abwicklungsanstalt, Dusseldorf, Germany	80,393	-
Landeskreditbank Baden-Wuerttemberg Foerderbank, Germany	75,080	178,701
Kommunalbanken AS, Oslo, Norway	59,474	-
Kreditanstalt fuer Wiederaufbau, Frankfurt, Germany	56,932	70,752
Kommuninvest I Sverige AB, Orebro, Sweden	15,612	65,484
Municipality Finance PLC, Helsinki, Finland	10,375	-
Toronto, Province of Ontario, Canada	2,999	5,007
Landwirtschaftliche Rentenbank, Frankfurt, Germany	2,546	4,072
Kommunekredit, Copenhagen, Denmark	-	37,942
New South Wales Treasury Corporation, Australia	-	23,292
	725,992	573,541
Total investments available-for-sale in foreign currency	5,097,929	4,568,521
Marketable government securities in national currency		
Georgian Government Bonds	155,198	143,660
Total investments available-for-sale in national currency	155,198	143,660

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Analysis of interest rates (coupon) and maturities on investment available-for-sale:

	31-Dec-17		31-Dec-16	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
In foreign currency:				
Government Bonds	0.625%-5.5%	2018-2020	0.25%-6.0%	2017-2020
Supranational Bonds	1.0%-6.5%	2018-2020	0.875%-3.75%	2017-2020
Agency Bonds	0.875%-6.25%	2018-2021	0.625%-6.25%	2017-2019
In national currency:				
Government Bonds	7.3%-14.375%	2018-2022	7.3%-14.375%	2017-2021

No financial assets available for sale are past due or impaired.

13. INVESTMENTS HELD-TO-MATURITY

	31-Dec-17		31-Dec-16	
	Carrying value	Nominal value	Carrying value	Nominal value
Georgian Government securities				
Georgia Government Bonds	321,952	320,846	362,804	360,846
Total investments held-to-maturity in national currency	321,952	320,846	362,804	360,846

Analysis of interest rate (coupon) and maturity of the held to maturity investment:

	31-Dec-17		31-Dec-16	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Georgian Government Bonds	7.31%	2018- 2025	11.51%	2017- 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 available-for-sale financial instruments (Note 12). Interest rate of the bond is subject to annual repricing considering market rates.

No financial assets at held-to-maturity are past due or impaired.

14. INVESTMENT PROPERTY

	2017	2016
Cost		
As at 1 January	2,632	2,632
Disposals	(414)	-
As at 31 December	2,218	2,632
Accumulated depreciation		
As at 1 January	(132)	(88)
Depreciation charge	(44)	(44)
As at 31 December	(176)	(132)
Net book value as at 31 December	2,042	2,500

Investment property includes a building used by a government agency under the usufruct agreement and with currently undetermined use. The building is held for capital appreciation purposes.

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15. PROPERTY AND EQUIPMENT

	Land and buildings	Computers, office equipment and fixtures	Vehicles and other	Total
At initial cost:				
1-Jan-2016	51,791	7,162	15,263	74,216
Additions	7	1,127	21	1,155
Disposals	(43)	(75)	(13)	(131)
31-Dec-16	51,755	8,214	15,271	75,240
Additions	152	1,467	3,011	4,630
Disposals	-	(234)	(4)	(238)
31-Dec-17	51,907	9,447	18,278	79,632
Accumulated depreciation:				
1-Jan-16	(3,149)	(4,354)	(11,885)	(19,388)
Depreciation charge	(1,033)	(986)	(1,595)	(3,614)
Disposals	1	69	12	82
31-Dec-16	(4,181)	(5,271)	(13,468)	(22,920)
Depreciation charge	(1,031)	(1,081)	(1,547)	(3,659)
Disposals	-	234	4	238
31-Dec-17	(5,212)	(6,118)	(15,011)	(26,341)
Net book value:				
As at 31 December 2017	46,695	3,329	3,267	53,291
As at 31 December 2016	47,574	2,943	1,803	52,320

