



საქართველოს ეროვნული ბანკი
National Bank of Georgia

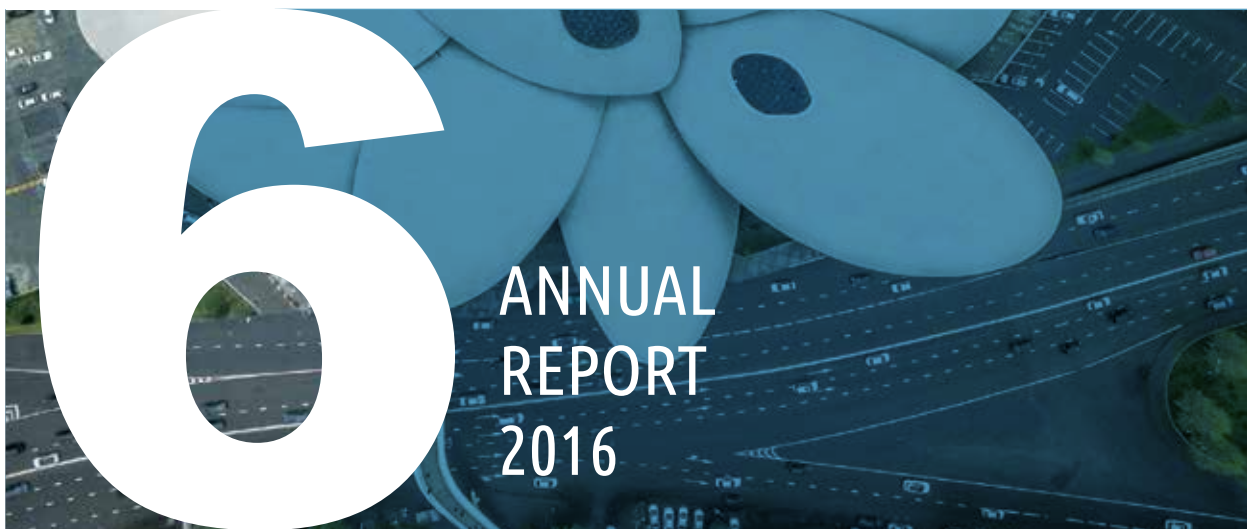
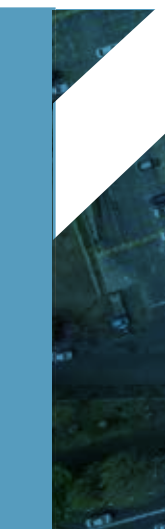
An aerial photograph of a multi-lane highway interchange with several cars visible. A large, stylized blue flower with dark blue centers is superimposed over the left side of the image. The text 'ANNUAL REPORT 2016' is written in white, bold, sans-serif capital letters over the right side of the flower and the highway.

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6

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CONTENT

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Abbreviations.....	7
Introduction.....	9
1 Macroeconomic Environment.....	17
1.1 World Economy.....	18
1.2 External Sector and Balance of Payments.....	20
1.3 Economic Growth.....	30
1.4 Change in Consumer Prices.....	34
2 Monetary and Exchange Rate Policy.....	39
2.1 Monetary Policy.....	40
2.2 Monetary Policy Instruments.....	50
2.2.1 Refinancing loans.....	51
2.2.2 One-month open market instrument.....	51
2.2.3 Overnight loans and deposits.....	52
2.2.4 Securities.....	52
2.2.5 Minimum reserve requirements.....	55
2.3 Exchange Rate Policy and International Reserves Management.....	56
3 Banking Supervision.....	61
3.1 Development of the Regulatory Framework.....	62
3.2 Group Structure Risk.....	67
3.3 Credit risk.....	73
3.4 Market Risk.....	85
3.4.1 Foreign Currency Risk.....	85
3.4.2 Interest Rate Risk.....	86
3.5 Liquidity Risk.....	87
3.5.1 Structure of Liquid Assets.....	87
3.5.2 Structure of Liabilities.....	89
3.5.3 Retail Funding.....	89
3.5.4 Wholesale Funding.....	91
3.5.5 Regulation of Liquidity Risk.....	93
3.6 Profitability Risk.....	93
3.7 Operational Risk.....	97
3.8 Macprudential Risks.....	101
3.9 Capital Adequacy.....	103
3.10 Financial Reporting and Transparency.....	106
3.11 Consumer Protection.....	108
3.12 Financial Education.....	112
3.13 International Cooperation.....	115
4 Non-Bank Supervision.....	117
4.1 Securities Sector.....	118
4.2 Other Financial Institutions.....	122
4.2.1 Microfinance Organizations.....	122
5 Money Laundering Inspection and Supervision.....	129
6 Payment Systems.....	133
7 Improvement of Information Technology.....	143
8 Organization of cash emission activities.....	147
9 Internal Audit and Risk Management.....	155
10 Public Relations and International Cooperation.....	159
11 Human Resources Management and Development.....	165
12 Development of the Normative Base.....	169
13 Statistical Activity.....	173

BOXES

Box N 1 Monetary Policy Communication.....	43
Box N 2 Larization Measures.....	48
Box N 3 Development of the Securities Settlement System in Georgi.....	56
Box N 4 Implementation of Basel III Pillar 1 and Pillar 2 capital buffers.....	62
Box N 5 Review of international practices on group level supervision.....	68

DIAGRAMS

Diagram N 1.1 Global Output.....	18
Diagram N 1.2 Global Inflation.....	19
Diagram N 1.3 Global commodity prices.....	20
Diagram N 1.4 Ratio of current account components to GDP.....	21
Diagram N 1.5 Annual growth rates of exports of goods (2010-2016).....	22
Diagram N 1.6 Export structure by country in 2016.....	22
Diagram N 1.7 Annual growth rates of imports of goods (2010-2016).....	23

Diagram N 1.8 Import structure by country in 2016.....	24
Diagram N 1.9 Tourism export revenues (2011-2016).....	25
Diagram N 1.10 Annual growth rate of money remittances (2010-2016).....	26
Diagram N 1.11 Contributions to the change in money remittances (2016).....	26
Diagram N 1.12 Financing of current account deficit.....	27
Diagram N 1.13 Indices of Real Effective Exchange Rate and Nominal Effective Exchange Rate (Dec. 2012=100).....	29
Diagram N 1.14 Growth rate of Georgia and its trade partners	30
Diagram N 1.15 GDP growth by expenditure	33
Diagram N 1.16 Headline and Core (without food and energy) inflation	34
Diagram N 1.17 Contribution of fuel, food, alcoholic beverages, tobacco and utility prices to headline inflation	35
Diagram N 1.18 Imported and domestic inflation.....	35
Diagram N 1.19 Inflation of tradable and non-tradable goods.....	36
Diagram N 1.20 Change of annual inflation for goods of different durability and services.....	37
Diagram N 2.1 Monetary policy rate.....	41
Diagram N 2.2 Monetary policy rate and interest rate on loans.....	42
Diagram N 2.3 Credit portfolio of commercial banks.....	42
Diagram N 2.4 Monetary policy trajectory (Monetary Policy Report, May 2016).....	43
Diagram N 2.5 The decrease of the Georgian lari yield curve.....	44
Diagram N 2.6 Factors affecting refinancing loans.....	45
Diagram N 2.7 Interbank money market.....	46
Diagram N 2.8 Money market interest rates	47
Diagram N 2.9 The dynamics of the balance of treasury securities and certificates of deposit.....	48
Diagram N 2.10 Loan and deposit dollarization.....	49
Diagram N 2.11 Portfolio of Certificates of Deposit 2012-2016.....	53
Diagram N 2.12 Portfolio of Treasury securities, 2014-2016.....	54
Diagram N 2.13 Treasury securities by holders.....	54
Diagram N 2.14 Minimum reserve requirements.....	55
Diagram N 2.15 Currency market dynamics from 2003 to 2016	57
Diagram N 2.16 Official FX reserves (mln USD, end of year).....	58
Diagram N 3.1 Comparison of the National Bank of Georgia's capital requirements with Basel III supervisory capital.....	63
Diagram N 3.2 Visualization of minimum capital requirements and buffers.....	65
Diagram N 3.3 APRA's 3-layer supervisory approach.....	72
Diagram N 3.4 YoY percentage change in gross loans	73
Diagram N 3.5 Monthly weighted average interest rates on loans per segment	74
Diagram N 3.6 Monthly weighted average interest rates on loans for the corporate segment.....	74
Diagram N 3.7 Monthly weighted average interest rates on loans for the SME segment.....	75
Diagram N 3.8 Monthly weighted average interest rates on loans for the retail segment.....	75
Diagram N 3.9 Share of pro-cyclical sectors in the gross loan portfolio.....	77
Diagram N 3.10 Retail products distribution	78
Diagram N 3.11 Segments by currency (excluding interbank loans).....	79
Diagram N 3.12 Retail portfolio composition by currency (excluding interbank loans).....	79
Diagram N 3.13 Loan portfolio composition by qualitative indicators (excluding interbank loans).....	81
Diagram N 3.14 Overdue loans of 90 days and more.....	81
Diagram N 3.15 The share of restructured loans in the gross loan portfolio.....	82
Diagram N 3.16 The ratio of loan loss reserves to gross portfolio.....	82
Diagram N 3.17 Volume and share of net floating interest rate loans in the net loan portfolio.....	83
Diagram N 3.18 Write-offs and recovery of loans.....	83
Diagram N 3.19 Problem assets.....	84
Diagram N 3.20 Repossessed property.....	84
Diagram N 3.21 Balance sheet and consolidated open currency positions to regulatory capital.....	85
Diagram N 3.22 Interest bearing assets' coverage of liabilities.....	87
Diagram N 3.23 Level of liquid assets.....	87
Diagram N 3.24 Liquidity ratio by currency.....	88
Diagram N 3.25 Liquidity gap: assets with maturity of less than one month to liabilities with a maturity of less than one month.....	88
Diagram N 3.26 Structure of liquid assets.....	89
Diagram N 3.27 Liability structure.....	89
Diagram N 3.28 Annual growth of non-bank deposits.....	90
Diagram N 3.29 Share of non-resident deposits.....	90
Diagram N 3.30 Structure of non-resident deposits (December 2016).....	91
Diagram N 3.31 Non-resident deposits by country (December 2016).....	92
Diagram N 3.32 Gross loans to non-bank deposits.....	92
Diagram N 3.33 Return on assets and equity	94
Diagram N 3.34 Decomposition of profitability growth.....	94
Diagram N 3.35 Interest spread and factors affecting it.....	95
Diagram N 3.36 Banking system net profit from operations and annual growth.....	95

Diagram N 3.37 Breakdown of FX effect on ROE (expressed as percentage points of return on equity).....	96
Diagram N 3.38 Comparison of the BGEO and TBC Groups' coefficient of price to book ratio with the corresponding Bloomberg EMEA banks' index coefficient.....	97
Diagram N 3.39 Time series of gross losses for 2013-2016.....	98
Diagram N 3.40 Percentage distribution of total gross losses of 2016.....	99
Diagram N 3.41 Loans to GDP gap.....	102
Diagram N 3.42 Capital adequacy ratios under the Basel I framework.....	103
Diagram N 3.43 Capital adequacy ratios under the Basel III framework.....	104
Diagram N 3.44 Decomposition of risk weighted assets.....	104
Diagram N 3.45 Yearly change in Tier 1 capital ratio (FX effect).....	105
Diagram N 3.46 Yearly change in total regulatory capital ratio (FX effect).....	106
Diagram N 3.47 Total claims received and considered reasonable by commercial banks (2012-2016).....	110
Diagram N 3.48 Distribution of claims received by commercial banks by product type (2012-2016).....	110
Diagram N 3.49 Distribution of claims received by commercial banks by content (2012-2016).....	111
Diagram N 4.1 Information on brokers' total assets, liabilities and equity, and share of consumer portfolio in total assets (2009-2016).....	119
Diagram N 4.2 Main trade indicators (deals executed during trading sessions and outside the stock exchange) (2007-2016).....	120
Diagram N 4.3 Number of deals executed on and off the stock exchange (2007-2016).....	121
Diagram N 4.4 Turnover of securities deposited with the Central Depository (2008-2016)	122
Diagram N 4.5 Turnover of funds deposited with the Central Depository (2008-2016).....	122
Diagram N 4.6 Total assets, liabilities, equity and liabilities-to-assets dynamics of microfinance organizations.....	123
Diagram N 4.7 Net loan portfolio growth relative to assets.....	123
Diagram N 4.8 Gross loan portfolio structure.....	124
Diagram N 4.9 Profitability indicators (ROE, ROA) of microfinance organizations	124
Diagram N 4.10 Borrowed funds structure, raised from non-resident organizations and private individuals.....	125
Diagram N 4.11 Funds borrowed from individuals and total number of creditor retail investors.....	126
Diagram N 6.1 Transfers processed through the RTGS system (2016).....	135
Diagram N 6.2 Transfers processed through the RTGS system (2002-2016).....	135
Diagram N 6.3 Timing of RTGS transfers during the day.....	136
Diagram N 6.4 Interbank transfer concentration in the RTGS (2011-2016).....	137
Diagram N 6.5 Cashless payments by means of initiation (2011-2016).....	138
Diagram N 6.6 Distribution of non-cash payments by means of payment order initiation (2016).....	138
Diagram N 6.7 Dynamics of the issued payment cards by card schemes (2012-2016).....	139
Diagram N 6.8 The share of the volume of cash withdrawals and POS payments (2013-2016).....	139
Diagram N 6.9 The share of the value of cash withdrawals and POS payments (2013-2016).....	140
Diagram N 6.10 Dynamics of card-accepting devices (December, 2013-2016).....	140
Diagram N 8.1 Share of each denomination (31 December 2016).....	148
Diagram N 8.2 Cash in circulation (2015-2016).....	148
Diagram N 8.3 New and old modification 20, 50 and 100 lari denomination banknotes in circulation (%).....	149
Diagram N 8.4 Counterfeit lari banknotes and coins detected in 2016, by percent.....	150
Diagram N 8.5 Number of counterfeit lari banknotes revealed in 2015-2016.....	151
Diagram N 8.6 Number of counterfeit coins revealed in 2015-2016.....	151
Diagram N 8.7 Investment, collector and numismatic products sold in 2015-2016.....	152

TABLES

Table N 1.1 Balance of Payments (2012-2016) (million USD).....	28
Table N 1.2 Annual changes in effective exchange rates in 2016.....	29
Table N 1.3 Real GDP growth and sector breakdown.....	32
Table N 1.4 Inflation indicators according to individual components (percentage), their share in the consumer basket (percentage) and contribution to CPI (percentage points).....	36
Table N 3.1 Transition to Basel III compatible buffers	65
Table N 3.2 Composition of the loan portfolio (excluding interbank loans) by segment (adjusted for exchange rate effect, exchange rate as of the end of 2015).....	74
Table N 3.3 Gross loan portfolio according to risk sectors.....	76
Table N 3.4 Growth of retail products adjusted for the exchange rate effect (exchange rate as of the end of 2015).....	78
Table N 3.5 Gross loan portfolio risk classification.....	80
Table N 3.6 Portfolio quality by segment.....	80
Table N 3.7 External sources of wholesale funding and their schedules as of 31 December 2016.....	92
Table N 4.1 Public emissions of bonds, 2016	118
Table N 4.2 Brokerage company activities (2016).....	119
Table N 4.3 Aggregate information on main indicators of trade concluded during trading sessions and outside the stock exchange (2012-2016).....	120
Table N 8.1 Examination results of suspicious banknotes and coins received by the NBG in 2016.....	150

ABBREVIATIONS

ADB - Asian Development Bank
AML - Anti Money Laundering
APRA - Australian Prudential Regulation Authority
BIS - Bank for International Settlements
BISIP - Bank for International Settlements Investment Pool
CET1 - Common Equity Tier 1
CSD - Central Securities Depository
CYFI - Child and Youth Finance International
DNS - Domain Name System
EBITDA - Earnings before interest, tax, depreciation and amortization
EBRD - European Bank for Reconstruction and Development
ECB - European Central Bank
EFSE DF - Development Facility of the European Fund for Southeast Europe
EMEA - Europe, the Middle East and Africa
FINMA - Swiss Financial Market Supervisory Authority
FINREP - Financial Reporting (a European regulation that applies to credit institutions)
FSAP - Financial Sector Assessment Program
GMRA - Global Master Repurchase Agreement
GPSS - Georgian Payment and Settlement System
GRAPE - General Risk Assessment Program
HHI - Herfindahl-Hirschman Index
ICAAP - Internal Capital Adequacy Assessment Process
ICMA - International Capital Market Association
IEEE - Institute of Electrical and Electronics Engineers
IFRS - International Financial Reporting Standards
IMF - International Monetary Fund

IMF East AFRITAC - IMF East Africa Regional Technical Assistance Center
INFE - International Network on Financial Education
IORWG - International Operational Risk Working Group
ISMS - Information Security Management System
ISO - International Organization for Standardization
IT - Information Technology
KRI - Key Risk Indicator
LCR - liquidity Coverage Ratio
LTV - Loan-to-Value
NSFR - Net Stable Funding Ratio
OECD - Organization for Economic Co-operation and Development
OPEC - Organization of Petroleum Exporting Countries
PRA - Prudential Regulation Authority
RCAP - Regulatory Consistency Assessment Program
ROE - Return on Equity
RTGS - Real Time Gross Settlement
SBFIC - Savings Banks Foundation for International Cooperation
SHA-1 - Secure Hash Algorithm 1
SHA-2 - Secure Hash Algorithm 2
SME - Small and medium-sized enterprises
SREP - Supervisory Review and Evaluation Process
ST - Stress Tests
SWIFT - Society for Worldwide Interbank Financial Telecommunication
TIBR - Tbilisi InterBank Rate
VPN - Virtual Private Network
XBRL - Extensible Business Reporting Language

INTRODUCTION

The 2016 Annual Report of National Bank of Georgia (NBG) is 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. This report presents the priorities of the country's central bank during the 2016 accounting period. It also contains the NBG's assessments of ongoing processes in both Georgia and abroad that had a significant impact on Georgia's economic position and on 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 and promote sustainable economic growth, without jeopardizing its primary objective.

Price stability means maintaining inflation around the target level in the medium term. The focus on the medium term is significant. In the short term, inflation can deviate from the target level, but in the medium term the inflation rate will return to the target level as a result of the NBG's monetary policy. In this way, price stability is reached with the lowest social costs, while long-run economic growth is high and stable compared to alternative approaches.

Implementation of the abovementioned monetary policy is possible under the inflation-targeting regime, which is widely regarded as the best monetary policy approach in international practice. The NBG adopted its inflation-targeting regime in 2009, and since then average inflation has equaled 3.4%.

The inflation target for 2016 was set at 5%. It will fall to 4% for 2017 and to 3% for 2018.

At the beginning of 2016, inflation was approaching the target level from above, but from Febru-

ary both headline and core¹ inflation started to decrease and were maintained below the target level. At the end of the year, the annual rate of consumer price inflation was 2.1% and average annual inflation stood at 3.1%. The average rate of annual inflation of the past three years amounts to 3.1%. During 2016, core inflation was higher than headline inflation, because of the low rate of food inflation and reduced fuel prices on international markets. The decrease in inflation in 2016 was mainly caused by the base effect. In 2015, increased excise tax on alcoholic beverages, rising electricity fees and increased prices on durable goods each made inflation rise substantially. However, in 2016, the impact of the aforementioned factors on inflation faded and inflation therefore decreased. The overall decrease in inflation was also caused by demand side factors. In 2016, aggregate demand remained weak and thus Georgia's real GDP (Gross Domestic Product) fell below its potential level and exerted weak pressure on the inflation rate. In terms of supply side factors, reduced commodity prices on global markets pushed inflation downward. During 2016, oil prices were lower than in the previous year and that put downward pressure on inflation. However, the latter factor started to gradually expire from July. As with other small open economies, Georgia faces exogenous shocks that can cause actual inflation to deviate from the target level. The size and duration of such deviations depend on the nature of the shocks and the NBG's response to them. Monetary policy is a tool to impact aggregate demand and it thus represents the central bank's main response to demand shocks. On the other hand, central banks do not usually react to supply side exogenous shocks, as doing so would facilitate economic fluctuations and increase social costs. Therefore, in the short run, actual inflation can deviate from the target level, assuming that in the medium term it will return to the target. However, if the deviation is so large that it drives

1. Excluding food and energy prices.

inflation expectations, then long-run inflation can be influenced. In such a case, the response of the NBG would depend on the estimation of two possible scenarios: how high inflation would negatively impact long-run economic growth; and how weak demand would hinder economic growth.

The transmission of external shocks to the Georgian economy continued in 2016. At the beginning of the year, Georgia's main trading partners' economies were still weak, but the impact of this on the Georgian economy was gradually neutralized as time progressed. In the absence of further external shocks, there was no need for additional monetary policy tightening in order to contain inflation expectations. Thus, in the meetings held in February and March, the Monetary Policy Committee (MPC) decided to keep the refinancing rate unchanged at 8%. Since then, both inflation and inflation expectations were decreasing. Based on macroeconomic forecasts, the NBG started to gradually phase out its tight monetary policy and the policy rate was gradually reduced by 150 percentage points to 6.5%.

Even though the GDP growth rate was below its potential level and demand side pressure on prices remained weak, at the end of the year the MPC decided to suspend monetary policy loosening and found it appropriate to retain the refinancing rate at 6.5%. This decision was partly related to the improvement of the monetary policy transmission mechanism. Alongside decreased interest rates, loans in GEL increased significantly, which had an additional monetary policy easing effect. At that stage, there was thus no need to rapidly phase out the tight monetary policy. On the other hand, at the end of the year, the impact of external factors on the Georgian economy worsened. Meanwhile, an increase of excise taxes on specific imported goods was announced. As a result, inflation forecasts and expectations both increased.

The first results of the loosened monetary policy were seen in the second half of the year. Interest

rates on mortgage loans issued in lari and on loans to legal entities decreased. As a result, demand for bank loans increased, which caused a corresponding increase of the banking system credit portfolio. The growth rate of loans issued in lari was significantly high by the end of the year.

The transmission of external shocks to the Georgian economy continued throughout 2016. The current account deficit widened by 229 mln USD and amounted to 13.3% of GDP. Improvements in the trade of goods positively contributed to the current account balance. An increase in the balance of services also had a positive impact on the current account. Tourism revenues, which have the largest share of service exports, increased by 12% (230 mln USD) and amounted to 2.2 bln USD. Overall, the widening of the current account deficit mainly stemmed from the deterioration of the income account balance – which itself was induced by increased profits in direct investments made in Georgia. Although an increase in reinvested income and dividends enlarge the current account deficit, the increase of reinvested income is part of the financial account and therefore does not cause capital outflow.

Trade balance is the largest negative component of the current account balance. The deficit of trade in goods narrowed modestly and reached 26.5% of GDP. From the beginning of 2016, the reduction of exports slowed to some extent and ultimately showed positive annual growth in the fourth quarter of the year. However, in overall terms, exports of goods decreased by 6.5% in 2016. Imports of goods followed a similar trajectory. In the first quarter of 2016, imports of goods continued to decline. This reduction became modest from April, and imports of goods showed a positive growth rate in the fourth quarter. Overall, imports of goods decreased by 4.9% in 2016.

In 2016, as in previous years, the current account deficit was mainly financed by foreign direct investments, which increased by 5% compared to

the previous year. The majority of investments were directed at the construction, manufacturing and energy sectors.

The growth of the Georgian economy amounted to 2.7% in 2016. The services sector made the largest contribution to that growth (at 1.5 percentage points), and the industrial sector's contribution was also significant.

The main driving force of GDP growth was the construction sector, which posted 8.1% growth and made a contribution of 0.5 percentage points. The high growth of the construction sector was due to both government-financed infrastructure projects and private constructions – of the latter, the new BP pipeline project is particularly noteworthy. The manufacturing sector also made a significant contribution to GDP growth (0.4 percentage points). As most export goods belong to the manufacturing sector, increased exports resulted in positive growth for manufacturing. The growth rate of the biggest sector of economy, the trade sector, increased compared to the previous year and amounted to 1.8%. Trade sector growth is very important for the Georgian economy as the sector contains the largest group of private sector employees.

Investments were the main driving force of economic growth in 2016, contributing 2 percentage points to overall growth. Government infrastructure projects had a significant share in the growth of investments, while the construction sector was the main contributor from the private sector. Of the latter, BP investments into the construction of a new pipeline held a significant share.

Consumption made a small, but positive contribution (0.8 percentage points) to economic growth in 2016, which was mostly due to increased public consumption. The contribution of net exports to economic growth remained negative in 2016, making a -0.1 percentage point change. The number

of visitors to Georgia exhibited a stable growth rate throughout the year and, consequently, so did tourism revenues. The latter supported the growth of services exports. External demand started to recover in the second half of the year and promoted growth in goods exports. Domestic demand exhibited signs of recovery in the last quarter of the year.

The total international reserves of the National Bank of Georgia increased by 236.9 million USD in 2016, and totaled 2.8 billion USD as of 31 December 2016. The surge of the NBG's international reserves was a result of increasing the reserve requirements on foreign currency deposits in June 2016. In addition, several more traditional factors affected the volume of the NBG's international reserves during 2016, including the foreign exchange interventions of the NBG, Georgian government expenditures and credits, and grants received from international organizations.

In 2016, the high level of dollarization in the Georgian economy was still a major challenge. Maintaining a low level of dollarization is important in terms of macroeconomic stability and fiscal sustainability. At the end of the year, loan dollarization amounted to 65.2% and deposit dollarization to 71.4%. In 2016, the National Bank of Georgia and the Government of Georgia planned various measures to increase the level of larization, including increasing access to long-term lari loans, adequate sharing of FX risk, and mandatory pricing in lari. As development of capital markets plays an important role for promoting the national currency, the National Bank of Georgia and the Government of Georgia jointly developed a Georgian capital market development strategy. The implementation of pension reforms is one aspect of the larization measures that will ultimately ensure a widening of long-term lari resources. Pension reform will also increase savings in lari. Subsequently, the difference between investment and saving will diminish and the current account balance will improve.

Evaluation of foreign exchange risk during decision-making processes is critical in Georgia because borrowers regularly have a mismatch between the currencies of their assets and their liabilities: their liabilities are often denominated in a foreign currency while their income tends to be received in the national currency. In order to hedge borrowers against FX risks, legislative amendments were implemented, according to which small loans (of below 100,000 lari) are only issued in the local currency.

Another obstacle to the larization process is that real estate prices are generally quoted in foreign currency; despite the fact that the majority of construction costs are denominated in the national currency. Amendments were thus prepared to the Organic Law on the National Bank of Georgia, according to which there will be mandatory pricing of all goods and services in lari alone.

Development and improvements of communication mechanisms are essential to increase the effectiveness of monetary policy. Communication gains particular importance within the framework of the inflation-targeting regime, because it is essential to properly formulate and manage public expectations. Enhancing the credibility and predictability of the NBG's monetary policy decisions will, in turn, promote rational expectations. Establishing effective communication with society is thus one of the NBG's main priorities.

In 2016, the NBG started to actively use media channels as communication tools. On a quarterly basis (every second meeting of the MPC), the Governor of the NBG began holding press conferences to announce the MPC's decision on the monetary policy rate. During the conferences, the Governor of the NBG explains the MPC's decision and reviews the current economic stance, inflation level and factors that affect prices.

In May 2016, the NBG moved into a new phase of its monetary policy communication by starting to publishing its forward monetary policy path. It

should be clearly stated that the forecasts of the monetary policy rate are not promises made by the National Bank of Georgia. They only represent the expected trajectory of the policy rate, assuming that all exogenous factors incorporated into the forecasts materialize as expected. Through this channel the future monetary policy stance became more predictable, which was reflected in long-run interest rates. As a result of such improvements in communication, the efficiency of monetary policy transmissions to the real economy increased.

In order to improve the analytical communication processes, the National Bank of Georgia also started publishing reports regarding the trends of macroeconomic and financial indicators in 2016. The NBG also continued to hold regular meetings with analysts, representatives of financial sectors and students. The main aim of such meetings is to enhance societal awareness of the NBG's goals and activities.

In order to improve the operational framework of monetary policy instruments, in December 2016 the NBG introduced a new instrument: one-month open market operations. The National Bank of Georgia uses this instrument to supply short-term liquidity to the country's banking system when needed. Similar to other open market operations, the objective of one-month open market operations is to manage short-term interest rates on the interbank money market. Use of this instrument is in line with the International Monetary Fund's recommendations and international best practices.

Throughout 2016, the National Bank of Georgia continued working on new legislative amendments in order to execute recommendations made following the "Financial Stability Assessment Program" (FSAP), which was undertaken by an International Monetary Fund and the World Bank joint mission in 2014, and to satisfy directives under the EU-Georgia Association Agreement. Adopting qualitative amendments to certain laws under

a package of legislative initiatives will refine the supervisory framework and accelerate its convergence with international practices. Such legal initiatives included updating the “Law of Georgia on Activities of Commercial Banks” and the “Organic Law on the National Bank of Georgia”. These changes should strengthen 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.

During 2016, concentration risk adjustments were actively pursued within Pillar 2 of the Basel III framework. According to the “Instruction on Capital Buffer for Credit Concentration Risk for Commercial Banks,” adopted at the end of 2015, commercial banks started the capital calculations needed for the inclusion of name and sectoral concentration risks.

Minimum capital requirements for existing commercial banks and legal persons seeking a banking license were increased to 50 million GEL. Existing banks that do not yet comply with this rule have been given a transitional period to fulfill the requirement. The purpose of this new requirement is to restrict excessive risk taking in low capitalized banks and to ensure financial stability. It is noteworthy that the previous minimum capital requirement was amongst the lowest in the world and did not correspond to the level of development of either the country or its financial sector.

In 2016, three commercial banks had their banking licenses revoked. It is worth noting that the liquidations of these institutions took place in an organized fashion and the demands of all creditors and depositors were satisfied in full and without blemish.

By 31 December 2016, 16 commercial banks were operating in the Georgian banking sector. At that time, 86% of bank assets and 84% of stockholder

equity was owned by foreign investors. During the year, JSC TBC Bank acquired 100% ownership of JSC Bank Republic and, as a result, a merger of the two entities is planned.

The banking system is well capitalized. The Tier I capital ratio, within the frames of Basel III, amounts to 10.5%, while the regulatory capital ratio amounts to 15.1%, which exceed the NBG’s minimum capital adequacy requirements by 2% and 4.6% respectively. The share of 90-day overdue loans in the gross loan portfolio (excluding interbank loans) amounts to 3.7%, which is one of the best results among comparable countries. Throughout 2016, the volume of liquid assets was high and was characterized by minor fluctuations. Liquid assets constitute 23% of total assets, which is sufficient to cover 41% of non-bank deposits.

After receiving feedback from commercial banks, disclosure requirements within Pillar 3 will come into force in 2017. This will facilitate financial sector transparency in the country. Throughout 2016, the National Bank of Georgia continued its assessment of the quality of commercial banks’ data and, at the same time, audits of their information systems continued. Furthermore, given the supervisory requirements of 2017, the National Bank of Georgia mandated that commercial banks conduct penetration tests.

Protection of consumer rights is a priority for the National Bank of Georgia and significant changes were made in this direction in 2016. Considering the problems identified over recent years, the rule on “Disclosing Essential Information to Consumers when Providing Services by Commercial Banks” was updated to better respond to existing challenges. It now extends not only to commercial banks, but also to all financial sector representatives. The new rule will be enacted starting from 1 June 2017. Furthermore, with the aim of strengthening the protection of customer rights and effectively raising financial literacy levels, structural changes were implemented in the beginning of

2017. These saw the “Consumer Rights Protection Division” be changed to the “Consumer Rights Protection and Financial Education Department”.

In 2016, on the initiative of the NBG and in cooperation with the Tbilisi/Georgian Stock Exchange, reforms of the Securities Settlement System commenced. This reform is part of the capital market development strategy. This project also considers the further development of the NBG Central Securities Depository (CSD).

As of 31 December 2016, other financial institutions in Georgia comprised 11 credit unions, 81 microfinance organizations, 1,200 currency exchange bureaus and 118 monetary remittance units.

The microfinance sector continued to grow and develop in 2016. In comparison with 2015, total assets increased by 25.4%, and amounted to 2.02 billion GEL. This growth was proportionate to the expense of liabilities and capital, which amounted to 1.47 billion GEL (18% growth) and 547 million GEL (50% growth) respectively. The growth of assets is partly related to the registration of highly capitalized online loan issuer companies as a microfinance companies in December 2016. Throughout the year, a light supervision regime continued to be maintained on microfinance organizations.

In 2016, efforts continued to work with those microfinance organizations that attract funds from less informed retail investors and that had expressed readiness to change their business models. These organizations presented an action plan that entails decreasing the amount of relatively small loans being issued to physical persons and a gradual exit from the retail segment. According to the action plan, microfinance organizations will stop advertisement campaigns to attract funds from retail investors and have started to replace retail investors with more qualified investors. This process has continued into 2017 as well.

Significant attention was also paid to non-banking financial intermediaries operating in the Georgian market that were not registered with the NBG, but were attracting funds from retail investors through various advertisement campaigns. It should be noted that, as a result of intensive communication efforts from the NBG, the majority of these organizations stopped attracting funds from retail investors and dropped their related advertisement campaigns.

In 2016, in order to increase the compliance of financial institutions with anti-money laundering legislation, the Money Laundering Inspection and Supervision Department implemented risk-based supervision of micro-finance organizations, securities registrars, broker companies and credit unions. Risk-based supervision implies early identification of problematic institutions, or internal risks facing institutions, and the implementation of adequate supervisory measures.

Payment systems and payment services are still steadily developing in Georgia. The RTGS (Real Time Gross Settlement System) represents the most significant payment system in Georgia. In 2016, the system’s availability ratio was 99.9%, as was the case in previous years, and is a clear indicator of the sustainability of the introduced system. The payments market continued to develop dynamically and the number of payment service providers increased (38 providers were registered by the end of 2016). In order to improve the regulation of payment services, the National Bank developed a new rule on “Registration and Regulation of Payment Service Providers,” which is suitable for the market development level. The rule entered force on 1 March 2017.

In 2016, work continued to improve information technology, with significant developments being made to the National Bank’s server infrastructure. At the beginning of 2016, the National Bank suc-

cessfully completed recertification of the Information Security Management System (ISMS) in compliance with International ISO 27001: 2013 standards. At this point, the National Bank of Georgia is the first and only organization in Georgia certified in compliance with that standard.

During 2016, the NBG actively continued to widen its statistical information system "SebStat".

The main aim is to create an aggregate information base and produce new statistical products that will be advantageous during monetary and supervisory management processes. Moreover, consumers of the NBG's statistics will have access to a better informational environment regarding current developments in the financial and external sectors.



01

MACROECONOMIC ENVIRONMENT



1.1 WORLD ECONOMY

In 2016, the global economy faced new challenges on top of existing geopolitical and structural problems. Although economic activity in developed countries improved, a slowdown was observed in the developing world. Of the events of 2016, it is worth noting that the decision of the UK population to leave the EU in June (Brexit) spawned additional risks. Given the background of deteriorated expectations, the likelihood increased that the recovery of the EU economy would be slower than expected. Nevertheless, current estimates sug-

gest that the short-term effects remain negligible. Significant political changes took place in the United States, where the new administration gave rise to expectations of fiscal stimulus and a quicker normalization of monetary policy. Meanwhile, the situation in Turkey in 2016 was significantly strained: economic activity slowed amid armed conflicts near the country's borders and internal political disturbances, including the attempted military coup in July. The International Monetary Fund estimates that the global economy grew by 3.1% in 2016 – a little lower than the 3.4% growth in 2015.

Diagram N 1.1
Global Output



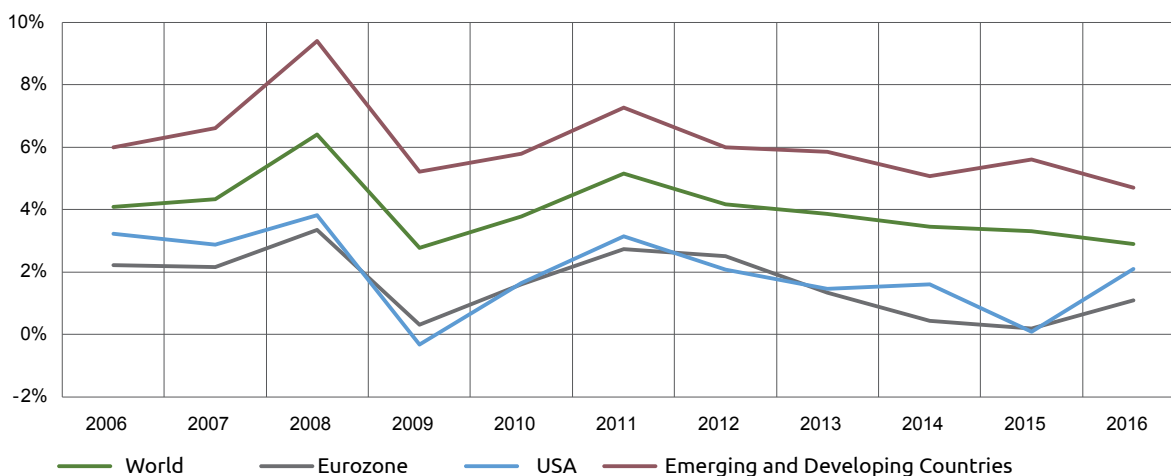
Source: International Monetary Fund

In Ukraine, after two years of decline, economic activity stabilized. In the second half of the year, against the background of a de-escalation of the military conflict in the eastern part of the country and a reduction of pressure on consumer prices, consumer and business sentiment significantly improved, and the government initiated structural reforms. At the same time, as a result of the efforts of the International Monetary Fund and donor countries, the country received substantial financial assistance to overcome its economic problems. In 2016, Ukraine's economy grew by

2%, while consumer prices were up by 12% year on year.

According to preliminary data, the Russian economy shrank by just 0.2% in 2016, indicating that the earlier shocks stemming from low global oil prices and economic sanctions had largely been neutralized. Under a floating exchange rate and a strict monetary and fiscal policy regime, the positive trade balance contracted less than expected, with the annual inflation rate dropping to 5%, and industrial production gradually improving.

Diagram N 1.2
Global Inflation



Source: International Monetary Fund

The year 2016 turned out to be extremely hard for the Turkish economy. The attempted military coup, terrorist acts, depreciation of the national currency and other political crises resulted in a major deterioration of business and consumer sentiment. Meanwhile, the driving forces of the economy – the industrial and tourism sectors – were substantially weakened. Despite the government's massive expenditures, in the third quarter, Turkey's GDP declined for the first time since the global financial crisis. The lira's depreciation against the US dollar put pressure on prices and increased the annual inflation rate to 8.5% by the end of 2016.

The decline in global oil prices has had a severe impact on the economy of Azerbaijan, with the country's GDP, according to the latest estimates, falling by a more-than-expected 3.5% in 2016. The government attempted to mitigate the negative shock by initiating massive infrastructural and social projects and encouraging non-oil industries. As a result, in the second half of the year, signs of a recovery of macroeconomic indicators emerged amid a stabilizing oil market. Consumer price inflation posted 12.5% year on year, due to pressure from the depreciation of the manat.

According to preliminary estimates, Armenia's economy grew by only 0.5% in 2016. This weak growth was mainly caused by the recession in Russia – the country's main trading and financial partner. In the wake of a decrease in aggregate demand, the country's agriculture and construction sectors significantly shrank; however, the stabilization of global commodity prices contributed to significant growth in the mining sector. Consumer price deflation reached 1.1% by the end of 2016. In 2016, real GDP in the US grew by 1.6% – a moderate figure that indicates the existence of a fundamental hindering factor. Despite the improvement of the labor market, the productivity in USD increased slightly against the background of weak investments from the business sector. Consumer demand was relatively solid during this period, which was a major contributing factor to the overall growth. Despite the fact that the new administration's plans have created some vagueness in terms of trade policy and geopolitical relations, it is believed that fiscal stimulus will take place. This, in turn, will require a more rapid normalization of monetary policy.

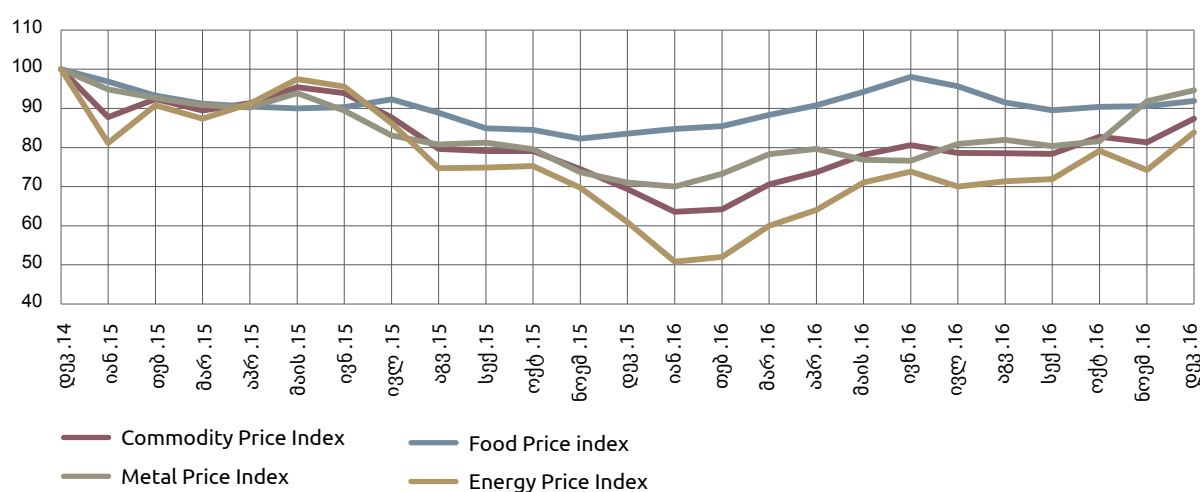
The decision taken by the United Kingdom to exit from the European Union did not have a significant effect on expectations and economic activity in the eurozone. The eurozone's recovery thus continued and was supported by improved labor market conditions, low inflation and a loose monetary policy. The real GDP of the eurozone grew by an annual 1.7%, while consumer price inflation hovered around 1.1%.

In the second half of 2016, alongside the weakening effect of the depreciation of local currencies, the annual inflation in countries within Georgia's region began to decline – this allowed their central banks to cut monetary policy rates to stimulate economic activity. Meanwhile, in those developed countries where output growth is below its potential and consumer prices are rising at a low

pace, expectations for loose monetary policy remained. As for the US, with the Federal Reserve increasing the policy rate last December, and given the recent high inflation and current levels of economic activity, expectations of a relatively faster tightening of the policy rate emerged.

During 2016, prices of commodity products tended to rise. This growth was positively affected by almost all subgroups, including food, energy and metal prices. The agreement made by oil exporter countries (OPEC) last November to reduce production was significant in terms of the changes in oil price dynamics on the international market. However, weak global demand and rising shale oil production in the United States prevented prices from increasing substantially.

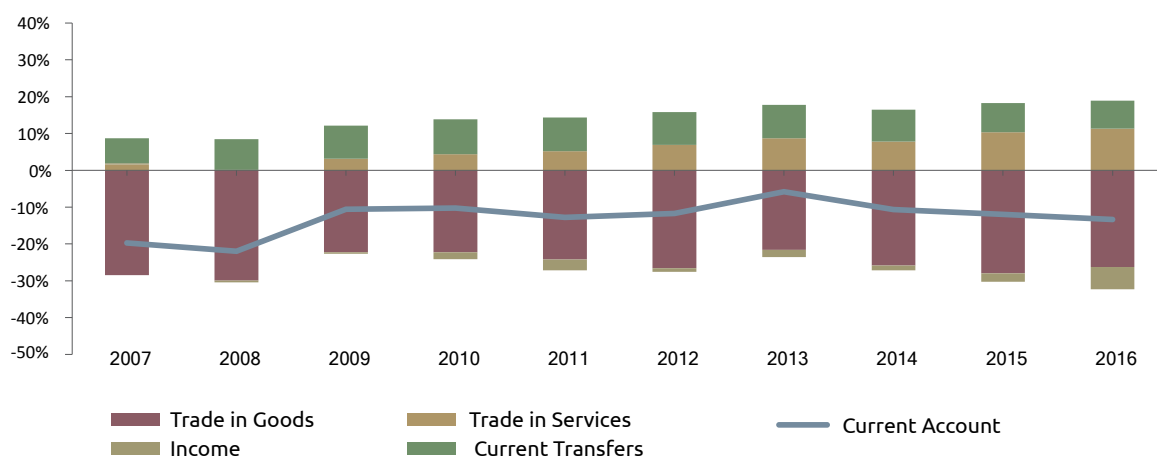
Diagram N 1.3
Global commodity prices



cal tensions, the national currencies of Georgia's major trading partners continued to depreciate. It is worth mentioning that the depreciation of the euro was the result of the continued expansionary monetary policy of the European Central Bank. Subsequently, the pressure on the exchange rate increased for the rest of the year. Prices on oil markets decreased at lower rates; however, as a result of oil prices having already been reduced, the demand on Georgian exports from oil exporting countries was moderate. In light of general

improvements in the economic environment, current transfers from Russia and Greece increased, which, to some extent, had a positive influence on trade balance financing. Moreover, it is worth mentioning that the GEL depreciation in 2015 had an offsetting effect on the trade balance in 2016. On the one hand, this induced a decrease in imports and, on the other hand, promoted tourism revenues and supported the slowdown of export reductions.

Diagram N 1.4
Ratio of current account components to GDP

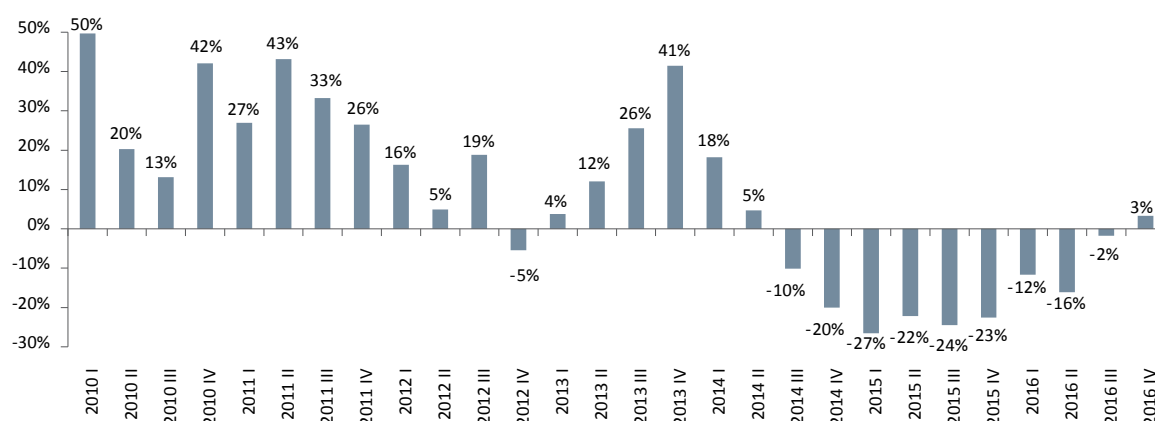


Source: National Bank of Georgia

In 2016, the current account deficit reached 13.3% of GDP, which was 1.3 percentage points higher than the same indicator from the previous year. In absolute terms, the current account deficit widened by 229 million USD and amounted to 1.9 billion USD. Furthermore, the trade balance improved by 4% or 139 million USD. Apart from having a positive impact and narrowing the current account deficit, the trade in services balance increased by 156 million USD. It is worth mention-

ing that tourism export inflows increased by 230 million USD (by 12%). The widening of the current account deficit was mainly due to the deterioration of the income account balance (by 514 million USD), which itself was induced by increased profits from direct investments made in Georgia. An increase in reinvested earnings, dividends and distributed profit brought the current account deficit to a higher level.

Diagram N 1.5
Annual growth rates of exports of goods (2010-2016)²

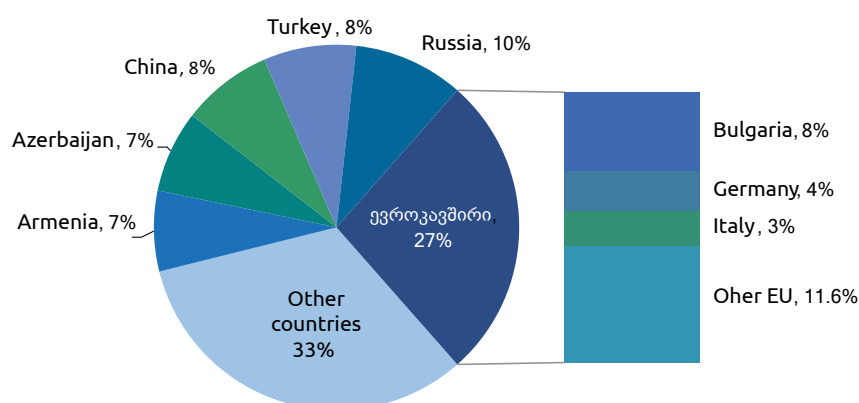


Source: National Bank of Georgia

The trade balance remains the most negative component of the current account. The deficit of trade in goods narrowed modestly and reached 26.5% of GDP. Exports of goods decreased substantially in 2015; however, from the beginning of 2016 this reduction slowed to some extent, before showing positive annual growth in the fourth quarter. Overall, exports of goods decreased by 6.5% in 2016. In terms of imports of goods, these continued to decline in the first quarter of 2016, but this

reduction became more modest from April. From the fourth quarter, imports of goods showed a positive growth rate. Overall, imports of goods decreased by 4.9% in 2016. It is worth mentioning that, unlike in 2015, the decline of consumer goods imports had a moderate share in the overall change in imports. The main part of the overall reduction can be attributed to intermediate goods, while imports of investment goods increased.

Diagram N 1.6
Export structure by country in 2016



Source: National Bank of Georgia

2. Exports of goods in BOP. 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 the BOP export/import of goods are presented in FOB prices.

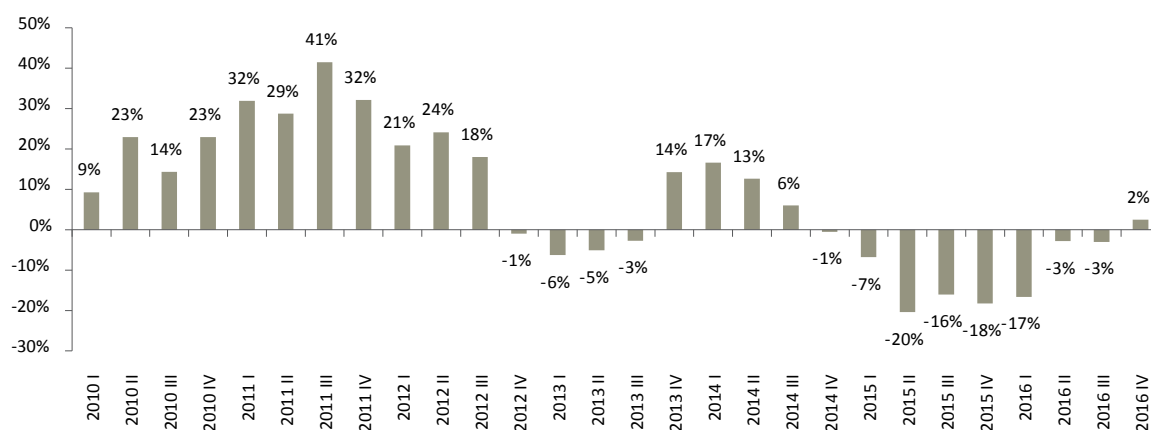
In light of the reduction of exports, it is interesting to observe the changes observed in destination countries. Exports to EU and CIS countries decreased by 11.5% and 12.3% respectively. The reduction in exports to CIS countries was mainly driven by the decrease of exports to Azerbaijan (-36.7%), Armenia (-16.4%) and Uzbekistan (-27.2%). On the other hand, exports increased to Russia (26.6%), China (34.8%) and Switzerland (165.1%). Of the latter, 52% of exports to Switzerland consisted of gold and gold substance commodities. Moreover, an export reduction was observed to the USA (-34.5%) and Turkey (-7.1%). Having been declining over the last two years, exports to Ukraine increased in 2016 (by 22.3%).

In 2016, the main export countries, aside from the EU, were Russia, Turkey and China. With an 8% share of total exports, China appeared in the list of

the top countries for the first time. A total of 78% of exports to China consisted of copper ores and concentrates. It is worth mentioning that copper ores and concentrates significantly contributed to the overall increase of exports in 2016, comprising 15% of overall exports in goods and showing 15.2% annual growth. Despite the drastic reduction of exports seen in recent years, with an 8% share in overall exports, motor cars again became a top export commodity.

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 copper and ferrous waste and scrap declined gradually to maintain a modest share in the overall export volume.

Diagram N 1.7
Annual growth rates of imports of goods (2010-2016)³



Source: National Bank of Georgia

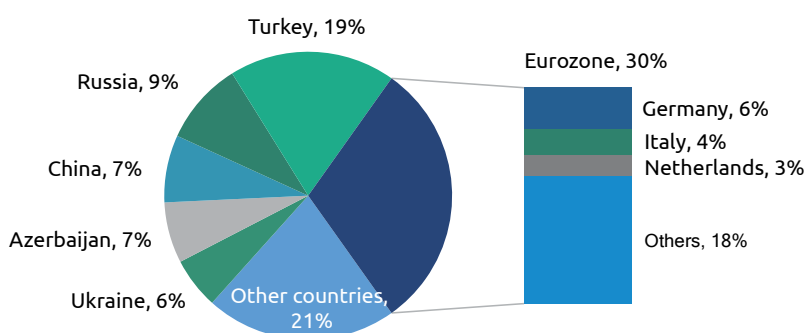
3. Exports of goods in BOP. External trade data by Geostat and the data on exports/imports by the BOP are different concepts that rely on different methodological frameworks. Foreign trade statistics are based on the principle of crossing a border, whereas the main principle of trade of goods in the 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 the BOP, export/import of goods are presented in FOB prices.

In 2016, import reductions were mostly observed in intermediate goods (-4.8%), while consumer goods imports decreased by only 1.2% annually (unlike the substantial change seen in 2015). In addition, imports of investment goods increased by 15%. The largest import commodity was again petroleum and petroleum oils, which had an 8% share in overall imports. Motorcars and tobacco products also both had large shares in overall imports (8%). Moreover, it is worth mentioning that

imports of copper ores and concentrates saw 20% growth in 2016 (having a 3.4% share in total imports), which was mainly driven by the recovery of copper re-exports during recent years.

Imports from the EU increased by 6.4% and covered 30% of overall imports. Imports from CIS countries increased modestly by 0.6%, and accounted for 27% of overall imports. All in all, imports from other countries declined by 4.6%.

Diagram N 1.8
Import structure by country in 2016



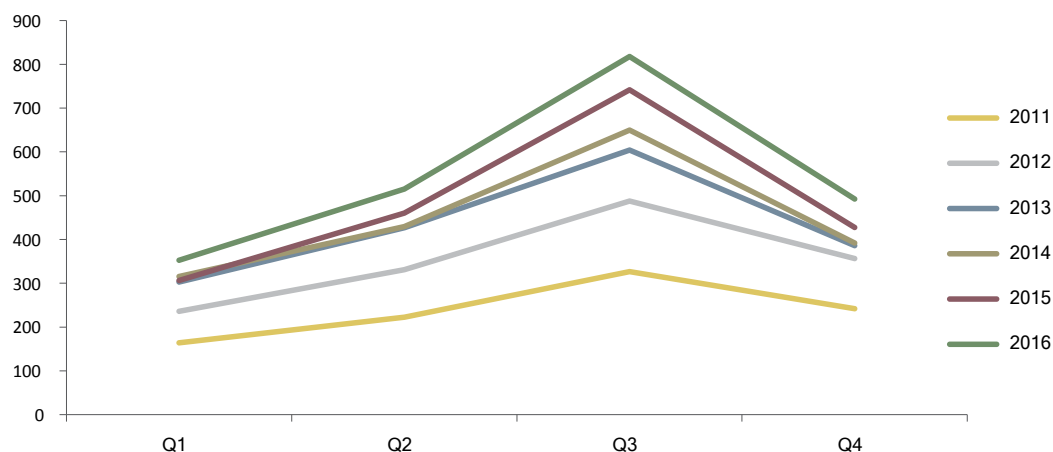
Source: National Statistics Office of Georgia

Similar to previous years, aside from the EU, imports were largest from Turkey, which had a 19% share of overall imports. In 2016, imports from Turkey grew by 1.9%, whereas imports from Russia increased by 8% and comprised 9% of overall imports. Imports from the Netherlands increased substantially (by 69.3%), which was mainly a result of the import of air pumps and generators in the framework of new pipeline constructions.

As has already been mentioned, improvements in the balance of trade in services positively impacted the current account deficit. The ratio of

trade in services surplus to GDP amounted to 11.9%, which is 0.8 percentage points higher than the same indicator from the previous year. In absolute terms, the balance of trade in services improved by 156 million USD compared to the previous year and reached 1.61 billion USD. The rise in the surplus was mainly due to increased inflows from the tourism sector. Revenues from tourism, which comprise the major part of services exports, amounted to 2.17 billion USD – an increase of 11.9% compared to the previous year. During recent years, revenues from tourism have become a major source of financing the goods trade deficit.

Diagram N 1.9
Tourism export revenues (2011-2016)



Source: National Bank of Georgia

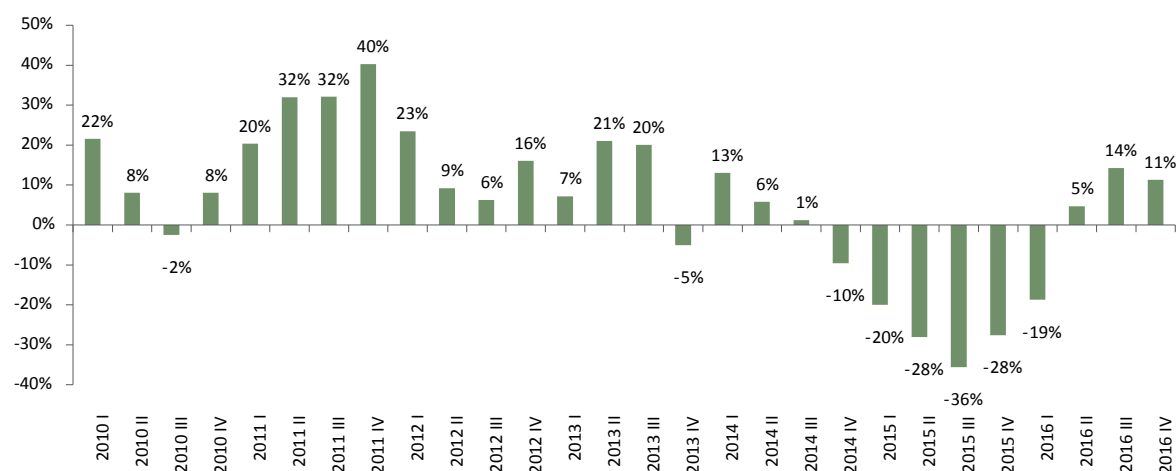
The number of international visitors to Georgia increased by 7.6%, which was mainly due to increased inflows of tourists from Azerbaijan (9.4%), Russia (12%) and Armenia (1.9%). Moreover, increased numbers of people arrived from Israel, Germany, Kazakhstan, the USA, Belarus and Poland. In percentage terms, the highest growth (485%) was seen in visitors from Iran. In addition, international visitors from Saudi Arabia and India grew substantially, by 116% and 201% respectively. It is worth mentioning that tourists were arriving from new countries and were staying in Georgia for longer periods than before. Although the number of visitors from Turkey decreased noticeably (by -9.7%), visitors from that country still accounted for a sizeable number of the overall number of international visitors.

In overall terms, the income account deficit widened by 514 million USD compared to the previous

year and amounted to 838 million USD. The deterioration of the income balance was again mainly driven by the deficit in investment income, which widened sharply by 584 million USD and amounted to 1.4 billion USD. This fact was induced by a worsening of the income account in terms of direct and other investments – specifically by the increase of distributed dividends and reinvested earnings. Although the latter has a negative impact on the current account balance, it was shown in foreign direct investments and thus did not induce capital outflows.

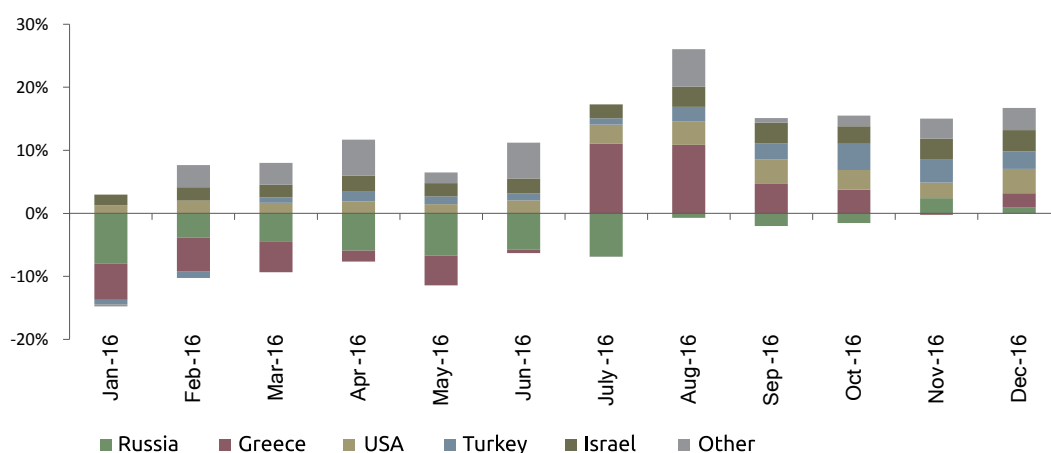
Moreover, the balance of compensation of employees increased by 70 million USD and amounted to 558 million USD. This increase was mainly due to the revived economic activities observed in neighboring countries; however, the depreciations of national currencies in these countries continued to negatively affect the overall income level.

Diagram N 1.10
Annual growth rate of money remittances (2010-2016)



Source: National Bank of Georgia

Diagram N 1.11
Contributions to the change in money remittances (2016)



Source: National Bank of Georgia

In 2016, there was a slight decline (of 0.8%) in net current transfers, while an increase was seen in transfers directed to the general government (13.6%). Personal remittances, which usually account for a substantial part of current transfers, grew by 2% annually. In 2016, personal remittances began to increase from the second quarter, mostly coming from Israel, the USA, Greece and

Turkey. Personal remittances from Russia once again decreased annually.

