Bulgarian National Bank

ANNUAL REPORT - 2015







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ISSN 1313-1494 (print) ISSN 2367-492X (online) Honourable Chairman of the National Assembly, Honourable People's Representatives,

Under the provisions of the Law on the Bulgarian National Bank Article 1, paragraph 2 and Articles 50 and 51, I have the honour of presenting the Bank's Annual Report for 2015.

The BNB Annual Report includes an overview of the global economic environment and Bulgaria's economic development and detailed information on BNB functions and duties arising from the Law on the BNB, as well as a report on other central bank business. It also contains a report on BNB budget implementation and consolidated financial statements (audited) by 31 December 2015, accompanied by an opinion of the international auditors and a list of important BNB Governing Council resolutions.

The BNB focused effort on its primary objective of maintaining price stability through ensuring the stability of the national currency and implementing monetary policy as set out in the Law on the BNB. The Bank continued to perform its other legal functions, including cash operations, managing international reserves in accordance with the principles and practices of prudent investment, regulating and supervising banks in Bulgaria, facilitating the development of payment systems, and payment oversight. The Bank's other business included: fiscal agent and state depository, macroeconomic research, and forecasts, and statistics.

In 2015 the BNB started implementing an 18-month plan of concrete measures in three priority areas: i. boosting the Bank's governance model efficiency with a focus on strengthening banking supervision; ii. establishing an institutional framework for the recovery and resolution of banks, and iii. reviewing commercial banks' assets. The BNB Annual Report records progress to implementating these measures.

turque

Dimitar Radev Governor

of the Bulgarian National Bank



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

Governing Council

Dimitar Radev

Governor

Kalin Hristov

Deputy Governor Issue Department

Nina Stoyanova

Deputy Governor
Banking Department

Dimitar Kostov

Deputy Governor
Banking Supervision Department

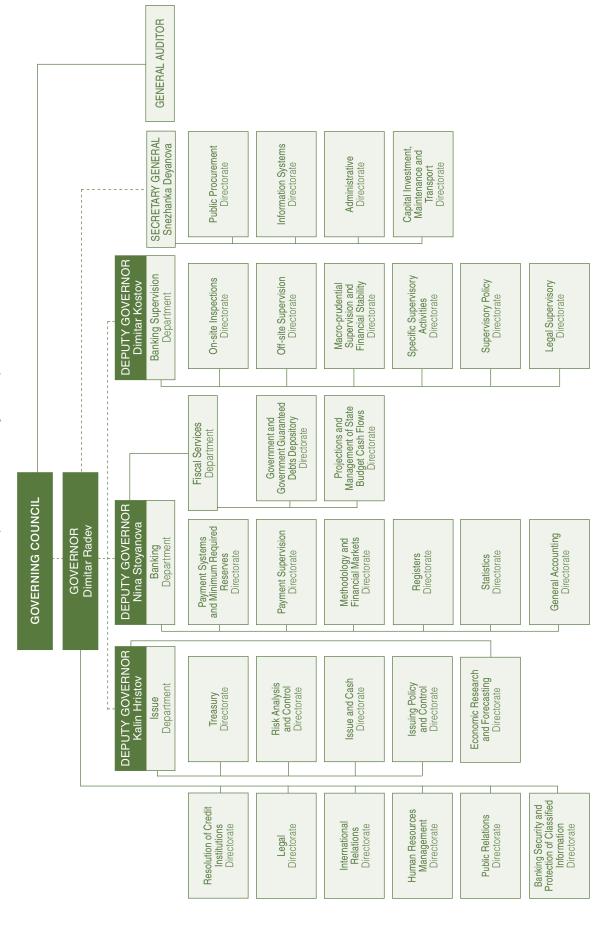
Statty Stattev

Boryana Pencheva

Lena Roussenova

Organisational Structure of the BNB

(as of 1 February 2016)



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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 BORICA Bank Organisation for Payments Initiated by Cards Bank Resolution Fund CBPP3 ECB's Third Covered Bond Purchase Programme CCR Central Credit Register CHF Swiss france 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 EDIS European Deposit Insurance Scheme EONIA Euro OverNight Index Average (registered trademark of the European Money Market Institute, EMMI) European System of National and Regional Accounts ESA 2010 ESCB European System of Central Banks ESRB European Systemic Risk Board ESROT Electronic System for Registering and Servicing Government Securities Trading EU 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 Law on the Recovery and Resolution of Credit Institutions and Investment Firms LRRCIIF Longer-term refinancing operations LTROs 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

Global economic growth moderated from 3.4 per cent in 2014 to 3.1 per cent in 2015, with continuing divergent developments across regions: accelerating growth in the euro area and Japan; a slowdown in China, and real terms GDP declines in Russia and Brazil. Growth in the euro area accelerated to 1.6 per cent on 0.9 in 2014, reflecting mainly the positive contribution of domestic demand. By country, Ireland and Malta reported the highest economic growth at 7.8 and 6.3 per cent and Greece was alone in reporting a decline (-0.2 per cent). In the United States real economic growth was 2.4 per cent, unchanged from 2014. Private consumption was the main positive contributor. The slowdown in global growth, and especially economic activity in developing countries, affected demand for commodities, raw materials, and fuels, their international prices continuing to decline. Global inflation went down from 1.7 per cent at the end of 2014 to 1.4 per cent at the end of 2015 on an annual basis: in developed countries it moderated to 0.4 per cent from 0.5 per cent at the end of 2014, while in developing economies it accelerated slightly to 3.1 per cent from 2.8 per cent at the end of 2014.

The divergence between ECB and US Federal Reserve monetary policy cycles increased further in 2015. Inflation hovered at low levels in the euro area and the United States, but economic growth and unemployment – the other two indicators with a major impact on monetary policy decisions - saw divergent dynamics. In 2015 economic growth in the euro area started to accelerate slowly, unemployment fell sightly while remaining high at 10.9 per cent on average for the year. In the US economic growth remained unchanged compared to the previous year and the average unemployment rate went down to 5.3 per cent. The two central banks based their interest rate and nonstandard monetary policy measures decisions on these indicators and forecasts of their future developments. Late 2015 saw changes in interest rate policy. On 9 December, the ECB lowered deposit facility rate by 10 basis points to -0.30 per cent leaving main refinancing operations and marginal lending facility interest rate unchanged at 0.05 and 0.30 per cent respectively. On 16 December the Federal Reserve System increased the federal fund rate fluctuation range by 25 basis points, launching a gradual increase in the US federal funds rate. In December the ECB extended the deadline and scope of its securities purchases programme, launching an expanded asset purchase programme for both public and private sector securities in January 2015. The Federal Reserve ended its securities purchase programmes in October 2014. Misalignment between ECB and Federal Reserve monetary policy, and especially uncertainty on when the Federal Reserve would start increasing interest rates in line with intentions in early 2015, boosted US dollar values and financial market fluctuations.

A sharp upward correction in euro area government bond yields in late April surprised market participants and signalled significant European government bond volatility for the rest of the year. Creditors halting the final tranche of the rescue package for Greece and the ECB decision not to increase the funds Greek banks can borrow added to financial market volatility. As a result, on 29 June the Greek government introduced capital controls and closed banks for a period. In the second half-year financial market volatility mostly reflected Chinese financial and foreign exchange market rebalancing and expectations of a Chinese economic growth slowdown.

The gradual improvement in euro area economic activity contributed to boosting real growth in Bulgaria to 3 per cent in 2015 from 1.5 in 2014, exports making the biggest contribution. The continuous decline in world crude oil and raw material prices contributed to continuing deflation in Bulgaria which came to 0.9 per cent at the end of 2015 from 2.0 per cent a year earlier. As in 2014, the labour market continued improving slowly, the number of employees in the economy picking up 0.4 per cent on an annual

basis. The unemployment rate went down to 9.2 per cent from 11.4 per cent on average in the prior year. Labour productivity growth accelerated to 2.6 per cent from 1.2 in 2014. The growth rate of compensation *per* employee in the total economy decelerated significantly to 1.8 per cent in nominal terms from 5.6 per cent in the prior year, and 2.9 per cent in real terms from 7.3 per cent in 2014.

In 2015 credit demand from non-financial corporations and households was very weak. In December the amount of banks' claims on the non-government sector fell by 1.6 per cent on the end of 2014. Banks' claims on both non-financial corporations and households also exhibited year-on-year declines of -1.6 and -1.3 per cent. Funds attracted from residents continued to be the main source of funding for the banking system. In December 2015 residents' deposits went up by BGN 4701 million on the end of 2014 due to non-government sector funds rising BGN 6086 million.

In 2015 the Consolidated Fiscal Programme deficit was BGN 2484.2 million (2.9 per cent of GDP): down BGN 588.7 million on 2014. The improvement in the fiscal position reflected increased revenue collection and limited current expenditure growth.

The Bulgarian National Bank conducts its business 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 its potential and capabilities effectively. The Bank performs its statutory duty of investing Bulgaria's gross international reserves to the principles and practices of the Law and prudent investment. It regulates and supervises banks in Bulgaria to maintain banking system stability and protect depositors' interests. The Bank assists the implementation, operation, and oversight of efficient payment systems by regulating and supervising the payment system operators, payment institutions, and electronic money institutions. As issuing bank, it prints banknotes and mints coins and preserves and scraps uncirculated or withdrawn cash. The Bank is government fiscal agent and state depository and actively participates in the European System of Central Banks (ESCB) and other EU bodies.

In 2015 it adopted changes to its minimum reserve requirement framework: a key Bank policy instrument. On the back of rising bank excess reserves, which by the end of 2015 exceeded the minimum reserve requirement by 127.8 per cent, on 26 November 2015 the BNB Governing Council adopted a new Ordinance No 21 on the on the Minimum Required Reserves Maintained by Banks which enters into force on 4 January 2016. Under the new Ordinance, the Bank applies the ECB deposit facility rate on banks' excess reserves where this interest rate is negative, and zero interest on excess reserves where the ECB deposit facility rate is positive or nil.

The BNB continued pursuing a conservative risk management policy in investing international reserves. To achieve its main objective of high international reserve security and liquidity, the BNB continued investing the main share of assets into government securities and German government guaranteed debt, and into short-term deposits with first class foreign banks. 2015 saw some changes to investment constraints related to credit risk management, intended to fully utilise investment opportunities in the context of historically low interest rates, greater financial market volatility, and geopolitical uncertainty. As the yield to maturity of euro-denominated government securities remained extremely low on international markets (reaching negative levels for some countries and sectors), the maximum term to maturity of some of the main asset classes in which the BNB invests its international reserves was extended.

By the end of 2015 the market value of gross international reserves was EUR 20,285 million: an increase of EUR 3751 million/22.69 per cent on the end of 2014. Net income from assets in euro comprises three components: i. income from investing gross international reserves in original currency: this was negative for the reporting period (EUR -7.80 million), while the total return for 2015 was 0.01 per cent; ii. currency imbalance yield which was also negative at EUR -0.70 million; and iii. expenditure on interest

on the Issue Department balance sheet liabilities of EUR 0.04 million. These three components brought net income from international reserve management for the reporting period to EUR -8.54 million. Net income from assets was positive at 0.12 per cent. The reason net yield was positive while net income was negative was that in different quarters international reserves had different market values reflecting foreign currency cash inflows or outflows. As a result the percentage yield is expressed differently in absolute terms.

In 2015 banking supervision business reflected financial sector legislative changes, preparations for the asset quality review, Bulgarian bank stress testing, and moves to reform and develop banking supervision. The Law on Recovery and Resolution of Credit Institutions and Investment Firms (LRRCIIF) was adopted in 2015. It entered into force on 14 August 2015 and named the BNB Governing Council responsible for bank resolution. Its work as a resolution authority and the preparation of relevant decisions are to be supported by the Resolution of Credit Institutions Directorate, a new autonomous structural unit established in early November and a supervisory authority or a central bank.

In line with the Law on the Recovery and Resolution of Credit Institutions and Investment Firms the BNB set the annual banking system dues to the Bank Resolution Fund (BRF) for 2015 at BGN 82,170,000 and apportioned it by banks to a special methodology. All banks settled their dues by the close of the year.

Under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms the BNB shall conduct an AQR and a stress test on banks in Bulgaria by mid-August 2016. Following a public tender on 25 November 2015, the BNB hired an external consultant for the asset quality review and stress test of the whole banking system. Until the end of 2015 joint work with the external consultant focused on adapting the ECB methodology for the asset quality review and fine tuning other details of the review. On 23 December 2015 the BNB forwarded detailed instructions and requirements to banks on selecting the AQR providers who would conduct the main parts of the asset quality review.

Based on an independent external assessment of Bulgarian banking supervision effectiveness by the International Monetary Fund and the World Bank, and on an internal analysis and assessment of Banking Supervision Department procedures and practices, on 5 October 2015 the BNB adopted a Plan on Reforming and Developing Banking Supervision with detailed measures and time limits until the end of 2016.

In 2015 the banking system remained stable, with growing balance sheet assets and deposits, and improved liquid and capital positions. The liquid asset ratio accounted for 31.6 per cent of banking system assets. The total capital adequacy ratio and tier 1 capital adequacy ratio increased and by the end of December accounted for 22.19 and 20.47 per cent. During the year banks made moves to optimise their balance sheets, mostly in credit risk assessment. Banks employed various instruments such as the sale of loans, derecognition at the expense of provisions, and debt to equity swaps through established securities. This reduced the overall credit portfolio and increased the amount of non-performing loans in the banking system. By the end of 2015 the net amount of gross non-performing loans (BGN 5.7 billion) was entirely covered by the amount of capital exceeding the minimum regulatory requirement of 8 per cent (BGN 7.0 billion). Cost management and the change in price strategies allowed most banks to improve their profitability indicators. As a result on 31 December 2015 unaudited banking system profit was BGN 847 million, up 19.2 per cent on 2014. Return on assets (ROA) improved to 0.97 per cent and return on equity (ROE) to 7.35 per cent.

As part of systemic risk monitoring in the banking system the BNB regularly monitors macroeconomic and financial parameters and EU Member State risks imported by subsidiary banks or branches with significant shares in Bulgaria's banking system. Given

Greece's worsened financial position in the first half of 2015, measures and recommendations to banks with Greek equity expanded. More important measures included tightening liquidity and capital requirements for institutions with Greek equity. They were recommended to decrease the net balance sheet positions (assets less liabilities) to their bank groups, to ensure operational (information systems and payment operations) independence, to tighten control over liquidity resources, and to prepare contingency plans in case of potential liquidity pressure.

In 2015 there were thirteen supervisory inspections of various scopes, including reviews of progress and implementation of recommendations from past supervisory inspections, assessment of changes in group models, and a joint inspection with the Oesterreichische Nationalbank. The on-site inspections focused mainly on credit institution development, economic environment effects, and reviewing mechanisms for managing non-performing exposures, collection efficiency, conditions for implementing resolution measures, and relevant internal procedures.

National payment systems functioned effectively and provided payment flow continuity. In 2015 RINGS, a real-time gross settlement system operated by the BNB, processed 86.3 per cent of payments in Bulgaria. The number of payments through the national system component of the Trans-European Automated Real-time Gross settlement Express Transfer system for the euro (TARGET2) run by the BNB (TARGET2-BNB) increased 7.49 per cent on an annual basis. The BNB oversees payment systems in Bulgaria to limit system risk and improve Bulgarian payment system reliability and efficiency. The Bank inspected four payment service providers.

BNB issue and cash operations include banknote printing, coin minting; accepting, delivering, repaying, processing, authenticity and fitness checking of Bulgarian and foreign cash; exchanging damaged Bulgarian cash; and destroying unfit Bulgarian cash. On 7 December 2015 the BNB put into circulation a new coin with a nominal value of 2 levs, issue 2015. The banknote with the same nominal remains legal tender. On 12 December the BNB Governing Council decided to withdraw from circulation the 1-lev banknote, issue 1999, which ceased to be legal tender on 1 January 2016. After this date, 1-lev banknotes, issue 1999 will be exchanged at BNB tills at nominal value with no limit on the amount, no fees, and no limit in time.

At the end of 2015 banknotes in circulation were 413.3 million: up 4.19 per cent. Coins in circulation increased by 8.69 per cent and numbered 1934.1 million. The share of retained non-genuine Bulgarian banknotes was 0.000273 per cent of total banknotes in circulation by the end of 2015, while that of retained non-genuine Bulgarian coins in the total number of circulating coins was 0.000043 per cent. To exercise its control functions in ensuring cash circulation integrity and security, in 2015 the BNB performed six full and 16 spot on-site checks into credit institution and service provider regulatory compliance in control over the quality of banknotes and coins in circulation.

Under contracts negotiated to market conditions and prices with the Ministry of Finance, the Bank compiles, processes, keeps and submits on a regular basis, statements budget entities and municipalities' accounts with banks in Bulgaria and acts as government debt agent servicing government bond trade. There were 18 government securities auctions held *via* the GSAS system. The total nominal volume of Electronic System for Registering and Servicing Government Securities Trading (ESROT) registered government securities transactions was BGN 28,193.5 million, down 35.9 per cent on 2014.

By participating in the committees and working groups of the ESCB, the European Commission, the EU Council, the European Systemic Risk Board, the European Banking Authority, and the Council for European Affairs, the BNB contributed to formulating Bulgarian standpoints on key economic governance areas and the financial sector.

Economic Development in 2015

1. The External Environment

Preliminary estimates show that global economic growth slowed down from 3.4 per cent in 2014 to 3.1 per cent in 2015.¹ Developments continued to diverge across regions. Economic growth in China slowed, while GDP growth in Russia and Brazil declined in real terms. Accelerated growth was recorded in some developed economies like the euro area and Japan. In 2015 global industrial output growth slowed to 1.7 per cent from 2.9 per cent in 2014 with slower growth in both developing and developed countries, except for the euro area where growth accelerated.² The growth rate of world trade in goods and services decreased to 2.6 per cent in 2015 (3.4 per cent in 2014) due to the significantly lower growth rate of trade in emerging and developing economies, unlike developed countries where it increased.³

Major Macroeconomic Indicators

(per cent)

| | Average annual real GDP growth | | Inflation (end of year) | | | Unemployment rate (average annual) | | | |
|---------------------------------|--------------------------------|------|----------------------------|------|------|------------------------------------|------|------|------|
| | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 |
| EU | 0.2 | 1.4 | 1.9 | 1.0 | -0.1 | 0.2 | 10.9 | 10.2 | 9.4 |
| Euro area | -0.3 | 0.9 | 1.6 | 8.0 | -0.2 | 0.2 | 12.0 | 11.7 | 10.9 |
| New non-euro area Member States | 1.3 | 2.8 | 3.4 | 0.7 | -0.4 | -0.3 | 9.9 | 8.7 | 7.5 |
| EU-3 | 1.8 | 2.6 | 2.5 | 1.7 | 0.5 | 0.3 | 7.6 | 6.4 | 5.7 |
| United States | 1.5 | 2.4 | 2.4 | 1.5 | 8.0 | 0.7 | 7.4 | 6.2 | 5.3 |
| Japan | 1.4 | 0.0 | 0.5 | 1.6 | 2.4 | 0.2 | 4.0 | 3.6 | 3.4 |
| China | 7.7 | 7.3 | 6.9 | 2.5 | 1.5 | 1.6 | 4.1 | 4.1 | 4.0 |

Notes: The EU includes all 28 Member States. New non-euro area Member States are countries joining since 2004 less those now in the euro area. EU-3 includes the United Kingdom, Sweden and Denmark. New non-euro area 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-28 in HICP calculated by Eurostat for inflation.

The growth estimate for new non-euro area Member States in 2015 is preliminary; Czech Republic 2015 real GDP data are missing.

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

The 2014 trend towards a recovery in euro area economic activity continued. In 2015 real GDP growth accelerated to 1.6 per cent (0.9 per cent in 2014) underpinned mainly by sharp oil product price declines, favourable financial conditions amid the ECB monetary policy and euro depreciation. Private consumption had the main positive contribution to economic activity growth, followed by investment in fixed capital. Ireland (7.8 per cent) and Malta (6.3 per cent), recorded the highest growth.⁴ A decline in real GDP growth was registered only in Greece (-0.2 per cent). Accelerated economic activity in the euro area was coupled with a drop in unemployment to 10.9 per cent (11.7 per cent in 2014), most pronounced in Spain, Ireland, and Slovakia. In 2015 the highest unemployment was reported in Greece (25.0 per cent), Spain (22.1 per cent) and Cyprus (15.0 per cent).

Real US economic growth was 2.4 per cent, remaining unchanged from 2014, private consumption having the main positive contribution stimulated by continuing improvement in the labour market and cheaper petroleum products. Fixed capital invest-

IMF data: World Economic Outlook Update, January 2016.

² Based on *CPB* data: *Netherlands Bureau for Economic Policy Analysis* by 24 March 2016.

³ IMF data: World Economic Outlook Update, January 2016.

⁴ 2015 data on real Czech Republic GDP are not published.

ment also had a positive contribution to real GDP growth over 2015 despite limited investment in the energy sector. The appreciating dollar⁵ and worsening external environment made net exports contribute negatively to growth. In 2015 unemployment continued falling to reach 5.3 per cent (6.2 per cent in 2014).

Global inflation dropped from 1.7 per cent in December 2014 to 1.4 per cent a year later, reflecting lower prices in petroleum and most commodity groups and raw materials in international markets.⁶ On an annual basis, Brent crude oil fell 47.1 per cent in USD and 36.3 per cent in EUR on 2014. The considerable oil price fall was due to excess global supply prompted mostly by OPEC countries' attempts to retain market shares and high inventory accumulation. In 2015 food and cereals prices in US dollars⁷ declined 12.2 and 13.1 per cent on average and metals by 26.8 per cent, while food and cereals prices in euro rose 5.2 and 4.3 per cent and metals fell 12.3 per cent.

Inflation in developed countries moderated insignificantly to 0.4 per cent by end-2015 (0.5 per cent by end-2014), unlike developing economies where it accelerated to 3.1 per cent (2.8 per cent by end-2014). Annual 2015 euro area inflation was 0.2 per cent (-0.2 per cent in December 2014), core inflation (excluding food, energy, alcohol and tobacco products) rising to 0.9 per cent (0.7 per cent in December 2014). Belgium and Malta led annual inflation at 1.5 and 1.3 per cent, while Cyprus and Slovenia trailed at -0.6 and -0.6 per cent. US inflation moderated slightly to 0.7 per cent by end-2015 from 0.8 per cent by end-2014, core inflation (excluding food and energy) increasing from 1.6 per cent in December 2014 to 2.1 per cent. Inflation measured by the private consumption expenditure deflator decelerated on an annual basis to 0.5 per cent in the fourth quarter of 2015 from 1.1 per cent in the fourth quarter of 2014.

Misalignment between the monetary policy cycles of the ECB and the Federal Reserve System continued to increase throughout 2015. With persistently low inflation prospects for the euro area, the ECB initiated additional standard and non-standard monetary policy measures. In January 2015 the ECB decided to launch an expanded programme to purchase public and private sector securities. In December 2015 the deposit facility rate was cut from -0.20 to -0.30 per cent, along with extending the term and scope of the programme. The ECB also decided to reinvest the principal payments on securities purchased under the programme as they mature, for as long as necessary.¹¹

In early 2015 the Federal Reserve System announced its intention to start increasing the federal funds rate. Because of the unfavourable external environment, however, this began only in December through a 25 basis point increase in the fluctuation range for the federal fund rate. Misalignment between ECB and Federal Reserve monetary policy cycles led to depreciation of the euro against the dollar in 2015.

Misalignment between ECB and Federal Reserve monetary policy cycles, global geopolitical uncertainty, Greek political uncertainty, expected growth moderation, and financial and foreign exchange market fluctuations in China were the main factors driving developments in 2015.

⁵ Referred to as US dollar below.

Based on World Bank data, Global Economic Monitor Database. The World Bank measures CPI change in individual groups of countries as a weighted average of CPI changes in the countries of the group. Real GDP based on purchasing power parity is used for calculating country weights. Groups include only World Bank Member States.

Based on ECB data.

⁸ Based on World Bank data, *Global Economic Monitor Database*.

⁹ Measured by the Harmonised Index of Consumer Prices (HICP).

¹⁰ Measured by the Consumer Price Index (CPI), non-seasonally adjusted data.

¹¹ For details on the ECB and US Federal Reserve monetary policy, see Chapter II.

¹² For further details, see the box on *Monetary Policy Normalisation in the United States*, *Economic Review*, 4/2015, pp. 16-18.

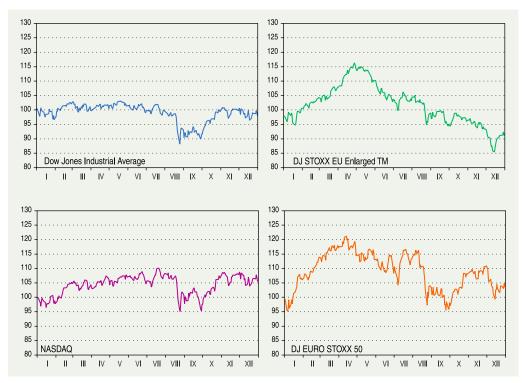


(per cent) 1.6 1.6 1.4 1.2 1.0 10 ECB main refinancing operations rate 0.8 0.8 Federal Reserve funds rate 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 2011 2012 2013 2014 2015

Sources: the ECB, the Federal Reserve System.

In the first months of 2015 European stock indices rose on the end of 2014 driven by expectations of ECB asset purchase programme expansion. From late April stock indices followed broadly downward trends until the end of the year. In December the EURO STOXX 50 increased by 4.1 per cent on average compared to December 2014, while the STOXX EU ENLARGED declined 10.3 per cent.

Main Stock Exchange Indices in 2015



Note: US dollars, December 2014 = 100.

Throughout 2015 US stock markets were comparatively stable, with temporary drops registered only at the end of the third and the beginning of the fourth quarters. In December the US Dow Jones fell 1.3 per cent on average from a year earlier, the NASDAQ rising 6.5 per cent.¹³

15

Economic Development in 2015

 $^{^{\}rm 13}$ For more information on government bond markets, see Chapter II.

2. The Bulgarian Economy

In 2015 real GDP¹⁴ growth accelerated to 3 per cent (1.5 per cent in 2014). Net exports made the main contribution to economic activity growth, with private consumption and fixed capital investment having a positive, though small, contribution to growth. The significant contribution of net exports to real GDP growth (2.1 percentage points) was driven mainly by significantly increased goods exports in early 2015 as a result of the end of specific one-off factors limiting exports in 2014¹⁵ and higher export growth rates for traditionally competitive goods groups. Through the year the contribution of net exports decreased gradually, while that of final consumption and fixed capital investment grew.

Real GDP Growth Rate and Contribution by Component of Final Use

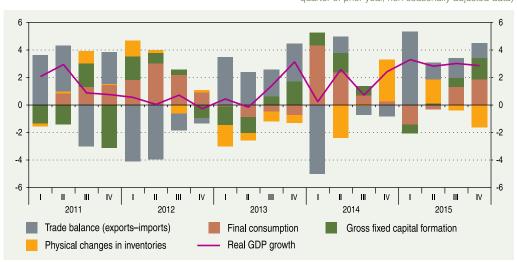
(on the corresponding period of 2014, non-seasonally adjusted data)

| | 2014 | | 2015 | |
|-----------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|
| | Change (per cent) | Contribution (percentage points) | Change (per cent) | Contribution (percentage points) |
| GDP | 1.5 | - | 3.0 | - |
| Final consumption | 2.2 | 1.7 | 0.7 | 0.5 |
| Household consumption | 2.7 | 1.7 | 0.8 | 0.5 |
| NPISH consumption | 8.6 | 0.0 | -1.1 | 0.0 |
| Individual government consumption | 1.0 | 0.1 | 0.2 | 0.0 |
| Collective consumption | -0.8 | -0.1 | 0.4 | 0.0 |
| Gross fixed capital formation | 3.4 | 0.7 | 2.5 | 0.5 |
| Physical changes in inventories | - | 0.2 | - | -0.1 |
| Exports (goods and services), net | - | -1.1 | - | 2.1 |
| Exports (goods and services) | -0.1 | -0.1 | 7.6 | 5.0 |
| Imports (goods and services) | 1.5 | -1.0 | 4.4 | -2.9 |

Sources: the NSI, BNB calculations.

Real GDP Growth Rate and Contribution by Component of Final Use

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



Sources: the NSI, BNB calculations.

 $^{^{14}}$ Data based on the European system of national and regional accounts (ESA 2010).

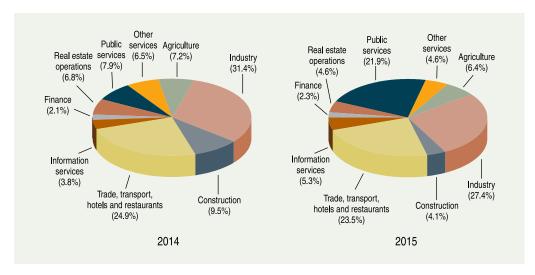
¹⁵ With the completion of maintenance works and construction of new oil production capacities, the sector performance recovered in 2015.

The labour market continued to improve, with slight employment recoveries in most economic sectors and an unemployment drop. However, lower household labour income growth depressed household consumption growth from 2.7 per cent in 2014 to 0.8 per cent in 2015.

Government consumption rose insignificantly by 0.3 per cent in 2015, and wage expenditure growth was largely offset by a sustainable operating expenditure and healthcare spending decline.

Real fixed capital investment grew 2.5 per cent over 2015, public investment contributing substantially to this. Despite better business expectations of future economic activity and high capacity utilisation, economic uncertainty continued being indicated as a major hindrance. Enterprises thus continued investing conservatively. Preliminary NSI data show that in 2015 nominal expenditure on acquiring fixed assets in the total economy fell 10.7 per cent on an annual basis (from 11.2 per cent in 2014). Investing decelerated in almost all sectors, except for information and public services. Industry and construction made the strongest contribution to the overall drop, with public services contributing most.

Fixed Asset Acquisition Expenditure by Economic Activity



Note: Preliminary data for 2015.

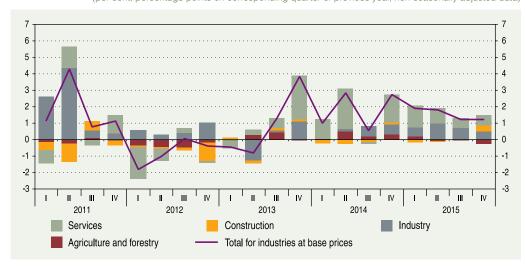
Sources: the NSI, BNB calculations.

Gross value added in the economy decelerated in 2015 to reach 1.5 per cent in real terms (1.8 per cent for 2014), contributing 1.3 percentage points to real GDP growth¹⁶. Economic activity increased in all sectors, industry and services contributing 0.8 percentage points each to value added growth. Among the services sub-sectors, trade, cars and motorcycles repair, transport, storage and mail services, hotels and restaurants, information and communication, telecommunications, financial and insurance activities and real estate operations posted stronger growth. Industry marked a more significant value added increase (3.1 per cent in real terms), while construction rose 1.4 per cent on an annual basis. Value added in agriculture, forestry and fishing declined by 1.4 per cent in 2015 (5.2 per cent growth in 2014), contributing negatively by 0.1 percentage points to gross value added in the economy.

¹⁶ The contribution of adjustments to GDP growth was 1.7 percentage points.

Gross Value Added Change in Real Terms and Contribution by Industry

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



Sources: the NSI, BNB calculations.

Gross Value Added Change in Real Terms and Contribution by Industry

| | 20 |)14 | 2015 | | |
|--------------------------|-------------------|---------------------------------|-------------------|---------------------------------|--|
| | Change (per cent) | Contribution, percentage points | Change (per cent) | Contribution, percentage points | |
| Gross value added | 1.8 | - | 1.5 | - | |
| Agriculture and forestry | 5.2 | 0.3 | -1.4 | -0.1 | |
| Industry* | 0.9 | 0.3 | 2.8 | 0.8 | |
| Services | 1.9 | 1.3 | 1.2 | 0.8 | |

^{*} Manufacturing and construction.

Sources: the NSI, BNB calculations.

In 2015 the labour market continued improving slowly. The number of people employed in the economy continued growing at 0.4 per cent as it had since 2014, with industrial sub-sectors and most services sub-sectors contributing most. Agriculture, forestry and fishing made negative contributions to the change.

