Bulgarian National Bank

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Honourable National Assembly President and People's Representatives:

I have the honour of presenting the Bank's Annual Report for 2016 as mandated by the Law on the Bulgarian National Bank Article 1, paragraph 2 and Articles 50 and 51.

The Report includes an overview of the global economic environment and Bulgaria's economic development in 2016, comprehensive accounts of legally set BNB functions and duties, and information on other central bank activities. The Report also contains accounts of BNB budget performance and consolidated financial statements (audited) as of 31 December 2016, accompanied by international auditors' opinion, and a list of major BNB Governing Council resolutions.

An 18-month BNB Management and Development Programme presented when I was elected Governor ended successfully in late 2016. The Report lists implementation of specific Programme measures for improving banking supervision, reviewing asset quality comprehensively, and creating an institutional framework to tackle banking sector problems. As a result of these measures, 2016 saw bank lending begin recovering, overall banking system profits rise, and the sector undergo a market consolidation process.

This is to assure the Honourable People's Representatives that the Bulgarian National Bank shall continue building upon the progress achieved in 2016 within its remit of maintaining national currency stability and the currency board.

Dimitar Radev
Governor
of the Bulgarian National Bank

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

BNB Governing Council

Dimitar Radev
Governor

Kalin Hristov
Deputy Governor
Issue Department

Nina Stoyanova
Deputy Governor
Banking Department

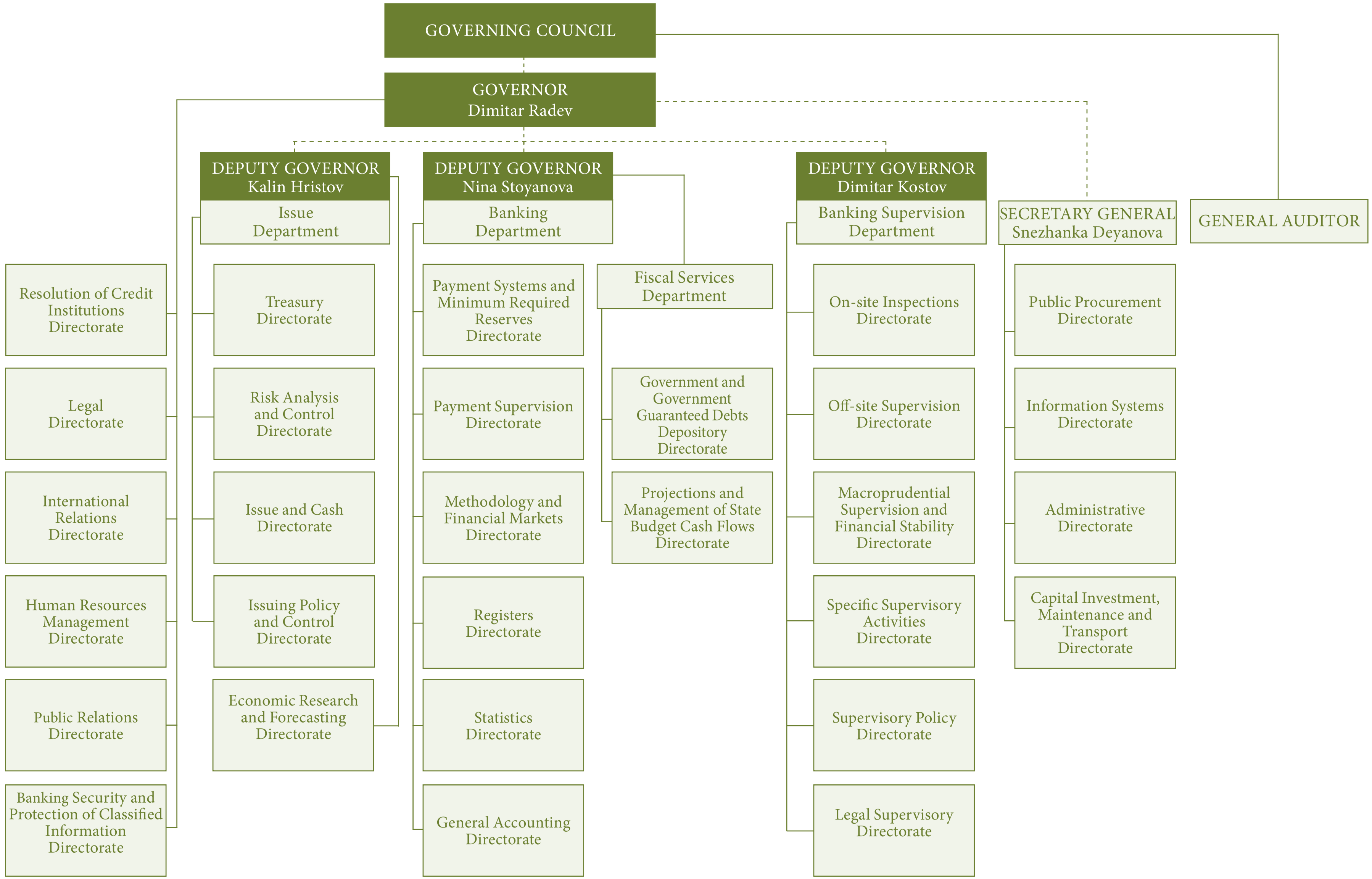
Dimitar Kostov
Deputy Governor
Banking Supervision Department

Boryana Pencheva

Lena Roussenova

Elitsa Nikolova

Organisational Structure of the BNB
(as of 31 December 2016)



Contents

Abbreviations

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

Summary

In 2016 real global economic growth was 3.1 per cent, from 3.2 in 2015. US, euro area, Japan, China and India growth slowed, while Russia and Brazil GDP declined on 2015 in real terms. Global trade growth moderated further to 1.9 per cent from 2.7 per cent in 2015, with accelerating growth in emerging and developing economies partially offsetting the developed economies' slowdown. Global inflation rose to 1.8 per cent from 1.6 per cent, driven by second half-year price rises of energy and many non-energy products.

International financial markets dynamics fluctuated greatly mostly due to negative factors. Early 2016 growth slowdowns in some big developing economies, including China, generated expectations of lower global economic growth, greatly curbing market participants' risk appetite. Curbed market expectations of an early increase in the Federal Reserve funds rate, and ECB measures in March on the low level of inflation in the euro area (cutting the main refinancing operations and marginal lending facility interest by 5 basis points each to 0.0 and 0.25 per cent, cutting the deposit facility rate by 10 basis points to -0.40 per cent, and expanding non-standard monetary policy measures) cut US and core euro area government bonds yields greatly at the year's beginning. The outcome of the UK EU membership referendum surprised most market participants, coupled with concerns about Italian banks, brought exceptionally strong volatility to international financial markets, triggering significant demand for safe assets in the second quarter and strong appreciation of developed countries' government bonds, including German ones, at the end of the second and beginning of the third quarters. Following the US presidential elections in November, market participants' expectations of expansionary fiscal policies by the forthcoming US administration, plus rising petrol prices and improving economic outlook for the euro area, helped boost global inflation expectations, pushing up US and euro area government bond yields in the fourth quarter. At the end of 2016 the Federal Reserve System raised the US federal funds target rate as anticipated by market participants. However, upward revisions of FOMC projections on the number of steps in which interest would rise in 2017 further depressed US government bond prices and boosted the US dollar.

In 2016 Bulgaria's real GDP rose 3.4 per cent from 3.6 per cent in 2015, net exports making a positive contribution, followed by private consumption and inventories changes. Lower government investment depressed gross fixed capital formation, while private investment contributed positively to it. The number of employed people rose slightly by 0.5 per cent from 0.4 in 2015, while unemployment continued falling to 7.6 per cent on average for the year, from 9.1 per cent in 2015. Remuneration per employee rose 4.5 per cent in real terms, from 6.8 per cent in 2015. Nominal unit labour cost rose marginally by 0.2 per cent, from 2.3 per cent in 2015. Annual consumer price inflation remained negative, reaching -0.5 per cent at the end of the yea, from -0.9 per cent in December 2015. The overall current and capital account was in surplus at 5.8 per cent of GDP.

The strong inflow of residents' attracted funds drove monetary aggregate developments. Broad money, M3, rose at relatively high rates, annual growth reaching 7.6 per cent in December. Contracting lending to non-financial corporations and households gradually reversed to 1.0 per cent growth from -1.6 per cent at the end of 2015.

In 2016 consolidated fiscal programme surplus was BGN 1465.5 million or 1.6 per cent of GDP, markedly exceeding the expected 1.9 per cent due to higher revenue and expenditure cuts (mainly capital).

The BNB discharged its primary duty of price stability through maintaining the stability of the national currency and implementing monetary policy as mandated by the Law on the Bulgarian National Bank and taking into account the international environment and national economy developments.

This Report presents the activities relating to the BNB's legal functions and duties, as follows: managing gross international reserves; operating and overseeing payment systems; monitoring banks' reserves at the BNB; managing cash circulation; maintaining banking system stability and protecting depositor interests; participating in credit institution resolutions; acting as fiscal agent and official depository; providing statistics. The Report also covers other BNB business related and supporting its functions and duties: running the Central Credit Register; participating in the European System of Central Banks and other EU bodies; conducting research; managing human resources; internal auditing. The Report also covers 2016 BNB budget performance and consolidated financial statements as of 31 December 2016, and lists major BNB Governing Council resolutions.

The BNB manages gross international reserves to ensure high security and liquidity. The main portion of international reserves continued to be invested into euro area core government bonds and government guaranteed debt, and into short-term deposits at first class foreign banks. By the end of 2016 some 67 per cent of international reserves was invested into assets with the highest AAA long-term credit rating. The market value of gross international reserves was EUR 23,899 million, up EUR 3613 million on the end of 2015. In 2016 net income from international reserves management was EUR 217.64 million or 1.24 per cent total return. By component, net income comprised: earnings from international reserve investment in the original currency (EUR 57.46 million), earnings from currency imbalance (EUR 149.79 million) almost entirely due to the change in the euro price of monetary gold, and the net financial result in liabilities which was positive (EUR 10.56 million) as a result of the early January 2016 interest on banks' excess reserves at the BNB and negative market rates on other customers' accounts.

The Bank regulates and supervises banks in Bulgaria to maintain banking system stability and protect depositors' interests. In the first half of the year the BNB conducted asset quality reviews at all 22 banks licensed by it, except six foreign bank branches operating in Bulgaria. The asset quality review included an independent external consultant selected by public tender, and independent consultants and appraisers employed by the banks by a uniform selection procedure approved by the BNB. More than 900 BNB experts and independent external parties conducted the AQR. The European Commission and European Banking Authority (EBA) were regularly informed and asked for opinions at all stages.

The AQR addressed assets worth BGN 84.2 billion on 31 December 2015: 96 per cent of banking system assets. It reviewed over 3400 individual credit files comprising BGN 23.2 billion or 71 per cent of banks' corporate and large SMEs loan books. The AQR resulted in aggregate adjustments of BGN 665 million or 1.3 per cent of risk-weighted assets in banks' 2016 financial statements.

The AQR-adjusted common equity tier one capital ratio for the banking system was 18.9 per cent on 31 December 2015. Though individual bank results varied, after the AQR the capital adequacy of all banks remained above regulatory minima. Capital adjustments at individual banks affect only capital buffers above regulatory capital adequacy minima. Follow-up measures to maintain or restore buffers were formulated.

There was a stress test (ST) of 22 banks in July 2016 to assess each bank's resilience against hypothetical negative financial and macroeconomic shocks. Results confirm the strong capital position and resilience to tested shocks, though results vary by bank. The BNB published the AQR and ST results on 13 August 2016.

Under the financial sector assessment programme, in October 2016 a joint IMF and World Bank mission comprehensively examined the BNB, with a particular focus on bank supervision, including supervisory practice compliance with Basel Core Principles for Effective Banking Supervision. The mission also comprehensively reviewed the process, documentation, approach and results of the recent asset quality review and stress test.

The Plan to Reform and Develop Banking Supervision launched revisions to the On-site Inspections Manual, aiming to improve procedures and techniques and offer additional guidelines for assessing bank risks within the supervisory review and assessment, thus improving inspection and overall supervision quality and effectiveness.

BNB supervision analyses credit institutions' financial performance, assesses risks they assume and capital and liquidity through macroprudential supervision, off-site supervision, on-site inspections, and specific supervisory actions. In 2016 bank balance sheet assets and deposits with banks continued rising, improving banks' liquid and capital positions. Banking sector profit reached BGN 1263 million from BGN 416 million in 2015: a 49.1 per cent rise. Return on assets (ROA) and equity (ROE) was 1.37 and 10.41 per cent from 0.97 and 7.35 per cent in 2015.

A new Ordinance No 21 on Minimum Reserve Requirements came into force on 4 January. Amendments introduce a definition of excess reserves and set the ECB deposit facility rate to excess bank reserves where it is negative. Zero interest applies to excess reserves where the ECB deposit facility interest rate is positive or zero. On 4 January 2016, the BNB applied the ECB deposit facility rate of -0.30 per cent on banks' excess reserves, changing the rate to -0.40 per cent on 16 March. In the first quarter of 2016 banks' excess reserves fell, remaining relatively stable the rest of the year at 89.8 per cent above the set minimum in December from 127.8 per cent in December 2015. In 2016 funds in banks' BNB Ordinance No 21 accounts exceeded minima by 92.0 per cent on an average daily basis compared to 93.4 per cent in 2015.

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. Discharging this duty, in 2016 Bank operations focused on establishing a framework to exchange information between the BNB and credit institutions on collecting, reviewing, and assessing information on critical functions and preparing bank resolution plans. As required by the Law, in March the BNB Governing Council set annual banking system 2016 BRF contribution at BGN 95,687,000. All banks remitted contributions within 30 days.

Implementing, operating, and overseeing efficient payment systems is an important central bank duty. In 2016 national payment systems continued to function effectively, ensuring payment flow continuity. RINGS, the real-time gross settlement system operated by the BNB, processed 83.6 per cent of payments in Bulgaria. The national system component of the Trans-European Automated Real-time Gross settlement Express Transfer system for the euro run by the BNB (TARGET2-BNB) processed 222,618 payments for EUR 341,533 million. Over the year the Bank inspected seven payment service providers and five companies to establish whether they had offered payment services without due licence. By the end of 2016 there were eleven payment institutions, three of them also licensed to operate as electronic money institutions.

BNB issue and cash operations include cash printing and minting; accepting, delivering, repaying, processing, authenticating and fitness checking Bulgarian and foreign cash; exchanging damaged Bulgarian cash; and scrapping unfit Bulgarian cash. In late 2016, 425.8 million banknotes circulated, worth BGN 13,839.0 million. Coins in circulation numbered 2114.7 million, with a total nominal value of BGN 306.7 million. The share of retained non-genuine Bulgarian banknotes was 0.000263 per cent of total banknotes in circulation by the end of 2016, while that of retained non-genuine Bulgarian coins in the total number of circulating coins was 0.000041 per cent. As part of its cash circulation integrity and security functions, in 2016 the Bank conducted four full on-site checks at credit institutions and service providers to check compliance with cash quality regulations.

Under contracts negotiated to market conditions and prices with the Ministry of Finance, the Bank compiles, processes, keeps and submits periodical statements of budget entities and municipalities' accounts with banks in Bulgaria and acts as government debt agent servicing government bond trade. The total nominal volume of Electronic System for Registering and Servicing Government Securities Trading (ESROT) registered government securities transactions was BGN 19,367.6 million, down 31.3 per cent on 2015.

By participating in the committees and working groups of the European System of Central Banks (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.

I. Economic Development in 2016

The External Environment

Preliminary estimates show that global economic growth was 3.1 per cent: close to the 3.2 per cent in 2015.[1] Economic activity in developed countries moderated due to weaker USA, euro area, and Japan economic growth. Economic activity growth in emerging and developing economies remained at its 2015 level, varying across regions. In China and India growth moderated, while in Russia and to a lesser extent Brazil real GDP declined less.

In 2016 global industrial production grew 1.7 per cent on 1.4 in 2015.[2] Developing economies reported a faster increase than in 2015, while developed ones' industrial production growth moderated, except in the euro area where it accelerated slightly. World goods and services trade growth decreased to 1.9 per cent in 2016 from 2.7 in 2015 due to significantly lower trade growth in developed economies only partially offset by accelerating emerging and developing economies' growth.[3]

Major Macroeconomic Indicators

(per cent)

	Average annual real GDP growth			Inflation (end of year)			Unemployment rate (average annual)		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
EU	1.6	2.2	1.9	-0.1	0.2	1.2	10.2	9.4	8.6
Euro area	1.2	2.0	1.7	-0.2	0.2	1.1	11.7	10.9	10.0
New non-euro area Member States	3.0	3.6	3.1	-0.4	-0.3	0.9	8.6	7.5	6.1
EU-3	2.9	2.4	2.0	0.5	0.3	1.5	6.4	5.7	5.3
United States	2.4	2.6	1.6	0.8	0.7	2.1	6.2	5.3	4.9
Japan	0.3	1.2	1.0	2.4	0.2	0.3	3.6	3.4	3.1
China	7.3	6.9	6.7	1.5	1.6	2.1	4.1	4.1	4.0

Notes: New non-euro area Member States are countries joining since 2004 less those now in the euro area. The EU-3 are 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 countries in HICP calculated by Eurostat for inflation.

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

Real GDP growth in the euro area slowed to 1.7 per cent in 2016, following 2.0 per cent in 2015. Private consumption made the main positive contribution to growth, followed by investment in fixed capital. The significant slowdown in goods and services growth, caused by weaker external demand from some developed economies and the negative contribution of net exports, contributed to lower GDP growth compared with 2015. Ireland, Malta, and Slovakia reported highest growth at 5.2, 5.0 and 3.3 per cent respectively, while Greece, where economic activity remained unchanged on 2015, reported zero growth. Unemployment rate fell to 10.0 per cent on average from 10.9 per cent in 2015, with Greece and Spain still recording the

[1] IMF data: World Economic Outlook Update, January 2017.

[2] Based on CPB data: Netherlands Bureau for Economic Policy Analysis, 24 March 2017.

[3] IMF data: World Economic Outlook Update, January 2017.

highest values at 23.5 and 19.6 per cent. In 2016 Germany remained the country with least unemployment (4.1 per cent), followed by Malta (4.7 per cent).

Real US economic growth was 1.6 per cent, slowing greatly on 2015's 2.6 per cent, largely due to weaker economic activity in the first half year. Negative investment contribution, and to a lesser extent lower positive contribution of private consumption growth, also slowed economic growth. Weak investment activity reflected political uncertainty related to coming US presidential elections, the referendum on United Kingdom European Union membership, and worsened global growth prospects in early 2016. Unemployment fell further to 4.9 per cent on average from 5.3 in 2015. Announcements of intentions to launch fiscal stimuli after the US presidential elections helped boost inflation expectations in the USA and globally.

In 2016 international commodity prices remained lower than in the previous year due to high output and inventories levels. In the second half year the global demand-supply gap started contracting, boosting energy and most non-energy commodity prices on an annual basis and global inflation. In 2016 the average annual Brent crude oil price fell 15.9 per cent in US dollars[4] and 15.6 per cent in euro on 2015, rising 43.3 per cent in US dollars and 47.9 per cent in euro in December. Food prices fell 4.2 per cent on an annual basis in US dollars and 3.9 per cent in euro. There were significant differences between sub-components, wheat prices falling 9.5 per cent on average in euro due to a good world harvest. In 2016 the metals euro price index dropped 3.8 per cent on 2015 despite a second half-year rise driven by Chinese demand related to higher government investment expenditure and expected higher US demand. In 2016 the average euro copper price fell 11.3 per cent on 2015, but rose 25.9 per cent on an annual basis in December.

Global inflation rose from 1.6 per cent at the end of 2015 to 1.8 per cent at the end of 2016.[5] Inflation in developed countries accelerated to 1.3 per cent from 0.2 at the end of 2015 and reached 3.1 per cent in developing countries from 2.9 in December 2015.[6] Euro area inflation[7] accelerated to 1.1 per cent on an annual basis from 0.2 in December 2015, core inflation (excluding food, energy, alcohol and tobacco products) remaining at its December 2015 level of 0.9 per cent. Estonia, Belgium, and Latvia led annual inflation at 2.4, 2.2 and 2.1 per cent, while Ireland, Cyprus, and Slovakia trailed at -0.2, 0.1 and 0.2 per cent. US inflation measured by the Consumer Price Index (CPI)[8] rose to 2.1 per cent at the end of 2016 from 0.7 per cent at the end of 2015, and inflation measured by the private consumption expenditure deflator accelerated on an annual basis to 1.4 per cent in the fourth quarter from 0.4 per cent in the fourth quarter of 2015.

Differences between ECB and US Federal Reserve monetary policies deepened.[9] In March unfavourable developments on euro area financial markets and persistently low euro area inflation and growth prospects prompted the ECB to cut main refinancing operations and marginal lending facility interest by 5 basis points to 0.0 and 0.25 per cent and reduce the deposit facility rate by 10 basis points to -0.40 per cent. The ECB also announced non-standard monetary policy measures. Given the view that the increase of inflation in the euro area is not on a sustainable path, in

[4] Referred to as the US dollar below.

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

[6] Based on World Bank data, Global Economic Monitor Database.

[7] Measured by the HICP.

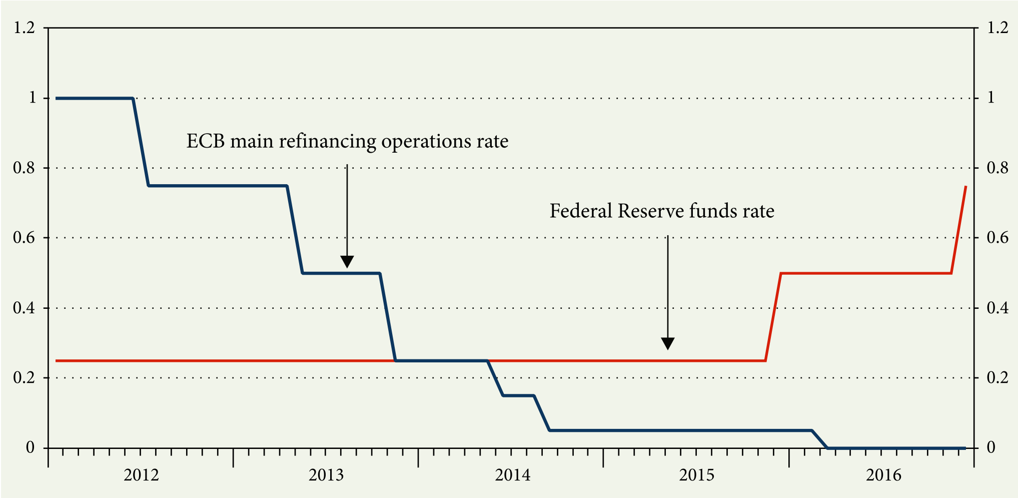
[8] Non-seasonally adjusted data.

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

December 2016 the ECB extended its expanded public and private sector asset purchase programme by nine months and adjusted some of its parameters.

Federal Reserve System and ECB Interest Rates

(per cent)



Sources: the ECB, the Federal Reserve System.

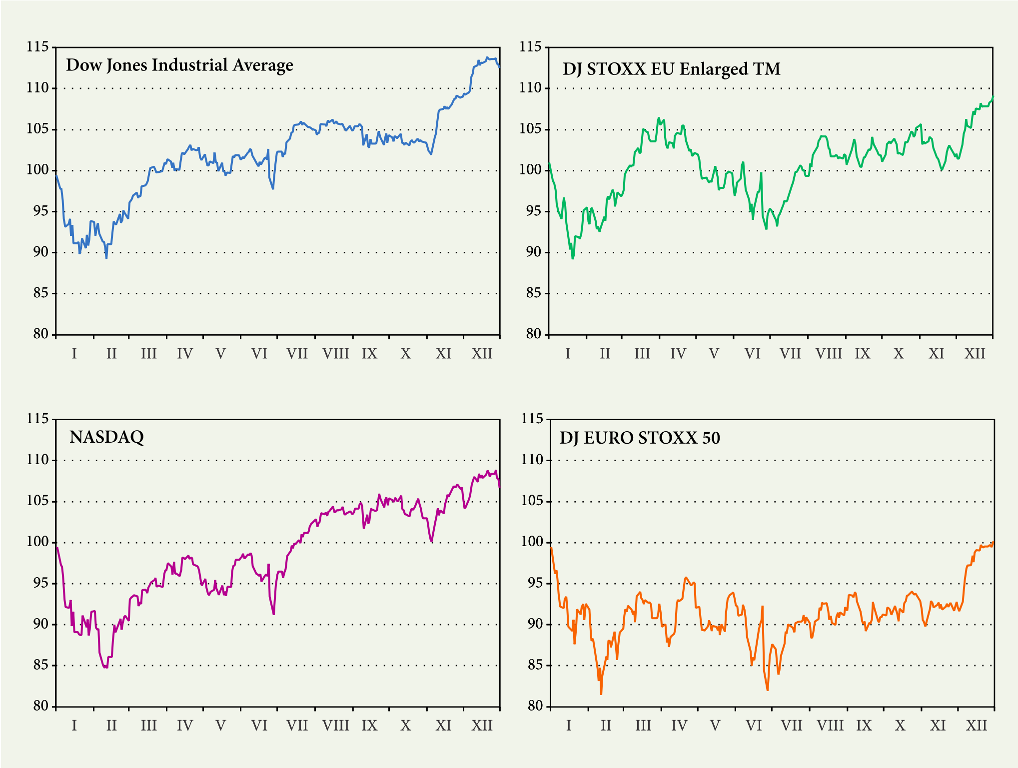
Having commenced to normalise monetary policy in December 2015, the US Federal Reserve System decided not to raise the federal funds rate target range in the first half year. This was largely due to low inflation, weak economic growth in the first half year, and growing external risks to the economy. Improved third quarter economic data and the gradual mitigation of external risks built up expectations of target rate rises. Sustainable economic indicator improvements prompted the US Federal Open Market Committee (FOMC) to raise the target range for the federal funds rate by 25 basis points to 0.50–0.75 per cent in December.

In 2016 international financial market developments expectations of ECB, US Federal Reserve, and Bank of Japan monetary policy measures continued to change. Uncertainty about China's economic outlook and the UK referendum, political uncertainty in the USA and Italy, and concerns about banking system performance in some European countries were the main factors behind changing investor risk appetite and financial asset prices.

In early 2016, unfavourable economic and financial indicators of big developed economies like China impacted US and euro area financial markets. Additional ECB monetary policy measures and growing uncertainty on the UK referendum added to the impact. In the second half year financial markets stabilised and US and euro area stock exchange indices followed a broadly upward path supported by the data showing signs of improving economic activity. Over the year US stock exchange indices were livelier than euro area ones, Dow Jones and NASDAQ rising 12.4 and 7.4 per cent on December 2015, while the DJ STOXX EU ENLARGED TOTAL MARKET rose 6.6 per cent and the DJ EURO STOXX 50 fell 2.4 per cent.10

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

Main Stock Exchange Indices in 2016



Note: US dollars, December 2015 = 100.

The Bulgarian Economy

In 2016 real GDP in Bulgaria rose 3.4 per cent on 3.6 in 2015,[11] growth largely due to net exports and, to a lesser extent, private consumption and inventories changes. Against the backdrop of increased demand for Bulgarian goods and services in 2016, exports continued to increase, traditionally competitive groups contributing most. Imports of goods and services grew less compared with 2015 which resulted in a higher positive contribution of net exports to GDP growth. Lower government investment depressed gross fixed capital formation, while private investment rose.[12] Private consumption also rose as households and firms became optimistic about the domestic economy as measured by improving business environment and consumer confidence indicators.

[11] According to the NSI October 2016 schedule for statistical survey results, the NSI released not only final GDP 2015 data, but also revised annual and quarterly GDP data based on the output, income, and final use methods from 2000 to the second quarter of 2016 inclusive.

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

Real GDP Growth Rate and Contribution by Component of Final Use

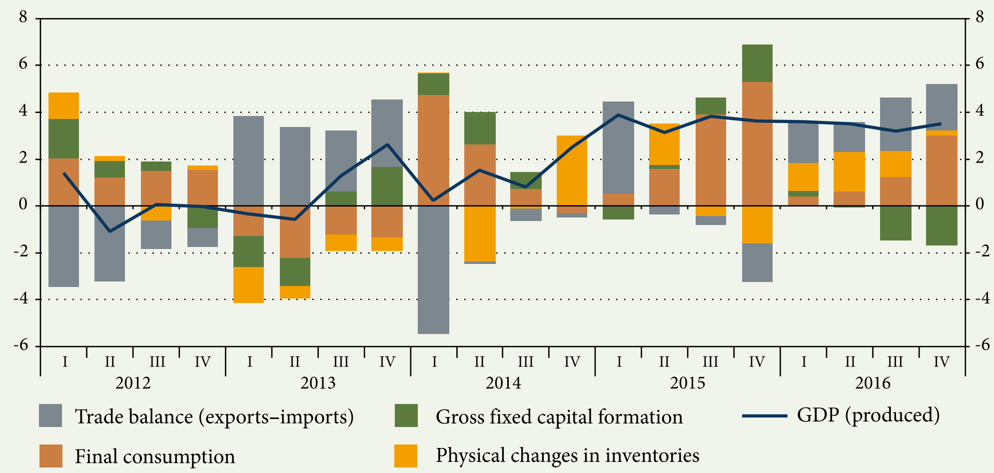
(on the corresponding period of 2014, non-seasonally adjusted data)

	2015		2016	
	Change (per cent)	Contribution, percentage points	Change (per cent)	Contribution, percentage points
GDP	**3.6**	-	**3.4**	-
Final consumption	3.8	3.0	1.8	1.4
Household consumption	4.3	2.7	2.1	1.3
NPISH consumption	27.9	0.1	5.8	0.0
Individual government consumption	-0.2	0.0	1.6	0.1
Collective consumption	2.9	0.2	-0.4	0.0
Gross fixed capital formation	2.7	0.6	-4.0	-0.8
Physical changes in inventories	-	-0.1	-	1.0
Exports (goods and services), net	-	0.1	-	1.8
Exports (goods and services)	5.7	3.7	5.7	3.6
Imports (goods and services)	5.4	-3.6	2.8	-1.8

Sources: the NSI, BNB calculations.

Real GDP Growth Rate and Contribution by Component of Final Use

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



Sources: the NSI, BNB calculations.

The labour market continued improving, with slight employment recoveries in most economic sectors. However, lower household labour income growth depressed household consumption growth from 4.5 per cent in 2015 to 2.1 per cent in 2016.

Government consumption grew 0.6 per cent in real terms due to moderate rises in pay, operating expenditure, and health insurance contributions.

Fixed capital investment fell 4.0 per cent in real terms in 2016 as government invested less due to the low EU 2014–2020 programme period fund absorption. Private investment rose as business expectations of future economic activity increased and capacity utilisation rose. However, economic uncertainty continued to be named a key hampering factor for firms' activities.

Gross value added in the economy rose 2.9 per cent in real terms from 3.0 in 2015, contributing 2.5 percentage points to real GDP growth.[13] Economic activity rose in all sectors, industry and services contributing 0.6 and 2.1 percentage points to value added growth. From the services sub-sectors, trade, transport, hotels and restaurants and real estate activities had the most substantial positive contribution to gross value added growth in the economy. Value added in industry grew by 2.8 per cent in real terms, falling in construction by 2.5 per cent on an annual basis. Value added in the agriculture, forestry and fishery sector rose 4.3 per cent in 2016 (compared to a decline of 6.8 per cent in 2015).

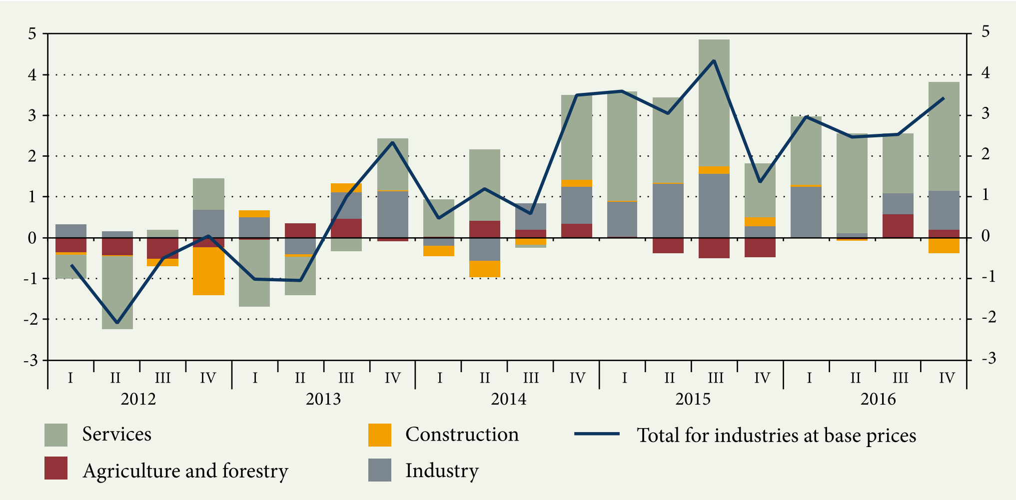
Gross Value Added Change in Real Terms and Contribution by Industry

	2015		2016	
	Change (per cent)	Contribution (percentage points)	Change (per cent)	Contribution (percentage points)
Gross value added	**3.0**	-	**2.9**	-
Agriculture and forestry	-6.8	-0.4	4.3	0.2
Industry*	4.2	1.1	2.0	0.6
Services	3.3	2.3	3.1	2.1

* Industry and construction.
Sources: the NSI, BNB calculations.

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.

In 2016 the number of employed went up by 0.5 per cent (0.4 per cent in 2015). Employment growth was reported in sectors with growing added value except for the agriculture, forestry and fishery sector which had a negative contribution for the second consecutive year. The services and industrial sub-sectors contributed most to the employment rise.

The 2016 NSI Labour Force Survey data show the unemployment rate continuing to fall, to 7.6 from 9.1 per cent on average for 2015. Employment Agency registrations put unemployment at 8.8 per cent on average from 10.1 per cent in 2015. The labour force participation rate of the 15-64 age group fell to 68.7 per cent from 69.3 on

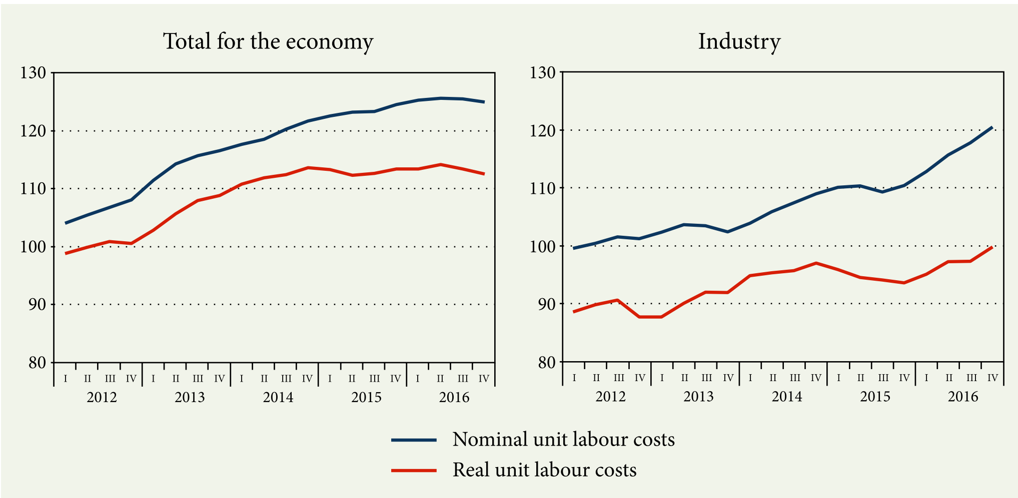
[13] The contribution of adjustments to GDP growth was 1.0 percentage points.

average in 2015, largely due to the decline in the economically active and increase in the currently economically inactive population. The number of discouraged persons continued falling, from 173,000 on average in 2015 to 165,000 in 2016.