16. INTANGIBLE ASSETS

	Software	Licenses	Total
At cost:			
1-Jan-16	7,035	303	7,338
Additions	79	2	81
Disposals	-	(2)	(2)
31-Dec-16	7,114	303	7,417
Additions	927	1,042	1,969
31-Dec-17	8,041	1,345	9,386
Accumulated amortization:			
1-Jan-16	(5,981)	(109)	(6,090)
Charge for the year	(891)	(1)	(892)
Disposals	-	2	2
31-Dec-16	(6,872)	(108)	(6,980)
Charge for the year	(119)	(171)	(290)
31-Dec-17	(6,991)	(279)	(7,270)
Net book value:			
31-Dec-17	1,050	1,066	2,116
31-Dec-16	242	195	437

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17. OTHER ASSETS AND LIABILITIES

	31-Dec-17	31-Dec-16
Other assets in foreign currency:		
Prepayments	-	171
Other debtors	6	34
Total other assets in foreign currency	6	205
Other assets in national currency:		
Commemorative gold coins and gold bars	3,728	4,335
Loans to employees	348	519
Inventory	483	465
Prepayments	1,665	1,249
Other debtors	579	254
	6,803	6,822
Allowance for impairment of other assets	(282)	(389)
Total other assets in national currency	6,521	6,433

As at 31 December 2017 and 2016, other financial assets, net of allowance, amount to GEL 651 thousand and GEL 417 thousand, respectively.

The movements in allowance for impairment losses on other assets were as follows:

	Allowance for impairment of other assets
1-Jan-16	(534)
Net impairment recovery	80
Write-offs	65
31-Dec-16	(389)
Net impairment recovery	104
Write-offs	3
31-Dec-17	(282)

Allowance for impairment losses on other assets represents allowance for impairment of loans to employees. Employees of the Bank used to have the right to take a loan from the Bank during the time period of his/her employment with the Bank. When an employee leaves the Bank, a 100% allowance is made for the outstanding loan. Write-off is conducted according to the decision made by the management of the Bank.

Other liabilities comprise:

	31-Dec-17	31-Dec-16
Other liabilities in foreign currency:		
Amounts due to suppliers	2,744	1,954
Total other liabilities in foreign currency	2,744	1,954
Other liabilities in national currency:		
Amount due to suppliers	5,872	5,716
Liability for realized banknotes and coins	1,589	1,518
Deferred revenue	2	11
Other liabilities	768	388
Total other liabilities in national currency	8,231	7,633
Total other liabilities	10,975	9,587

As at 31 December 2017 and 2016, other financial liabilities amount to GEL 10,901 thousand and GEL 9,308 thousand, respectively.

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18. DUE TO RESIDENT FINANCIAL INSTITUTIONS

Due to resident financial institutions comprise:

	31-Dec-17	31-Dec-16
Due to resident financial institutions under monetary policy instruments		
Correspondent accounts in national currency	426,778	505,972
Overnight deposits in national currency	12,000	5,001
Total due to resident financial institutions under monetary policy instruments in national currency	438,778	510,973
Obligatory reserves of banks in foreign currency	2,818,536	2,766,331
Total due to resident financial institutions under monetary policy instruments	3,257,314	3,277,304
Due to resident financial institutions, other		
Correspondent accounts in foreign currency	130,723	133,603
Special Deposits pledged as collateral under the Larisation program	181,454	-
Total due to resident financial institutions, other	312,177	133,603
Total due to resident financial institutions	3,569,491	3,410,907

As at 31 December 2017 and 2016 included in due to resident financial institutions is a balance with the three largest local commercial banks of GEL 2,646,651 thousand and GEL 2,195,475 thousand, respectively, that represent 74.15% 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 2017 the obligatory reserves are calculated as 7% of their eligible liabilities denominated in national currencies (2016: 7%), and 20% of their eligible liabilities denominated in foreign currencies (2016: 20%). For foreign currency liabilities with a remaining maturity of 1-2 years the reserve requirement amounts to 10% (2016: 10%). As at 31 December 2017 and 2016 the annual interest rate on GEL denominated obligatory reserves is 5% and 6.5%, respectively. As at 31 December 2017 and 2016 the annual interest rate on USD and EUR denominated obligatory reserves are 1% and – 0.60% and 0.25% and – 0.40%, 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

	31-Dec-17	31-Dec-16
Due to the Ministry of Finance		
Current accounts in foreign currency	434,263	250,708
Current account in national currency	541,489	747,074
Total due to the Ministry of Finance of Georgia	975,752	997,782