The NSI Labour Force Survey showed unemployment dropping from 11.4 per cent on average in 2014 to 9.2 per cent in 2015. The decreased number of unemployed persons made a major contribution to the unemployment rate drop. At the same time, there was a slight decrease in the number of economically active population. Unemployment, estimated by Employment Agency registrations, reached 10.1 per cent on average (11.2 per cent for 2014). Declines in working age population amid a slight fall in the labour force helped boost the economic activity rate of the 15–64 age group to 69.3 per cent in 2015, from 69 per cent on average in 2014. The number of discouraged persons continued to decrease: from 192,000 in 2014 to 173,000 in 2015. Long-term unemployment (over 12 months) declined more slowly than all unemployed. Hence, their share rose to 61.3 per cent of all unemployed (60.6 per cent in the previous year).

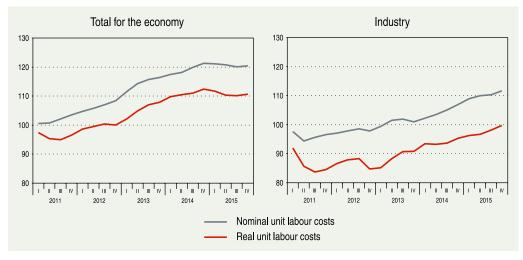
In 2015 nominal labour cost dynamics reflected business efforts to optimise labour costs amid falling producer and consumer prices. The growth rate of compensation *per* employee moderated significantly in nominal terms to 2.8 per cent in 2015, from 5.4 per cent in 2014. In a period of a slight change in employment, wage developments in the total economy reflected mainly slowing employee pay growth: from 5.6 per cent in 2014 to 1.8 per cent in 2015, up 2.9 per cent in real terms¹⁷ from

¹⁷ HICP deflated.

7.3 per cent in 2014. National accounts show lower employee pay growth in almost all sectors, with some services sub-sectors reporting declines (trade, transport, hotels and restaurants, financial and insurance activities, real estate operations and culture, sports and entertainment; other activities). In 2015 labour productivity in the overall economy¹⁸ grew by 2.6 per cent (1.2 per cent in 2014), industry (excluding construction) contributing most.

Given the lower growth in nominal compensation *per* employee and real labour productivity in 2015, nominal unit labour costs declined 0.7 per cent from last year (following a 4.4 per cent rise in 2014). This indicator rose in the sub-sectors of industry and in information and communication, telecommunications, professional services and research, administrative and ancillary services. Declines were observed in almost all remaining services sub-sectors. Real unit labour costs decreased by 1.1 per cent in the total economy. In export oriented industry, real labour cost growth rose by 4.6 per cent in 2015, from 4.7 per cent in 2014.

Unit Labour Costs (moving average, 2010 = 100)



Sources: the NSI, the BNB.

Gross operating surplus increased by 0.2 per cent in 2015 against 0.8 per cent in 2014. This growth was due to the services sub-sectors: trade, cars and motorcycles repair, transport, storage and mail services, hotels and restaurants, real estate operations and financial and insurance activities. Other sectors made negative contributions: agriculture, forestry and fishing, information and communication; telecommunications and general government; education; human health and social work activities.

In 2015 the GDP deflator was 0.3 per cent on an annual basis. By final use component, government consumption and fixed capital investment deflators were positive, while goods and service imports and exports and household final consumption expenditure were negative.

In 2015 deflation continued, the consumer price index decreasing 0.9 per cent at end of the year (down 2.0 per cent in December 2014).¹⁹ The decline in end-use prices was driven mainly by the deflationary effect of the external environment which reflected the downward dynamics of international goods and commodities prices. The domestic environment, marked by weakly rising domestic demand and lower output costs, exerted no upward pressure on consumer prices. The indirect effects of lower fuel prices and output costs reflecting decreased intermediate consumption goods

¹⁸ Real GDP measures labour productivity in the overall economy. Sectoral calculations are based on value added of the sector in real terms.

¹⁹ The analysis employs HICP data

prices and declining nominal unit labour costs had a damping effect on core HICP component prices.

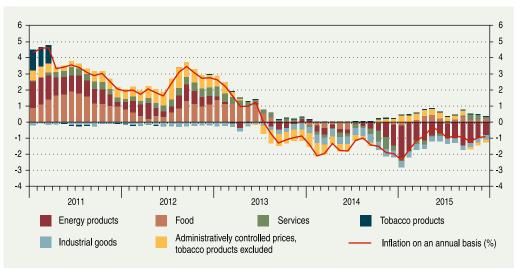
The downward year-on-year trend in import goods prices since 2013 continued, contributing to the drop in domestic producer price index and end-use prices. Euro depreciation against the US dollar helped ease the deflationary effect of lower oil prices, limit industrial goods deflation, and increase food prices.

Transport fuels made the highest negative contribution to the overall inflation accumulated by the year's end. The administratively controlled price group also contributed negatively as a result of lower prices in services like district heating and gas supply, affected indirectly by oil prices. The food group recorded low positive inflation amid increasing producer prices over the second half of 2015. This reflected the reduced rate of decline in import food prices²⁰ and higher agricultural product prices in Bulgaria due to a poorer harvest than in 2014.²¹

In 2015 the negative rate of core inflation (including services and non-food prices) decelerated to -0.3 per cent from -1.6 per cent in December 2014.²² This was attributable to both reduced non-food deflation and positive services inflation in the second half of the year. The long-term downward trend in non-food prices since 2010 continued to reflect lower car prices along with slowing rates of price declines in the rest of the durable goods range. Non-durable goods prices rose on an annual basis and also had a limiting effect on the decreasing index of non-food goods prices, reflecting positive import deflators in finished products due to euro depreciation against the US dollar. The major driver for the 2015 trend reversal in services deflation was the exhausted base effects of one-off medical, dental²³ and telecommunication services²⁴ price declines in 2014. Catering and package holidays, accommodation, and cultural recreation services also made positive contributions to the overall inflation.

Annual Inflation and Contributions by Major Group of Goods and Services

(per cent, percentage points)



Sources: the NSI, the BNB.

²⁰ Third quarter 2014 data on import deflators under the Standard International Trade Classification (SITC).

²¹ NSI data derived from agricultural accounts.

²² Core inflation is based on HICP, excluding food, energy products, goods and services with controlled prices, and tobacco products.

²³ Fees paid to GPs, specialist physicians and dentists with National Health Insurance Fund contracts were administratively reduced by 28.6 per cent from 1 January 2014.

²⁴ Roaming charge caps within the EU were lowered from July 2014.

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

| | 20 |)14 | 2015 | | |
|------------------------------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|--|
| Inflation (per cent) | -2.0 | | -(|).9 | |
| | Rate of inflation by group (per cent) | Contribution, percentage points | Rate of inflation by group (per cent) | Contribution, percentage points | |
| Food | -0.7 | -0.19 | 0.9 | 0.22 | |
| Processed food | -0.7 | -0.12 | 1.2 | 0.20 | |
| Unprocessed food | -0.8 | -0.07 | 0.3 | 0.02 | |
| Services | -1.2 | -0.30 | 0.5 | 0.12 | |
| Catering services | 0.9 | 0.05 | 1.6 | 0.09 | |
| Transportation services | 2.4 | 0.09 | -3.6 | -0.13 | |
| Telecommunication services | -7.7 | -0.37 | -1.3 | -0.06 | |
| Other services | -0.6 | -0.07 | 2.0 | 0.23 | |
| Energy products | -13.9 | -1.28 | -10.5 | -0.81 | |
| Transport fuels | -14.8 | -1.27 | -11.7 | -0.83 | |
| Industrial goods | -2.2 | -0.43 | -1.4 | -0.28 | |
| Administratively controlled prices | 1.2 | 0.20 | -1.1 | -0.17 | |
| Tobacco products | 1.0 | 0.04 | 0.6 | 0.02 | |

Note: This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented 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,

The overall current and capital account surplus was EUR 2027.0 million, up EUR 702.8 million on an annual basis largely as a result of higher surpluses on both current and capital accounts related to the increase in capital transfers under EU programmes. The effect of current account flows on growth in the positive overall balance on current and capital account from 2014 was circumscribed by the increased primary income account deficit offsetting the lower trade balance deficit.

The year-on-year trade deficit contraction in 2015 reflected higher nominal Bulgarian goods exports growing faster than nominal goods imports. The decrease in international prices of major commodity groups dampened the change in nominal exports and imports. Concurrently, the exhaustion of one-off factors limiting exports in 2014 and favourable trading conditions helped boost nominal export growth *vis-à-vis* imports. Weak private consumption and private investment dynamics also dampened import developments.

In 2015 nominal goods exports grew by 5.5 per cent on the previous year. Machines, vehicles, appliances, tooling and weapons, and chemical products, plastics, and rubber had the most positive contribution to this growth, according to external trade data²⁵. Nominal goods imports rose 1.3 per cent. By end use, imports of raw materials made the largest positive contribution, followed by consumer goods. Energy commodities, reflecting decreased international prices, had a dampening effect on imports of goods.

The positive services balance in 2015 picked up from the previous year as a result largely of increased revenue in the other services sub-item. The decline in inflows on the travel sub-item stemming from fewer Russian and Greek visitors, circumscribed services balance surplus growth. At the same time, Bulgarians travelled abroad more.

²⁵ The analysis employs balance of payments data in accordance with the sixth edition of the IMF Balance of Payments and International Investment Position Manual (IMF, 2008): BPM6. BPM6 introduced major methodological changes in reporting goods and services trade, leading to a mismatch between data on them and those on international trade in goods compiled by the NSI (see the BNB balance of payments press release for February 2015).

The increased deficit on the primary income balance was one of the main drivers of current account flow dynamics. This was due mostly to higher outflows from the reinvested earnings sub-item. In addition, larger dividends and distributed profit paid to foreign investors, reflecting the upward trend in gross operating surplus in the total economy, had a key significance for developments in the primary income item. The secondary income surplus increased slightly on an annual basis.

In 2015 the BOP financial account²⁶ was negative, with its deficit shrinking from 2014 as a result of higher declines in liabilities than in assets. Bank transactions and foreign direct investment inflows were of primary importance for the financial account balance. As regards bank transactions, net assets were negative due to banks' foreign assets falling more than foreign liabilities. Preliminary BOP data for 2015 show that direct investment liabilities (reporting direct investment in Bulgaria) were EUR 1580.3 million (3.6 per cent of GDP).

The financial account balance was also influenced by government transactions. Despite the Eurobonds issue in March 2015, general government liabilities decreased from 2014, reflecting repayments on government bonds issued on international capital markets and the March repayment of the bank bridge loan disbursed in late 2014.

In December 2015 gross external debt decreased by EUR 5265.5 million from the end of 2014 to EUR 34.1 billion (77.2 per cent of GDP). Reduced intercompany debt (down EUR 3225.5 million)²⁷ and lower external bank debt (down EUR 1340.9 million) made the major contributions to this decline. Public and publicly guaranteed external debt decreased by EUR 554.3 million from December 2014. Other sectors' external debt²⁸ also declined (EUR 249.0 million), largely reflecting reduced external obligations of electricity, heating, gas and water supply, financial intermediation and construction sectors.

As a result of positive net current and capital account flows and financial account inflows, BNB international reserves increased by EUR 3729.7 million, according to the 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, their growth is estimated at EUR 3751.2 million on the end of 2014.

Continuing increases of household and non-financial corporation deposits and their reluctance to assume new obligations in an uncertain economic environment was the main driver of monetary and credit aggregate developments in 2015.

Non-government sector funds in the banking system followed an upward trend throughout 2015 with no change in households' preferred form of saving. Changes in the scope of tax on individuals' time deposit interest²⁹ and comparatively higher returns from agreed maturity deposits ³⁰ moved households to prefer time deposits to those redeemable at notice, as in 2014. Household overnight deposits also picked up, albeit less than time deposits. Non-financial corporations continued to direct their funds mainly into overnight deposits. Rising funds from the non-financial sector determined the major contribution by overnight deposits to the annual growth of broad money at the end of 2015, with a lesser contribution by money outside monetary

After introduction of the sixth edition of the Balance of Payments Manual, the financial account balance was computed by deducting the value of liabilities on the account from the value of assets for the purposes of compiling balance of payments statistical data. Under the new reporting rules, an increase in assets and liabilities is recorded with a plus sign and a decrease with a minus sign.

²⁷ This reflected mostly a unilateral write-off of a claim by a foreign creditor.

²⁸ Excluding trade and bond loan liabilities.

²⁹ An amendment to the Personal Income Tax Law in early 2015 extended the scope of income tax on deposit interest to all deposits except child ones.

³⁰ Against the background of an overall downward trend in deposit rates, there were more significant 2015 declines in rates on deposits redeemable at notice compared to other deposit rates: an incentive for households to shift savings into longer-term deposits.

financial institutions and by agreed maturity deposits. In December 2015 the growth rate of broad money accounted for 8.8 per cent (1.1 per cent in December 2014).³¹

Household and non-financial corporation deposits rose 8.5 and 18.7 per cent on 2014, contributing 5.8 and 5.0 percentage points to the overall growth of non-government sector deposits.

Monetary Aggregates

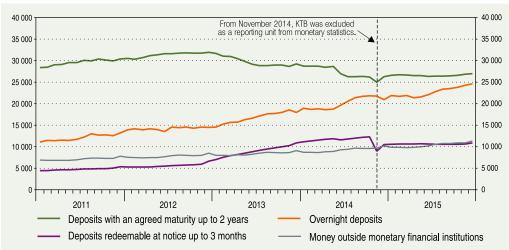
(annual change)

(per cent) 30 30 From November 2014, KTB was excluded as a reporting unit from monetary statistics. 25 25 20 20 15 15 10 10 5 0 0 -5 -5 -10 -10 -15 2011 2012 2013 2014 2015 М1 МЗ Quasi-money

Source: the BNB.

The Amount of Main M3 Components

(BGN million)



Source: the BNB

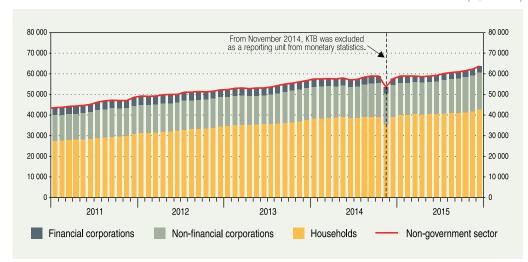
In 2015 demand for loans by non-financial corporations and households remained low. At the same time, banks continued applying conservative borrowing requirements and sold portions of their credit portfolios. In December the amount of claims on the non-government sector fell 1.6 per cent on the end of 2014. Banks' claims on both non-financial corporations and households also fell (1.6 and 1.3 per cent year on year). Loans for housing purposes made the main negative contribution to household

³¹ After the revocation of the KTB banking license, that bank was excluded as a reporting agent from interest rate statistics from November 2014. Thus, the annual change in monetary and credit aggregates between November 2014 and November 2015 also reflects the effect of this bank's removal from monetary statistics. The payout of guaranteed KTB deposits (most of which remained in the banking system) from 4 December 2014 had an additional effect on the annual change in monetary and deposit indicators.

lending growth. Overdrafts and other lending also declined, while consumer credit made a slight positive contribution over most of the year.

Deposits of the Non-government Sector and Contributions of Individual Sectors

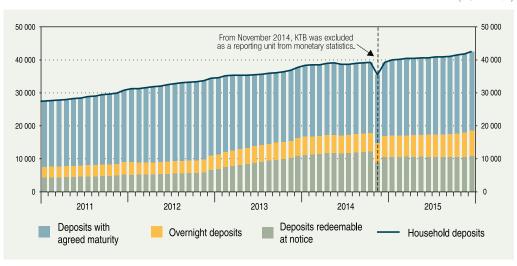
(BGN million)



Source: the BNB

Household Deposits and Contribution of Individual Types of Deposits

(BGN million)



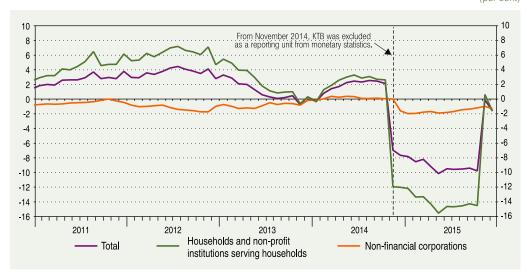
Source: the BNB.

BNB quarterly lending survey data show increased, though still relatively low, credit demand by households and non-financial corporations in 2015. The rise was more marked in consumer lending rather than loans for house purchase. Banks felt that corporate financing demand for inventories, working capital, and investment, were among the factors boosting corporate lending. In the first two quarters of 2015 banks eased lending standards on both non-financial corporations and households. In the second half of the year this policy remained unchanged for corporate lending, while consumer credit and, to a lesser extent, mortgage standards continued to ease. Banks offered more favourable conditions mainly on interest rates and fees and commissions, justified by lower costs and increased volumes of attracted funds, enhanced competition from other banks and lack of high yield alternative investment. At the same time, bank conditions on the maximum loan size and premia for riskier

corporate loans tightened slightly to reflect credit and collateral risk and the uncertain macroeconomic environment.

Claims on Non-government Sector (annual change)

(per cent)



Source: the BNB.

Amount of Claims on Non-financial Corporations and Households (annual change)

(BGN million) (BGN million) 38 000 23 000 From November 2014, KTB was excluded as a reporting unit from monetary statistics. 37 000 22 000 36 000 21 000 35 000 20 000 34 000 19 000 33 000 18 000 32 000 17 000 31 000 16 000 30 000 15 000 2011 2012 2013 2014 2015 Non-financial corporations (left scale) Households (right scale)

Source: the BNB.

Funds attracted from residents continued rising and being banks' main source of funding in 2015. In December 2015 resident deposits increased by BGN 4701 million on the end of the prior year, reflecting a BGN 6086 million rise in non-government sector deposits and a decline in government and monetary and financial sector deposits.

The continuing high household savings rate and low lending pushed up banking system liquidity. BNB measures to counteract transmission of external risks to Bulgarian banks contributed to strengthening their liquidity position.³² Declining, even negative yields in the euro area as a result of ECB monetary policy stimulated Bulgarian banks

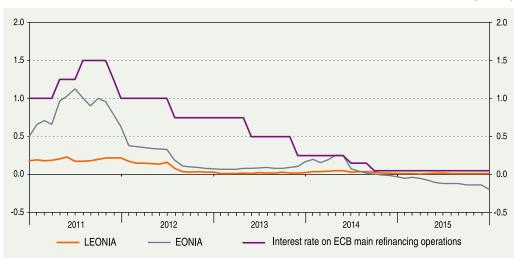
³² See Chapter VI here and the BNB Precautionary Measures to Counteract External Risks to Bulgaria's Banking System box in Economic Review, 2/2015, p. 28.

to deposit significant funds with the BNB in the form of excess reserves³³ and, to a lesser extent, investment in government bonds. In December banks' net foreign assets were BGN 2.59 billion (BGN 4.22 billion in December 2014).

Transactions in reserve currency (euro) with the BNB were banks' main instrument for managing lev liquidity. Such transactions took advantage of the main function of the currency board: buying and selling on demand national currency against euro at the fixed exchange rate under the Law on the Bulgarian National Bank.³⁴ Total foreign currency market turnover was EUR 683.1 billion,³⁵ up 91.0 per cent on 2014. An increase was recorded in the three main foreign exchange market segments: transactions between banks and the BNB, interbank trading (excluding the BNB) and trading between banks and their final customers, with the first segment posting the strongest growth.

Interbank Money Market Interest Rate

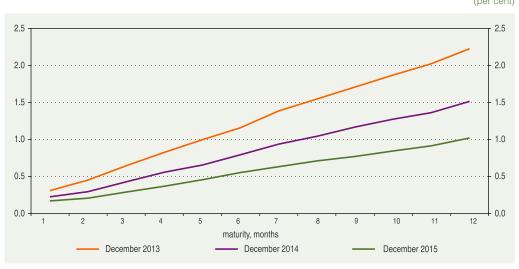
(per cent)



Sources: the BNB, the ECB.

Interbank Money Market Yield Curve

(per cent)



Note: Average SOFIBOR/SOFIBID Index.

Source: the BNB.

 $^{^{33}}$ For further information on the dynamics of banks' excess reserves, see Chapter IV of the Report.

³⁴ See Chapter II.

³⁵ This comprises transactions by banks and the BNB in foreign currency against levs with a spot value date of up to two business days and includes the double volume of trade between the BNB and banks, as well as interbank trading.

The year saw changes in the interbank foreign exchange trading structure (excluding the BNB). The share of USD-denominated transactions decreased in favour of those in euro whose share reached 93.7 per cent (83.0 per cent in 2014). In final customer trading, this structure remained broadly unchanged, euro operations comprising 86 per cent of all foreign currency transactions.

In 2015 traded volumes in the lev interbank market declined significantly from the previous year due to increased liquidity in the banking system. Subdued interbank money market trading and euro area interest rates were the main factors depressing interest rates across all maturity sectors traded between banks over the year.

The average interest rate on interbank deposits and repurchase agreements was 0.03 per cent, down 3 basis points from the average value for 2014. From early 2015 the spread between LEONIA and EONIA, close to zero at the end of 2014, expanded to 21 basis points in December 2015. This reflected the deepening decline in EONIA after the negative values attained in the last quarter of 2014 as a result of the ECB negative deposit facility rate, while LEONIA remained at a level close to zero since bank account balances with the BNB are not remunerated.³⁶

The total volume of interbank money market transactions was BGN 13.9 billion, down 70.4 per cent on the previous year. Deposits comprised 60.6 per cent of the turnover, and repo operations in government securities 39.4 per cent. Overnight transactions dominated the structure of deposits at 87.8 per cent.

In 2015 the consolidated fiscal programme deficit came to BGN 2484.2 million (2.9 per cent of GDP), down BGN 588.7 million (0.8 per cent of GDP) on 2014. The improvement in the budget position reflected both the strong revenue collection and limited growth in some current expenditure. The BGN 382 million year-on-year fall in the deficit on EU programmes contributed to the improvement in the budget balance, with a significant rise recorded in both revenue and expenditure due to the finalisation of the projects in 2015 under the 2007–2013 programme period.

Total revenue and grants grew by 9.5 per cent driven mainly by tax revenue (6.2 percentage points) and grants (2.5 percentage points). Tax revenue dynamics largely reflected higher indirect tax receipts (8.4 per cent) as a result primarily of the measures to boost tax collection and combat tax evasion, as well as the lower basis of 2014 VAT revenue reflecting one-off factors. Tax revenue growth was also stimulated by social and health insurance contributions (up 7.7 per cent) following legislative amendments introduced during the year³⁷ and higher compensation *per* employee. Corporate tax and personal income tax revenue grew 10.8 and 5.2 per cent, respectively. Non-tax revenue rose 7.2 per cent on an annual basis, and grants increased 24.9 per cent.

In 2015 total government expenditure, including the EU budget contribution, grew 6.8 per cent on the previous year, with capital expenditure contributing most.³⁸ Rising budget revenue side and the 2015 budgetary framework update helped boost capital expenditure to 39.4 per cent at the end of 2015, the last year for implementing projects under the 2007–2013 financial framework. The contribution of social payments (0.7 percentage points) to growth of total expenditure was significantly lower than in the previous year (3.2 percentage points), with this fall reflecting a base effect of higher one-off healthcare costs in 2014. Interest payments grew 20.4 per cent

³⁶ The new BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks was adopted by the BNB Governing Council on 26 November and entered into force on 4 January 2016. It introduced a definition of bank excess reserves and set a negative interest rate on excess reserves where the ECB deposit facility rate is negative, and a zero rate where the ECB has set a positive or zero deposit facility rate. See also Chapter IV.

³⁷ The amendments include raising the maximum social security income from BGN 2400 to BGN 2600, the minimum insurance income for farmers from BGN 300 to BGN 360, and minimum insurance thresholds by major economic activity and occupational groups by 4.4 per cent on average, alongside the minimum wage from BGN 340 to BGN 360 from 1 January 2015 and to BGN 380 from 1 July.

³⁸ Including growth in the government reserve.

over the year, mainly reflecting interest payments on USD-denominated global bonds maturing in January 2015 and Eurobonds issued in 2014. Public sector employee compensation costs increased slightly, the 5.2 per cent drop in operating expenditure contributing most to limiting growth in total expenditure.

Budget deficit and government debt payments in 2015 were financed mainly by the triple tranche of Eurobonds issued in March in international capital markets to the total nominal value of BGN 6161 million³⁹ (financing value of BGN 5980 million), by fiscal reserve funds of BGN 1328 million, and by gross domestic government securities financing of BGN 1308.9 million. The year saw significant government debt payments, including the bridge loan repaid at the end of March (BGN 2934 million), payments on domestic government bonds (BGN 2234 million) and on USD-denominated global bonds maturing in January (BGN 1879 million).

By the year's close the fiscal reserve amounted to BGN 7872.9 million, of which BGN 6788.7 million on deposits.

In 2015 MF issuing policy on the domestic market focused on offering lev-denominated government securities with a maturity of three, five and ten years. Demand for Bulgarian government securities in the primary market remained high, the bid-to-cover ratio reaching 2.0 (1.99 in 2014) amid a strong decline in newly issued debt instruments on 2014. The average annual yield attained in the primary market fell from 2014 in all maturity segments. In December Bulgaria's long-term interest rate⁴⁰ declined to 2.43 per cent (2.96 per cent in the same period of the previous year).⁴¹

At the end of 2015 Bulgarian Eurobonds maturing in 2017 and 2024 were traded at a premium and price of 106.3 and 103.9 (corresponding to an annual yield of 0.04 and 2.45 per cent) *vis-à-vis* an issue price of 99.2 and 99.1. Triple tranche Eurobonds issued in March 2015 and maturing in 2022, 2027 and 2035 were traded at prices of 101.8, 98.0 and 90.6 (corresponding to annual yields of 1.7, 2.84 and 3.83 per cent) *vis-à-vis* issue prices of 98.9, 98.9 and 98.42

Bulgarian Stock Exchange Indices in 2015



Sources: the BNB, the Bulgarian Stock Exchange.

³⁹ In November the MF reopened an issue of 20-year Eurobonds maturing on 26 March 2035 with a nominal value of BGN 97.79 million.

⁴⁰ The long term interest rate for assessing the degree of convergence is based on the yield to maturity in the secondary market of a long-term security (benchmark) issued by the Ministry of Finance (central government) and denominated in national currency.

⁴¹ For more information on the government securities primary and secondary market, see Chapter VIII.

⁴² The issue price of the issue reopened in November 2015 is 88.5.

The leading Bulgarian Stock Exchange SOFIX and BGBX40 indices showed downward dynamics in 2015. In December both indices declined on the previous year, with *SOFIX* falling by 11.7 per cent, and *BGBX40* by 11.3 per cent.

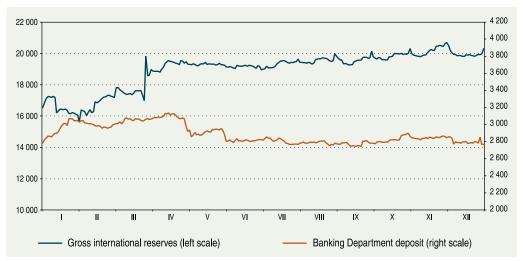
Secondary market stock trading dropped 47.8 per cent to BGN 304.4 million (BGN 583.3 million in 2014) and *bourse* trade in bonds decreased by 34.3 per cent to BGN 97.8 million. Over-the-counter equity transactions totalled BGN 685.3 million (growth of 13.9 per cent, from BGN 601.7 million in 2014) and over-the-counter bond transactions came to BGN 3.2 million (down 91 per cent from BGN 35.6 million in 2014). In December 2015 market capitalisation of the Bulgarian Stock Exchange, Sofia, was BGN 8.6 billion or 9.9 per cent of GDP (from 11.7 per cent of GDP at the close of 2014).

Gross International Foreign Exchange Reserves

The BNB manages its gross international reserves in line with the Law on the Bulgarian National Bank, ⁴³ investment constraints, business procedures and methodologies, and opportunities offered by international financial markets. They comprise the Issue Department balance sheet assets, and their role is to provide complete coverage for monetary liabilities at the fixed exchange rate of the lev to the euro set out in the Law on the Bulgarian National Bank. ⁴⁴ The excess of gross international reserves over monetary liabilities forms the Banking Department deposit item or the net value of the Issue Department's balance sheet. ⁴⁵

Gross International Reserves and Banking Department Deposit in 2015

(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.

The Amount and Structure of Gross International Reserves

By the end of 2015 the market value of gross international reserves was EUR 20,285 million: an increase of EUR 3751 million,⁴⁶ or 22.69 per cent on the end of 2014. Major factors affecting the market value of assets include income from asset man-

⁴³ There were no Law on the BNB amendments concerning the regulatory framework for gross international reserve management in 2015.

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 foreign 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 international financial organisations or other foreign financial institutions with one of the two highest ratings from two international financial organisations or other foreign financial institutions with one of the two highest ratings from two international financial organisations or other foreign financial institutions with one of the two highest ratings from two international financial organisations or other foreign financial institutions with one of the two highest ratings from two international financial organisations or other foreign financial institutions with one of the two highest ratings from two international financial organisations.

⁴⁵ According to the Law on the BNB Article 28, paragraph 1, of "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.

⁴⁶ Balances in banks' TARGET2 national system component accounts (worth EUR 62 million at the end of 2015), and the two tranches of SDR 611 million disbursed in August and September 2009 upon general SDR allocation by the IMF are not included in the analysis of changes in BNB gross international reserves below. For further details, see BNB Annual Report, 2009, p 25.

agement, income from foreign currency revaluation and external cash flow effects. to the increase in international reserves. The increased market value of international reserves reflected mainly foreign currency inflows into MF accounts from government bond issues sold on international financial markets and cosh inflows. with the BNB. Banks' net sales of reserve currency at EUR 998 million also had a significant positive contribution, unlike 2014 when there were EUR 2926 million of net outflows. Net funds of EUR 843 million were deposited into bank accounts with the BNB (including bank minimum reserves). The analogous cash flow in 2014 was negative as EUR 101 million net were refunded to banks. The year saw the following more significant foreign currency payments and revenue from and into government § accounts:

- receipts of EUR 3056 million with a value date 26 March 2015 from government bond issues on international financial markets;
- principal and interest global bond repayments of USD 1131 million transferred on 14 January 2015 and bridge loan repayments of EUR 1505 million (a loan disbursed to the MF at the end of 2014) to HSBC Bank Plc, Société Genérale, Citibank N.A. (London), and UniCredit Bulbank.

External Cash Flows in Foreign Currency

(EUR million)

| | 2014 | 2015 |
|-------------------------------------------------|---------|---------|
| I. Euro purchases and sales | | |
| at tills | -44 | -36 |
| with banks | -2 926 | 998 |
| purchases from banks | 38 337 | 41 214 |
| sales to banks | -41 263 | -40 216 |
| Subtotal I | -2 970 | 962 |
| II. Currency flows with banks, the MF, etc. | | |
| Bank reserves (incl. minimum required reserves) | -101 | 843 |
| Government and other depositors | 5 122 | 1 825 |
| Subtotal II | 5 020 | 2 668 |
| Total I+II | 2 050 | 3 630 |

Source: the BNB.

In 2015 the share of monetary gold in the Issue Department balance sheet declined to 7.50 per cent from 8.84 per cent for 2014, reflecting largely strong cash inflows boosting the share of euro-denominated assets to 91.55 per cent.

Currency Structure of Gross International Reserves

(per cent)

| Currency | Issue Department b | Issue Department balance sheet assets | | |
|----------|--------------------|---------------------------------------|--|--|
| Currency | 2014 | 2015 | | |
| EUR | 90.51 | 91.55 | | |
| USD | 0.36 | 0.70 | | |
| XAU | 8.84 | 7.50 | | |
| XDR | 0.28 | 0.24 | | |
| CHF | 0.01 | 0.01 | | |

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

Source: the BNB

The share of deposits increased in the structure of assets by financial instrument at the expense of securities, mainly reflecting a higher liquidity portfolio in euro maintained in 2015 as a precaution against potential deepening of the Greek crisis. Most assets (70 per cent) continued to be invested in securities.

Gross International Reserves by Financial Instrument

(per cent)

| Financial instruments | 2014 | 2015 |
|-----------------------|-------|-------|
| Vault cash* | 4.62 | 4.51 |
| Deposits** | 19.65 | 25.54 |
| Securities** | 75.73 | 69.95 |

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

Source: the BNB.

In 2015 the bulk of assets in the structure of international reserves by residual term to maturity continued to be invested in the maturity sector of up to a year (current accounts, short-term deposits in foreign currency and gold, and short-term securities), its share averaging 57.27 per cent. Investment in the one to three year maturity sector declined, while that in the three to five year and five to ten year sectors posted growth, as shown in the table below.