NSI Labour Force Survey data show that in 2016 the number of long-term (over a year) unemployed fell more than that of shorter-term (up to a year) unemployed, its share coming to 59.1 per cent of all unemployed on average in 2016 from 61.3 per cent in 2015.

In 2016 nominal labour cost dynamics reflected business efforts to optimise labour costs amid falling producer and consumer prices. The growth rate of nominal compensation per employee in the total economy moderated to 5.0 per cent in 2016, from 6.7 per cent in 2015. Amid a slight employment change, total economy pay developments mainly reflected compensation per employee growth slowing from 5.6 per cent in 2015 to 3.1 per cent, up 4.5 per cent in real terms14 from 6.8 per cent in 2015. Based on national accounts data some services sub-sectors (information and communication, financial and insurance activities and real estate activities) had negative contributions to compensation per employee growth. In 2016 labour productivity15 in the total economy increased by 2.9 per cent (3.3 per cent in 2015) with trade, repair of motor vehicles and motorcycles, transport, storage and mail services, hotels and restaurants and real estate activities sectors contributing most to this.

Unit Labour Costs
(moving average, 2010 = 100)



Sources: the NSI, the BNB.

Similar nominal employee pay and real labour productivity growth in 2016 kept nominal unit labour costs close to their 2015 level (0.2 per cent up from 2.3 in 2015). This item rose in some industry sub-sectors and in culture, sports and entertainment; other service activities; activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; activities of extraterritorial organisations and bodies; professional, scientific and technical activities; administrative and support service activities. It dropped in all other services sectors, including agriculture, forestry and fishery. Real unit labour costs fell

[14] HICP deflated.

[15] Real GDP measures labour productivity in the overall economy. Labour productivity by sector is calculated based on value added of the sector in real terms.

0.9 per cent in the total economy. In export industries, real labour cost rose 6.6 per cent in 2016, after a 3.5 per cent drop in 2015.

Gross operating surplus in the economy rose 2.5 per cent in 2016 from 3.8 per cent in 2015. The trade, transport, hotels and restaurants, real estate activities and financial and insurance activities sub-sectors had the most significant positive contribution to this growth, while agriculture, forestry and fishery and industrial sub-sectors detracted most.

In 2016 the GDP deflator was 1.1 per cent on an annual basis. By final use component, the government consumption deflator was positive, while the private consumption, investment in fixed capital, exports and imports of goods and services deflators were negative.

In 2016 annual consumer price inflation was negative, reaching -0.5 per cent at the end of the year from -0.9 per cent in December 2015, reflecting external and internal deflationary factors.[16] World crude oil and commodity price falls in early 2016 contributed to falling imported goods prices, passed onto final fuels, natural gas, and heating consumer prices. The second half year saw a downward trend in the negative contribution of energy products prices to inflation in line with rising world oil prices. Domestic environment characterised by weakly rising domestic demand and lower firm production costs related to cheaper intermediate consumption goods, tended to depress domestic prices. Over the year specific factors like price falls in services like air transport and telecommunications with relatively high weights in the consumer basket and continuing falls in durable goods prices affected consumer prices. Tax legislation changes which resulted in an increase in administratively controlled prices of some goods and services pushed inflation upwards.

Tobacco excise and road fees price rises in early 2016[17] and urban transport fares rises in June caused tobacco and administratively controlled prices to contribute positively to overall inflation at the close of the year.

At the end of 2016 low foods group inflation reflected processed and unprocessed food price rises caused by rising food import prices and poor weather in Bulgaria.[18] Lower current consumption of goods and services prices in agriculture and agricultural products prices observed since 2015 were an internal factor limiting processed and unprocessed food inflation.[19]

In 2016 core HICP component prices fell to -2.1 per cent at the close of the year from -0.3 per cent in December 2015 due to accelerating non-food goods and services deflation.[20] The long-term downward trend in non-food prices since 2010 continued reflecting mainly falling car and other durable goods prices. These mostly imported goods' prices lowered imported durable prices. Non-durable goods prices declined less and made a low negative contribution to overall inflation. In 2016 services deflation mainly reflected cheaper telecommunication services amid fierce price competition in this sector, and cheaper transport services. The decrease in transport services prices reflected lower airfares indirectly helped by significant world oil price falls in early 2016 and low fare airline pricing.

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[16] The analysis employs HICP data.

[17] The overall minimum excise duty (specific and *ad-volarem*) on tobacco and road fees rose 8.8 and 47.4 per cent on average in early 2016.

[18] Third quarter data on import deflators and wholesale price data published by the Commodity Exchange and Wholesale Markets Commission were used according to the Standard International Trade Classifications (SITC).

[19] NSI data of 17 February 2017 on Economic Accounts for Agriculture (second estimate).

[20] Core inflation is based on HICP, excluding food, energy products, administratively controlled prices, and tobacco products.

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

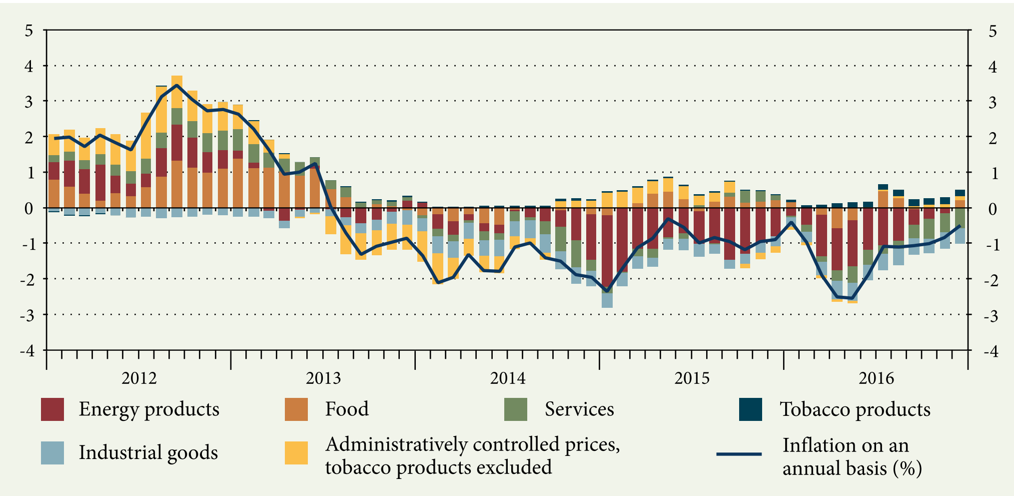
	2015		2016	
Inflation (per cent)	-0.9		-0.5	
	Rate of inflation by group (per cent)	Contribution, percentage points	Rate of inflation by group (per cent)	Contribution, percentage points
Food	**0.9**	**0.22**	**0.9**	**0.23**
Processed food	1.2	0.20	0.5	0.09
Unprocessed food	0.3	0.02	1.9	0.14
Services	**0.5**	**0.12**	**-2.1**	**-0.57**
Catering	1.6	0.09	2.0	0.11
Transport services	-3.6	-0.13	-8.4	-0.32
Telecommunication services	-1.3	-0.06	-6.1	-0.33
Other services	2.0	0.23	-0.3	-0.03
Energy products	**-10.5**	**-0.81**	**-0.2**	**-0.01**
Transport fuels	-11.7	-0.83	-0.4	-0.02
Industrial goods	**-1.4**	**-0.28**	**-1.9**	**-0.44**
Goods and services with administratively controlled prices	**-1.1**	**-0.17**	**0.6**	**0.10**
Tobacco products	**0.6**	**0.02**	**3.8**	**0.19**

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.

Annual Inflation and Contributions by Major Group of Goods and Services

(percentage points; per cent)



Sources: the NSI, the BNB.

In 2016 the overall balance on the current and the capital account was in surplus at EUR 3055.6 million, up EUR 1694.5 million on an annual basis. The current account surplus rose on 2015 because of the lower deficit on the net primary income item and the trade balance. The capital account surplus and the current account net secondary income surplus remained lower than in 2015 due to weak EU 2014–2020 Operational Programme fund absorption.

In 2016 the favourable terms of trade and higher goods exports than imports[21] in real terms cut trade deficit greatly: the main reason for the higher current account surplus.

Foreign trade data[22] show nominal goods exports rising 2.6 per cent on 2015, despite the dampening effect of lower year-on-year export prices. Machines, vehicles, appliances, instruments and weapons, and animal and plant products, food, drinks and tobacco groups had the strongest positive contribution to nominal export growth. In 2016 nominal goods imports fell 1.0 per cent due to lower imports prices, whereas real volumes rose on 2015. By use, imports of investment and consumer goods had the strongest positive contribution.

The positive services trade balance rose in 2016 mostly because of 15.7 per cent higher tourism revenue.[23] Bulgarians' foreign travel spending rose 21.9 per cent and was the main reason for greater 2016 service imports.

The lower deficit on the net primary income item was one of the main reasons for the current account flow dynamics in 2016. This reflected mainly lower dividend payment and distributed profit to non-residents than in 2015, possibly because of slower gross operating surplus growth in the economy and lower interest rates[24] on external obligations.

In 2016, the balance of payments financial account was negative as foreign liabilities to residents grew faster than foreign assets. The EUR 2744.2 million increase in foreign liabilities in 2016was mostly down to new government external obligations, including the March international capital markets bonds issue and the December 2016 Bank Deposit Insurance Fund (BDIF) loan financing.[25] Foreign direct investment inflow and the Bulgarian Energy Holding third quarter international capital market bonds issues contributed less to growth in liabilities to non-residents.[26] Preliminary BOP data for 2016 show that direct investment liabilities (reporting direct investment in Bulgaria) were EUR 1129.1 million or 2.4 per cent of GDP. Bulgarian residents' foreign assets rose EUR 2692.9 million, the private non-bank sector contributing most and bank transactions less.

Positive net current and capital account flows and financial account inflows boosted BNB international reserves by EUR 3467.3 million according to balance of payments data (valuation adjustments and price revaluations excluded). If changes in international foreign reserves on the BNB Issue Department balance sheet are taken into account, including valuation adjustments and price revaluations, annual growth was EUR 3613.2 million on the end of 2015.

In December 2016 gross external debt rose EUR 695.2 million from the end of 2015 to EUR 34.6 billion or 73.1 per cent of GDP. This reflected the EUR 1204 billion increase in general government debt. Other sectors' external debt, and to a lesser extent intercompany loans, fell, while banks' external debt rose slightly from

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[21] According to GDP data

[22] 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 with data on international trade in goods compiled by the NSI (see the BNB balance of payments press release for February 2015).

[23] NSI data show a 14 per cent rise in foreign tourist visits for 2016, Romanian and German ones contributing most.

[24] Based on data on interest rates on newly declared loans and gross external debt statistics.

[25] In 2015 the Bulgarian Deposit Insurance Fund was reclassified into in the general government sector. According to Ministry of Finance information of 19 December 2016 the BDIF took up used EUR 298.5 million of a government guaranteed loan from the European Bank for Reconstruction and Development and EUR 250 million from a government guaranteed loan by the International Bank for Reconstruction and Development (the World Bank). The funds repaid most of the loan extended by the Ministry of Finance to the BDIF at the end of 2014.

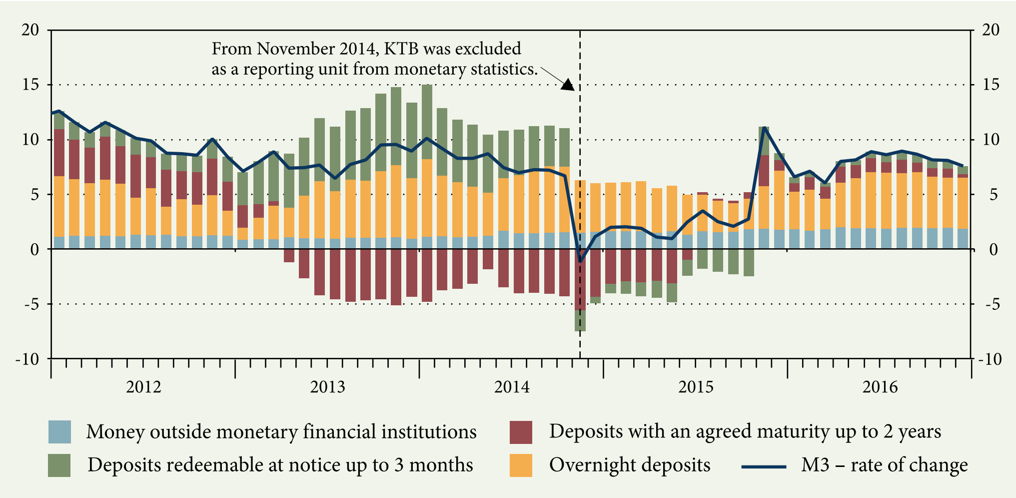
[26] According to the 27 July 2016 press release on on the Bulgarian Energy Holding website: http://www.bgenh.com/index.php/en/archive-news-2016/560-press-release-27-07-2016

end-2015. The other sectors' EUR 934.3 million debt fall [27]reflected mainly lower obligations of electricity, heating, gaseous fuels and water supply; trade, repair of motor vehicles and motorcycles, personal belongings and household goods and transport, storage and communications obligations.

Monetary aggregates developments reflect mainly the strong inflow of residents' attracted funds. Broad money M3 rose relatively fast at 7.6 per cent by December. Growing non-financial sector overnight deposits continued to play a leading role in the annual broad money rise, while money outside MFIs and deposits with an agreed maturity contributed less. Low interest prompted households and firms to prefer overnight deposits, and in terms of currency, deposits in levs. By the end of 2016 overall non-government sector deposits grew 7 per cent on an annual basis. Household deposits, amounting to BGN 45.4 billion in December, grew 6.6 per cent year on year. The annual growth rate of non-financial corporations' deposits tended to slow, accounting for 6.3 per cent in December. They reached BGN 19.4 billion.

Annual Rate of Change in M3 and Contribution by Component

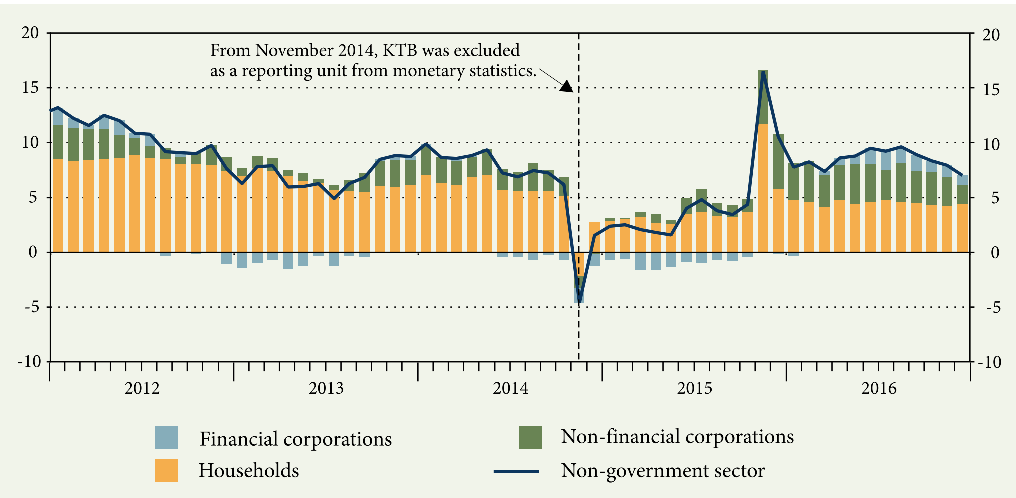
(percentage points; per cent)



Source: the BNB

Annual Growth of Non-government Sector's Deposits and Contribution by Sector

(percentage points; per cent)



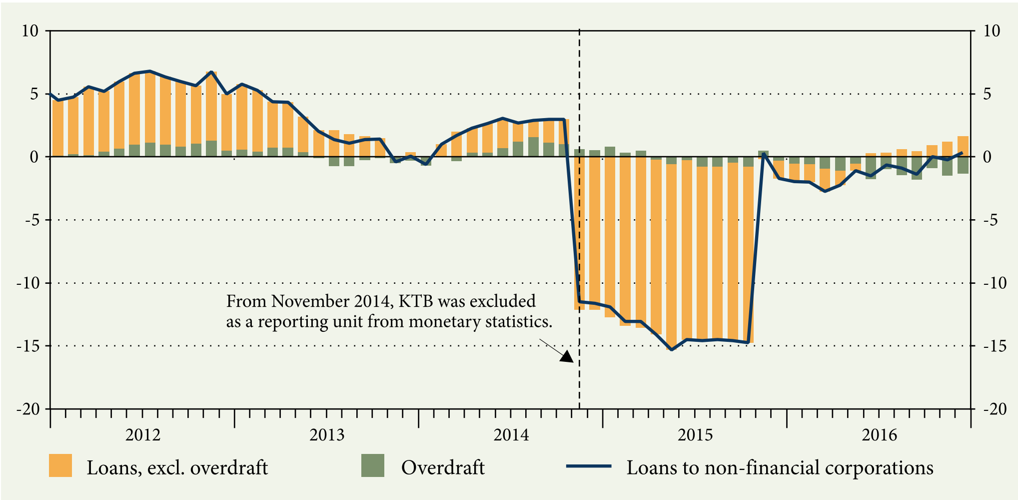
Source: the BNB.

[27] Excluding trade and bond loan liabilities.

In 2016 the negative rate of growth in loans to non-financial corporations and households gradually decreased, turning low positive by 1 per cent in December from -1.6 per cent at the end of 2015. The annual change in loans to non-financial corporations, which remained negative in most months of 2016, accounted for 0.3 per cent in December from -1.7 per cent at the end of 2015. The annual growth rate in lending to households accelerated in the second half of 2016 to 2.0 per cent in December (from -1.3 per cent at the end of 2015, housing and other household lending contributing most. The increase in other lending reflected loans extended under the National Residential Buildings Energy Efficiency programme. New lending to non-financial corporations and households tended to rise in 2016.

Annual Growth of the Credit to Non-financial Corporations and Contributions of Individual Types of Loans

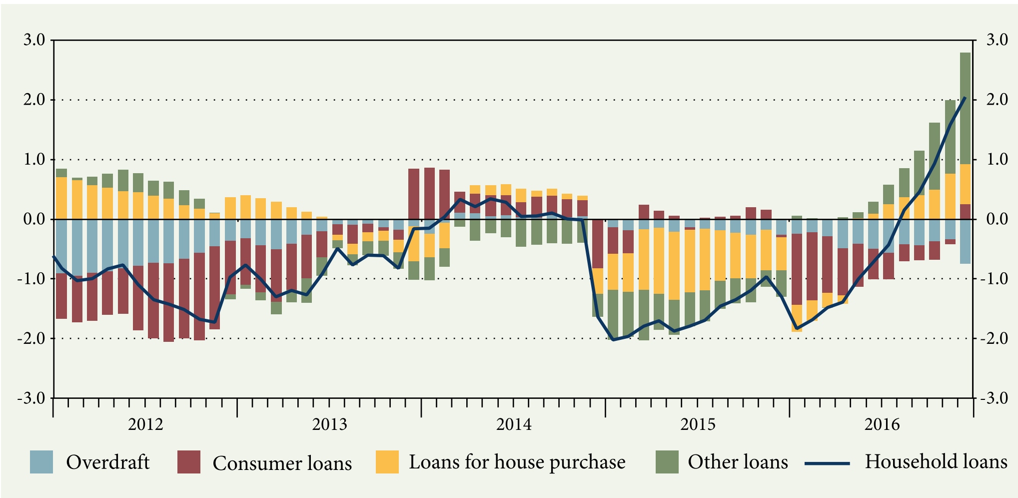
(per cent)



Source: the BNB.

Annual Growth of Household Credit and Contributions by Individual Loan Types

(per cent)



Source: the BNB.

The BNB quarterly lending survey showed demand starting to recover, with household demand stronger and corporate demand weaker. Rising demand for corporate, consumer, and housing loans mainly reflected low interest rates. Demand for funds to finance working capital and inventories, refinancing, restructuring or renegotiating debt and, to a lesser degree investment, also contributed significantly to stronger corporate credit demand. Increased consumer credit demand by households reflected current consumption and durable goods purchases, as well as consumers' views on the macroeconomic environment. Rising housing loan demand was driven by the favourable residential property market outlook, including house prices.

On the supply side, banks reported a net easing of household lending standards in 2016. There was a net tightening of corporate lending standards in the first half of the year, easing in the third quarter to remain unchanged until the year's end. Increased competition, high banking system liquidity, rising volumes and falling costs of attracted funds contributed most to easing bank corporate and household lending policies. Lowered risk assessments as a result of favourable macroeconomic environment and housing market assessments added to easing household lending standards. Banks' corporate lending risk aversion was a factor for tighter policies throughout the year.

In 2016 the banking sector retained strong liquidity, the liquid asset ratio calculated to BNB Ordinance No 11 accounting for 38.24 per cent from 36.71 per cent at the end of 2015. Unlike 2015, when banks redirected significant funds into deposits with the BNB as excess reserves, in 2016 they preferred to increase their investment abroad, and used a portion of their resources to increase Bulgarian government bonds portfolios, lend to the non-government sector, and repay foreign liabilities. A decrease in banks' excess reserves, mainly in the first quarter, is a result of the implementation of new BNB Ordinance No 21, effective as of early 2016, under which the BNB applies the ECB deposit facility rate on excess reserves where it is negative.[28] Banks' net foreign assets rose to BGN 4.8 billion at the end of 2016 from 2.6 billion in December 2015, reflecting increased foreign assets and repayment of external liabilities.

Reserve currency (euro) transactions with the BNB is banks' main instrument for managing lev liquidity. This takes advantage of the main function of the currency board: buying and selling levs for euro at the fixed exchange rate set by the Law on the Bulgarian National Bank. In most months, the BNB was a net purchaser of foreign currency from banks, unlike the previous three years when euro sales exceeded purchases.[29] In 2016 BNB purchased EUR 1 billion net from banks.

Applying the negative ECB deposit facility rate on banks' excess reserves and negative market rates charged to other BNB customers' accounts accelerated ECB monetary policy transmission to Bulgarian interbank money market rates. As a result, in 2016 interest rates in all maturities fell greatly, maturities of up to four months[30] being negative at the close of the year.

Average interest on interbank deposits and repurchase agreements in 2016 was -0.09 per cent, down 12 basis points from the average value in 2015. The past year saw significant fluctuations in LEONIA due to the small number and low volume

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[28] For further information on the amended Ordinance No 21 of the BNB on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks (in force from 4 January 2016) and bank excess reserve dynamics, see Chapter IV.

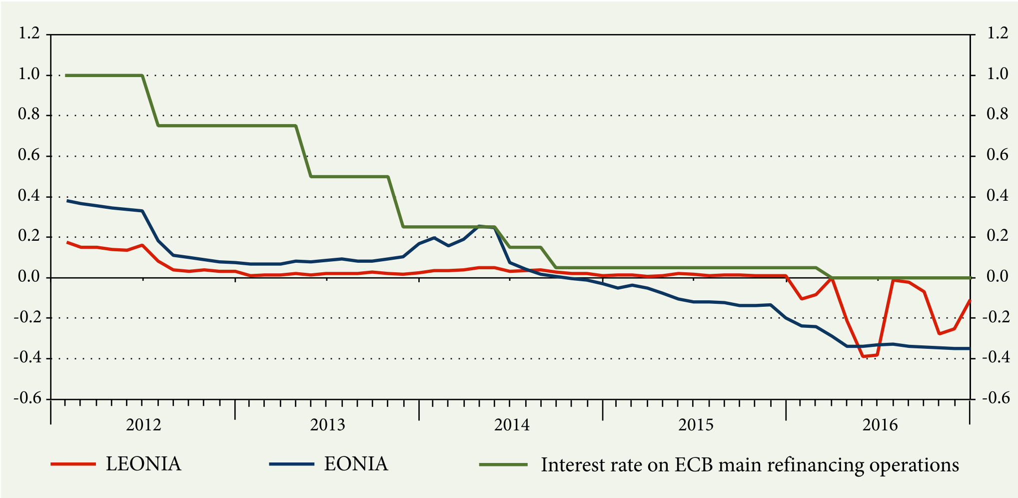
[29] Data refer to all bank transactions in foreign currency including liquidity management operations related to the transfer of own funds from lev accounts with the BNB to own accounts with the BNB in euro and *vice versa*.

[30] Refers to average SOFIBOR/SOFIBID values.

of transactions included in the index. Concurrently, EONIA followed a downward pattern accounting for -0.35 per cent in December 2016. Marked LEONIA volatility over 2016 made the spread between LEONIA and EONIA vary from -5 basis points in May and June to 32 basis points in July.

Interbank Money Market Interest Rate

(per cent)

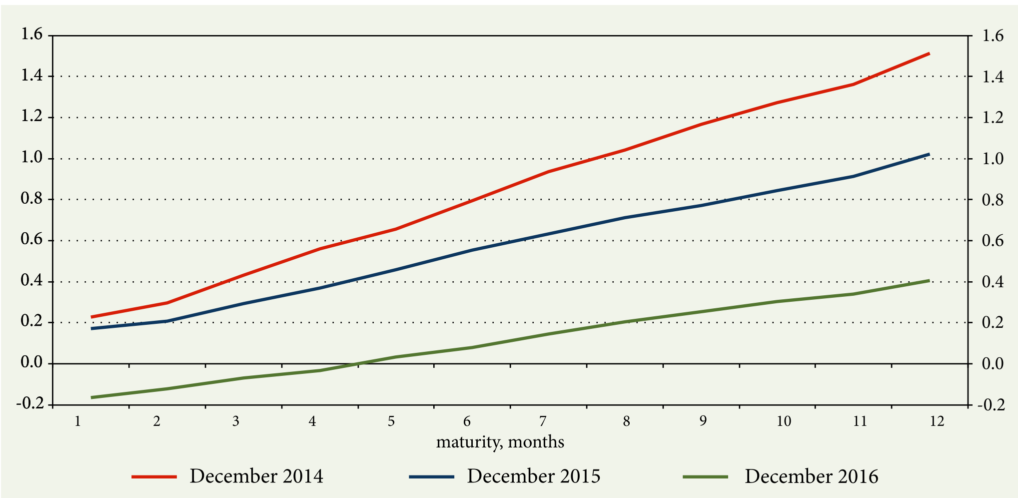


Sources: the BNB, the ECB.

Amid high banking system liquidity, traded volumes in the lev interbank market remained low in 2016, deposit transactions and repurchase agreements coming to BGN 59 million on an average daily basis from BGN 56 million in 2015. Total 2016 transactions volume was BGN 14.9 billion, a slight increase on 2015. Deposits comprised 59 per cent of turnover, and government securities repos 41 per cent. Overnight transactions continued dominating interbank deposit transactions at 80.2 per cent.

Interbank Money Market Yield Curve

(per cent)



Note: Average SOFIBOR/SOFIBID Index.

Source: the BNB.

Consolidated fiscal programme surplus was BGN 1465.5 million in 2016 (1.6 per cent of GDP). The budget balance markedly exceeded the revised April 2016 mid-term forecast which set deficit for 2016 at 1.9 per cent.

Total revenue and grants under the consolidated fiscal programme grew 5.5 per cent driven mainly by tax (6.4 percentage points) and non-tax revenue (1.4 percentage points). Tax and social insurance revenue growth by 8.2 per cent reflected measures to improve tax collection, 2016 legislative changes,[31] and expanding main tax bases (namely compensation *per* employee, gross operating surplus, and private consumption). Grants[32] dropped much (-20.3 per cent) on December 2015 due to weak absorption of EU 2014–2020 programming period funds.

Total expenditure, including the EU budget contribution, fell 6.3 per cent, reflecting 43.9 per cent lower capital expenditure.[33] Lower capital expenditure resulted from the weak absorption of EU 2014–2020 Operational Programme funds, while national budget capital expenditure grew significantly through higher costs at the end of the year. Current non-interest expenditure rose 3.4 per cent mostly because of increased social payments (4.0 per cent), compensation of employees (3.2 per cent) and operating expenditure (3.1 per cent). Expenditure on Bulgaria's contribution to the EU budget fell 9.2 per cent.

The past year saw BGN 3588 million positive external financing under the consolidated fiscal programme, driven mainly by the seven and 12-year March benchmark issues on international capital markets worth EUR 1994 million. The net government securities issue on the domestic market was negative at BGN -550.8 million from BGN 500 million issued since the start of the year.[34]

Funds from the positive net debt financing and the accumulated cash surplus boosted the fiscal deposit funds by BGN 4319 million on the end of December 2015. The fiscal reserve, including claims on EU funds over certified expenses, advance, and other payments, reached BGN 12,883 million, of which BGN 11,108 million in fiscal reserve deposits.

By the close of the year the Bulgarian government Eurobond yield fell from 2015, most in issues maturing 2022 and 2024. At the end of the year yield of the issue maturing in 2017 was negative. Yields on the two new March 2016 benchmark issues also fell.

The leading Bulgarian Stock Exchange SOFIX and BGBX40 indices were relatively steady until August 2016, moving upward from September. At the end of 2016, SOFIX rose by 27.2 per cent from December 2015 and BGBX40 by 19.9 per cent.

Secondary market stock trading rose 13.6 per cent to BGN 345.7 million and *bourse* bond turnover dropped 49.9 per cent to BGN 49.0 million. Over-the-counter equity deals came to BGN 889.5 million and those in bonds to BGN 51.6 million. Bulgarian Stock Exchange, Sofia, market capitalisation was BGN 9.7 billion or 10.5 per cent of GDP, from 9.7 per cent at the close of 2015.

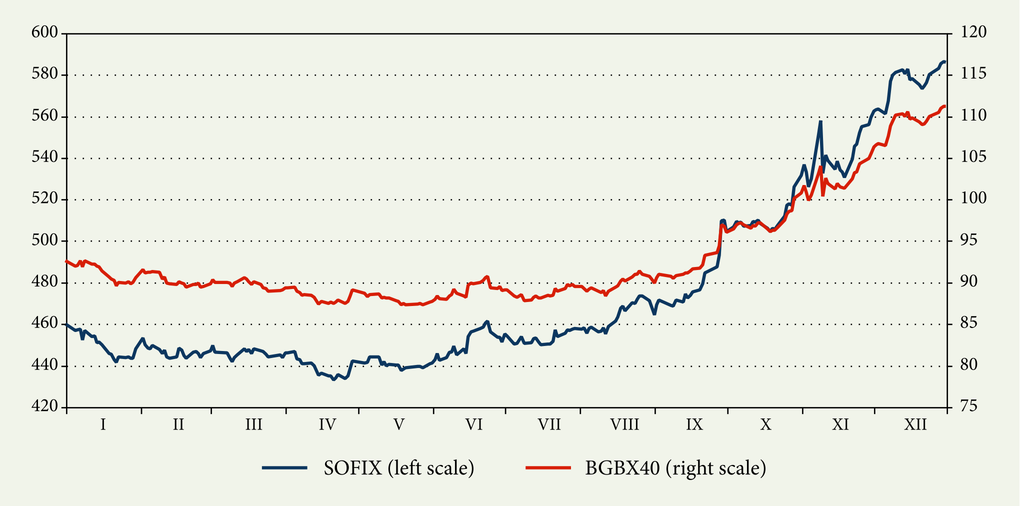
[31] These changes include higher cigarette and fuel excise duties, 8.6 per cent average minimum insurance contribution rises for major business sectors and occupational groups, and a 1 January minimum wage rise from BGN 380 to BGN 420.

[32] Grants were mostly in the form of reimbursements from EU Cohesion and Structural Funds and the European Agricultural Fund for Rural Development.

[33] Including government reserve growth.

[34] In 2016 domestic market government securities offers were limited as government had sufficient liquid funds after the March 2016 international capital market issue and budget surplus. For more information on the government securities primary and secondary markets, see Chapter IX.

Bulgarian Stock Exchange Indices in 2016

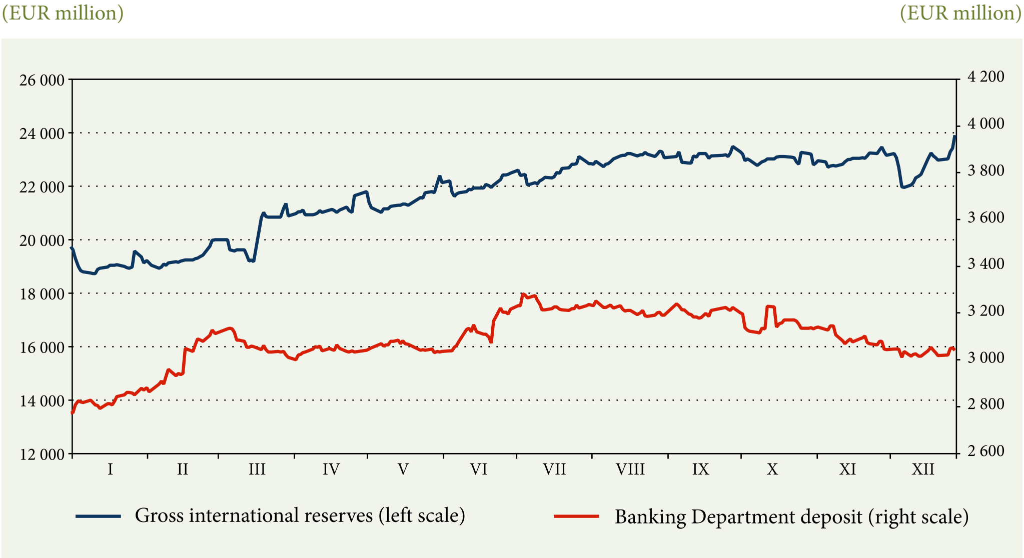


Sources: the BNB, the Bulgarian Stock Exchange.

II. Gross International Reserves

The BNB manages its gross international reserves in line with the Law on the Bulgarian National Bank,[35] investment constraints, business procedures and methodologies, and opportunities offered by international financial markets. BNB gross international reserves comprise the assets on the Issue Department's balance sheet and their role is to provide complete cover for monetary liabilities under the lev euro fixed exchange rate set by the Law on the Bulgarian National Bank.[36] The excess of gross international reserves over monetary liabilities forms the Banking Department Deposit item or the net value in the Issue Department's balance sheet.[37]

Gross International Reserves and Banking Department Deposit in 2016



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.

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

[36] 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 internationally recognised credit agencies; and BNB futures and options which bind non-residents and which are payable in freely convertible foreign currency. The Law on the BNB stipulates that these assets are estimated at market value.

