# BULGARIAN NATIONAL BANK

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# Bulgarian National Bank

## Report • January – June 2018

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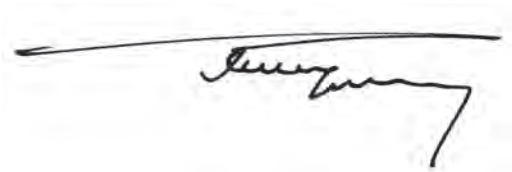
Honourable Chair of the National Assembly,
Honourable People's Representatives,

Under the provisions of Article 1, paragraph 2 and Article 50 of the Law on the Bulgarian National Bank, I have the honour of presenting the January–June 2018 Report.



Dimitar Radev
Governor
of the Bulgarian National Bank

BNB Governing Council

Sitting from left to right: Boryana Pencheva, Nina Stoyanova, Lena Roussenova, Elitsa Nikolova.
Standing from left to right: Dimitar Kostov, Dimitar Radev, Kalin Hristov.

# BNB Governing Council

**Dimitar Radev**
Governor

**Kalin Hristov**
Deputy Governor
Issue Department

**Nina Stoyanova**
Deputy Governor
Banking Department

**Dimitar Kostov**
Deputy Governor
Banking Supervision Department

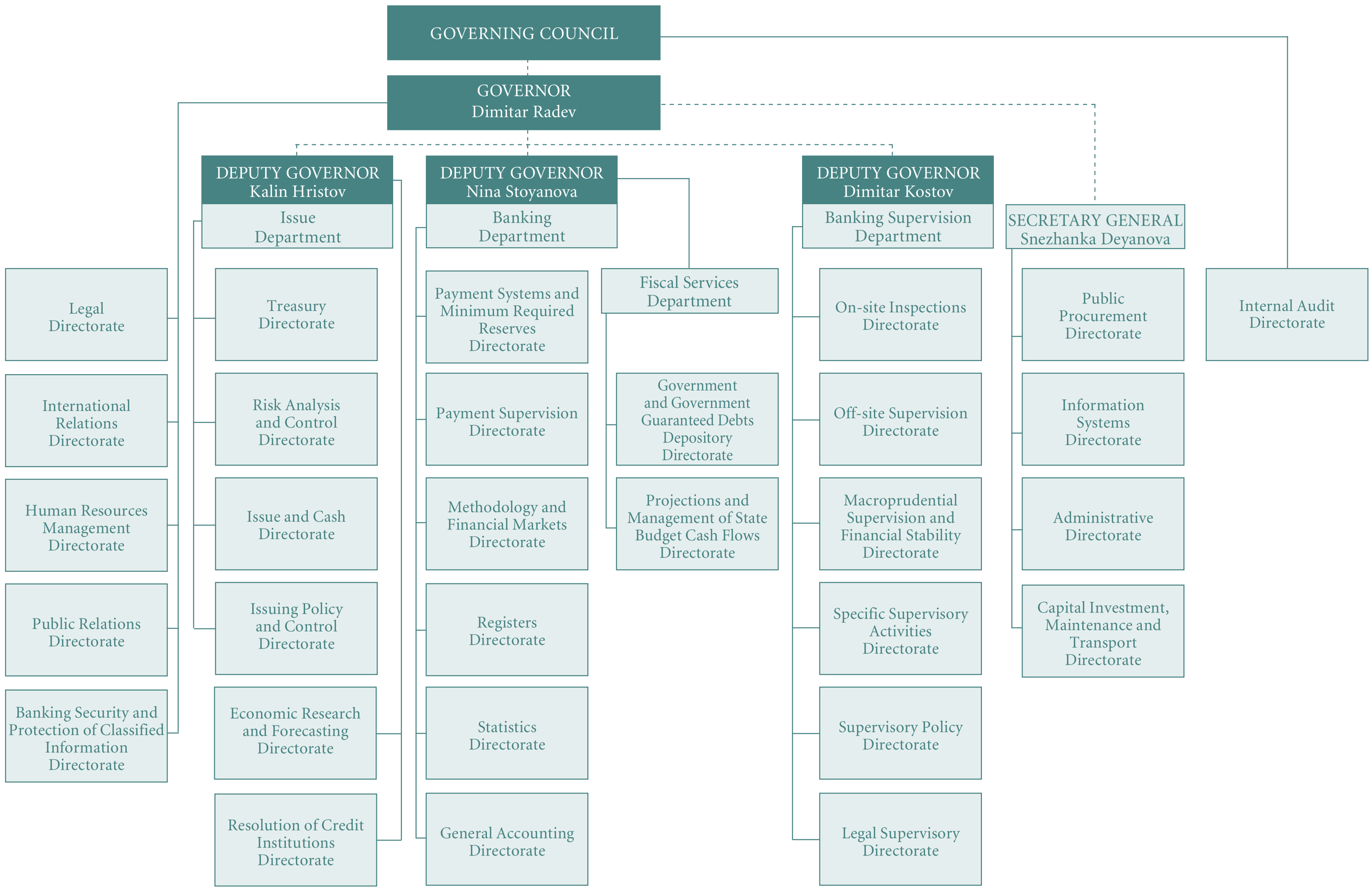
**Boryana Pencheva**

**Lena Roussenova**

**Elitsa Nikolova**

# Organisational Structure of the BNB

(as of November 2018)



# Contents

## Abbreviations

| | |
|---|---|
| ABSPP | ECB Asset-backed Securities Purchase Programme |
| APP | ECB Asset Purchase Programme |
| AQR | asset quality review |
| AS ROAD | Automated System for Registration and Servicing of External Debt |
| ATM | Automated Teller Machine |
| BIS | Bank for International Settlements |
| BISERA | Bank Integrated System for Electronic Payments |
| BNB | Bulgarian National Bank |
| BOP | Balance of payments |
| BORICA | Bank Organisation for Payments Initiated by Cards |
| BRF | Bank Resolution Fund |
| CBPP3 | ECB's Third Covered Bond Purchase Programme |
| CCR | Central Credit Register |
| CHF | Swiss franc |
| CNY | Chinese yuan |
| EBA | European Banking Authority |
| EC | European Commission |
| ECB | European Central Bank |
| Ecofin | Economic and Financial Affairs Council of the European Union comprising Member State economics and finance ministers |
| EDIS | European Deposit Insurance Scheme |
| EONIA | Euro OverNight Index Average (registered trademark of the European Money Market Institute, EMMI) |
| ESA 2010 | European System of National and Regional Accounts |
| ESCB | European System of Central Banks |
| ESRB | European Systemic Risk Board |
| ESROT | Electronic System for Registering and Servicing Government Securities Trading |
| EU | European Union |
| EUR | euro |
| EURIBOR | Euro InterBank Offered Rate (EURIBOR, registered trademark of the European Money Market Institute, EMMI) |
| GDP | Gross Domestic Product |
| GSAS | System for Government Securities Sale and Repurchase Auctions |
| HICP | Harmonized Index of Consumer Prices |
| IAS | International Accounting Standards |
| IASB | International Accounting Standards Board |
| IFRS | International Financial Reporting Standards |
| IMF | International Monetary Fund |
| IOBFR | System for Budget and Fiscal Reserve Information Servicing |
| KTB | Corporate Commercial Bank AD |
| LBDG | Law on Bank Deposit Guarantee |
| LBNB | Law on the BNB |
| LCI | Law on Credit Institutions |
| LEONIA | an interest rate on real transactions in unsecured overnight deposits in BGN offered at the interbank market |
| LPSPS | Law on Payment Services and Payment Systems |
| LRRCIIF | Law on the Recovery and Resolution of Credit Institutions and Investment Firms |
| LTROs | Longer-term refinancing operations |
| MF | Ministry of Finance |
| MFI | Monetary Financial Institutions |
| NPISH | Non-profit Institutions Serving Households |
| NSI | National Statistical Institute |
| OPEC | Organization of Petroleum Exporting Countries |
| POS | Point of sale/point of service: a retail trade terminal for credit and debit card transactions |
| PSPP | Public Sector Purchase Programme |
| RINGS | Real-time gross settlement system |
| ROA | Return on Assets |
| ROE | Return on Equity |
| SDR | Special Drawing Rights |
| SEPA | Single Euro Payments Area |
| SITC | Standard International Trade Classification |
| SOFIBID | (Sofia Interbank Bid Rate) is an index calculated as the average of the bid quotes for unsecured BGN deposits |
| SOFIBOR | (Sofia Interbank Offered Rate) is a fixing of the quotes for unsecured BGN deposits offered in the Bulgarian interbank market |
| TARGET2 | Trans-European Automated Real-time Gross settlement Express Transfer system for the euro |
| TARGET2-BNB | Bulgarian system component of TARGET 2 |
| USD | US dollar |
| VaR | Value-at-Risk |
| VAT | Value Added Tax |
| WB | World Bank |
| XAU | troy ounce gold |
| XDR | currency code for special drawing rights |
| ZUNK | Law on Settlement of Non-performing Credits Negotiated prior to 31 December 1990 |

# Summary

The Bulgarian National Bank conducts its policy taking into account the international situation and developments in the domestic economy. The BNB pursues its primary objective of price stability through maintaining the stability of the national currency by adhering to the Law on the Bulgarian National Bank and applying effectively its potential and capabilities.

The BNB January–June 2018 Report covers the activities relating to the BNB's legal functions and duties, as well as other BNB business supporting its functions and duties. The Report also includes BNB budget implementation for the first half of 2018 and consolidated financial statements as of 30 June 2018 (unaudited). Information under Article 17, paragraph 5 of the Law on the Bulgarian National Bank concerning resolutions adopted by the BNB Governing Council in January–June 2018 is also included.

In the first half of 2018 global PMI remained above the neutral limit of 50 points, continuing to signal rising global economic activity. By the end of the first six months global trade uncertainty grew significantly after protectionist measures by the United States and countermeasures by their major trading partners. Euro area economic activity continued rising, with private consumption and investment in fixed capital contributing most substantially to this trend. All euro area countries posted real GDP growth, Ireland leading and Italy trailing. Domestic demand and investment also contributed most to higher US growth. Global inflation continued to accelerate slightly, reaching 2.4 per cent by end-June 2018. Inflation in euro area and US rose from 1.4 and 2.1 per cent at the end of 2017 to 2.0 and 2.9 per cent in June 2018.

The differences between ECB and US Federal Reserve monetary policies increased. Euro area main refinancing operations, marginal lending facility and deposit facility interest stayed at nil, 0.25 and -0.4 per cent. Federal Reserve System continued the process of monetary policy normalisation, raising the federal funds rate target range in March and June by 25 basis points to 1.75–2.00 per cent.

In the first half year international financial market prices mainly reflected intensifying trade conflicts between the United States and their trading partners, and Italian political uncertainty. This led to enhanced demand for low-risk financial assets by market participants. As a result, German government bond yields fell in all maturity sectors, while other euro area countries' yield spreads mostly widened against German ones. Significant volatility in European government bond prices, especially in the second quarter, reflected increasing Italian political uncertainty. In the first six months of 2018 US government bond yields increased particularly in the short-term maturity sectors mainly because of the US Federal Reserve System rises of the federal funds target rate.

Bulgaria's economic activity remained comparatively buoyant, real GDP growing 3.4 per cent, from 3.8 at this time last year. The previous year's main contribution of private consumption and investment to growth was sustained. Continued improvement in the labour market supported increasing consumption. The number of employees rose 0.7 per cent on an annual basis, while unemployment continued falling to 5.6 per cent in the first six months of 2018, from 6.6 per cent on average a year earlier. Labour productivity in the total economy continued growing by 2.7 per cent on an annual basis. Average wage also continued to increase on an annual basis in both nominal terms (4.8 per cent) and real terms (2.8 per cent), though at lower pace on the same period of 2017.

Annual inflation continued its upward trend, reaching 3.0 per cent in June (1.8 per cent in December 2017). Inflation dynamics in the first six months of 2018 reflected substantial increases in international oil prices and specific factors in some subgroups of services.

Continued strong inflows of funds attracted from residents in the banking system contributed to the accelerated annual growth rate of broad money. Overall non-government sector deposits in the banking sector grew 8.5 per cent in June 2018, with household deposits making the largest contribution. Favourable macroeconomic environment and low lending rates contributed to gradually accelerating credit growth to non-financial corporations and households: 5.8 per cent by June 2018, from 3.3 by December 2017. The upward trend in loans to the private sector reflected household lending rising 9.2 per cent on an annual basis, mainly due to the accelerated annual growth of consumer and housing loans. Accelerated consumer lending (up 15.1 per cent in June 2018) was strongly influenced by the inclusion of a new reporting unit in the scope of monetary statistics from April 2018. Annual lending to non-financial corporations accelerated to 3.8 per cent in June, from 1.6 at the end of 2017.

In the first half of 2018 the cash balance on the consolidated fiscal programme ended in a surplus of BGN 1713.2 million, with total revenue and grants growing 9.9 per cent annually and total budget expenditure increasing 11.2 per cent. The accumulated cash surplus was used to finance the net negative issue of government securities in the domestic market at BGN -1051.6 million.

In managing gross international reserves, the BNB maintained a conservative policy to ensure high security and liquidity. The market value of gross international reserves at the end of June 2018 was EUR 23,509.83 million: down EUR 152.29 million on the end of 2017. The BNB continued investing the vast majority of assets into euro area core country government bonds and government guaranteed debt, and short-term deposits with first class foreign banks. By the end of the first half year about 68 per cent of international reserves was invested into assets with the highest AAA long-term credit rating. Net income from international reserve management was negative at EUR -32.47 million or -0.15 per cent total return for the first half year. Broken by component, net income comprised: earnings from international reserve investment in the original currency (EUR -26.19 million) reflecting mainly the negative yields posted by euro-denominated high credit quality bonds with a maturity of about five years; earnings from currency imbalance (EUR -15.15 million) almost entirely due to changes in the euro price of monetary gold; and the net financial result of liabilities which was positive (EUR 8.88 million) reflecting the early October 2015 new interest policy on bank excess reserves with the BNB and negative market rates on other customers' account balances.

Implementing, operating, and overseeing efficient payment systems is an important central bank duty. National payment systems functioned effectively and provided payment flow continuity. In the first half of 2018 RINGS, a real-time gross settlement system, operated by the BNB, processed 85.1 per cent of payments in Bulgaria. RINGS payments numbered 499,443, up 7.5 per cent on the first half of 2017, their total value reaching BGN 460,763 million (up 44.1 per cent on the same period of 2017). The number and value of payments processed by BORICA and BISERA also rose in the first six months of 2018 on the corresponding period of the previous year.

The national system component of the Trans-European Automated Real-time Gross settlement Express Transfer system for the euro run by the BNB – TARGET2-BNB – processed 131,830 payments (up 10.2 per cent on the first six months of 2017) for EUR 214,708 million (up 29.2 per cent on the first half of 2017).

The BNB regulates and oversees payment system operators, securities settlement systems operators in executing payment operations, payment institutions, electronic money institutions, and other payment service providers. In the first half of 2018 the Bank completed three and started four supervisory inspections of payment service providers.

The BNB has a monopoly on banknote and coin issue in Bulgaria. Its currency is mandatorily acceptable as legal tender at face value without restriction. BNB issue and cash operations include: banknote printing, coin minting, accepting, delivering, repaying, processing, authenticity and fitness checking of Bulgarian banknotes and coins and foreign currency, exchanging damaged Bulgarian banknotes and coins, and scrapping unfit Bulgarian banknotes and coins. In late June 2018, 440.4 million banknotes (up 5.73 per cent on June 2017), amounting to BGN 15,375.1 million (up 10.82 per cent on June 2017) and 2350.5 million coins (up 7.17 per cent on June 2017), worth BGN 386.0 million (up 15.76 per cent on June 2017) were in circulation. As part of its cash circulation integrity and security functions, in the first half of 2018 the Bank conducted two full on-site checks at credit institutions to check compliance with regulations on quality of banknotes and coins in currency circulation.

The Bank regulates and supervises banks in Bulgaria to maintain banking system stability and protect depositor interests. Banking Supervision focused on analyses and assessments of the banking financial position to identify in a timely manner potential risks and initiate remedial measures.

Supervisors reviewed banks' Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP) reports for 2017. The main purpose of the on-site supervisory inspections was to review management processes and systems and control mechanisms concerning specific risks and areas, in particular credit and credit concentration risks. Monitoring the implementation of supervisory measures imposed during previous inspections formed another focus. Improvements in credit risk management and controls were found. On the basis of the inspections findings, supervisory reports included recommendations to the inspected banks' managements. Macro-prudential supervision activities focused on monitoring the processes and inherent risks affecting banking system stability. In the first half of 2018 a deeper analysis focused on non-performing loan dynamics and banks' credit standards in mortgage lending, as well as risks related to bank exposures to third parties.

In discharging its duties as a resolution authority of credit institutions under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms (LRRCIIF), the Bank focused on preparing, reviewing and developing resolution plans. Work continued on developing and improving methodologies and procedures to ensure a common approach in assessments and analyses used in resolution plans and discharge of other Bank obligations under the LRRCIIF. Under this Law, in March the Governing Council set the total amount of banking system contribution to the Bank Resolution Fund (BRF) for 2018 at BGN 121,956,000.

Participating in the European System of Central Banks (ESCB), European Commission (EC), EU Council, European Systemic Risk Board (ESRB), European Banking Authority (EBA), and national Council for European Affairs committees and working parties, the BNB contributed to formulating Bulgarian standpoints on key economic governance areas and the financial sector. In the first six months of 2018 BNB representatives took part in preparing and conducting the Bulgarian presidency of the EU Council. They were part of thematic teams working on EC legislative proposals on financial services, providing their expertise to the Ministry of Finance teams. Bank representatives were involved in discussions on legislative measures to curb banking sector risks (the 'banking package'), the review of the European System of Financial Supervision and proposals for a package of measures for sovereign bond backed securities and proposals within the package of measures to tackle non-performing loans.

In the first half of 2018 the BNB continued to collect, process, analyse and disseminate the official monetary and interest statistics, external statistics, statistics on quarterly financial accounts of all institutional sectors, government finance statistics, statistics on non-bank financial institutions, including leasing companies and investment funds, specialised lenders and insurance and reinsurance undertakings. In addition to the compilation of statistical data, the BNB was actively involved in a number of national, European and international fora discussing and solving methodological issues in the area of statistics.

The BNB maintains the Central Credit Register (CCR): an information system on customer debt to Bulgarian banks, other financial institutions, and payment and electronic money institutions extending loans under Article 19 of the Law on Payment Services and Payment Systems. In the first six months of the year banks, financial institutions, payments institutions, electronic money institutions and government and judicial authorities authorised to electronic access to the CCR conducted 4,309,000 searches on 3,713,000 individuals and 596,000 legal entities, their average monthly number reaching 718,000. From early 2017  the BNB maintains the Register of Bank Accounts and Safe Deposit Boxes (RBASDB): an electronic information system on bank account numbers, holders and attorneys, data on account preservation orders, bank deposit box holders and attorneys. As of 30 June 2018, RBASDB information system included records of 1.461 million new accounts, 1.648 million closed accounts and also of 209,200 account preservation orders placed after 1 January 2018. Bodies and institutions entitled to Register access conducted searches on 305,180 individuals. From January to June 2018, 1056 applications for CCR disclosures were filed, of which 1017 by individuals and 39 by legal entities.

Acting as fiscal agent and official depository, the BNB maintains, develops and improves electronic systems for budget and fiscal reserve information servicing, auctions, settlement and securities trade servicing, the Register of Pledges, and external debt transactions. Over the review period the second stage of the GSAS upgrade project continued.

Economic research and projections support the Bank's management in making decisions and delivering economic policy stance. In the first half of 2018 the Research Plan covered analysis of labour cost setting in non-financial corporations, factors driving investment, the transmission mechanism, relations between the financial and business cycles, construction of uncertainty indicator for Bulgaria, and assessments of the potential mismatch between labour supply and demand.

The BNB competitive human resource management system is developed and maintained by ensuring a favourable working and social environment, attracting appropriate candidates and retaining qualified employees by providing career development opportunities. In the first half of 2018 employees numbered 884, from 873 at the end of June 2017. The annual training and qualification schedule offered employees plentiful training programmes and specialisations.

BNB internal audit conforms to the International Standards for the Professional Practice of Internal Auditing, the Code of Ethics of Internal Auditors, ESCB Internal Auditor Committee Rules and Internal Auditor Rules approved by the BNB Governing Council. There were five audits by June 2018. Audits sought assurance of adequate and effective control, corporate governance and management of inherent risks to ensure: effective attainment of objectives and tasks; reliability and integrity of financial and operational information; effective and efficient operations and programmes; asset safeguarding; legal, regulatory, internal rule, policy, procedure and contractual observance. Implementation of past audit recommendations was monitored.

The BNB budget underpins Bank functions and tasks. In the first half of 2018 the BNB spent BGN 46,267,000 or 44.9 per cent of budget, including currency circulation costs of BGN 14,421,000. The Bank invested BGN 514,000 or 2.1 per cent of annual budget. Planned investment programme funds relate to procurement procedures, some still in preparation or under way, and thus not fully utilised during the half year.

Consolidated financial statements present the Bank's financial position as of 30 June 2018.

# I. Economic Development in the First Half of 2018

## The External Environment

In the first half of 2018 global PMI remained above the neutral limit of 50, continuing to signal rising global economic activity. Average PMI between January and June 2018 rose on the same period of 2017, reflecting simultaneous rises in both industrial production and services indices. Global trade uncertainty grew significantly after protectionist measures by the United States and countermeasures by their major trading partners. This depressed global *PMI* in the second quarter *vis-à-vis* the first three months of the year.

### Major Macroeconomic Indicators

(per cent, non-seasonally adjusted data)

| | Real GDP Growth Rate | | | | Inflation (end of period) | | | | Unemployment rate (average for period ) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | | 2016 | 2017 | 2018 | | 2016 | 2017 | 2018 | |
| | | | I | II | | | I | II | | | I | II |
| EU | 2.0 | 2.4 | 2.1 | 2.2 | 1.2 | 1.7 | 1.5 | 2.1 | 8.6 | 7.6 | 7.4 | 6.8 |
| Euro area | 1.9 | 2.4 | 2.1 | 2.2 | 1.1 | 1.4 | 1.3 | 2.0 | 10 | 9.1 | 8.9 | 8.2 |
| New EU Member States | 3.2 | 4.8 | 4.4 | 4.2 | 0.9 | 2.0 | 1.7 | 2.5 | 5.8 | 4.6 | 4.2 | 3.6 |
| EU-3 | 1.9 | 1.8 | 1.8 | 1.4 | 1.5 | 2.7 | 2.3 | 2.3 | 5.2 | 4.7 | 4.2 | 4.0 |
| The United States | 1.6 | 2.2 | 2.6 | 2.9 | 2.1 | 2.1 | 2.4 | 2.9 | 4.9 | 4.4 | 4.3 | 3.8 |
| Japan | 1.0 | 1.7 | 1.0 | 1.3 | 0.3 | 1.0 | 1.1 | 0.7 | 3.1 | 2.8 | 2.5 | 2.4 |
| China | 6.7 | 6.9 | 6.8 | 6.7 | 2.0 | 1.6 | 2.1 | 1.9 | 4.0 | 3.9 | 3.9 | 3.8 |

**Notes:** The table employs data published by 10 October 2018. New EU Member States are those joining since 2004 less those now in the euro area. The EU-3 are the United Kingdom, Sweden, and Denmark. New EU Member States and EU-3 indicators are calculated by weighing time series by country weights in group GDP for growth, in group labour force for unemployment, and the weights of the EU countries in HICP calculated by Eurostat for inflation. Real GDP growth calculated on an annual basis according to non-seasonally adjusted data. Quarterly unemployment data are seasonally adjusted. Denmark unemployment data are not available for the first six months of 2018.

**Sources:** Eurostat, Bureau of Economic Analysis, Bureau of Labour Statistics, Statistics Bureau of Japan, the National Bureau of Statistics of China, BNB computations.

Global industrial production rose 3.6 per cent[1] on an annual basis on 3.1 per cent in the same period of 2017 across broad areas excluding Japan and Central and Eastern Europe where growth slowed. World trade volumes increased by 4.1 per cent[2], slightly down from the 4.2 per cent annual growth in the first half of 2017. Emerging economies drove this slowdown, developed countries recording rises in trade growth.

Euro area economic activity continued rising, helped by ECB monetary policy measures. Private consumption and fixed capital investments contributed most significantly to real GDP growth on an annual basis[3] in both the first and second quarters. All euro area countries posted a positive growth rate in the first half of 2018, with Ireland recording the highest real annual rates of 9.3 and 9.0 per cent in the first and second quarters and Italy the lowest at 1.2 and 1.5 per cent, respectively. On a quarterly basis however, real GDP growth moderated from the second half of 2017. Unemployment fell to 8.6 per cent, from 9.5 in the same period of 2017, Greece leading at 20.1 per cent. Germany had the lowest euro area unemployment at 3.6 per cent.

[1] Based on CPB data: Netherlands Bureau for Economic Policy Analysis, 24 September 2018.

[2] *Ibid*.

[3] Non-seasonally adjusted data.

Real US economic activity rose 2.8 per cent on an annual basis in the first half year, private consumption and fixed capital investment contributing most. Unemployment continued falling to 4.1 per cent on average in the half year, from 4.6 a year earlier.

Prices of major commodity groups and raw materials in international markets rose on an annual basis. Brent crude rose in both dollars[4] (35.5 per cent) and euro (21.2 per cent). Main factors were higher demand for oil products than in the same period of 2017, OPEC's agreement with other major oil producers to limit output and production disruptions in parts of the US and Venezuela. In the first half year dollar food prices remained unchanged on an annual basis, but those in euro fell 10.6 per cent reflecting the euro appreciation against the dollar. Dollar cereals prices rose 6.6 per cent and fell 4.6 per cent in euro. Higher dollar prices were mainly because of rising wheat prices after poor weather in Russia and the EU led to expectations of poorer yields than a year earlier.

The dollar metal price index rose 11.2 per cent on the first half of 2017, falling 0.7 per cent in euro. The main factors for metal price rises in dollar terms were rising demand and falling world production after China moved to cut air pollution. US sanctions against the world's second largest aluminium producer, Russian company Rusal, and possible sanctions against Russian nickel exports also boosted metal prices. Annual aluminum prices increased 17.6 per cent and 5.2 per cent in dollars and euro, nickel prices growing 42.3 and 27.2 per cent.

Global inflation was 2.4 per cent[5] in June 2018, rising slightly on the end of 2017. Inflation in developed economies rose, remaining steady in developing economies.[6]

As of June annual euro area inflation[7] rose to 2.0 per cent on 1.4 in December 2017, core inflation (excluding food, energy, alcohol, and tobacco) staying unchanged at 0.9 per cent. Estonia led the euro area annual inflation at 3.9 per cent, Ireland trailing at 0.7 per cent.

In June US annual inflation[8] was 2.9 per cent, from 2.1 at the end of 2017. Inflation measured by the personal consumption expenditure price index increased to 2.0 per cent, from 1.8 in the first half of 2017.

ECB and US Federal Reserve monetary policies remained different over the first half year.[9] Euro area main refinancing operations, marginal lending facility, and deposit facility interest stayed at nil, 0.25 and -0.4 per cent. At its January monetary policy meeting, the ECB Governing Council announced no adjustments to its future monetary policy guidance and Asset Purchase Programme (APP) parameters. Taking into account euro area economic development data, the March meeting precluded the possibility for a future increase in APP purchases. The June meeting announced intentions to extend the APP from October to December at the reduced monthly volume of EUR 15 billion, ending it in December. The meeting also changed euro area interest forward guidance, expected to remain static at least until the end of summer 2019.

In the first half of 2018 the Federal Reserve System continued normalising US monetary policy, raising the federal funds target range by 25 basis points in March and June. In March economic activity and the labour market prompted the US Federal Open Market Committee (FOMC) to raise the federal funds range to 1.50–1.75 per cent. Continuing stable employment growth, falling unemployment, and annual

[4] Hereinafter referred to as the US dollar.

[5] Based on 3 October 2018 seasonally adjusted World Bank data.

[6] *Ibid.*

[7] Measured by the HICP.

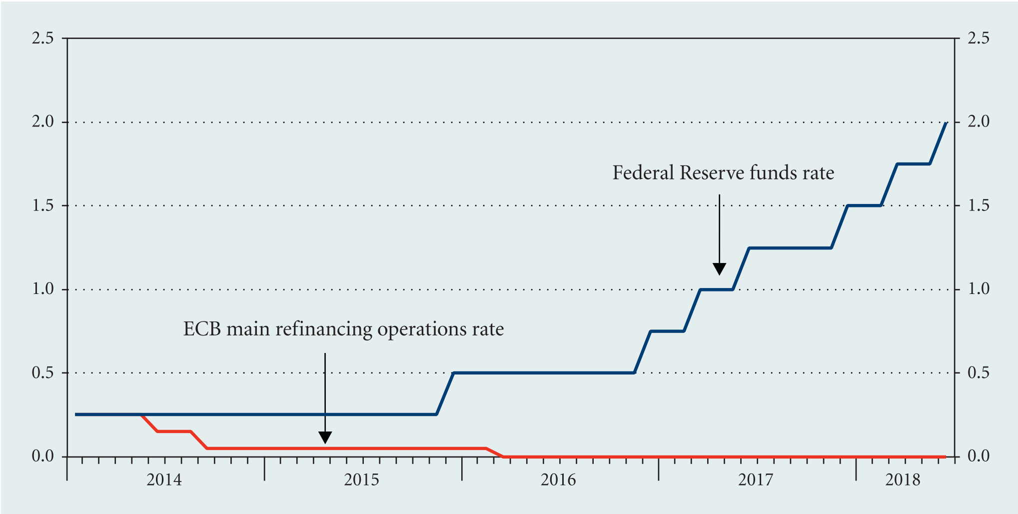
[8] Measured by CPI.

[9] For details on ECB and US Federal Reserve monetary policies, see Chapter II.

consumer price growth close to the 2 per cent inflation target prompted a second federal funds target rate rise to 1.75–2.00 per cent since early 2018.

### Federal Reserve System and ECB Interest Rates

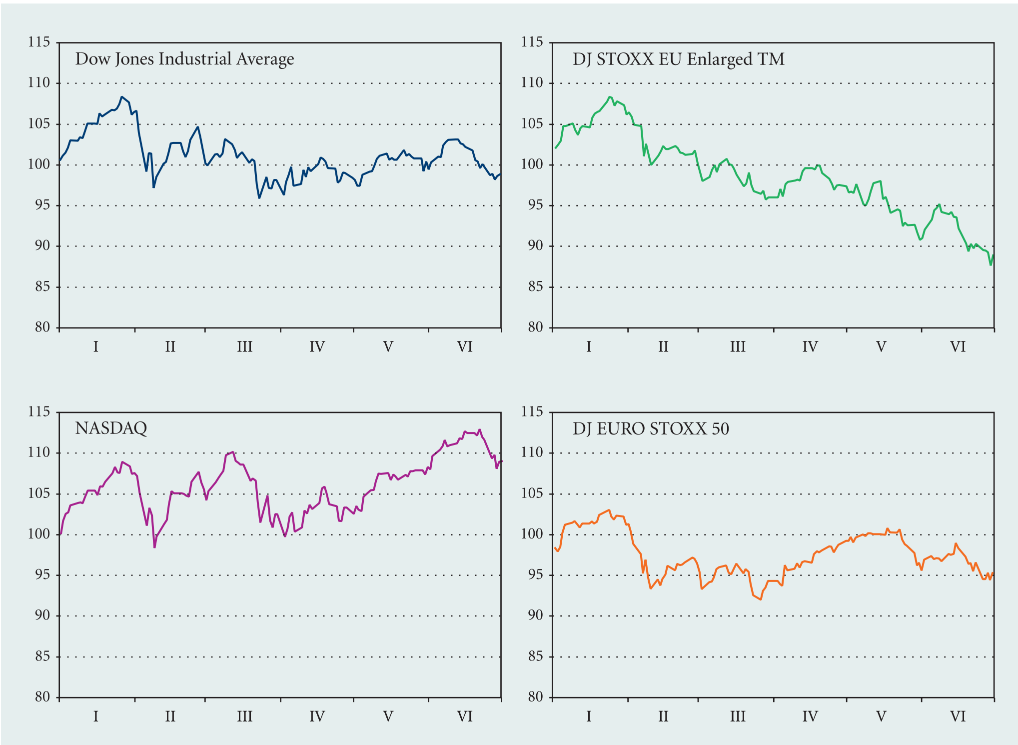
(per cent)




**Sources:** the ECB; the Federal Reserve System.

In the first half year international financial market prices mainly reflected intensifying trade conflicts between the United States and their trading partners and Italian political uncertainty.[10]

### Main Stock Exchange Indices in the First Half of 2018




**Note:** US dollars, December 2017 = 100.

[10] For more information on government bond markets, see Chapter II.

The EURO STOXX 50 and STOXX EU ENLARGED, Dow Jones, and NASDAQ indices were very volatile over the first half year. The European indices tended to decline on the end of 2017, reflecting euro area macroeconomic data and political uncertainty in Italy and Spain. US indices were driven by foreign trade measures and increased geopolitical tension following the US withdrawal from the Iran nuclear deal.

## The Bulgarian Economy

In the first half of 2018 Bulgaria's real GDP grew 3.4 per cent[11] on an annual basis, according to non-seasonally adjusted data. As in 2017, domestic demand components contributed most significantly to growth.[12] Private consumption (4.9 percentage points) and, to a lesser extent, fixed capital investment (1.6 percentage points) had the largest positive contributions to the economic activity increase. Net exports contributed negatively to real growth (-3.9 percentage points) due to a stronger increase in goods and services imports and a decline reported in exports. Lower real goods exports reflected oil product production drops due to scheduled facility maintenance in March and April.[13] Government consumption followed by changes in inventories had a low positive contribution to the growth in domestic economic activity.

### Real GDP Growth Rate and Contribution by Component of Final Use

(compared to the same period last year, non-seasonally adjusted data)

| | 2017 | | | | 2018 | |
|---|---|---|---|---|---|---|
| | January – June | | July – December | | January – June | |
| | Change (per cent) | Contribution, percentage points | Change (per cent) | Contribution, percentage points | Change (per cent) | Contribution, percentage points |
| **GDP** | **3.8** | - | **3.8** | - | **3.4** | - |
| Final consumption | 4.3 | 3.4 | 4.4 | 3.3 | 6.9 | 5.5 |
| Household consumption | 4.4 | 2.7 | 4.6 | 2.7 | 7.9 | 4.9 |
| NPISH consumption | 4.8 | 0.0 | 8.2 | 0.1 | 7.4 | 0.0 |
| Final consumption expenditures by general government | 4.7 | 0.4 | 1.3 | 0.1 | 2.5 | 0.2 |
| Collective consumption | 2.9 | 0.2 | 5.7 | 0.4 | 4.1 | 0.3 |
| Gross fixed capital formation | 3.3 | 0.6 | 3.2 | 0.6 | 8.5 | 1.6 |
| Physical changes in inventories | - | 0.6 | - | 0.7 | - | 0.2 |
| Exports (goods and services), net | - | -0.7 | - | -0.8 | - | -3.9 |
| Exports (goods and services) | 6.0 | 3.8 | 5.6 | 3.6 | -0.7 | -0.5 |
| Imports (goods and services) | 7.6 | 4.6 | 7.3 | 4.4 | 4.8 | 3.4 |

**Sources:** the NSI, the BNB.

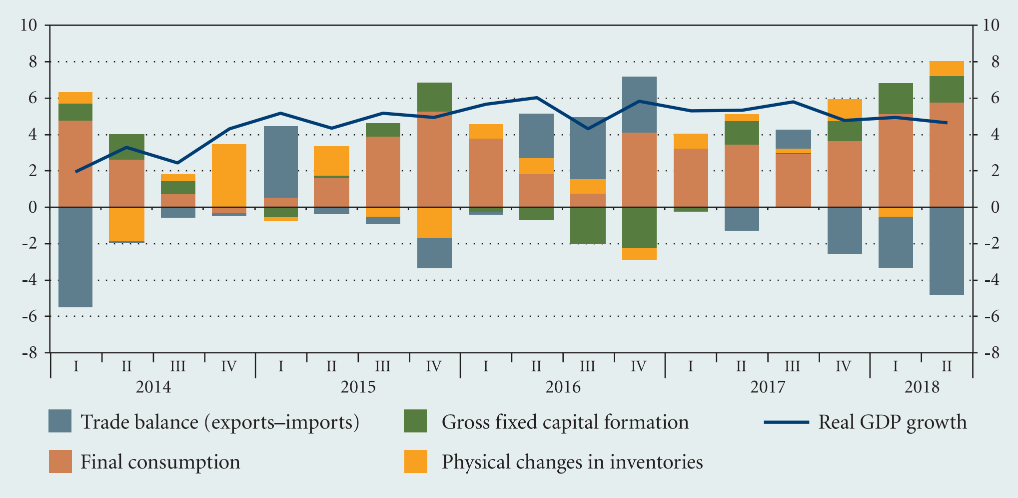
[11] The analysis employs GDP data published by the NSI on 3 October 2018.

[12] The BNB Economic Review quarterly publishes further information and analyses on major macroeconomic indicators in Bulgaria.

[13] NSI data on foreign trade and production and supply of energy products.

## Real GDP Growth Rate and Contribution by Component of Final Use

(per cent, percentage points on corresponding quarter of previous year, non-seasonally adjusted data)




**Sources:** the NSI, the BNB.

In the first half year employment rises and labour income growth favoured household consumption. It also reflected a long-term improvement in consumer confidence and low interest levels stimulating consumer credit demand. As a result, annual final household consumption expenditure rose by 7.9 per cent in real terms.

Gross fixed capital investment grew by 8.5 per cent in real terms compared with the same period of 2017. Rising public and private investment boosted investment growth.[14] Growing EU programme investment contributed most to the public investment growth. Private investment growth reflected improved corporate expectations about the business situation, high capacity utilisation, continuing favourable financing conditions, and increased corporate profitability.

## Gross Value Added Growth Rate in Real Terms and Contributions by Industry

(compared to the same period last year, non-seasonally adjusted data)

| | 2017 | | | | 2018 | |
|---|---|---|---|---|---|---|
| | January – June | | July – December | | January – June | |
| | Change (per cent) | Contribution, percentage points | Change (per cent) | Contribution, percentage points | Change (per cent) | Contribution, percentage points |
| **Gross value added** | **4.7** | **4.7** | **3.8** | **3.8** | **3.1** | **3.1** |
| Agriculture and forestry | 8.0 | 0.3 | 9.3 | 0.5 | -1.5 | 0.0 |
| Industry* | 5.2 | 1.6 | 3.0 | 0.8 | 1.4 | 0.4 |
| Services | 4.1 | 2.7 | 3.7 | 2.5 | 4.0 | 2.6 |

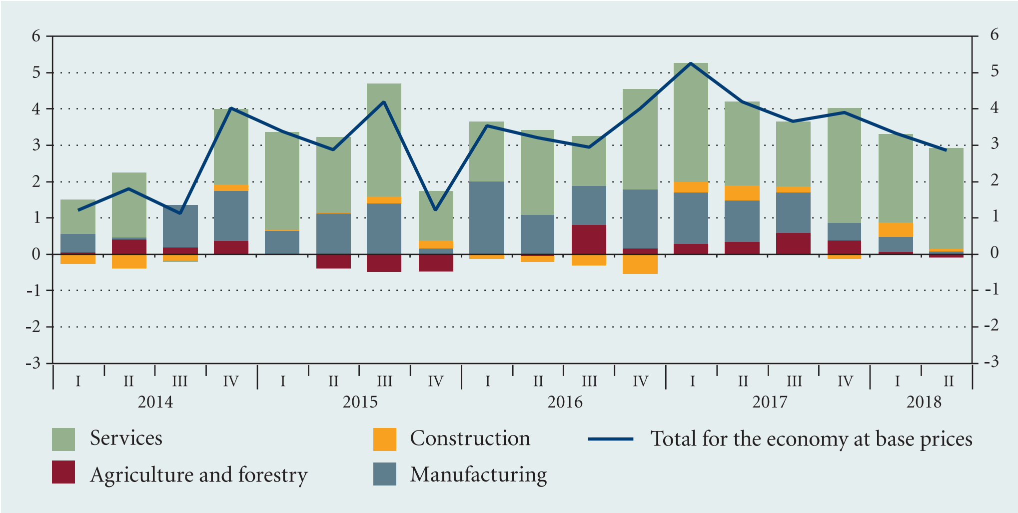
* Manufacturing and construction.

**Sources:** the NSI, the BNB.

[14] Private and government investment is assessed from available national accounts data on overall investment, quarterly non-financial accounts data on the general government sector, and consolidated fiscal programme implementation reports.

## Gross Value Added Growth Rate in Real Terms and Contributions by Industry

(per cent, percentage points on corresponding quarter of prior year, non-seasonally adjusted data)




**Sources:** the NSI, the BNB.

In the first half year gross value added growth in the economy was 3.1 per cent in real terms (4.7 per cent in the same period of 2017). The services sector and, to a lesser extent, industry had positive contributions to the growth in economic activity. In the sector of services, real estate operations, trade[15] and general government[16] had the largest contributions to value added growth.

The number of employees rose by 0.7 per cent on an annual basis, from 1.0 per cent in the first half of 2017, reflecting the decline in self-employed in agriculture. The remaining major sectors boosted the number of employees, with the retail sub-sector contributing most, followed by manufacturing and construction.

Unemployment, estimated by Employment Agency registrations, declined to 6.7 per cent on average, from 7.8 per cent in the first half of 2017. NSI Labour Force Survey data show unemployment as defined by the International Labour Organization also falling to 5.6 per cent in the half year, from 6.6 per cent on average a year earlier. Long-term unemployment continued falling, though its share increased to 55.4 per cent, from 54.9 per cent in the same same period of 2017 in the total number of jobless people, as short-term unemployment fell more significantly. The economic activity rate of the 15–64 age group rose to 71.2 per cent, from 70.5 per cent in the first half of 2017, the number of discouraged persons in same group falling to 88,000 on average, from 124,000 in the first half of 2017.

In the first half of 2018 labour productivity in the total economy continued growing by 2.7 per cent on an annual basis, from 2.8 in the same period of 2017. Labour productivity dynamics differed by sector, real estate operations and agriculture growing most on the same period of 2017. Annual labour productivity decreased slightly in industrial and some services sub-sectors (the arts, entertainment and recreation, information and communications, and retail trade).

[15] Specifically, wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities under the economic activities classification at level A10.

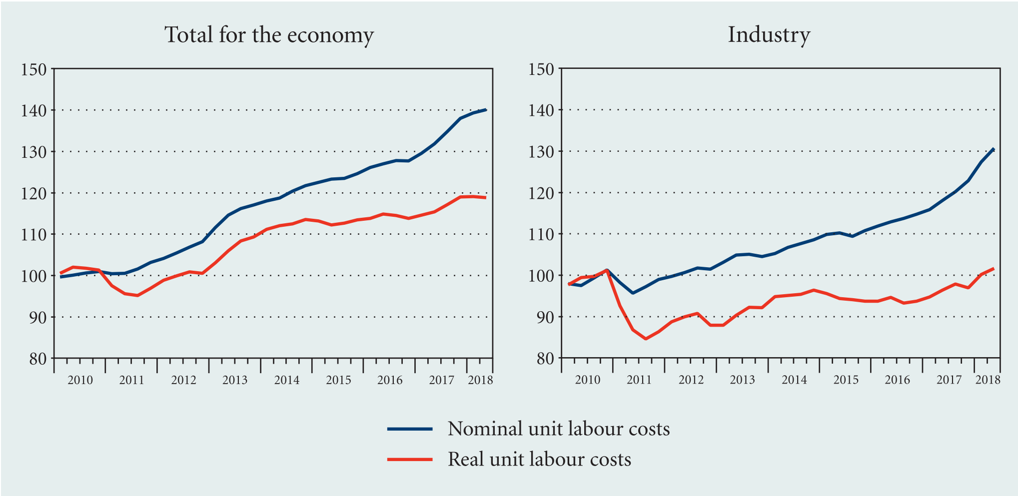
[16] General government, education, and human health and social work activities under the economic activities classification at level A10.

The increase in minimum wage, minimum insurance threshold and public sector wages affected wage dynamics. Increased economic activity in Bulgaria, measured by value added dynamics, and employment growth in most economic sub-sectors also contributed to the rise in wages. Average nominal wage increased by 4.8 per cent on an annual basis, compared to 8.1 per cent in the same period of 2017. National account data show a wage increase in all major economic sectors, with declines observed in some services sub-sectors, such as real estate operations, information and communications and trade. The pay drops in the latter two sectors reflected lower labour productivity. A relatively higher than average growth rate of wages was reported in industry and services sub-sectors of arts, entertainment and recreation and general government. Real terms average pay rose 2.8 per cent on an annual basis, slowing from 7.0 per cent in the same period of 2017. Compensation *per* employee picked up 5.5 per cent on an annual basis, from 9.0 per cent in the first six months of 2017.

Nominal unit labour cost growth slowed, rising 2.8 per cent on an annual basis in the half year, from 6.0 per cent in the first half of 2017. Real terms unit labour costs declined by 0.4 per cent on an annual basis, compared to an increase of 2.5 per cent in the previous year.

### Unit Labour Costs

(moving average, 2010 = 100)




**Sources:** the NSI, the BNB.

Gross operating surplus growth for the total economy moderated to 4.5 per cent on an annual basis, from 6.9 per cent in the same period of 2017. Services sub-sectors had the major contribution to the growth in operating surplus, while industry (manufacturing and construction) and agriculture, forestry and fishing contributed negatively.