In 2016, similar to previous years, the current account deficit was mainly financed by foreign direct investments. These reached 1.6 billion USD, which was 5% more than the previous year. The majority of investments were directed to the construction,

manufacturing and energy sectors. Compared to the previous year, foreign direct investments increased to those sectors by 47.7%, 79.2% and 63.9% respectively. It is worth mentioning that foreign direct investments to the financial sector decreased considerably (by -23.9%), which was mainly a consequence of the exit of the French “Societe Generale Group” from the Georgian banking sector.

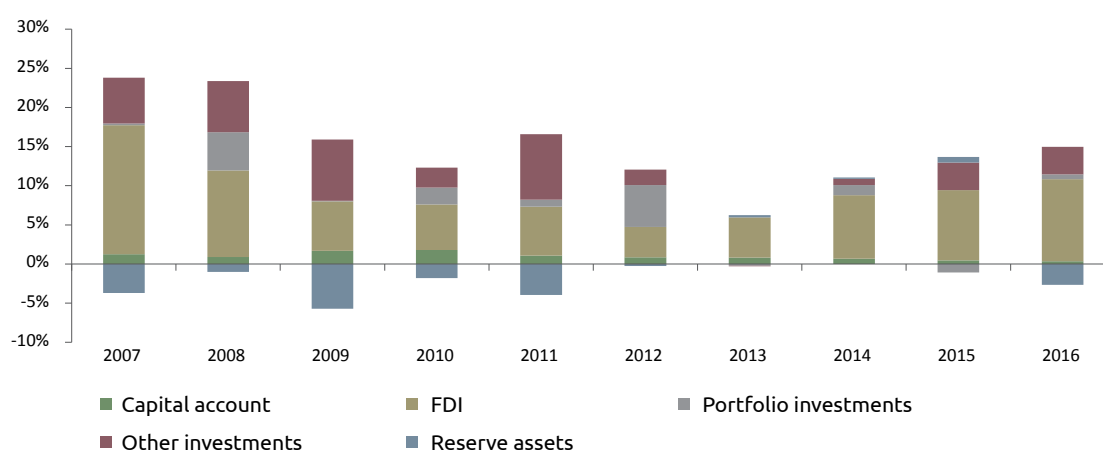
In 2016, the balance of portfolio investments was negative and amounted to 329 million USD, which was mostly attributed to the banking sector. It is noteworthy that in the second half of 2016, a commercial bank repurchased bonds (issued in previous years) and thus a negative balance was obtained in portfolio investments. These liabilities were paid off with new loans, which appeared in the inflows of other investments.

Furthermore, the contribution of other investments in financing the current account deficit was substantially higher than in the previous year. In 2016, net inflows of other investments amounted

to 1.1 billion USD. The majority of increased liabilities were attributed to the general government and the private (non-bank) sector. Total loans directed to the general government amounted to 295 million USD. It is noteworthy that 99 million USD of state budget support credits were obtained from the Asian Development Bank. Moreover, one should mention that the banking sector accumulated additional resources from abroad, which were then partially directed to the reimbursement of old liabilities.

In 2016, international reserve assets increased by 235.9 million USD and amounted to 2.76 billion USD. This increase was mainly due to the rise of minimum reserve requirements (from June for foreign currency liabilities), which induced a surge of reserve assets in 2016. On the other hand, the intervention of the NBG in the foreign exchange market was moderate. During 2016, the NBG bought 1.7 million USD through FX auctions. By the end of the year, the ratio of total reserves to months of imports (forecasted imports of 2017) was around 3.7.

Diagram N 1.12
Financing of current account deficit



Source: National Bank of Georgia

Table N 1.1
Balance of Payments (2012-2016) (million USD)⁴

Name	2012	2013	2014	2015	2016
Current Account	-1,857	-938	-1,769	-1,681	-1,910
Goods	-4,216	-3,493	-4,271	-3,935	-3,796
Export	3,502	4,246	4,073	3,099	2,897
Import	-7,718	-7,738	-8,344	-7,034	-6,693
Services	1,101	1,405	1,289	1,458	1,614
Credit	2,544	2,964	3,019	3,133	3,349
o/w: Tourism Revenues	1,411	1,720	1,787	1,936	2,166
Debit	-1,443	-1,559	-1,730	-1,675	-1,735
Income (Net)	-149	-316	-221	-323	-838
o/w: Interest Payments	-397	-385	-409	-490	-502
o/w: Income on Equity	-227	-441	-327	-189	-805
o/w: Compensation of Employees	568	631	663	488	558
Current Transfers (Net)	1,408	1,466	1,434	1,120	1,110
o/w: General Government	118	91	56	109	124
o/w: Other Private Transfers and Remittances, credit	1,300	1,386	1,397	1,028	1,000
Capital Account	134	134	110	64	58
Financial Account	1,776	846	1,738	1,705	1,926
Direct Investment (Net)	614	830	1,356	1,267	1,430
o/w: Direct Investments in Georgia	911	950	1,763	1,576	1,661
Portfolio Investments (Net)	848	-37	209	-154	-329
Financial Derivatives (Net)	5	-2	8	-2	-4
Other Investments (Net)	347	10	131	494	1,075
o/w: General Government	154	-101	221	276	283
o/w: Others (w/o general government)	193	111	-90	218	792
Reserve Assets	-38	45	33	99	-245
Net errors and Omissions	-53	-43	-79	-88	-74
Important Coefficients					
Reserve Assets in Months of Imports of the Next Year (Months)	3.7	3.4	3.7	3.6	3.7
Export/Import (G&S)	-66%	-78%	-70%	-72%	-74%
CAB/ GDP	-11.7%	-5.8%	-10.7%	-12.0%	-13.3%

Source: National Bank of Georgia

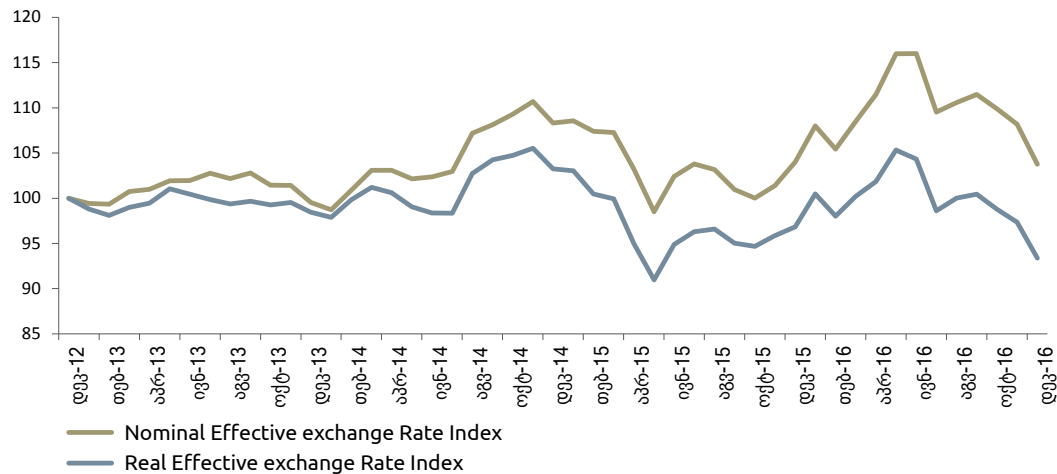
4. According to the fifth edition of the Balance of Payments Manual, issued in 1993.

The real effective exchange rate (REER) is a crucial indicator for assessing the country's external competitiveness. In 2016, the REER depreciated by

3.6%, while the nominal effective exchange rate depreciated by only 0.2%.

Diagram N 1.13

Indices of Real Effective Exchange Rate and Nominal Effective Exchange Rate (Dec. 2012=100)



Source: National Bank of Georgia

Table N 1.2

Annual changes in effective exchange rates in 2016

	Change in nominal effective exchange rate, %	Change in real effective exchange rate, %	Share in real effective exchange rate
Effective Exchange Rate	-0.2	-3.6	-3.6
Eurozone	-6.7	-6.1	-1.5
Turkey	8.4	1.7	0.3
Ukraine	1.4	-8.1	-0.6
Armenia	-9.3	-6.6	-0.3
The United States	-9.5	-9.7	-0.5
Russia	-19.4	-22.2	-2.1
Azerbaijan	39.1	22.6	2.6
Others	-6.1	-5.5	-1.6

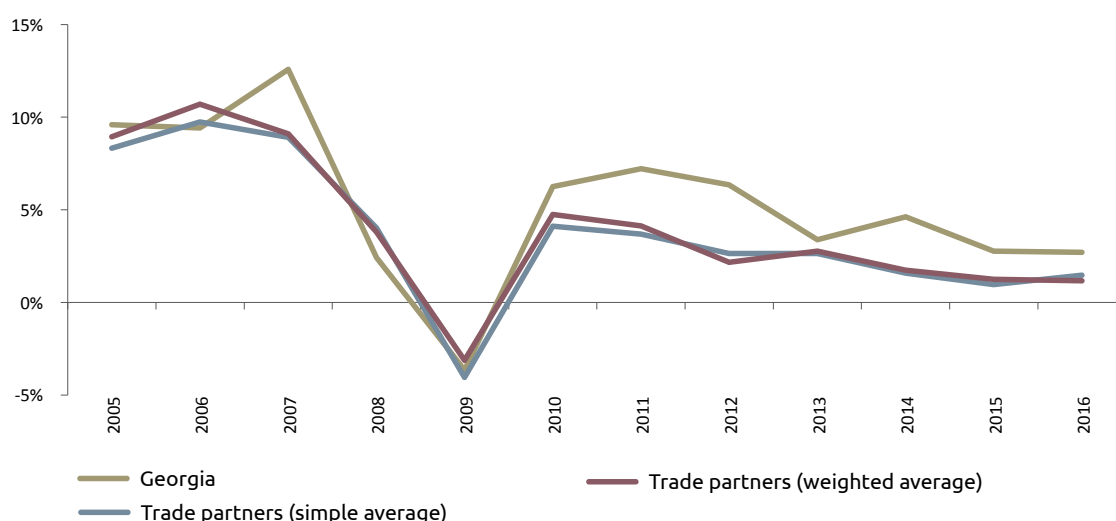
Source: National Bank of Georgia

1.3 ECONOMIC GROWTH

The Georgian economy faced the negative impact of external shocks in 2016. Despite the fact that domestic demand started rising in the second half of the year, it remained weak. Almost every (major) trading partner of Georgia faced economic problems in 2016, as was the case in 2015. The Turkish economy was negatively affected by an attempted coup, terrorism, the depreciation of the national currency and other political crises. The

economy of Armenia started declining since the second half of 2016. Meanwhile, low oil prices (despite an increasing trend) had a negative impact on the economy of Azerbaijan. The USA and EU still maintain sanctions against Russia, however the negative growth rate of the Russian economy declined in the second half of 2016 as a result of stabilized oil prices on the global market. The Ukrainian economy also showed some signs of recovery in the second half of the year.

Diagram N 1.14
Growth rate of Georgia and its trade partners



Source: WEO, IMF

The growth of the Georgian economy amounted to 2.7% in 2016. The services sector made the largest contribution to this growth (1.5 percentage points). The industrial sectors also made a significant contribution (of 1.2 percentage points). Construction was the main driving force of GDP growth, which posted 8.1% growth and contributed 0.5 percentage points. The high growth of the construction sector was due to both government-financed infrastructure projects and private constructions. Of the latter, the new BP pipeline project was particularly noteworthy. The manu-

facturing sector had a significant share in GDP growth (0.4 percentage points) and, unlike in 2015, the sector posted a positive growth rate (of 4.8%) and was among the top contributors to economic growth. 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 growth of manufacturing. Although the mining and quarry sector posted a negative growth rate in the fourth quarter of 2016, the high growth rates in the first half of the year enabled

the sector to still post significant annual growth. The growth of the mining and quarry sector was based on increased gold exports.

The growth rate of the biggest sector of the economy, the trade sector, increased compared to the previous year and amounted to 1.8%. Trade sector growth is very important for the Georgian economy because this sector employs the largest number of people in the private sector. High growth was recorded in the financial intermediation sector (9.4%), which made a significant (0.3 percentage points) contribution to GDP growth.

Throughout the year (especially during the second half), interest rates on loans exhibited a declining trend. This was followed by increased demand for loans, especially on loans for housing. As a result of these trends, the real estate sector posted 6.7% growth (a 0.4 percentage points contribution to GDP growth). Meanwhile, increased tourism revenues had a positive impact on the hotels and restaurants sector, which posted the highest growth rate among all sectors in 2016. The only services sector to post a negative growth rate was the transportation sector – a decline that stemmed from a decrease in railway transportation.

Table N 1.3
Real GDP growth and sector breakdown

	2014		2015		2016	
	Growth	Contribution	Growth	Contribution	Growth	Contribution
Agriculture, hunting and forestry; fishing	1.6%	0.1%	1.5%	0.1%	0.0%	0.0%
Mining and quarrying	0.2%	0.0%	22.4%	0.2%	7.6%	0.1%
Manufacturing	3.3%	0.3%	-2.4%	-0.2%	4.8%	0.4%
Electricity, gas and water supply	-2.4%	-0.1%	3.3%	0.1%	3.7%	0.1%
Processing of products by Households	1.3%	0.0%	3.5%	0.1%	3.0%	0.1%
Construction	13.1%	0.8%	13.5%	0.8%	8.1%	0.5%
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	5.8%	0.9%	0.2%	0.0%	1.8%	0.3%
Hotels and restaurants	7.3%	0.1%	7.5%	0.2%	9.9%	0.2%
Transport	5.8%	0.4%	3.4%	0.2%	-0.9%	-0.1%
Communication	6.3%	0.2%	4.3%	0.1%	-0.2%	0.0%
Financial intermediation	9.9%	0.3%	10.2%	0.3%	9.3%	0.3%
Real estate, renting and business Activities	8.1%	0.4%	6.0%	0.3%	6.7%	0.4%
Imputed rent of own occupied Dwellings	2.6%	0.1%	0.3%	0.0%	2.6%	0.1%
Public administration	2.5%	0.2%	2.1%	0.2%	1.7%	0.1%
Education	3.1%	0.1%	2.1%	0.1%	2.3%	0.1%
Health and social work	1.5%	0.1%	2.4%	0.1%	0.3%	0.0%
Other community, social and personal service activities	0.8%	0.0%	8.5%	0.3%	1.8%	0.1%
Private households employing domestic staff and undifferentiated production activities of households for own use	-5.4%	0.0%	-4.8%	0.0%	-0.6%	0.0%
Financial Intermediation Services Indirectly Measured	11.0%	-0.1%	8.7%	-0.1%	8.1%	-0.1%
(+) Taxes on products	5.7%	0.8%	1.0%	0.1%	1.4%	0.2%
(-) Subsidies on products	0.0%	0.0%	4.5%	0.0%	3.4%	0.0%
GDP at market prices		4.6%		2.9%		2.7%

Source: Geostat

DEMAND

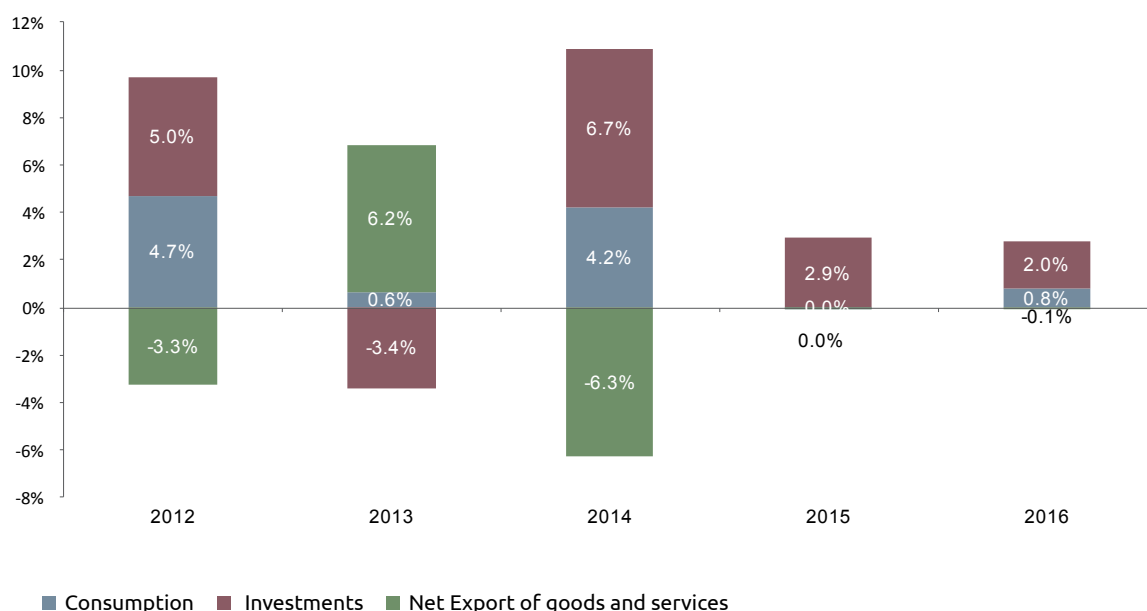
As in 2015, investments were the main driving force of economic growth in 2016 – contributing 2 percentage points. Government infrastructure projects had a significant share in the growth of investments, whereas the construction sector was the main contributor from the private sector. BP investments in the construction of a new pipeline had a significant share of the latter.

Consumption made a small but positive contribution (of 0.8 percentage points) to economic growth in 2016, which was mostly due to increased public consumption. During the first half of the year, private consumption exhibited a declining trend, but started posting slight growth in the second half of the year. The latter stemmed from increased consumer loans in the second half of the year (that

resulted from decreased interest rates on loans). Increased money transfers in the second half of the year also supported the growth of private consumption.

The contribution of net exports to economic growth remained negative in 2016 at -0.1 percentage point. The number of visitors to Georgia exhibited stable growth throughout the year and tourism revenues thus rose, thereby supporting the growth of services exports. External demand started to recover in the second half of the year and promoted growth of goods exports. Domestic demand exhibited recovery signs in the last quarter of the year and consumer goods made the biggest contribution to the growth of imports (in previous quarters, the biggest contribution was made by investment goods).

Diagram N 1.15
GDP growth by expenditure⁵



Source: Geostat; NBG assumptions

5. Consumption and imports in 2015 and 2016 do not include imports of hepatitis C treatments that formed part of the state program.

1.4 CHANGE IN CONSUMER PRICES

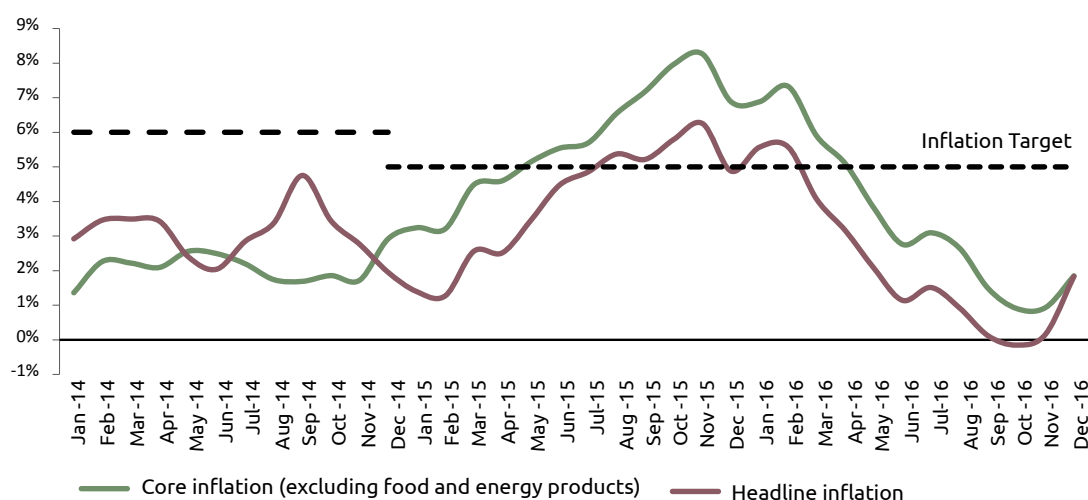
The National Bank's main objective is to ensure price stability in the country. The National Bank uses an inflation-targeting regime to fulfill this obligation. This regime implies announcing a medium-term inflation target in advance. For 2015-2016, the inflation target was 5%.

At the beginning of 2016, inflation was slightly above the target level, but for the remainder of the year, until December, it followed a mostly declining trend and fell below the target level. There are several explanations for this trajectory. The

first explanation is the base effect: in 2015, the increased excise tax on alcoholic beverages, the rise in electricity fees and increased prices on durable goods (on home appliances, in particular) made inflation rise substantially. Therefore, when this effect expired in 2016, inflation decreased.

Another reason for the low inflation in 2016 was weak internal demand, which was a result of low economic activity. Core inflation, which is calculated without food and energy, had a trajectory similar to headline inflation, albeit at a higher level because of the modest increase of food prices and reduced prices on fuel (Diagram N 1.16).

Diagram N 1.16
Headline and Core (without food and energy) inflation



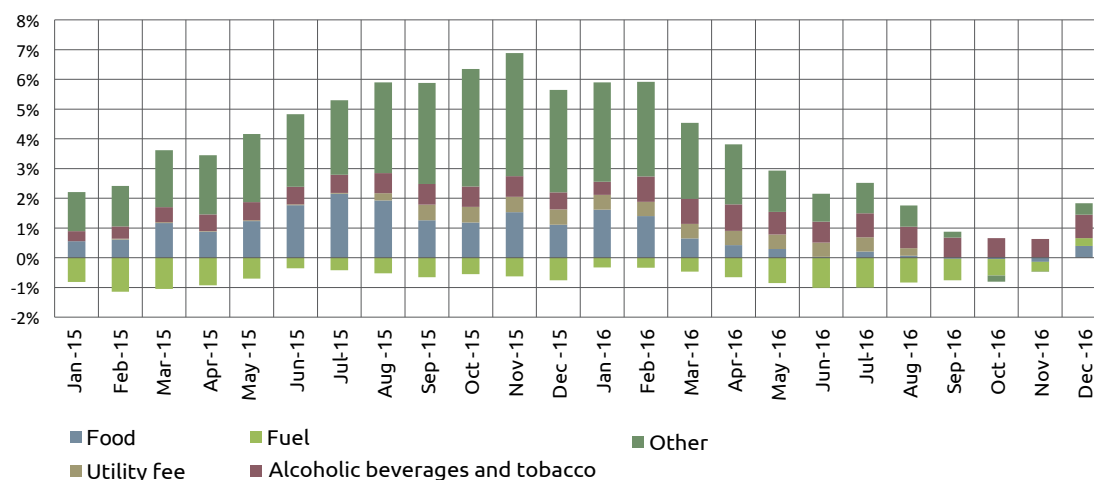
Source: GeoStat

With a weight of 31% by December 2015, "Food and non alcoholic beverages" was the most important group in the consumer basket. Throughout 2016, inflation on food declined and in the second half of the year neared the zero mark.

In 2016, prices of oil on the world market were lower in comparison with the previous year. Consequently, prices on fuel contributed to a reduction of inflation. However, from July, this factor started to expire. After world oil prices grew in December, prices of fuel increased and contributed 0.3 percentage points (pp) to annual inflation.

Diagram N 1.17

Contribution of fuel, food, alcoholic beverages, tobacco and utility prices to headline inflation



Source: GeoStat; NBG calculations

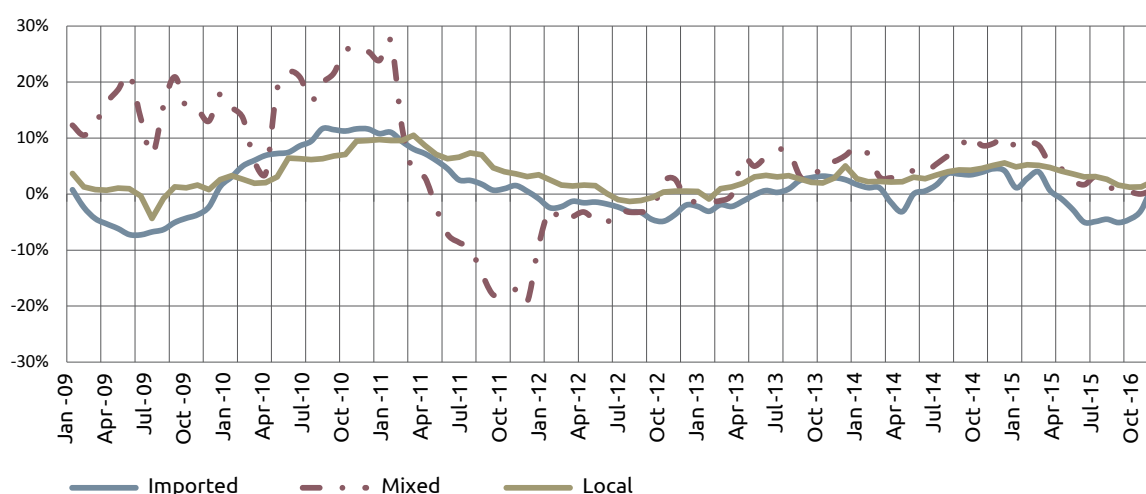
In terms of supply factors, the changing trend on prices of imported products is noteworthy. Imported products account for more than one third of the total consumer basket. Throughout 2016, the lari nominal effective exchange rate was mostly appreciating. As a result, imported products were getting cheaper on average. However, in December inflation on imported products reached 1.6% and their contribution to headline inflation amounted to 0.3 pp, whereas it was -0.7 pp in No-

vember. The contribution of rising fuel prices was the most important aspect of this change. Furthermore, in December the lari nominal effective exchange rate depreciated, which pushed inflation further upward.

From the beginning of the year, inflation on local and mixed products were mostly declining. This can be explained by the base effect and weak internal demand (Diagram N 1.18).

Diagram N 1.18

Imported⁶ and domestic inflation



Source: GeoStat; NBG calculations

6. 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 1.19
Inflation of tradable and non-tradable goods



Source: GeoStat; NBG calculations

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

	2015 December weights	Dec16/Dec15		Jan16-Dec16/Jan15- Dec15	
		Inflation	Contribution	Inflation	Contribution
Total	100.0%	1.8%	1.8%	2.1%	2.1%
Food and Non-Alcoholic Beverages	31.1%	1.6%	0.5%	1.6%	0.5%
Food	27.8%	1.3%	0.4%	1.3%	0.4%
Bread and Bakery	6.8%	0.4%	0.0%	1.3%	0.1%
Meat and Meat Products	6.2%	0.3%	0.0%	-0.5%	0.0%
Fish Products	0.1%	1.3%	0.0%	2.6%	0.0%
Milk, Cheese, and Eggs	5.0%	0.6%	0.0%	-0.8%	0.0%
Oil and Fats	1.8%	1.5%	0.0%	4.1%	0.1%
Fruits, Grapes	1.2%	3.4%	0.0%	9.1%	0.1%
Vegetables, Melons, Potatoes and other Tubers	3.1%	-9.9%	-0.3%	-9.0%	-0.3%
Sugar, Jams, Honey, Syrups, Chocolate, Pastry	3.0%	16.3%	0.5%	12.9%	0.4%
Other Food Products	0.6%	-1.0%	0.0%	0.3%	0.0%
Non-alcoholic beverages	3.3%	4.7%	0.2%	4.6%	0.2%

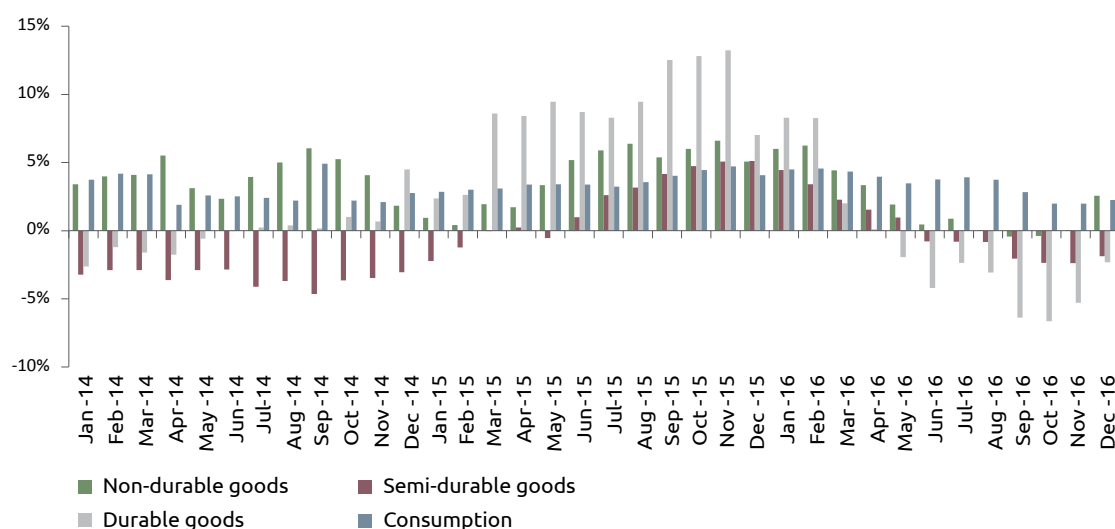
Alcoholic Beverages, Tobacco	6.0%	13.1%	0.8%	12.1%	0.7%
Clothing and Footwear	3.1%	-5.7%	-0.2%	-3.0%	-0.1%
Housing, Water, Electricity, Gas and other Fuels	8.2%	0.1%	0.0%	3.5%	0.3%
Furnishings, Household Equipment, Routine House Maintenance	6.4%	-2.5%	-0.2%	2.1%	0.1%
Healthcare	9.8%	2.1%	0.2%	5.1%	0.5%
Transport	12.1%	2.2%	0.3%	-5.3%	-0.7%
Communication	3.2%	4.3%	0.1%	3.5%	0.1%
Recreation and Culture	6.2%	0.0%	0.0%	2.0%	0.1%
Education	5.0%	1.4%	0.1%	2.0%	0.1%
Hotels, Cafes and Restaurants	4.0%	4.1%	0.2%	5.4%	0.2%
Miscellaneous Goods and Services	4.8%	0.3%	0.0%	2.7%	0.1%

Source: GeoStat

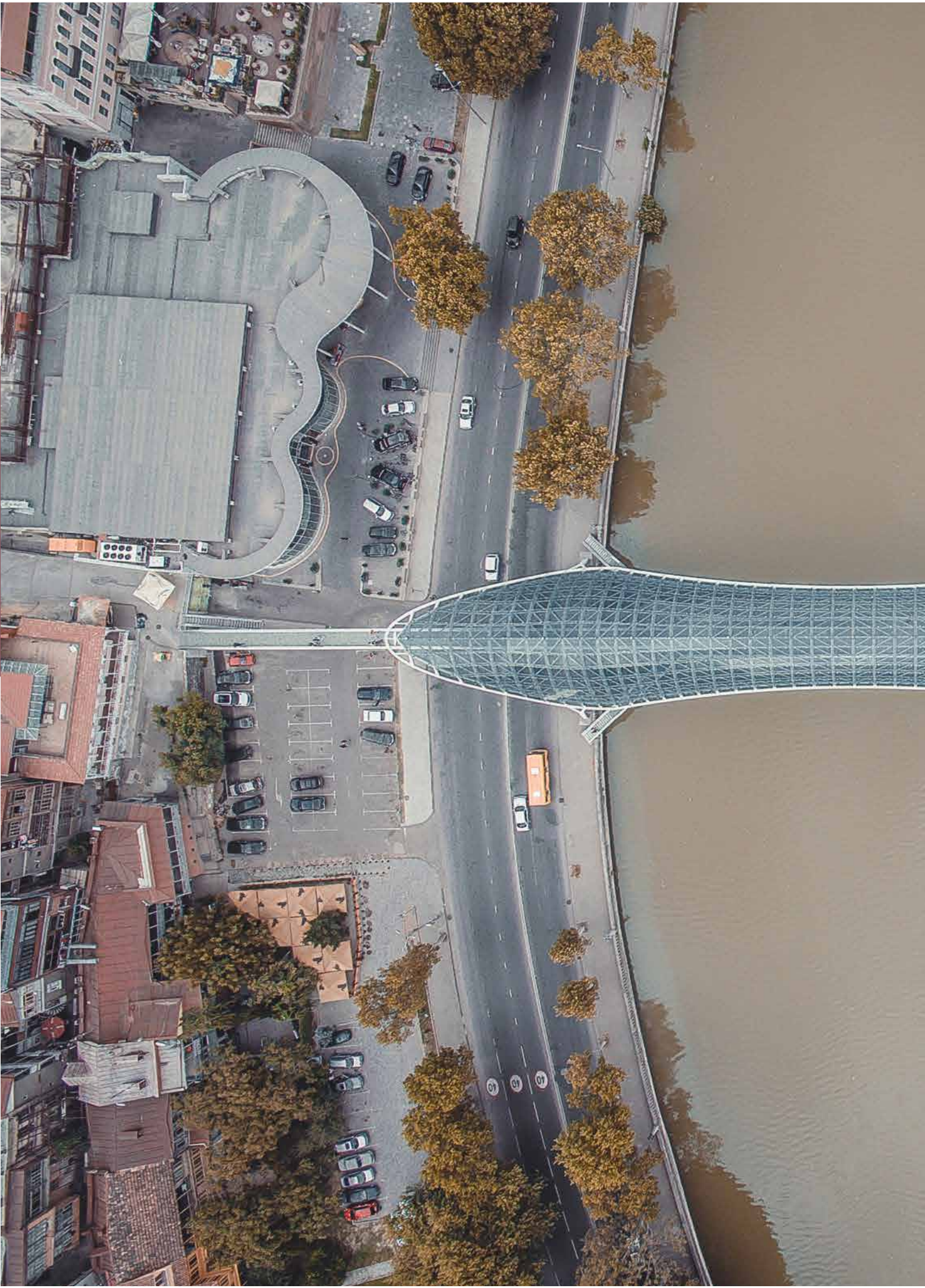
An analysis of price changes in terms of consumption durability demonstrates that the level of consumer prices decreased throughout 2016 for products of long-term use. The category of durable consumption goods mainly consists of imported products (motorcars, household appliances, etc.). Because of the nominal effective exchange rate (NEER) depreciation in 2015, prices on such goods

increased substantially. In 2016, with the appreciation of the NEER, prices decreased and by the end of the year amounted to -2.3%. In the same period, prices on short-term use products and services increased by 2.6% and 2.2% respectively. For goods of medium-term use, the year-on-year deflation amounted to 1.9% (see Diagram N 1.20).

Diagram N 1.20
Change of annual inflation for goods of different durability and services



Source: GeoStat



02

MONETARY AND EXCHANGE RATE POLICY



2.1 MONETARY POLICY

In accordance with the Organic Law of Georgia on the National Bank of Georgia, the primary purpose of the National Bank is to ensure the maintenance of price stability. In addition, the law obliges the National Bank to “ensure stability and transparency of the financial system and promote sustainable economic growth in the country, without jeopardizing the primary objective”.

The monetary policy of the NBG relies on an inflation-targeting regime. In line with the development of monetary policy instruments and the strengthening of monetary policy transmission mechanisms, the NBG has greater ability to maintain inflation at an optimal level. Given Georgia’s current stage of economic development, the inflation target was set at 5% for 2016. The inflation target will decrease to 4% for 2017 and to 3% for 2018 – targets that are outlined in the Decree of the Parliament of Georgia on “the main directions of monetary and exchange rate policy”. If the 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. In Georgia, as in other small open economies, exogenous shocks are imminent. Exogenous factors can thus cause actual inflation to deviate from the target level. The size and duration of such deviations depend on the nature of the shocks and the NBG’s response to them. 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, because doing so would facilitate economic fluctuations and increase social costs. Isard and Laxton (2000)⁷ indicate that the transmission of monetary policy to the real

economy needs a time lag. Thus, in the short run actual inflation can deviate from the target level if it is assumed that in the medium term inflation will remain at the target level. However, if a deviation is so large that it impacts inflation expectations, then it can influence long-run inflation. In such a case, the response of the NBG will depend on the estimation of two possible scenarios: how high inflation would negatively impact long-run economic growth; and how weak demand would hinder economic growth.

The transmission of external shocks to the Georgian economy continued in 2016. At the beginning of the year, Georgia’s main trading partner economies were still weak, but their impact on the Georgian economy was gradually neutralized as time passed. The decline of exports of goods slowed, which was mainly caused by the base effect. Meanwhile, as a result of the depreciation of the exchange rate, imports of goods decreased, which ultimately improved the trade balance. In absence of further external shocks, there was no need for additional monetary policy tightening to contain inflation expectations. Thus, in meetings held in February and March, the Monetary Policy Committee (MPC) decided to keep the refinancing rate unchanged at 8%.

Since the beginning of the year, headline and core inflation were below the target level. Lower inflation was mainly caused by the base effect and reduced commodity prices on international markets. Weak aggregate demand also pushed inflation down, which was partly related to the tightened monetary policy in 2015. Alongside lower inflation, inflation expectations were also reduced. Based on macroeconomic forecasts, the NBG started to gradually phase out its tight monetary policy and the refinancing rate was predicted to be at the

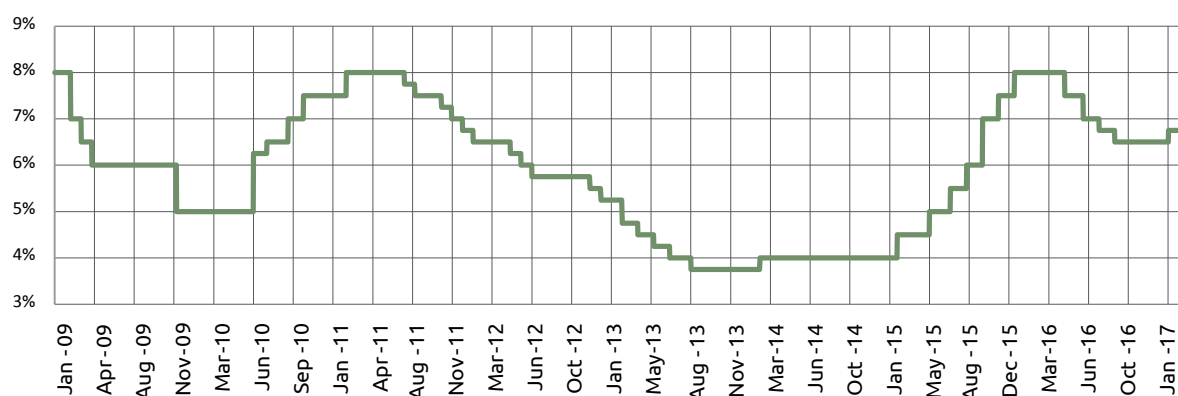
7. Peter Isard and Douglas Laxton, (2000). “Inflation-Forecast Targeting and the Role of Macroeconomic Models”, in *Inflation Targeting in Transition Economies: The Case of the Czech Republic*, ed. by Warren Coates, Czech National Bank, pp. 105-137.

neutral level of 6% by the end of the year. During 2016, the monetary policy rate was gradually reduced by 150 percentage points to 6.5%.

Even though the GDP growth rate was below its potential and demand side pressure on prices remained weak, based on the circumstances at the end of the year, the MPC decided to suspend its monetary policy loosening and found it appropriate to keep the refinancing rate at 6.5%. This decision was partly related to the improvement of the monetary policy transmission mechanism. Alongside decreased interest rates, loans in GEL increased significantly, which had an additional monetary policy easing effect. At that stage,

there was thus no need to rapidly phase out the tight monetary policy. However, at the end of the year the impact of external factors on the Georgian economy worsened. In Turkey, deteriorating domestic and geopolitical factors became a major obstacle to economic growth. The Turkish lira depreciated significantly against the US dollar, which was transmitted to the GEL through the expectations channel. Moreover, the global strengthening of the US dollar put additional pressure on the GEL exchange rate against the USD. Meanwhile, at the end of the year, an increase of excise taxes on specific imported goods was announced. As a result of these factors, inflation forecasts and inflation expectations were both increased.

Diagram N 2.1
Monetary policy rate



Source: National Bank of Georgia

The first results of the loosened monetary policy were seen in the second half of the year. Interest rates decreased on mortgage loans issued in lari and on loans to legal entities. As a result, demand for bank loans increased, which caused an increase of the banking system credit portfolio. The growth rate of loans issued in lari was significantly high by the end of the year.

However, in the first half of the year, the banking system credit portfolio was affected by the tight-

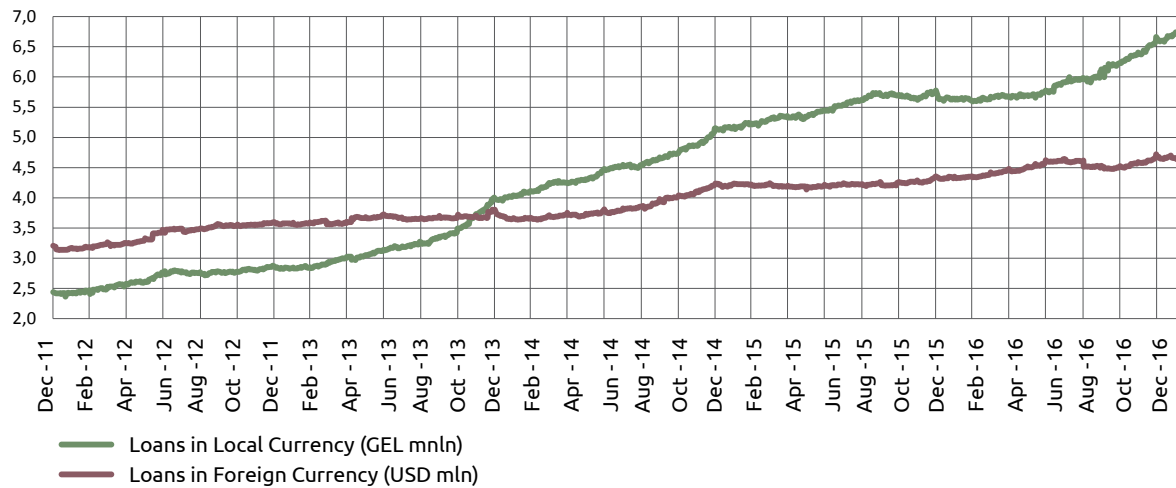
ened monetary policy in the previous year. During this period, the growth rate of lari loans slowed. At the same time, the growth rate of foreign currency loans was high, which increased financial stability risks. Given this situation, the implementation of new measures to contain foreign currency loans were essential. For that reason, the NBG increased its minimum reserve requirements for foreign loans from 15% to 20% and reduced the minimum reserve requirement for national currency loans from 10% to 7%.

Diagram N 2.2
Monetary policy rate and interest rate on loans



Source: National Bank of Georgia

Diagram N 2.3
Credit portfolio of commercial banks



Source: National Bank of Georgia

BOX N 1 MONETARY POLICY COMMUNICATION

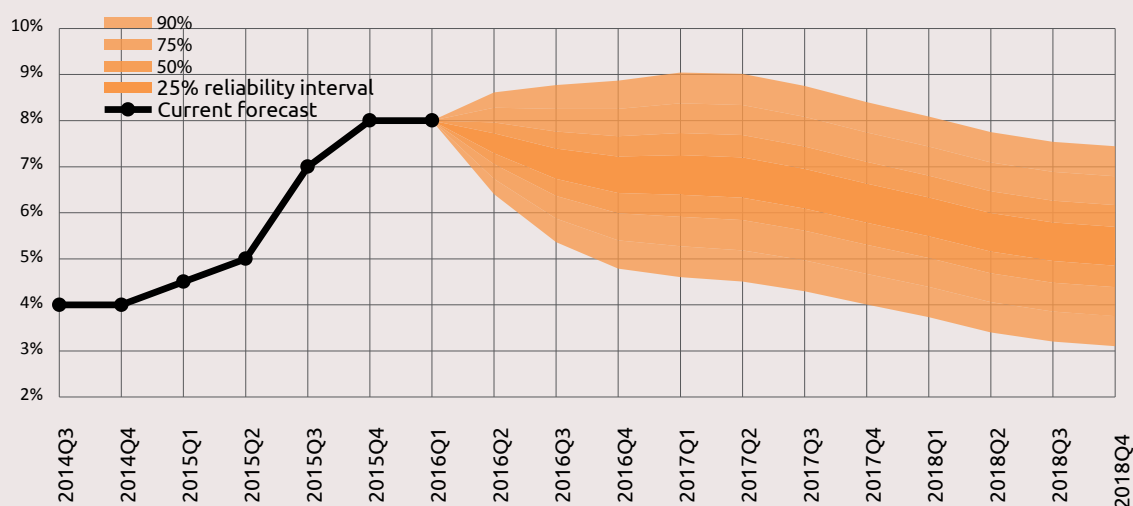
The development of communication mechanisms is essential to increasing the effectiveness of monetary policy. Vayid (2013)⁸ highlights that the formulation of proper expectations plays an important role for monetary policy. At this point, it is important to explain the advantages of communicating the forward monetary policy stance and to examine its impact on the real economy. Effective communication enhances the credibility of a central bank. Moreover, the future monetary policy stance will become more predictable, which will lead to rational expectations.

Establishing effective communication with society is one of the NBG's main priorities and 2016 was remarkable in terms of the development of various communication channels.

In 2016, the NBG started to actively use media channels as a communication tool. On a quarterly basis (every second meeting of the MPC), the Governor of the NBG started press conferences to announce the MPC's decision on the monetary policy rate. During these conferences, the governor explains the MPC's decision and reviews the current economic stance, inflation rate and those factors that affect prices. Meanwhile, these offer representatives of the media an opportunity to ask questions about monetary policy decisions. It is worth noting that the NBG also planned to hold quarterly press conferences in the regions to further enhance its credibility. The latter started in 2017.

In 2016, the NBG continued to hold regular meetings with analysts, representatives of financial sectors and students. The main aim of these meetings is to enhance society's awareness about the NBG's goals and activities.

Diagram N 2.4
Monetary policy trajectory (Monetary Policy Report, May 2016)



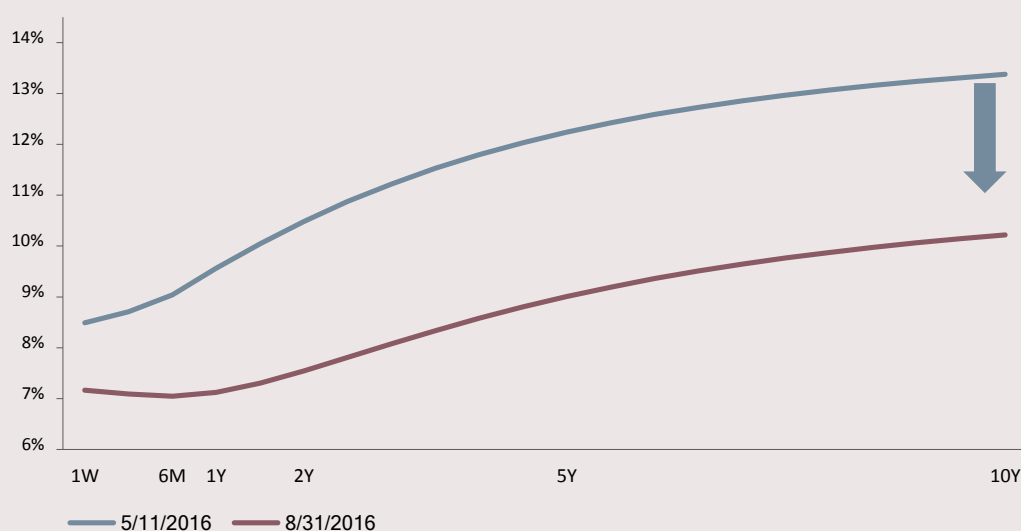
Source: Monetary Policy Report. May 2016

8. Ianthi Vayid (2013). "Central Bank Communication Before, During and After the Crisis: From Open-Market Operations to Open-Mouth Policy," Bank of Canada Working Paper No. 41.

In May 2016, the NBG moved to a new phase of its monetary policy communication and started publishing its forward monetary policy path.⁹ The forward monetary policy path helps economic agents to form rational expectations. It should be clearly stated that the forecast of the monetary policy rate is not a promise from the National Bank of Georgia. It is only the expected trajectory of the policy rate, assuming that all the exogenous factors incorporated into the forecast materialize as

expected. Through this channel, the future monetary policy stance becomes more predictable – which is reflected in long-run interest rates. Subsequently, alongside the decline of the monetary policy rate, the interest rate on treasury bills with various maturities has also decreased. Thus, as a result of communications improvements, the efficiency of monetary policy transmission to the real economy increased.

Diagram N 2.5 The decrease of the Georgian lari yield curve



Source: National Bank of Georgia

To improve its analytical communication, the National Bank of Georgia started publishing reports regarding trends of macroeconomic and financial indicators. The goal of these reports is to provide the general public with short- and long-term macroeconomic analysis.

Recently, many residents and foreign non-bank clients have become interested in treasury bills. In light of this, the NBG has published an explanation of how to buy treasury bills: (<https://www.nbg.gov.ge/index.php?m=339&n&newsid=2915>).

9. The National Bank of Georgia is only the seventh central bank in the world to publish its forward monetary policy path. The other countries doing so are New Zealand, Norway, the Czech Republic, Sweden, Israel and Iceland.

In 2016, the National Bank of Georgia and the Government of Georgia jointly developed the Georgian Capital Market Development Strategy. This strategy envisaged an expansion of the collateral base. Since 1 July 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. Moreover, in 2016 the rules for using standard loans as collateral were simplified. The volume of the collateral base for commercial banks thus increased and costs associated with liquidity management decreased. As a result, commercial banks more actively offer lari loans with lower interest rates.

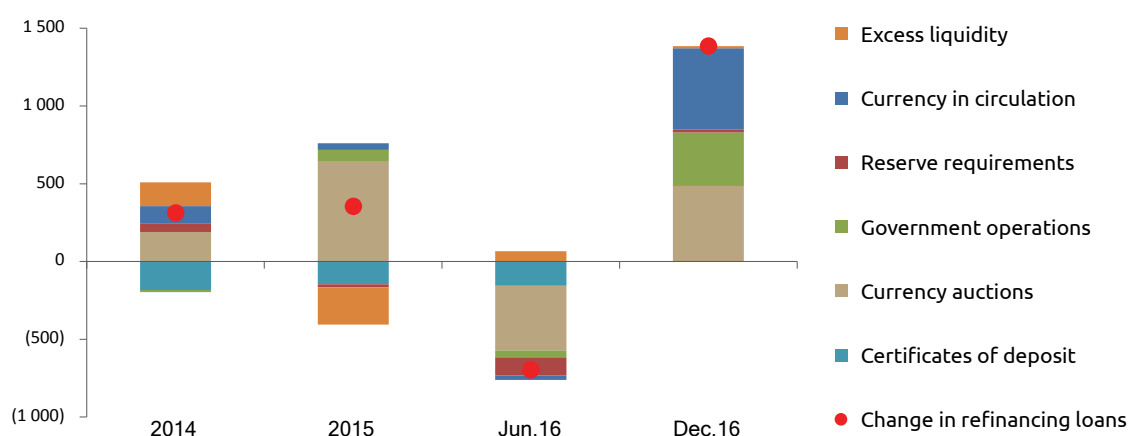
The year 2016 was important in terms of monetary policy instruments. Under the inflation-targeting regime, the primary instrument to achieve price stability is to maintain stable interest rates. Achieving this depends on the effective management of short-term liquidity by commercial banks (see Diagram N2.7).

When necessary, the NBG supplies short-term liquidity to the country's banking system through refinancing loans. In the first half of 2016, demand for refinancing loans in the banking system de-

creased, especially at the end of May and in June. Foreign exchange interventions were the main reason for the reduced demand on refinancing loans. At that time, the NBG purchased foreign currency at FX auctions. Such auctions supplied lari liquidity to the market and the demand for refinancing loans reduced correspondingly. Meanwhile, the reduction of certificates of deposit (CDs) in circulation also had an impact on the volume of refinancing loans. From the beginning of the year, the NBG reduced its absorption of liquidity through CDs and, consequently, banks' demand for refinancing loans decreased.

In the second half of the year, demand for refinancing loans in the banking system increased as a result of several factors. At the end of the year, demand for cash increased and thus demand for liquid assets in the banking system was enlarged. At the same time, as a result of government operations, liquidity in the banking system declined, which was balanced by refinancing loans. Moreover, the NBG's foreign exchange interventions (selling foreign currency) decreased liquidity in lari in the banking system, which was balanced by refinancing loans. As Diagram N 2.6 shows, as a result of the aforementioned operations, the volume of refinancing loans increased.

Diagram N 2.6
Factors affecting refinancing loans



Source: National Bank of Georgia

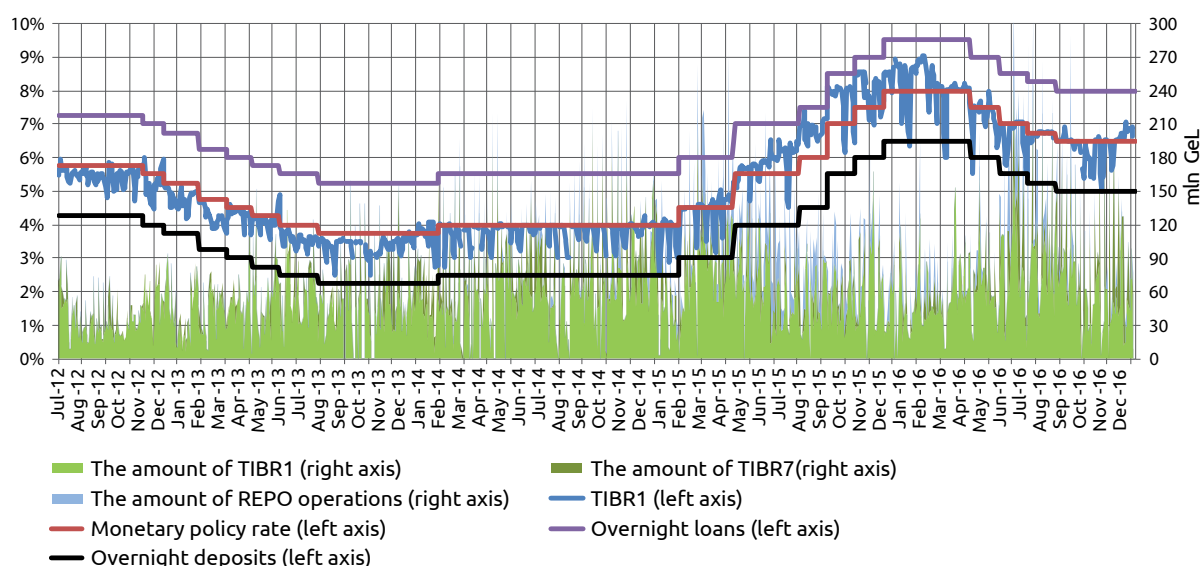
It is worth noting that in December 2016, the National Bank of Georgia introduced a new monetary policy instrument: one-month open market operations. This instrument allows the National Bank of Georgia to supply short-term liquidity to the country's banking system when needed. Similar to other open market operations, the goal of one-month open market operations is to manage short-term interest rates on the interbank money market by providing liquidity to the banking sector and/or absorbing excess liquidity.

For the effective control of short-term interest rates, the National Bank uses both liquidity providing and liquidity absorbing tools. During 2016, there was no need to absorb liquidity as the volume of refinancing loans exceeded the volume of certificates of deposits. The volume of liquidity in the system with CDs lowered from 320 mln GEL at the beginning of the year to 200 mln GEL by the end. Although issuing CDs as a liquidity absorbing

tool was no longer necessary, the NBG still continued to issue 3- and 6-month CDs in minimum amounts to ensure the presence of long maturity interest rates in the market (which are necessary for the development of the money market). However, it should be noted that in 2017 the Ministry of Finance started to issue 6-month treasury bonds and there is thus no longer any need to issue 6-month CDs. From 2017 the NBG will therefore only issue 3-month CDs.

As a result of efficient liquidity management, interest rate volatility is low and fluctuates around the monetary policy rate. As can be seen from Diagram N 2.7, a certain fluctuation of the market interest rate still exists, which is characteristic of any active money market. The money market interest rate volatility is low, which is a precondition for the improvement of the monetary policy transmission mechanism.

Diagram N 2.7
Interbank money market



Source: National Bank of Georgia

In order for the monetary policy mechanism to function, it is necessary that changes in short-term interest rates are also applied to longer-term interest rates and, ultimately, to lending rates. During 2016, the monetary policy rate was decreased by 150 percentage points, resulting in a decrease

in yields on government securities of various maturities. However, at the end of the year, money market interest rates started to grow, which was mainly caused by expectations about monetary policy tightening.

Diagram N 2.8
Money market interest rates



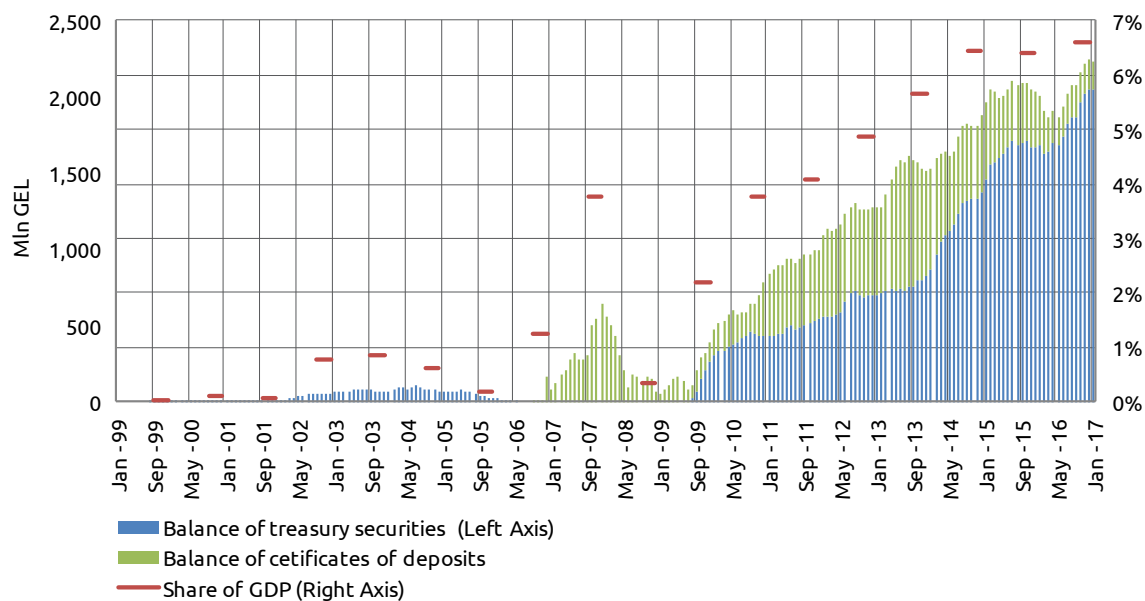
Source: National Bank of Georgia

The activities carried out by the NBG in previous years had a significant influence on the revitalization and development of the money and capital markets of Georgia. Over the past few years, considerable growth was recorded in the trade volumes of treasury securities. In 2016, the balance of treasury securities increased by 22% compared

to the previous year. For the development of the financial market, along with the expansion of primary markets, it is important to revitalize secondary markets to further promote market liquidity. A significant enhancement was recorded in repo transactions during the last two years.

Diagram N 2.9

The dynamics of the balance of treasury securities and certificates of deposit



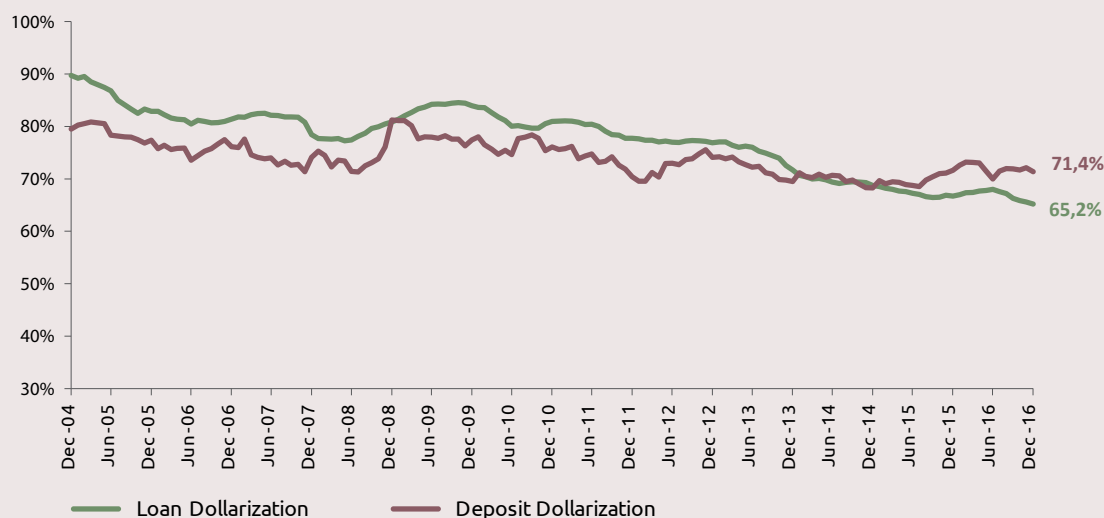
Source: National Bank of Georgia

BOX N 2 LARIZATION MEASURES

In 2016, the high level of dollarization in Georgia remained a major challenge for the economy. At the end of the year, loan dollarization amounted to 65.2% and deposit dollarization to 71.4%. There are several factors behind the high level of dollarization in Georgia. Its origins can be found in the turbulent political and macroeconomic envi-

ronment of the 1990s where, during the transition to a market economy, high levels of inflation and an unstable political environment reduced confidence in the national currency. Subsequently, foreign currency substituted the national currency and the former was used as both a store of value and a medium of exchange. At the same time, the underdeveloped financial markets in Georgia were a major obstacle and a high dependency of money remittances helped cause deposit dollarization.

Diagram N 2.10
Loan and deposit dollarization



Source: National Bank of Georgia

Dollarization is associated with various negative factors. A high level of dollarization imposes risks to financial stability. Furthermore, a floating exchange rate regime absorbs exogenous shocks and is characterized by short-run fluctuations. However, in the case of a rapid depreciation of the lari, the solvency of borrowers, whose liabilities are denominated in foreign currency while their income is in the national currency, will be threatened. Kokenyne et al. (2010)¹⁰ indicate that dollarization limits the effectiveness of monetary policy because changes in monetary policy are only partially transmitted to the real economy. Besides, the role of the NBG to act as a lender of last resort is limited as it cannot supply unlimited foreign currency liquidity to the market in the event of necessity.