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

The Amount and Structure of Gross International Reserves

By the end of 2016 the market value of gross international reserves was EUR 23,899 million: an increase of EUR 3613 million[38] or 17.8 per cent on the end of 2015. Major factors affecting the market value of assets include income from asset management, income from foreign currency revaluation, and external cash flow dynamics. External cash inflows of EUR 3212 million made the largest net positive contribution to the increase in international reserves.

External Cash Flows in Foreign Currency

(EUR million)

	2015	2016
I. Euro bought and sold		
at tills	-36	-61
with banks	998	-159
bought from banks	41 214	99 944
sold to banks	-40 216	-100 103
Subtotal I	**962**	**-220**
II. Currency flows with banks, the MF, and others		
Bank reserves (including minimum required reserves)	843	397
Government and other depositors	1 825	3 034
Subtotal II	**2 668**	**3 432**
Total I+II	**3 630**	**3 212**

Source: the BNB.

Most of the external inflows into Ministry of Finance BNB accounts came from two Eurobonds issues totalling EUR 1958 million sold on international markets in March. Cash inflows of EUR1897 million into the European Commission's account in Bulgaria also contributed positively. The balance of commercial banks' BNB accounts (including minimum required reserves) also rose by EUR 397 million net.

Commercial banks' net reserve currency sales of EUR 159 million reduced gross international reserves (in 2015 the BNB bought EUR 998 million from commercial banks). Other material cash outflows included MF government debt principal and interest repayments of EUR 533 million.

Currency Structure of Gross International Reserves

(per cent)

Currency	Issue Department balance sheet assets	
	2015	2016
EUR	91.55	91.96
USD	0.70	0.48
XAU	7.50	7.02
XDR	0.24	0.53
CHF	0.01	0.00

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

[38] Balances in banks' TARGET2 national system component accounts (worth EUR 191.6 million at the end of 2016), and the two tranches of SDR 611 million the IMF disbursed in August and September 2009 upon general SDR allocation are not included in the analysis of changes below. For further details, see BNB Annual Report, 2009, p 25.

The share of gold in gross international reserves fell to an average of 7.02 per cent from 7.5 per cent in 2015. This was mainly due to large cash inflows to the Issue Department balance sheet which boosted the weight of euro-denominated assets whose average share for the year was 91.96 per cent.

The share of deposits in the structure of assets by financial instrument increased, mainly reflecting a higher liquidity portfolio in euro maintained throughout 2016. Most assets (68.78 per cent) continued to be invested in securities.

Gross International Reserves by Financial Instrument

(per cent)

Financial instruments	2015	2016
Vault cash*	4.51	3.91
Deposits**	25.54	27.32
Securities**	69.95	68.78

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

Source: the BNB.

By residual term to maturity, most international reserves assets (averaging 57.41 per cent) continued to be invested in the up to a year maturity sector (current accounts, short-term deposits in foreign currency and gold, and short-term securities). Over the review period investment in the one to three year maturity sector rose at the expense of the three to five and five to ten year sectors.

Gross International Reserves by Residual Term to Maturity

(per cent)

Maturity sectors	2015	2016
Up to a year	57.27	57.41
One to three years	18.50	23.10
Three to five years	13.88	11.81
Five to ten years	10.35	7.50
Over ten years	0.00	0.17

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

Source: the BNB.

Gross International Reserves Risk and Return

The Market Environment

In 2016 international financial markets continued to reflect mainly changing expectations of ECB, ,US Federal Reserve, and Bank of Japan monetary policy measures, largely driven by inflationary trends in their regions. China's economic outlook, a series of unexpected political events in the United Kingdom, the USA and Italy, and concerns about banking system performance in some European countries, were the main factors behind changing investor risk appetite and hence, financial asset price moves.

In the first quarter of 2016, global financial markets noted negative economic and financial developments at some major developing countries, including China, creating expectations of lower global growth and greatly lowering market risk appetite. The persistently low inflation outlook, by additional ECB monetary policy measures going beyond market expectations, and growing uncertainty on the United Kingdom referendum on EU membership also influenced European financial markets. These developments, together with falling market expectations of an early increase in the US Federal Funds target rate substantially depressed US and core euro area government bond yields in the first months of the year. The second quarter saw the UK vote in favour of leaving the EU, surprising most markets and causing extremely marked volatility, boosting demand for safe assets. Over the same period growing market concerns about Italian banks were another important factor driving rising demand for quality assets.

Uncertainty about the economic effects of the UK vote to leave the EU significantly boosted government bond prices in most developed economies with some, including German ones, reaching historic highs at the beginning of the second half year. Global financial markets gradually calmed after publication of global economic indicators showing improved economic activity in the US, euro area, China, and the UK.

Following the election of Donald Trump as US president, market expectations of expansionary US fiscal policies contributed to strengthening global inflation expectations which, in addition to rising petrol prices and improving euro area economic outlook, contributed to higher fourth quarter US and euro area government bond yields. At the end of the year the Federal Reserve System raised the federal funds target rate as anticipated by market participants. However, revised Federal Open Market Committee forecasts of further step rises in the interest rate during 2017 further weakened US government bonds and boosted the US dollar.

ECB and Federal Reserve System Policies

Unfavourable euro area economic and financial conditions and downward ECB inflation and growth forecasts prompted the ECB 10 March meeting to cut main refinancing operations and marginal lending facility interest by 5 basis points each to nil and 0.25 per cent and cut the deposit facility rate by 10 basis points to -0.40 per cent. The ECB also moved to broaden non-standard monetary policy measures. The additional measures exceeded market participants' expectations and involved: (i) raising the monthly purchase volume under the expanded asset purchase programme (APP) from April from EUR 60 to EUR 80 billion; (ii) including euro-denominated investment grade bonds issued by euro area non-bank corporations in purchases under the expanded APP (new Corporate Sector Purchase Programme, CSPP) starting 8 June; (iii) launching new quarterly targeted longer-term refinancing operations (TLTRO II) from June 2016 to March 2017, all with four year durations. TLTRO II interest will be fixed for each operation at the main refinancing operations (MROs) rate on the day of each operation, with an opportunity of cutting it if new bank lending exceeds set volumes. Depending on the percentage by which banks exceed their benchmark stock of eligible loans,TLTROs interest may be cut to the level of the ECB deposit facility rate on operation day.

As regards its public sector purchase programme (PSPP), the ECB increased the share of purchases of euro-denominated bonds issued by international organisations and supranational development banks from 33 to 50 per cent of each issue and of each issuer's total outstanding securities. It also cut the share of monthly PSPP purchases from 12 to 10 per cent from early April 2016, raising its share in PSPP purchases from 8 to 10 per cent.

The subsequent April, June, July, September, and October 2016 ECB meetings did not change expanded asset purchase programme interest or parameters.

Insufficient progress towards a sustainable euro area inflation rise prompted the ECB Governing Council 8 December meeting to adopt these non-standard monetary policy measures: (i) extend APP duration by nine months and reduce the monthly volume of purchases between April and December 2017 from EUR 80 to EUR 60 billion; (ii) amend the APP range by permitting purchases of eligible securities with minimum remaining maturities and yields to maturity below the ECB deposit facility rate from 2017; (iii) let the Eurosystem make PSPP holdings available for lending (PSPP securities lending) against cash collateral to a EUR 50 billion limit. This decision entered into force on 15 December 2016 and was implemented by the ECB and the Belgian, German, French, Irish, Dutch, and Spanish central banks.

The ECB based its decision to cut the monthly volume of APP purchases upon the gradual but sustainable economic improvement and the significant weakening of deflation risks in the euro area. At the same time, the ECB left itself the option of increasing programme extent and/or duration in future, if necessary.

ECB 2016 operations and programmes significantly boosted euro area excess liquidity and the Eurosystem balance sheet figure. At the end of the year excess liquidity rose to EUR 1207 billion on EUR 661 billion at the end of 2015, while the Eurosystem balance sheet figure rose 32 per cent to EUR 3663 billion. These increases were mainly due to public asset purchases of EUR 763.4 billion since the end of 2015, covered bonds purchases of EUR 60.2 billion since the end of 2015, asset backed securities purchases of EUR 7.5 billion since the end of 2015, and corporate bonds purchases of EUR 51.1 billion since programme start. Allotted funds under the five TLTROs totalled EUR 520.8 billion, while the net effect on euro area banking system liquidity was EUR 127.7 billion after banks' early repayment of EUR 393.1 billion on past LTROs.

EONIA reference overnight interest in euro moved between -0.23 and -0.36 per cent, its average annual level reaching -0.32 per cent from -0.11 in 2015. The biggest drop was in the first quarter, after the ECB Governing Council decided to cut the deposit facility rate. In 2016 the average interest at which euro area banks borrowed time deposits in euro from each other also fell, interest in all maturity sectors turning negative by the year's close. Compared to the end of 2015, one and three-month interest fell some 26 basis points to -0.37 and -0.32 per cent, six and 12-month rates falling 22 and 20 basis points to -0.22 and -0.08 per cent. Credit and liquidity risk premia measured by relevant reference rates fell, three and six-month ones by 8 and 9 basis points from the end of 2015 to 3 and 13 basis points.

Low inflation, signs of a US economic growth slowdown, rising external risks related to financial developments in China, and uncertainty on the UK referendum outcome were among the main FOMC arguments for leaving the federal funds rate target range unchanged in the first half year.

Improving US economic data and the gradual mitigation of external risks boosted market participants' expectations of the FOMC September meeting raising the target rate. The FOMC, however, considered that any new target range increase would follow additional confirmation of progress towards the Federal Fund's objectives given persistent downside risks to US economic outlook and the restricted set of monetary policy instruments for stimulating economic activity.

US inflation indicators did not change much in the fourth quarter, but strong improvements in the outlook prompted the FOMC December meeting to unanimously raise the federal funds rate corridor by 25 basis points to 0.50–0.75 per cent. In addition, the Committee revised US GDP growth projections to 2019 upwards, individual members' projection medians showing expectations of a three step increase in the federal funds rate in 2017. These decisions were a further step towards the monetary policy normalisation which started in late 2015.

Euro Area and US Sovereign Bonds Yields

In 2016 German government bond yields fell greatly to historic lows in all maturity sectors. In July medium and long-term maturity sectors hit the lowest yields for 2016 before trending upwards. The short-term maturity sector hit its lowest yields in December. The yield curve measured by the difference between ten and two-year bond yields did not change. German government bond yields with 2 and 10-year residual terms to maturity fell 42 basis points each to 0.77 and 0.21 per cent. By the end of the year all German government bonds with under eight-year maturities traded at negative annual yields. Large yield curve fluctuations accompanied these developments.

Spreads between yields on euro area periphery government bonds and German benchmark bonds widened, especially 10-year Portuguese and Italian ones, by 167 and 64 basis points. Failure by the Portuguese government to meet its 2015 budget deficit target and the need for additional fiscal consolidation in 2016, speculations about a DBRS credit rating downgrade, and concerns about reaching ECB Portuguese bond purchase limits were the key reasons for Portuguese spread widening. In Italy, the spread widened because of growing concerns about the state of Italian banks, political uncertainty prompted by the referendum, the less favourable Moody's and Fitch credit rating outlook, and the unsuccessful private sector attempt to recapitalise the third largest bank by assets, Banca Monte dei Paschi di Siena SpA at the end of the year.

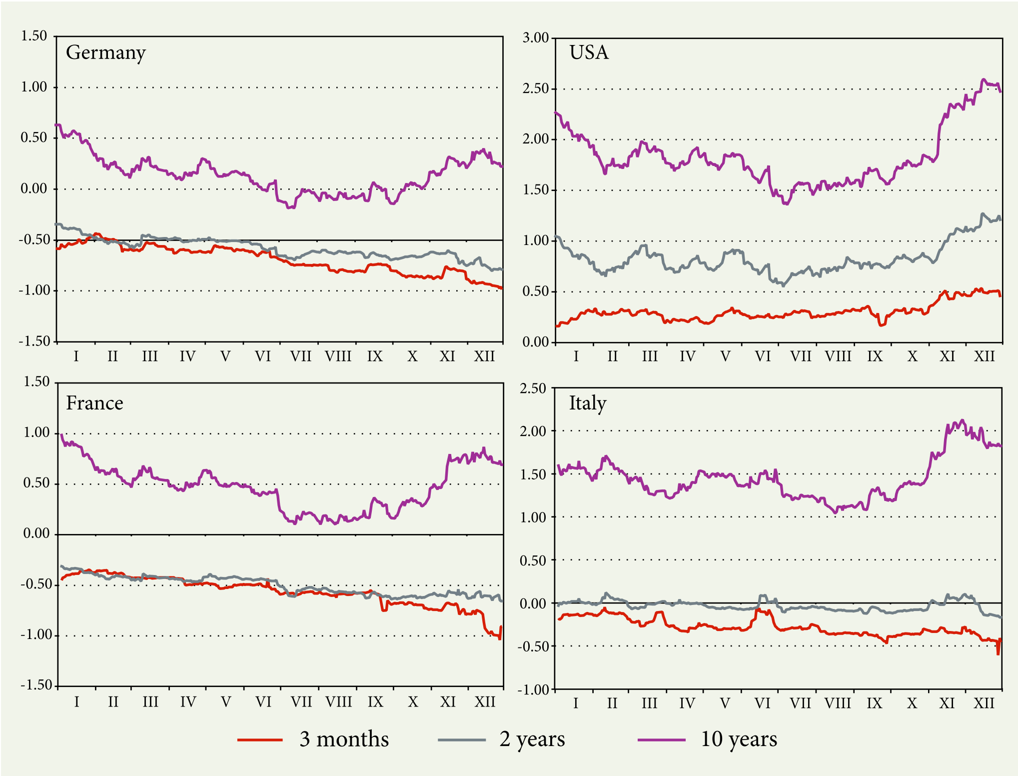
Core euro area government bond yield spreads widened in the two-year segment, whereas the ten-year segment mostly tightened. The widening of short-term maturity segment spreads was due to the greater drop by German two-year government bond yields than other core euro area government bonds. This resulted from rising demand for German short-term government bonds, deemed a high credit quality asset used as collateral in repurchase operations in the euro area, especially in the fourth quarter. In the two-year segment, the spread of Finnish government bonds widened most, by 11 basis points to 0.12 per cent, at the end of the year two-year Finnish government bond yield being higher than the comparable segment of Dutch, French, Austrian and Belgian government bonds.

Moody's and Fitch one step downgrades of Finland's credit rating in the first half year stripped Finland of its first class rating by all three major rating agencies. At the end of the first half year Moody's downgraded Austria's credit rating because of low medium-term growth prospects. In September S&P raised Finland's credit rating outlook because of an expected gradual economic recovery and improved public finances. In October France's credit rating outlook rose, reflecting gradual tax system and Labour Code reform and the expected stabilisation of employment, growth, competitiveness, and public finances. Despite improved economic outlook after the US presidential elections, French government bond yield spread widened by 8 basis points in the two-year and 12 basis points in the ten-year segments because of growing political concerns and presidential elections in the second quarter of 2017.

Over 2016 the US government bond yield curve rose slightly by 3 basis points due to the less pronounced increase in short-term than long-term yields: short-term yields rose 14 basis points to 1.19 per cent in the two-year sector and long term yields rose 17 basis points to 2.44 per cent in the ten-year sector. Prevailing market expectations of a hike in the federal funds target range grew markedly in the second half year and were a key reason for higher short-term maturity sector yields. At the same time, medium and long-term US government bonds reflected a number of divergent factors: mixed signals about the state of the US economy, further ECB monetary policy incentives, investor flights to safety in the face of political risks attending the UK's decision to leave the EU and the US presidential campaign. After the US presidential elections long-term US government bond yields rose sharply as the markets trimmed growth and inflation expectations to the future President's promises of sizeable infrastructure investment and fiscal stimuli for US businesses. The FOMC announcement of federal funds rate target range rises as of December, widely expected by markets, led to no significant changes in US government bond prices, but signs of a possible rapid increase in the federal funds rate corridor in 2017 boosted US government bonds yields further at the end of 2016.

Government Bond Yields in 2016

(per cent)



Gold and Exchange Rates

In 2016 the gold price rose 8 per cent in US dollars and 11.8 per cent in euro. It moved between USD 1061 and USD 1366 and EUR 977 and EUR 1236 per troy ounce. In the first half year the price of gold rose because of a flight to safety amid global stock market price volatility. Falling market expectations on the rate of increase of US federal funds interest also boosted gold prices. Imposition of negative interest on a portion of Japanese banks' reserves and the cut in the ECB deposit facility rate also boosted gold price. In late June gold appreciated strongly to a two-year peak, mostly because of the flight to safety triggered by the UK referendum outcome. In the second half year gold depreciated due to the stronger US dollar and to market expectations of faster US monetary policy normalisation.

The US dollar appreciated by 3.1 per cent on the euro, mainly in the last quarter. The USD/EUR exchange rate moved between 1.04 and 1.15 or EUR 0.87 to 0.96 *per* USD. The first half year saw a dollar weakening against the euro, mostly because of unfavourable US data contravening market expectations, and a higher likelihood of a global economy slowdown. Investors accordingly downgraded expectations of the number of steps to raise the federal funds rate in 2016, in turn eroding foreign exchange market expectations of a further deepening of euro area and US monetary policy differences. The end of June saw a strong dollar rise against the euro after the unexpected outcome of the UK referendum and uncertainty about its impact on the European economy. In the fourth quarter of 2016 the US dollar again rose greatly against the euro, exchange dynamics mostly reflecting changes in market US monetary and fiscal policy outlook expectations. Following Donald Trump's election, US inflation expectations switched to faster rising consumer prices, reflecting the president-elect's intended fiscal stimuli and a measure of trade protectionism. Changing US fiscal and foreign trade policy expectations and an anticipated faster federal funds rate increase resulted in significant US dollar appreciation against all other major currencies. Subsequent publication of FOMC expectations of a three-step 2017 rise in the federal funds rate further boosted the US dollar against the euro at the year's end.

The USD/EUR Exchange Rate in 2016

(EUR)

Troy Ounce Gold Price in US Dollars in 2016

(USD)

Troy Ounce Gold Price in Euro in 2016

(EUR)

Major Types of Risk

In 2016 net value risk in the Issue Department balance sheet measured by value-at-risk (VaR) was 12.77 per cent on an annual basis.[39]

Gross international reserve **interest rate risk** measured by reserves' average modified duration was 1.61 years. The duration maintained in 2016 was 0.16 years shorter than the average for 2015. The limit for maximum deviation in the modified duration of investment portfolios from benchmark was in the asymmetric range of -0.40 to +0.10 years in the first half year and from -0.20 to +0.20 in the second half.

Gross international reserve **currency risk** was constrained by the Law on the BNB stipulation that the sum of the absolute values of open foreign currency positions [40] in currencies other than euro, SDR, and monetary gold, should not exceed 2 per cent of the market value of monetary liabilities in these currencies. There were minimal open positions in foreign currencies in the reporting period, the open position in monetary gold posing the main currency risk to the BNB.

The Bank continued its conservative **credit risk** policy in gross international reserve investment. Limits on various types of investment exposures to individual countries changed in early 2016. Countries were divided into three groups by credit risk level according to current country exposure distribution principles. The minimum weight of securities issued by non-euro area countries and institutions rose from 10 to 15 per cent. In the third quarter of 2016, following the UK referendum surprise, the minimum for Group 1 Countries asset class (mainly German government bonds, German government guaranteed debt, and German federal government debt) rose from 30 to 35 per cent.

To achieve its main gross international reserves management objectives of high international reserve security and liquidity, the BNB continued investing most assets into core euro area government securities and government guaranteed debt.

By the end of 2016 some 67 per cent of international reserves was invested into assets with the highest AAA long-term credit rating.

[39] *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.

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

Operational risk remained in strict compliance with investment constraints and relevant business procedures for international reserve management.

Return and Efficiency

Net income from assets in euro is the sum of three components: (i) income from investing gross international reserves in the original currency; (ii) income from currency imbalance;[41] (iii) expenditure and/or income from liabilities. In 2016 BNB income from gross international reserve investment was EUR 57.46 million or 0.34 per cent annual yield. This reflected mainly falling euro-denominated government bond yields in the first half year, which boosted the price of government bonds in the BNB portfolio. The fourth quarter saw divergent dynamics: an increase in yield on international financial markets, leading to negative market revaluations, some securities price declines in the BNB portfolio, and annual yield drop. The currency imbalance income of EUR 149.79 million was almost entirely down to the change in the monetary gold price in euro. The new January 2016 BNB interest policy made the net financial result from liabilities positive at 0.06 per cent for the year, corresponding to a EUR 10.56 million income. These three components brought net earnings from BNB international reserve management to EUR 217.64 million: 1.24 per cent of total 2016 profitability.

International Reserves Income and Return in 2016

Period	Net income (EUR million)	Net return[1] (per cent)	Income (EUR million)	Return (per cent)	Income (EUR million)	Return (per cent)	Expenditure (EUR million)	Return (per cent)
			on assets		on currency revaluation of assets and liabilities		on liabilities	
	(1)+(2)+(3)		(1)		(2)		(3)	
First quarter	205.98	1.13	68.88	0.37	134.78	0.74	2.32	0.01
Second quarter	190.37	0.91	46.78	0.22	141.08	0.68	2.51	0.01
Third quarter	-4.48	-0.02	19.16	0.09	-26.42	-0.12	2.78	0.01
Fourth quarter	-174.24	-0.78	-77.36	-0.35	-99.65	-0.45	2.95	0.01
Total	217.64	1.24	57.46	0.34	149.79	0.85	10.56	0.06

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

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. At the end of 2016 some 4 per cent of gross international reserves was managed by international financial institutions as external managers. 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.

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

Portfolio Return and Risk in 2016

Portfolio	Return		Volatility (risk)		Information ratio[3]
	Absolute (per cent)	Relative[1] (basis points)	Absolute (basis points)	Relative[2] (basis points)	
Investment 1, EUR	0.39	-6	52	20	-0.31
Investment 2, EUR	0.41	-4	45	26	-0.14
External manager A, EUR	0.87	1	74	5	0.28
External manager B, EUR	0.82	-4	70	9	-0.43
Liquid, *EUR*	-0.27	24	1	1	-
Liquid, *XAU*	0.40	-	9	-	-
Liquid, *USD*	0.84	55	12	12	-

[1] A portfolio's positive relative return is attained profit against benchmark return. Relative returns with a negative sign are interpreted as opportunity cost in portfolio management.
[2] Relative volatility (relative risk) against benchmark indicates the degree of deviation of portfolio risk characteristics from benchmark through active portfolio management. The risk is on an annual basis.
[3] Information ratio is the ratio between relative portfolio return and relative portfolio risk on an annual basis.

Source: the BNB.

III. Payment Systems and Payment Oversight

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

Bulgaria's lev payment systems are:

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

Bulgaria's euro payment systems are:

- 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.

Bulgaria's 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 2016 the RINGS real-time gross settlement system processed most lev payments in Bulgaria. This helped mitigate risks to the payment system: one of the major goals of a central bank. On 31 December 2016, the BNB and 27 banks participated in RINGS.

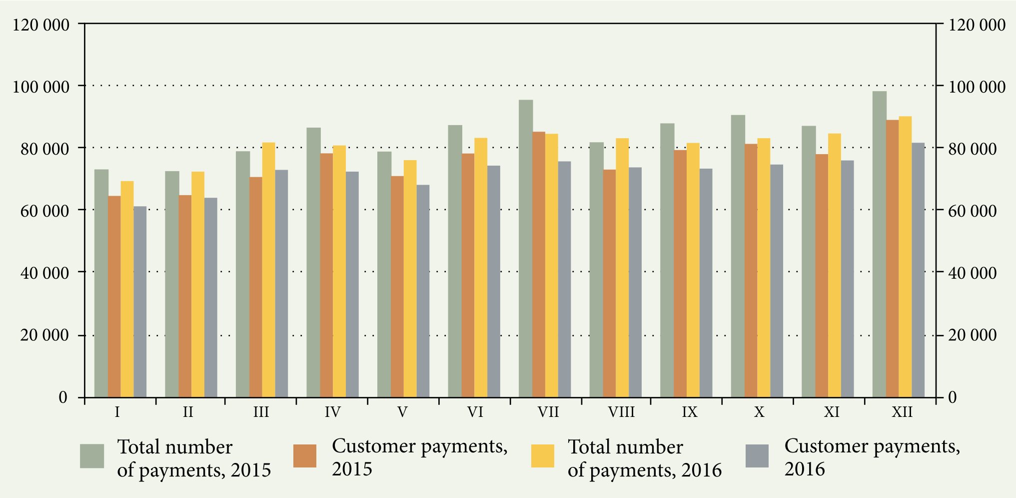
In 2016 RINGS processed 970,476 payments totalling BGN 779,507 million: down 4.4 per cent in number and 16.1 per cent in value on 2015. Customer payments numbered 867,922 (89.4 per cent of all) accounting for BGN 189,153 million (24.3 per cent of all).

The daily average number of payments *via* the system was 3851, and daily average value was BGN 3093 million.

In 2016, 63 per cent of payments were processed by noon and 86.3 per cent by 2:30 pm. The balance of 13.7 per cent went through by 5:30pm. As regards system traffic, 82.7 per cent of the number of system payments were effected by 2:30pm. RINGS offered 100 per cent availability[42] in the period under review.

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

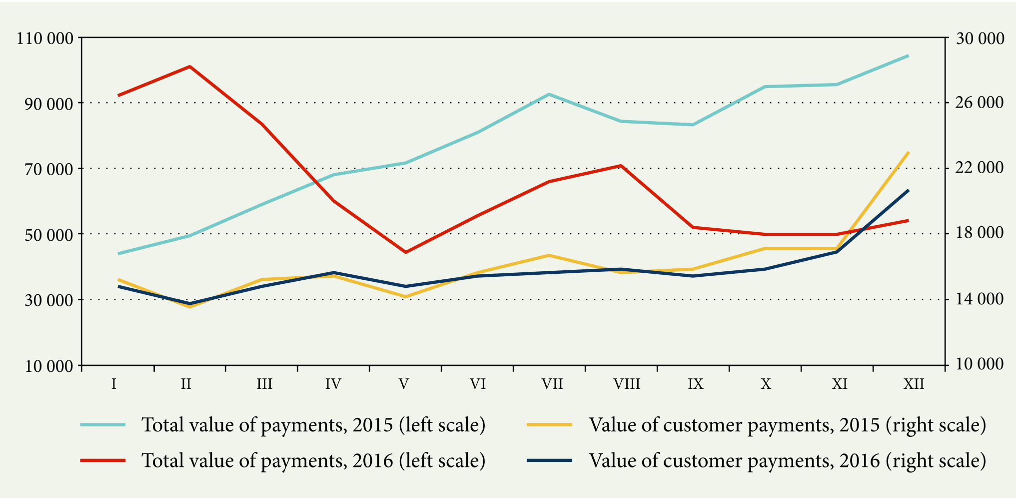
RINGS Payment Number in 2015 and 2016



Source: the BNB.

RINGS Payment Value in 2015 and 2016

(BGN million) (BGN million)



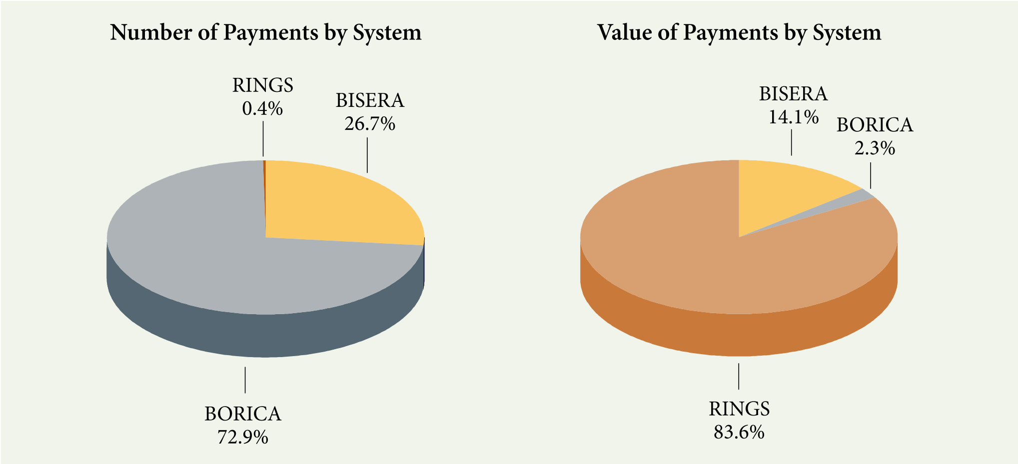
Source: the BNB.

Bulgarian lev payment shares by payment system remained unchanged from 2015. RINGS processed 83.6 per cent of the value of all payments, with values around 80 per cent deemed optimal for the operation of real-time gross settlement systems. RINGS also processed 0.4 per cent of the total number of lev non-cash payments in Bulgaria.

BORICA processed 107.1 million of payments for BGN 11,166.4 million: up 13 per cent in number and 11.4 per cent in value on 2015. ATM cash withdrawal value and number rose 2.5 and 7.7 per cent. BORICA processed card payments rose 23.3 and 21.5 per cent in number and value.

In 2016 BISERA processed 69.2 million of payments for BGN 131,559.4 million. Processed transactions rose 5.9 per cent in number and 2.8 per cent in value.

Distribution of Lev Payments in Bulgaria by Payment System in 2016

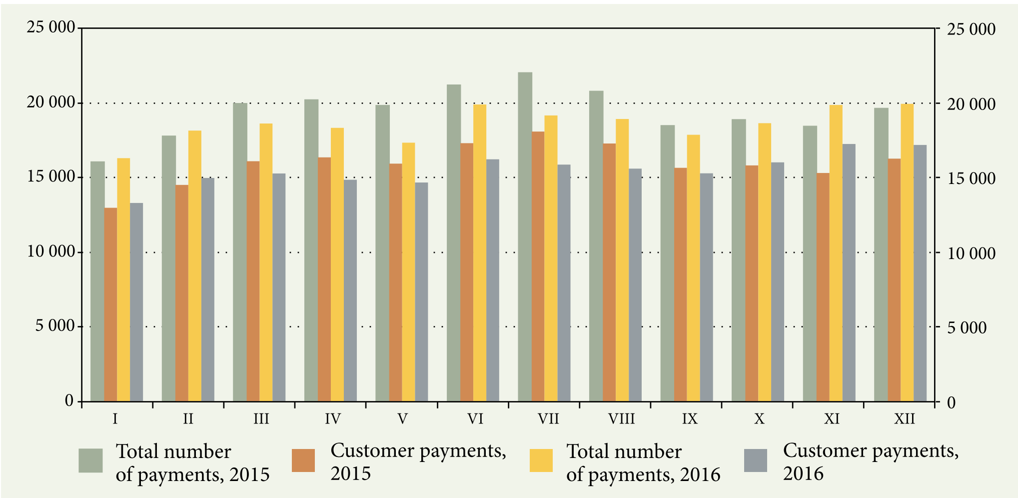


Source: the BNB.

Euro Payment Systems

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

TARGET2-BNB Payment Number in 2015 and 2016



Source: the BNB.

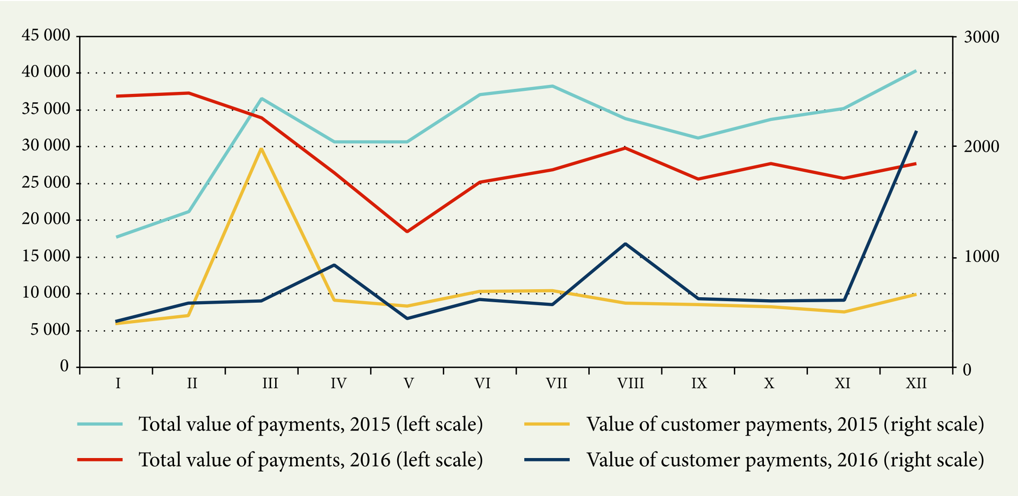
On 31 December 2016 the system included the BNB, 21 direct participant banks, four addressable BIC holders, and two ancillary systems: the BISERA7-EUR for settling customer transfers in euro at a designated time and the BNBGSSS for government securities settlement at the BNB.[43]

[43] For a current list of TARGET2 participants in TARGET2-BNB, see the BNB website: http://bnb.bg/PaymentSystem/PSTARGET2/PSTARGETList/index.htm?toLang=_EN

In 2016 TARGET2-BNB processed 222,618 of payments worth EUR 341,533 million. Customer payments numbered 186,088 (83.6 per cent of the total) accounting for EUR 9252 million (2.7 per cent of the total). Payment number fell 4.4 per cent and value fell 11.6 per cent on 2015.

TARGET2-BNB Payment Value in 2015 and 2016

(EUR million) (EUR million)



Source: the BNB.

Payments by other system components to banks were 89.8 per cent of the number and 77.9 per cent of the value of all national component payments. The daily average number of system payments was 867, their average value reaching EUR 1335 million. The daily number peak of payments ordered by TARGET2-BNB participants was 1518, with a daily transaction value peak of EUR 3815 million.

The BISERA7-EUR ancillary system processes designated time customer euro transfers. As of 31 December 2016, 16 banks participated in BISERA7-EUR. The system processed 41,414 payments for EUR 399 million, up 19 per cent in number and down 0.8 per cent in value from 2015.

Bulgarian Payment and Settlement System Development

The Bulgarian National Bank and all banks and foreign bank branches in Bulgaria process SEPA credit transfers and participate in the EU SEPA credit transfer scheme, making necessary arrangements to comply with 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. To meet the requirements of Regulation (EU) No 260/2012 in the area of the payment infrastructure, the BISERA7-EUR payment system for small payments in euro, operated by BORICA–Bankservice AD, processes SEPA payments and ensures interoperability with SEPA Clearer, Equens and EuroELIXIR systems, allowing SEPA credit transfers between banks in Bulgaria and other EU Member States.

On 31 December 2016, 95.1 per cent of Bulgarian cards, including 95.3 per cent of debit and 93.5 per cent of credit ones, had migrated to the EMV[44] standard to boost payment security and limit abuse and misuse in line with global trends. EMV

[44] EMV is a global standard for credit and debit cards based on microprocessor technology (smart or chip cards) and developed by Europay, Mastercard and Visa.

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.

The review year saw amendments to the Law on Payment Services and Payment Systems[45] transposing Directive 2014/92/EU of the European Parliament and of 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.