The GDP deflator was positive at 3.2 per cent against 3.4 per cent in the same period of 2017. Positive values of the value added deflator were observed in all major economic sectors, except for agriculture, forestry and fishing and the services sub-sectors of real estate operations, financial and insurance activities and arts, entertainment and recreation. GDP deflator breakdown by final consumption expenditure component shows all sub-component deflators growing on an annual basis. The imports of goods and services deflator grew faster than the exports one.

Over the first six months of 2018 annual inflation[17] continued its upward trend, reaching 3.0 per cent in June (1.8 per cent in December 2017). Another critical factor behind inflation dynamics was the 21.2 per cent year-on-year increase of international oil prices in euro[18] on average, exerting direct effects on energy product inflation and indirect effects on other HICP components through corporate production costs and producer prices. Together with steadily rising consumer demand and specific factors in some services sub-groups, this contributed to the acceleration in services inflation, with this group recording the highest positive contribution to the overall inflation as of end-June 2018.

Goods and services with administratively controlled prices (including tobacco products) were another group which made a relatively large contribution to annual inflation as of June, mainly reflecting increased tobacco excise for a third consecutive year.[19] Water supply services, natural gas and heating also contributed to inflation.

Over the first half year food prices continued to increase on an annual basis, though slower than at the end of 2017. In June annual inflation in both unprocessed and processed foods fell to 2.5 and 1.4 per cent, from 3.0 and 2.5 per cent at the end of 2017. This followed a declining trend in international euro food prices since the second half of 2017. Internal factors pushing food prices up involved higher agriculture production costs measured by current consumption goods and services prices.

### HICP Inflation Accumulated since the Year's Start and Contributions by Major Goods and Services Groups

| | January–June 2017 | | January–June 2018 | |
|---|---|---|---|---|
| Inflation (per cent) | 0.3 | | 1.4 | |
| | Rate of inflation by group (per cent) | Contribution (percentage points) | Rate of inflation by group (per cent) | Contribution (percentage points) |
| **Food** | **1.9** | **0.46** | **1.0** | **0.25** |
| Processed food | 1.5 | 0.24 | 0.5 | 0.08 |
| Unprocessed food | 2.7 | 0.21 | 2.1 | 0.18 |
| **Services** | **-1.4** | **-0.36** | **2.2** | **0.55** |
| Catering | 1.4 | 0.08 | 1.8 | 0.10 |
| Transport services | -5.2 | -0.19 | 2.1 | 0.07 |
| Telecommunication services | -1.0 | -0.05 | 1.2 | 0.05 |
| Other services | -1.8 | -0.20 | 2.8 | 0.33 |
| **Energy products** | **0.4** | **0.03** | **6.0** | **0.50** |
| Transport fuels | 0.5 | 0.03 | 7.3 | 0.48 |
| **Industrial goods** | **-0.6** | **-0.14** | **-0.5** | **-0.09** |
| **Goods and services with administratively controlled prices** | **1.4** | **0.23** | **0.6** | **0.11** |
| **Tobacco products** | **0.7** | **0.03** | **2.9** | **0.13** |

**Notes:** This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are shown separately. The index of goods and services with administratively controlled prices is calculated through the elementary aggregates level in the consumer basket.

**Sources:** the NSI, the BNB.

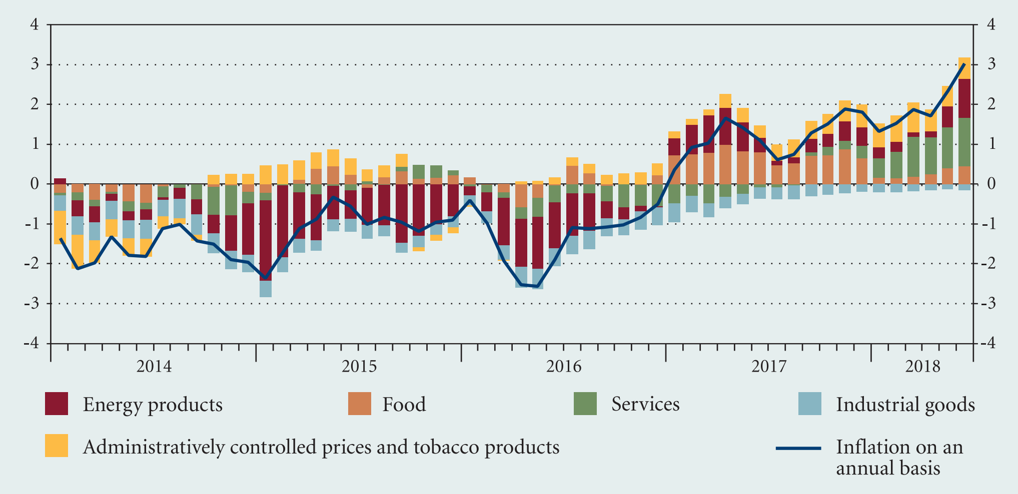
[17] The analysis employs HICP data.

[18] Brent oil prices in euro.

[19] A specific excise duty rise from BGN 101 to109 *per* 1000 cigarettes, an *ad volarem* excise duty drop from 27 to 25 per cent, and a minimum overall excise duty (specific and *ad volarem*) rise from BGN 168 to 177 *per* 1000 cigarettes from the start of 2018.

**Annual Inflation Rate and Contributions by Major Group of Goods and Services**

(per cent, on an annual basis; percentage points)




**Sources:** the NSI, the BNB.

Core inflation (excluding food, energy products, goods and services with controlled prices, and tobacco) rose by 2.3 per cent annually in June, from 0.3 per cent in December 2017. It largely reflected services inflation rising to 4.9 per cent, from 1.2 in December 2017. Within this group, short-stay accommodation services,[20] transport and catering had the highest positive contributions to overall June inflation within this group. Transport services also followed an upward price trend since the beginning of the year (-0.6 per cent annually in December 2017), mainly through higher airfares amid international oil price rises. Catering prices continued growing on an annual basis, driven by higher food prices. In the first six months of 2018 end prices of non-food goods continued falling on an annual basis, though by less (by 0.7 per cent in June, from 0.9 per cent in December). Decreased non-food prices were mainly driven by durable goods (automobiles and television equipment) unlike non-durable goods prices which increased slightly on an annual basis. Cheaper non-food goods were potentially affected by the euro appreciating on average 11.9 per cent against the dollar between January and June 2018.

Preliminary data show that in the first half of 2018 the total balance of the current and capital accounts was positive at EUR 180.4 million. The surplus shrank by EUR 981.2 million from the first half of 2017, reflecting almost entirely the strong increase in trade deficit.

The increased trade balance deficit resulted from higher real imports of goods, lower real exports of goods and worsened terms of trade. Half year foreign trade figures show nominal goods exports falling 2.3 per cent on the same period last year and nominal imports rising 6.6 per cent on an annual basis. Both exports and imports in all commodity groups posted year-on-year growth, mineral products and fuels the only exceptions.[21] Animal and vegetable products, food, and drinks and tobacco contributed positively to exports. Machines, transportation vehicles, appliances, instruments, and weapons contributed most significantly to imports.

[20] Accommodation services inflation reflects a 2018 methodological change in calculating the price index in this group since the beginning of 2018.

[21] A significant oil processing drop due to scheduled refinery maintenance in March and April, as reported in NSI data on oil and oil products production and delivery of 27 June 2018, is a potential reason for decreased mineral product and fuel exports and imports.

Capital account and net secondary income surpluses were lower than last year due to weaker EU programme transfers and a higher contribution to the EU budget. There were no essential changes in net primary income balance from the same period of 2017.

The lower current and capital account surplus was partially offset by an increased services trade balance. The net services trade surplus rose as annual services exports dropped more significantly at 10.5 per cent than imports at 2.1 per cent. Tourism revenue and transportation services exports contributed most to services exports. NSI data show a 9.3 per cent increase in foreign visits from the same period of 2017.

The balance of payments financial account was in a EUR 1002.2 million surplus, from EUR 1.8 million in the first half of 2017. This was because foreign assets rose significantly more than liabilities to non-residents. Other sectors' transactions contributed most significantly to the increased assets on the financial account.[22] An increase in foreign liabilities was observed only in other sectors.

Preliminary balance of payments data for the first half year put direct investment liabilities at EUR 555.9 million, down 4.7 per cent from the first half of 2017.

In June 2018 gross external debt increased by EUR 78.5 million from the end of 2017 to EUR 33.5 billion or 62.9 per cent of GDP. Foreign debt dynamics was driven by both increased bank debt and higher intercompany loans.

All external current, capital, and financial transactions led to a decrease in BNB international reserves by EUR 143.6 million, according to balance of payments data (valuation adjustments and price revaluations excluded). If changes in international foreign reserves on the BNB Issue Department balance sheet are taken into account, including valuation adjustments and price revaluations, as of June they fell by EUR 152.3 million on the end of 2017.

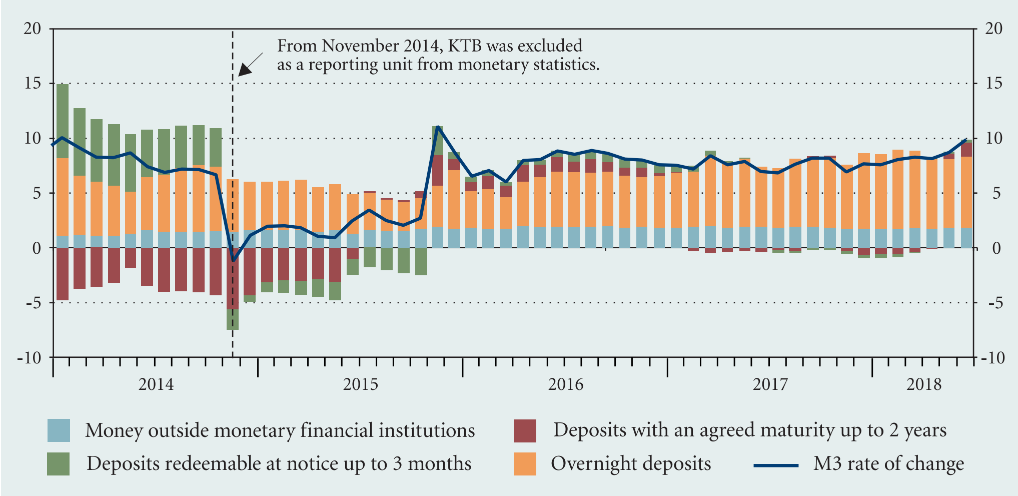
Continued strong inflows of funds attracted from residents in the banking system contributed to the accelerated annual growth rate of broad money. In June M3 monetary aggregate rose by 10.0 per cent on an annual basis (7.7 per cent at the end of 2017), with overnight deposits contributing most significantly to this dynamics. Amid continuing macroeconomic improvements and low deposit rates, both businesses and households preferred demand deposits with easier access to savings. Following the quasi-money negative contribution to annual M3 growth since the second quarter of 2017, between April and June its contribution was positive and gradually increasing, reflecting mainly deposits with an agreed maturity of up to two years. The contribution of money outside MFIs almost matched its levels of the end of 2017.

Overall non-government sector deposits in the banking system grew 8.5 per cent in June, from 6.2 per cent at the end of 2017, mainly due to household deposits. Household deposits grew 7.0 per cent, from 5.4 at the end of 2017 and non-financial corporations' deposits growth rose to 15.6 per cent, from 13.8 at the end of 2017. In the first half year households continued preferring to save in levs, while non-financial corporations increased their deposits in both levs and foreign currencies. Financial corporations continued contributing negatively to the overall growth of non-government sector deposits.

[22] Sectors other than central bank, other monetary financial institutions and general government.

## Annual Rate of Change in M3 and Contribution by Component

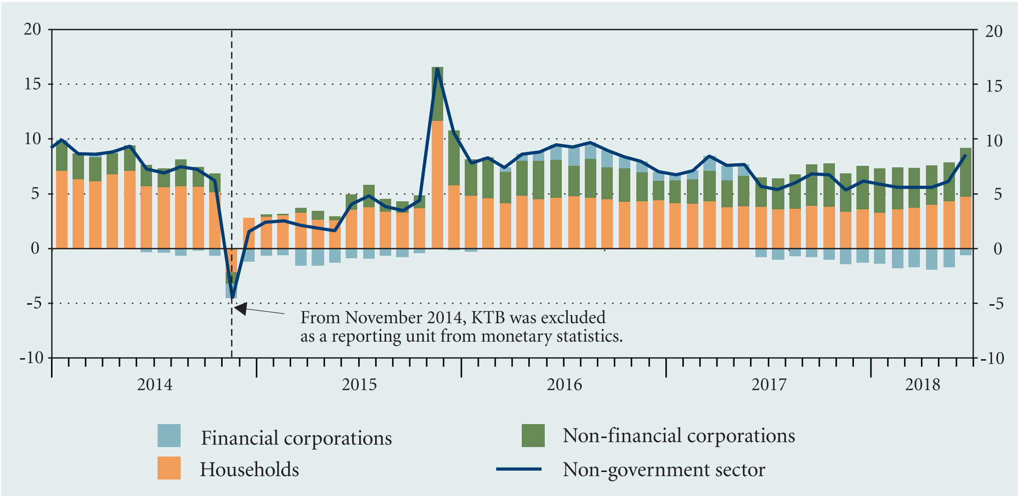
(per cent, percentage points)




**Source:** the BNB.

## Annual Growth of Non-government Sector Deposits and Contribution by Sector

(per cent, percentage points)




**Source:** the BNB.

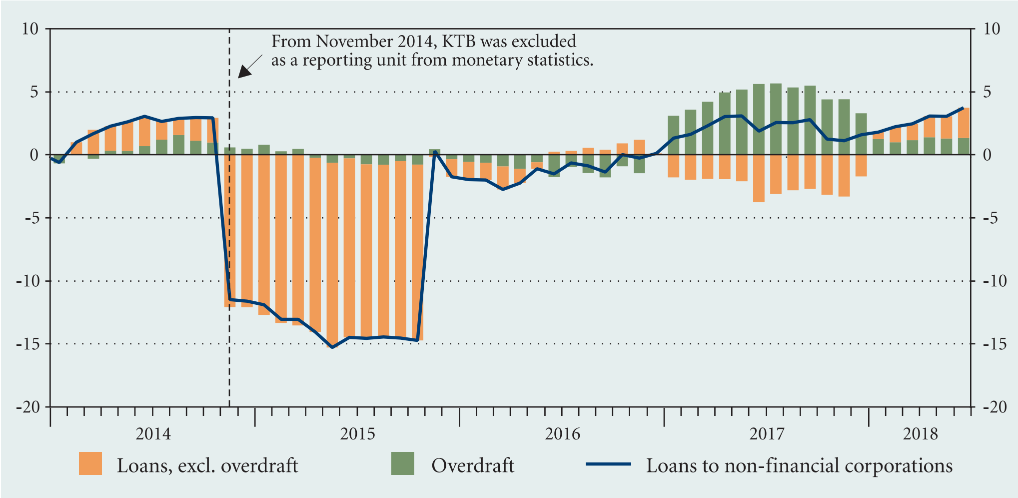
Favourable macroeconomic environment and low lending rates contributed to gradually accelerating credit growth to non-financial corporations and households: 5.8 per cent by June, from 3.3 by December 2017. The upward trend in loans to the private sector reflected household lending rising 9.2 per cent on an annual basis, from 6.0 per cent in December. A stronger annual increase compared with the end of 2017 was reported in both consumer and housing loans, while the contribution of other loans to the overall dynamics of household credit was negative. Accelerated consumer lending (up 15.1 per cent in June 2018) was strongly influenced by the inclusion of a new reporting unit in the scope of monetary statistics from April 2018.[23] Annual

[23] As from April 2018, the other monetary financial institutions sector includes BNP Paribas Personal Finance S.A. – Bulgaria branch, with balances reclassified from the sector of other financial intermediaries. The reclassification results from BNP Paribas Personal Finance EAD specialised in lending being transformed through merger into the new credit institution. Until March 2018, it was included in the sector of other financial intermediaries for the purposes of monetary statistics.

lending to non-financial corporations accelerated to 3.8 per cent in June, from 1.6 at the end of 2017, mainly reflecting loans except overdrafts.

### Annual Non-financial Corporation Credit Growth and Contribution by Loan Type

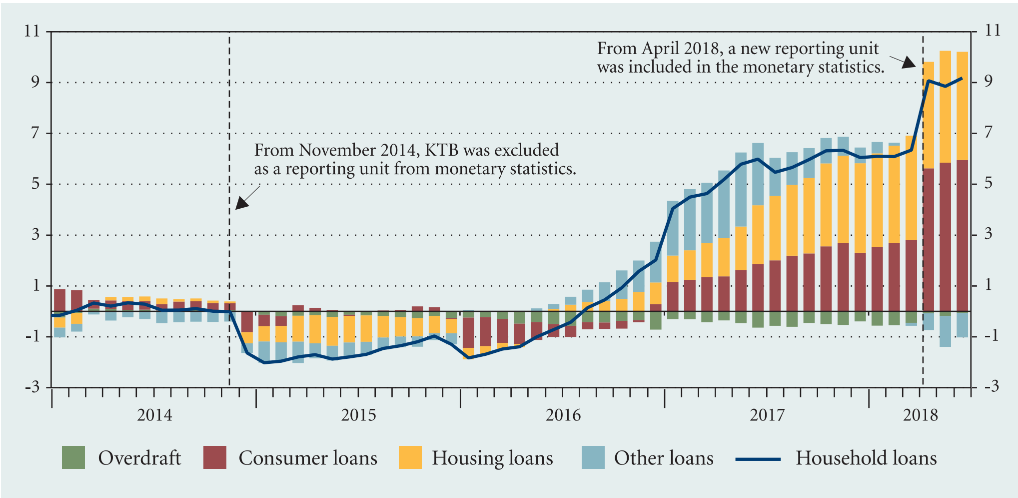
(per cent, percentage points)




**Source:** the BNB.

### Annual Household Credit Growth and Contribution by Individual Loan Type

(per cent, percentage points)




**Source:** the BNB.

According to the summarised weighted results of the BNB quarterly lending survey, credit demand by both corporations and households grew in the first half of 2018, most in consumer lending. According to a weighted balance of opinions, low interest rates and demand for investment purpose funds contributed most to the higher corporate credit demand. Demand for funds to finance working capital and inventories, refinancing, restructuring or renegotiating debt also had a significant effect on it. Major factors fostering household demand for consumer loans involved low interest rates, demand for funds for purchasing durable goods and those intended for current consumption, and positive consumer sentiment about the macroeconomic environment. In addition to interest rate levels, favourable prospects in the domestic housing market also contributed strongly to the enhanced demand for housing loans.

On the supply side, banks tightened corporate lending standards in the first quarter, keeping them unchanged in the second quarter, with lower bank risk appetite appearing to be the main factor. Household credit standards were eased in the first quarter, slightly tightened for consumer loans and retained unchanged for housing loans in the second quarter, according to the weighted balance of opinions. Strong competition between banks, decreased risk assessments as a result of the overall macroeconomic improvement, favourable housing market prospects, increased borrower solvency, and lower collateral risk contributed to easing of household lending standards and conditions. As in corporate lending, credit policy tightening in the first half was due to banks' lower risk appetite.

In the first six months the banking system retained its strong liquidity position, with the liquid asset ratio[24] accounting for 315.1 per cent in June (347.6 per cent in December 2017).

Bank transactions with the BNB in reserve currency (euro) are banks' main instrument for managing their lev liquidity under currency board arrangements in Bulgaria. This takes advantage of the main currency board function: buying and selling levs for euro at the fixed exchange rate under the Law on the Bulgarian National Bank.[25] In the first half of 2018 net BNB sales of euro to banks were EUR 0.5 billion.

Traded volumes in the interbank lev market rose significantly from the same period of 2017, with deposit and repo transactions reaching BGN 231 million on an average daily basis (BGN 96 million in the first half of 2017). Interbank trading had already started to intensify in the fourth quarter of 2017, reflecting the decreased interest rate on banks' excess reserves with the BNB from -0.40 to -0.60 per cent.[26] Interbank money market lev transactions came to BGN 28.4 billion, rising 139.4 per cent on the same period of 2017. Deposits comprised 83.9 per cent of turnover and repos in government securities 16.1 per cent. Overnight transactions continued to dominate deposit transactions between banks at 80.2 per cent.

Between January and June 2018 the average interest rate on interbank deposits and repurchase agreements dipped by 33 basis points from this time last year to -0.49 per cent. Following the greater dip in LEONIA Plus[27] over the fourth quarter of 2017 under the influence of the decreased interest rate on bank excess reserves with the BNB, its dynamics in the first half of 2018 remained stable within -0.49 to -0.50 per cent band. The EONIA index also reported no significant changes, the spread between LEONIA Plus and EONIA remaining close to the level of the end of 2017 (-0.14 per cent in June).

Indicative interbank money market rates based on SOFIBOR,[28] with no real transactions concluded, declined across all maturities. The dip was sharper in the long end of the yield curve, with negative interest on instruments with maturities of up to four months by the close of June. Overnight transactions continued to dominate deposit transactions between banks at 80.2 per cent.

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[24] The liquidity coverage ratio (LCR) for the banking system is calculated as the ratio of liquidity buffer to total net cash outflows. For more information, see Chapter VI.

[25] See Chapter II.

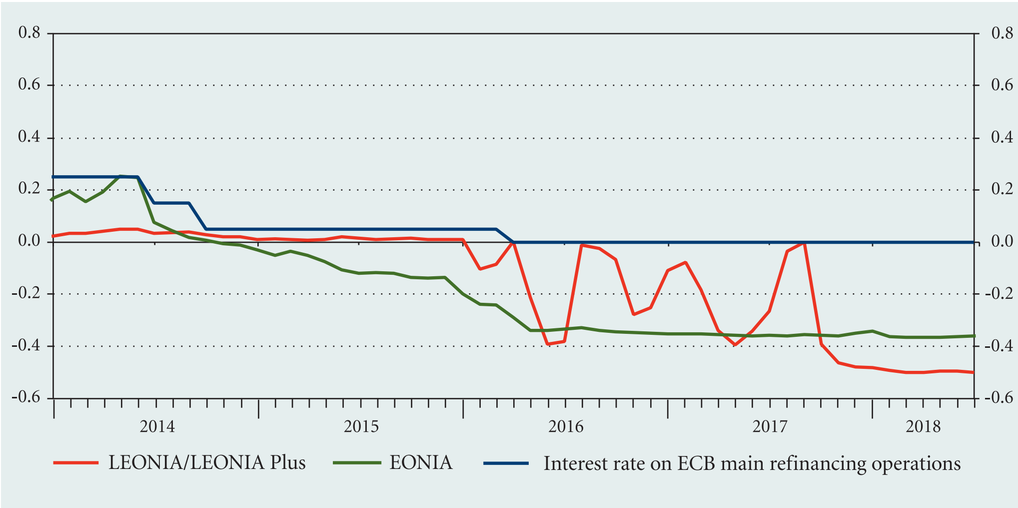
[26] On 4 October 2017 changes in the methodology for calculating interest rates on accounts with the BNB came into force. The Bank applies on bank excess reserves the lower of: 0 per cent or the ECB deposit facility rate reduced by 20 basis points. This cut excess reserve interest rate to -0.60 per cent.

[27] LEONIA Plus (LEv OverNight Interest Average Plus) is a reference rate of unsecured overnight deposit transactions in Bulgarian levs on the interbank market.

[28] According to the Governing Council decision of 16 March 2017, the BNB discontinued all activities related to the calculation and publication of the SOFIBID and SOFIBOR reference rates as from 1 July 2018. For further details, see the BNB press release of 16 March 2017: http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20170316_EN

## Interbank Money Market Interest Rate

(per cent)

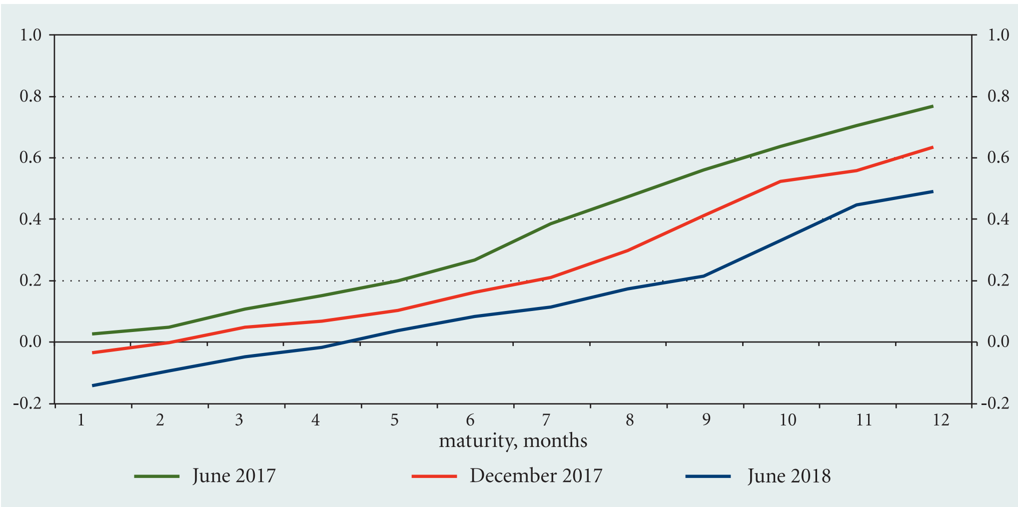



**Note:** LEONIA Plus replaced LEONIA on 1 July 2017. LEONIA Plus monthly values are calculated as an arithmetic average for days when overnight unsecured lending transactions are concluded in the interbank market in levs.

**Sources:** the BNB, the ECB.

## Interbank Money Market Yield Curve

(per cent)




**Note:** The average monthly SOFIBOR rate for the relevant maturity.

**Source:** the BNB.

In the first half year cash based consolidated fiscal programme surplus was BGN 1713.2 million. Budget balance posted a minimal decline of BGN 32.7 million compared to the same period of last year.

Total revenue and grants under the consolidated fiscal programme grew 9.9 per cent annually driven mainly by the upward dynamics in all major groups of tax and social insurance revenue. The 10.2 per cent annual growth in tax revenue reflected accelerated nominal growth in household consumption and increased compensation of employees and gross operating surplus. Additional factors were the increases introduced since the beginning of the year: in the pension contribution (by 1 percentage point), cigarette excise, the minimum insurance income and minimum wage, and continuing measures to boost tax collection. Between January and June non-tax revenue and grants rose by 9.5 and 4.1 per cent on an annual basis, with a more limited contribution to the growth in budget revenue.

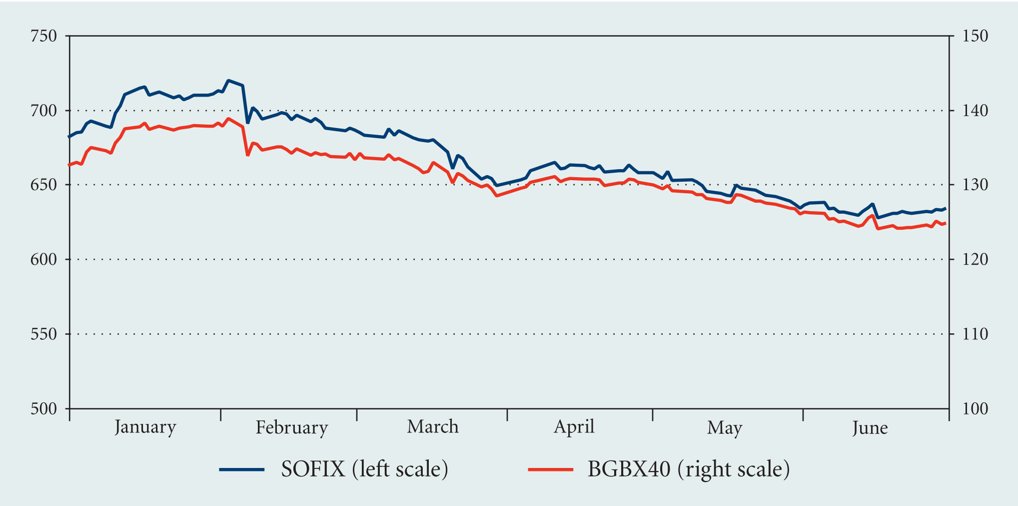
Total CFP expenses were 11.2 per cent higher than a year earlier, driven mainly by social payments (3.3 percentage points), capital expenditure[29] (2.9 percentage points) and personnel costs (2.8 percentage points). Government social payments mainly reflected increased old age pensions for length of service and age since July 2017 and the July and October 2017 minimum pension rises. Increased remunerations in the secondary education system since the second half of 2017 and raised pension contributions, minimum wage and remunerations in other budget sectors since early 2018 were the main drivers for boosting staff expenditure in the first half of 2018. Capital expenses rose significantly, their 53.9 per cent annual growth reflecting those under EU programmes and, to a lesser extent, national budget investment.

The accumulated cash surplus was used to finance the net negative issue of government securities in the domestic market at BGN -1051.6 million (with no government securities issued since the beginning of the year).[30] Funds on fiscal reserve deposits grew by BGN 83.9 million to BGN 9866.8 million, with total fiscal reserve, including certified expenditure claims on EU funds, advances, and other payments reaching BGN 10,830.7 million. Funds in the State Fund for Guaranteeing the Stability of the State Pension System (the Silver Fund) included in the scope of the fiscal reserve increased by BGN 119.2 million to BGN 2905.0 million by end-June.

Reflecting mainly external factors, Bulgarian government bond yields showed divergent developments in the first half of 2018, with a more essential rise in all maturities observed in early 2018, followed by a decrease in medium-term government yields. By the end of June the yield on bonds maturing in 2022–2024 posted a minimal 5–10 basis point increase on the end of 2017, unlike the 22–41 basis point rise at the long end of the maturity curve.

The leading Bulgarian Stock Exchange SOFIX and BGBX40 indices followed clear downward trends. In June SOFIX fell by 6.4 per cent from the end of 2017 and BGBX40 by 5.4 per cent. In June 2018 market capitalisation of the Bulgarian Stock Exchange, Sofia, was BGN 23.7 billion or 22.8 per cent of GDP, from 23.4 per cent at the close of 2017.

## Bulgarian Stock Exchange Indices in the First Half of 2018




**Sources:** the BNB, Bulgarian Stock Exchange.

[29] Including government reserve growth.

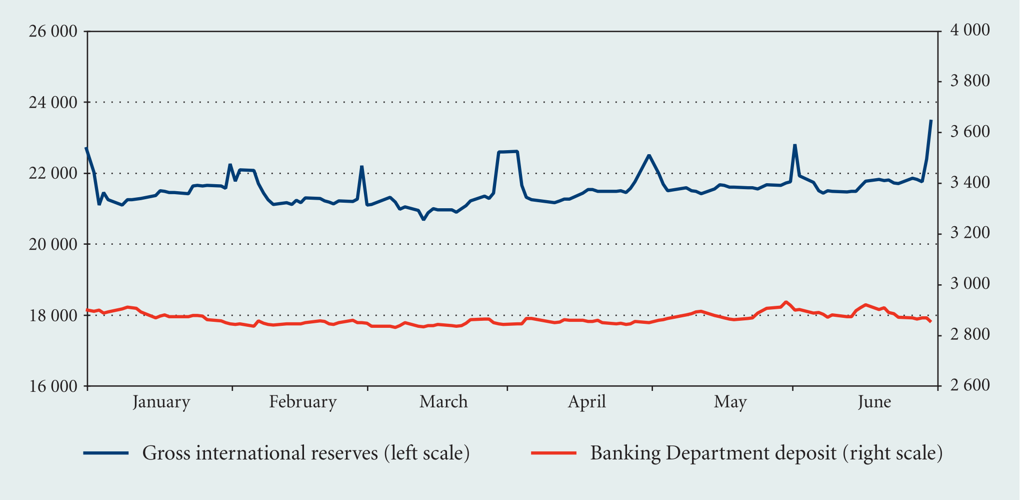
[30] For more information on government securities primary and secondary markets, see Chapter XII.

# II. Gross International Reserves

The BNB manages its gross international reserves in line with the Law on the Bulgarian National Bank[31], investment constraints, business procedures and methodologies, and opportunities offered by international financial markets. Gross international reserves comprise the assets on the Issue Department's balance sheet. Their role is to provide complete cover for monetary liabilities under the fixed exchange rate of the lev to the euro provided for by the Law on the Bulgarian National Bank[32]. The excess of gross international reserves over monetary liabilities forms the Banking Department Deposit item or the net value in the Issue Department's balance sheet[33].

### Gross International Reserves and Banking Department Deposit in the First Six Months of 2018

(EUR million) (EUR million)




**Note:** The chart shows daily movements of the Issue Department balance sheet figure and the Banking Department deposit in the Issue Department balance sheet.

**Source:** the BNB.

[31] There were no Law on the BNB amendments of the regulatory framework for gross international reserve management.

[32] The Law on the BNB Article 28, paragraph 2 defines the Bank's monetary obligations as all circulating cash issued by the BNB and all balances of other entities' BNB accounts, except the IMF. Article 28, paragraph 3 defines what assets may comprise gross international reserves: monetary gold; Special Drawing Rights; banknotes and coins in freely convertible foreign currency; funds in freely convertible foreign currency held by the BNB on accounts with foreign central banks or other financial institutions or international financial organisations with one of the two highest ratings by two internationally recognised credit rating agencies; securities issued by other countries, central banks, other foreign financial institutions, or international financial organisations assigned one of the two highest ratings by two internationally recognised credit rating agencies; the balance on accounts receivable and payable on BNB forward or repo agreements with (or guaranteed by) foreign central banks, public international financial organisations or other foreign financial institutions with one of the two highest ratings from two internationally recognised credit agencies; and BNB futures and options which bind non-residents and which are payable in freely convertible foreign currency. The Law on the BNB stipulates that these assets are estimated at market value.

[33] According to the Law on the BNB Article 28, paragraph 1 'the aggregate amount of monetary liabilities of the BNB shall not exceed the lev equivalent of gross international reserves,' with the lev equivalent determined on the basis of the fixed exchange rate.

## The Amount and Structure of Gross International Reserves

By the end of June of 2018 the market value of gross international reserves was EUR 23,509.83 million: a decrease of EUR 152.29 million[34] or 0.64 per cent share of BNB foreign currency assets. Major factors affecting the market value of assets include income from asset management, income from foreign currency revaluation, and external cash flow effects. Negative foreign currency flows of EUR 337.90 million made the largest net negative contribution to the international reserve drops in the first half of 2018.

### External Cash Flows in Foreign Currency

(EUR million)

| | January–June 2017 | January–June 2018 |
|---|---|---|
| **I. Euro purchases and sales** | | |
| at tills | -24 | -32 |
| with banks | 513 | -483 |
| purchases from banks | 32,436 | 14,503 |
| sales to banks | -31,923 | -14,987 |
| **Subtotal I** | **489** | **-516** |
| **II. Currency flows with banks, the MF, *etc*.** | | |
| Bank reserves (including minimum required reserves) | -411 | -209 |
| Government and other depositors | 259 | 387 |
| **Subtotal II** | **-152** | **178** |
| **Total I+II** | **336** | **-338** |

**Source:** the BNB.

Cash flows from net reserve currency sales by commercial banks affected international reserves most, resulting in EUR 483 million cash outflow. EUR 209 million net withdrawals by commercial banks maintaining required and excess reserves with the BNB, had a negative effect on the amount of international reserves. The government and other budget entities deposited net EUR 387 million positive cash inflow in the first six months.

Over the reporting period the relative share of gold in gross international reserves grew to 6.88 per cent on average on 6.46 per cent in 2017. This was mainly because cash outflows from the Issue Department balance sheet cut the average share of euro-denominated assets to 92.37 per cent. The share of assets invested in US dollars also declined to 0.17 per cent due to a decrease in the market value of monetary liabilities in this currency.

### Currency Structure of Gross International Reserves

(per cent)

| Currency | Issue Department balance sheet assets | |
|---|---|---|
| | 2017 | January–June 2018 |
| EUR | 92.79 | 92.37 |
| USD | 0.20 | 0.17 |
| XAU | 6.46 | 6.88 |
| XDR | 0.54 | 0.57 |
| CHF | 0.00 | 0.00 |

**Note:** Average values calculated on a daily basis for the period.

**Source:** the BNB.

[34] Balances in banks' TARGET2 national system component accounts (worth EUR 447.95 million at the end of June 2018), and the two tranches of SDR 611 million the IMF disbursed in August and September 2009 upon general SDR allocation are not included in the analysis of changes below. For further details see BNB Annual Report, 2009, p 26.

The share of investment into securities rose in the structure of assets by financial instrument, mainly because investment into deposits offered worse returns, its share falling 3.86 per cent from 2017. At 60.72 per cent most assets continued to be invested into securities.

### Gross International Reserves by Financial Instrument

(per cent)

| Financial instruments | 2017 | January–June 2018 |
|---|---|---|
| Vault cash* | 3.47 | 3.66 |
| Deposits** | 39.48 | 35.62 |
| Securities** | 57.05 | 60.72 |

**Note:** Average values calculated on a daily basis for the period
* Account balances, payments, and monetary gold.
** Including instruments in foreign currency and gold.
**Source:** the BNB.

Most assets (averaging 65.61 per cent, up 3.51 percentage points on 2017) in the structure of international reserves by residual term to maturity continued to be invested in the up to a year maturity sector (current accounts, short term deposits in foreign currency and gold, and short term securities). Over the reporting period investment into securities in all other maturity sectors, especially in three to five year one, declined as asset interest (duration) fell.

### Gross International Reserves by Residual Term to Maturity

(per cent)

| Maturity sectors | 2017 | January–June 2018 |
|---|---|---|
| Up to a year | 62.10 | 65.61 |
| One to three years | 29.05 | 27.23 |
| Three to five years | 8.43 | 6.83 |
| Five to ten years | 0.41 | 0.33 |
| Over ten years | 0.01 | 0.00 |

**Note:** Average values calculated on a daily basis for the period.
**Source:** the BNB.

## Gross International Reserves Risk and Return

### The Market Environment

In the first half of 2018 European government bond market dynamics reflected incoming data showing slower growth in the euro area compared to 2017 and higher demand for low-risk assets driven by political uncertainty in Italy and concerns of trade conflicts between the United States and their major trading partners. The ECB Governing Council's June decision to extend the Asset Purchase Programme (APP) until the end of 2018 at a monthly volume of EUR 15 billion was largely expected and met no significant market response. However, the change in the forward guidance on euro area reference interest boosted government bond prices, markets expecting the first ECB deposit facility rate rise in the last quarter of 2019.

In the first half of 2018 German government bond yield fell in both short- and long-term maturity sectors. Other euro area countries' yield spreads mostly widened against German ones. Significant volatility in European government bond prices, especially in the second quarter, reflected increasing Italian political uncertainty.

In the first half of 2018 US government bond yield rose. This was more pronounced in the short-term sectors, mainly because of the US Federal Reserve's two-step rises of the federal funds target rate range to 1.50–1.75 per cent in March and 1.75–2.00 per cent in June, and the US Federal Open Market Committee (FOMC)'s two-step target rate rises by 25 basis points by the end of 2018. Positive US economic data and the policy of reducing the Federal Reserve balance sheet boosted long-term US government bond yield. Rising tension in trade relations between the United States and their major trading partners contributed to US government bond price volatility.

### *Euro Area Central Banks and US Policies*

At its monetary policy meeting of 25 January 2018, the ECB Governing Council made no changes to the interest reference rates, its future monetary policy guidance and APP parameters. The ECB Governing Council saw euro exchange rate volatility as a source of uncertainty to be monitored given its potential impact on the outlook for euro area price stability.

The 8 March monetary policy meeting left reference interest unchanged but changed APP forward guidance by removing the option of expanding the APP. The APP forward guidance change took account of euro area economic performance, without constraining ECB expectations and future moves.

The 26 April and 14 June 2018 monetary policy meetings kept reference interest rates unchanged. At its meeting of 14 June 2018, the ECB Governing Council announced its intention to extend APP to December at monthly volume of EUR 15 billion from EUR 30 billion, discontinuing net purchases after that. Net asset purchases were to depend on incoming economic data, the APP remaining part of the monetary policy toolkit. The ECB Governing Council also changed the forward guidance on reference interest rates, which were expected to remain at their current levels at least until the end of summer 2019. It maintained forward guidance on reinvesting principal payments from maturing Eurosystem portfolio securities, indicating this would be discussed at a future Council meeting.

In the first half of 2018 the Eurosystem balance sheet figure rose 2.7 per cent to EUR 4.59 trillion on the end of 2017. This was mainly due to early 2018 purchases of assets under four ECB's programmes: EUR 122.8 billion under the Public Sector Purchase Programme (PSPP), EUR 30.4 billion under the Corporate Sector Purchase Programme (CSPP), EUR 13.7 billion under the Covered Bond Purchase Programme 3 (CBPP3), and EUR 2.4 billion under the Asset-Backed Securities Purchase Programme (ABSPP). Euro area banking system excess liquidity rose to EUR 1781 billion from EUR 1779 billion at the end of 2017 and average effective EONIA overnight unsecured deposit interest fell to -0.36 per cent from -0.35 per cent on average in the second half of 2017. By end-June the one-month interest was unchanged from the end of 2017 at -0.38 per cent, and six- and 12-month interest was -0.27 and -0.18 per cent (no change and 1 basis point up).

The US Federal Reserve System continued the process of monetary policy normalisation, raising the federal funds rate corridor in March and June by 25 basis points to 1.50–1.75 and 1.75–2.00 per cent. The FOMC cited strong employment growth, low unemployment, and US consumer prices moving in line with the Federal Reserve target. The June FOMC meeting removed the forward guidance that federal funds rate were to remain below long-term equilibrium levels. The FOMC projected a reference rate rise by the end of 2018 and changed the expected number of 2018 and 2019 rate rises from three to four and from two to three. FOMC expectations of the target rate at the end of 2020 and its long-term equilibrium level remained unchanged at 3.38 and 2.88 per cent.

### *Euro Area and US Sovereign Bond Yields*

In the first half of 2018 the German government bond yield curve flattened due to the greater decrease in long-term maturity sector yields. Yield in the two- and ten-year maturity sectors fell 4 and 13 basis points to -0.67 and 0.30 per cent on the end of 2017. Higher demand for low-risk assets amid Italian political uncertainty and intensifying global trade conflicts drove German government bond yield fall. Worse than expected euro area economic data also depressed German government bond yields.

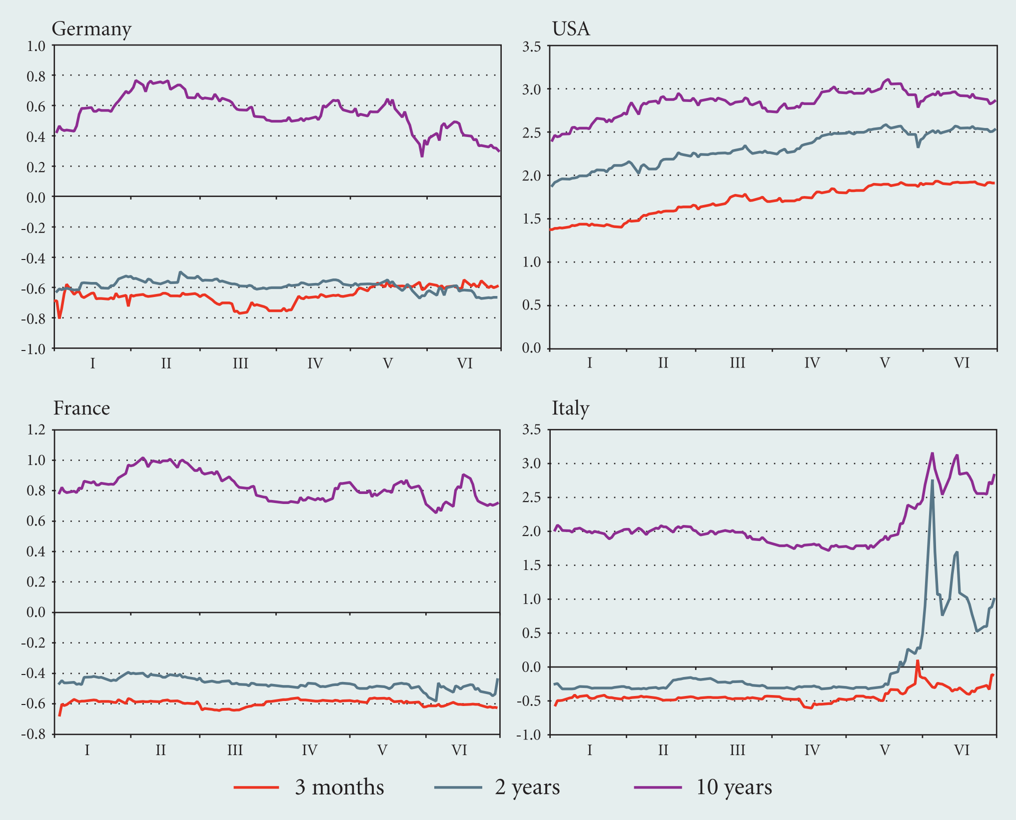
Euro area government bond yield spreads mostly widened compared to German ones, with significant volatility, especially in the second quarter. Italian political uncertainty drove dynamics over that period. Italian government bond yield spreads widened to their highest level by 99 basis points in the two-year and 79 basis points in the ten-year maturity sectors, with very high volatility by the end of May and very low liquidity in the Italian bond market. Two-year Italian government bond yields recorded unusually large daily movements, rising 186 basis points to 2.77 per cent by 29 May and falling 107 basis points the next day. Short-term Italian yields rose more because the new government's economic measures were expected to worsen Italy's fiscal indicators greatly. The Italian bond market recovered somewhat in early June, higher price volatility continuing. The Italian situation helped cut German government bond safe asset yields. The significant widening of Italian bond spreads had also a negative impact on the bond yield spreads of other countries from the euro area periphery, as defined by market participants, especially on Spanish and Portuguese bonds. Other euro area countries' bond spreads widened less. Spanish political uncertainty over the no-confidence motion and the June change of government also contributed to widening government bond yield spreads, by much less than Italian government bonds. Spain's credit rating upgrades by one step to 'A-' with a stable outlook by Fitch and one step to 'A-' with a positive outlook by S&P soothed government bond price dynamics.