Gross International Reserves by Residual Term to Maturity

(per cent)

| Maturity sectors | 2014 | 2015 |
|---------------------|-------|-------|
| Up to a year | 59.66 | 57.27 |
| One to three years | 28.33 | 18.50 |
| Three to five years | 8.18 | 13.88 |
| Five to ten years | 3.84 | 10.35 |
| Over ten years | 0.00 | 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 2015 international financial market developments mainly reflected market participants' expectations of Federal Reserve and ECB monetary policy measures, largely driven by unfavourable inflationary trends amid significant oil and commodity price declines. Global geopolitical uncertainty, Greek political uncertainty, and Chinese economic and financial developments were the main sources of 2015 financial market volatility.

In the first months of the year financial markets, and particularly EU government bond markets, were most affected by the announcement and implementation of the ECB's expanded public and private sector asset purchase programme with a monthly volume of EUR 60 billion. Euro area money and bond market interest declined steadily, government bond yields in some countries reaching historic lows. At the end of April there was a sharp and mostly unexpected rise in euro area bond yields. Strong European government bond fluctuations continued until mid year, amplified by market concerns about Greek solvency.

In the third quarter international financial markets reflected mostly Chinese economic and financial processes, including the People's Bank of China decision to change the methodology for setting the CNY/USD exchange rate.

In the last months of the year US labour market conditions improved, while the euro area continued growing slowly amid steady inflation and inflation expectation falls arising from renewed oil price declines. Market expectations of growing euro area and US monetary policy divergences mostly drove financial market developments over the period. In December the ECB launched additional expansionary monetary policy incentives whose size and scope fell well below market expectations. The Federal

 ^{*} Account balances, payments, and monetary gold.

^{**}Including instruments in foreign currency and gold.

Reserve's unanimous decision to raise the target range for the federal funds rate was largely expected by investors.

ECB and Federal Reserve System Policies

Persistently low inflation prospects for the euro area prompted the ECB to apply additional standard and non-standard monetary policy measures. At its 22 January 2015 monetary policy meeting, the ECB Governing Council announced an expanded asset purchase programme (APP). In March 2015 the ECB and euro area NCBs decided to purchase EUR 60 billion of public and private assets *per* month until September 2016, or some EUR 1.1 trillion altogether. The APP included bond purchases under the Covered Bond Purchase Programme 3 (CBPP3) and the Asset-backed Securities Purchase Programme (ABSPP) which began at the end of 2014, plus additional secondary market purchases of EUR-denominated bonds issued by euro area governments, agencies, and European institutions (Public Sector Purchase Programme, PSPP). Implementing the ECB programmes and Targeted Longer-term Refinancing Operations, the ECB aimed to increase its balance sheet figure gradually to the level of early 2012 (about EUR 3 trillion).

In the second half of 2015 inflation and economic growth outlooks worsened as the downward trend in oil prices resumed, and the uncertainty about financial and economic processes in developing economies prompted concern about global economic growth and contributed to global financial market turbulence. In September this led the ECB to revise its euro area inflation and economic growth forecasts for 2015, 2016, and 2017 downwards, with risks considered to lie on the downside for the whole period. At its 3 September meeting, the ECB Governing Council expressed a willingness to initiate additional monetary policy measures if necessary.

Continuing unfavourable euro area inflation prospects justified the 3 December ECB decision at 2015's last Governing Council meeting to cut the deposit facility rate by 10 basis points to -0.30 per cent, effective from 9 December 2015. On non-standard measures of monetary policy, the Governing Council decided: 1. to extend the asset purchase programme (APP) until the end of March 2017, while continuing monthly purchases of EUR 60 billion; 2. to continue reinvesting the principal payments on securities purchased under the APP as they mature for as long as necessary; 3. to include euro-denominated marketable debt instruments issued by euro area regional and local governments in the public sector purchase programme (PSPP); 4. to continue offering ample liquidity through the full allotment procedure in its regular refinancing operations, *i.e.* main refinancing operations (MROs) and three-month longer-term refinancing operations (LTRO) for as long as necessary, and at least until the end of 2017. The ECB Governing Council expected the extension of the APP term and reinvestments of maturing securities to boost euro area banking system liquidity by EUR 680 billion (6.5 per cent of euro area GDP) until 2019.

ECB operations and programmes boosted euro area excess liquidity and the ECB balance sheet figure significantly in 2015. By the year's end excess liquidity rose to EUR 661 billion, from EUR 235 billion at the end of 2014, and the ECB balance sheet figure rose 29 per cent to EUR 2768 billion. This was mainly thanks to EUR 491.2 billion of PSPP purchases since the beginning of the programme, CBPP3 purchases of EUR 113.7 billion by the end of 2014, ABSPP purchases of EUR 13.6 billion by the end of 2014, and the four TLTROs worth EUR 205.5 billion.

EONIA reference overnight interest moved between -0.24 and 0.09 per cent, its average annual level reaching -0.11 per cent *vis-à-vis* 0.10 per cent in 2014. In 2015 EURIBOR, the average interest at which euro area banks borrow time deposits from one another, also decreased, and interest in the up to six month maturity sectors turned negative by the year's close. Compared to the end of 2014, one and three-month interest rates fell by some 22 basis points to -0.21 and -0.13 per cent, while six and 12-month rates went down 21 and 27 basis points to -0.04 and 0.06 per

cent. Credit and liquidity risk premia measured by the EURIBOR-OIS spread changed insignificantly, with those in the three and six-month segments reaching 10 basis points (unchanged from the end of 2014) and 22 basis points (-1 basis point from the end of 2014).

At its 15–16 December meeting, the FOMC decided to increase the target ranges for the federal funds rate by 25 basis points. This ended the policy of keeping reference money market rates close to zero and launched monetary policy normalisation in the United States. ⁴⁷ The intention to raise reference interest rates was announced as early as the March meeting and led to a gradual increase in market expectations of a higher central bank target rate. It is only at its last 2015 meeting that the FOMC decided unanimously to lift the upper and lower limits of the federal funds rate corridor by 25 basis points each to 0.25 and 0.5 per cent, given marked improvements in US labour market conditions and confidence that inflation would rise to the 2 per cent target in the medium term. To maintain favourable lending conditions, the policy of reinvesting proceeds from maturing treasury securities and mortgage-backed bonds on the Federal Reserve's portfolio in new similar instruments remained unchanged.

Euro Area and US Sovereign Bond Yields

In 2015 German government bond yields declined sharply to a historic low in the short and medium maturity sectors. Yields in long-term maturity sectors grew, resulting in a 34 basis point expansion of the yield curve measured by the difference between ten and two-year bond yields. Lower German government bond yields fell by 25 basis points to -0.35 per cent in the two-year maturity sector and increased by 9 basis points to 0.63 per cent in the ten-year sector. By the end of the year all German government bonds with maturities under five years traded at negative annual yields. Large German yield curve fluctuations accompanied these yield developments over the year, especially in long-term maturities.

In the first months of the year German government bond yields followed a downward trend, arising from market expectations that PSPP purchases will lead to significant declines in secondary market bonds of euro area countries. On 20 April 2015 German ten-year yields reached a historic low of 0.08 per cent. The trend reversed later, yields beginning to rise dramatically. Concentrated in long-term maturity sectors and accompanied by very high volatility, the rise was unexpected by most market participants.

The second half year saw worsening prospects for euro area inflation mainly because of a significant decline in oil prices. These developments prompted increased market expectations that the ECB would initiate additional monetary policy measures, pushing down German short and medium-term yields. Financial and economic developments in China over the third quarter also depressed German bond yields since increased international financial market turbulence reduced the risk appetite of market participants and stimulated flight-to-safety portfolio shifts. However, the additional ECB December measures appeared more limited in size and scope, leading on 3 December to a significant rise in euro area government bond yields in all maturity sectors. Additional factors for yield rises by the year's end were the 16 December Federal Reserve decision to raise the federal funds rate and favourable economic activity data for the euro area.

Compared to the reference German bonds, euro area periphery government bond yield spreads contracted broadly during 2015. The decrease resulted mainly from economic and fiscal indicator improvements in individual countries and additional ECB monetary policy measures, in particular PSPP. In the second quarter downward spread trends temporarily halted amid market concerns about Greek solvency and

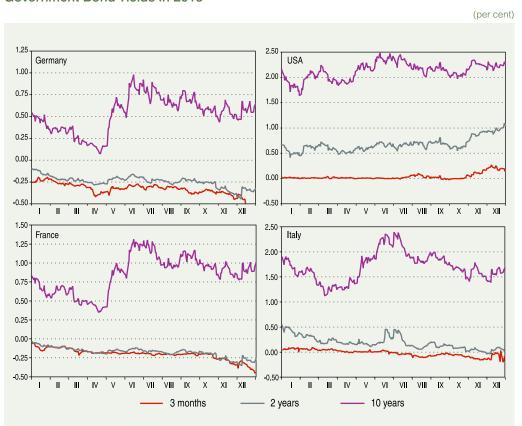
⁴⁷ For further details, see the box *Monetary Policy Normalisation in the United States* in *Economic Review*, 4/2015, pp 16–18.

its potential impact on euro area economies, speculations about possible ECB bond purchase cuts, and heightened European government bond market volatility. Agreement between Greece and its official creditors for a new three-year European Financial Stability Facility loan and ECB readiness to launch an additional quantitative easing programme in the second half year further depressed euro area periphery yield spreads. In the two-year maturity sector, the largest yield spread declines in 2015 were recorded by Italy (32 basis points) and Spain (15 basis points) to 32 and 35 basis points, and in the ten-year sector by Italy and Portugal (by 38 to 97 basis points and by 26 to 189 basis points).

Core euro area government bond yield spreads shrank slightly in the two-year segment and expanded in the ten-year segment. Ten-year spreads increased most in Finland (by 17 to 29 basis points) and Austria (by 17 to 27 basis points). The Finnish rise was largely due to credit rating downgrades by the three major rating agencies. The Austrian rise was prompted by Fitch's one step credit rating downgrade due to high sovereign debt and low economic growth.

Over 2015 the US government securities yield curve measured by ten and two-year bond yield differences decreased by 29 basis points on 2014. This reflected a higher rise in two-year yields (by 38 basis points to 1.05 per cent and by 10 basis points to 2.27 per cent). Market expectations of US federal funds rate rises in the second half of 2015 were the main driver boosting short-term bond yields. The lower increase in US medium and long-term yields, however, reflected several factors, such as additional ECB expansionary monetary policy measures, enhanced flights to safety amid concerns of a significant world economic slowdown, declining of long-term inflation expectation indicators, and significant global oil price declines. The FOMC announcement of federal funds rate target range rises was largely expected by market participants and led to no significant changes in US government bond prices.

Government Bond Yields in 2015



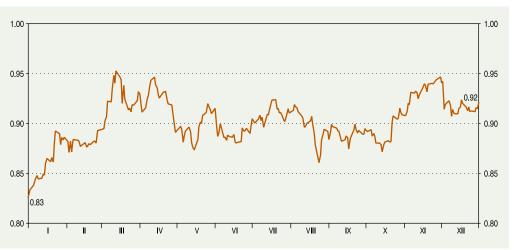
Gold and Exchange Rates

In 2015 the price of gold fell 10.6 per cent in US dollars and 0.4 per cent in euro. It varied between USD 1053 and USD 1301 and EUR 966 and EUR 1155 *per* troy ounce. In early 2015 gold prices rose as investors increasingly sought a safe haven mainly following Greek political uncertainty and the surprising Swiss National Bank decision to abandon its currency cap against the euro. The ECB expanded asset purchase programme also helped the gold price increase. The upward trend was reversed in the second half year, however, because of strong US dollar appreciation and rising market expectations that the Federal Reserve System would raise its target interest rate by the year's end. Lower demand for gold as a hedge against inflation was also a factor for its price decline.

In 2015 the US dollar appreciated cumulatively by 11.4 per cent on the euro, the increase most pronounced in the first quarter of the year. The USD/EUR rate moved between USD 1.05 and USD 1.21 per EUR 1 (EUR 0.83 to EUR 0.95 per USD). The dollar considerable appreciation against the euro in the first months of 2015 was primarily due to the announcement and implementation of the ECB's expanded public and private sector asset purchase programme. It was helped by US labour market recovery and Federal Reserve communications prompting expectations of a rise in the federal funds rate. Growing uncertainty about Federal Reserve policy stance intensified foreign market fluctuations in the second and third quarters. Over the period USD/EUR exchange rate developments broadly followed the interest rate differentials between German and US long-term yields. Another factor was People's Bank of China decision to change the methodology for setting the CNY/USD exchange rate. Market concerns that this might cause a planned devaluation of the Chinese currency led to strong fluctuations in exchange rates of many currencies against the US dollar, including the euro. By the year's end USD/EUR dynamics mostly reflected investor expectations of ECB and Federal Reserve monetary policies. The additional ECB measures announced in December did not match expectations and prompted a significant euro rise against the dollar. However, the Federal Reserve's decision to raise the target range for the federal funds rate was expected by most investors and therefore caused no significant change in the dollar euro rate.

The USD/EUR Exchange Rate in 2015

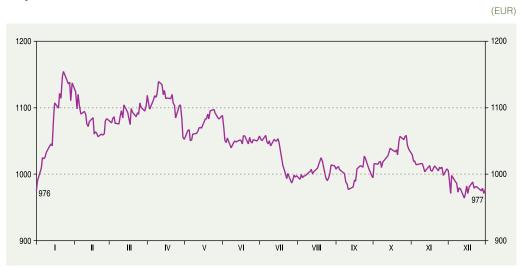




Troy Ounce Gold Price in US Dollars in 2015



Troy Ounce Gold Price in Euro in 2015



Major Risk Types

Over 2015 net value risk in the Issue Department balance sheet measured by valueat-risk (VaR) came to 13.67 per cent on an annual basis.⁴⁸

International reserve interest rate risk measured by reserves' average modified duration was 1.77 years. The duration maintained in 2015 was longer than the average for 2014. From the beginning of the second quarter, the BNB raised the limit for a maximum deviation in modified duration of investment portfolios from that of the respective benchmark to ±0.40 years, in mid-June setting a narrower range of -0.40 to +0.05 years due to significantly greater global bond market fluctuations. From the beginning of October, the upper limit was changed to +0.10 years.

International reserve currency risk was constrained by the Law on the Bulgarian National Bank provision that the sum of the absolute values of open foreign currency positions⁴⁹ in currencies other than the 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 maintained for operational

⁴⁸ VaR=-X% (X>0) at 95 per cent confidence level and allowing for normal yield allocation means that 95 per cent of the time maximum net value loss would not exceed X per cent.

⁴⁹ An open foreign currency position is the difference between the value of assets and liabilities in any currency other than euro

objectives in the reporting period, the open position in monetary gold posing the main currency risk to the BNB.

The Bank continued its conservative policy on controlling **credit risk** in government and government guaranteed debt investment and retained constraints on sovereign issuers which are conditionally divided into three inherent risk groups. To achieve its main objectives by ensuring high international reserve security and liquidity, the BNB continued to invest the main part of assets into government securities and German government guaranteed debt, and into short-term deposits with first class foreign banks.

The year saw some changes to investment constraints related to credit risk management, intended to utilise investment opportunities better in the context of historically low interest rates, greater financial market fluctuations and recent geopolitical uncertainty. Given persistently low government euro bond yields (reaching negative values in some countries and sectors), the maximum term to maturity of main assets into which international reserves may be invested lengthened in the review period.

The BNB continued its efforts to expand investment opportunities in secured debt issued by financial institutions assigned highest credit ratings. To this end, in early 2015 the maximum weight of investment into secured debt rose from 25 to 30 per cent, while the maximum weight of investment into banks was cut from 30 to 25 per cent of all Issue Department assets. These changes were in force until June when these limits reverted to their previous levels due to the significant change in financial market conditions and increased volatility in euro area bond markets.

By the end of 2015 some 68 per cent of international reserves was invested into assets with the highest AAA long-term credit rating.

Operational risk management involved thorough and strict monitoring and control of investment restrictions and limits, while observing relevant rules and business procedures for international reserve management.

Return and Efficiency

Net income from assets comprised these three components:50 i. income from investment of gross international reserves in original currency; ii. currency imbalance income⁵¹, and iii. expenditure on liabilities. BNB earnings from international reserve investment were negative at EUR -7.80 million, or 0.01 per cent cumulative income for 2015. Net returns were positive, while net income was negative, because foreign currency inflows and outflows changed the market value of international reserves in individual quarters, giving a unit of percentage return different values as absolute income. Thus, most of the cumulative return was generated in the first two quarters: a positive return in the first quarter and a negative one in the second quarter. The market value of assets in the second quarter was significantly higher due to strong cash inflows. As a result, the negative income recorded in the second quarter could not be fully offset by the positive income in the first and last two quarters of 2015. Currency imbalance income was EUR -0.70 million. Interest paid on Issue Department balance sheet liabilities⁵² was EUR 0.04 million. These three components brought net returns from international reserve management to EUR -8.54 million, a 0.12 per cent net return on assets for 2015.

⁵⁰ Each net income component is obtained by accruing compound interest on its daily returns for the relevant quarter. Thus, the simple sum of returns by given component by quarter (or components by quarter) may differ from the value of total annual return (or the value of total return for the relevant quarter).

⁵¹ Currency imbalance income is the result of the effects of exchange rate movements on assets' and liabilities' open foreign currency positions.

⁵² Data on Issue Department liabilities are not entered directly into the international reserve management information system; they enter the system *via* the accounting system interface.

International Reserves Income and Return in 2015

| Period | Net income (EUR million) | Net return (per cent) ¹ | 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 | 247.33 | 1.51 | 84.51 | 0.52 | 162.82 | 0.99 | 0.00 | 0.00 |
| Second quarter | -206.09 | -1.10 | -139.25 | -0.75 | -66.84 | -0.36 | 0.00 | 0.00 |
| Third quarter | -39.47 | -0.21 | 31.28 | 0.17 | -70.74 | -0.38 | -0.01 | 0.00 |
| Fourth quarter | -10.30 | -0.06 | 15.66 | 0.08 | -25.95 | -0.13 | -0.02 | 0.00 |
| Total | -8.54 | 0.12 | -7.80 | 0.01 | -0.70 | 0.11 | -0.04 | 0.00 |

¹ Return between time T_o and time T_N is calculated by chain linked returns for this period. It is calculated using the following formula: $R(T_o, T_w) = (1 + r_f)/(1 + r_s) \dots (1 + r_N) - 1$. This formula for calculating investment returns comply fully with the Global Investment Performance Standards (GIPS).

Source: the BNB.

Portfolio Return and Risk in 2015

| | Ref | turn | Volatili | Information | | |
|-------------------------|---------------------|--------------------------------------|-------------------------|--------------------------------------|--------------------|--|
| Portfolio | Absolute (per cent) | Relative ¹ (basis points) | Absolute (basis points) | Relative ² (basis points) | ratio ³ | |
| Investment 1, EUR | 0.02 | -5 | 82 | 15 | -0.35 | |
| Investment 2, EUR | 0.03 | -4 | 77 | 18 | -0.23 | |
| External manager A, EUR | 0.11 | 1 | 184 | 6 | 0.11 | |
| External manager B, EUR | 0.02 | 0 | 183 | 13 | 0.03 | |
| Liquid, EUR | -0.11 | 15 | 1 | 1 | - | |
| Liquid, XAU | 0.41 | - | 7 | - | - | |
| Liquid, USD | 0.27 | 26 | 4 | 4 | - | |

¹ A portfolio's positive relative return is the attained profit against benchmark return. Relative returns with a negative sign are interpreted as opportunity cost in portfolio management.

Source: the BNB.

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

To diversify management styles and reduce operational risk, most euro-denominated assets continued being distributed into two investment portfolios with identical benchmarks and investment limits, managed by different BNB teams. By the end of 2015 around 4 per cent of gross international reserves was managed by external managers that were international financial institutions. Beside additional diversification, using external managers helped exchange expertise in international market investment management. Liquid portfolios were intended mainly to assist immediate BNB foreign currency payment needs.

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.

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.

Lev settlement systems are:

- RINGS, a real-time gross settlement system, operated by the BNB;
- Ancillary systems settling transactions in RINGS:
 - BISERA, for settling customer transfers at a designated time, operated by BORICA-Bankservice AD;
 - BORICA, for servicing bank card payments in Bulgaria, operated by BORICA– Bankservice AD;

Euro settlement systems in Bulgaria include:

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

Securities settlement systems are:

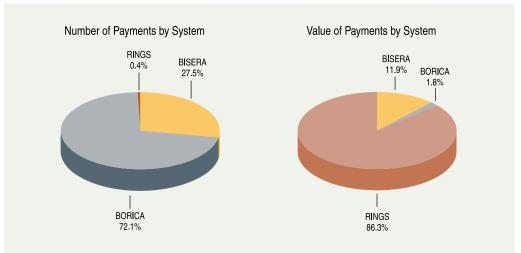
- The book-entry government securities settlement system, run by the BNB;
- The book-entry securities registration and servicing system, run by the Central Depository.

Lev Payment Systems

In 2015 the RINGS real-time gross settlement system processed the bulk of lev payment value in Bulgaria (86.3 per cent)⁵³. This helps mitigate payment risk. RINGS also processed 0.4 per cent of the total number of lev non-cash payments in Bulgaria. In 2015 transactions through BISERA rose by 7.4 per cent in value and 8 per cent in number compared with the previous year. BORICA transaction value rose 15.4 per cent and number 9.7 per cent on 2014. ATM cash withdrawal value and number picked up 12.8 and 5.5 per cent. BORICA authorised POS terminal transaction value rose 194.1 per cent and 257 per cent in number. As of 31 December 2015, the BNB and 28 banks participated in RINGS.

⁵³ Values around 80 per cent are deemed optimal for the operation of real-time gross settlement systems.

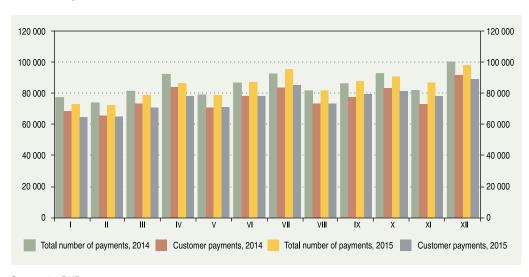
Distribution of Lev Payments in Bulgaria by Payment System in 2015



Source: the BNB.

In 2015 RINGS processed 1,015,424 payments totalling BGN 928,714 million: a decrease of 0.9 per cent in number and an increase of 46.5 per cent in value on 2014. Customer payments numbered 913,125 (89.9 per cent of the total) for BGN 193,990 million (20.9 per cent of the total). The daily average number of payments *via* the system was 4029 and their daily average value was BGN 3685 million. Payments processed by noon accounted for 53.3 per cent and those processed by 2:30 pm 88.7 per cent. As regards system traffic, 82.8 per cent of RINGS payments went through by 2:30 pm.

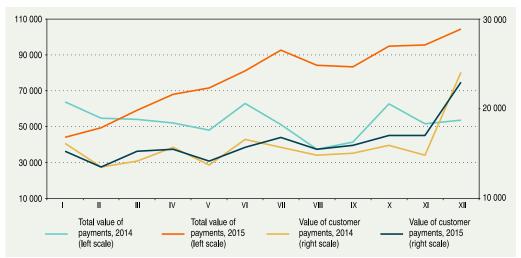
RINGS Payment Numbers in 2014 and 2015



Source: the BNB

RINGS Payment Value in 2014 and 2015

(BGN million) (BGN million)



Source: the BNB.

In the review period RINGS offered 99.91 per cent availability.54

Euro Payment Systems

The BNB operates the TARGET2-BNB national system component and is responsible for the business relations of its participants and the coordination with the European Central Bank and the participating banks.⁵⁵ On 31 December 2015 the TARGET2-BNB national system component included the BNB, 22 direct participant banks, four addressable BIC holders, and two ancillary systems: the BISERA7-EUR for settling customer transfers in euro at a designated time and the BNBGSSS for registering and settling government securities operations denominated and payable in euro.⁵⁶

In 2015 TARGET2-BNB processed 232,745 payments for EUR 386,163 million, including 191,182 customer payments for EUR 8261 million. Payment number rose 7.49 per cent and value fell 19.06 per cent on 2014.

Payments by other system components to banks were 90.34 per cent of the number and 77.92 per cent of the value of all TARGET2-BNB payments. The daily average number of system payments was 910, their value reaching EUR 1503 million. The daily number peak of payments ordered by TARGET2-BNB participants was 1805, with a daily transaction value peak of EUR 4734 million.

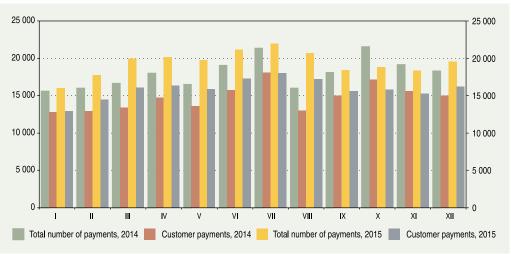
The BISERA7-EUR ancillary system processes customer transfers in euro at a designated time. Over the review period the BISERA7-EUR system processed 34,818 payments for EUR 402 million, up 20 per cent in number and 39 per cent in value on 2014.

 $^{^{54}}$ The ratio of time when the system is operational to scheduled operating time.

⁵⁵ TARGET2 settles gross euro payments in real time with central bank money. It is a Single Shared Platform (SSP) system, each participating and connected central bank responsible for its system component. On 31 December 2015 the ECB and 23 EU central banks connected with TARGET2.

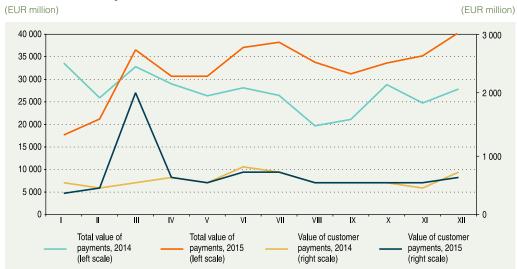
⁵⁶ For a current list of TARGET2 participants in TARGET2-BNB, see the BNB website: http://www.bnb.bg/PaymentSystem/PSTARGET2/PSTARGETList/index.htm?toLang=_EN As of 31 December 2015 the BISERA7-EUR ancillary system includes 13 of 22 direct participant banks in TARGET2-BNB.

TARGET2-BNB Payment Numbers in 2014 and 2015



Source: the BNB.

TARGET2-BNB Payment Value in 2014 and 2015



Source: the BNB

The Single Euro Payments Area (SEPA) is the most significant move to harmonise EU small payment practice and standards. By late 2015 almost all banks and foreign bank branches in Bulgaria handled SEPA credit transfers. Their share was 59.2 per cent of all customer euro payments under Regulation (EU) No 260/2012 of the European Parliament and of the Council of 14 March 2012 Establishing Technical and Business Requirements for Credit Transfers and Direct Debits in Euro.

The BISERA7-EUR payment system for small payments in euro, operated by BORICA–Bankservice AD, processes only SEPA credit transfers and direct debits. To ensure banks' availability in processing SEPA payments to and from foreign banks in other countries, BISERA7-EUR connected with SEPA Clearer, Equens and EuroELIXIR. This allows SEPA crediting between banks in Bulgaria and other EU Member States, mainly Germany, Greece, Italy, the Netherlands, Poland, as well as Switzerland.

Payment Systems and Payment Oversight

Bulgarian Payment and Settlement System Development

As of 31 December 2015 EMV standard cards⁵⁷ comprised 91.3 per cent of all cards issued in Bulgaria, including 90.4 per cent of debit and 99.8 per cent of credit cards. EMV implementation into the card payments infrastructure was almost complete, with 100 per cent of ATMs and 99.9 per cent of POS terminals migrated to EMV.

Regulation (EU) No 2015/751 of the European Parliament and of the Council of 29 April 2015 on Interchange Fees for Card-based Payment Transactions was adopted on 8 June 2015. It caps interchange fees for payments by customer debit and credit cards due by the retail trader's bank to the card-holder's bank for each purchase paid by card. The regulation has mandated the European Banking Authority to develop regulatory technical standards to meet set requirements.

In 2015 the BNB acted and proposed legislative changes to introduce the requirements of Directive 2014/92/EU of the European Parliament and the Council of 23 July 2014 on the Comparability of Fees Related to Payment Accounts, Payment Account Switching, and Access to Payment Accounts with Basic Features. The Directive harmonises EU requirements in three major areas: comparability of fees charged by banks and other payment service providers on payment accounts; establishing a quick and simple procedure for consumers wishing to change payment service providers within countries; enabling consumers legally residing in the EU to open payment accounts for basic payment operations irrespective of their place of residence and financial status. The deadline for transposing the Directive's requirements into Member States' legislations is 18 September 2016.

Payment Systems Oversight

The Law on the BNB and the Law on Payment Services and Payment Systems mandate the Bank to regulate and supervise payment system operators, securities settlement systems operators as regards payment operations, payment institutions, electronic money institutions and other payment service providers. The BNB oversees compliance with national and European statutory requirements and relevant international principles, standards and recommendations.

On 15 January 2015 the BNB Governing Council, finding that all Law on Payment Services and Payment Systems and BNB Ordinance 16 statutory requirements were met, licensed Credibul EAD to provide payment services under Law on Payment Services and Payment Systems Article 4, item 4b and item 5 for payment card and similar transactions where the funds are covered by a credit line to a payment service user, and to issue payment instruments and/or accept payments *via* payment instruments.

On 30 January 2015 the BNB approved the transfer of TBI Financial Services Bulgaria EAD equity in TBI Credit EAD to Transact Europe Holdings OOD under Law on Payment Services and Payment Systems Article 77g. TBI credit EAD, a BNB licensed payment institution and electronic money institution, changed its name to Transact Europe EAD.

On 30 July 2015 the BNB Governing Council declined an electronic money licence to the Blue Sky Electronic Money Company AD on finding that Law on Payment Services and Payment Systems Article 77, paragraph 2 in connection with Article 10, paragraph 4, items 5, 6, and 7, and Article 77a, paragraph 1 had not been met.

On the same day the BNB Governing Council revoked the payment institution license of SEL INT Bulgaria EOOD (formerly Coinstar Money Transfer [Bulgaria] EOOD) on finding that the institution had not provided payment services for more than six months and no longer met the provisions of Law on Payment Services and Payment Systems Article 10, paragraph 4, item 5a and item 7.

⁵⁷ 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.

On 5 October 2015 the BNB Governing Council, on finding that all statutory requirements of Law on Payment Services and Payment Systems and BNB Ordinance No 16 had been met, licensed BNP Paribas Personal Finance to provide payment services under Law on Payment Services and Payment Systems Article 4, item 4b and item 5 on payment card and similar instrument payment transactions where funds are covered by a credit line to a payment service user, and to issue payment instruments and/or accept payment instrument payments.

By the end of 2015 there were ten payment institutions and electronic money institutions licensed by the BNB.

In 2015 the Bank inspected two payment service providers. The aim was to check whether payment service providers complied with the Law on Payment Services and Payment Systems and its statutory instruments. The Bank also inspected two institutions to establish whether they had issued electronic money and offered payment services without due license. As a result the maximum penalty was imposed on one of the institutions for operating as an electronic money institution.

In 2015 the following entries and deletions were made to relevant BNB registers under Law on Payment Services and Payment Systems Article 7 and BNB Ordinance 16 Article 17:

- 313 agents were listed and 196 agents were delisted in the public register of licensed payment institutions and electronic money institutions;
- 87 payment institutions and electronic money institutions licensed elsewhere in the EU and eligible to operate in Bulgaria, were listed. Eighty four payment service providers' agents from other EU Member States were also listed.

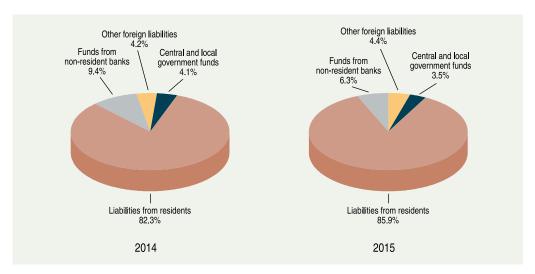
The year saw enquiries into 176 complaints submitted to the BNB by individual and corporate payment service users.

IV.

Banks' Reserves at the BNB

In 2015 the average daily value of banks' attracted funds for reserve calculation purposes (excluding central and local government budget funds) went up 0.2 per cent on 2014. This was due to a 3.7 per cent increase in lev-denominated liabilities and a 3.3 per cent decrease in foreign currency liabilities. The average daily value of residents' funds (excluding budgeted central and local government funds) rose by 4.0 per cent, and those from non-residents dropped by 22.4 per cent. Banks' central and local government liabilities went down by 13.1 per cent. The change in the structure of attracted funds boosted the effective implicit ratio of minimum required reserves by 0.02 percentage points on 2014 to 9.1 per cent on average for the year.⁵⁸

Structure of Attracted Funds in the Banking System*



* Average daily value for reserve calculation purposes. Source: the BNB.