Maintaining macroeconomic stability is essential to enhancing confidence in the national currency. The main aim of the NBG is to maintain low and stable inflation that will consequently ensure economic stability. Maintaining stable prices and

a floating exchange rate are preconditions for increasing the level of larization. Those factors will ensure that income denominated in the national currency is more stable than income in a foreign currency. A floating exchange rate regime is important for open, small-size economies like Georgia, as it absorbs external shocks. Therefore, under a floating exchange regime external shocks have a relatively small impact on economic growth and employment. A floating exchange rate assures stable employment and the stability of incomes in the national currency, while low and stable inflation guarantees the purchasing power of incomes. In addition to macroeconomic stability, countries, including Georgia, implement various measures to support de-dollarization. The year 2016 was a significant for the process of larization, as the National Bank of Georgia with Government of Georgia started to implement various measures. However, it is noteworthy that the reforms undertaken by the NBG over recent years, the NBG has played an important role in the process of promoting lar-

10. Annamaria Kokenyne, Jeremy Ley, and Romain Veyrune (2010). "Dedollarization". International Monetary Fund Working Paper, WP/10/188.

ization. Firstly, the inflation-targeting regime with a floating exchange rate assures price stability and creates preconditions to increase the level of larization. The effective management of liquidity in lari is also significant. In 2008, one-week refinancing loans were introduced, which were followed, in 2010, by the introduction of overnight loans and deposits. Using those monetary instruments reduced lari liquidity management costs. Consequently, commercial banks started to offer low interest rate long-run loans in the Georgian currency, which caused an increase in the level of loan larization.

In 2016, the National Bank of Georgia with the Government of Georgia planned various measures to increase the level of larization, including increasing access to long-term lari loans, adequate sharing of FX risk and compulsory pricing in lari. As the development of capital markets plays an important role for promoting the national currency, the National Bank of Georgia with Government of Georgia jointly created a Georgian capital market development strategy. The implementation pension reforms forms part of the larization process and will ultimately ensure a widening of long-term lari resources. The pension reform will also increase saving in lari. Subsequently, the difference

between investment and saving will diminish and the current account balance will improve.

Evaluation of the foreign exchange risk during decision-making processes is critical in Georgia because most borrowers have a mismatch in the currencies of their assets and liabilities: their liabilities are denominated in a foreign currency, while their income is received in the national currency. In order for borrowers to be hedged against FX risks, amendments in the legislation were implemented, according to which small-size loans (of below 100,000 lari) are only issued in the local currency. This regulation will protect those consumers that do not have sufficient resources to estimate or manage exchange rate risks.

It is worth noting that real estate prices are regularly quoted in foreign currency, which helps cause a low level of larization. Although the majority of construction costs are denominated in the national currency, the final prices of real estate tend to be announced in foreign currency. Amendments are currently being prepared to the Organic Law on the National Bank of Georgia, according to which pricing of all goods and services in lari only will be mandatory.

2.2 MONETARY POLICY INSTRUMENTS

The implementation of the 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.¹¹

The interbank deposit/loan market is a money market where banks trade short-term excess li-

11. See the main directions of monetary and exchange rate policy - <https://www.nbg.gov.ge/index.php?m=587&lng=eng>.

quidity. The NBG has a vital interest in the market as it has an important role in the functioning of the monetary transition mechanism. 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-7.¹²

The volume of transactions carried out in the national currency in 2016 rose by 10.3%, compared to 2015, and equaled 19.6 billion GEL. The NBG monetary policy rate in 2016 decreased from 8% to 6.5%. 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. To keep the weighted average rate of the auction close to the policy rate, the NBG determined the weekly volumes of the refinance facility and (starting from December 2016) the one-month open market instrument.

2.2.1 REFINANCING LOANS

To ensure short-term liquidity in the banking system, throughout 2016 the National Bank of Georgia used the refinancing loan instrument on a weekly basis. This instrument first came into effect in 2008. The mechanism of refinancing loans represents 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. The National Bank is the sole provider of short-term liquidity in GEL on the market. As such, the NBG has the capacity to achieve its desired interest rate on the interbank market. As mentioned in Laxton, S. (2017)¹³, it is important for central banks to manage short-term interest rates to in-

fluence inflation and keep it to the medium trend. The interest rate of refinancing loans through auctions is based on the NBG's monetary policy rate. For the purpose of meeting mandatory liquidity requirements in the banking system and for enhancing the confidence of financial market participants towards the refinancing loan mechanism, the National Bank also utilized a guaranteed refinance loan instrument (from the first half of December 2016), which was issued without auctions. The guaranteed refinance loan instrument provided commercial banks with a guaranteed source of liquidity when needed. Banks were able to use refinancing loans even in those cases when their bids were not satisfied in regular refinancing loan auctions. The interest rates for guaranteed refinancing loans were set in advance by the Monetary Policy Committee of the NBG and are determined by the prevailing monetary policy rate plus 1.5%.

In 2016, the collateral base of monetary operations encompassed certificates of deposits of the National Bank of Georgia, Georgian government securities, loan assets of commercial banks, GEL denominated securities issued by international financial intuitions (IFI) and GEL denominated securities issued by resident and non-resident legal entities. The satisfactory criteria for each type of collateral was defined by the National Bank. Commercial banks actively used all types of collateral in their operations with the National Bank of Georgia in 2016.

2.2.2 ONE-MONTH OPEN MARKET INSTRUMENT

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 bank-

12. 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.

13. Kevin Clinton, Tibor Hlédik, Tomáš Holub, Douglas Laxton, and Hou Wang. (2017). "Czech Magic: Implementing Inflation-Forecast Targeting at the CNB". International Monetary Fund Working Paper. WP/17/21.

ing system when needed. 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 and the recommendations of the technical assistance mission of the IMF. 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 banks have the right to participate in that auction. NBG certificates 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

In line with global best practice, in 2016 the NBG continued using an interest rate corridor for the purposes of financial market development, to reduce interbank interest rate fluctuations and to boost the activities of the financial market. This allowed interbank market interest rates to be maintained within stable limits. The interest rate corridor is defined by equal deviations from the monetary policy rate in both directions, thus forming the upper and lower interest rate limits. The upper limit was used for the NBG's overnight loans, while the lower limit was used for the NBG's overnight deposits. In 2016, the interest rate corridor was equal to 3% – the monetary policy rate plus or minus 1.5 percentage points. The use of the interest rate corridor reduces the sharp fluctuation of interest rates on the interbank market and promotes the convergence of interbank interest rates with the monetary policy rate.

Overnight loans from the National Bank represented the fastest source of instant liquidity for the banking sector, albeit with a higher price in comparison with the market rate (a fact that pushes banks to the interbank market in order to find a better price for the funds they need). Thus, demand on this instrument was not high. Commercial banks mostly used refinancing loans, which the banking sector considered a significantly more flexible and comprehensive mechanism for the management of short-term liquidity. The collateral base accepted for one-day 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 2016. By using the overnight deposit instrument, 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 correspondent account at the beginning of the next workday. The existence of an interest corridor played an essential role in the stabilization of interest rates on the interbank market.

2.2.4 SECURITIES

Certificates of Deposit

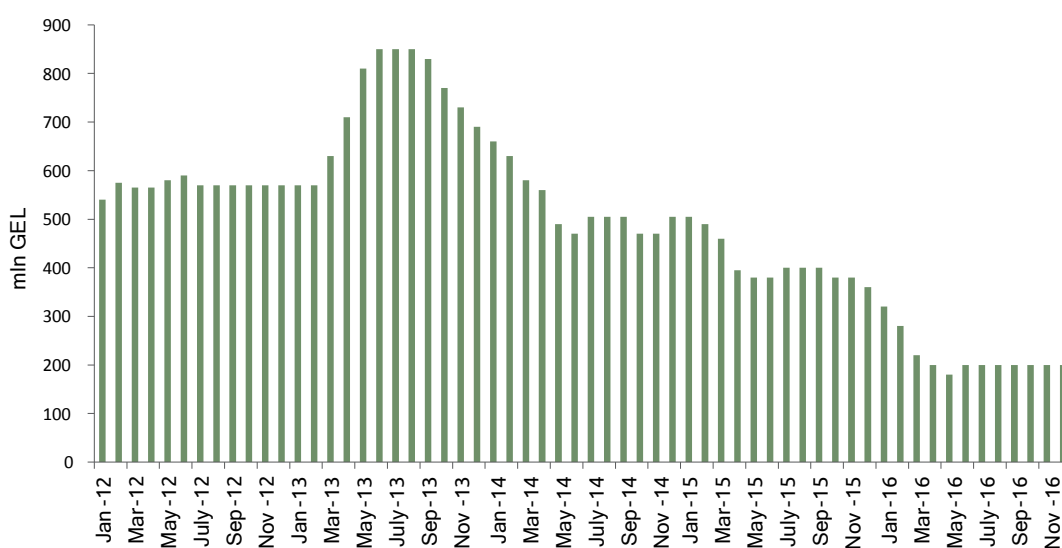
In 2016, the NBG continued to issue its own certificates of deposit (CD) securities. Together with treasury bills and bonds issued by the Ministry of Finance, certificates of deposit enjoyed a high level of demand from commercial banks. CDs are on the short side of the term structure, trading for 3- and 6-month maturities, while government securities trade for 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 progress in terms of market efficiency.

In 2016, the NBG issued 3- and 6-month CDs, which the banking sector used as the most attractive and effective short-term liquidity management instrument.

In 2016, commercial banks purchased NBG CDs in all 26 auctions conducted by the NBG. The nomi-

nal amount of allotment was equal to GEL 520 mln GEL and 680 mln GEL was redeemed in 2016. The stock of the NBG's CD decreased from 360 million GEL at the start of the year to 200 million GEL at the end of the year. As of 31 December 2016, there were 10 commercial banks that held 200 million GEL worth of CDs.

Diagram N 2.11
Portfolio of Certificates of Deposit 2012-2016



Source: National Bank of Georgia

Government Bonds

As of 31 December 2016, the NBG held government bonds with a par value of 135 million GEL, which were not used for open market operations during the year.

Treasury Bills and Treasury Bonds

To further develop the GEL money market, it was vital that the Ministry of Finance of Georgia increase the emission of government securities. In 2016, the Ministry of Finance issued 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

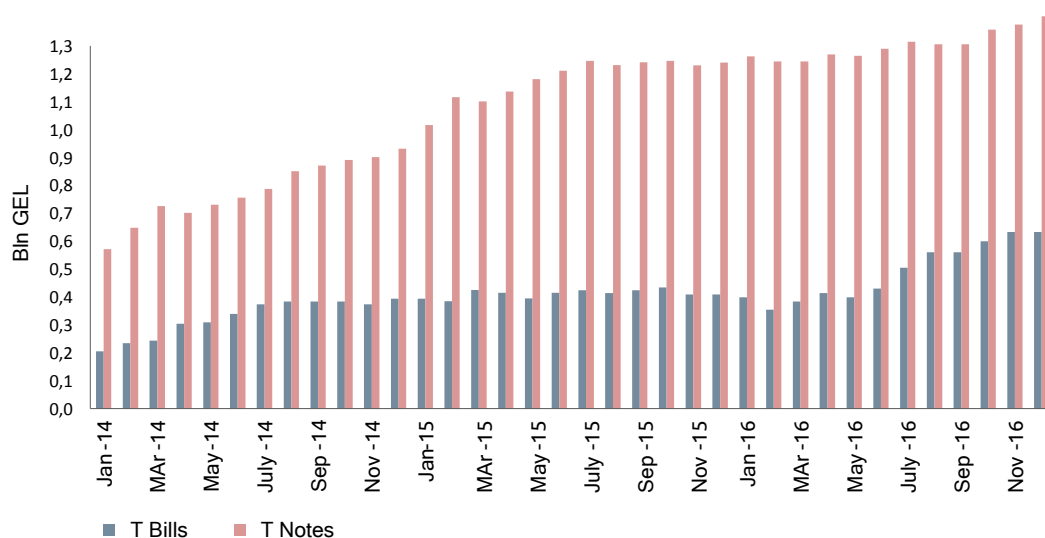
placement of treasury bills and bonds is executed through a multiple price auction conducted by the NBG via the Bloomberg trading platform. All commercial banks licensed by the NBG have the right to participate in the auctions and any individual or legal entity can use a bank as its representative. A 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 2016, 41 auctions of treasury bills and notes were conducted and 1.1 bln GEL worth of securities were issued and fully allotted on those auctions.

As of 31 December 2016, there were 15 commercial banks and non-banking investors that held 2 bln GEL (6% of GDP) worth of securities in circulation. Non-banking investors held 166 million GEL worth of securities.

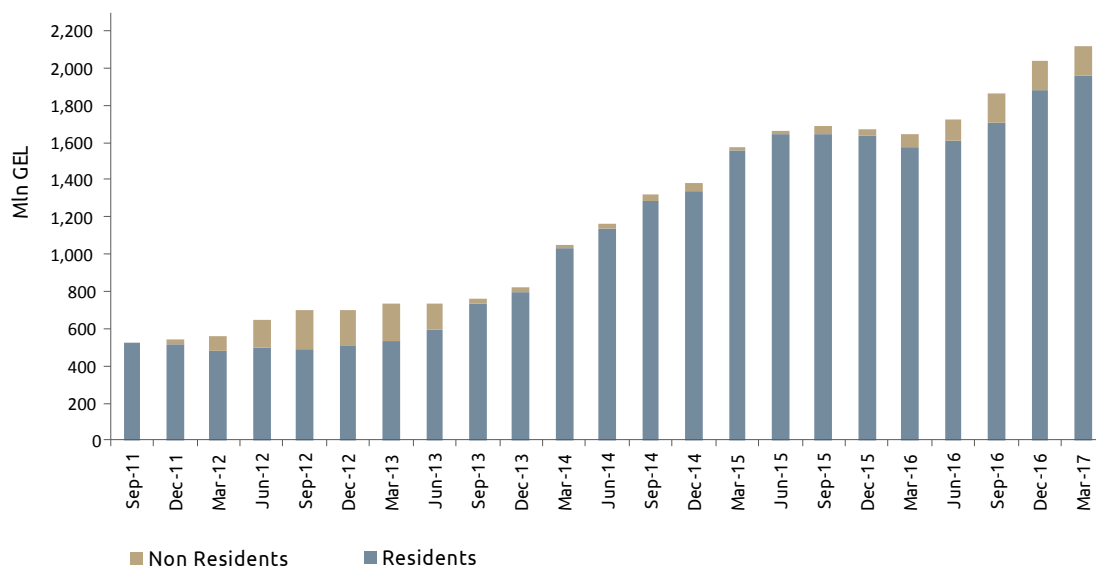
It is worth mentioning that the size of government securities in circulation remains small relative to the size of the economy (6% of GDP). To increase market liquidity, it is essential to increase the volume of the stock of government securities, which will decrease risks associated with external loan acquisition.

Diagram N 2.12
Portfolio of Treasury securities, 2014-2016



Source: National Bank of Georgia

Diagram N 2.13
Treasury securities by holders



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 inter-bank repo market significantly intensified. The market was based on the internationally adopted repo master agreement, which had been created at the initiative of the NBG and 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 2016 a total of 202 repo transactions were conducted between commercial banks involving government securities with a total nominal amount of 2.7 bln GEL.

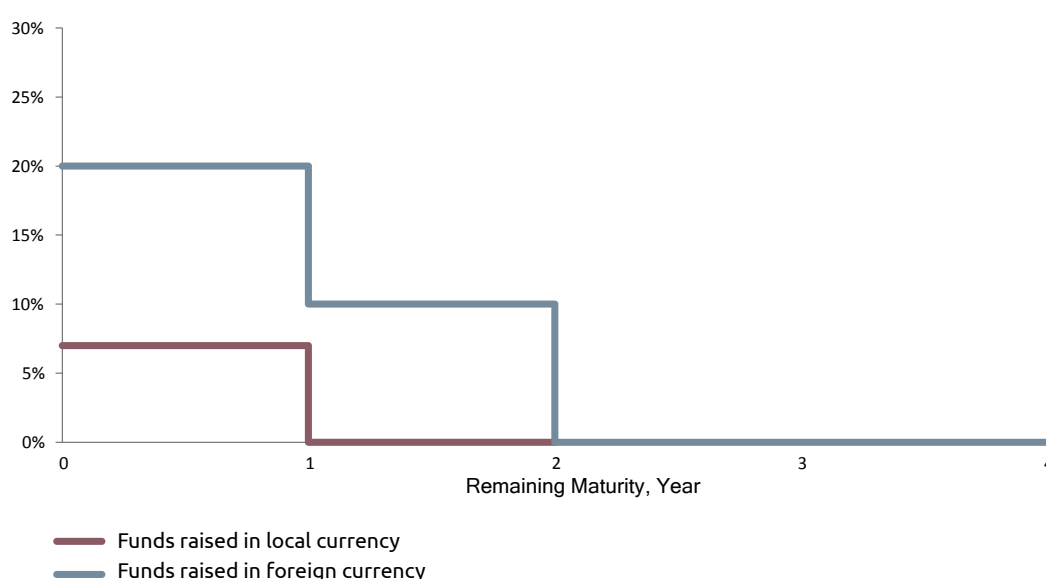
2.2.5 MINIMUM RESERVE REQUIREMENTS

Through the minimum reserve requirements instrument, the NBG has the opportunity to influence the money multiplier and create preconditions

for the efficient use of other monetary instruments. For the purposes of supporting the monetary policy transmission channel, promoting the development of the GEL money market, and encouraging larization, the minimum reserve requirement rate for funds denominated in the national currency was decreased from 10% to 7% in 2016 (the reserve requirement for funds with a residual maturity of more than 1 year equals 0%); for foreign currency denominated funds, the rate rose from 15% to 20% (the minimum reserve rate for FX funds with a residual maturity from 1 to 2 years is 10%, while it was 0% for FX funds with a residual maturity of more than 2 years). In 2016, commercial banks could earn interest equal to the NBG's monetary policy rate on minimum reserve balances placed in GEL correspondent accounts.¹⁴

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

Diagram N 2.14
Minimum reserve requirements



Source: National Bank of Georgia

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

BOX N 3 DEVELOPMENT OF THE SECURITIES SETTLEMENT SYSTEM IN GEORGIA

First implemented in 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 RTGS 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. This reform is a part of the capital market development strategy and the project considers the further development of the NBG CSD. In order to develop this system, a triparty agreement was signed between the NBG, the Georgian Stock Exchange and Montran Corporation on 13 January 2017.

The renewed system will service all participants of the Georgian securities market; it will support registration and settlement of all types of securities, including securities and stocks issued by private enterprises in Georgia. The system will support the fully automatized settlement operations of private 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.

The new 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 go live by the end of 2017.

2.3 EXCHANGE RATE POLICY AND INTERNATIONAL RESERVES MANAGEMENT

As in previous years, in 2016 the National Bank of Georgia maintained a floating exchange rate that ensures exchange rate formation on market principles. At the same time, the National Bank aimed to maintain its international reserves at an adequate level.

For small open economies, like Georgia, a floating exchange rate is considered the optimal choice. This is also reflected in the monetary policy strat-

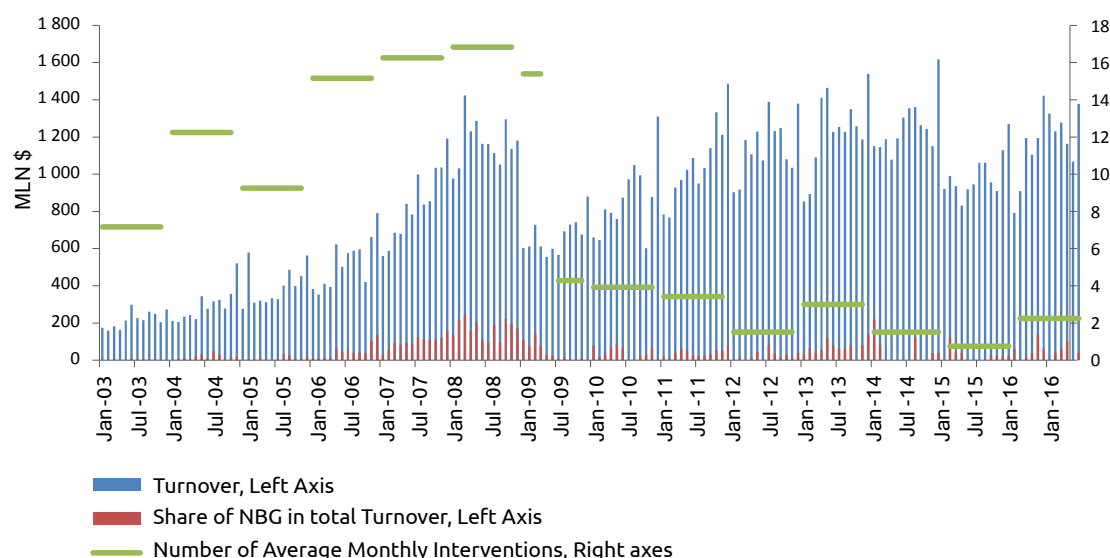
egy of NBG. It should also be noted that the main advantage of this regime is that it absorbs the effects of external shocks and acts as an automatic stabilizer for the economy.

The NBG considers foreign exchange interventions through auctions only when the economy is facing a temporary inflow of excess capital, which causes sharp, short-term currency fluctuations; to fill international reserves; to balance the state's foreign operations; and to avoid an increase in inflationary expectations resulting from excessive exchange rate fluctuations due to one-off factors. As in previous years, in 2016 the National Bank of

Georgia used the auction mechanism to perform foreign currency interventions. The National Bank

conducted interventions in both directions during 2016. Net sales on the foreign exchange amounted to only 1.7 million USD.

Diagram N 2.15
Currency market dynamics from 2003 to 2016



Source: National Bank of Georgia

In 2016, as a result of the high level of dollarization, limited market size, instability, volatility in capital flows and one-off factors, the foreign exchange market was characterized by short-term fluctuations. Moreover, the unstable economic environment in Georgia's main trading partners, global appreciation of the US dollar and depreciation of the currencies of neighboring countries, all continued to negatively impact the Georgian economy.

At the beginning of 2016, the pressure on the exchange rate from the external shock of the previous year continued. To neutralize negative expectations on the Georgian market, in January, the National Bank supplied 60 mln USD to the market through auction. In the following months, and in parallel with the positive trends seen from the reduction of imports and increasing exports, the lari exchange rate started to appreciate, allowing the National Bank to purchase FX on the market and to partially recover the loss of international

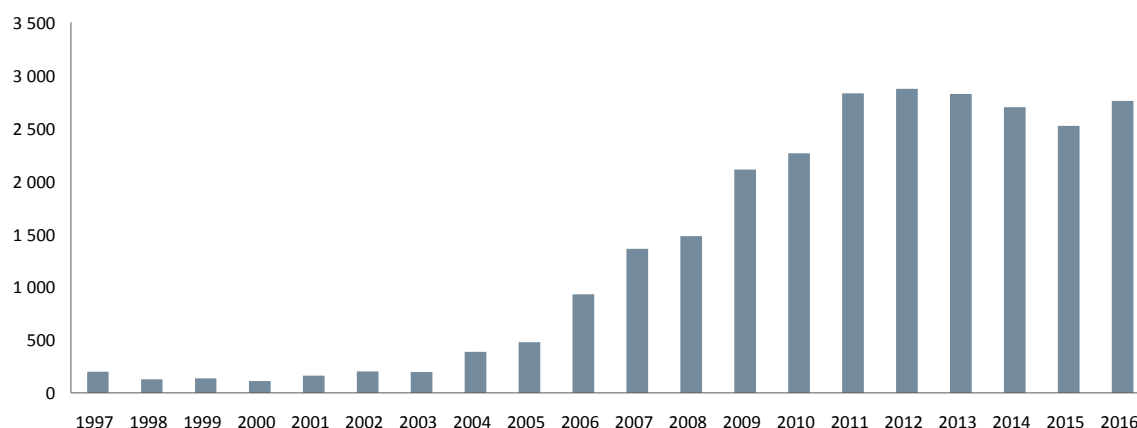
reserves from previous periods. From March to June, the National Bank purchased a total of 258.4 million USD in reserves.

In subsequent months, despite a relative improvement in economic indicators, the pressure on the lari nominal exchange rate further strengthened, mainly due to one-off transactions and the negative expectations related to these. Thus, in order to neutralize the negative expectations, and in line with its announced strategy for the last four months of the year, the NBG sold 200 mln USD through auctions.

International Reserves Management

The total international reserves of the National Bank of Georgia increased by 236.9 million USD to total 2,757 million USD as of 31 December 2016 (which includes funds managed externally by the World Bank and the Bank for International Settlements).

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



Source: National Bank of Georgia

The surge of the NBG's international reserves was a result of the increase in reserve requirements on foreign currency deposits that came into force in June 2016. Besides that, several other traditional factors affected the volume of the NBG's international reserves during 2016: 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 sales of foreign currency via FX auctions amounted to 1.7 million USD. The loans and grants received by the Georgian Government to finance various programs and projects from international financial organizations and donor countries amounted to 311 million USD in 2016. On the other hand, the Georgian government debt service amounted to 224 million USD and currency conversions by the government amounted to 213 million USD.

By the second half of the year, after the US presidential elections, economic growth expectations improved among market participants. This was reflected in US Treasury note yields. Yields on 10-year US Treasury notes increased by at least 22% and ended the year at 2.445%. Rate hike expectations were further strengthened after the Federal

Open Market Committee raised the refinancing rate by 25 basis points to the 0.50%-0.75% range. The European Central Bank (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. The ECB purchased securities with a nominal value of 1.33 trillion EUR as of 31 December 2016 and it aims to purchase a total of 2.33 trillion EUR nominal securities as part of the program. The program will probably be extended until the end of 2017 to fight deflation in the eurozone, tackle euro depreciation and encourage economic activity. The ECB reduced its refinancing rate again in March 2016, moving from 0.05% to 0.00%. The ECB Deposit Facility Discount Rate was reduced even further into negative territory, moving from -0.30% to -0.40%. There is no indication that the ECB plans to deviate from its zero interest rate policy in the near future.

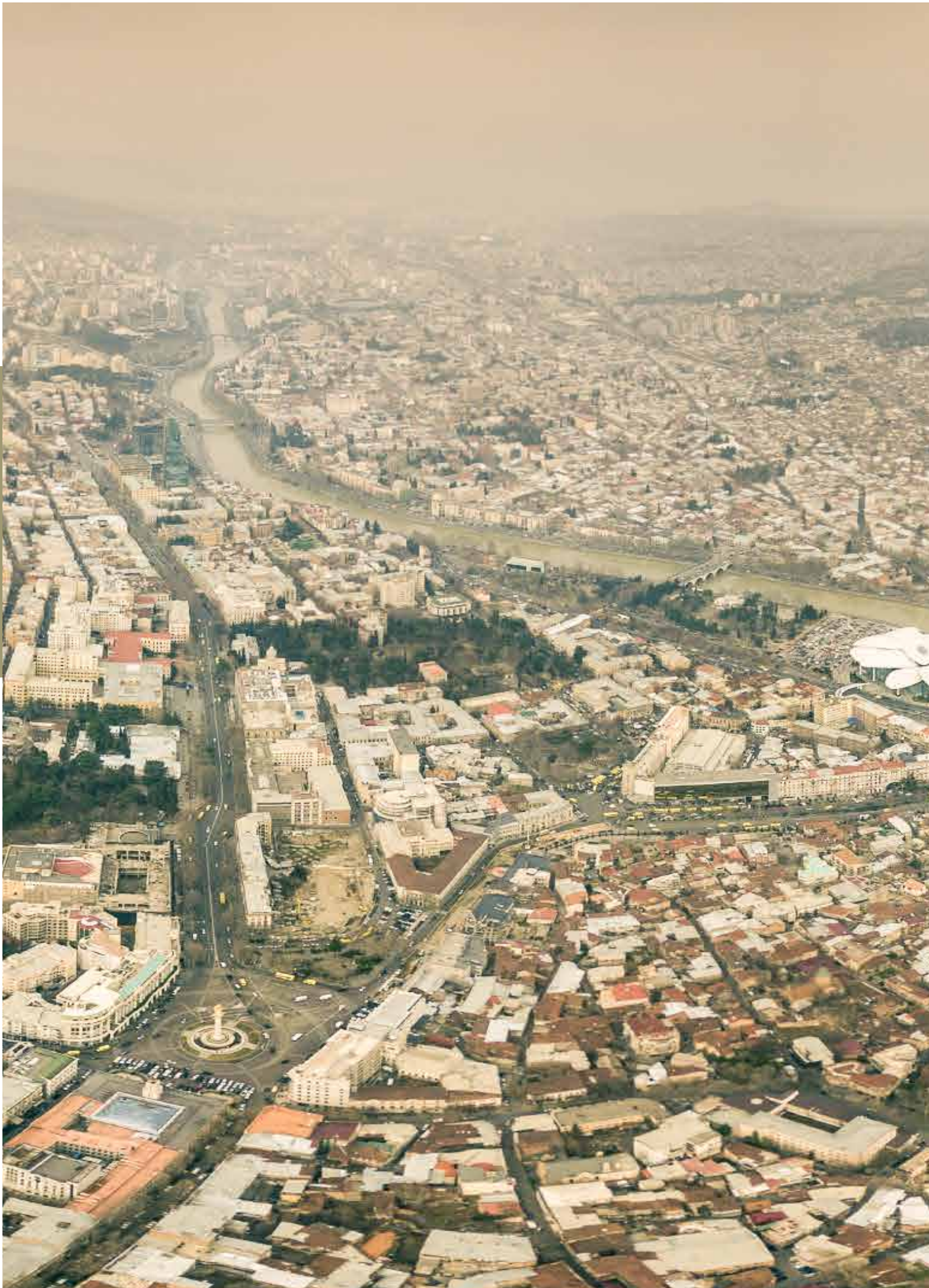
Eurozone government securities' yields remained in negative territory in 2016, which made investments of the EUR portion of the NBG's international reserves in securities practically impossible. Throughout 2016, the NBG's investment policy re-

mained 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 2016, the income generated from the management of international reserves amounted to 39.4 mln GEL, which was 65% more than in 2015.

In 2016, 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 de-

velopment of international reserve management, the creation of proper infrastructure and accumulation of knowledge. The program entails sharing the World Bank's experience in the fields of portfolio and risk management, settlements, accounting, legal and IT.

The NBG continued cooperating with the Bank for International Settlements (BIS) in 2016 as part of the BIS Investment Pool (BISIP) program, which the NBG joined at the end of 2014. The BISIP program implies management of funds from different central banks and international financial institutions in a single portfolio. The BISIP program also involves assistance and experience sharing in other aspects of reserves management.



03

BANKING SUPERVISION



3.1 DEVELOPMENT OF THE REGULATORY FRAMEWORK

Throughout 2016, the National Bank of Georgia actively continued working towards improvement of the supervisory framework and on bringing existing standards in line with international practices and principles. Working on new legislative amendments continued in order to execute recommendations made through the “Financial Stability Assessment Program” (FSAP), which was undertaken by a joint International Monetary Fund and World Bank mission in 2014, and to satisfy the directives under the EU-Georgia Association Agreement. Adopting qualitative amendments in certain laws under a package of legislative initiatives will refine the supervisory framework and accelerate its convergence with international practices. Such legal initiatives include updating the “Law of Georgia on Activities of Commercial Banks” and the “Organic Law on the National Bank of Georgia”.

These changes should strengthen 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.

In the beginning of 2017, amendments were made to a number of normative acts issued by the National Bank of Georgia, the preparation of which had taken place in 2016. Specifically, changes were made to the “Regulation on Fit and Proper Criteria for Administrators of Commercial Banks” and the “Regulation on Licensing of Commercial Banks”, which brought existing standards in line with international practices. Furthermore, an updated version of the “Regulation for Establishing a Branch, a Division (Service Centre) and a Representative Office by Commercial Banks” was put into force, which will ensure that the establishment of branches, divisions and representative offices is carried out according to international best practice.

During 2016, concentration risk adjustments were actively pursued within Pillar 2 of the Basel III framework. According to the “Instruction on Capital Buffer for Credit Concentration Risk for Commercial Banks,” adopted at the end of 2015, commercial banks started using the Herfindahl-Hirschman Index-based capital calculation technique needed for the inclusion of name and sectoral concentration risks. In 2017, the NBG plans to determine additional guidelines within Pillar 2 for orientation purposes, in order to ensure that banks calculate capital for those risks not included in Pillar 1.

BOX N 4 IMPLEMENTATION OF BASEL III PILLAR 1 AND PILLAR 2 CAPITAL BUFFERS

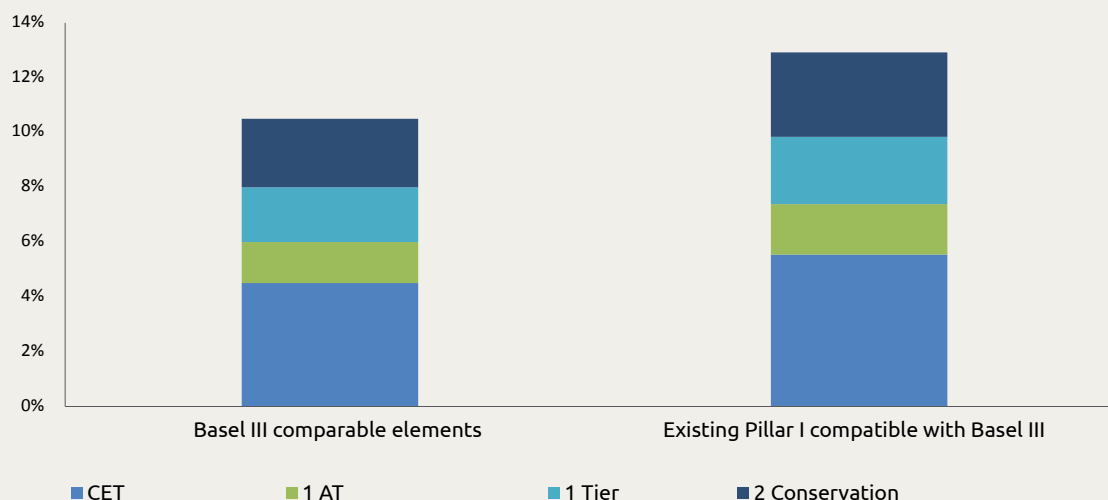
Basel III minimum capital requirements are presented in Pillar 1 and Pillar 2. Pillar 1 considers base level capital requirements, while Pillar 2, in accordance with Basel III, is the pivotal part of the supervisory framework. The latter entails all risks that have been either entirely excluded or are insufficiently covered under Pillar 1. Pillar 2 is based on a Supervisory Review and Assessment Process

(SREP), which determines additional capital requirements based on bank-specific risks.

It is important to note that the existing Pillar 1 minimum requirements in Georgia are not compatible with the Basel metrics; they are more conservative. The reason behind this is that foreign currency denominated unhedged risk exposures are additionally weighted for foreign exchange rate risk (CICR – Currency Induced Credit Risk). Diagram N 3.1 compares the current 10.5% minimum capital requirement with the Basel III capital requirement.

Diagram N 3.1

Comparison of the National Bank of Georgia's capital requirements with Basel III supervisory capital



Source: National Bank of Georgia

Moving to Basel metrics, as illustrated in the diagram, will soften the supervisory requirements under Pillar 1. However, it is noteworthy that Basel III capital buffers in Georgia are determined¹⁵ neither under Pillar 1 nor Pillar 2. Therefore, the vital part of implementing Basel III is its convergence with the Basel metric, as well as establishment of a supervisory buffer compatible with the Basel framework. As a result, the transparency of the minimum capital requirements framework will improve and international comparisons for both minimum capital requirements and the demonstration of risk will increase.

For this purpose, besides incorporating the Basel III metrics, the National Bank of Georgia plans to separate the conservation buffer from existing minimum capital requirements and introduce the following additional buffers:

- **Pillar 1 Buffers to be maintained by Common Equity Tier 1 capital:**
 - ✓ **Conservation Buffer** – As previously mentioned, the conservation buffer is currently

incorporated in Tier 1 capital requirements and will be separated.

- ✓ **Systemic Buffer** – The Systemic Buffer is an additional requirement for banks that are systemically important for the proper functioning of the financial sector.
- ✓ **Countercyclical Buffer** – A macroprudential comprehensive buffer that is used to constrain pro-cyclical performance of the financial system.
- **Pillar 2 Buffers.** Buffers should be proportionately incorporated in capital requirements. Specifically, 56.25% should be held through common equity Tier 1 capital, 75% through total Tier 1 capital, and the rest (to a maximum of 25%)¹⁶ can be supplemented through Tier 2 capital elements.
- ✓ **Credit Risk Concentration Buffer** – For the purpose of calculating the concentration buffer, a concentration index of credit risk weighted exposures (the Herfindahl-Hirschman Index – HHI) is used. The buffer is calculated by commercial banks according to the NBG's methodology and contains

15. This does not mean that NBG does not use additional buffers (individual or systemic), but that the framework, in parallel with supervisory risks and macroprudential orientation, is in the process of development and calibration. For example, in previous years, annual reports often showed the use of macroprudential buffers.

16. The measure is calculated according to the CET1, Tier 1 and Tier 2 percentages in the supervisory capital.

two parts: a stress test deductible and a fixed component. For example, if the risk exposure that caused concentration during stress tests is in default and additional capital is required, such an exposure is deducted so that a double capital charge is not applied for the same risk.

- ✓ **Unhedged Currency Induced Credit Risk Buffer** – This macroprudential buffer is a risk aversion technique and motivates the larization process. It is anticipated that this buffer, as a component for facilitating larization, will be reduced in parallel with the broader larization process to a point necessary for the existing levels of risk at commercial banks. The buffer is calculated according to the supervisor's methodology by weighting relevant risk exposures. It consists of two parts: a stress test deductible and a fixed component.
- ✓ **Net Stress Test Buffer** – The stress test buffer is determined according to supervi-

sory stress tests.¹⁷ This buffer is aimed at protecting banks from defaulting. Therefore, it is usually added to minimum capital requirements after the application of a systemic buffer. Stress tests are calculated by deducting conservation and countercyclical buffers. In addition, unhedged borrower's currency induced credit risk and the deductible part of the concentration buffer are subtracted.

- ✓ **Net GRAPE (General Risk Assessment Program) Buffer** – The GRAPE buffer is determined through the supervisory process and contains all material risks not included in Pillar 1. Since stress tests are integrated into the supervisory process, it is worth noting that the implementation of the net GRAPE requirement will have immaterial effects. Nevertheless, because other buffers are concentrated on inherent risks¹⁸, the need for the net GRAPE buffer may arise.

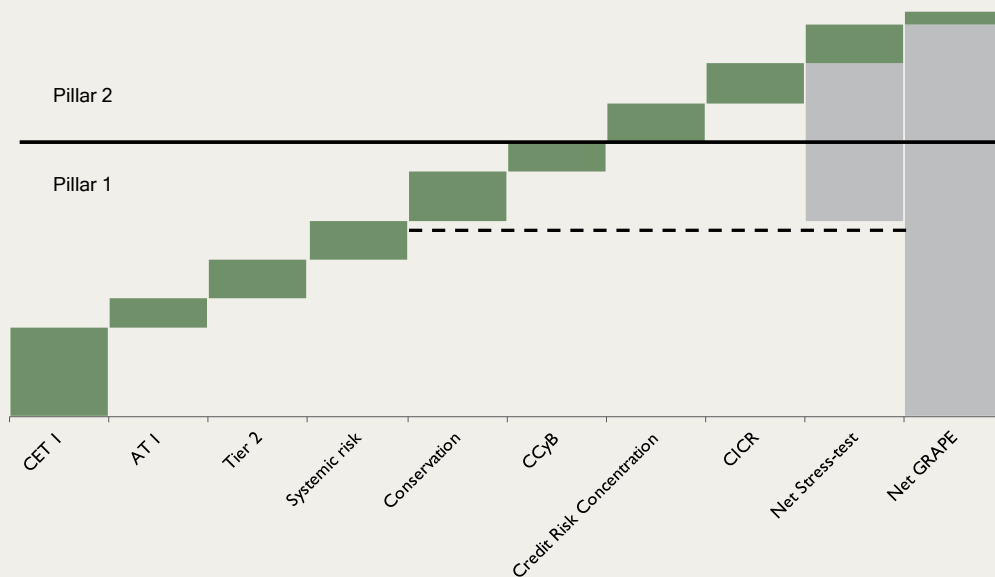
17. For the supervisory stress tests framework, refer to the Annual Report of 2015.

18. Inherent risk does not take into account risk management (mitigation) mechanisms that can alter existing risk levels. By applying mitigation to inherent risks, the so-called residual risk remains, which determines the total risk level.

Table N 3.1
Transition to Basel III compatible buffers

	Existing Ratios	Basel III
Common Equity Tier 1 Ratio (CET1)	7%	4.5%
Total Tier 1 Capital Ratio (Tier 1)	8.5%	6%
Regulatory Capital Ratio (Tier 1 + Tier 2)	10.5%	8%
Systemic Buffer		0-2.5%
Conservation Buffer (a)		2.5%
Countercyclical Buffer (b)		0-2.5%
Concentration Buffer. Contains deductible (c_d) and fixed elements (c_f)		Determined according to the NBG's methodology.
Unhedged Currency Induced Credit Risk Buffer. Contains deductible(c_d) and fixed elements (c_f)		Determined according to the NBG's methodology.
Net Stress Test Buffer		Stress test results (ST) are added to minimum requirements after the systemic buffer is applied. The net stress test buffer is defined as $\max \{ST-(a)-(b)-(c_d)-(d_d); 0\}$
Net GRAPE Buffer	This buffer is a Pillar 2 add-on and is determined through the supervisory process.	Is determined through the supervisory process and results in a Pillar 2 add-on if any material risk was not covered in the abovementioned buffers.

Diagram N 3.2
Visualization of minimum capital requirements and buffers¹⁹



19. The horizontal line depicts Pillar 1 and Pillar 2 requirement levels. The dashed line represents the level at which stress test results are added. If these are higher than the previously identified buffers above the dashed line, then the net stress test buffer is added. For illustrative purposes, concentration and unhedged currency credit risk buffers are considered completely deductible.

The calibration of these buffers has already been initiated and they will be implemented during the transitional period. Those buffers based on comparatively simple rules will be introduced first – for example, the conservation and systemic buffers without currency induced credit risk weighting for

unhedged borrowers. The currency induced credit risk buffer will also be separated.

During the next stage, the concentration and stress test buffers will be simultaneously introduced with a re-calibration of unhedged borrowers' currency induced credit risk weighting.

During 2015-2016, the Basel Banking Supervisory Committee, functioning within the Basel III reform, started working on Pillar 3 in order to further develop transparency. Within Pillar 3, commercial banks are obliged to publish quantitative and qualitative information regarding capital elements, risk weighted assets, top management remuneration and other material issues. In 2016, the NBG worked on a developing a decree concerning disclosure requirements for commercial banks. This has been provided to commercial banks for review. In 2017, after feedback from commercial banks has been received, the disclosure requirements within Pillar 3 will come into force. This will facilitate financial sector transparency in the country.

In 2016, the calibration of the Basel III Liquidity Coverage Ratio (LCR) and its integration in the banking sector was finalized. The LCR 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. Mandatory adherence to the minimum requirements is planned for banks starting in September 2017. Furthermore, in order to improve the management of long-term liquidity, implementation of the Net Stable Funding Ratio (NSFR) is planned. Following the introduction of the latter ratio, the existing liquidity requirement (of 30% of short-term liabilities) will be 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 is 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.

In 2017, the NBG updated the "Law Defining Minimum Capital Requirements for Commercial Banks". According to the updated version of the law, legal persons seeking a banking license and existing commercial banks must comply with a minimum capital requirement of 50 million GEL. Furthermore, existing banks that do not comply with this requirement will be given a transitional period of three stages. According to this, the 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 previous minimum capital requirement was amongst the lowest in the world and did not correspond to the level of development of either the country or its financial sector.

3.2 GROUP STRUCTURE RISK

Assessment of risks related to the group structure of commercial banks is part of the National Bank of Georgia's General Risk Assessment Program (GRAPE). Group structure risk assessment entails the evaluation of risks related to banks' ownership structure, transactions carried out with banking group members, and those related to banks' investments and investment activities. Within the frames of the group structure risk assessment, 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 2016, JSC TBC Bank acquired 100% ownership of JSC Bank Republic; and, as a result of this transaction, a merger of these two entities is planned. In approving this transaction, the NBG considered the effects of a merger on the competitive environment of the banking sector and the need to maintain banking sector effectiveness and protect investor and consumer rights. The small size of the market was also considered. According to international practice, in markets like Georgia's, expansion is one way of achieving efficiency. Furthermore, economies of scale and increased efficiency facilitate lowering of interest rates. It is important to note that the lack of restrictions on entering and exiting the market helps the free flow of investments and lowers expenditure on attracting new capital – all of which positively reflects on the efficient functioning of Georgia's banking sector. As part of the risk-based supervision regime, three commercial banks operating in Georgia had their banking licenses revoked in 2016:

- ✓ For "JSC Caucasian Development Bank – Georgia" the appointment of a temporary administration, followed by revoking of the banking license, was caused by events taking place around the parent bank in Azerbaijan, which was subsequently liquidated.

- ✓ In 2016, the majority of assets and liabilities of JSC Progress Bank were purchased by JSC TBC Bank. In October, as a result of the joint decision of shareholders, the banking license of JSC Progress Bank was revoked. Consequently, the liquidation process began.
- ✓ The banking license was also revoked for JSC Capital Bank. The reason was the bank's failure to comply with the requirements of Anti Money Laundering legislations, as well as the bank's violation of NBG rules and instructions, and international banking standards and practices.

It is worth noting, that each of these liquidations took place in an organized fashion and the demands of all creditors and depositors were satisfied in full and without blemish.

As a result, by 31 December 2016, 16 commercial banks were operating in the Georgian banking sector. At that time, 86% of bank assets and 84% of stockholder equity was owned by foreign investors.

In 2014, for the purpose of risk mitigation, 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 2016, the NBG continued monitoring 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, in order to mitigate risks caused by non-financial group companies and for the purpose of incorporating international best practices, legislative initiatives are planned to clearly define the NBG's role and authority in setting prudential limits on the consolidated level and in receiving information from group companies. Furthermore, in accordance with the EU-Georgia Association Agreement, the NBG, in cooperation with the insurance sector supervisor, is working on the development and implementation of a conglomerates supervision framework.

BOX N 5 REVIEW OF INTERNATIONAL PRACTICES ON GROUP LEVEL SUPERVISION

A financial group or conglomerate encompasses economic agents under common control that are active outside the financial sector, but where a financial sector entity represents the group's pivotal entity.

Financial groups often have significant merit in terms of economic development and the enhancement of effectiveness. On the other hand, mixed entities that include regulated and non-regulated members, may pose significant financial risks and, in this regard, pose a challenge to regulators overseeing regulated entities. Financial stability risks are especially high in small countries with highly concentrated banking sectors (for example, in Israel).

According to the Toronto Leadership Center,²⁰ large conglomerates challenge banking supervisors in three areas. The main challenge is from bank-affiliated companies and the risks stemming from such groups, including poor assessment or non-identification of risks from off-balance sheet exposures/contingent liabilities. The second challenge concerns the complexity of the structure of groups, and the third challenge regards a group's systemic importance.

Due to these factors, the financial group assessment process requires multi-disciplinary skills and resources. It is worth considering that financial groups that contain real sector companies other than commercial banks face the following additional risks (beside those associated with the traditional banking sector):

- **Transparency Risk** – Being associated with a large group may distort standard supervisory indicators. For example, a group's capital and/or profit may be overstated, while the group's risks understated. For capital adequacy purposes, the following should be taken into consideration:
 - ✓ *Multiple use of capital* – Incorporating the same capital instruments several times for group member companies during calculations of supervisory capital.
 - ✓ *Cross financing of capital among group entities* – An example of this instance would be a bank giving out a loan to its subsidiary that is then reinjected into the bank as a capital instrument.
 - ✓ *The risk that a bank will not have the ability to correctly assess the effect of a transaction or an aggregate of such transactions with related parties on its capital adequacy measures.*
- **Contagion Risk** – These refer to problems of regulated or unregulated entities within the group or their affiliated companies, trusts or other entities that may have a spillover effect on the bank. This means contagion among entities of financial, reputational and legal risks.
- **Autonomy Risk** – A bank's supervisory and management board may comprise physical persons that are present in the parent company of the bank or within the top management of other companies of the group. As a result, their independence and fiduciary²¹ obligations, as well as the obligation to protect consumers and minority shareholders, become subject to conflicts of interest, considering existing incentives to reach profitability, pricing and expense efficiency.

20. Toronto Centre Supervisory Guidance Series, Group-Wide Consolidated Supervision in Bank and Financial Groups, 2016.

21. Fiduciary obligations arise when a person is elected as a member of the bank's management or supervisory board. According to legislation of Georgia, those charged with the governance of a company (including a bank) have the responsibility of good faith, specifically they should act in the same way as their counterparties in similar positions, who are reasonable in their actions and act in the best interests of the company (bank) (Association of Banks of Georgia, 2009, Corporate governance code of commercial banks).

- **Arbitrage Risk** – Arbitrage risk is caused by inconsistencies among the regulations of different sectors (banking, financial instrument, insurance, commercial and industrial) that enable group entities to transact in a way to avoid or loosen regulations established by regulators.
- **Risk of conflicts of interest** – Often the interests of banks do not coincide with the interests of other entities of the same group. For example, a bank may be experiencing coercion from the holding company to pay out dividends, in spite of the fact that the interests of the bank or its depositors may suffer as a result. Conflict of interests are caused not only when a group's companies share the same management personnel (autonomy risk), but when a bank's management or supervisory board do not have sufficient authority to influence decisions made at the holding company level.
- **Effective Resolution Risk** – Complex group structures and intragroup transactions hinder the implementation of resolution plans by the bank and/or the regulator's ability to effectively carry out resolutions for the bank in times of crisis.

Supervisory instruments and international practices

According to the basic principles²² of the Basel Committee on Banking Supervision, the main goal of banking supervision should be the safe and proper functioning of the banking sector. In order to achieve this objective, regulators should possess sufficient supervisory instruments and authority. Supervisory bodies should thus conduct banking supervision at both the individual and consolidated level. The latter entails setting regulatory requirements for the bank and its group's entities. In addition, if a bank is a member of a large conglomerate, it is necessary to assess

all risks that may be caused by entities outside of the banking group and/or their related parties, in order to mitigate the negative effects a group's unregulated entities may have on a bank. To mitigate the negative effects on the group level, both a ring-fencing approach (which prohibits banking groups, as well as their parent companies, from investing in non-financial companies) and the expansion of supervisory authority to the group-wide level (group-wide supervision) are used. This enables the use of supervisory instruments for the purpose of enabling the bank and banking sector's safe and proper functioning.

European Union

According to European Parliament and Committee directives, European member states are obliged to set requirements on the consolidated level and regulate groups that operate in different (heterogenic) financial sectors.²³ For this purpose, directive 2002/87/EEC on financial conglomerates was drawn up, according to which when a bank and insurance entity (or investment entity) are in the same group, additional requirements on the conglomerate level are necessary, including capital adequacy, risk concentration, intragroup transactions and corporate governance.²⁴

Furthermore, for the purpose of effective supervision, supervisors of EU member states are not restricted in their authority to set stricter requirements. Therefore, in order to efficiently supervise at the group-wide level, different countries have created specifically tailored frameworks.

Great Britain

In Great Britain, amendments made to the Companies Act in 2012 widened the authority of the Prudential Regulation Authority (PRA) to enable it

22. Core Principles for Effective Banking Supervision, Basel Committee on Banking Supervision, 2012; <http://www.bis.org/publ/bcbs230.pdf>.

23. Regulation (EU) No 575/2013 and Directive 2013/36/EU entails setting requirements and limits on the consolidated level for capital adequacy, liquidity, related party transactions and concentration risk.

24. Directive 2002/87/EC of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate.

to set requirements for qualifying parent undertakings and qualifying authorized persons.²⁵ The latter entails three main directions:

- Authority to define the course of action.
- Authority to define rules with regards to information supply.
- Administering sanctions against non-delivery of information or relevant instructions.

The PRA received discretionary authority to set requirements for the parent undertaking in pre-determined instances. Such cases may include, but are not limited to, the following: having capital of insufficient quantity or quality, or a lack of liquid assets or those of high quality; intragroup transactions that do not meet PRA expectations; a group-wide resolution plan that does not satisfy PRA standards; a group-wide remuneration scheme that is not acceptable for the PRA; a decision made by the parent that, according to the PRA's assessment, will hinder supervision on a consolidated or group-wide basis; complex group structures that get in the way of the PRA measuring risk; insufficient transparency; instances where risks stemming from unregulated entities disturb the stability of the group or regulated entity; group-wide risk management and control systems that do not meet PRA requirements; instances where group-wide corporate governance, including top management, requirements do not coincide with internationally accepted and PRA standards; and, lastly, cases where resolution scenarios increase the likelihood of using tax payers' money.

In response to the above mentioned circumstances, the PRA has discretionary authority to take ac-

tions that may include, but are not limited to, the following: administering certain requirements on the consolidated level; demanding improvements in corporate governance or risk management systems in order to improve supervision on a consolidated level; restricting dividend distribution or other capital instrument payments on the group-wide basis; as a response to increasing risks, moving certain assets or resources; changing group structure in order to simplify supervision; restricting or limiting investment activities on the group-wide level; requiring capital injection; and requiring the resignation of administrators that do not meet PRA requirements.

Switzerland

As part of the Financial Sector Assessment Program, the International Monetary Fund and World Bank assessed Switzerland's supervisory approaches in a joint mission in 2014. According to the assessment papers,²⁶ despite the high-quality consolidated supervision established by FINMA²⁷, this framework needs legal implementation. The supervisory legal framework in Switzerland does not authorize supervision of a holding company that owns a banking or conglomerate group.

According to the recommendations of the mission, an enhancement of the legal framework is necessary so that continuous and temporary measures can be administered at the holding company level. United States of America

In the USA, the supervisory authority has drawn up the Banking Holding Companies' Act that defines permitted non-banking activities for holding companies. A banking holding company encompasses

25. The qualifying parent undertakings and qualifying authorized person is an entity established in Great Britain that conducts its main activities on the territory of Britain. This could be an insurance holding company, financial holding company, or mixed financial holding company (including conglomerate). To enforce its authority, the PRA defines final ownership as the head entity; however, in practice, such an entity may be defined as the entity on which effective supervision is enforceable

26. IMF, 2014, Country Report No. 14/264, Switzerland: Detailed Assessment of Compliance-Basel Core Principles for Effective Banking Supervision, <https://www.imf.org/external/pubs/cat/longres.aspx?sk=41880.0>

27. Swiss Financial Market Supervisory Authority.

any company (including a bank) that directly or indirectly controls a bank. A bank holding company or its subsidiary undertakings are forbidden from holding any kind of direct or indirect ownership, financial instruments with voting rights, or assets of other entities, except for those entities whose activities are inseparable from banking activity or represent bank ancillary services.

South Korea

In South Korea, commercial banks are restricted from investing in non-financial companies. Specifically, banks are forbidden from owning more than 15% of non-financial company shares. Restrictions on non-financial company ownership applies to the shareholders of banks and their related parties. Specifically, bank shareholders and related parties need the supervisor's approval if their investment in a non-financial entity exceeds 4%. Due to these restrictions, large conglomerates in South Korea, known as Chaebols, are not allowed to have banks as members due to contagion and other risks.

Israel

In Israel, the law of "Competition Enhancement and Reduction of Concentration"²⁸ initiated in 2013, has significantly transformed the ownership structure of commercial banks. The law contains requirements to separate material financial and non-financial corporations. Organizations that owned significant shares in financial and non-financial corporations before the enforcement of this law have been made to comply with the requirements during a 4- to 6-year transitional period by selling their ownership in one of the sectors. Specifically, until 2019 the following requirements must be satisfied:

- A material non-financial (real) corporation must not own more than 10% of any kind of

material financial institution.

- A shareholder of a material non-financial corporation that owns more than 5% is not allowed to own a controlling interest in any material financial organization.

A material financial organization is a legal entity that conducts investment, banking and other financial activities, whose total assets are no less than 40 billion shekel. Whereas material non-financial corporations are entities that represent construction, food and representatives of other real sectors whose total annual turnover amounts to no less than 6 billion shekel (and, in the case of monopolistic activity, no less than 2 billion shekel).

These requirements are currently in the process of implementation. The owner of the controlling interest of the largest bank in Israel who, at the same time, is involved in water, salt, real estate and other commercial businesses, reduced his shares in the bank to 20% in 2015. In 2016, information was published²⁹ on reducing that group's remaining ownership to half. According to a source, the group is currently conducting negotiations with an American investment fund, which may result in the sale of ownership.

Australia

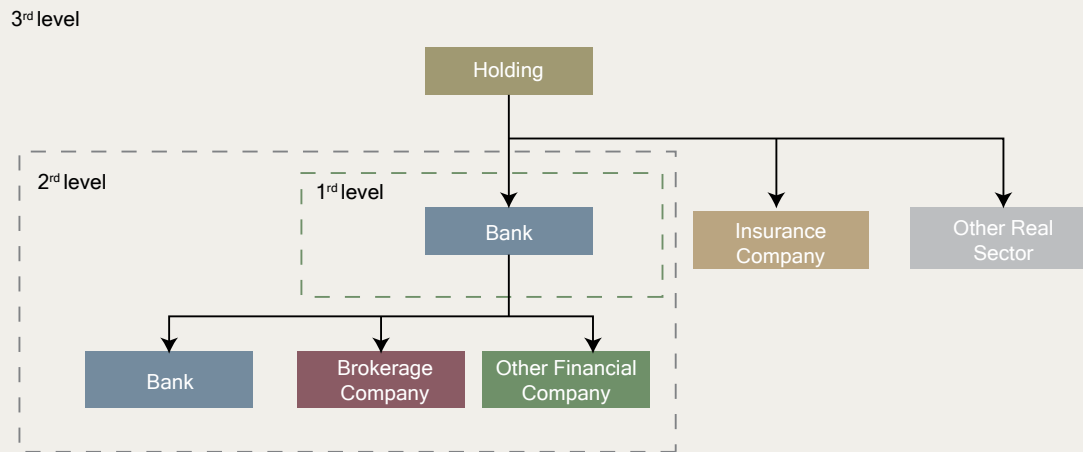
The Australian Prudential Regulatory Authority (APRA) has created a so-called three-layer supervisory approach (see Diagram N 3.3). The first layer entails supervising and regulating institutions (banks, insurance companies or other regulated entities) on an individual basis. The second layer regulates groups that conduct business in a single industry. Lastly, the APRA regulates conglomerates operating in several industries. The APRA regulates the latter based on three fundamental principles:

28. Israel Government Decision 5772 No.706 p.1084, 2013, The Law for Promotion of Competition and Reduction of Concentration, <http://www.antitrust.gov.il/eng/subject/215.aspx>

29. themarker.com, 2016, Arison negotiating to sell half of its holdings in Hapoalim to a US fund, <http://www.themarker.com/markets/1.2951805>

1. *Transparency in information* – entails sharing information with the supervisory board and supervisors, including disclosure of matters related to material regulated or unregulated entities and material intragroup transactions.
2. *Proper risk management environment* – means the requirement of balanced risk management, including for material unregulated entities.
3. *Capital requirements* – these become mandatory for third level entities in instances when a group is a large entity; when, according to the supervisor's assessment, capital is not sufficient; or when the group contains unregulated entities and material intragroup transactions are present.

Diagram N 3.3
APRA's 3-layer supervisory approach



Source: APRA

According to these principles, the APRA uses three fundamental methods:

- *Strengthening the supervisory board* – the APRA cooperates with the supervisory board, that determines the group capital and risk management plan, management motivations and incentives for third level conglomerates.
- *Pragmatic simplicity* – entails identifying third level conglomerates and establishing capital requirement for them. In setting the capital requirements, less capital is required in the case of diversified activities in different sectors in order to manage risk; while more capital is required in the case of concentration and contagion risks, fictitious intragroup transactions and complex group structures.
- *Flexible, proactive supervision* – entails applying first and second level supervisory approaches

to third level entities. This approach entails usage of a discretionary authority, as in the case of the Basel III Pillar 2 framework, when the weight is shifted to the whole group. At this level, complying with the requirements set by the supervisors is necessary, but insufficient.

According to observations of the APRA:

- In order to regulate entities with complex structures, it is not necessary to invent complex rules.
- The supervisory body should have the authority to regulate holding companies at the group level.
- It is of high importance to strengthen supervisory boards.
- Having a transparent information environment and effective risk management are no less important than capital.
- A supervisory regime being proactive is critically important.

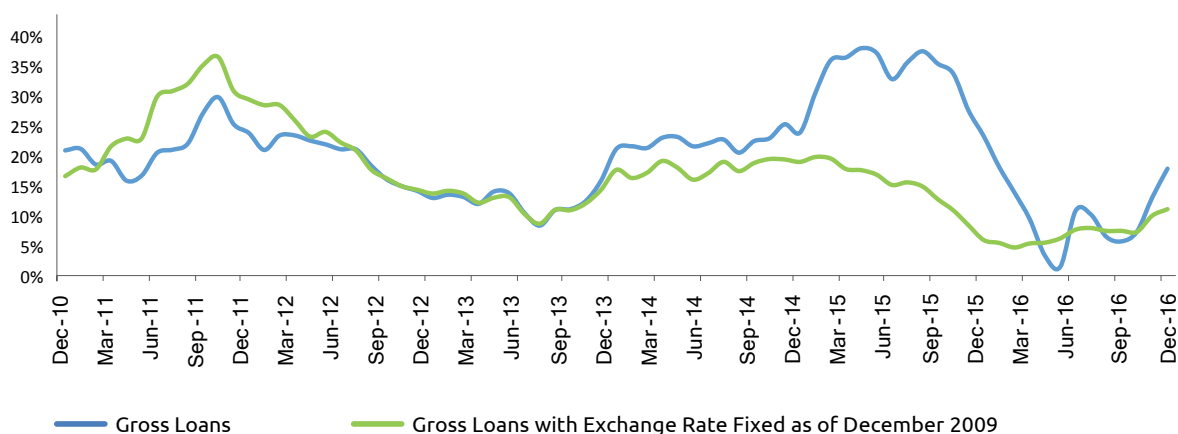
3.3 CREDIT RISK

The share of the loan portfolio disbursed to retail and small and medium sized enterprises (SME) continues to grow. It is noteworthy that this rebalancing of the loan structure from corporate borrowers was instigated by the optimization of risks. Despite the challenges of 2015-2016, the quality of the credit portfolio was largely maintained due to the buffers existing under lending standards (see the Annual Report of 2015). The latter was also supported by a reduction in interest rates. However, in the case of foreign currency loans, the recourse for further interest rate reductions is largely exhausted in light of exiting the international monetary easing process. Therefore, for the

sustainable growth of the loan portfolio, it is crucial for commercial banks to recover/preserve the abovementioned buffers and to further improve credit risk management by adhering to sound credit standards.