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20. 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 2017 and 2016 are as follows:

	2017	2016
Balance as at 1 January	2,999,323	2,503,735
Banknotes issued into circulation	4,915,164	4,994,573
Coins issued into circulation	59,401	60,452
Banknotes withdrawn from circulation	(4,617,167)	(4,509,488)
Coins withdrawn from circulation	(47,852)	(49,949)
Balance as at 31 December	3,308,869	2,999,323

21. DEBT SECURITIES ISSUED

	Interest rate p.a.	Maturity	Nominal value	Carrying value
Certificates of deposit as at 31-Dec-17	7.09%-7.33%	4 Jan-29 March 2018	80,000	79,284
Certificates of deposit as at 31-Dec-16	6.46%-6.99%	5 Jan-15 June 2017	200,000	197,240

22. 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 2017 and 2016.

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 profit of the Bank for each financial year is calculated as the sum of unrealised net gains or losses resulting from net operational profit or loss and revaluation. Net operational profit or loss shall be received 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. After 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.

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 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

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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.

In 2017 and 2016 the Bank transferred GEL 88,532 thousand and GEL 89,706 thousand, respectively, to the Reserve Fund out of which GEL 65,000 thousand was transferred to the Ministry of Finance ("MOF") of Georgia in 2017 (2016: nil) based on the resolution of the Council of the Bank. In accordance with the Article 25 of the Law, the transfer to the MOF of the remaining realised profit for the year ended 31 December 2017 of GEL 70,000 thousand shall take place within the six months after the reporting date.

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 2017 the entire amount of unrealized loss on foreign currencies translation of GEL 30,653 thousand was transferred to the foreign currency revaluation reserve (2016: gain GEL 380,937 thousand). During 2016 GEL 1,464 was transferred from retained earnings to other revaluation reserve created for this purpose and in 2017 the Bank transferred GEL 256 thousand from other revaluation reserve back to retained earnings.

Revaluation reserve for investments available-for-sale

This reserve records fair value changes of investments available-for-sale.

23. 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

As at 31 December 2017 and 2016 the Bank has no material capital commitments.

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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Operating lease commitments

No material lease commitments were outstanding as at 31 December 2017 and 2016.

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 2017 and 2016, 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.

24. SECURITIES LENDING PROGRAMME

The Bank participates in the automatic securities lending programme, where securities held by the Bank are lent against other securities' collateral. On behalf of the Bank this programme is managed by a specialized agent (Depository Clearstream, Luxembourg). 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 2017, the fair value of the securities lent was GEL 1,126,346 thousand (2016: GEL 2,077,786 thousand).

As at 31 December 2017 and 2016, the fair value of collateral provided in securities lending transactions was as follows:

	31-Dec-17	31-Dec-16
Debt securities of foreign governments	1,041,108	1,777,507
Debt securities of foreign financial institutions	126,973	280,704
Debt securities of foreign non-financial corporations	10,671	51,674
	1,178,752	2,109,885

25. RELATED PARTY TRANSACTIONS

The Bank, as a state entity, is related to the Government of Georgia entities. To achieve its policy objectives, the Bank maintains a position of structural and functional independence from the Government of Georgia through its ability to fund its own operations without external assistance and through its management and governance.

Under key management personnel are regarded those persons having authority and responsibility for planning, directing and controlling the activities of the Bank, directly or indirectly. Key management personnel comprise the Board members, Chief Executive Officer and head of departments.

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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.

The Bank had the following transactions outstanding with related parties:

	Year ended 31 December 2017		Year ended 31 December 2016	
	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	(3,091)	(18,004)	(2,673)	(15,057)

	Note	31-Dec-17		31-Dec-16	
		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 available-for-sale in national currency- Government of Georgia	12	155,198	155,198	143,660	143,660
Investments held-to-maturity in national currency- Government of Georgia	13	321,952	321,952	362,804	362,804
Loans to employees-Key management personnel	17	38	348	66	519
Liabilities:					
Due to the Ministry of Finance-	19	975,752	975,752	997,782	997,782

	Year ended 31 December 2017		Year ended 31 December 2016	
	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
Statement of profit or loss and other comprehensive income				
Interest income	42,297	235,898	51,259	151,904
- Government of Georgia	42,293	-	51,251	-
- Key management personnel	4	-	8	-
Loss on disposal of property and equipment	-	-	-	(49)

26. 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:

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- 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 and classified as derivative financial instruments, trading securities and investments available-for-sale. 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:
 - quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in markets that are not active;
 - 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;
 - market-corroborated inputs

Georgian Government securities, classified as investments available-for-sale, 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.