Reserve assets covering this ratio include funds in banks' BNB accounts (8.0 per cent) and half of cash balances designated as reserves (1.1 per cent). In 2015 the average daily value of lev assets dropped 14.5 per cent on average from the prior year, while euro assets rose 35.9 per cent. This changed the currency structure of banks' reserve assets, the euro's relative share going up to 45.0 per cent on average from 34.2 per cent in 2014.

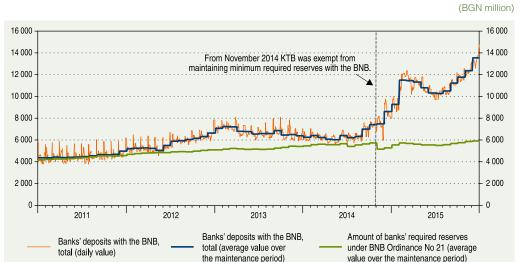
The upward trend in banks' excess reserves continued through the year, exceeding the minimum required reserves under Ordinance No 21 by 127.8 per cent in December 2015. The high level of excess reserves in the Bulgarian banking system resulted from the continuing significant inflow of deposits into the system and the low credit demand in the economy, with ECB monetary policy⁵⁹ contributing. Funds in banks' BNB Ordinance No 21 accounts exceeded minima by 93.5 per cent on average for 2015 from 15.3 per cent in 2014. In addition to funds in minimum required reserve accounts and excess reserves, banks kept funds in TARGET2-BNB national system

⁵⁸ BNB Ordinance No 21 sets banks' minimum reserves at 10 per cent of their domestic and 5 per cent of their foreign deposit base. Central and local government funds are exempt (0 per cent).

⁵⁹ In June the ECB introduced negative interest rate on the deposit facility which led to significant falls in money market rates, three-month EURIBOR interbank rates turning negative by December 2015.

component accounts, whose recognised minimum required reserve amount gradually rose through the year.⁶⁰

Banks' Reserves at the BNB



Note: Following the revocation of its banking license, KTB was exempt from maintaining minimum required reserves with the BNB from November 2014.

Source: the BNB.

As banks' excess reserves grew steadily, on 26 November 2015 the BNB Governing Council adopted Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, to come into force from 4 January 2016. The new Ordinance introduces a definition of what constitutes excess reserves⁶¹. The BNB applies the ECB deposit facility rate on excess reserves where this interest rate is negative. Where the ECB deposit facility rate is negative or nil, the BNB applies zero interest on excess reserves. The new ordinance removed the recognition of banks' funds in the TARGET2-BNB national system component as a component of reserve assets.

⁶⁰ The Issue Department Balance Sheet lists banks' funds in the TARGET2-BNB national system as liabilities to banks.

⁶¹ The new Ordinance No 21 Article 5, paragraph 1 defines excess reserves as all funds exceeding the reserve requirement by more than 5 per cent holdings.

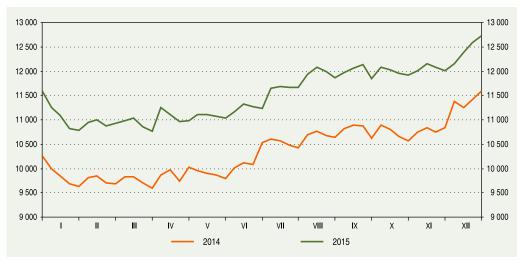
V. Currency in Circulation

The Bulgarian National Bank holds the Bulgarian currency monopoly. 62 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.

At the end of 2015 circulating currency⁶³ was worth BGN 12,724.8 million, up BGN 1137.9 million or 9.82 per cent on the end of 2014. The share of banknotes in the structure of the currency in circulation accounted for 98.01 per cent, that of coins 1.94 per cent, and that of commemorative coins 0.05 per cent.

Banknotes and Coins in Circulation (Outside BNB Vaults)

(BGN million)



Source: the BNB.

By the close of 2015 circulating banknotes numbered 413.3 million worth BGN 12,471.0 million. In a year their number rose 4.19 per cent (16.6 million), and their value 9.83 per cent (BGN 1116.1 million). The BGN 20, BGN 50 and BGN 100 banknotes comprised the bulk of circulating banknotes, the numerical growth of BGN 50 and BGN 100 banknotes significantly exceeding that of BGN 20 banknotes.

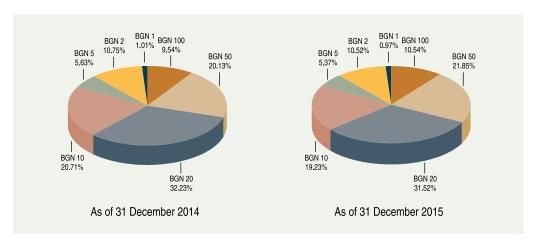
In 2015 the number of BGN 100 increased by 5.7 million or 15.11 per cent: the fastest percentage growth of all banknotes. The number of BGN 50 banknotes in circulation rose by 10.4 million, or 13.06 per cent.

On 12 December 2015 the BNB Governing Council withdrew the 1999 issue BGN 1 banknote which ceased to be legal tender on 1 January 2016. Old 1 lev banknotes were exchangeable at BNB tills at nominal value with no limits to amounts, fees, or limits in time.

⁶² The Law on the BNB Article 2, paragraph 5 and Article 25.

⁶³ Banknotes and circulating and commemorative coins issued after 5 July 1999.

Individual Denomination Shares in the Total Number of Circulating Banknotes

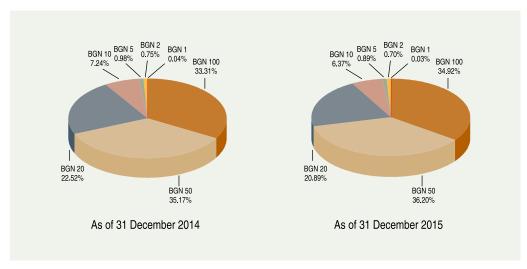


Source: the BNB.

By the end of 2015 the BGN 20 banknote led by number in the structure of circulating banknotes at 31.52 per cent or 130.3 million banknotes, down 0.71 percentage point on the end of 2014. In 2015 the share of BGN 2, BGN 5 and BGN 10 banknotes also declined, while the shares of BGN 50 and BGN 100 banknotes showed a relatively steady upward trend in the total number of circulating banknotes.

By the end of 2015 the BGN 50 banknote held the largest share in the structure of circulating banknotes at 36.20 per cent, followed by BGN 100 and BGN 20 banknotes at 34.92 and 20.89 per cent.

Individual Denomination Shares in the Total Value of Circulating Banknotes

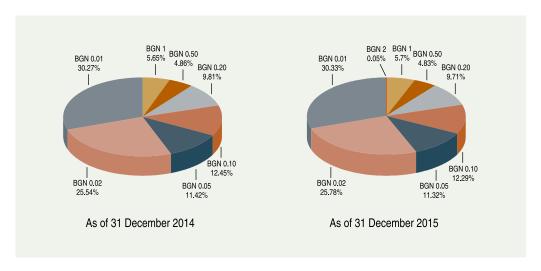


Source: the BNB.

The average banknote circulating at the end of 2015 was worth BGN 30.17: an annual increase of BGN 1.54 (5.41 per cent) attributable to higher growth of BGN 50 and BGN 100 banknotes throughout 2015 compared with others.

As of 31 December 2015, the number of circulating coins was 1934.1 million, with a total value of BGN 246.9 million. Over 2015 the number of circulating coins rose 8.69 per cent (154.6 million), and their value 9.51 per cent (21.4 million), across all denominations. The number of BGN 0.01 coins increased most, by 47.9 million (8.90 per cent). BGN 0.02 coins increased fastest, by 9.72 per cent (44.2 million), and BGN 1 by 9.62 per cent (9.7 million). The increase in other denominations ranged between 7.32 per cent for BGN 0.10 coins to 7.97 per cent for BGN 0.50 coins.

Individual Nominal Value Shares in the Total Number of Circulating Coins



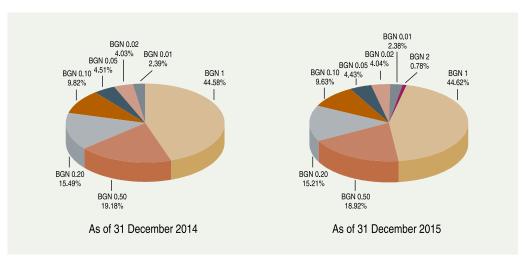
Source: the BNB

At the end of 2015 the BGN 0.01 coin occupied the largest share at 30.33 per cent, up 0.06 percentage points on the end of 2014. The higher growth of BGN 0.01, BGN 0.02, and BGN 1 coins changed the structure of circulating coins by number over the year. The shares of BGN 0.05, BGN 0.10, BGN 0.20 and BGN 0.50 coins decreased. On 7 December 2015 the BNB put into circulation a new coin of BGN 2 nominal value, issue 2015. Its circulation share remained low at the end of the year (0.05 per cent).

The established growth trend in the number of coins in the currency in circulation led to changes in the structure of coins by value. Compared with the end of 2014, by the end of 2015 the share of BGN 0.02 coins grew by 0.01 percentage points in value (from 4.03 to 4.04 per cent) and BGN 1 coins by 0.04 percentage points (from 44.58 to 44.62 per cent), while the shares of 0.01, 0.05, 0.10, 0.20 and 0.50 coins decreased. The BGN 1 coin had the largest share at 44.62 per cent of the total value of circulating coins by the close of 2015, followed by BGN 0.50 and BGN 0.20 coins at 18.92 and 15.21 per cent.

At the end of 2015 the average circulating coin matched its late 2014 level at BGN 0.13.

Individual Nominal Value Shares in the Total Value of Circulating Coins



Source: the BNB.

The share of commemorative coins in the total value of the currency in circulation accounted for 0.05 per cent: 0.01 percentage points less than in 2014.

Non-genuine Banknotes and Circulating Coins

In 2015 the BNB National Analysis Centre retained 1127 non-genuine Bulgarian banknotes which had entered into circulation. The share of retained non-genuine banknotes remained very low at 0.000273 per cent of all circulating banknote against 0.000723 per cent at the end of 2014. The number of retained non-genuine banknotes in 2015 was 1742 less than in the prior year. The BGN 20 banknote had the largest share of all retained non-genuine banknotes at 59.89 per cent, followed by BGN 50 at 21.30 per cent and BGN 10 at 16.95 per cent. The 21 non-genuine BGN 2, 5, and 100 banknotes comprised 1.86 per cent of all non-genuine banknotes retained in the year.

The share of retained circulating non-genuine Bulgarian coins was also very low at 0.000043 per cent by the end of 2015. There were 824 non-genuine retained coins: 269 BGN 1 coins, 553 BGN 0.50 coins and two BGN 0.20 coins.

The National Analysis Centre also retained 2263 euro banknotes, 763 US dollar banknotes, and 944 sundry foreign 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.

In 2015 producers supplied 86.9 million new banknotes and 154.9 million new coins worth BGN 3099.0 million. Under the Law on the BNB Article 25, paragraph 1 and as planned in its 2015 Minting Programme, the BNB issued a new BGN 2 coin and four new commemorative coins⁶⁴.

In 2015 banknote and coin deposits and withdrawals totalled BGN 33,596.4 million. Banks deposited BGN 16,228.7 million of cash, up BGN 597.8 million (3.82 per cent) on 2014. Over the same period Bulgarian banknotes and coins worth BGN 17,367.6 million were withdrawn from the BNB: up BGN 404.9 million or 2.39 per cent on the prior year.

In 2015 banknotes recirculated through BNB tills averaged 2.4 times a year. High value banknotes returned less often: a BGN 100 banknote returns 0.5 times, while BGN 10 and BGN 20 banknotes, customarily used in transactions, return 4.7 and 3.3 times.

In 2015 BNB and Cash Services Company banknote processing machines tested 914.9 million banknotes and 159.3 million coins to established authenticity and fitness standards. Banknote numbers rose 6.79 per cent and coins fell 1.70 per cent on 2014. BGN 10 and BGN 20 banknotes and BGN 0.20 and BGN 1 coins were most often processed by value.

Banknotes failing fitness standards numbered 75.4 million, up 14.0 million (22.86 per cent) compared with 2014. BGN 10 and BGN 20 banknotes had the largest share of banknotes unfit for circulation at 31.93 and 25.98 per cent.

Processing and fitness checks revealed 1.5 million unfit coins, up 26.02 per cent in a year. The share of unfit coins processed in 2015 was 0.93 per cent.

In 2015 the BNB bought EUR 11.7 million of reserve currency, including EUR 11.6 million from budget organisations and EUR 0.01 million from individuals. At the same time the Bank sold EUR 47.4 million of reserve currency: EUR 6.2 million to budget organisations and EUR 41.2 million to individuals.

⁶⁴ See the BNB website for banknote and circulating and commemorative coin issues.

The BNB conducted six full checks into credit institutions to ensure compliance with Ordinance No 18 on the Control over Quality of Banknotes and Coins in Currency Circulation and the instructions on its implementation. The inspections included internal regulation reviews regulating cash operations, tests controlling the quality of banknotes loaded into ATMs and tests of sorting machines and customer-operated machines. The BNB conducted 12 spot on-site checks into credit institutions and four checks at service providers within the meaning of Ordinance No 18 for authorising and testing 197 sorting machines and customer-operated machines in line with the standards for identification and fitness.

Maintaining Banking System Stability and Protecting Depositor Interests

1. State of the Banking System

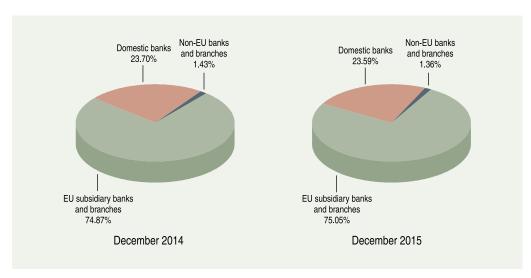
In 2015 the banking system remained stable, reporting growth of balance sheet assets and deposits and improved liquid and capital position. The downward trend in the cost of attracted resources, most evident in household deposits, had no effect on depositors' behaviour. Substantially increased resident deposits throughout 2015 entirely offset the decline in non-resident deposits (funds from credit institutions). Lending activity remained weak despite cheaper credit. Credit risk management in banks' balance sheets was again a priority in risk management in banking. Measures to optimise bank balance sheets helped lower the banking system credit portfolio volume (except loans to credit institutions and central banks), but also increase non-performing loans. The accumulated impairment against credit risk continued to provide more than 50 per cent coverage of all non-performing loans.

The banking system preserved its capital buffers. By the end of 2015 capital exceeding the minimum regulatory requirement of 8 per cent⁶⁵ fully covered the net amount of non-performing loans, after deducting impairment.

Most credit institutions retained their capacity to generate revenue. The decline in interest income was entirely offset by lower interest expenditure. The higher financial result reported in 2015 contributed to improving ROA and ROE indicators.

In 2015 the structure of the banking system balance sheet was mostly impacted by weak lending, limited choice of investment alternatives, and the increasing volume of deposits. The share of cash in banks' balance sheets increased. Investment in securities remained concentrated in Bulgarian government bonds.

Market Shares of Domestic and Foreign Banks by Asset



Source: the BNB.

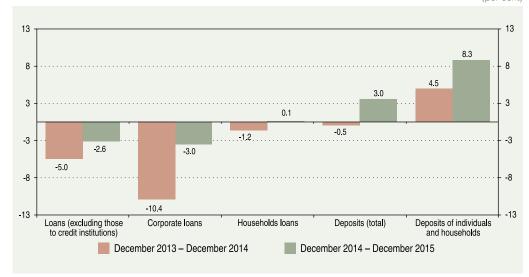
Banking system assets rose BGN 2.4 billion (2.9 per cent) on the end of 2014 to BGN 87.5 billion. Over the year the market share of dominant Bulgarian banks

⁶⁵ The amount of capital exceeding the minimum regulatory requirement of 8 per cent also includes additional capital buffer requirements. More information on the role of capital buffers is published on the BNB website in the quarterly *Banks in Bulgaria*, July–September 2015, p. 20: http://www.bnb.bg/bnbweb/groups/public/documents/bnb_publication/pub_b_in_b_2015_09_bg.pdf

decreased insignificantly (to 23.6 per cent) in favour of the EU bank subsidiaries and branches share increase to 75.0 per cent. The share of non-EU banks and branches remained unchanged at 1.4 per cent.

Dynamics of Selected Balance Sheet Indicators (annual change)

(per cent)



Note: A 2015 accounting change replaces the attracted funds item with the deposits item. For comparability with end-2015, the subordinated term debt and debt/equity (hybrid) instruments are excluded from 2014 data.

Source: the BNB.

Asset conversion over the review period boosted cash (other demand deposits excluded)⁶⁶ by BGN 6.8 billion (69.6 per cent), its share in assets rising to 18.9 per cent (11.5 per cent a year earlier). Government securities portfolios increased slightly by BGN 209 million or 1.9 per cent, and their dynamics was divergent: more Bulgarian government securities acquired by banks and fewer repo agreements in foreign issuers' instruments. As a result the share of government securities in assets remained almost unchanged at 12.8 per cent from 12.9 per cent at the end of 2014. Claims on credit institutions decreased reflecting the dynamics in placements with non-resident banks.

By the end of 2015 the total amount of gross loans and advances⁶⁷ was BGN 74.5 billion. Over the year exposures to residents rose to 88.9 per cent, while those to non-residents fell to 11.1 per cent⁶⁸. The decrease in non-resident exposures was driven by lower claims on credit institutions, totalling BGN 7.1 billion at the end of December.

Loans, excluding those to credit institutions and central banks, decreased slightly. By the end of December loans to non-financial corporations accounted for the largest share (61.5 per cent, BGN 33.3 billion) in the credit portfolio structure, followed by those to households (33.8 per cent, BGN 18.3 billion). Exposures to government sector deposits decreased to BGN 660 million. By the end of December claims on other financial sector assets totalled BGN 1.9 billion. The share of lev-denominated items rose to 51.9 per cent, that of euro-denominated items falling to 42.0 per cent in the currency structure of gross loans and advances.

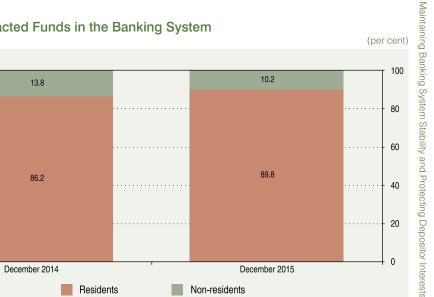
By the end of 2015 the total amount of deposits reached BGN 74.3 billion.

⁶⁶ From 1 January 2015 the BNB started publishing balance sheet and profit or loss account data to the reporting templates introduced by Implementing Regulation (EU) No 680/2014 of the Commission. Due to harmonisation of EU concepts and definitions, there is no match between the manner and scope of reporting these items before and after the end of 2014. To achieve data comparability with end-2014, cash includes only cash holdings and cash balances with central banks (excluding other demand deposits).

⁶⁷ Source: the BNB (Macroprudential Form 1 – MPF1).

⁶⁸ The increased resident share also resulted from the methodological change (widening the scope of the loans and advances item).

Structure of Attracted Funds in the Banking System



Note: The subordinated term debt and debt/equity (hybrid) instruments were excluded from the 2014 data to make them comparable with end-2015.

Source: the BNB.

100

80

60

40

20

0

The share of household resources rose to 59.7 per cent, and that of non-financial corporations to 26.5 per cent of the deposit total. Credit institution and the general government sector deposits went down accounting for 6.8 and 2.5 per cent of the total amount respectively. By the end of 2015 the share of resources from domestic sources reached 89.8 per cent at the expense of deposits from non-residents (a tenth of total deposits). This changed the currency structure of banking system deposits (total), with the share of lev resources increasing to 54 per cent, that in euro decreasing to 36.9 per cent.

Credit institutions adhered to early 2015 BNB macroprudential recommendations to limit dividends from 2014 profit. The amount of equity balance sheet item reached BGN 11.5 billion at the end of 2015. Compared with the same period of the prior year it rose BGN 719 million (6.7 per cent).

In 2015 the banking sector also felt significant external influence. International instability was a source of tension which had an unfavourable effect on the banking system. The financial situation in Greece posed a serious risk to Bulgarian banks but measures launched by the BNB helped overcome its potential spillover into domestic banks with Greek equity. 69 Bulgarian credit institutions with Greek equity remained stable, their liquid buffers intact. Liquidity risk was monitored on a daily basis at all credit institutions in Bulgaria throughout the year. By the end of 2015 the banking system liquid position reached a historic high and the rate of liquid assets rose to 36.71 per cent.

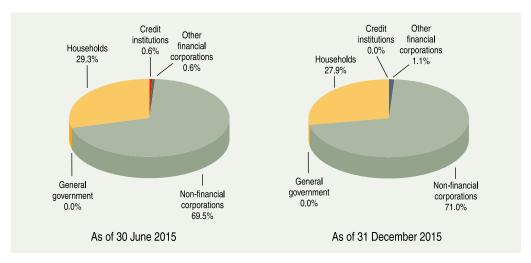
Credit risk remained the dominant risk in banks' balance sheets. Banks took steps to optimise their balance sheets, particularly with regard to credit risk assessment. This involved selling loans, derecognition at the expense of provisions, and swapping debt for equity using pledged security. Alongside this, banks moved to improving methodologies for assessing credit risk also of acquired securities on loans. These measures reduced the overall extent of the credit portfolio, while increasing the amount of nonperforming loans. By the end of December 2015 non-performing loans⁷⁰ in the bank-

⁶⁹ For further details see *Economic Review*, 2/2015.

⁷⁰ Amendments to Commission Implementing Regulation (EU) No 680/2014 of 9 January 2015 (published in Official Journal of the European Union, 20 February 2015) introduced definitions, scope and frequency of reporting and reporting templates applicable to the asset quality and restructured exposures. BNB reporting form 40, Credit Quality and Impairment Data, was dropped as part of harmonisation. Therefore, no comparability should be sought with data up to the close of 2014. Based on the single EU methodology for accounting purposes non performing exposures are all impaired assets which may be loans and advances or debt securities.

ing system totalled BGN 11.2 billion, including loans and advances of BGN 11,158 million. Exposures past due over one year came to BGN 6.9 billion. By the end of 2015 the net amount of gross non-performing loans (BGN 5.7 billion) was entirely covered by the amount of capital exceeding the minimum regulatory requirement of 8 per cent (BGN 7.0 billion).⁷¹

Structure of Non-performing Loans and Advances by Sector



Source: the BNB

The share of non-performing loans and debt securities in total gross banking exposures was 13.11 per cent at the end of 2015. The share of non-financial corporations' exposures increased to 71.0 per cent of non-performing loans. By the end of the review period problem claims on households comprised 27.9 per cent, and those on other financial corporations 1.1 per cent.

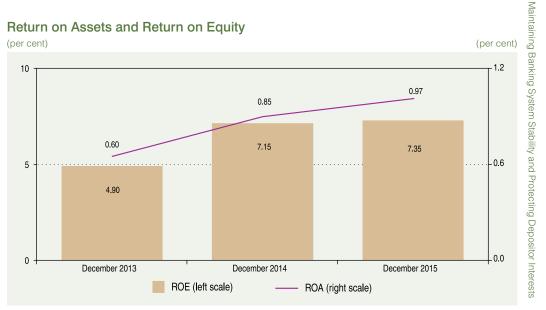
Impairment accumulated in the banking system by the end of December reached BGN 5.7 billion, accrued mostly for exposures past due over one year. The total impairment provided a 51.3 per cent coverage on all non-performing exposures.

Balance sheet items (other than loans) remained of good quality. The additional macroprudential measures the BNB launched to limit the spread of external environment risk in the banking system contributed to this effect. These measures concerned mainly placements within bank groups and high-risk government securities.

Given low interest and the need to maintain high liquidity, in 2015 the banking system had limited opportunities for alternative investment. These conditions also explain the continuing decline (though at a lower rate) in income from interest bearing-assets. Cost management and changes in pricing strategies allowed most banks to improve profitability indicators compared with 2014 and 2013. Interest expenditure in 2015 decreased by BGN 452 million (34.0 per cent) from 2014. Interest income over the same period went down by BGN 310 million (7.8 per cent). As a result banking sector net interest income reached BGN 2.8 billion at the end of the year posting BGN 142 million growth. Higher profit from financial assets and liabilities and income from fees and commissions also contributed to improved banking system profitability. Over the review year credit institutions' impairment costs amounted to BGN 1.2 billion, down 1.9 per cent from 2014. By the end of December 2015 unaudited banking system profit totalled BGN 847 million (up 19.2 per cent on 2014). Return on assets (ROA) improved to 0.97 per cent and return on equity (ROE) to 7.35 per cent.

⁷¹ The net amount of gross non-performing loans (after deducting impairment) is the residual credit risk in the bank balance sheets.

Return on Assets and Return on Equity



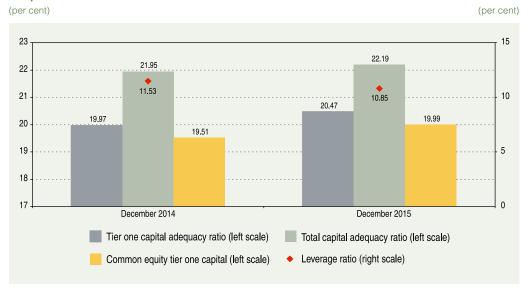
Note: From 2015 the indicators are computed on the basis of assets and balance sheet equity at the end of respective period in line with the requirements of the European Banking Authority for key risk indicators. In preceding periods (before EU harmonised criteria) calculations were based on average values for assets and the balance sheet equity.

Source: the BNB.

In 2015 there were no significant changes to the banking system's capital position which preserved its capacity to cover risks inherent in credit institution business. Banking system equity rose BGN 145 million (1.3 per cent) to BGN 11 billion. Tier one capital, reaching BGN 10.1 billion, contributed to this increase. Tier two capital went down to BGN 851 million at the end of December.

The structure of risk-weighted exposures experienced no significant changes through the year. The share of credit risk-weighted exposures was 88.8 per cent, that of position, currency and commodity risk 1.5 per cent, and of operational risk 9.6 per cent. The corporate share led credit risk-weighted exposures.

Selected Capital Indicators under Regulation (EU) No 575/2013 on Capital Requirements



Source: the BNB.

The total capital adequacy ratio and tier one capital adequacy ratio increased to 22.19 and 20.47 per cent by the end of December. The common equity tier one capital also went up to 19.99 per cent. At the end of December 2015 all banks reported capital adequacy ratios above the required minimum of 8 per cent. Capital in excess

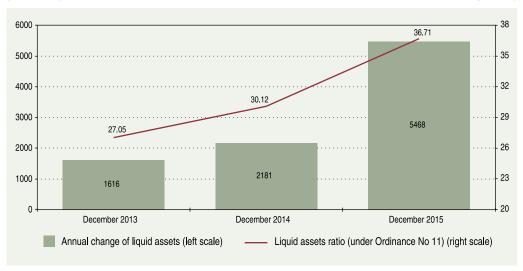
of the minimum required 8 per cent amounted to BGN 7.0 billion for the system and grew on 2014.

By the end of December leverage was 10.85 per cent, continuing to reflect low banking system indebtedness.⁷²

Banking system and individual credit institutions' liquidity position strengthened further in 2015. Banking system liquid assets picked up by BGN 5.5 billion on the end of 2014, growing in the second half of 2015 by BGN 4 billion (16.8 per cent). By the close of 2015 they came to BGN 27.7 billion⁷³ or 31.6 per cent of banking system assets.

Selected Liquidity Indicators

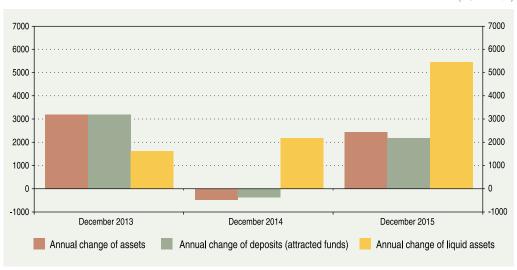
(BGN million) (per cent)



Source: the BNB.

Dynamics of Assets, Deposits and Liquid Assets

(BGN million)



Note: Under 2015 reporting changes the deposits item replaced the attracted funds item. To be comparable with the end of 2015 the subordinated term debt and debt/equity (hybrid) instruments were excluded from the 2014 data.

Source: the BNB

⁷² Under Regulation (EU) No 575/2013 Article 429, leverage is calculated by dividing institutions' capital (tier one capital) by total exposure expressed as a percentages. From 1 January 2015 institutions calculate the leverage ratio at the reporting reference date. The mandatory requirement for the leverage ratio is expected to be implemented from 1 January 2018.

⁷³ The amount of liquid assets in the banking system was not affected by the announced amendments to BNB Regulation No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks (effective from 2016).

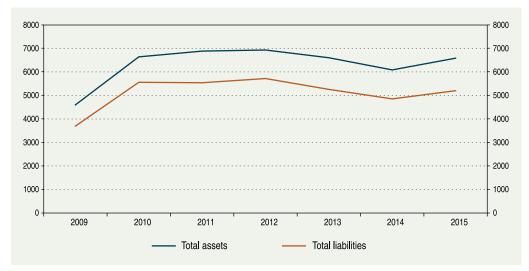
Throughout the year the banking system liquid assets ratio (the liquid assets/liabilities ratio) remained high, reaching 36.71 per cent at the end of December. Credit institutions adhered to the supervisory recommendation for not less than 20 per cent coverage of deposits of households and legal entities by liquid assets.

Financial Institutions Registered under Law on Credit Institutions Article 3a

In 2015 financial institutions registered under Law on Credit Institutions Article 3a were supposed to re-register in line with new operational requirements. By the end of 2015 the total number of recorded credit institutions meeting BNB Ordinance No 26 and Law on Credit Institutions criteria reached 170, including 111 lenders, 42 financial lessors, and 12 loan claim purchasers. The banking sector's balance sheet amounted to BGN 6.6 billion accounting for 7.5 per cent of credit institutions' assets.

Dynamics of Assets and Liabilities by Year

(BGN million)



Source: the BNB.

In the asset breakdown leasing companies continued to dominate comprising 54 per cent, followed by lending companies (36 per cent), whose share rose strongly on end-2014 due to increased interest in short-term loans. The share of companies providing guarantee transactions and acquiring credit claims, reported under other item, posted a decrease.

Credit portfolio quality remained an inherent risk for financial institutions. The coverage of loans past due over 90 days by impairment accounted for 44.3 per cent, the share of net non-performing loans remaining relatively high at 29.8 per cent.

By the end of 2015 financial institutions' equity increased to BGN 1.4 billion and internal sources of financing the sector (reserves, including undistributed profits) reached BGN 510 million.

Companies preserved their capacity to generate operating revenue, with net interest income coming to BGN 534 million, up BGN 52 million (9.7 per cent) on 2014. Accumulated impairment was BGN 671 million: a significant 35 per cent decline from 2014. Profit reached BGN 174 million. Overall sectoral balance sheet indicators recovered. ROA and ROE improved significantly at 2.6 and 12.6 per cent and financial indebtedness fell to 13.3 per cent from 25 per cent in 2014.

3. Banking Supervision

Current Supervision Activity Supervisory reviews and assessments of credit institutions conducted through onand off-site inspections remained a banking supervision priority in 2015. Periodic analyses of credit institutions through regular reporting and on-site inspections presented the system's risk profile and the financial status of individual credit institutions operating in Bulgaria. There was a year-long review and assessment of internal capital adequacy analysis in terms of capital sufficiency for current and future risks. Results were adequate. Annual risk assessment system ratings covered capital adequacy, asset quality, liquidity, market, and operational risks and reflected risk extent and management in 2014.

Off-site supervision, an important part of supervisory review and assessment, focused mainly on ongoing monitoring and assessment of credit institution risk profile and viability. Ratings for each institution are assigned by supervisory assessment which also creates conditions for early intervention and analyses circumstances for determining a bank as failing or likely to fail. Assessments and analyses employ a set of indicators helping identify worsening financial performance, including through threatened liquidity, rapidly increasing indebtedness, non-performing loans, or credit concentrations. Goal attainment involves: analysing and controlling reporting; maintaining and improving an early warning system; communicating with credit institutions and participating in supervisor and resolution colleges. To ensure completeness, accuracy, and reliability of data obtained from credit institutions, a control mechanism supports and automates received data validation, amplifying European Banking Authority validation rules. A major element of off-site supervision review and assessment involves analysing compliance with various bank supervisory requirements, particularly total capital adequacy ratios, capital buffers, regulatory limits to large exposures, and diverse statutory ratios.