In the first half-year the US government bond yield curve measured by ten-and two-year bond yield differences dropped 19 basis points on the end of 2017 to 33 basis points by the end of June. This resulted from the 65 basis point higher yield on two-year US government bonds, exceeding the increase in ten-year government bond yields.

Two-year government bonds yield dynamics reflected largely FOMC decisions on the rise of federal funds target rate and statements on four target rate increases in 2018. Positive US economic data and policy aimed at reducing Federal Reserve balance sheet were the main drivers boosting long-term maturity sector yields. Rising trade tensions between the United States and major trading partners, particularly China, and geopolitical tension following the US withdrawal from the Iran nuclear deal reversed the upward trend in US government bond yields in the medium- and long-term maturity sectors.

### Government Bond Yields in the First Six Months of 2018

(per cent)



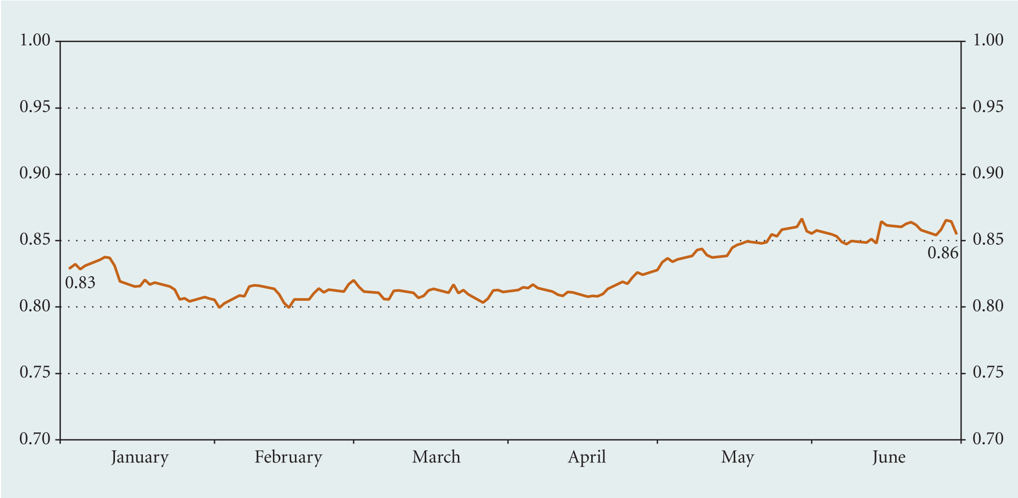

## *Gold and Exchange Rates*

In the first half of 2018 the gold price measured in US dollars fell 3.9 per cent to USD 1253, while the euro price posted a decline of 1.2 per cent to EUR 1072 *per* troy ounce. It moved within the relatively narrow range of USD 1250 to 1363 and EUR 1067 to 1128 *per* troy ounce. The appreciation of the US dollar in the second quarter of 2018 and rising US government bond yields were the main factors behind gold depreciation. Weaker global demand for safe assets, despite Italian political uncertainty and the changes in the US foreign trade policy, to a lesser extent, also depressed the gold price.

In the first six months of 2018 the US dollar appreciated 2.7 per cent on the euro, mostly in the second quarter, the USD/EUR exchange rate 2018 ranging from EUR 0.79 to 0.87 per USD 1. The change in the USD/EUR exchange rate was due to various factors, some of which strengthening the US dollar and others weakening the euro. US dollar appreciation mainly reflected relatively more favourable US economic data than those for the euro area, impacting investors' expectations of accelerated federal funds rate increase in 2018. This boosted US government bond yields and demand for dollars. Concurrently, divergent and weaker than expected euro area economic data coupled with ECB Governing Council caution on expected first interest rate rise and Italian political uncertainty drove euro depreciation against the US dollar.

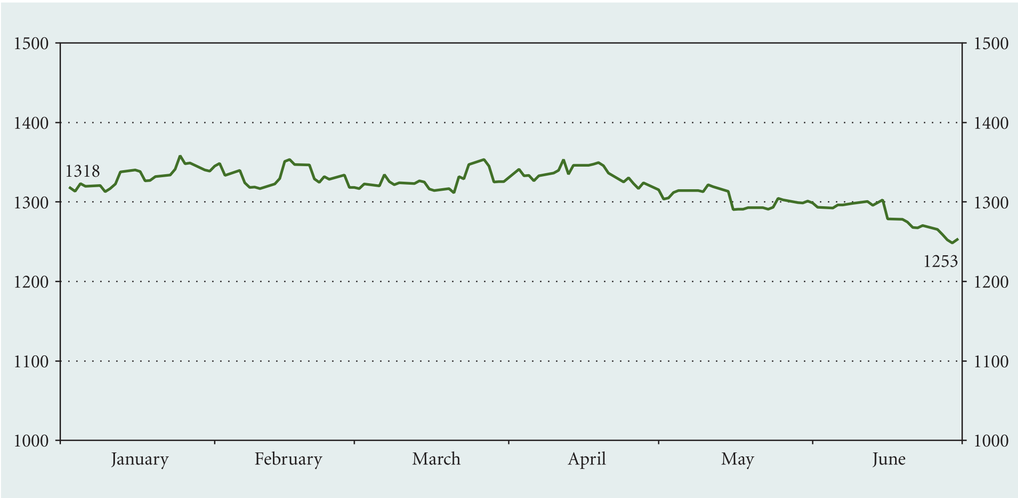
## USD/EUR Exchange Rate in the First Six Months of 2018

(EUR)



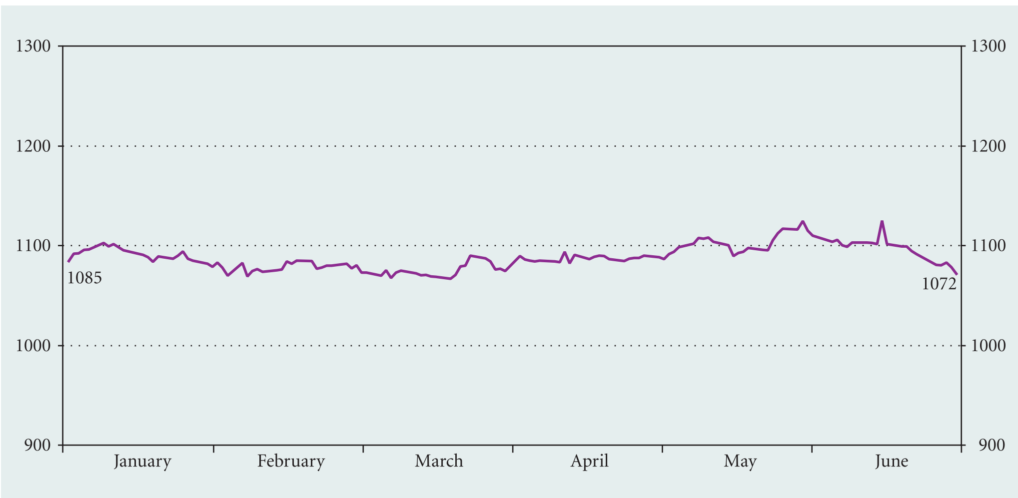

## Troy Ounce Gold Price in US Dollars in the First Six Months of 2018

(USD)




## Troy Ounce Gold Price in Euro in the First Six Months of 2018

(EUR)



## Major Types of Risk

Over the first half of 2018 net value risk in the Issue Department balance sheet measured by standard deviation of return on net worth was 6.05 per cent on an annual basis.

In the first half of the year international reserve **interest rate risk** measured by reserves' average modified duration was 0.91 years. The duration maintained was 0.08 years shorter than the average for 2017. The relative interest risk limit of investment portfolios was set on the basis of not more than 0.25 per cent relative yield volatility.

Gross international reserve **currency risk** was constrained by the Law on the BNB stipulation that the sum of the absolute values of open foreign currency positions[35] in currencies other than euro, SDR, and monetary gold, should not exceed 2 per cent of the market value of monetary liabilities in these currencies. There were minimal open positions in foreign currencies in the reporting period, the open position in monetary gold posing the main currency risk to the BNB.

The Bank continued its conservative **credit risk** policy in gross international reserve investment. Since the beginning of 2018 there were no major changes related to this type of risk, except temporary bans on investing into particular issuers' securities.

To achieve its main objective of very high international reserve security and liquidity, the BNB continued investing the main share of assets into euro area core country government bonds and government guaranteed debt, and into short term deposits with first class foreign banks.

By the end of the first half about 68 per cent of international reserves were invested into assets with the highest AAA long-term credit rating.

**Operational risk** was managed in strict compliance with, and control over, investment constraints and relevant business procedures for international reserve management.

## Return and Efficiency

Net income from assets in euro is the sum of three components: 1. income from investment of gross international reserves in the original currency; 2. income from currency imbalance[36]; and 3) expenditure and/or income from liabilities. BNB income from international reserve investment in the first half year was negative at EUR 26.19 million: -0.13 per cent yield. This reflected mainly the negative yields posted in the last two years by the euro-denominated high credit quality bonds with a maturity of about five years in which most BNB international reserves are invested. Currency imbalance income of EUR 15.15 million was also negative and almost entirely due to the change in the market price of monetary gold in euro. The new October 2015 BNB interest policy made the net financial result from liabilities positive at 0.05 per cent for the first half year, corresponding to a EUR 8.88 million income. The above three components brought negative net returns from international reserve management of EUR 32.47 million: -0.15 per cent half-year return[37].

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[35] An open foreign currency position is the difference between the value of assets and liabilities in any currency other than euro.

[36] Currency imbalance income is the result of the effects of exchange rate movements on asset and liability open foreign currency positions.

[37] Total return is obtained as a product, rather than simple sum, of the return of the relevant components.

## International Reserves Income and Return[1] in the First Half of 2018

| Period | Net income (EUR million) | Net return (per cent) | Income (EUR million) | Return (per cent) | Income (EUR million) | Return (per cent) | Expenditure (EUR million) | Return (per cent) |
|---|---|---|---|---|---|---|---|---|
| | | | on assets | | on currency revaluation of assets and liabilities | | on liabilities | |
| | (1)+(2)+(3) | | (1) | | (2) | | (3) | |
| First quarter | -26.29 | -0 12 | -17.05 | -0.08 | -13.35 | -0.06 | 4.11 | 0.02 |
| Second quarter | -6.17 | -0.03 | -9.14 | -0.04 | -1.80 | -0.01 | 4.76 | 0.03 |
| **Total** | **-32.47** | **-0.15** | **-26.19** | **-0.13** | **-15.15** | **-0.07** | **8.88** | **0.05** |

[1] Return between time $T_0$ and time $T_N$ is calculated by chain linked returns for this period. It is calculated using the following formula: $R(T_0, T_N) = (1+r_1)(1+r_2)\dots(1+r_N)-1$. This formula complies with Global Investment Performance Standards (GIPS).

**Source:** the BNB.

For operational management purposes, gross international reserves are split into portfolios by currency and investment goal, each with a benchmark, investment goals, and investment limits. The table below shows major BNB portfolios and the results from their management.

## Portfolio Return and Risk in the First Half of 2018

| Portfolio | Return | | Volatility (risk) | | Information ratio[3] |
|---|---|---|---|---|---|
| | Absolute (per cent) | Relative[1] (basis points) | Absolute (basis points) | Relative[2] (basis points) | |
| Investment 1, EUR | -0.14 | 7 | 12 | 8 | 1.72 |
| Investment 2, EUR | -0.15 | 6 | 11 | 9 | 1.39 |
| External manager A, EUR | 0.25 | 4 | 78 | 13 | 0.66 |
| External manager B, EUR | 0.18 | -3 | 79 | 11 | -0.45 |
| Liquid, EUR | -0.22 | 4 | 0 | 0 | - |
| Liquid, XAU | 0.09 | 7 | 4 | 4 | - |
| Liquid, USD | 1.06 | 28 | 11 | 11 | - |

[1] A portfolio's positive relative return is attained profit against benchmark return. Relative returns with a negative sign are interpreted as opportunity cost in portfolio management. The return is for a six-month period.

[2] Relative volatility (relative risk) against benchmark indicates the degree of deviation of portfolio risk characteristics from benchmark through active portfolio management. The risk is on an annual basis.

[3] Information ratio is the ratio between relative portfolio return and relative portfolio risk on an annual basis.

**Source:** the BNB.

To diversify management styles and cut operational risk, most euro-denominated assets continued being split into two investment portfolios with identical benchmarks and investment limits, managed by different BNB teams. By the end of the first half of 2018 international financial institution external managers managed some 4.04 per cent of gross international reserves. Beside additional diversification, using external managers helped exchange expertise in international market investment management. Liquid portfolios were intended mainly to assist immediate liquidity management objectives and BNB foreign currency payment needs.

# III. Payment Systems and Payment Oversight

The Law on the Bulgarian National Bank tasks the Bank with payment system organisation, support, and development by assisting the implementation, operation, and oversight of efficient payment mechanisms. The Bank's major goals are curbing systemic risk and integrating Bulgarian payment systems into the European payment infrastructure.

Bulgaria's lev payment systems are:

- RINGS, a real-time gross settlement system operated by the BNB;
- RINGS has these transaction settlement ancillary systems:
  - BISERA, for settling customer transfers at a designated time, operated by BORICA AD;
  - BORICA, for servicing bank card payments in Bulgaria, operated by BORICA AD.

Bulgaria's euro payment systems are:

- The TARGET2 national system component, TARGET2-BNB, run by the BNB;
- The TARGET2-BNB settlement ancillary system:
  - BISERA7-EUR, a system for servicing customer transfers to be settled at a designated time, operated by BORICA AD.

Bulgaria's securities settlement systems, where the cash leg is settled in payment systems run by the BNB, are:

- the book-entry government securities settlement system, run by the BNB;
- the book-entry securities registration and servicing system, run by the Central Depository.

## Lev Payment Systems

In the first half of 2018 the RINGS real-time gross settlement system processed most lev payments in Bulgaria. On 30 June 2018 the BNB and 26 banks participated in RINGS.

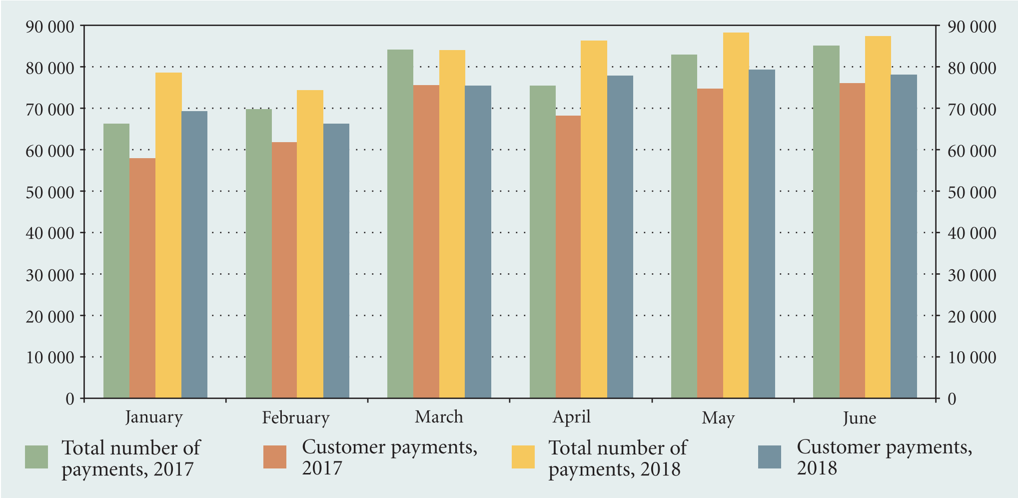
In the first half of 2018 RINGS processed payments worth BGN 460,763 million, up 44.1 per cent on this time last year, their number reaching 499,443 or a 7.5 per cent rise on the first half of 2017. There were 446,528 customer payments or 89.4 per cent of the total for BGN 105,907 million (22.9 per cent of the total).

The daily average value of payments *via* the system was BGN 3746 million and their daily average number was 4061. The daily value peak was BGN 5510 million, with a daily number peak of 6540.

In the half year 71.3 per cent of payments by value were processed by noon and 87.3 per cent by 2:30 pm. The balance of 12.7 per cent went through by 5:30 pm. As regards system traffic, 82.3 per cent of the number of system payments were effected by 2:30 pm. RINGS offered 100 per cent availability[38] in the period under review.

[38] The ratio of time when the system is operational to scheduled operating time.

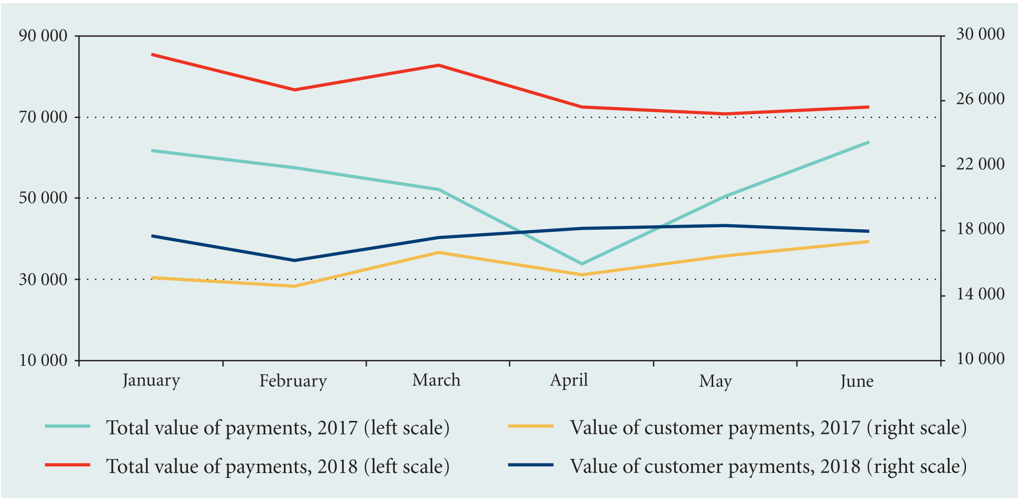
## RINGS Payment Number in the First Halves of 2017 and 2018




**Source:** the BNB.

## RINGS Payment Value in the First Halves of 2017 and 2018

(BGN million) (BGN million)



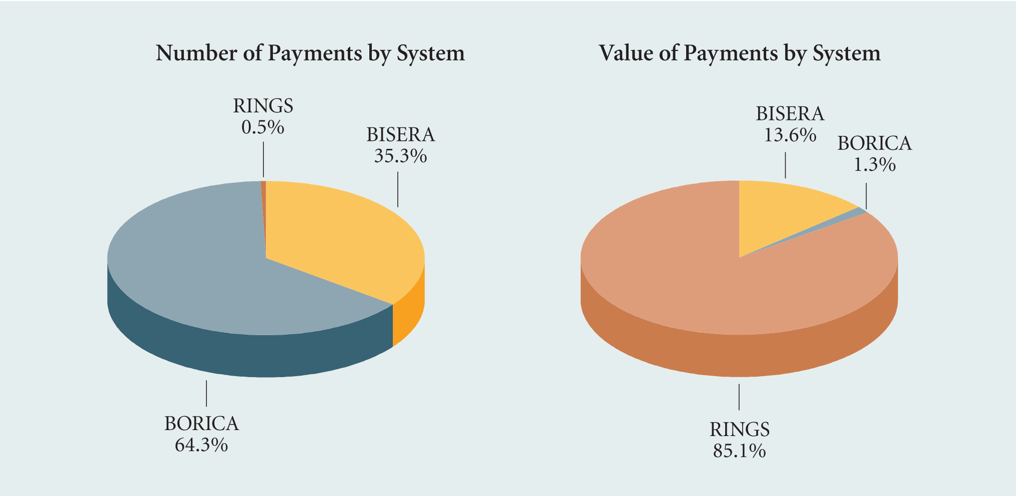

**Source:** the BNB.

Lev payment distribution in Bulgaria by payment system saw no changes from the first half of 2017. RINGS processed 85.1 per cent of the payments effected in Bulgaria. Values around 80 per cent are deemed optimal for the operation of real-time gross settlement systems. RINGS also processed 0.5 per cent of the total number of lev non-cash payments in Bulgaria.

In the first half of 2018 BORICA processed 70 million of payments effected via ATM and POS terminals, totalling BGN 6905.7 million: a rise of 20.1 per cent in number and 16.3 per cent in value on the first six months of 2017.

In the first half of 2018 BISERA processed 38.4 million of payments for BGN 73,697.8 million: up 4.6 per cent in number and 11.6 per cent in value in the first six months of 2018.

### Distribution of Lev Payments in Bulgaria by Payment System in the First Half of 2018




**Source:** the BNB.

## Euro Payment Systems

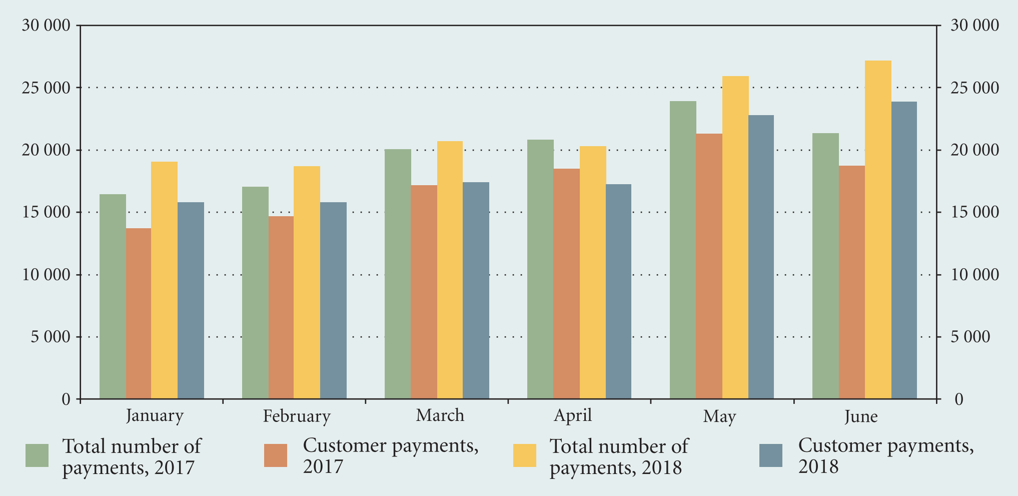
TARGET2 provides real-time gross settlement for payments in euro, with settlement in central bank money. It is a Single Shared Platform (SSP) system, each participating and connected central bank responsible for its system component. The BNB has operated the TARGET2-BNB national system component since 1 February 2010 and controlled participants' business relations and coordination with the European Central Bank and participant banks.

By 30 June 2018 the system included the BNB, 21 direct participant banks, three addressable BIC holders, and three ancillary systems: the BISSERA7-EUR for settling customer transfers in euro at a designated time, BNBGSSS for government securities settlement in the BNB, and the book-entry securities registration and servicing system, run by the Central Depository (Central Depository AD CSDBG)[39], incorporated as ancillary system into TARGET2 since 8 February 2018.

In the first half of 2018 TARGET2-BNB processed 131,830 payments for EUR 214,708 million, including 112,973 customer payments for EUR 4672 million. Data show a rise of 29.2 per cent in total value and 10.2 per cent in total number of processed payments on the first half of 2017.

[39] For a current list of TARGET2 participants in TARGET2-BNB, see the BNB website: http://www.БНБ.bg/PaymentSystem/PSTAPГЕТ2/PSTAPГЕТList/index.htm

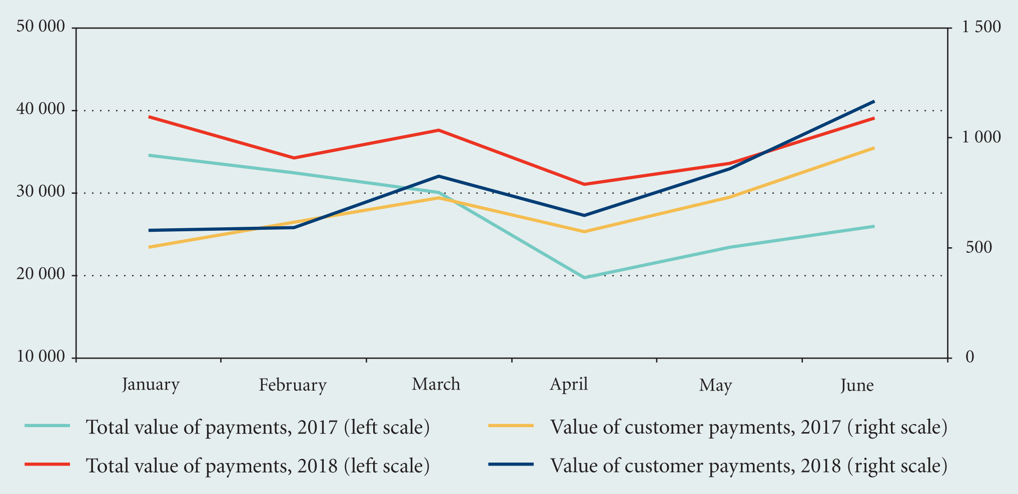
### TARGET2-BNB Payment Number in the First Halves of 2017 and 2018




**Source:** the BNB.

### TARGET2-BNB Payment Value in the First Halves of 2017 and 2018

(EUR million) (EUR million)




**Source:** the BNB.

The value and number of other system component payments to banks were 82.6 and 93.1 per cent of payments processed through the national component. There were 1046 daily average TARGET2-BNB payments, worth EUR 1704 million. The daily value peak was EUR 4616 million, with a daily number peak of 2136.

The BISERA7-EUR ancillary system processes designated time customer euro transfers. In the first half of 2018 it processed 27,442 payments for EUR 212 million, up 0.5 per cent in value and down 1.4 per cent in number on the first half of 2017.

## Bulgarian Payment and Settlement System Development

In the first half of 2018 the new Law on Payment Services and Payment Systems (LPSPS)[40] was adopted and entered into force, transposing Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market (the Payment Services Directive II) and updating payment services legislation. The new Law continues incorporating Directive 98/26/EC, 2009/44/EC, 2009/110/EC, 2010/78/EU and 2014/92/EU provisions.

The Payment Services Directive II transposed by the new LPSPS introduces these main changes: extends the negative scope; introduces new payment services and new payment service provider regulations; introduces additional payment institution and electronic money institution licensing requirements; calls for registration of the new category of account information service providers; sets out new security requirements for off-site or on-line payments; introduces measures for the management of operational and security risks in the provision of payment services. The new Law also lays down European and international provisions, including CPSS/IOSCO Principles for Financial Market Infrastructures and Regulation (EU) 2016/1011 of the European Parliament and of the Council on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

In the period under review the BNB adopted a new Ordinance No 16 on Granting Licences and Approvals, Entry into the Register under Article 19 of the Law on Payment Services and Payment Systems, and Requirements to the Activity of Operators of Payment Systems with Settlement Finality[41], repealing BNB Ordinance No 16 of 16 July 2009 on Licensing of Payment Institutions, Electronic Money Institutions and Payment System Operators. It introduces regulatory requirements arising from Payment Services Directive II and EBA Guidelines[42] on the information to be provided for the authorisation of payment institutions and e-money institutions and for the registration of account information service providers under Article 5(5) of Directive (EU) 2015/2366, and Guidelines[43] on the criteria on how to stipulate the minimum monetary amount of the professional indemnity insurance or other comparable guarantee under Article 5(4) of Directive (EU) 2015/2366. The Ordinance lays down the terms and procedure for: licensing of a payment institution and an electronic money institution; entering into the Register under Article 19 of the Law on Payment Services and Payment Systems of an account information service provider; licensing and conducting activities as an operator of a payment system with settlement finality, and carrying out settlement in the BNB.

The BNB also adopted a new Ordinance No 3 on the Terms and Procedure for Opening Payment Accounts, Executing Payment Transactions and Using Payment Instruments[44], which repealed BNB Ordinance No 3 of 16 July 2009 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments. The new Ordinance governs opening and keeping payment accounts; requirements to the execution of payment transactions and corrective transfers; and payment transactions through payment and prepaid cards; calculation and application of reasonable fees charged for services on payment accounts with basic features. It reviews and updates the provisions in compliance with the new Law on Payment Services and Payment Systems and Directive (EU) 2015/2366 of the European Parliament and of

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[40] Published in the Darjaven Vestnik, issue 20 of 6 March 2018.

[41] Published in the Darjaven Vestnik, issue 32 of 13 April 2018.

[42] EBA/GL/2017/09.

[43] EBA/GL/2017/08.

[44] Published in the Darjaven Vestnik, issue 37 of 4 May 2018.

the Council of 25 November 2015 on payment services in the internal market. In addition, it introduces requirements to payment service providers concerning management of operational and security risks in the provision of payment services, and notification of major incidents. The Ordinance sets out a national list of the most representative services linked to a payment account, the operation of the fee comparison websites, the form and the content of the fee information document and the statement of fees. These provisions comply with the requirements of the new Law on Payment Services and Payment Systems, EBA Guidelines[45], Commission Delegated Regulation[46] and Commission Implementing Regulation[47] published at the end of 2017 and in the beginning of 2018.

On 8 February 2018 the BNB as operator of TARGET2-BNB national system component incorporated the book-entry securities registration and servicing system run by the Central Depository into TARGET2 as ancillary system. This allows for the euro settlement of the cash leg to be effected through central bank accounts under Regulation (EU) No 909/2014 of the European Parliament and the Council of 23 July 2014 on Improving Securities Settlement in the European Union and on Central Securities Depositories (CSDR).

As of 30 June 2018, 99.7 per cent of Bulgarian cards, including 99.6 per cent of debit and 100 per cent of credit cards had migrated to the EMV standard.[48] EMV implementation into the card payments infrastructure was almost complete, with all ATMs and 99.9 per cent of POS terminals migrated by end of June 2018.

## Payment Systems Oversight

In line with the Law on the BNB and the Law on Payment Services and Payment Systems, the Bank regulates and oversees payment system operators with settlement finality, payment service providers and electronic money issuers in Bulgaria. The BNB grants licences and oversees compliance with national and European statutory requirements and relevant international principles, standards, and recommendations.

In the first half of 2018 the Bank completed three and started four inspections of payment service providers. The aim was to check if payment service providers complied with the Law on Payment Services and Payment Systems and its statutory instruments. Breaches were duly removed by the payment service providers. The Bank also started an inspection of an institution to establish whether it had provided payment services without due licence.

In the first six months of 2018 the BNB started spot on-site inspections of all payment service providers licensed by the BNB to establish compliance with the requirements of EBA Final guidelines on the security of internet payments of 19 December 2014 and Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions.

In accordance with the Law on Payment Services and Payment Systems the BNB Governing Council licensed Datecs Payment Technology EAD to provide payment

[45] EBA/GL/2017/10.

[46] Commission Delegated Regulation (EU) No 2018/32.

[47] Commission Implementing Regulation (EU) 2018/33 and Commission Implementing Regulation (EU) 2018/34.

[48] The EMV is a global standard for credit and debit cards based on microprocessor technology (smart or chip cards). It was developed by Europay, Mastercard and Visa to boost card payment security and limit abuse and misuse.

services under Article 4, second alternative of item 5 of LPSPS: acquiring of payment instruments.

BNB Governing Council consented to BNP Paribas Personal Finance EAD terminating its payment institution business. BNP Paribas Personal Finance S.A., successor of all rights and obligations of the payment institution BNP Paribas Personal Finance EAD, starts credit institution operations through a branch.

In the first half of 2018 the BNB Governing Council decided on three applications of companies operating simultaneously as payment institutions and electronic money institutions, filed under § 8, paragraph 1 of Provisional and Final provisions of the new LPSPS in force as of 6 March 2018. The BNB withdrew the licences of iCard AD, Paynetics EAD and Transact Europe AD to operate as a payment institution, pursuing however activities as an electronic money institution under a licence including payment service provision as well.

By the end of the first half of 2018 there were seven payment institutions and three electronic money institutions licensed by the BNB.

The period saw these entries and deletions in/from registers under the LPSPS and BNB Ordinance No 16 of payment institutions and electronic money institutions licensed by the BNB or the competent authorities of another Member State:

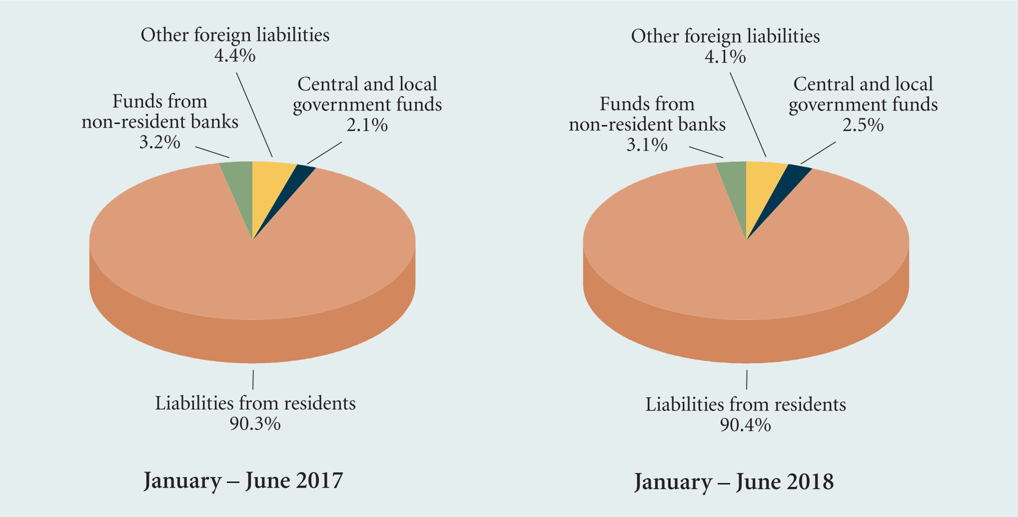
- 168 agents of payment institutions and electronic money institutions licensed by the BNB operating in Bulgaria were listed and 119 agents were delisted;
- four agents of payment institutions and electronic money institutions licensed by the BNB operating elsewhere in the EU were listed;
- 32 payment institutions and electronic money institutions licensed elsewhere in the EU and eligible to operate in Bulgaria were listed and one delisted.
- 457 agents of payment institutions and electronic money institutions licensed elsewhere in the EU and eligible to operate in Bulgaria were listed and 101 agents delisted;

The BNB enquired into 134 complaints submitted by members of the public and corporate payment service users. In eight of them the Bank issued mandatory instructions. The other cases involved no breaches of the Law on Payment Services and Payment Systems and its statutory instruments, or were resolved in favour of payment service users through correspondence.

# IV. Banks' Reserves at the BNB

In the first six months of 2018 the average daily value of banks' attracted funds on which minimum required reserves accrued (excluding central and local government budget fund accounts) increased 5.3 per cent on the first half of 2017. This was due to 7.6 and 2.3 per cent rises in lev and foreign currency denominated liabilities. The average daily value of residents' funds (excluding funds in central and local government budget accounts) grew by 5.8 per cent, non-residents' ones declining by 0.3 per cent, and funds from non-resident banks rising by 1.5 per cent. Central and local government attracted funds increased by 24.3 per cent. The effective implicit ratio of minimum required reserves remained unchanged at 9.4 per cent.[49] Reserve assets covering this ratio include funds in banks' BNB accounts (8.4 per cent) and half the cash balances designated as reserve assets (1.0 per cent).

### Structure of Attracted Funds in the Banking System*




* Average daily value of attracted funds for reserve calculation purposes.

**Note:** The sum may differ from 100 per cent due to rounding.

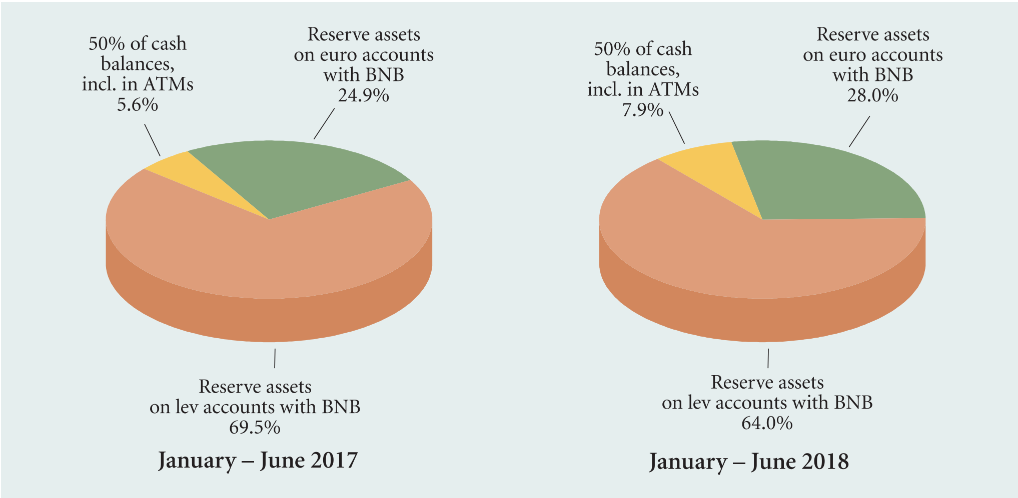
**Source:** the BNB.

Banks keep reserves in their own assets: BNB lev and euro accounts and half their cash balances, including in ATMs.[50] In the half year the share of lev-denominated reserve assets was 64.0 per cent on an average daily basis, from 69.5 per cent a year earlier, while euro reserve assets increased to 28.0 per cent, from 24.9 per cent a year earlier.

[49] BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the BNB by Banks has left reserves on funds attracted from residents at 10 per cent of the reserve base, those from non-residents at 5 per cent, and those from central and local government budgets at nil since 4 January 2016.

[50] According to Article 4 of Ordinance No 21 of the BNB.

## Banks' Reserve Asset Structure under Article 4 of Ordinance No 21



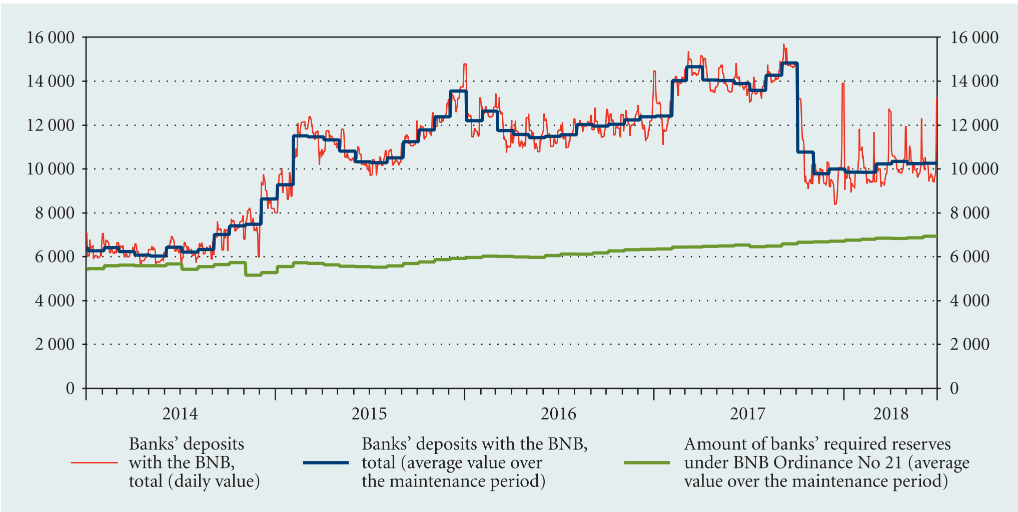

**Note:** The sum total may differ from 100 per cent due to rounding.

**Source:** the BNB.

Excess reserve interest[51] under BNB Ordinance No 21 remained at -0.60 per cent. Excess reserve dynamics on an annual basis reflected the effect of the changed methodology for calculating interest rates on BNB accounts, effective from October 2017.[52] The average daily amount of excess reserves declined by BGN 4.4 billion on the same period of 2017. Funds in banks' BNB Ordinance No 21 accounts exceeded minima by 41.0 per cent on an average daily basis, from 111.2 per cent a year earlier.

## Banks' Reserves at the BNB

(BGN million)




**Source:** the BNB.

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[51] Ordinance No 21 Article 5, paragraph 1 defines excess reserves as funds exceeding the reserve requirement by more than 5 per cent holdings.

[52] According to the interest methodology for BNB accounts effective since 4 October 2017, banks' excess reserves attract the lower of: 0 per cent or the ECB deposit facility rate reduced by 20 basis points.

# V. Currency in Circulation

The Bulgarian National Bank has a monopoly on banknote and coin issue in Bulgaria.[53] Its currency is mandatorily acceptable as legal tender at face value without restriction. The Bank prints banknotes, mints coins, and keeps and scraps uncirculated or withdrawn currency.

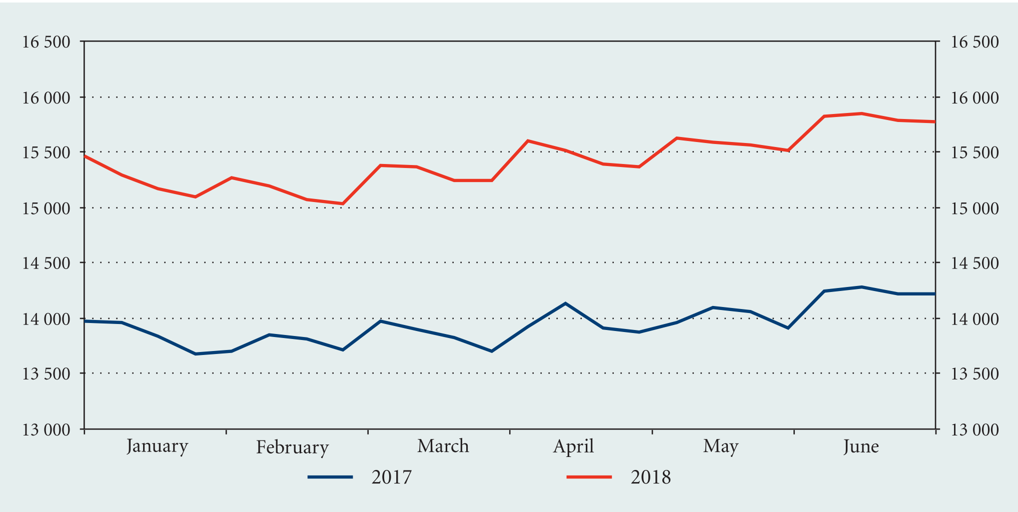
Pursuant to LBNB Article 26, the BNB Governing Council decided to withdraw from circulation the commemorative coins issued between 5 July 1999 and 31 December 2012 which ceased to be legal tender on 15 May 2018. They may be exchanged at BNB tills at face value with no limit to amounts and no charge until 31 December 2019.

## Banknotes and Coins in Circulation (Outside BNB Vaults)

As of 30 June 2018 currency in circulation (outside BNB vaults)[54] reached BGN 15,768.7 million, rising by BGN 1553.8 million, or 10.93 per cent on the end of June 2017. Recent years' upward currency circulation trend continued in the first half year.

### Banknotes and Coins in Circulation (Outside BNB Vaults) in the First Halves of 2017 and 2018

(BGN million)




**Source:** the BNB.

In late June 2018, 440.4 million banknotes were in circulation, amounting to BGN 15,375.1 million. Their number rose 23.9 million or 5.73 per cent and value BGN 1501.0 million or 10.82 per cent in a year.

Banknotes comprised 97.5 per cent of the total value of cash outside BNB vaults by 30 June 2018. The BGN 20 and BGN 50 banknotes were most common. BGN 20 banknotes numbered 128.4 million and BGN 50 banknotes 123.1 million: 29.16 and 27.95 per cent by number of circulating banknotes.

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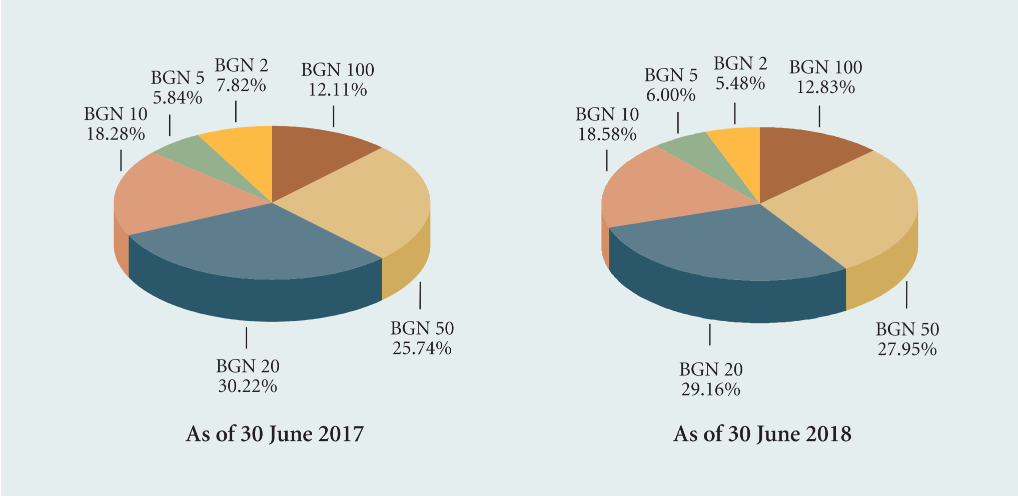
[53] Article 2, paragraph 5 and Article 25 of Law on the BNB.