The table below analyses financial instruments measured at fair value at 31 December 2017 and 2016, 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:

		Fair value as at				Significant unobservable inputs
Financial Assets	Notes	31-Dec-17	31-Dec-16	Fair value hierarchy	Valuation techniques and key inputs	
International reserves						
Derivative financial assets	10	657	-	Level 1	Quoted bid prices in an active market	N/A
Trading securities	11	655,807	671,242	Level 1	Quoted bid prices in an active market	N/A
Investments available-for-sale	12	5,097,929	4,568,521	Level 1	Quoted bid prices in an active market	N/A
Monetary policy instruments						
Investments available-for-sale	12	155,198	143,660	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 2017 and 2016.

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Gains and losses included in other comprehensive income relate to investments available-for-sale and are reported as changes in revaluation reserve of investments available-for-sale.

Net unrealized gain/(loss) from securities and derivatives included in profit or loss relates to derivative financial assets and trading securities as changes in fair value during the year ended 31 December 2017.

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 approximates 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 held-to-maturity) 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 organisations to support developing countries. As a result, these borrowings were considered received in an “arm’s length” transaction.

27. 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 defence model. The model allocates clear roles and responsibilities for business departments, risk management and internal audit.

First line of defense: Departmental management

The first line of defense (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

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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 the components of the statement of financial position.

	Notes	Maximum Exposure 31-Dec-17	Maximum exposure 31-Dec-16
Foreign currency assets			
International Reserves			
Cash and cash equivalents (excluding cash on hand)	7	1,513,386	1,178,508
Special Drawing Rights holdings with the International Monetary Fund	9	534,253	512,592
Assets related to derivative instruments	10	657	-
Trading securities	11	655,807	671,242
Investments available-for-sale	12	5,097,929	4,568,521
Other foreign currency assets			
Other financial assets	17	6	34
National currency assets			
Monetary policy instruments			
Due from resident financial institutions	8	1,590,936	1,756,140
Investments available-for-sale	12	155,198	143,660
Other national currency assets			
Investments held-to-maturity	13	321,952	362,804
Due from resident financial institutions	8	221,303	-
Other financial assets	17	645	384
Total credit risk exposure		10,092,072	9,193,885

International reserve portfolio

According to the Law the Bank is eligible to hold and manage an international reserve portfolio. The Bank maintains a portfolio to support its monetary and exchange policies and normal functioning of domestic and foreign payments. Reserves are also employed to protect the country from external vulnerability by maintaining sufficient liquidity to absorb shocks during a financial crisis. Therefore, the multiple objectives of holding international reserves feature safety, liquidity, and profitability. Hence, assets under the international reserve portfolio are invested on a conservative basis to facilitate these objectives, with an emphasis on liquidity and capital preservation. For instance the Bank's Investment Guidelines prioritizes the preservation of capital and a high level of liquidity of reserves. Once these conditions are met, return is to be maximized.

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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 AA- rating. While for bank deposits and other financial instruments the minimum acceptable level of credit rating is A-. However, minimum credit rating of BBB is acceptable for counterparties used only for Nostro accounts, securities trading, repo/reverse repo operations and derivatives trading.

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.

The table below provides information on credit ratings of financial instruments within the international reserve portfolio:

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As at 31 December 2017	Notes	AAA	AA+	AA	AA-	A+	A	A-	BBB+	Total
Foreign currency assets										
International reserves										
Cash and cash equivalents (excluding cash on hand)	7	834,627	-	374	399,835	34,440	243,064	467	579	1,513,386
Special Drawing Rights holdings with the International Monetary Fund	9	534,253	-	-	-	-	-	-	-	534,253
Assets related to derivative instruments	10	-	-	-	657	-	-	-	-	657
Trading securities	11	562,318	49,017	29,891	14,581	-	-	-	-	655,807
Investments available-for-sale	12	4,703,641	312,991	20,350	60,947	-	-	-	-	5,097,929
Total international reserves		6,634,839	362,008	50,615	476,020	34,440	243,064	467	579	7,802,032
<hr/>										
As at 31 December 2016	Notes	AAA	AA+	AA	AA-	A+	A	A-		Total
Foreign currency assets										
International reserves										
Cash and cash equivalents (excluding cash on hand)	7	645,091	-	643	293,917	44,504	192,514	1,839	-	1,178,508
Special Drawing Rights holdings with the International Monetary Fund	9	512,592	-	-	-	-	-	-	-	512,592
Trading securities	11	567,330	62,951	40,961	-	-	-	-	-	671,242
Investments available-for-sale	12	4,476,906	68,125	18,483	5,007	-	-	-	-	4,568,521
Total international reserves		6,201,919	131,076	60,087	298,924	44,504	192,514	1,839		6,930,863

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.

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.

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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

The table below shows the credit quality by class of assets under the monetary policy portfolio and other financial assets, based on the banks internal credit rating system:

As at 31 December 2017				
	Notes	Neither past due nor impaired AAA grade	B grade	Total
Foreign currency assets				
Other financial assets	17	-	6	6
National currency assets				
Monetary policy instruments				
Due from resident financial institutions	8	1,590,936	-	1,590,936
Investments available-for-sale	12	155,198	-	155,198
Other national currency assets				
Investments held-to-maturity	13	321,952	-	321,952
Due from resident financial institutions	8	221,303	-	221,303
Other financial assets	17	-	645	645
Total		2,289,389	651	2,290,040

As at 31 December 2016				
	Notes	Neither past due nor impaired AAA grade	B grade	Total
Foreign currency assets				
Other financial assets	17	-	34	34
National currency assets				
Monetary policy instruments				
Due from resident financial institutions	8	1,756,140	-	1,756,140
Investments available-for-sale	12	143,660	-	143,660
Other national currency assets				
Investments held-to-maturity	13	362,804	-	362,804
Other financial assets	17	-	384	383
Total		2,262,604	418	2,263,021

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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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

Geographical concentration

The Bank's financial assets and liabilities are 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 2017	Notes	US	EU	Australia	Canada	International	Other	Total
Assets:								
International reserves								
Cash and cash equivalents (excluding cash on hand)	7	102,271	953,190	94	9,241	185,342	263,248	1,513,386
Special Drawing Rights holdings with the IMF	9	-	-	-	-	534,253	-	534,253
Assets related to derivative instruments	10	13	-	-	-	-	644	657
Trading securities	11	282,389	211,783	-	14,581	147,054	-	655,807
Investments available-for-sale	12	3,379,696	787,556	525,543	269,319	135,815	-	5,097,929
		3,764,369	1,952,529	525,637	293,141	1,002,464	263,892	7,802,032
Liabilities:								
Due to the International Monetary Fund	9	-	-	-	-	754,816	-	754,816
		3,764,369	1,952,529	525,637	293,141	247,648	263,892	7,047,216
Net position								
			EU*	Australia	Canada	International	Other	Total
As at 31 December 2016								
Assets:								
International reserves								
Cash and cash equivalents (excluding cash on hand)	7	87,764	1,016,816	53	69,241	-	4,634	1,178,508
Special Drawing Rights holdings with the IMF	9	-	-	-	-	512,592	-	512,592
Trading securities	11	233,255	268,844	-	3,715	165,428	-	671,242
Investments available-for-sale	12	3,114,646	570,965	516,952	192,857	173,101	-	4,568,521
		3,435,665	1,856,625	517,005	265,813	851,121	4,634	6,930,863
Liabilities:								
Due to the International Monetary Fund	9	-	-	-	-	528,994	-	528,994
		3,435,665	1,856,625	517,005	265,813	322,127	4,634	6,401,869
Net position								

*EU-including Norwegian agency securities.