The results of off-site supervision form a basis for a risk-based approach to examine credit institutions to the principle of proportionality in the scope, frequency, and depth of supervisory involvement and communication with institutions, including planning of on-site supervisory inspections.

In 2015 there were thirteen supervisory inspections of varying scope, including oversight of progress in implementing recommendations from prior supervisory inspections, assessing changes in group models, and a joint inspection with the Central Bank of Austria on applying the group statutory framework for calculating operational risk capital requirements. On-site inspections aimed to analyse and assess: credit institutions' risk profile; assumed risk and capital sufficiency monitoring and control system adequacy; corporate management and internal control mechanisms; asset quality; banks' capacity to generate profit; liquidity risks and the liquid position; market risks; 2014 regulatory compliance and proper interpretation, including laws, ordinances, regulations, directives, implementing technical standards, regulatory technical standards, and guidelines. On-site inspections focused mainly on credit institutions' development and the effects of the economic environment, reviewed mechanisms for managing non-performing exposures, collection efficiency, conditions for implementing resolution measures, and approved internal procedures.

Inspectors found 234 formal breaches of the banking statutory framework and made 195 recommendations on improving operations and risk management to banks' managements. Most breaches concerned incorrect identification and measurement of the risk degree of individual risk exposures and their impairment, and shortcomings in implementing the requirements of supervisory regulations. Recommendations mainly addressed the need to improve lending and the assessment, monitoring, control and management of credit risk and credit portfolio concentrations, improvement of super-

visory reporting quality, and capital adequacy internal analysis by particular units and committees. Recommendations to banks applying advanced risk measurement approaches mainly required improving data quality, documentation, internal validations, recalculation in some internal models, additional tests for some risk areas, attention to internal audit results, and reporting of changes in the common regulatory framework.

Under macroprudential powers in the Law on Credit Institutions Article 79, paragraph 2, the BNB exercises macroprudential supervision of banks to maintain the stability of the banking system. There were supervisory measures to avoid or minimise threats to the overall banking sector and financial system. This involved continuing to implement a set of macroprudential instruments of diverse scope, depth and character. In general, these may be divided into two groups: capital buffers and liquidity buffers of general systemic nature concerning all credit institutions, and additional instruments related to reporting general systemic trends and maintaining recommended operational levels. In 2015 expert analysis addressed the calibration of an anti-cyclical buffer to protect the banking system against potential losses from cyclical systemic risk accumulation in periods of excessive credit growth. In December the Governing Council of the BNB set the anti-cyclical buffer level to credit risk exposures in Bulgaria for the first quarter of 2016. Along with the capital conservation buffer and the systemic risk buffer (introduced in 2014), this is the third buffer to be maintained by banks over the minimum required 8 per cent.

The macroprudential recommendations for further strengthening through distribution of dividend under consideration remained valid. Compliance with recommended minimum cash and total liquidity levels continued to be monitored throughout the year.

A comprehensive package of macroprudential monitoring was launched. It aims at early identification of areas of increased risk to system stability, to limit risk credit growth (including in foreign currency), and to prevent the accumulation of systemic risk from excessive bank and financial coherence. Macroprudential statements designed and launched over the year supplemented harmonised financial information under EBA implementing technical standards and focused on systemically important EU bank groups.

The supervisory information service provided reliable information exchange between the BNB and credit institutions, and between the BNB, the ECB and other supervisory institutions. The exchange also grew increasingly intensive on standardised products, newly developed supplementary statements, and Implementing Technical Standard amendments.

There was considerable effort to secure both the required quality of credit institution analytical supervisory process information, and reliable banking system data for external users and authorities working with the BNB based on agreed formats.

Special supervision followed a new legal framework for erecting safety systems to protect the banking sector against funds of criminal nature, and amid intensified communication with external bodies. World Bank and IMF expert recommendations resulted in structural changes establishing separate units with requisite sectoral experience and specialisation. Allocating resources according to the risk approach ensured the efficiency of both scheduled on-site inspections and inspections at the request of relevant competent authorities.

Inspections at nine credit institutions established that procedures and control mechanisms for assessing and managing risks were being applied, including as regards administrative capacity and organisational culture. The 33 breaches found related mainly to weaknesses in preparing documents and implementing extended due dili-

gence and raised no serious supervisory concerns. A number of recommendations were made to banks and the State Agency of National Security Financial Intelligence Directorate was informed under the Law on Measures against Money Laundering procedures. One bank incurred a supervisory measure of an explicitly punitive nature for systematically breaching the Law on Measures against Money Laundering. Joint inspections with the State Agency of National Security Financial Intelligence Directorate continued, the August 2015 instruction for cooperation between the BNB and State Agency of National Security helping supervision. Two EU instruments adopted in mid-year to prevent the use of the financial system for the purposes of money laundering or terrorist financing and provide adequate information on fund transfers involved BNB participation in inter-service panels on transposing Regulation (EU) 2015/849 into national legislation and developing a national risk assessment methodology. Periodic analysis of the legal structure and financial status of bank shareholders provided continual and consistent monitoring over an extended time span.

In the first half of the year checks on the methods and practices used by banks in forming the deposit base, as defined by the Law on Bank Deposit Guarantee, showed no deviations from results from the previous period.

Banks were recommended to disclose clear and transparent conditions for the deposit products on offer, with assessment of the effect on depositors. National efforts were supported by the EBA Consumer Protection and Financial Innovation Committee, where together with BNB experts *Guidelines on provisional national lists of the most representative services linked to a payment account and subject to a fee were prepared and published.* Analyses of complaints from credit institution customers suggested a higher risk of personal data misuse and non-transparent additional costs paid to creditors and guaranteeing companies. To counter this, correspondence with the Commission on Consumer Protection, the Commission on Personal Data Protection, and legal authorities intensified.

The two inspections conducted jointly with the Financial Supervision Commission at banks acting as supplementary pension insurance fund custodians showed observance of legal requirements.

Cooperation with the Ministry of Foreign Affairs and the State Agency of National Security continued on issues associated with the implementation of restrictive measures as defined in the EU and UN Security Council regulation.

In 2015 the number of financial institutions registered under the Law on Credit Institutions Article 3a fell by half compared with the previous year. This is because of tighter capital requirements, fit-and-proper requirements for owners and managers, and fewer business areas requiring registration. A number of related companies transformed to provide adequate capacity under defined criteria. The BNB refused to enrol six companies into the register of financial institutions because of contradictory or incorrect information or unproven legal compliance.

There were no new credit institution licensing procedures and no new bank operations licences in 2015.

The application by Industrialen Holding Doverie AD, Sofia to acquire a majority stake in Tokuda Bank was refused.

The shareholder structure of several banks changed during the year. Shareholders with qualifying holdings in D Commerce Bank (Fuat Güven) and the Bulgarian American Credit Bank (Gramercy Group) transferred their shares to other companies controlled by them. Due to a merger of the majority shareholder of Tokuda Bank into the controlling Tokushukai Incorporated, the latter became a direct shareholder in the Bulgarian bank.

To implement a Court ruling on quashing a General Shareholder Meeting's resolutions, Investbank AD was allowed to decrease its equity by the number of shares issued to increase equity by resolution of that meeting.

Following notice in July and referral to the BNB in November 2015, a procedure opened for preliminary approval of the transfer of the Alpha Bank AE, Greece, Bulgarian branch (Alpha Bank, Bulgaria) to Eurobank Bulgaria⁷⁴.

In 2015 a permit was issued to include in the tier two capital of Société Générale Expressbank AD funds attracted from the bank in accordance with a subordinated term loan agreement concluded with the Société Générale, France creditor.

There were significant management changes at ProCredit Bank (Bulgaria) EAD, the First Investment Bank AD, and Allianz Bank Bulgaria AD. UniCredit Bulbank AD and Eurobank Bulgaria AD changed supervisory board members. Fourteen other banks and a foreign bank branch made minor changes to managing and control bodies.

Ten new EU Member State credit institutions exercised the freedom to provide services under the mutual recognition of passporting procedures through notice of intent to provide cross-border bank services in Bulgaria to the BNB from bank operation licensing supervisors. This raised the number of notices of direct services in Bulgaria received by the BNB to 254.

German banking supervisor BaFin acknowledged the BNB notice of free service provision by the Bulgarian American Credit Bank in Germany.

In 2015 ten credit institutions were subject to supervisory measures. In two of them large exposures to groups of connected clients were established, with the amount of exposures exceeding the maximum permissible ratio of such exposures to the bank's equity under Regulation (EU) No 575/2013. Removal of the breaches within a set term was imposed under the Law on Credit Institutions Article 103, paragraph 2.

Supervisory measures under the Law on Credit Institutions Article 103, paragraph 2 required two other banks to remove supervisory framework breaches and address operational weaknesses found during on-site inspections and within the comprehensive supervisory review.

A reported capital shortfall resulted in a bank being prohibited to pay interest under agreements for provision of debt capital included in its equity. The bank was recommended to address weaknesses in its capital adequacy assessment highlighted by an on-site inspection. It was also recommended to develop its internal legal framework further, employ a reliable methodology for assessing required capital, and select an approach to determining it by risk type and aggregation.

Over 2015 the BNB Banking Supervision Department registered and reviewed complaints from bank customers and financial institutions. Where complaints stemmed from property disputes arising from contractual relations, the BNB referred complainants to relevant banks or financial institutions or a Court. The BNB advised the Consumer Protection Commission of complaints within the purview of the Consumer Protection Commission to help their speedy consideration. Where poor customer relations were established, banks concerned were asked to remove the weaknesses.

BNB client complaint information was used in the EBA annual Consumer Trends Report for 2015.

⁷⁴ On 11 February 2016 the BNB approved the finalisation of the transfer of Alpha Bank, Bulgaria to Eurobank Bulgaria by a Transfer Ongoing Concern Sale Agreement (TOSA).

Changes in the Supervisory Activity

BNB supervisory practice compliance with the Basel Core Principles for Effective Banking Supervision were assessed in the first half of 2015. Detailed International Monetary Fund and World Bank questionnaires following the structure and logic of the 29 Basel principles for effective banking supervision were sent to the BNB. Further to information from the Banking Supervision Department, an official mission conducted an on-site inspection between 17 March and 3 April 2015.

After thoroughly analysing findings and recommendations, the BNB Governing Council adopted an opinion on the IMF/WB independent assessment of BNB banking supervision at its 30 July 2015 meeting. A detailed report covered BNB self assessment, IMF/WB assessment and recommendations, and the degree of compliance by individual principle.⁷⁵

On 5 October the BNB Governing Council adopted a Plan on Reforms and Development of Banking Supervision which defines priorities and timescales for 2015 and 2016. Banking supervision reform and development should bring Bulgarian supervisory practice into the greatest possible alignment with the effective international standard of the 2012 Basel Core Principles of Effective Banking Supervision. The plan resulted from a nearly year-long process comprising two main stages: internal analysis and assessment of Banking Supervision Department procedures and practice, and an independent external assessment of banking supervision effectiveness in Bulgaria by an IMF and World Bank team. Plan development, adoption, and disclosure were in line with commitments on Bank governance made by the BNB Governor before the National Assembly.

On 1 November 2015 the Banking Supervision Department was reorganised. One of the major changes was the establishment of an Off-site Supervision Directorate within the Department. This important aspect of supervisory work was separated from on-site inspections which continue to be conducted by the Inspection Directorate.

Key Measures to Reform and Develop Banking Supervision

| Measure | Deadline | Status* |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|
| 1. Management Model | | |
| 1.1. BNB Governing Council resolution approving internal rules and manuals on supervisory performance | October 2015 | Completed |
| 1.2. Annual internal audit on compliance with supervisory rules and procedures and reporting the results of the audit to the BNB Governing Council | Annually | In progress |
| 1.3. Quarterly reports to the BNB Governing Council on current supervisory monitoring of banks (off- and on-site), supervisory issues identified, supervisory measures launched and their implementation, and changes in banks' shareholder structures | Continual | In Progress |
| 2. Internal organisation of the Banking Supervision Department | | |
| 2.1. Establishing an Off-site Supervision Directorate | October 2015 | Done |
| 2.2. Establishing an Internal Advisory Board on supervisory measure preparation and implementation | October 2015 | Done |
| 2.3. Increasing the number of inspection teams | December 2015 | In progress |
| 2.4. Establishing a Market Conduct Risk Analysis Division within the Special Supervision Directorate** | December 2015 | Done |
| 3. Regulatory Framework | | |
| 3.1. Preparing statutory amendments to expand powers to impose supervisory measures | March 2016 | Done |
| 3.2. Comprehensively reviewing ordinances, internal rules, and manuals regulating the supervisory activity to bring them in line with the Basel principles. | September 2016. | In progress |
| 3.3. Adopting a manual for supervisory review and evaluation in line with European Banking Authority resolutions on common procedures and methodologies | September 2016 | In progress |

^{*} Implementation of plan measures is shown by April 2016.

^{**}Currently the Specific Supervisory Activities Directorate.

⁷⁵ http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20151005_1_BG

Asset Quality Review and a Stress Test

Implementing the BNB's Law on the Recovery and Resolution of Credit Institutions and Investment Firms duty to conduct a banking system asset quality review on 30 July 2015, including the quality and adequacy of the evaluations used for measuring the value of assets, security, and impairment and provisioning practice, involving external independent experts of high professional standing. The BNB Governing Council approved a call for tenders for an independent external consultant to the BNB to organise and conduct an asset quality review of the banking sector. The public procurement notice was published on 10 August 2015, and approved bids were ranked on 28 October 2015. The highest ranked tenderer under the publicly announced methodology was the Deloitte Bulgaria OOD team. The BNB entered into contract with Deloitte Bulgaria OOD on 25 November.

Until the end of 2015 joint work with the external consultant focused on adapting ECB methodology for the asset quality review and fine tuning other details of the review. The asset quality review encompassed all 22 banks, excluding foreign bank branches.⁷⁶

The specifics of review scope also entailed adaptation of the approach to reflect the business models of Bulgarian banks and risk factors of significant import to them. Representatives of the European Commission and the European Banking Authority conducted an independent expert evaluation of the adaptation process.

⁷⁶ By comparison, upon launching the Single Supervisory Mechanism in 2014 the ECB carried out asset quality reviews and stress tests only in the largest euro area countries.

VII. BNB Activity on Resolution of Credit Institutions

The Law on the Recovery and Resolution of Credit Institutions and Investment Firms in force from 14 August 2015 makes the BNB Governing Council responsible for bank resolution. Its resolution authority function and elaboration of relevant decisions are supported by the Resolution of Credit Institutions Directorate, a new autonomous structural unit established in early November 2015. The Law provides for operational independence between the BNB's functions as a resolution authority and supervisory authority or central bank.

A newly established Bank Resolution Fund (BRF) will finance BNB application of resolution instruments and powers. The main sources of BRF funds are annual bank contributions. The BNB governs BRF disbursement as required for effective implementation of selected resolution strategies.

Under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms the BNB set the annual banking system contribution to the BRF for 2015 at BGN 82,170,000 and apportioned it among banks to an approved methodology. All banks remitted their contributions by the close of the year.

VIII. The Central Credit Register

The Bulgarian National Bank maintains an information system on customer debt to Bulgarian banks, financial institutions, and payment and electronic money institutions (reporting units). 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 CCR lists all bank, financial institution, payment institution, and electronic money institution loans, irrespective of amount. Ordinance No 22 on the Central Credit Register was amended after the amendments of the Law on Credit Institutions, Article 56 ⁷⁸ and now includes new CCR participants who provide guarantee transactions, acquire credit claims, and offer factoring, forfaiting, and other finance. Including these into the CCR Information System provides fuller data on individuals' credit indebtedness and improves the quality of register information. This made the CCR information system more valuable.

The Register provides centralised access to information for reporting units. The Register provides monthly and ongoing data on customers' debt to participants and the BNB. Real time customer debt information includes loan status, arrears, and repaid loans for five years back, plus borrower histories.

By 31 December 2015 the CCR had 169 participants: 29 banks, 138 financial institutions, and two payment institutions. Over the review year, 13 new financial and one payment institutions entered the CCR information system. The amendments to the Law on Credit Institutions under § 80, paragraph 4 of the Law on Amendment of the Law on Credit Institutions required reregistration of financial institutions listed in the Banking Supervision Department public register. In that context, 49 financial institutions which did not meet reregistration criteria left the register.

By 31 December 2015 the CCR listed 4,088,000 loans with a balance sheet exposure of BGN 63,872 million. At the same time borrowers numbered 2,108,000, of whom: 2,005,000 individuals, 91,000 legal entities, 5000 non residents not registered at Bulgarian addresses and 7000 self-employed persons engaged in liberal professions or handicrafts.

CCR Searches

(number)



Source: the BNB.

⁷⁷ Darjaven Vestnik, issue 93 of 1 December 2015.

⁷⁸ Darjaven Vestnik, issue 27 of 15 May 2014.

Residual debts up to BGN 5000 predominated with individuals (66.03 per cent), while debts of BGN 5000 to 50,000 predominated with legal entities (35.59 per cent).

CCR information is used to assess borrower creditworthiness and credit risk to institutions. Data on arrears and repaid loans is an important element of it. Access to these data raises credit institutions' awareness, eases analysis, and helps lending decisions.

In 2015 banks, non-bank financial institutions, payment institutions, and electronic money institutions conducted 6,104,000 CCR searches on 4,895,000 individuals and 1,209,000 legal entities. The average monthly searches in 2015 were 509,000 of which 68 per cent by banks and 32 per cent by financial and payment institutions.

Under BNB Ordinance No 22 CCR information covers not only entities' credit indebtedness but also that of individuals and legal persons. The Tariff of CCR Fees allows individuals one free access to CCR data a year.

In 2015 there were 9987 applications for CCR statements: 9782 by individuals and 205 by legal entities.

CCR Statement Applications

(number)



Source: the BNB.

Under the Law on Credit Institutions Chapter Eight, Bank and Professional Secrecy, the Bank may also provide information to third parties – judicial and government authorities.

The CCR is a modern information system which complies with state of the art information use requirements on three user interfaces based on new information-sharing technologies. The Register exchanges information with other European credit registers to improve its technological and methodological performance. CCR information compiling and maintenance follows relevant best practice.

The CCR cooperates with the ECB, the World Bank, the IMF, and other international organisations. It has participated in the World Bank's *Doing Business* Project since its creation in 2004 *via* the credit awareness index assessing the scope, amount and availability of information offered by central credit registers internationally. Since 2008 the CCR has received praise for the quality of information it collects and maintains on individuals and legal entities, their credit history, and the access right it grants to individuals. This is an important indicator of overall CCR information system development. By participating in the *Doing Business* Project, the CCR contributes to the development of regulatory best practices and trends in lending and reporting systems.

The Fiscal Agent and State Depository Function

The Bulgarian National Bank acts as the fiscal agent and official depository of the state under the Law on the BNB. Under contracts negotiated to market conditions and prices with the Ministry of Finance, the BNB collects and submits information on budget entities' domestic bank accounts to the Ministry of Finance and acts as government debt agent.

These duties call for continuing improvement of 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.

In 2015 revenue from BNB agency function fees and commissions totalled BGN 2107.7 thousand, down 36.1 per cent on the previous year. This reflected the approximate halving of revenue from system participants resulting from curbed government domestic market bond supply which led to a significant decline in the volume of documents on primary market auctions and primary market government securities registration and settlement, and the smaller volume of maturing government securities.

Information Service

Servicing state budget information under the MF contract involved submitting daily and periodical statements on budget entities' (municipalities included) budget, extra budgetary, EU funds, deposit, foreign currency, and letter of credit lev and foreign currency accounts at the BNB and other Bulgarian banks *via* IOBFR. The BNB, on behalf of the Ministry of Finance, also monitored security pledged by banks under the Public Finance Law and the State Budget Law, tallying it with reported balances daily.

As of 31 December 2015, 21 banks (BNB included) serviced budget funds with access to the IOBFR. According to aggregate data, the overall balance of budget entities' accounts (including the central budget) was BGN 7579.1 million⁷⁹ on the 31 December 2015: down 21.6 per cent on 31 December 2014. By the close of 2015 BGN 5978.5 million or 79 per cent of this was in accounts with the BNB and the rest with commercial banks in Bulgaria.

Account balances⁸⁰ of budget entities outside the central bank went down 45.8 per cent on end-2014. As in previous years, five banks held over 70 per cent of these balances

Almost 90 per cent of the balances of budget accounts with the BNB and commercial banks in Bulgaria are included in the fiscal reserve⁸¹ and comprise its liquidity part which came to BGN 6788.7 million on 31 December 2015. Of this, BGN 4661.4 million was in the targeted accounts of the State Fund for Guaranteeing the Stability of the State Pension System (the Silver Fund), the MF National Fund, the Agricultural State Fund, and the Teachers' Pension Fund.

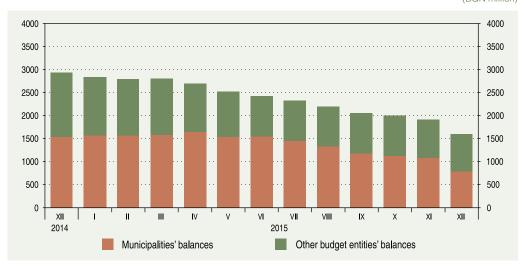
⁷⁹ Foreign currency account balances are recalculated in lev at the BNB exchange rate on 31 December 2015.

⁸⁰ Including central budget account balances.

⁸¹ According to the Law on Public Finance Additional Provisions Section § 1, item 41, the fiscal reserve is an indicator comprising both the balances of all budget entities' bank accounts (excluding municipalities and their budget spending units) and other assets and claims on EU funds.

Budget Entities' Accounts with Domestic Banks (BNB Excluded)

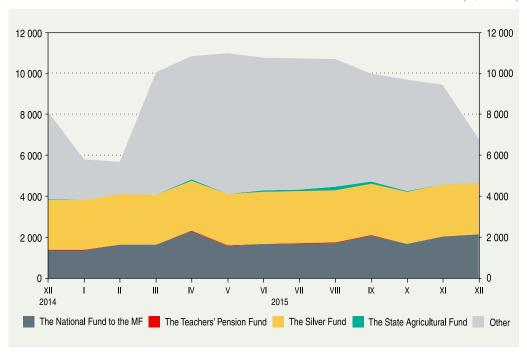
(BGN million)



Source: the BNB.

Fiscal Reserve Structure

(BGN million)



Source: the BNB.

BNB duties to the MF and standing joint instructions by the Minister of Finance and the BNB Governor⁸² involved preparing 1000 statistical budget reporting forms, including 306 fiscal reserve account statements balances: somewhat more than in 2014 due to more daily reporting forms.

The AS ROAD system maintained up-to-date information on the government's foreign financial obligations on which the BNB is calculating and paying agent.⁸³ Based on written MF notifications, the first tranche of the credit agreement between the govern-

⁸² New joint instructions by the Minister of Finance and the BNB Governor under Article 152, paragraph 13 of the Law on Public Finance and in relation to Articles 95, 96 and 98 of the 2015 State Budget Law, regulate day-to-day and other periodic information on budget entities' operations and the manner of managing the daily securing of funds in these accounts.

 $^{^{\}rm 83}$ Under the government debt agency agreement between the BNB and MF.

ment of the Republic of Bulgaria and the European Investment Bank for a structural programmed loan to the amount of EUR 150 million was registered in 2015. In addition, three new issues of global bonds with seven, twelve and twenty year maturities were registered, as well as the reopening of the last of those. The total amount of global bonds by 31 December 2015 was EUR 3150 million. Upon MF confirmation, repayments of EUR 2712.4 million were made ⁸⁴, comprising EUR 2543.3 million in principal and EUR 169.1 million in interest. Reflecting new loans and repayments registered by 31 December 2015, the total amount of obligations in AS ROAD reached EUR 6993.0 million⁸⁵ or EUR 858.5 million more than a year earlier. In structural terms, euro-denominated debt continued occupying the largest relative share at 99.9 per cent.

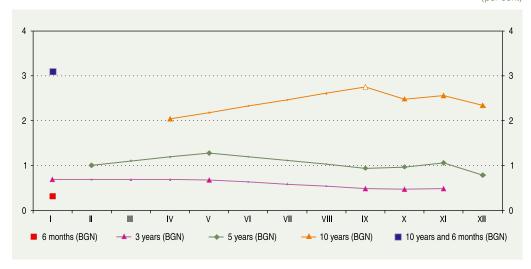
Servicing Government Securities Trading

In line with MF issuing policy,⁸⁶ 2015 saw 18 BGN-denominated government securities auctions⁸⁷ *via* the GSAS system. Five issues were offered: one short-term, two medium-term and two long-term. The average weighted residual term to maturity of sold issues was four years and four months.

The total nominal value of government securities offered for sale was BGN 1700 million. Over 80 per cent of bids were by banks (BGN 2728.8 million, with BGN 678.8 million by non-bank institutions). Some private pension funds were among the most active non-bank institutions, comprising 7.8 per cent of bids, followed by contractual and other funds at 5.3 per cent, insurance corporations at 3.3 per cent, the National Insurance Institute (the NOI) at 2.7 per cent, investment firms at 0.6 per cent and the NOI Employees' Pay Guarantee Fund at 0.3 per cent. The total volume of government securities sales reached BGN 1311.5 million, or 77.1 per cent of the scheduled volume. Over two-thirds of all sold bonds were acquired by primary⁸⁸ and non-primary dealer banks. The average annual yield of six-month, three-year, five-year, ten-year and 10.5-year issues was 0.3, 0.5, 1.0, 2.4 and 3.1 per cent respectively.

Average Annual Yield Attained at Domestic Government Securities Auctions in 2015

(per cent)



Notes: 1. There were no government securities auctions in March, June, July and August 2015.
2. Average yield for the 28 September 2015 10-year bond auction where the MF rejected all bids is shown at the average annual yield proposed for the offered volume.

Source: the BNB.

⁸⁴ The payments total is recalculated in euro at the BNB rate for 31 December 2015.

⁸⁵ Debt total in euro at the BNB rate for 31 December 2015.

⁸⁶ In 2015 the issuer made a number of changes to the initial issue schedules: February and March each had an auction cancelled; April's two scheduled openings of two issues were replaced by an auction for a new issue; both June auctions were cancelled; in September all bids at the 10-year maturity issue auction were rejected; in October and November the sales volume of government securities was BGN 338.5 million less than offered.

⁸⁷ In accordance with MF issuing policy, in 2015 no EUR-denominated government securities were offered by the Ministry of Finance on the domestic sovereign debt market.

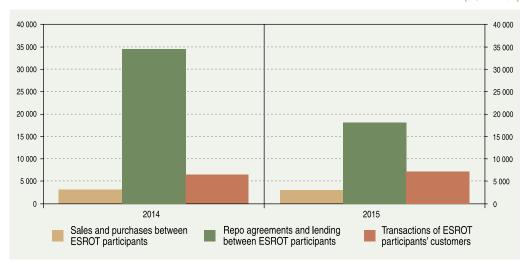
⁸⁸ There were twelve primary dealers designated under Ordinance No 15 of the MF and BNB.

ESROT registered BGN 2500.5 million⁸⁹ of corporate event payments on behalf and for the account of the issuer, down BGN 1260.0 million on the same period of the previous year. By the end of 2015 the nominal volume of the 29 traded government securities issues was BGN 7283.3 million⁹⁰ down 11.7 per cent on 31 December 2014. The issues' currency structure remained unchanged, with BGN-denominated government securities redeemable in levs generally occupying the largest relative share of 71.8 per cent, followed by EUR-denominated government securities redeemable in euro at 26.4 per cent. USD and EUR-denominated government securities redeemable in levs occupied the smallest relative share of 1.8 per cent. The maturity structure underwent the following changes: medium- and long-term government bond issues remained in circulation, in contrast with the end of 2014 when 22.6 per cent of the issues in circulation had maturities of up to one year.

The nominal value of government securities registered in ESROT came to BGN 28,193.5 million, down 35.9 per cent on 2014. The largest share was occupied by repurchase agreements (64 per cent), including those concluded for one day (44 per cent) in both lev- and euro-denominated government securities. The average-weighted annual yield of repo agreements in all maturities moved within wide bands compared to the previous year: from 0.01 per cent to 0.34 per cent (0.03 per cent to 0.08 per cent in 2014). More significant yield fluctuations were observed in transactions concluded for over 30 days.

Volume of Transactions in Tradeable Government Securities

(BGN million)



Source: the BNB.

Government securities sales and purchase transaction volume totalled BGN 10,152.7 million, up BGN 731.1 million on 2014. Of this, BGN 2939.3 million was in operations between participants, BGN 6740.1 million in operations between participants and customers and BGN 473.3 million between ESROT participants' customers⁹¹. This segment occupied 36 per cent of the market, increasing 14.5 per cent on the previous year. Securities traded across the entire yield curve, BGN and EUR-denominated bonds with residual terms to maturity of about five years being most liquid. Average annual yield of the long-term benchmark issue (with a maturity of 10 years and 6 months) moved within a narrow band of 2.95 per cent in January to 2.43 per cent

⁸⁹ The lev equivalent of payments on foreign currency denominated government securities issues was calculated at the BNB rate on the date of payment.

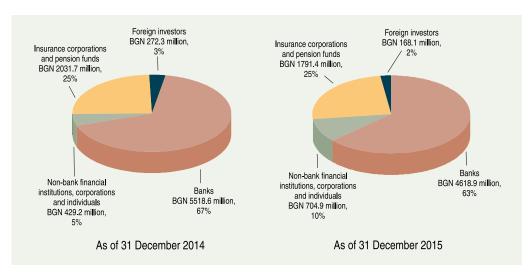
⁹⁰ The lev equivalent of government securities denominated in foreign currency is calculated at the BNB exchange rate for 31 December 2015. The total volume was reduced by the amount of government securities removed from the MF register/accounts and transferred into the pleasure of the Minister of Finance under Article 152, paragraph 9 of the Law on Public Finance.

 $^{^{\}rm 91}$ ESROT does not register transactions between customers of the same participant.

in December, reporting a decline on 2014 (from 3.56 per cent in January to 2.96 per cent in December). The liquidity ratio⁹² on the secondary government securities market was 3.86 for the year compared with 5.29 in the previous year. In 2015 ESROT participants encountered no difficulties and provided the necessary government securities and cash in levs and euro for the delivery versus payment (*DvP*) settlement of government securities transactions on time, with a 100 per cent average settlement ratio⁹³.

Over the reporting period blocking and unblocking operations in domestic government securities registered in ESROT and related to securing funds in budget entities' bank accounts and on registered pledges under the Law on Special Pledges totalled BGN 11,760.5 million against BGN 20,858.8 million in 2014.

Holders of Government Securities Issued in the Domestic Market



Source: the BNB.

Due to the decrease in circulating domestic market government securities, the end of 2015 saw a decline on 2014 in government securities investment by the portfolios of the main bond holder categories: banks (down BGN 900 million) and insurance corporations and pension funds (BGN 240 million). At the same time, non-bank financial institutions, corporations and individuals increased their investment in government securities by BGN 157 million. This led to changes in exposures of individual government bond holder categories on 31 December 2015: 63 per cent with banks; 25 per cent with insurance corporations and pension funds, 10 per cent with non-bank financial institutions, corporations and individuals, and 2 per cent with foreign investors (compared to 67, 25, 5 and 3 per cent on 31 December 2014).

Over the review period ESROT offered 99.8 per cent availability, ⁹⁴ with no call for contingency rules for interaction between systems operated by the BNB. Upon the inclusion of one member state bank in ESROT as a direct participant, the number of participants in the system came to 29 at the end of 2015 (26 banks, one international central securities depository, the Reserve Collateral Pool, and the MF).

On 31 December 2015 there were 1328 accounts in the government securities settlement system under BNB Ordinance No 31 on Government Securities Settlement. Of them, 29 were for government securities of the issuer (the MF), 542 for participants' own government securities portfolios, 348 for encumbered bonds, and 409 held by

⁹² The liquidity ratio is the ratio between the volume of secondary market government bond transactions concluded over a year and the volume of circulating government securities by that year's end.

⁹³ The settlement ratio is the ratio of the number of transactions settled on the set date to all transactions subject to registration and settlement within the system for the reporting period.