[54] Legal tender banknotes, circulating, and commemorative coins issued after 5 July 1999, including those withdrawn from circulation with no time restriction on exchange.

## Individual Denomination Shares in the Total Number of Circulating Banknotes



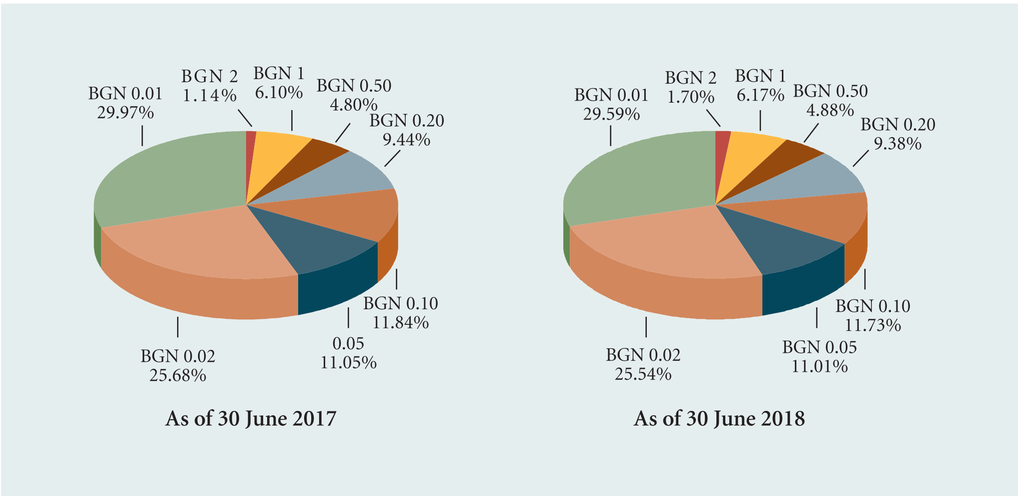

**Note:** The sum total may not add up to 100 per cent due to rounding.
**Source:** the BNB.

The BGN 50 banknote held the largest share in the structure of circulating banknotes. By mid-year the value of BGN 50 banknotes was BGN 6154.1 million or 40.04 per cent of circulating banknotes. BGN 100 and BGN 20 banknotes had 36.76 and 16.71 per cent shares.

The average circulating banknote was worth BGN 34.9, up BGN 1.05 on the end of 2017. In a year its value rose BGN 1.6 or 4.82 per cent, reflecting higher growth in the number of high value banknotes (BGN 50 and BGN 100) and the BGN 2 bill's rollover with a coin.

In late June, 2350.5 million banknotes circulated, worth BGN 386.0 million. Circulating coins outside BNB vaults grew by 157.3 million (7.17 per cent), their value rising BGN 52.6 million or 15.76 per cent. By 30 June 2018 the share of circulating coins was 2.45 per cent of the total value of banknotes and coins outside BNB vaults.

## Individual Nominal Value Shares in the Total Number of Circulating Coins




**Note:** The sum may not add up to 100 per cent due to rounding.
**Source:** the BNB.

The long-term upward trend on an annual basis in the number of circulating coins continued. The number of high nominal value coins (BGN 0.50, BGN 1 and BGN 2) grew faster in the currency circulation, with the number of BGN 0.50 coins increasing by 9.0 per cent (9.5 million), BGN 1 by 8.51 per cent (11.4 million), BGN 2 by 60.64 per cent (15.1 million). The annual rise of the other coins was within the range of 5.82 per cent for BGN 0.01 coins to 6.75 per cent for BGN 0.05 coins.

Circulating BGN 0.01 coins had the greatest 29.59 per cent share of circulating coins by the end of June 2018. By value, BGN 1 coins held the highest share at 37.59 per cent.

By mid year the average coin in circulation matched its level of late 2017 at BGN 0.16, up BGN 0.01 in a year due to the launch of the BGN 2 coin.

In the first half of 2018 three new BGN 10 silver commemorative coins were put into circulation: Bulgarian Presidency of the EU Council 2018, 140 Years since Bulgarian Liberation and The Old Elm Tree in Sliven. Commemorative coins outside BNB vaults were worth BGN 7.6 million, with their share comprising 0.05 per cent of currency in circulation.

## Non-genuine Banknotes and Circulating Coins

In the first half of 2018 the BNB retained 396 non-genuine banknotes which had entered circulation. The share of all retained non-genuine banknotes remained very low at 0.00009 per cent of total circulating banknotes.

The BGN 20 banknote had the largest share of non-genuine banknotes retained in the first half of 2018 at 62.63 per cent. As compared with the respective number of banknotes in circulation by the end of June 2018, the share of non-genuine BGN 20 banknotes amounted to 0.000193 per cent. Non-genuine BGN 50 and BGN 10 banknotes occupied 24.24 per cent and 11.62 per cent of the number of retained non-genuine banknotes. Non-genuine BGN 100 banknotes numbered 6 accounting for 1.52 per cent of retained non-genuine Bulgarian banknotes over the review period. No non-genuine BGN 2 and BGN 5 were retained.

The non-genuine Bulgarian coins retained at the BNB numbered 267: 189 of BGN 0.50, 59 of BGN 1 and 19 of BGN 2. The share of retained non-genuine Bulgarian coins in the total number of circulating coins by 30 June 2018 was 0.000011 per cent.

Performing its statutory duty of assessing foreign banknotes and coins retained in Bulgaria, in the first half of 2018 the Bank's National Analysis Centre retained: 5551 euro banknotes, 186 US dollar banknotes, and 108 assorted foreign non-genuine banknotes.

## BNB Issue and Cash Operations

BNB issue and cash operations include: banknote printing, coin minting, accepting, delivering, repaying, processing, authenticity and fitness checking of Bulgarian banknotes and coins and foreign currency, exchanging damaged Bulgarian banknotes and coins, and scrapping unfit Bulgarian banknotes and coins.

Between January and June 60.1 million newly printed banknotes and 101.2 million newly minted coins worth BGN 946.5 million were supplied under contracts with producers.[55] The Bank launched three commemorative coins planned in its minting programme under the Law on the BNB.[56]

In the first half of 2018 banknotes and circulating coins deposited with the BNB came to BGN 7945.8 million, up BGN 55.8 million or 0.71 per cent on the corresponding period of 2017. Withdrawals were 8012.0 million, up BGN 59.5 million or 0.75 per cent.

Between January and June 2018 banknote processing machines tested 380.6 million banknotes and 48.2 million coins. The number of processed banknotes and coins fell 9.77 and 33.3 per cent on this time last year. BGN 10 and BGN 20 banknotes and BGN 0.50, and BGN 1 coins were most often processed by nominal value.

Processing and fitness testing failed 26.2 million banknotes, down 0.6 million or 2.12 per cent on the same period of 2017. In the half year BGN 10 and 20 banknotes were most often retained as non-genuine at 38.84 and 21.0 per cent. Retained unfit coins numbered 670,900, up 91,900 or 15.88 per cent on this time last year.

The BNB purchased EUR 0.25 million of reserve currency, including EUR 0.24 million from budget organisations and EUR 0.01 million from individuals. BNB reserve currency sales were EUR 32.66 million, including EUR 4.99 million to budget organisations and EUR 27.67 million to individuals.

The BNB conducted two full checks into credit institutions to ensure compliance with Ordinance No 18 on the Control over Quality of Currency in Circulation and instructions on its implementation. The BNB tested 201 sorting machines and customer operated machines in line with identification and fitness standards into six credit institutions and three service providers under Ordinance No 18 and conducted functionality tests at machine manufacturers and their authorised representatives.

[55] Pursuant to Article 25 paragraph 1 of the Law on the BNB.

[56] See the BNB website for new banknote and circulating and commemorative coin issues.

# VI. Maintaining Banking System Stability and Protecting Depositor Interests

## Assessment of the State of the Banking System[57]

In the first half of 2018 non-performing loan amount and share continued falling, as did residual credit risk measured by net non-performing loans and advances. With the enactment of the new IFRS 9 Financial Instruments standard, the accrued impairment increased and the coverage ratio of gross non-performing loans and advances also rose. Borrowers' improved ability to service obligations reduced credit risk.

By end-June banking sector capital adequacy ratios continued exceeding minimal regulatory and prudential requirements. Banks had Common Equity Tier 1 above the required minimum and adhered to capital buffer requirements.

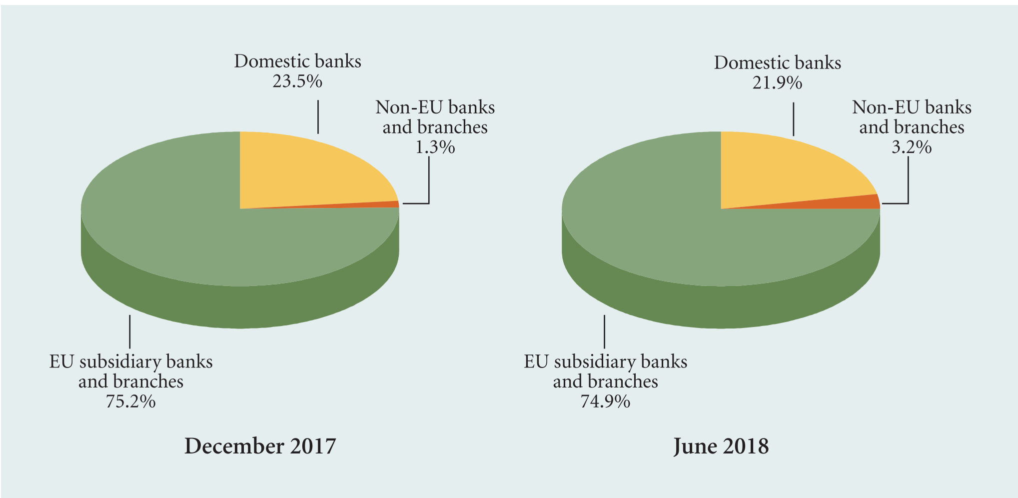
Delegated Regulation (EU) 2015/61 of the Commission introduced new liquidity reporting requirements in early 2018. The liquidity asset structure changed little and the new requirements did not affect overall banking system liquidity. All credit institutions observed the minimum required 20 per cent liquid asset cover for funds attracted from legal entities (other than credit institutions) and households.

Between June 2017 and June 2018 ROA and ROE indicators increased, despite the environment of low interest rates.

Banking sector consolidation continued, with CIBANK EAD merging into the United Bulgarian Bank (UBB) AD. There was a change in Municipal Bank ownership and BNP Paribas Personal Finance transformed from payment institution into a branch of the credit institution BNP Paribas Personal Finance S.A., France.

The half year saw rising loans and advances, falling cash balances with central banks, and growing deposits in the banking balance sheet. Total assets increased by BGN 2.4 billion (2.4 per cent) to BGN 100 billion.

### Domestic and Foreign Bank Market Shares by Asset Size




**Source:** the BNB.

[57] Based on supervisory statements on an individual basis as of end-June 2018 and end-December 2017 submitted by 20 August and 26 February 2018.

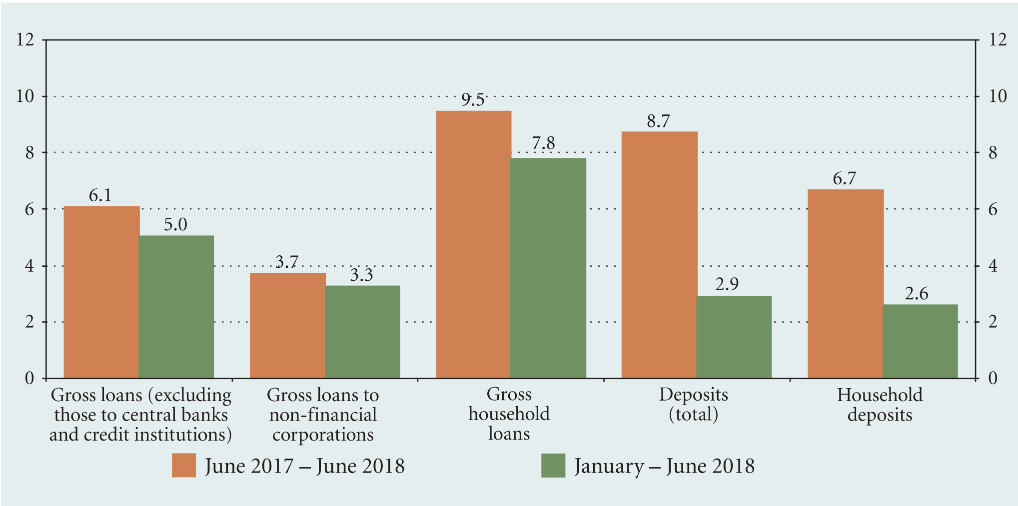
By end-June the big five banks' assets comprised 58.4 per cent of banking system's balance sheet. The market share of banks with predominantly Bulgarian equity fell to 21.9 per cent, that of non-EU banks and branches rising to 3.2 per cent. The market share of EU subsidiary banks and branches was 74.9 per cent, from 75.2 per cent at the end of December 2017.

In the first six months of 2018 the total amount of gross loans and advances[58] rose by BGN 3.1 billion (3.8 per cent) to reach BGN 84.7 billion. By end-June the shares of resident and non-resident claims were 85.5 and 14.5 per cent, from 86.0 and 14.0 per cent in December.

### Dynamics of Selected Balance Sheet Indicators

(annual and semi-annual changes)

(per cent)




**Source:** the BNB.

The gross credit portfolio (excluding loans and advances to credit institutions and central banks) rose BGN 2.8 billion to BGN 58.9 billion. Loans to households and non-financial corporations increased most significantly (by BGN 1.5 billion and BGN 1.1 million, respectively). The gross credit portfolio foreign currency structure shows lev-denominated items rising 1 percentage point to 61.9 per cent and the euro share falling 1.2 percentage points to 36.3 per cent.

Banking system deposits grew by 2.4 billion to BGN 86.1 billion across all institutional sectors. More than half of this growth was due to funds attracted from households, which rose by BGN 1.3 billion. Funds attracted from the general government sector, other financial corporations, non-financial corporations and credit institutions increased by BGN 451 million, BGN 377 million, BGN 220 million, and BGN 80 million. The structure of deposits by source changed little, the share of resident and non-resident deposits ending the period at 91.2 and 8.8 per cent. Deposit currency structure also remained almost unchanged, lev deposits rising from 57.3 to 57.4 per cent and euro ones from 34.4 to 34.5 per cent.

[58] Source: the BNB (Macroprudential Form 1 – MPF1).

### Banking System Deposit Structure by Source

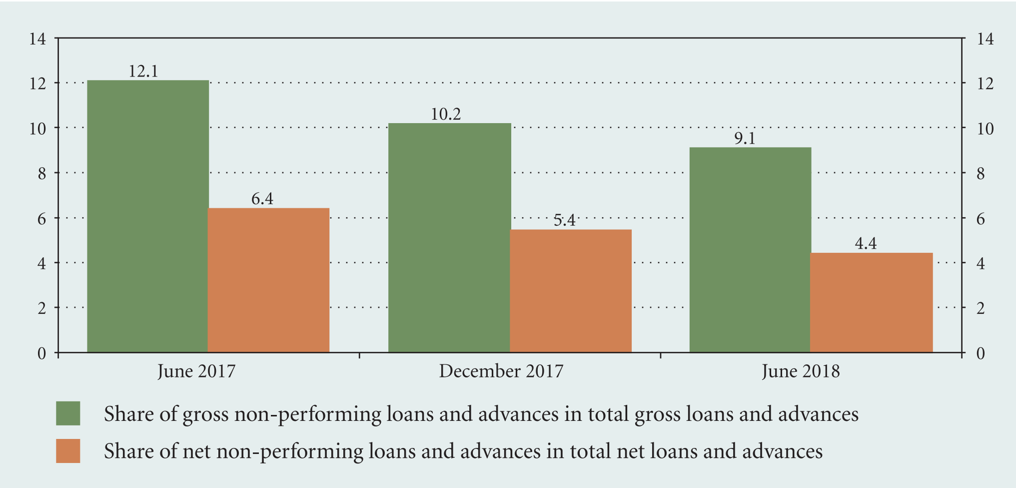
(per cent)


**Source:** the BNB.

Asset quality indicators improved further over the first half year.

### Non-performing Loans and Advances in Total Loans and Advances

(per cent)




**Source:** the BNB.

Between January and June 2018 gross non-performing exposures, including loans, advances and securities declined by BGN 614 million (7.4 per cent) to BGN 7.7 billion. Non-performing loans and advances, mostly in the unlikely to be paid back or past due over 90 days categories, fell by BGN 596 million.

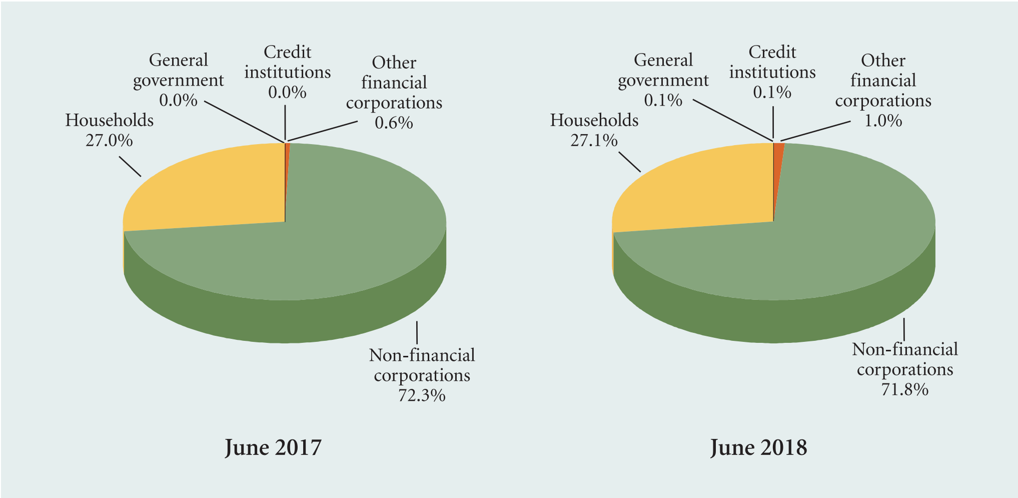
By end-June the share of gross non-performing loans and advances in total gross loans and advances was 9.1 per cent (10.2 per cent by end-December 2017). Rising gross loans and advances also influenced this dynamics.

IFRS 9 and the requirement to measure the expected credit losses boosted performing and non-performing loan and advance impairments. The impairment coverage ratio of gross non-performing loans and advances increased from both the end of 2017 and end of June 2018, its value reaching 54.2 per cent. Increased inherent impairment and decreased gross non-performing loans and advances led to a decline in the sum of net non-performing loans and advances.[59] Net non-performing loans and advances

[59] Net non-performing loans and advances are calculated using EBA methodology: gross non-performing loans and advances less accumulated impairment for this category. The net values of non-performing loans and advances and total loans and advances are used in calculating the share of net non-performing loans and advances.

(residual credit risk) declined by BGN 675 million (16.1 per cent) on end-2017 to BGN 3.5 billion at the end of June 2018. Residual banking balance sheet credit risk remained fully covered by the BGN 7.2 billion of capital exceeding the 8 per cent regulatory minimum.

### Non-performing Loans and Advances by Sector

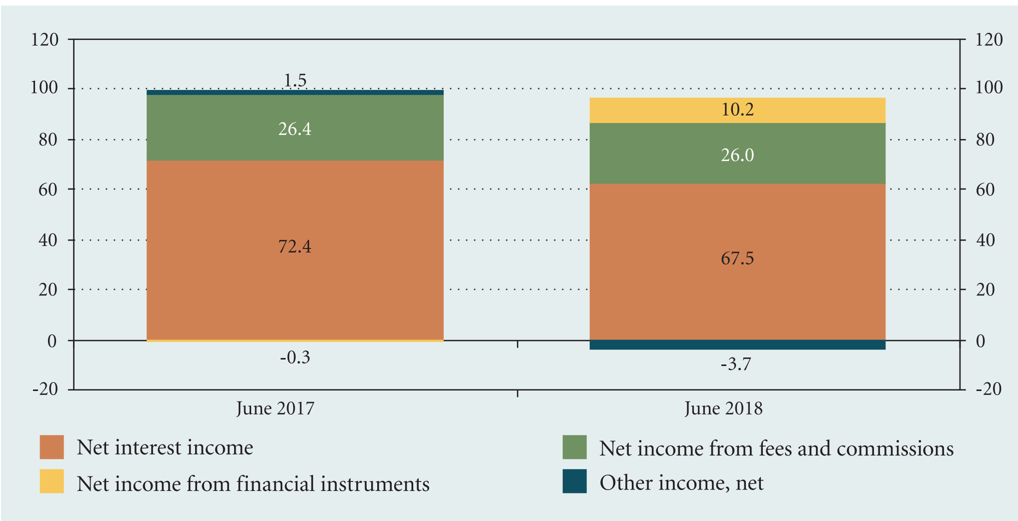



**Note:** The sum total may not come to 100 per cent owing to rounding.
**Source:** the BNB.

In the major institutional sectors of non-financial corporations and households, the asset quality review showed annual and semi-annual improvements. The share of the most liquid balance sheet aggregate, cash, cash balances with central banks and other demand deposits, remained almost unchanged at 19.9 per cent of system assets, with the main share of cash balances at 13.4 per cent. Bank securities holdings remained low risk and less impaired, reflecting the predominance of bonds issued by the general government sector. By end-June debt and equity instruments occupied 13.5 per cent of system assets. Claims on credit institutions represented primarily placements with non-resident institutions, mainly parent companies.

### Net Operating Income Structure

(per cent)




**Source:** the BNB.

Mid-year banking system profit was BGN 801 million, up BGN 141 million on the same period of 2017. Total net operating income rose 147 million (7.9 per cent) on end-June 2017 to reach BGN 2.0 billion. Over the past year, net income from financial instruments and one-off factors strongly boosted net operating income. The two key revenue components of net interest income and net fee and commission income were 67.5 and 26.0 per cent, from 72.4 and 26.4 per cent in June 2017.

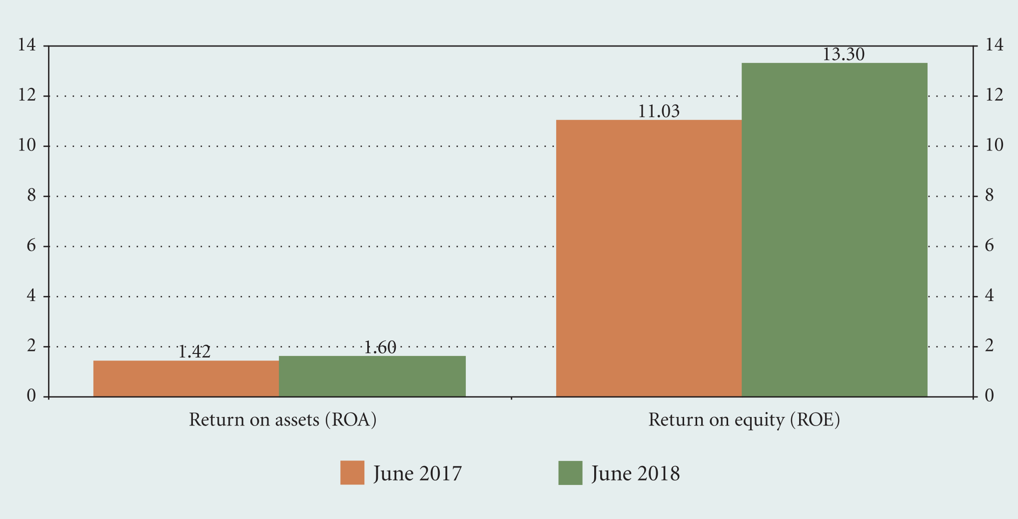
As of 30 June 2018 year-on-year interest expenditure of the banking system fell at rates similar to those a year earlier, while interest income declines slowed down. Interest income fell by BGN 39 million over one year (2.6 per cent), with return on interest bearing assets declining to 3.55 per cent (3.96 per cent at the end of June 2017). Interest expenditure decreased by BGN 47 million (23.8 per cent) due to decreased costs of interest liabilities to 0.25 per cent (0.40 per cent on 30 June 2017).

Impairment charges of financial assets which are not carried at fair value through profit or loss were BGN 207 million, down BGN 29 million from the end of June 2017.

Higher banking system profits boosted major earnings indicators over the past year. ROA and ROE increased to 1.60 and 13.30 per cent, respectively.

## Return on Assets and Return on Equity

(per cent)




**Source:** the BNB.

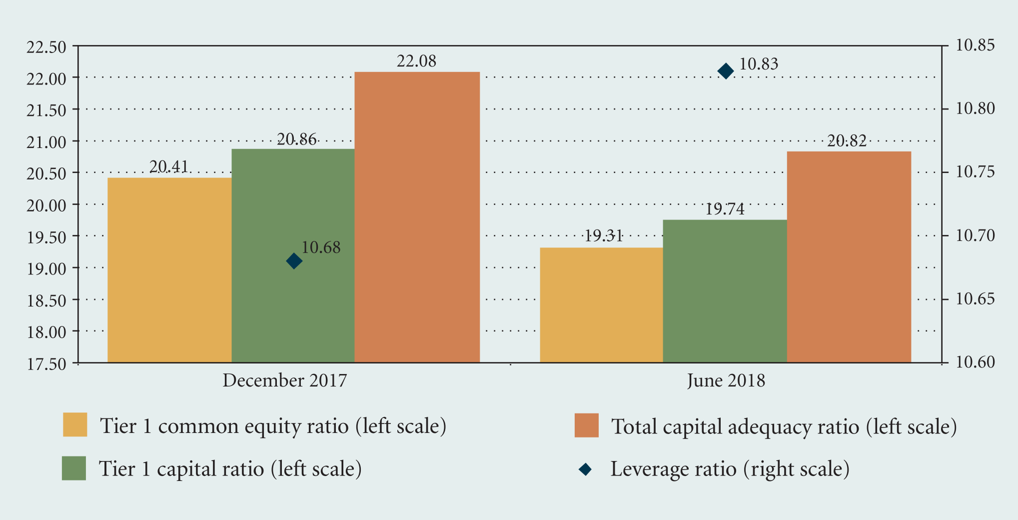
After dividend withdrawals, total balance sheet equity fell by 4.2 per cent to BGN 12.0 billion in the half year. Regulatory own funds grew by BGN 241 million (2.1 per cent) to BGN 11.7 billion, reflecting the rise in Common Equity Tier 1 from BGN 10.6 billion to BGN 10.9 billion. Additional Tier 1 capital also increased, with total Tier 1 capital rising by BGN 261 million to BGN 11.1 billion. Total risk exposures picked up BGN 4.3 billion (8.3 per cent) to BGN 56.4 billion under the influence of higher lending and effects of some regulatory changes.[60] This reflected mainly credit risk weighted exposures occupying the largest share in total risk exposures at 89.2 per cent by end-June 2018 compared to 88.5 per cent by end-December 2017. The total amount of exposures to position, currency and commodity risks decreased, their share remaining small (1.0 per cent by end-June 2018). Operational risk exposures grew, but their share dropped (from 10.2 to 9.8 per cent). Risk weighted exposures for

[60] On 1 January2018 the preferential treatment of certain exposures to which banks assigned nil risk weight and nil capital requirement for the lev/euro currency pair ended.

credit risk increased by BGN 4.2 billion (9.1 per cent) between January and June 2018 to BGN 50.3 billion. Total risk exposures growing faster than equity affected Tier 1 common equity, Tier 1 capital, and total capital adequacy ratios, which ended June at 19.31, 19.74 and 20.82 per cent.

### Selected Capital Indicators

(per cent) (per cent)



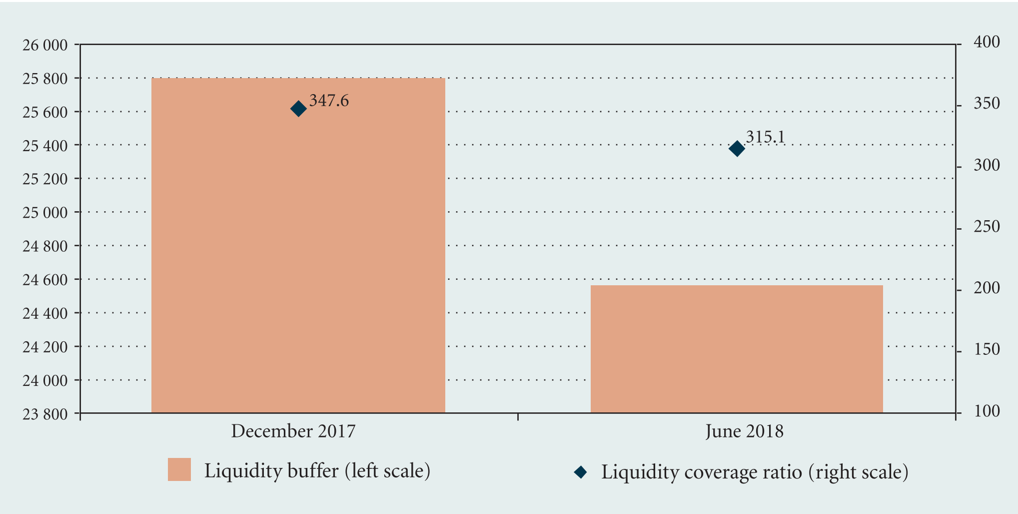

**Source:** the BNB.

Banking leverage ratio rose to 10.83 per cent, from 10.68 per cent in December 2017.

Total unadjusted Level 1 assets reported according to the new liquidity coverage requirements decreased by BGN 1.2 billion (4.8 per cent) to BGN 24.5 billion. Assets with the central bank, coins and banknotes, and assets in central government also declined. Reserves in the central bank with an option of withdrawal rose from 48.8 to 51.7 per cent of unadjusted Level 1 assets on December 2017. Assets in central government occupied 40.0 per cent (39.3 per cent on 31 December 2017).

### Selected Liquidity Indicators under Commission Delegated Regulation (EU) 2015/61

(BGN million) (per cent)




**Source:** the BNB.

The liquidity coverage ratio fell to 315.1 per cent, from 347.6 per cent on 31 December, remaining significantly above the 100 per cent required minimum. The ratio denominator (liquidity buffer)[61] consisting of level 1 and level 2 liquid assets declined by BGN 1.2 billion (4.8 per cent) to BGN 24.6 billion, while the numerator (net liquid outflows) grew by BGN 372 million (5.0 per cent) to BGN 7.8 billion. The liquidity buffer's share in balance sheet assets was 25.3 per cent, from 27.0 on 31 December 2017.

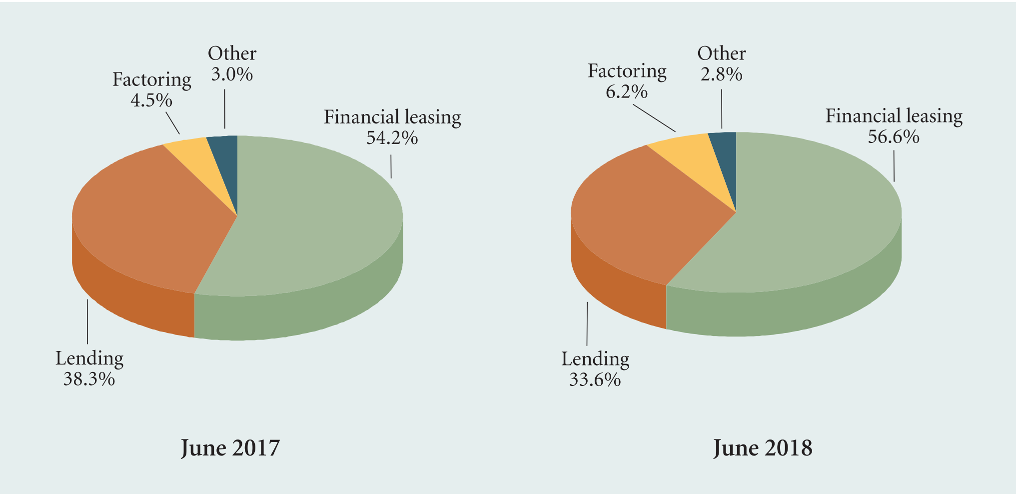
## Overview of Financial Institutions Recorded in the BNB Register[62] as of 30 June 2018

The entities listed in the Register of Financial Institutions continued growing to 189. Lenders remained most numerous at 124, ahead of leasing companies at 46. Two foreign financial institutions enrolled through Directive 2013/36/EU Article 34 notifications in the context of freedom to provide financial services within the EU, increasing the total number of foreign financial institutions under Article 3a of the LCI to five.

By end-June total assets of financial institutions grew by 8.3 per cent from the same period of 2017, despite the exclusion of BNP Paribas Personal Finance EAD after its transformation into a credit institution branch. Sector assets were BGN 7.8 billion or 7.8 per cent of banking system assets. The 20 largest financial institutions' assets held 75.5 per cent of this.

In a year sector net portfolio rose by 8.1 per cent to BGN 6.7 billion. Asset quality indicators continued improving: by the end of June performing loans occupied 72 per cent of total gross portfolio, and gross non-performing loans and advances past due over 90 days fell to 8 per cent. Impairments due to default or other reasons remained close to June 2017 levels. Loans and receivables in foreign currency remained at 40 per cent of the item's balance sheet value.

### Breakdown of Financial Institutions' Assets by Type of Business




**Notes:** The sum total may not come to 100 per cent owing to rounding. June asset distribution reflects the exclusion of BNP Paribas Personal Finance EAD after its transformation into a credit institution branch.

**Source:** the BNB.

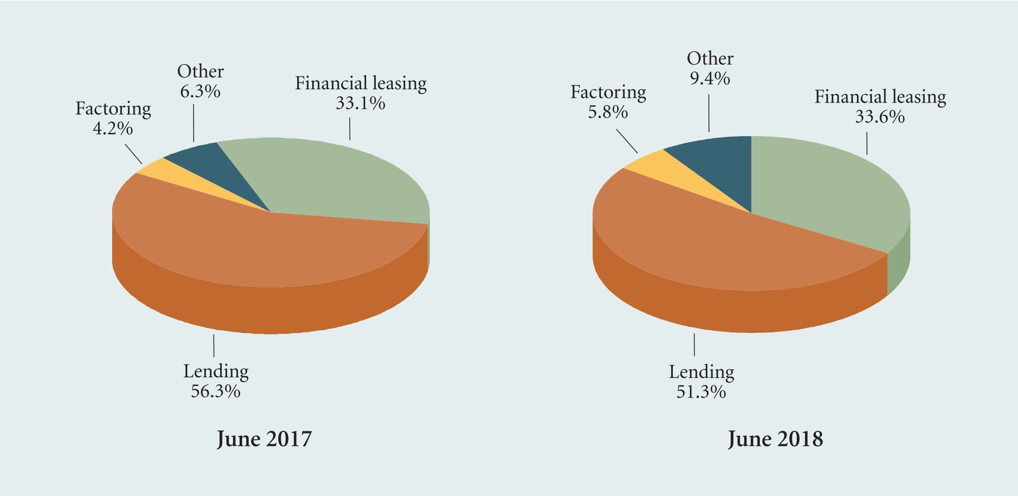
[61] Article 17 of Commission Delegated Regulation (EU) 2015/61 sets requirements for the composition of the liquidity buffer by asset level: a minimum of 60 per cent of the liquidity buffer is to be composed of level 1 assets, a minimum of 30 per cent of the liquidity buffer is to be composed of level 1 assets excluding extremely high quality covered bonds (referred to in Article 10), a maximum of 15 per cent of the liquidity buffer may be held in level 2B assets.

[62] The BNB Public Register under Article 3a, paragraph 1 of the Law on Credit Institutions.

In the year to June 2018 attracted funds increased by 7.2 per cent on an annual basis to BGN 5.5 billion. Financing received by the top 20 institutions (BGN 4.6 billion) fell slightly to 82.9 per cent of sector financing, from 83.8 per cent at the same time last year. The operating income of the top 20 institutions fell to 51 per cent of sector income. ROA (4.3 per cent) and ROE (18.8 per cent) continued to decrease due to a lower profit (BGN 166 million) by 30 June.

Own funds rose by BGN 34 million on an annual basis (17 per cent) to BGN 1.77 billion. The top 20 institutions' balance sheet equity continued providing over half (59.3 per cent) of the sector's total capital position.

### Equity Broken Down by Group of Financial Institutions




**Note:** The sum total may not add up to 100 per cent owing to rounding.
**Source:** the BNB.

## Banking Supervision

### Off-site Supervision

Over the review period off-site supervision's objective was to monitor and assess credit institutions' risk profiles and viability using the supervisory review and evaluation process (SREP).

Quarterly supervisory reports on banks were prepared to assign current ratings under the risk assessment system reflecting the current state of major risk components. Current assessments reflect capital adequacy and risk, credit and concentration risk, profitability and liquidity risk analyses.

Supervisors reviewed banks' Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP) reports for 2017. Supervisory instruments defined the reliability, efficiency, and comprehensiveness of the ICAAP and ILAAP frameworks to EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) (EBA/GL/2014/13). Supervisors also assessed how ICAAP and ILAAP are integrated into overall risk management and strategic management practices, including capital and liquidity planning.

Another thrust involved the updated recovery plans of domestic banks which are not group subsidiaries under Article 6, paragraph 1 of the Law on the Recovery and Resolution of Credit Institutions and Investment Firms (LRRCIIF). This also addressed implementation of 2017 BNB recommendations on weaknesses and shortcomings in past plans. The analysis assessed adequacy of the measures banks intend to take to preserve their viability in an economic stress situation and the extent to which their plans comply with the requirements of the regulatory framework, including whether the criteria of soundness, effectiveness and comprehensiveness are fulfilled. There was both an improvement and gaps in the recovery plans requiring revisions and updates. The relevant banks were notified of the review findings and the term for submission of revised versions to the BNB or required to remove weaknesses during the next update of their recovery plans.

Supervisors met statutory auditors of credit institutions as recommended in the Guidelines on communication between competent authorities supervising credit institutions and the statutory auditor(s) and the audit firm(s) carrying out the statutory audit of credit institutions (EBA/GL/2016/05). They discussed bank specific risk areas and the IFRS 9 implementation impact.

Following up the implementation of supervisory measures and recommendations was another area of off-site supervision work.

## On-site Inspections

The SREP continued on the basis of an approved annual schedule and scope. The BNB conducted on-site thematic inspections into four credit institutions and started five others, four extending beyond the reporting period. These inspections review management processes and systems and control mechanisms concerning specific risks and areas, in particular credit and credit concentration risk. These risks also relate to the capital position. Inspections complemented risk profile assessments by addressing elements, like the business model and internal management reflecting in the overall viability assessment. The Bank also ran an unscheduled inspection of significant planned changes to the internal rating based model.

Monitoring the implementation of supervisory measures imposed during previous inspections formed another focus. This noted management and control mechanism improvements following negative assessments, weaknesses, and breaches. Recommendations improved internal risk management systems, changed internal rules and procedures and rendered them easier to assess and report. Some banks appeared to remain insufficiently determined to fight credit risk, failing to take note of recommendations to remove recurrent poor classifying and reporting credit exposures or recognising and reporting eligible collateral for provisioning and accountability.

Some banks still needed to improve their overall approach to the ICAAP. Others failed to implement fully supervisory prescriptions on an ICAAP documentation methodology and approaches to internal assessment of bank stability under stress, and incorporating all significant risks into internal risk management and evaluation systems to be reflected in capital adequacy and planning.

Inspections resulted in supervisory reports including recommendations to improve credit activity and risk management, monitoring and evaluation systems and associated rules. Borrower creditworthiness analyses and lending terms and conditions changes needed to improve; classified credit exposures needed to be reported to regulatory requirements; concentration risk and large exposures needed to be reflected in supervisory reporting without undue delay; analyses of required additional ICAAP capitalisation to cover the concentration risk needed to be improved. Inspection findings on internal management and business models at some banks resulted in recommendations that, *inter alia*, they should change their risk and business strategies and set adequate limits to credit and market risks. Prescriptions addressed improving the effectiveness of various committees supporting management bodies with control tasks.

## Supervisory Measures

The first half year saw supervisory measures imposed by the BNB Governing Council on four banks for supervisory framework breaches.

## Macroprudential Supervision

As part of its supervisory functions, the BNB continued close monitoring of processes in the Bulgarian economy which affect the banking sector. A deep analysis focused on non-performing loan dynamics and banks' credit standards in mortgage lending, as well as risks related to bank exposures to third parties.

The Bank also monitored major indicators measuring the adequate level of the countercyclical capital buffer[63] for Bulgarian banks. As part of its macroprudential mandate and policy of transparency, the BNB continued publishing risks and major banking trends in the *Banks in Bulgaria* quarterly and monthly press releases on the state of the banking system.

Active expertise and information exchange continued in the EU supervisory architecture area, with the main emphasis on residential mortgages and loans secured with real estate.

## Specific Supervisory Activities

Shaping a business environment precluding the use of the banking sector for money laundering and terrorist financing is a BNB priority.

In the first half of 2018 anti-money laundering and counter-terrorist financing legislation changed. Following the risk based approach, target supervisory inspections in five banks focused on money laundering and terrorist financing prevention. They involved following up the implementation of previous recommendations and supervisory measures. On-site inspections found nine breaches and made 19 recommendations on the banks' administrative capacity, availability and quality of special software, and further improvements to controls in conducting due diligence to customers. Timely follow up control had a generally favourable effect on prevention at these banks. No supervisory measures were imposed during the review period.

Cooperation with the Financial Supervision Commission continued, with two joint inspections at banks acting as supplementary pension insurance fund custodians.

Work progressed on developing the National Money Laundering and Terrorist Financing (ML/TF) risk assessment, a second draft report expected by the end of the next reporting period.

To minimise risks in housing lending to individuals, supervisory attention focused closely on the requirements of the Law on Real Estate Loans for Consumers (LRELC). Borrower creditworthiness rules adopted by creditors, professional training systems and staff remuneration policies drew the main stress. LRELC inspections showed that credit institution rules and control mechanisms met legal requirements, weaknesses involving mainly late updating of remuneration policies.

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[63] For more information on capital buffers, see http://www.bnb.bg/BankSupervision/BSCapitalBuffers/index.htm.

Bank LRELC work also involved checks of legal entities and natural persons acting as unregistered credit intermediaries. Supervisory scrutiny resulted in an administrative infringement notice to one company and 25 warnings to other companies to end wrongful advertising and misleading consumer information.

Registrations of credit intermediaries continued with five new Bulgarian companies and two new companies bearing notifications from EU Member States entering the BNB public register.

## Regulatory Framework Work

To improve internal exposure arrangements, the BNB drew up a new Ordinance No 37 on the Internal Exposures of Banks regulating internal rules and procedures on forming, identifying, and reporting internal exposures and proper reporting of inherent risks. The Ordinance also regulates the manner of calculating internal exposures and reports and notices banks have to submit on these exposures.

Amendments to Ordinance No 11 changed banks' liquidity management and supervision arrangements. The amendments follow the Annex to Regulation (EU) No 575/2013 and Commission Implementing Regulation (EU) No 2017/2114,[64] and remove some provisions on a maturity ladder of assets, liabilities and off-balance sheet items, liquid assets ratio, and liquidity ratios by maturity time bands. Pursuant to Commission Delegated Regulation (EU) 2015/61, treatment of minimum reserve requirements was defined for the purposes of liquidity. Most provisions of Ordinance No 11 were retained in compliance with Directive No 2013/36/EU.[65]

In the first half year a new Law on Measures against Money Laundering came into force, bringing Bulgarian legislation into line with Directive No 2015/849.[66]

## Issue of Licences, Permits, and Approvals

There were no new bank operations licences or bank licensing procedures in the half year.

The procedure to transform CIBANK EAD through merger into UBB AD under Article 262 of the Commercial Law ended with BNB Governing Council approval for the UBB to acquire the entire CIBANK equity.

Procedures requested by the Bulgarian-American Credit Bank and Investbank for 100 per cent acquisition of Commercial Bank Victoria equity[67] ended with BNB Governing Council resolutions to issue equity acquisition preapprovals to each of the two banks.

In December 2017 Novito Opportunities Fund AGmvK applied to acquire 67.646407 per cent of Municipal Bank AD paid up equity and the BNB approved the acquisition after assessing compliance with the criteria under Article 28a, paragraph 3 of the LCI.

[64] Commission Implementing Regulation (EU) 2017/2114 of 9 November 2017 amending Implementing Regulation (EU) 680/2014 as regards templates and instructions.

[65] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

[66] Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC.

[67] In connection with involvement in the sale of equity and claims in and on Commercial Bank Victoria by assignees in bankruptcy of the insolvent Corporate Commercial Bank AD.

In February the German Federal Financial Supervisory Authority notified the BNB of the Varengold Bank's intention to operate in Bulgaria through a branch. This procedure was completed on 20 May 2018 with the branch listed in the Registry Agency's Commercial Register.

In March 2018 the procedure of deleting IšBank AG of Germany from the Commercial Register and the Register of Non-Profit Legal Entities ended and the Bank closed its Bulgarian branch. IšBank AG's competent authority notified the BNB of its consent to branch closure. On assessing compliance with bank operation termination requirements, the BNB concurred in consent.