As of 31 December 2016, the size of the gross loan portfolio in the banking system reached 19 billion lari and the annual growth rate, adjusted for exchange rate effects, amounted to 10.8%. Compared to 2015, 2016 was characterized by increased lending activity in the banking system; however, the growth rate of the credit portfolio in 2016 remained significantly lower than the growth rates prior to 2015.

Diagram N 3.4
YoY percentage change in gross loans



Source: National Bank of Georgia

During 2016, the composition of the loan portfolio (excluding interbank loans) by segment slightly changed. This was largely due to the increased share of the retail loan segment. Adjusted for ex-

change rate effects, the retail loan segment saw the largest growth during 2016. However, a portion of this segment's growth can be attributed to the reclassification of the SME loan portfolio.

30. At the beginning of the year, a technical reclassification of the portfolio was made from the SME loan segment to the retail loan segment, which had a one-time effect on growth rates. The National Bank estimates the retail loan segment growth as being at 19% and the SME loan portfolio growth at 15%.

Table N 3.2

Composition of the loan portfolio (excluding interbank loans) by segment (adjusted for exchange rate effect, exchange rate as of the end of 2015).

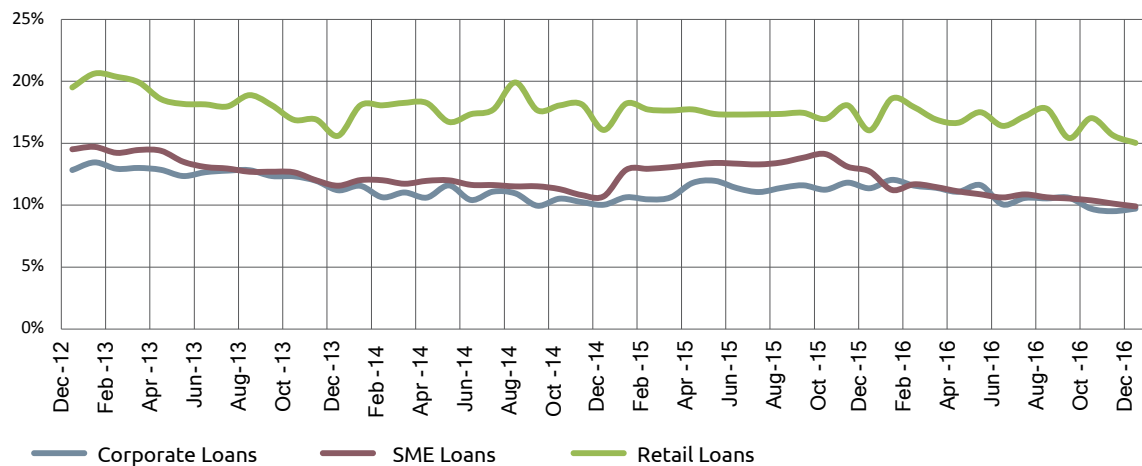
	Dec-15		Dec-16		Percentage change
	Mln GEL	%	Mln GEL	%	
Corporate	5 954	37%	6 036	34%	1%
SME	3 621	23%	3 712	21%	3%
Retail	6 438	40%	7 977	45%	24%
Total	16 013	100%	17 725	100%	11%

Source: National Bank of Georgia

During 2016, interest rates on loans decreased for all segments compared to 2015. There was a minor increase in interest rates in the retail segment, but only for loans disbursed in GEL.

Diagram N 3.5

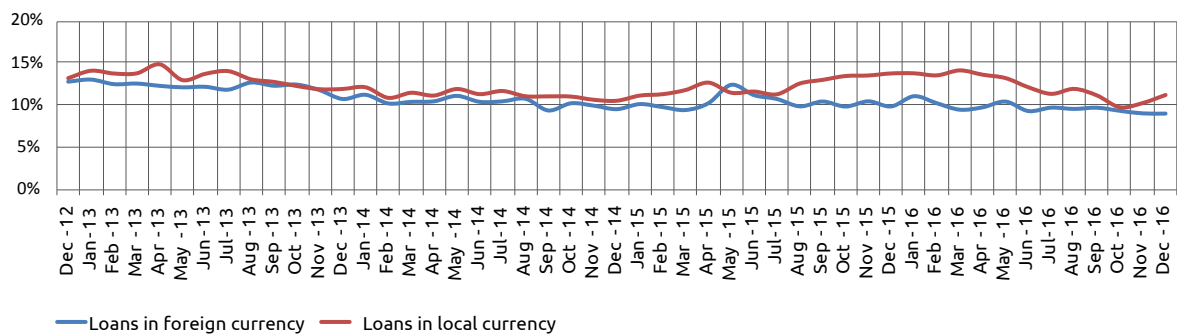
Monthly weighted average interest rates on loans per segment



Source: National Bank of Georgia

Diagram N 3.6

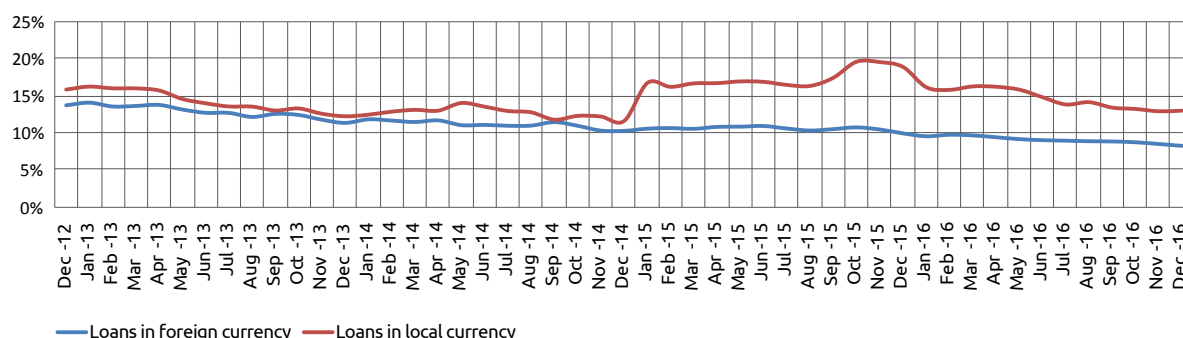
Monthly weighted average interest rates on loans for the corporate segment



Source: National Bank of Georgia

Diagram N 3.7

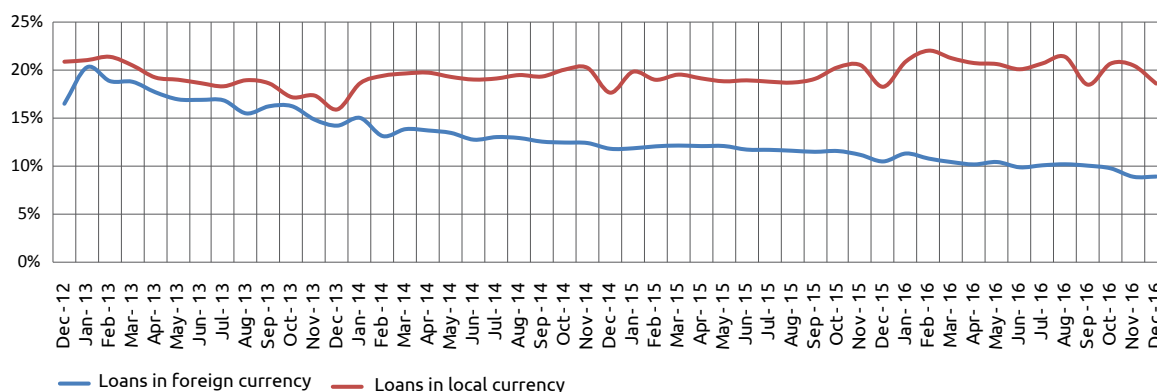
Monthly weighted average interest rates on loans for the SME segment



Source: National Bank of Georgia

Diagram N 3.8

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 2016, the share of pro-cyclical sectors (real estate development, real estate management, production and trade of construction materials, production and trade of durable

goods, and automobile dealers) in the banking sector's loan portfolio remained moderate and stable (see Diagram N 3.9). The high volume of loan loss reserves in some sectors was largely caused by idiosyncratic³¹ events (see Table N 3.3).

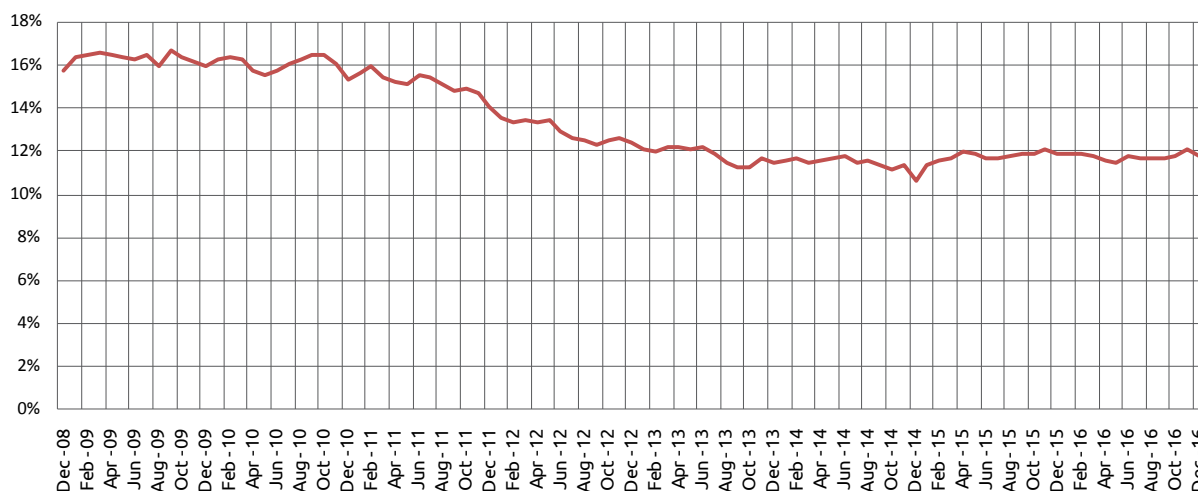
31. Idiosyncratic refers to individual, sector-specific factors and does not include factors of a systemic nature.

Table N 3.3
Gross loan portfolio according to risk sectors

Sector excluding interbank loans (mln GEL)	Share in Gross Portfolio	Loan Balance	Loan Reserve	Loan Reserve to Portfolio
State Organizations	0.1%	28	1	3.2%
Financial Institutions	2.2%	417	11	2.6%
Pawn-shop Loans	2.8%	531	39	7.4%
Real Estate Development	2.8%	524	62	11.9%
Real Estate Management	4.9%	924	50	5.4%
Construction Companies (non-developers)	2.2%	418	41	9.7%
Production and Trade of Construction Materials	2.0%	375	20	5.3%
Trade of Consumer Goods	4.1%	780	50	6.4%
Production of Consumer Goods	4.0%	759	57	7.5%
Production and Trade of Durable Goods	1.3%	241	15	6.1%
Production and Trade of Clothes, Shoes and Textiles	0.6%	120	6	5.0%
Trade (other)	4.5%	843	51	6.1%
Production (other)	1.8%	346	18	5.1%
Hotels and Tourism	3.4%	634	32	5.1%
Restaurants, Bars, Cafes and Fast Food Outlets	1.4%	259	18	6.8%
Heavy Industry	1.8%	343	53	15.4%
Oil Importers and Retailers	1.2%	219	7	3.3%
Energy	3.1%	587	18	3.1%
Automobile Dealers	0.9%	169	61	36.2%
Healthcare	2.5%	473	16	3.3%
Pharmaceutical	0.6%	118	11	9.0%
Telecommunication	0.8%	148	3	2.3%
Service	3.9%	730	58	7.9%
Agriculture	4.0%	750	39	5.2%
Other (including scrap metals)	2.1%	396	24	6.0%
Retail Products	41.1%	7 770	415	5.3%
Car Loans	0.4%	77	3	4.5%
Consumer Loans	17.6%	3 320	182	5.5%
Instant Installments	2.1%	405	33	8.2%
Payrolls (overdrafts)	0.3%	62	7	10.7%
Credit Cards	2.6%	490	31	6.4%
Loans for House Renovations	1.7%	317	12	3.7%
Mortgage Loans	16.4%	3 099	147	4.7%
Total	100.0%	18 902	1 175	6.2%

Source: National Bank of Georgia

Diagram N 3.9
Share of pro-cyclical sectors in the gross loan portfolio



Source: National Bank of Georgia

The main drivers of retail loan product growth were mortgages, consumer loans and instant installments. Loans for house renovations grew insignificantly, while other retail products decreased. The annual growth rate for consumer loans reached 29% in 2016, but considering the above-mentioned reclassification effect, the annual growth of consumer loans was 22.1%.

During 2016, commercial banks loosened their retail loan policy procedures. The maximum limits on the PTI ratio (the ratio of monthly loan payments to monthly income) were increased. In light of intensified competition during 2016, commercial banks introduced so-called “recruitment/win client over” campaigns for real estate collateralized loans. During such promotions clients’ income

sources were not confirmed and high LTV ratios (the ratio of the loan amount to the value of collateral) were allowed. Since such lending activity is associated with a significant increase in risk levels, certain promotions, when identified as risky, were promptly suspended by the National Bank of Georgia. The escalation of this process emphasizes the need to introduce system-wide minimum lending standards.

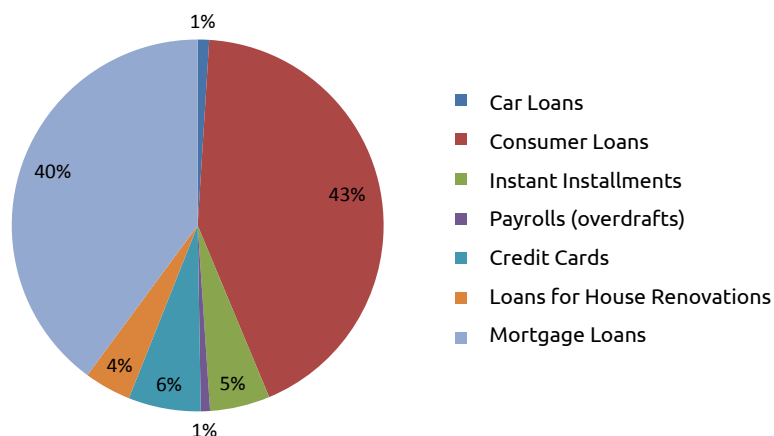
In parallel with the loosening of retail portfolio lending standards, an increase in loan maturity was also observed during 2016. Accompanied by the strengthening of the US dollar from the end of 2014, this significantly reduced the ability of the retail credit portfolio to absorb potential negative effects.

Table N 3.4
Growth of retail products adjusted for the exchange rate effect (exchange rate as of the end of 2015)

	Dec-2015		Dec-2016		Change %	Change mln GEL	Change % (Adjusted for exchange rate and reclassification effects)
	mln GEL	Share, %	mln GEL	Share, %			
Retail products	%	100%	7 375	100%	25%	1 453	21.7%
Car Loans	74	1%	70	1%	-5%	-4	-5.1%
Consumer Loans	2 507	42%	3 230	44%	29%	723	22.1%
Instant Installments	350	6%	405	5%	16%	56	16.0%
Payrolls (overdrafts)	67	1%	62	1%	-7%	-5	-9.7%
Credit Cards	492	8%	488	7%	-1%	-4	-0.8%
Loans for House Renovations	277	5%	291	4%	5%	14	5.0%
Mortgage Loans	2 156	36%	2 829	38%	31%	673	31.2%

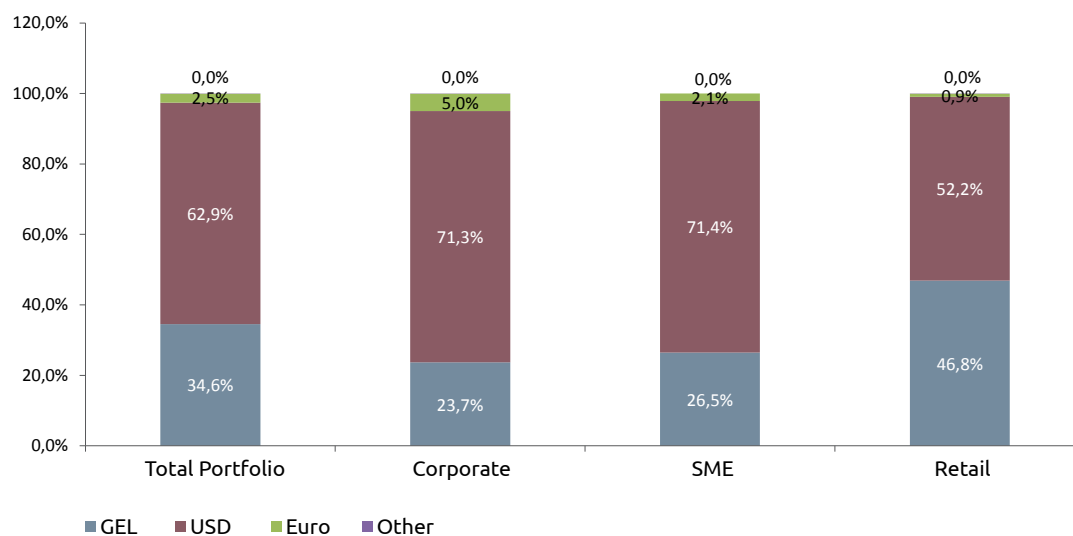
Source: National Bank of Georgia

Diagram N 3.10
Retail products distribution



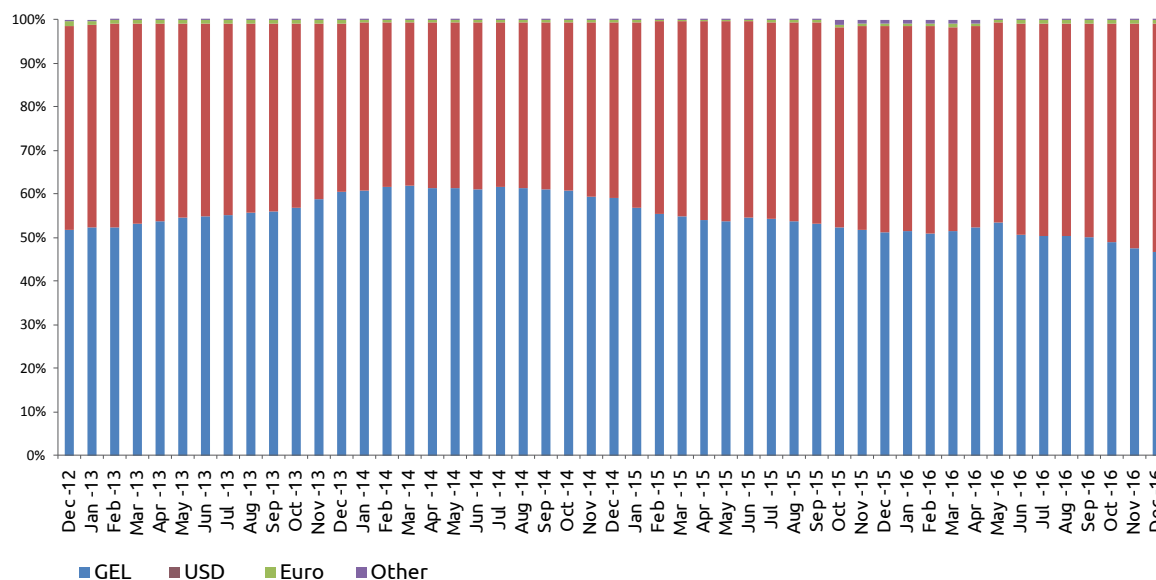
Source: National Bank of Georgia

Diagram N 3.11
Segments by currency (excluding interbank loans)



Source: National Bank of Georgia

Diagram N 3.12
Retail portfolio composition by currency (excluding interbank loans)



Source: National Bank of Georgia

By the end of 2016, the quality of the loan portfolio was satisfactory. However, due to the depreciation of the Georgian lari, the volume of buffers,

and hence the ability of the loan portfolio to absorb shocks, decreased.

Table N 3.5
Gross loan portfolio risk classification

Risk category (excluding interbank loans)	Amount (mln GEL)	Share	Reserve
Standard	16 366	86.6%	2%
<i>Negative Loans</i>	2 536	13.4%	31%
Watch	1 155	6.1%	10%
<i>Non-performing</i>	1 380	7.3%	49%
Substandard	687	3.6%	30%
Doubtful	308	1.6%	50%
Loss	386	2.0%	82%
Total	18 902	100%	6%

Source: National Bank of Georgia

The quality of the portfolio varies significantly by segment. Historically, corporate segment losses have been considerably higher than SME and retail loan portfolio losses. This is clearly evident when comparing qualitative parameters by segment. The retail and SME loan segments have a relatively lower debt burden and, therefore, a lower level of risk. However, the constantly growing levels of le-

verage in the corporate loan segment is of concern.³²

Due to adequate debt burden levels and the relatively low maturity of the loan portfolio, the significant strengthening of the US dollar, which began at the end of 2014, did not materially affect the quality of the portfolio (for more information, see the Annual Report of 2015).

Table N 3.6
Portfolio quality by segment

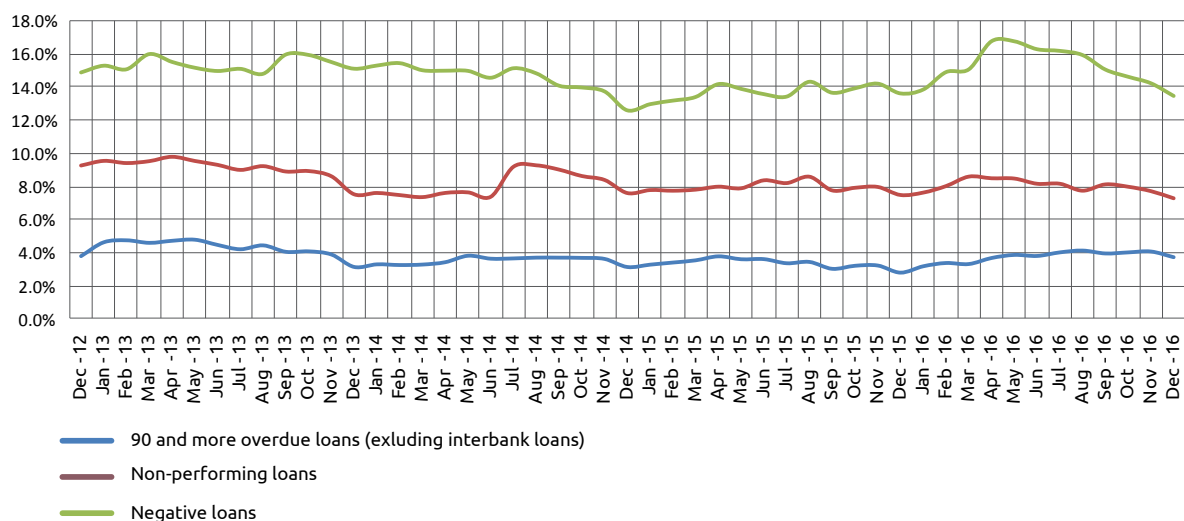
Segment	Negative Loans	Non-performing Loans	Average reserve
Corporate	23.20%	13.12%	8.35%
SME	10.50%	5.15%	4.87%
Retail	7.22%	3.82%	5.21%

Source: National Bank of Georgia

32. A corporation's leverage is an indicator of its debt level. Different ratios are used to evaluate this. For example, the ratio of assets to equity or the ratio of debt to EBITDA.

Diagram N 3.13

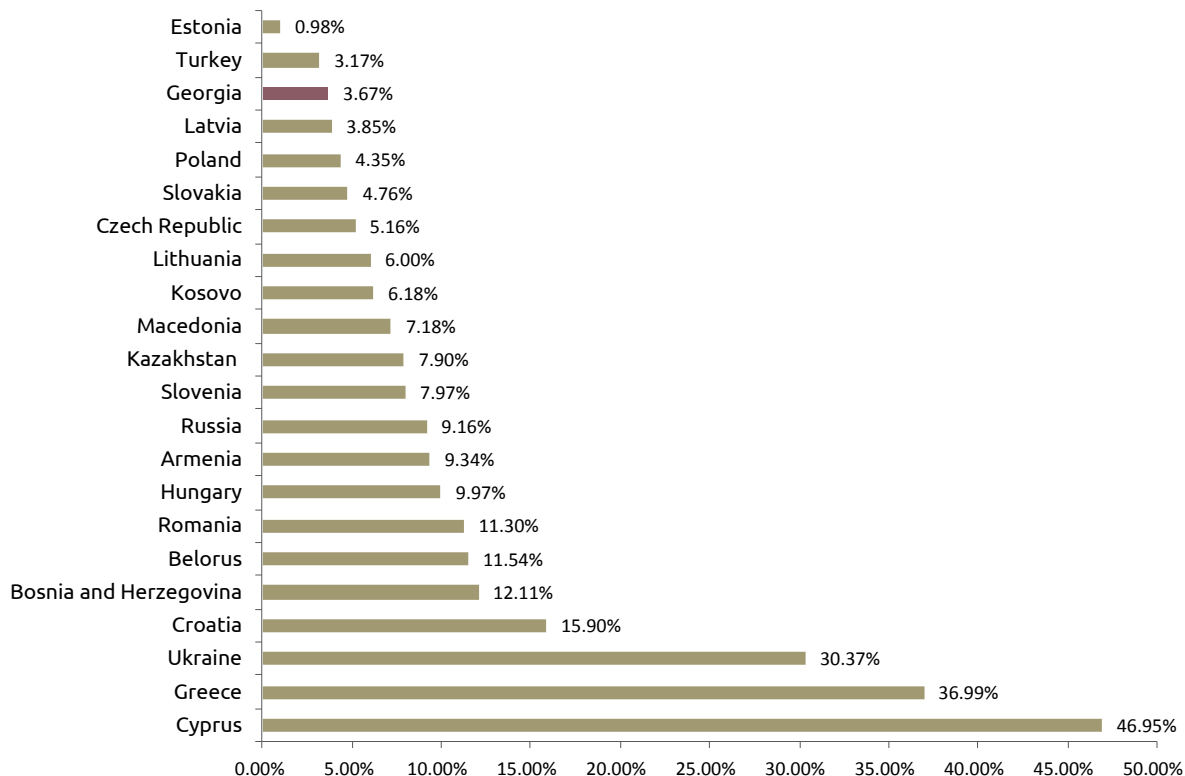
Loan portfolio composition by qualitative indicators (excluding interbank loans)



Source: National Bank of Georgia

The share of 90-day overdue loans in the gross loan portfolio (excluding interbank loans) amounts to 3.67%, which is one of the best results among comparable countries.

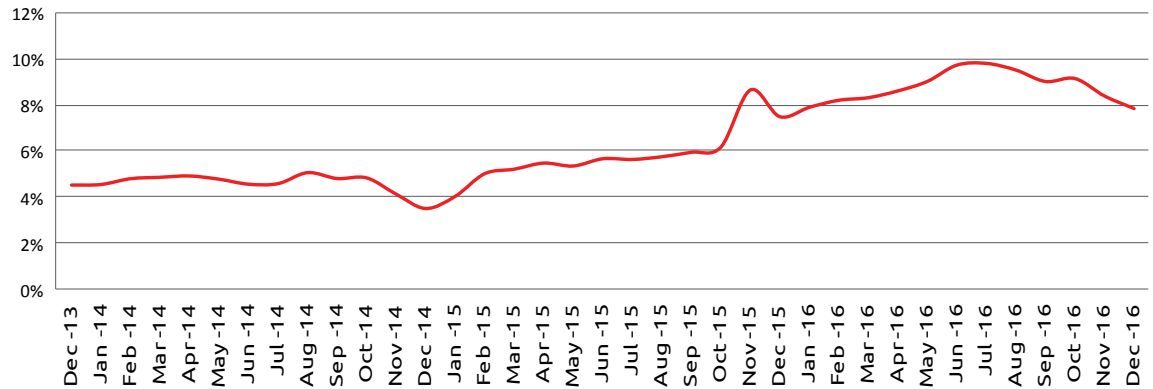
Diagram N 3.14

Overdue loans of 90 days and more³³

Source: National Bank of Georgia

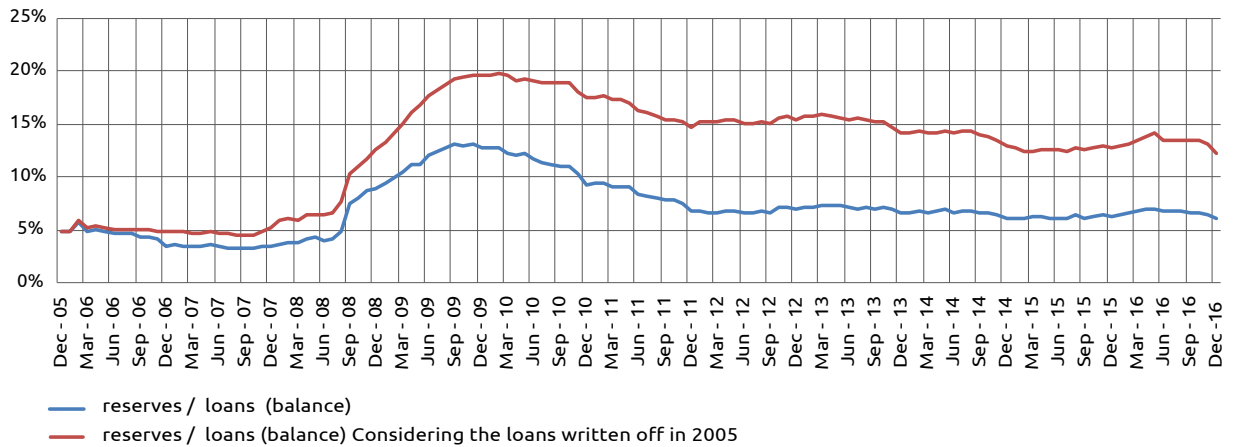
33. Data from the end of 2016. Although the latest available dates are used, there may be several months' difference in the data.

Diagram N 3.15
The share of restructured loans in the gross loan portfolio



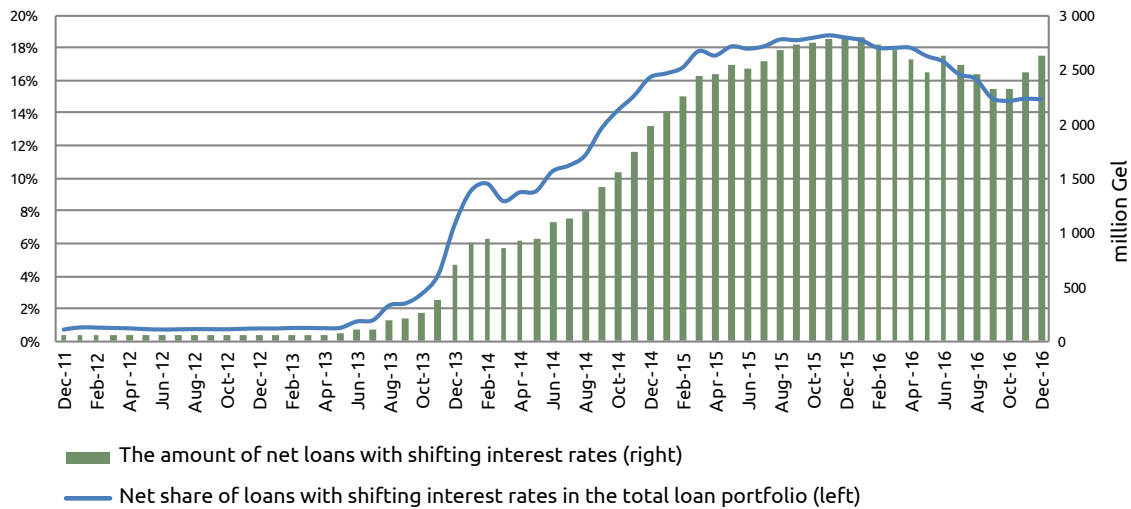
Source: National Bank of Georgia

DiagramN 3.16
The ratio of loan loss reserves to gross portfolio



Source: National Bank of Georgia

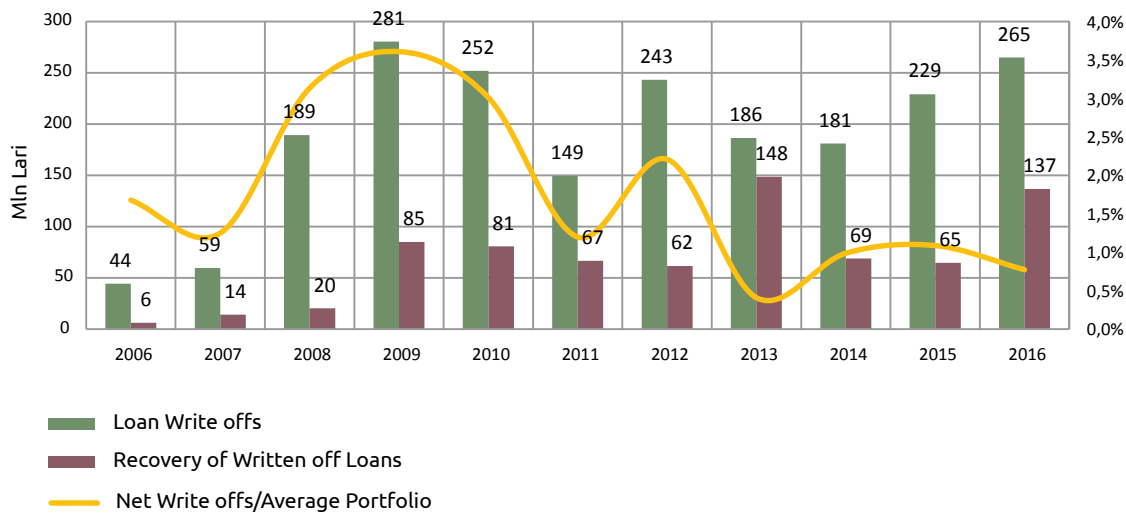
DiagramN 3.17
Volume and share of net floating interest rate loans in the net loan portfolio³⁴



Source: National Bank of Georgia

In 2016, the net value of written-off loans decreased by 22% compared to the corresponding figure from 2015. The main reason for this was the upsurge in the recovery of written-off loans.

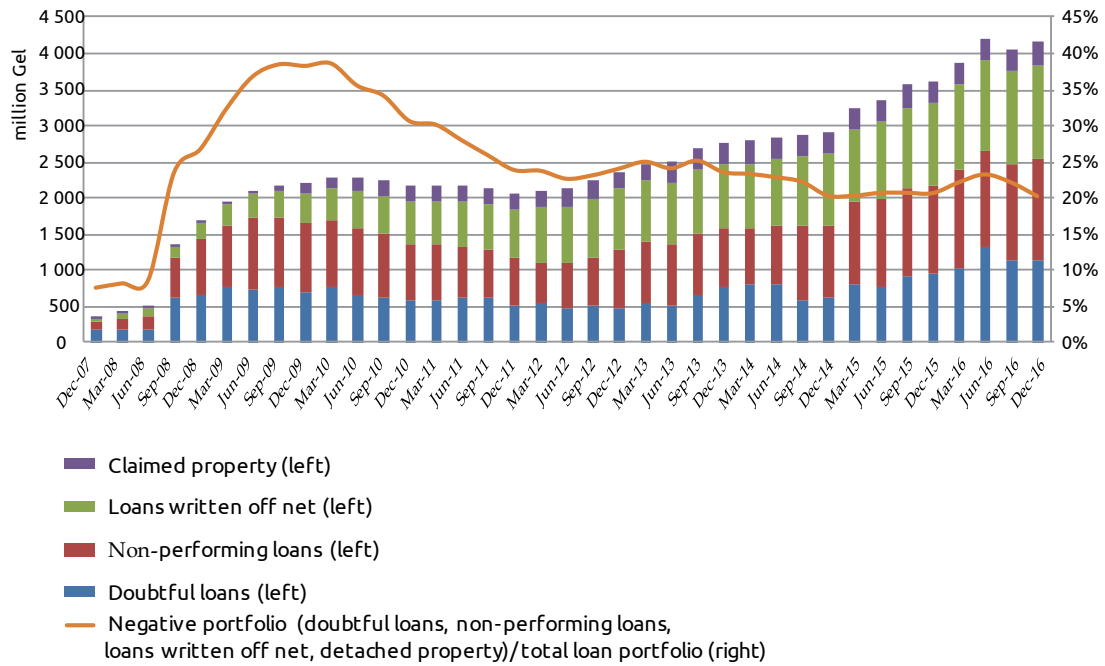
Diagram N 3.18
Write-offs and recovery of loans



Source: National Bank of Georgia

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

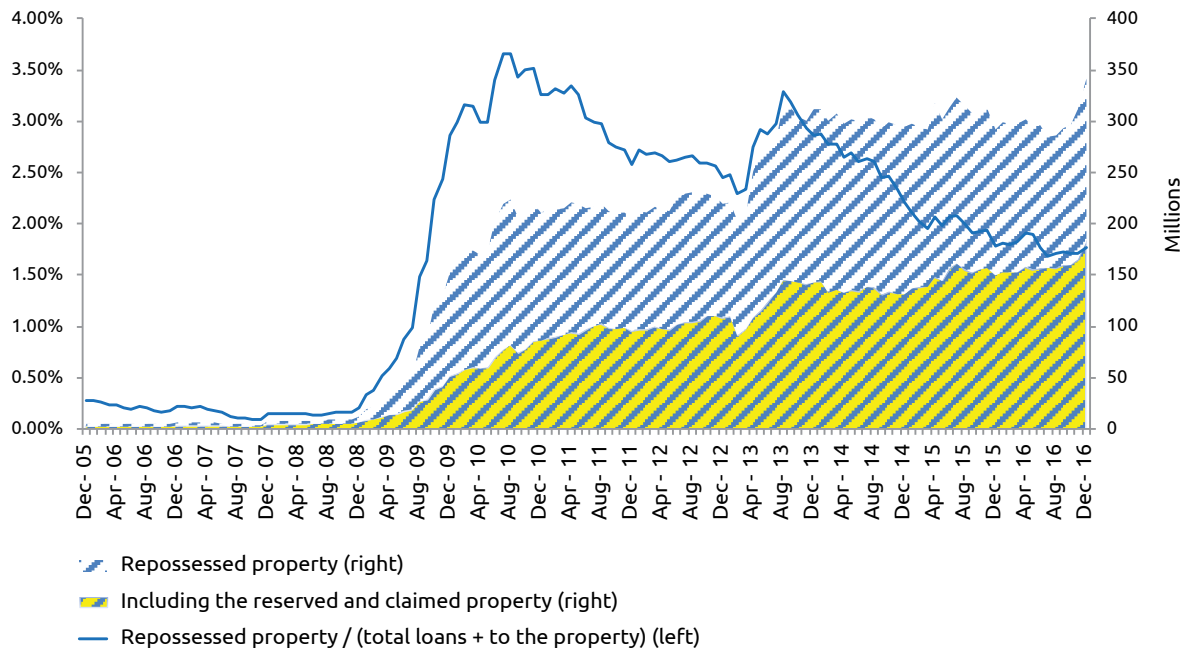
Diagram N 3.19
Problem assets



Source: National Bank of Georgia

In 2016, the ratio of repossessed assets to the sum of loans and repossessed assets did not change significantly compared to 2015.

Diagram N 3.20
Repossessed property



Source: National Bank of Georgia

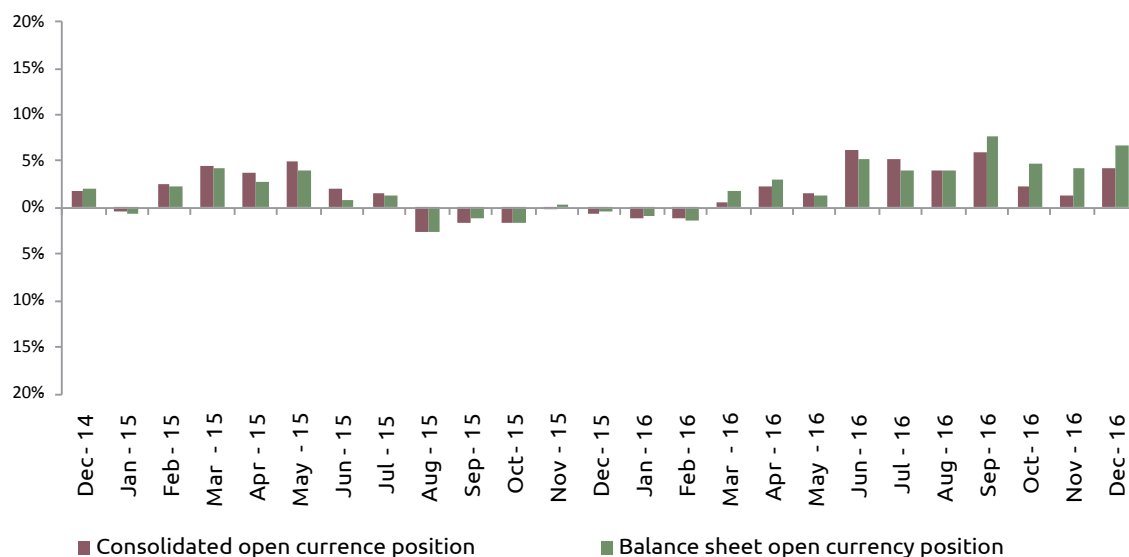
3.4 MARKET RISK

3.4.1 FOREIGN CURRENCY RISK

The sensitivity of the Georgian banking system to FX risk is high. Considering the structure of financial market liabilities, the laraization of loans remains at a low level (over 45% of loans to individuals and 35% of total loans). The NBG continues to direct its supervisory efforts towards improving its existing approaches to foreign exchange risk management. Particular attention is paid to the revaluation of foreign exchange reserves and the assessment of risks related to structural position as well as improving banks' internal models. This process has gained even more importance due to the increased currency volatility in the countries of the region.

If we look at the 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.³⁵ As a result, considering the revaluation of reserves, commercial banks are at a loss during periods of currency depreciation. Furthermore, because the share capital is denominated in lari, the revaluation of risk-weighted assets due to currency depreciation significantly reduces banks' capital adequacy ratios, which further increases the vulnerability of banks towards this risk. Credit risk caused by exchange rate fluctuations is a separate matter and is discussed in detail in the Credit Risk section of this report.

Diagram N 3.21
Balance sheet and consolidated open currency positions to regulatory capital



Source: National Bank of Georgia

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

3.4.2 INTEREST RATE RISK

Similar to previous years, Georgian banks held almost no trading securities in 2016. In light of this, the banking book approach was used for the entire balance sheet for supervisory purposes. Nevertheless, the NBG requires that banks with trading books develop relevant procedures and report to the National Bank. When significant growth opportunities are identified as a result of monitoring, regulations for the management of trading books will be enforced.

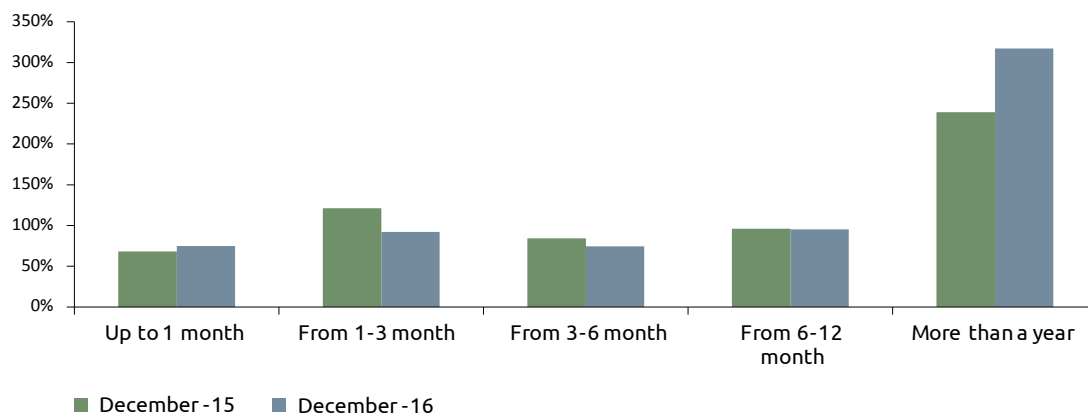
All things held constant, if interest rates go up by 300 basis points on interest-bearing bank assets and liabilities, system-wide annual incremental losses will amount to 86 million GEL, while the regulatory capital adequacy ratio will decrease from 15.1% to 14.8%.

The aforementioned result accounts for the balance sheet effect in the reporting period. The influence of interest rate shocks on economic value – which is not directly reflected in profit and loss, but has an impact on a bank's market value – is also noteworthy. In this regard, based on existing assessments, the effect of a 400-basis-point interest rate growth in lari and a 200-basis-point

interest rate growth in foreign currency on this measure is manageable and falls significantly behind the 20% threshold of regulatory capital established by international standards. Therefore, the latter does not pose a threat to the stability of the system. Supervisory mitigation measures are applied to those banks that have high interest rate risks. When analyzing the interest rate risk stress scenario, attention is currently focused on risks of a hike in interest rates, especially considering increasing risk levels due to regional instability. It should also be noted that the United States Federal Reserve System has started the process of increasing interest rates on the US dollar, which will have the effect of raising interest rates globally.

Further, under the new Basel III capital framework, and as part of the Internal Capital Adequacy Assessment Process (ICAAP), banks submitted their own calculations of interest rate risks for supervisory review. In this regard, the evaluation process will continue and the NBG's position will be communicated with the banks. This process aims at supporting the establishment of interest rate risk management mechanisms as an important and efficient way of mitigating risk at commercial banks.

Diagram N 3.22
Interest bearing assets' coverage of liabilities



Source: National Bank of Georgia

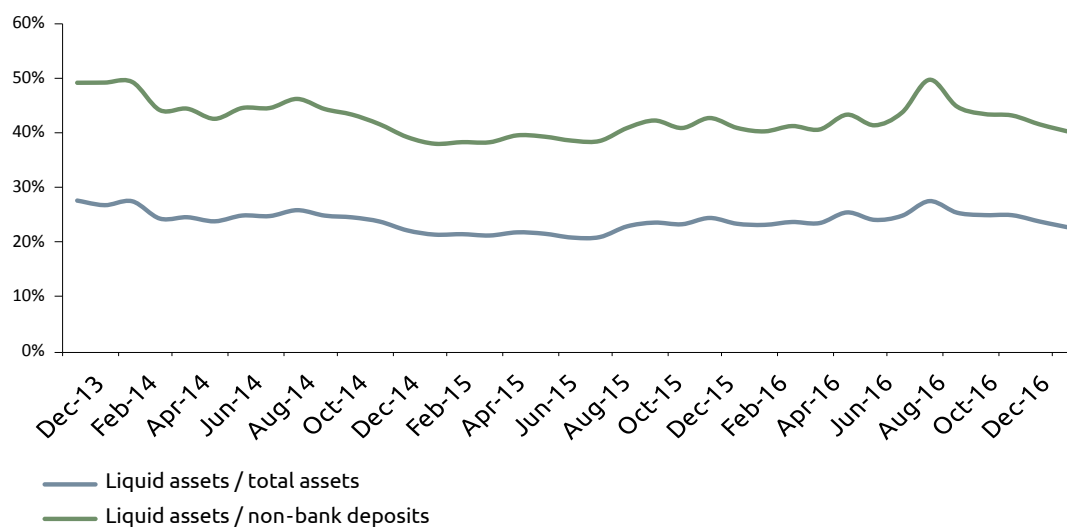
3.5 LIQUIDITY RISK

high and was characterized by minor fluctuations. Liquid assets constitute 23% of total assets, which is sufficient to cover 41% of non-bank deposits.

3.5.1 STRUCTURE OF LIQUID ASSETS

Throughout 2016, the volume of liquid assets was

Diagram N 3.23
Level of liquid assets

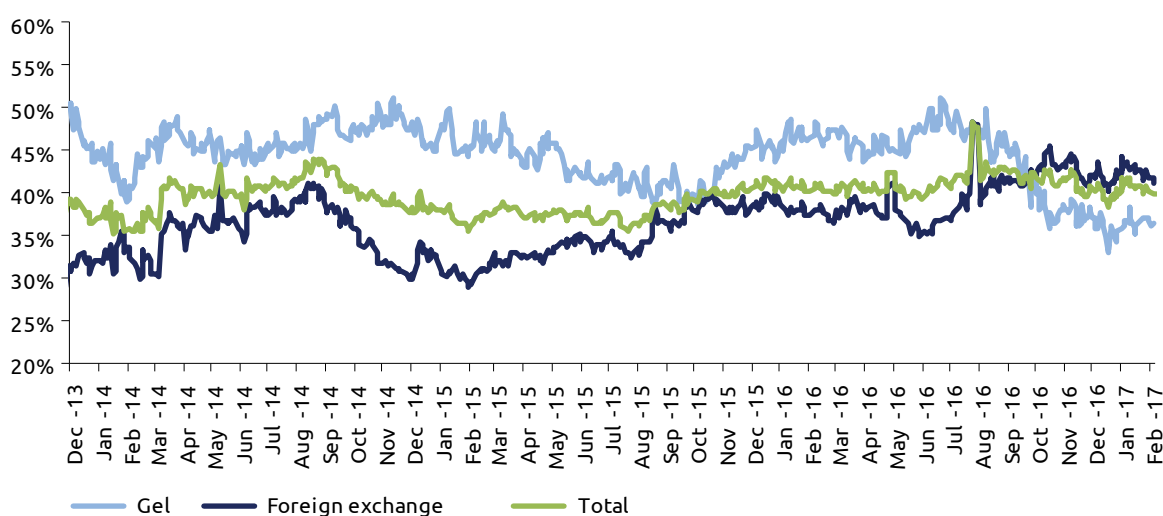


Source: National Bank of Georgia

Despite the stability of the total liquidity ratio, it is noteworthy that liquidity by currency was characterized by significant fluctuations. Demand for foreign currency loans dropped as a result of the lari exchange rate fluctuations and the slowdown of economic activities. Reserve requirements on foreign currency liabilities also increased, which led to the growth of foreign currency liquidity

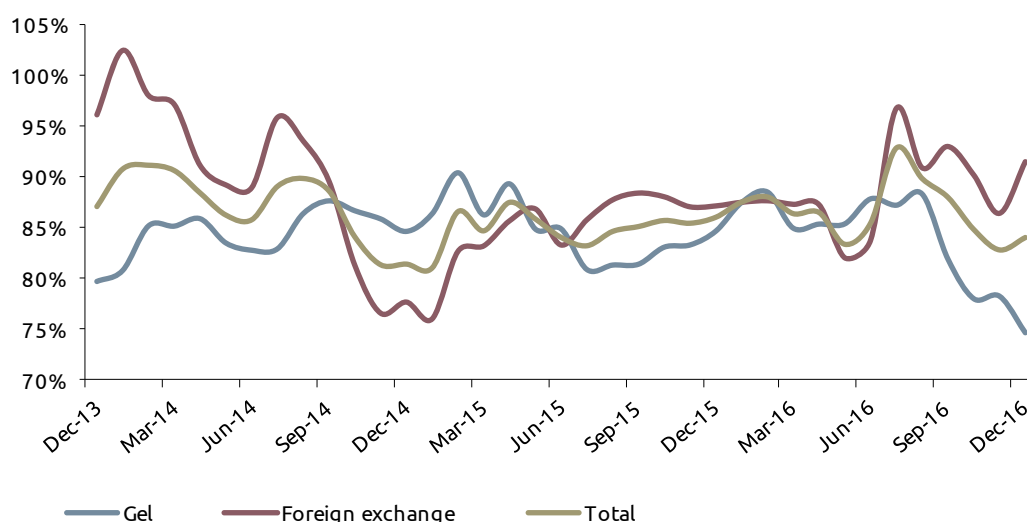
throughout the year. These dynamics were also reflected on the maturity gap of less than one month; the share of money due from the National Bank of Georgia increased in the structure of liquid assets, which was also caused by changes in reserve requirements. Throughout the year, the National Bank continued to monitor liquidity risk by currency.

Diagram N 3.24
Liquidity ratio by currency



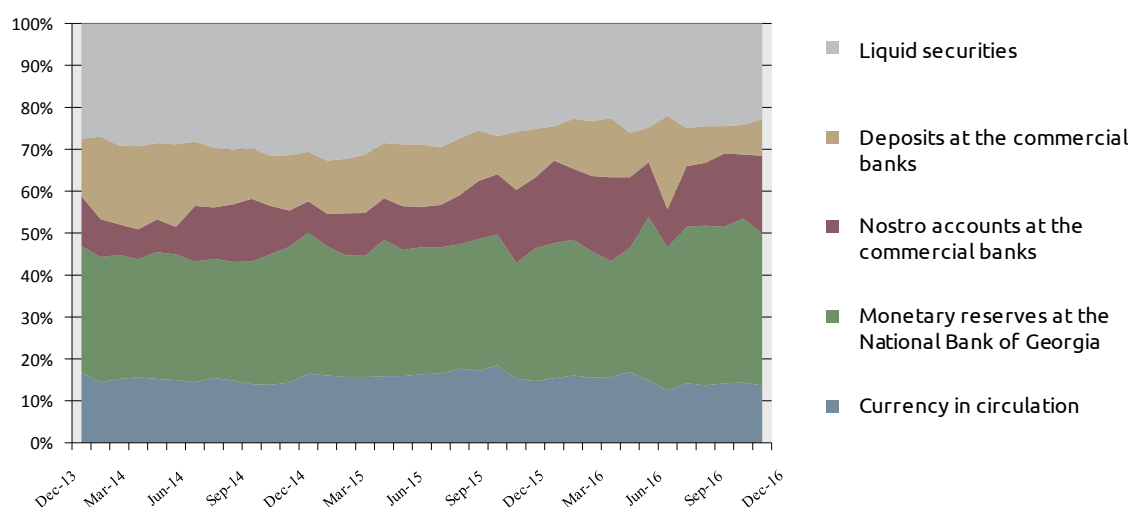
Source: National Bank of Georgia

Diagram N 3.25
Liquidity gap: assets with maturity of less than one month to liabilities with a maturity of less than one month



Source: National Bank of Georgia

Diagram N 3.26
Structure of liquid assets



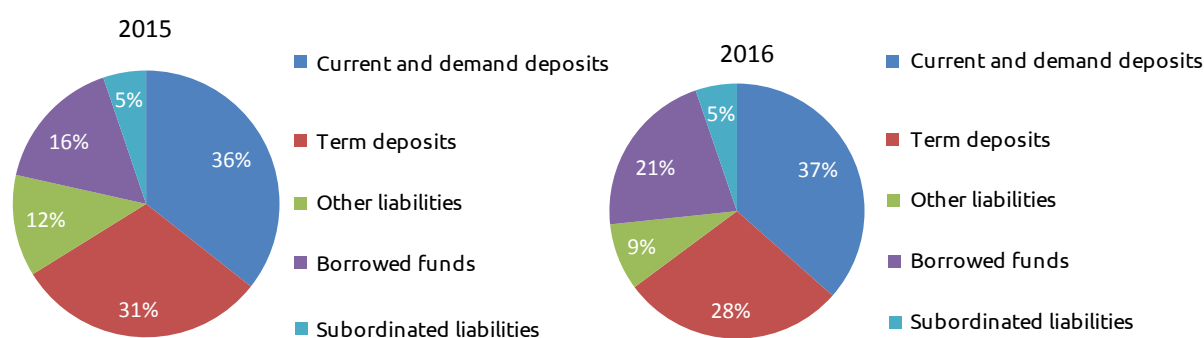
Source: National Bank of Georgia

3.5.2 STRUCTURE OF LIABILITIES

The share of borrowed funds increased in the structure of liabilities, including by issuing debt securities, which represents a stable funding source.

In addition, banks maintained a comfortable level of liquid assets, corresponding to the risks of liability structure.

Diagram N 3.27
Liability structure



Source: National Bank of Georgia

3.5.3 RETAIL FUNDING

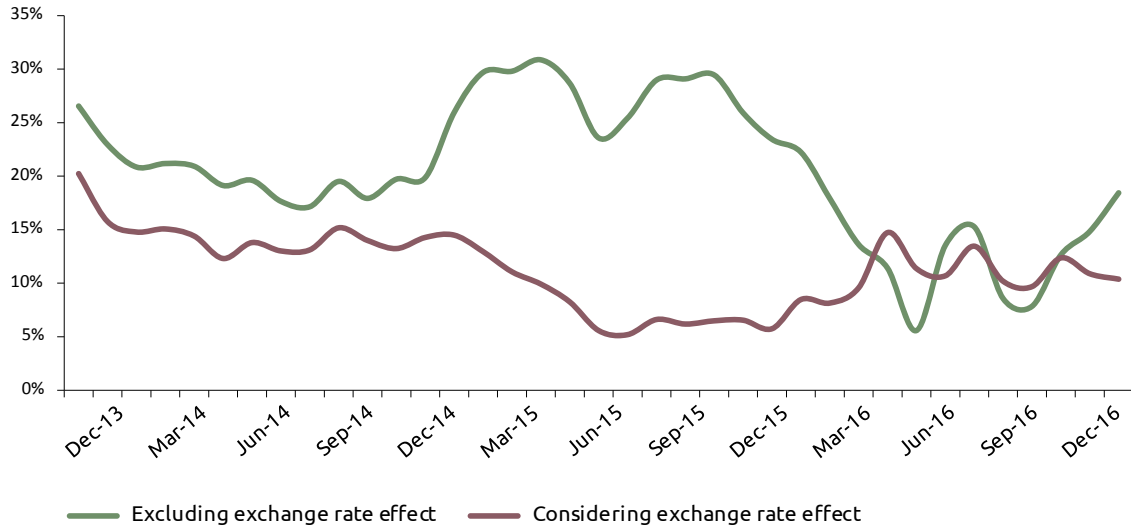
During 2016, the volume of deposits increased by 2.6 billion GEL (by 18.4% or by 10.4% if adjusted for exchange rate effects) and totaled 17.0 billion GEL by December. In terms of depositors'

structure, the growth of deposits by individuals and legal entities amounted to 24.5% and 12% respectively (14.8% and 5.6%, when adjusted for exchange rate effects). The drop in the growth rate in comparison with previous years was primarily

caused by a slowdown of economic activities. In light of expectations of an exchange rate depreciation, the dollarization of deposits increased in

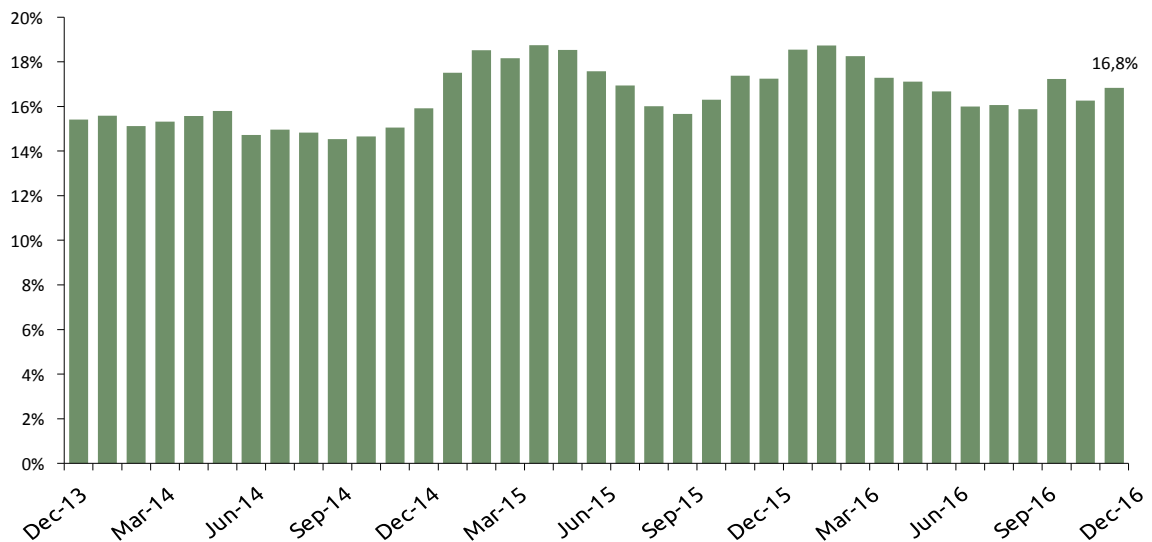
the second half of 2016 and reached 71% by December.

Diagram N 3.28
Annual growth of non-bank deposits



Source: National Bank of Georgia

Diagram N 3.29
Share of non-resident deposits



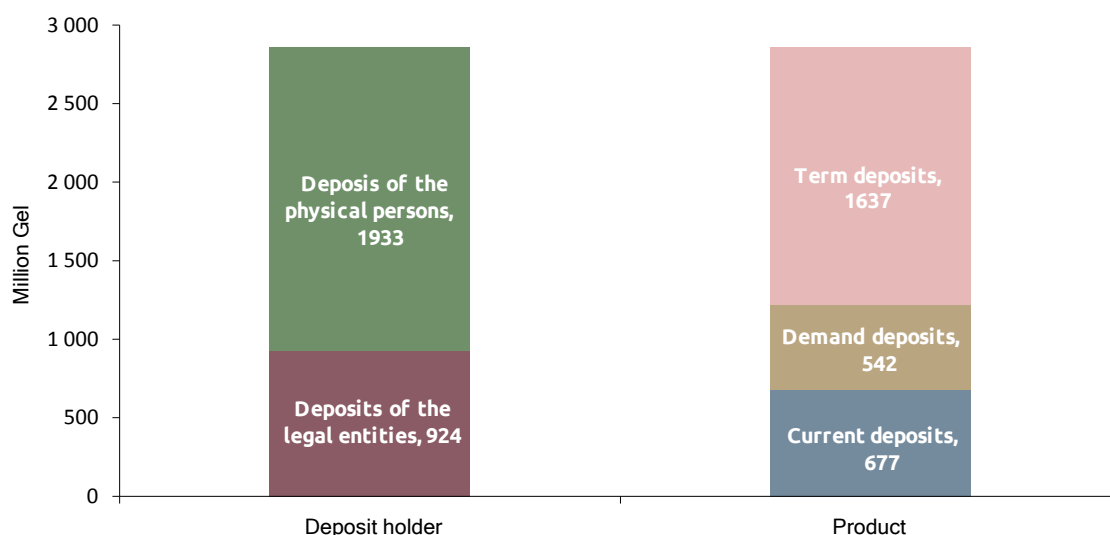
Source: National Bank of Georgia

The share of non-resident deposits in total non-bank deposits did not significantly change in 2016, and amounted to 16.8% 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%.³⁶ 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 a stabilization of the share of non-resident deposits in recent years.