With the enactment of legislative amendments to comply with 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 and 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 BNB amended Ordinance No 3 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments and Ordinance No 16 on Payment Institutions and Payment System Operators Licensing and adopted Ordinance No 13 on International Bank Account Numbers and Bank Identifier Codes.[46]

The amended Ordinance No 3 introduces more effective mechanisms to curb systemic risk in line with EU practice and BIS and the International Organization of Securities Commissions principles for financial market infrastructures (IOSCO):

– A mechanism is introduced whereby RINGS can reject net settlement requests from system operators or securities settlement systems within an hour of acceptance due to insufficient funds in a bank's settlement account. So as not to hinder and delay other participants' payments, the system operator recalculates participants' net positions, excluding payments to/from participants with insufficient funds, and forwards the recalculated settlement request to RINGS forthwith;
– The Reserve Guarantee Fund is transformed into a guarantee mechanism for BORICA (the payment system for servicing card payments within Bulgaria) settlement requests, creating credit exposures between participant banks before their settlement in RINGS.

In 2016 the BNB proposed legislative changes to introduce the requirements of Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market (the Payment Services Directive II). This harmonises EU payment services requirements and repeals Directive 2007/64/EC. The deadline for transposing the Directive's requirements into Member States' legislations is 13 January 2018.

[45] Published in the Darjaven Vestnik, issue 59 of 2016.
[46] Published in the Darjaven Vestnik, issue 69 of 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 in 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.

In 2016 the Bank inspected seven payment service providers to check compliance with the Law on Payment Services and Payment Systems and its statutory instruments. The main breaches found referred to safeguarding measures under Law on Payment Services and Payment Systems Article 21 and agents' activities. The inspections resulted in measures to remove breaches within set time limits.

The Bank also inspected five institutions to establish whether they had issued electronic money and/or provided payment services without due license. Three cases resulted in referrals to the Sofia City Prosecutor's Office. One case resulted in measures to impose a pecuniary penalty, and another in mandatory instructions to comply with relevant requirements.

The BNB Governing Council took decisions to issue six licenses under the Law on Payment Services and Payment Systems. The BNB granted a license to Easy Payment Services EOOD to provide LPSPS Article 4, letter b and item 5 payment services and to Paynetics AD to operate as an electronic money institution. The Governing Council refused a payment institution license to Europay Solutions EOOD (incorporation underway) and to Varchev Exchange OOD. The CardGuard BG AD payment institution licensing procedure was terminated. Cash Credit EAD was declined an electronic money licence.

At the end of 2016 there were eleven payment institutions licensed by the BNB, three of them also licensed to operate as electronic money institutions.

In 2016 the following entries and deletions were made in relevant BNB registers under Law on Payment Services and Payment Systems Article 17 and BNB Ordinance No 16 Articles 7 and 39:

- 200 agents were listed and 129 agents were delisted in the public register of licensed payment institutions and electronic money institutions operating in Bulgaria;
- 213 agents of payment institutions and electronic money institutions licensed elsewhere in the EU and eligible to operate in Bulgaria were listed and 102 agents delisted;
- 85 payment institutions and electronic money institutions licensed elsewhere in the EU and eligible to operate in Bulgaria were listed and 12 delisted.

The year saw enquiries into 224 complaints submitted to the BNB by individual and corporate payment service users. In 12 of these, the Bank issued mandatory instructions and implementation deadlines. The other cases involved no breaches of the Law on Payment Services and Payment Systems and its statutory instruments, or were resolved in favour of payment service users through correspondence.

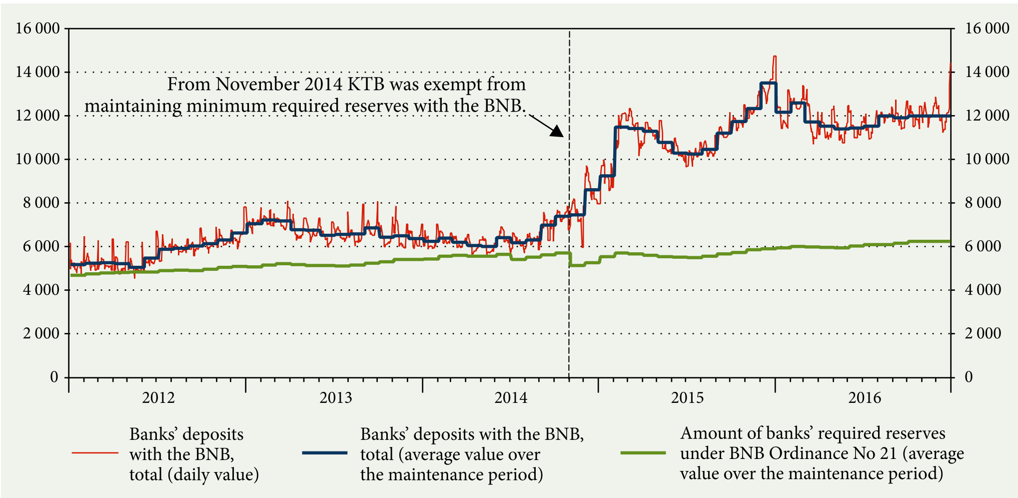
IV. Banks' Reserves at the BNB

The new Ordinance No 21 of the BNB on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks[47] came into force on 4 January 2016. It introduces a definition of excess reserves.[48] The new Ordinance applies negative interest on banks' excess reserves where the ECB deposit facility rate is negative, and zero interest where the ECB deposit facility rate is positive or zero. Banks' funds in the TARGET2-BNB national system component[49] are no longer recognised as reserve assets.

In line with the amendments to Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, the BNB applied the ECB deposit facility rate of -0.30 per cent on banks' excess reserves on 4 January and cut it to -0.40 per cent on 16 March 2016. In the first quarter of 2016 banks' excess reserves fell, their share remained relatively stable the rest of the year, ending at 89.8 per cent in December from 127.8 per cent a year earlier. In 2016 average daily reserve assets in banks' accounts with the BNB amounted to BGN 11.727 billion, exceeding the minimum required reserves of BGN 6.110 billion by 93.5 per cent from 93.4 per cent in 2015.

Banks' Reserves at the BNB

(BGN million)



Source: the BNB.

In 2016 the average daily value of banks' attracted funds for reserve calculation purposes (excluding central and local government budget funds) rose 5.6 per cent on 2015. This was due to an 11.5 per cent rise in lev-denominated liabilities and a 0.6 per cent fall in foreign currency liabilities. The average daily value of residents' funds (excluding central and local government funds) rose 9.0 per cent, and those from non-residents fell 21.9 per cent, funds attracted from non-resident banks

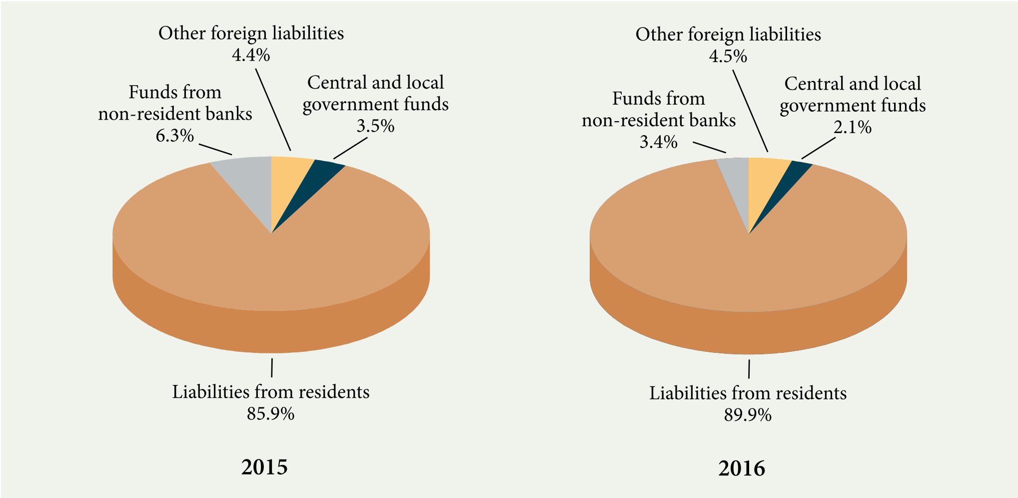
[47] In addition to amending Ordinance No 21, on 26 November 2015 the BNB Governing Council also changed the penalty interest charged on banks' minimum reserve breaches.

[48] 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.

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

falling 43.1 per cent. Banks' central and local government liabilities fell 36.7 per cent. The change in the structure of attracted funds hiked the effective implicit ratio of minimum required reserves by 0.3 percentage points on 2015 to 9.4 per cent on average for 2016.[50] Reserve assets covering this ratio include funds in banks' BNB accounts (8.3 percentage points) and half of cash balances designated as reserve assets (1.1 percentage points).

Structure of Attracted Funds in the Banking System*



* Average daily value for reserve calculation purposes.

Source: the BNB.

Ordinance No 21 mandates banks to maintain minimum required reserves in own assets in lev and euro accounts with the BNB. In 2016 the average daily lev-denominated reserve assets of BGN 8.416 billion fell 0.1 per cent in a year, while the average daily EUR-denominated reserve assets rose 29.5 per cent to EUR 3.311 billion. Growth was mainly because of more EUR-denominated funds maintained by one bank. The share of reserve assets in euro accounted for 28.2 per cent of banks' total reserve assets with the BNB: a 4.9 per cent increase from the 23.3 per cent in 2015.

In September amendments to Article 42 of BNB Ordinance No 3 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments transformed the Reserve Guarantee Fund into a guarantee mechanism for settling participant banks' payments in the BORICA card payments servicing system operated by BORICA–Bankservice AD. The funds to the guarantee mechanism are in a BNB account and are apportioned to participants. Participation in the guarantee mechanism is deemed part of participants' minimum required reserves.

[50] From 4 January, the new Ordinance No 21 set the rate for funds attracted from residents at 10 per cent of the deposit base, with 5 per cent for those from non-residents and nil for those from from the state and local government budgets.

V. Currency in Circulation

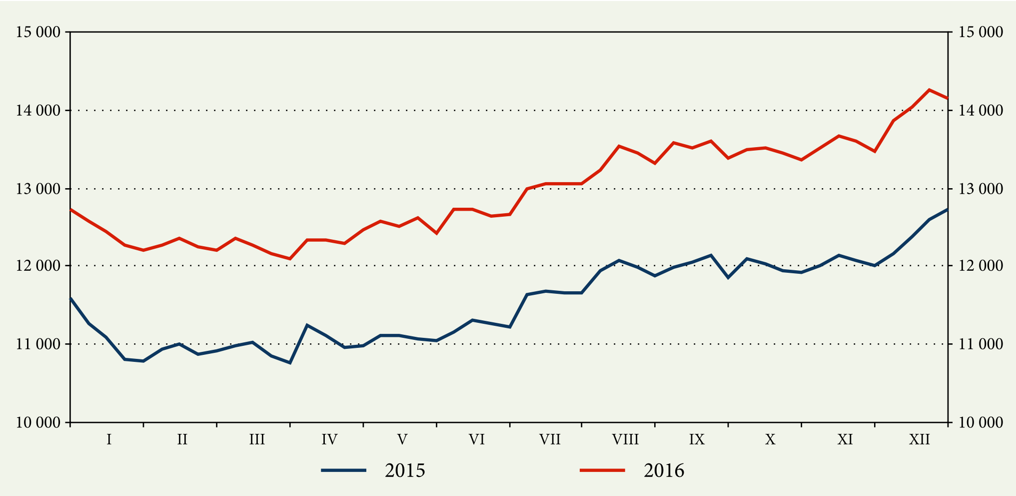
The Bulgarian National Bank has a monopoly on banknote and coin issue in Bulgaria.[51] Its currency is mandatorily acceptable as legal tender at face value without restriction. The Bank prints banknotes, mints coins, and keeps and scraps uncirculated or withdrawn currency.

On 1 January the BGN 1 banknote, issue 1999, ceased to be legal tender, with banknotes exchangeable at BNB tills at nominal value with no amount and time restriction.

At the end of 2016 circulating currency[52] reached BGN 14,152.9 million, up BGN 1428.1 million, or 11.22 per cent on the end of 2015. The share of banknotes in currency was 97.78 per cent, that of coins 2.17 per cent, and that of commemorative coins 0.05 per cent.

Banknotes and Coins in Circulation (Outside BNB Vaults)

(BGN million)



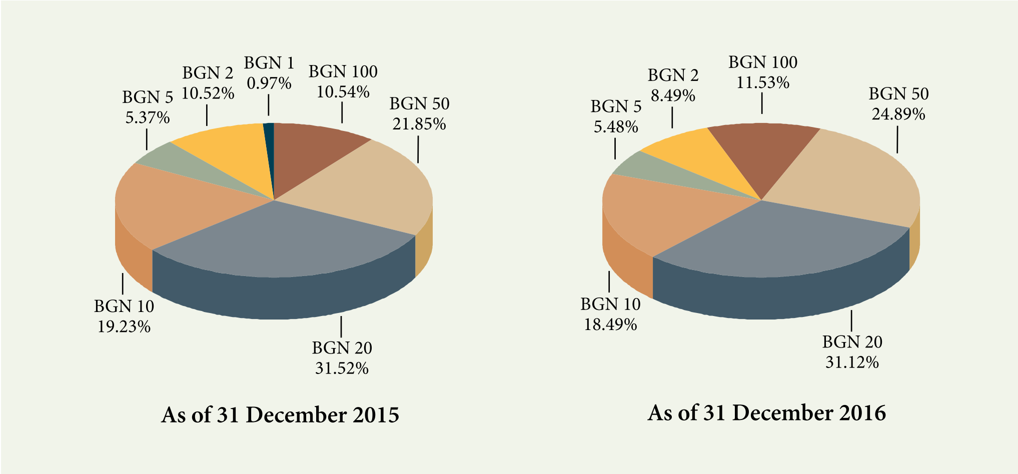
Source: the BNB.

By the close of 2016 circulating banknotes numbered 425.8 million worth BGN 13,839.0 million. In a year, their number rose 3.02 per cent (12.5 million), and their value 10.97 per cent (BGN 1368.1 million). The BGN 50 and 100 banknotes contributed most to the annual rise in the number of circulating banknotes. On an annual basis, the number of BGN 100 banknotes increased by 5.6 million or 12.77 per cent. BGN 50 banknotes rose 15.7 million in number or 17.37 per cent: the highest percentage growth.

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

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

Individual Denomination Shares in the Total Number of Circulating Banknotes

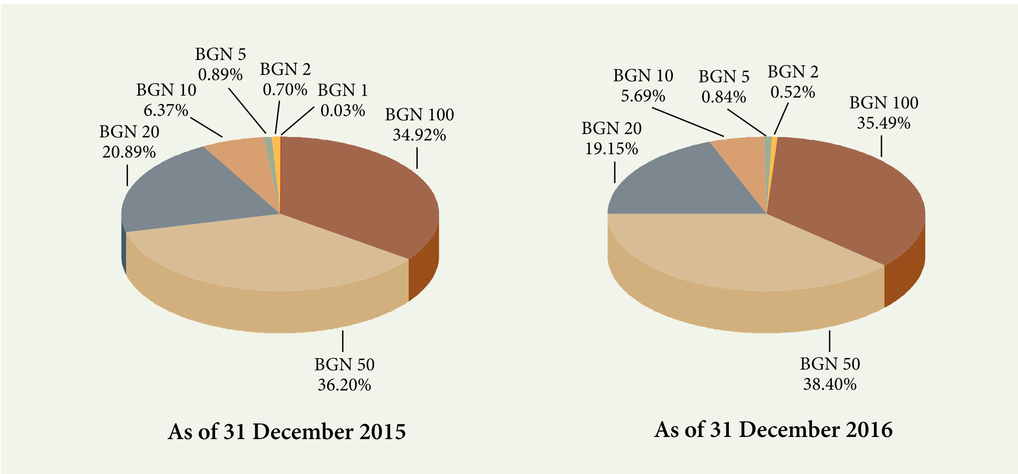


Source: the BNB.

By the end of 2016, the BGN 20 banknote led by number among circulating banknotes at 31.12 per cent (132.5 million) banknotes, down 0.4 percentage points in a year. Shares of BGN 10 and 2 banknotes also declined by 0.74 and 2.03 percentage points. By end-2016, BGN 2 banknotes comprised 8.49 per cent of all banknotes. As a year earlier, the shares of BGN 50 and 100 banknotes rose relatively steadily: by 3.04 and 0.99 percentage points.

The BGN 50 banknote held the largest share in the structure of circulating banknotes by value at 38.30 per cent, followed by the BGN 100 and 20 banknotes at 35.49 and 19.15 per cent.

Individual Denomination Shares in the Total Value of Circulating Banknotes



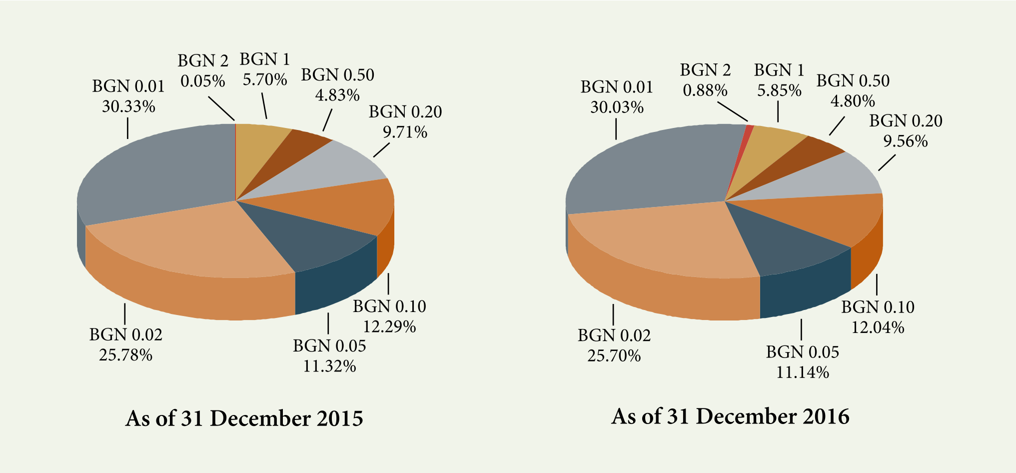
Source: the BNB.

The average value of a circulating banknote at the close of 2016 was BGN 32.50, up BGN 2.33 (7.69 per cent), reflecting faster growth of BGN 50 and 100 banknotes.

In late 2016, 2114.7 million coins circulated, worth BGN 306.7 million. Year on year, their number rose 9.34 per cent (180.6 million), and their value 24.20 per cent (BGN 59.7 million). The number of BGN 0.01 coins rose fastest, by 48.5 million (8.26 per cent). Other denominations rose between 7.1 per cent for BGN 0.10 coins and 12.17 per cent for BGN 1 coins. The BGN 2 coin rose faster than other denominations to 18.6 million.

The BGN 0.01 coin occupied the largest share at 30.03 per cent. Its share declined 0.30 percentage points in a year. Recent years' upward trend in the share of BGN 1 coin continued. The faster rise of BGN 1 and the new BGN 2 coins cut the shares of BGN 0.01, 0.02, 0.05, 0.10, 0.20 and 0.50 coins.

Individual Nominal Value Shares in the Total Number of Circulating Coins

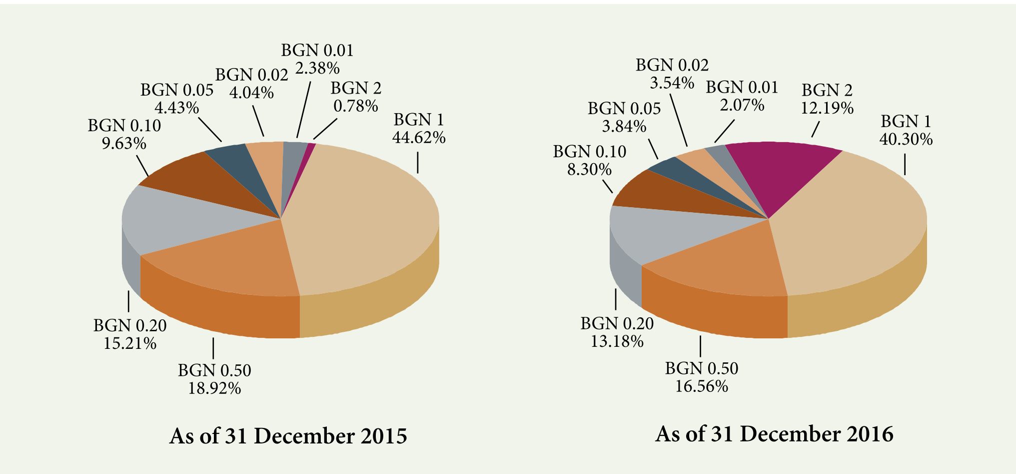


Source: the BNB.

The long-term growth trend in the number of circulating coins continued in 2016, as did the constant and relatively high growth of low denomination and BGN 1 coins. The increasing number of circulating coins and launch of BGN 2 coins changed the value composition.

The BGN 1 coin had the largest share at 40.30 per cent of circulating coin value, followed by BGN 0.50 and BGN 0.20 coins at 16.56 and 13.18 per cent. Excluding the BGN 2 coins whose share increased, those of all other denominations fell from 0.31 percentage points for the BGN 0.01 to 4.32 percentage points for the BGN 1.

Individual Nominal Value Shares in the Total Value of Circulating Coins



Source: the BNB.

At the end of 2016 the average circulating coin was BGN 0.15, rising BGN 0.02 on the end of 2015.

The share of commemorative coins in circulating currency was 0.05 per cent: unchanged since 2015.

Non-genuine Banknotes and Circulating Coins

In 2016 the BNB National Analysis Centre (NAC) retained 1121 non-genuine Bulgarian banknotes, 1117 after entering into circulation: down 6 on last year. The share of retained non-genuine banknotes remained very low at 0.000263 per cent of all circulating banknotes against 0.000273 per cent at the end of 2015.

The BGN 20 banknote had the largest share of retained non-genuine banknotes at 62.98 per cent followed by BGN 50 at 21.14 per cent and BGN 10 at 13.38 per cent. The 28 non-genuine BGN 2, 5, and 100 banknotes comprised 2.50 per cent of retained non-genuine banknotes.

There were 872 non-genuine retained coins: 23 BGN 2 coins, 301 BGN 1 coins, 546 BGN 0.50 coins and two BGN 0.20 coins. The share of retained circulating non-genuine Bulgarian coins was also very low at 0.000041 per cent by the end of 2016.

Evaluating suspect foreign banknotes and coins, in 2016 the NAC retained 4292 euro banknotes, 1297 US dollar banknotes, and 4446 other 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 2016 producers supplied 63.9 million new banknotes and 173.7 million new coins worth BGN 1773.1 million. Under the Law on the BNB Article 25, paragraph 1 and as planned in its 2016 Minting Programme, the BNB issued five new commemorative coins.[53]

In 2016 banks deposited BGN 16,445.8 million of cash, up BGN 217.0 million (1.34 per cent) on 2015. Over the same period, Bulgarian banknotes and coins worth BGN 17,875.1 million were withdrawn from the BNB: up BGN 507.5 million or 2.92 per cent in a year.

In 2016 banknotes recirculated through BNB tills an average of 2.1 times. Highest and lowest value banknotes returned less often, from 0.3 to once; BGN 10 and BGN 20 banknotes returned more often at 4.7 and 3.2 times.

In 2016 BNB and Cash Services Company banknote processing machines tested 903.8 million banknotes and 163.8 million circulating coins. Compared with the same period of 2015, the number of processed banknotes decreased by 1.21 per cent, while that of processed circulating coins increased 2.82 per cent. BGN 10 and BGN 20 banknotes and BGN 0.20 and BGN 1 coins had the largest shares of nominal value.

Cash quality and integrity checks identified some 75.6 million banknotes as unfit for circulation, up 0.3 million (0.37 per cent) on 2015. BGN 10 and BGN 20 banknotes had the largest shares of unfit banknotes at 32.11 and 23.29 per cent. The share

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

of unfit banknotes processed in 2016 was 8.37 per cent. In a year, processing and fitness checks revealed 1.4 million unfit coins, down 6.84 per cent from the previous year. The share of unfit coins processed in 2016 was 0.84 per cent.

In 2016 the BNB bought EUR 0.85 million of reserve currency, including EUR 0.81 million from budget organisations and EUR 0.04 million from individuals. At the same time, the Bank sold EUR 61.6 million of reserve currency: EUR 7.7 million to budget organisations and EUR 53.9 million to individuals.

The Bank conducted four full checks into credit institutions and a service provider to ensure observance of Ordinance No 18 on the Control over Quality of Banknotes and Coins in Currency Circulation and its enabling instruments. The BNB conducted spot on-site checks into credit institutions and service providers under Ordinance No 18 for authorising and testing 139 sorting machines and customer operated machines in line with identification and fitness standards.

VI. Maintaining Banking System Stability and Protecting Depositor Interests

State of the Banking System[54]

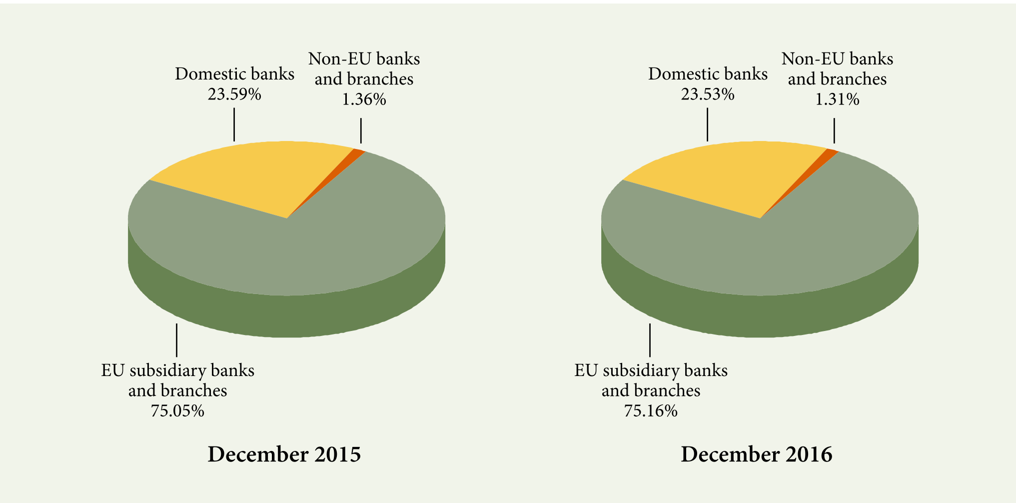
Over 2016 banking system assets rose at a higher rate than in the previous year driven by growth in deposits. The banking sector balance sheet showed no changes in the financial intermediation model. Attracted deposits were invested mostly into debt securities and placements within the group. The credit portfolio grew weakly, yet institutions managed to generate more organic revenue amid falling lending and deposit interest rates. Profitability indicators increased. Higher banking system profits helped strengthen the balance sheet equity.

There was a banking system asset quality review (AQR) and stress tests of the banking system and individual banks. The results confirmed the strong capital position and system resilience to shocks. The AQR and stress tests helped optimise supervisory strategies and improve management models.

Credit risk remained concentrated in the credit portfolio (excluding loans and advances to central banks and credit institutions). In a one-year horizon, non-performing loans in the banking system decreased, and their coverage by impairment remained over 50 per cent. The share of non-performing loans in the credit portfolio also fell, both on a gross and net basis. Balance sheet structure and asset characteristics indicate good quality of balance sheet positions other than loans.

Both the sector and individual banks preserved capital and liquidity buffers. The liquidity position in 2016 reflected the significant deposits rise and limited opportunities of investing them into higher-yielding assets.

Domestic and Foreign Bank Market Shares by Asset



Source: the BNB.

A portion of free bank resources was invested into securities portfolios, mostly Bulgarian government ones. The share of cash, cash balances at central banks, and other

[54] Based on individual supervisory statements as of end-December 2016 received by 24 February 2017, and as of the end of December 2015, received by 18 April 2016.

demand deposits remained high. The balance sheet value of loans and advances rose BGN 2.0 billion (3.7 per cent) to BGN 55.9 billion.

Between January and December 2016 banking system assets rose BGN 4.6 billion or 5.2 per cent to BGN 92.1 billion. The composition of the five largest banks changed when Eurobank Bulgaria acquired Alpha Bank, Bulgaria in 2015, but the group's share remained at the 57.3 per cent on end-2015. The market shares of banks with mainly Bulgarian equity and non-EU banks and bank branches remained almost unchanged, accounting for 23.5 and 1.3 per cent at the end of 2016. The shares of EU subsidiary banks and bank branches continued to exceed three-quarters of banking system assets at 75.2 per cent.

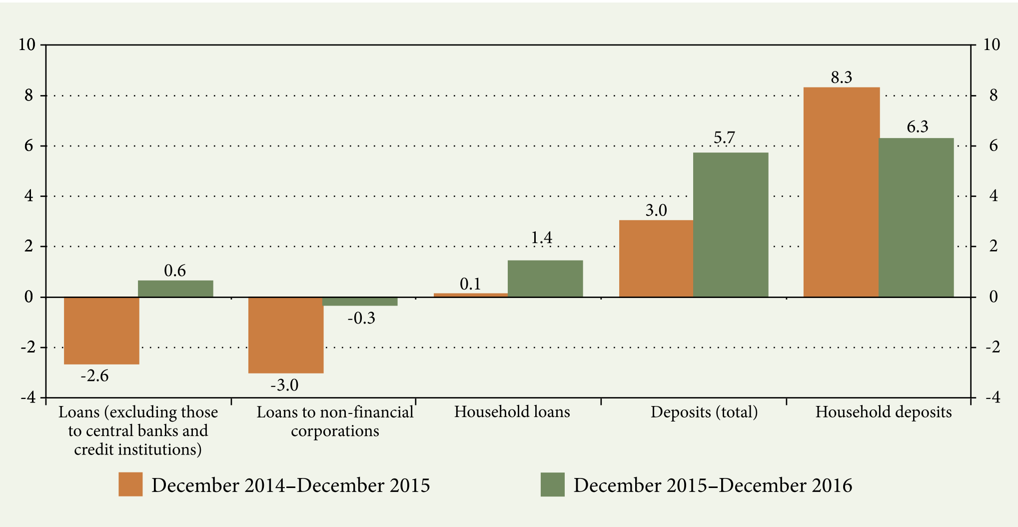
Gross loans and advances totalled BGN 75.5 billion at the end of 2016. Claims on credit institutions (mainly on parent banks) and loans to other financial corporations, households and general government rose. By 31 December 2016 claims on credit institutions came to BGN 8.6 billion, mainly on non-resident institutions. Within the structure of gross loans and advances, the share of claims on residents was 87.8 per cent and on non-residents 12.2 per cent.

Banking system gross credit portfolio (excluding loans and advances to central banks and credit institutions) rose BGN 347 million/0.6 per cent on 2015. Loans to households contributed most and came to BGN 18.6 billion[55] from BGN 18.3 billion in 2015. Loans to other financial corporations reached BGN 2.0 billion, up BGN 161 million (8.6 per cent) in a year. Despite the slight decrease (by BGN 105 million, 0.3 per cent) in loans to non-financial corporations, they continued to comprise more than half of the banking system gross credit portfolio at 60.9 per cent (BGN 33.2 billion). Loans to general government rose BGN 26 million (4.0 per cent) to 0.7 billion, their share in the gross credit portfolio remaining lowest at 1.3 per cent. In the currency structure of gross credit portfolio (excluding loans and advances to central banks and credit institutions) the share of loans in euro fell from 48.2 to 43.1 per cent, while that in levs rose from 49.3 to 54.5 per cent.

Dynamics of Selected Balance Sheet Indicators

(annual change)

(per cent)



Source: the BNB.

[55] A significant portion of growth in these exposures was related mainly to the National Programme on Energy Efficiency of Residential Buildings.

By the end of 2016 banking system deposits reached BGN 78.6 billion, resident funds rising BGN 4.2 billion in a year. Households and non-financial corporation funds accounted for 60.1 and 27.2 per cent of deposits. The share of other financial corporation deposits rose to 5.0 per cent and that of credit institutions and the general government sector fell to 5.7 and 2.1 per cent, respectively. The share of residents' deposits rose to 90.5 per cent at the expense of non-residents' deposits due to the dynamics of credit institutions' funds.

Banking System Deposits Residence Structure, Total

(per cent)

Source: the BNB.

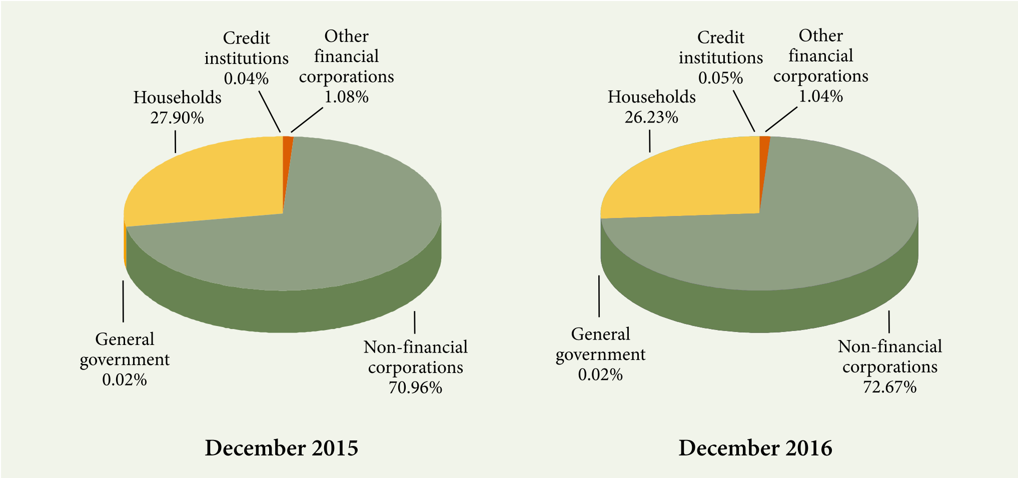
Reduced financing in euro by credit institutions and increased lev deposits attracted from households and non-financial corporations changed deposit currency structure. The lev share rose from 54.0 to 55.7 per cent, the euro share falling from 36.9 to 35.4 per cent.

Compared with end-2015, the balance sheet equity grew by BGN 607 million (5.3 per cent to BGN 12.1 billion, with paid-up capital, accumulated other comprehensive income, and earnings contributing most.

Credit risk management and mitigation measures triggered favourable asset quality developments. Gross non-performing exposures fell by BGN 1.2 billion (10.6 per cent) to BGN 10 billion at the end of the period. All claims by institutional sector improved, non-performing loans and advances amounting to BGN 9964 million and securities to BGN 37 million. Exposures past due over one year fell most, by BGN 1 billion from 2015. The share of non-performing loans and debt securities in total gross banking exposures fell to 11.2 per cent from 13.1 per cent over the year.

The share of non-performing exposures to non-financial corporations increased to 72.7 per cent and that of problem claims on households decreased to 26.2 per cent.

Structure of Non-performing Exposures by Sector



Source: the BNB.