Following a BNB decision, four banks were allowed to include 2017 profits into Common Equity Tier 1, and four others obtained approvals under Article 71, paragraph 3 to amend their statutes.

Between January and June eight new EU credit institutions exercised the freedom to provide services under the mutual recognition of passporting procedures through notices to the BNB from bank operation licensing supervisors. The BNB received 296 such notices. The BNB Banking Supervision Department also registered and handled 92 complaints from banks' customers.

Applications for registration of new financial institutions under Article 3a of the LCI decreased over the period. Three companies were denied registration because of unclear capital origins. Two companies received administrative breach notices followed by penalties for acting as financial institutions without registration and breaching BNB Ordinances No 26 and No 22 reporting requirements.

## Participating in Single Supervisory Mechanism Colleges

BNB off-site supervision also addressed expanding cooperation and the exchange of information within supervisory colleges responsible for EU bank subsidiaries. Under the commitments to supervisory colleges, the annual reports issued in the first half year assessed capital and liquidity (risk assessments) of eight banks which are part of European banking groups. Six banking groups' recovery plans were assessed to serve as a basis for formulating joint decisions.

# VII. BNB Work on Resolution of Credit Institutions

The Law on the Recovery and Resolution of Credit Institutions and Investment Firms (LRRCIIF) tasks the BNB Governing Council with resolving credit institutions.

In the first six months of 2018 the BNB as the body responsible for resolving credit institutions focused on preparing and reviewing resolution plans. It continued developing and improving methodologies and procedures for a common approach to assessments and analyses in recovery plans and discharging other resolution duties. In early 2018 a detailed methodology setting out critical functions of credit institutions and branches for which the BNB is the group level resolution authority was adopted in line with Commission Delegated Regulation (EU) 2016/778.[68]

As a resolution authority for subsidiary banks of EU parent companies, the BNB participates in international resolution colleges for EU cross-border banking groups. In the first half of 2018 the BNB jointly with the group-level resolution authority and other resolution authorities of EU subsidiary companies (resolution colleges) worked on assessing the opportunities for resolution and reviewing resolution plans of seven banking groups and their subsidiaries licensed in Bulgaria. Within the seven colleges, in early 2018 the BNB adopted in the form of joint decisions updated resolution plans for banking groups with Bulgarian licensed subsidiaries. All updated resolution plans include assessments of banking group resolvability, significant corporations in the banking group and business model analyses, identified critical functions of significant corporations, and preferred resolution strategy and instrument of the relevant banking group.

The BNB Governing Council approved in the form of a joint decision a minimum requirement for own funds and eligible liabilities (MREL) on a consolidated basis for three banking groups with subsidiaries licensed in Bulgaria whose group level resolution authority is the Single Resolution Board (SRB). In line with SRB policy,[69] in updating resolution plans for 2017, a binding MREL target is set on a consolidated basis for the largest and most complex banking groups and not for all groups falling within the SRB scope. Under the SRB policy which does not provide for MREL on an individual basis for subsidiaries during the year, no individual basis MREL for subsidiaries licensed in Bulgaria was specified in updated banking group resolution plans approved by the BNB Governing Council.

In the first half year the BNB continued to collect standardised credit institution information required for assessing resolvability and preparing resolution plans.

Under the LRRCIIF, in March the Governing Council set the total amount of 2018 annual bank contributions to the Bank Resolution Fund (BRF) at BGN 121,956,000. In April this was apportioned to individual banks given their risk profile. All banks paid their due contributions into the Fund within the term set in the LRRCIIF, with accumulated funds exceeding BGN 410 million.

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[68] Commission Delegated Regulation (EU) 2016/778 of 2 February 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to the circumstances and conditions under which the payment of extraordinary *ex post* contributions may be partially or entirely deferred, and on the criteria for the determination of the activities, services and operations with regard to critical functions, and for the determination of the business lines and associated services with regard to core business lines (OJ L 131, 20.5.2016)

[69] Minimum Requirement for Own Funds and Eligible Liabilities (MREL) – SRB Policy for 2017 and Next Steps, Single Resolution Board, 20 December 2017.

# VIII. Participating in the ESCB and EU Bodies

Bulgaria presided the EU Council from January to June 2018 and the BNB took part in preparing and conducting the Presidency. A BNB Deputy Governor sat on the Coordination Board with the Council of Ministers for the Bulgarian Presidency. BNB representatives were part of interministerial teams working on EC legislative proposals on financial services, providing their expertise to the Ministry of Finance teams.

In April finance and economy ministers and EU central bank governors took part in the informal Ecofin Council meeting in Sofia.

## The European System of Central Banks

The BNB Governor sits on the ECB General Council with EU central bank governors and the ECB President and Vice President. In the first half of 2018 the two sessions of the ECB General Council focused on EU economic development and financial sector performance, and ECB key documents: the report on the economic outlook and monetary policies of non-euro area Member States, the report on compliance with the ban on monetary financing by central banks and the report on public finance. The ECB General Council also approved the 2018 Convergence Report assessing the degree of economic convergence between Member States which have not adopted the euro and compliance between their legislations and the Treaties.

BNB representatives sat on 12 ESCB committees[70], 47 working groups, and the Human Resource Conference. Bank representatives on ESCB bodies, committees, and working groups helped elaborate ECB legal instruments on monetary and banking policy, payment and settlement systems, statistical reporting and research, and other central banking issues. The Bank also helped formulate ECB standpoints in written consultations with EU Member States on legislative bills within ECB purview.

## The European Systemic Risk Board, the European Banking Authority, and Colleges of Supervisors

The BNB Governor and BNB Deputy Governor are members of the ESRB General Board. Debate at the two General Council meetings in the first half of 2018 focused mainly on assessment of financial stability risk and identification of vulnerabilities in the EU financial system.

The March General Board addressed Member States' 2017 macroprudential measures to curb cyclical risks. The General Board approved the adverse scenarios for two stress tests carried out in 2018: the banks' stress tests coordinated by the European Banking Authority (EBA) and the insurance institutions' stress tests coordinated by the European Insurance and Occupational Pensions Authority (EIOPA). The June General

[70] The Accounting and Monetary Income Committee (AMICO), the Financial Stability Committee (FSC), the Banknotes Committee (BANCO), the Eurosystem/ESCB Communications Committee (ECCO), the Information Technology Committee (ITC), the Internal Auditors' Committee (IAC), the International Relations Committee (IRC), the Legal Committee (LEGCO), the Market Operations Committee (MOC), the Monetary Policy Committee (MPC), the Market Infrastructure and Payments Committee (MIPC), and the Statistics Committee (STC).

Board discussed credit dynamics and real estate price changes in EU Member States and non-financial private sector indebtedness.

The General Board continued working on macroprudential approaches for resolving the non-performing loan problem in the EU focusing on factors contributing to non-performing loan increase and their impact during the recent financial crisis.

In line with the 2015 Recommendation on recognising and setting countercyclical buffer rates for exposures to third countries, the BNB prepared and sent the ESRB the required information on third countries to which domestically licensed institutions have material exposures.

Bank representatives were actively involved in the work of the ESRB General Board, Advisory Technical Committee, two working groups, and task forces and prepared positions on topics discussed at meetings, written procedures, and consultations.

In 2018 interaction and cooperation with the supervisory colleges, and international colleges for resolution continued.

## The Ecofin Council and Economic and Financial Committee (EFC)

Under the Bulgarian Presidency of the EU Council, work continued on legislation creating a regulatory framework to complete the Banking Union. Bank representatives were actively involved in discussions and negotiations on packages of legislative measures to curb banking sector risks[71] (the 'banking package'). The Presidency team with BNB representatives' participation discussed and drafted compromise proposals for amending the Directive and Regulation on the Taking up and Pursuit of the Business of Credit Institutions and Minimum Capital Requirements (CRD IV/CRR) helping overcome differences between EU Member States. In May 2018 the Ecofin Council agreed on a general approach to the 'banking package' of legislative proposals on the banking sector.

In the first half of 2018 BNB representatives helped debate on the EC legislative package on the review of the European System of Financial Supervision (ESFS), providing for reforms and enhancing the capacity of European Supervisory Authorities (ESA) and the ESRB. Negotiations within the Financial Services working group with the leading participation of BNB experts achieved great progress on the proposal for a Regulation amending Regulation (EU) No 1092/2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board.

BNB's experts also helped debate and progress EC proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 924/2009 as regards certain charges on cross-border payments in the Union and currency

[71] Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements and amending Regulation (EU) No 648/2012; Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures; Proposal for a Directive of the European Parliament and of the Council amending Directive 2014/59/EU on loss-absorbing and recapitalisation capacity of credit institutions and investment firms and amending Directive 98/26/EC, Directive 2002/47/EC, Directive 2012/30/EU, Directive 2011/35/EU, Directive 2005/56/EC, Directive 2004/25/EC and Directive 2007/36/EC; Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 806/2014 as regards loss-absorbing and recapitalisation capacity for credit institutions and investment firms.

conversion charges. EC proposal aim is to ensure that natural and legal entities from non-euro area Member States benefit from the same conditions as euro area ones when making cross-border payments in euro.

BNB representatives brought their expertise to the preparation of Bulgaria's position in the negotiations initiated during the Bulgarian Presidency on the two legislative proposals[72] within the package of measures to tackle non-performing loans, submitted to the EC on 14 March 2018.

Between March and June 2018 BNB experts assisted an MF team in discussions on EC legislative proposals[73] on completing and deepening the Capital Markets Union by promoting EU covered bonds at the market as an important source of long-term funding for credit institutions and enhancing their capacity to support the real economy.

BNB representatives also actively participated in the discussions on the legislative proposal for the creation of a European Deposit Insurance Scheme (EDIS) as part of the measures for building Banking Union's third pillar. As a result the Bulgarian Presidency prepared and coordinated a balanced progress report, which was approved at Ecofin Council's meeting on 22 June 2018.

The Bank was strongly involved in the Economic and Financial Committee work. In addition to the regular reviews of the economic situation, risks to financial stability, and the EU financial sector and government debt market development trends, the Committee discussed implementation of measures towards completing the Banking Union, creating the capital markets union and issues related to obstacles to the free movement of capitals and measures to remove them. The Committee members examined the progress made in implementing the Action Plan to tackle non-performing loans and held initial debate on EC proposals for a comprehensive package of measures to tackle non-performing loans in Europe and for sovereign bond backed securities. In the context of building the Capital Markets Union the Committee discussed the proposals for creating a legislative framework supporting the issuance of covered bonds, and promoting their use as a stable source of  credit institutions funding.

Ministers of finance or economy and central bank governors, among them the BNB Governor and a Deputy Governor took part in the Informal EU Ecofin Council April meeting in Sofia. The Bank and the Ministry of Finance, which chaired the Ecofin Council during Bulgaria's Presidency, also helped draft documents discussed at the meeting. During the first working session ministers and governors focused on the opportunities for promoting the economic convergence between EU Member States and examined concepts for tools and mechanisms supporting convergence within the context of deepening the Economic and Monetary Union. Topics for discussion also included measures for building the Capital Markets Union and how to reduce their fragmentation in the EU.

By participating in the Council for European Affairs at the Council of Ministers the BNB contributed to formulating Bulgarian standpoints on key economic governance areas and the financial sector.

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[72] Proposal for a Regulation of the European Parliament and of the Council on amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures and Proposal for a Directive of the European Parliament and of the Council on credit servicers, credit purchasers and the recovery of collateral.

[73] Proposal for a Directive of the European Parliament and of the Council on the issue of covered bonds and covered bond public supervision and amending Directive 2009/65/EC and Directive 2014/59/EU and Proposal for a Regulation of the European Parliament and of the Council on amending Regulation (EU) No 575/2013 as regards exposures in the form of covered bonds.

# IX. International Relations

The Law on the Bulgarian National Bank entitles the Bank to participate in international organisations furthering currency, monetary, and credit policy cooperation. Where Bulgaria participates in international financial institutions, the BNB is sovereign fiscal agent and depository.

The Bulgarian National Bank holds equity in the Bank for International Settlements (BIS). The BNB Governor sat on BIS central bank governors' regular meetings: a major forum for cooperation and debate on world economic development and prospects, and international financial markets. The BIS Governors allocated net profit at the Annual General Shareholder Meeting in late June 2018, the BNB receiving EUR 2.3 million dividend for its 8000 shares.

The Governor represents Bulgaria as member on the IMF Board of Governors. Bulgaria's IMF quota is SDR 896.3 million or 10,428 voting shares: 0.21 per cent of IMF voting shares.

In April 2018 the BNB contributed USD 10,000 to the Group of Thirty.

In January 2018 representatives of the central bank of Albania visited the BNB. They familiarised themselves with the design and functions of the BNB Cash Centre and discussed the management and automation of cash operations.

Helping step up regional cooperation, the Bank also participated at summit level in the Central Banks Governors' Club of Central Asia, Black Sea Region and Balkan Countries.

# X. Statistics

The BNB compiles statistical information under Article 42 of the Law on the Bulgarian National Bank and as ESCB member under Article 5 of the Statute of the ESCB and the ECB. The Bank adheres to European harmonised standards based on international statistical methodology of relevant leading institutions (the ECB, Eurostat, the IMF, the BIS, the OECD, the UN, and the World Bank).

The BNB collects, processes, analyses and disseminates official monetary[74] and interest[75] statistics, external sector statistics[76], quarterly financial account statistics for all institutional sectors[77], government finance statistics[78], and statistics on non-bank financial institutions, including leasing companies and investment funds[79], specialised lenders and insurance and reinsurance undertakings[80].

In the first half of 2018 the Bank continued to disseminate up-to-date data on its website and by regular communications with the ECB, Eurostat, the ESRB, the IMF, the BIS, and other national and international institutions. Compiled statistical data are also used for economic research and forecasting, financial stability analyses, major BNB operations, and a number of foreign publications and reports like the ECB and Eurostat statistical databases, the ECB Annual Report, the Convergence Report, and the Table of Indicators related to the macroeconomic imbalance procedure. In the first half of 2018 all statistical data were published on the BNB website as scheduled.

In addition to the compilation of statistical data, the BNB was actively involved in a number of national, European and international fora discussing and solving methodological issues in the area of statistics. All statistical data published by the BNB were accompanied by the relevant metadata which were periodically revised where necessary. In the first half of 2018 monetary statistics methodological requirements for classifying loans by quality and for reporting provisions under IFRS 9 were updated. To increase the information value, the description of the methodology for assessing remittances by emigrants was also updated.

On 29 March 2018 the BNB Governing Council adopted new Ordinance No 17 on the Monetary and Interest Rate Statistics and Financial Accounts Statistics[81] based on updated BNB instructions. The Ordinance establishes requirements for providing and

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[74] Pursuant to Regulation (EU) No 1071/2013 of the European Central Bank of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (recast).

[75] Pursuant to Regulation (EU) No 1072/2013 of the European Central Bank of 24 September 2013 concerning statistics on interest rates applied by monetary financial institutions (recast).

[76] Pursuant to Regulation (EC) No 184/2005 of the European Parliament and of the Council of 12 January 2005 on Community statistics concerning balance of payments, international trade in services and foreign direct investment and Guideline of the ECB of 9 December 2011 on the statistical reporting requirements of the European Central Bank in the field of external statistics (ECB/2011/23).

[77] Pursuant to Guideline of the ECB of 25 July 2013 on the Statistical Reporting Requirements of the European Central Bank in the Field of Quarterly Financial Accounts (recast) (ECB/2013/24) and subsequent amendments.

[78] Pursuant to Guideline of the ECB of 25 July 2013 on government finance statistics (ECB/2013/23) and subsequent amendments.

[79] Pursuant to Regulation (EU) No 1073/2013 of the ECB of 18 October 2013 concerning statistics on the assets and liabilities of investment funds.

[80] Pursuant to Regulation (EU) No 1374/2014 of the ECB of 28 November 2014 on statistical reporting requirements for insurance corporations (ECB/2014/50).

[81] This Ordinance is issued on the grounds of Article 42 of the Law on the BNB, amended by § 15, item 3 of the Transitional and Final Provisions of the Law on Payment Services and Payment Systems (adopted by the 44th National Assembly on 22 February 2018, published in the Darjaven Vestnik, issue 20 of 6 March 2018).

processing statistical information defining the scope of reporting units, data types, frequency, and timescales for providing data to the BNB.

Following the additional statistical data user requirements and European legal amendments, including the new Regulation on statistical reporting requirements for pension funds in early 2018[82] and the amended ECB Guideline on monetary and financial statistics, the Bank updated reporting forms and methodological instructions for monetary and interest rate statistics, insurance and reinsurance companies, and pension funds.

In line with ESCB priorities and objectives and amendments to the Register of Institutions and Affiliated Data (RIAD), the statistical database continued to be developed and improved, including reference individual data at the BNB: the Register of Domestic Economic Agents and the Bulgarian securities database. Along with analytical options at the national level, these databases allow the BNB to fulfil its commitments to the ESCB in managing the quality and maintaining information updated regarding data for Bulgaria in RIAD and the Centralised Securities Database (CSDB[83]). In April 2018 the BNB started reporting in line with the new requirements for widening the scope of information provided for the purposes of the updated version of RIAD. This contains reference information on credit institutions, money market funds, financial vehicle corporations, investment funds and their management companies, payment service providers and payment system operators, insurance and reinsurance companies, and holding companies and head offices. In the first half year all Bulgarian financial corporations, issuers of government securities, and domestic non-financial corporations which had issued securities abroad became RIAD reported units in stages. This allows RIAD issuer reference data to link with CSDB securities data.

The BNB continued participating in the ECB Securities Holdings Statistics project[84] which is important for both gathering various statistical data and analysing financial stability.

In the first half year the Bank continued developing and elaborating the Integrated Statistical Information System (ISIS) and the Information System for Monetary and Interest Rate Statistics (ISMIRS). They automate management, improve the reliability and quality of statistical information the BNB receives, processes and disseminates, and greatly reduce the administrative burden on individuals and legal entities by offering electronic submission of statistical reports and declarations. Early 2018 changes to ISIS improved access to the system by data suppliers with certificates issued by trust service providers in line with Regulation (EU) No 910/2014 of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market.

The BNB attaches great importance to the quality of the statistical data compiled by it. It follows the principles of the Public Commitment on European Statistics by the European System of Central Banks, based on the fundamental principles of UN official statistics. The Bank took part in ECB and Eurostat reports on quality assessment measuring compliance with these principles through set indicators. At the end of June the ECB published two reports on the quality of statistical data underpinning the

[82] Pursuant to Regulation (EU) 2018/231 of the ECB of 26 January 2018 on statistical reporting requirements for pension funds (ECB/2018/2).

[83] Pursuant to Guideline and Recommendation of the ECB of 26 September 2012 on the data quality management framework for the Centralised Securities Database (ECB/2012/21 and ECB/2012/22).

[84] Pursuant to Regulation (EU) No 1011/2012 of the European Central Bank of 17 October 2012 concerning statistics on holdings of securities (ECB/2012/24) and subsequent amendments, Guideline of the ECB of 22 March 2013 concerning statistics on holdings of securities (ECB/2013/7) and subsequent amendments, Recommendation of the ECB of 2 August 2016 on the data quality management framework for statistics on holdings of securities (ECB/2016/24).

indicators used in the procedure of macroeconomic imbalances. The reports analysed euro area data quality and for the first time their appendices contained indicators for non-euro area EU Member States, including BNB statistics on the balance of payments, the international investment position, and quarterly financial accounts. These indicators measure compliance with the principles of central bank statistical products: accessibility and clarity, punctuality, reliability, comparability and coherence. The published reports ensure transparency and allow for a comparative analysis of the quality of these statistical products for all EU Member State central banks. The BNB as coordinator for Bulgaria also adheres to the requirements of the IMF Data Quality Assessment Framework, part of the Special Data Dissemination Standard Plus (SDDS Plus) which Bulgaria has joined.

In the field of statistics, the BNB cooperates with the NSI and the MF, national and international statistical offices and central banks. In early June 2018 the BNB attended the regular ECB and Eurostat experts' mission for notification tables on the deficit/surplus and general government debt, hosted by the NSI. At the end of June the BNB took part in the conference of the European statistical information users in Bulgaria entitled 'Better Cooperation, Better Data Quality'.

# XI. The Central Credit Register and the Register of Bank Accounts and Safe Deposit Boxes

## The Central Credit Register

The Bulgarian National Bank keeps information on debt to Bulgarian banks, other financial institutions, and payment and electronic money institutions lending under Article 21 of the Law on Payment Services and Payment Systems (reporting units) operating in Bulgaria. BNB Ordinance No 22 on the Central Credit Register regulates the terms, procedure, and information flows to and from the Central Credit Register (CCR). The Register provides information by and to reporting units and the BNB.

By 30 June 2018 the CCR had 210 participants: 27 banks, 180 financial institutions, and three payment institutions. Six new reporting units entered and three left the CCR information system.

The CCR listed 5,552,000 loans with a balance sheet exposure of BGN 73,383 million from 4,991,000 and BGN 69,009 million a year earlier. Borrowers numbered 2,415,000, of whom 2,251,000 individuals, 98,000 legal entities, 58,000 non-residents, and 8,000 freelancers.

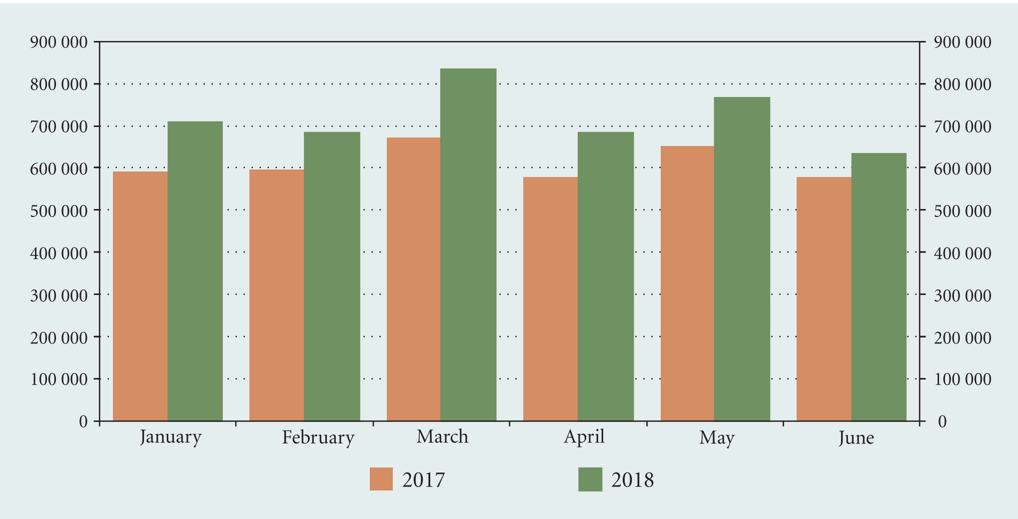
Residual debt up to BGN 5000 predominated with individuals (61.8 per cent), while debts of BGN 5000 to 50,000 predominated with legal entities (34.2 per cent).

In the first half of 2018 banks, financial institutions, payment institutions and government authorities with electronic access to the CCR conducted 4,309,000 searches on 3,713,000 individuals and 596,000 legal entities. The average monthly number of searches was 718,000.

Pursuant to BNB Ordinance 22 on the Central Credit Register, the BNB provides information on debts of individuals (including for probate purposes) and legal entities. The half year saw 7818 applications for CCR disclosures, of them 7622 by individuals and 196 by legal entities.

### Electronic Searches by Participants in the CCR Information System (Monthly)

(number)

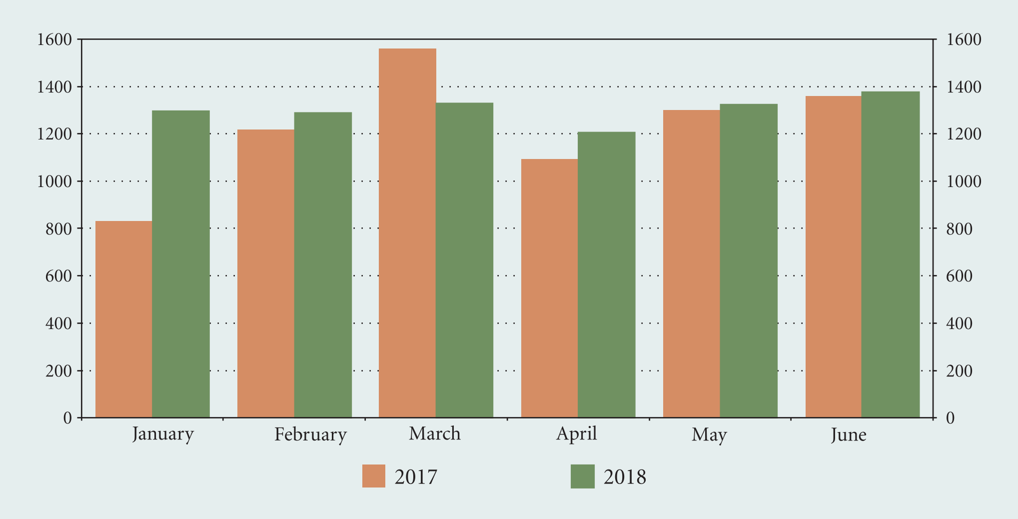



**Source:** the BNB.

According to the changing criteria for the national and international lending development, the CCR activity continually improves. To boost data quality and reliability, the CCR information is constantly analysed and the system is constantly changed and improved. CCR information is of essential importance to creditors in assessing borrower creditworthiness, encouraging policies and measures to stimulate prudent lending and avoid excessive debt. Arrears and repayment histories help minimise the risk of non-performing loans in creditors' portfolios, preserve good asset quality and stability in the Bulgarian financial system.

### Searches in the CCR Electronic System Based on Submitted Applications (Monthly)

(number)




**Source:** the BNB.

The CCR has established and maintains close cooperation with partner ESCB credit registers and successfully exchanges information to bring technological and methodological performance up to the best practice.

The CCR cooperates with the World Bank under the Doing Business project, with the ECB, with the IMF under the Access to and Use of Financial Services Survey, and with other international bodies for research, statistical analysis and annual surveys.

## The Register of Bank Accounts and Safe Deposit Boxes

From early 2017 the BNB maintains the Register of Bank Accounts and Safe Deposit Boxes (RBASDB): an electronic information system on bank account numbers, holders and attorneys, data on account preservation orders, bank deposit box holders and attorneys. Banks and foreign bank branches in Bulgaria, and the BNB submit information to the Register. BNB Ordinance No 12 establishes the operation, scope, terms, procedure and timelines of information flows to and from the RBASDB.

As of 30 June 2018 the Register logged 16.08 million bank accounts and 32,400 safe deposit box hires from 16.23 million and 32,500 in June 2017. The RBASDB information system included records of 1.461 million new accounts, 1.648 million closed accounts (from 1.474 million, and 1.936 million in June 2017) and also of 209,200 account preservation orders placed after 1 January 2018.

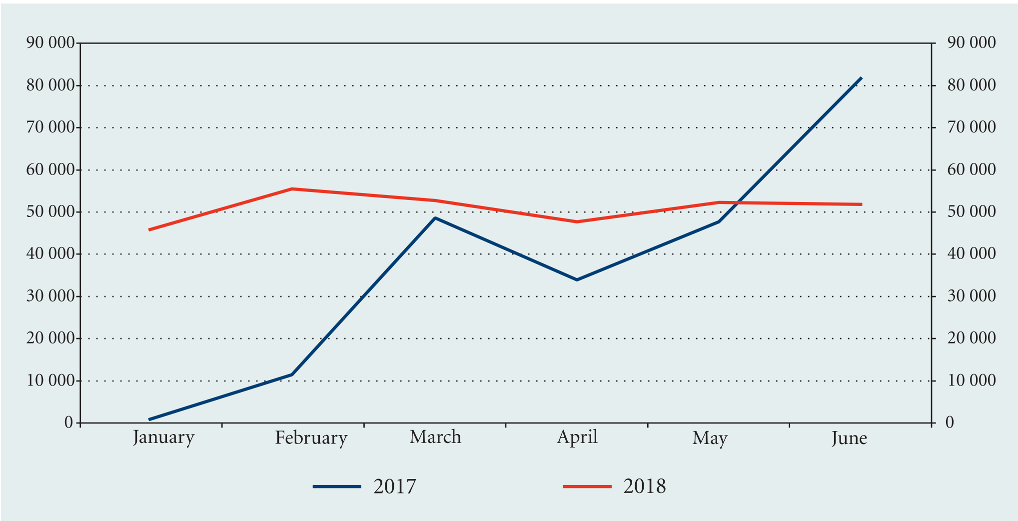
The Law on Credit Institutions grants Register information access to judicial authorities (Courts, the Prosecutor's Office, and criminal investigation authorities), the Ministry of the Interior Chief National Police Administration, the Chief Directorate for Countering Organised Crime, the State Agency for National Security, the National Revenue Agency, the Commission for Countering Corruption and Forfeiting Illegally Acquired Assets, the Customs Agency, private and state bailiffs in enforcement proceedings, and other bodies listed in the Law on Credit Institutions Article 56a. Facilities offering electronic access to the system to authorised bodies are available. By 30 June 2018 electronic statements accounted for 98 per cent of all statements in the first half of the year. This compares with 87.78 per cent on the same time last year.

By June bodies and institutions entitled to access under the Law on Credit Institutions Article 56a, paragraph 3 conducted searches on 305,180 individuals. The average monthly number of searches was 50,863.

BNB Ordinance No 12 on the Register of Bank Accounts and Safe Deposit Boxes grants individuals (including for probate purposes) and legal entities access to information on bank accounts and safe deposit boxes. From January to June 2018, 1056 applications for CCR disclosures were filed of which 1017 by individuals and 39 by legal entities.

### RBASDB Searches by Bodies and Institutions under Article 56a, paragraph 3 of the Law on Credit Institutions

(number)




**Source:** the BNB

The RBASDB continuously improves and develops using the best EU practices in creating and operating bank account registers. To boost data quality and reliability, incoming information is constantly analysed and the RBASDB changed and improved.

# XII. The Fiscal Agent and State Depository Function

The Law on the BNB tasks the Bank with acting as the fiscal agent and official depository pursuant to contract. These duties call for maintaining and improving the GSAS system for conducting government securities auctions; the ESROT electronic system for registering and servicing government securities trading; the GSSS government securities settlement system; the Register of Special Pledges; the AS ROAD automated system for registering and servicing external debt; and the IOBFR system for budget and fiscal reserve information servicing.

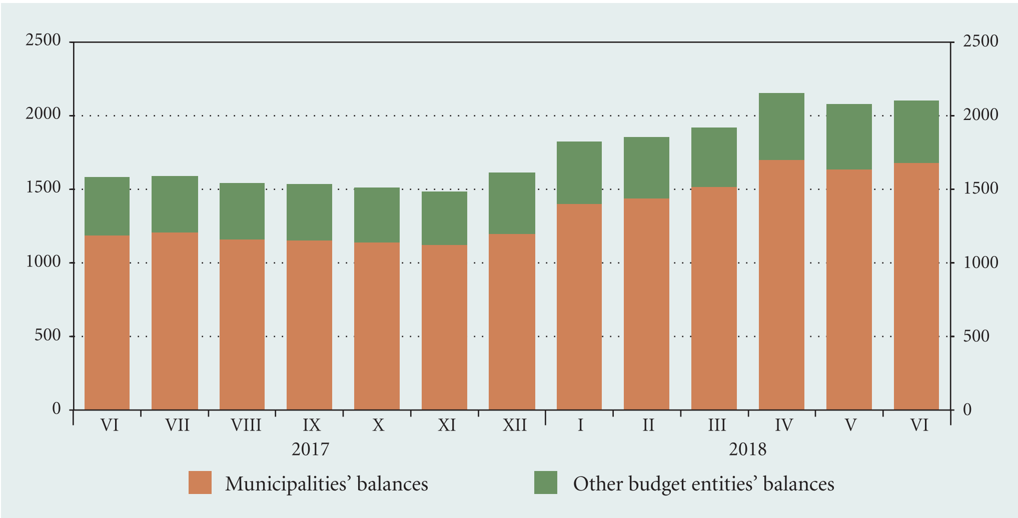
First half-year revenue raised by system participants under the BNB Tariff of Fees and Commissions Charged on Processing Government Securities Transactions and by the MF under Article 43 of the Law on the BNB was BGN 942,900, from BGN 1,087,800 in this time last year.

## Information Service

Providing state budget information under the MF contract involved issuing 485 statements on budget entity operations and balances at the BNB and Bulgarian banks *via* the custom designed IOBFR system. Summarised information sets the overall balance of budget entities' accounts (including municipalities) at BGN 11,552.4 million,[85] down 13.6 per cent on 30 June 2017. At end-June BGN 9449.5 million or 81.8 per cent was in BNB accounts and the rest with 18 domestic banks.

### Budget Entities' Accounts with Domestic Banks (BNB excluded)

(BGN million)




**Source:** the BNB.

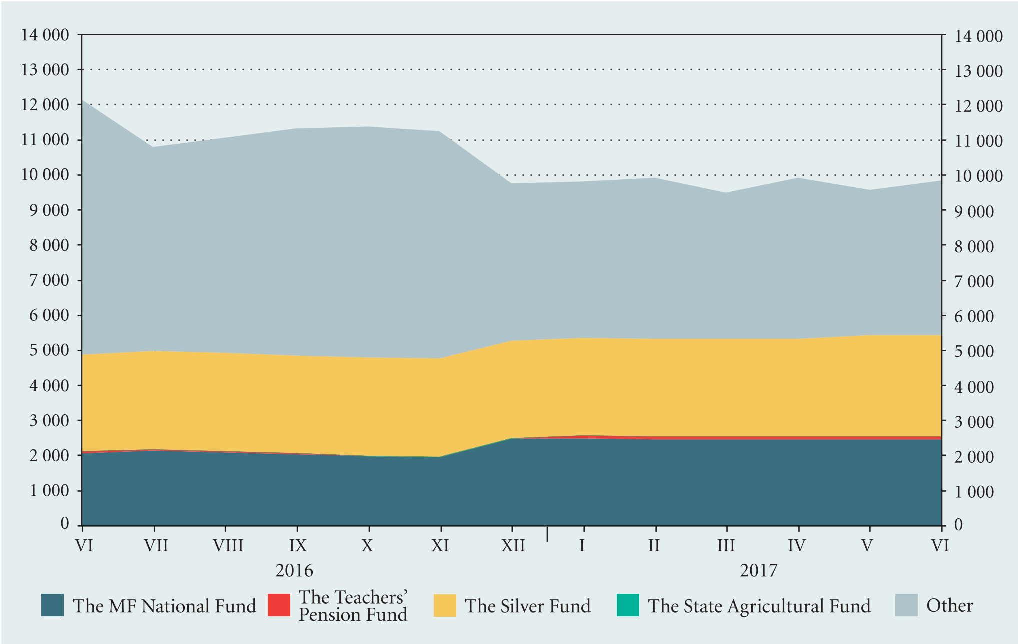
Budget entities' account balances outside the central bank rose by 32.9 per cent on 30 June 2017, of which 77 per cent at five banks.

[85] Foreign currency account balances are recalculated in levs at the BNB exchange rate on 30 June 2018.

Approximately 85.0 per cent of total budget funds at the BNB and domestic banks formed the fiscal reserve's[86] liquidity portion: BGN 9846.9 million on 30 June 2018. Of this, BGN 5467.9 million was allocated to earmarked funds: the State Fund for Guaranteeing the Stability of the State Pension System (the Silver Fund), the MF National Fund, the Agricultural State Fund Disbursement Agency, and the Teachers' Pension Fund.

### Structure of Bank Account Balances within the Fiscal Reserve Scope

(BGN million)




**Source:** the BNB.

Standing Minister of Finance and BNB Governor joint instructions task the Bank, on behalf of the Ministry of Finance, to monitor security pledged by banks under the Law on Public Finance and tally it with IOBFR balances daily.

The AS ROAD system updates information on the government's foreign financial obligations on which the Bank is calculating and paying agent as part of its agency functions.[87] Based on that information and upon MF clearance, there were payments of EUR 171.1 million, comprising EUR 35.8 million principal and EUR 135.3 million interest. Obligations registered in AS ROAD on 30 June 2018 were EUR 7838.8 million.

## Servicing Government Securities Trading

In the first half of 2018 MF issuing policy involved one auction for BGN-denominated government securities *via* the GSAS system. A 25-year issue at 2 per cent annual interest rate was offered at the auction.

The total nominal value of government securities offered for sale was BGN 100 million. BGN 139.9 million of bids competed at an average weighted annual yield of

[86] According to § 1, item 41 of the Additional Provisions of the Law on Public Finance, the fiscal reserve comprises the balances on all budget entities' bank accounts (excluding municipalities and their budget spending units) and other assets and claims on EU funds.

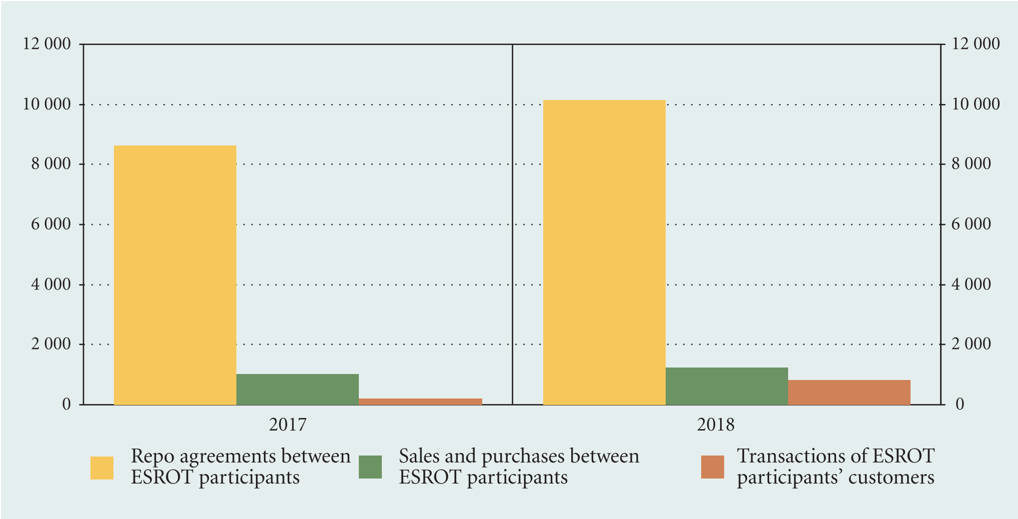
[87] Under the government debt agency agreement between the BNB and MF.

2.98 per cent. Just over half were by non-bank institutions (BGN 70.7 million) with BGN 69.2 million by banks. Based on the MF decision all bids were rejected.

ESROT registered BGN 1175.1 million of corporate event payments on behalf and on account of the issuer[88], up BGN 255.1 million or 27.7 per cent on this time last year. The 24 circulating MF issues had an overall nominal value of BGN 5647.3 million[89]: 11 per cent down. Bond currency structure did not change, BGN-denominated issues, redeemable in levs with the largest share at 72.8 per cent, followed by EUR-denominated issues redeemable in euro at 26.6 per cent, and EUR and USD-denominated issues redeemable in levs at 0.6 per cent. The maturity structure underwent no changes from end-June 2017, medium- and long-term bonds comprising 19.7 and 80.3 per cent.

### Volume of Transactions in Tradable Government Securities in the First Six Months

(BGN million)




**Source:** the BNB.

The nominal volume of ESROT transactions was BGN 12,233.5 million, up 24 per cent on this time last year. Repos had the largest share at 83 per cent, including those concluded for a period of four to seven days (50.5 per cent), mostly in lev-denominated government securities. Government securities sale and purchase transactions totalled BGN 1254.7 million. Of this, transactions between ESROT participants accounted for BGN 658.4 million, those between participants and customers for BGN 596.3 million and between ESROT participants' customers for BGN 826 million.[90]

Given greater activity in government securities trade the secondary government bond market liquidity ratio[91] in the first half year rose to 2.1 from 1.6 in the first half of 2017. ESROT participants encountered no problems and provided government bonds

[88] The lev equivalent of payments on foreign currency denominated government securities issues was calculated at the BNB rate on the date of payment.

[89] The lev equivalent of government securities denominated in foreign currency is calculated at the BNB rate for 30 June 2018. The total was reduced by the amount of government securities removed from the MF register/accounts on instructions from title holder and transferred to the disposition of the Minister of Finance under Article 152, paragraph 9 of the Law on Public Finance.

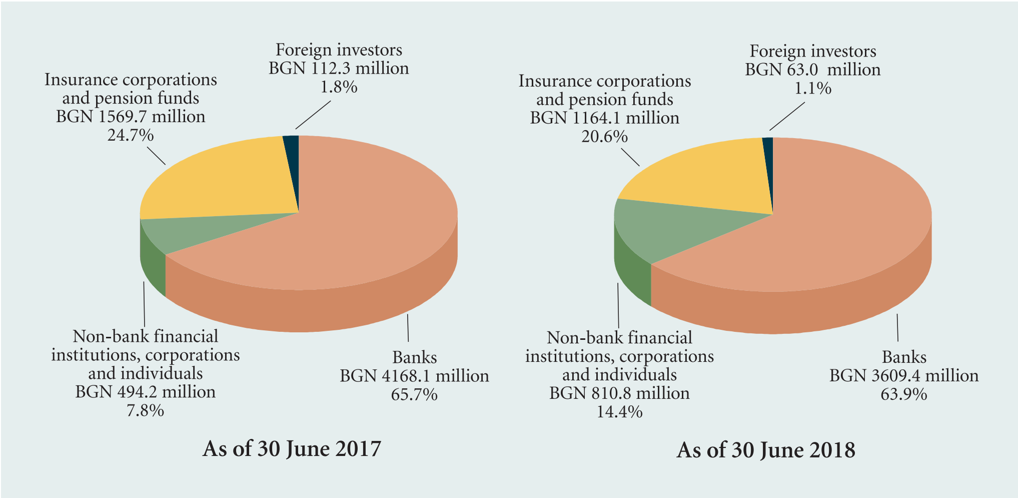
[90] ESROT does not register transactions between customers of the same participant.

[91] Liquidity ratio is the ratio between the volume of secondary market government bond transactions concluded over the period and the volume of government securities circulating at the close of the period.

and cash in levs and euro for the delivery versus payment (DvP) settlement of government securities transactions, the average settlement ratio[92] being 100 per cent.

Between January and June there were BGN 4192.4 million of blocking and unblocking operations in domestic government securities registered in ESROT and related to securing funds in budget entities' bank accounts and registered pledges under the Law on Special Pledges from BGN 1329 million this time last year.

## Holders of Government Securities Issued in the Domestic Market




**Notes:** The lev equivalence of government securities issues denominated in foreign currency is calculated on the basis of the BNB exchange rate valid for the last business day of the relevant period.
According to BNB and ESROT participants data.

**Source:** the BNB.

As circulating domestic market government securities decreased, the half year saw annual declines in government securities investment by all bond holder categories. This changed government bond holder exposures by category: 64 per cent with banks; 21 per cent with insurance corporations and pension funds, 14 per cent with non-bank financial institutions, corporations and individuals, and 1 per cent with foreign investors, from 65, 25, 8 and 2 per cent in June 2017.

The ESROT offered 100 per cent availability,[93] with no call for contingency rules for interaction between systems operated by the BNB.

On 30 June 2018 there were 1033 accounts in the government securities settlement system under BNB Ordinance No 31 on Government Securities Settlement. Of them, 24 were for government securities of the issuer (the MF), 416 for participants' own government securities portfolios, 251 for encumbered bonds, and 342 for participants' customers. Account nominals tallied with the amount of outstanding issues at BGN 5647.3 million.[94]

[92] Settlement ratio is the ratio of the number of transactions settled on the set date and all transactions subject to registration and settlement within the system for the reporting period.

[93] The ratio of time when the system is operational to scheduled operating time.

[94] The lev equivalence of government securities issues denominated in foreign currency is shown at the BNB rate for 30 June 2018.

## System Development

Over the review period the second stage of the GSAS upgrade project continued, including design and development of a new version of the system to business requirements approved by the MF and test auctions involving 15 debt management operations.

As government securities began trading on a regulated market and in line with the Rules for Admission to Government Securities Trading on a Regulated Market organised by the Bulgarian Stock Exchange Sofia AD approved by the Minister of Finance and the BNB Governor and transactions with the BNB, ESROT participant banks, government securities sub-depository banks, and the Central Depository AD, in February the Central Depository AD became an ESROT participant under Article 3, paragraph 1, item 5 of the MF and the BNB Ordinance No 5 on the Terms and Procedure for Acquisition, Registration, Redemption and Trade in Government Securities. This allows *bourse* investment firms which are not ESROT participants and government securities sub-depository customers to complete government securities transactions concluded on the Bulgarian Stock Exchange Sofia AD in the Central Depository.

# XIII. Research

Economic research, Bulgarian economic analyses, and macroeconomic forecasts prepared by BNB experts support the Bank's management decisions and economic policy formulation. Specialised research under the 2017 to 2018 BNB Research Plan supported the Bank's operations by analysing individual economic processes and issues and improving forecasting and modelling tools.

In the first half of 2018 the Research Plan covered analysis of labour cost setting in non-financial corporations, factors driving investment, the transmission mechanism, relations between the financial and business cycles, construction of uncertainty indicator for Bulgaria, and assessments of the potential mismatch between labour supply and demand. Research results featured in technical reports and seminars held by the Bank for experts from relevant bodies, academia, and non-governmental organisations. Honing the basic model for BNB macroeconometric forecasting continued to improve related BNB forecasting.