DiagramN 3.30
Structure of non-resident deposits (December 2016)



Source: National Bank of Georgia

3.5.4 WHOLESALE FUNDING

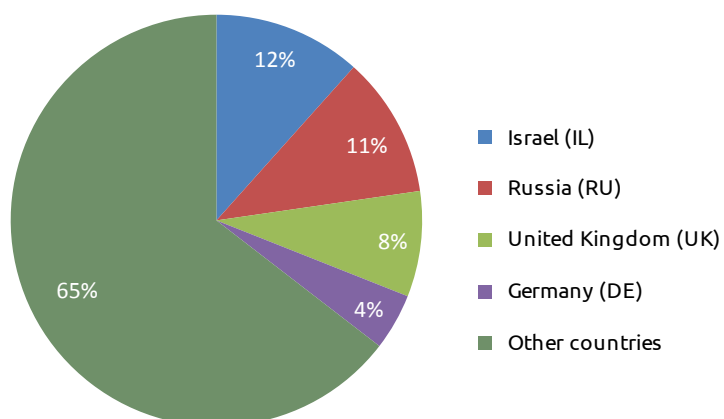
Throughout 2016, the ratio of loans to deposits remained stable.

Wholesale funding is diversified in terms of both lender type and residual maturity. One commercial bank successfully made a principal Eurobond prepayment in 2016. In addition, one of the largest Georgian companies refinanced Eurobonds, which reduces funding risk in the system.

A total of 51% of wholesale funding was attributed to international financial institutions, 25% to parent/related companies and 24% 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. Covenants were regularly monitored and their effects were reflected in the new framework of stress tests.

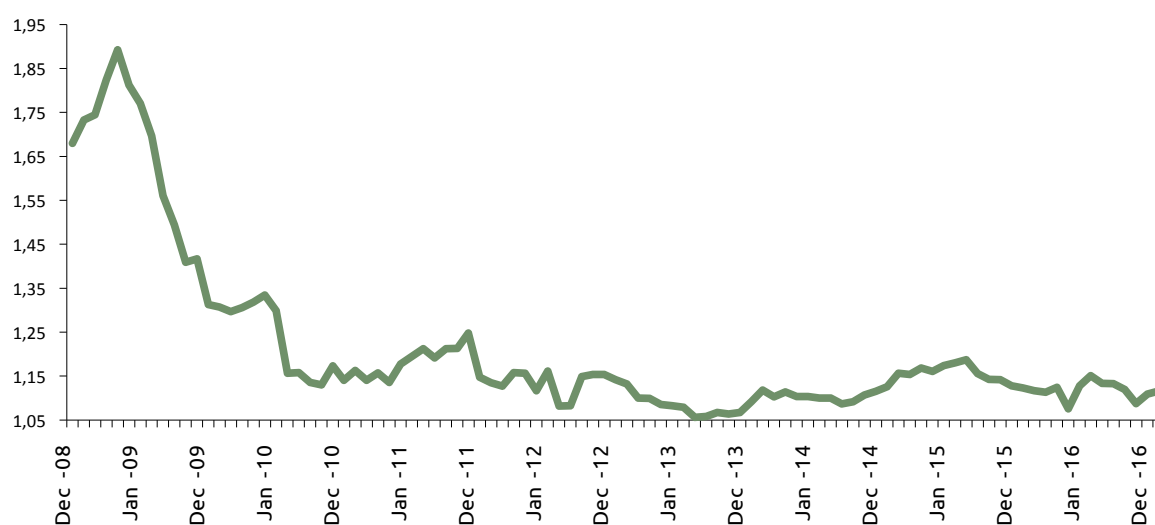
36. The liquidity requirement for non-resident deposits increases by as many percentage points as the share of non-resident deposits in total non-bank deposits exceeds 10%.

Diagram N 3.31
Non-resident deposits by country (December 2016)



Source: National Bank of Georgia

Diagram N 3.32
Gross loans to non-bank deposits



Source: National Bank of Georgia

Table N 3.7
External sources of wholesale funding and their schedules as of 31 December 2016

Month	<1	1-3	3-6	6-12	12-24	24-36	36-60	>60	jami
Total	9.94%	5.37%	4.77%	10.05%	15.05%	12.76%	15.98%	26.08%	100.00%
International Financial Institutions	2.20%	1.20%	1.95%	4.19%	10.54%	7.58%	9.39%	13.65%	50.70%
Related/Parent Financial Institutions	4.50%	1.76%	1.17%	0.20%	0.57%	3.21%	4.11%	9.41%	24.93%
Other Private Financing	3.24%	2.41%	1.65%	5.66%	3.94%	1.97%	2.48%	3.02%	24.37%

Source: National Bank of Georgia

3.5.5 REGULATION OF LIQUIDITY RISK

Throughout 2016, several amendments were introduced regarding liquidity supervisory requirements and a detailed analytical reporting form for separate categories of liquid assets and short-term liabilities was implemented.

Throughout 2016, the process of calibrating and implementing the Basel III liquidity coverage ratio (LCR) in the banking system was finalized. 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. Full enforcement of LCR will be required from banks from 1 September 2017.

The implementation of the Liquidity Coverage Ratio (LCR) will significantly improve prudential supervision, but it must be taken into consideration that it does not cover some integral aspects of liquidity risk regulation that receive attention during risk assessment, such as the concentration of payments for liabilities and actual contingency funding plans. In addition, from 2017 the implementation process of the Net Stable Funding Ratio (NSFR) is planned, which will improve long-term liquidity regulation. After the introduction of the NSFR, existing liquidity requirements (30% of short-term liabilities) will be annulled and will only be used for monitoring purposes. As a result, the liquidity risk supervisory framework will be fully compliant with Basel standards.

Further, in order to reduce liquidity risk in foreign currency and to encourage the lengthening of

the maturities of liabilities, it is planned to give long-term certificates of deposits issued by banks certain relief in terms of minimum reserve requirements. Such certificates of deposits are non-callable and the development of this instrument will significantly reduce the instantaneous outflow of liabilities during times of financial stress.

3.6 PROFITABILITY RISK

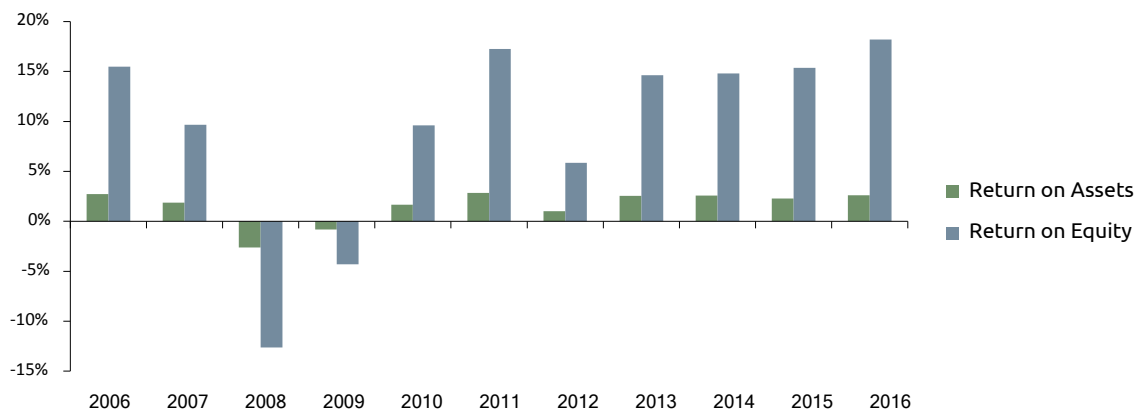
In 2016, the return on average assets and equity³⁷ amounted to 2.6% and 18.2% respectively. The rate of banking system profitability has remained stable in recent years and, in total, has approached the required return on equity for shareholders.

The profitability of the banking system was positively affected by the growth of assets and the subsequent increase in effectiveness due to economies of scale. Considering the growth of total assets by 19.8% and total loans by 17.7%³⁸, non-interest expenses increased by only 10.2%. The increase of efficiency was reflected in the cost to income ratio, which dropped from 46.6% to 40.0%. On the other hand, the improvement of profitability in 2016 was negatively affected by the decrease of the interest rate spread, which was a result of the relatively small increase in interest rates on loans compared to those on deposits. In addition, there was an insufficient growth of non-interest income, compared to assets. However, the latter has little impact on profitability. In addition, the yield of liquid assets decreased as a result of the lower interest income on interbank accounts and deposits, as well as the return on certificates of deposit and treasury bonds.

37. 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.

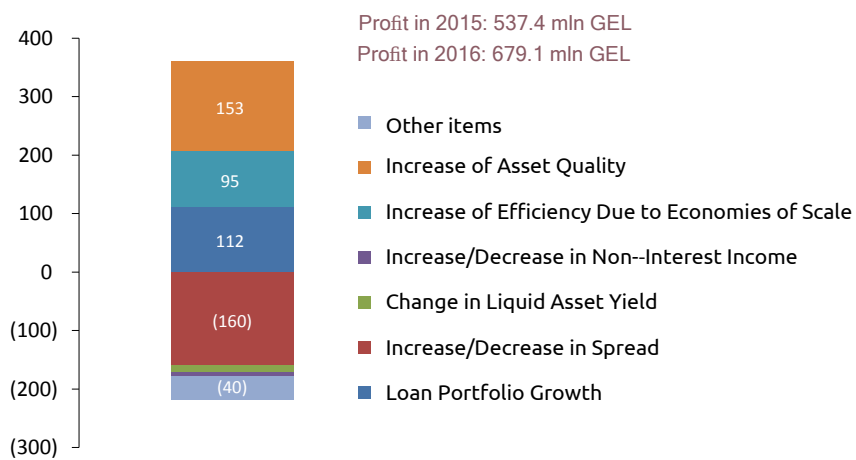
38. Including the exchange rate effect.

Diagram N 3.33
Return on assets and equity



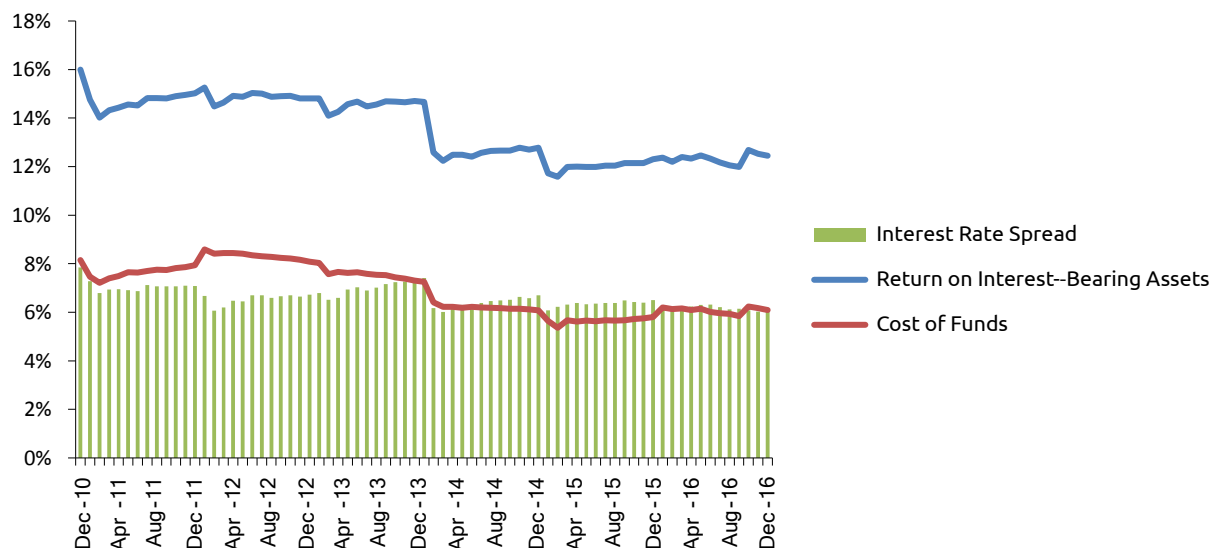
Source: National Bank of Georgia

Diagram N 3.34
Decomposition of profitability growth



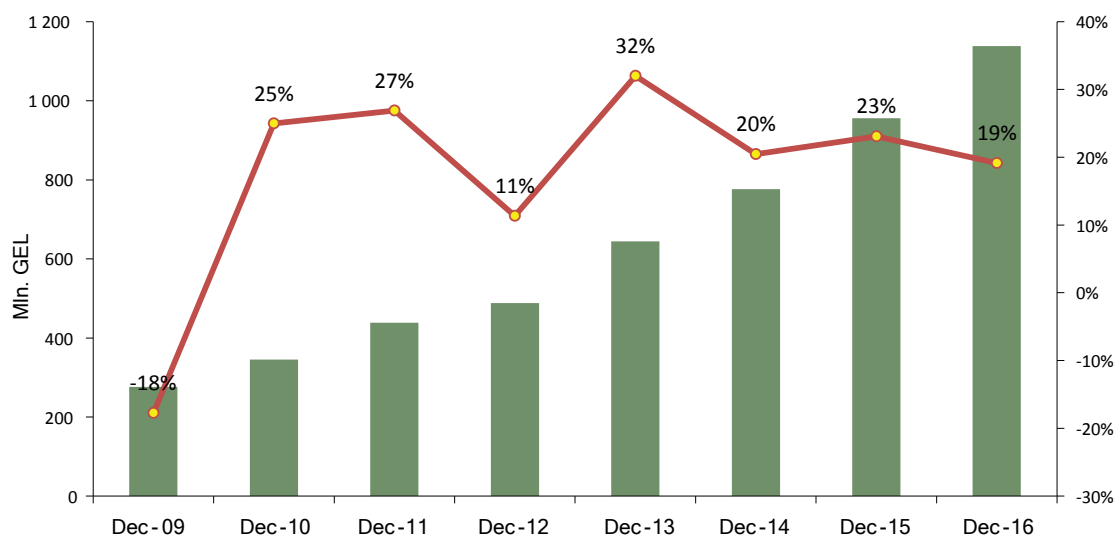
Source: National Bank of Georgia

Diagram N 3.35
Interest spread and factors affecting it



Source: National Bank of Georgia

Diagram N 3.36
Banking system net profit from operations and annual growth



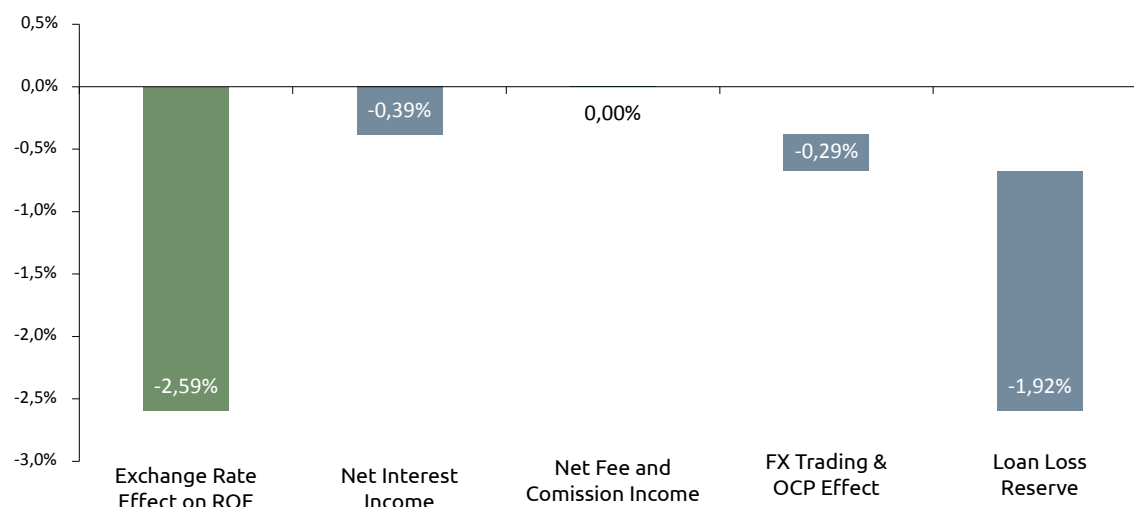
Source: National Bank of Georgia

We can assess the impact of the depreciation of the Georgian lari on individual elements of the banking system in general terms. Due to the volatile GEL/USD exchange rate during the last year,

aggregate depreciation was negatively reflected on banking system profitability and the ROE (return on equity) was reduced by 2.59 percentage points (see Diagram N 3.37)

Diagram N 3.37

Breakdown of FX effect on ROE (expressed as percentage points of return on equity)



Source: National Bank of Georgia

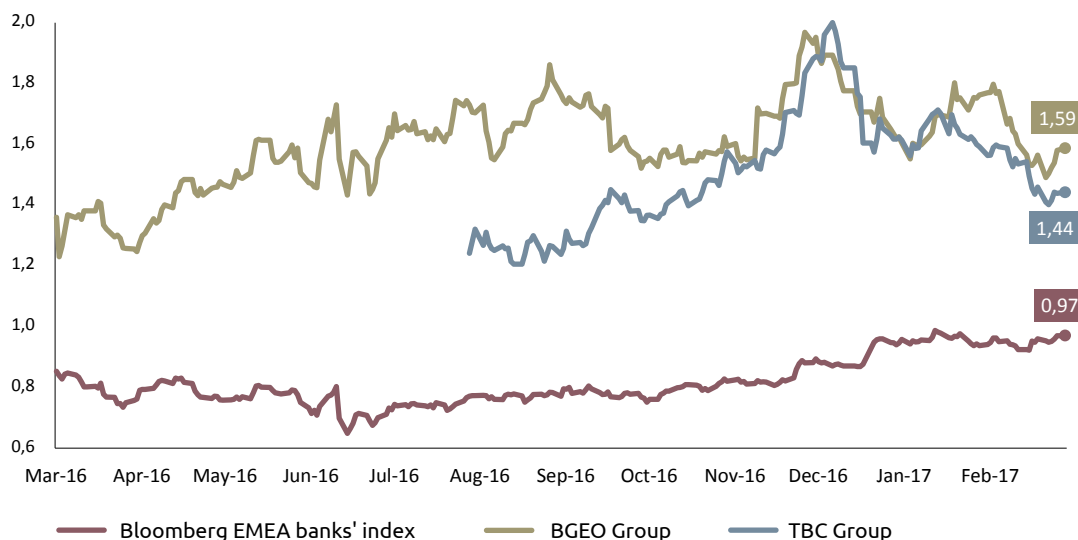
In addition, the debt burden of borrowers increased, which increases the credit risk for banks in the following period. To mitigate this risk, the National Bank of Georgia encourages the introduction of loan standards in the banking sector using different methods, including the usage of debt service coefficients in the asset classification system. Furthermore, considering the existing ownership structure of the banking system, and despite the positive ROE, non-resident shareholders faced some losses due to the revaluation of investments made in GEL. Because the Georgian lari hedging market is virtually nonexistent, it is im-

possible to insure these assets against exchange rate fluctuations. This was also reflected on the dynamics of the share prices of Georgian banks listed on international markets. However, it is noteworthy that demand for these assets remains high. For instance, despite recent corrections, the price to book ratio of leading Georgian banks is higher than those of peer countries (EMEA Banks Index).³⁹ This, alongside other indices, indicates that market participants evaluate the Georgian financial sector as being healthier compared to those of peer countries.

39. The Bloomberg EMEA Banks Index is a capitalization-weighted index of 48 leading banks across Europe, the Middle East and Africa. In this case, the price to book ratio is used.

Diagram N 3.38

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



Source: National Bank of Georgia

It must 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 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. Therefore, considering risk-based supervisory principles, throughout 2016, significant resources were allocated to the 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.

3.7 OPERATIONAL RISK

The process of expanding and improving the operational risk management framework of commercial banks continued in 2016. Special attention was paid to the improvement and testing of the business continuity management policies of commercial banks. The National Bank of Georgia also continued its assessment of the quality of commercial banks' data. At the same time, information systems audits continued and, within the supervisory requirements of 2017, the NBG mandated that commercial banks conduct penetration tests (see the Information Systems Audit section, below).

At the end of October, representatives from the Dutch Central Bank visited the National Bank of Georgia. The two central banks shared their experiences and exchanged views on data quality management and risk data aggregation, as

well as on supervisory approaches related to the abovementioned topics. Use of the XBRL reporting standard⁴⁰ for supervisory reporting was also discussed during consultations. The National Bank of Georgia demonstrated its supervisory reporting system, which was positively assessed by the Dutch Central Bank delegation. The two central banks also met with commercial banks and discussed data quality management and the XBRL reporting standard.

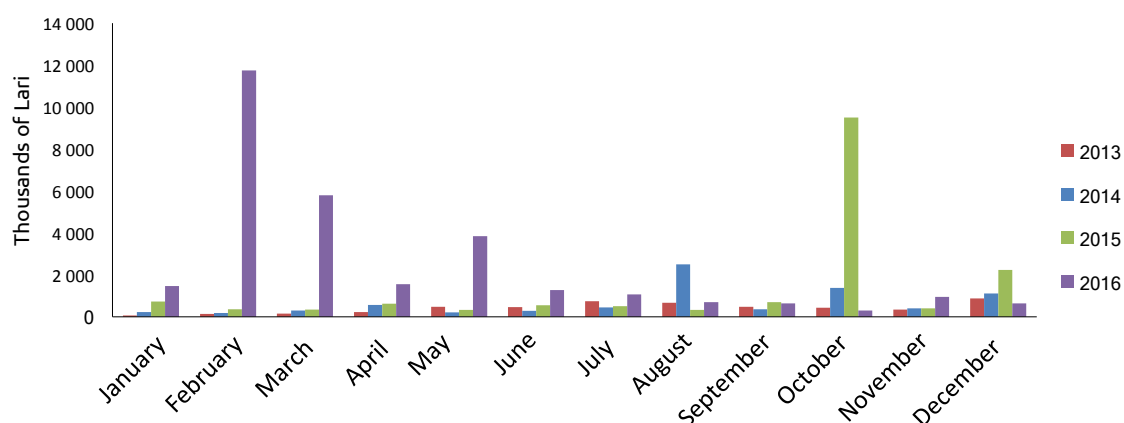
Review of operational risk events

The total gross losses of commercial banks amounted to 30.0 million GEL in 2016. The ratio

of total gross losses to gross income, calculated according to Basel II methodology, amounted to 1.4%. Gross losses consist of losses linked to the initial loss amount of an operational event, before any compensation/reimbursements have taken place.

A total of 18,040 operational loss events occurred in 2016. It should be noted that within the context of the NBG's operational risk reporting framework, commercial banks are obliged to record all operational loss events where the gross loss of the event equals or exceeds 10 GEL. The average gross loss for 2016 amounted to 1.661.8 GEL.

Diagram N 3.39
Time series of gross losses for 2013-2016



Source: National Bank of Georgia

Gross losses were mainly observed in the retail banking and, to some extent, commercial banking business lines. The retail banking business line includes gross losses related to payment cards, along with traditional retail banking activities. The primary reason that gross losses in the banking sector mostly fall into either the retail or commercial banking business lines, is because these two lines represent the main activity of the banking sector in Georgia. The remaining six business lines

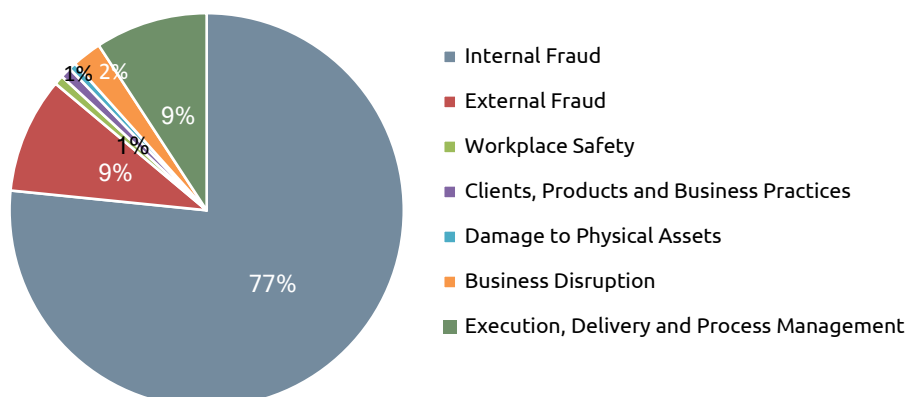
defined by the Basel Committee for Banking Supervision are not actively developed in Georgia.⁴¹

If gross operational losses are divided by loss event categories, the largest share by amount (77% of total gross losses) was recorded under the internal fraud category, while sharing second place were the external fraud and execution, delivery and process management categories (at 9% each).

40. The Extensible Business Reporting Language (XBRL) represents a global standard for business data and information sharing.

41. A detailed description of Basel business lines is presented in Annex 8 of the Basel II document of the Bank for International Settlements (<http://www.bis.org/publ/bcbs128.pdf>).

Diagram N 3.40
Percentage distribution of total gross losses of 2016



Source: National Bank of Georgia

Business Continuity Management

The issue of conducting tests of commercial bank's business continuity plans remains relevant. During the year, several banks expanded their business continuity plans, bringing them in line with international standards and implementing testing processes in accordance with the NBG's operational risk regulations. It should be noted that supervisors from the NBG physically attended several banks' business continuity tests during the year and evaluated banks' evacuation plans and the restoration of the organizations' critical business processes in real time. Furthermore, as was mentioned in the Annual Report of 2015, business impact analyses and risk assessments are part of a cyclical process that requires active monitoring and supervision. The NBG will thus continue its proactive supervision of business continuity management.

Outsourcing⁴²

In 2016, the National Bank of Georgia actively continued its assessment of outsourcing agreements and related business processes. It is especially important for banks to have adequate risk assessments in this respect. It should be noted that, as

stipulated by operational risk regulations, commercial banks should assess the risks before signing outsourcing agreements.

Accuracy Risk

The National Bank of Georgia considers data accuracy and data quality management in the banking sector a priority. Within the context of a joint project carried out by the National Bank of Georgia and the Dutch Central Bank, an international conference on the topic of data quality management for supervisors from Europe, Central Asia and the Caucasus is planned to be held in Tbilisi in 2017. From the point of view of data quality, integrity risk is very important because financial data should be protected from unauthorized changes and modifications. The National Bank of Georgia thus evaluates and monitors the data quality of various financial institutions. In 2016, the financial statements and a portion of supervisory capital-related reports of various commercial banks were examined. Within its data quality reviews, the National Bank of Georgia also focuses on business process efficiency related to reporting. In parallel, the NBG analyzes the level of information systems automation and their complexity.

42. Outsourcing implies a company transferring its business process or processes outside the organization where a third party (company or individual) takes responsibility to fulfill the function or activity transferred to them.

Information Systems Audit

Information systems audits play a significant role in modern commercial bank risk management processes and include the topic of cyber security. The operational risk regulations of the National Bank of Georgia require commercial banks to conduct regular audits of information systems. In terms of cyber security, against the backdrop of an increasing number of global incidents that have directly affected the banking sector, commercial banks operating in Georgia have been mandated to conduct penetration tests. Such tests are a good mechanism to detect the potential cyber threats that an organization might face and to best prepare appropriate responses to mitigate any identified threats.

The Banking Sector's Dependence on other Critical Sectors

The different sectors of the economy are closely linked. The National Bank of Georgia closely monitors risks stemming from the banking sector's dependence on other critical sectors of the economy, including the energy, information technology and communications, and transportation sectors. Furthermore, to improve the supervisory framework, it is desirable to establish close relations with the representatives of such critically important sectors of the economy and the relevant regulatory authorities.

It should be noted that the number of cyberattacks occurring worldwide has increased. The number of extortion-related cybercrimes increased fourfold worldwide in 2016. These events often involve criminals extorting money from organizations in exchange for the cessation of some kind of cyber-attack or the mitigation of certain potential outcomes. Attacks aimed at service interruption are a common form of these kinds of attacks. In order to stop/mitigate the impact of the latter variety of attack, it is crucial for the public and private sectors to work together. Furthermore, since the financial sector is an attractive target for criminals, and as cyberattacks are being more actively used

to target that sector, it is essential to have a unified approach that the participants of various sectors of the economy can follow in order to prevent and deter cyberattacks.

International Cooperation

The Operational Risk and Information Processing Division of the National Bank of Georgia maintains permanent contact with various European central banks and supervisory authorities. In April 2016, representatives of the division held a presentation on business continuity management in Sarajevo (Bosnia and Herzegovina). In October, a high-level delegation from the Dutch Central Bank, including the head of the Operational Risks Department, visited the National Bank of Georgia.

Unified Database of Operational Losses

Because there is currently no external loss database for operational risk events in Georgia, it is necessary to create such a unified database in the near future. An external loss database would give commercial banks access to information that they could use to improve their operational risk management processes and refine capital-related practices for capital measurement. Furthermore, a unified database of operational losses would allow commercial banks to compare their institution-specific operational losses with data from the whole banking sector.

Raising Awareness

The National Bank of Georgia actively works on raising the level of awareness about operational risk within the banking sector. Against the backdrop of an increasing number of cyber incidents in the world, the National Bank of Georgia has intensified its communications with commercial banks in this direction. Taking into account the increasing use of new technologies, awareness of information systems audits needs to be raised as well. In 2017, the National Bank of Georgia will continue to work closely with commercial banks to raise awareness about the importance of information system audits in the banking sector and beyond.

3.8 MACROPRUDENTIAL 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 different sections of this report. An incomplete list of the main challenges currently facing the banking system includes the following: unhedged borrowers' increased debt burdens due to the Georgian lari depreciation 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 in 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, dropped significantly in the past two years; however, when expressed in GEL, prices are relatively stable. In light of the slowdown of mortgage loan activities and the increase in the number of permits given for the construction of residential apartments, there is a risk of a further reduction in prices, which is risky for the real estate collateralized loan 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 (due to the situation in the region), may lead to excess supply and low occupancy rates. Although the financing of this sector by commercial banks is limited, should a negative scenario mate-

rialize it will have a significant negative effect on the profitability of commercial banks.

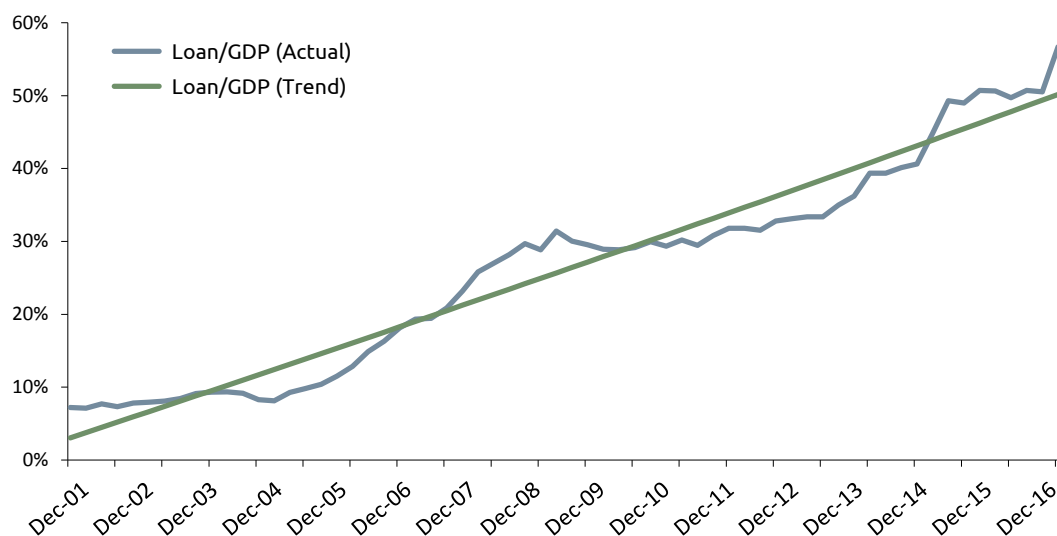
Within the framework of the forward-looking supervisory approach, periodic reviews of the main parameters of stress tests and discussions of these with commercial banks are conducted. Activities oriented towards the enhancement of micro tests are carried out in coordination with commercial banks.

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

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

In order to monitor credit cycles, the NBG continues to monitor the loan-to-GDP gap, which is calculated with the Basel methodology. Statistically, this indicator well describes bank activities and provides correct warning signals; however, it becomes less useful when there are exchange rate fluctuations in dollarized economies. In this case, the positive gap in the fourth quarter of 2016 was mainly caused by the exchange rate effect.

Diagram N 3.41
Loans to GDP gap



Source: National Bank of Georgia

As mentioned above, minimum reserve requirements were increased for foreign currency liabilities in order to mitigate risks associated with high dollarization. In parallel with this change, only 75% of minimum reserves will be counted as liquid assets for the purpose of the liquidity coverage ratio. Banks will have to maintain additional foreign currency liquidity and, as a result, will be less dependent on the reserves held at the National Bank, which, in the case of deposit outflows during periods of financial stress, will mitigate liquidity risk to some extent. It is noteworthy that banks' liquidity contingency funding plans, other mitigation measures and the NBG's support instruments are all constrained in foreign currency.

The NBG started working on a further macroprudential instrument in 2016, which would see an additional capital buffer introduced for systemically important banks. This is a recommendation from the Basel Committee of Banking Supervision that represents best international practice. The main goal of this buffer is to strengthen the resistance of financial stability, reduce the probability of large banks' bankruptcy, and limit subsequent systemic problems. Moreover, it aims to reduce

moral hazard in systemically important banks; to avoid a potential burden for taxpayers when budget funds are used to help problematic banks; to lower concentration and support competition. The latter is particularly important due to the high concentration in the Georgian banking system. In formulating this instrument, the practice of other countries will be studied in terms of identifying systemically important banks and setting the amount of the buffer. Details about the method chosen by NBG and the stages for the introduction of the requirement will be published in 2017, after consultations with the banking industry.

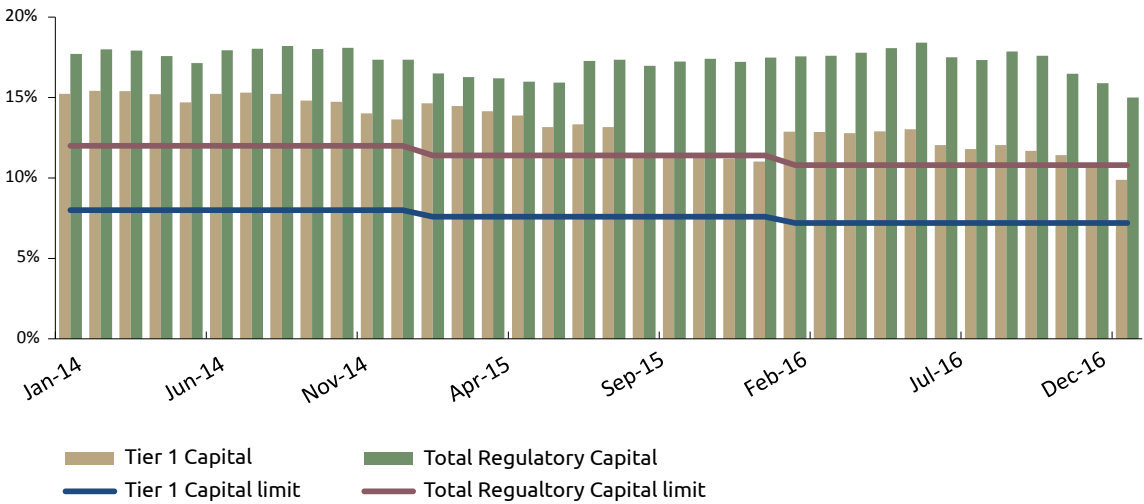
Legislative amendments are in process to increase the credit information bureau's coverage of not only the non-banking sector, but also of entities that lend money but are not regulated by the NBG. Studies undertaken on private lenders, pawnshops and "online" loans indicated that this segment has a material impact on total debt burden of banking system borrowers, but the information on the liabilities of such clients are seldom provided to the credit information bureau. As a result, banks cannot properly assess the creditworthiness of such clients. The planned changes should support mitigation of these risks.

3.9 CAPITAL ADEQUACY

In spite of the devaluation of the GEL against the USD throughout 2016, the Georgian banking system still maintained adequate capitalization in terms of the capital adequacy framework based on both Basel I and Basel III. The Tier I capital ratio, calculated with Basel I, was 10% and the regulatory capital ratio was more than 15%; exceeding the NBG's minimum capital adequacy requirements by 2.8% and 4.2% respectively. The Tier I capital ratio,

within the frames of Basel III, amounted to 10.5%, while the regulatory capital ratio amounted to 15.1%, which exceeds the NBG's minimum capital adequacy requirements by 2% and 4.6% respectively (see Diagram N 3.43). The simple leverage indicator (capital/assets) was also high, reaching 13.2%; while, due to high liquidity, the ratio of net loans to equity equaled 4.46. Capital growth resources were positively assessed by the NBG in terms of both shareholder strength and profitability.

Diagram N 3.42
Capital adequacy ratios under the Basel I framework

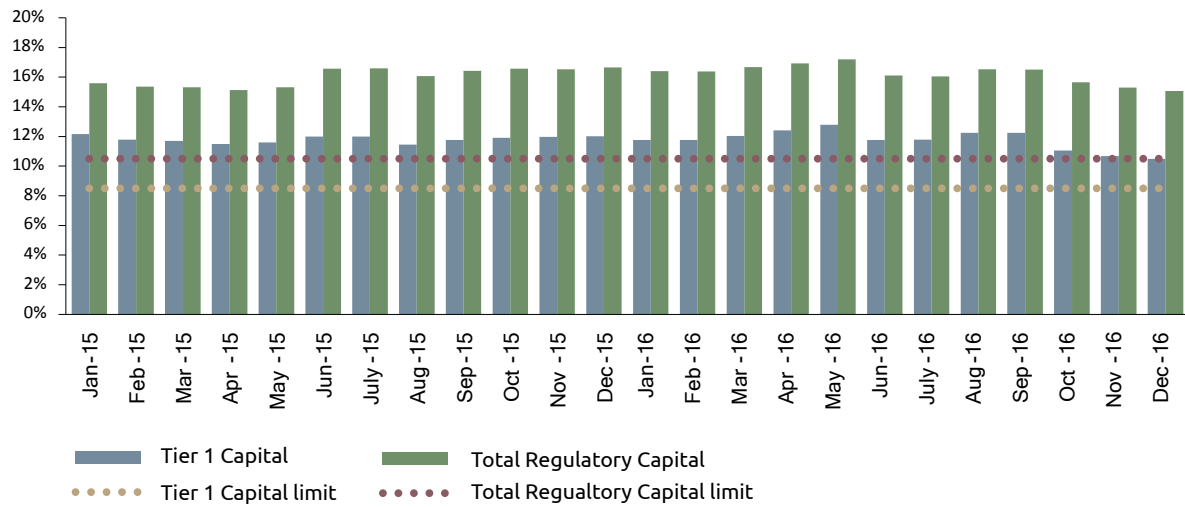


Source: National Bank of Georgia

It is noteworthy that in 2016 commercial banks were required to meet 90% of the Tier I and total regulatory capital adequacy requirements within the Basel I framework. Starting from 2017, commercial banks will be required to meet 80% of the Tier 1 and total regulatory capital adequacy re-

quirements based on Basel I, which are equal to 6.4% and 9.6% respectively. These requirements will be in force throughout the year and, starting from 2018, will be fully replaced by the Basel III framework.

Diagram N 3.43
Capital adequacy ratios under the Basel III framework

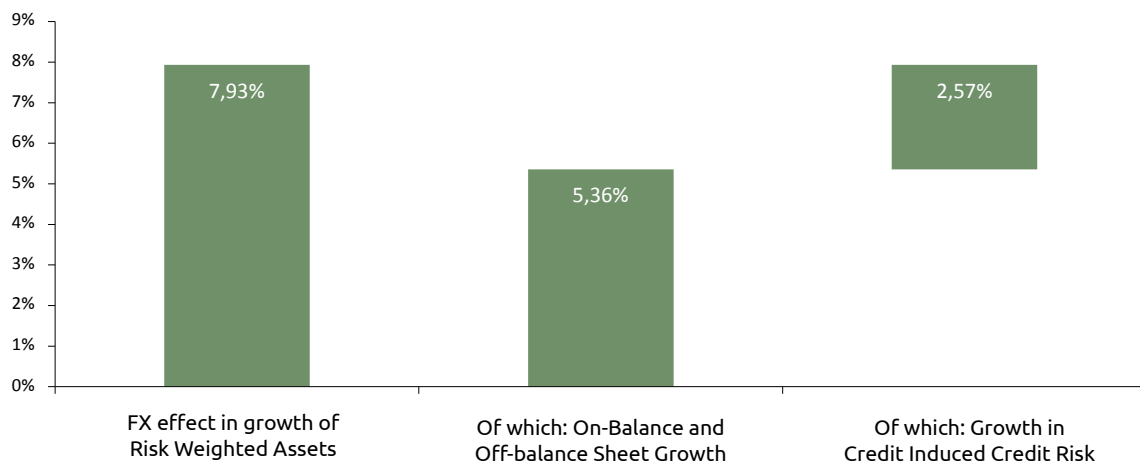


Source: National Bank of Georgia

Throughout 2016, the devaluation of the lari against major foreign currencies was reflected in increased risk weighted assets, which negatively affected capital adequacy ratios during the year. The growth in risk weighted assets caused by the devaluation of the domestic currency amounted

to 8%, of which 2.6% was due to the growth of risk weighted assets for currency induced credit risk. As a result, the Tier 1 capital ratio, calculated within Pillar 1 of the Basel III framework, decreased in 2016.

Diagram N 3.44
Decomposition of risk weighted assets



Source: National Bank of Georgia

The realization of the aforementioned risk indicates the importance of hedging the structural position. Within the Basel framework, the structural position is an open currency position, which secures capital adequacy ratios from the volatility in risk weighted assets caused by exchange rate effects. Microprudentially, the structural position is even more important in light of the high dollar-

ization of assets. However, the structural position is not implemented in Georgia, as it will cause a further increase in asset dollarization and, hence, increase macroprudential risks.⁴³ It must be pointed out that the significant volatility of the foreign currency exchange rate can increase risks due to the unbalanced structural position.

Diagram N 3.45
Yearly change in Tier 1 capital ratio (FX effect)



Source: National Bank of Georgia

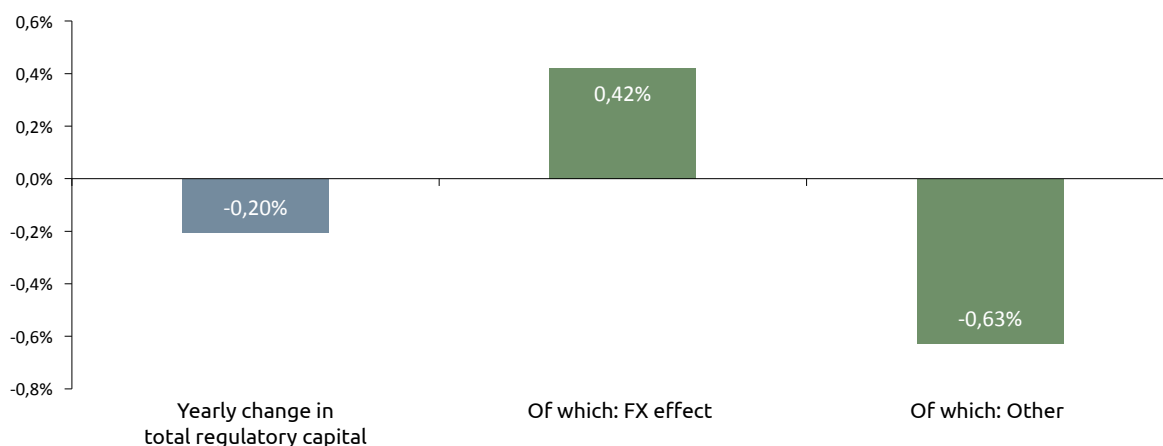
The growth in risk weighted assets had comparatively less impact on total regulatory capital ratios because Tier 2 capital elements in the total regulatory capital, which were mostly subordinated

debts, were denominated in foreign currency and were positively affected by the lari devaluation (see Diagram N 3.46).

43. In order for the currency exchange rate to not affect the capital adequacy ratio, an open FX position needs to be maintained. This will balance the effects of changes in risk weighted assets with the profit/loss from revaluations. In this case, this means taking a long FX position that causes an increase in the dollarization of assets, including loans. The following reduces microprudential risks at the expense of macroprudential risks.

Diagram N 3.46

Yearly change in total regulatory capital ratio (FX effect)



Source: National Bank of Georgia

Throughout 2016, work towards enhancing and developing the Pillar 2 elements of the capital adequacy framework under Basel III continued. Based on the “Instruction on Determining Capital Buffer for Credit Concentration Risk for Commercial Banks” legislation, which came into force in December 2015, commercial banks started calculation of the required capital for name and sectoral credit risk concentrations and communicating the results to the NBG.

In 2017, the National Bank of Georgia plans to determine additional guidelines/instructions for commercial banks within the Pillar 2 framework, in order to ensure that banks calculate capital for those risks not included in Pillar 1.

In 2017, the National Bank of Georgia plans to implement the Basel III leverage ratio within the Pillar 1 framework. The leverage ratio is a simple and transparent figure that is 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 expressed in a percent-

age, while the minimum requirement will be 3%, in line with best practices.

In order to fully comply with the Basel III Tier 2 capital quality standards, the NBG plans to undertake work on defining additional requirements for Tier 1 and Tier 2 capital instruments. The following implies creating write-off or conversion requirements for additional Tier I and Tier 2 capital instruments into common Tier 1 equity, upon the occurrence of predetermined trigger events or at the NBG’s request.

3.10 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.

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 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 – the new standard related to accounting of financial instruments, which will become effective from 1 January 2018 – is of special importance. The main aspect of this standard is the expected credit loss (ECL) model, which implies a 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. Publication of this information will facilitate preparation of annual financial statements, ensuring that the information necessary for IFRS 9, the collection of which requires huge resources, is readily available to everybody. The usage of a single source of macroeconomic forecasts will also facilitate comparisons among financial sector representatives. It is worth mentioning that using the macroeconomic forecasts published by the NBG is advisable, rather than mandatory.

At the beginning of 2017, the NBG provided commercial banks with a draft format for publishing forecasted indicators of the macroeconomic factors necessary for IFRS 9. The NBG organized consultations with commercial banks regarding this matter and to give a forum for exchanging views between the NBG and commercial banks. The auditors of commercial banks were also introduced to the initiative.

Throughout 2016, the NBG continued working on the transition of commercial banks' regulatory reporting requirements to IFRS. This implies that the continuous regulatory reporting by commercial banks be based on a reporting form developed by the European Union (FINREP), which is prepared in accordance with IFRS. This will contribute to the enhancement of transparency and efficiency because the reporting will be based on international standards and a double reporting burden will be avoided. At the same time, the NBG will continue to retain the existing prudential filters at its disposal to ensure that the risk-based supervision process continues uninterrupted.

In 2015-2016, the NBG developed a pilot version of the FINREP form. This is a modified version of the European Union's form that considers the specifics of the Georgian banking sector. Commercial banks filled out the pilot form and presented them to the NBG with feedback. In 2017, the NBG plans to improve the form by considering the comments received from commercial banks. It is also planned to change the form in accordance with the requirements of IFRS 9. Considering the difficulties related to the implementation of IFRS 9, it is planned that commercial banks should continue to fill out the draft version of the updated FINREP form until its final enactment. This will allow the NBG to examine and, if necessary, take into account further comments from commercial banks. Up until June 2016, the NBG was a member of a temporary inter-agency working group on accounting and auditing reform issues. The working group's activities included ensuring the enactment of relevant reforms in Georgian legislation related to accounting, financial reporting and auditing, in order to gradually approximate these to EU legislation. In addition to participating in consultations held with accounting and auditing professional organizations, within the scope of its membership of the working group the NBG was

also engaged in the process of developing new legislation related to reporting and auditing. In 2016, the working group finished working on the planned legislation, as a result of which the new “Law on Accounting, Reporting and Auditing” came into force. Enforcing this law is an important step for increasing transparency and improving corporate governance. This, in turn, supports the attraction of loans and direct foreign investments in the country, as well as the development of private equity and capital markets.

3.11 CONSUMER PROTECTION

The protection of consumer rights is a priority area for the National Bank of Georgia. Significant changes were made in this regard in 2016. Considering the problems that have been identified over recent years, the rule on “Disclosing Essential Information to Consumers when Providing Services by Commercial Banks” was updated. It now better responds to existing challenges and extends not only to commercial banks, but also to all financial sector representatives. With the aim of strengthening the protection of customer rights and effectively raising financial literacy levels, structural changes were implemented at the beginning of 2017 that saw the “Consumer Rights Protection Division” be changed to the “Consumer Rights Protection and Financial Education Department”.

The Rule on Protection of Consumer Rights while Rendering Services by Financial Institutions:

After much intensive work, in December 2016 the rule on “Protection of Consumer Rights while Rendering Services by Financial Institutions” was approved. The new rule, which will be enacted from 1 June 2017, was developed based on an analysis of needs of consumer rights protection on the financial market. This will replace the rule on “Disclosing Essential Information to Consumers when Providing Services by Commercial Banks”. Accord-

ing to the amendments, the coverage of the rule has been expanded. In particular, while the existing rule only obliged commercial banks to adhere to special rules regarding their relations with customers, the new rule also concerns microfinance organizations and non-bank deposit institutions (credit unions and qualified credit institutions).

Furthermore, while the current regulation obliges all necessary information to be accumulated in the “Header” of the contract for individuals only and concerns credit within the range of GEL 300 and GEL 50,000; the updated rule will also extend to legal entities and extends to a maximum limit of 200,000 GEL.

According to the new regulations, rules for the preparation of promotional and advertising materials were developed. According to these, financial organizations are obliged to ensure the transparency of product terms, especially regarding information about prices. In particular, if a price is indicated on an advertisement, disclosure of the effective interest rate is also necessary. Moreover, a minimal font size for contracts (size 12 for headers and 10 for basic terms) has been determined to make contracts more easily understandable and to eliminate additional issues that can arise while reading them.

Financial organizations are obliged to provide consumers with account statements and copies of contracts already signed periodically and upon demand free of charge. Besides, before signing a contract, financial organizations are obliged to provide consumers with a draft agreement upon demand. In the event of an overdue payment of credit and the emergence of any other liability, as well as in the event of suspending/temporary terminating services, the financial institution should use the contact information provided by the customer to notify him/her, as well as any co-borrower, guarantor and/or joint guarantor, no later than

within five working days. According to the existing rules, the provision of such information was only considered an act of good will from the financial organization.

Rules regarding the termination of fee accrual for inactive products have also been established. Financial institutions must discontinue fee accrual on inactive financial products (a product that has not been used by a customer for twelve months in sequence).

If an agreement foresees the possibility of a financial institution unilaterally introducing changes in its terms, the financial institution must offer the customer at least one individual communication channel that is free of charge. This can include using material or electronic means for advance notification in a medium that is available and acceptable for the customer (SMS, internet banking, phone call, etc.). Providing such information through public areas alone is not sufficient according to the rule.

A number of amendments are planned regarding prepayment processes and related commissions. In particular, the amount of any prepayment penalties are established with consideration of the period remaining on the agreement as of the early repayment date. The upper limit of prepayment commission was maintained at 2% of the outstanding principal. In the event of early partial repayment of credit, if 20% of the initial principal is being repaid to an amount of at least 500 GEL, the financial institution shall offer the consumer terms for restructuring the loan (offering a new loan schedule).

In addition, financial organizations are obliged to develop a code of ethics in terms of loan collections and must observe moral norms, the best practice of business relations and act in accordance with the principles of good faith, transparency and fairness in order to contribute to strengthening their reputations of having a reliable partnership with customers.

Amendments to the “Civil Code of Georgia”:

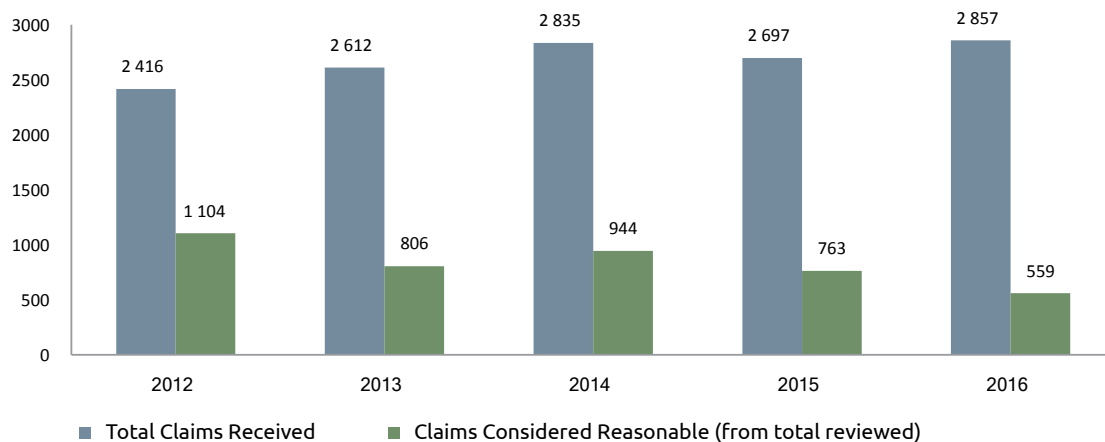
As in previous years, instant “online” (payday) credit lenders remained active on the retail financial market. In this regard, in January 2017, amendments were made to the “Civil Code of Georgia”, according to which upper limits of commissions and effective interest rates were established for any type of credit. In order to enforce the amendments made to the law, the National Bank of Georgia was obliged to define the effective interest rate, for which a relevant document was developed.

Claims made to Commercial Banks:

During 2016, commercial banks received 2,857 complaints from consumers, which was 5.9% higher than the previous year’s figure. Only 19.6% of the complaints received and reviewed were considered as reasonable by the banks and were subsequently resolved in favor of the consumer. This figure was 26.7% lower than the analogous data from the previous year. If we look at the dynamics of all complaints received in period 2012-2016 there is a growing trend in the number of complaints received. In spite of this, the number of complaints considered reasonable had a declining trend.

Diagram N 3.47

Total claims received and considered reasonable by commercial banks (2012-2016)



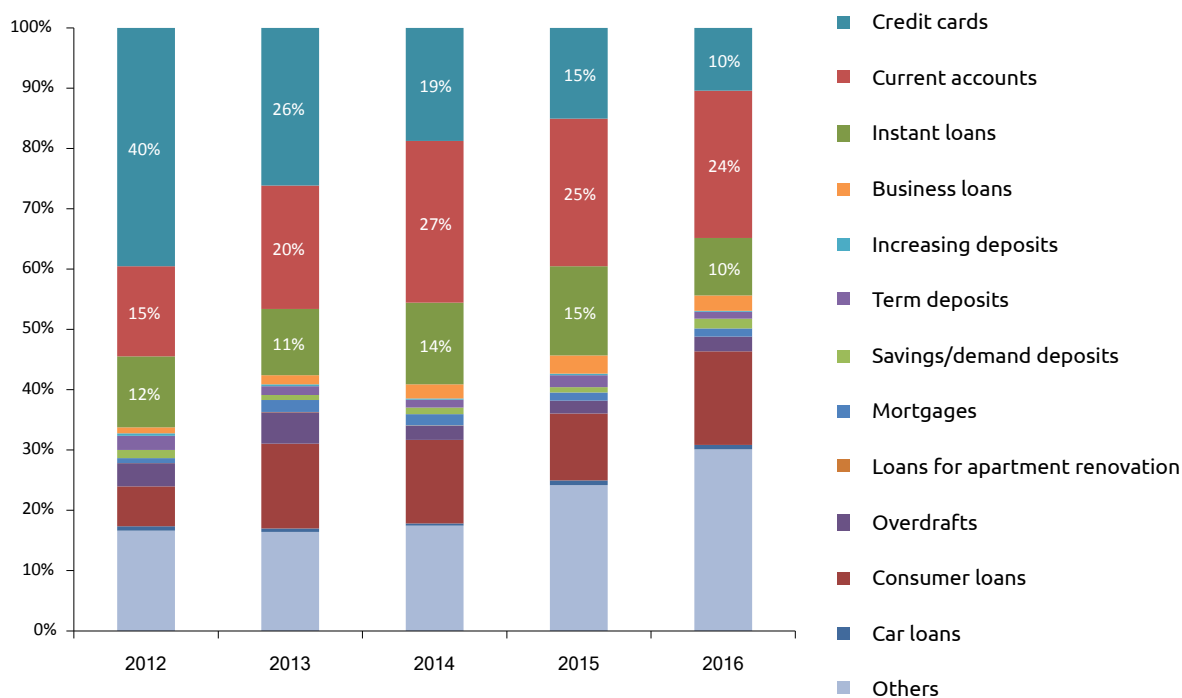
Source: National Bank of Georgia

It is also interesting to analyze the distribution of consumer claims received during 2011-2016 according to the type of banking product. The top three banking products in terms of number

of claims received have remained practically unchanged over the years: 1) current accounts; 2) credit cards; and 3) instant installments.

Diagram N 3.48

Distribution of claims received by commercial banks by product type (2012-2016)

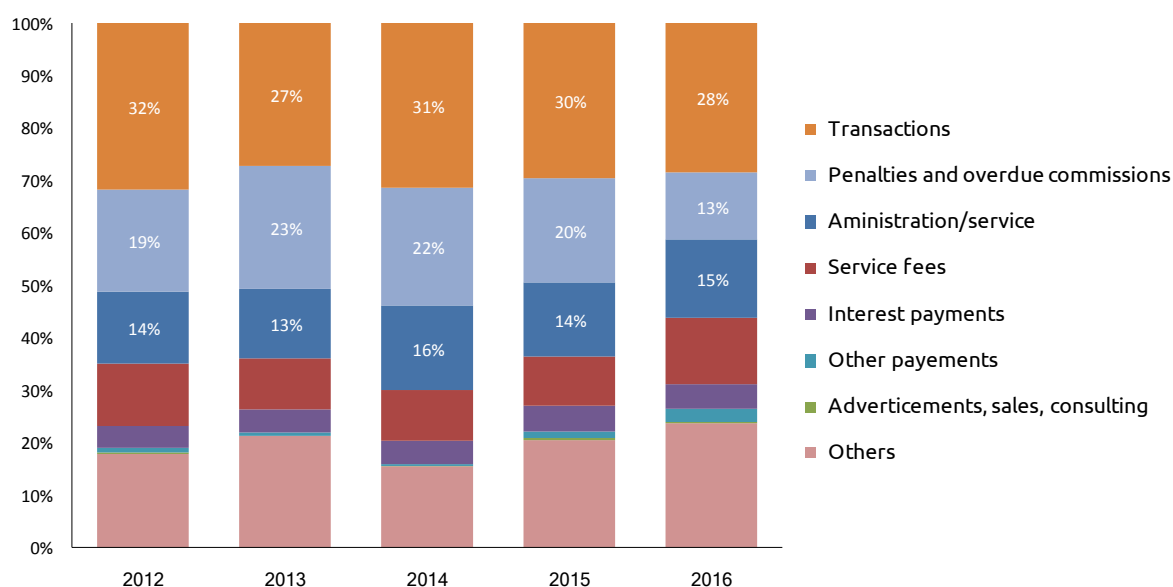


Source: National Bank of Georgia

Approximately half of the total claims received by commercial banks relate to transactions, penalties and commission fees. The share of claims received regarding service quality is also noteworthy, amounting to 14% on average. These statistics allow us to conclude that consumer complaints are often due to difficulties consumers have in understanding banking products and their related commissions. However, over time, both consumers and bank employees have adapted to banking prod-

ucts. It is thus important for the National Bank to monitor whether commercial banks care for their customers, particularly in terms of ensuring the elimination of possible barriers (e.g. preventing consumers from laying a claim) for making claims. At the same time, delivering financial education and raising awareness regarding the benefits of financial education in both the general population and among representatives of the financial sector remain priorities for the NBG.

Diagram N 3.49
Distribution of claims received by commercial banks by content (2012-2016)



Source: National Bank of Georgia

Claims submitted to the National Bank of Georgia:

In 2016, the Consumer Protection division of the NBG received 1,363 claims from consumers, which was an increase of approximately 33% over the previous year. The majority of claims, 885 (65%), were made over the phone. The number of claims received via other means also increased: 178 complaints were made in writing (13%); 57 were expressed over social networks (4%); 120 consumers (8.8%) addressed the NBG over email, and 123 (9%) visited the NBG personally. In terms of con-

tent, the majority of complaints expressed were regarding credit restructuring requests and the prepayment process. Compared to the previous year, there was a relative increase in the number of complaints submitted to the NBG related to the "FX bank loan conversion to lari" program. This program implied the voluntary conversion of individuals' US dollar-denominated loans collateralized by real estate into lari. This arrangement would be based on agreements between a bank and its client, where the government would provide the subsidy to ensure that the conversion of

loans into lari was made on an exchange rate favorable for the client.

In 2016, in order to provide consumers with qualified consultations, the NBG continued its practice of discussing claims in detail with the relevant financial institutions and other structural units of the NBG.

3.12 FINANCIAL EDUCATION

Improving the level of financial literacy in Georgia is one of the priorities for the National Bank. In light of this, a separate Financial Education Division was established at the NBG. Throughout 2016, the National Bank undertook important steps to study the financial literacy levels of the population, and for responding to existing challenges.

The National Strategy for Financial Education

In 2016, with the involvement of local and international stakeholders, and with support from the Savings Banks Foundation for International Cooperation (SBFIC) and an invited international expert, the National Bank developed and signed into force the National Strategy for Financial Education.⁴⁴ This strategy is an integral part of the financial sector consumer framework and is aimed at supporting the financial wellbeing the population, as well as financial stability as a whole. The objective of the strategy is to raise awareness of the benefits of financial education, enhance coordination and collaboration among stakeholders, and extend opportunities to learn.