⁹⁴ See footnote 54.

participants' customers. Account nominals tallied with the amount of outstanding issues at BGN 7283.3 million.95

In compliance with Ordinance No 15 of the MF and BNB on Control over Transactions in Government Securities, there were joint on-site inspections of banks participating in ESROT and performing sub-depository functions for their customers in November 2015. No breaches of statutory instruments regulating the government bond market were found.

System Development

The MF moved amendments to government securities market legislation (the Law on Government Debt, the Law on Registered Pledges and Ordinance No 5 of the Ministry of Finance and the BNB on the Terms and Procedure for Acquisition, Registration, Redemption and Trade in Government Securities) regulating the possibility of transferring of pledges on government securities between ESROT participants with the same effect as the special pledge and no change in registered circumstances. This led to new functionalities for the Register of Special Pledges and ESROT to enable such operations in government securities.

Over the review period joint consultations continued between the issuer, market participants, and the BNB on the future development of government debt instruments in Bulgaria, including the context of 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). There was consensus between the MF and market participants on the parameters and criteria for an organised trading facility given the need for the market to meet the high liquidity requirements for traded securities laid down in Commission Delegated Regulation (EU) 2015/61. Following notice by the Minister of Finance on this decision, the Bank moved to establish a direct connection between the BNB Government Securities Depository and the *E-BOND* system – an electronic functionality to the *Bloomberg Professional* platform, that will allow the primary dealers of government securities to use this system for real time trading of government securities held by them.

⁹⁵ The lev equivalent of government securities denominated in foreign currency is calculated on the basis of the BNB exchange rate on 31 December 2015.

X. Participating in the ESCB and EU Bodies

In 2015 the EU bodies and institutions continued efforts to recover economic growth, promote investment and enhance trust in the financial system. At the end of June the Five Presidents' Report, ⁹⁶ Completing Europe's Economic and Monetary Union, outlined milestones to Economic and Monetary Union. In line with this, in November 2015 the EC presented a legislative proposal to create a European deposit guarantee scheme and a European deposit guarantee fund as part of initiatives to complete euro area Banking Union.

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 2015 the four ECB General Council sessions focused on: economic development and EU financial sector performance, ECB report on the economic outlook and monetary policies of non-euro area Member States, report on compliance with the ban on monetary financing by central banks⁹⁷, ECB report on the monitoring of non-euro area Member States, and ECB fiscal policy comments in autumn 2015.

BNB representatives sat on 12 ESCB committees⁹⁸ and 36 working groups, and the Human Resources Conference (HRC). Through representatives in ESCB bodies, committees and working groups, the Bank 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 took part in formulating ECB opinions with regard to written consultations between EU Member States and the ECB on legislative bills within its purview. In 2015 the Bank consulted the ECB in writing on the draft amendments to the Law on Credit Institutions⁹⁹ related to the establishment of a register of bank accounts.

The European Systemic Risk Board, European Banking Authority, Colleges of Supervisors The Governor of the BNB is a member of the General Council of the European Systemic Risk Board (ESRB). Discussions at the four General Council meetings focused on assessing risks to EU financial stability arising from the low interest rate environment, the change in the global risk premium, high public and private sector indebtedness, and the situation in the real estate sector. The ESRB also addressed the review of macroprudential policies pursued by EU Member States after the implementation of macroprudential instruments by the Directive and Regulation on the Taking up and Pursuit of the Business of Credit Institutions and Minimum Capital Requirements (the *CRD IV/CRR* package). There was special attention to the cross-border aspects of macroprudential policy. As a result, in December 2015 there were two recommendations: one for establishing a framework for recognising and setting countercyclical buffer rates for exposures to third countries, and one for assessing the cross border effects of macroprudential policy and voluntary reciprocity in its measures.

⁹⁶ The President of the European Commission Jean-Claude Juncker, in close collaboration with Euro Summit President Donald Tusk, Eurogroup President Jeroen Dijsselbloem, European Central Bank President Mario Draghi, and European Parliament President Martin Schulz.

⁹⁷ Report on central bank compliance with the prohibitions specified in Articles 123 and 124 of the Treaty on the Functioning of the European Union.

⁹⁸ 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 Payment and Settlement Systems Committee (PSSC), the Statistics Committee (STC).

⁹⁹ Published, Darjaven Vestnik issue 94 of 2015, effective as of 1 January 2017.

The Bank is represented on the ESRB General Council, Advisory Technical Committee, two working groups, and task forces. In line with the 2012 ESRB Recommendation on the Funding of Credit Institutions, the BNB reported to the ESRB on effective action related to monitoring and assessing risks ensuing from encumbered assets. In December the Bank reported on measures to conduct a more intensive assessment of risks taken by credit institutions with regard to their funding and liquidity. With the Financial Supervision Commission and MF consultation, the Bank reported on the response to the ESRB 2013 Recommendation on Intermediate Objectives and Instruments of Macroprudential Policy.

In 2015 BNB experts continued to sit on EBA working groups and committees. Technical Standards and Delegated Acts were adopted on the *CRD IV/CRR* framework and the recovery and resolution of credit institutions and investment firms. BNB participation in supervisory colleges over the review period focused mainly on preparing and debating recovery plans of banks which form part of foreign bank groups. Views were exchanged on the functioning of individual supervisory colleges and special working meetings were organised to discuss bank group recovery plans.

Cooperation and information exchange among colleges of supervisors, in which the BNB took part as a competent authority responsible for supervision of subsidiaries representing parts of European bank groups, continued over the review period. The past year saw ten risk assessments covering analyses of capital and liquidity positions, business models and corporate governance, and internal control mechanisms. The assessments were included in the summary information for formulating joint decisions on capital adequacy and liquidity at banking group level and for individual credit institutions. Resolution colleges began work under Directive 2014/59/EU for the Recovery and Resolution of Credit Institutions and Investment Firms. The BNB participated in them as a group level resolution authority.

The European Council, Ecofin Council and Economic and Financial Committee (EFC)

In July the Ecofin Council adopted a Recommendation on the National Reform Programme 2015 containing an opinion on Bulgaria's Convergence Programme for 2015. It focused on areas requiring timely measures to correct the identified excessive macroeconomic imbalances. Concrete commitments, measures, and a schedule for implementing specific recommendations in the problem areas identified were set out in the updated 2015 National Reform Programme. BNB representatives participated in the new inter-service task force for monitoring and reporting imbalances in the banking sector, and in debates on progress to remedying identified imbalances. On 26 November 2015, the European Commission published an Alert Mechanism Report stating that the financial sector was stabilising, but that there were still economic imbalances which had to be examined further by the Commission.

In 2015 the Bank continued to be involved in negotiations on euro area Banking Union instruments. After the first element of Banking Union – the Single Supervisory Mechanism, was established and negotiations on the main legal instrument of the second element, the Single Resolution Mechanism (SRM) and Single Resolution Fund (SRF), ended in 2014, in December 2015 the ratification of the Intergovernmental Agreement on the transfer and mutualisation of contributions to the SRF by euro area member states was completed. The Agreement governs the phased SRF buildup and the mechanism for transferring and pooling national compartment funds in it. Agreement negotiations were open to Member States outside the euro area and BNB and Government representatives took part in them. Provisions on countries joining the SSM and SRM later were of particular interest to the Bank. The focus was on clear and sufficiently effective Banking Union mechanisms ensuring the proper framework for its function and taking into account both euro area countries and other EU members.

On 24 November 2015, the European Commission published a legislative proposal for the creation of a European Deposit Insurance Scheme (EDIS). EDIS, the third element

of Banking Union, is foreseen as a staged development. Initially it will operate as reinsurance for national deposit guarantee schemes. Negotiations on the legislative proposal started in December 2015. BNB experts participate in the ad hoc working group on strengthening Banking Union where Bulgaria supports further integration initiatives within Banking Union, considering EDIS establishment as a long-term measure.

After extensive debate at tripartite meetings, the European Commission, the EU Council, and the European Parliament in late November 2015 agreed on the final text of the Regulation on Indices Used as Benchmarks in Financial Instruments and Financial Contracts or to measure the performance of investment funds. The Regulation aims to establish reliable standards for the entire process of setting benchmarks, from submissions of quotes or other input data by market participants, through administration and control over benchmark setting, to benchmark dissemination and publication. The BNB's constructive involvement in the negotiations contributed to specific provisions tailored to the needs of the Bulgarian financial instruments and contracts market .

In 2015 the Bank worked intensively on harmonising national legislation with European requirements. BNB representatives were involved in drafting the Law on Recovery and Resolution of Credit Institutions and Investment Firms, which entered into force in July 2015¹⁰⁰. This transposed the Directive on the Recovery and Resolution of Credit Institutions and Investment Firms¹⁰¹ into Bulgarian legislation.

In connection with the new European framework for deposit guarantee schemes, BNB experts were involved in drafting the Law on Bank Deposit Guarantee¹⁰² transposing Directive 2014/49/EU on Deposit Guarantee Schemes into national legislation.

In 2015 the Bank representatives took part in the inter-service task force on transposing Directive No 2014/17/EU on Credit Agreements for consumers Relating to Residential Immovable Property¹⁰³ into national legislation. The Directive sets out measures designed to provide high protection to market participants: consumers, creditors, and credit intermediaries, and promote responsible behaviour at each stage of the lending process, thus boosting financial stability. A new draft law proposes to regulate mortgage lending to individuals and transpose European requirements in national law.

The BNB continued contributing to the work of the Economic and Financial Committee. Over the year discussions focused on reviewing the economic situation, EU financial sector trends, progress towards the Capital Markets Union and Economic and Monetary Union, and regulatory treatment of sovereign debt exposures. The Committee addressed the surveillance of Member States' fiscal and macroeconomic policies in the context of the fifth European Semester. Also discussed were issues of international financial institution reform. The Committee and an Informal Ecofin meeting discussed the Five Presidents' report. Major topics included proposals to improve the Economic and Monetary Union economic governance framework and the gradual transition to common representation of euro area Member States in international financial institutions.

¹⁰⁰ Published, Darjaven Vestnik issue 62 of 14 August 2015.

¹⁰¹ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 Establishing a Framework for the Recovery and Resolution of Credit Institutions and Investment Firms and Amending Council Directive 82/891/ EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012 of the European Parliament and of the Council.

¹⁰² Law on Bank Deposit Guarantee, amended Darjaven Vestnik, issue 62 of 14 August 2015; amended, issue 96 of 2015; amended, Darjaven Vestnik, issue 102 of 2015, effective as of 1 January 2016.

Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on Credit Agreements for Consumers Relating to Residential Immovable Property and Amending Directives 2008/48/EC and 2013/36/ EU and Regulation (EU) No 1093/2010.

XI.

International Relations

International Financial Institutions

The Law of 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 government 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 bimonthly meetings: a major forum for cooperation and debate on world economic development and prospects and international financial markets. At the Annual General Shareholder Meeting in late June 2015, where the BIS Governors allocated the institutions' net profit, the BNB received a dividend of EUR 2.3 million.

The Governor represents Bulgaria as member on the IMF Board of Governors. For the second time since 1999, in May 2015 Bulgaria hosted the regular meeting of the IMF group and the organisations of the World Bank Group of which Bulgaria is a member. Finance and economy ministers, central bank governors, and senior national representatives in the group took part in the meetings. The forum served as a useful platform to organise discussions and exchange ideas and views between participants and the senior management of the IMF, World Bank, ECB and other international institutions on issues related to investment in Europe's economy, aspects of growth, income distribution and population ageing, and programmes for assessing EU member states' financial sectors. Led by the BNB Governor, the Bulgarian delegation took part in the IMF and World Bank 9 to 11 October 2015 Lima, Peru, Annual Meetings. Bulgarian representatives used the forum to expand and deepen international contacts by participating in the plenary session and related events, and for a number of bilateral meetings with international financial institutions, financial sector, and central bank executives. The IMF confirmed its commitment to conduct a joint IMF/World Bank review under the Financial Sector Assessment Program in the second half of 2016.

In January 2015 the BNB paid its annual contribution of USD 8500 to the International Financial Reporting Standards Foundation and USD 10,000 to the Group of Thirty.

Central Bank Cooperation and Technical Assistance

The BNB continued stepping up cooperation with Western Balkans central banks and backing their EU accession preparations. In March a closing event in Pristina marked the end of BNB work on a EU financed, ECB managed technical cooperation programme with the Western Balkans central banks under which it assisted the Bank of Albania on financial stability.

In April 2015 representatives of the central bank of the Russian Federation visited the BNB to study Bulgarian experience of international cooperation. The visit was in the context of a Memorandum of Cooperation between the two central banks. Representatives of the Republic of Macedonia visited the BNB in September 2015 to exchange experience in payment systems, payment infrastructures and their regulatory framework, preparation and implementation of projects for large and small payments, and transposing the Payment Services Directive into national legislation.

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

XII. Statistics

The BNB collects, compiles, and publishes statistical information under Article 42 of the Law on the Bulgarian National Bank and Article 5 of the Statute of the ESCB and the ECB. Alongside regular submissions of reliable and sound statistical information to the ECB, Eurostat, the ESRB, the IMF, and other international institutions, the Bank disseminates timely and up-to-date data to all users of statistical information.

In 2015 work continued on introducing and implementing the new European System of Accounts (ESA 2010)¹⁰⁴ and other international statistical standards.

In monetary and interest rate statistics, the Bank continued to collect and disseminate MFI balance sheet data and information on interest rates applied by MFIs to deposits and loans *vis-à-vis* households and non-financial corporations and on the long-term interest rate for assessing the degree of convergence. In line with additional statistical information user requirements and ESA 2010 implementation, preparations for extended methodological guidelines and reporting forms in monetary and interest rate statistics¹⁰⁵, and statistics of investment funds¹⁰⁶ and financial vehicle corporations engaged in securitisation transactions¹⁰⁷ continued over the review period. In 2015 the BNB continued gathering and publishing statistics on non-bank financial institutions, including insurers. In June 2015 the BNB started reporting these statistics to the ECB on a regular basis, including quarterly historical data on the March 2008 to March 2015 period. At the same time, preparations began to update and expand the methodological guidelines in line with new ECB statistical reporting requirements for insurance corporations¹⁰⁸.

Work on data control and maintenance of good quality and up-to-date information in the ECB register of Monetary financial institutions, investment firms, financial vehicle corporations and their subsidiaries (Register of Institutions and Affiliates Database, RIAD) continued. Under the ECB project to expand and amplify RIAD information¹⁰⁹, the BNB started collecting and processing more detailed information on credit institutions, money market funds, financial vehicle corporations, investments firms and payment service providers, and payment system operators.

Technological changes enabled the provision of required information on lists of holding corporations, head offices, and insurance corporations. Thus in December 2015 the BNB submitted to the Register the list of holding corporations and head offices to sectoral classification criteria predefined by the BNB and NSI.

In 2015 work continued on implementing the sixth edition of the Balance of Payments Manual. It introduces changes in definitions and presentation of balance sheet items and the international investment position. From April 2015 the BNB started publishing monthly data on the balance of payments, and from June quarterly figures on the international investment position compiled under this Manual. In the second quarter of 2015 BNB Ordinance No 27 on the scope, type and timelines for the submission of securities statistics entered into force.

¹⁰⁴ Regulation (EU) No 549/2013 of the European Parliament and of the Ocuncil on the European System of National and Regional Accounts in the European Union.

Regulation (EU) No 1071/2013 Concerning the Balance Sheet of the Monetary Financial Institutions Sector and Regulation (EU) No 1072/2013 Concerning Statistics on Interest Rates Applied by Monetary Financial Institutions.

¹⁰⁶ Regulation (EU) No 1073/2013 Concerning Statistics on the Assets and Liabilities of Investment Funds.

¹⁰⁷ Regulation (EU) No 1075/2013 Concerning Statistics on the Assets and Liabilities of Financial Vehicle Corporations Engaged in Securitisation Transactions.

¹⁰⁸ Regulation (EU) No 1374/2014 of the European Central Bank on Statistical Reporting Requirements for Insurance Corporations (ECB/2014/50).

¹⁰⁹ In accordance with Guideline of the ECB of 4 April 2014 on Monetary and Financial Statistics (ECB/2014/15).

In 2015 work continued on the ESCB Centralised Securities Database project and on compiling a Bulgarian securities database. The BNB as a member of the ESCB took part in the Securities Holdings Statistics project, which is important for compiling other statistics and for financial stability analyses.

On financial accounts, the BNB regularly compiles data on the quarterly financial accounts of the general government sector, government finance statistics, and quarterly financial accounts of all sectors.¹¹⁰

In September 2015 Bulgaria expressed interest in joining the new IMF statistical data dissemination standard, the Special Data Dissemination Standard Plus (SDDS Plus) and the NSI, MF and BNB continued preparing to be coordinators for Bulgaria for this standard.

In compliance with BIS requirements, the BNB regularly provides macroeconomic statistics.

In 2015 work continued on developing and elaborating the Integrated Statistical Information System and the Information System for Monetary and Interest Rate Statistics which automate control over electronic statistical information and its processing and dissemination. This enabled the BNB to publish more reliable statistical information.

There were over 6400 registered external users in the ISIS electronic submission of statistical information portal. More than half of them report on more than one entity. ISIS reporting of direct investment and securities statistics from 2015 rounds off electronic submission of statistical declarations and reporting forms under BNB Ordinance No 27. This greatly reduced the burden of submitting statistical information and declarations.

¹¹⁰ Under Regulation (EC) No 501/2004 of the European Parliament and of the Council, Guideline of the European Central Bank 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 Guideline of the ECB of 25 July 2013 on Government Finance Statistics (ECB/2013/23).

XIII. Research

Economic research, Bulgarian economic analyses, and macroeconomic forecasts prepared by BNB experts support the Bank's management in making decisions and formulating economic policy. In 2015 research focused on factors behind domestic price dynamics, the relationship between inflation and economic cycles, the labour market, modelling various aspects of the banking system, international trade flows, analysis and assessment of the effects of some proposals for structural reforms, and developing macroeconomic forecasting models.

Specialised research under the 2015 to 2016 BNB Research Plan supported the Bank's operations by analysing individual economic processes and issues and improving forecasting and modelling tools. Work under the 2015 Research Plan addressed labour cost determining mechanisms in non-financial corporations, the effects of non-financial corporations' indebtedness on the economy and relations between inflation, potential growth, and structural unemployment. Testing and honing the basic model for BNB macroeconometric forecasting continued with a view to improving related BNB forecasting. Research results featured in technical reports and seminars held by the Bank for experts from relevant bodies, academia, and non-governmental organisations.

Through its Discussion Papers research series, in 2015 the BNB continued to encourage the research potential of Bulgarian economic science and practice in macroeconomics and finance. Over the year the Discussion Papers Editorial Board reviewed five new submissions of which three were published.

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 Review also contains quantitative assessments of developments anticipated 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. In 2015 major highlights included: details on the ECB Public Sector Purchase Programme; analysis of results from the Bank Lending Survey for the 2003–2014 period; precautionary BNB measures to counteract external risks to Bulgaria's banking system; potential effects of the USD/EUR exchange rate change on the Bulgarian economy; the process of US monetary policy normalisation.

XIV.

Human Resource Management

In 2015 BNB human resource management focused on the key priorities of: boosting staff performance through training and career development, maintaining analytical and administrative capacity, applying performance-related pay, ensuring a sociable environment, and promoting health and safety at work.

Structural changes in the Bank from 1 November 2015¹¹¹ related to new powers of the BNB as bank resolution authority under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms, the Plan for Reforming and Developing Banking Supervision¹¹² approved by the BNB Governing Council on 5 October 2015, and the BNB Governor's commitments on Bank's institutional development presented to the National Assembly. The Law on the Recovery and Resolution of Credit Institutions and Investment Firms Article 2, paragraph 2 involved establishing a new Resolution of Credit Institutions Directorate reporting directly to the Governor of the BNB. The Plan on Reforms and Development of Banking Supervision involved reorganising the Banking Supervision Department into these directorates: Inspections, Off-site Supervision, Macro-prudential Supervision and Financial Stability, Specific Supervisory Activities, Supervisory Policy, and Legal Supervisory Directorate. Increasing work on payment infrastructure, payment systems, payment systems oversight, and the Central Credit Register meant structural changes at the Banking Department which now comprises these directorates: Payment Systems, Payment Supervision, Methodology and Financial Markets, Central Credit Register and Minimum Required Reserves, and Statistics and General Accounting.

By the end of 2015 there were 843 employees against 861 a year earlier. Fifty two new full time employees were appointed against 48 in 2014. Staff turnover increased slightly from 7.1 per cent in 2014 to 7.9 per cent. Sixty seven employees left in 2015 against 61 in 2014. The number of retiring employees was 25 from 24 in 2014.

The BNB continued attracting candidates with relevant degrees as required by the policy of recruiting highly qualified staff. There were no major changes in staff education and qualification structure. The share of university graduates remained at 72 per cent, of whom 492 with a masters degrees and 96 with baccalaureates. At the end of 2015, 20 BNB employees read for doctorates from 19 in 2014.

Specialists held the largest share at 50.1 per cent, followed by support staff and management.

The share of employees aged up to 30 continued to decrease (by 1.3 percentage points on 2014). The number of employees in the other three age groups remained almost unchanged.

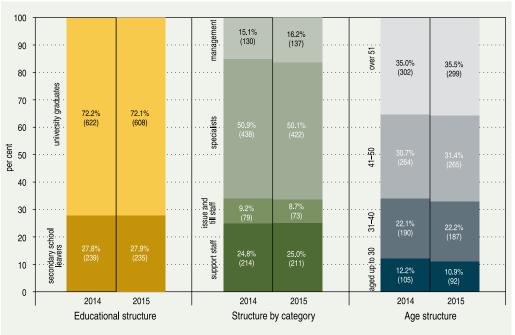
Staff gender was women at 63.82 per cent and men at 36.18 per cent. By comparison, in 2014 women accounted for 64.58 per cent of employees and men 35.42 per cent.

¹¹¹ See the BNB press release of 29 October 2015. http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20151029_BG

¹¹² See the BNB press release of 5 October 2015. http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20151005_1_BG

Staff Structure on 31 December

(per cent, number)



Source: the BNB.

Acquiring knowledge and skills by moving between positions and units remained a practice in 2015. The number of employees moving to other units or positions increased three fold from 25 in 2014 to 84 in 2015.

Six BNB employees (from eight in 2014) worked on short-term appointments at the ECB, ESCB, national central banks, and EU structures.

In 2015 pay continued reflecting performance and each employee's individual contributions to Bank targets.

An annual schedule offered employees plentiful opportunities to take a variety of training and qualification boosting programmes like specialised courses, seminars and other forms of training at home and abroad, distant learning programmes, language courses, information technology courses, and specialised training in statutory and internal regulations. Induction training developed further appropriate means for familiarising new employees with the Bank's corporate culture, topical tasks, internal rules, and general administrative procedures.

Over the year 21 employees, of whom seven reading for doctors', six for masters', and eight for bachelors' degrees, boosted their educational attainments without discontinuing work. Four of them graduated, one with a doctorate, two with masters' degrees, and one with a baccalaureate.

Fourteen employees took part in five international distant training programmes. Certified financial analyst programmes and audit and control programmes attracted most participants.

Over the year nine internal bank training sessions like courses, seminars, and various other information exchanges attracted 220 employees.

The BNB continued cooperating with the central banks of European countries and with a number of international financial organisations and training centres and institutes. Bank employees attended international courses, seminars, and conferences in: banking supervision and financial stability, monetary policy and financial program-

Human Resource Management

ming, payment and settlement systems, financial markets, and assets management and market operations.

In 2015 there was training on improving general computer and information technology skills.

Training courses and seminars in law and procurement, accounting and internal audit, and human resources management enjoyed high interest.

In 2015 work on ensuring health and safety at work focused mainly on limiting occupational risk, awareness, and motivating staff to discharge their duties safely and prevent health hazards. Structural units and officers determined by internal regulations participated in this.

The BNB continued providing career opportunities and encouraging students to deepen their research and academic knowledge. The annual scholarship programme continued enjoying great interest. In early 2015, following a contest, the BNB awarded a masters' degree scholarship.

Interest in the BNB traineeships programme remained strong despite a decline compared with previous years. The number of candidates exceeded 70 of whom 13 were approved. The Bank participated in two career fora at which it presented its recruitment and career development programmes to undergraduates and postgraduate students.

XV. BNB Internal Audit

In 2015 there were ten audits under the annual Internal Audit Programme approved by the BNB Governing Council and three audits under the ESCB Internal Auditors Committee Programme.

Audits sought reasonable assurance of adequate and effective control, corporate governance, and risk management for 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 compliance.

BNB Internal Audit Programme Audits

| BNB Functions | Audits |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Supervisory policy |
| Supervision and financial stability | Credit institutions supervision |
| Banknotes and coins | Cash supply and retrieval of cash at the BNB Cash Centre and the Sofia, Plovdiv, Varna, Pleven, and Burgas cash centres. |
| | Control over the Bulgarian Banknote Production Process |
| Payment and securities settlement systems | The electronic system for registration and servicing of book entry government securities (ESROT), the SDTK system for government securities settlement and the Register of Special Pledges |
| Bank services to government and public organisations | First Issue of book entry government securities |
| Financial Accounting and Financial Statements | BNB Consolidated Financial Statements for the Year Ended 30 June 2015 |
| Internal services | Banking security and protection of classified information |
| Tracking performance | Follow-up on recommendations from past audits under the BNB Internal Audit Programme |
| BNB Internal Audit | Quality assessment of BNB Internal Audit activities |

Source: the BNB.

Audit commitments under the ESCB Internal Auditor Committee annual programme focused on statistics and payment systems. The implementation of past audit recommendations was monitored.

In 2015 the BNB's Chief Auditor organised the Internal Audit Unit and coordinated it with external auditors and the auditing team from the Court of Auditors of the Republic of Bulgaria. Comments were made on draft internal regulations on major BNB and subsidiary functions. The *TeamMate* audit management application and the maintenance system and base software were updated. New functionalities facilitating the audit process were introduced.

Two major internal documents – BNB Operational Risk Management Policy and Guidelines on Implementing BNB Operational Risk Management Policy, were updated. Under the Operational Risk Management Committee plan for 2015 and in line with the above two documents, self-assessment was conducted within the new operational risk management system – *Mega GRC*. User guides were prepared for the three key system modules: Risk Control and Self-Assessment, Action Plans, and Incidents. The Bank organised a training session where the software provider helped Heads of Risk Management Units to use the new system.

XVI. BNB Budget Implementation

The Governing Council adopted the 2015 BNB budget by Resolution No 154 of 27 November 2014. The report on the Bank's budget comprises two sections pursuant to the BNB Governing Council's Internal Rules on Drafting, Implementing, and Reporting the BNB Budget: BNB Operating Expenditure and Investment Programme.

1. Operating Expenditure

In 2015 the BNB spent BGN 79,842,000 or 85.7 per cent of its budgeted figure for the year.

Currency circulation cost BGN 19,338,000 or 90.5 per cent of annual budget and 24.2 per cent of total operating expenditure budgeted for the review period. To guarantee cash in circulation BGN 18,904,000 were spent of which BGN 8,673,000 went on banknotes production and BGN 10,231,000 on new coins: including BGN 9,695,000 on circulating coins and BGN 536,000 on commemorative coins minted in line with the Commemorative Coin Programme approved by the BNB Governing Council. The design of new banknotes and coins cost BGN 34,000 including funds for 5 competitions for the design of commemorative coins that will be minted in 2016. Spending on machines for servicing circulating cash came to BGN 74,000 and that on consumables for banknote and coin processing reached BGN 163,000. Renting premises at the Cash Services Company AD and the Bulgarian Mint Ltd cost BGN 162,000.

Materials, services, and depreciation cost BGN 32,341,000 or 78.0 per cent of the annual budget under this item and 40.5 per cent of the Bank's total operating expenditure. Materials cost BGN 922,000, the largest share in this group being occupied by vehicle fleet fuel and spares (BGN 341,000) and office consumables (BGN 229,000). The Bank spent BGN 167,000 on inventories. External services cost BGN 16,966,000. A significant share in this group was occupied by software maintenance subscriptions at BGN 3,474,000, Bloomberg, Reuters, internet and other systems at BGN 1,011,000, mandatory TARGET2 modules at BGN 968,000, and BORICA-Bankservice AD subscriptions at BGN 544,000. Equipment maintenance was BGN 1,883,000. Property and refuse collection levies were BGN 1,300,000. Mail, telephone and telex expenditure came to BGN 595,000 in line with the trend towards improving and updating the BNB voice services. Electric bills were BGN 1,186,000 and heating and water cost BGN 250,000. Property insurance expenses came to BGN 110,000. The Bank spent BGN 2,227,000 on security and fire protection. Major building maintenance cost BGN 2,034,000 for the reporting period. Consultancy services amounted to BGN 403,000. The Bank used consultancy services for the conduct of a national survey on public perceptions of social and economic development in Bulgaria, financial institutions and the role of the BNB, translation of supervisory documentation in English, improvement of professional skills of the security staff and access control, legal services, and running the Banking and Financial History Research and Publications Programme Council. In 2015 depreciation expenditure amounted to BGN 14,453,000.

Payroll, social, and healthcare spending was BGN 23,155,000 or 99.5 per cent of budget funds for this item and 29.0 per cent of Bank's total operating expenditure for the reporting period. The Bank reported BGN 719,000 of current retirement obligations and unused paid leave under IAS 19, Income of Hired Persons. Social expenditure was BGN 2,139,000.

Miscellaneous administrative spending was BGN 1,116,000 or 50.6 per cent of budgeted funds and 1.4 per cent of total operating expenditure. Inland travel worth BGN 71,000 involved mainly regional cash centre logistics and checks. Foreign travel unrelated to the participation in the ESCB and other EU bodies cost BGN 260,000. The annual BNB Staff Education and Professional Training Programme cost BGN 494,000. BNB employees took part in various distance learning programmes, professional courses and seminars organised by EU central banks and international financial institutions. BNB representatives actively participated in specialised training and seminars related to the expert work in EU institutions and bodies.

The BNB spent BGN 1,753,000 on BNB participation in the ESCB, or 68.1 per cent of the annual budget under this item and 2.2 per cent of all operating expenditure. BNB representatives took part in ESCB committees and working groups and other EU bodies, with travel accounting for BGN 682,000 and training – BGN 54,000. The annual fee for European Banking Authority membership was BGN 966,000. The Bank hosted a working meeting of the Information security and risk management group to the ESCB Information Technology Committee spending BGN 26,000 thereon. Hiring telecommunication services amounted to BGN 25,000.

2. The Investment Programme

The BNB spent BGN 9,928,000 on its Investment Programme, or 47.2 per cent of a total of BGN 21,027,000 budgeted for 2015.

Over the review period, the Bank spent BGN 290,000 on construction, refurbishment and modernisation: including BGN 165,000 on dismantling and construction of the roof and tower of the BNB Cash Centre building in Pleven; BGN 107,000 on emergency rehabilitation of the solar panel and waterproofing of the BNB recreation home in Primorsko; BGN 18,000 on preliminary examination of the investment project and on consultancy related to the Cash and Information Centre in Plovdiv. However, the full amount of budgeted funds was not utilized due to required changes in the parameters of this construction project.

Machine and equipment, vehicle, and other equipment investment came to BGN 1,677,000, or 61.7 per cent of approved funds and 16.9 per cent of total investment for the review period. Two special armoured currency circulation vehicles were delivered for BGN 1,173,000. Equipment related to cash operations cost BGN 224,000, including: BGN 109,000 on two coin-sorting machines and one coinwrapping machine; BGN 74,000 on sensors for two cash-handling machines; and BNB 41,000 on sundry equipment. Expansion of security systems cost BGN 118,000. Supply and installation of air-conditioning in the main building came to BGN 129,000.

Funds invested in information systems totalled BGN 7,960,000, or 59.5 per cent of projected funds and 80.2 per cent of total investment expenses for the review period. Funds went mostly into keeping the BNB information and communication technology infrastructure modern.

Hardware cost BGN 5,245,000 and went mainly on computer and communications equipment for updating and expanding the existing systems, as well as for their back-up. Software spending of BGN 2,715,000 was on licence purchases (BGN 1,395,000) and functionality expansion of existing systems (BGN 1,320,000).

The BNB budget implementation and the utilization of funds under the two sections were strictly monitored given the unfavourable market environment. At the same time, in the second half-year the Investment Programme was revised to improve its efficiency and set out clear investment priorities. As a result, some of the projects planned for 2015 were delayed and entered in the 2016 Budget Implementation.