In the first half of 2018 the BNB continued to encourage the research potential of Bulgarian economic science and practice in the area of macroeconomics and finance through its Discussion Papers research series. The Discussion Papers Editorial Board reviewed four submissions for subsequent publication: Constructing an Uncertainty Indicator for Bulgaria by Evgeni Ivanov; Determinants of Investment in Bulgaria by Evgeni Ivanov, Neli Ivanova, Daniel Kasabov, Kristina Karagyozova; How Do Firms Adjust to Rises in the Minimum Wage? Survey Evidence from Central and Eastern Europe by Katalin Bodnár, Ludmila Fadejeva, Stefania Iordache, Liina Malk, Jurga Pesliakaite, Nataša Todorovic Jemec, Peter Tóth, Robert Wyszynski and Desislava Paskaleva; Cost- and Price-setting Drivers in Bulgaria in the Period 2009–2013, WDN Survey Evidence by Daniel Kasabov and Desislava Paskaleva.

The BNB quarterly Economic Review presents information and Bulgarian economic forecasts, analyses of the balance of payments flows dynamics, monetary aggregates, their link with the development of the real economy, and their bearing on price stability. External developments directly affecting the Bulgarian economy were also analysed. The Economic Review also carries quantitative assessments of anticipated short-term developments in a set of key macroeconomic indicators. The results of BNB analyses of particular economic issues are presented briefly under special headings and in dedicated topics.

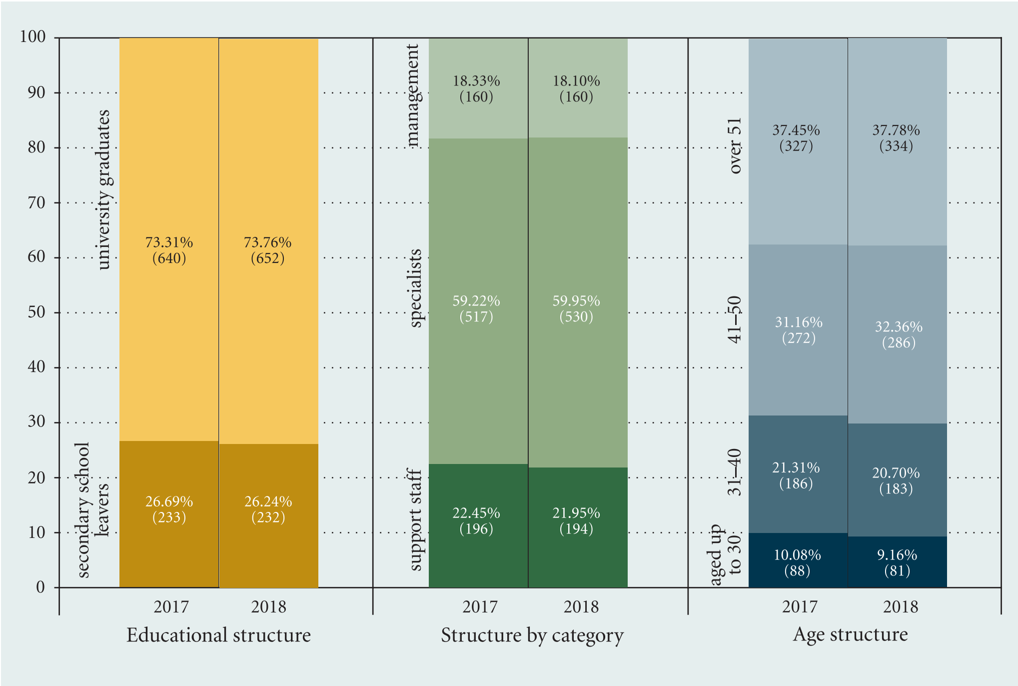
# XIV. Human Resource Management

Maintaining and developing competitive human resources is a key Bank policy. Main priorities are to provide a favourable working and sociable environment, attract appropriate candidates, and retain qualified employees by providing career development.

Over the review period new legislation on protecting personal data and countering corruption changed aspects of human resource management. In line with statutory changes applicable internal acts were supplemented and updated and personal data processing of employees and candidates was improved. Rules on preventing and ascertaining conflicts of interest also changed.

### Staff Structure on 30 June

(per cent, number)




**Source:** the BNB.

In the first half year the number of employees rose to 884 on 873 in the first half of 2017. Staff turnover continued to fall: 30 employees left from 34 in the first half of 2017. Five employees retired from eight a year earlier. Thirty four new full time employees joined against 45 in the same period of 2017.

Staff educational attainments and qualifications changed little. The share of university graduates reached some 74 per cent. By 30 June 25 BNB employees read for doctorates.

The staff grading structure remained broadly unchanged, the Specialist grade having the largest share at about 60 per cent, followed by Support Staff (approximately 22 per cent) and Managerial grades (approximately 18 per cent).

Age structure changed insignificantly on the first six months of 2017. The shares of employees aged up to 30 and that of 31 to 40 year olds fell by some 1 per cent each, while the share of employees aged between 41 and 50 rose by 1.2 per cent.

The number of employees of over 51 remained practically static. Gender distribution remained unchanged from the same period in 2016: women at 64 and men at 36 per cent.

To boost professional knowledge and skills and exchange experience across business areas, the Bank promoted staff mobility, 16 employees moving across units. Two employees worked in EU institutions on short term contracts.

BNB remuneration policy links pay with performance, taking into account each employee's contribution to Bank tasks and goals.

The annual schedule offered employees plentiful opportunities to take a variety of training and qualification boosting programmes like distance learning, professional courses and seminars in Bulgaria and abroad, language courses, information technology courses, and courses for specific responsibilities.

Induction training familiarised new employees with the Bank's corporate culture, topical tasks and challenges, internal rules, and general administrative procedures.

Thirteen employees boosted their educational attainments without discontinuing work, four reading for doctors', two for masters', and seven for bachelors' degrees. Four BNB employees took part in distance learning and certification programmes, focusing on reserve management and information security.

Bank employees took part in various specialised courses and seminars organised by the ESCB, international financial institutions, and international training centres. These focused on banking supervision, financial stability and macroprudential policy, monetary policy and financial programming, cash circulation management, payment settlement systems, financial markets, asset management and market operations, modelling and forecasting, accounting, audit, and internal control. There was also training in a wider range of topics like conflict management, effective communication and presentation, and successful negotiation.

Bank employees continued to take specialised courses, seminars, and working meetings on ESCB committees and working groups and European supervisory bodies.

BNB employees took specialised courses and seminars in Bulgaria in applying international financial reporting standards, cyber security, bond, commercial and civil law, banking, financial and commercial law, public procurement procedures, novelties in social and health insurance and employment relations, personal data protection.

BNB employees attended courses in English, German, and French.

Bank regulations encouraged professional training for specific responsibilities. A number of preventive measures were planned and launched including health and safety at work training and instructions.

With students, the BNB continued providing career opportunities and encouraging knowledge acquisition and research. Thirty applicants enquired into the annual scholarship programme for master's and doctor's degrees: 10 for doctors' and 20 for masters' degrees. The Bank awarded two master's degree scholarships after a contest. In March 2018 the Bank presented its career development programmes, traineeships, scholarships, guest researcher programmes, recruitment procedures, and conditions of employment at the National Career Days annual student and youth professional forum.

# XV. BNB Internal Audit

There were five audits by June 2018: four under the BNB Governing Council's Annual Internal Audit Programme, and one under the ESCB Internal Auditors Committee Programme.

Audits sought assurance of adequate and effective control, corporate governance, and management of inherent risks to ensure:

- effective attainment of objectives and tasks;
- reliability and completeness of financial and operational information;
- effective and efficient operations and programmes;
- safeguarding assets;
- legal, regulatory, internal rule, policy, procedure, and contractual observance.

## Audits under the Annual Internal Audit Plan

| BNB Functions | Audits |
|---|---|
| Supervision and financial stability | Adequacy and efficiency of risk management, control and governance of operation carried out by the Resolution of Credit Institutions Directorate. |
| Payment and securities settlement systems | Adequacy and efficiency of risk management, control and management of minimum required reserves maintained with the BNB by banks. |
| Internal services | Banking security and protection of classified information focusing on banking security |
| Result monitoring | Follow up on recommendations from past audits under the BNB Internal Audit Programme |

**Source:** the BNB.

Implementation of past audit recommendations was monitored under the ESCB Internal Auditors Committee Programme.

The BNB Chief Auditor organised and coordinated Internal Audit Directorate work with external auditors and the Republic of Bulgaria Court of Auditors.

# XVI. BNB Budget Implementation in the First Half of 2018

The BNB Budget for 2018 was adopted by the BNB Governing Council under Resolution No 173 of 30 November 2017.

The report on the Bank's budget implementation comprises two sections pursuant to the Governing Council's Internal Rules on Drafting, Implementing, and Reporting the BNB Budget: BNB Operating Expenditure and Investment Programme.

## I. Operating Expenditure

BNB half year operating expenditure was BGN 46,267,000 or 44.9 per cent of annual budget.

Currency circulation cost BGN 14,421,000 or 53.0 per cent of annual budget for this item and 31.2 per cent of Bank's operating expenditure budgeted for the reporting period. Minting occupied the largest share at BGN 9,242,000, of which BGN 9,001,000 on circulating coins. Commemorative coins cost BGN 241,000 in line with the BNB Governing Council Commemorative Coin Programme. New banknote production cost BGN 4,891,000. Cash processing consumables cost BGN 72,000. Plovdiv Municipality, Cash Services Company, and State Mint premise rentals for issue and cash operations cost BGN 145,000, while cash machine spares and servicing cost BGN 70,000. New banknotes and coin design cost BGN 1000.

Materials, services, and depreciation cost BGN 13,404,000 or 35.9 per cent of annual item budget and 28.9 per cent of half year operating expenditure. Materials totalled BGN 340,000 or 28.0 per cent of approved funds under this item and 0.7 per cent of operating expenditure. Specialised fleet fuel and spares and office consumables occupied the largest share in this group at BGN 129,000 and 86,000.

External services cost BGN 7,740,000 or 35.5 per cent of annual item budget and 16.7 per cent of half-year operating expenditure. Software maintenance subscriptions at BGN 1,747,000, spending on security and fire protection at BGN 1,026,000, property and refuse collection levies and other charges at BGN 900,000 were notable in this group. Office equipment maintenance was BGN 886,000. Bloomberg, Reuters, internet, and other system provision cost BGN 557,000. Mandatory TARGET2 modules cost BGN 539,000. Major building maintenance cost BGN 434,000. Electricity cost BGN 379,000. Mail, telephone, and telex cost BGN 271,000, with a trend towards optimising voice service spend. BORICA AD subscriptions cost BGN 264,000. Court and legal services cost BGN 196,000. Heating and water bills were BGN 137,000. External vehicle costs (fuel, repair works and spares) were BGN 120,000. Parking bay and freight vehicle garaging cost BGN 63,000. Banking and economic periodicals and economics publication translations cost BGN 54,000. Property insurance premia were BGN 51,000. Health and safety at work and special clothing cost BGN 50,000.

Depreciation cost BGN 5,324,000 or 37.2 per cent of annual budget or 11.5 per cent of total operating expenditure.

Payroll, social, and healthcare spend was BGN 15,173,000 or 51.3 per cent of budget funds for this item and 32.8 per cent of Bank half year operating expenditure. The BNB reported BGN 2,145,000 of current retirement obligations and unused paid leave under IAS 19, Income of Hired Persons.

Social expenditure was BGN 1,551,000 or 65.9 per cent of annual budget and 3.4 per cent of Bank half year operating expenditure.

Miscellaneous administrative spending (inland and foreign business travel, training and representative expenses) was BGN 414,000 or 19.3 per cent of budget and 0.9 per cent of BNB's total operating expenditure. Inland travel worth BGN 30,000 involved mainly regional cash centre logistics and checks. Foreign travel unrelated to the ESCB and other EU bodies cost BGN 110,000. The annual BNB Staff Education and Professional Training Programme sent employees to EU central bank, international financial institution, and international training centre distance learning programmes, professional courses, and seminars costing BGN 257,000. The Bank's representative and protocol expenses were BGN 17,000.

ESCB participation cost BGN 1,304,000/30 per cent of budget and 2.8 per cent of operating expenditure. European Banking Authority annual membership cost BGN 901,000. ESCB committee and working group and other EU body travel and training cost BGN 332,000 and BGN 22,000.

## II. The Investment Programme

The Bank invested BGN 514,000 or 2.1 per cent of approved budget for the year under this item. Investment programme funds relate to procurement procedures, some still in preparation or underway, and thus not fully taken up during the half year.

The Bank spent BGN 72,000 on construction, refurbishment, and modernisation: 1.0 per cent of annual item budget and 14 per cent of total investment funds for the half year. Work ended on the BNB Plovdiv Cash Centre technical design and consultancy on assessing the compliance of technical projects. The funds went on design, technical project congruity, compliance assessment, and professional fees.

Machine and equipment, vehicle, and other equipment investment came to BGN 68,000, or 1.3 per cent of annual budget and 13.2 per cent of total investment for the half year. Funds went on upgrading the security system, office equipment, and other equipment and furniture.

Funds invested into information systems totalled BGN 374,000, or 3.0 per cent of annual budget and 72.8 per cent of half year investment. Funds went mostly into keeping BNB information and communication technology infrastructure modern. Software spending of BGN 338,000 went on developing and upgrading information systems. Hardware cost BGN 36,000, mainly for printers, scanners, multifunctional devices, and communications cabling design.

## BNB Budget Implementation as of 30 June 2018

| Indicators | Report 30 June 2018 (BGN'000) | Budget 2018 (BGN'000) | Implementation (per cent) |
|---|---|---|---|
| **Section I. Operating Expenditure** | **46,267** | **102,937** | **44.9** |
| Currency circulation | 14,421 | 27,195 | 53.0 |
| Materials, services, and depreciation | 13,404 | 37,334 | 35.9 |
| Staff | 15,173 | 29,563 | 51.3 |
| Social activity expenditure | 1,551 | 2,355 | 65.9 |
| Other administrative expenditure | 414 | 2,142 | 19.3 |
| ESCB membership | 1,304 | 4,348 | 30.0 |
| **Section II. Investment Programme** | **514** | **24,550** | **2.1** |
| Construction, refurbishment, and modernisation | 72 | 6,880 | 1.0 |
| Machines, equipment, vehicles, and other equipment | 68 | 5,325 | 1.3 |
| BNB information systems | 374 | 12,341 | 3.0 |
| Investment related to ESCB membership | 0 | 4 | 0.0 |

**Source:** the BNB

# XVII. BNB Consolidated Financial Statements as of 30 June 2018 (Unaudited)

## Statement of Responsibilities of the Governing Council of the Bulgarian National Bank

The Governing Council of the Bulgarian National Bank is responsible for preparing and approving financial statements to present the Bank's financial position and performance for the period.

The financial statements of the Bulgarian National Bank approved by the its Governing Council are prepared in accordance with the International Financial Reporting Standards adopted by the European Commission.

The Governing Council of the Bulgarian National Bank is responsible for maintaining proper accounting records to disclose with reasonable accuracy at any time the financial position of the Bulgarian National Bank. It has overall responsibility for taking such steps as are reasonably open to it to safeguard the assets of the Bulgarian National Bank and to prevent or detect fraud and other irregularities.

**Dimitar Radev**

Governor of the Bulgarian National Bank

## Consolidated Statement of Comprehensive Income for the Period Ended 30 June 2018 (Unaudited)

(BGN'000)

| | Note | 30 June 2018 | 30 June 2017 |
|---|---|---|---|
| Interest income | 7 | 132,241 | 171,657 |
| Interest expense | 7 | (33,660) | (33,665) |
| **Net interest income** | | **98,581** | **137,992** |
| Fee and commission income | | 4,323 | 4,091 |
| Fee and commission expense | | (1,997) | (2,323) |
| **Net fee and commission income** | | **2,326** | **1,768** |
| Net (losses)/gains from financial assets and liabilities entered at fair value in the profit or loss | 8 | (153,141) | (250,337) |
| Other operating income | 9 | 19,595 | 23,192 |
| **Total income from banking operations** | | **(32,639)** | **(87,385)** |
| Administrative expenses | 10 | (65,103) | (53,781) |
| **(Loss)/profit for the period** | | **(97,742)** | **(141,166)** |
| **Other comprehensive income** | | | |
| *Other comprehensive income that can be reclassified into profit or loss at a future point in time* | | - | - |
| *Other comprehensive income that cannot be reclassified into profit or loss at a future point in time* | | *(640)* | *(72)* |
| **Other comprehensive income, total** | | **(640)** | **(72)** |
| **Total comprehensive income for the period** | | **(98,382)** | **(141,238)** |
| **Profit attributable to:** | | | |
| Equity holder of the Bank | | (97,760) | (141,210) |
| Non-controlling interest | | 18 | 44 |
| **(Loss)/profit for the period** | | **(97,742)** | **(141,166)** |
| **Total comprehensive income attributable to:** | | | |
| Equity holder of the Bank | | (98,400) | (141,282) |
| Non-controlling interest | | 18 | 44 |
| **Total comprehensive income for the period** | | **(98,382)** | **(141,238)** |

The accompanying notes on pages 93 to 125 form an integral part of the Consolidated Financial Statements.

## Consolidated Statement of Financial Position as of 30 June 2018 (Unaudited)

(BGN'000)

| | Note | 30 June 2018 | 31 December 2017 |
|---|---|---|---|
| **ASSETS** | | | |
| Cash and deposits in foreign currency | 11 | 18,030,901 | 20,948,427 |
| Gold, instruments in gold, and other precious metals | 12 | 2,764,371 | 2,785,663 |
| Financial assets at fair value through profit or loss | 13 | 24,982,867 | 22,353,795 |
| Investments | 14 | 2,164,911 | 2,131,506 |
| Tangible assets | 15 | 153,104 | 156,021 |
| Intangible assets | 16 | 3,835 | 4,426 |
| Other assets | 17 | 83,451 | 82,238 |
| **Total assets** | | **48,183,440** | **48,462,076** |
| **LIABILITIES** | | | |
| Currency in circulation | 18 | 15,768,716 | 15,703,197 |
| Liabilities to banks and other financial institutions | 19 | 13,200,672 | 13,892,496 |
| Liabilities to government institutions and other borrowings | 20 | 11,430,315 | 10,993,617 |
| Borrowings against Bulgaria's participation in international financial institutions | 21 | 3,327,196 | 3,274,519 |
| Other liabilities | 22 | 189,499 | 231,667 |
| **Total liabilities** | | **43,916,398** | **44,095,496** |
| **EQUITY** | | | |
| Capital | 23 | 20,000 | 20,000 |
| Reserves | 23 | 4,242,167 | 4,341,723 |
| Non-controlling interest | 24 | 4,875 | 4,857 |
| **Total equity** | | **4,267,042** | **4,366,580** |
| **Total liabilities and equity** | | **48,183,440** | **48,462,076** |

The accompanying notes on pages 93 to 125 form an integral part of the Consolidated Financial Statements.

## Consolidated Statement of Cash Flows for the Period Ended 30 June 2018 (Unaudited)

(BGN'000)

| | Note | 30 June 2018 | 30 June 2017 |
|---|---|---|---|
| **OPERATING ACTIVITIES** | | | |
| Net (loss)/profit | | (97,742) | (141,122) |
| Adjustments | | | |
| Dividend income | 9 | (4,572) | (15,714) |
| Depreciation | 15, 16 | 6,604 | 7,350 |
| (Profit)/loss on disposal of tangible assets | | (79) | 4 |
| Profit/(loss) on financial assets and liabilities arising from market movements | | 54,653 | 118,200 |
| Profit of associates | | - | - |
| Other adjustments | | (1,658) | (896) |
| **Net cash flow from operating activities before changes in operating assets and liabilities** | | **(42,794)** | **(32,178)** |
| **Change in operating assets** | | | |
| (Increase) in gold, instruments in gold and other precious metals | | (968) | (3,260) |
| Decrease/(increase) in financial assets at fair value through profit or loss | | (2,642,193) | 4,096,120 |
| (Increase) in financial assets available for sale | | | |
| – Republic of Bulgaria's quota in the IMF | | - | - |
| (Increase) in other assets | | (1,147) | (3,580) |
| **Change in operating liabilities** | | | |
| Increase in currency in circulation | | 65,519 | 62,027 |
| (Decrease) in due to banks and other financial institutions | | (691,824) | (1,046,220) |
| (Decrease)/increase in due to government institutions and other liabilities | | 436,698 | 1,357,850 |
| Increase in debt to international financial institutions for the increase of the Republic of Bulgaria's quota in the IMF | | - | - |
| (Decrease)/increase in other liabilities | | (42,168) | (36,155) |
| **Net cash flow from/(used in) operating activities** | | **(2,918,877)** | **4,394,604** |
| **INVESTMENT ACTIVITIES** | | | |
| Acquisition of tangible and intangible assets | | (3,155) | (1,164) |
| Dividends received | | 4,572 | 15,714 |
| **Net cash flow from/(used in) investing activities** | | **1,417** | **14,550** |
| **FINANCING ACTIVITIES** | | | |
| Payments to the state budget | | - | - |
| **Net cash flow (used in) financing activities** | | **-** | **-** |
| **Net increase in cash and cash equivalents** | | **(2,917,460)** | **4,409,154** |
| **Cash and cash equivalents at beginning of period** | | **20,997,724** | **14,835,050** |
| **Cash and cash equivalents at the end of period** | 11, 17 | **18,080,264** | **19,244,204** |

The accompanying notes on pages 93 to 125 form an integral part of the Consolidated Financial Statements.

# Consolidated Statement of Changes in Equity for the Period Ended 30 June 2018 (Unaudited)

(BGN'000)

| | Capital | Revaluation of non-monetary assets | Special and other reserves | Total capital and reserves | Non-controlling interest | Total equity |
|---|---|---|---|---|---|---|
| **Balance as at 1 January 2017** | **20,000** | **136,415** | **4,423,103** | **4,579,518** | **4,777** | **4,584,295** |
| Profit/(loss) for the period | - | - | (141,210) | (141,210) | 44 | **(141,166)** |
| Other comprehensive income: | | | | | | |
| other income | - | 77 | (72) | 5 | - | **5** |
| Other comprehensive income, total | - | 77 | (72) | 5 | - | **5** |
| Total comprehensive income for the period | - | 77 | (141,282) | (141,205) | 44 | **(141,161)** |
| Contributions by and distributions to owners: | | | | | | |
| contribution to the budget of the Republic of Bulgaria | - | - | - | - | - | - |
| dividend paid by subsidiaries to minority shareholders | - | - | (857) | (857) | - | **(857)** |
| Transactions with owners, total | - | - | (857) | (857) | | **(857)** |
| **Balance as at 30 June 2017** | **20,000** | **136,492** | **4,280,964** | **4,437,456** | **4,821** | **4,442,277** |
| **Balance as at 1 January 2018** | **20,000** | **133,463** | **4,208,260** | **4,361,723** | **4,857** | **4,366,580** |
| (Loss)/profit for the period | - | - | (97,760) | (97,760) | 18 | **(97,742)** |
| Other comprehensive income: | | | | | | |
| other income | - | (676) | (640) | (1,316) | - | **(1,316)** |
| Other comprehensive income, total | - | (676) | (640) | (1,316) | - | **(1,316)** |
| Total comprehensive income for the period | - | (676) | (98,400) | (99,076) | 18 | **(99,058)** |
| Contributions by and distributions to owners: | | | | | | |
| contribution to the budget of the Republic of Bulgaria | - | - | - | - | - | - |
| dividend paid by subsidiaries to minority shareholders | - | - | (480) | (480) | - | **(480)** |
| Transactions with owners, total | - | - | (480) | (480) | - | **(480)** |
| **Balance as at 30 June 2018** | **20,000** | **132,787** | **4,109,380** | **4,262,167** | **4,875** | **4,267,042** |

The accompanying notes on pages 93 to 125 form an integral part of the Consolidated Financial Statements.

# Notes to the Consolidated Financial Statements

## 1. Statute and Principal Activities

The Bulgarian National Bank (the 'Bank') is 100 per cent owned by the Bulgarian state and is the central bank of the Republic of Bulgaria. The operation of the Bank is governed by the Law on the Bulgarian National Bank (LBNB), which has been effective since 10 June 1997.

Under this Law, the principal activities of the Bank may be summarised as:

- Maintaining price stability through ensuring national currency stability;
- Exclusive right to issue banknotes and coins;
- Regulation and supervision of other banks' activities in the country with a view to banking system stability maintenance;
- Establishment and operation of efficient payment systems;
- Regulation and supervision of the activity of payment system operators, payment institutions and electronic money institutions in the country;
- The Bank shall not extend credit and guarantees in any form whatsoever, including through acquisition of debt instruments, to the Council of Ministers, municipalities, as well as to other government and municipal institutions, organisations and enterprises;
- The Bank may not provide credit to banks except in the case of liquidity risk threatening to affect the stability of the banking system;• The Bank may not deal in Bulgarian government securities;
- The Bank may not issue Bulgarian levs in excess of the Bulgarian lev equivalent of the gross international reserves;
- The Bank acts as the fiscal agent and depository for the state.

The Governing Council of the BNB approved the Consolidated Financial Statements, set out on pages 87 to 125 on 28 November 2018.

## 2. Applicable Standards

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Commission.

## 3. Basis of Preparation

The consolidated financial statements are presented in Bulgarian levs rounded to the nearest thousand (BGN'000), which is the functional currency of the Bank. They are prepared on a historical cost basis, except for the following items, which are measured on an alternative basis as at each reporting date:

| Items | Measurement basis |
|---|---|
| Derivative financial instruments | Fair value |
| Non-derivative financial instruments at fair value through profit or loss | Fair value |
| Tangible non-current assets | Revalued amount, which is the asset's fair value at the revaluation date less subsequent depreciation and impairment loss |
| Defined benefit liability | Present value of the defined benefit liability |

### *Use of estimates and judgements*

In preparing these Consolidated Financial Statements, the Bank has made judgements, estimates and assumptions that affect the reported amounts of assets and liabilities, incomes and expenses, and the disclosure of contingent receivables and payables as at the Financial Statements date. These estimates, judgements and assumptions are based on data available as at the date of the Consolidated Financial Statements; therefore, actual future results may differ from these estimates.

The estimates and main assumptions are revised on an ongoing basis and are recognised prospectively.

***Judgements***

The Bank has estimated and classified currency in circulation as a financial liability (ref. note 18).

***Assumptions and estimation uncertainties***

Measurements of the present value of long-term obligations to retiring staff (following a defined benefit plan) use certified actuarial calculations based on mortality assumptions, rate of staff turnover, future level of salaries and discount factor, which assumptions may lead to adjustments in the next financial year; management, however, considers them to be reasonable and appropriate for the Bank (ref. note 10).

Some of the Bank's accounting policies and disclosures require fair value measurements of financial and non-financial assets and liabilities. For information on fair value measurements, see note 6(e) and note 15.

***New and amended standards and clarifications***

The accounting policies adopted are consistent with those of the previous reporting period, except for the following amendments to IFRSs adopted as of 1 January 2018:

*IAS 12 Income Taxes (Amendments):* Recognition of Deferred Tax Assets for Unrealised Losses

The objective of these amendments is to clarify the accounting for deferred tax assets for unrealised losses in order to address diversity in practice in the application of IAS 12 Income Taxes with regard to: any deductible temporary differences arising upon a decrease in the fair value; recovery of an asset for more than its carrying amount; a probable future taxable profit; a combined *versus* separate assessment. Adoption of these amendments has not impacted the financial position or performance of the Bank.

*IAS 7 Statement of Cash Flows* (Amendments): Disclosure Initiative

The objective of these amendments is to enable users of financial statements to evaluate changes in liabilities arising from financing activities, including changes arising from cash flows and non-cash changes. The Amendments specify that one way to fulfil the disclosure requirement is by providing a tabular reconciliation between the opening and closing balances in the statement of financial position for liabilities arising from financing activities; including changes from financing cash flows, changes arising from obtaining or losing control of subsidiaries or other businesses; the effect of changes in foreign exchange rates; changes in fair values; and other changes. The amendments affect presentation only and have no impact on the Bank's financial position or performance.

The adoption of the above amendments to standards has no effect on the Bank's financial statements.

*IFRS 9 Financial Instruments:* Classification and Measurement

The standard is effective for annual periods beginning on or after 1 January 2018 with early adoption permitted. In July 2014, the IASB published the final version of IFRS 9 Financial Instruments which replaced IAS 39 Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. IFRS 9 brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting. Except for hedge accounting, retrospective application is required but providing comparative information is not compulsory. For hedge accounting, the requirements are generally applied prospectively, with some limited exceptions.

The Bank adopted the new IFRS on the date of its enforcement, *i.e.* 1 January 2018 and will not restate comparative information.

The Bank expects no material effect on the statements of financial position and equity as a result of the initial application of IFRS 9.

*IFRS 15 Revenue from Contracts with Customers*

The standard is effective for annual periods beginning on or after 1 January 2018 with earlier application permitted. IFRS 15 establishes a five-step model that will apply to revenue earned from a contract with a customer (with limited exceptions), regardless of the type of the revenue transaction or industry. The standard's requirements will also apply to the recognition and measurement of gains and losses on the sale of some non-financial assets that are not an output of the entity's ordinary activities (*e.g.* sales of property, plant and equipment or intangibles). Extensive disclosures are required, including disaggregation of total revenue; information about performance obligations; changes in contract asset and liability account balances between periods and key judgements and estimates. It is not expected that these amendments would impact the financial position or performance of the Bank.

*IFRS 15 Revenue from Contracts with Customers* (Clarifications)

The clarifications apply for annual periods beginning on or after 1 January 2018, with earlier application permitted. The objective of the clarifications is to clarify the IASB's intentions when developing the requirements in IFRS 15 Revenue from Contracts with Customers, particularly the accounting of identifying performance obligations amending the wording of the 'separately identifiable' principle, of principal *versus* agent considerations, including the assessment of whether an entity is a principal or an agent, as well as applications of the control principle and of licensing providing additional guidance for accounting of intellectual property and royalties. The clarifications also provide additional practical expedients for entities that either apply IFRS 15 fully retrospectively or that elect to apply the modified retrospective approach. It is not expected that these amendments would impact the financial position or performance of the Bank.

*IFRS 2 Share-based Payment* (Amendments): Classification and Measurement of Share-based Payment Transactions

The amendments are effective for annual periods beginning on or after 1 January 2018, with earlier application permitted. The amendments provide requirements on the accounting for the effects of vesting and non-vesting conditions on the measurement of cash-settled share-based payments, for share-based payment transactions with a net settlement feature for withholding tax obligations and for modifications to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity-settled. It is not expected that these amendments would be relevant to the Bank.

*IFRS 4 Insurance contracts* (Amendments): Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts

The amendments are effective for annual periods beginning on or after 1 January 2018. The objective of these amendments is to address issues arising from the different effective dates of IFRS 9 and the upcoming new insurance contracts standard.

*IFRIC 22 Foreign Currency Transactions and Advance Consideration*

The interpretation is effective for annual periods beginning on or after 1 January 2018 with earlier application permitted. This interpretation addresses how to determine the date of the transaction for the purpose of determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency. The Bank will analyse and assess the impact of the new interpretation on its financial position or performance.

*IAS 40 Investment Property* (Amendments): Transfers of Investment Property

The amendments are effective for annual periods beginning on or after 1 January 2018, with earlier application permitted. The amendments clarify transfers of property to, or from, investment property when there is a change in the use of such property which is supported by evidence. It is not expected that these amendments would be relevant to the Bank.

## 4. Basis of Consolidation

***Subsidiaries***

Subsidiaries are the entities controlled by the Bank. Control over an entity exists when the Bank is exposed to or has rights over the variable return from its participation in that entity, and is able to influence that return through its powers. The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The share in the net assets of the Bank's subsidiaries, which corresponds to the minority shareholders' proportionate share, is disclosed separately from Capital and Reserves under the Non-controlling Interest item.

*Associates*

Associates are those entities in which the Bank has significant influence, but which are neither a subsidiary enterprise, nor a joint venture. Investments in associates are accounted for in the Bank's Consolidated Financial Statements using the equity method as an amount corresponding to the Bank's share in the associates' own funds as of the end of the reporting period. The Bank's share of associates' net results subsequent to acquisition is disclosed in 'profit or loss' as investment income/expenses and is added to/subtracted from the carrying value of the investment.

***Transactions eliminated on consolidation***

All receivables and payables, incomes and expenses, as well as intragroup profits, resulting from intercompany transactions within the group, are eliminated, except where these are immaterial.

## 5. Significant Accounting Policies

### a) Income recognition

Interest income and expense are recognised in the 'profit or loss' using the effective interest rate method. The effective interest rate is the rate which precisely discounts the estimated future cash payments and income over the term of the financial asset or liability to the carrying amount of the asset or liability. The effective interest rate is determined on the initial recognition of the financial asset or liability and does not change thereafter.

The calculation of the effective interest rate includes all transaction costs and fees and points that are an integral part of the effective interest rate. Transaction costs include incremental costs directly attributable to the acquisition, issue or derecognition of a financial asset or liability.

Interest income and expense presented in the statement of profit or loss include:

- interest on financial assets and financial liabilities measured at amortised cost calculated on an effective interest basis;
- interest on available-for-sale investment securities calculated on an effective interest basis.

Dividend income is recognised in profit or loss when the Bank establishes the right to receive income. Foreign currency differences arising from available-for-sale investments are recognised in profit or loss.

Net gains/losses from financial assets and liabilities at fair value through profit or loss include net gains from operations in securities, net gains from operations in foreign currency, net revaluation gains on securities, net gains from gold revaluation, net gains from revaluation of futures, and net gains from revaluation of assets and liabilities denominated in foreign currencies.

### b) Financial instruments

*i) Classification*

For the purposes of subsequent measurement of financial assets, the BNB uses the following business models:

- financial assets held to collect contractual cash flows;
- financial assets held to collect contractual cash flows and for sale;

The cash flows under the models applied are solely payments of principal and interest.

*The business model of financial assets held to collect contractual cash flows* include all BNB's current accounts with foreign correspondent banks, and the assets are measured at amortised cost.

The business model of *financial assets held to collect contractual cash flows and for sale* includes: deposits, securities and investment. The assets in this group are measured as follows:

- deposits: at amortised cost;
- securities: at fair value through profit or loss;
- investment: at fair value in other comprehensive income.

***ii) Recognition***

The Bank recognises trading financial assets and investments, the Bank's loans and receivables, and financial liabilities at amortised cost on the date at which they are originated. All other financial assets and financial liabilities are initially recognised on the trade date at which the Bank becomes a party to the contractual provisions of the instrument. From that moment on, any changes in their fair value are recognised by the Bank as income or expense.

Financial instruments are initially measured at fair value, and for those financial instruments which are not recognised at fair value through profit or loss, the amount recognised includes directly attributable acquisition costs.

***iii) Amortised cost measurement***

The amortised cost of a financial asset or liability is the amount at which the financial asset or liability is measured upon the initial recognition, minus principal repayments, plus or minus cumulative amortisation using an effective interest rate for the difference between the initial amount recognised and the maturity amount, minus any reduction for impairment.

***iv) Fair value measurement and disclosure 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 in the principal market and, if no such market is available, then in the most advantageous and accessible market on the measurement date. The fair value of a liability reflects the effect of non-performance risk.

Whenever possible, the Bank measures the fair value of an instrument using quoted prices in an active market of that instrument. A market is considered as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If no quoted price in an active market is available, the Bank uses the most relevant observable inputs and makes minimum use of unobservable data. The aim of using a valuation technique is to estimate the price that would be obtained in an orderly transaction between market participants. The chosen valuation technique makes maximum use of market inputs, relies as little as possible on estimates specific to the Bank, incorporates all factors that market participants would consider in determining a price, and is consistent with accepted economic methodologies for pricing financial instruments.

Inputs to valuation techniques reasonably represent market expectations and measures of the risk-return factors inherent in the financial instrument. The Bank calibrates valuation techniques and tests them for validity using prices from observable current market transactions in the same instrument or based on other available observable market data.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, *i.e.* the fair value of the consideration given or received. When the Bank finds a difference between the fair value at initial recognition and the transaction price, and the fair value is neither evidenced by a quoted price in an active market for identical assets or liabilities, nor based on a valuation technique based only on data from observable markets, then the financial instrument is initially recognised at fair value adjusted with the difference between the fair value at initial recognition and the transaction price. This difference is subsequently recognised in profit or loss on an appropriate basis over the life of the instrument but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

The Bank recognises assets and long positions at a bid price and liabilities and short positions at an ask price when assets or liabilities measured at fair value have a bid and an ask price.

Where the Bank has positions in a group of financial assets and financial liabilities, it is exposed to market risks and a credit risk. On the basis of the net exposure to either market or credit risks, the Bank measures them at fair value on the basis of a price that would be received to sell a net long position or paid to transfer a net short position for a particular risk exposure. These portfolio-level adjustments are allocated to the individual assets and liabilities on the basis of the relative risk adjustment of each of the individual instruments in the portfolio.

Where the Bank has positions with offsetting risks, mid-market prices are used to measure them and a bid or ask price adjustment is applied only to the net open position as appropriate. Fair value reflects the credit risk of the instrument and includes adjustments to take account of the credit risk of the Bank entity and the counterparty where appropriate. Fair value estimates obtained from models are adjusted for any other factors, such as liquidity risk or model uncertainties, to the extent that the Bank believes a third-party market participant would take them into account in pricing a transaction.

The Bank recognises transfers between levels of the fair value hierarchy as of the end of the reporting period during which the change has occurred.

*v) Derecognition*

The Bank derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or when it transfers the rights to the receipt of the contractual cash flows from the financial asset in the transaction in which substantially all risks and rewards of ownership of the financial asset are transferred. Any holding in transferred financial assets, which has been originated or kept by the Bank, is recognised as a separate asset or liability.

The Bank derecognises a financial liability when its contractual obligations are discharged or cancelled or expired.

The Bank enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or the substantial risks and rewards of the transferred assets or a part of them. If a part of or all substantial risks and rewards are retained, then the transferred assets are not derecognised from the statement of financial position. Transfers of assets with retention of a part of or all substantial risks and rewards are, for instance, securities lending or repurchase agreements.

In transactions where the Bank neither retains nor transfers all substantial risks and rewards of ownership of a financial asset, it derecognises the asset if it does not retain the control of that asset. The rights and obligations retained in the transfer are recognised separately as assets and as liabilities, respectively. In transactions where control of the asset is retained, the Bank continues to recognise the asset to the extent of its continuing involvement, determined by the extent to which the Bank is exposed to changes in the value of the transferred asset.

In certain transactions the Bank retains the obligation to service the transferred financial asset for a fee. The transferred asset is derecognised if it meets the derecognition criteria. An asset or liability is recognised for the servicing contract, depending on whether the servicing fee is more than adequate (asset) or is less than adequate (liability) for performing the servicing.

*vi) Offsetting*

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when the Bank has a legal right to offset the recognised amounts and intends to settle the asset or the liability on a net basis.

Income and expenses are presented on a net basis only when permitted under IFRSs, or for gains and losses arising from a group of similar transactions such as in the Bank's trading operations.

*vii) Impairment of assets*

Financial assets which are not carried at fair value through profit or loss are reviewed at each reporting date to determine whether there is evidence of impairment. Financial assets are impaired if there is objective evidence of impairment as a result of a loss event that occurred after the initial recognition of the asset and that the loss event had an impact on the future cash flows which can be reliably estimated.

Objective evidence of impairment loss from financial assets, including equity instruments, is a default or a borrower's inability to repay his obligations, restructuring of loans under unfavourable financial conditions for the Bank, indications that a borrower or the issuer of a financial instrument would go out of business, the disappearance of an active security market, or other public information. Furthermore, in case of a continuous or significant fall in the market value of an investment in equity instruments, there is objective evidence of impairment of these equity instruments.

The Bank considers the need of impairment of loans or investments held to maturity at both individual and group level. All individually significant loans and investments held to maturity are evaluated for specific impairment. All individually significant loans and investments held to maturity on which no specific impairment losses have been charged are evaluated on a portfolio basis. Loans and held-to-maturity investments that are not individually significant are collectively assessed for impairment by grouping together loans and held-to-maturity investment securities with similar risk characteristics.

In assessing collective impairment, the Bank uses statistical modelling of historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical modelling. Default rates, loss rates and the expected timing of future recoveries are regularly benchmarked against actual outcomes to ensure that they remain appropriate.

Impairment losses from assets carried at amortised cost are measured as the difference between the carrying amount of the financial asset and the present value of the estimated future cash flows discounted by the original effective interest rate of the asset. Impairment losses are recognised in profit or loss and reflected in an allowance account against loans and receivables. Interest on the impaired asset continues to be recognised through unwinding of the discount. When a subsequent event reduces an impairment loss, the reduction in the impairment loss is reversed through profit and loss.

Impairment losses on held-for-sale investment securities are recognised by transferring the cumulative loss, that has been recognised in equity, to profit or loss. The cumulative loss that is transferred from equity to profit or loss is the difference between the acquisition cost, net of any principal repayments and amortisation, and the current fair value, less any impairment loss previously recognised in profit or loss. If, in a subsequent period, the fair value of an impaired debt security available for sale increases, and the increase can be objectively linked to an event that occurred after the impairment loss had been recognised in profit and loss, then the impairment loss is reversed, and the reversed amount is recognised in profit and loss. However, any subsequent recovery in the fair value of an impaired equity instrument available for sale is directly recognised in other comprehensive income.

### *viii) Financial assets and liabilities held to collect contractual cash flows and for sale*

Financial assets and liabilities held to collect contractual cash flows and for sale are recognised initially at fair value in the statement of financial position, with transaction costs recognised in profit or loss. All changes in the fair value are recognised as net income from trading operations in profit or loss.

### *ix) Financial assets held within a business model whose objective is to hold financial assets to collect contractual cash flows*

Financial assets held within a business model whose objective is to hold financial assets to collect contractual cash flows are initially recognised at acquisition cost and subsequently are carried at amortised cost which is the initial asset valuation adjusted for amortised premium or discount using the effective interest rate method. Premium or discount is amortised for each individual item and is recognised in the Bank's income statement. Interest is calculated or recognised on a daily basis in the Bank's income statement.

*x) Investments held for sale*

Available-for-sale investments are non-derivative assets that cannot be classified in any other category of financial assets. Equity investments not quoted in the market and whose fair value cannot be reliably measured are carried at cost. All other available-for-sale investments are carried at fair value.

Differences in the fair value are recognised directly in equity until the investment is sold or fully impaired when the cumulative gains and losses recognised in equity are recognised in profit or loss.

c) **Gold and other precious metals**

The BNB as a central bank maintains particular volumes of gold as part of Bulgaria's international reserves. In compliance with the requirements of the Law on the BNB, the Bank may take any necessary action in connection with the acquisition, possession and sale of gross international reserves, including monetary gold. Consequently, monetary gold as part of international reserves may be immediately used by the BNB without further constraints which determines it as a monetary asset. Pursuant to the requirements of the 'General Provisions for Defining the Valuation Basis in the Financial Statements' to the IFRS, the Bank defines the recognition and valuation of the monetary gold as an asset reported at fair value through profit or loss as the most reliable and appropriate base for a subsequent valuation of this financial asset.

Gold and other precious metals are measured at market value based on the London Bullion Market fixing in euro at the reporting date.

d) **Equity investments**

For the purposes of measuring the equity investments subsequent to initial recognition, they are classified as held-for-trading financial assets and measured at fair value.

Details of investments held by the Bank are set out in note 14.

e) **Property, plant, equipment and intangible assets**

The policy pursued by the Bank is to present land, buildings and other groups of fixed tangible assets in the statements of financial position at revalued amount as per the alternative approach allowed in IAS 16 Property, Plant and Equipment. The intangible assets are measured in the statement of the financial position at cost, less accumulated depreciation, and impairment losses.

Land and buildings are measured at fair value which is regularly assessed by professionally qualified valuers. The revaluation of property is done asset by asset, and any accumulated depreciation at the revaluation date is derecognised against the gross carrying amount of the asset, and the net amount restated to the revalued amount of the asset. When the value of assets increases as a result of revaluation, the increase is reflected directly in other comprehensive income. When the value of assets decreases as a result of revaluation, the decrease is recognised by decreasing the revaluation reserve in equity, and in case of a shortage, the difference is recognised as an expense in profit or loss.

*i) Subsequent costs*

The separately accounted for costs incurred to replace a component of an item of property, plant and equipment are capitalised. All other subsequent costs are capitalised only when future economic benefits embodied in the item of property, plant and equipment will flow to the Bank. All other costs are recognised in 'profit or loss' as incurred.

*ii) Depreciation*

Depreciation is provided on a straight-line basis at prescribed rates designed to write down the cost or revalued amount of property, plant, equipment and intangible assets over their estimated useful lives. Land is not depreciated. The annual depreciation rates used are as follows:

(per cent)

| | |
|---|---|
| Buildings | 2–4 |
| Plant & equipment | 3–15 |
| Computers | 30–33.3 |
| Fixtures and fittings | 15–20 |
| Motor vehicles | 8–25 |
| Intangible fixed assets | 20–25 |

Expenditures incurred for the acquisition of property, plant, equipment and intangible assets are not depreciated until they are brought into use.