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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

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 2017 and 2016 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 2017	Notes	Less than 3 months	1 to 5 years	Over 5 years	Total
Foreign currency assets					
International Reserves					
Cash and cash equivalents (excluding cash on hand)	7	1,513,386	-	-	1,513,386
Special Drawing Rights holdings with the International Monetary Fund	9	534,253	-	-	534,253
Assets related to derivative instruments	10	657	-	-	657
Trading securities	11	655,807	-	-	655,807
Investments available-for-sale	12	5,097,929	-	-	5,097,929
Other foreign currency assets					
Other financial assets	17	6	-	-	6
Total foreign currency assets		7,802,038	-	-	7,802,038
Foreign currency liabilities					
Due to resident financial institutions	18	3,130,713	-	-	3,130,713
Due to the Ministry of Finance	19	434,263	-	-	434,263
Due to the International Monetary Fund	9	531,525	46,145	175,351	753,021
Other liabilities	17	2,673	-	-	2,673
Total foreign currency liabilities		4,099,174	46,145	175,351	4,320,670
Net Position		3,702,864	(46,145)	(175,351)	3,481,368

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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

As at 31 December 2016	Notes	Less than 3 months	3 to 12 months	Total
Foreign currency assets				
International Reserves				
Cash and cash equivalents (excluding cash on hand)	7	1,178,508	-	1,178,508
Special Drawing Rights holdings with the International Monetary Fund	9	512,592	-	512,592
Trading securities	11	671,242	-	671,242
Investments available-for-sale	12	4,568,521	-	4,568,521
Other foreign currency assets				
Other financial assets	17	34	-	34
Total foreign currency assets		6,930,897	-	6,930,897
Foreign currency liabilities				
Due to resident financial institutions	18	2,899,934	-	2,899,934
Due to the Ministry of Finance	19	250,708	-	250,708
Due to the International Monetary Fund	9	522,380	4,981	527,361
Other liabilities	17	1,757	-	1,757
Total foreign currency liabilities		3,674,779	4,981	3,679,760
Net Position		3,256,118	(4,981)	3,251,137

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.

Strategic Benchmark Durations and Active Market Risk Limits for the international reserve portfolio are as follows:

Tranches	Benchmark Duration (Duration Deviation Limits)	Ex-Ante Tracking Error Limits
Liquidity Portfolio in USD	3 Months (+/-1 Month)	10 Basis Point
Investment Portfolio in USD	6 Months (+/-3 Months)	15 Basis Point
Investment Portfolio in EUR*	1 year (+/-3 Months)*	15 Basis Point*
Investment Portfolio in AUD	1,5 year (+/-3 Months)	15 Basis Point
Investment Portfolio in CAD	1,5 year (+/-3 Months)	15 Basis Point

* The EUR Investment Portfolio was stopped to be managed versus Benchmark since 15 December 2015

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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

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:

Currency	2017		2016	
	Increase in Market Yield	Sensitivity of asset value	Increase in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	(8,088)	1%	(5,932)
Investment Tranche in EUR	1%	(150)	1%	(217)
Investment Tranche in AUD	1%	(3,671)	1%	(3,091)
Investment Tranche in CAD	1%	(1,241)	1%	(1,014)
Liquidity Tranche in USD	1%	(2,149)	1%	(1,570)
Working Capital Tranche in USD	1%	(326)	1%	(255)

Currency	2017		2016	
	Decrease in Market Yield	Sensitivity of asset value	Decrease in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	8,294	1%	6,075
Investment Tranche in EUR	1%	155	1%	226
Investment Tranche in AUD	1%	3,787	1%	3,186
Investment Tranche in CAD	1%	1,276	1%	1,042
Liquidity Tranche	1%	2,196	1%	1,593
Working Capital Tranche	1%	331	1%	261

* Investment Tranche in USD* does not include interest rate exposure of externally managed portfolio;

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.

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NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017

(in thousands of Georgian Lari)

Currency	2017		2016	
	Increase in interest rate	Sensitivity of net interest income	Increase in interest rate	Sensitivity of net interest income
USD	1%	34,772	1%	28,309
SDR	1%	(2,188)	1%	(147)
EUR	1%	(1,320)	1%	(740)
AUD	1%	5,750	1%	5,338
CAD	1%	2,344	1%	2,224
GEL	1%	14,699	1%	16,419
Other	1%	39	1%	53

Currency	2017		2016	
	Decrease in interest rate	Sensitivity of net interest income	Decrease in interest rate	Sensitivity of net interest income
USD	1%	(34,772)	1%	(28,309)
SDR	1%	2,188	1%	147
EUR	1%	1,320	1%	740
AUD	1%	(5,750)	1%	(5,338)
CAD	1%	(2,344)	1%	(2,224)
GEL	1%	(14,699)	1%	(16,419)
Other	1%	(39)	1%	(53)

The sensitivity of equity is calculated by revaluing fixed rate available-for-sale financial assets at 31 December 2017 and 2016 for 1% change in interest rates.