BNB Budget Implementation as of 31 December 2015

| Indicator | Report 31 December 2015 (BGN'000) | Budget 2015 (BGN'000) | Implementation (per cent) |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------|---------------------------|
| Section I. Operating Expenditure | 79,842 | 93,137 | 85.7 |
| Currency circulation expenditure | 19,338 | 21,358 | 90.5 |
| Materials, services, and depreciation expenditure | 32,341 | 41,472 | 78.0 |
| Staff expenditure | 23,155 | 23,276 | 99.5 |
| Social activity expenditure | 2,139 | 2,254 | 94.9 |
| Other administrative expenditure | 1,116 | 2,204 | 50.6 |
| BNB expenditure on ESCB membership | 1,753 | 2,573 | 68.1 |
| Section II. Investment Programme | 9,928 | 21,027 | 47.2 |
| Expenditure on construction, refurbishment, and modernisation Expenditure on machines, vehicles. | 290 | 4,741 | 6.1 |
| and other equipment | 1,677 | 2,716 | 61.7 |
| Expenditure on BNB computerisation | 7,960 | 13,374 | 59.5 |
| Investment related to ESCB membership | 1 | 196 | 0.5 |

Source: the BNB.

XVII. Bulgarian National Bank Consolidated Financial Statements as of 31 December 2015

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Ernal & Young Auult 000 Polygraphia Office Center 47A (Sengridsky Shase Blvs., Floor & 1124 Solid, Burdana Tal: +359 2 81 77 100 Fac: +359 2 81 77 111

Independent Auditors' Report to the Governing Council of the Bulgarian National Bank

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of the Bulgarian National Bank and its subsidiaries, which comprise the consolidated statement of financial position as of 31 December 2015, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and presentation of consolidated financial statements that give a true and fair view in accordance with the international Financial Reporting Standards, as adopted for use in the European Union, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with the International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

Translation in English of the official Auditors: Report issued in Bulgarian.

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We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Bulgarlan National Bank and its subsidiaries as of 31 December 2015, and of their financial performance and cash flows for the year then ended in accordance with international Financial Reporting Standards, as adopted for use in the European Union.

Other Matter

The consolidated financial statements of the Bulgarian National Bank and its subsidiaries for the year ended 31 December 2014 were audited by another auditor who expressed an unmodified opinion on those statements on 23 April 2015.

Report on Other Legal Requirements

Pursuant to the requirements of the Bulgarian Accountancy Act, Article 38, paragraph 4 (effective for financial year 2015), we read the Annual Management Report accompanying the consolidated financial statements for the year ended 31 December 2015.

In our opinion, the information given in the Annual Management Report is consistent with the accompanying annual consolidated financial statements as of 31 December 2015.

Nikolay Garnev, CPA Registered Auditor Partner Ernst & Young Audit OOD Milka Natcheva-Ivanova. CPA Registered Auditor Partner Ernst & Young Audit OOD

11, April 2016 Sofia, Bulgaria

Translation in English of the official Auditors' Report issued in Bulganan.

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

The Law on the Bulgarian National Bank requires the Governing Council to prepare 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 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, which disclose with reasonable accuracy at any time the financial position of the Bulgarian National Bank. It has overall responsibility for taking such steps so as 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 Year Ended 31 December 2015

(BGN'000)

| | Note | 2015 | 2014 |
|------------------------------------------------------------------|------|-----------|-----------|
| Interest income | 7 | 404,238 | 397,412 |
| Interest expense | 7 | (6,802) | (1,498) |
| Net interest income | | 397,436 | 395,914 |
| Fee and commission income | | 9,457 | 10,333 |
| Fee and commission expense | | (4,866) | (4,250) |
| Net fee and commission income | | 4,591 | 6,083 |
| Net (losses)/gains from financial assets and liabilities at fair | | | |
| value through profit or loss | 8 | (419,974) | 189,180 |
| Other operating income | 9 | 42,303 | 40,286 |
| Total income from banking operations | | 24,356 | 631,463 |
| Administrative expenses | 10 | (107,038) | (101,470) |
| (Loss)/profit for the period | | (82,682) | 529,993 |
| Other comprehensive income | | | |
| Other comprehensive income, total | | 1,110 | 1,384 |
| Total comprehensive income for the period | | (81,572) | 531,377 |
| Profit attributable to: | | | |
| Equity holder of the Bank | | (82,862) | 529,813 |
| Non-controlling interest | | 180 | 180 |
| (Loss)/profit for the period | | (82,682) | 529,993 |
| Total comprehensive income attributable to: | | | |
| Equity holder of the Bank | | (81,752) | 531,197 |
| Non-controlling interest | | 180 | 180 |
| Total comprehensive income for the period | | (81,572) | 531,377 |
| | | | |

Consolidated Statement of Financial Position as of 31 December 2015

(BGN'000)

| | Note | 31 December 2015 | 31 December 2014 |
|--------------------------------------------------------------|------|---------------------|---------------------|
| ASSETS | | | |
| Cash and deposits in foreign currencies | 11 | 10,881,166 | 6,537,102 |
| Gold, instruments in gold and other precious metals | 12 | 2,504,516 | 2,495,289 |
| Financial assets at fair value through profit or loss | 13 | 26,238,186 | 23,260,551 |
| Financial assets available for sale | 14 | 1,647,810 | 1,546,949 |
| Tangible assets | 15 | 172,664 | 179,588 |
| Intangible assets | 16 | 4,289 | 3,491 |
| Other assets | 17 | 98,193 | 91,775 |
| Total assets | | 41,546,824 | 34,114,745 |
| LIABILITIES | | | |
| Banknotes and coins in circulation | 18 | 12,724,818 | 11,586,943 |
| Due to banks and other financial institutions | 19 | 14,860,012 | 8,125,056 |
| Liabilities to government institutions and other liabilities | 20 | 6,577,074 | 7,027,509 |
| Borrowings against Bulgaria's participation in international | | | |
| financial institutions | 21 | 3,021,397 | 2,835,018 |
| Other liabilities | 22 | 143,437 | 189,839 |
| Total liabilities | | 37,326,738 | 29,764,365 |
| EQUITY | | | |
| Capital | 23 | 20,000 | 20,000 |
| Reserves | 23 | 4,195,486 | 4,325,960 |
| Non-controlling interest | 24 | 4,600 | 4,420 |
| Total equity | | 4,220,086 | 4,350,380 |
| Total liabilities and equity | | 41,546,824 | 34,114,745 |

Consolidated Statement of Cash Flows for the Year Ended 31 December 2015

(BGN'000)

| | Note | 2015 | 2014 |
|--------------------------------------------------------------------------------------------|--------|-------------|-------------|
| OPERATING ACTIVITIES | | | |
| Net (loss)/profit | | (79,161) | 529,993 |
| Adjustments: | | | |
| Dividend income | 9 | (10,165) | (6,994) |
| Depreciation and amortisation | 15, 16 | 18,211 | 19,047 |
| (Loss)/Profit on disposal of tangible assets | | (137) | 44 |
| Profit/(Loss) on financial assets and liabilities arising from market movements | | 204,965 | (374,520) |
| (Loss)/Profit of associates | | (1,387) | 1,003 |
| Other adjustments | | (421) | (20) |
| Net cash flow from operating activities before changes in operating assets and liabilities | | 131,905 | 168,553 |
| Change in operating assets | | | |
| (Increase) in gold, instruments in gold and other precious metals | | (8,539) | (5,094) |
| (Increase) in financial assets at fair value through profit or | | | |
| loss | | (3,094,853) | (3,441,047) |
| (Increase)/Decrease in other assets | | (4,787) | 14,766 |
| Change in operating liabilities | | | |
| Increase in currency in circulation | | 1,137,875 | 1,333,221 |
| Increase in due to banks and other financial institutions | | 6,734,956 | 1,061,646 |
| (Decrease)/Increase in due to government institutions and other liabilities | | (450,435) | 1,121,802 |
| (Decrease)/Increase in other liabilities | | (46,402) | 46,569 |
| Net cash flow from/(used in) operating activities INVESTING ACTIVITIES | | 4,399,720 | 300,416 |
| Acquisition of tangible and intangible assets | | (12,105) | (7,412) |
| Dividends received | | 6,644 | 6,994 |
| Other investments | | | 43 |
| Net cash flow (used in) investing activities FINANCING ACTIVITIES | | (5,461) | (375) |
| Payments to the Government | | (48,564) | (62,300) |
| Net cash flow (used in) financing activities | | (48,564) | (62,300) |
| Net increase in cash and cash equivalents | | 4,345,695 | 237,741 |
| Cash and cash equivalents at beginning of period | | 6,605,981 | 6,368,240 |
| Cash and cash equivalents at end of period | 11, 17 | 10,951,676 | 6,605,981 |

Consolidated Statement of Changes in Equity for the Year Ended 31 December 2015

(BGN'000)

| | | | | | | (Bail 000) |
|--------------------------------------------------------|---------|----------------------------------------------|----------------------------|----------------------------------|---------------------------------|-----------------|
| | Capital | Revaluation of non- monetary assets | Special and other reserves | Total capital and reserves | Non- controlling interest | Total equity |
| Balance as of 1 January 2014 | 20,000 | 133,609 | 3,723,454 | 3,877,063 | 4,240 | 3,881,303 |
| | | | | | | |
| Profit/(Loss) for the period | - | - | 529,813 | 529,813 | 180 | 529,993 |
| Other comprehensive income: | | | | | | |
| - other income | - | 1,370 | 14 | 1,384 | - | 1,384 |
| Other comprehensive income, total | - | 1,370 | 14 | 1,384 | - | 1,384 |
| Total comprehensive income for the period | - | 1,370 | 529,827 | 531,197 | 180 | 531,377 |
| Contributions by and distributions to owners: | | | | | | |
| contribution to the budget of the Republic of Bulgaria | - | - | (62,300) | (62,300) | - | (62,300) |
| Transactions with owners, total | - | - | (62,300) | (62,300) | - | (62,300) |
| Balance as of 31 December 2014 | 20,000 | 134,979 | 4,190,981 | 4,345,960 | 4,420 | 4,350,380 |
| | | | | | | |
| Balance as of 1 January 2015 | 20,000 | 134,979 | 4,190,981 | 4,345,960 | 4,420 | 4,350,380 |
| (Loss)/Profit for the period | | | (82,862) | (82,862) | 180 | (82,682) |
| Other comprehensive income: | | | (02,002) | (02,002) | 100 | (02,002) |
| - other income | - | 1,357 | (247) | 1,110 | | 1,110 |
| Other comprehensive income, total | - | 1,357 | (247) | 1,110 | | 1,110 |
| Total comprehensive income for the period | - | 1,357 | (83,109) | (81,752) | 180 | (81,572) |
| Contributions by and distributions to owners: | | | | | | |
| contribution to the budget of the Republic of Bulgaria | - | - | (48,564) | (48,564) | - | (48,564) |
| dividends paid by subsidiaries to minority owners | | | (158) | (158) | _ | (158) |
| Transactions with owners, total | - | | (48,722) | (48,722) | - | (48,722) |
| Balance as of 31 December 2015 | 20,000 | 136,336 | 4,059,150 | 4,215,486 | 4,600 | 4,220,086 |
| | | | | | | |

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 purchase 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 89 to 127, on 11 April 2016.

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 lev 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 |
| Available-for-sale financial assets | 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 cash in circulation as a financial liability (see 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 (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 financial year. The following amendments to standards have been adopted by the Bank as of 1 January 2015:

- Annual improvements to IFRSs 2011–2013 Cycle which comprise minor clarification changes in:
 - IFRS 3 Business Combinations
 - IFRS 13 Fair Value Measurement
 - IAS 40 Investment Property

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

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.

Associated companies

Associates are those entities in which the Bank has significant influence, but which are neither subsidiary enterprise, nor 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 inter-company 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 includes 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 measuring financial instruments subsequent to initial recognition, the Bank classifies the financial instruments into four categories:

Financial instruments at fair value through profit or loss are those that the Bank holds primarily for the purpose of short-term profit. These include investments that are not designated for any particular purpose and effective hedging instruments and liabilities from short-term sales of financial instruments. Net receivables under derivatives held for trading (positive fair value), as well as options purchased, if any, are reported as trading assets. All net liabilities under derivatives for trading (negative fair value), as well as options written, if any, are reported as trading liabilities.

Loans and receivables are instruments issued by the Bank through providing money to a debtor other than those created with the intention of short-term profit taking.

Held-to-maturity financial assets are assets with fixed or determinable payments and fixed maturity that the Bank has the intent and ability to hold to maturity.

Available-for-sale financial assets are all assets that cannot be classified in any other category, as well as those financial assets designated as available for sale at initial recognition.

(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 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.

Portfolios of financial assets and financial liabilities that are exposed to market risk and credit risk that are managed by the Bank on the basis of the net exposure to either market or credit risk are measured 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. Those 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 values reflect the credit risk of the instrument and include 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 impairment loss, the reduction in the impairment loss is reversed through profit and loss.

Impairment losses on available-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 profit or loss is the difference between the acquisition cost, net of any principal repayment 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/liabilities held for trading

Financial assets at fair value through profit or loss include instruments which the Bank acquires or incurs principally for the purpose of selling or repurchasing in the near term, or holds as part of a portfolio that is managed as a whole with the purpose of short-term profit.

Initially financial assets and liabilities held for trading are recognised at fair value in the statement of financial position and 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) Investments

(1) Held-to-maturity investments

Held-to-maturity financial assets are non-derivative assets with fixed or determinable payments and fixed maturity that the Bank has the intent and ability to hold to maturity, are not designated at fair value through the profit or loss, and are not available for sale financial assets.

Held-to-maturity investments are carried at amortised cost on the basis of an effective interest rate method. In case of sale or reclassification of more than an insignificant part of the assets held to maturity that are not falling due in the immediate future, there should be a reclassification of the entire portfolio of investments held to maturity in the group of available-for-sale investments. As a result of this reclassification, the Bank may not classify investments as held to maturity in the current year and the following two years.

(2) Available-for-sale investments

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 assets 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 available-for-sale financial assets and are 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 Bank presents 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.

1) 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.

2) Depreciation

Depreciation is provided on a straight-line basis at prescribed rates designed to write down the cost of 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 d | 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.

3) 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.

4) 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 31 December 2015 and 31 December 2014 are as follows:

| Currency | 31 December 2015 | 31 December 2014 |
|------------------------|---------------------------|---------------------------|
| US dollars | 1 : BGN 1.79007 | 1 : BGN 1.60841 |
| Euro | 1 : BGN 1.95583 | 1 : BGN 1.95583 |
| Special Drawing Rights | 1 : BGN 2.48258 | 1 : BGN 2.32959 |
| Gold | 1 troy ounce: BGN 1911.36 | 1 troy ounce: BGN 1909.95 |

(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 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.

IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets (Amendments): Clarification of Acceptable Methods of Depreciation and Amortisation

The amendments are effective for annual periods beginning on or after 1 January 2016. They clarify the principle in IAS 16 and IAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, the ratio of revenue generated to total revenue expected to be generated cannot be used to depreciate property, plant and equipment or amortise intangible assets. It is not expected that these amendments would be relevant to the Bank.

IAS 19 Employee Benefits (Amended): Employee Contributions

The amendment is effective for annual periods beginning on or after 1 February 2015. The amendment applies to contributions from employees or third parties to defined benefit plans. The objective of the amendment is to simplify the accounting for contributions that are independent of the number of years of employee service, for example, employee contributions that are calculated according to a fixed percentage of salary. It is not expected that this amendment would be relevant to the Bank.

IFRS 9 Financial Instruments

The standard is applied for annual periods beginning on or after 1 January 2018 with early adoption permitted. The final phase of IFRS 9 replaces IAS 39 Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. The standard has not yet been endorsed by the EU. The Bank will analyse and assess the impact of the new standard on its future financial position or performance.

IFRS 11 Joint Arrangements (Amendment): Accounting for Acquisitions of Interests in Joint Operations

The amendment is effective for annual periods beginning on or after 1 January 2016. It adds new guidance on how to account for the acquisition of an interest in a joint operation that constitutes a business in accordance with IFRS. It is not expected that this amendment would be relevant to the Bank.

IFRS 10, IFRS 12 and IAS 28: Investment Entities: Applying the Consolidation Exception (Amendments)

The amendments are effective for annual periods beginning on or after 1 January 2016. The amendments clarify that the exemption from presenting consolidated financial statements applies to a parent entity that is a subsidiary of an investment entity, when the investment entity measures all of its subsidiaries at fair value. Also, the amendments clarify that only a subsidiary that is not an investment entity itself and provides support services to the investment entity is consolidated. All other subsidiaries of an investment entity are measured at fair value. The amendments to IAS 28 Investments in Associates and Joint Ventures allow the investor, when applying the equity method, to retain the fair value measurement applied by the investment entity associate or joint venture to its interests in subsidiaries. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would be relevant to the Bank.

IAS 1 Presentation of Financial Statements: Disclosure Initiative (Amendment)

The amendments are effective for annual periods beginning on or after 1 January 2016. The amendments to IAS 1 Presentation of Financial Statements further encourage companies to apply professional judgment in determining what information to disclose and how to structure it in their financial statements. They clarify, rather than significantly change, existing IAS 1 requirements. The amendments relate to materiality, order of the notes, subtotals and disaggregation, accounting policies and presentation of items of other comprehensive income (OCI) arising from equity accounted investments. The Bank is in the process of assessing the impact of these amendments on its financial statements.

IFRS 14 Regulatory Deferral Accounts

The standard is effective for annual periods beginning on or after 1 January 2016. The aim of this interim standard is to enhance the comparability of financial reporting by entities that are engaged in rate-regulated activities, whereby governments regulate the pricing of particular types of activity. This can include utilities such as gas, electricity and water. The standard requires that the effect of rate regulation must be presented separately from other items and grants exemption to IFRS first-time adopters. This standard has not yet been endorsed by the EU. As the Bank has adopted IFRS in prior periods and is not engaged in government regulated activities, it is not expected that the standard would be relevant to the Bank.

IFRS 15 Revenue from Contracts with Customers

The standard is effective for annual periods beginning on or after 1 January 2018. 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 revenue transaction or the 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 will be required, including disaggregation of total revenue; information about performance obligations and key judgments and estimates. 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 16 Leases

The standard is effective for annual periods beginning on or after 1 January 2019. 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.

IAS 27 Separate Financial Statements (Amended)

The amendment is effective from 1 January 2016. This amendment will allow entities to use the equity method to account for investments in subsidiaries, joint ventures and associates in their separate financial statements. It is not expected that these amendments would be relevant 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 amendments will be effective from annual periods commencing on or after 1 January 2016. 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 12 Income Taxes (Amendments): Recognition of Deferred Tax Assets for Unrealised Losses

The amendments are effective for annual periods beginning on or after 1 January 2017, with early application permitted. The objective of these amendments is to clarify the accounting for deferred tax assets for unrealised losses on debt instruments measured at fair value. For example, the amendments clarify the accounting for deferred tax assets when an entity is not allowed to deduct unrealised losses for tax purposes or when it has the ability and intention to hold the debt instruments until the unrealised loss reverses. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would be relevant to the Bank.

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

The amendments are effective for annual periods beginning on or after 1 January 2017, with earlier application permitted. The objective of these amendments is to enable users of financial statements to evaluate changes in liabilities arising from financing activities. The amendments will require entities to provide disclosures that enable investors to evaluate changes in liabilities arising from financing activities, including changes arising from cash flows and non-cash changes. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would be relevant to the Bank.

Annual Improvements to IFRSs 2010-2012 Cycle

In the 2010–2012 annual improvements cycle, the IASB issued amendments to seven standards which are effective for annual periods beginning on or after 1 February 2015. Summary of amendments and related standards are provided below:

- IFRS 2 Share-based Payments amended definitions of 'vesting conditions' and 'market conditions' and added the definitions of 'performance condition' and 'service condition';
- IFRS 3 Business Combinations clarification on the accounting for contingent consideration arising from business combination;
- IFRS 8 Operating Segments additional disclosures of management judgement on aggregating operating segments and clarification on reconciliation of total segments' assets to the entity's assets;
- IFRS 13 Fair Value Measurement clarification on interaction with IFRS 9 as regards short-term receivables and payables;
- IAS 16 Property, Plant and Equipment amended to state that when an item of property, plant and equipment is revalued, the gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount, while the accumulated depreciation is calculated as a difference between the gross carrying amount and the carrying amount after taking into account accumulated impairment losses;
- IAS 24 Related Party Disclosures clarifies that a management entity that provides key management services to a reporting entity is deemed to be a related party; disclosure of the service fee paid or payable is required;
- IAS 38 Intangible Assets same amendment as IAS 16 above.

The Bank is in the process of assessing the impact of the amendments on its financial statements.

Annual Improvements to IFRSs 2012-2014 Cycle

In the 2012–2014 annual improvements cycle, the IASB issued amendments to four standards which are applicable for financial year 2016. Summary of amendments and related standards are provided below:

- IFRS 5 Non-current Assets Held for Sale and Discontinued Operations clarification that changing from one of the disposal methods to the other (through sale or through distribution to the owners) should not be considered to be a new plan of disposal but a continuation of the original plan;
- IFRS 7 Financial Instruments: Disclosures provides examples of continuing involvement in a financial asset and clarifies required disclosures in the condensed interim financial report;
- IAS 19 Employee Benefits clarification on long-term liability discount rate determination;
- IAS 34 Interim Financial Reporting clarification on required interim disclosures: they must either be in the interim financial statements or incorporated by cross-reference to other interim financial information (e.g., in the management report) that is available to users on the same terms and at the same time as the interim financial statements.

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 very 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 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 rules of behaviour and procedures 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;
- 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 – issuers of European covered bonds;
- Bonds issued by governments or government guaranteed institutions, supranational financial institutions, specialised financial agencies, banks and other financial institu-

tions – 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: 1) a maximum or minimum limit on the weight of each asset class, and 2) an individual maximum acceptable exposure of the BNB 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 timeframe 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:

| | Up to 1 month | From 1 month to 3 months | From 3 months to 1 year | From 1 year to 5 years | Over 5 years | Undefined maturity | Total |
|----------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------|-------------------------------|------------------------------|------------------|-----------------------------------|--------------------------|
| As of 31 December 2015 | | | | | | | |
| Financial assets | | | | | | | |
| Cash and deposits in foreign currencies | 7,483,584 | 2,174,003 | 1,223,579 | - | - | | 10,881,166 |
| Gold, instruments in gold, and other precious metals | 1,490,144 | | | | | 1,014,372 | 2,504,516 |
| Financial assets at fair value through profit or loss | 1,370,930 | 2,023,918 | 7,170,429 | 13,564,597 | 2,108,312 | | 26,238,186 |
| Financial assets available for sale | 84,656 | | | | | 1,563,154 | 1,647,810 |
| Other assets | 15,973 | 5,438 | 49,075 | - | - | - | 70,486 |
| Total financial assets | 10,445,287 | 4,203,359 | 8,443,083 | 13,564,597 | 2,108,312 | 2,577,526 | 41,342,164 |
| | | | | | | | |
| Financial liabilities | | | | | | | |
| Banknotes and coins in circulation | - | | _ | | | | |
| | | | _ | - | - | 12,724,818 | 12,724,818 |
| Due to banks and other financial institutions | 14,860,012 | | | | | 12,724,818 | 12,724,818 14,860,012 |
| | 14,860,012 3,364,990 | 21,514 | 3,190,570 | - | - | 12,724,818 | , , |
| institutions Liabilities to government institutions and | | - 21,514 - | 3,190,570 | - - - | | 12,724,818 - - 3,021,397 | 14,860,012 |
| institutions Liabilities to government institutions and other borrowings Borrowings against Bulgaria's participation | | 21,514 - 21,514 | 3,190,570 - 3,190,570 | - - - | - - - - | - | 14,860,012 6,577,074 |

| | Up to 1 month | From 1 month to 3 months | From 3 months to 1 year | From 1 year to 5 years | Over 5 years | Undefined maturity | Total |
|-------------------------------------------------------------------------------------|------------------|--------------------------------|-------------------------|------------------------------|-----------------|--------------------|------------|
| As of 31 December 2014 | | | | | | | |
| Financial assets | | | | | | | |
| Cash and deposits in foreign currencies | 5,859,646 | 677,456 | - | - | | | 6,537,102 |
| Gold, instruments in gold, and other precious metals | 1,326,862 | 154,126 | | | - | 1,014,301 | 2,495,289 |
| Financial assets at fair value through profit or loss | 343,600 | 1,085,789 | 6,785,520 | 10,821,858 | 4,223,784 | | 23,260,551 |
| Financial assets available for sale | 79,442 | | - | - | | 1,467,507 | 1,546,949 |
| Other assets | 17,479 | 7,020 | 44,347 | - | - | - | 68,846 |
| Total financial assets | 7,627,029 | 1,924,391 | 6,829,867 | 10,821,858 | 4,223,784 | 2,481,808 | 33,908,737 |
| Financial liabilities | | | | | | | |
| Banknotes and coins in circulation | - | • | • | • | • | 11,586,943 | 11,586,943 |
| Due to banks and other financial institutions | 8,125,056 | | | | | | 8,125,056 |
| Liabilities to government institutions and other borrowings | 7,005,995 | 21,514 | | - | | | 7,027,509 |
| Borrowings against Bulgaria's participation in international financial institutions | | | | - | - | 2,835,018 | 2,835,018 |
| Total financial liabilities | 15,131,051 | 21,514 | | | | 14,421,961 | 29,574,526 |
| Asset-liability maturity mismatch | (7,504,022) | 1,902,877 | 6,829,867 | 10,821,858 | 4,223,784 | (11,940,153) | 4,334,211 |

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 month to 3 months | From 3 months to 1 year | From 1 year to 5 years | Over 5 years |
|-------------------------------------------------------------------------------------------|------------|----------------------------------|------------------|--------------------------------|-------------------------|------------------------------|--------------|
| As of 31 December 2015 | | | | | | | |
| Banknotes and coins in circulation | 12,724,818 | 12,724,818 | | | - | - | 12,724,818 |
| Due to banks and other financial institutions | 14,860,012 | 14,860,012 | 14,860,012 | | | | |
| Liabilities to government institutions and other borrowings | 6,577,074 | 6,577,449 | 3,364,989 | 21,514 | 3,190,945 | | |
| Borrowings against Bulgaria's participation in international financial | | | | | | | |
| institutions | 3,021,397 | 3,021,397 | • | | - | | 3,021,397 |
| | 37,183,301 | 37,183,676 | 18,225,001 | 21,514 | 3,190,945 | - | 15,746,215 |
| As of 31 December 2014 | | | | | | | |
| Banknotes and coins in circulation | 11,586,943 | 11,586,943 | | | - | - | 11,586,943 |
| Due to banks and other financial institutions | 8,125,056 | 8,125,056 | 8,125,056 | | | | |
| Liabilities to government institutions and other borrowings | 7,027,509 | 7,027,509 | 7,005,995 | 21,514 | | | |
| Borrowings against Bulgaria's participation in international financial institutions | 2,835,018 | 2,835,018 | | | | | 2,835,018 |
| | 29,574,526 | 29,574,526 | 15,131,051 | 21,514 | | | 14,421,961 |

(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 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 31 December 2015 | Average | Maximum | Minimum |
|------------------------|------------------------|----------|----------|----------|
| Currency risk | (37,935) | (34,449) | (76,238) | (15,379) |
| Interest rate risk | (15,024) | (18,863) | (49,520) | (3,688) |
| Correlation (per cent) | 0.22 | 0.25 | 0.63 | (0.23) |
| Overall risk | (42,124) | (49,320) | (95,700) | (10,145) |
| | | | | |
| | As of 31 December 2014 | Average | Maximum | Minimum |
| Currency risk | (32,964) | (23,933) | (41,506) | (7,465) |
| Interest rate risk | (7,720) | (4,003) | (9,196) | (1,400) |
| Correlation (per cent) | 0.07 | 0.24 | 0.65 | (0.29) |
| Overall risk | (35,797) | (25,542) | (46,563) | (10,154) |

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. The Bank uses modified duration as a key measurement for interest rate risk. 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 modified duration of the portfolio from that of the respective benchmark.

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

(BGN'000)

| | | | | | (20000 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|------------------------|--------------------------------|---------------|
| | | Electing rate | Fixe | d rate instrun | nents |
| | Total | Floating rate instruments | Up to 1 month | From 1 month to 3 months | Over 3 months |
| As of 31 December 2015 | | | | 0 | |
| Interest-earning assets | | | | | |
| Cash and deposits in foreign currencies | 10,663,614 | 1,794,489 | 5,471,609 | 2,173,937 | 1,223,579 |
| Gold, instruments in gold and other precious metals | 1,489,306 | - | 1,489,306 | - | - |
| Financial assets at fair value through profit or loss | 26,279,180 | 88,014 | 1,375,552 | 2,023,481 | 22,792,133 |
| Financial assets available for sale | 84,659 | - | 84,659 | - | - |
| Other interest-earning assets | 70,486 | 6,646 | 9,327 | 5,438 | 49,075 |
| Total | 38,587,245 | 1,889,149 | 8,430,453 | 4,202,856 | 24,064,787 |
| Interest-bearing liabilities | | | | | |
| Due to banks and other financial institutions | 14,860,012 | - | 14,860,012 | - | - |
| Liabilities to government institutions and other borrowings | 3,212,076 | - | - | 21,514 | 3,190,562 |
| Borrowings against Bulgaria's participation in international | | | | | |
| financial institutions | 1,516,547 | 1,516,547 | - | - | - |
| Total | 19,588,635 | 1,516,547 | 14,860,012 | 21,514 | 3,190,562 |
| Interest-bearing assets/liability gap | 18,998,610 | 372,602 | (6,429,559) | 4,181,342 | 20,874,226 |
| As of 31 December 2014 | | | | | |
| Interest-earning assets | | | | | |
| Cash and deposits in foreign currencies | 6,249,030 | 1,460,338 | 4,111,449 | 677,243 | - |
| Gold, instruments in gold and other precious metals | 1,480,491 | - | 1,326,414 | 154,077 | - |
| Financial assets at fair value through profit or loss | 23,219,611 | 254,542 | 301,811 | 1,035,786 | 21,627,472 |
| Financial assets available for sale | 79,442 | - | 79,442 | - | - |
| Other interest-earning assets | 68,846 | 7,585 | 9,894 | 7,020 | 44,347 |
| | | 1 700 405 | 5,829,010 | 1.874.126 | 21,671,819 |
| Total | 31,097,420 | 1,722,465 | 0,020,010 | .,0,0 | |
| | 31,097,420 | 1,722,400 | 0,020,010 | 1,01 1,120 | ,- , |
| Interest-bearing liabilities | 31,097,420 8,125,056 | 1,722,405 | 8,125,056 | - | |
| Interest-bearing liabilities Due to banks and other financial institutions | | 1,722,465 - - | | 21,514 | - |
| Interest-bearing liabilities Due to banks and other financial institutions Liabilities to government institutions and other borrowings Borrowings against Bulgaria's participation in international | 8,125,056 | 1,423,090 | 8,125,056 | - | - |
| Total Interest-bearing liabilities Due to banks and other financial institutions Liabilities to government institutions and other borrowings Borrowings against Bulgaria's participation in international financial institutions Total | 8,125,056 2,465,514 | - - | 8,125,056 2,444,000 | - | - |

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: 1) a 100 basis points instant and parallel increase; 2) a 100 basis points instant and parallel decrease; 3) a 50 basis points parallel increase in the yield curves for a period of 12 months; and 4) 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:

| | 100 basis points instant parallel increase | 100 basis points parallel decrease | 50 basis points parallel increase in the beginning of the period | 50 basis points parallel decrease in the beginning of the period |
|------------------------|--------------------------------------------|------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| As of 31 December 2015 | (534,235) | 534,235 | (151,252) | 31,199 |
| As of 31 December 2014 | (617,726) | 617,726 | (137,085) | 200,398 |

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)

| | 31 December 2015 | 31 December 2014 |
|-----------------------------------|------------------|------------------|
| Assets | | |
| Bulgarian lev and euro | 35,748,097 | 26,780,917 |
| US dollar | 193,102 | 1,930,093 |
| Japanese yen | 170 | 36 |
| Pound sterling | 256 | 547 |
| SDR | 3,132,609 | 2,939,576 |
| Gold | 2,470,755 | 2,460,874 |
| Other | 1,835 | 2,702 |
| | 41,546,824 | 34,114,745 |
| Liabilities, capital and reserves | | |
| Bulgarian lev and euro | 38,328,006 | 29,344,688 |
| US dollar | 191,940 | 1,929,707 |
| Japanese yen | 1 | - |
| Pound sterling | 45 | 320 |
| SDR | 3,022,929 | 2,836,639 |
| Other | 3,903 | 3,391 |
| | 41,546,824 | 34,114,745 |
| Net position | | |
| Bulgarian lev and euro | (2,579,909) | (2,563,771) |
| US dollar | 1,162 | 386 |
| Japanese yen | 169 | 36 |
| Pound sterling | 211 | 227 |
| SDR | 109,680 | 102,937 |
| Gold | 2,470,755 | 2,460,874 |
| Other | (2,068) | (689) |

(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.