### *iii) Calculation of recoverable amount of assets*

The recoverable amount of the Bank's fixed assets is the higher of the net selling price and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using the Bank's incremental borrowing rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

### *iv) Reversals of impairment*

Impairment losses of tangible fixed assets are reversed when a change occurs in the estimates used to determine the recoverable amount and may be reversed only up to that carrying amount of the asset before recognising impairment losses.

## f) Foreign exchange

Gains and losses arising in foreign currencies are translated to BGN at the official rates of exchange on the transaction date. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated at the official exchange rate of the Bank on that day. Foreign currency gains and losses resulting from the revaluation of monetary assets and liabilities are recognised in profit or loss. Non-monetary assets and liabilities denominated in foreign currency are retranslated to the functional currency at the exchange rate at the date that the fair value was determined.

Outstanding forward contracts in foreign currency are marked to market. The gains and losses on revaluation of outstanding forward contacts are recognised in profit or loss.

The exchange rates of the major foreign currencies as of 30 June 2018 and 31 December 2017 are as follows:

| Currency | 30 June 2018 | 31 December 2017 |
|---|---|---|
| US dollar | 1 : BGN 1.67767 | 1 : BGN 1.63081 |
| Euro | 1 : BGN 1.95583 | 1 : BGN 1.95583 |
| Special drawing rights | 1 : BGN 2.35976 | 1: BGN 2.32249 |
| Gold | 1 troy ounce: BGN 2100.27 | 1 troy ounce: BGN 2117.09 |

## g) Taxation

The Bank is not subject to income tax from its core activities. Income tax from subsidiaries for the period comprises current tax and deferred tax. Current tax comprises tax payable calculated on the basis of the expected taxable income for the period, using the effective tax rate or the current one at the reporting date. Deferred tax is derived using the balance sheet liability method on all temporary differences between the amounts used for taxation purposes and the carrying amounts of assets and liabilities.

The deferred tax is calculated using tax rates which are expected to be applied for the period of asset realisation or liability settlement. The effect on the deferred tax from changes in the tax rates is recorded in the statement of comprehensive income up to the amount already charged or reported directly as other comprehensive income.

A deferred tax asset is recognised to the extent that is probable that future taxable profits will be available against which the unused tax losses or tax credit can be utilised. The deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

### h) Profit distribution policy of the Bank

The Bank's policy of distribution of profit from banking operations is defined in the Law on the BNB. Internal rules for preparation of financial statements and accounting policies were adopted upon a decision of the Governing Council effective from 1 January 2007, which are in compliance with Article 36, paragraphs 1 and 2 of the Law on the BNB. According to these rules, the Bank allocates to special reserves unrealised net gains and losses arising from revaluation of assets and liabilities denominated in foreign currency or gold. According to the requirements of Article 8, paragraph 2 of the Law on the BNB, the Bank sets aside 25 per cent of the excess of its annual revenue over its annual expenditure into a Reserve Fund. According to Article 8, paragraph 3 of the Law on the BNB, after the allocation to the Reserve Fund, the Bank may allocate reserves to cover market risk losses and other reserves upon a decision of the Governing Council. Subsequent to the allocation of reserves as required by the Law on the BNB, the Bank stipulates the remainder to be paid into the State Budget. The distribution of excess of revenue over expenditure is set out in note 23.

### i) Cash in hand and deposits in foreign currency

Cash and cash equivalents consist of cash in hand, current accounts and time deposits with maturities of less than three months.

### j) Employee benefits

The Bank has the obligation to pay certain amounts to each employee who retires in accordance with the requirements of Article 222, § 3 of the Labour Code in Bulgaria. According to these Labour Code requirements, on termination of the employment contract of an employee who has become entitled to retirement, the employer is obliged to pay him/her compensation amounting to twice his/her gross monthly salary. If, at the date of retirement, the employee has been employed by the Bank for ten or more years, the amount of the compensation is six gross monthly salaries. As at the date of the statement of financial position, the Bank's Management estimates the approximate amount of the potential expenditures for all employees based on an actuarial report using the projected unit credit method. The estimated amount of the obligation and the main assumptions, on the base of which the estimation of the obligation has been made, is disclosed to the Financial Statements in note 10.

#### *Termination benefits*

Termination benefits are recognised as an expense when the Bank is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Bank has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than 12 months after the reporting period, then they are discounted to their present value.

#### *Short-term employee benefits*

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under a short-term cash bonus or profit-sharing plans if the Bank has a present constructive obligation to pay this amount as a result of past services provided by the employee, and the obligation can be estimated reliably. The Bank recognises as a liability the undiscounted amount of the estimated costs related to annual leave expected to be paid in exchange for the employee's service for the period completed.

### k) Standards issued but not yet effective and not early adopted

Standards issued by IASB/IFRIC but not yet effective and not early adopted up to the date of issuance of the Bank financial statements are listed below. This listing is of standards and interpretations issued, which the Bank reasonably expects to have an impact on disclosures, financial position or performance when applied at a future date. The Bank intends to adopt those standards when they become effective.

*IFRS 16 Leases*

The standard is effective for annual periods beginning on or after 1 January 2019. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, *i.e.* the customer (lessee) and the supplier (lessor). IFRS 16 requires lessees to recognise most leases on their balance sheet and to have a single accounting model for all leases, with certain exemptions. Lessor accounting is substantially unchanged. The standard has not been yet endorsed by the EU. The Bank will analyse and assess the impact of the new standard on its financial position or performance.

*IFRS 17 Insurance Contracts*

The standard is effective for annual periods beginning on or after 1 January 2021 with earlier application permitted provided that the entity applies also IFRS 15 Revenue from Contracts with Customers and IFRS 9 Financial instruments. IFRS 17 sets out the principles for recognition, measurement, presentation and disclosure of issued insurance contracts. In addition, it requires the application of similar principles with regard also to reinsurance contracts and investment contracts containing a discretionary participation feature. The objective of this standard is to require companies to provide the information related to insurance contracts in a way that fairly reflects these contracts. This information enables users of financial statements to evaluate the effect of the contracts covered by IFRS 17 on the financial position, performance and cash flows of the company. The standard has not been yet endorsed by the EU. It is not applicable to the Bank.

Amendments in *IFRS 10 Consolidated Financial Statements* and *IAS 28 Investments in Associates and Joint Ventures*: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments address an acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28, in dealing with the sale or contribution of assets between an investor and its associate or joint venture. A full gain or loss is recognised when a transaction involves a business or a partial gain or loss is recognised when a transaction involves assets that do not constitute a business. The IASB postponed the effective date of this amendment indefinitely pending the outcome of its research project on the equity method of accounting. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would impact the financial position or performance of the Bank.

*IFRIC 23 Uncertainty over Income Tax Treatments*

The standard is effective for annual periods beginning on or after 1 January 2019 with earlier application permitted. This interpretation addresses income tax accounting where tax treatments relate to an uncertainty surrounding the application of IAS 12. The interpretation provides guidelines on uncertain tax treatments separately or together as a group, examinations by tax authorities, reporting methods for reflecting uncertainties and accounting of changes in facts and circumstances. The interpretation has not yet been endorsed by the EU. The Bank will analyse and assess the impact of the new interpretation on its financial position or performance.

*IFRS 9 Financial Instruments:* Classification and Measurement (Amendments): Prepayment Features with Negative Compensation

The amendments, effective for annual periods beginning on or after 1 January 2019 with earlier application permitted, propose a change to IFRS 9 for particular financial assets that would otherwise have contractual cash flows that are solely payments of principal and interest but do not meet that condition only as a result of a negative prepayment feature. Specifically, for a financial asset that contains a prepayment option that may result in the payment of a reasonable negative compensation amount, the amendments require the financial asset to be measured at amortized cost or at fair value through other comprehensive income, subject to the assessment of the business model in which it is held. The amendments have not yet been endorsed by the EU. It is not expected that these amendments would impact the financial position or performance of the Bank.

IAS 28 *Investment Property* (Amendments): long-term interests in associates and joint ventures

The amendments are effective for annual periods beginning on or after 1 January 2019, with earlier application permitted. The Amendments clarify that an entity applies IFRS 9 Financial Instruments to long-term interests in an associate or joint venture that, in substance, form part of the net investment in the associate or joint venture but to which the equity method is not applied. An entity applies IFRS 9 to such long-term interests before it applies IAS 28. In applying IFRS 9, the entity does not take account of any adjustments to the carrying amount of long-term interests that arise from applying IAS 28. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would impact the financial position or performance of the Bank.

IAS 19 *Employee Benefits* (Amendments): plan amendments, curtailments and settlements.

The amendments are effective for annual periods beginning on or after 1 January 2019, with earlier application permitted. The amendments require entities to use updated actuarial assumptions to determine current service cost and net interest for the remainder of the annual reporting period after a plan amendment, curtailment or settlement has occurred. The amendments also clarify how the accounting for a plan amendment, curtailment or settlement affects applying the asset ceiling requirements The amendments have not yet been endorsed by the EU. The Bank will analyse and assess the impact of the amendments on its financial position or performance.

**Annual Improvements to IFRSs 2014–2016 Cycle**

In the 2014–2016 annual improvements cycle, the IASB issued amendments to three standards which are effective for annual periods beginning on or after 1 January 2017/1 January 2018. Summary of amendments and related standards are provided below:

- *IFRS 1 First-time Adoption of International Financial Reporting Standards: deletion of short-term exemptions for first-time adopters (* (effective for annual periods beginning on or after 1 January 2018);
- *IFRS 12 Disclosure of Interests in Other Entities: clarification of the scope of the Standard* (effective for annual periods beginning on or after 1 January 2017), and
- *IAS 28 Investments in Associates and Joint Ventures: measuring an associate or joint venture at fair value* (effective for annual periods beginning on or after 1 January 2018).

It is not expected that these amendments would impact the financial position or performance of the Bank.

**Annual Improvements to IFRSs 2015–2017 Cycle**

In the 2015–2017 annual improvements cycle, the IASB issued amendments which are effective for annual periods beginning on or after 1 January 2019. Summary of amendments and related standards are provided below:

- *IFRS 3 Business Combinations and IFRS 11 Joint Arrangements: clarification on the accounting of previously held interests in joint operations;*
- *AS 12 Income Taxes: Clarification on income tax consequences of payments on instruments classified as equity;*
- *IAS 23 Borrowing Costs: Clarification on borrowing costs meeting the requirements for capitalisation.*

The improvements to IFRSs 2015–2017 Cycle have not yet been endorsed by EU. The Bank is in the process of assessing the impact of the amendments on its financial statements.

## 6. Financial Risk Management Policy Disclosure

### a) Introduction and overview

The Bank is exposed to the following types of risk in relation to the financial instruments operations:

- credit risk;
- liquidity risk;
- market risk;
- operational risk.

This note provides information on the Bank's goals, exposures to each of the above types of risk and the policies and processes for risk measurement and management.

*General provisions of risk management*

In the process of management of the gross international reserves, the Bank aims to achieve high security and liquidity of the assets, first, and then to maximise returns in the situation of the current global financial markets. Its investment strategy depends mainly on the specific function of a central bank operating under a currency board arrangement and in full compliance with the requirements of the Law on the BNB.

The major portion of BNB's international reserves is invested in assets of comparatively low credit risk, such as discount and coupon securities issued by highly rated issuers (governments, government agencies or supranational financial institutions), and short-term foreign currency or gold deposits placed with first-rate foreign banks. The remaining portion is held in SDRs on BNB accounts with the IMF and in monetary gold kept in the Bank's vaults.

The risks of international reserve management are handled by an independent risk management unit. It is directly responsible for strategic asset structuring and setting up benchmark for the international reserves, preparing and submitting investment management limits for approval. On a quarterly basis, an overall review is made of the changes in the market conditions, the amount and structure of international reserves, and if required, the investment limits and model portfolios (benchmarks) are updated. The monitoring of underlying limits, rules, and procedures is undertaken on a daily basis. Reports are regularly prepared for both the needs of international reserves operating management and providing updated information to the Bank's management.

All approved financial instruments and asset classes, in which the BNB may invest, are specified in internal documents. The documents define the main portfolios and the respective model portfolios (benchmarks), all limits for credit, interest rate, currency and operational risk, and give a list of the foreign financial institutions which are counterparties of the Bank.

The international reserves management is governed by a business procedure and rules of behaviour regulating the performance of the functions and tasks of the main structural units involved in the process.

### b) Credit risk

The BNB is exposed to credit risk through its trading operations and investment activities and in cases where it acts as an intermediary on behalf of the government or other public institutions. The Bank assumes credit risk also in operations of purchases and sales of foreign currency with banks. In general, this credit risk is associated with the probability of insolvency of a BNB's counterparty or the insolvency of an issuer, in whose debt instruments the Bank has invested its own funds. The credit risk in managing BNB's gross international reserves is assessed in line with the requirements in Article 28, paragraph 3 of the Law on the BNB. According to these requirements, the BNB may invest in debt instruments issued by foreign governments, central banks, other foreign financial institutions or international financial organisations whose debts are rated with one of the top two grades by two internationally recognised credit rating agencies and are payable in freely convertible currency in line with an internally developed methodology as per the requirements of Article 28 of the LBNB.

According to these requirements, the approved types of financial instruments for investment of funds in managing the international reserves are as follows:

- investment programmes with central banks;
- automatic borrowings/lending of securities with the main depository;
- tri-party repo agreements with specially designated counterparties of the BNB carried out through the Bank's main depository as a third party;
- deposits in foreign currency (time deposits and funds on current accounts) with BNB counterparties, including central banks or supranational financial institutions;
- deposits in gold (time deposits and funds on current accounts) with BNB counterparties, including central banks or supranational financial institutions;
- commercial securities (of up to one year term to maturity), issued by governments or government guaranteed institutions, supranational financial institutions, specialised financial agencies, banks, and other financial institutions;
- bonds issued by governments or government guaranteed institutions, supranational financial institutions, specialised financial agencies, banks and other financial institutions – issuers of covered bonds. All bonds must be with a one-off payment of their face value on the maturity date and without any embedded option;
- purchases and sales of foreign currency with a value date of up to two business days.

Two basic types of limits are set which are calculated on the basis of the market value of foreign currency reserves: (i) a maximum or minimum limit on the weight of each asset class in the Issue Department balance sheet, and (ii) an individual maximum acceptable exposure of the BNB to a country, as well as an individual exposure to an issuer/counterparty (concentration limit).

c) **Liquidity risk**

Liquidity risk arises in the funding of the Bank's core activities and in the management of positions. It is primarily manifested in two aspects: the first aspect is risk for the Bank of being unable to meet its obligations when due and the second aspect comprises the risk of its being unable to sell an asset on international markets at a fair value within an appropriate time frame in compliance with the respective market conventions.

The BNB is striving to maintain a balance between the maturity of attracted funds and that of assets by means of investments in financial instruments of a different maturity structure. The instruments for attracting funds, which are provided to customers on the liability side, are primarily deposit/investment accounts and settlement accounts. The Bank maintains a minimum level of liquidity by type of currency on a daily basis to ensure all BNB payments in foreign currency. To better manage the risk arising from liquidation of positions in financial instruments, the latter are grouped by liquidity rank subject to the level of difficulty (*i.e.* discount from the fair value), at which they could be sold on the market in time of crisis. Limits are set for the different types of financial instruments based on the liquidity ranks.

As part of its overall liquidity risk management strategy, the Bank has defined requirements for the management of a portfolio of liquid assets denominated in euro and for maintaining assets denominated in other currencies for the purposes of meeting its cash inflows and outflows.

The Bank's financial assets and liabilities, analysed by residual term to maturity from the date of the statement of financial position to the date of any subsequent agreement or contractual maturity, are as follows:

(BGN'000)

| | Up to 1 month | From 1 to 3 months | From 3 months to 1 year | From 1 to 5 years | Over 5 years | Undefined maturity | Total |
|---|---|---|---|---|---|---|---|
| **As of 30 June 2018** | | | | | | | |
| **Financial assets** | | | | | | | |
| Cash and deposits in foreign currency | 16,790,525 | 652,582 | 587,794 | - | - | - | 18,030,901 |
| Gold, instruments in gold, and other precious metals | 2,753,137 | 11,234 | - | - | - | - | 2,764,371 |
| Financial assets at fair value through profit or loss | 706,492 | 995,059 | 10,422,244 | 12,804,294 | 54,778 | - | 24,982,867 |
| Investments | 231,555 | - | - | - | - | 1,933,356 | 2,164,911 |
| Other assets | 25,548 | 1,228 | 22,557 | - | - | - | 49,333 |
| **Total financial assets** | **20,507,257** | **1,660,103** | **11,032,595** | **12,804,294** | **54,778** | **1,933,356** | **47,992,383** |
| **Financial liabilities** | | | | | | | |
| Currency in circulation | - | - | - | - | - | 15,768,716 | 15,768,716 |
| Liabilities to banks and other financial institutions | 13,200,672 | - | - | - | - | - | 13,200,672 |
| Liabilities to government institutions and other borrowings | 3,201,537 | 84,850 | 8,143,926 | - | - | - | 11,430,315 |
| Borrowings against Bulgaria's participation in international financial institutions | - | - | - | - | - | 3,327,196 | 3,327,196 |
| **Total financial liabilities** | **16,402,209** | **84,850** | **8,143,926** | **-** | **-** | **19,095,912** | **43,726,899** |
| **Asset-liability maturity mismatch** | **4,105,048** | **1,575,253** | **2,888,669** | **12,804,294** | **54,778** | **(17,162,556)** | **4,265,484** |
| **As of 31 December 2017** | | | | | | | |
| **Financial assets** | | | | | | | |
| Cash and deposits in foreign currency | 20,327,135 | 621,292 | - | - | - | - | 20,948,427 |
| Gold, instruments in gold, and other precious metals | 2,785,663 | - | - | - | - | - | 2,785,663 |
| Financial assets at fair value through profit or loss | 253,399 | 618,114 | 6,777,831 | 14,677,416 | 27,035 | - | 22,353,795 |
| Investments | 227,898 | - | - | - | - | 1,903,608 | 2,131,506 |
| Other assets | 15,126 | 5,333 | 28,816 | - | - | - | 49,275 |
| **Total financial assets** | **23,609,221** | **1,244,739** | **6,806,647** | **14,677,416** | **27,035** | **1,903,608** | **48,268,666** |
| **Financial liabilities** | | | | | | | |
| Currency in circulation | - | - | - | - | - | 15,703,197 | 15,703,197 |
| Liabilities to banks and other financial institutions | 13,892,496 | - | - | - | - | - | 13,892,496 |
| Liabilities to government institutions and other borrowings | 2,766,605 | 2,923,074 | 5,303,938 | - | - | - | 10,993,617 |
| Borrowings against Bulgaria's participation in international financial institutions | - | - | - | - | - | 3,274,519 | 3,274,519 |
| **Total financial liabilities** | **16,659,101** | **2,923,074** | **5,303,938** | **-** | **-** | **18,977,716** | **43,863,829** |
| **Asset-liability maturity mismatch** | **6,950,120** | **(1,678,335)** | **1,502,709** | **14,677,416** | **27,035** | **(17,074,108)** | **4,404,837** |

The outstanding contractual maturities of the Bank's financial liabilities are as follows:

(BGN'000)

| | Book value | Gross nominal outgoing cash flow | Up to 1 month | From 1 to 3 months | From 3 months to 1 year | From 1 to 5 years | Over 5 years |
|---|---|---|---|---|---|---|---|
| **As of 30 June 2018** | | | | | | | |
| Currency in circulation | 15,768,716 | 15,768,716 | - | - | - | - | 15,768,716 |
| Liabilities to banks and other financial institutions | 13,200,672 | 13,200,672 | 13,200,672 | - | - | - | - |
| Liabilities to government institutions and other borrowings | 11,430,315 | 11,407,771 | 3,200,042 | 84,637 | 8,123,092 | - | - |
| Borrowings against Bulgaria's participation in international financial institutions | 3,327,196 | 3,327,196 | - | - | - | - | 3,327,196 |
| | **43,726,899** | **43,704,355** | **16,400,714** | **84,637** | **8,123,092** | **-** | **19,095,912** |
| **As of 31 December 2017** | | | | | | | |
| Currency in circulation | 15,703,197 | 15,703,197 | - | - | - | - | 15,703,197 |
| Liabilities to banks and other financial institutions | 13,892,496 | 13,892,496 | 13,892,496 | - | - | - | - |
| Liabilities to government institutions and other borrowings | 10,993,617 | 10,984,165 | 2,766,586 | 2,922,288 | 5,295,291 | - | - |
| Borrowings against Bulgaria's participation in international financial institutions | 3,274,519 | 3,274,519 | - | - | - | - | 3,274,519 |
| | **43,863,829** | **43,854,377** | **16,659,082** | **2,922,288** | **5,295,291** | **-** | **18,977,716** |

## d) Market risk

### *Market risk*

All financial instruments are subject to market risk, *i.e.* the risk of impairment as a result of changes in the market conditions. The instruments are evaluated on a daily basis at fair market value which best reflects current financial market conditions for the respective type of financial instrument. The Bank manages its portfolios in response to changing market conditions and to changes in the liability structure of Issue Department balance sheet. Market risk exposure is managed in accordance with the risk limits specified in the document Investment Limits for the Management of the Gross International Reserves.

The table below presents one important measure of market risk, *i.e.* Value at Risk (VaR). VaR is an indicator of the maximum loss over a certain period of time (holding period) and with a certain probability (called a confidence level or confidence interval). The VaR used in this report is based on a 95 per cent confidence level and a one-day holding period.

To calculate the total risk, currency risk and interest rate risk, the empiric distributions, derived from time series of 30 daily observations of total income, currency income and interest income of assets, respectively have been used. The correlation between the currency and interest rate risk is also presented. For each of the parameters, the value as of the last date for the period, the average value for the whole period and the minimum and maximum values have been calculated.

(BGN'000)

| | As of 30 June 2018 | Average | Maximum | Minimum |
|---|---|---|---|---|
| Currency risk | (24,291) | (16,496) | (26,179) | (8,924) |
| Interest rate risk | (3,925) | (4,727) | (10,951) | (1,788) |
| Correlation (per cent) | (0.29) | 0.14 | 0.69 | (0.45) |
| **Overall risk** | **(28,472)** | **(19,438)** | **(36,968)** | **(10,351)** |
| | **As of 31 December 2017** | **Average** | **Maximum** | **Minimum** |
| Currency risk | (15,779) | (23,240) | (48,467) | (4,010) |
| Interest rate risk | (5,099) | (5,166) | (12,169) | (1,638) |
| Correlation (per cent) | (0.14) | 0.45 | 0.72 | (0.14) |
| **Overall risk** | **(19,015)** | **(25,729)** | **(54,391)** | **(4,815)** |

### *Interest rate risk*

The Bank's operations are subject to the risk of interest rate fluctuations, which impact the prices of interest-earning assets (including investments) and interest-bearing liabilities. Modified duration measures the effect of the change in the market value of an asset (liability) in percentage points in response to a 1 basis point (1/100th of 1 per cent) change in the interest rate levels. In addition, portfolios' technical parameters such as protuberance (convexity), duration in a fixed point of the yield curve, *etc.* are monitored on a daily basis. For each portfolio held by the BNB, the interest rate is limited by a model portfolio (benchmark) and by the investment limits for a maximum deviation of the interest rate from that of the respective benchmark. The relative interest risk limit of investment portfolios has been set on the basis of the risk measure, *i.e.* relative yield volatility measure.

Assets and liabilities with floating interest rates involve the risk of changes in the base which serves to determine the interest rates.

(BGN'000)

| | Total | Floating rate instruments | Fixed rate instruments | | |
|---|---|---|---|---|---|
| | | | Up to 1 month | From 1 to 3 months | Over 3 months |
| **As of 30 June 2018** | | | | | |
| **Interest-earning assets** | | | | | |
| Cash and deposits in foreign currency | 17,884,400 | 6,167,016 | 10,475,951 | 653,173 | 588,260 |
| Gold, instruments in gold, and other precious metals | 1,651,164 | - | 1,639,931 | 11,233 | - |
| Financial assets at fair value through profit or loss | 25,174,916 | 325,263 | 685,858 | 1,008,349 | 23,155,446 |
| Investments | 231,555 | - | 231,555 | - | - |
| Other interest-earning assets | 49,333 | 25,548 | - | 1,228 | 22,557 |
| **Total** | **44,991,368** | **6,517,827** | **13,033,295** | **1,673,983** | **23,766,263** |
| **Interest-bearing liabilities** | | | | | |
| Due to banks and other financial institutions | 13,200,672 | - | 13,200,672 | - | - |
| Liabilities to government institutions and other borrowings | 8,982,456 | - | 746,643 | - | 7,237,813 |
| Borrowings against Bulgaria's participation in international financial institutions | 1,441,520 | 1,441,520 | - | - | - |
| **Total** | **23,624,648** | **1,441,520** | **13,947,315** | **-** | **7,237,813** |
| **Interest-bearing asset/liability gap** | **21,336,720** | **5,076,307** | **(914,020)** | **1,673,983** | **16,528,450** |
| **As of 31 December 2017** | | | | | |
| **Interest-earning assets** | | | | | |
| Cash and deposits in foreign currency | 20,844,164 | 11,322,824 | 8,898,782 | 622,558 | - |
| Gold, instruments in gold, and other precious metals | 1,662,158 | - | 1,662,158 | - | - |
| Financial assets at fair value through profit or loss | 22,540,705 | 121,501 | 259,529 | 643,586 | 21,516,089 |
| Investments | 227,897 | - | 227,897 | - | - |
| Other interest-earning assets | 49,275 | 15,123 | 3 | 5,333 | 28,816 |
| **Total** | **45,324,199** | **11,459,448** | **11,048,369** | **1,271,477** | **21,544,905** |
| **Interest-bearing liabilities** | | | | | |
| Due to banks and other financial institutions | 13,892,496 | - | 13,892,496 | - | - |
| Liabilities to government institutions and other borrowings | 8,783,597 | - | 551,444 | 2,925,847 | 5,306,306 |
| Borrowings against Bulgaria's participation in international financial institutions | 1,418,752 | 1,418,752 | - | - | - |
| **Total** | **24,094,845** | **1,418,752** | **14,443,940** | **2,925,847** | **5,306,306** |
| **Interest-bearing asset/liability gap** | **21,229,354** | **10,040,696** | **(3,359,571)** | **(1,654,370)** | **16,238,599** |

For managing interest rate risk and the band of interest rate changes, the sensitivity of financial assets and liabilities to various standard and non-standard interest rate movement scenarios are monitored.

The standard scenarios include the following changes in yield curves: (i) a 100 basis points instant and parallel increase; (ii) a 100 basis points instant parallel decrease; (iii) a 50 basis points parallel increase in the yield curves for a period of 12 months; and (iv) a 50 basis points parallel decrease in the yield curves also for a period of 12 months. The second two scenarios assume that the change in yields takes place at the beginning of the period, and over the one-year period the yield curve remains unchanged.

The analysis of the sensitivity of the Bank's assets (to first approximation) to changes in interest rates, assuming a constant spread of assets and liabilities and parallel shifts in the yield curves of the relevant assets, is as follows:

(BGN'000)

| | 100 b.p. intraday instant parallel increase | 100 b.p. intraday instant parallel decrease | 50 b.p. parallel increase in the beginning of the period | 50 b.p. parallel decrease in the beginning of the period |
|---|---|---|---|---|
| As of 30 June 2018 | (347,870) | 347,870 | (147,487) | (206,744) |
| As of 31 December 2017 | (360,049) | 360,049 | (172,698) | (227,714) |

### *Currency risk*

For the Bank, a currency risk exists where there is a mismatch between the currency structure of assets and that of liabilities. From an accounting point of view, the Bank is exposed to currency risk when entering into transactions in financial instruments denominated in foreign currencies other than the euro.

With the introduction of the currency board arrangement in Bulgaria and the fixing of the Bulgarian currency to the euro, the Bank's financial statements, prepared in Bulgarian levs, are affected by movements in the exchange rate of the lev against the currencies other than the euro.

To minimise currency risk, there is a limit to the mismatches between the currency structure of assets and that of liabilities. According to Article 31, paragraph 3 of the Law on the BNB, the total market value of assets in a foreign currency other than the euro, SDR and monetary gold, may not deviate by more than +/-2 per cent from the market value of the liabilities denominated in these currencies.

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| **Assets** | | |
| Bulgarian lev and euro | 41,793,703 | 42,115,441 |
| US dollar | 73,620 | 68,818 |
| Japanese yen | 151 | 60 |
| Pound sterling | 151 | 253 |
| SDR | 3,585,339 | 3,527,917 |
| Gold | 2,729,433 | 2,748,964 |
| Other | 1,043 | 623 |
| | 48,183,440 | 48,462,076 |
| **Liabilities, capital and reserves** | | |
| Bulgarian lev and euro | 44,626,035 | 44,951,608 |
| US dollar | 74,842 | 69,100 |
| Japanese yen | 1 | 1 |
| Pound sterling | 3 | - |
| SDR | 3,480,998 | 3,424,985 |
| Other | 1,561 | 16,382 |
| | 48,183,440 | 48,462,076 |
| **Net position** | | |
| Bulgarian lev and euro | (2,832,332) | (2,836,167) |
| US dollar | (1,222) | (282) |
| Japanese yen | 150 | 59 |
| Pound sterling | 148 | 253 |
| SDR | 104,341 | 102,932 |
| Gold | 2,729,433 | 2,748,964 |
| Other | (518) | (15,759) |

e) **Using accounting judgements and assumptions**

The Governing Council discusses the development, selection and disclosure of critical accounting policies and assumptions, as well as their application.

These disclosures supplement the notes to the financial risk management.

Management's major priorities in the next few years will still be to maintain monetary and financial system stability in the country, keep the Bank's stable liquidity position and to improve continuously Bank's valuation methods and techniques, international reserves management and control on international financial markets.

***i) Determination of fair values***

The determination of fair values of financial assets and liabilities for which there is no observable market price requires the use of valuation techniques described in the accounting policy. For financial instruments that trade infrequently and whose price is not transparent, the fair value is less objective and requires an expert's judgement depending on liquidity, concentration, market factors uncertainty, pricing assumptions, and other risks affecting the particular instrument.

***ii) Valuation of financial instruments***

The Bank measures the fair value of financial instruments using the following hierarchy of methods:

- **Level 1**: Quoted market price or closing price for positions for which there is a reliable market;
- **Level 2**: Valuation techniques based on observable market information about the yield curve. This category of methods is used to measure debt securities for which there is no reliable market.
- **Level 3**: Valuation techniques, where inputs on financial assets and liabilities are not based on observable market data.

The fair values of financial assets and liabilities traded in international financial markets for which there is available market information are based on market quotations or closing market prices. The use of observable market prices and information reduces the need for management judgement and estimation and also reduces the uncertainty associated with determination of fair values. The availability of actual market prices and information varies depending on products and markets and changes because of specific events and the general conditions of financial markets. The Bank determines the fair values of all other financial instruments for which there are no current market quotes by using a valuation technique based on a net present value. The net present value is computed by means of market yield curves and credit spreads, where necessary, for the relevant instrument. The purpose of the valuation techniques is to determine a fair value which reflects the price of the financial instrument on the reporting date.

The Bank has established a control framework with respect to the measurement of fair values. The fair values of financial instruments controls are set by an independent risk analysis and control unit. Specific controls include: checking the actual price information; regular reviews of current valuation models and, if necessary, development, approval and introduction of new valuation models; follow-up verification by means of analysis and comparison of data from various information sources, *etc.*

The table below analyses financial instruments reported at fair value using valuation models. The data does not include equity instruments reported at acquisition cost (note 14).

(BGN'000)

| | Level 1 Quoted market prices on active markets | Level 2 Valuation techniques (using market data) | Total |
|---|---|---|---|
| **As of 30 June 2018** | | | |
| Cash and deposits in foreign currency | 18,030,901 | - | 18,030,901 |
| Gold, instruments in gold, and other precious metals | 2,764,371 | - | 2,764,371 |
| Financial assets at fair value through profit or loss | 24,982,867 | - | 24,982,867 |
| **Total** | **45,778,139** | - | **45,778,139** |
| **31 December 2017** | | | |
| Cash and deposits in foreign currency | 20,948,427 | - | 20,948,427 |
| Gold, instruments in gold, and other precious metals | 2,785,663 | - | 2,785,663 |
| Financial assets at fair value through profit or loss | 22,353,795 | - | 22,353,795 |
| **Total** | **46,087,885** | - | **46,087,885** |

Financial instruments not measured at fair value, but by applying a level of the fair value hierarchy where a fair value measurement is categorised, are analysed as follows:

(BGN'000)

| | Level 1 Quoted market prices on active markets | Level 2 Observable inputs other than quoted prices | Total |
|---|---|---|---|
| **As of 30 June 2018** | | | |
| Liabilities to banks and other financial institutions | - | 13,200,672 | 13,200,672 |
| Liabilities to government institutions and other borrowings | - | 11,430,315 | 11,430,315 |
| Borrowings against Bulgaria's participation in international financial institutions | - | 3,327,196 | 3,327,196 |
| **Total** | - | **27,958,183** | **27,958,183** |
| **31 December 2017** | | | |
| Due to banks and other financial institutions | - | 13,892,496 | 13,892,496 |
| Liabilities to government institutions and other borrowings | - | 10,993,617 | 10,993,617 |
| Borrowings against Bulgaria's participation in international financial institutions | - | 3,274,519 | 3,274,519 |
| **Total** | - | **28,160,632** | **28,160,632** |

The fair value of due to banks and other financial institutions and of liabilities to government institutions is approximately equal to the reporting value as they are short-term.

The fair value of the liabilities for participation in international financial institutions is approximately equal to their reporting value as they are interest-free and of no definite maturity.

### f) Maturity structure of assets and liabilities

The Bank's assets and liabilities, analysed by residual term to maturity from the date of the statement of financial position to the date of any subsequent agreement or contractual maturity, are as follows:

(BGN'000)

| | Up to 1 month | From 1 to 3 months | From 3 months to 1 year | From 1 to 5 years | Over 5 years | Undefined maturity | Total |
|---|---|---|---|---|---|---|---|
| **As of 30 June 2018** | | | | | | | |
| **Financial assets** | | | | | | | |
| Cash and deposits in foreign currency | 16,790,525 | 652,582 | 587,794 | - | - | - | 18,030,901 |
| Gold, instruments in gold, and other precious metals | 2,753,137 | 11,234 | - | - | - | - | 2,764,371 |
| Financial assets at fair value through profit or loss | 706,492 | 995,059 | 10,422,244 | 12,804,294 | 54,778 | - | 24,982,867 |
| Investments | 231,555 | - | - | - | - | 1,933,356 | 2,164,911 |
| Tangible assets | - | - | - | - | - | 153,104 | 153,104 |
| Intangible assets | - | - | - | - | - | 3,835 | 3,835 |
| Other assets | 25,548 | 1,228 | 22,557 | - | - | 34,118 | 83,451 |
| **Total financial assets** | **20,507,257** | **1,660,103** | **11,032,595** | **12,804,294** | **54,778** | **2,124,413** | **48,183,440** |
| **Financial liabilities** | | | | | | | |
| Currency in circulation | - | - | - | - | - | 15,768,716 | 15,768,716 |
| Liabilities to banks and other financial institutions | 13,200,672 | - | - | - | - | - | 13,200,672 |
| Liabilities to government institutions and other borrowings | 3,201,537 | 84,850 | 8,143,926 | - | - | - | 11,430,313 |
| Borrowings against Bulgaria's participation in international financial institutions | - | - | - | - | - | 3,327,196 | 3,327,196 |
| Other liabilities | - | - | - | - | - | 189,499 | 189,499 |
| **Total financial liabilities** | **16,402,209** | **84,850** | **8,143,926** | **-** | **-** | **19,285,411** | **43,916,396** |
| **Asset-liability maturity mismatch** | **4,105,048** | **1,575,253** | **2,888,669** | **12,804,294** | **54,778** | **(17,160,998)** | **4,267,044** |
| **As of 31 December 2017** | | | | | | | |
| **Financial assets** | | | | | | | |
| Cash and deposits in foreign currency | 20,327,135 | 621,292 | - | - | - | - | 20,948,427 |
| Gold, instruments in gold, and other precious metals | 2,785,663 | - | - | - | - | - | 2,785,663 |
| Financial assets at fair value through profit or loss | 253,399 | 618,114 | 6,777,831 | 14,677,416 | 27,035 | - | 22,353,795 |
| Investments | 227,898 | - | - | - | - | 1,903,608 | 2,131,506 |
| Tangible assets | - | - | - | - | - | 156,021 | 156,021 |
| Intangible assets | - | - | - | - | - | 4,426 | 4,426 |
| Other assets | 15,126 | 5,333 | 28,816 | - | - | 32,963 | 82,238 |
| **Total financial assets** | **23,609,221** | **1,244,739** | **6,806,647** | **14,677,416** | **27,035** | **2,097,018** | **48,462,076** |
| **Financial liabilities** | | | | | | | |
| Currency in circulation | - | - | - | - | - | 15,703,197 | 15,703,197 |
| Liabilities to banks and other financial institutions | 13,892,496 | - | - | - | - | - | 13,892,496 |
| Liabilities to government institutions and other borrowings | 2,766,605 | 2,923,074 | 5,303,938 | - | - | - | 10,993,617 |
| Borrowings against Bulgaria's participation in international financial institutions | - | - | - | - | - | 3,274,519 | 3,274,519 |
| Other liabilities | - | - | - | - | - | 231,667 | 231,667 |
| **Total financial liabilities** | **16,659,101** | **2,923,074** | **5,303,938** | **-** | **-** | **19,209,383** | **44,095,496** |
| **Asset-liability maturity mismatch** | **6,950,120** | **(1,678,335)** | **1,502,709** | **14,677,416** | **27,035** | **(17,112,365)** | **4,366,580** |

## 7. Interest Income and Expense

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| **Interest income** | | |
| – securities | 104,155 | 144,995 |
| – deposits | 28,085 | 26,661 |
| – other | 1 | 1 |
| | 132,241 | 171,657 |
| **Interest expense** | | |
| – deposits | 33,660 | 33,665 |
| – other | - | - |
| | 33,660 | 33,665 |

As of 30 June 2018 there are no interest expenses paid on government deposits in foreign currency (compared to BGN 916 thousand as of 30 June 2017).

As of 30 June 2018 there are no interest paid on deposits of other organisations in foreign currency (compared to BGN 108 thousand as of 30 June 2017).

Interest expenses paid on deposits include interest paid of BGN 14,389 thousand (30 June 2017: BGN 16,578 thousand) on deposits with foreign correspondent banks as a result of using negative reference interest rates.

In addition BGN 1247 thousand (30 June 2017: BGN 439 thousand) interest paid on the technical account of the national system component TARGET2-BNB at the ECB are included.

During the period under review interest rate on the Eurosystem's deposit facility set by the ECB Governing Council remained negative at -0.40 per cent.

## 8. Net Gains/(Losses) from Financial Assets and Liabilities at Fair Value through Profit or Loss

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Net (losses) from operations in securities | (127,138) | (181,637) |
| Net gains from operations in foreign currency | 204 | 260 |
| Net revaluation (losses)/gains on futures | (127) | 302 |
| Net revaluation (losses) on securities | (5,038) | (45,680) |
| Net revaluation (losses)/gains on foreign currency assets and liabilities | 1,218 | (3,868) |
| Net revaluation (losses) on gold | (22,260) | (19,714) |
| | (153,141) | (250,337) |

Net losses from financial assets and liabilities carried at fair value through profit or loss as at 30 June 2018 are largely attributable to operation in securities of BGN 127,138 thousand. The main factor is the lower market yields on securities from their coupon yield which led to be traded at premium above their face value.

During the reporting period the market yield on the securities is characterised by mixed movements between issuers, maturity sectors and quarters, but overall, during the period the yield securities increased between 10 and 20 basis points on the short-term securities in which the BNB primarily invested. The net effect from revaluation of securities resulting from these movements was negative: BGN 5038 thousand.

As of 30 June 2018 the revaluation loss on gold was BGN 22,260 thousand and was due to a fall in the market price of gold denominated in euro: BGN 2117.09 per troy ounce as of 31 December 2017 to BGN 2100.27 as of 30 June 2018.

## 9. Other Operating Income

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Income from subsidiaries | 13,732 | 14,094 |
| Income from associates | - | (7,610) |
| Income from sale of coins | 638 | 389 |
| Dividend income | 4,572 | 15,714 |
| Other income, net | 653 | 605 |
| | 19,595 | 23,192 |

Dividend income includes dividends from BNB's participation in the Bank for International Settlements (BIS) amounting to BGN 4445 thousand and in Cash Service Company AD amounting to BGN 128 thousand.

In 2017 the BNB received a dividend payment of BGN 480 thousand from its participation in 'Bulgarian Mint EAD which is eliminated for the purpose of the consolidated financial statement.

The other net income includes financial income from subsidiaries of BGN 188 thousand, income from reallocated remuneration from the ECB in relation to TARGET2 of BGN 465 thousand.

## 10. General Administrative Expenses

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Staff expenditure | 20,426 | 18,410 |
| Administrative expenses | 27,782 | 26,249 |
| Depreciation | 6,742 | 7,351 |
| Other expenses | 10,153 | 1,771 |
| | 65,103 | 53,781 |

The number of employees of the Bank and its subsidiaries is 1157 as of 30 June 2018 (30 June 2017: 1148), including the BNB staff of 884 (30 June 2017: 873).

Staff expenditure include salaries, social and health insurance costs charged under the local legislation provisions as at 30 June 2018, and social activities costs, respectively for the BNB: BGN 16,724 thousand (30 June 2017: BGN 14,850 thousand), for the Printing Works of the BNB Corp.: BGN 2232 thousand (30 June 2017: BGN 2218), and for the Bulgarian Mint EAD: BGN 1470 thousand (30 June 2017: BGN 1342 thousand).

Staff expenditure include expenses for remunerations paid to the BNB Governing Council members of BGN 549 thousand as of 30 June 2018 (30 June 2017: BGN 553 thousand), presented, as follows:

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Total gross remuneration expenses* | 549 | 541 |
| including bonuses up to established threshold in accordance with Article 23, paragraph 3 of the LBNB by BNB Governing Council's resolution of 30 July 2015** | 136 | 136 |
| Expenses on BNB Governing Council members' retirement/ termination benefits | - | 12 |
| Total gross remuneration paid to the BNB Governing Council members | 549 | 553 |

* Remunerations are before tax.

** http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20150730_1_EN

In accordance with the BNB Governing Council's Decision of 30 July 2015 the monthly remunerations paid to the Governing Council members are set as follows: Governor – BGN 15,368; Deputy Governors – BGN 13,173; other Governing Council members – BGN 4391.

Based on actuarial calculations, the Bank has accrued compensation liabilities for personnel on retirement and for unused paid annual leave at BGN 2004 thousand (30 June 2017: BGN 1796 thousand). The retirement and unused paid annual leave compensation for the Bank's subsidiaries as of 30 June 2018 are BGN 67 thousand (30 June 2017: BGN 72 thousand).

Staff retirement liabilities calculated based on actuarial valuation and pursuant to IAS 19 'Employee Benefits' are given below:

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| **Defined benefit liabilities as of 1 January** | **2,810** | **2,609** |
| Plan benefits paid | (69) | (74) |
| Current service cost | 189 | 146 |
| Interest expense | 6 | 15 |
| Re-measurements | - | - |
| Actuarial (gain)/loss arising from experience adjustment | 254 | 53 |
| Actuarial (gain) arising from change in demographic assumptions | - | - |
| Actuarial loss arising from change in financial assumptions | (15) | 23 |
| Actuarial (gain)/loss recognised in expenses | - | 1 |
| **Defined benefit liabilities as at 30 June** | **3,175** | **2,763** |

### *Costs carried through profit and loss*

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Current service cost | 189 | 146 |
| Interest expense | 6 | 15 |
| Actuarial losses | - | 1 |
| Re-measurements | - | - |
| **Total** | 195 | 162 |

### *Actuarial Assumptions*

The key actuarial assumptions as at the Financial Statements date are the following (weighted average):

(per cent)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Discount interest rate as at 30 June | 0.72 | 1.23 |
| Future salary growth | 4.50 | 4.50 |

| Distribution of BNB staff liabilities (subsidiaries excluded) by residual term | 30 June 2018 | 30 June 2017 |
|---|---|---|
| Up to 1 year | 413 | 400 |
| From 1 to 3 years | 456 | 420 |
| From 3 to 5 years | 288 | 259 |
| From 5 to 10 years | 422 | 339 |
| Over ten years | 784 | 608 |
| **Total** | **2,363** | **2,026** |

Administrative expenses include the BNB's currency circulation expenses of BGN 14,421 thousand as of 30 June 2018 (30 June 2017: BGN 11,746 thousand).

## 11. Cash and Deposits in Foreign Currency

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Cash in foreign currency | 161,714 | 111,676 |
| Current accounts in other banks | 6,165,814 | 11,321,167 |
| Deposits in foreign currency | 11,703,373 | 9,515,584 |
| | 18,030,901 | 20,948,427 |

Cash and deposits in foreign currency with correspondents are disclosed as follows:

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Euro area residents | | |
| In EUR | 11,092,849 | 14,888,915 |
| In other currencies | 69,456 | 2 |
| | 11,162,305 | 14,888,917 |
| Non-euro area residents | | |
| In EUR | 5,416,151 | 4,566,830 |
| In other currencies | 1,452,445 | 1,492,680 |
| | 6,868,596 | 6,059,510 |
| | 18,030,901 | 20,948,427 |

Deposits in foreign currency with correspondents with counterparty's credit rating graded by at least two of the six internationally recognised credit rating agencies – Standard&Poor's, Fitch Ratings, Moody's, DBRS, R&I and JCRA – are disclosed as follows:

(BGN'000)

| | Counterparty short-term credit rating | 30 June 2018 | 31 December 2017 |
|---|---|---|---|
| Investment graded deposits by the counterparty's credit rating | *A-1+* | 1,246,263 | 5,853,791 |
| | *A-1* | 10,454,052 | 3,660,155 |
| | | 11,700,315 | 9,513,946 |

The disclosure by credit rating does not include demand deposits with external managers.