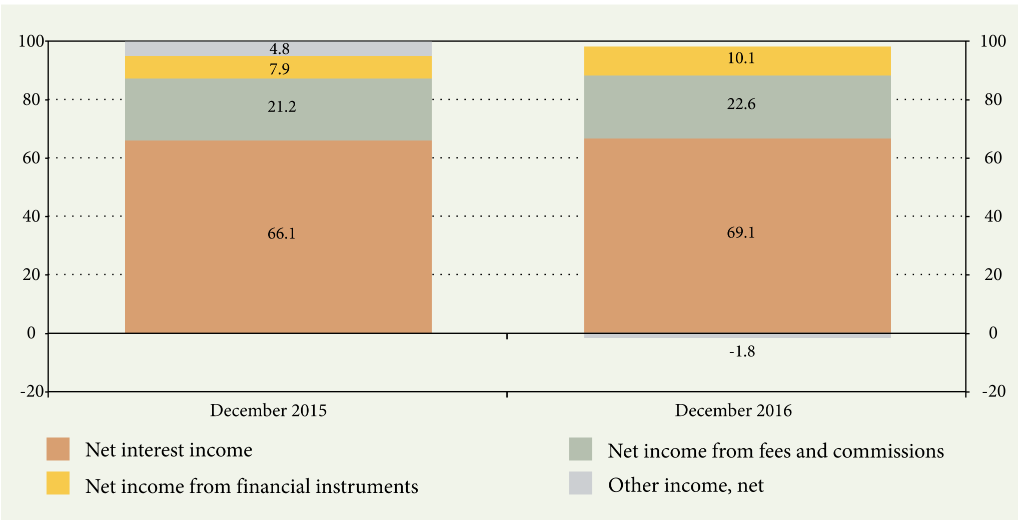
Net non-performing loans[56] fell to BGN 5 billion and remained fully covered by capital exceeding the regulatory minimum of 8 per cent (BGN 7.1 billion). Accumulated impairment on non-performing loans declined from 2015 due to write-offs of fully impaired loans, its amount continuing to cover more than half of gross non-performing loans.

Balance sheet items other than loans retained good quality. The securities portfolios share rose from 12.8 to 14.6 per cent of banking assets. The shares of cash, cash balances at central banks and other demand deposits, and credit and advances items fell from 21.0 to 19.8 per cent and from 61.6 to 60.7 per cent.

A profit of BGN 1263 million (up BGN 416 million, or 49.1 per cent compared to 2015) was reported in 2016. More than half of credit institutions reported a higher profit, and losses of banks with negative financial results decreased accordingly.

Net Operating Income Structure

(per cent) (per cent)



Source: the BNB.

[56] Net non-performing exposures are calculated as gross non-performing loans less inherent accumulated impairment.

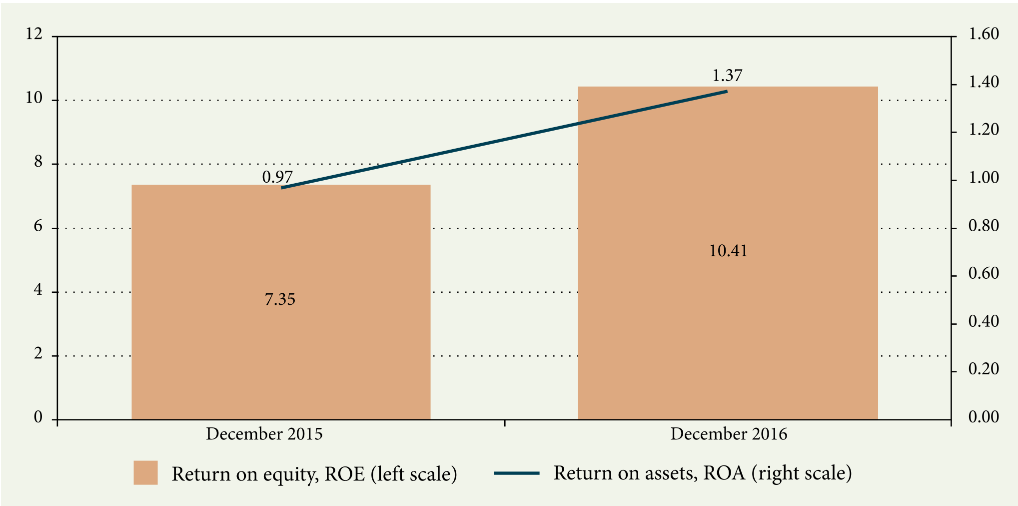
By the end of 2016 net interest income was BGN 2.8 billion, up BGN 46 million or 1.7 per cent on last year. Interest income was BGN 336 million (down 9.2 per cent), and return on interest bearing assets continued falling. Interest expenditure continued falling faster, by BGN 381 million or 43.4 per cent from 2015. Net fee and commission and financial instrument income rose BGN 31 million (3.5 per cent) and BGN 80 million (24.2 per cent).[57] Other net income depended on other operating revenue and expenditure.

Loans and receivables impairment costs fell BGN 336 million (29.5 per cent) to BGN 805 million.

The upward return on assets and return on equity trends continued throughout the year. The strong growth rate of profit compared with that reported by 31 December 2015 was behind the improvement of both indicators on an annual basis. ROA rose to 1.37 per cent from 0.97 in 2015 and ROE to 10.41 per cent from 7.35 per cent in 2015.

Return on Assets and Return on Equity

(per cent) (per cent)



Source: the BNB.

Banking system capital ratios continued to be high in 2016. Credit institutions observed capital buffer requirements (2.5 per cent capital conservation, 3 per cent systemic risk,[58] and 0 per cent countercyclical capital buffer). Equity grew BGN 125 million or 1.1 per cent to BGN 11.1 billion. The increase in tier one capital, including CET 1, to BGN 10.5 billion and BGN 10.2 billion contributed to this. Capital instruments eligible for CET1 and other reserves rose. Increased risk exposures reflected mainly the rise in risk weighted exposures for credit risk and operational risk ones. There was no major change in total risk exposures compared with 2015. By the end of 2016 the share of credit risk exposures was 88.5 per cent, risk exposures for operational risk 9.9 per cent, and those for position, currency and commodity risk 1.5 per cent. The CET1 and tier one capital ratios rose to 20.41 and 20.88 per cent. Despite the tier two capital fall, total capital adequacy remained high at 22.15 per cent. Capital exceeding the 8 per cent regulatory minimum continued rising, to BGN 7.1 billion at the year's end.

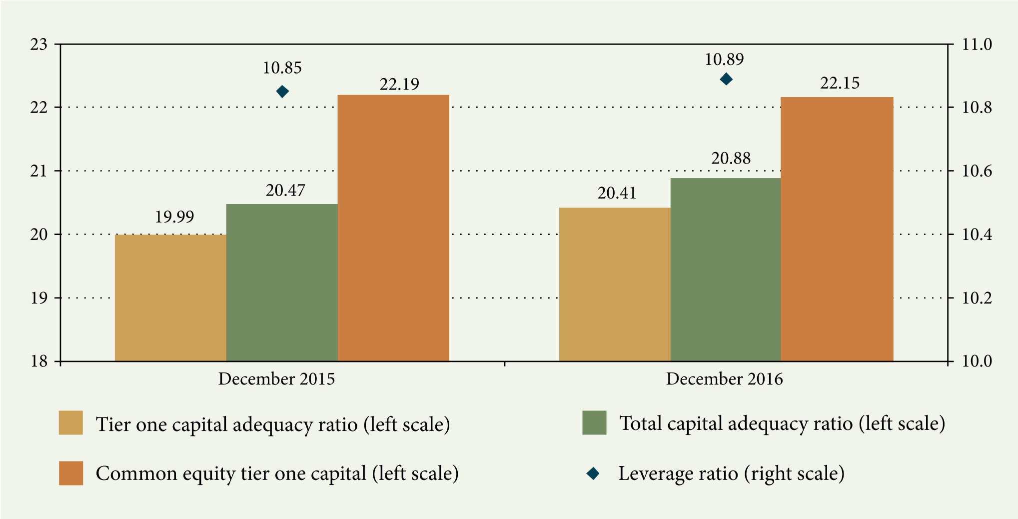
[57] The acquisition of Visa Europe by Visa Inc. added to growth, profits from financial assets available for sale increasing markedly.

[58] Systemic risk buffer: 3 per cent of Bulgaria's risk weighted exposures.

At the end of December leverage was 10.89 per cent, showing no major changes compared with 2015 and indicating low banking system indebtedness.[59]

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

(per cent) (per cent)

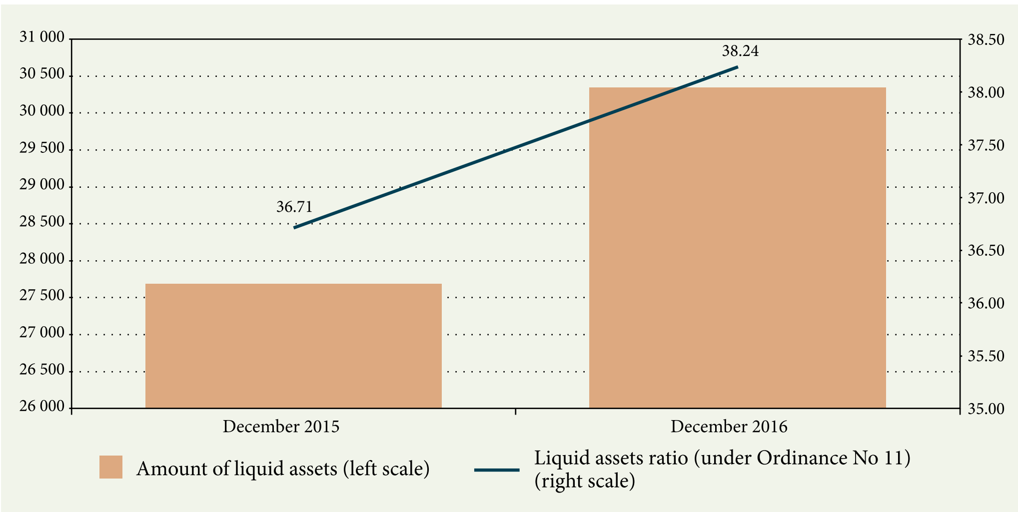


Source: the BNB.

Banking system liquidity continued rising. Liquid assets rose BGN 2.7 billion (9.6 per cent) to BGN 30.3 billion, their share in assets reaching 32.9 per cent from 31.6 per cent in December 2015. There was no serious change to the structure of liquid assets despite the increase in most components, particularly marketable government or central bank debt securities and current account balances with other banks and interbank deposits with terms up to seven days. All credit institutions adhered to the supervisory recommendation for not less than 20 per cent coverage of funds attracted from households and legal entities by liquid assets.

Selected Liquidity Indicators

(BGN million) (per cent)



Source: the BNB.

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

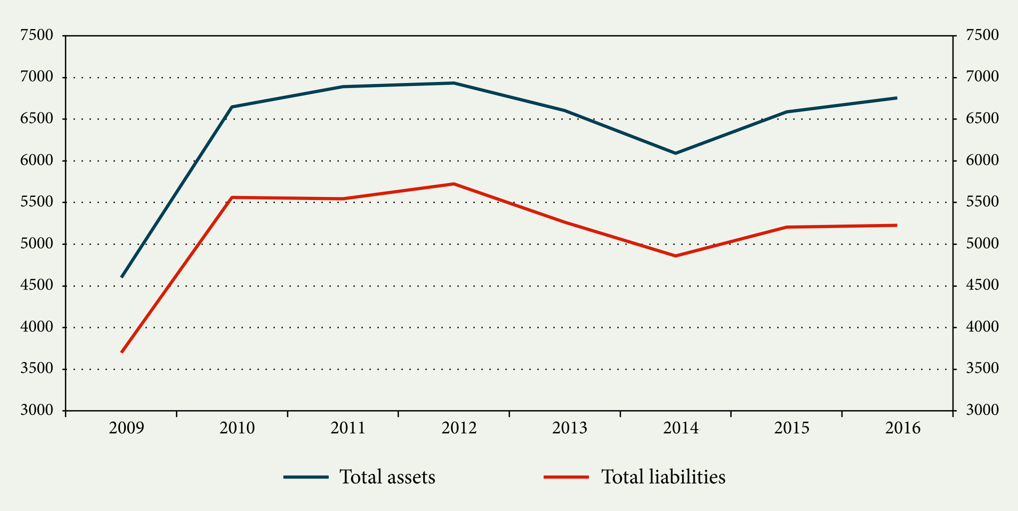
The liquid assets ratio calculated under Ordinance No 11 provisions reached 38.24 per cent at the end of the review period (against 36.71 per cent at the end of 2015). The higher growth rate of liquid assets (9.6 per cent) than that of liabilities (5.2 per cent, BGN 3.9 billion) throughout the year had an effect. Resident deposits in the sectors other than credit institutions played a key role to growth.

Financial Institutions on the BNB Register[60]

By the end of 2016 there were 178 financial institutions registered under the Law on Credit Institutions Article 3a.[61] Most were specialised lenders (116), financial leasing corporations (45) and entities whose major activity involve acquisition of credit claims (11). By the close of the year the sector had BGN 6.8 billion of assets, or 7.3 per cent of credit institutions' assets, an insignificant fall on 2015 (7.5 per cent).

Dynamics of Assets and Liabilities by Year

(BGN million)



Source: the BNB.

In the asset breakdown by type of business, leasing companies continued to dominate as in 2015 at 55.4 per cent, their share posting a slight rise from 53.7 per cent, followed by lenders at 37.2 from 36 per cent at the end of 2015. Companies acquiring credit claims and those in the Others group held 7.4 per cent of sector assets.

Despite an improvement, credit risk remained, the share of non-performing loans falling to 11.5 from 29.8 per cent in 2015.

The total amount of attracted funds remained almost unchanged from 2015 at BGN 5 billion. Bank resources dominated funds by financing source despite a falling share: 72.1 per cent (BGN 3.6 billion from 75.7 per cent (BGN 3.7 billion a year earlier).

By the end of 2016 financial institutions' equity rose to BGN 1.5 billion, and the year ended with BGN 301 million profit.

Companies preserved their capacity to generate operating revenue, with net interest income growing 14.3 per cent to BGN 610 million. In 2016 ROA (4.5 per cent)

[60] The BNB Public Register under the Law on Credit Institutions Article 3 paragraph 1 opened.

[61] With regard to the the Law on Credit Institutions Article 24 mutual recognition of activities and in connection with Directive 2013/36/EU of the European Parliament and of the Council, a foreign financial institution which declared direct lending using own funds in Bulgaria was registered in 2016.

and ROE (19.6 per cent) continued improving, and financial indebtedness reached 14.2 per cent.

Banking Supervision

Asset Quality Review and Stress Test

The asset quality review (AQR) of all 22 BNB licensed banks (excluding six foreign bank branches in Bulgaria) was a Banking Supervision Department priority in 2016. The BNB conducted the AQR with an independent external consultant selected by public tender, and independent consultants and appraisers hired by the banks to a BNB approved uniform selection procedure. More than 900 BNB and independent external experts were involved. The European Commission and European Banking Authority (EBA) were informed and consulted throughout.

The AQR addressed 96 per cent of banking system assets worth BGN 84.2 billion on 31 December 2015. The review comprised ten blocks, eight of which finished in the first half of 2016: Policies, processes, and accounting practices review; loan portfolio data creation and data integrity validation; sample determination; credit file review; collateral and real estate valuation; credit file review results extrapolation; collective provision analysis and review of other exposures.

Policies, processes, and accounting practices review paid special attention to classifying exposures in risk groups, determining accounting provisions, identifying connected customers, assessing and managing real estate holdings, and adjusting credit valuations for derivatives.

The task addressed internal lending rules, deconsolidation and accounting policies, credit files, and assets assessed at fair value by service providers. Meetings discussed credit risk assessment and collateral on risk exposures, and their effect on provisions. Asset measurement methods by service providers were monitored for compliance with BNB guidelines. There were weekly progress reports by block.

Over 3400 individual credit files were reviewed, comprising BGN 23.2 billion or 71 per cent of banks' corporate and large SMEs loan books. The AQR resulted in aggregate adjustments of BGN 665 million, or 1.3 per cent of risk weighted assets, to be reflected in the banks' 2016 financial statements. The AQR-adjusted common equity tier one capital ratio for the banking system was 18.9 per cent by 31 December 2015. Though results varied by bank, after the AQR all banks' capital adequacy remained above regulatory minima. Anticipated capital adjustments at set banks only affected capital buffers above regulatory capital adequacy minima. Relevant follow up measures involved maintaining or restoring buffers.

Within the AQR, the stress tests (ST) of the 22 banks assessed their resilience to hypothetical financial and macroeconomic shocks. The asset quality review and stress test ended on 13 August, within legally set deadlines. Results, conclusions and individual corrective actions for improving balance sheets to provide adequate credit risk cover were published. Depending on individual results, measures vary from recommendations to improve individual policies, procedures, and rules, to mandating action to cut risk weighted assets and boost capital buffers.

Final results were published for both the banking system and individual banks.[62] The results of the stress test confirmed the banking system's strong capital position and resilience to shocks. Banks' capital positions remained strong.

[62] http://bnb.bg/BankSupervision/BSAQR/BSAQRResults/index.htm

Assessment Programme and Peer Reviews

In October 2016 the IMF and the World Bank conducted a joint mission to assess the overall financial sector in Bulgaria (the Financial Sector Assessment Program, FSAP).

In the mission, the IMF and World Bank examined the BNB comprehensively. The mission addressed the way the BNB exercised bank supervision, including supervisory practice compliance with Basel Core Principles for Effective Banking Supervision. The mission also reviewed the process, documentation, approach, and results of the recent AQR and stress test comprehensively.

In 2016 the Banking Supervision Department participated in the EBA peer review on practices related to the implementation of requirements under Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.[63]

Current Supervisory Activity

Off-site Supervision

In 2016 current supervision and credit institutions risk profile assessment focused on continuous monitoring of banks' financial performance and assigning *CAEL* assessment system ratings. Reviewing and assessing banks' recovery plans, monitoring supervisory recommendation implementation, and participating in supervisory colleges were among the top priorities. Daily monitoring of all credit institutions' liquidity positions continued, tracking ongoing changes in liquidity assets and observance of the BNB recommended attracted funds cover. Work focused on improving supervisory reporting data quality to provide reliable information on micro and macroprudential goals in line with the BNB mandate. Data validation tools were improved to boost supervisory reporting quality.

A continuous review and evaluation of risks assumed by banks involved monitoring the dynamics of key risk indicators, assessing risk to capital and liquidity based on business environment and credit institutions strategy analyses, and assessing credit risk and risk to liquidity and financing. A comprehensive assessment of credit institutions' financial performance and risk profile emerged from the review and assessment of recovery plans, banks' internal capital adequacy assessment reports, internal liquidity assessment analysis reports, and financing plans.

Findings from monitoring key indicators and assessing individual elements of the supervisory review and evaluation process went into regular analyses of all credit institutions and foreign bank branches. Supervisors identified potential areas of unacceptable risk at individual credit institutions and launched relevant supervisory measures.

Banks' replies to the World Bank corporate management questionnaire resulted in a review of general management frameworks, strategy and planning, the roles of supervisory boards and their committees, and credit and liquidity risks.

[63] Banking Supervision experts took part in a meeting with an EBA team (including experts of the EBA and the central banks of Romania and Greece) related to the review on implementing technical standards for supervisory reporting (*Peer Review on ITS for Supervisory Reporting*). BNB banking supervisors met Romanian and Greek central bank colleagues to gather experience on data quality control and optimise the process.

Quarterly analyses of credit institutions' financial performance helped determine the strategy of current supervision and the need of planning on-site supervisory inspections in particular areas.

Combined findings of all supervisory review and evaluation process elements, including on-site inspection findings, went into assigning annual credit institution (*CAMELOS*)[64] current risk assessment ratings.

Recovery plans by Bulgarian banks which are not group subsidiaries and are subject to consolidated supervision under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms Article 6, paragraph 1 were reviewed and assessed in line with the applicable European and national framework and based on a standardised assessment sample. As a result, serious weaknesses and malpractices were found in the recovery plans of domestic banks, and they were required to revise them.

In addition to periodic analyses, the follow-up of the implementation of supervisory measures prescribed as a result of supervisory inspections continued with a view to ensuring effective supervision over credit institutions.[65] Banks with established breaches or subject to supervisory recommendations submitted plans to bring operations into line with recommendations or removing breaches. Based on regular incoming information on the implementations of these plans, the current implementation of the recommendations made in the course of on-site inspections was monitored. It was established that the respective credit institutions initiated appropriate measures to improve lending and functions of some units and committees addressing credit risk and credit portfolio concentrations assessment, monitoring, control, and management, supervisory reporting, and internal capital adequacy analyses.

In the second half year work began to adopt EBA additional liquidity ratio information (including new LCR and NSFR statements).

On-site Supervision

In 2016 supervision frequency, intensity, and effectiveness increased. Alongside the AQR, planned supervisory inspections at several banks checked how far recommendations to improve risk management had been implemented, and to what effect. The results were satisfactory. Most recommendations on credit risk identification, monitoring and management were implemented. Some banks failed to implement supervisory prescriptions on market risk management in setting more conservative stress test assumptions and price and interest risk limits, and on internal capital adequacy analyses.

Inspections at some banks focused on operational and market risks, and on risk concentration and management. Inspections found weaknesses in internal policies of monitoring, control and management of these risks, and breaches of regulations, technical standards, or guidelines.

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[64] The assessment is based on the financial performance, observance of laws, ordinances and overall operational stability of credit institutions, taking at the same time the specificity of operations.

[65] Supervisors reviewed banks' moves to bring operations into line with regulatory requirements. Some banks removed breaches of Regulation (EC) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 and under Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 according to Regulation (EU) No 575/2013 of the European Parliament and of the Council, laying down implementing technical standards with regard to provision of information by institutions to supervisory bodies.

Reports of all inspections were prepared, recommending boards to improve: management and monitoring of credit exposures, exposure assessment and classification in line with the regulatory framework; internal capital adequacy analyses; long-term development strategies, objectives, and implementation (including priority areas and products, serious risk mitigation limits, planned structural changes, and risk policy changes); market risk management and relevant internal policies; measures (including expanding the range of key risk indicators and improving reported operational event databases) for cutting operational risk as a condition for minimising operational losses.

Inspections were conducted due to changes to the internal credit risk measuring model planned by an international bank groups with a Bulgarian subsidiary focusing on the effect of changes on the domestic subsidiary bank.[66]

In accordance with the Plan on Reforms and Development of Banking Supervision work started on revising and improving the On-site Inspections Manual intended to improve the existing procedures and techniques of no-site inspections and to produce additional guidelines for assessing bank risks within the supervisory review and assessment, a precondition for improving the quality and effectiveness of supervisory inspections and credit institution supervision as a whole.

Macroprudential Supervision

Risks affecting banking system stability continued to be monitored in 2016 in line with macroprudential supervision objectives. To ensure early identification of areas of increased risk to system stability a wide range of indicators are employed for analysing and assessing the balance of risks. Stress test simulations and sensitivity analyses are part of this process, including the 2016 bank stress test[67] conducted with other BNB units.[68] Analyses and assessments continued prompting various precautionary measures and macroprudential recommendations to counteract external risks and avoid instability spillover from other financial systems. The liquidity position of all credit institutions continued to be monitored daily.

The supervisory information service facilitated reliable information exchange between the BNB and credit and financial institutions and provided data to external users and institutions with which the BNB liaises to agreed formats. Key supervisory risk indicators were developed and implemented to analyse credit institutions and individual risks reliably. Implementing Technical Standards were amended.

Expert analyses and assessments addressed the calibration of a countercyclical macroprudential buffer[69] protecting the banking system against potential losses from cyclical systemic risk accumulation in periods of excessive credit growth. The BNB based the framework for setting countercyclical buffer rates in Bulgaria on the methodology of the Basel Committee on Banking Supervision, plus the specific BNB

[66] In one bank, the inspection found that planned changes would have a minor effect on risk management and the capital position. Permits for each of the planned changes reflected inspection results. Problem areas in another bank required board action. The bank failed to receive regulatory approval for planned changes to its internal credit risks model. Measures required of the bank include a revision intended to improve modelling and make it more precise, affecting databases and documentation, approach sequencing, and the consistency and completeness of the default definition.

[67] Stress Test Guidelines, 2016, BNB, 28 April 2016: <http://bnb.bg/BankSupervision/BSAQR/BSAQRSTGuidelines/index.htm>

[68] Baseline and Adverse Macroeconomic Scenarios of the BNB for the Purposes of the 2016 Stress Test of the Banking System, BNB, 28 April 2016: <http://bnb.bg/bnbweb/groups/public/documents/bnb_pressrelease/pr_20160428_1_a2_bg.pdf>

[69] Countercyclical capital buffer: http://bnb.bg/BankSupervision/BSCapitalBuffers/index.htm

methodology on determining the broad definition of credit (both to domestic banks and obligations to non-residents).

At the end of 2016 a buffer for other systemically important institutions was introduced as an instrument for implementing the intermediate goal of macroprudential policy for limiting the risk ensuing from the activity of systemically important institutions.[70] It is aimed at strengthening the capacity of other systemically important institutions to absorb losses, thus limiting the transmission of risks of possible stress situations in systemically important banks to other credit institutions or to the banking system. The BNB followed the EBA Guidelines in identifying banks in Bulgaria as other systemically important institutions. Currently, ten banks in Bulgaria are identified as systemically important. The capital buffer is rolling out in stages to maintain stability of the banking sector and to prevent additional credit cycle burdens. The early disclosure of the buffer for other systemically important institutions provides the principles of predictability and transparency of the BNB Policy of Macroprudential Instruments. The amount of buffer for other systemically important institutions for the 2018–2020 period is subject to changes as a result of the annual review and identification of other systemically important institutions and determining a relevant buffer by the BNB. Calibrating the buffer, the BNB took into account 2016 and 2017 supervisory measures reflecting AQR and stress-test results.

Significant BNB macroprudential supervision effort continued to relate to the European Systemic Risk Board (ESRB) and substructures monitoring of risks to the EU financial system. This supports BNB macroprudential policy implementation and helps expand Bank capacity in the area.

Implementation of two ESRB recommendations was reported. Recommendation ESRB/2013/1 requires macroprudential authorities to determine intermediate policy objectives and instruments. Recommendation ESRB/2012/2 requires monitoring and assessment of risks to banks in terms of funding sources and encumbered assets. Measures launched by the BNB were approved by ESRB assessment teams.

Specific Supervisory Activities

Spot on-site inspections assessing the degree of deposit product transparency showed improved depositor information. Remaining weaknesses include information bulletin presentation, resulting in recommendations to two banks. An assessment of several banks' customer dispute procedures and practice showed that specialised units handled complaints in line with internal rules to best European practice.

Joint inspections with the Financial Supervision Commission at two banks acting as supplementary pension insurance fund custodian showed legal observance.

Supervisory inspections reviewed systems preventing bank use for money laundering and terrorist financing in the context of European legal changes applying uniform counteraction of illegal cash transfers and non-transparent corporate structures. The inspections, in 11 banks, found 42 breaches. Seventy-nine recommendations addressed resource strengthening and quality control in applying due diligence to higher risk customers. Supervisory measures were imposed on four banks for failing to implement supervisory prescriptions and weaknesses in risk management. The results of the joint inspections with the State National Security Agency were similar to the general assessment of business lines in the banking system.

Spot inspections at three credit institutions checked compliance with new Law on Bank Deposit Guarantee (LBDG) provisions on reporting guaranteed deposits. No

[70] Capital buffer for other systemically important institutions: http://bnb.bg/BankSupervision/BSCapitalBuffers/index.htm

breaches were found. Recommendations aimed to improve reporting of guaranteed deposits through detailed procedures and LBDG inclusion into internal audit.

In 2016 eight financial institutions were deleted due to termination or non-compliance with the Law on Credit Institutions and Ordinance No 26 of the BNB. Four companies were denied registration, mainly because of insufficient capital and own funds or unclear capital origins. Complaints from financial institution customers continued declining in 2016, public awareness measures and enhanced communication between the BNB and the Consumer Protection Commission contributing most significantly to this effect.

Legal Supervisory Activity

There were no new bank operations licences or new credit institution licensing procedures over 2016.

In March preapproval was granted for the transfer of Alpha Bank, Bulgaria to Eurobank Bulgaria with full succession to the latter.

Over the review period the BNB granted preapproval for 4FINANCE HOLDING S.A., Luxembourg to indirectly acquire 100 per cent of paid-in share capital in TBI Bank by acquiring all shares of sole owner TBIF Financial Services BV.

UniCredit Group S.p.A restructuring involved a UniCredit preapproval request for direct acquisition of a UniCredit Bank Austria AG, Austria share representing 99.45 per cent of UniCredit Bulbank AD, Bulgaria equity. The procedure ended in August 2016 with preapproval.

In late December D Commerce Bank requested preapproval for direct acquisition of 100 per cent of Commercial Bank Victoria equity.

In 2016 five banks were cleared to include increased equity into common equity tier one, and three banks were cleared to include intermediate or annual profit into common equity tier one.

Four banks requested early repayment of obligations on instruments in tier two capital and an instrument in additional tier one capital. The BNB allowed early repayment of obligations to three of them, instructing one to discontinue treating a subordinated loan agreement as a tier two capital regulatory instrument.

In 2016 banks where supervisory monitoring and on-site inspections found weaknesses were subjected to supervisory measures. Supervisory measures under the Law on Credit institutions were launched, including instructions to bring exposures into line with statutory regulators and to initiate measures for improving financial performance, increasing the capital and changing internal rules and procedures.[71]

To remove the weaknesses in their operations, banks were instructed to revise and improve their internal legal framework in line with the effective regulatory framework, including adjustment of risk management policies, a review of stress tests applied by banks with additional scenarios for assessing interest rate, operational

[71] One bank was asked to launch corrective measures associated with the AQR results by providing an audit opinion on the need for additional accounting provisions reflecting service provider findings. The bank was required to submit a corrected report on internal capital adequacy assessment (ICAA) in line with review findings. A capital increase plan was also required. Another bank was asked to remove breaches of the effective regulatory framework and additional supervisory reporting. The bank was also asked to launch corrective actions listed in the service provider's AQR report. An audit opinion on additional accounting provisions and bringing policies, rules, and procedures into line with International Accounting Standard 39 was also required. A capital plan was also required, taking into account internal capital adequacy assessments and the AQR and stress test conclusions and assessments.

and outsourcing risks, revision and supplementing of credit procedures, policies of assessment and classification of risk exposures and of reporting impairment losses after the AQR.

There were board member changes at: CIBANK EAD; Investbank AD; TBI Bank EAD; UniCredit Bulbank AD; Société Générale Expressbank; Tokuda Bank AD; Raiffeisenbank Bulgaria EAD; Allianz Bank Bulgaria AD; Texim Bank AD; DSK Bank EAD; ProCredit Bank (Bulgaria) AD, T.C. Ziraat Bankası, Sofia Branch; International Asset Bank; Piraeus Bank Bulgaria AD.

Twelve new EU credit institutions exercised the freedom to provide services under the mutual recognition of passporting procedures through notices to the BNB from bank operation licensing supervisors. The BNB received 266 such notices during 2016.

The BNB Banking Supervision Department also registered and handled 237 complaints from bank customers. The number of complaints and queries tended to decrease compared with the previous year when registered complaints from bank customers numbered 358, including 267 from individuals and 91 from legal entities.[72]

Regulatory Framework Activity

The Law on Real Estate Loans for Consumers was adopted in 2016. The Law assigns new tasks to the Banking Supervision Department related to the registration of credit intermediaries and observance of the level of knowledge and competence of credit institution and credit intermediary personnel, customers creditworthiness assessment and examination of creditor and credit intermediary remuneration policies. By Resolution of the BNB Governing Council, Ordinance No 19 on Credit Intermediaries was adopted establishing the procedure for entering or deleting credit intermediaries and the documents and information required for the entry. Instructions on enacting the Ordinance were also published. EBA announced Guidelines on Product Oversight and Governance Arrangements for Retail Banking Products, Creditworthiness Assessment, and Remuneration Policies and Practices Related to the Sale and Provision of Retail Banking Products and Services. The year ended with the registration of the first foreign credit intermediary and applications by several Bulgarian ones.

The joint working party including BNB representatives for transposing Directive (EU) 2015/849 of the European Parliament and of the Council on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing into national law helped complete the new draft law. BNB experts continued helping develop national risk assessment methods.

The BNB and the Bulgarian Deposit Insurance Fund ran a project on setting data parameters under BNB Ordinance No 30 for Calculating Contributions Due by Banks under the Law on Bank Deposit Guarantee.

EBA announced guidelines and recommendations and notices of observance on communication between competent authorities supervising credit institutions and the statutory auditor(s) and the audit firm(s) carrying out the statutory audit of

[72] Where complaints stemmed from property disputes arising from contractual relations, the BNB referred complainants to relevant banks or to Court. The BNB advised some complainants that their complaints fell within the purview of the Consumer Protection Commission, the Financial Supervision Commission, or the Courts. In cases of poor customer relations, banks concerned were asked to remove the weaknesses.

credit institutions, sound remuneration policies under Articles 74(3) and 75(2) of Directive 2013/36/EU and disclosures under Article 450 of Regulation (EU) No 575/2013.

As an integral part of the supervisory process, common equity tier one issue reviews included simulations on the effect of changes in the composition and amount of equity on regulatory capital in response to banks' requests for early repayment of capital instruments and inclusion of annual profit into regulatory capital.

Alongside meetings, coordination, and replies to EBA questionnaires, current questions and replies to banks, and internal supervisory training, instructions to banks for conducting internal analyses of liquidity were issued.

Participation in Single Supervisory Mechanism and Single Resolution Mechanism Colleges

In 2016 BNB Banking Supervision Department representatives and the competent national bodies (the Hungarian Central Bank, the Single Supervisory Mechanism to the ECB, German Federal Financial Supervisory Authority – BaFin) took part in meetings in the supervisory colleges to discuss risk assessments of the relevant bank groups and subsidiary banks and to issue joint decisions about these groups' capital and liquidity, including subsidiaries. Some colleges addressed parent bank and individual subsidiary strategies for decreasing the non-performing loan share.

In the second half of 2016 meetings with representatives of competent authorities discussed quantitative and qualitative results of the joint EBA and ECB stress test for 2016 and reviewed revised recovery plans of groups with subsidiaries in Bulgaria.

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 responsible for bank resolution. In this regard, the Bank and commercial banks worked on exchanging information for analysing and assessing critical functions, preparing resolution plans, and assessing bank resolvability. The standardised reporting templates were based on the EBA and the Single Resolution Mechanism reporting forms adjusted to national legislation. Follow up communication with banks improved statement data quality. Identifying the type and structure of banks' balance sheet liabilities, particularly in terms of bank creditor type, is one of most important areas of additional bank reporting.

In November banks attended training on the regulatory framework for recovery and resolution of credit institutions and its practical implementation. This improved their awareness of resolution objectives and instruments, and improved resolution planning interaction between the BNB and banks.

Most BNB licensed large banks are subsidiaries of EU cross-border bank groups. June saw cooperation agreements on newly established international resolution colleges for each of these groups, whose group level resolution authority is the Single Resolution Board. By the year's close, information exchange on draft resolution plan sand resolvability assessments for relevant groups intensified within the colleges. In 2016 the BNB signed a cooperation and resolution college agreement with a Member State central bank, which is the resolution authority for a cross-border banking group whose parent undertaking is outside the banking union.

Bulgarian banks operating abroad, for which the BNB is the group-level resolution authority, conduct minor operations through branches in EU Member States and subsidiaries in third countries. The Bank took no steps for establishing resolution colleges for them.