The Bank is operating in a complicated global economic and financial environment which also affects the Bulgarian market and could have negative implications for the Bank's performance and risk. Management has already taken measures, and its major priorities in the next few years will still be to keep the Bank's stable liquidity position and the continuous improvement in its evaluation methods, international reserves quality control and management.

(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: A 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).

| | Level 1 Market quotes in active markets | Level 2 Valuation techniques using market data | Total |
|-------------------------------------------------------|------------------------------------------|------------------------------------------------|------------|
| 31 December 2015 | | | |
| Cash and deposits in foreign currency | 10,881,166 | - | 10,881,166 |
| Gold, instruments in gold and other precious metals | 2,504,516 | - | 2,504,516 |
| Financial assets at fair value through profit or loss | 24,323,579 | 1,914,607 | 26,238,186 |
| Total | 37,709,261 | 1,914,607 | 39,623,868 |
| | | | |
| 31 December 2014 | | | |
| Cash and deposits in foreign currency | 6,537,102 | - | 6,537,102 |
| Gold, instruments in gold and other precious metals | 2,495,289 | - | 2,495,289 |
| Financial assets at fair value | | | |
| through profit or loss | 20,928,166 | 2,332,385 | 23,260,551 |
| Total | 29,960,557 | 2,332,385 | 32,292,942 |

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 in the table below:

(BGN'000)

| | Level 1 Quoted market prices on active markets | Level 2 Observable inputs other than quoted prices | Total |
|-------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------|------------|
| 31 December 2015 | | | |
| Due to banks and other financial institutions | - | 14,860,012 | 14,860,012 |
| Liabilities to government institutions and other borrowings | - | 6,577,074 | 6,577,074 |
| Borrowings against Bulgaria's participation in international financial institutions | - | 3,021,397 | 3,021,397 |
| Total | • | 24,458,483 | 24,458,483 |
| | | | |
| 31 December 2014 | | | |
| Due to banks and other financial institutions | - | 8,125,056 | 8,125,056 |
| Liabilities to government institutions and other borrowings | - | 7,027,509 | 7,027,509 |
| Borrowings against Bulgaria's participation in international financial institutions | - | 2,835,018 | 2,835,018 |
| Total | • | 17,987,583 | 17,987,583 |

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.

7. Interest Income and Expense

(BGN'000)

| 2015 | 2014 |
|---------|------------------------------------------------|
| | |
| 394,676 | 386,162 |
| 9,560 | 11,145 |
| 2 | 105 |
| 404,238 | 397,412 |
| | |
| 6,796 | 1,498 |
| 6 | - |
| 6,802 | 1,498 |
| | 394,676 9,560 2 404,238 6,796 6 |

As at 31 December 2015 interest expenses paid on government deposits in foreign currencies amounted to BGN 59 thousand (as at 31 December 2014 there were no interest expenses paid on government deposits either in BGN or in foreign currencies).

As at 31 December 2015 there are no interest expenses paid on deposit of other organisations denominated in lev or foreign currency (as at 31 December 2014 there were no interest expenses paid on other organisations' deposits either in BGN or in foreign currencies).

Interest expenses paid on deposits include interest paid of BGN 5690 thousand (31 December 2014: BGN 101 thousand) on deposits with foreign correspondent banks as a result of using negative reference interest rates.

In addition BGN 225 thousand (31 December 2014: BGN 244 thousand) interest paid on the technical account of the national system component TARGET2-BNB at the ECB are included.

During the year, the ECB Governing Council continued to set negative interest rates for the Eurosystem's deposit facility and during most of the year the interest rate was fixed at -0.20 per cent and from 9 December 2015 it was reduced to -0.30 per cent.

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

(BGN'000)

| | 2015 | 2014 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|
| Net (losses) from operations in securities | (309,280) | (273,101) |
| Net (losses)/gains from operations in foreign currency | 622 | 344 |
| Net revaluation (losses)/gains on futures | (226) | 18 |
| Net revaluation (losses)/gains on securities | (116,992) | 195,260 |
| Net revaluation gains on foreign currency assets and liabilities | 5,214 | 4,945 |
| Net revaluation gains on gold | 688 | 261,714 |
| | (419,974) | 189,180 |
| Net revaluation (losses)/gains on futures Net revaluation (losses)/gains on securities Net revaluation gains on foreign currency assets and liabilities | (226) (116,992) 5,214 688 | 18 195,260 4,945 261,714 |

Net losses from financial assets and liabilities carried at fair value through profit or loss as at 31 December 2015 are largely attributable to operation with investments of BGN 309,280 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. Another factor is that the market value of the securities was higher in the second quarter when the prices fells and the realised during this period negative yield cannot be fully offset by the realised positive yield during the other quarters of the year.

During the period the market yield on the securities in which BNB primary invests was highly volatile and with mixed movements between issuers, maturity sectors and quarters. Overall, during the year the yield on the most short-term securities decreased between 15 and 40 bps for most issuers and increased between 10 and 26 bps in long-term ones. The net effect from revaluation of securities consequence due to these movements was negative: BGN 116,992 thousand.

As at 31 December 2015 net gains from gold revaluation amounted to BGN 688 thousand owing to a very slight gold price appreciation. The market price of gold determined based on the London Bullion Market fixing in euro increased marginally from BGN 1909.95 *per* troy ounce as at 31 December 2014 to BGN 1911.36 as at 31 December 2015.

9. Other Operating Income

(BGN'000)

| | 2015 | 2014 |
|----------------------------------|--------|---------|
| Income from subsidiaries | 31,001 | 30,927 |
| Income from associated companies | 1,387 | (1,003) |
| Income from sale of coins | 737 | 748 |
| Dividend income | 6,644 | 6,994 |
| Other income, net | 2,534 | 2,620 |
| | 42,303 | 40,286 |

Dividend income includes dividends from BNB's participation in: BIS Basle amounting to BGN 4425 thousand, BORICA-Bankservice of BGN 2039 thousand, Cash Service Company AD of BGN 180 thousand and dividends from other subsidiaries amounting to BGN 3521 thousand.

In 2015 the BNB received a dividend payment of BGN 3521 thousand from its participation in 'Printing Works' AD which is eliminated for the purpose of the consolidated financial statement.

The other net incomes include financial incomes from subsidiaries of BGN 1078 thousand, incomes from reallocated remuneration from the ECB in relation to TARGET2 of BGN 866 thousand, rental income of BGN 290 thousand, incomes from sale of scrap of BGN 132 thousand and other incomes of BGN 168 thousand.

10. Administrative Expenses

(BGN'000)

| Personnel costs 32,199 32,225 Administrative expenses 53,289 45,009 Depreciation 18,211 19,047 | | 2015 | 2014 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|---------|
| | Personnel costs | 32,199 | 32,225 |
| Depreciation 18.211 19.047 | Administrative expenses | 53,289 | 45,009 |
| | Depreciation | 18,211 | 19,047 |
| Other expenses 3,339 5,189 | Other expenses | 3,339 | 5,189 |
| 107,038 101,470 | | 107,038 | 101,470 |

Bank and its subsidiaries is 1134 as of 31 December 2015 (31 December 2014: 1155), including the BNB staff of 843 as of 31 December 2015 (31 December 2014: 861).

Personnel costs include salaries, social and health insurance costs charged under the local legislation provisions as of 31 December 2015, and social activities costs, respectively for the BNB: BGN 25,294 thousand, for the Printing Works of the BNB Corp.: BGN 4273 thousand, and for the Bulgarian Mint EAD BGN 2632 thousand.

The number of employees of the Personnel costs include expenses for remunerations paid to the BNB Governing Council members of BGN 1041 thousand for 2015 (31 December 2014: BGN 1003 thousand), presented, as follows:

(BGN'000)

| | 2015 | 2014 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|
| Total gross remuneration expenses* | 940 | 969 |
| Including bonuses up to established threshold in accordance with Article 23, paragraph 3 of the LBNB with BNB Governing Council's Decision of 30 July 2015** | 252 | 302 |
| Expenses for BNB Governing Council members' retirement/ termination benefits | 101 | 34 |
| Total gross remuneration paid to the BNB Governing Council members | 1,041 | 1,003 |

^{*} Remunerations are before tax.

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 719 thousand (31 December 2014: BGN 461 thousand). The retirement and unused paid annual leave compensation for the Bank's subsidiaries as of 31 December 2015 are BGN 151 thousand (31 December 2014: BGN 144 thousand).

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

| | 2015 | 2014 |
|----------------------------------------------------------------------|-------|-------|
| Defined benefit liabilities as at 1 January | 2,178 | 2,136 |
| Plan benefits paid | (354) | (204) |
| Current service costs | 227 | 214 |
| Interest costs | 60 | 66 |
| Re-measurements | 60 | - |
| Actuarial (gain) loss arising from experience adjustment | 19 | - |
| Actuarial (gain) loss arising from change in demographic assumptions | | 109 |
| Actuarial (gain) loss arising from change in financial assumptions | 231 | (143) |
| Actuarial gains recognised in expenses | 3 | - |
| Defined benefit liabilities as at 31 December | 2,424 | 2,178 |

^{**} http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20150730_1_BG

Costs carried through profit and loss

(BGN'000)

| | 2015 | 2014 |
|----------------------------|------|------|
| Current service costs | 227 | 214 |
| Interest costs | 60 | 66 |
| Actuarial (gains) losses | 3 | (3) |
| Effect from change of plan | 60 | - |
| Total | 350 | 277 |

Actuarial Assumptions

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

(per cent)

| | 2015 | 2014 |
|------------------------------------------|------|------|
| Discount interest rate as at 31 December | 1.82 | 3.29 |
| Future salary growth | 3.50 | 3.50 |

Administrative expenses include the BNB's currency circulation expenses of BGN 19,338 thousand as of 31 December 2015 (31 December 2014: BGN 12,836 thousand).

11. Cash and Deposits in Foreign Currencies

(BGN'000)

| | 31 December 2015 | 31 December 2014 |
|---------------------------------|------------------|------------------|
| Cash in foreign currencies | 217,335 | 287,495 |
| Current accounts in other banks | 1,789,066 | 1,456,067 |
| Deposits in foreign currencies | 8,874,765 | 4,793,540 |
| | 10,881,166 | 6,537,102 |

Cash and deposits in foreign currencies with correspondents are disclosed as follows: (BGN'000)

| 31 December 2015 | 31 December 2014 |
|------------------|--------------------------------------------------------------------|
| | |
| 2,957,377 | 683,840 |
| 2 | 691,640 |
| 2,957,379 | 1,375,480 |
| | |
| 6,210,115 | 2,500,019 |
| 1,713,672 | 2,661,603 |
| 7,923,787 | 5,161,622 |
| 10,881,166 | 6,537,102 |
| | 2,957,377 2 2,957,379 6,210,115 1,713,672 7,923,787 |

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

| | 31 December 2015 | | 31 Decem | ber 2014 |
|--------------------------------|------------------|-----------|------------------|-----------|
| | '000 troy ounces | BGN'000 | '000 troy ounces | BGN'000 |
| Gold bullion in standard form | 513 | 980,610 | 513 | 979,886 |
| Gold deposits in standard form | 780 | 1,490,145 | 775 | 1,480,988 |
| Gold in other form | 16 | 30,748 | 16 | 30,787 |
| Other precious metals | | 3,013 | _ | 3,628 |
| | | 2,504,516 | | 2,495,289 |
| | | | | |

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 0.18 per cent and 0.95 per cent annually.

Gold in other form includes commemorative gold coins of BGN 25,953 thousand.

Other precious metals include silver commemorative coins of BGN 497 thousand and platinum commemorative coins of BGN 2516 thousand.

13. Financial Assets at Fair Value through Profit or Loss

(BGN'000)

| Securities at fair value through profit or loss | 31 December 2015 | 31 December 2014 |
|-------------------------------------------------|------------------|------------------|
| Foreign treasury bills, notes and bonds | 26,238,186 | 23,260,551 |
| | 26,238,186 | 23,260,551 |

Securities comprise both coupon and discount securities denominated in euro. The maximum coupon interest of the EUR-denominated securities was 1.81 per cent as of 31 December 2015 (31 December 2014: 2.01 per cent).

Similarly as at 31 December 2014, as at 31 December 2015 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)

| | Issuer's credit rating | 31 December 2015 | 31 December 2014 |
|-------------------------------------------------------------------|------------------------|------------------|------------------|
| Investment graded securities by the emission/issuer credit rating | AAA | 14,772,152 | 13,629,360 |
| | AA+ | 2,566,941 | 2,576,563 |
| | AA | 279,626 | 48,924 |
| | AA- | 5,958,588 | 4,203,246 |
| | A+ | 2,660,879 | 2,495,317 |
| | A | - | 307,141 |
| | | 26,238,186 | 23,260,551 |

14. Financial Assets Available for Sale

(BGN'000)

| | 31 December 2015 | 31 December 2014 |
|------------------------------------------------------------|------------------|------------------|
| Republic of Bulgaria's quota in the IMF | 1,589,348 | 1,491,404 |
| Equity investments in international financial institutions | 31,681 | 30,151 |
| Investments in associates | 26,781 | 25,394 |
| | 1,647,810 | 1,546,949 |
| | | |

The Republic of Bulgaria's quota in the IMF is SDR 640,200 thousand. BGN 84,659 thousand of the Republic of Bulgaria's quota in the IMF represents the reserve tranche held with the IMF. The IMF pays remuneration (interest) to those members who have a remunerated reserve tranche position, at an average rate of 0.04 per cent.

Equity investments in international financial institutions include the equity investment in the Bank for International Settlements, Basle, and 25 per cent of the equity investment in BIS Basle is paid up. As of 31 December 2015 the current value of 10,000 thousand shares in SDR amounts to BGN 24,826 thousand while as of 31 December 2014 it was BGN 23,296 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 31 December 2015 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 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 at 31 December 2015, 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 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 significant influence on the financial and operational policies of the associated companies listed below, and its investments in domestic companies can be analysed as follows:

| Associated companies | Share holding, per cent | Principal activity |
|----------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------|
| BORICA-Bankservice AD | 36.11 | Interbank card payments |
| International Bank Institute OOD | 44.23 | Financial training and research |
| 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)

| | | | | | | ' | BGN 000) |
|------------------------------------------|--------------------|---------------------|-------------------|-------------------|---------------------------------------------------------|-----------------------------|-----------|
| | Land and buildings | Plant and equipment | IT equip- ment | Office equip-ment | Other equip- ment (includ- ing motor vehicles) | Tangible assets in progress | Total |
| As of 1 January 2015 | 181,149 | 87,059 | 43,135 | 9,864 | 7,398 | 3,463 | 332,068 |
| Additions | 22 | 1,262 | 14 | 23 | 69 | 7,983 | 9,373 |
| Disposals | - | (453) | (1,782) | (151) | (380) | - | (2,766) |
| Transfers | - | 1,787 | 5,715 | 44 | 1,188 | (8,734) | - |
| As of 31 December 2015 | 181,171 | 89,655 | 47,082 | 9,780 | 8,275 | 2,712 | 338,675 |
| Depreciation and impairment loss | | | | | | | |
| As of 1 January 2015 | (39,289) | (62,687) | (36,898) | (7,532) | (6,074) | - | (152,480) |
| Charge for the period | (5,646) | (5,450) | (3,995) | (796) | (390) | - | (16,277) |
| On disposals | - | 452 | 1,774 | 141 | 379 | - | 2,746 |
| As of 31 December 2015 | (44,935) | (67,685) | (39,119) | (8,187) | (6,085) | - | (166,011) |
| Net book value as of 31 December 2015 | 136,236 | 21,970 | 7,963 | 1,593 | 2,190 | 2,712 | 172,664 |
| Net book value as of 31 December 2014 | 141,860 | 24,372 | 6,237 | 2,332 | 1,324 | 3,463 | 179,588 |
| As of 1 January 2014 | 181,113 | 86,134 | 41,609 | 9,758 | 6,678 | 2,265 | 327,557 |
| Additions | 36 | 1,379 | 15 | 47 | 65 | 4,811 | 6,353 |
| Disposals | - | (774) | (828) | (151) | (16) | (73) | (1,842) |
| Transfers | - | 320 | 2,339 | 210 | 671 | (3,540) | - |
| As of 31 December 2014 | 181,149 | 87,059 | 43,135 | 9,864 | 7,398 | 3,463 | 332,068 |
| Depreciation and impairment loss | | | | | | | |
| As of 1 January 2014 | (33,645) | (57,994) | (33,193) | (6,843) | (5,814) | - | (137,489) |
| Charge for the period | (5,644) | (5,464) | (4,532) | (835) | (276) | - | (16,751) |
| On disposals | - | 771 | 827 | 146 | 16 | - | 1,760 |
| As of 31 December 2014 | (39,289) | (62,687) | (36,898) | (7,532) | (6,074) | - | (152,480) |
| Net book value as of 31 December 2014 | 141,860 | 24,372 | 6,237 | 2,332 | 1,324 | 3,463 | 179,588 |
| Net book value as of 31 December 2013 | 147,468 | 28,140 | 8,416 | 2,915 | 864 | 2,265 | 190,068 |

In applying IAS 16 Property, Plant and Equipment and BNB's Internal Rules for Financial Statements and Accounting Policy, as at 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 31 December 2015, 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.

16. Intangible Assets

(BGN'000)

| | Software | Other intangible assets | Development costs | Total |
|---------------------------------------|----------|-------------------------|-------------------|----------|
| As of 1 January 2015 | 46,544 | 161 | 115 | 46,820 |
| Additions | 11 | - | 2,721 | 2,732 |
| Disposals | (133) | - | - | (133) |
| Transfers | 2,589 | - | (2,589) | - |
| As of 31 December 2015 | 49,011 | 161 | 247 | 49,419 |
| Depreciation and impairment loss | | | | |
| As of 1 January 2015 | (43,174) | (155) | - | (43,329) |
| Charge for the period | (1,932) | (2) | - | (1,934) |
| On disposals | 133 | - | - | 133 |
| As of 31 December 2015 | (44,973) | (157) | - | (45,130) |
| Net book value as of 31 December 2015 | 4,038 | 4 | 247 | 4,289 |
| Net book value as of 31 December 2014 | 3,370 | 6 | 115 | 3,491 |
| | 3,370 | 6 | 115 | 3,491 |

Software includes, as of 31 December 2015, licenses purchased by the BNB to the total amount of BGN 1401 thousand (31 December 2014: BGN 365 thousand), and software products to the amount of BGN 1320 thousand (31 December 2014: BGN 694 thousand).

(BGN'000)

| | Software | Other intangible assets | Development costs | Total |
|---------------------------------------|----------|-------------------------|-------------------|----------|
| As of 1 January 2014 | 45,606 | 161 | 133 | 45,900 |
| Additions | - | - | 1,059 | 1,059 |
| Disposals | (139) | - | - | (139) |
| Transfers | 1,077 | - | (1,077) | - |
| As of 31 December 2014 | 46,544 | 161 | 115 | 46,820 |
| Depreciation and impairment loss | | | | |
| As of 1 January 2014 | (41,043) | (128) | - | (41,171) |
| Charge for the period | (2,269) | (27) | - | (2,296) |
| On disposals | 138 | - | - | 138 |
| As of 31 December 2014 | (43,174) | (155) | - | (43,329) |
| Net book value as of 31 December 2014 | 3,370 | 6 | 115 | 3,491 |
| Net book value as of 31 December | | | | |
| 2013 | 4,563 | 33 | 133 | 4,729 |

Software includes, as of 31 December 2014, licenses purchased by the BNB to the total amount of BGN 365 thousand (31 December 2013: BGN 1017 thousand), and software products to the amount of BGN 694 thousand (31 December 2013: BGN 473 thousand).

17. Other Assets

| | 31 December 2015 | 31 December 2014 |
|----------------------------------------------------------|------------------|------------------|
| Cash held by subsidiaries with local banks | 70,510 | 68,879 |
| Investments of subsidiary undertakings in joint ventures | | |
| and associates | 6,091 | 6,091 |
| Commemorative coins for sale | 309 | 324 |
| Inventories | 16,963 | 11,973 |
| Accounts receivable | 1,484 | 1,808 |
| Deferred charges | 1,892 | 1,771 |
| Other receivables | 944 | 929 |
| | 98,193 | 91,775 |

Cash held by subsidiaries with local banks comprise BGN 63,856 thousand of Printing Works of the BNB Corp. and BGN 6654 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 BNB Printing Works AD has established a joint venture for banknote production.

18. Banknotes and Coins in Circulation

(BGN'000)

| | 31 December 2015 | 31 December 2014 |
|--------------------------|------------------|------------------|
| Banknotes in circulation | 12,470,856 | 11,354,769 |
| Coins in circulation | 253,962 | 232,174 |
| | 12,724,818 | 11,586,943 |
| | | |

19. Due to Banks and Other Financial Institutions

(BGN'000)

| | 31 December 2015 | 31 December 2014 |
|-------------------------------------------------------------|------------------|------------------|
| Demand deposits from banks and other financial institutions | | |
| - in BGN | 11,464,908 | 6,707,502 |
| - in foreign currency | 3,395,104 | 1,417,554 |
| | 14,860,012 | 8,125,056 |

The Bank does not pay interest on demand deposits from banks and other financial institutions. Demand deposits include BGN 5,885,977 thousand representing the required reserves, which all local banks are required to maintain on accounts with the BNB (31 December 2014: BGN 5,375,773 thousand).

20. Liabilities to Government Institutions and Other Liabilities

(BGN'000)

| | 31 December 2015 | 31 December 2014 | |
|---------|------------------|------------------|--|
| unts: | | | |
| GN . | 1,833,548 | 1,217,327 | |
| urrency | 1,531,450 | 3,344,668 | |
| | | | |
| | 2,534,000 | 2,444,000 | |
| | 678,076 | 21,514 | |
| | 6,577,074 | 7,027,509 | |
| | | | |

The government's deposits and current accounts with the Bank comprise funds held on behalf of state budget and other government organisations. No interest is payable on the current accounts.

The government deposits in euro and in BGN bear 0.00 per cent interest.

In 2014 BGN and foreign currency deposits bear 0.00 per cent interest.

21. Borrowings against Bulgaria's Participation in International Financial Institutions

The borrowings against Bulgaria's participation in the IMF as of 31 December 2015 amount to BGN 1,500,715 thousand: SDR 604,475 thousand (as of 31 December 2014: BGN 1,408,223 thousand, SDR 604,475 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 4008 thousand (as of 31 December 2014: BGN 3576 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)

| | 31 December 2015 | 31 December 2014 |
|--------------------------------------|------------------|------------------|
| Funds of EU institutions and bodies | 98,463 | 153,880 |
| Salaries and social security payable | 3,474 | 3,120 |
| Deferred income | 1,408 | 1,414 |
| Other liabilities | 40,092 | 31,425 |
| | 143,437 | 189,839 |

'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 31 December 2015 the funds on these accounts were BGN 98,459 thousand. The Bank opened accounts with the European Investment Bank (EIB) for the purposes of a financial arrangement between the Government of the Republic of Bulgarian and the EIB with the funds on these accounts amounting to BGN 4 thousand as at 31 December 2015.

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 31 December 2015 profit distribution in accordance with the profit distribution policy disclosed in note 5 (h) is as follows:

(BGN'000)

| | 2015 | 2014 |
|---------------------------------------------------------------------------------------------------|----------|-----------|
| Profit/(Loss) for the period | (82,682) | 529,993 |
| Allocation to special reserve under Article 36 of the Law on the BNB: | | |
| Unrealised (gains) from gold revaluation | (688) | (261,714) |
| Unrealised (gains)/loss from revaluation of financial assets at fair value through profit or loss | 116,992 | (195,578) |
| Unrealised (gains) from foreign currency valuation | (5,214) | (4,945) |
| Other unrealised loss/(gains) | 226 | (18) |
| Result after allocation to special reserve | 28,634 | 67,738 |
| incl. | | |
| Allocation to Reserve Fund under Article 8 of the LBNB | 6,547 | 16,188 |
| Result from consolidation and non-controlling interest | 2,447 | 2,986 |
| Allocation to a special-purpose fund under Article 8 of the LBNB | - | - |
| Planned contribution to the state budget | 19,640 | 48,564 |

24. Non-controlling Interest

Printing Works of the BNB Corp. is a joint-stock company with two shareholders: the BNB and the Government represented by the Ministry of Finance. The BNB holds 95.6 per cent of the company's capital and the State holds the remaining 4.4 per cent of the company's capital.

25. Monetary Liabilities and Gross International Reserves

(BGN'000)

| | 31 December 2015 | 31 December 2014 |
|-------------------------------------------------------------------|------------------|------------------|
| Gross international reserves | | |
| Cash and deposits in foreign currencies | 10,881,166 | 6,537,102 |
| Monetary gold and other instruments in gold | 2,470,755 | 2,460,874 |
| Security investments | 26,238,186 | 23,260,551 |
| Equity investments and quota in the IMF | 84,659 | 79,442 |
| | 39,674,766 | 32,337,969 |
| Monetary liabilities | | |
| Currency in circulation | 12,724,818 | 11,586,943 |
| Due to banks and other financial institutions | 14,776,742 | 7,999,377 |
| Liabilities to government institutions | 5,978,548 | 6,716,855 |
| Other liabilities | 780,258 | 590,212 |
| | 34,260,366 | 26,893,387 |
| | | |
| Surplus of gross international reserves over monetary liabilities | 5,414,400 | 5,444,582 |

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 31 December 2015, 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 31 December 2015, the par value of the government securities held in custody was BGN 7283 million (31 December 2014: BGN 8252 million).

27. Subsidiaries

(per cent)

| Ownership interest | 31 December 2015 | 31 December 2014 |
|-----------------------------------------------|------------------|------------------|
| Bulgarian Mint EAD | 100 | 100 |
| Printing Works of the BNB Corp (ref. note 24) | 95.6 | 95.6 |

The net income from subsidiaries for the period comprises net profit of BGN 497 thousand from the Bulgarian Mint EAD (31 December 2014: net loss of BGN 98 thousand) and BGN 4084 thousand from the Printing Works of the BNB Corp. (31 December 2014: BGN 4087 thousand).

28. Commitments and Contingencies

(i) Participation in the Bank for International Settlements

The Bank holds 8000 shares of the capital of BIS, Basle, each amounting to SDR 5000. Twenty-five per cent of the equity investment in BIS, Basle 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 31 December 2015 is BGN 74,477 thousand (31 December 2014: BGN 69,888 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 1,482,601 thousand.

(iii) Capital commitments

As of 31 December 2015 the Bank has committed to BGN 374 thousand to purchase non-current assets (31 December 2014: BGN 1359 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.

29. 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.

Major Resolutions of the BNB Governing Council in 2015

- The BNB Governing Council granted a license to Credibul EAD to operate as a payment institution providing payment services under Article 4, item 4, letter 'b' and item 5 of the LPSPS for execution of payment transactions by payment cards or other similar instruments where the funds are covered by a loan to a payment service user, and for issuing of payment instruments and/or accepting payments *via* payment instruments.
 - 12 March The BNB Governing Council approved the *Report on the BNB Budget Implementation as of 31 December 2014*. The approved report shall be presented to the National Audit Office for examination under Article 48, paragraph 3 of the Law on the BNB.
 - **2 April** The BNB Governing Council approved the Report on the Budget Implementation of Administrative Expenditure of the Bulgarian Deposit Insurance Fund for 2014.

The BNB Governing Council took note of the information from the KTB Conservators Report regarding their activity over the periods from 25 June 2014 to 5 November 2014 and from 6 November 2014 to 18 March 2015.

- 23 April The BNB Governing Council approved the 2014 BNB Annual Report.
- 21 May As of 20 July 2015 the Bulgarian National Bank put into circulation a silver commemorative coin '100 Years of Bulgarian Aircraft Manufacture' with a nominal value of BGN 10, issue 2015.
- **9 July** Ordinance on Amendment to Ordinance No 5 of 2007 of the Ministry of Finance and the Bulgarian National Bank on the Terms and Procedure for Acquisition, Registration, Redemption and Trade in Government Securities was adopted.
- **30 July** Pursuant to Article 12, paragraph 8 and Article 23, paragraph 3 of the Law on the BNB the Governing Council took a decision on determining and disclosing remuneration of the BNB Governing Council.

The BNB Governing Council approved an opinion on the independent assessment of the BNB banking supervision prepared by the International Monetary Fund and the World Bank.

Pursuant to Article 16, paragraph 8 of the Public Procurement Act the BNB Governing Council approved the opening of a tendering procedure for selecting an independent external consultant to organise and conduct an asset quality review of banks.

The BNB Governing Council approved the Budget of Administrative Expenses of the Bulgarian Deposit Insurance Fund for 2015.

The license of SEL INT Bulgaria EOOD to operate as a payment institution providing payment services under Article 4, item 6 of the LPSPS- was revoked.

The BNB Governing Council refused to issue a license to Blue Sky Electronic Money Company AD to operate as an electronic money institution.

As of 31 August 2015, the BNB put into circulation a partially gold-plated silver commemorative coin '130 Years since Unification of Bulgaria', with a nominal value of BGN 10, issue 2015.

15 September

The BNB Governing Council approved the Report on the BNB Budget Implementation as of 30 June 2015.

As of 2 November 2015, the BNB put in circulation a gold commemorative coin 'St. Mina' of the series 'Bulgarian Iconography' with a nominal value of BGN 100, issue 2015.

5 October The BNB Governing Council adopted a Plan on Reforms and Development of Banking Supervision, which includes the priorities and their on timescales in 2015 and 2016.

> The BNB Governing Council granted a licence to BNP Paribas Personal Finance EAD to operate as a payment institution providing payment services under Article 4, item 4, letter 'b' and item 5 of the LPSPS for execution of payment transactions by payment cards or other similar instruments where the funds are covered by a loan to a payment service user, and for issuing of payment instruments.

22 October The BNB Governing Council adopted Amendments to the General Conditions of the Bulgarian National Bank for Servicing Customers with Banknotes and Coins at Declared Value and the Tariff of Fees Charged by the Bulgarian National Bank for Servicing Customers with Banknotes and Coins.

> The BNB Governing Council approved Ernst & Young Audit OOD as the BNB international auditor for the financial years 2015, 2016 and 2017 on the grounds of Article 49, paragraph 4 of the Law on the BNB and an open procedure conducted pursuant to Article 16, paragraph 8 of the Public Procurement Law.

> As of 7 December 2015, the Bulgarian National Bank will put in circulation a new circulation coin with a nominal value of BGN 2, issue 2015.

The Governing Council approved structural changes in the BNB resulting from the powers conferred to the central bank by law as a bank resolution authority and the Plan on Reforms and Development of Banking Supervision adopted by the Governing Council on 5 October 2015, as well as the commitments related to the Bank's institutional development undertaken by the BNB Governor and presented to the National Assembly.

The Governing Council adopted Ordinance on Amendment to Ordinance No 33 of the BNB on the Assignee's in Bankruptcy Remuneration.

19 November The Governing Council adopted Ordinance on Amendment to Ordinance No 22 of the BNB of 16 July 2009 on the Central Credit Register.

> The BNB Governing Council decided to start publishing BNB projections of major macroeconomic indicators twice a year: in issue 2 and issue 4 of the Economic Review of the BNB.

20 November The Governing Council determined the total banking system contribution to the Bank Resolution Fund for 2015 at BGN 82,170,000 and its distribution by bank.

26 November The Governing Council adopted the Report of the Bulgarian National Bank for the January-June 2015 period.

> The 2016 budget of the Bulgarian National Bank was adopted which would be presented to the National Assembly.

> The Governing Council adopted new Ordinance No 21 of the BNB on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, effective as of 4 January 2016.

12 December The BNB Governing Council set the rate of the countercyclical buffer applicable to credit risk exposures in the Republic of Bulgaria at 0 per cent for the first quarter of 2016.

> The BNB Governing Council decided to withdraw from circulation the BGN 1 banknote, issue 1999. The BGN 1 banknotes, issue 1999, will be exchanged at the teller desks of the Bulgarian National Bank at their nominal value with no limit on the amount, no fees and no limit in time.

> The BNB Governing Council approved Ordinance on the Terms and Procedure for Funding the Administrative Expenses of the Bulgarian Deposit Insurance Fund.

> The BNB Governing Council approved the Rules of Procedure of the Conciliation Commission on Payment Disputes.