Considering that promoting financial education is a complex task, it is very important to ensure the active involvement of stakeholders. Therefore, establishing a steering committee for the

national strategy is planned for 2017. This will be comprised of stakeholders from the public, private and civil sectors. The committee will assess ongoing and future projects, raise initiatives and develop recommendations, carry out financial and technical assistance, and encourage the involvement of other relevant stakeholders.

As a result of the important initiatives that the NBG carried out in 2016 in the directions of children's financial education and the development of the National Strategy for Financial Education, the National Bank was nominated as a Regional Finalist in the "Country Award" category at the 2017 Global Inclusion Awards. The winner of this category will be unveiled at an awards ceremony in May 2017.

Financial Literacy and Financial Inclusion Study

In spring 2016, a countrywide adult Financial Literacy and Financial Inclusion Study was carried out at the initiative of the National Bank, and with support from the Development Facility of the European Fund for Southeast Europe (EFSE DF).⁴⁵

The study analyzed the financial knowledge, behaviors and attitudes of the Georgian population, and its results constituted a baseline for the National Strategy for Financial Education. The survey methodology was based on the 2015 OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion.⁴⁶ The study's results were also included in the 2016 OECD/INFE International Survey of Adult Financial Literacy Competencies, which incorporated the data from 30 different countries.⁴⁷

According to the results of the study, the financial literacy of the Georgian population is at the intermediate level: while consumers correctly respond

44. For more information, see: <https://www.nbg.gov.ge/index.php?m=654&lng=eng>

45. For more information, see: https://www.nbg.gov.ge/uploads/2016finganat/Financial%20Literacy%20Study_ENG.pdf

46. For more information, see: http://www.oecd.org/daf/fin/financial-education/2015_OECD_INFE_Toolkit_Measuring_Financial_Literacy.pdf

47. For more information, see: <http://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf>

to simple questions measuring their financial knowledge, answering questions that are more complex clearly constitute a challenge. A number of positive financial behaviors can be observed across the population: for example, 89% of the population pay bills on time and 75% closely control their own finances. However, only 41% of the population set long-term financial goals and strive to achieve them, and 45% borrow to make ends meet. Further, only 32% of the surveyed audience prefer long-term saving over spending, and 93% of the population overwhelmingly consider that money is there to be spent.

Financial literacy levels differ significantly across demographics, which provides useful information for developing financial literacy initiatives for various target groups. The detailed results of the study can be viewed on the website of the National Bank: https://www.nbg.gov.ge/uploads/2016finganat/Financial%20Literacy%20Study_ENG.pdf.

Financial Literacy Conference

On 29 July 2016, the National Bank of Georgia and the SBFIC organized an international conference on “Financial Literacy for Financial Wellbeing.” Relevant stakeholders from the private, public and civil sectors were invited to the conference, at which the National Bank presented the National Strategy for Financial Education and unveiled the findings of Financial Literacy and Financial Inclusion Study. Conference participants discussed existing problems and challenges in the direction of financial education, the objectives and implementation mechanisms of the National Strategy for Financial Education, and the future steps to be taken.

Educational Resources

In 2016, the National Bank of Georgia, with support from the EFSE DF, continued its project of

developing Georgian-language versions of Khan Academy videos. The National Bank developed an additional 32 videos on the key topics from economics and finance, including the subjects of nominal and effective interest rates, the time value of money, so-called “payday” loans, and different types of mortgage loans. The National Bank of Georgia also developed a mortgage loan calculator for users. These resources are available on the YouTube channel of the NBG, from Khan Academy,⁴⁸ and are on the NBG’s consumer webpage: <http://nbg.gov.ge/cp/>.

Awareness-raising Campaigns

Throughout 2016, the National Bank continued its practice of organizing different activities aimed at raising awareness of the benefits of financial literacy across the population. During 14-20 March, the National Bank, with the involvement of Child and Youth Finance International (CYFI) and different local stakeholders, celebrated Global Money Week. The theme of 2016’s Global Money Week was “Take Part. Save Smart”. The objective of the Global Money Week is to support financial literacy and the inclusion of children and youth. Within the frames of Global Money Week, the National Bank of Georgia and the National Youth and Children’s Palace organized a countrywide creative competition among the youth on the theme of Global Money Week. The National Bank invited the winners of the competition to the Money Museum in Kvareli, where they received different gifts from the NBG and FINCA Bank Georgia.

From 31 October to 5 November 2016, the National Bank of Georgia, the Savings Banks Foundation for International Cooperation (SBFIC), and eight commercial banks (FINCA Bank Georgia, Liberty Bank, Basisbank, Bank of Georgia, VTB Bank, Tera Bank and Procredit Bank), celebrated World Savings Day for the fifth time in a row. The goal of the World Savings Day is to increase awareness

48. Found at: <http://www.youtube.com/channel/UCSK9eCwLfU90FFQvZ969Nng>

of the benefits of saving among the population, and to foster dialogue between the population and the banking sector. Within the frames of the World Savings Day, a creative competition was announced via social media that encouraged participating children to record videos on the importance and different methods of saving. The winners of the competition were invited to the Money Museum in Kvareli and were awarded different gifts; furthermore, commercial banks opened deposit accounts for the winners to help them save money for achieving their goals.

Print Educational Materials

In 2016, the National Bank completed its work on developing brochures for small business owners and future homeowners. This project was implemented with support from EFSE DF. The brochure developed for future homeowners is written in consumer-friendly language and addresses the main aspects of taking a mortgage loan including risks and opportunities, the total cost of taking a mortgage, and key terms and conditions of mortgage agreements. The brochure for small business owners, on the other hand, teaches consumers how to realistically assess risks related to FX borrowing, and offers practical and easily understandable tips for fostering their businesses. The latter publication is accompanied by three practical tools – a Cash Flow tool, Balance Sheet tool, and Debt Service Ratio tool – which will help small businesses better analyze their own finances, enabling them to make sound financial decisions. These practical tools can be downloaded from the NBG website.⁴⁹

The abovementioned brochures were distributed in the branches of 16 commercial banks in Georgia (including in the regions), and in the libraries of eight universities. In addition, the brochures were given to the Regional Development Association, which distributed them to the beneficiaries of the

“Support to Micro and Small Enterprises” project. In 2016, the NBG and SBFIC developed a children’s comic book on savings and a board game called the “Savings Game”. The comic book is called “The Story of Saving” and teaches children the importance of saving in child-friendly language. This comic book was distributed to schoolchildren across Georgia and received positive feedback from the beneficiaries. The “Savings Game” demonstrates to players the benefits of setting financial goals and saving to achieve them. Within the game, players plan a family budget and balance income and expenses in order to meet expected, as well as unforeseen financial events. In October 2016, the SBFIC conducted a training of trainers for the “Savings Game”, and it is planned to introduce this game in a number of educational institutions during 2017.

Cooperation with the Ministry of Education and Sciences of Georgia

The Ministry of Education and Sciences of Georgia has an important role in raising financial literacy levels in the country. In the second half of 2016, the National Bank and the ministry started active cooperation on incorporating financial literacy into the national curriculum and the annual plan for the Primary Stage for school classes VII-IX. The key financial topics to be included in the curriculum include, but are not limited to, saving, spending and investing, smart money management, the financial system and financial products, and consumer rights. It is planned to sign the updated curriculum into force in 2017.

Project SchoolBank

Children and the youth are priority target groups within the frames of the National Strategy for Financial Education. In 2016, the National Bank, in cooperation with CYFI, started working on implementing the project SchoolBank in Georgia. Within the frames of this project, a common edu-

49. Found at: <https://www.nbg.gov.ge/index.php?m=649>

cational module was developed by NBG and CYFI that can be used by commercial banks and schools participating in the project. As part of this project, in 2016 the Bank of Georgia developed a payment and travel card for schoolchildren called “sCool Card”, and conducted financial literacy classes called “Business School” in a number of schools across Tbilisi. At the moment, the NBG is in the process of discussing scaling up the project with the Ministry of Education and Sciences of Georgia and a number of additional commercial banks.

Lectures on Financial Literacy

Throughout 2016, the NBG, in cooperation with the Administration of the President of Georgia and the Business and Technology University (BTU), conducted lectures on the topics of financial literacy and consumer rights with one thousand high schoolers from different regions of Georgia. In 2017, similar lectures are planned for an additional thousand children.

3.13 INTERNATIONAL COOPERATION

The National Bank of Georgia deepened its ties with the Basel Committee of Banking Supervision within the Regulatory Consistency Assessment Program (RCAP). Employees of National Bank of

Georgia were invited as experts in the program. As part of the program, employees of the NBG monitor and assess Pillar 3 implementation in Basel Committee member states. Furthermore, during 2016 the NBG was actively involved in the Supervisory and Implementation Group’s activities of the Basel Committee on Banking Supervision, specifically during the renewal of stress test principles.

In 2016, the export of regulatory reforms by the National bank of Georgia increased. For the purpose of getting acquainted with reforms in macroprudential supervision, the National Bank of Georgia was visited by a delegation from the Central Bank of the Republic of Uganda. The visit was organized by the International Monetary Fund East African Technical Assistance Center (IMF East AF-RITAC) within the regional development program. During the visit, Georgian experts shared their analytical framework and experience in macroprudential supervision with their Ugandan counterparts, including the monitoring of the Loan to Value ratio (LTV), the development of a countercyclical capital buffer, calculating risk exposures of loans denominated in a foreign currency, analyzing financial ratios in order to assess credit risk on a systemic basis, the stress testing framework, and integrating microprudential and macroprudential supervision.





04

NON-BANK
SUPERVISION

4.1 SECURITIES SECTOR

By the end of 2016, two stock exchanges, a Central Securities Depository, seven brokerage companies and four independent securities registrars were operating on the Georgian securities market. Of the seven brokerage companies, two were not members of the stock exchange. Registrars maintained the registry of shares of 848 joint-stock companies (JSCs), which was an increase of 20 over the previous year.

The trend for the development of the debt securities market and the growth of investor interest, which started in 2014 and 2015, continued. In 2016, three different companies emitted obligations three times each in the form of public offerings. Additionally, three international financial institutions and six companies emitted obligations in the form of private offerings. It should also be noted that in 2016 two companies (JSC Liberty Consumer and JSC Teliani Valley) issued stock in the form of public offerings, with a total value of 19.5 million USD.

Table N 4.1
Public emissions of bonds, 2016

#	Issuer	Currency/ Volume	Tenor	Nominal	Interest Rate (%)
1	JSC Nikora Trade	USD/5,000,000	2	USD/1,000	11
2	JSC M2 Real Estate	USD/25,000,000	3	USD/1,000	7.5
3	LTD Georgian Water and Power	GEL/30,000,000	5	GEL/1,000	NBG Refinancing Rate+3,5%

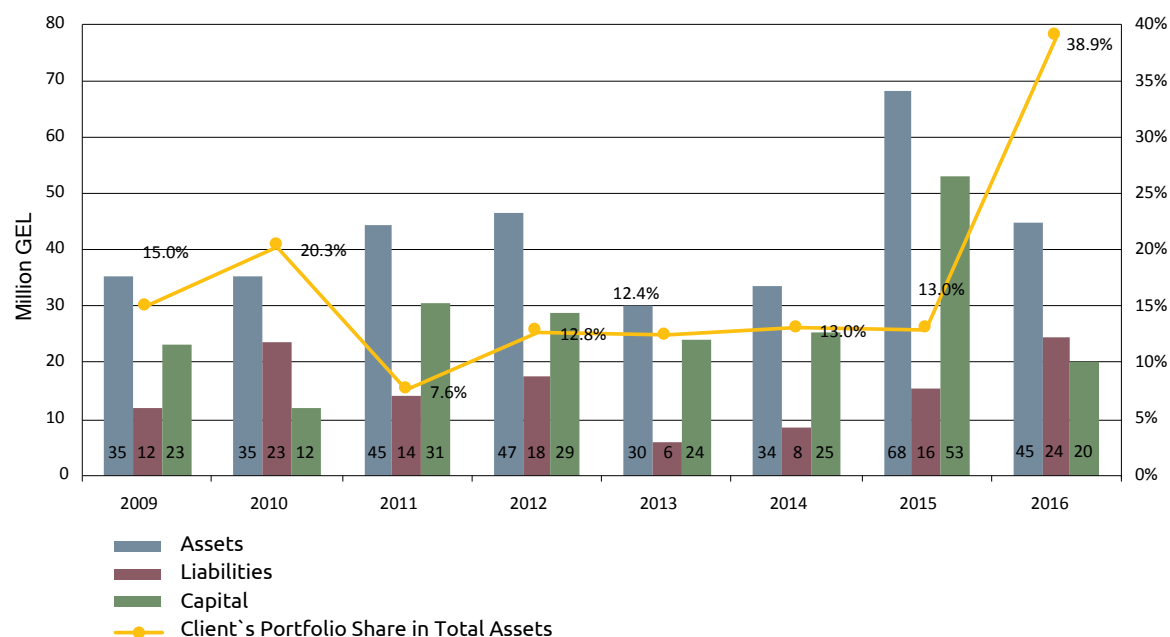
Source: National Bank of Georgia

Activities of market intermediaries also increased as a result of the development of the debt securities market. By 31 December 2016, the total volume of active brokerage companies' assets amounted to 45.98 million GEL, which was 33% less than the previous year. The total volume of liabilities increased by 65% and amounted to 25.4 million GEL; while the total volume of capital amounted to 20.56 million GEL, what was 61%

less than in 2015. This change was caused by the fact that one brokerage company left the market. According to 2016 data, the consumer portfolio (cash and securities) comprised 37.8% of brokerage companies' total assets and amounted to 17.4 million GEL. It should be mentioned that the consumer portfolio to total assets ratio almost doubled compared to that of the previous year.

Diagram N 4.1

Information on brokers' total assets, liabilities and equity, and share of consumer portfolio in total assets (2009-2016)



Source: National Bank of Georgia

Table N 4.2

Brokerage company activities (2016)

Brokerage Company	Volume (number of securities)	Value (GEL)
JSC Galt and Taggart	1,119,181,352	1,242,976,352
LLC TBC Capital	332,800	512,504,977
LLS Liberty Securities	322,921,955	5,401,312
JSC Caucasus Capital Group	853,214	2,208,154
LLS Cartu Broker	34,603	17,198
LLS Abbey Asset Management	-	-
LLS Tbilisi Traders Club	-	-
Total	1,443,323,924	1,763,107,992⁵⁰

Source: National Bank of Georgia

50. A significant portion of this volume is related to operations carried out on the international market.

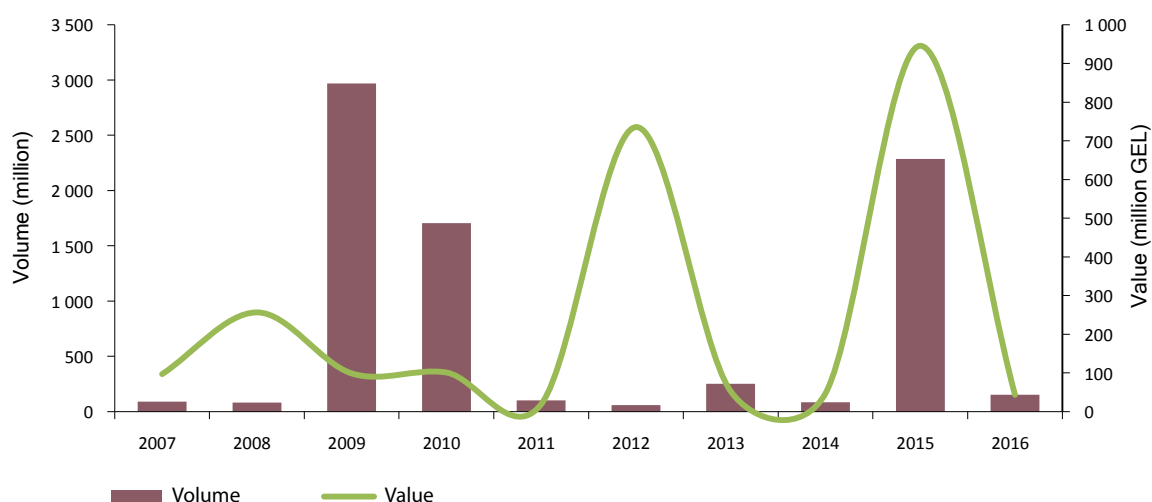
The value of securities transactions (both over-the-counter and through the stock exchange) executed via brokerage companies amounted to 1,763 million GEL (1,443 million securities). Of which, deals amounting to 5.8 million GEL (3.6 million securities) were executed via stock exchange trading sessions and the remaining deals, amounting to 1,757.2 million GEL (1,440 million pieces), were made over-the-counter (OTC).

As of December 2016, the securities of 122 issuers were admitted for trading through the Georgian Stock Exchange (GSE). During the reporting

period, the total value of securities transactions amounted to 43.3 million GEL (151.8 million securities). Of this, deals amounting to 5.8 million GEL were executed via stock exchange trading sessions and deals amounting to 37.5 million GEL were made through fixing. In addition, registrars executed several OTC transactions that, according to current legislation, are not subject to fixing and include transfer of securities via inheritance, gifts and other transactions. During 2016, 3,015 such transactions were executed on 98.2 million securities. The total amount of transactions amounted to 775.4 million GEL and 3.2 million USD.

Diagram N 4.2

Main trade indicators (deals executed during trading sessions and outside the stock exchange) (2007-2016)



Source: National Bank of Georgia

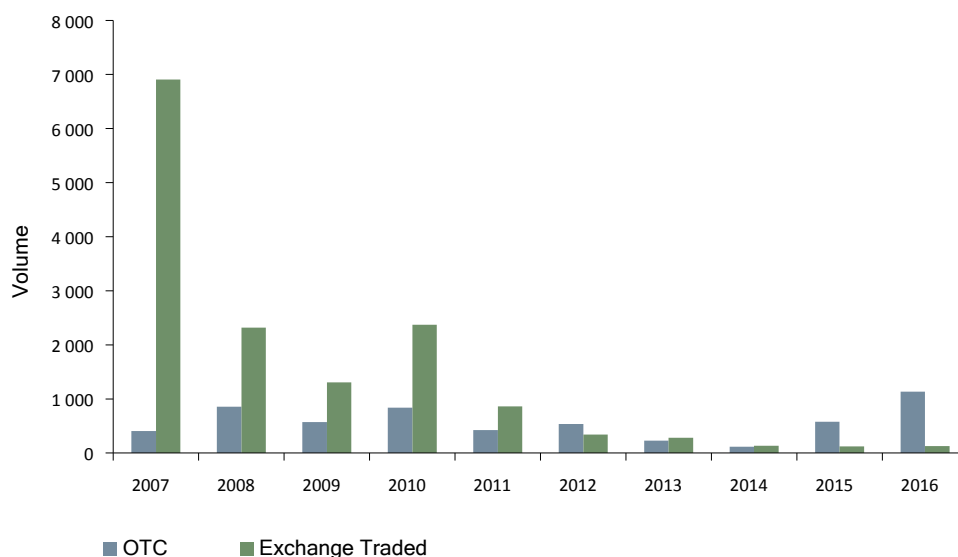
Table N 4.3

Aggregate information on main indicators of trade concluded during trading sessions and outside the stock exchange (2012-2016)

Year	Number of Deals		Volume of securities (Number)		Value of securities (GEL)	
	2016	2015	2016	2015	2016	2015
At Stock Exchange	127	120	3,607,946	6,157,585	5,803,477	1,635,820
Outside Stock Exchange	1,135	579	148,170,076	2,278,584,220	37,534,720	943,987,562
Total	1,262	699	151,778,022	2,284,741,805	43,338,198	945,623,382

Source: National Bank of Georgia

Diagram N 4.3
Number of deals executed on and off the stock exchange (2007–2016)

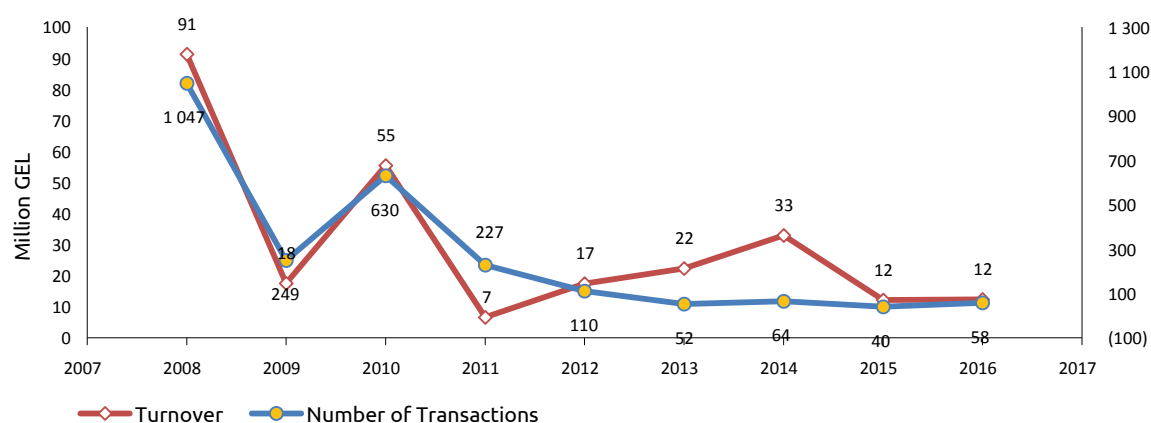


Source: National Bank of Georgia

In 2016, 12.3 million securities (pieces) and 3.7 million GEL in cash were deposited in the Central Securities Depository. A total of 517,807 transactions were executed during the year. In comparison

to 2015, the number of securities transactions in the depository increased by 45% and the turnover of deposited securities rose by 1.4%.

Diagram N 4.4
Turnover of securities deposited with the Central Depository (2008–2016)

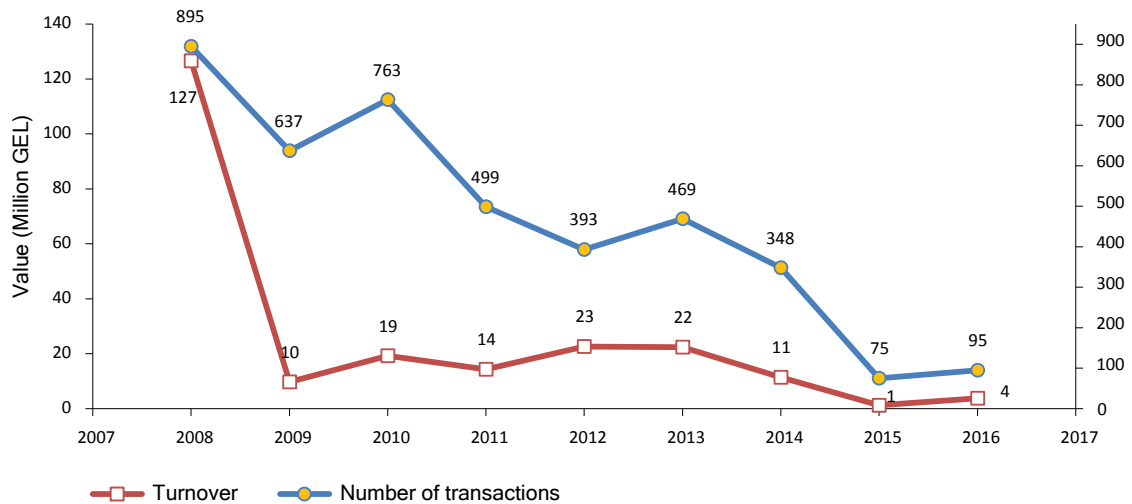


Source: National Bank of Georgia

In the reporting year, turnover of funds in the Central Securities Depository increased by 2.5 million

GEL and the number of transactions increased by 27%, in comparison with 2015.

Diagram N 4.5
Turnover of funds deposited with the Central Depository (2008-2016)



Source: National Bank of Georgia

4.2 OTHER FINANCIAL INSTITUTIONS

As of 31 December 2016, other financial institutions in Georgia comprised 11 credit unions, 81 microfinance organizations, 1,200 currency exchange bureaus and 118 monetary remittance units.

4.2.1 MICROFINANCE ORGANIZATIONS

The microfinance sector continued to grow and develop in 2016. In comparison with 2015, total assets increased by 25.4%, and amounted to 2.02 bil-

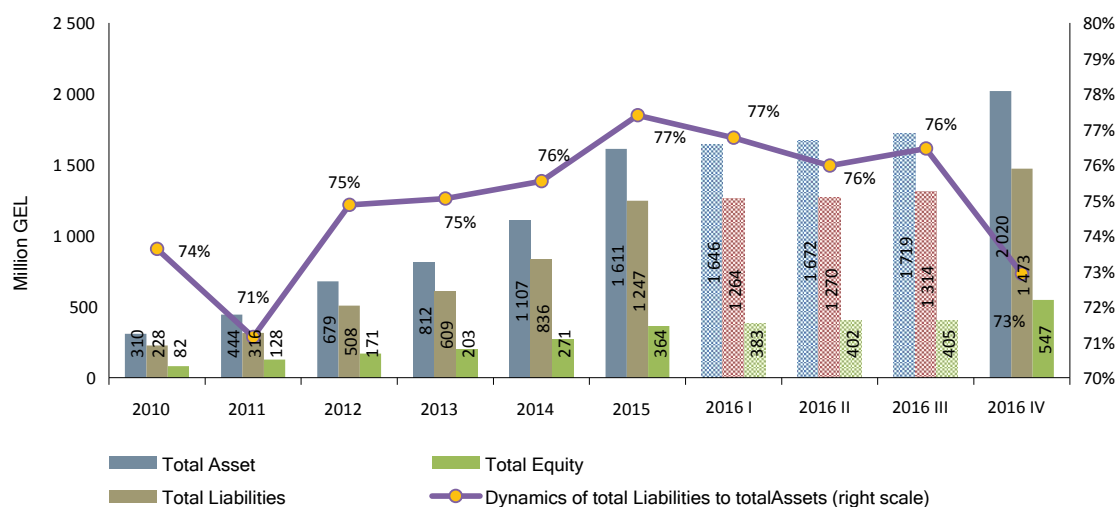
lion GEL. The growth was proportionate with the expense of liabilities and capital, which amounted to 1.47 billion GEL (growth of 18%) and 547 million GEL (growth of 50%) respectively.

This indicator of asset growth is partly related to the registration of highly-capitalized online loan issuing companies as microfinance companies in December 2016.

In 2016, a light supervision regime was still maintained on microfinance organizations. However, work continued to improve regulatory legislative and supervisory frameworks, which, to some extent, aim to tighten regulative norms.

Diagram N 4.6

Total assets, liabilities, equity and liabilities-to-assets dynamics of microfinance organizations



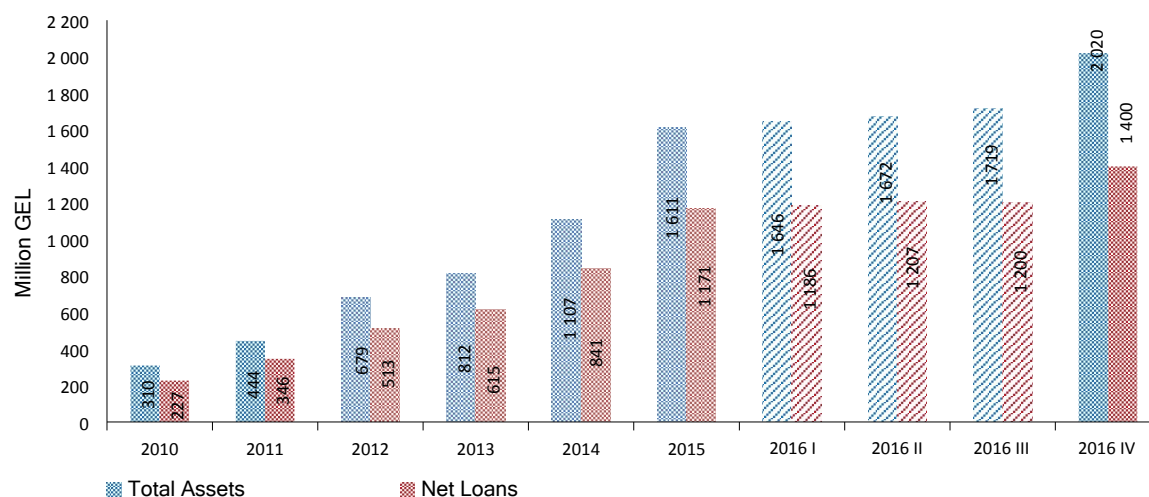
Source: National Bank of Georgia

According to 2016 data, the net loan portfolio comprised 69% of total assets and was equal to 1.399 billion GEL. It must be mentioned that the

ratio of net loans to total assets has not changed substantially over recent years. Last year, the growth rate of net loans was 19.5%.

Diagram N 4.7

Net loan portfolio growth relative to assets

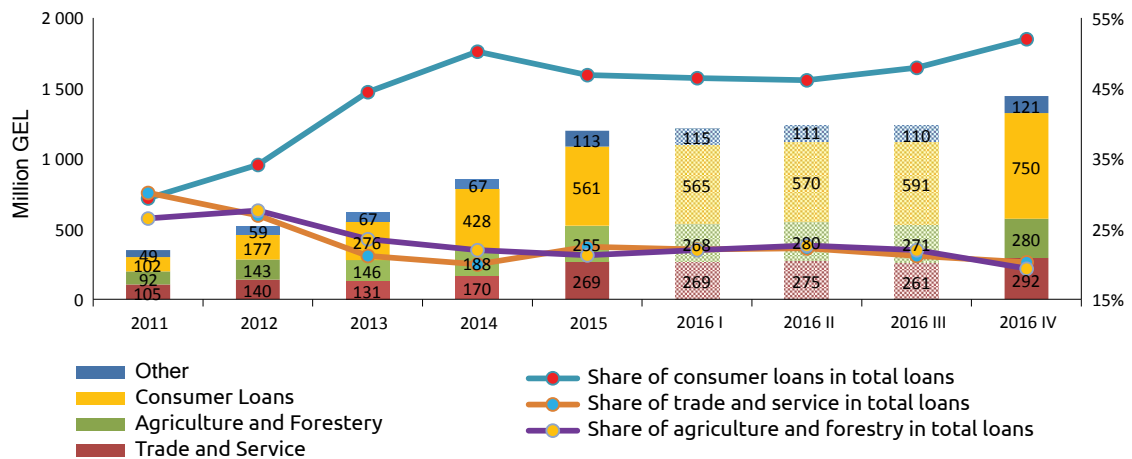


Source: National Bank of Georgia

According to 2016 data, the gross loan portfolio of the microfinance sector amounted to 1.444 billion GEL. This portfolio is represented by three main sectors:

1. Trade and services – 292 million GEL (20% of the portfolio).
2. Agriculture and forestry – 280 million GEL (19% of the portfolio).
3. Consumer loans – 750 million GEL (52% of the portfolio).

Diagram N 4.8
Gross loan portfolio structure



Source: National Bank of Georgia

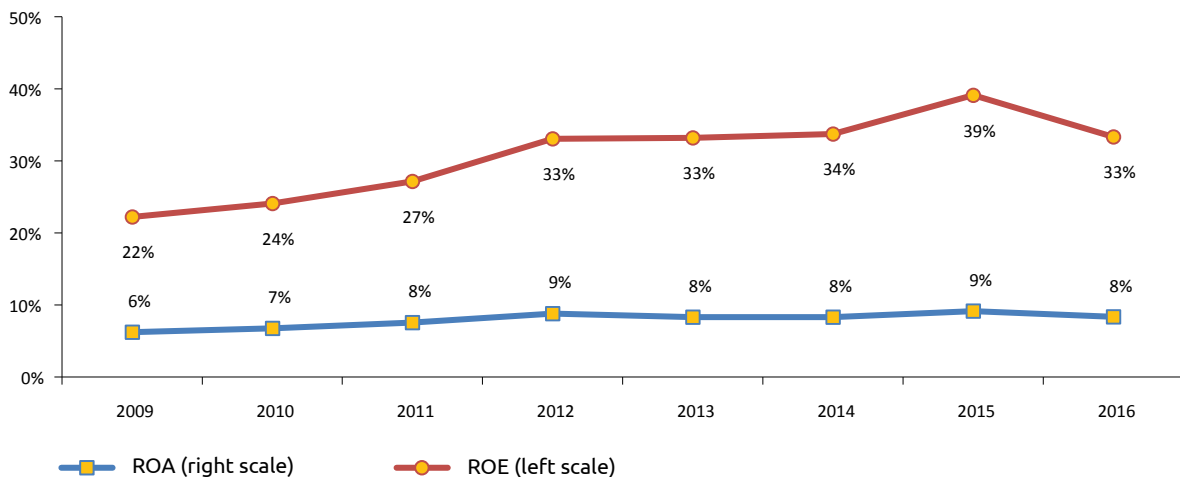
According to Diagram N 4.8, in light of the growth in the share of consumer loans, the share of loans granted to the agriculture sector decreased.

Because of the high margins on products offered to the market, the microfinance sector is charac-

terized by high profitability (see Diagram N 4.9).

It should be noted that because of the existing "light" supervision regime, the NBG does not inspect the adequacy of loan loss reserves.

Diagram N 4.9
Profitability indicators (ROE, ROA) of microfinance organizations



Source: National Bank of Georgia

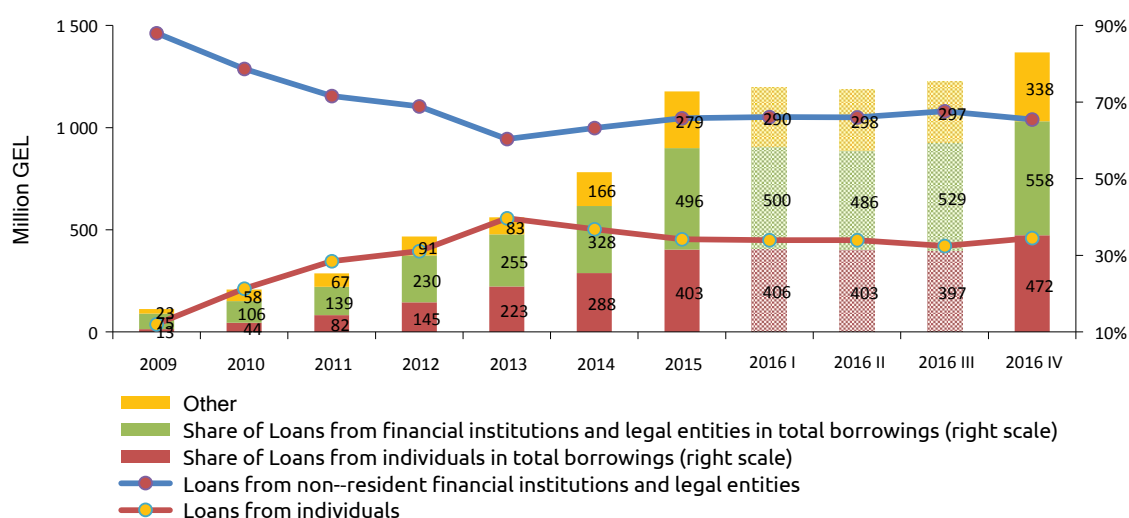
It is noteworthy that 20% of net profits in 2015 were related to the revaluation of foreign exchange funds, and in 2016 the effect of the currency exchange rate was significantly reduced. At the same time, in 2016 there was a decrease of interest rates and margins, which significantly reduced the sectoral profitability options (ROE at 27.3% and ROA at 6.3%). It should also be noted

that the December 2016 registration of highly capitalized online loan companies as microfinance organizations had an effect on the growth of these indicators.

As in previous years, borrowed funds were the main source of asset financing (68% on average).

Diagram N 4.10

Borrowed funds structure, raised from non-resident organizations and private individuals



Source: National Bank of Georgia

Due to growth in foreign and resident institutional financing and the NBG's activities targeting retail investors, the share of funds attracted from individuals in the liability structure of microfinance organizations declined in 2014-2016.

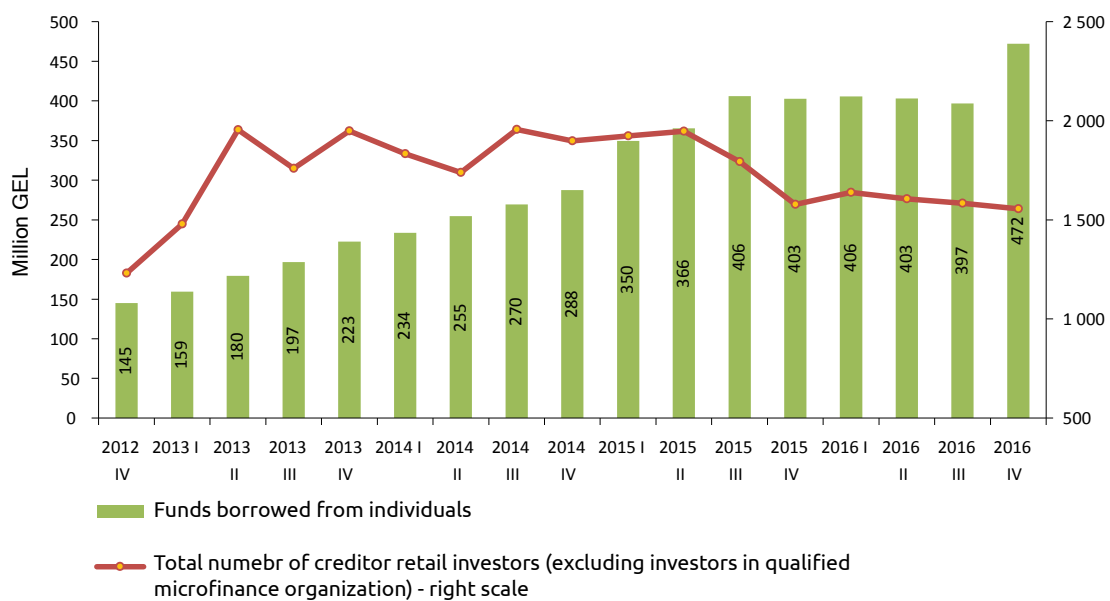
In 2016, efforts were continued to work with those microfinance organizations that attract funds from less informed retail investors and that have expressed readiness to change their business models. These organizations presented an action plan that entails a decrease of relatively small loans being issued to physical persons, and a gradual exit from the retail segment. According to the

action plan, microfinance organizations stopped their advertisement campaigns used to attract funds from retail investors and started to replace retail investors with more qualified investors. This process will continue in 2017. This issue has gained increased importance because interest rates on bank deposits denominated in foreign currency declined radically, which has increased the risk to flow of resources in non-banking channels.

As a result of measures taken, the structure of individual (physical person) creditors partly improved and was reflected in a decreased number of less-qualified customers (see Diagram N 4.11).

Diagram N 4.11

Funds borrowed from individuals and total number of creditor retail investors



Source: National Bank of Georgia

Significant attention was also paid to non-banking financial intermediaries operating in the Georgian market. These entities were not registered with the NBG and were, through various advertisement campaigns, attracting funds from retail investors. It should be noted that, as a result of intensive communication efforts from the NBG, the majority of these organizations stopped attracting funds from retail investors and ceased their related advertisement campaigns. At the same time, the NBG made several public statements that urged the population to invest their funds based on intelligent and informed decisions – especially in those companies offering higher interest rates than other financial institutions on the market.

In 2016, three companies, which had been recognized as qualified credit institutions, did not fulfill the NBG's instructions. According to the NBG's individual administrative legal acts, these companies were prohibited from attracting funds, run-

ning any kind of advertising campaign related to their activity and from providing any kind of service to related parties. The management of these companies did not comply with the requirements of the National Bank and the relevant information was subsequently provided to law enforcement agencies. Two of these cases have since been taken to court.

In order to reduce risks related to deposit taking activities, on 15 January 2017, the Civil Code was amended to prohibit entrepreneurs, or groups of related entrepreneurs, from attracting funds in any form if the number of depositors exceeds 20 people and the money attracted from each is less than 100,000 GEL. At the same time, the NBG continues to work on a legislative framework aimed at improving the regulatory legislative base, supervising microfinance organizations and protecting their customers.





05

MONEY
LAUNDERING
INSPECTION AND
SUPERVISION

In 2016, for the purpose of increasing efficiency and enhancing the compliance of financial institutions with anti-money laundering legislations, the Money Laundering Inspection and Supervision Department implemented risk-based supervision of micro-finance organizations, securities registrars, broker companies and credit unions. Risk-based supervision implies early identification of problematic institutions, or of internal risks facing institutions, and the implementation of adequate supervisory measures to counter the identified risks.

Furthermore, bearing in mind the risk-based supervision arrangements, a new on-site inspection methodology was implemented for commercial banks and micro-finance organizations. The methodology determines important features of on-site inspection, including the planning process and its goals, type (complex, thematic, additional) and theme.

In 2016, one commercial bank was selected for an on-site inspection and was inspected based on the principles of the new methodology. Due to the detection of critical threats and systematic violations of anti-money laundering requirements, the

banking license of the inspected commercial bank was revoked.

During the reporting period, on-site inspections were also conducted on 111 currency exchange offices, 13 micro-finance organizations and nine money transfer operators. The total volume of pecuniary sanctions imposed on them amounted to 1.3 million GEL and the registration of 70 currency exchange offices was revoked.

The results of the supervision make it clear that the lack of qualifications of employees and the insufficient material-technical resources of non-banking financial institutions can lead to misconceptions of the risks of money laundering and terrorism financing and, consequently, decrease the efficiency of their internal controls. Systematic violations that have been detected during on-site inspections include improper execution of identification/verification process of clients and beneficial owners; improper registration/maintenance of information; not filing reports to the Financial Monitoring Service on transactions that should have been subject to monitoring; and not taking specific measures in line with the risk-based approach.





An aerial night photograph of a city, likely Moscow, showing a dense urban landscape with various buildings, streets, and a prominent circular plaza with a fountain. A large, white, semi-transparent number '06' is overlaid on the left side of the image.

06

PAYMENT SYSTEMS

Payment Systems and Payment Services are still steadily developing in Georgia. The RTGS (the Real Time Gross Settlement System) represents the most significant payment system in Georgia. In 2016, as in previous years, the system's availability ratio was 99.9%, which reflects the sustainability of the system. In order to improve crisis management and increase reliability and soundness, the RTGS business continuity plan is tested every year to examine the effectiveness of its continuity measures in a real environment and to improve those measures.

In 2016, like in the previous year, the payments market dynamically developed and the number of payment service providers increased (38 providers were registered by the end of 2016). In order to improve the regulation of payment services, the National Bank developed a new rule on "Registration and Regulation of Payment Service Provider". The rule entered into force on 1 March 2017. In developing this rule, intensive consultations were undertaken with market participants. The new rule should simplify the successful implementation of the new regulations on the market and thus make payment service supervision more efficient. The obligations of providers, including important providers, are clearly established in the rule. In terms of consumer rights protection, rules and terms for receiving and reviewing customer complaints were defined. Additional requirements were determined for important providers with regard to the rules and procedures, security measures, risk assessments and mitigation measures. In addition, the rule determines requirements for the placement and protection of customer funds, terms

for outsourcing a provider's operational functions and the use of agents by the provider. Other aspects regarding the functioning of a provider's head office were also specified.

RTGS STATISTICS

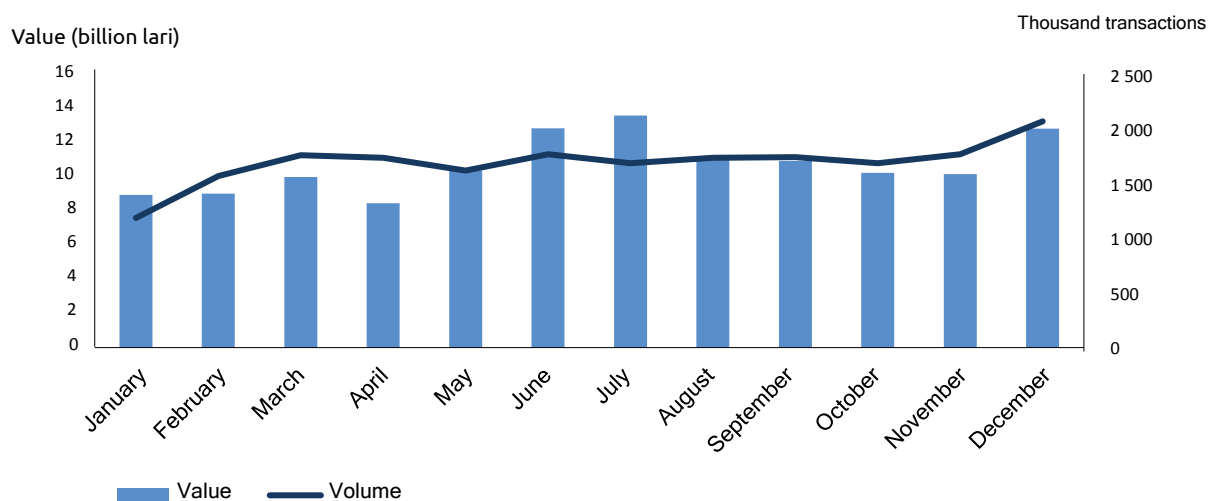
Throughout 2016, 20.5 million payment operations were processed through the Real Time Gross Settlement (RTGS) system (the average daily number of transactions was 82,300 operations), amounting to 129.6 billion GEL (the average daily value was 520.2 million GEL). Compared to 2015, the number of transfers through the RTGS system increased by 1.3 million (6.6%), while the value decreased by 5.4 million GEL (4%). It should be noted that the reduction in value was due to a reduction of the value of commercial banks' transfers to the National Bank. In particular, compared to 2015, the value of the above-mentioned turnover decreased by 16% and amounted to 40.9 billion GEL.⁵¹ As for transfer turnover between commercial banks (bank's clients and interbank transfers), the value increased by 2.2% and amounted to 62.3 billion GEL. Transfer turnover also increased by 5.2% between commercial banks and the Treasury Department of the Ministry of Finance and amounted to 24.4 billion GEL.

In 2016, the maximum number of daily processed transactions was 207,763 (compared to 193,514 transactions in 2015) and the maximum amount was 1.479 billion GEL (1.541 billion GEL in 2015).

The statistical data for the RTGS system can be found on Diagrams N 6.1 and N 6.2 below.

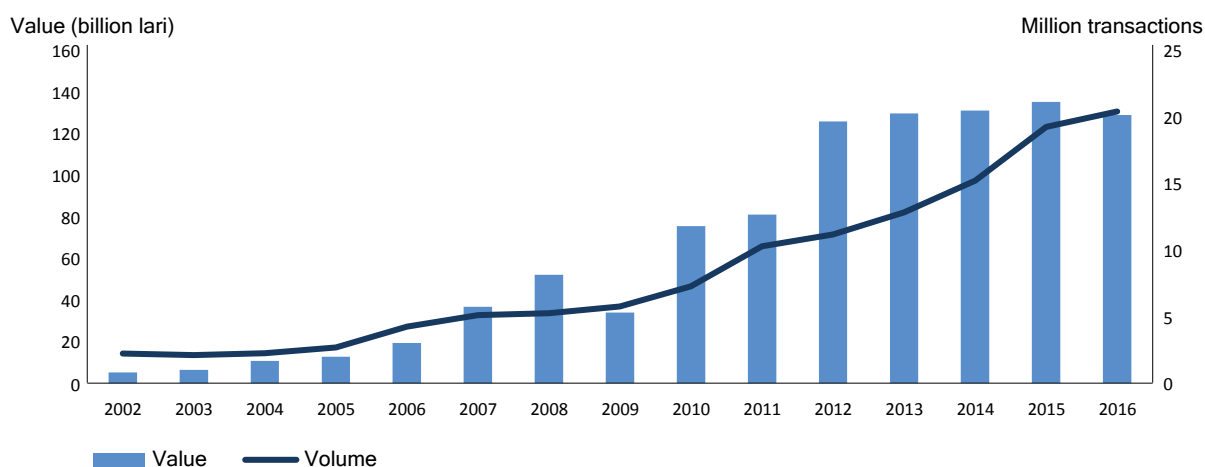
51. The above-mentioned turnover is not directly linked to the gross value of transactions between commercial banks and the NBG due to the net settlement of transactions with the NBG.

Diagram N 6.1
Transfers processed through the RTGS system (2016)



Source: National Bank of Georgia

Diagram N 6.2
Transfers processed through the RTGS system (2002-2016)



Source: National Bank of Georgia

Throughout 2016, as in previous years, the RTGS system continued to play a key role in 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)

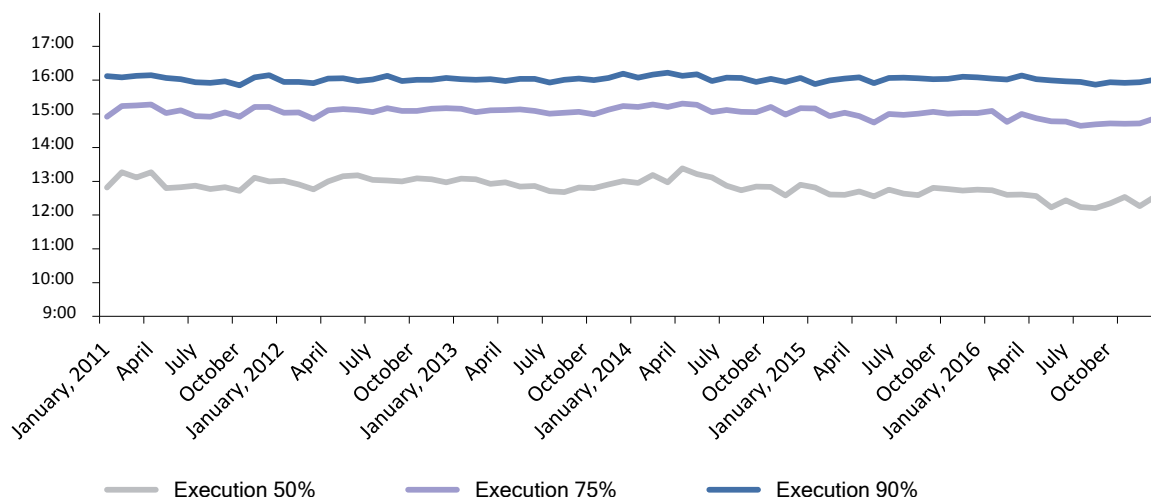
in 2016 was 67% (in 2015, this figure amounted to 73%), which is significantly greater than that of any other non-cash payment system/means⁵² used in Georgia. The RTGS is thus the most important element for the smooth flow of financial resources.

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

It should be noted that the current RTGS system has been functioning for six years and during this time the volume of RTGS transactions has almost doubled (increasing by 98%), although this did not have any impact on the intraday settlement pro-

cess. More than 50% of daily transactions were performed before 13:00, while 90% were completed by 16:00, much earlier than at the end of the day (see Diagram N 6.3).⁵³

Diagram N 6.3
Timing of RTGS transfers during the day



Source: National Bank of Georgia

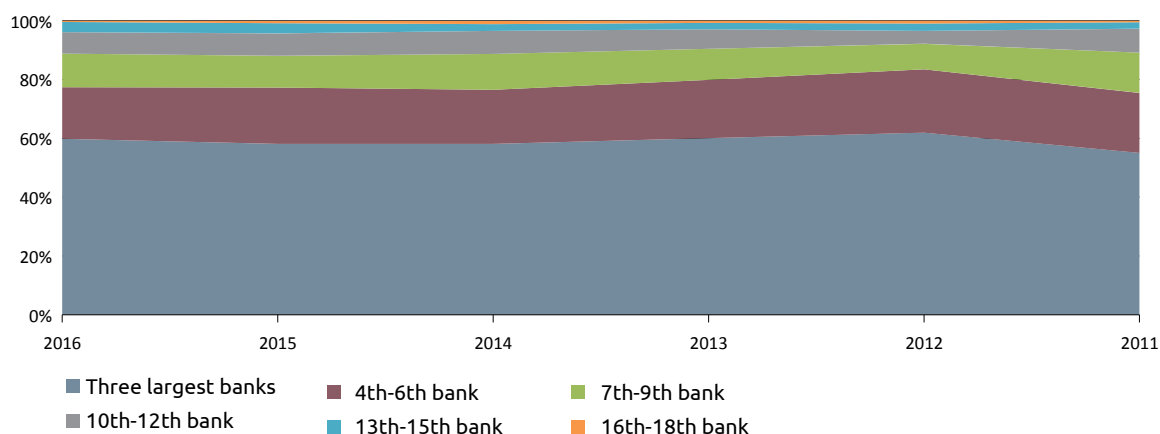
According to the data of 2016, the share of the turnover of the three largest banks' in total interbank turnover⁵⁴ amounted to 59.9%, which was slightly higher than the 2014-2015 indicator (58.1% in both cases), and a little lower than the

2012-2013 indicator (of 62% and 60.1% respectively). As Diagram N 6.4 shows, the concentration of interbank transfers in 2011-2016 has changed slightly.

53. According to RTGS 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, aside from securities settlements and payments to the National Bank.

54. Excluding payments related to financial paper transactions and operations with the NBG.

Diagram N 6.4
Interbank transfer concentration in the RTGS (2011-2016)⁵⁵



Source: National Bank of Georgia

ELECTRONIC PAYMENT INSTRUMENTS

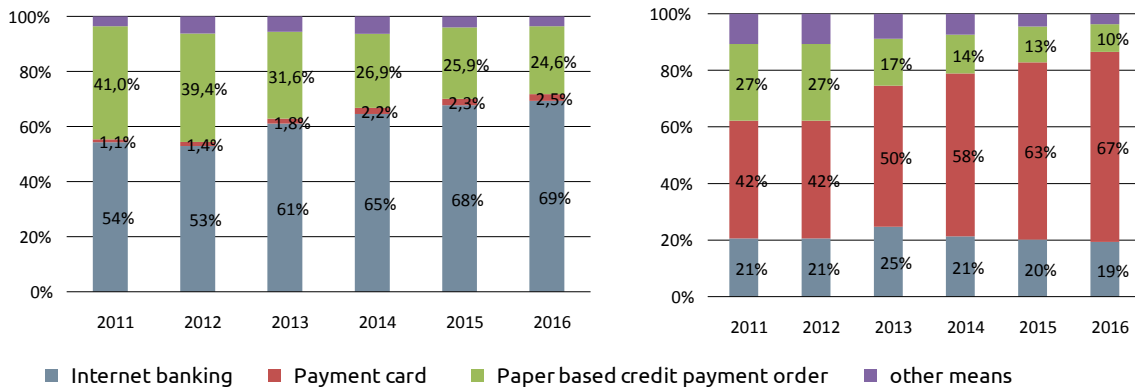
During 2016, consumer attitudes towards electronic means of payment (payment cards, online banking, etc.) maintained a positive trend, as was the case in the previous year. In terms of payment instruments, the use of payment cards by consumers has been stably growing during the past four years. In 2016, the share of card payments volume in total volume of cashless payments amounted to 67.2% (in 2012, this indicator was 41% and was growing annually). The share of transactions performed by internet banking in the total volume of cashless transactions was also significant. The number of internet banking transactions increased by 28% compared to the previous year

and amounted to 19% of total non-cash transactions (20.1% in 2015). In 2016, the share of internet banking transactions was, in terms of value, still the largest out of total non-cash payments, amounting to 69.3% of the total. 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 five years, in terms of both volume and value; in 2016, its share in total cashless payment transactions amounted to 9.8% in volume and 24.6% in value (in 2015, these shares amounted to 12.6% and 25.9% respectively).

The statistics of cashless payments by means of initiation are shown in Diagrams N 6.5 and N 6.6.

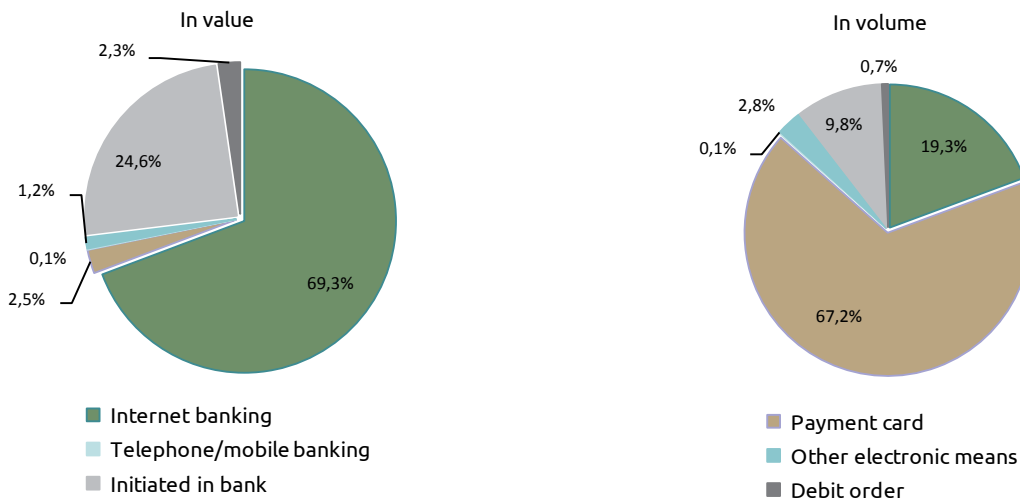
55. Bank 1 indicates the bank that has executed the maximum number of transactions, and Bank 18 is the bank with the minimum number of transactions.

Diagram N 6.5
Cashless payments by means of initiation (2011-2016)



Source: National Bank of Georgia

Diagram N 6.6
Distribution of non-cash payments by means of payment order initiation (2016)



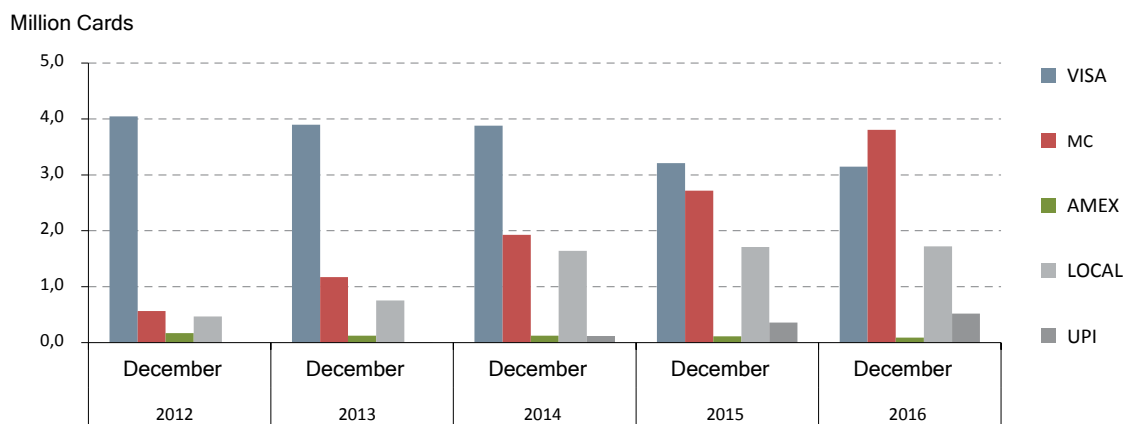
Source: National Bank of Georgia

PAYMENT CARDS

At the end of 2016, the number of payment cards issued by Georgian commercial banks amounted to 9.3 million, out of which 8% were credit cards and the rest were debit cards. Most of the issued cards (82%) were international cards (Visa 34%, MasterCard 41%, UnionPay International 6% and American Express 1%). The remaining 18% are local cards that are used only in the local network. It

must be noted that, compared to December 2015, the share of Visa cards and local cards in the total number of cards issued decreased by 6 percentage points and 2 percentage points respectively, while the number of MasterCard cards issued increased by 7 percentage points. By the end of 2016, 25 cards were issued per ten inhabitants in Georgia. The dynamics of payment cards issued for 2012-2016 are shown in Diagram N 6.7.

Diagram N 6.7
Dynamics of the issued payment cards by card schemes (2012-2016)



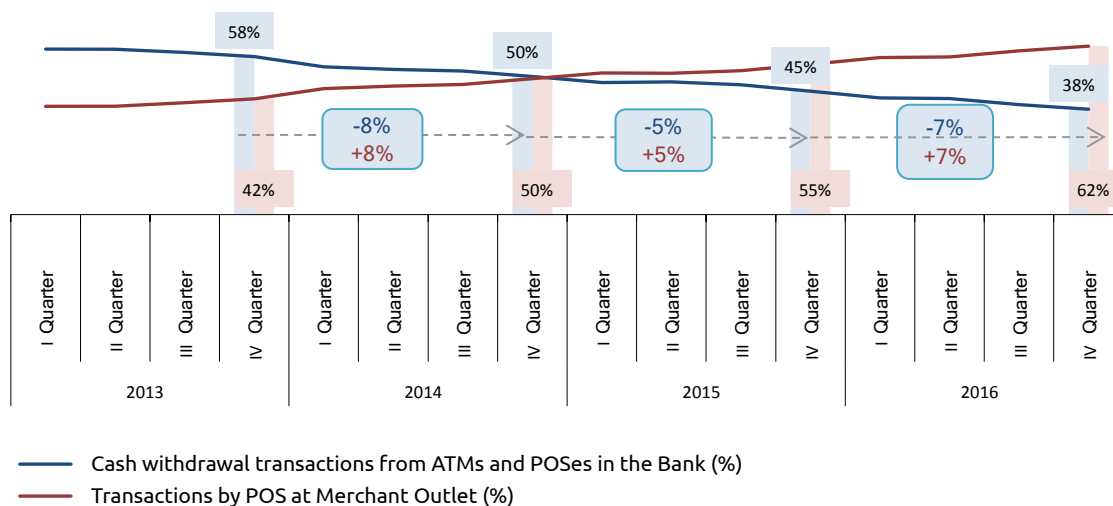
Source: National Bank of Georgia

In 2016, the average monthly number of transactions performed with a single active card was 6.3, with a total value of 700 GEL. A total of 136 million transactions were performed by cards issued in Georgia in 2016, with a total value of 15.3 billion GEL. A total of 96% of transactions in terms of volume, and 94% in terms of value were performed inside the country, with the remainder performed abroad.