The BNB maximum exposure to credit risk is equivalent to the book value of cash on current accounts and deposits.

## 12. Gold, Instruments in Gold, and Other Precious Metals

| | 30 June 2018 | | 31 December 2017 | |
|---|---|---|---|---|
| | '000 troy ounces | BGN'000 | '000 troy ounces | BGN'000 |
| Gold bullion in standard form | 513 | 1,077,529 | 513 | 1,086,158 |
| Gold deposits in standard form | 787 | 1,650,848 | 785 | 1,662,806 |
| Gold in other form | 16 | 33,149 | 16 | 33,733 |
| Other precious metals | | 2,845 | | 2,966 |
| | | 2,764,371 | | 2,785,663 |

Gold in standard form includes gold held for safekeeping with a depository and deposits. Deposits in gold are held with banks whose liabilities are rated with one of the two highest ratings given by two internationally recognised rating agencies and bear interest between 0.05 per cent and 0.29 per cent annually.

Gold in other form includes commemorative gold coins of BGN 27,879 thousand.

Other precious metals include silver commemorative coins of BGN 392 thousand and platinum commemorative coins of BGN 2300 thousand.

## 13. Financial Assets at Fair Value through Profit and Loss

(BGN'000)

| Securities at fair value through profit or loss | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Foreign treasury bills, notes and bonds | 24,982,867 | 22,353,795 |
| | 24,982,867 | 22,353,795 |

Securities comprise of both coupon and discount securities denominated in EUR. The maximum coupon interest of the EUR-denominated securities was 0.788 per cent as of 30 June 2018 (31 December 2017: 0.97 per cent).

Similarly as at 31 December 2017, as at 30 June 2018 there were no securities pledged as collateral on futures transactions.

The securities issued by foreign governments and other issuers or relevant issuers with credit rating graded by at least two of the six internationally recognised credit rating agencies – Standard&Poor's, Fitch Ratings, Moody's, DBRS, R&I and JCRA are disclosed as follows:

(BGN'000)

| | Issue/issuer credit rating | 30 June 2018 | 31 December 2017 |
|---|---|---|---|
| Investment graded securities by the issue/issuer credit rating | *AAA* | 23,562,968 | 20,977,496 |
| | *AA+* | 276,985 | 216,058 |
| | *AA* | 569,901 | 818,250 |
| | *A+* | - | 341,991 |
| | *A* | 573,013 | - |
| | | 24,982,867 | 22,353,795 |

## 14. Investments

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Republic of Bulgaria's quota in the IMF | 2,115,053 | 2,081,648 |
| Equity investments in international financial institutions | 30,081 | 30,081 |
| Investments in associates | 19,777 | 19,777 |
| | 2,164,911 | 2,131,506 |

The Republic of Bulgaria's quota in the IMF is SDR 896,300 thousand (31 December 2017: SDR 896,300 thousand). BGN 227,897 thousand of the Republic of Bulgaria's quota in the IMF represents the reserve tranche held with the IMF (31 December 2017: BGN 227,897 thousand). The IMF pays remuneration (interest) to those members who have a remunerated reserve tranche position, at an average rate of 0.85 per cent.

Equity investments in international financial institutions include the equity investment in the Bank for International Settlements (BIS), and 25 per cent of the equity investment in BIS Basel is paid up. As of 30 June 2018 the current value of SDR 10,000 thousand shares amounts to BGN 23,225 thousand while as of 31 December 2017 it was BGN 23,225 thousand (ref. note 28). The capital subscribed, but not paid-in has an option to be paid in within three months upon a decision of the BIS Board of Governors.

Equity investments in international financial institutions do not exceed 10 per cent of the subscribed share capital of the respective institution.

Investments in international financial institutions also include BNB's participation in the ECB. As of 1 January 2007 (when the Republic of Bulgaria joined the EU), the Bulgarian National Bank has a share in the ECB capital. As at 30 June 2018 the amount of the BNB paid-up share in the ECB capital is EUR 3487 thousand or BGN 6820 thousand.

Pursuant to Article 28 of the Statute of the ESCB and the ECB, only ESCB NCBs are entitled to participate in the ECB capital. Capital subscription follows the requirements and the key set forth in Article 29 of the Statute of the ESCB and of the ECB, *i.e.* the share of each NCB in the ECB capital is determined in percentage and corresponds to the share of the respective

Member State in the EU's total population and GDP (in equal proportions). The percentage is adjusted every five years and whenever a new Member State joins the EU. As of 30 June 2018, the BNB's capital share in the ECB subscribed capital is 0.8590 per cent, which corresponds to EUR 92,986.8 thousand.

As a non-euro area NCB, the BNB is required to pay up the minimum percentage of its subscribed capital in the ECB, which is pursuant to Article 47 of the Statute of the ESCB and of the ECB (as set out by the ECB General Council) and represents the BNB contribution to the ECB operational costs. As of 29 December 2010 this percentage amounts to 3.75 per cent. Unlike euro area NCBs, the BNB is not entitled to the ECB's distributable profit, nor is it required to fund any loss of the ECB. Upon joining the euro area, the BNB will be required to pay up the remaining 96.25 per cent of its capital subscription to the ECB, which is EUR 89,499.8 thousand.

The Bank exercises substantial influence on the financial and operational policies of the associated companies listed below, and its investments in domestic companies are analysed as follows:

| Associates | Share holding, per cent | Principal activity |
|---|---|---|
| BORICA AD | 36.11 | Interbank card payments |
| Cash Services Company AD | 20.00 | Handling of sealed parcels of Bulgarian coins and banknotes transferred from the BNB and the banks |

## 15. Tangible Assets

The fair value of land and buildings is categorised as Level-3 fair value based on the input data for the given assessment technique.

For the remaining asset classes: Plant and Machinery, Equipment, Vehicles, Fixtures and Fittings, the fair value is considered to be their present value on the Bank's balance sheet as most of them were bought in the last four years and their book value is close to their fair value.

When revaluating tangible fixed assets the Bank derecognises the accrued depreciation at the expense of the gross book value of the assets and their net value is recalculated against the revalued amount.

(BGN'000)

| | Land and buildings | Plant and equipment | IT equipment | Office equipment | Other equipment (including motor vehicles) | Assets under construction | Total |
|---|---|---|---|---|---|---|---|
| As of 1 January 2018 | 184,096 | 91,053 | 48,237 | 9,984 | 8,233 | 2,142 | 343,745 |
| Additions | - | 49 | 12 | 10 | 9 | 2,737 | 2,817 |
| Disposals | - | (81) | (49) | (8) | - | (18) | (156) |
| Transfers | - | 489 | 18 | 36 | 1 | (447) | 97 |
| As of 30 June 2018 | 184,096 | 91,510 | 48,218 | 10,022 | 8,243 | 4,414 | 346,503 |
| **Depreciation and impairment loss** | | | | | | | |
| As of 1 January 2018 | (56,320) | (73,244) | (42,728) | (8,721) | (6,711) | - | (187,724) |
| Charge for the period | (2,590) | (1,201) | (1,702) | (129) | (191) | - | (5,813) |
| On disposals | - | 81 | 49 | 8 | - | - | 138 |
| As of 30 June 2018 | (58,910) | (74,364) | (44,381) | (8,842) | (6,902) | - | (193,399) |
| **Net book value as of 30 June 2018** | **125,186** | **17,146** | **3,837** | **1,180** | **1,341** | **4,414** | **153,104** |
| **Net book value as of 31 December 2017** | **127,776** | **17,809** | **5,509** | **1,263** | **1,522** | **2,142** | **156,021** |

(BGN'000)

| | Land and buildings | Plant and equipment | IT equip-ment | Office equipment | Other equipment (including motor vehi-cles) | Assets under con-struction | Total |
|---|---|---|---|---|---|---|---|
| As of 1 January 2017 | 183,232 | 90,297 | 48,156 | 9,829 | 8,374 | 1,871 | 341,759 |
| Additions | 864 | 1,415 | 300 | 120 | - | 1,009 | 3,708 |
| Disposals | - | (813) | (706) | (58) | (145) | - | (1,722) |
| Transfers | - | 154 | 487 | 93 | 4 | (738) | - |
| As of 31 December 2017 | 184,096 | 91,053 | 48,237 | 9,984 | 8,233 | 2,142 | 343,745 |
| **Depreciation and im-pairment loss** | | | | | | | |
| As of 1 January 2017 | (50,592) | (71,285) | (39,568) | (8,575) | (6,454) | - | (176,474) |
| Charge for the period | (5,728) | (2,737) | (3,868) | (199) | (402) | - | (12,934) |
| On disposals | - | 778 | 708 | 53 | 145 | - | 1,684 |
| As of 31 December 2017 | (56,320) | (73,244) | (42,728) | (8,721) | (6,711) | - | (187,724) |
| **Net book value as of 31 December 2017** | **127,776** | **17,809** | **5,509** | **1,263** | **1,522** | **2,142** | **156,021** |
| **Net book value as of 31 December 2016** | **132,640** | **19,012** | **8,588** | **1,254** | **1,920** | **1,871** | **165,285** |

In applying IAS 16 Property, Plant and Equipment and BNB's Internal Rules for Financial Statements and Accounting Policy, as of December 2013 a review was made of the book value of tangible fixed assets stated in the Bank's balance sheet. The fair value of land and buildings was determined by an external, independent and licensed assessor of recognised professional qualification and experience in assessing property of location and category similar to the assessed ones. As at 30 June 2018, the fair value of land and buildings did not differ materially from their book value as at the same date; therefore, it is considered that the present book value of land and buildings on the Bank's balance sheet fairly reflects their market value. The fair value of fully amortized tangible fixed assets as of 30 June 2018 was BGN 78,223 thousand (31 December 2017: BGN 73,839 thousand).

## 16. Intangible Assets

(BGN'000)

| | Software | Other intangi-ble assets | Development costs | Total |
|---|---|---|---|---|
| As of 1 January 2018 | 52,064 | 174 | 63 | 52,301 |
| Additions | - | - | 338 | 338 |
| Disposals | - | - | - | - |
| Transfers | 338 | - | (338) | - |
| As of 30 June 2018 | 52,402 | 174 | 63 | 52,639 |
| **Depreciation and impairment loss** | | | | |
| As of 1 January 2018 | (47,714) | (161) | - | (47,875) |
| Charge for the period | (927) | (2) | - | (929) |
| On disposals | - | - | - | - |
| As of 30 June 2018 | (48,641) | (163) | - | (48,804) |
| **Net book value as of 30 June 2018** | **3,761** | **11** | **63** | **3,835** |
| **Net book value as of 31 December 2017** | **4,350** | **13** | **63** | **4,426** |

Software includes, as of 30 June 2018, licenses purchased by the BNB to the total amount of BGN 119 thousand (31 December 2017: BGN 486 thousand), and software products to the amount of BGN 219 thousand (31 December 2017: BGN 1170 thousand).

(BGN'000)

| | Software | Other intangible assets | Development costs | Total |
|---|---|---|---|---|
| As of 1 January 2017 | 49,947 | 161 | 406 | 50,514 |
| Additions | 95 | 13 | 1,756 | 1,864 |
| Disposals | (77) | - | - | (77) |
| Transfers | 2,099 | - | (2,099) | - |
| As of 31 December 2017 | 52,064 | 174 | 63 | 52,301 |
| **Depreciation and impairment loss** | | | | |
| As of 1 January 2017 | (46,118) | (159) | - | (46,277) |
| Charge for the period | (1,673) | (2) | - | (1,675) |
| On disposals | 77 | - | - | 77 |
| As of 31 December 2017 | (47,714) | (161) | - | (47,875) |
| **Net book value as of 31 December 2017** | **4,350** | **13** | **63** | **4,426** |
| **Net book value as of 31 December 2016** | **3,829** | **2** | **406** | **4,237** |

Software includes, as of 31 December 2017, licenses purchased by the BNB to the amount of BGN 486 thousand (31 December 2016: BGN 372 thousand), and software products to the amount of BGN 1170 thousand (31 December 2016: BGN 1395 thousand).

## 17. Other Assets

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Cash held by subsidiaries with local banks | 49,363 | 49,297 |
| Investments of subsidiary undertakings in joint ventures and associates | 8,791 | 8,791 |
| Commemorative coins for sale | 414 | 344 |
| Inventories | 19,473 | 17,786 |
| Accounts receivable | 3,158 | 3,880 |
| Deferred charges | 1,356 | 1,284 |
| Other receivables | 896 | 856 |
| | 83,451 | 82,238 |

Cash held by subsidiaries with local banks comprise BGN 43,935 thousand of Printing Works of the BNB AD and BGN 5428 thousand of Bulgarian Mint EAD.

Investments of subsidiary undertakings in joint ventures and associates include a non-monetary contribution in the form of banknote production equipment to the capital of François-Charles Oberthur Group with which Printing Works of the BNB AD has established a joint venture for banknote production.

## 18. Currency in Circulation

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Banknotes in circulation | 15,375,062 | 15,333,225 |
| Coins in Circulation | 393,654 | 369,972 |
| | 15,768,716 | 15,703,197 |

## 19. Liabilities to Banks and Other Financial Institutions

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Demand deposits from banks and other financial institutions | | |
| – in BGN | 7,637,622 | 8,341,080 |
| – in foreign currency | 5,563,050 | 5,551,416 |
| | 13,200,672 | 13,892,496 |

Demand deposits include BGN 6,939,408 thousand representing the required reserves, which all local banks are required to maintain on accounts with the BNB (31 December 2017: BGN 6,707,578 thousand).

On 26 November 2015 the Governing Council of the Bulgarian National Bank adopted Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank which came into force as of 4 January 2016. It removed the recognition of banks' funds in the TARGET2-BNB national system component as a component of reserve assets.

As of 30 September 2016, the amendments to Article 42 of BNB Ordinance No 3 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments transformed the Reserve Guarantee Fund (RGF) into a guarantee mechanism for settling participant banks' payments in the BORICA card payments servicing system operated by BORICA AD. Pursuant to Article 42, paragraph 3 the participation in the guarantee mechanism is included in the reserve assets of the respective participant when reporting the performance of minimum required reserves with the BNB.

## 20. Liabilities to Government Institutions and Other Borrowings

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Current accounts | | |
| – in BGN | 2,222,164 | 2,086,817 |
| – in foreign currency | 225,695 | 123,203 |
| Time deposit accounts | | |
| – in BGN | 5,477,000 | 5,325,000 |
| – in foreign currency | 3,505,456 | 3,458,597 |
| | 11,430,315 | 10,993,617 |

The government's deposits and current accounts with the Bank comprise funds held on behalf of the state budget and other government organisations. As of 4 January 2016 the Bank shall apply interest rates in line with the General Terms and Conditions of the Bulgarian National Bank on accepting cash deposits and servicing bank accounts, budget organisations and other customers adopted by a decision of the BNB Governing Council of 26 November 2015.

## 21. Borrowings against Bulgaria's Participation in International Financial Institutions

The borrowings against Bulgaria's participation in the IMF as of 30 June 2018 amount to BGN 1,883,454 thousand, or SDR 795,933 thousand (31 December 2017: BGN 1,848,546 thousand or SDR 795,933 thousand).

Borrowings from the IMF are denominated in SDRs. Borrowings related to Bulgaria's quota in the IMF are non-interest bearing with no stated maturity. This note includes account No 1 and account No 2 of the IMF in levs amounting to BGN 5243 thousand (31 December 2017: BGN 5524 thousand).

The Bank's borrowings from the IMF of the general and special allocation of SDRs amount to SDR 474,586,534 and SDR 136,289,102, respectively. Repayment will take place on IMF's demand. Under Article XX of IMF Statute, the Bank receives interest on the existing SDRs and pays a fee on its borrowings from the general and special allocation at the same interest rate.

## 22. Other Liabilities

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Funds of EU institutions and bodies | 6,622 | 4,211 |
| Salaries and social security payable | 6,093 | 5,688 |
| Deferred income | 577 | 1,402 |
| Other liabilities | 176,207 | 220,366 |
| | 189,499 | 231,667 |

'Funds of EU institutions and bodies' include European Commission's funds and European Investment Bank's funds. Pursuant to Article 9 of Council Regulation No 1150 of 2000 and Bulgaria's participation in the funding of the EU budget, the Bank opened accounts of the European Commission. As at 30 June 2018 the funds on these accounts were BGN 6622 thousand.

## 23. Capital and Reserves

The capital of the Bank is determined by the Law on the BNB and amounts to BGN 20,000 thousand.

Non-monetary asset revaluation reserves comprise the net change in fair value of property, equity investments and other non-monetary assets.

Pursuant to Article 36 of the Law on the Bulgarian National Bank, unrealised gains/losses arising from the revaluation of assets and liabilities denominated in foreign currencies or gold are transferred to a special reserve account and form special reserves.

Other reserves include the transfers to reserves of 25 per cent of the annual excess of revenue over expenditure after the allocation to special reserves, upon a decision of the BNB Governing Council.

As of 30 June 2018 profit distribution in accordance with the profit distribution policy disclosed in note 5 (h) is as follows:

(BGN'000)

| | 30 June 2018 | 30 June 2017 |
|---|---|---|
| **Profit/(loss) for the period** | **(97,742)** | **(141,166)** |
| Allocation to special reserve under Article 36 of the Law on the BNB: | | |
| Unrealised loss from gold revaluation | 22,260 | 19,714 |
| Unrealised loss from revaluation of financial assets at fair value through profit or loss | 13,421 | 146,359 |
| Unrealised (gain)/ loss from foreign currency valuation | (1,218) | 3,868 |
| Other unrealised loss/(gain) | 127 | (302) |
| **Result after allocation to special reserve** | **(63,152)** | **(28,473)** |

## 24. Non-controlling Interest

The Printing Works of the BNB AD is a joint-stock company with two shareholders: the BNB and the State represented by the Ministry of Finance. The BNB holds 95.6 per cent of the company's capital and the government holds the remaining 4.4 per cent of the company's capital.

## 25. Monetary Liabilities and Gross International Reserves

(BGN'000)

| | 30 June 2018 | 31 December 2017 |
|---|---|---|
| **Gross international reserves** | | |
| Cash and foreign currency denominated deposits | 18,037,371 | 20,948,427 |
| Monetary gold and other instruments in gold | 2,729,433 | 2,748,964 |
| Security investments | 24,982,868 | 22,353,795 |
| Equity investments and quota in the IMF | 231,554 | 227,897 |
| | 45,981,226 | 46,279,083 |
| **Monetary liabilities** | | |
| Currency in circulation | 15,768,716 | 15,703,197 |
| Liabilities to banks | 13,199,374 | 13,891,858 |
| Liabilities to government institutions | 9,443,214 | 9,397,550 |
| Other liabilities | 1,995,020 | 1,600,916 |
| | 40,406,324 | 40,593,521 |
| Surplus of gross international reserves over monetary liabilities | 5,574,902 | 5,685,562 |

Interest receivable and interest payable are carried to the relevant financial assets and liabilities.

Monetary gold and other instruments in gold are revalued on a daily basis based on the euro fixing of the London Bullion Market closing price.

## 26. Related Party Transactions

### Bulgarian Government

#### *International Monetary Fund*

As of 30 June 2018, the Republic of Bulgaria has not received funds under IMF agreements.

The Republic of Bulgaria's quota in the IMF is secured by promissory notes jointly signed by the Bank and the Government (ref. note 21).

#### *Government bank accounts*

Government budget organisations have current accounts and time deposits with the Bank (ref. note 20).

#### *Fiduciary activities*

In accordance with the Law on the BNB and under the terms agreed upon with the Minister of Finance, the BNB acts as an agent in government or government-guaranteed debts. With regard to this role, the BNB performs agent and central depository services related to the administration and management of government securities issued by the Ministry of Finance. The Bank receives commission for providing these services. These government securities are not assets or liabilities of the BNB and are not recognised in its consolidated statement of financial position. The Bank is not exposed to any credit risk relating to government securities as it does not guarantee them. As of 30 June 2018, the par value of the government securities held in custody was BGN 5647 million (31 December 2017: BGN 6712 million).

## 27. Subsidiaries

(per cent)

| Ownership interest | 30 June 2018 | 31 December 2017 |
|---|---|---|
| Bulgarian Mint EAD | 100 | 100 |
| BNB Printing Works AD (ref. note 24) | 95.6 | 95.6 |

The net income from subsidiaries for the period comprises net profit of BGN 238 thousand from the Bulgarian Mint EAD (30 June 2017: BGN 396 thousand) and BGN 2095 thousand from the Printing Works of the BNB AD (30 June 2017: BGN 995 thousand).

## 28. Commitments and Contingencies

### *i) Participation in the Bank for International Settlements*

The Bank holds 8000 shares of the capital of BIS, Basel, each amounting to SDR 5000. Twenty-five per cent of the equity investment in BIS, Basel is paid up. The capital subscribed but not paid in is with an option to be paid in within three months following a decision of the BIS Board of Governors. The contingent amount as of 30 June 2018 is BGN 69,675 thousand (31 December 2017: BGN 69,675 thousand).

### *ii) IMF quota and borrowings*

The IMF quota is secured by promissory notes jointly signed by the Bank and the Government of the Republic of Bulgaria amounting to BGN 1,853,334 thousand.

### *iii) Capital commitments*

As of 30 June 2018 the Bank has committed to BGN 2161 thousand to purchase non-current assets (31 December 2017: BGN 2222 thousand).

### *iv) Other commitments and liabilities*

There are no other outstanding guarantees, letters of credit or commitments to purchase or sell either gold, other precious metals or foreign currency.

### *v) Other contingent liabilities*

Legal proceedings have been instituted against BNB as regards claims for delayed payment of deposits exceeding the insured deposit amount or to challenge bank transfers made by the customers of Corporate Commercial Bank AD (in bankruptcy) to a total amount of around BGN 54 million. Currently, in Bulgaria there is no settled case-law on similar issues including a number of open points as to the applicable law and the procedural rules for their examination. Court proceedings are at an early stage because most of them have been stayed pending the preliminary ruling on those issued from Bulgarian courts and the Court of the European Union. Therefore, and based on the available information on both cases Bank's management considers that it is cannot assess the likely outcome of the legal proceedings and consequently no provisions for these contingent liabilities should be made.

## 29. Provisions for Expected Credit Losses as a Result of Applying IFRS 9

The expected credit losses from financial instruments are calculated according to the methodology adopted by the BNB Governing Council. As of 30 June 2018 the calculated credit loss for financial assets reported under the amortised cost category amounted to BGN 7526 thousand. For analytical purposes, as at 31 December 2017 the Bank made similar calculations of the expected credit losses which amounted to BGN 7501 thousand.

## 30. Events Occurred after the Reporting Date

There are no events after the reporting date that require additional disclosure or adjustments to the Bank's Financial Statements.

# Information under Article 17, Paragraph 5 of the LBNB Concerning Resolutions Adopted by the BNB Governing Council in January–June 2018

## Reporting and Budget

**RESOLUTION No 8 of 10 January**

Ordinance No 1 on the Format and Contents of Separate Balance Sheets of the Issue and Banking Departments and of the Consolidated Statement of Financial Position of the Bulgarian National Bank was approved.

**RESOLUTION No 75 of 29 March**

Amendments to the General Terms and Conditions of the Bulgarian National Bank on accepting cash deposits and servicing bank accounts, budget organisations and other customers were approved.

**RESOLUTION No 86 of 4 April**

The BNB Annual Report for 2017 was approved on first reading.

**RESOLUTION No 87 of 4 April**

The Report on BNB Budget Implementation as of 31 December 2017 was approved on first reading.

**RESOLUTION No 101 of 18 April**

The BNB Annual Report for 2017 was approved.

**RESOLUTION No 102 of 18 April**

The Report on the Implementation of the BNB Budget as of 31 December 2017 was approved.

## Gross International Reserves

**RESOLUTION No 21 of 25 January**

The BNB Governing Council took note of the selected benchmark for dynamic asset allocation in the first quarter of 2018.

**RESOLUTION No 74 of 29 March**

The BNB Governing Council supported the Bulgarian National Bank membership in the FX Global Code in the third wave of banks of the European System of the Central Banks.

**RESOLUTION No 92 of 4 April**

The BNB Governing Council took note of the International Reserve Management Report in 2017.

**RESOLUTION No 113 of 18 April**

The BNB Governing Council took note of the selected benchmark for dynamic asset allocation in the second quarter of 2018.

**RESOLUTION No 165 of 15 June**

The BNB Governing Council took note of the International Reserve Management Report in the first quarter of 2018.

## Payment Systems and Payment Oversight

**RESOLUTION No 6 of 10 January**

The BNB Governing Council consented to BNP Paribas Personal Finance EAD terminating its payment institution business from 1 February 2018. BNP Paribas Personal Finance S.A. will launch credit institution operations in Bulgaria through a branch.

**RESOLUTION No 9 of 10 January**

The BNB Governing Council suggests that the BNB starts implementing until the end of the first half of 2018 Guidelines on Major Incidents Reporting under Directive (EU) 2015/2366 (EBA/GL/2017/10 of 19 December 2017) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 14 of 18 January**

The BNB Governing Council approved the proposal for amendments to the draft Law on Payment Services and Payment Systems adopted at first reading by the National Assembly on 7 December 2017. The amendments with the relevant justification thereto would be sent to the Chairman of the Budget and Finance Commission of the 44th National Assembly.

**RESOLUTION No 16 of 25 January**

The BNB Governing Council took note of the Programme of Supervisory Inspections of Payment Services Providers for 2018.

**RESOLUTION No 17 of 25 January**

The BNB Governing Council licensed Datex Payment Technology EAD to operate as a payment institution.

**RESOLUTION No 31 of 7 February**

The BNB Governing Council took note of the implementation of the projects for including an auxiliary system operated by the Central Depository AD in the TARGET2 (Trans-European Automated Real-time Gross settlement Express Transfer system), providing access to the Central Depository AD to the RINGS (Real-time Gross Settlement System), including for payments on corporate operations in securities and participation of the Central Depository AD in the ESROT (Electronic System For Registering and Servicing Government Securities). The relevant agreements would be concluded between the parties.

**RESOLUTION No 32 of 7 February**

The BNB Governing Council suggests that the BNB starts implementing until the end of the first half of 2018 Guidelines on the Security Measures for Operational and Security Risks of Payment Services under Directive (EU) 2015/2366 (EBA/GL/2017/17 of 12 January 2018) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 43 of 22 February**

The BNB Governing Council took note of the Annual Report of the Conciliation Committee in 2017.

**RESOLUTION No 76 of 29 March**

The BNB Governing Council adopted Ordinance No. 16 on Granting Licenses and Approvals, Entry into the Register under Article 19 of the Law on Payment Services and Payment Systems, and Requirements to the Activity of Operators of Payment Systems with Settlement Finality.

**RESOLUTION No 105 of 18 April**

The BNB Governing Council adopted Ordinance No 3 on the Terms and Procedure for Opening Payment Accounts, Executing Payment Transactions and Using Payment Instruments.

**RESOLUTION No 106 of 18 April**

The BNB Governing Council took note of the calculated average amount of fees charged by banks on services under Appendix 1 to Article 34 of Draft Ordinance No 3 of the BNB on current accounts for 2018 in relation to Article 120, paragraph 6 of the Law on Payment Services and Payment Systems and Article 35, paragraph 2 of the Draft Ordinance No 3 of the BNB.

**RESOLUTION No 107 of 18 April**

The license of iCard AD (former name Intercard Finace AD) to operate as a payment institution issued by BNB Governing Council Resolution No 60 of 3 June 2010 was withdrawn.

**RESOLUTION No 108 of 18 April**

The license of Transact Europe (former name TBI Credit EAD) to operate as a payment institution issued by BNB Governing Council Resolution No 59 of 3 June 2010 was withdrawn.

**RESOLUTION No 109 of 18 April**

The license of Paynetics AD (former name Credibul EAD) to operate as a payment institution issued by BNB Governing Council Resolution No 5 of 15 January 2015 was withdrawn.

**RESOLUTION No 160 of 5 June**

The BNB Governing Council authorised Deputy Governors heading the Banking Department and Banking Supervision Department to notify banks in Bulgaria to launch the appropriate measures for implementing the action plans prepared by banks in cases when the used benchmark changed significantly or was no longer calculated under Article 28, paragraph 2 of Regulation (EU) 2016/2011 in relation to the discontinued calculation and publication by the BNB of SOFIBID and SOFIBOR indices on 1 July 2018.

Between January and June 2018 the BNB Governing Council took two decisions containing approvals, authorisations an other actions on administration procedures related to payment supervision.

## The Circulation of Banknotes and Coins

### RESOLUTION No 22 of 25 January

The BNB Governing Council decided to put into circulation, as of 26 February 2018, a silver commemorative coin '140 Years since Bulgaria's Liberation'.

### RESOLUTION No 33 of 7 February

The BNB Governing Council took note of the availability and flow in the BNB Strategic Stock of Banknotes for 2017.

### RESOLUTION No 34 of 7 February

The list of selling prices of Bulgarian coins, issues 1951–2018, was approved.

The list of selling prices of Bulgarian banknotes, issues 1950–2006, was approved.

### RESOLUTION No 35 of 7 February

The silver commemorative coin '140 Years from the Liberation of Bulgaria', issue 2018, will be sold at BNB tills at BGN 78.

### RESOLUTION No 47 of 22 February

The BNB Governing Council approved the General Conditions of the Bulgarian National Bank on Wholesale Purchase and Subsequent Retail Sales of Commemorative Coins and Coin Sets by Banks and Service Providers (Distributors).

### RESOLUTION No 56 of 8 March

The BNB Governing Council decided to put into circulation on 23 April 2018 a silver commemorative coin 'The Old Elm Tree in Sliven'.

### RESOLUTION No 80 of 29 March

The silver commemorative coin 'The Old Elm Tree in Sliven', issue 2018, will be sold at BNB tills at BGN 78.

### RESOLUTION No 96 of 4 April

The BNB Governing Council approved amendments to Appendix No 1 to the Tariff of the Fees Charged by the BNB for Exchanging Banknotes and Coins, Effective as of 10 April 2018.

### RESOLUTION No 114 of 18 April

Pursuant to the Law on the BNB Article 26, the BNB Governing Council decided to withdraw from circulation the commemorative coins issued between 5 July 1999 and 31 December 2012, which ceased to be legal tender on 15 May 2018.

Commemorative coins issued between 5 July 1999 and 31 December 2012 will be exchangeable at BNB tills at nominal value with no limits to amounts, free of charge, until 31 December 2019.

Pursuant to Appendix No 2, the BNB Governing Council decided to discontinue mintage of ten gold commemorative coins, issue 2002, commemorating the 28th Summer Olympic Games, Athens (Greece), 2004 and to terminate Contract No RD29-2136/27.09.2002, concluded between the State Mint EAD and the BNB.

**RESOLUTION No 149 of 22 May**

The BNB Governing Council approved the General Conditions of the Bulgarian National Bank for Organising or Assisting in Training of Employees Working with Banknotes and Coins under Ordinance No. 18 of the BNB, effective as of 4 June 2018.

**RESOLUTION No 166 of 15 June**

The BNB Governing Council decided to put into circulation on 17 September 2018 a partially gold-plated silver commemorative coin 'Tsar Ivan Asen II' of the 'Medieval Bulgarian Rulers' series.

**RESOLUTION No 175 of 26 June**

The BNB Governing Council adopted the Commemorative Coin and Banknote Production Programme for 2019.

The BNB Governing Council took note of the Preliminary Commemorative Coin and Banknote Production Programme for 2020-2021 as a basis for preparing annual programmes.

## Maintaining Banking System Stability and Protecting Depositor Interests

**RESOLUTION No 1 of 10 January**

The BNB Governing Council decided to authorise the restructuring of Cibank EAD by its merging into United Bulgarian Bank AD pursuant to Article 262 of the Law on Commerce.

**RESOLUTION No 2 of 10 January**

The BNB Governing Council approved the Draft Joint Decision of the Bulgarian National Bank, the National Bank of Hungary and regulatory authorities supervising OTP Group subsidiaries on significant changes to the Advanced Measurement Approach applied at group level for measuring operational risk.

**RESOLUTION No 4 of 10 January**

The BNB Governing Council approved the direct acquisition by Novito Opportunities Fund AGmvK of 3,880,388 book-entry shares, or 67.646407 per cent of the registered share capital of Municipal Bank AD, worth BGN 57,362,810.

**RESOLUTION No 15 of 25 January**

The BNB Governing Council approved the Draft Joint Decision of the Bulgarian National Bank, the German Federal Financial Supervisory Authority (BaFin), Deutsche Bundesbank and the National Bank of Romania on determining special liquidity requirements and on the adequacy of the ProCredit Group liquidity risk management framework.

**RESOLUTION No 30 of 7 February**

The BNB Governing Council suggests that the BNB starts implementing from 26 June 2018 Joint Guidelines under Articles 17 and 18(4) of Directive (EU) 2015/849 on simplified and enhanced customer due diligence and the factors credit and financial institutions should consider when assessing the money laundering and terrorist financing risk associated with individual business relationships and occasional transactions (The

Risk Factors Guidelines) (JC/GL/2017/37) issued by the Joint Committee of the European Supervisory Authorities.

The BNB Governing Council suggests that the BNB starts implementing from 16 July 2018 Joint Guidelines under Article 25 of Regulation (EU) 2015/847 on the measures payment service providers should take to detect missing or incomplete information on the payer or the payee, and the procedures they should put in place to manage a transfer of funds lacking the required information (JC/GL/2017/16) issued by the Joint Committee of the European Supervisory Authorities.

**RESOLUTION No 43 of 22 February**

The BNB Governing Council took note of the Annual Report of the Sectoral Conciliation Commission on Financial Services for 2017.

**RESOLUTION No 44 of 22 February**

The BNB Governing Council suggests that the BNB starts implementing from the end of the first quarter of 2018 Recommendation on the coverage of entities in the group recovery plan (EBA/Rec/2017/02) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 51 of 8 March**

The BNB Governing Council approved the direct acquisition of the shares of Commercial Bank Victoria AD by the Bulgarian American Credit Bank AD.

**RESOLUTION No 52 of 8 March**

The BNB Governing Council approved the direct acquisition of the shares of Commercial Bank Victoria AD by Investbank EAD.

**RESOLUTION No 59 of 8 March**

The BNB Governing Council suggests that the BNB starts implementing from the end of the first quarter of 2018 Guidelines on uniform disclosures under Article 473a of Regulation (EU) No 575/2013 as regards transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds (EBA/GL/2018/01) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 65 of 29 March**

The BNB Governing Council postponed the review of the Report on the State of the Banking System (fourth quarter of 2017) for 4 April 2018.

The BNB Governing Council took note of the publication of Banks in Bulgaria (October–December 2017).

**RESOLUTION No 66 of 29 March**

The BNB countercyclical capital buffer rate applicable to credit risk exposures in the Republic of Bulgaria was set at 0 per cent for the second quarter of 2018.

**RESOLUTION No 67 of 29 March**

The BNB Governing Council suggests that the BNB starts implementing from 1 January 2019 Guidelines on connected clients under Article 4(1)(39) of Regulation (EU) No 575/2013 (EBA/GL/2017/15) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 68 of 29 March**

The BNB Governing Council approved the Joint Decision of the Bulgarian National Bank, the German Federal Financial Supervisory Authority (BaFin), Deutsche Bundesbank and the National Bank of Romania on determining the adequacy of own funds and the required own funds to be maintained by the ProCredit Holding Group and group subsidiaries, including ProCredit Bank (Bulgaria) EAD.

**RESOLUTION No 69 of 29 March**

The BNB Governing Council approved the Draft Joint Decision of the European Central Bank, the Bulgarian National Bank, the Czech National Bank, the National Bank of Romania, the Croatian National Bank and the National Bank of Hungary in their functions as regulatory authorities supervising the UniCredit Group and its subsidiaries in relation to signing a joint decision on a review and assessment of UniCredit Group recovery plan submitted in September 2017.

**RESOLUTION No 70 of 29 March**

The BNB Governing Council approved the Draft Joint Decision of the European Central Bank, the Bulgarian National Bank, the Czech National Bank, the Polish Financial Supervision Authority, the National Bank of Romania and the UK Prudential Regulation Authority on a review and assessment of Société Générale Group recovery plan submitted in September 2017.

**RESOLUTION No 71 of 29 March**

The BNB Governing Council approved the Draft Joint Decision of the European Central Bank, the Bulgarian National Bank and the National Bank of Romania on a review and assessment of Piraeus Bank S.A. recovery plan submitted in September 2017.

**RESOLUTION No 72 of 29 March**

The BNB Governing Council approved the Draft Joint Decision of the European Central Bank, the Bulgarian National Bank and the National Bank of Romania on a review and assessment of Eurobank Ergasias S.A. Group recovery plan submitted in 2017.

**RESOLUTION No 73 of 29 March**

The BNB Governing Council approved the Draft Joint Decision of the European Central Bank, the Bulgarian National Bank, the Czech National Bank and the National Bank of Hungary on a review and assessment of KBC Group recovery plan submitted in September 2017.

**RESOLUTION No 88 of 4 April**

The BNB Governing Council took note of the Report on the State of the Banking System (fourth quarter of 2017).

**RESOLUTION No 89 of 4 April**

The BNB Governing Council took note of the Supervisory Review of Banks Report as of 31 December 2017.

**RESOLUTION No 120 of 3 May**

The BNB Governing Council suggests that the BNB starts implementing from 1 January 2019 Guidelines on the assessment of the suitability of members of the management body and key function holders (EBA/GL/2017/12) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 121 of 3 May**

The BNB Governing Council suggests that the BNB starts implementing from 31 May 2018 Guidelines on supervision of significant branches (EBA/GL/2017/14) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 122 of 3 May**

The BNB Governing Council suggests that the BNB starts implementing from 1 January 2019 Guidelines on internal governance (EBA/GL/2017/11) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 150 of 22 May**

The BNB Governing Council suggests that the BNB starts implementing from 1 January 2021 Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures (EBA/GL/2017/16) issued by the European Banking Authority and published on its official website.

**RESOLUTION No 170 of 26 June**

The BNB Governing Council took note of the Report on the State of the Banking System (first quarter of 2018).

**RESOLUTION No 171 of 26 June**

The BNB countercyclical capital buffer rate applicable to credit risk exposures in the Republic of Bulgaria was set at 0 per cent for the third quarter of 2018.

**RESOLUTION No 172 of 26 June**

The BNB Governing Council took note of the Supervisory Review of Banks Report as of 31 March 2018.

**RESOLUTION No 173 of 26 June**

The BNB Governing Council approved on first reading Ordinance on Internal Exposures of Banks.

Over the January to June 2018 period, the BNB Governing Council approved:

- 24 resolutions pursuant to Article 11, paragraph 3 of the Law on Credit Institutions on issuing a preliminary approval for holding a position of a member of management and supervisory bodies or a procurator of a credit institution;
- seven resolutions pursuant to Article 76, paragraph 4 of the Law on Credit Institutions on coordinating the choice of an auditor of a credit institution;
- four resolutions under Article 71, paragraph 3 in connection with paragraph 1, item 6 of the Law on Credit Institutions approving the amendments to the Articles of Association of a credit institution;
- four resolutions pursuant to Article 26, paragraph 2 in relation to paragraph 1, letter ‘c’ of Regulation (EU) 575/2013 for the inclusion of a credit institutions’ net profit in the common equity tier one;
- eight resolutions related to measures, approvals, permits and other actions on banking supervision administrative procedures.

## BNB Work on Resolution of Credit Institutions

**RESOLUTION No 7 of 10 January**

The BNB Governing Council approved a methodology for determining critical functions of credit institutions and credit institution branches for which the BNB is a resolution authority.

**RESOLUTION No 53 of 8 March**

The BNB Governing Council set the annual banks' contribution to the Bank Resolution Fund for 2018 at BGN 121,956,185.

**RESOLUTION No 54 of 8 March**

The BNB Governing Council took note of the Summarised information and analysis on the final draft resolution plans and assessment of the resolution potential of Eurobank Ergasias Group and Piraeus Bank Group and on the work of resolution colleges of Eurobank Ergasias Group and Piraeus Bank Group in the process of planning the resolution in 2017.

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of Eurobank Ergasias Group in 2017.

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of Piraeus Bank Group in 2017.

**RESOLUTION No 61 of 23 March**

The BNB Governing Council took note of the 'Summarised information and analysis on the final draft resolution plans of Société Générale Group and *R*aiffeisen Bank International Group and on the work of resolution colleges of Société Générale Group and Raiffeisen Bank International Group in the process of planning the resolution in 2017.'

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of Société Générale Group in 2017.

The BNB Governing Council adopted a joint decision on setting a minimum requirement for own funds and eligible liabilities on a consolidated basis for Société Générale Group in 2017.

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of Raiffeisen Bank International Group in 2017.

**RESOLUTION No 93 of 4 April**

The BNB Governing Council adopted a methodology setting the total amount of individual annual contributions by third country banks and branches to the Bank Resolution Fund.

**RESOLUTION No 94 of 4 April**

The BNB Governing Council took note of the Summarised information and analysis on the final draft resolution plans of KBC Group and UniCredit Group and on the work of resolution colleges of KBC Group and UniCredit Group in the process of planning the resolution in 2017.

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of KBC Group in 2017.

The BNB Governing Council adopted a joint decision on setting a minimum requirement for own funds and eligible liabilities on a consolidated basis for KBC Group in 2017.

The BNB Governing Council adopted a joint decision on a resolution plan and assessment of the resolution potential of UniCredit Group in 2017.

The BNB Governing Council adopted a joint decision on setting a minimum requirement for own funds and eligible liabilities on a consolidated basis for UniCredit Group in 2017.

### RESOLUTION No 95 of 4 April

The BNB Governing Council adopted a revised joint decision on a resolution plan and assessment of the resolution potential of Société Générale Group in 2017.

The BNB Governing Council adopted a revised joint decision on setting a minimum requirement for own funds and eligible liabilities on a consolidated basis for Société Générale Group in 2017.

The BNB Governing Council took note of the initiated proceedings on settling disagreements to the European Banking Authority in the process of planning the resolution of Raiffeisen Bank International Group in 2017.

### RESOLUTION No 111 of 18 April

The BNB Governing Council took note of the Summarised information and analysis on the final draft resolution plans of OTP Group and on the work of resolution colleges of OTP Group in the process of planning the resolution in 2017.

### RESOLUTION No 112 of 18 April

The BNB Governing Council set the individual annual contributions of credit institutions and branches of third country credit institutions to the Bank Resolution Fund for 2018.

### RESOLUTION No 147 of 22 May

The BNB Governing Council took note of the information provided by the Bulgarian Deposit Insurance Fund on the annual accounts of the Bank Resolution Fund for the year ending 31 December 2017.

### RESOLUTION No 148 of 22 May

The BNB Governing Council assigns to the Deputy Governor heading the Issue Department to inform the entities under Article 1, paragraph 1 of the Law on the Recovery and Resolution of Credit Institutions and Investment Firms in respect of which the BNB is a resolution authority that they should keep detailed documentation and information on financial agreements and to provide them to the BNB under the procedure and term as specified by it.

## Statistics

### RESOLUTION No 78 of 29 March

The BNB Governing Council adopted Ordinance No 17 on the Monetary and Interest Rate Statistics and Financial Accounts Statistics.

## The Central Credit Register and the Register of Bank Accounts and Safe Deposit Boxes

### RESOLUTION No 103 of 18 April

The BNB Governing Council adopted Ordinance on Amendment of Ordinance No 22 of 16 July 2009 on the Central Credit Register.

### RESOLUTION No 104 of 18 April

The BNB Governing Council adopted Ordinance on Amendment of Ordinance No 12 of 29 September 2016 on the Register of Bank Accounts and Safe Deposit Boxes.

## Research

### RESOLUTION No 36 of 7 February

The BNB Governing Council took note of the assessments of developments in major macroeconomic indicators in the first and second quarters of 2018 along with BNB forecasts of major macroeconomic indicators for 2017–2019 (based on data as at 19 December 2017) to be published in the Economic Review quarterly (issue 4 of 2017).

### RESOLUTION No 48 of 22 February

The BNB awarded no doctor's degree scholarships in 2018.

The BNB awarded two master's degree scholarships.

### RESOLUTION No 49 of 22 February

As of 2018 the BNB will not calculate prices, offer for sale and subscription, and print on paper the following publications of the Bulgarian National Bank: *Икономически преглед, Economic Review, Банките в България and Banks in Bulgaria.*

### RESOLUTION No 126 of 3 May

The BNB Governing Council took note of the assessments of developments in major macroeconomic indicators in the second and third quarters of 2018 to be published in the Economic Review quarterly (issue 1 of 2018).

## BNB Internal Audit

### RESOLUTION No 152 of 22 May

The BNB Governing Council approved the Report of the Chief Auditor of the Bulgarian National Bank for 2017.

In the January–June 2018 period the BNB Governing Council adopted decisions on internal bank rules of the Bank (seven decisions), representation in joint meetings of companies in which the BNB holds participation (five decisions), public procurements and contracts (16 decisions)* and organisation of bank activities (25 decisions).

* Detailed information on procurement procedures is available on the BNB website: http://www.bnb.bg/AboutUs/AUPublicProcurements/AUPPList/index.htm

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