Currency	2017		2016	
	Increase in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	42,774	1%	38,182
EUR	1%	204	1%	257
AUD	1%	5,749	1%	5,318
CAD	1%	2,252	1%	1,929
GEL	1%	1,552	1%	1,437

Currency	2017		2016	
	Decrease in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	(42,774)	1%	(38,182)
EUR	1%	(204)	1%	(257)
AUD	1%	(5,749)	1%	(5,318)
CAD	1%	(2,252)	1%	(1,929)
GEL	1%	(1,552)	1%	(1,437)

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 and to a limited extent, foreign currency risk can be partially mitigated by holding assets across a diversified portfolio of currencies. Throughout the year, prior to 14th December 2015 the Bank held foreign reserves in the following currencies: U.S. dollars (70%), Euros (20%), Canadian dollars, Australian dollars and other currencies up to 10%. Since December 14, 2015, the target currency composition has changed to 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 (in thousands of Georgian Lari)

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 2017	USD	EUR	SDR	AUD	CAD	Other	Total
Foreign currency assets	6,235,371	295,398	534,253	575,028	234,413	3,845	7,878,308
Foreign currency liabilities	2,946,513	621,169	753,021	-	-	38	4,320,741
Net position	3,288,858	(325,771)	(218,768)	575,028	234,413	3,807	3,557,567
As at 31 December 2016	USD	EUR	SDR	AUD	CAD	Other	Total
Foreign currency assets	5,710,677	311,068	512,592	533,770	222,394	5,272	7,295,773
Foreign currency liabilities	(2,696,130)	(456,382)	(527,299)	-	-	(84)	(3,679,895)
Net position	3,014,547	(145,314)	(14,707)	533,770	222,394	5,188	3,615,878
Effect on statement of total comprehensive income							
31-Dec-17							
	USD	EUR	SDR	AUD	CAD	Other	Total
Increase in currency rate of 1%	32,889	(3,258)	(2,188)	5,750	2,344	39	35,576
Increase in currency rate of 5%	164,443	(16,288)	(10,938)	28,751	11,721	190	177,879
Increase in currency rate of 10%	328,886	(32,577)	(21,877)	57,503	23,441	381	355,757
Decrease in currency rate of 1%	(32,889)	3,258	2,188	(5,750)	(2,344)	(39)	(35,576)
Decrease in currency rate of 5%	(164,443)	16,288	10,938	(28,751)	(11,721)	(190)	(177,879)
Decrease in currency rate of 10%	(328,886)	32,577	21,877	(57,503)	(23,441)	(381)	(355,757)
Effect on statement of total comprehensive income							
31-Dec-16							
	USD	EUR	SDR	AUD	CAD	Other	Total
Increase in currency rate of 1%	30,145	(1,453)	(147)	5,338	2,224	52	36,159
Increase in currency rate of 5%	150,727	(7,266)	(735)	26,689	11,120	259	180,794
Increase in currency rate of 10%	301,455	(14,531)	(1,471)	53,377	22,239	519	361,588
Decrease in currency rate of 1%	(30,145)	1,453	147	(5,338)	(2,224)	(52)	(36,159)
Decrease in currency rate of 5%	(150,727)	7,266	735	(26,689)	(11,120)	(259)	(180,794)
Decrease in currency rate of 10%	(301,455)	14,531	1,471	(53,377)	(22,239)	(519)	(361,588)

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2017 *(in thousands of Georgian Lari)*