In 2016, the share of POS payments in total card payments amounted to 59% in terms of volume

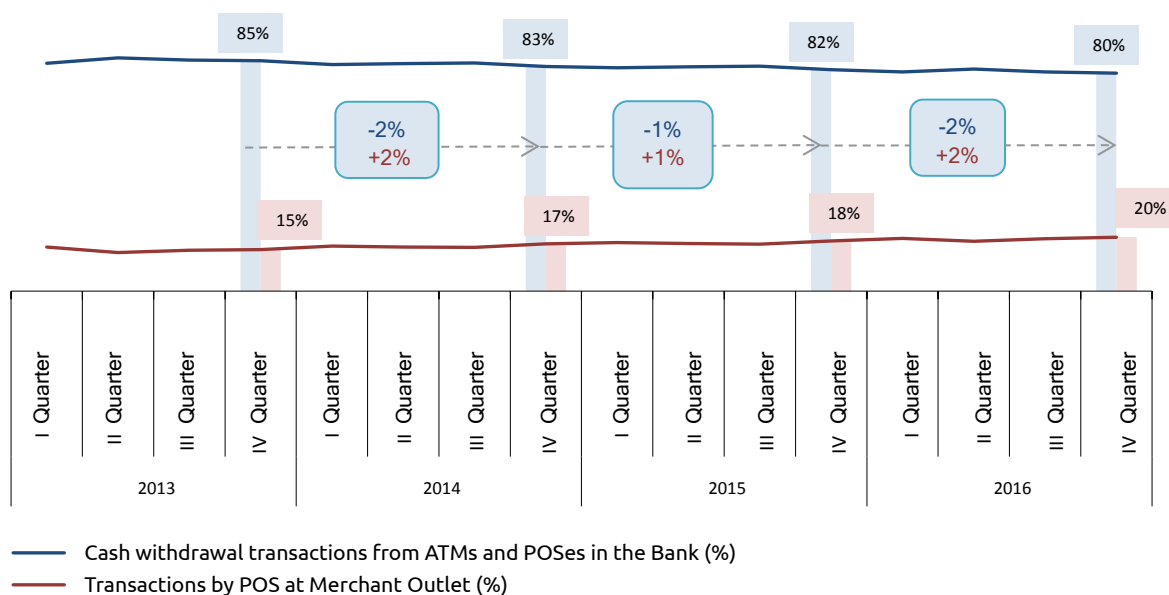
and 19% in terms of value – a rise of 6 percentage points in terms of volume and 1 percentage point in terms of value over the previous year. The share of internet transactions out of total POS payments amounted to 16% in terms of volume and 25% in terms of value. It should be noted that in recent years the share of POS payments in total card payments has significantly increased, while the number of cash withdrawal operations has decreased (Diagram N 6.8). In terms of the share of the value indicator, the change is negligible (Diagram N 6.9).

Diagram N 6.8
The share of the volume of cash withdrawals and POS payments (2013-2016)



Source: National Bank of Georgia

Diagram N 6.9
The share of the value of cash withdrawals and POS payments (2013-2016)

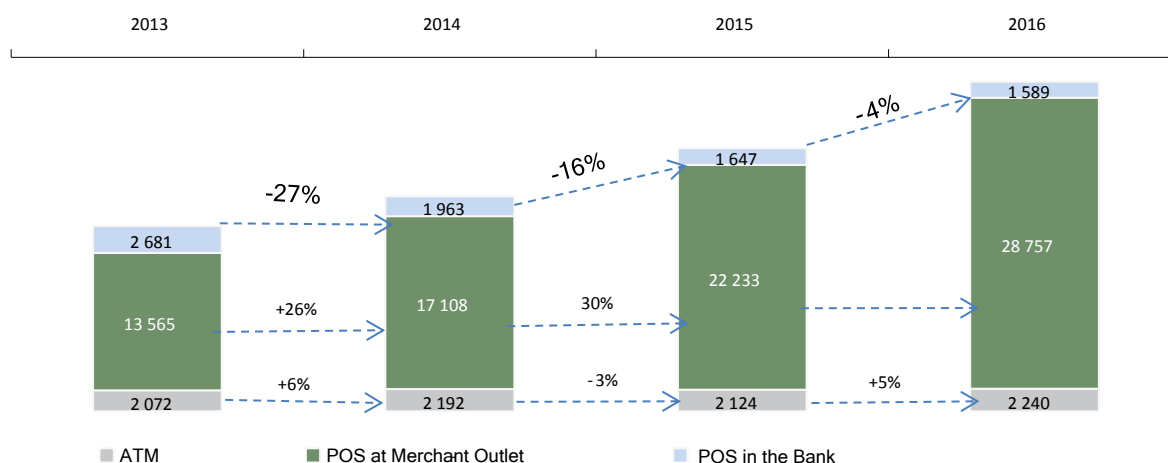


Source: National Bank of Georgia

The infrastructure of payment card-accepting devices has been developing annually. Compared to the previous year, the number of POS terminals increased by 29%, with their number reaching

28,757 by the end of the year (December). The number of ATMs increased by 5% and reached 2,240. The dynamics of card accepting devices are shown in Diagram N 6.10.

Diagram N 6.10
Dynamics of card-accepting devices (December, 2013-2016)



Source: National Bank of Georgia

In 2016, transactions with card accepting devices located in Georgia out of a total of 95% in terms of volume, and 90% in terms of value, were performed by cards issued in Georgia, while the rest were carried out by cards issued abroad. It should be noted that the total number of transactions performed by foreign cards increased by 19% in terms of volume and 11% in terms of value compared to the previous year – of which card transactions at merchant outlets increased by 19% in terms of volume and 7% in terms of value. Moreover, cash withdrawal operations increased by 18% in terms of volume and by 19% in terms of value.

In 2016, the average monthly number of cash withdrawal transactions performed at a single ATM located in Georgia was 2,183, amounting to 479,000 GEL in terms of value. The average number of monthly payment transactions performed by one POS terminal were 254 in terms of volume and 9,000 GEL in terms of value.

PAYMENT SERVICE PROVIDERS

By 31 December 2016, 38 payment service providers were registered in the National Bank of Georgia. 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.

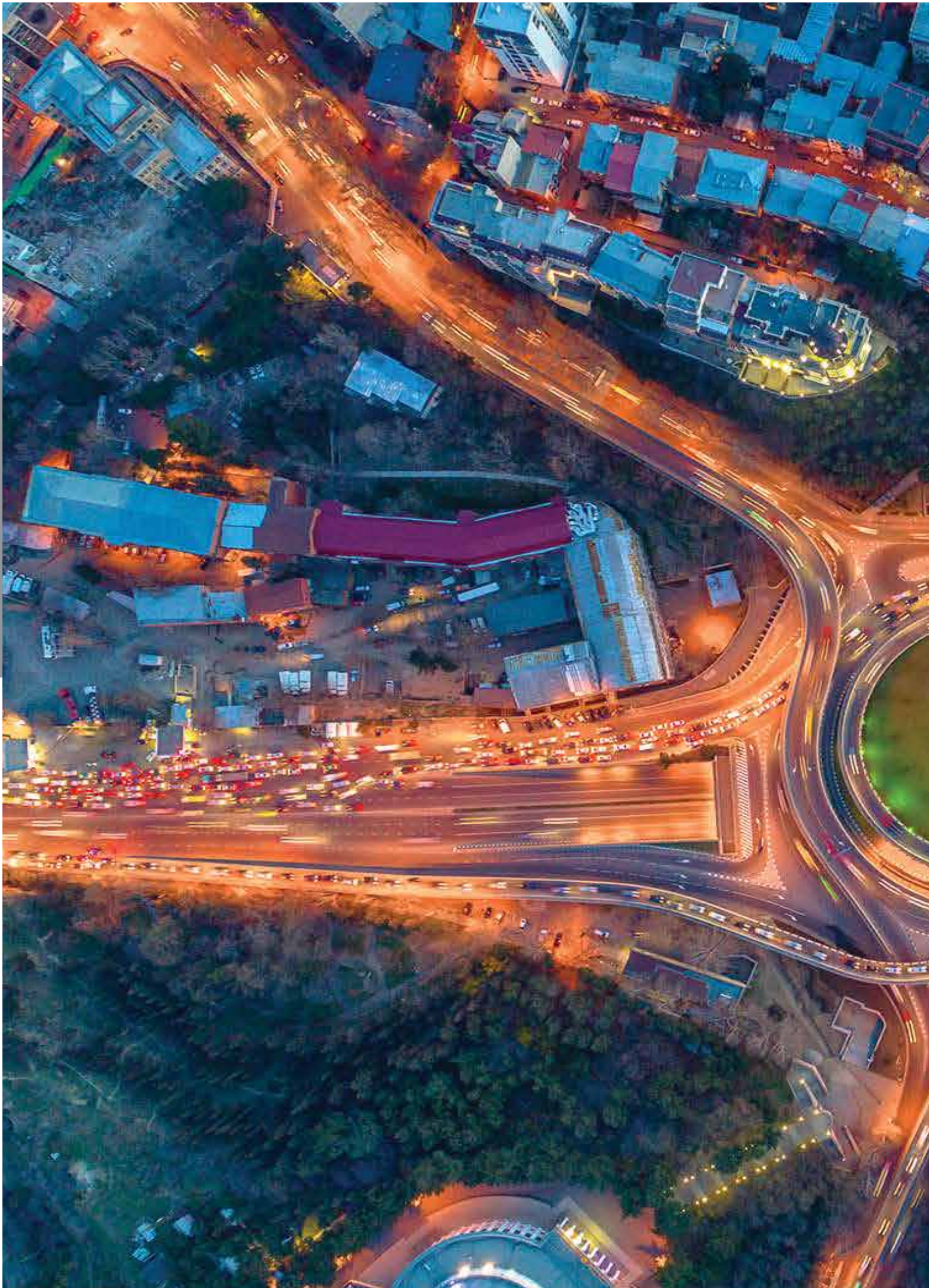
In 2016, the total value of payment service providers' services amounted to 5.8 billion GEL (35% more than the previous year), which made up a small part of the total payments executed by commercial banks (3%). Nevertheless, these providers play an important role in low value (retail) payments. In particular, according to the cumulative data of 2016, the number of payments executed by registered providers was equal to 504 million

transactions (a 1% growth over 2015), which is almost four times higher than the total number of banks' payments.

In 2016, the ratio between e-money and non-e-money payment transactions performed by payment service providers slightly changed. The number of non-e-money payments increased by 2% and accounted for 56% of the total number of payments executed by registered payment service providers (growth of 1 percentage point over 2015), while the number of electronic money payments decreased by 1% and accounted for 44% of total payments performed by payment service providers. The total value of transactions executed with non-e-money increased by 32% and amounted to 95% of total payments of payment service providers. The value of e-money payments increased by 93% and its share reached 5% (growth of 1 percentage point) of total payment service provider payments.

It is noteworthy that in 2016 the majority of non-e-money payments were through self-service kiosks (in terms of volume as well as value), as was the case in the previous year (80% of non-e-money payments in terms of volume and 76% in terms of value). In 2016, transactions through self-service kiosks amounted to 45% in terms of volume and 72% in terms of value of the total payments made by registered payment service providers. However, the share of payments made through kiosks out of the total payments made by providers fell by 3 percentage points in terms of volume and by 5 percentage points in terms of value, compared to the previous year.

In 2016, payments made in public transportation (subway, minibuses and buses) continued to play a key role in e-money payments. The share of payments made on public transportation amounted to 97% in terms of volume and 17% in terms of value out of total e-money payments.





07

IMPROVEMENT
OF INFORMATION
TECHNOLOGY

During the reporting period, work was actively undertaken to improve information technology, with significant developments being made to the National Bank's server infrastructure. Servers and data storage systems were added to the virtualization platform, which has significantly improved the performance and sustainability of production and test environments. Furthermore, the virtualization platform and operating systems were updated for critical systems. The test environment was optimized and updated and the application servers of Georgia's payment and securities settlement and reserve management systems were virtualized.

In accordance with the recommendations of foreign experts, during the reporting year the National Bank introduced a modern two-factor authentication system that is integrated into critical banking services in the National Bank. Authentication in the NBG's critical systems is now carried out not only by username and password, but also by use of a one-time password. This has further improved the security of authentication processes and has significantly reduced the risk of unauthorized access to critical systems.

At the same time, the introduction of the two-factor authentication system created a technological environment that allows users to have secure remote access to the services of the National Bank. This service may be used by employees during business trips and in other circumstances, which will increase employee productivity.

In order to improve the security of payment systems, in 2016 the DNS service configuration was modified and access to all of the components required for the service are currently only available via VPN-connections and no longer depend on publicly available services.

During 2016, the Information Technology Department was actively involved in testing and improving various scenarios relevant to the National Bank's Business Continuity Management. One of the continuity plans was tested together with

World Bank representatives, who were observing and evaluating the NBG's business continuity plan. The World Bank representatives positively assessed the testing process and presented recommendations for further development. During the year, other work resulted in improved network switching processes and significantly reduced network switching times.

In accordance with the National Bank's Information Security Management System (ISMS) policy guidelines, at the end of last year the National Bank launched a data leakage prevention system. The system was implemented in the infrastructure of the bank and changes in the network and server infrastructure were implemented, resulting in the launch of the data leakage system in pilot mode. The data leakage prevention system will further improve the quality of the National Bank's security.

At the beginning of 2016, the National Bank successfully completed recertification of its information security management system (ISMS) in compliance with the international ISO 27001: 2013 standard. At this moment, the National Bank of Georgia is the first and only organization in Georgia certified in compliance with this standard. This is clear recognition that the measures to ensure accessibility, confidentiality and integrity of information available at the National Bank are subject to best international practices.

In order to improve network security, maintenance was done to improve the IEEE 802.1x standard of Access Control that is implemented in the National Bank's corporate network. This prevents access to the NBG's internal network from unauthorized devices. The system components related to the protocol were also upgraded.

In order to ensure a higher and more modern level of security, the certificates for the National Bank's reporting system were migrated from SHA1 to the SHA2 hashing⁵⁶ algorithm.

During the reporting period, significant work was carried out in the National Bank of Georgia on sys-

56. "Hashing function" (Algorithm) – a hash function is any function that can be used to map data of an arbitrary size to data of a fixed size.

tems that provide encryption of data. The system has been expanded and file encryption functionality was added. The number of users of e-mail encryption has also increased significantly. At the same time, the system was reconfigured, upgraded to a new version and the parameters of the keys were changed, which significantly increased system performance and reliability.

In 2016, it became possible to restore the real environment of the reserve management system in a fully identical test environment. This has significantly improved the system's support and development process, since it has become possible to test any kind of changes in the fully-functional test environment (which is identical to the real environment), and then apply any necessary changes to the real environment without problems.

In order to effectively conduct inspection process for financial institutions on anti-money laundering (AML) laws and bylaws, last year the National Bank introduced software that searches for and identifies suspicious individuals in terms of money laundering risk. The system allows financial institutions to be checked in terms of both local and international transactions against lists of natural and legal persons that have been identified as being exposed to terrorism or as being similarly politically active.

During the year, work was undertaken to prepare the contract for upgrading the payment and securities settlement GPSS system.

In 2016, changes also were made in the lari exchange rate calculation software. In particular, the basic parameters of the calculation are now outlined in the program interface and therefore changes in parameters can be made by business users without software modification.

During the reporting period, data imports and processing was completed for the National Bank of Georgia's financial, macroeconomic and statistical information system, "SEBSTAT". Meanwhile, implementation of the requirements of other departments to receive other types of supervisory or statistical data from financial institutions through this system was started.

The modernized portal for electronic signatures (esds.com.ge) has significantly improved system support. During the 2016, two commercial banks were added to the system. A test environment was also set up and the system documentation was compiled.

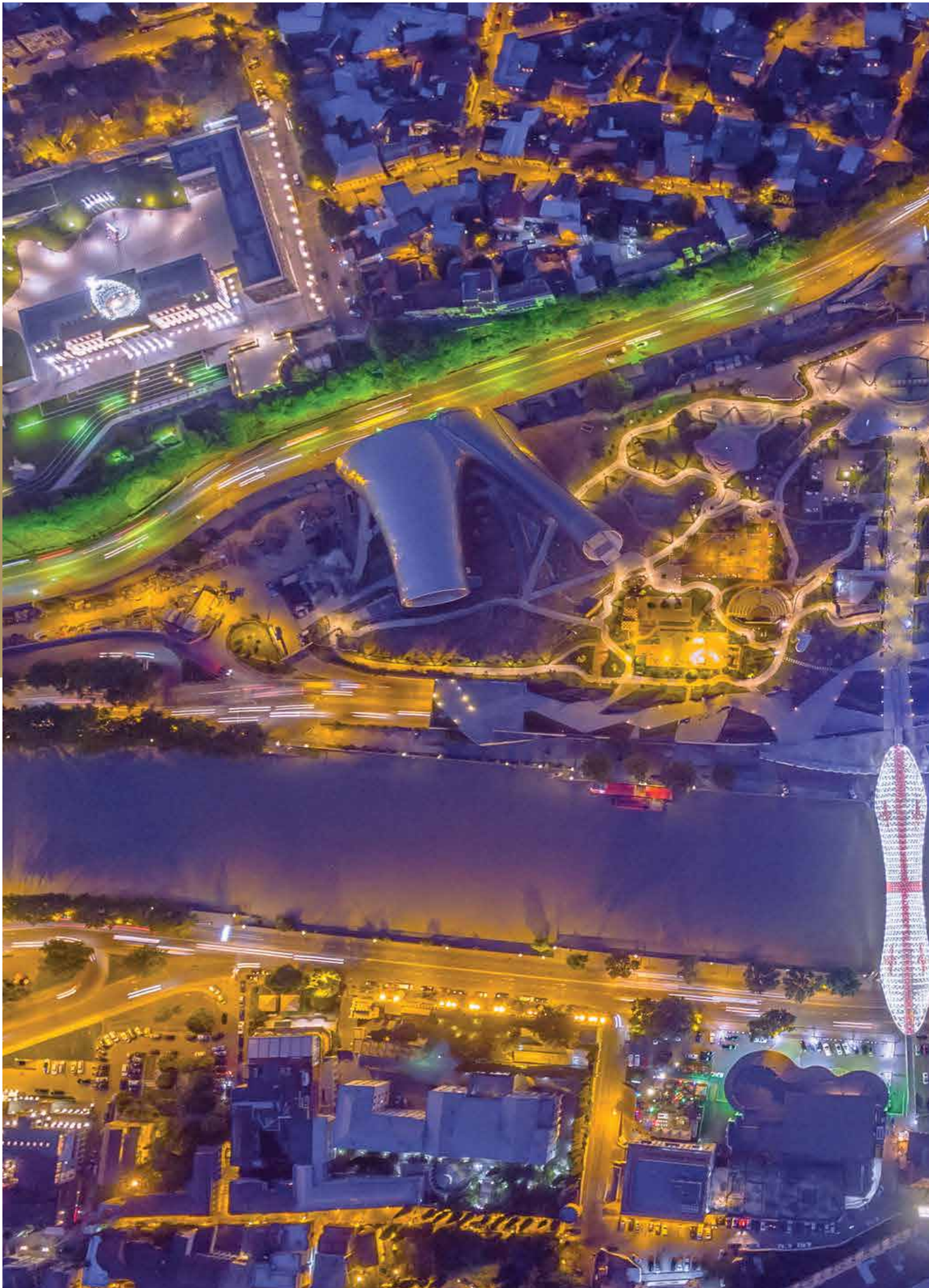
In 2016, a service was developed which allows for the collection and accumulation of information provided by money counting machines for future analysis.

In accordance with business requirements, amendments were made to "AML-Points", which allow the inspection of exchange bureaus and the creation of electronic ordinances for fines.

During the reporting period, modifications were made to the National Bank of Georgia's money laundering and special inspection software "AML-Inspection", which is designed to facilitate the processing of electronic information provided by the inspected organizations. Additional filters have been created in the system that will improve the extraction of results from the files provided by commercial banks.

Last year, following the recommendations of foreign experts, the Information Technology Department of the National Bank signed a service level agreement on delivering IT services to other departments of the National Bank of Georgia. This agreement provides terms and conditions that define the level of service and maximum time needed to eliminate system faults. The agreement will facilitate the establishment of correct expectations in relation to various business applications and significantly improve the quality of IT service delivery.

In 2016, experts from the International Bank Transfer System SWIFT, carried out an audit of the international banking system at the National Bank. The inspection revealed that the National Bank's existing infrastructure is in full compliance with international best practices. In addition, the international experts made several recommendations that will be implemented in the nearest future.



An aerial night photograph of a city, showing a complex network of roads and buildings. Light trails from vehicles are visible on the roads, and the city lights create a warm, yellowish glow. A large, white, stylized number '08' is overlaid on the left side of the image. The background image is split horizontally, with the top half showing a different urban area and the bottom half showing a city with a large stadium or arena in the foreground.

08

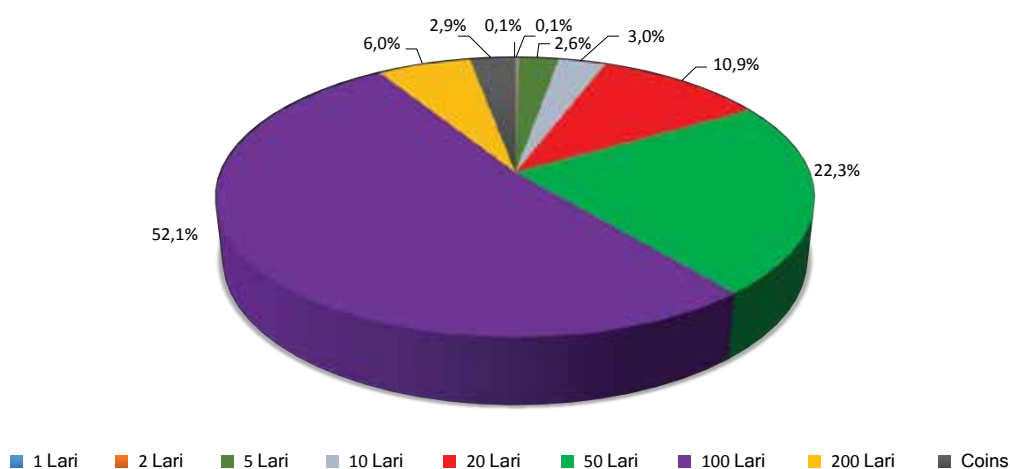
ORGANIZATION
OF CASH EMISSION
ACTIVITIES

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 their 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 the established rules; the destruction of unfit banknotes; and the improve-

ment of currency expert procedures and legal acts.

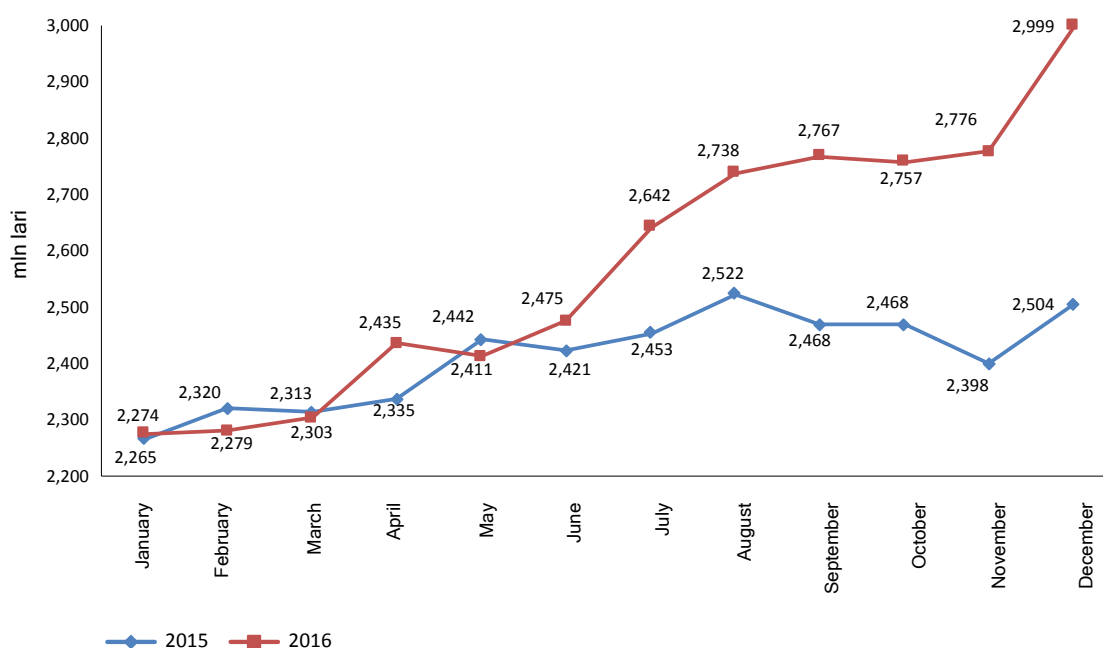
As of 31 December 2016, the value of cash in circulation amounted to 2,999.3 mln GEL, of which banknotes accounted for 2,911.6 mln GEL and coins 87.7 mln GEL (the share of the banknotes per denomination as well as the coins in circulation by value is given in Diagram N 8.1).

Diagram N 8.1
Share of each denomination (31 December 2016)



Source: National Bank of Georgia

Diagram N 8.2
Cash in circulation (2015-2016)



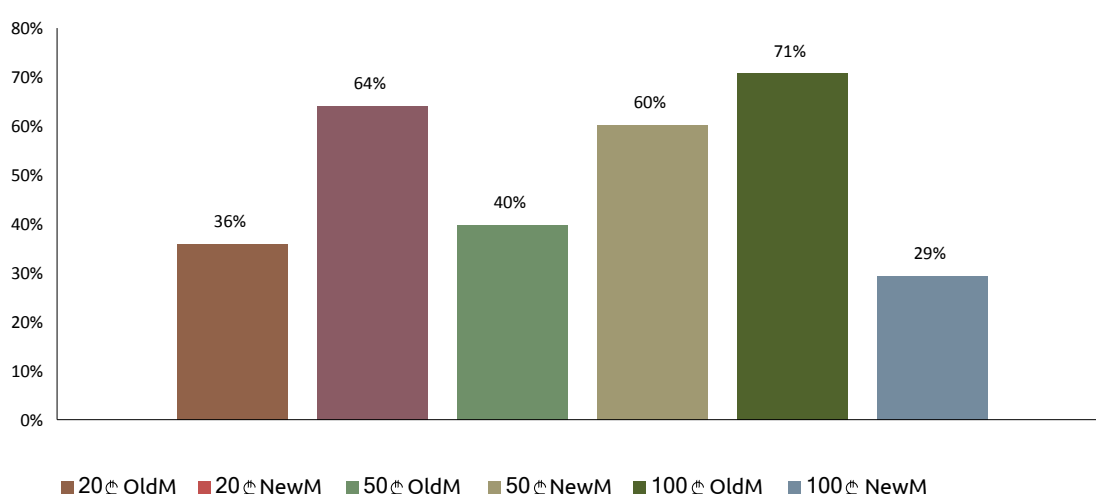
Source: National Bank of Georgia

In 2016, the volume of banknotes in circulation increased by 485.1 mln GEL and amounted to 97.1% of the total volume of cash in circulation. The demand for high denomination banknotes (20, 50 and 100 lari) increased by 23.4% and decreased by 14.9% for 10 lari banknotes. The upgraded banknotes in the 20, 50 and 100 lari denominations have been successfully spread. At the end of the reporting period, the new 20 lari

banknotes had a 64.1% share of the total volume of all 20 lari banknotes in circulation, the new 50 lari banknotes had a 60.2% share of the total volume of 50 lari banknotes in circulation, and the new 100 lari banknotes (which was issued on 1 November 2016) had a 29.3% share of the total volume of 100 lari banknotes in circulation (see Diagram N 8.3).

Diagram N 8.3

New and old modification 20, 50 and 100 lari denomination banknotes in circulation (%)



Source: National Bank of Georgia

During the reporting period, the volume of 1 and 2 lari banknotes in circulation fell by 0.4% (i.e. 23.8 mln GEL), whilst the volume of 1 and 2 lari coins increased by 16.5% and amounted 57.1 mln GEL at the end of the year.

The volume of tetri coins in circulation increased by 8.8% compared to the same figure in 2015.

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 and putting them in circulation. Furthermore, work continued on the issuance of collector coins.

Cash payments at the NBG increased during the reporting period compared to 2015. Specifically, whereas the NBG received 4.4 bln GEL, which was nearly the same amount as had been received in the previous year, cash payments from the NBG in 2016 amounted to 4.9 bln GEL, which was 8.9% higher than the same figure in the previous year. During the reporting period, the cash handling offices serving individuals at the NBG's Cash Centre replaced cash totaling 484.3 thousand GEL and provided 908 operations in total.

Within the reporting period, NBG experts examined a total of 26,364 suspicious banknotes submitted by the NBG cash desk, commercial banks, cash exchange and microfinance offices, and private individuals (Table N 8.1 shows the results of the examinations).

Table N 8.1

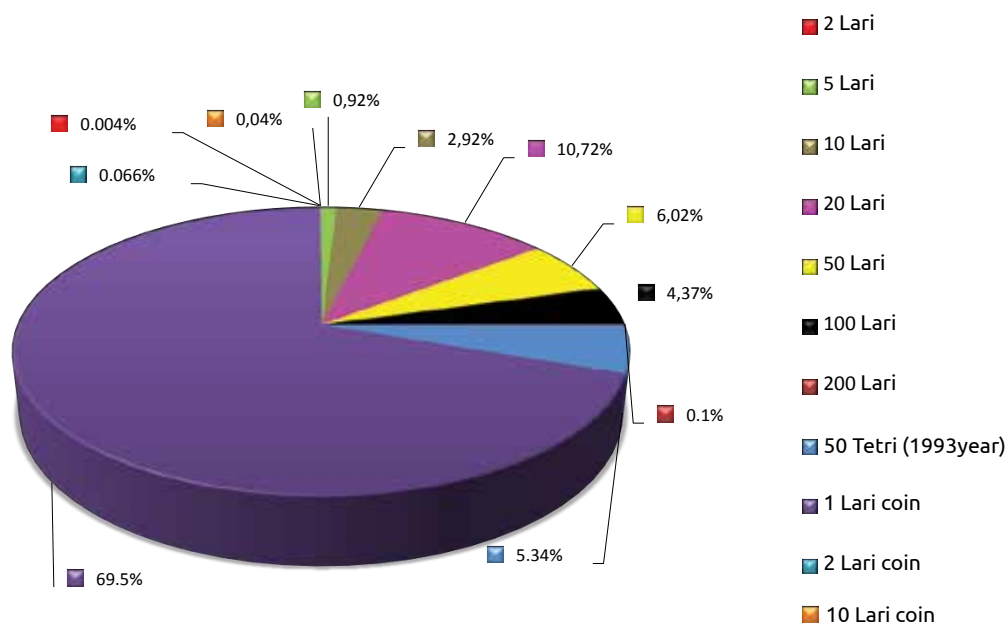
Examination results of suspicious banknotes and coins received by the NBG in 2016

	Suspicious	Counterfeit	Genuine	Non-redeemable
Lari notes	5 775	5 223	374	178
Lari coins	19 435	15 631	3 804	–
USD	869	707	162	–
EUR	142	116	26	–
Other foreign currency	143	127	16	–
Total	26 364	21 804	4 382	178

The share of counterfeit lari banknotes and coins removed from circulation in 2016 are shown in Diagram N 8.4.

Diagram N 8.4

Counterfeit lari banknotes and coins detected in 2016, by percent

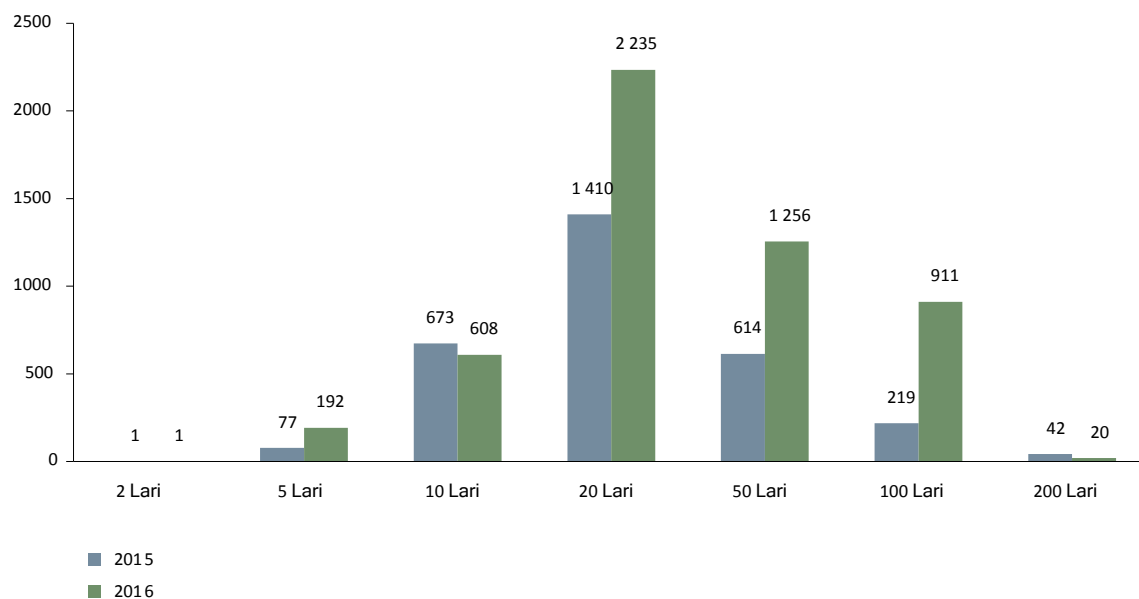


Source: National Bank of Georgia

The number of counterfeit lari banknotes detected during the reporting period increased by 1.7 times compared to 2015. As for foreign currency, the number of counterfeit euro banknotes detected increased 1.5 times and the number of counterfeit US dollar notes decreased 1.1 times. Other counterfeit foreign currency notes detected increased 1.3 times.

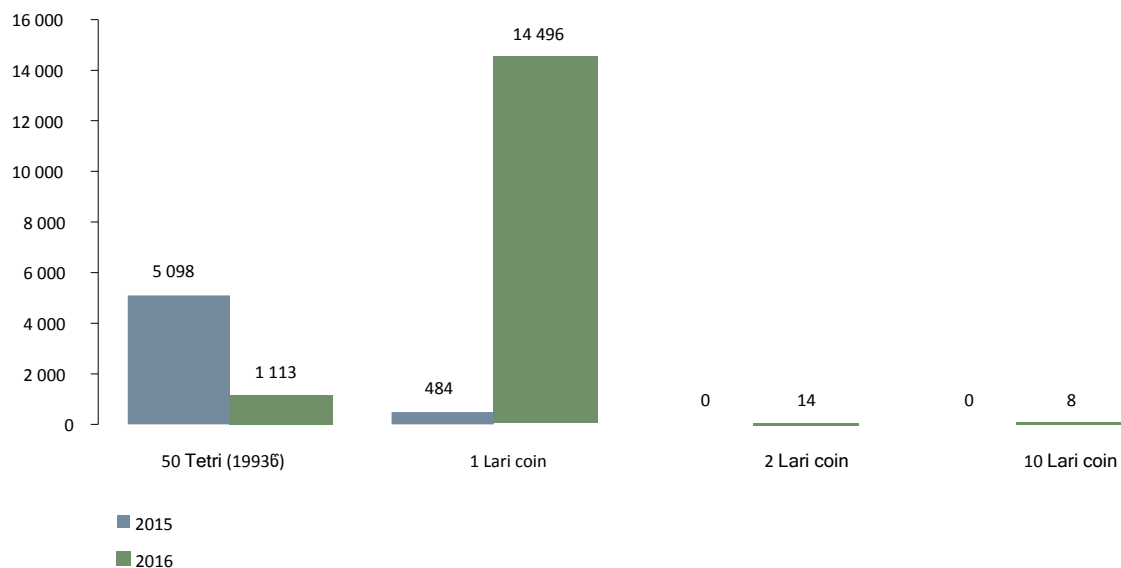
As regards counterfeit coins, the number of counterfeit 50 tetri coins detected decreased 4.6 times, while the number of 1 lari coins increased around 30 times (Diagrams N 8.5 and N 8.6 illustrate the number of counterfeit lari banknotes and coins revealed in 2015-2016).

Diagram N 8.5
Number of counterfeit lari banknotes revealed in 2015-2016



Source: National Bank of Georgia

Diagram N 8.6
Number of counterfeit coins revealed in 2015-2016



Source: National Bank of Georgia

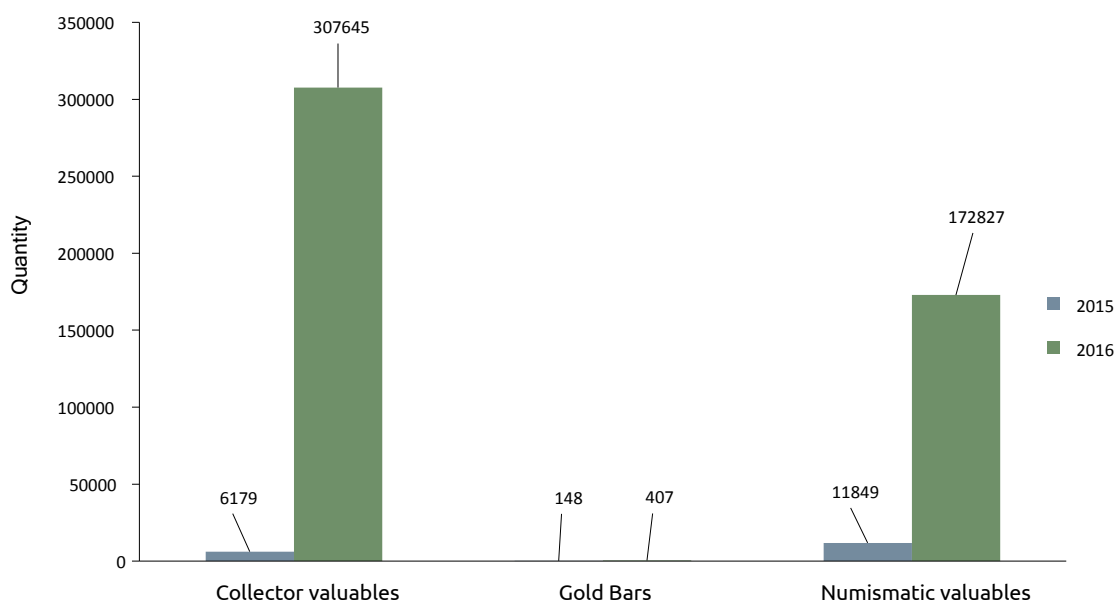
During 2016, the NBG provided methodological support to commercial banks, currency exchange bureaus, other legal entities and individuals regarding the enhancement of qualifications of personnel performing cash activities. In total, 741 persons were trained to improve their knowledge of currency authenticity and fitness checks, security features and 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. Total sales amounted to 480,879 pieces, which was 26.5 times higher than the same figure in 2015.

During the reporting period, revenues from the sale of these products amounted to 1 151 thousand

GEL which was 28.4% higher than in 2015. In total, 307,645 pieces of lari banknotes/coins worth 671 thousand GEL (including 241 pieces of gold investment coins worth 300 thousand GEL) were sold for collection purposes, which was 49.8 times more than had been sold in 2015. However, the amount of the revenue obtained from these sales was 10.5% lower than in the previous year. In addition, 407 pieces of gold bars (excluding gold certificate bars) worth 347.4 thousand GEL were sold, which was 3.1 times more than the amount received in 2015; some 172,827 pieces of numismatic and other products were sold worth 133 thousand GEL, which was 4 times more than the amount received in 2015 (Diagram N 8.7 shows the quantity of products sold in 2015-2016).

Diagram N 8.7
Investment, collector and numismatic products sold in 2015-2016



Source: National Bank of Georgia


In order to promote the history of Georgian money and raise public awareness of the main activities of the National Bank of Georgia, the NBG Museum of Money continued offering educational lectures to the public. Within the course of 2016, the museum received 3,823 visitors.

During the reporting period, 78 educational field trips were carried out in the NBG's Money Museum, which included an overview of Georgian numismatics and the viewing of artifacts. A total of 1,093 students and 85 teachers participated in lectures at the museum. In addition, two thematic lectures on the

"History of Georgian money and the functions and responsibilities of the National Bank of Georgia" were given for 38 students.

In May 2016, within the framework of the week celebrating the Independence of Georgia, the NBG's Money museum hosted an exhibition of young painters' work, which earned acclaim from visitors. Moreover, within the framework of a media tour organized by the National Bank of Georgia, representatives from the business media visited the Money Museum on 19 June 2016.



An aerial photograph of a theme park, likely Six Flags Great Escape & Great Escape II at Great Escape Resort in New York. The image shows a winding road, a parking lot with several vehicles, and a large, light-colored building with a distinctive roofline. A large white number '09' is overlaid on the image, with a small circular inset showing a yellow sphere, possibly a ride car or a ball, inside the number '9'.

09

INTERNAL AUDIT AND RISK MANAGEMENT

Internal Audit

Internal audit activities during the reporting period were aimed at implementation of the goals defined by the Strategy of Internal Audit for 2015-2018, which represents a set of consolidated objectives for the 3-year period and the ways of achieving them.

From the start of 2016, taking into account one of the main components of the Strategy, the Internal Audit Service introduced a new approach of Risk Based Internal Audit Planning, which puts greater focus on the expectations of stakeholders and gives the opportunity for a better concentration of Internal Audit resources on areas containing significant risks for the organization. The Risk Based Internal Audit assumes carrying out internal audit activities relying on the organization's risk map, which depends on the risk management "maturity" level. The process of planning included several steps: the grouping and classification of risks, their prioritization, and the creation of the Audit Universe. According to the Risk Based Internal Audit approach, and taking into account the 3-year audit cycle, a long-term orientation plan on assurance services was elaborated for the Business Audit Universe (42 auditees) and the IT Audit Universe (27 auditees).

Based on the long-term plan, an annual action plan for 2016 was worked out for auditees from both the Business and IT Audit Universes. The annual plan was agreed with the Audit Committee and approved by the Board of the National Bank of Georgia. According to the annual plan, within the framework of assurance activities, 36 audit engagements were conducted during the reporting year. As a result of those, assessments and appropriate recommendations on the adequacy of internal controls and compliance with regulatory requirements regarding audited processes were provided.

At the same time, the Internal Audit Service provided consulting services regarding certain issues and procedures in order to contribute to the devel-

opment of the risk management system within the organization.

During 2016, the Internal Audit Service carried out periodic follow up of recommendations provided by the Internal Audit and by various external parties.

In the reporting period, the Internal Audit Service also received the final report on the Full External Quality Assessment that was conducted in 2015 by experts from the Nederlandsche Bank. According to the results of the assessment, the Internal Audit Service of the NBG conforms to the International Standards for Internal Audit Professional Practice and the Code of Ethics.

It is also worth mentioning that, according to Strategy of the Internal Audit Service, a new project on the automatization of internal audit processes was initiated in 2016. The scope of this project also includes Centralized Risk Management processes. A significant part of the work envisaged by the project was carried out during the reporting year, and its completion is scheduled for 2017.

Continuous professional development is an important component of the Strategy of the Internal Audit Service. With this in mind, during 2016 internal auditors participated in various seminars and training events arranged by the central banks of different countries as well as international institutions.

Risk Management

The Centralized Risk Management Department has developed and implemented an integrated system of non-financial risk management. For this purpose, the department implemented a centralized risk management framework based on international standards and the experience of other central banks. During the reporting period, the department cooperated with the World Bank, the central banks of the Netherlands and Belgium, and with the International Operational Risk Working Group (IORWG).

A three lines of defense model is used to ensure the effectiveness of centralized risk management. Risk owner structural units represent the first line of defense, the Centralized Risk Management Department is the second line of defense and the Internal Audit Service is third line of defense.

In terms of extending and improving the framework of centralized risk management, an incident management system was implemented in the reporting period. The incident management system involves activities to identify, analyze, assess, monitor and report incidents. With the help of Key Risk Indicators (KRI), the system aims to detect any errors at the early stages and to identify appropriate responses for their elimination. In this regard, the structural units of the National Bank register incidents applicable to relevant KRIs in the centralized register, the monitoring of which is conducted by the Centralized Risk Management Department. The use of this tool made significant progress in the enhancement of the risk management framework and improved the risk management culture of the bank.

In 2016, the NBG's non-financial risk assessment showed that such risks are within an acceptable level and the minimization of risks has been achieved through existing controls.

In line with the latest international practice, business continuity is integrated with the operational risk management framework and, accordingly, with the centralized risk management framework of the National Bank of Georgia. It should be mentioned that during the reporting period, the scope of business continuity was extended and business supervision processes were incorporated.

In 2016, the Centralized Risk Management Department was involved in planning projects to be implemented throughout the National Bank. For the purpose of effectively monitoring the implementation process and its progress, the department developed a project management framework. In addition, the department was responsible for the renewal and improvement of the bank's internal procedures to support the minimization of non-financial risks.



An aerial photograph of a dense forest with thick mist or fog rising from the canopy, creating a layered, ethereal effect. The trees are dark green, and the mist is a pale, hazy grey. The overall mood is serene and mysterious.

10

PUBLIC RELATIONS
AND INTERNATIONAL
COOPERATION



Public Relations

As in previous years, dynamic communication with the public remained a high priority for the NBG. 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 NBG and their impact on the economy. To that end, in 2016 the National Bank of Georgia engaged in a new active communication strategy regarding its monetary policy.

The new strategy was reflected in press briefings that were held four times during the year, after Monetary Policy Committee meetings. The briefings not only clarified the decisions of the Monetary Policy Committee, but also ensured that the central bank responded to questions regarding the monetary policy, its instruments and decisions.

In order to guarantee maximum transparency and to inform society of current processes in the banking sector in a timely manner, the NBG promptly disseminated press releases and statistical data, conducted press conferences, briefings, conferences and seminars, presentations and held 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 NBG made efforts to ensure the accessibility of information on current trends in the money and FX markets, to express its opinion 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 NBG publishes a "Monthly Review", a quarterly "Inflation Report", as well as various statistical data and Monetary Policy Committee press releases. Additionally, in 2016 the NBG prepared and printed the "Annual Report of the National Bank of Georgia, 2015". The NBG published four issues of the scientific-analytical magazine "Economics and Banking", offering papers and articles on various topical issues. The NBG also produced a new publication, "Legal Regulations", which is a collection of normative acts on the activities of the NBG and the financial sector. Electronic versions of the NBG's publications are available on the bank's official website: www.nbg.gov.ge/index.php?m=308.

International Cooperation

The year 2016 was vital from the perspective of international cooperation, with the NBG hosting several high-level international meetings.

On 4-6 May, the National Bank of Georgia, with the support of the European Bank for Reconstruction and Development (EBRD) and the consulting company OGREsearch, hosted an international forum. The main issues discussed during the forum were monetary policy and the development of its instruments. The forum was attended by the members of the NBG and representatives of the central banks



of Armenia, Kyrgyzstan and Mongolia. The forum's main focus was to enhance monetary policy communication, but participants also discussed the case of the NBG to examine how an inflation-targeting central bank can cope with an external shock in a small economy; and discussed monetary policy formulation and policy communication. Participants also discussed different approaches of how monetary policy communication could be enhanced, using the cases of Mongolia and Kyrgyzstan.

In February 2016, a delegation from the Central Bank of Armenia (CBA) visited the National Bank of Georgia in order to study reforms made in the direction of banking supervision, as well as to exchange experience. The supervisors of the CBA reviewed the main principles and framework of the risk-based supervisory approaches implemented by the NBG. Interest towards the NBG's supervisory approaches rose considerably after the joint mission of the International Monetary Fund and the World Bank published rather positive conclusions within the framework of the Financial Sector Assessment Program (FSAP).

It is noteworthy that in 2016 the Basel Committee on banking supervision once again invited the National Bank of Georgia to develop new international supervisory approaches. The Basel Core Committee's Supervision and Implementation Group works

on implementing advanced approaches in international supervisory policy, with the principles that it develops constituting international standards. The National Bank of Georgia, along with representatives from leading supervisory institutions, has been working in this group to develop international principles for determining prudential norms for asset quality review since 2014. In 2016, the NBG became a member of a working group on stress-tests. The first meeting of this working group was held in New York on 21 June. Representatives from the European Central Bank, as well as those from supervisory institutions of the United States, Canada, Australia, Japan and other developed countries participated in the meeting.

Throughout the accounting period, the National Bank of Georgia hosted a further event to review supervisory approaches. Within the framework of the regional capacity development program, the International Monetary Fund Technical Assistance Center for East Africa (IMF East AFRITAC) arranged a visit of representatives from the Bank of Uganda to share experience of reforms in macroprudential supervision. During this visit, Georgian specialists shared the analytical framework and their experience with their Ugandan counterparts.

The year was also crucial for the development of the Georgian capital market. Koba Gvenetadze, Gov-



ernor of the National Bank of Georgia, and Bruno Balvanera, EBRD Director for the Caucasus, Moldova and Belarus, held a joint briefing on 17 June and stated that the EBRD had placed its bonds on the Georgian Stock Exchange. The first public bond of 107 million GEL is linked to the three-month certificate of deposit rate issued by the NBG. The initial coupon is 6.45%, for the three-month period after the NBG's certificate of deposit auction. This is the third successful bond issuance in lari for the Eurobank. The process is managed by JSC "Galt & Taggart." After the auction procedures, the bond will be listed on the Georgian Stock Exchange. Since the EBRD's inaugural private placement of the first ever domestic lari bond by an international financial institution ("IFI") on the local market in March 2014, the EBRD has been working with regulators, and in particular with the NBG, to introduce regulatory changes to take account its supranational structure and to recognize the specificities of an IFI, ensuring that all requirements for public offerings in the domestic market can be met, including the listing of bonds on the Georgian Stock Exchange.

The National Bank of Kazakhstan (NBK) expressed interest in the successful and unique Cash Centre project of the NBG. The Cash Center opened in 2012 and is the only center in the former Soviet space equipped with modern safety technologies in com-

pliance with European standards. The delegation from the NBK, which was led by Deputy Governor Dina Galieva, visited the Cash Center, where the NBG shared their experience. During the visit, the representatives of the Cash Center provided information about establishing the Cash Centre, its operations and other important aspects that would be beneficial for a country seeking implement its own center. On 6 April 2016, the National Bank of Georgia, with the support of the International Capital Markets Association (ICMA) and the financial support of FrontClear, held an international seminar regarding repo transactions and the Global Market Repurchase Agreement (GMRA). Representatives from commercial banks in Georgia, brokerage companies and leading law firms attended the two-day seminar. Representatives from financial institutions received detailed information about the repo market structures, the trends of the market, and the legal and operational aspects of the repo agreement. They also discussed types of repo transactions and discussed its business environment. The working seminar was led by a Professor from Reading University and a Senior Fellow at the ICMA.

The year was also significant in terms of enhancing financial education. The National Bank of Georgia engaged in a campaign to increase financial education in the country. On 29 July, with the support of

the German Savings Banks Foundation for International Cooperation (SBFIC), the NBG organized an international conference “Financial Literacy for Financial Wellbeing” in Tbilisi. The participants of the conference reviewed the National Strategy for Financial Education in Georgia, which aims to enhance the level of financial literacy in Georgia. A high level of financial literacy is a precondition for the financial well-being of the population and for the protection of consumer rights. International experts were in consultation with the NBG while developing the strategy.





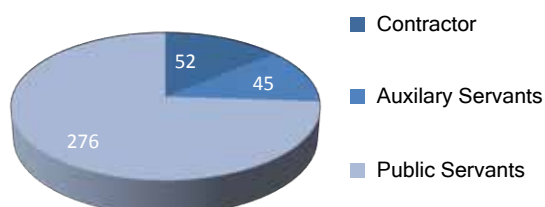
11

HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT

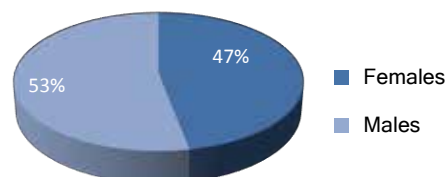


Statistical information on the number of employees:

By the end of 2016, the NBG employed 364 individuals, 45 contractors, 52 auxiliary servants and 276 public servants.



The average age of the employees is 40 and 90% of employees have a higher education degree; of the total number of employees, 47% are female and 53% are male.



Cooperation with higher education institutions

Every year, the NBG 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 NBG took on 40 interns, of whom sixteen subsequently became NBG employees.

At the same time, the NBG provides summer internship opportunities for Georgian students who study abroad. The objective of these is to increase the interest of these students toward the NBG, so that after graduating they might decide to return to Georgia and apply their knowledge. During 2016, five such students enrolled in the internship program.

Employee's professional experience

During 2016, the NBG continued to take care of its employees' professional development. A total of 125 NBG 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, 32 NBG employees were trained in Georgian educational institutions.

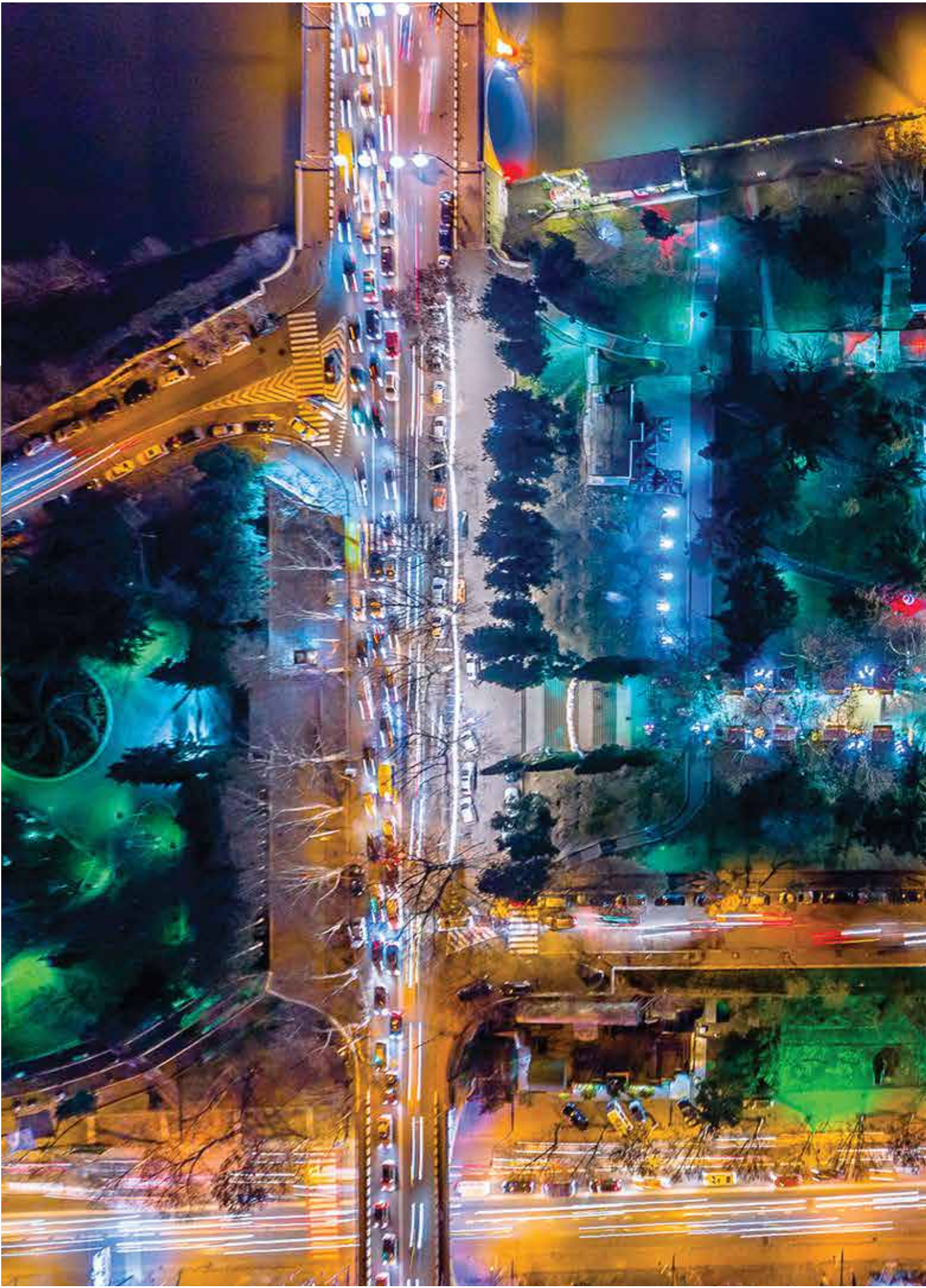
An English language course was held at the National Bank of Georgia in 2016 and was attended by 21 NBG employees. Furthermore, internal training sessions were carried out at the National Bank throughout the year to share accumulated knowledge and experience with interested employees. A business continuity seminar was also carried out for all NBG employees. Naturally, managing business continuity is a priority issue in any organization with critical systems and operations, like the National Bank of Georgia. At the seminar, employees learned how the NBG should work in an uninterrupted way during unexpected, non-standard or critical situations. At the same time, practical testing of pre-developed scenarios was carried out – such testing being an important prerequisite for detecting shortfalls.

To achieve a more effective working environment and increase the motivation of its employees, the NBG encourages additional team building. With this

in mind, throughout the year various sporting and social activities were conducted.

Professional development of financial sector employees

The NBG also supports the professional development of banking sector employees. To that end, in February, April and October 2016, experts from the Luxembourg Financial Technology Transfer Agency conducted three seminars at the NBG, which were attended by 70 employees from the NBG and commercial banks.





During the reporting period, the normative acts of the National Bank of Georgia were further developed and renewed.

In 2016, involvement of the National Bank of Georgia resulted in amendments to the Civil Code of Georgia and the Organic Law on the National Bank of Georgia. According to amendments made to the Organic Law on the National Bank of Georgia, any entrepreneur who makes an offer or advertisement of services or the realization of property on the territory of Georgia, must make such an offer or advertisement in Georgian lari. Whereas the amendments to the Civil Code of Georgia establish a set of requirements for granting loans (bank credit).

During the analytical period, 35 draft normative acts of the NBG were prepared and officially published on the website of the official Legislative Herald of Georgia. These normative acts included, but were not limited to, the following:

1. Order N1/04 of the Governor, dated 6 January 2016, "On approving the rule on disclosure of necessary information to the customer during performance of payment services." The main objective of this rule is to provide customers with terms of payment services and to achieve full transparency so that they have capacity to make conscious decisions. The rule lists the forms of information to be provided during the provision of payment services. The payment system provider is under duty to provide true and accurate information to the customer.
2. Order N18/04 of the Governor, dated 23 February 2016, "On the approval of methodological guideline on implementation of electronic signature." The objective of this order is to ensure that during the provision of the services by commercial banks the

use of electronic signatures is compliant with requirements of the security policy agreed with the National Bank of Georgia. This guideline is drafted in compliance with the requirements of Georgian legislation as well as the relevant regulations of EU. The guideline is based on the technical, procedural and quality requirements of electronic identification, authentication and signature (eIAS), established by relevant EU regulations.

3. In 2016, certain regulations were made on the procedure for completing reports and providing information on the supervision of microfinance organizations, brokerage companies and security registrars regarding risks of financing of illicit crime and terrorism. The new provisions introduce the concept of distance supervision of risks and the assessment of the adequacy of internal control systems. Based on the findings resulting from such supervision, the NBG will use relevant supervisory measures where appropriate.

The National Bank of Georgia, in cooperation with the European Bank for Reconstruction and Development, continued the project to develop the derivatives market in Georgia. The project's objective is to create a proper legal and business environment for the development of money markets. One of the outcomes of the project is to bring Georgian legislation into compliance with recognized best international practice.

During the year, the NBG prepared a draft law on "Financial Collateral, Netting and Derivatives," together with draft packages for other legislations that will ensure the enforceability of derivatives, netting and financial collateral agreements.

During the reporting period, a new project was launched on the taxation of financial instruments by the National Bank of Georgia, the Ministry of Finance of Georgia and the Ministry of Economy and Sustainable Development of Georgia. This project is conducted with close cooperation and assistance from the International Monetary Fund. The objective of the project is to create a tax policy for the taxation of financial instruments, which will be transparent and compliant with best international practice. The

NBG is actively involved in drafting these provisions. In 2016, the NBG commenced its reforms on capital market legislation, the primary objective of which is to perform obligations envisaged in the respective chapter of the EU-Georgia Association Agreement. After the completion of the project, the capital market legislation of Georgia will be compliant with the relevant EU directives and regulations. This project is conducted with the assistance of the Asian Development Bank (ADB).





STATISTICAL ACTIVITY



During 2016, the NBG has continued to implement new statistical products.

The statistical business process has been improved and extended, with the development of a data warehouse and the automation of data collection, processing, quality control and publication alongside interested departments.

After implementing the new statistical information system, SebStat, data quality and the efficiency of data processing significantly increased. In 2016, more than 10 million records were reported in the database, from which more than 6,800 time series were published. However, the SebStat system remains capable of providing much more information to users and these features will be enhanced and made available in 2017.

During the year, significant steps were taken in compiling the financial account. In particular, the following accounts were compiled:

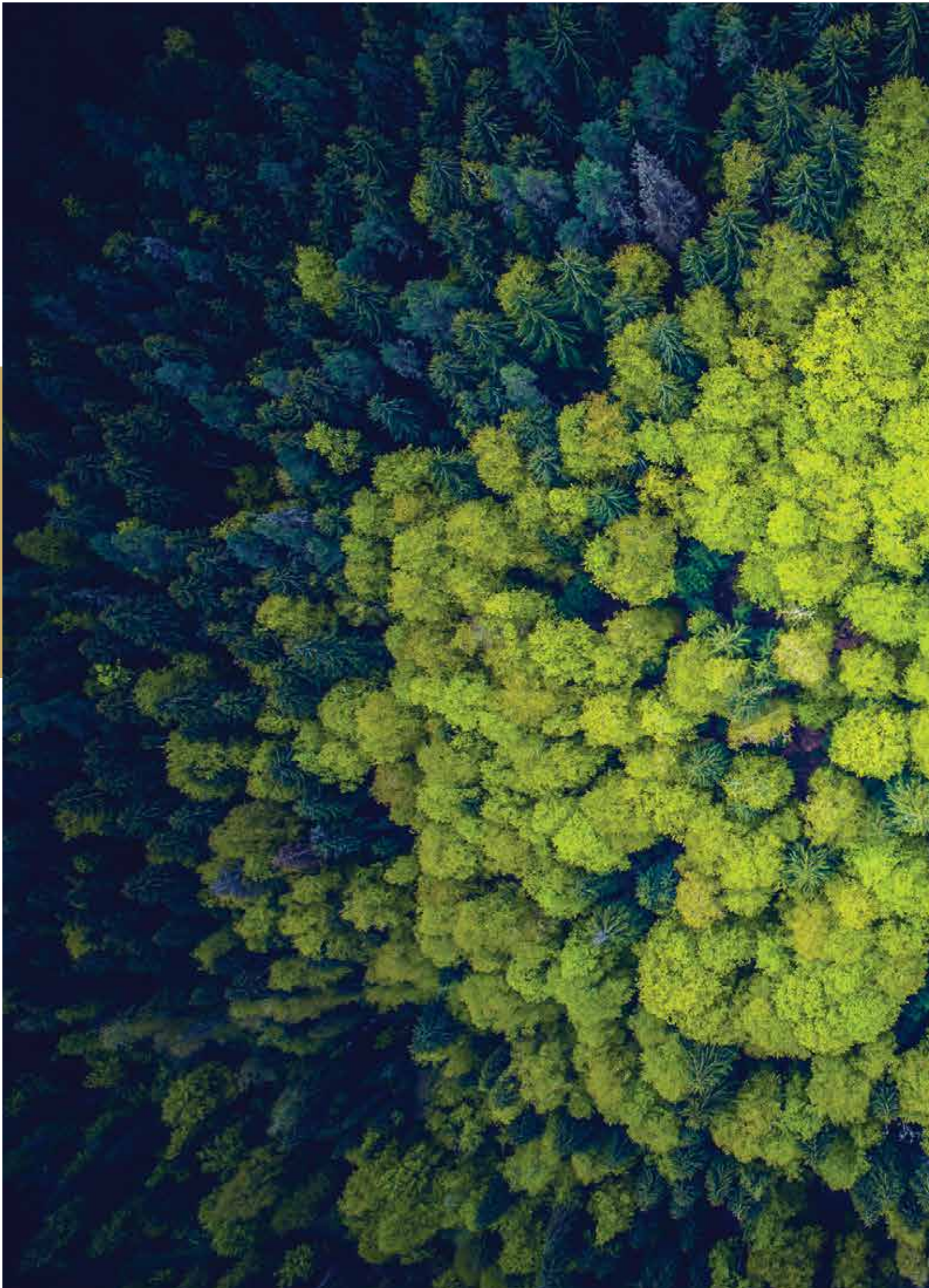
- Flow-of-funds of the central bank (Stocks, transactions).
- Flow-of-funds of other depository corporations (stocks, transactions).
- Flow-of-funds of other financial corporations (stocks, transactions).