Under the Law on the Recovery and Resolution of Credit Institutions and Investment Firms, in March the Governing Council set the banking system 2016 contribution to the Bank Resolution Fund (BRF) at BGN 95,687,000. This was apportioned to banks in April 2016 according to a methodology approved by the BNB Governing Council for determining individual contributions of banks to the BRF. All banks paid their contributions within a month of the decision.

VIII. The Central Credit Register

The Bulgarian National Bank maintains an information system on customer debt to banks, financial institutions, and payment and electronic money institutions (reporting units). BNB Ordinance No 22 on the Central Credit Register establishes the operation, scope, terms, procedure and timelines of information flows to and from the Central Credit Register (CCR).

Information maintained by the CCR is continuously developed and improved to match lending developments and requirements. CCR data are continuously analysed and upgraded to improve its quality and reliability in line with the requirements of Regulation (EU) No 575/2013 of the European Parliament and of the Council and Commission Implementing Regulation (EU) No 680/2014. In November 2016 the CCR information system upgrade project was finalised. As of 28 November 2016 reporting units file and receive information in line with the implemented changes, including data on monthly contributions according to borrowers' repayment plans.

Amendments to the Law on Credit Institutions Article 56[73]call for preparatory technical upgrade procedures in the CCR information system. A methodology for calculating the amount of charges for issuing statements and certificates becomes effective on 1 January 2017.

The CCR lists customers' loans to reporting units irrespective of amount. The Register provides centralised access to information for reporting units. The information system provides data on customers' debt to CCR participants and the BNB. Real time customer debt information includes loan statuses, arrears, and repaid loans for five years back, plus borrower histories.

By 31 December 2016 the CCR had 198 reporting units: 29 banks, 166 financial institutions, and three payment institutions. One payment and 31 financial institutions joined the CCR information system in 2016, including 12 financial institutions providing guarantee transactions and acquiring credit claims and other forms of financing (excluding factoring and forfeiting on commercial receivables). Over the review period three financial institutions were excluded from the CCR as the public register of financial institutions under Article 3a of the Law on Credit Institutions maintained by the BNB was deleted.

By 31 December 2016 the CCR information system listed 4,945,000 loans with a balance sheet exposure of BGN 67,809 million. Borrowers numbered 2,326,000, of whom 2,216,000 individuals, 96,000 legal entities, 6000 non-residents not registered under URN/UIC/code under BULSTAT/PIC and 8000 self-employed professionals and craftspeople. Residual debts up to BGN 5000 predominated with individuals (64.5 per cent), while debts of BGN 5000 to 50,000 predominated with legal entities (36.09 per cent).

CCR information is of essential importance to creditors in assessing borrower creditworthiness, encouraging policies and measures to stimulate prudent lending and avoid excessive debt. Arrears and repayment histories help minimise the risk of non-performing loans, preserve good asset quality and stability in the Bulgarian financial system.

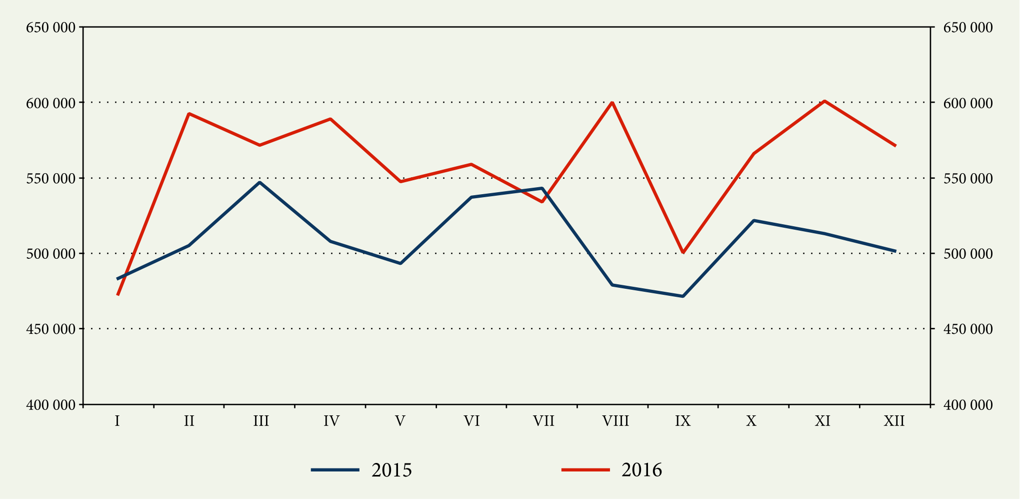
In 2016 banks, financial institutions, payment institutions, and electronic money institutions conducted 6,706,000 searches in the CCR information system. The

[73] Published in the Darjaven Vestnik, issue 98 of 9 December 2016.

monthly average was 559,000, of which 68 per cent by banks and 32 per cent by financial and payment institutions.

CCR Searches Conducted by Reporting Units in 2015 and 2016

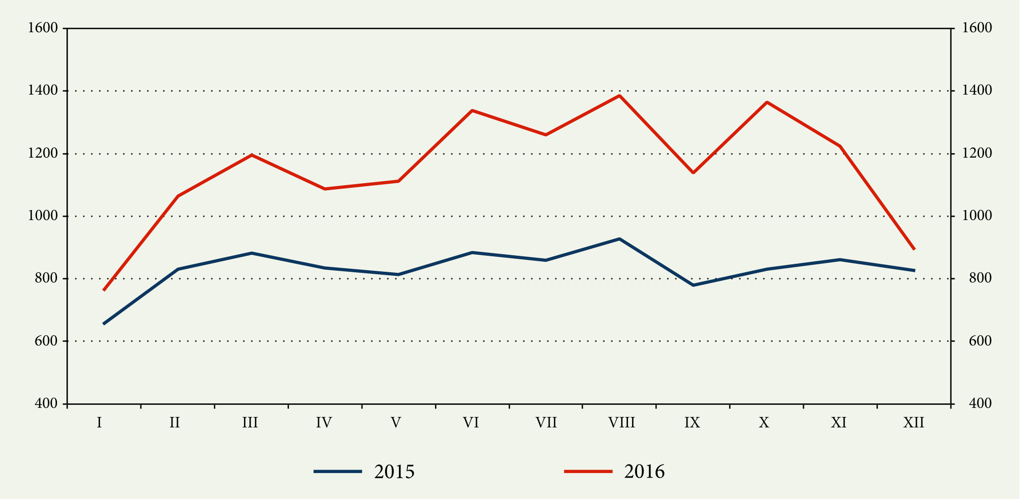
(number)



Source: the BNB.

CCR Statement Applications in 2015 and 2016

(number)



Source: the BNB.

In 2016 there were 13,832 applications for issuing CCR statements: 13,636 by individuals and 196 by legal entities.

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

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

The CCR provides research, statistical analyses, and annual information to the World Bank under the Doing Business project, the ECB, the IMF, and other international bodies.

IX. 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 commitments call for a 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.

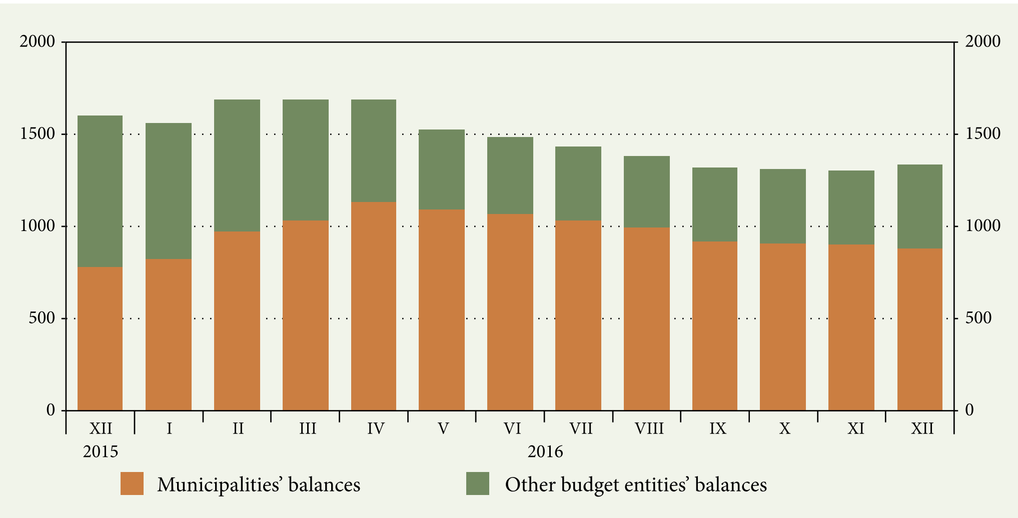
Revenue raised in 2016 by system participants under the Tariff of Fees and Commissions Charged on Processing Government Securities Transactions and by the MF under LBNB Article 43 was BGN 1,681,600 on BGN 2,107,700 in 2015.

Information Service

Servicing state budget information under the MF contract involved submitting daily and periodical statements on budget entities' (municipalities included) budget, 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 2016 State Budget Law, tallying it with reported balances daily.

Budget Entities' Accounts with Domestic Banks (BNB Excluded)

(BGN million)



Source: the BNB.

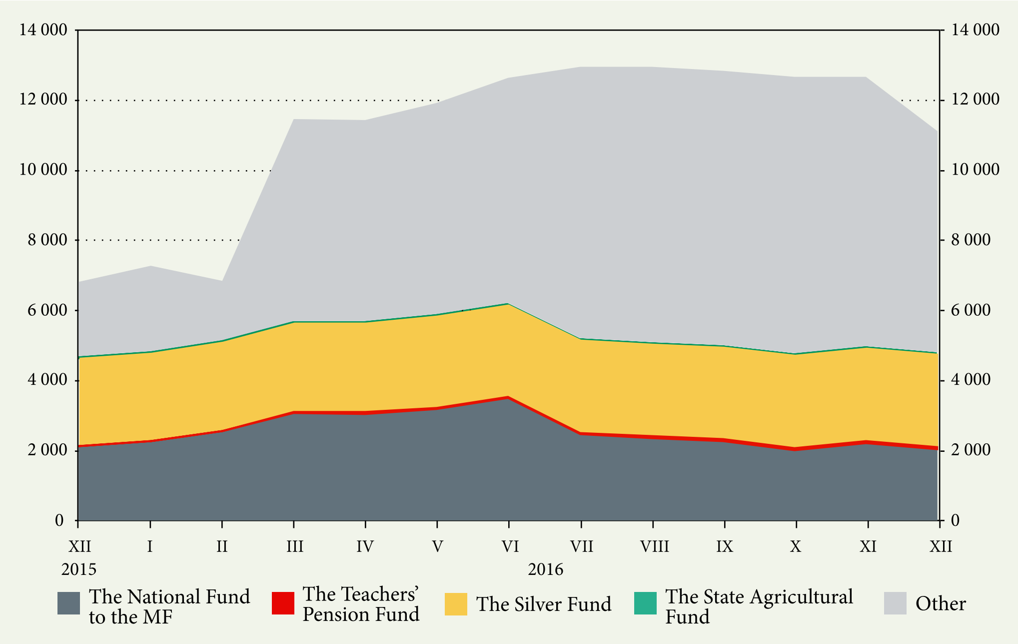
On 31 December 2016, 20 banks including the BNB serviced budget funds with IOBFR access. Summarised information sets the overall balance of budget entities' accounts (including the central budget) at BGN 12,035.5 million,[74] up 58.8 per cent on 31 December 2015. By the end of 2016, some 89 per cent or BGN 10,700.3 million was in BNB accounts and the rest with other domestic banks.

Budget entities' account balances outside the central bank fell by 16.6 per cent on 2015. As in previous years, five banks held almost 70 per cent of these balances.

Approximately 92 per cent of budget funds at the BNB and other domestic banks formed the fiscal reserve's liquidity portion:[75] BGN 11,090.0 million on 31 December. Of this, BGN 4769.7 million was allocated to earmarked funds: the State Fund for Guaranteeing the Stability of the State Pension System (the Silver Fund), the MF National Fund, the State Agricultural Fund – Disbursement Agency, and the Teachers' Pension Fund.

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 Governor involved preparing 1000 statistical budget reporting forms, including 305 on fiscal reserve account balances.

The AS ROAD system maintains up to date information on the government's foreign financial obligations on which the Bank is calculating and paying agent.[76] Two new issues of global bonds worth EUR 1994 million with seven and 12 year maturities were registered upon written MF advice. Payments of EUR 275.4 million[77] were effected, comprising EUR 80.5 million principal and EUR 194.9 million interest repayments, upon MF clearance. Reflecting new loans and repayments

[74] Foreign currency account balances are recalculated in levs at the BNB exchange rate on 31 December 2016.

[75] According to the Law on Public Finance Additional Provisions § 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.

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

[77] The payments total was recalculated in euro at the BNB rate for 31 December 2016.

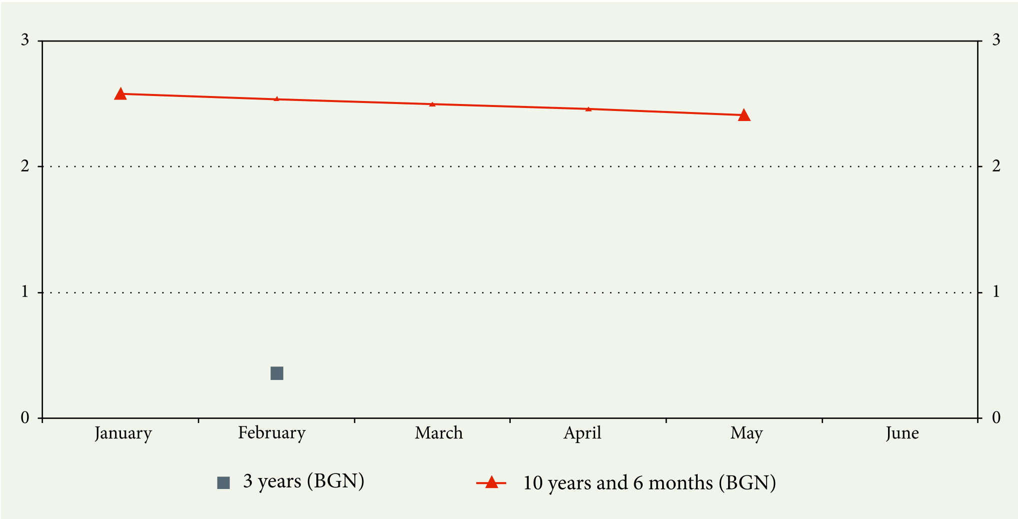
reported by 31 December, the total amount of obligations in AS ROAD reached EUR 8907.0 million,[78] up EUR 1914.0 million on 2015. In structural terms, euro-denominated debt continued holding the largest share at 99.9 per cent.

Servicing Government Securities Trading

The MF issuing policy in 2016 involved three auctions for BGN-denominated government securities *via* the GSAS system. They offered one medium and one long-term issue. The average weighted residual term to maturity of sold issues was seven years and five months.

Average Annual Yield Attained at Domestic Government Securities Auctions in 2016

(per cent)



Note: The issuer announced no government securities auctions in March, April and June–December 2016.
Source: the BNB.

The total nominal value of government securities offered for sale was BGN 500 million. Over 79 per cent of bids were by banks (BGN 634.9 million) with BGN 164.4 million by non-bank institutions. Some private pension funds were among the most active non-bank institutions, making 7.2 per cent of bids, followed by the National Insurance Institute at 5.7 per cent, investment firms at 3 per cent, insurance corporations at 2.1 per cent, contractual and other funds at 1.6 per cent, and the Employees' Pay Guarantee Fund at 1 per cent. Government bond sales volume was BGN 500 million, or 100 per cent of the scheduled volume. Almost three quarters of all sold bonds were acquired by banks: primary[79] and non-primary dealers. Average annual yields of three-year and 10.5-year issues were 0.4 and 2.5 per cent, respectively.

ESROT registered BGN 1316.8 million of corporate event payments on behalf and for the account of the issuer.[80] The 27 circulating MF issues had an overall nominal value of BGN 6724.6 million[81] or 7.7 per cent less than at the end of 2015. Bond

[78] Total debt was recalculated in euro at the official BNB rate for 31 December 2016.

[79] There were twelve MF and BNB Ordinance No 15 primary dealers.

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

[81] The lev equivalent of government securities denominated in foreign currency is calculated at the BNB rate for 31 December 2016. The total was reduced by the amount of government securities removed from the MF register/accounts and transferred to the disposal of the Minister of Finance under the Law on Public Finance Article 152, paragraph 9.

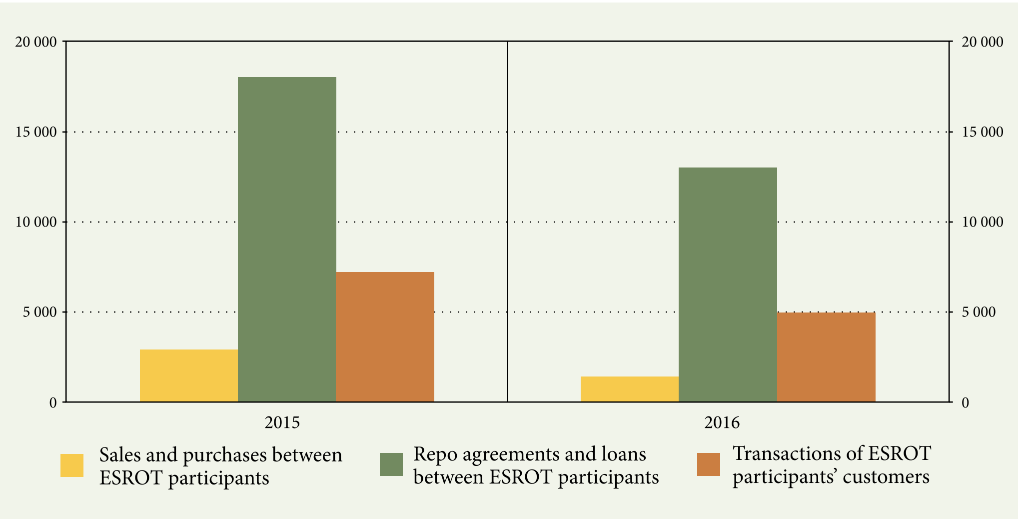
currency structure did not change, with BGN-denominated issues redeemable in levs occupying the largest share at 76.2 per cent, followed by EUR-denominated issues redeemable in euro at 22.3 per cent, and EUR and USD-denominated issues redeemable in levs at 1.5 per cent. The maturity structure underwent no essential change from the end of 2015, with medium and long-term bonds comprising 25 and 75 per cent.

The total nominal volume of ESROT transactions was BGN 19,367.6 million, down 31.3 per cent on the end of 2015. Repo transactions had the largest share at 67.1 per cent, including those concluded for a day (50.6 per cent) in both lev and euro-denominated government bonds. The average weighted annual yield of repo agreements in all maturities was negative at -0.03 to -0.19 per cent, from 0.01 to 0.34 per cent in 2015. There were more significant yield fluctuations in transactions concluded for one to three day periods.

Bond sales and purchases were BGN 6374.5 million, down 37 per cent on 2015. Of this, transactions between ESROT participants totalled BGN 1419.7 million, operations between participants and customers BGN 4580.4 million and those between ESROT participants' customers BGN 374.4 million.[82] This segment occupied 32.9 per cent of the market, 37 per cent down on the prior year. Government securities traded across the entire yield curve, BGN-denominated bonds with a residual term to maturity of about five years being most liquid. The average annual yield of the long-term benchmark issue (10 years and 6 months maturity) moved within a broader band of 2.44 per cent in January to 1.8 per cent in December, down on 2015 from 2.95 per cent in January to 2.43 per cent in December. The secondary government bond market liquidity ratio[83] was 2.87 against 3.86 in the previous year. ESROT participants encountered no problems and provided government bonds and cash in levs and euro for the delivery versus payment (DvP) settlement of government securities transactions, the averaged settlement ratio[84] reaching 100 per cent.

Volume of Transactions in Tradable Government Securities

(BGN million)



Source: the BNB.

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

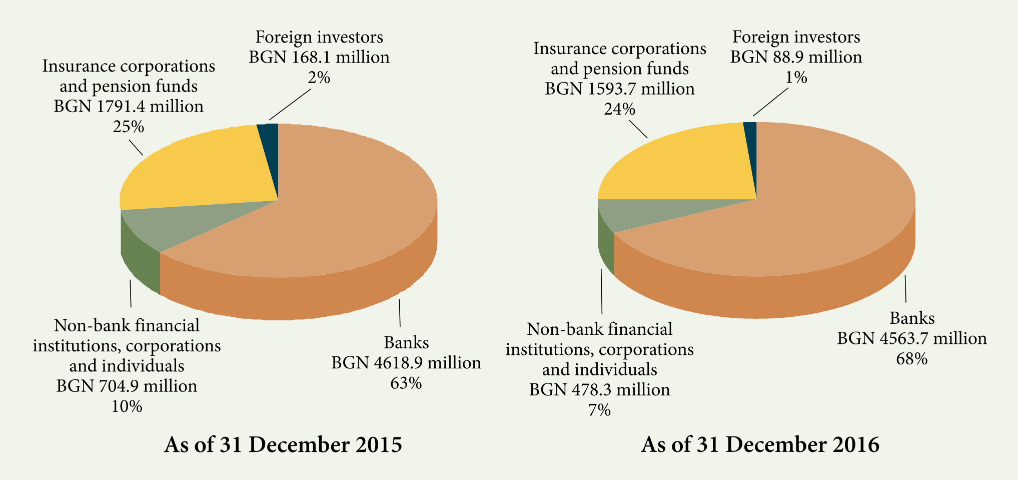
[83] Liquidity ratio is the ratio between the volume of secondary market government bond transactions concluded over a year and the volume of circulating government securities by that year's end.

[84] 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.

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 3083.8 million against BGN 11,760.5 million in 2015.

Reflecting decreased circulating domestic government securities, the end of 2016 saw a decline in government securities investment by major bond holder categories: banks down BGN 55.2 million, insurance corporations and pension funds down BGN 197.7 million, and non-bank financial institutions, corporations and individuals down BGN 226.6 million. This changed individual government bond holder category exposures by 31 December 2016: 68 per cent with banks; 24 per cent with insurance corporations and pension funds, 7 per cent with non-bank financial institutions, corporations and individuals, and 1 per cent with foreign investors, from 63, 25, 10 and 2 per cent in 2015. Over 2016 the ESROT offered 99.9 per cent availability,[85] with no call for contingency rules for interaction between systems operated by the BNB. The system had 27 participants by the end of the year: 25 banks, an international central securities depository, and the Ministry of Finance.

Holders of Government Securities Issued in the Domestic Market



Notes: 1. The lev equivalence of government securities issues denominated in foreign currency is calculated on the basis of the BNB exchange rate valid for the last business day of the relevant period.
2. According to BNB and ESROT participants data.

Source: the BNB.

On 31 December 2016 there were 1173 government securities accounts under BNB Ordinance No 31 on Government Securities Settlement. Of them, 27 were for government securities of the issuer (the MF), 479 for participants' own government securities portfolios, 293 for encumbered bonds, and 374 held by participants' customers. Account nominals tallied with the amount of outstanding issues at BGN 6724.6 million.[86]

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

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

[86] The lev equivalence of government securities issues denominated in foreign currency is shown at the BNB rate for 31 December 2016.

System Development

At the end of the review period the MF agreed to start a project on GSAS modernisation to match new Bank specifications. It involves migrating the system to new hardware, software, and application architecture offering easier upgrading as needed by the issuer's debt management policy.

In line with the schedule agreed with the MF at the close of 2016, the BNB finalised the launch of new ESROT functionalities to build an interface between the BNB Government Securities Depository and the E-Bond system. In parallel, the conciliation procedure between the MF and primary government securities dealers developed further to include E-bond trading rules and drafting amendments to statutory government bond market instruments on admission of government securities to the E-Bond system and a regulated market organised by the Bulgarian Stock Exchange – Sofia under the Law on Financial Instruments Markets Article 74, paragraph 1.

X. Participating in the ESCB and EU Bodies

In 2016 EU bodies and institutions continued efforts to recover economic growth, promote investment, establish a well functioning and integrated capital market union, and raise confidence in the financial system. In June 2016 the Ecofin Council adopted a road map for completing Banking Union, including measures to curb financial system risks and improve financial institution restructuring rules. In line with the Road Map, in November 2016 the European Commission presented a comprehensive package of five legislative proposals to enhance EU credit institution resilience.

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 2016 the four sessions of the ECB General Council focused on important issues related to the economic development and EU financial sector performance, and on key ECB documents: the report on the outlook and monetary policies in non-euro area EU countries; the report monitoring central bank compliance with the prohibition of monetary financing; the 2016 Convergence Report; the 2016 ECB Surveillance Report on non-euro area EU-countries, and the 2016 autumn fiscal policy note.

BNB representatives took part in 12 ESCB committees, 45 working groups, and the Human Resource Conference. Through representatives on 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 helped formulate ECB opinions for written consultations between EU Member States and the ECB on draft legislative acts within its purview. In 2016 Bulgaria held written consultations with the ECB on: the draft Law on amendment to the Law on Payment Services and Payment Systems to transpose the Payments Account Directive into Bulgarian law; the amendments to the Law on Credit Institutions to clarify fees for accessing the Central Credit Register; the draft Law on amendment to the Law on Public Sector Internal Audit and the amendments to the Law on the Bulgarian National Bank improving the organisation and legal framework of BNB internal audit; the draft 2017 Law on the State Budget of the Republic of Bulgaria proposing amendments to the Law on Credit Institutions allowing the BNB to set Central Credit Register and Register of Bank Accounts access fees.

The BNB hosted the early July meeting of the ESCB International Relations Committee. The meeting offered a platform for discussions, ideas, and views on world economic and trade developments, international capital flows, and the ways different countries manage them.

The European Systemic Risk Board, European Banking Authority, Colleges of Supervisors

The BNB Governor and BNB Deputy Governor are members of the General Council of the ESRB. Discussions at the four General Council meetings focused on assessing risks to EU financial system stability stemming from the continued deterioration of financial institutions' balance sheets, global risk premia reversal amplified by low market liquidity, and growing concerns about public and non-financial sector debt on a background of heightened uncertainty and low nominal growth. The General Council continued debating the macroprudential and structural issues triggered by the low interest environment to identify potential risks to EU financial stability and the possible macroprudential policies needed to address them.

Reviewing and evaluating risks related to the unregulated banking sector, investment funds, and companies engaged in market maintenance (market makers) formed an accent in ESRB work. The General Council approved the adverse scenarios for the stress tests of banks, insurance companies and central counterparties coordinated by the EBA, European Insurance and Occupational Pensions Authority (EIOPA), as well as for the stress tests of central counterparties in 2016 and 2017 coordinated by the European Securities and Markets Authority. General Council members discussed also possible improvements in the European macroprudential policy framework with a view to drafting a reply to the EC 2016 consultation on the EU macroprudential policy framework review. At the September 2016 meeting, the General Council reviewed the medium-term risks related to EU level vulnerability in the real estate sector and found a certain short-term vulnerability to be the source of systemic risk to the financial system with a potential to have serious negative consequences for the real economy.

In line with the 2012 ESRB Recommendation on the funding of credit institutions, the BNB reported to the ESRB on effective action to monitor, assess and manage risks related to financing and encumbered assets. Also in 2016, the Bank reported on the response to the 2014 ESRB Recommendation on guidance for setting countercyclical buffer rates and the end-2015 Recommendation on recognising and setting countercyclical buffer rates for exposures to third countries.

In 2016 compliance with the requirements of the Recommendation on the funding of credit institutions and the Recommendation on intermediate objectives and instruments of macroprudential policy was assessed. The overall assessment of the degree of compliance with the recommendations for Bulgaria and the BNB as a body exercising micro- and macroprudential supervision of banks was fully compliant.

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

In 2016 BNB representatives took part in meetings in the supervisory colleges and competent national bodies (the central bank of Hungary, Single Supervisory Mechanism to the ECB, German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)) to discuss risk assessments of the relevant bank groups and subsidiary banks and prepare joint decisions about their capital and liquidity.

The BNB was represented by a Deputy Governor at the High-Level Task Force established by the ESRB General Board to create a portfolio of low-risk assets. The Task Force explores the possibility for the creation of low-risk securities of two components – senior and subordinated claims, backed by a diversified portfolio of sovereign bonds.

The BNB established international cooperation in the area of resolution of credit institutions in the framework of international colleges for the resolution of all cross-border EU bank groups, having subsidiary credit institutions licensed by the BNB and for which the group level resolution authority is the Single Resolution Board.

In March and August 2016 Banking Supervision Department experts attended an EBA workshop on assessing BNB implementation of supervisory review procedures and methodologies and participation in the supervisory colleges of European bank group subsidiaries under EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP).

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

In 2016 EU negotiations continued on the regulatory framework for the establishment of the Banking Union in the euro area, with discussions focusing on the third element of the Banking Union – the European Deposit Insurance Scheme (EDIS). BNB experts participated in the deliberations of the EU Council ad hoc working group on strengthening Banking Union, where Bulgaria supports further integration initiatives within the Banking Union. A major stress in the position was EDIS establishment as a long-term measure, with progress on curbing financial system risk made either before or simultaneously with EDIS launch.

As part of the review of the Union's financial legislation aimed at curbing risks in the financial sector, in November 2016 the European Commission brought forward a new package of measures to enhance the resilience of EU credit institutions. The new measures implement in EU legislation the international standards adopted within the framework of the Basel Committee on Banking Supervision and the Financial Stability Committee, taking into account European specificities and establishing conditions for the improvement of credit institutions' capacity for financing the real economy.

Regulation (EU) No 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks[87] was adopted in 2016. The Regulation aims to establish a common European framework on reliable and correct benchmarks to reference financial instruments or financial contracts, or measure EU investment fund performance. The BNB's constructive negotiating stance contributed to specific provisions tailored to the Bulgarian financial instruments and contracts market.

In 2016 the Bank continued its intensive work on harmonising national legislation with European requirements. BNB experts were involved in drafting the Law on Amendment to the Law on Payment Services and Payment Systems adopted in July 2016, transposing the requirements of the Directive on the comparability of fees related to payment accounts, payment account switching and access to payment

[87] Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (OJ, L 171/1 of 29 June 2016).

accounts with basic features[88] and certain measures for implementing Regulation on interchange fees for card-based payment transactions.[89] In the second half of 2016 BNB representatives helped draft a new Law on Payment Services and Payment Systems, to transpose the requirements of the Payment Services Directive II.[90] Bank representatives were involved in drafting the Law on Real Estate Loans for Consumers adopted in July 2016 and transposing the requirements of Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property.[91]

In July, the ECOFIN Council adopted Recommendation on the national reform programme for 2016 delivering an opinion on the convergence programme of Bulgaria for 2016. It focused on areas requiring timely measures to correct the identified excessive macroeconomic imbalances. As regards banking sector, it recommended the asset quality review and the stress tests to be completed by the close of the year. On 13 August 2016 the BNB published the report containing data on the banking system as a whole and on individual bank results from the AQR and ST of the Bulgarian banking system provided by the independent consultants and summarised by the international consulting firm Deloitte.

The Bank contributed to the work of the Economic and Financial Committee. Debate focused on reviewing the economic situation, risks to financial stability, and EU financial sector trends. The outcome of the late June 2016 referendum on UK membership in the EU and its effect on economic activity and EU financial sector stability was a key issue in the deliberations of the Committee. It regularly discussed and monitored the implementation of agreed measures towards Banking Union and focused on complementary measures to strengthen the Union by reducing and sharing risks. The Committee and an Informal Ecofin meeting, in which the BNB Governor took part, discussed the regulatory treatment of sovereign exposures which helped prepare the EU position on this topic for debate in the Basel Committee on Banking Supervision.

The meetings in the second half year focused on the examination of the progress made in implementing the measures included in the action plan for the establishment of the capital markets union and of the results of the EBA coordinated EU-wide stress test conducted in 2016. Major topics also included EC proposals to improve existing fiscal rules framework clarity and reduce its complexity, establish national Competitiveness Boards, and introduce unified euro area representation in international organisations and the IMF in particular. 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.

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[88] Directive 2014/92/EU of the European Parliament and of 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 (OJ, L 257/214 of 28 August 2014).

[89] 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 (OJ, L 123/1 of 19 May 2015).

[90] Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (OJ L 337/35 of 23 December 2015).

[91] 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 (OJ L 60/34 of 28 February 2014) .

XI. International Relations

The Law on the Bulgarian National Bank entitles the Bank to participate organisationally and financially in international organisations furthering foreign exchange, 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, where the BIS Governors allocated net profit, the BNB received EUR 2.2 million of dividend for its 8000 BIS shares.

The Governor represents Bulgaria on the IMF Board of Governors. On 22 February 2016 Bulgaria paid its increased IMF 14th General Quota Review quota. The increase was SDR 256.1 million of the SDR 896.3 million new quota. This increased Bulgaria's voting shares from 6652 to 10,427, or 0.21 per cent of IMF members' voting shares.

In April the BNB Governor led a Bulgarian delegation to the regular IMF and World Bank Group spring meetings and took the opportunity to expand and deepen contacts with the international financial institutions' management and financial executives.

Between 7 and 16 September 2016 an IMF mission visited Bulgaria for its regular annual consultations under Article IV of IMF's Statute and held meetings with representatives of national bodies, private sector, and non-governmental organisation to discuss Bulgarian economy.

At the annual IMF and Word Bank Group institutions' meetings held between 7 and 9 October, the Bulgarian delegation and the BNB Governor participated in bilateral meetings with international financial institutions, financial sector, and central bank executives, as well as in the plenary session and related events, using the forum to expand and deepen international contacts.

The joint IMF/World Bank review under the Financial Sector Assessment Program (FSAP) started in October.

In March 2016 the BNB contributed USD 10,000 to support the Group of Thirty.

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

XII. Statistics

The BNB collects, compiles, and publishes statistical information under the Law on the Bulgarian National Bank Article 42 and the Statute of the ESCB and the ECB Article 5. 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 other users.

In 2016 the BNB continued introducing ESA 2010[92] and other new international statistical standards.

In monetary and interest rate statistics, the Bank continued collecting and disseminating MFI balance sheet data and information on deposits and loans broken down by quantitative categories and business, 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 August 2016 the BNB broadened the scope of interest rate statistics by publishing credit card interest and volumes to non-financial corporations and households on its website.

In 2016 the Bank continued gathering and publishing statistics on non-bank financial institutions including insurers and investment funds. In September the BNB began reporting broader insurance statistics to the ECB in line with Regulation ECB/201/50,[93] plus quarterly statistics on pension funds assets and liabilities.

Preparations to extend methodological guidelines and reporting forms in statistics on monetary and interest rates,[94] investment funds[95] and financial vehicle corporations engaged in securitisation transactions,[96] insurance companies,[97] and pension funds continued to satisfy additional statistical information user requirements and ESA 2010 implementation.

In connection with the regular data provision, work continued on controlling data for the ECB Register of Institutions and Affiliates Database (RIAD), and maintaining quality up to date information in it. The Register contains reference information on credit institutions, money market funds, financial vehicle corporations, investment funds, payment service providers and payment system operators, insurance companies, holding corporations, and head offices.