Non-Financial Risks

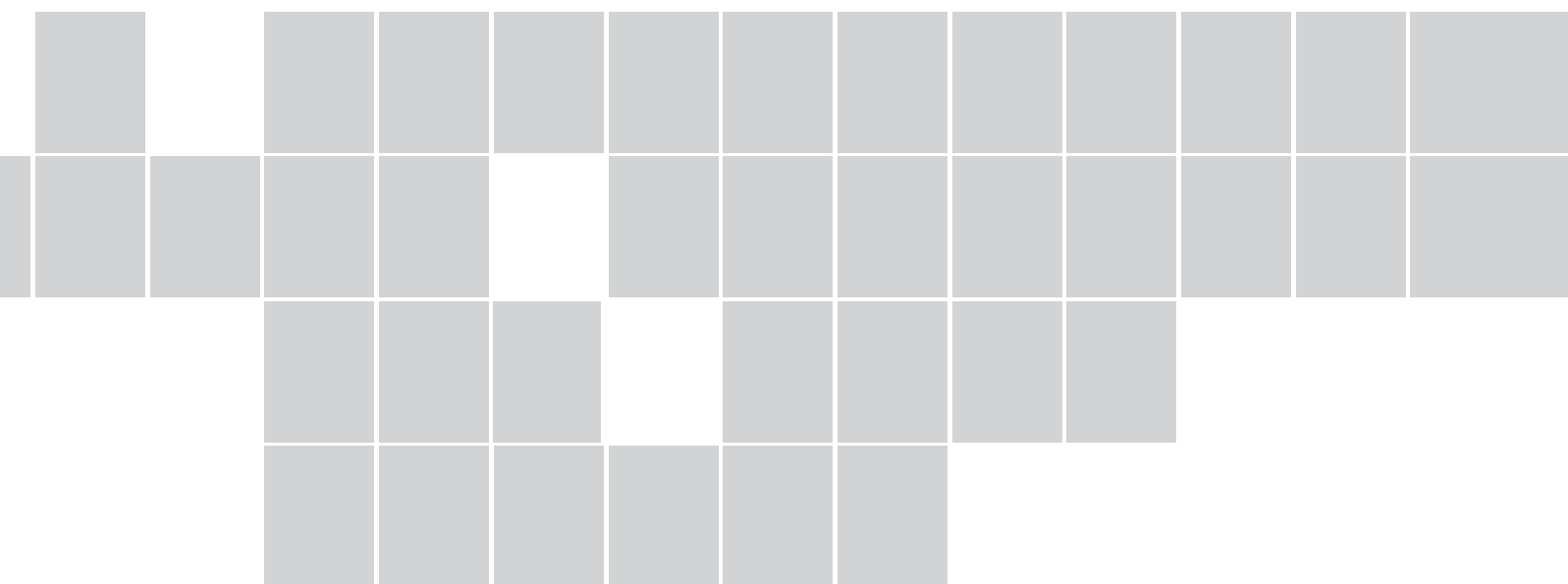
Non-financial risk may generate financial loss, damage to reputation or inability to achieve the objectives of the business processes, resulting from one or more root causes of the risk, originating from human factors, or defective, inadequate processes or systems, or external events. The Bank is exposed to the following categories of non-financial risks: Reputational, Legal, Information Technology, Human resources, Security (physical and information), Project, Third party, Business continuity and Settlement risks.

The Centralized Risk Management Department ensures the systematic approach of identifying, assessing and managing the non-financial risks at the Bank. In terms of managing the non-financial risks, the Bank has a conservative approach. The Bank makes resources available and sets the effective governance process to control and maintain non-financial risks to acceptable levels.

Centralized Risk Management (CRM) framework is based on qualitative analysis (relative scale of Probability and Impact (1 to 5) encompassing all business processes of the Bank where risks could jeopardize the achievement of the objectives). The Risk assessment process is comprised of risk identification, analysis and evaluation stages.

According to the best international practice, the business continuity risk is integrated in an operational risk management framework. The business continuity system was introduced in 2014 and since then this is subject to continuous improvement. The Bank aims to sustain the resilience by responding and recovering from incidents affecting the critical business processes. The Bank introduced two key units: Business Continuity Committee and Business Continuity Team. The Business Continuity Committee is led by the Chief Executive Officer of the Bank and is responsible for the policy and related strategic decisions. The Business Continuity Team is responsible for the execution of the tasks. To support the BCS Centralized Risk Management Department coordinates and facilitates all activities related to business continuity management.

Furthermore, to support and expand CRM framework, the Incident Management Framework has been developed and implemented at the Bank. The CRM department analysis and acknowledges the results and observations received from the incident management system to determine the tolerance for each category of non-financial risks.



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