In addition, the following experimental accounts were compiled:

- From whom-to-whom matrix.
- Flow-of-funds of non-financial corporations, households and NPISHs (stocks, transactions).
- During the IMF technical mission (of October 2016), a revaluation and other changes in the volume of assets account for the central bank and other depository corporations were compiled.

It should be mentioned that while compiling the experimental accounts, the need for additional sources of information was clearly visible. Further work with the National Statistics Office of Georgia and with the State Treasury of the Ministry of Finance is required. The National Statistics Office of Georgia was actively involved in compiling the financial account for non-financial sectors during the IMF technical mission, which was an important step for improving the quality of the flow-of-funds for those sectors.







14

FINANCIAL STATEMENTS

FOR THE YEAR ENDED
31 DECEMBER 2016

TABLE OF CONTENTS

STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016	179
INDEPENDENT AUDITORS' REPORT	180-181
FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016:	
Statement of profit or loss and other comprehensive income	182-183
Statement of financial position	184-185
Statement of changes in equity	186
Statement of cash flows	187
Notes to the financial statements	188-227

NATIONAL BANK OF GEORGIA

STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016

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 2016, 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 2016 were authorized for issue on 12 April 2017 by the Council of the Bank.

On behalf of the Council of the Bank:



Chairman of the Council
Koba Gvenetadze

12 April 2017
Tbilisi, Georgia



Head of Finance and Accounting Department
Salome Skhirtladze

12 April 2017
Tbilisi, Georgia



KPMG Georgia LLC
2nd Floor, Besiki Business Centre
4, Besiki Street
0108 Tbilisi, Georgia
Telephone +995 322 93 5713
Fax +995 322 98 2276
Internet www.kpmg.ge

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 2016, 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 2016, 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), and we have fulfilled our other ethical responsibilities in accordance with 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 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 financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

KPMG Georgia LLC, a company incorporated under the Laws of Georgia, a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner on the audit resulting in this independent auditors' report is:

Karen Safaryan

KPMG Georgia LLC
Tbilisi, Georgia
18 April 2017

NATIONAL BANK OF GEORGIA

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2016

(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-16	Year ended 31-Dec-15
Interest income			
International reserves management			
Due from international financial institutions		4,445	1,934
Trading securities		3,357	1,174
Investments available-for-sale		28,707	20,513
Other		400	232
		<u>36,909</u>	<u>23,853</u>
Monetary policy operations			
Due from resident financial institutions		63,716	59,552
Investments available-for-sale		13,269	8,989
		<u>76,985</u>	<u>68,541</u>
Other interest income			
Investments held-to-maturity		37,982	24,227
Other		28	49
		<u>38,010</u>	<u>24,276</u>
Total interest income		151,904	116,670
Interest expense			
Monetary policy operations			
Debt securities issued		(18,283)	(24,846)
Due to resident financial institutions		(15,362)	(12,127)
		<u>(33,645)</u>	<u>(36,973)</u>
Other interest expenses			
Due to International Monetary Fund		(605)	(517)
Total interest expense		(34,250)	(37,490)
NET INTEREST INCOME		117,654	79,180
Recovery of impairment on other assets	18	80	92
NET INTEREST INCOME AFTER IMPAIRMENT PROVISION		117,734	79,272
Net gains/(losses) from foreign currencies:			
-translation differences		380,937	700,237
-dealing		(457)	(258)
Fee and commission income	4	1,651	1,577
Fee and commission expense	4	(1,492)	(1,585)
Net gain on realised available-for-sale financial assets		3,875	2,321
Net loss on financial instruments at fair value through profit or loss		(2,888)	(553)
Net unrealized gain/(loss) on financial instruments at fair value through profit or loss		1,464	(1,817)
Other income	5	1,321	1,620
NON-INTEREST INCOME		384,411	701,542

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.

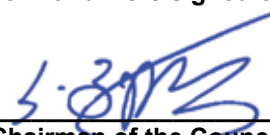
NATIONAL BANK OF GEORGIA


STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2016 (CONTINUED)

(in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-16	Year ended 31-Dec-15
Personnel expenses	6	(15,057)	(13,453)
General and administrative expenses	6	(6,488)	(9,336)
Money printing expenses		(3,782)	(11,134)
Depreciation and amortization	6	(4,550)	(5,426)
Loss on disposal of property and equipment		(49)	(5)
Other expenses		(112)	(33)
NON-INTEREST EXPENSES		(30,038)	(39,387)
PROFIT FOR THE YEAR		472,107	741,427
Other comprehensive income			
<i>Items that are or may be reclassified subsequently to profit or loss:</i>			
Net unrealized gain/(loss) on revaluation of available-for-sale investments during the year		1,179	(15,705)
Net realized gain/(loss) on available-for-sale investments reclassified to profit or loss		16,938	(1,124)
Total other comprehensive income/(loss)		18,117	(16,829)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		490,224	724,598

The financial statements as set out on pages 188 to 227 were approved by management on 12 April 2017 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Salome Skhirtladze

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 2016

(in thousands of Georgian Lari)

	Notes	31-Dec-16	31-Dec-15
ASSETS:			
Foreign currency assets			
International reserves			
Cash and cash equivalents	7	1,543,384	1,541,161
Special Drawing Rights holdings with the International Monetary Fund	9	512,592	478,230
Assets related to derivative instruments	10	-	3,204
Trading securities	11	671,242	577,474
Investments available-for-sale	12	4,568,521	3,440,021
Other foreign currency assets			
Other assets	18	205	65
		7,295,944	6,040,155
National currency assets			
Monetary policy instruments			
Due from resident financial institutions	8	1,756,140	1,067,000
Investments available-for-sale	12	143,660	101,617
Other national currency assets			
Investments held-to-maturity	13	362,804	401,914
Investment property	14	2,500	2,544
Property and equipment	16	52,320	54,828
Intangible assets	17	437	1,248
Other assets	18	6,433	6,086
		2,324,294	1,635,237
TOTAL ASSETS		9,620,238	7,675,392

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 2016 (CONTINUED) (in thousands of Georgian Lari)

	Notes	31-Dec-16	31-Dec-15
LIABILITIES AND EQUITY:			
LIABILITIES:			
Foreign currency liabilities			
Monetary policy instruments			
Due to resident financial institutions	19	2,766,331	1,717,245
Other foreign currency liabilities			
Due to resident financial institutions	19	133,603	273,349
Due to the Ministry of Finance	20	250,708	261,914
Due to the International Monetary Fund	9	527,299	524,010
Other liabilities	18	1,954	2,472
		3,679,895	2,778,990
National currency liabilities			
Money issued in circulation	21	2,999,323	2,503,735
Monetary policy instruments			
Debt securities issued	23	197,240	353,397
Due to resident financial institutions	19	510,973	453,832
Other national currency liabilities			
Due to the Ministry of Finance	20	747,074	591,464
Due to customers	22	2,711	777
Due to the International Monetary Fund	9	1,695	1,252
Other liabilities	18	7,633	8,475
		4,466,649	3,912,932
TOTAL LIABILITIES		8,146,544	6,691,922
EQUITY:			
Capital	24	15,000	15,000
Reserve fund	24	141,648	51,942
Foreign currency revaluation reserve	24	1,310,776	929,839
Revaluation reserve of investments available-for-sale	24	4,806	(13,311)
Other revaluation reserve	24	1,464	-
TOTAL EQUITY		1,473,694	983,470
TOTAL LIABILITIES AND EQUITY		9,620,238	7,675,392

The financial statements as set out on pages 188 to 227 were approved by management on 12 April 2017 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Salome Skhirtladze

The statement of financial position is to be read in conjunction with the notes to, and forming part of, the financial statements.

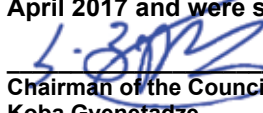
NATIONAL BANK OF GEORGIA

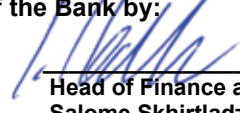
STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2016

(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-15	15,000	10,373	229,602	379	3,518	-	258,872
Total comprehensive income							
Profit for the year	-	-	-	-	-	741,427	741,427
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	-	-	-	-	(15,705)	-	(15,705)
Net realized loss on available-for-sale investments reclassified to profit or loss	-	-	-	-	(1,124)	-	(1,124)
Total other comprehensive income	-	-	-	-	(16,829)	-	(16,829)
Total comprehensive income for the year	-	-	-	-	(16,829)	741,427	724,598
Transactions recorded directly in equity							
Transfer to reserve fund (Note 24)	-	41,569	-	-	-	(41,569)	-
Transfer to foreign currency revaluation reserve (Note 24)	-	-	700,237	-	-	(700,237)	-
Transfer from other revaluation reserve (Note 24)	-	-	-	(379)	-	379	-
Total transactions recorded directly in equity	-	41,569	700,237	(379)	-	(741,427)	-
31-Dec-15	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	-	16,938
Net realized gain on available-for-sale investments reclassified to profit or loss	-	-	-	-	16,938	-	1,179
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 24)	-	89,706	-	-	-	(89,706)	-
Transfer to foreign currency revaluation reserve (Note 24)	-	-	380,937	-	-	(380,937)	-
Transfer to other revaluation reserve (Note 24)	-	-	-	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

The financial statements as set out on pages 188 to 227 were approved by management on 12 of April 2017 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Salome Skhirtladze

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 2016 (in thousands of Georgian Lari)

	Notes	Year ended 31-Dec-2016	Year ended 31-Dec-2015
CASH FLOWS FROM OPERATING ACTIVITIES:			
Interest received		166,573	139,328
Interest paid		(31,375)	(30,535)
Fees and commissions received		1,651	1,577
Fees and commissions paid		(1,492)	(1,585)
Net loss on financial instruments at fair value through profit or loss		2,888	553
Net realized loss from dealing in foreign currencies		(457)	(258)
Other income received		1,271	1,248
Personnel expenses paid		(15,057)	(13,453)
Cash paid for printing money		(3,782)	(11,134)
Other general and administrative expenses paid		(6,859)	(9,323)
Cash flow from operating activities before changes in operating assets and liabilities		113,361	76,418
<i>Net (increase)/decrease in operating assets:</i>			
Due from resident financial institutions		(687,996)	(353,364)
Special Drawing Rights holdings with the International Monetary Fund		(642)	2,001
Assets related to derivative instruments		3,204	(369)
Trading securities		(31,007)	26,773
Other assets		531	(1,761)
<i>Net increase/(decrease) in operating liabilities:</i>			
Money issued in circulation		495,591	41,624
Due to resident financial institutions		610,715	63,708
Due to the Ministry of Finance		117,001	211,126
Due to customers		1,934	(269)
Other liabilities		(295)	(212)
Net cash inflow from operating activities		622,397	65,675
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment		(1,155)	(246)
Purchase of intangible assets		(81)	(156)
Purchase of investments available-for-sale		(7,447,250)	(5,492,000)
Proceeds from redemption of investments available-for-sale		6,819,506	5,090,795
Net cash used in investing activities		(628,980)	(401,607)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Debt securities issued		505,560	1,017,863
Debt securities redeemed		(664,145)	(1,172,143)
Repayment of amounts due to the International Monetary Fund		(31,770)	(48,141)
Net cash used in financing activities		(190,355)	(202,421)
Effect of exchange rates changes on cash and cash equivalents		199,161	354,486
Net increase/(decrease) in cash and cash equivalents		2,223	(183,867)
CASH AND CASH EQUIVALENTS, at the beginning of the year	7	1,541,161	1,725,028
CASH AND CASH EQUIVALENTS, at the end of the year	7	1,543,384	1,541,161

The financial statements as set out on pages 188 to 227 were approved by management on 12 of April 2017 and were signed on behalf of the Council of the Bank by:


Chairman of the Council
Koba Gvenetadze


Head of Finance and Accounting Department
Salome Skhirtladze

The statement of cash flows is to be read in conjunction with the notes to, and forming part of, the financial statements.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (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 functions are carried out as part of the broad functions described below.

Monetary policy

The main objective of the monetary policy of the National Bank of Georgia 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 is ensuring 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, 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 the Government payments in national currency.

Governance

As at 31 December 2016 and 2015, the members of the Council of the Bank are:

Position	Name (2016)	Name (2015)
Chairman	Mr. Koba Gvenetadze (Governor)	Mr. Giorgi Kadagidze (Governor)
Member	Mr. Archil Mestvirishvili	Mr. Archil Mestvirishvili
Member	Mr. Murtaz Kikoria	Mr. Otari Nadaraia
Member	Mr. Robert H. Singletary	Mr. Lasha Jugeli
Member	Mr. Nikoloz Gongliashvili	Mr. Nikoloz Gongliashvili
Member	Mr. Vazha Jankarashvili	Mr. Vazha Jankarashvili
Member	Mr. Nikoloz Kavelashvili	Mr. Nikoloz Kavelashvili

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

The Bank's main office is located at 2 Sanapiro, Tbilisi, 0114, Georgia. As at 31 December 2016 and 2015 the Bank has one cash service center. The Bank has 364 and 339 personnel as at 31 December 2016 and 2015, 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. The presentation principle according to the latter concept has been first applied in 2014.

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, 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016

(in thousands of Georgian Lari)

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 and time deposit accounts including overnight deposits and amounts due from financial institutions 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. 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

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 - World Bank and 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 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 28.

Derivative financial instruments

The Bank uses interest rate futures contracts on overseas exchanges to manage interest rate risk on its portfolio of foreign securities. An interest rate futures contract is a contract to buy or sell a specific amount of securities for a specific price on a specific future date.

Interest rate futures positions are classified under IAS 39 as 'at fair value through profit or loss'. 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 balance 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 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. The Georgian Government bond is classified as HTM.

Investments available-for-sale

Investments available for sale financial assets are non-derivatives 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, except for impairment losses, foreign exchange gains or losses on debt financial instruments available-for-sale and interest income accrued using the effective interest method, which 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 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

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

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.

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 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.

Allowance for impairment losses on financial assets

An asset is impaired if its carrying amount is greater than its estimated recoverable amount.

(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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

(b) Financial assets carried at fair value

The Bank assesses whether there is objective evidence that available for sale financial asset carried at fair value is impaired at each reporting date. In the case of equity investments classified as available-for-sale, 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 for available-for-sale financial assets, 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 a subsequent periods, the fair value 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 equity 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.

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 bars are recognised as current expenses when produced and reflected in the statement of profit or loss and other comprehensive income.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

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.

Assets held for sale

A non-current asset is classified as held for sale if it is highly probable that the asset's carrying amount will be recovered through a sale transaction rather than through continuing use and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification of an asset as held for sale.

Non-current assets held for sale are measured at the lower of its carrying amount and fair value less costs to sell. If the fair value less costs to sell of an asset held for sale is lower than its carrying amount, an impairment loss is recognised in the statement of profit or loss and other comprehensive income as loss from non-current assets held for sale. Any subsequent increase in an asset's fair value less costs to sell is recognized in total comprehensive income to the extent of the cumulative impairment loss that was previously recognised in relation to that specific asset.

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

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

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 Law assets, property and income of the Bank, as well as its activities and operations are exempted from all taxes and other levies.

Contingencies

Contingent liabilities are not recognised in the statement of financial position but are disclosed unless the possibility of any outflow in settlement is remote. A contingent asset is not recognised in the statement of financial position but disclosed when an inflow of economic benefits is probable.

Recognition of income and expense

Revenue is recognised 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.

Once 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 recognized 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

Differences between the contractual exchange rate of a transaction in a foreign currency and the Bank's exchange rate on the date of the transaction are included in net gains (losses) from dealing in foreign currencies.

Rates of exchange

The exchange rates used by the Bank in the preparation of the financial statements as at year-end are as follows:

	31-Dec-16	31-Dec-15
GEL/1 US Dollar	2.6468	2.3949
GEL/1 Euro	2.7940	2.6169
GEL/1 Australian Dollar	1.9128	1.7478
GEL/1 Canadian Dollar	1.9636	1.7263
GEL/1 Special Drawing Right	3.5582	3.3187

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. Information about significant areas of estimation

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

uncertainty and critical judgments in applying accounting policies is described in the Note 28 Fair value of financial instruments.

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.

(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.

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 recognize 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'). 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 defaulted are considered to be in stage 2; and financial assets that are in default or otherwise 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, resulting in increased volatility in profit or loss. It will also tend to result in an increased impairment allowance, since all financial assets will be assessed for at least 12-month ECL and 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.

Calculation of expected credit losses is likely to be based on the following approach: Probability of default multiplied by loss given default and multiplied by exposure at default (at least for some portfolios), depending on the type of the exposure, stage at which the exposure is classified under IFRS 9, collective or individual assessment, etc.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

(ii) 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 does not intend to adopt the standard earlier.

Currently the Bank is in the process of development of IFRS 9 implementation plan, finalizing IFRS 9 framework and expected credit loss model for International reserve and monetary policy portfolios.

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 2017. The 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-16	Year ended 31-Dec-15
Fee and commission income:		
Funds transfer	1,641	1,568
Other	10	9
Total fee and commission income	1,651	1,577
Fee and commission expense:		
Fees paid to external manager	(964)	(949)
Custodian and Settlement Fees	(495)	(509)
Cash operations	(33)	(127)
Total fee and commission expense	(1,492)	(1,585)

The Bank owns and manages a real-time gross settlement system, which is an interbank payment system for national currency settlement operations. Funds transfer represents the billing fees paid by the participants (except for the Ministry of Finance of Georgia) for settlement transactions.

5. OTHER INCOME

Other income comprises:

	Year ended 31-Dec-16	Year ended 31-Dec-15
Revenue from grant received	624	1,084
Other	697	536
Other income	1,321	1,620

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

6. OPERATING EXPENSES

Operating expenses comprise:

	Year ended 31-Dec-16	Year ended 31-Dec-15
Salaries and bonuses	14,131	12,515
Paid vacation and sick leave	926	938
Total personnel expenses	15,057	13,453
Subscription to information services	1,515	1,278
Software maintenance fees	766	729
Utilities	736	781
Social benefit expenses	636	520
Business travel and related expenses	356	357
Repairs and maintenance	324	377
Advertisement expenses	319	382
Legal and consultancy	317	452
Security	305	305
Personnel training	197	138
Fuel expenses	177	197
Communications	67	55
Office supplies	19	19
Expenses related to EBRD event in Tbilisi.	-	3,000
Other	754	746
Total general and administrative expenses	6,488	9,336
Depreciation charge (Notes 14, 16)	3,658	4,004
Amortization charge (Note 17)	892	1,422
Total depreciation and amortization	4,550	5,426

7. CASH AND CASH EQUIVALENTS

	31-Dec-16	31-Dec-15
Cash on hand in foreign currencies	364,876	331,819
Current accounts	270,290	180,105
Time deposits with credit institutions up to 90 days	908,218	1,029,237
Total cash and cash equivalents	1,543,384	1,541,161

No cash and cash equivalents are impaired or past due.

As at 31 December 2016 and 2015, GEL 1,171,173 thousand and GEL 1,170,939 thousand, respectively, was placed in current accounts and time deposits up to ninety days with nine (eight in 2015) internationally recognised banks and central banks from the Organization of Economic Co-operation and Development member countries (OECD).

As at 31 December 2016 and 2015, annual interest rate range of time deposits with financial institutions up to 90 days was 0.73%-1.75% and 0.24%-2.23%, respectively.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

8. DUE FROM RESIDENT FINANCIAL INSTITUTIONS

Due from financial institutions as at 31 December 2016 and 2015 comprise:

	31-Dec-16	31-Dec-15
Due from resident financial institutions		
Refinancing loans	1,300,472	1,020,000
One-month open market instrument	400,655	-
Overnight loans	55,013	47,000
Total due from financial institutions in national currency	1,756,140	1,067,000

Refinancing loans are the Bank's Monetary Policy instruments that are issued to Georgian commercial banks for liquidity purposes and have 7 days maturity. In December 2016, the Bank introduced a new Monetary Policy Instrument – one-month open market instrument. Similar to refinancing loans, through this new policy instrument the Bank supplies short-term liquidity to the Georgia's banking system when needed

As at 31 December 2016 and 2015, the Bank had a concentration of refinancing loans of GEL 1,240,450 thousand due from three resident commercial banks at annual interest rates of 6.57%-6.65%, and GEL 862,200 thousand due from four resident commercial banks at annual interest rates of 9.07%-9.50%, respectively. As at 31 December 2016 the concentration of one-month open market operations was GEL 385,630 thousand due from three resident commercial banks at annual interest rates of 6.57%-6.71% (2015: nil).

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 by the resident or non-resident legal entities in accordance with the "Law of Georgia on Securities Market", denominated in Lari; d) claims to eligible loan assets of commercial banks; e) Foreign currency Deposits in the Bank; In special cases, the Council of National 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. 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 2016 and 2015 types and fair values of financial assets collateralizing due from resident financial institutions are:

	31-Dec-16	31-Dec-15
Government securities (treasury bills/notes)	1,282,975	721,976
Loan portfolio of commercial banks	298,309	97,333
Debt securities issued by the Bank (certificates of deposits)	15,284	91,467
Bonds issued by International Financial Institutions, denominated in GEL:		
European Bank for Reconstruction and Development (EBRD)	132,000	75,000
Black Sea Trade and Development Bank (BSTDB)	108,000	48,000
Asian Development Bank (ADB)	64,000	100,000
International Finance Corporation (IFC)	27,700	27,700
Corporate bonds	4,450	-
	1,932,718	1,161,476

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

9. SPECIAL DRAWING RIGHTS HOLDINGS WITH THE INTERNATIONAL MONETARY FUND

Balances with the International Monetary Fund ("IMF") comprise:

	31-Dec-16	31-Dec-15
Assets:		
Special Drawing Rights (SDR) holdings	512,592	478,230
Liabilities:		
IMF current accounts		
Current account # 1	1,663	1,220
Current account # 2	32	32
	1,695	1,252
Borrowings from the IMF		
Poverty Reduction and Growth Facility (PRGF)	14,882	46,210
General SDR allocation	396,687	369,888
Special SDR allocation	115,730	107,912
	527,299	524,010
Total due to the IMF	528,994	525,262
Off-balance sheet balances:		
IMF Quota	665,269	488,150
Security held in custody in respect of IMF quota and as collateral of IMF granted facilities	(916,528)	(746,725)

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 2016 and 2015 is 0.050%-0.273% and 0.050%-0.055%, 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 PRGF loan with a carrying amount of GEL 14,882 thousand with original maturity of 10 years bearing an initial interest rate of 0.5% per annum issued for the purpose of poverty reduction and macroeconomic stability. The PRGF-ECF (Extended Credit Facility) Trust borrows resources from central banks, governments, and official institutions generally at market-related interest rates, and lends them on a pass-through basis to PRGF-eligible countries. There is no such trust for other IMF granted facilities. On 10 December 2014 the IMF Executive Board extended through to 31 December 2016, the interest waiver for PRGF-ECF facilities that was introduced on 7 January 2010. Projected interest charges for 2017 and 2018 was defined at 0%. The IMF Executive Board will review did not make any changes to the interest rates for all PRGF ECF facilities by the end of 2016 and it remained 0%. The PRGF-ECF borrowing is expected to be fully repaid in 2017.

All facilities received from the IMF are denominated in SDR.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

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 2016 and 2015 is 0.050%-0.273% and 0.050%-0.055%, respectively.

IMF Quota

The IMF Quota of Special Drawing Rights of 210,400 thousand, represents the membership subscription of Georgia with the IMF, and is non-interest bearing. On December 15, 2010, the Board of Governors of IMF, the Fund's highest decision-making body, completed the 14th General Review of Quotas, which became effective on January 26, 2016, involved a package of far-reaching reforms of the Fund's quotas and governance. Under this reform package on February 11, 2016 the quota of Georgia increased from 150,300 thousand SDR to 210,400 thousand SDR. 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 National Bank of Georgia is a fiscal agent between republic of Georgia and 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 from GEL 665,269 thousand, in respect of the IMF quota and GEL 251,259 thousand, held in custody as collateral for the IMF granted facilities. 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

	31-Dec-16	Notional principal 31-Dec-16	31-Dec-15	Notional principal 31-Dec-15
Interest rate futures				
Futures margin	-	-	4,523	
Interest futures assets	-	-	-	52,338
Interest futures liabilities	-	-	(1,319)	(1,804,797)
Net interest futures position	-	-	(1,319)	(1,752,459)
Total derivative financial assets	-	-	3,204	(1,752,459)

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

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 3 month Eurodollar time deposit with notional amount of USD 1 million. When trading Eurodollar futures, the Bank is facing the credit risk only of the clearing house, where purchases and sales of Eurodollar futures offset one another.

The Bank is taking positions in Eurodollars for hedging purposes, by means of buying/selling US Treasuries or Spread Products (Agency and Supranational Securities) and entering opposite positions of corresponding amounts of Eurodollar Futures, matching the risk (duration and curve). The main purpose of such strategies is to reduce the portfolio's exposure to interest rate risks and express a view on credit spreads.

Eurodollar futures held in the Bank's portfolio are not held for trading purposes, i.e. the Bank is not going to make profits from favorable movements in their prices. As of year end 2016, the Bank had no outstanding Futures contract.

11. TRADING SECURITIES

Trading securities comprise:

	31-Dec-16	31-Dec-15
Funds managed under the World Bank RAMP* program		
Government securities		
US Treasury Notes	233,255	306,786
Kingdom of Belgium	-	2,401
	233,255	309,187
Supranational securities		
European Investment Bank, Luxembourg	16,186	5,979
Asian Development Bank, Manila	10,606	4,785
African Development Bank, Abidjan	5,300	-
Council of Europe Development Bank, Paris	-	4,848
	32,092	15,612
Agency securities		
Landeskreditbank Baden-Wuerttemberg Foerderbank	25,285	10,229
FMS Wertmanagement, Munich	24,914	3,595
Kreditanstalt fuer Wiederaufbau, Frankfurt	24,126	20,674
Svensk Exportkredit AB, Stockholm	21,508	11,972
Caisse Des Depots et Consignations, Paris	21,310	16,813
Kommunalbanken AS, Oslo	21,192	10,532
Bank Nederlandse Gemeenten, Den Hague	19,892	15,443
Caisse D'Amortissement de la Dette Sociale, Paris	19,650	8,170
NRW Bank, Düsseldorf	15,978	4,790
Erste Abwicklungsanstalt, Düsseldorf	12,742	8,152
Landwirtschaftliche Rentenbank, Frankfurt	12,065	-
Kommunekredit, Copenhagen	10,677	4,792
Neder Waterschapsbank, The Hague	10,614	2,640
Municipality Finance PLC, Helsinki	7,429	-
Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden NV, Hague	5,563	6,467
Kommuninvest I Sverige AB, Orebro	5,305	-
Nordic Investment Bank, Helsinki	5,302	-
State of North Rhine-Westphalia, Düsseldorf	5,291	2,147
British Columbia	3,715	2,653
Province of Ontario Canada, Toronto	-	3,609
	272,558	132,678
Total funds managed under the World Bank RAMP program	537,905	457,477

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

Funds managed by BIS**

BISIP_K	133,337	119,997
Total trading securities	671,242	577,474

* Funds managed under the RAMP program corresponds to the outsourcing of the management of a portion of the 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 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-16		31-Dec-15	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Government securities	0.5%-1.0%	2017	0.25%-1.125%	2016 - 2018
Supranational securities	0.875%-1.625%	2017-2018	1.625%-2.625%	2016 - 2020
Agency securities	0.625%-5.125%	2017-2020	0.5%-2.625%	2016 - 2020

No financial assets at fair value through profit or loss are past due or impaired.

12. INVESTMENTS AVAILABLE-FOR-SALE

	31-Dec-16	31-Dec-15
Investments available-for-sale in foreign currency:		
Government securities		
US Treasury Notes	3,114,646	1,929,279
Australian Treasury Bills	493,658	-
Canada Government Bond	187,850	162,421
France Treasury Note	18,483	57,084
Austria Government Bond	4,389	4,282
Finland Government Bond	2,852	10,225
Australia Government Bond	-	376,691
Germany Government Bond	-	36,771
Netherlands Government Bond	-	18,344
	3,821,878	2,595,097
Supranational securities		
African Development Bank	69,052	-
Inter-American Development Bank	48,568	21,881
International Finance Corporation	28,985	26,116
European Investment Bank	26,497	73,358
IBRD World Bank	-	106,548
Asian Development Bank	-	13,587
EUROFIMA, Basel	-	11,977
	173,102	253,467

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

	31-Dec-16	31-Dec-15
Agency securities		
Landeskreditbank Baden-Wuerttemberg Foerderbank	178,701	95,851
Kreditanstalt fuer Wiederaufbau, Frankfurt	70,752	76,926
Bank Nederlandse Gemeenten, Den Hague –Netherlands	66,332	58,971
Kommuninvest I Sverige AB, Orebro	65,484	38,161
Neder Waterschapsbank, Hague	61,074	131,101
NRW Bank, Düsseldorf	60,885	114,779
Kommunekredit, Copenhagen	37,942	-
New South Wales Treasury Corp-Australia	23,292	-
Province of Ontario Canada, Toronto	5,007	26,957
Landwirtschaftliche Rentenbank, Frankfurt	4,072	12,034
Kommunalbanken AS, Oslo	-	24,704
Svensk Exportkredit AB, Stockholm	-	11,973
	573,541	591,457
Total investments available-for-sale in foreign currency	4,568,521	3,440,021
Marketable government securities in national currency		
Georgian Government Bonds	143,660	101,617
Total investments available-for-sale in national currency	143,660	101,617

Analysis of interest rates (coupon) and maturities on investment available-for-sale:

	31-Dec-16		31-Dec-15	
In foreign currency:	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Government Bonds	0.25%-6.0%	2017-2020	0.25%-6.0%	2016-2020
Supranational Bonds	0.875%-3.75%	2017-2020	0.5%-6.0%	2016-2020
Agency Bonds	0.625%-6.25%	2017-2019	0.44%-6.0%	2016-2020
In national currency:				
Government Bonds	7.3%-14.375%	2017-2021	7.3%-9.125%	2016-2020

No financial assets available for sale are past due or impaired.

13. INVESTMENTS HELD-TO-MATURITY

	31-Dec-16		31-Dec-15	
	Carrying value	Nominal value	Carrying value	Nominal value
Georgian Government securities				
Georgia Government Bonds	362,804	360,846	401,914	400,846
Total investments held-to-maturity in national currency	362,804	360,846	401,914	400,846

Analysis of interest rate (coupon) and maturity of the held to maturity investment:

	31-Dec-16		31-Dec-15	
	Interest rate p.a.	Maturity	Interest rate p.a.	Maturity
Georgian Government Bonds	11.51%	2017-2025	5.92%	2016-2025

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

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

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

	2016	2015
Cost		
As at 1 January	2,632	2,217
Transferred from assets held for sale	-	415
As at 31 December	2,632	2,632
Accumulated depreciation		
As at 1 January	(88)	(44)
Depreciation charge	(44)	(44)
As at 31 December	(132)	(88)
Net book value as at 31 December	2,500	2,544

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. During 2015, property classified as assets held for sale of GEL 415 thousand was reclassified to Investment Property (Note 15) as it was not expected to be realized within twelve months after the year then ended.

15. ASSETS HELD FOR SALE

	2016	2015
Beginning balance at 1 January	-	415
Transfer from/to investment property	-	(415)
Ending balance at 31 December	-	-

16. PROPERTY AND EQUIPMENT

	Land and buildings	Computers, office equipment and fixtures	Vehicles and other	Total
At initial cost:				
1-Jan-2015	51,755	7,223	15,184	74,162
Additions	36	130	80	246
Disposals	-	(191)	(1)	(192)
31-Dec-15	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
Accumulated depreciation:				
1-Jan-15	(2,118)	(3,499)	(9,998)	(15,615)
Depreciation charge	(1,031)	(1,041)	(1,888)	(3,960)
Disposals	-	186	1	187
31-Dec-15	(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)
Net book value:				
As at 31 December 2016	47,574	2,943	1,803	52,320
As at 31 December 2015	48,642	2,808	3,378	54,828

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

17. INTANGIBLE ASSETS

	Software	Licenses	Total
At cost:			
1-Jan-15	6,922	260	7,182
Additions	113	43	156
31-Dec-15	7,035	303	7,338
Additions	79	2	81
Disposals	-	(2)	(2)
31-Dec-16	7,114	303	7,417
Accumulated amortization:			
1-Jan-15	(4,612)	(56)	(4,668)
Charge for the year	(1,369)	(53)	(1,422)
31-Dec-15	(5,981)	(109)	(6,090)
Charge for the year	(891)	(1)	(892)
Disposals	-	2	2
31-Dec-16	(6,872)	(108)	(6,980)
Net book value			
31-Dec-16	242	195	437
31-Dec-15	1,054	194	1,248

18. OTHER ASSETS AND LIABILITIES

	31-Dec-16	31-Dec-15
Other assets in foreign currency:		
Prepayments	171	60
Other debtors	34	5
Total other assets in foreign currency	205	65
Other assets in national currency:		
Commemorative gold coins and gold bars	4,335	4,804
Loans to employees	519	755
Inventory	465	508
Prepayments	1,249	446
Other debtors	254	107
	6,822	6,620
Allowance for impairment of other assets	(389)	(534)
Total other assets in national currency	6,433	6,086

As at 31 December 2016 and 2015, other financial assets amount to GEL 417 thousand and GEL 333 thousand, respectively.

The movements in allowance for impairment losses on other assets were as follows:

	Allowance for impairment of other assets
1-Jan-15	(663)
Net impairment recovery	92
Write-offs	37
31-Dec-15	(534)

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

Net impairment recovery	80
Write-offs	65
31-Dec-16	(389)

Allowance for impairment losses on other assets represents allowance for impairment of loans to employees. Employees of the Bank 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-16	31-Dec-15
Other liabilities in foreign currency:		
Amounts due to suppliers	1,954	2,472
Total other liabilities in foreign currency	1,954	2,472
Other liabilities in national currency:		
Amount due to suppliers	5,716	5,724
Liability for realized banknotes and coins	1,518	1,488
Deferred revenue	11	636
Other liabilities	388	627
Total other liabilities in national currency	7,633	8,475
Total other liabilities	9,587	10,947

As at 31 December 2016 and 2015, other financial liabilities amount to GEL 9,308 thousand and GEL 10,260 thousand, respectively.

19. DUE TO RESIDENT FINANCIAL INSTITUTIONS

Due to resident financial institutions comprise:

	31-Dec-16	31-Dec-15
Due to resident financial institutions under monetary policy instruments		
Correspondent accounts in national currency	505,972	453,832
Overnight deposits in national currency	5,001	-
Total due to resident financial institutions under monetary policy instruments in local currency	510,973	453,832
Obligatory reserves of banks in foreign currency	2,766,331	1,717,245
Total due to resident financial institutions under monetary policy instruments	3,277,304	2,171,077
Due to resident financial institutions, other		
Correspondent accounts in foreign currency	133,603	273,349
Total due to resident financial institutions, other	133,603	273,349
Total due to resident financial institutions	3,410,907	2,444,426

As at 31 December 2016 and 2015 included in due to resident financial institutions is a balance with the three largest local commercial banks of GEL 2,195,475 thousand and GEL 1,718,216 thousand, that exceed 64.37% of the total balance due to resident financial institutions.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

Resident commercial banks are required to maintain obligatory reserves with the Bank. As at 31 December 2016 the obligatory reserves are calculated as 7% of their eligible liabilities denominated in national currencies (2015: 10%), and 20% of their eligible liabilities denominated in foreign currencies (2015: 15%). For foreign currency liabilities with a remaining maturity of 1-2 years the reserve requirement amounts to 10% (2015: 5%). As at 31 December 2016 and 2015 annual interest rate on GEL denominated obligatory reserves is 6.5% and 8.0%, respectively. As at 31 December 2016 the USD and EUR denominated obligatory reserves are 0.25% and – 0.40%, respectively, and nil in 2015. 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.

20. DUE TO THE MINISTRY OF FINANCE

	31-Dec-16	31-Dec-15
Due to the Ministry of Finance		
Current accounts in foreign currency	250,708	261,914
Current account in national currency	747,074	591,464
Total due to the Ministry of Finance of Georgia	997,782	853,378

21. MONEY ISSUED IN CIRCULATION

Money issued in circulation represents the amount of national currency of Georgia issued by the Bank. Movements during the year ended 31 December 2016 and 2015 are as follows:

	2016	2015
Balance as at 1 January	2,503,735	2,462,111
Banknotes issued into circulation	4,994,573	4,479,460
Coins issued into circulation	60,452	64,876
Banknotes withdrawn from circulation	(4,509,488)	(4,445,195)
Coins withdrawn from circulation	(49,949)	(57,517)
Balance as at 31 December	2,999,323	2,503,735

22. DUE TO CUSTOMERS

Due to customers comprise:

	31-Dec-16	31-Dec-15
International financial institutions	2,711	777

23. DEBT SECURITIES ISSUED

	Interest rate p.a.	Maturity	Nominal value	Carrying value
Certificates of deposit as at 31-Dec-16	6.46%-6.99%	5 Jan-15 June, 2017	200,000	197,240
Certificates of deposit as at 31-Dec-15	8.16%-10.36%	8 Jan-16 June, 2016	360,000	353,397

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

24. 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 2016 and 2015.

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 are 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 is entitled to take a decision on the distribution of the reserve fund. Upon establishment of the reserve fund, the residual balance of realised profit of the Bank shall be transferred to the State Budget of Georgia.

In 2016 and 2015 Bank transferred GEL 89,706 thousand and GEL 41,569 thousand, respectively, to the reserve fund.

Foreign currency and other revaluation reserves

According to the Article 25(a) of the Law, the Bank transfers net unrealized gains from foreign currency revaluation to the foreign currency revaluation reserve and net unrealized gains arising from changes of the FVTPL financial assets' market prices are transferred to the revaluation reserve created for this purpose.

During 2016 the entire amount of unrealized gain on foreign currencies translation of GEL 380,937 thousand was transferred to the foreign currency revaluation reserve (2015: GEL 700,237 thousand). During 2015 the Bank transferred GEL 379 thousand from other revaluation reserve back to retained earnings while in 2016 GEL 1,464 thousand was transferred from retained earnings to other revaluation reserve created for this purpose.

Revaluation reserve for investments available-for-sale

This reserve records fair value changes of investments available-for-sale.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

25. 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 2016 and 2015 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 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.

Operating lease commitments

No material lease commitments were outstanding as at 31 December 2016 and 2015.

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 2016 and 2015, 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,

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

there is a risk that the loss or destruction of certain assets could have adverse effect on operations and financial position.

26. 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 of 31 December 2016, the fair value of the securities lent was GEL 2,077,786 thousand (2015: nil).

As of 31 December 2016, the fair value of collateral provided in securities lending transactions was as follows:

	31-Dec-16	31-Dec-15
Debt securities of foreign governments	1,777,507	-
Debt securities of foreign financial institutions	280,704	-
Debt securities of foreign non-financial corporations	51,674	-
	2,109,885	-

27. 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.

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 2016		Year ended 31 December 2015	
	Related party transactions	Total category as per the financial statements caption	Related party transactions	Total category as per the financial statements caption
Key management personnel compensation:				
- short-term employee benefits	(2,673)	(15,057)	(2,644)	(13,453)

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

		31-Dec-16		31-Dec-15	
	Note	Related party balances	Total category as per the financial statements caption	Related party balances	Total category as per the financial statements caption
Statement of financial position					
Assets:					
Investments available-for-sale in national currency		143,660	143,660	101,617	101,617
- Government of Georgia	12	143,660		101,617	
Investments held-to-maturity in national currency		362,804	362,804	401,914	401,914
- Government of Georgia	13	362,804		401,914	
Loans to employees		66	519	124	755
- Key management personnel	18	66		124	
Liabilities:					
Due to the Ministry of Finance		997,782	997,782	853,378	853,378
- Government of Georgia	20	997,782		853,378	
Year ended 31 December 2016				Year ended 31 December 2015	
		Related party transactions	Total category as per the financial statements caption	Related party transactions	Total category as per the financial statements caption
Statement of profit or loss and other comprehensive income					
Interest income		51,259	151,904	33,230	116,670
- Government of Georgia		51,251		33,216	
- Key management personnel		8		14	
Loss on disposal of property and equipment		-	(49)	-	(3)

28. FAIR VALUE OF FINANCIAL INSTRUMENTS

IFRS defines fair value as the price that would be received to sell an asset or paid to transfer a liability in orderly transactions between market participants at the measurement date.

Fair value of the Bank's financial instruments measured at fair value on a recurring basis

Some of the Bank's financial instruments are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets are determined (in particular, the valuation techniques and inputs used).

Financial instruments measured at fair value are broken down for disclosure purposes into a three level fair value hierarchy based on the observability of inputs:

- Quoted prices in an active market (**Level 1**) – Valuations based on quoted prices in active markets that the Bank has the ability to access for identical assets or liabilities. Valuation adjustments and block discounts are not applied to these financial instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuations of these products do not require a significant amount of judgment. This level entails financial instruments under international reserve portfolio and classified as derivative financial instruments, trading securities and investments available-for-sale. The instruments are valued on daily bases, based on the bid prices obtained from the 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:

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

- interest rates and yield curves observable at commonly quoted intervals;
- implied volatilities; and
- credit spreads;
- d) 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 Georgian Government. For fair value assessment, a discount 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 2016 and 2015, 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-16	31-Dec-15	Fair value hierarchy	Valuation techniques and key inputs	
International reserves						
Derivative financial assets	10	-	3,204	Level 1	Quoted bid prices in an active market	N/A
Trading securities	11	671,242	577,474	Level 1	Quoted bid prices in an active market	N/A
Investments available-for-sale	12	4,568,521	3,440,021	Level 1	Quoted bid prices in an active market	N/A
Monetary policy instruments						
Investments available-for-sale	12	143,660	101,617	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 2016 and 2015.

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 2016.

Fair value of financial assets and financial liabilities that are not measured at fair value on a recurring bases (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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

29. RISK MANAGEMENT

Introduction

The activities of the Bank are exposed to various risks. These include financial risks in the form of market, credit, and liquidity risks. It is also exposed to operational risks. Due to its unique role and functions, the Bank's risk management and control are not based simply on institutional risk and return considerations, but also take into account national interest, in line with its statutory responsibilities prescribed in relevant legislation. The Bank views risk management and control as an integral part 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 key risks and reviewing its risk management policies and procedures; however, there are separate business units responsible for managing and monitoring the various risks.

First line of defense: Departmental management

Risk management and internal control are an integral part of the Bank's management and accountability function. Depending on the structure of operations, the risk management in the Bank is conducted by a centralised and non-centralised method. Departmental management carries the primary responsibility for the ongoing identification, assessment and management of risks in their respective departments, including designing, implementing and maintaining an adequate and effective system of control.

Second line of defense: Integrated risk management functions

The National Bank of Georgia identified risk management activities as a strategic priority and the Centralized risk management department was established in November 2014. The department is accountable to the Governor. However, the day-to-day risk management (financial, non-financial) still resides at department level, but overall responsibility for coordinated, comprehensive and systematic management is provided by the Centralized Risk Management Department. The department ensures that risks are identified, assessed and mitigated within the framework that is consistent to standards and approaches of best international risk management activities.

Third line of defense: Internal Audit

Risk management processes throughout the Bank are audited regularly by Internal Audit that examines both the adequacy of the procedures and the Bank's compliance with the procedures. Internal Audit discusses the results of all assessments with management, and reports its findings and recommendations to the Chairman of the Council.

Organization of risk management department

Nature of risk	Management	Guidelines	Supervision
		policies issued by	
Financial risks	At department level	Monetary policy committee	Board
		International reserve management committee	
Non-financial risk	At department level	Centralized risk management department	Internal Audit, Audit Committee

Centralized Risk Management at the Bank

Risk management is a fully integrated process in activities and responsibilities of the Bank and is provided by the centralised risk management department. The department ensures the effective and efficient risk management implementation across the bank and is accountable directly to the Governor.

The three lines of defense model supports the clear allocation of roles and responsibilities for business departments, risk management and internal audit. According to this model, the first line of defense (the

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

Bank's departments) have a responsibility to assess the risks related to their processes, put in place appropriate controls and implement additional internal controls if required. The second line of defense (Centralized Risk management department) assists individual departments to manage their risk environment effectively within the approved framework, facilitates and coordinates all risk processes and provides business continuity support. Internal Audit represents the third line of defense and ensures the effectiveness and adequacy of credit risk management system. The abovementioned roles and responsibilities are formalised in Centralised risk management policy and framework. The process itself is comprehended all over the Bank (see non-financial risks).

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.

The table below shows the maximum exposure to credit risk for the components of the statement of financial position.

	Notes	Maximum Exposure 31-Dec-16	Maximum exposure 31-Dec-15
Foreign currency assets			
International Reserves			
Cash and cash equivalents (excluding cash on hand)	7	1,178,508	1,209,342
Special Drawing Rights holdings with the International Monetary Fund	9	512,592	478,230
Assets related to derivative instruments	10	-	3,204
Trading securities	11	671,242	577,474
Investments available-for-sale	12	4,568,521	3,440,021
Other foreign currency assets			
Other financial assets	18	34	5
National currency assets			
Monetary policy instruments			
Due from financial institutions	8	1,756,140	1,067,000
Investments available-for-sale	12	143,660	101,617
Other national currency assets			
Investments held-to-maturity	13	362,804	401,914
Other financial assets	18	383	328
Total credit risk exposure		9,193,884	7,279,135

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 conservative bases to facilitate these objectives, with an emphasis on liquidity and capital preservation. For instance the Bank's Investment Guidelines prioritizes the preservation of capital and a high level of liquidity of reserves. Once these conditions are met, return is to be maximized.

The portfolio is managed in line with investment guidelines approved by the Council. The Reserve Management Committee (the "Committee") of the Bank is responsible for monitoring and implementation of risk mitigation measures prescribed in the investment guidelines and making sure that the Bank operates

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

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.

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.

Credit risk

Credit risk is the risk that one party will incur a loss because the other party failed to comply with its financial obligations.

a) Financial instruments under 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 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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

The table below provides information on credit ratings of financial instruments within the international reserve portfolio:

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

As at 31 December 2015	Notes	AAA	AA+	AA	AA-	A+	A	A-	Total
Foreign currency assets									
International reserves									
Cash and cash equivalents (excluding cash on hand)	7	567,376	-	-	189,259	263,609	188,628	470	1,209,342
Special Drawing Rights holdings with the International Monetary Fund	9	478,230	-	-	-	-	-	-	478,230
Assets related to derivative instruments	10	-	-	-	-	3,204	-	-	3,204
Trading securities	11	514,572	31,909	27,384	3,609	-	-	-	577,474
Investments available-for-sale	12	3,212,969	143,011	57,084	26,957	-	-	-	3,440,021
Total international reserves		4,773,147	174,920	84,468	219,825	266,813	188,628	470	5,708,271

b) *Financial instruments under 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 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 2016				
	Notes	Neither past due nor impaired AAA grade	B grade	Total
Foreign currency assets				
Other financial assets	18	-	34	34
National currency assets				
Monetary policy instruments				
Due from 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	18	-	383	383
Total		2,262,604	417	2,263,021

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

	Notes	As at 31 December 2015		Total
		Neither past due nor impaired AAA grade	B grade	
Foreign currency assets				
Other financial assets	18	-	5	5
National currency assets				
Monetary policy instruments				
Due from financial institutions	8	1,067,000	-	1,067,000
Investments available-for-sale	12	101,617	-	101,617
Other national currency assets				
Investments held-to-maturity	13	401,914	-	401,914
Other financial assets	18	-	328	328
Total		1,570,531	333	1,570,864

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.

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (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 for these financial assets and liabilities outside of Georgia:

As at 31 December 2016	Notes	US	EU*	Australia	Canada	International	Other	Total
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 International Monetary Fund	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								
As at 31 December 2015								
Assets:								
International reserves								
Cash and cash equivalents (excluding cash on hand)	7	143,533	663,891	17	192,096	198,795	11,010	1,209,342
Special Drawing Rights holdings with the International Monetary Fund	9	-	-	-	-	478,230	-	478,230
Assets related to derivative instruments	10	3,204	-	-	-	-	-	3,204
Trading securities	11	306,786	128,817	-	6,262	135,609	-	577,474
Investments available-for-sale	12	1,929,279	691,206	376,691	189,378	253,467	-	3,440,021
		2,382,802	1,483,914	376,708	387,736	1,066,101	11,010	5,708,271
Liabilities:								
Due to the International Monetary Fund	9	-	-	-	-	525,262	-	525,262
		2,382,802	1,483,914	376,708	387,736	540,839	11,010	5,183,009

*EU-including Norwegian agency securities.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (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 the 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 2016 and 2015 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 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	18	34	-	34
Total foreign currency assets		6,930,897	-	6,930,897
Foreign currency liabilities				
Due to resident financial institutions	19	2,899,934	-	2,899,934
Due to the Ministry of Finance	20	250,708	-	250,708
Due to the International Monetary Fund	9	522,380	4,981	527,361
Other liabilities	18	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

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

As at 31 December 2015	Notes	Less than 3 months	3 to 12 months	1 to 5 years	Total
Foreign currency assets					
International Reserves					
Cash and cash equivalents (excluding cash on hand)	7	1,209,342	-	-	1,209,342
Special Drawing Rights holdings with the International Monetary Fund	9	478,230	-	-	478,230
Assets related to derivative instruments	10	3,204	-	-	3,204
Trading securities	11	577,474	-	-	577,474
Investments available-for-sale	12	3,440,021	-	-	3,440,021
Other foreign currency assets					
Other financial assets	18	5	-	-	5
Total foreign currency assets		5,708,276	-	-	5,708,276
Foreign currency liabilities					
Due to resident financial institutions	19	1,990,594	-	-	1,990,594
Due to the Ministry of Finance	20	261,914	-	-	261,914
Due to the International Monetary Fund	9	487,092	23,231	13,939	524,262
Other liabilities	18	2,472	-	-	2,472
Total foreign currency liabilities		2,742,072	23,231	13,939	2,779,242
Net Position		2,966,204	(23,231)	(13,939)	2,929,034

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.

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.

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016

(in thousands of Georgian Lari)

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

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. The bank measures interest rate risk for its tranches based on 1% change terms in interest rates, which indicates a change in a fair market value of financial instruments per 1% change in market yields.

The market yield sensitivity of the Bank's International Reserve tranches

The table shows the sensitivity of reserve tranches to 1% increase or decrease in market yields to the asset values.:

Currency	2016		2015	
	Increase in Market Yield	Sensitivity of asset value	Increase in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	(5,932)	1%	(5,346)
Investment Tranche in EUR	1%	(217)	1%	(489)
Investment Tranche in AUD	1%	(3,091)	1%	(2,943)
Investment Tranche in CAD	1%	(1,014)	1%	(1,083)
Liquidity Tranche in USD	1%	(1,570)	1%	(1,061)
Working Capital Tranche in USD	1%	(255)	1%	(438)

Currency	2016		2015	
	Decrease in Market Yield	Sensitivity of asset value	Decrease in Market Yield	Sensitivity of asset value
Investment Tranche in USD*	1%	6,075	1%	5,534
Investment Tranche in EUR	1%	226	1%	507
Investment Tranche in AUD	1%	3,186	1%	3,030
Investment Tranche in CAD	1%	1,042	1%	1,113
Liquidity Tranche	1%	1,593	1%	1,075
Working Capital Tranche	1%	261	1%	445

* Investment Tranche in USD* does not include interest rate exposure of externally managed portfolio;

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 (in thousands of Georgian Lari)

b) Financial instruments under monetary policy portfolio

For open-market operations, this risk is mainly associated with changes in the market value of Georgian government bonds, and the change in value of collaterals received in liquidity injection transactions. For collaterals the risk of value loss is mitigated by using margins and haircuts that write-down their value and allow the effective amount lent to be lower than the collateral received.

The interest rate sensitivity of the Bank's financial assets and liabilities

Interest rate risk arises from the possibility that changes in interest rates will affect future cash flows or the fair value of financial instruments. The following table demonstrates the net effect of 1% change in interest rates, with all other variables held constant, of the Bank's statement of profit or loss taking into account the effect of derivatives.

Currency	2016		2015	
	Increase in interest rate	Sensitivity of net interest income	Increase in interest rate	Sensitivity of net interest income
USD	1%	28,309	1%	27,864
SDR	1%	(147)	1%	(460)
EUR	1%	(740)	1%	329
AUD	1%	5,338	1%	4,569
CAD	1%	2,224	1%	1,904
GEL	1%	16,419	1%	12,188
Other	1%	53	1%	112

Currency	2016		2015	
	Decrease in interest rate	Sensitivity of net interest income	Decrease in interest rate	Sensitivity of net interest income
USD	1%	(28,309)	1%	(27,864)
SDR	1%	147	1%	460
EUR	1%	740	1%	(329)
AUD	1%	(5,338)	1%	(4,569)
CAD	1%	(2,224)	1%	(1,904)
GEL	1%	(16,419)	1%	(12,188)
Other	1%	(53)	1%	(112)

The sensitivity of equity is calculated by revaluing fixed rate available-for-sale financial assets at 31 December 2016 and 2015 for 1% change in interest rates.

Currency	2016		2015	
	Increase in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	38,182	1%	26,541
EUR	1%	257	1%	1,177
AUD	1%	5,318	1%	4,471
CAD	1%	1,929	1%	1,876
GEL	1%	1,437	1%	1,120

Currency	2016		2015	
	Decrease in interest rate	Sensitivity of equity	Increase in interest rate	Sensitivity of equity
USD	1%	(38,182)	1%	(26,541)
EUR	1%	(257)	1%	(1,177)
AUD	1%	(5,318)	1%	(4,471)
CAD	1%	(1,929)	1%	(1,876)
GEL	1%	(1,437)	1%	(1,120)

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS

AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016

(in thousands of Georgian Lari)

Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign 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.

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 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
As at 31 December 2015	USD	EUR	SDR	AUD	CAD	Other	Total
Foreign currency assets	4,544,286	333,535	478,230	477,977	194,836	11,226	6,040,090
Foreign currency liabilities	(1,908,067)	(346,674)	(524,010)	-	-	(185)	(2,778,936)
Net position	2,636,219	(13,139)	(45,780)	477,977	194,836	11,041	3,261,154

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%	301,454	(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%	(301,454)	14,531	1,471	(53,377)	(22,239)	(519)	(361,588)

Effect on statement of total comprehensive income							
31-Dec-15							
	USD	EUR	SDR	AUD	CAD	Other	Total
Increase in currency rate of 1%	26,362	(131)	(458)	4,780	1,948	110	32,611
Increase in currency rate of 5%	131,811	(657)	(2,289)	23,899	9,742	552	163,058
Increase in currency rate of 10%	263,622	(1,314)	(4,578)	47,798	19,484	1,104	326,116
Decrease in currency rate of 1%	(26,362)	131	458	(4,780)	(1,948)	(110)	(32,611)
Decrease in currency rate of 5%	(131,811)	657	2,289	(23,899)	(9,742)	(552)	(163,058)
Decrease in currency rate of 10%	(263,622)	1,314	4,578	(47,798)	(19,484)	(1,104)	(326,116)

NATIONAL BANK OF GEORGIA

NOTES TO THE FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2016 *(in thousands of Georgian Lari)*

Other Risks

Settlement risk

Settlement risk (i.e., the risk that the counterparty may not be able to complete a transaction) is mitigated in a number of ways. The Bank will only transfer funds after sufficient collateral has been secured. For outright transactions in securities, settlement risk is eliminated through the use of systems that are based on delivery versus payment, that is, the simultaneous exchange of securities and cash. Additionally, the settlement of the cash component is performed through the payment system referred to as Real Time Gross Settlement, which is owned and managed by the Bank, which determines the position of each participant in real time on an individual payment-to-payment basis. This automatically avoids overdrafts and as it simultaneously uses accounts in the Bank as settlement asset, it mitigates credit risk.

Non-Financial Risks

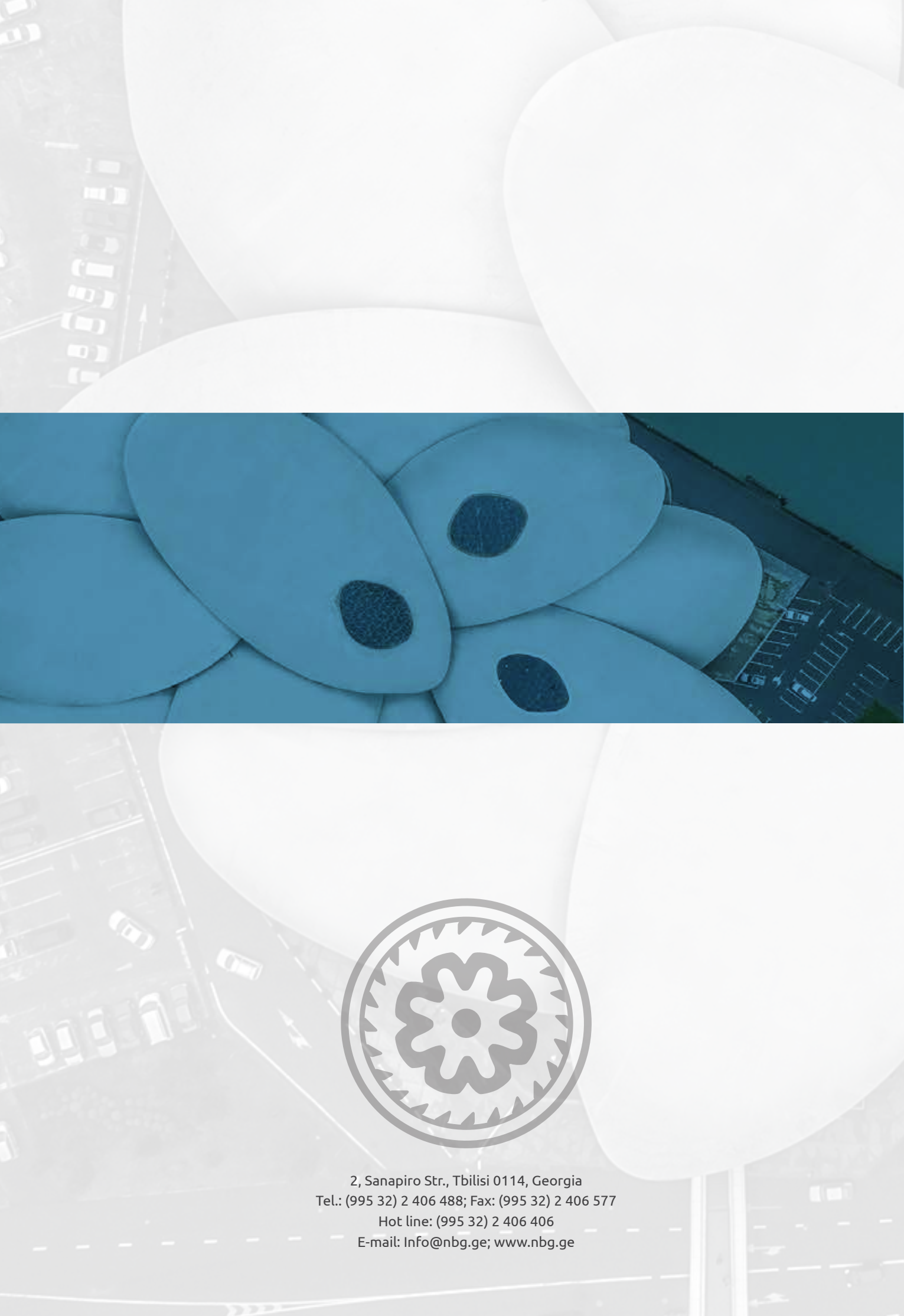
Non-financial risk may generate financial loss, damage to reputation or inability to achieve the objectives of the business, resulting from one or more causes of risk, originating from human factors, or defective or inadequate processes or systems, or external events. The Bank is exposed to the following categories of non-financial risks: Reputational, Legal, Information Technology, Human resources, Security, 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 5 scale assessment model of Probability and Impact 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.

Among non-financial risks management, Business Continuity Plan became a critical component for the Bank. In this regard the Bank improved the resilience of the Bank's critical processes providing the management of business continuity risks. The Business Continuity system was implemented during 2014. 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 tasks. The Committee monitors and verifies all actions taken to manage those risks.

Furthermore, to support and expand CRM framework, the Incident Management framework has been developed and implemented. 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.



2, Sanapiro Str., Tbilisi 0114, Georgia
Tel.: (995 32) 2 406 488; Fax: (995 32) 2 406 577
Hot line: (995 32) 2 406 406
E-mail: Info@nbg.ge; www.nbg.ge