In 2016 work continued on improving the methodology for compiling balance of payments statistics to the requirements of the sixth edition of the Balance of Payments Manual. The scope, type, and timescales for statistical data submission in

[92] Regulation (EU) No 549/2013 of the European Parliament and of the Council on the European System of National and Regional Accounts in the European Union.

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

[94] 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.

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

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

[97] Council Regulation (EU) No 1374/2014.

BNB Ordinance No 27 on the Balance of Payments, International Investment Position, and Securities Statistics were amended.

Work continued on the ESCB Centralised Securities Database project and on compiling a Bulgarian securities database. As member of the ESCB, the BNB took part in the Securities Holdings Statistics project which is relevant to compiling other types of statistics and financial stability analyses.

On financial accounts, the BNB continued to compile data on the quarterly financial accounts of the general government sector, government finance statistics, and all sectors' quarterly financial accounts.[98]

In October 2016 the Bank included data on quarterly financial accounts by institutional sectors in the BNB website statistical database. In addition to the already published information on the general government sector quarterly financial accounts, data on other resident institutional sectors (and sector groupings) and the rest of the world sector were also added.

As Bulgarian coordinator on joining the IMF's new Special Data Dissemination Standard Plus (SDDS Plus), the BNB developed a National Summary Data Plus (NSDP Plus) and data dissemination forms. As data compiler for SDDS Plus categories, the Bank completed preparations to align its quarterly financial accounts data, debt securities statistics, and financial stability indicators with the standard. Following SDDS Plus accession on 31 May 2016, the Bank commenced regular updates of information published in NSDP Plus according to the data dissemination calendar.

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

In 2016 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 improved the quality and reliability of the statistical information published by the Bank.

[98] 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 2016 research focused on the factors behind domestic price dynamics, the relationship between inflation and cyclical position of the economy, the labour market, the effects of corporate indebtedness, modelling various banking system aspects, Bulgaria's foreign trade dynamics, fiscal policy, 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. The first half year saw the preparation of a baseline and adverse macroeconomic scenarios of the BNB for the purposes of the 2016 banking system stress test[99] and the development of an econometric model for assessing and forecasting the probability of default, the results of which were also used in conducting the banking system stress test.

In 2016 Research Plan implementation addressed labour cost setting mechanisms in non-financial corporations and relations between inflation, potential growth, and structural unemployment, as well as the impact of Bulgarian corporate debt on economic behaviour. Testing and honing the basic model for BNB macroeconometric forecasting continued to improve related BNB forecasting. Research results under BNB Research Plan were presented at seminars held by the Bank for experts from relevant bodies, academia, and non-governmental organisations and the final results were published in learned publications.

In 2016 the BNB continued to encourage the research potential of Bulgarian economic science and practice in the area of macroeconomics and finance through its Discussion Papers research series. The year saw five new submissions reviewed, of which two 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 Economic Review also carries quantitative assessments of anticipated developments in a set of key macroeconomic indicators. The results of BNB analyses of particular economic issues are presented briefly under special headings and dedicated topics. In 2016 major highlights included: the 10 March 2016 ECB monetary policy measures; the effects of ECB monetary policy on Bulgarian interest rates; macroeconomic scenarios for the purposes of the Bulgarian banking system stress test: comparison with the scenarios for the 2016 Stress Test in the EU and current macroeconomic developments in Bulgaria; Bulgaria's position in global value chains.

[99] See 28 April 2016 press release on stress testing Bulgarian banks (http://www.bnb.bg/bnbweb/groups/public/documents/bnb_pressrelease/pr_20160428_1_a2_en.pdf). See also Macroeconomic Scenarios for the Purposes of the Stress Test of the Banking System: Comparison with the Scenarios for the 2016 Stress Test in the EU and Current Macroeconomic Developments in Bulgaria in the Economic Review 3/2016, pp. 56–63.

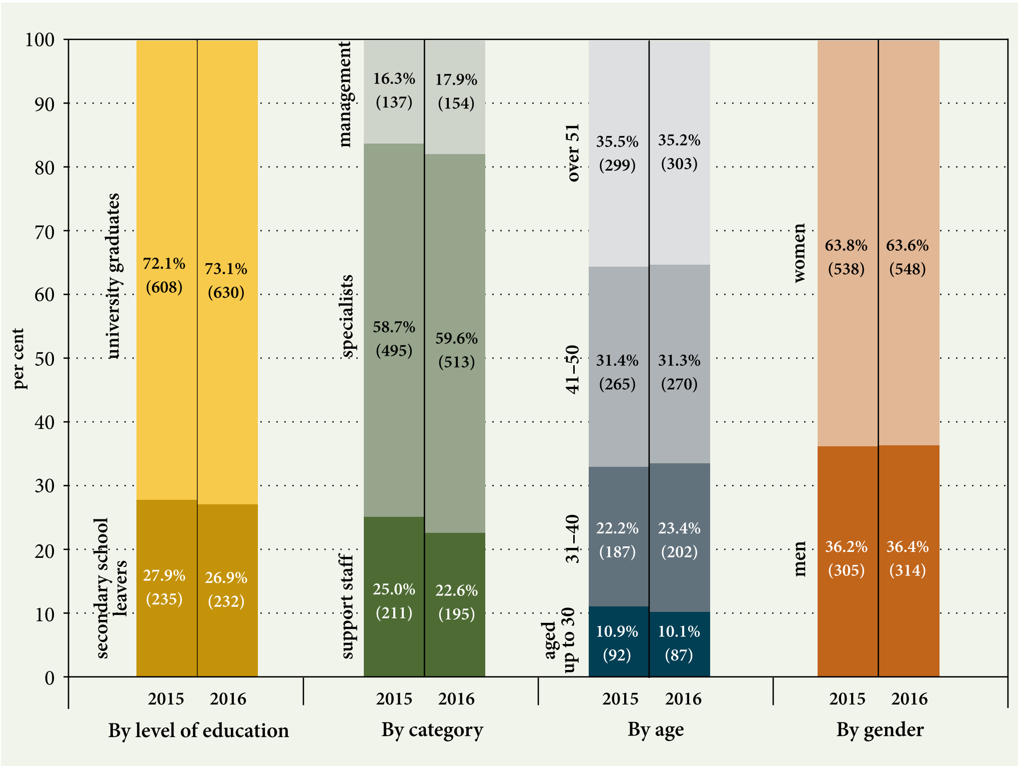
XIV. Human Resource Management

Creating a more competitive human resource management and development system was a key objective in 2016. Improving working conditions and providing a sociable environment to attract and keep qualified employees were also priorities. A review was carried out and measures outlined for developing the policy and employee assessment and adequate remuneration systems tailored to the performance of job responsibilities, results and statutory requirements.

At the end of 2016, there were 862 employees in the BNB from 843 a year earlier. Of these, 80 were recruited, from 52 in 2015. The BNB continued attracting candidates with relevant degrees as required by the policy of recruiting highly qualified staff to comply with the requirements of the institution. The year saw 19 vacancy notices, attracting 736 applicants. Sixty-four employees left, from 67 in 2015, and 14 retired, from 25 in 2015. Staff turnover decreased slightly to 7.4 per cent from 7.9 per cent in 2015.

Staff Structure on 31 December

(per cent, number)



Source: the BNB.

The year saw no significant changes to the staff structure. The share of university graduates rose insignificantly to 73.1 per cent (from 72.1 per cent in the previous year), of them 84.9 per cent with masters degrees and 11.1 per cent with baccalaureates. Twenty-five employees had doctorates, from 20 in 2015. In the structure of staff by category, specialists held the largest share at 59.5 per cent, followed by support staff and management. The share of employees between 31 and 40 rose by

1 percentage point, other age groups remaining practically unchanged. At the end of 2016 women were 63.6 per cent and men 36.4 per cent of staff.

Exchanges of experience across business areas and knowledge, and practical skill acquisition by moving between positions and units continued. Employees moving to other units or positions numbered 67 from 84 in 2015. Three BNB employees worked on ECB, ESCB national central banks, and EU short-term assignments.

Pay continued reflecting performance, and mechanisms for measuring employees' contributions to Bank tasks and goals improved over the year.

The annual schedule offered employees plentiful opportunities to take a variety of training and qualification boosting programmes like distance learning, professional courses and seminars in Bulgaria and abroad, language courses, information technology courses, and courses for specific responsibilities. Induction training 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, 22 employees, of whom seven reading for doctors', four for masters', and 11 for bachelors' degrees, boosted their educational attainments without discontinuing work. Five of them graduated, two with doctorates, two with masters' degrees, and one with a baccalaureate.

Over the year, a number of internal bank training sessions like seminars, and various other information exchanges were organised, related to issuing and cash operations, banking supervision, setting up and maintaining registers, and internal audit. Employees took specialised courses and seminars in Bulgaria in banking, financial and commercial law, novelties in social insurance and employment relations, public tender procedures, and audit techniques and instruments for preparing audit reports. Fourteen employees took part in five international certification training programmes. Certified financial analyst programmes attracted most participants. Three employees acquired certificates in internal audit in the public sector.

The BNB continued cooperating with the central banks of European countries and with a number of international financial institutions and training centres. Bank employees attended international courses, seminars, and conferences in banking supervision and financial stability, monetary policy and financial programming, payment and settlement systems, financial markets, assets management and market operations, issuing policy and cash operations, modelling and forecasting, accounting, audit and internal control.

Work on ensuring health and safety at work focused mainly on limiting occupational risks, awareness, training and motivating staff to discharge their duties safely and avoid health hazards.

The BNB continued providing career opportunities and encouraging students to deepen their research and academic knowledge. The annual scholarship programme for masters' and doctors' degree holders enjoyed greater interest. Two doctoral students received scholarships after a contest in early 2016. The Bank participated in two career fora at which it presented its recruitment and career development programmes to undergraduate and postgraduate students. The number of candidates in the traineeships programme exceeded 70, of whom 12 were approved.

XV. BNB Internal Audit

In 2016 there were nine audits: six under the annual Internal Audit Programme approved by the BNB Governing Council and three audits under the ESCB Internal Auditors Committee Programme.

Audits sought assurance of adequate and effective control, corporate governance, and risk management ensuring:

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

BNB Internal Audit Programme Audits

BNB Functions	Audits
Supervision and financial stability	Adequacy and efficiency of internal legal framework regulating bank supervisory processes and the Single Data Depository information system
Human resource management and social policy	Human resource management focusing on the BNB Staff Code of Ethics
Internal services	Execution of supply, works and services contracts
Information and communication technologies	The human resource management and wage system
Financial accounting and financial statements	BNB Consolidated Financial Statements as of 30 June 2016
Tracking performance	Follow-up on recommendations from past audits under the BNB Internal Audit Programme

Source: the BNB.

ESCB Internal Auditor Committee Programme audits focused on information and communication technologies and business continuity management. Implementation of past audit recommendations was monitored.

A plan to upgrade quality assurance software and revise the audit plan risk evaluation methodology and update risk level definition was developed and implemented over 2016. Audit management software was upgraded. Opinions were given on draft internal regulations on major BNB functions.

In 2016 the BNB Chief Auditor coordinated Internal Audit Unit work with external auditors and the Republic of Bulgaria Court of Auditors auditing team.

XVI. BNB Budget Implementation in 2016

The Governing Council adopted the BNB budget by Resolution No 115 of 26 November 2015. This report on the Bank's budget comprises two sections pursuant to the Governing Council Internal Rules on Drafting, Implementing, and Reporting the BNB Budget: BNB Operating Expenditure and Investment Programme.

BNB Operating Expenditure

In 2016 the BNB spent BGN 82,601,000 or 85.7 per cent of budget.

Currency circulation cost BGN 17,666,000 or 90.4 per cent of budget and 21.4 per cent of Bank's operating expenditure budgeted for the reporting period. New banknotes cost BGN 6,158,000 and minting BGN 11,007,000, of which BGN 10,417,000 on circulating coins. Commemorative coins cost BGN 590,000 in line with the BNB Governing Council 2016 Commemorative Coin Programme. New banknote and coin design cost BGN 23,000. Expenditure included funding five 2017 commemorative coin design competitions. Spending on machines for servicing circulating cash was BGN 107,000 and that on consumables for banknote and coin processing came to BGN 213,000. Premise rental at the Cash Services Company and the State Mint cost BGN 157,000.

Materials, services, and depreciation cost BGN 34,366,000: 81.5 per cent of budget and 41.6 per cent of Bank's operating expenditure. Materials cost BGN 833,000, led by vehicle fuel and spares (BGN 276,000) and office consumables (BGN 248,000). Inventories cost BGN 94,000.

External services cost BGN 20,446,000, led by software maintenance subscriptions (BGN 3,506,000), Bloomberg, Reuters, SWIFT, internet and other systems (BGN 1,096,000), mandatory TARGET2 (Trans-European Automated Real-time Gross settlement Express Transfer system for the euro) modules (BGN 1,026,000), and BORICA–Bankservice AD subscriptions (BGN 535,000). Consultancy services cost BGN 5,224,000, with BGN 5,027,000 spent on the bank asset quality review and stress tests. Equipment maintenance cost BGN 1,814,000. Property and refuse collection levies were BGN 1,326,000. Mail and telephony cost BGN 591,000 in line with the trend towards improving and updating the BNB voice services. Electric bills were BGN 937,000 and heating and water bills BGN 185,000. Property insurance cost BGN 113,000. The Bank spent BGN 1,436,000 on security and fire protection. Major building maintenance cost BGN 1,778,000.

In 2016 depreciation was BGN 13,087,000.

Payroll expenses, including social, and healthcare spending was BGN 25,239,000 or 94.5 per cent of budget funds for this item and 30.6 per cent of Bank's total operating expenditure for the reporting period. The BNB reported BGN 877,000 of current retirement obligations and unused paid leave under IAS 19, Income of Hired Persons.

Social expenditure was BGN 2,105,000 or 89.4 per cent of budget and 2.5 per cent of operating expenditure.

Other administrative expenses were BGN 973,000 or 42.3 per cent of budgeted funds and 1.2 per cent of BNB total operating expenditure. Inland travel worth BGN 79,000 involved mainly regional cash centre logistics and checks. Foreign travel unrelated to the participation in the ESCB and other EU bodies cost BGN 249,000. The annual BNB Staff Education and Professional Training Programme cost BGN 507,000. BNB employees took part in professional courses and seminars organised by EU central banks and international financial institutions. BNB employees participated in distant learning programmes, language courses, information technology courses and other forms of training at home and abroad.

The BNB spent BGN 2,252,000 on participation in the ESCB, or 65.0 per cent of budget and 2.7 per cent of operating expenditure. The annual European Banking Authority membership fee was BGN 1,254,000. BNB representatives sat on ESCB committees and working groups and other EU bodies, travel costing BGN 628,000 and training BGN 46,000. The annual Centralised Securities Database contribution was BGN 265,000. In 2016 hosting ESCB committee and working group meetings cost BGN 59,000.

The BNB Investment Programme

Expenditure on the Bank's investment programme in 2016 was BGN 8,194,000 or 39.8 per cent of annual budget.

To analyse priorities and increase the efficiency of investment expenditure, in 2016 an internal review of expenditure was carried out related to the development of BNB information systems and spending on construction, refurbishment, and modernisation, including BNB investment intents to participate in the project for constructing a new cash centre in Plovdiv.

Budget funds under the Bank's investment programme were not fully utilised due to a change in priorities and prioritising computerisation projects intended to optimise the architecture of bank information systems. Some procurement procedures were terminated or suspended without contract. An additional assessment of participants' investment intentions in the joint project of the BNB and BORICA–Bankservice AD for design and construction of cash and information centre in Plovdiv was made. As a result, design specifications were changed which led to postponing the implementation of the project for 2017.

The Bank spent BGN 1,359,000 on construction and modernisation. These expenses include a purchase of a regulated landed estate of BGN 1,002,000 for the construction of the cash centre in Plovdiv, and BGN 302,000 was paid on construction of the roof and the tower of the BNB Cash Centre building in Pleven.

Machine and equipment, vehicle, and other equipment investment came to BGN 269,000 in 2016. Cash operations equipment cost BGN 31,000, including: fitting M-sensors on two Cash Services Company handling machines, fitting two *Scan Coin* sorters and a *SELEX* wrapper, and metal container transporters. The BNB spent BGN 190,000 on purchasing other equipment, including: BGN 84,000 on replacing the BNB main building power substation; BGN 82,000 on supply and installation of air-conditioners and BGN 24,000 on office equipment and equipment for Bank's rest homes. Expansion of security systems in the BNB premises cost BGN 49,000.

Funds invested into information systems totalled BGN 6,566,000, or 48.9 per cent of annual budget and 80.1 per cent of total investment expenditure at the end of the reporting period. Funds went mostly into keeping BNB information and communication technology infrastructure modern.

Hardware expenditure was BGN 4,803,000 and went mainly on computer and communications equipment for updating and expanding the existing systems, as well as for their back-up. Software cost BGN 1,763,000 for licence purchases (BGN 372,000) and functionality expansions (BGN 1,391,000).

The BNB budget implementation and utilisation of funds under the two sections were strictly monitored.

BNB Budget Implementation as of 31 December 2016

Indicators	Report 31 December 2016 (BGN'000)	Budget 2016 (BGN'000)	Implementation (per cent)
Section I. Operating expenditure	**82 601**	**96 511**	**85.6**
Currency circulation	17 666	19 533	90.4
Materials, services, and depreciation	34 366	42 161	81.5
Staff	25 239	26 699	94.5
Social activities	2 105	2 355	89.4
Other administrative expenditure	973	2 301	42.3
ESCB membership	2 252	3 462	65.0
Section II. Investment programme	**8 194**	**20 605**	**39.8**
Construction, refurbishment, and modernisation	1 359	5 824	23.3
Expenditure on machines, equipment, vehicles, and other equipment	269	1 356	19.8
Expenditure on BNB computerisation	6 566	13 425	48.9
Investment related to ESCB membership	-	-	-

Source: the BNB.

XVII. Bulgarian National Bank Consolidated Financial Statements for the Year Ended 31 December 2016

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Independent auditor's report

To the Governing Council of
Bulgarian National Bank

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of Bulgarian National Bank and its subsidiaries, which comprise the consolidated statement of financial position as at 31 December 2016, 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 notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Bulgarian National Bank as at 31 December 2016, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Bulgarian National Bank in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)* together with the ethical requirements of the Independent Financial Audit Act (IFAA) that are relevant to our audit of the consolidated financial statements in Bulgaria, and we have fulfilled our other ethical responsibilities in accordance with the requirements of the IFAA and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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Information Other than the Consolidated Financial Statements and Auditor's Report Thereon

Management is responsible for the other information. The other information comprises the consolidated management report, prepared by management in accordance with Chapter Seven of the Accountancy Act and the Law on the Bulgarian National Bank, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon, unless and to the extent explicitly specified in our report.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of Management for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is responsible for assessing the Bulgarian National Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

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Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

Report on Other Legal and Regulatory Requirements

Additional Matters to be Reported under the Accountancy Act

In addition to our responsibilities and reporting in accordance with ISAs, described above in the *Information Other than the Consolidated Financial Statements and Auditor's Report Thereon* section, in relation to the consolidated management report, we have also performed the procedures added to those required under ISAs in accordance with the Guidelines of the professional organisation of certified public accountants and registered auditors in Bulgaria, i.e. the Institute of Certified Public Accountants (ICPA), issued on 29 November 2016 / approved by its Management Board on 29 November 2016. These procedures refer to testing the existence, form and content of this other information to assist us in forming an opinion about whether the other information includes the disclosures and reporting provided for in Chapter Seven of the Accountancy Act applicable in Bulgaria.

Opinion in connection with Art. 37, paragraph 6 of the Accountancy Act

Based on the procedures performed, our opinion is that:

a) The information included in the consolidated management report referring to the financial year for which the consolidated financial statements have been prepared is consistent with those consolidated financial statements.
b) The consolidated management report has been prepared in accordance with the requirements of Chapter Seven of the Accountancy Act and the Law on the Bulgarian National Bank.

Audit Firm Ernst & Young Audit OOD:

Nikolay Garnev, CPA
Registered Auditor
Partner
Ernst & Young Audit OOD

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

13, April 2017
Sofia, Bulgaria

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

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

The financial statements of the Bulgarian National Bank approved by the 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 2016

(BGN'000)

	Note	2016	2015
Interest income	7	398,031	404,238
Interest expense	7	(22 278)	(6 802)
Net interest income		**375,753**	**397,436**
Fee and commission income		9,727	9,457
Fees and commission expense		(5 228)	(4 866)
Net fee and commission income		**4,499**	**4,591**
Net gains/(losses) from financial assets and liabilities at fair value through profit or loss	8	72,435	(419 974)
Other operating income	9	41,717	42,303
Total income from banking operations		**494,404**	**24,356**
Administrative expenses	10	(109 480)	(107 038)
Profit/(loss) for the period		**384,924**	**(82 682)**
Other comprehensive income			
Other comprehensive income that can be reclassified into profit or loss at a future point in time		-	-
Other comprehensive income that cannot be reclassified into profit or loss at a future point in time		*(18)*	*1,110*
Other comprehensive income, total		**(18)**	**1,110**
Total comprehensive income for the period		**384,906**	**(81 572)**
Profit attributable to:			
Equity holder of the Bank		384,747	(82 862)
Non-controlling interest		177	180
Profit/(loss) for the period		**384,924**	**(82 682)**
Total comprehensive income attributable to:			
Equity holder of the Bank		384,729	(81 752)
Non-controlling interest		177	180
Total comprehensive income for the period		**384,906**	**(81 572)**

The accompanying notes on pages 101 to 133 form an integral part of the Consolidated Financial Statements.

Consolidated Statement of Financial Position as of 31 December 2016

(BGN'000)

	Note	31 December 2016	31 December 2015
ASSETS			
Cash and deposits in foreign currency	11	14,783,663	10,881,166
Gold, instruments in gold and other precious metals	12	2,822,205	2,504,516
Financial assets at fair value through profit or loss	13	28,928,706	26,238,186
Financial assets available for sale	14	2,293,978	1,647,810
Tangible assets	15	165,285	172,664
Intangible assets	16	4,237	4,289
Other assets	17	82,040	98,193
Total assets		**49,080,114**	**41,546,824**
LIABILITIES			
Banknotes and coins in circulation	18	14,152,921	12,724,818
Liabilities to banks and other financial institutions	19	14,670,285	14,860,012
Liabilities to government institutions and other liabilities	20	11,800,095	6,577,074
Borrowings against Bulgaria's participation in international financial institutions	21	3,515,099	3,021,397
Other liabilities	22	357,419	143,437
Total liabilities		**44,495,819**	**37,326,738**
EQUITY			
Capital	23	20,000	20,000
Reserves	23	4,559,518	4,195,486
Non-controlling interest	24	4,777	4,600
Total equity		**4,584,295**	**4,220,086**
Total liabilities and equity		**49,080,114**	**41,546,824**

The accompanying notes on pages 101 to 133 form an integral part of the Consolidated Financial Statements.

Consolidated Statement of Cash Flows for the Year Ended 31 December 2016

(BGN'000)

	Note	2016	2015
OPERATING ACTIVITIES			
Net profit/(loss)		408,448	(79,161)
Adjustments			
Dividend income	9	(31,394)	(10,165)
Depreciation and amortisation	15, 16	16,642	18,211
Profit/(loss) on disposal of tangible assets		373	(137)
(Loss)/profit on financial assets and liabilities arising from market movements		(382,419)	204,965
Profit/(loss) of associates		279	(1,387)
Other adjustments		(1,180)	(421)
Net cash flow from operating activities before changes in operating assets and liabilities		**10,749**	**131,905**
Change in operating assets			
(Increase) in gold, instruments in gold and other precious metals		(7,341)	(8,539)
(Increase) in financial assets at fair value through profit or loss		(2,611,616)	(3,094,853)
(Increase) in financial assets available for sale			
– Republic of Bulgaria's quota in the IMF		(628,992)	-
(Increase) in other assets		(2,970)	(4,787)
Change in operating liabilities			
Increase in currency in circulation		1,428,103	1,137,875
(Decrease)/increase in due to banks and other financial institutions		(189,727)	6,734,956
Increase/(decrease) in due to government institutions and other liabilities		5,223,021	(450,435)
Increase in debt to international financial institutions for the increase of the Republic of Bulgaria's quota in the IMF		469,532	-
Increase/(decrease) in other liabilities		213,982	(46,402)
Net cash flow from/(used in) operating activities		**3,904,741**	**4,399,720**
INVESTMENT ACTIVITIES			
Acquisition of tangible and intangible assets		(9,597)	(12,105)
Dividends received		7,870	6,644
Other investments		-	-
Net cash flow (used in) investing activities		**(1,727)**	**(5,461)**
FINANCING ACTIVITIES			
Payments to the state budget		(19,640)	(48,564)
Net cash flow (used in) financing activities		**(19,640)**	**(48,564)**
Net increase in cash and cash equivalents		**3,883,374**	**4,345,695**
Cash and cash equivalents at beginning of period		**10,951,676**	**6,605,981**
Cash and cash equivalents at end of period	11, 17	**14,835,050**	**10,951,676**
Cash flows from interest and dividends			
Interest received		394,965	375,145
Interest paid		(17,704)	(6,400)

The accompanying notes on pages 101 to 133 form an integral part of the Consolidated Financial Statements.

Consolidated Statement of Changes in Equity for the Year Ended 31 December 2016

(BGN'000)

	Capital	Revaluation of non-monetary assets	Special and other reserves	Total capital and reserves	Non-controlling interest	Total equity
Balance as at 1 January 2015	**20,000**	**134,979**	**4,190,981**	**4,345,960**	**4,420**	**4,350,380**
Profit/(loss) for the period	-	-	(82,862)	(82,862)	180	**(82,682)**
Other comprehensive income:						
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)**
Dividend paid by subsidiaries to minority shareholders	-	-	(158)	(158)	-	**(158)**
Transactions with owners, total	-	-	(48,722)	(48,722)	-	**(48,722)**
Balance as at 31 December 2015	**20,000**	**136,336**	**4,059,150**	**4,215,486**	**4,600**	**4,220,086**
Balance as at 1 January 2016	**20,000**	**136,336**	**4,059,150**	**4,215,486**	**4,600**	**4,220,086**
Profit for the period	-	-	384,747	384,747	177	**384,924**
Other comprehensive income:						
other income	-	79	(97)	(18)	-	**(18)**
Other comprehensive income, total	-	79	(97)	(18)	-	**(18)**
Total comprehensive income for the period	-	79	384,650	384,729	177	**384,906**
Contributions by and distributions to owners:						
contribution to the budget of the Republic of Bulgaria	-	-	(19,640)	(19,640)	-	**(19,640)**
Dividend paid by subsidiaries to minority shareholders	-	-	(1,057)	(1,057)	-	**(1,057)**
Transactions with owners, total	-	-	(20,697)	(20,697)	-	**(20,697)**
Balance as at 31 December 2016	**20,000**	**136,415**	**4,423,103**	**4,579,518**	**4,777**	**4,584,295**

The accompanying notes on pages 101 to 133 form an integral part of the Consolidated Financial Statements.

Notes to the Consolidated Financial Statements

1. Statute and Principal Activities

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

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

- Maintaining price stability through ensuring national currency stability;
- Exclusive right to issue banknotes and coins;
- Regulation and supervision of other banks' activities in the country with a view to banking system stability maintenance;
- Establishment and operation of efficient payment systems;
- Regulation and supervision of the activity of payment system operators, payment institutions and electronic money institutions in the country;
- The Bank shall not extend credit and guarantees in any form whatsoever, including through 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 91 to 133 on 13 April 2017.

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
Financial assets available for sale	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 2016:

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

The amendments 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. The amendments have no effect on the financial position or performance of the Bank.

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

The amendment 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. The Bank had no transactions in scope of this amendment.

Annual Improvements to IFRSs 2010–2012 Cycle

Summary of amendments and related standards are provided as follows:

IFRS 2 Share-based Payments – amended definitions of 'vesting conditions' and 'market conditions' and added the definitions of 'performance condition' and 'service condition';

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

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. The amendments have no effect on the financial position or performance of the Bank.

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

The amendments to IAS 1 Presentation of Financial Statements further encourage companies to apply professional judgement 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 amendments have no effect on the financial position or performance of the Bank.

IAS 27 Separate Financial Statements (amendment)

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. The amendment has no effect on the financial position or performance of the Bank.

- 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 total 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 amendments as IAS 16 above.

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

Annual Improvements to IFRSs 2012–2014 Cycle

Summary of amendments and related standards are provided as follows:

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 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.

Associates

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 currency.

(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 or, 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

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.

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 investments are carried at fair value.

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

(c) Gold and other precious metals

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

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

(d) Equity investments

For the purposes of measuring the equity investments subsequent to initial recognition, they are classified as 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 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 currency are translated to BGN at the official rates of exchange on the transaction date. Monetary assets and liabilities denominated in foreign currency 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 2016 and 31 December 2015 are as follows:

Currency	31 December 2016	31 December 2015
US dollar	1 : BGN 1.85545	1 : BGN 1.79007
Euro	1 : BGN 1.95583	1 : BGN 1.95583
Special drawing rights	1 :BGN 2.49434	1 : BGN 2.48258
Gold	1 troy ounce : BGN 2148.21	1 troy ounce: BGN 1911.36

(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.

(j) Cash in hand and deposits in foreign currency

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

(j) Employee benefits

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

Termination benefits

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

Short-term employee benefits

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

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

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

IFRS 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 been yet endorsed by the EU. The Bank will analyse and assess the impact of the new standard on its future financial position or performance.

IFRS 15 Revenue from Contracts with Customers

The standard is effective for annual periods beginning on or after 1 January 2018 with earlier application permitted. IFRS 15 establishes a five-step model that will apply to revenue earned from a contract with a customer (with limited exceptions), regardless of the type of 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; changes in contract asset and liability account balances between periods and key judgements and estimates. The Bank will analyse and assess the impact of the new standard on its financial position or performance.

IFRS 15 Revenue from Contracts with Customers (Clarifications)

The clarifications apply for annual periods beginning on or after 1 January 2018, with earlier application permitted. The objective of the clarifications is to clarify the IASB's intentions when developing the requirements in IFRS 15 Revenue from Contracts with Customers, particularly the accounting of identifying performance obligations amending the wording of the 'separately identifiable' principle, of principal versus agent considerations including the assessment of whether an entity is a principal or an agent as well as applications of control principle and of licensing providing additional guidance for accounting of intellectual property and royalties. The clarifications also provide additional practical expedients for entities that either apply IFRS 15 fully retrospectively or that elect to apply the modified retrospective approach. These clarifications have not yet been endorsed by the EU. The Bank will analyse and assess the impact of these clarifications 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 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, *i.e.* the customer (lessee) and the supplier (lessor). IFRS 16 requires lessees to recognise most leases on their balance sheet and to have a single accounting model for all leases, with certain exemptions. Lessor accounting is substantially unchanged. The standard has not been yet endorsed by the EU. The Bank will analyse and assess the impact of the new standard on its financial position or performance.

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

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

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 earlier application permitted. The objective of these amendments is to clarify the accounting for deferred tax assets for unrealised losses in order to address diversity in practice in the application of IAS 12 Income Taxes. The specific issues where diversity in practice existed relate to the existence of a deductible temporary difference upon a decrease in fair value, to recovering an asset for more than its carrying amount, to probable future taxable profit and to combined versus separate assessment. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would be relevant to the Bank's financial statements.

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.

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

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

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

The amendments are effective for annual periods beginning on or after 1 January 2018. The objective of these amendments is to address issues arising from the different effective dates of IFRS 9 Financial Instruments and the upcoming new insurance contracts standard IFRS 17 Insurance Contracts. Entities issuing insurance contracts will still be able to adopt IFRS 9 on 1 January 2018. The amendments introduce two alternative options for entities issuing contracts within the scope of IFRS 4, notably a temporary exemption and an overlay approach. The temporary exemption enables eligible entities to defer the implementation date of IFRS 9. The overlay approach allows an entity applying IFRS 9 from 2018 onwards to remove from profit or loss the effects of some of the accounting mismatches that may occur from applying IFRS 9 before IFRS 17 is applied. These amendments have not yet been endorsed by the EU. It is not expected that these amendments would be relevant to the Bank.

IFRIC 22 Foreign Currency Transactions and Advance Consideration

The interpretation is effective for annual periods beginning on or after 1 January 2018 with earlier application permitted. This interpretation addresses how to determine the date of the transaction for the purpose of determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency. The interpretation has not yet been endorsed by the EU. The Bank will analyse and assess the impact of the new interpretation on its financial position or performance.

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

The amendments are effective for annual periods beginning on or after 1 January 2018, with earlier application permitted. The amendments clarify transfers of property to, or from, investment property when there is a change in the use of such property which is supported by evidence. 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 2014–2016 Cycle

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

IFRS 1 First-time Adoption of International Financial Reporting Standards: deletion of short-term exemptions for first-time adopters (effective for annual periods beginning on or after 1 January 2018);

IFRS 12 Disclosure of Interests in Other Entities: clarification of the scope of the Standard (effective for annual periods beginning on or after 1 January 2017), and

IAS 28 Investments in Associates and Joint Ventures: measuring an associate or joint venture at fair value (effective for annual periods beginning on or after 1 January 2018).

The improvements to IFRSs 2014–2016 Cycle have not yet been endorsed by EU. The Bank will analyse and assess the impact of the amendments on its financial statements.

6. Financial risk management policy disclosure

(a) Introduction and overview

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

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

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

General provisions of risk management

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

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

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

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

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

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

(c) Liquidity risk

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

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

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

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

(BGN'000)

	Up to 1 month	From 1 to 3 months	From 3 months to 1 year	From 1 to 5 years	Over 5 years	Undefined maturity	Total
As of 31 December 2016							
Financial assets							
Cash and deposits in foreign currency	13,225,289	907,472	650,902	-	-	-	14,783,663
Gold, instruments in gold and other precious metals	1,139,949	1,682,256	-	-	-	-	2,822,205
Financial assets at fair value through profit or loss	1,185,358	2,436,966	6,902,621	13,940,161	4,463,600	-	28,928,706
Financial assets available for sale	244,760	-	-	-	-	2,049,218	2,293,978
Other assets	18,246	33,114	-	-	-	-	51,360
Total financial assets	**15,813,602**	**5,059,808**	**7,553,523**	**13,940,161**	**4,463,600**	**2,049,218**	**48,879,912**
Financial liabilities							
Banknotes and coins in circulation	-	-	-	-	-	14,152,921	14,152,921
Due to banks and other financial institutions	14,670,285	-	-	-	-	-	14,670,285
Liabilities to government institutions and other borrowings	1,712,660	4,399,265	5,688,170	-	-	-	11,800,095
Borrowings against Bulgaria's participation in international financial institutions	-	-	-	-	-	3,515,099	3,515,099
Total financial liabilities	**16,382,945**	**4,399,265**	**5,688,170**	**-**	**-**	**17,668,020**	**44,138,400**
Asset-liability maturity mismatch	**(569,343)**	**660,543**	**1,865,353**	**13,940,161**	**4,463,600**	**(15,618,802)**	**4,741,512**
As of 31 December 2015							
Financial assets							
Cash and deposits in foreign currency	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	-	-	-	-	-	14,860,012
Liabilities to government institutions and other borrowings	3,364,990	21,514	3,190,570	-	-	-	6,577,074
Borrowings against Bulgaria's participation in international financial institutions	-	-	-	-	-	3,021,397	3,021,397
Total financial liabilities	**18,225,002**	**21,514**	**3,190,570**	**-**	**-**	**15,746,215**	**37,183,301**
Asset-liability maturity mismatch	**(7,779,715)**	**4,181,845**	**5,252,513**	**13,567,597**	**2,108,312**	**(13,168,689)**	**4,158,863**

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

(BGN'000)

	Book value	Gross nominal outgoing cash flow	Up to 1 month	From 1 to 3 months	From 3 months to 1 year	From 1 to 5 years	Over 5 years
As of 31 December 2016							
Banknotes and coins in circulation	14,152,921	14,152,921	-	-	-	-	14,152,921
Due to banks and other financial institutions	14,670,285	14,670,285	14,670,285	-	-	-	-
Liabilities to government institutions and other borrowings	11,800,095	11,796,652	1,712,660	4,399,299	5,684,693	-	-
Borrowings against Bulgaria's participation in international financial institutions	3,515,099	3,515,099	-	-	-	-	3,515,099
	44,138,400	**44,134,957**	**16,382,945**	**4,399,299**	5,684,693	-	**17,668,020**
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**

(d) Market risk

Market risk

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

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

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

(BGN'000)

	As of 31 December 2016	Average	Maximum	Minimum
Currency risk	(26,878)	(28,539)	(51,037)	(9,456)
Interest rate risk	(16,146)	(11,870)	(23,182)	(2,470)
Correlation (per cent)	0.40	0.33	0.90	0.01
Overall risk	**(36,097)**	**(35,740)**	**(60,966)**	**(17,401)**

	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)**

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 one 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)

	Total	Floating rate instruments	Fixed rate instruments		
			Up to 1 month	From 1 to 3 months	Over 3 months
As of 31 December 2016					
Interest-earning assets					
Cash and deposits in foreign currency	14,588,581	1,995,820	11,033,578	907,892	651,291
Gold, instruments in gold and other precious metals	1,681,530	-	-	1,681,530	-
Financial assets at fair value through profit or loss	29,096,173	68,446	1,195,920	2,446,452	25,385,355
Financial assets available for sale	244,760	-	244,760	-	-
Other interest-earning assets	51,360	14,226	4,020	33,114	-
Total	**45,662,404**	**2,078,492**	**12,478,278**	**5,068,988**	**26,036,646**
Interest-bearing liabilities					
Due to banks and other financial institutions	14,670,285	-	14,670,285	-	-
Liabilities to government institutions and other borrowings	10,170,026	-	82,000	4,399,586	5,688,440
Borrowings against Bulgaria's participation in international financial institutions	1,523,731	1,523,731	-	-	-
Total	**26,364,042**	**1,523,731**	**14,752,285**	**4,399,586**	**5,688,440**
Interest-bearing asset/liability gap	**19,298,362**	**554,761**	**(2 274 007)**	**669,402**	**20,348,206**
As of 31 December 2015					
Interest-earning assets					
Cash and deposits in foreign currency	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 asset/liability gap	**18,998,610**	**372,602**	**(6 429 559)**	**4,181,342**	**20,874,225**

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

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

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

(BGN'000)

	100 b.p. intraday instant parallel increase	100 b.p. intraday instant parallel decrease	50 b.p. parallel increase in the beginning of the period	50 b.p. parallel decrease in the beginning of the period
As of 31 December 2016	(734,510)	734,510	(329,892)	(12,338)
As of 31 December 2015	(534,235)	534,235	(151,252)	31,199

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 currency 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 2016	31 December 2015
Assets		
Bulgarian lev and euro	42,298,587	35,748,097
US dollar	209,554	193,102
Japanese yen	93	170
Pound sterling	300	256
SDR	3,786,748	3,132,609
Gold	2,784,379	2,470,755
Other	453	1,835
	49,080,114	41,546,824
Liabilities, capital and reserves		
Bulgarian lev and euro	45,195,831	38,328,006
US dollar	206,925	191,940
Japanese yen	1	1
Pound sterling	-	45
SDR	3,676,477	3,022,929
Other	880	3,903
	49,080,114	41,546,824
Net position		
Bulgarian lev and euro	(2,897,444)	(2,579,909)
US dollar	2,629	1,162
Japanese yen	92	169
Pound sterling	300	211
SDR	110,271	109,680
Gold	2,784,379	2,470,755
Other	(427)	(2,068)

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

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

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

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

(BGN'000)

	Level 1: Quoted market prices on active markets	**Level 2:** Valuation techniques using market data)	Total
31 December 2016			
Cash and deposits in foreign currency	14,783,663	-	14,783,663
Gold, instruments in gold and other precious metals	2,822,205	-	2,822,205
Financial assets at fair value through profit or loss	28,840,698	88,008	28,928,706
Total	**46,446,566**	**88,008**	**46,534,574**
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**

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 in active markets	**Level 2** Observable inputs other than quoted prices	Total
31 December 2016			
Due to banks and other financial institutions	-	14,670,285	14,670,285
Liabilities to government institutions and other borrowings	-	11,800,095	11,800,095
Borrowings against Bulgaria's participation in international financial institutions	-	3,515,099	3,515,099
Total	-	**29,985,479**	**29,985,479**
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**

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 Bulgaria's participation in international financial institutions is approximately equal to their reporting value as they are interest-free and of no definite maturity.

g) Maturity structure of assets and liabilities

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

(BGN'000)

	Up to 1 month	From 1 to 3 months	From 3 months to 1 year	From 1 to 5 years	Over 5 years	Undefined maturity	Total
As of 31 December 2016							
Financial assets							
Cash and deposits in foreign currency	13,225,289	907,472	650,902	-	-	-	14,783,663
Gold, instruments in gold and other precious metals	1,139,949	1,682,256	-	-	-	-	2,822,205
Financial assets at fair value through profit or loss	1,185,358	2,436,966	6,902,621	13,940,161	4,463,600	-	28,928,706
Financial assets available for sale	244,760	-	-	-	-	2,049,218	2,293,978
Tangible assets	-	-	-	-	-	165,285	165,285
Intangible assets	-	-	-	-	-	4,237	4,237
Other assets	18,246	33,114	-	-	-	30,680	82,040
Total financial assets	**15,813,602**	**5,059,808**	**7,553,523**	**13,940,161**	**4,463,600**	**2,249,420**	**49,080,114**
Financial liabilities							
Banknotes and coins in circulation	-	-	-	-	-	14,152,921	14,152,921
Due to banks and other financial institutions	14,670,285	-	-	-	-	-	14,670,285
Liabilities to government institutions and other borrowings	1,712,660	4,399,265	5,688,170	-	-	-	11,800,095
Borrowings against Bulgaria's participation in international financial institutions	-	-	-	-	-	3,515,099	3,515,099
Other liabilities	-	-	-	-	-	357,419	357,419
Total financial liabilities	**16,382,945**	**4,399,265**	**5,688,170**	**-**	**-**	**18,025,439**	**44,495,819**
Asset-liability maturity mismatch	**(569,343)**	**660,543**	**1,865,353**	**13,940,161**	**4,463,600**	**(15,776,019)**	**4,584,295**
As of 31 December 2015							
Financial assets							
Cash and deposits in foreign currency	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
Tangible assets	-	-	-	-	-	172,664	172,664
Intangible assets	-	-	-	-	-	4,289	4,289
Other assets	15,973	5,438	49,075	-	-	27,707	98,193
Total financial assets	**10,445,287**	**4,203,359**	**8,443,083**	**13,564,597**	**2,108,312**	**2,782,186**	**41,546,824**
Financial liabilities							
Banknotes and coins in circulation	-	-	-	-	-	12,724,818	12,724,818
Due to banks and other financial institutions	14,860,012	-	-	-	-	-	14,860,012
Liabilities to government institutions and other borrowings	3,364,990	21,514	3,190,570	-	-	-	6,577,074
Borrowings against Bulgaria's participation in international financial institutions	-	-	-	-	-	3,021,397	3,021,397
Other liabilities	-	-	-	-	-	143,437	143,437
Total financial liabilities	**18,225,002**	**21,514**	**3,190,570**	**-**	**-**	**15,889,652**	**37,326,738**
Asset-liability maturity mismatch	**(7,779,715)**	**4,181,845**	**5,252,513**	**13,564,597**	**2,108,312**	**(13,107,466)**	**4,158,863**

7. Interest Income and Expense

(BGN'000)

	2016	2015
Interest income		
– securities	364,439	394,676
– deposits	33,590	9,560
– other	2	2
	398,031	404,238
Interest expense		
– deposits	22,278	6,796
– other	-	6
	22,278	6,802

As of 31 December 2016 interest expenses paid on government deposits in foreign currency amounted to BGN 393 thousand (compared to BGN 59 thousand as of 31 December 2015).

As of 31 December 2016 interest paid on deposits of other organisations in foreign currency amounted to BGN 14 thousand (as of 31 December 2015 no interest payments had been made on deposits of other organisations in lev and in foreign currency).

Interest expenses paid on deposits include interest paid of BGN 16,578 thousand (31 December 2015: BGN 5690 thousand) on deposits with foreign correspondent banks as a result of using negative reference interest rates.

In addition BGN 802 thousand (31 December 2015: BGN 225 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 reporting period the interest rate was fixed at -0.40 per cent.

8. Net Gains/(Losses) from Financial Assets and Liabilities Entered at Fair Value in the Profit or Loss

(BGN'000)

	2016	2015
Net (losses) from operations in securities	(317,960)	(309,280)
Net gains from operations in foreign currency	767	622
Net revaluation gains/(losses) on futures	86	(226)
Net revaluation gains/(losses) on securities	78,904	(116,992)
Net revaluation gains on foreign currency assets and liabilities	290	5,214
Net revaluation gains on gold	310,348	688
	72,435	(419,974)

Net losses from financial assets and liabilities carried at fair value through profit or loss as at 31 December 2016 are largely attributable to operation with securities of BGN 317,960 thousand. The main factor is the lower market yields on securities from their coupon yield which led to trades at premium above their face value.

During the period the market yield on the securities in which the BNB primarily invested was highly volatile and with mixed movements between issuers, maturity sectors and quarters. Overall, during the year the yield on short-term securities decreased between 30 and 42 basis points and between 30 and 57 basis points in long-term ones. The net effect from revaluation of securities resulting from these movements was positive: BGN 78,904 thousand.

As of 31 December 2016 the profit from revaluation of gold amounted to BGN 310,348 thousand due to an increase in the market price of gold denominated in euro of about 12 per cent: from BGN 1911.36 *per* troy ounce as of 31 December 2015 to BGN 2148.21 as of 31 December 2016.

9. Other Operating Income

(BGN'000)

	2016	2015
Income from subsidiaries	31,744	31,001
Income from associates	(279)	1,387
Income from sale of coins	781	737
Dividend income	7,870	6,644
Other income, net	1,601	2,534
	41,717	42,303

Dividend income includes dividends from BNB's participation in: the BIS Basel amounting to BGN 4239 thousand, BORICA-Bankservice of BGN 3453 thousand, and the Cash Service Company AD of BGN 178 thousand.

In 2016 the BNB received a dividend payment of BGN 23,524 thousand from its participation in the BNB Printing Works AD which is eliminated for the purpose of the consolidated financial statements.

The other net income includes financial income from subsidiaries of BGN 322 thousand, income from reallocated remuneration from the ECB in relation to TARGET2 of BGN 888 thousand, rental income of BGN 301 thousand, and other income of BGN 90 thousand.

10. General Administrative Expenses

(BGN'000)

	2016	2015
Staff expenditure	34,718	32,199
Administrative expenses	54,877	53,289
Depreciation	16,642	18,211
Other expenses	3,243	3,339
	109,480	107,038

The number of employees of the Bank and its subsidiaries is 1142 as of 31 December 2016 (31 December 2015: 1134), including the BNB staff of 862 (31 December 2015: 843).

Staff expenditure include salaries, social and health insurance costs charged under the local legislation provisions as of 31 December 2016, and social activities costs, respectively for the BNB: BGN 27,344 thousand (31 December 2015: BGN 25,294 thousand), for the BNB Printing Works AD: BGN 4596 thousand (31 December 2015: BGN 4273 thousand), and for the Bulgarian Mint EAD: BGN 2778 thousand (31 December 2015: BGN 2632 thousand).

Staff expenditure include expenses for remunerations paid to the BNB Governing Council members of BGN 1209 thousand for 2016 (31 December 2015: BGN 1041 thousand), presented, as follows:

(BGN'000)

	2016	2015
Total gross remuneration expenses*	1,161	940
including bonuses up to established threshold in accordance with Article 23, paragraph 3 of the LBNB with BNB Governing Council's resolution of 30 July 2015**	350	252
Expenses for BNB Governing Council members' retirement/termination benefits	48	101
Total gross remuneration paid to the BNB Governing Council members	1,209	1,041

* Remunerations are before tax.

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

In accordance with the BNB Governing Council's resolution 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's 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 877 thousand (31 December 2015: BGN 719 thousand). The retirement and unused paid annual leave compensations for the Bank's subsidiaries as of 31 December 2016 are BGN 212 thousand (31 December 2015: BGN 151 thousand).

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

(BGN'000)

	2016	2015
Defined benefit liabilities as of 1 January	**2,424**	**2,178**
Plan benefits paid	(212)	(354)
Current service costs	292	227
Interest costs	51	60
Re-measurements	-	60
Actuarial (gain)/loss arising from experience adjustment	(78)	19
Actuarial (gain) arising from change in demographic assumptions	(34)	-
Actuarial loss arising from change in financial assumptions	156	231
Actuarial gains recognised in expenses	3	3
Defined benefit liabilities as of 31 December	**2,602**	**2,424**

Costs carried through profit or loss

(BGN'000)

	2016	2015
Current service costs	292	227
Interest costs	51	60
Actuarial losses	3	3
Re-measurements	-	60
Total	346	350

Actuarial Assumptions

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

(per cent)

	2016	2015
Discount interest rate as of 31 December	1.4	1.82
Future salary growth	4.5	3.50

Distribution of BNB staff liabilities (subsidiaries excluded) by residual term	2016	2015
Up to 1 year	353	179
From 1 to 3 years	433	349
From 3 to 5 years	247	288
From 5 to 10 years	301	381
Over ten years	561	538
Total	**1,895**	**1,735**

Administrative expenses include BNB's currency circulation expenses of BGN 17,666 thousand as of 31 December 2016 (31 December 2015: BGN 19,338 thousand).

11. Cash and Deposits in Foreign Currency

(BGN'000)

	31 December 2016	31 December 2015
Cash in foreign currency	196,351	217,335
Current accounts in other banks	1,991,946	1,789,066
Deposits in foreign currency	12,595,366	8,874,765
	14,783,663	10,881,166

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

(BGN'000)

	31 December 2016	31 December 2015
Euro area residents		
In EUR	6,308,024	2,957,377
In other currencies	133,525	2
	6,441,549	2,957,379
Non-euro area residents		
In EUR	6,739,240	6,210,115
In other currencies	1,602,874	1,713,672
	8,342,114	7,923,787
	14,783,663	10,881,166

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

(BGN'000)

	Counterparty's credit rating	31 December 2016	31 December 2015
Investment graded deposits by the counterparty's credit rating	*AAA*	2,220,227	2,702,949
	AA+	133,523	-
	AA-	3,504,670	2,374,621
	A+	2,250,240	886,026
	A	4,482,223	2,905,618
		12,590,883	8,869,214

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

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

12. Gold, Instruments in Gold and Other Precious Metals

	31 December 2016		31 December 2015	
	troy ounce	BGN'000	troy ounce	BGN'000
Gold bullion in standard form	513	1,102,124	513	980,610
Gold deposits in standard form	783	1,682,255	780	1,490,145
Gold in other form	16	34,518	16	30,748
Other precious metals		3,308		3,013
		2,822,205		2,504,516

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 0.11 per cent and 1.25 per cent annually.

Gold in other form includes commemorative gold coins of BGN 29,128 thousand.

Other precious metals include silver commemorative coins of BGN 434 thousand and platinum commemorative coins of BGN 2704 thousand.

13. Financial Assets at Fair Value through Profit or Loss

(BGN'000)

Securities at fair value through profit or loss	31 December 2016	31 December 2015
Foreign treasury bills, notes and bonds	28,928,706	26,238,186
	28,928,706	26,238,186

Securities comprise of both coupon and discount securities denominated in EUR. The maximum coupon interest of the EUR-denominated securities was 1.32 per cent as of 31 December 2016 (31 December 2015: 1.81 per cent).

Similarly as of 31 December 2015, as of 31 December 2016 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 2016	31 December 2015
Investment graded securities by the issue/issuer credit rating	*AAA*	16,520,652	14,772,152
	AA+	2,068,402	2,566,941
	AA	95,928	279,626
	AA-	8,037,373	5,958,588
	A+	2,152,689	2,660,879
	A	53,662	-
		28,928,706	26,238,186

14. Financial Assets Available for Sale

(BGN'000)

	31 December 2016	31 December 2015
Republic of Bulgaria's quota in the IMF	2,235,677	1,589,348
Equity investments in international financial institutions	31,799	31,681
Investments in associates	26,502	26,781
	2,293,978	1,647,810

The Republic of Bulgaria's quota in the IMF is SDR 896,300 thousand (31 December 2015: SDR 640,200 thousand). The increase of SDR 256,100 thousand is a result of the payment done on 22 February 2016 by Bulgaria, for an increase of the quota in the IMF, according to the 14th General Quota Review. BGN 244,760 thousand of the Republic of Bulgaria's quota in the IMF represents the reserve tranche held with the IMF (31 December 2015: BGN 84,659 thousand). The IMF pays remuneration (interest) to those members who have a remunerated reserve tranche position, at an average rate of 0.08 per cent.

Equity investments in international financial institutions include the equity investment in the Bank for International Settlements (BIS), Basel, and 25 per cent of the equity investment in BIS Basel is paid up. As of 31 December 2016 the current value of SDR 10,000 thousand shares amounts to BGN 24,943 thousand while as of 31 December 2015 it was BGN 24,826 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 of 31 December 2016 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 of the ECB, only ESCB NCBs are entitled to participate in the ECB capital. Capital subscription follows the requirements and the key set forth in Article 29 of the Statute of the ESCB and of the ECB, *i.e.* the share of each NCB in the ECB capital is determined in percentage and corresponds to the share of the respective Member State in the EU's total population and GDP (in equal proportions). The percentage is adjusted every five years and whenever a new Member State joins the EU. As of 31 December 2016, the BNB's capital share in the ECB subscribed capital is 0.8590 per cent, which corresponds to EUR 92,986.8 thousand.

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

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

Associates	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)

	Land and buildings	Plant and equipment	IT equipment	Office equipment	Other equipment (including motor vehicles)	Assets under construction	Total
As of 1 January 2016	181,171	89,655	47,082	9,780	8,275	2,712	338,675
Additions	589	244	15	40	144	6,798	7,830
Disposals	-	(542)	(3,698)	(33)	(90)	(383)	(4,746)
Transfers	1,472	940	4,757	42	45	(7,256)	-
As of 31 December 2016	183,232	90,297	48,156	9,829	8,374	1,871	341,759
Depreciation and impairment loss							
As of 1 January 2016	(44,935)	(67,685)	(39,119)	(8,187)	(6,085)	-	(166,011)
Charge for the period	(5,657)	(4,140)	(4,137)	(421)	(468)	-	(14,823)
On disposals	-	540	3,688	33	99	-	4,360
As of 31 December 2016	(50,592)	(71,285)	(39,568)	(8,575)	(6,454)	-	(176,474)
Net book value as of 31 December 2016	**132,640**	**19,012**	**8,588**	**1,254**	**1,920**	**1,871**	**165,285**
Net book value as of 31 December 2015	**136,236**	**21,970**	**7,963**	**1,593**	**2,190**	**2,712**	**172,664**
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**

In applying IAS 16 Property, Plant and Equipment and BNB's Internal Rules for Financial Statements and Accounting Policy, as of December 2013 a review was made of the book value of tangible fixed assets stated in the Bank's balance sheet. The fair value of land and buildings was determined by an external, independent and licensed assessor of recognised professional qualification and experience in assessing property of location and category similar to the assessed ones. As of 31 December 2016, the fair value of land and buildings did not differ materially from their book value as at the same date; therefore, it is considered that the present book value of land and buildings on the Bank's balance sheet fairly reflects their market value. The fair value of fully amortized tangible fixed assets as of 31 December 2016 was BGN 73,958 thousand (31 December 2015: BGN 60,777 thousand).

16. Intangible Assets

(BGN'000)

	Software	Other intangible assets	Development costs	Total
As of 1 January 2016	49,011	161	247	49,419
Additions	-	-	1,767	1,767
Disposals	(672)	-	-	(672)
Transfers	1,608	-	(1,608)	-
As of 31 December 2016	49,947	161	406	50,514
Depreciation and impairment loss				
As of 1 January 2016	(44,973)	(157)	-	(45,130)
Charge for the period	(1,817)	(2)	-	(1,819)
On disposals	672	-	-	672
As of 31 December 2016	(46,118)	(159)	-	(46,277)
Net book value as of 31 December 2016	**3,829**	**2**	**406**	**4,237**
Net book value as of 31 December 2015	**4,038**	**4**	**247**	**4,289**

Software includes, as of 31 December 2016, licenses purchased by the BNB to the total amount of BGN 372 thousand (31 December 2015: BGN 1,401 thousand), and software products to the amount of BGN 1395 thousand (31 December 2015: BGN 1320 thousand).

(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**

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).

17. Other Assets

(BGN'000)

	31 December 2016	31 December 2015
Cash held by subsidiaries with local banks	51,387	70,510
Investments of subsidiary undertakings in joint ventures and associates	8,791	6,091
Commemorative coins for sale	283	309
Inventories	18,743	16,963
Accounts receivable	1,238	1,484
Deferred charges	895	1,892
Other receivables	703	944
	82,040	98,193

Cash held by subsidiaries with local banks comprise BGN 43,965 thousand of the BNB Printing Works AD and BGN 7422 thousand of the 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 2016	31 December 2015
Banknotes in circulation	13,838,892	12,470,856
Coins in circulation	314,029	253,962
	14,152,921	12,724,818

19. Due to Banks and Other Financial Institutions

(BGN'000)

	31 December 2016	31 December 2015
Demand deposits from banks and other financial institutions		
– in BGN	10,154,008	11,464,908
– in foreign currency	4,516,277	3,395,104
	14,670,285	14,860,012

Demand deposits include BGN 6,293,102 thousand representing the required reserves, which all local banks are required to maintain on accounts with the BNB (31 December 2015: BGN 5,885,977 thousand).

On 26 November 2015 the Governing Council of the Bulgarian National Bank adopted a new Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks which came into force as of 4 January 2016. The new BNB Ordinance No 21 removed the recognition of banks' funds in the TARGET2-BNB national system component as a component of reserve assets.

The amendments to Article 42 of Ordinance No 3 of the BNB transformed as of 30 September 2016 the Reserve Guarantee Fund into a guarantee mechanism for settlement of participant banks' payments in the payment system for servicing card payments (BORICA) operated by BORICA–Bankservice AD. Pursuant to paragraph 3 of Article 42 the participation in the guarantee mechanism is included in the reserve assets of the respective participant when reporting the performance of minimum required reserves with the BNB.

20. Liabilities to Government Institutions and Other Borrowings

(BGN'000)

	31 December 2016	31 December 2015
Current accounts		
– in BGN	1,251,609	1,833,548
– in foreign currency	378,460	1,531,450
Time deposit accounts		
– in BGN	5,512,000	2,534,000
– in foreign currency	4,658,026	678,076
	11,800,095	6,577,074

The government's deposits and current accounts with the Bank comprise funds held on behalf of the state budget and other government organisations. As of 4 January 2016 the Bank shall apply interest rates in line with the General Terms and Conditions of the Bulgarian National Bank on accepting cash deposits and servicing bank accounts, budget organisations and other customers adopted by a resolution of the BNB Governing Council of 26 November 2015.

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

The borrowings against Bulgaria's participation in the IMF as of 31 December 2016 amount to BGN 1,985,327 thousand, or SDR 795,933 thousand (as of 31 December 2015: BGN 1,500,715 thousand, or 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 5495 thousand (31 December 2015: BGN 4008 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 2016	31 December 2015
Funds of EU institutions and bodies	170,307	98,463
Salaries and social security payable	3,844	3,474
Deferred income	1,392	1,408
Other liabilities	181,876	40,092
	357,419	143,437

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 2016 the funds on these accounts were BGN 170,307 thousand.

23. Capital and Reserves

The capital of the Bank is determined by the Law on the BNB and amounts to BGN 20,000 thousand.

Non-monetary asset revaluation reserves comprise the net change in fair value of property, equity investments and other non-monetary assets.

Pursuant to Article 36 of the Law on the Bulgarian National Bank, unrealised gains/losses arising from the revaluation of assets and liabilities denominated in foreign currency 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 resolution of the BNB Governing Council.

As of 31 December 2016 profit distribution in accordance with the profit distribution policy disclosed in note 5 (h) is as follows:

(BGN'000)

	2016	2015
Profit/(loss) for the period	**384,924**	**(82,682)**
Allocation to special reserve under Article 36 of the Law on the BNB:		
Unrealised (gain) from gold revaluation	(310,348)	(688)
Unrealised loss/(gain) from revaluation of financial assets at fair value through profit or loss	(78,904)	116,992
Unrealised (gain) from foreign currency valuation	(290)	(5,214)
Other unrealised loss/(gain)	(86)	226
Result after allocation to special reserve	**(4,704)**	**28,634**
including:		
Allocation to Reserve Fund under Article 8 of the LBNB	3,556	6,547
Result from consolidation and non-controlling interest	(18,927)	2,447
Allocation to a special-purpose fund under Article 8 of the LBNB	10,667	-
Planned contribution to the state budget	-	19,640

24. Non-controlling Interest

The BNB Printing Works AD 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 government holds the remaining 4.4 per cent of the company's capital.

25. Monetary Liabilities and Gross International Reserves

(BGN'000)

	31 December 2016	31 December 2015
Gross International Reserves		
Cash and foreign currency denominated deposits	14,783,663	10,881,166
Monetary gold and other instruments in gold	2,784,380	2,470,755
Security investments	28,928,706	26,238,186
Equity investments and quota in the IMF	244,760	84,659
	46,741,509	39,674,766
Monetary liabilities		
Banknotes and coins in circulation	14,152,921	12,724,818
Due to banks and other financial institutions	14,444,466	14,776,742
Liabilities to government institutions	10,699,824	5,978,548
Other liabilities	1,496,397	780,258
	40,793,608	34,260,366
Surplus of gross international reserves over monetary liabilities	5,947,901	5,414,400

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 2016, 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 2016, the par value of the government securities held in custody was BGN 6725 million (31 December 2015: BGN 7283 million).

27. Subsidiaries

(per cent)

Ownership interest	31 December 2016	31 December 2015
Bulgarian Mint EAD	100	100
BNB Printing Works AD (ref. note 24)	95.6	95.6

The net income from subsidiaries for the period comprises net profit of BGN 857 thousand from the Bulgarian Mint EAD (31 December 2015: BGN 497 thousand) and BGN 4019 thousand from the BNB Printing Works AD (31 December 2015: BGN 4084 thousand).

28. Commitments and contingencies

(i) Participation in the Bank for International Settlements

The Bank holds 8000 shares of the capital of BIS, Basel, each amounting to SDR 5000. Twenty-five per cent of the equity investment in BIS, Basel is paid up. The capital subscribed but not paid in is with an option to be paid in within three months following a decision of the BIS Board of Governors. The contingent amount as of 31 December 2016 is BGN 74,830 thousand (31 December 2015: BGN 74,477 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 1,942,565 thousand.

(iii) Capital commitments

As of 31 December 2016 the Bank has committed to BGN 320 thousand to purchase non-current assets (31 December 2015: BGN 374 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 Adopted in 2016

21 January

The Governing Council approved Ordinance No 30 on Calculation of the Premium Contributions Due by Banks under the Law on Bank Deposit Guarantee.

The Governing Council refused to grant a licence for conducting operations as an electronic money institution to Cash Credit EAD.

10 February

The BNB Governing Council decided to close the preliminary stage of the assessment of assets in the Bulgarian banking system and to publish guidelines on the organisation and management of the project and on ensuring the use of ECB's asset quality review methodology.

The BNB Governing Council decided to put into circulation, as of 28 March 2016, a silver commemorative coin '140 Years since the April Uprising' with a nominal value of 10 levs, issue 2016.

21 March

The BNB put into circulation, as of 18 April 2016, a copper commemorative coin '150 Years since the Birth of Pencho Slaveikov' of the Bulgarian Artists series with a nominal value of 2 levs, issue 2016.

31 March

The BNB Governing Council approved the BNB Budget Implementation as of 31 December 2015, which is included in the Annual Report of the Bulgarian National Bank for 2015.

The total amount of the banking system contribution to the Bank Resolution Fund for 2016 was set at BGN 95,687,327.

In compliance with Article 5, paragraph 3 and paragraph 4 of Ordinance No 8 of the BNB on Banks' Capital Buffers, the countercyclical buffer rate applicable to credit risk exposures in the Republic of Bulgaria was set at 0 per cent for the second quarter of 2016.

11 April

The BNB Governing Council approved the Annual Report of the Bulgarian National Bank for 2015.

The BNB Governing Council issued a license for conducting operations as an electronic money institution to Credibul EAD under Article 77, paragraph 1 of the Law on Payment Services and Payment Systems.

27 April

Pursuant to Article 139, paragraph 2 of the Law on the Recovery and Resolution of Credit Institutions and Investment Firms, the BNB Governing Council set the 2016 amount of individual annual contributions of banks and branches of third country banks to the Bank Resolution Fund calculated according to a methodology adopted by the BNB Governing Council on 31 March 2016.

Under § 14 of Ordinance No 30 of 2016 on Calculation of the Premium Contributions Due by Banks under the Law on Bank Deposit Guarantee, the BNB Governing Council adopted Guidelines on Provision of Information under Article 23 of Ordinance No 30 of the BNB on Calculation of the Premium Contributions Due by Banks under the Law on Bank Deposit Guarantee.

The BNB Governing Council took note of proposed macroeconomic scenarios and 2016 stress test guidelines.

The BNB Governing Council adopted a draft Ordinance on the Organisation and Control over Ensuring Security of Banks and Financial Institutions, prepared jointly with the Ministry of Interior.

The BNB Governing Council decided to put into circulation on 20 June 2016 a silver commemorative coin '150 Years since the First Railroad in Bulgaria: Ruse – Varna' with a nominal value of 10 levs, issue 2016.

19 May

The BNB Governing Council licensed Easy Payment Services EOOD (incorporation underway) to provide payment services under Law on Payment Services and Payment Systems Article 4, item 4b and item 5 for payment cards 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.

16 June

Under Article 5, paragraphs 3 and 4 of BNB Ordinance No 8 on Banks' Capital Buffers, the BNB Governing Council set the countercyclical capital buffer rate applicable to credit risk exposures in the Republic of Bulgaria at 0 per cent for the third quarter of 2016.

The Governing Council adopted a decision stating that as of 1 July 2016 the Bulgarian National Bank shall publish the exchange rate of the Bulgarian lev to BNB-selected foreign currencies on each business day for the Republic of Bulgaria by 6 p.m. Bulgarian time.

30 June

Under the Currency Law Article 7, paragraph 11, Article 8, paragraph 4 and Article 10, paragraph 4 and the Law on the Bulgarian National Bank Article 42, the BNB Governing Council adopted an Ordinance on Amendment of BNB Ordinance No 27 of 13 March 2014 on the Balance of Payments Statistics, International Investment Position and Securities Statistics.

14July

The BNB Governing Council terminated the procedure on issuing a payment institution license to CardGuard BG AD.

11 August

The BNB Governing Council adopted the Report of the Asset Quality Review and Stress Test of the Banks, prepared by the Banking Supervision Department based on data provided by independent consultants and summarised by the international professional services company Deloitte as a consultant of the Bulgarian National Bank on the accomplishment of the task. The Report is submitted by the BNB Governor to the President of the National Assembly of the Republic of Bulgaria.

18 August

The BNB Governing Council adopted Ordinance on Amendments to Ordinance No 3 of the BNB of 16 July 2009 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments.

The BNB Governing Council adopted new Ordinance No 13 of the BNB on the Application of International Bank Account Numbers and BAE Codes repealing Ordinance No 13 of the BNB of 16 July 2009 on the Application of International Bank Account Numbers and Bank Codes.

The BNB Governing Council adopted Ordinance on Amendments to Ordinance No 16 of the BNB of 16 July 2009 on Licensing of Payment Institutions, Electronic Money Institutions and Payment System Operators.

The Governing Council of the BNB refused to issue a license to Europay Solution EOOD (under incorporation) for conducting activity as a payment institution.

15 September

The BNB Governing Council decided to put into circulation on 14 November 2016 a partially gold-plated silver commemorative coin 'St. Kliment Ohridski' with a nominal value of BGN 10.

29 September

The BNB Governing Council adopted Ordinance No 12 on the Register of Bank Accounts and Safe Deposit Boxes.

The BNB Governing Council approved Ordinance on Amendment of Ordinance No 22 on the Central Credit Register of 16 July 2009.

The BNB Governing Council adopted the BNB budget implementation report as of 30 June 2016.

Under Article 5, paragraphs 3 and 4 of BNB Ordinance No.8 on Banks' Capital Buffers, the BNB Governing Council set the countercyclical capital buffer rate applicable to credit risk exposures in the Republic of Bulgaria at 0 per cent for the fourth quarter of 2016.

20 October

The BNB Governing Council adopted Ordinance No 19 on Credit Intermediaries.

The BNB Governing Council decided to put into circulation on 5 December 2016 a gold commemorative coin 'Exarch Anthim I' with a nominal value of BGN 100.

27 October

The BNB Governing Council refused to issue a license to Varchev Exchange OOD for conducting activity as a payment institution.

10 November

The Governing Council adopted amendments to Ordinance No. 16 of the BNB of 16 July 2009 on Licensing of Payment Institutions, Electronic Money Institutions and Payment System Operators.

The Governing Council discussed and took note of the Annual Review of the Plan on Reforms and Development of Banking Supervision adopted by the BNB Governing Council on 5 October 2015.

The Governing Council defined other systemically important institutions and the set the capital buffer levels for them.

24 November

The BNB Governing Council approved the Annual Report of the Bulgarian National Bank for 2016.

The Governing Council adopted the 2017 Budget of the Bulgarian National Bank, which the BNB Governor shall present to the National Assembly within 30 days after its adoption.

16 June

Under Article 5, paragraphs 3 and 4 of BNB Ordinance No 8 on Banks Capital Buffers, the BNB Governing Council set the countercyclical capital buffer rate applicable to credit risk exposures in the Republic of Bulgaria at 0 per cent for the first quarter of 2017.

The BNB Governing Council adopted Ordinance No 23 on the Terms and Procedure for Payout of Covered Deposit Amounts.

The BNB Governing Council adopted Ordinance on Amendment of Ordinance No 12 of 29 September 2016 on the Register of Bank Accounts and Safe Deposit Boxes.

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

The BNB Governing Council adopted amendments to the General Terms and Conditions of the Bulgarian National Bank on accepting cash deposits and servicing bank accounts, budget organisations and other customers.