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ANNUAL REPORT 2016

ECONOMIC DEVELOPMENT AND POLICIES IN BULGARIA: EVALUATIONS AND PROSPECTS

Focus: Agricultural Sector as a Factor for the Economic Development of Bulgaria

Economic Research Institute at BAS

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Focus:

Agricultural Sector as a Factor for the Economic Development of Bulgaria

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The report analyzes the state of the Bulgarian economy in 2015 and outlines the perspectives for its development in middle term. The focus is on the development of the agricultural sector as a factor for the economic development of Bulgaria.
Analysis and forecast evaluation are directed towards a wider circle of specialists and most of all the state institutions, municipal and local governing structures, non-government organizations, scientific community and the general public. The conclusions about the macroeconomic development and policies concern the opportunities for improvement.
The evaluations and projections are expert ones and reflect the views of the authors.

The report is discussed and approved by the Scientific Council in the Economic Research Institute at BAS.

We wish to thank all the colleagues of the Economic Research Institute at BAS for their comments and recommendations.

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ABBREVIATIONS

BAS	-	Bulgarian Academy of Sciences
BNB	-	Bulgarian National Bank
CAP	-	Common Agricultural Policy
CFP	-	Consolidated Fiscal Program
CFP	-	Consolidated Fiscal Programme
CIS	-	Commonwealth of Independent States
CMEA	-	Council for Mutual Economic Assistance
ECB	-	European Central Bank
EFTA	-	European Free Trade Association
EU	-	European Union
FDI	-	Foreign Direct Investment
GDP	-	Gross Domestic Product
GED	-	Gross External Debt
GFC	-	Global Financial Crisis
GVA	-	Gross Value Added
HICP	-	Harmonised Index of Consumer Prices
IASED	-	Integral Assessments of the Socio-Economic Development
IMF	-	International Monetary Fund
KTB	-	Corporate Commercial Bank
LFS	-	Labour Force Survey
M1	-	Narrow Money
M2	-	Intermediate Money
M3	-	Broad Money
MAF	-	Ministry of Agriculture and Food
MFIs	-	Monetary-Financial Institutions
MIT	-	Minimum Insurance Thresholds
MoF	-	Ministry of Finance
NHIF	-	National Health Insurance Fund
NPP	-	Nuclear Power Plant
NSI	-	National Statistical Institute
NSSI	-	National Social Security Institute
NUTS	-	Nomenclature of Units for Territorial Statistics
OECD	-	Organisation for Economic Cooperation and Development
PFI	-	Public Finance Institution
PMC	-	Potential Migration Coefficient
PnL	-	Profit and Loss
SEDC	-	Socio-Economic Development Coefficient
SNA	-	System of National Accounts
UAA	-	Utilized Agricultural Areas
VAT	-	Value Added Tax
WEO	-	World Economic Outlook
YOY	-	Year-Over-Year

INTRODUCTION

For another successive year the Economic Research Institute at the Bulgarian Academy of Sciences (BAS) prepares and presents to the scientific community, the institutions and the general public an annual report analyzing the economic development of Bulgaria and the economic policies.

The goal of the report is to analyze the ongoing economic processes in Bulgaria in proceeding year, to project their mid-term development, to assess the conducted policies and to formulate conclusions and recommendations. On the basis of structural macroeconomic model a mid-term macroeconomic framework is recommended, which reflects various assumptions about the development of the international economic environment, as well as of the anticipated policies.

Report 2016 studies the status and the development of the national economy in 2015 and presents forecast assessments of the economic development in medium term. The main economic sectors (real, internal, fiscal, monetary, banking) are analyzed, as well as the progress in the labour market development. Special attention is paid to the impact of emigration on Bulgarian labour market, the role of remittances for supporting household's budgets, and the link between regional economic development and the emigration intentions. This year the focus of the report is placed on the agricultural sector and the agricultural policy, and its potential to stimulate the economic development and growth in Bulgaria.

The report contains three parts. The ***first part*** presents analytical research of the economic environment (internal and external), as well as assessments and short-term forecasts of the most important variables, included in the macroeconomic model. The main macroeconomic parameters of the development of Bulgaria are presented, as well as a forecast for the period until 2018. Conclusions for the development trends are drawn and recommendations for improvement of the conducted policies are made.

The analyses of the economic policies by sectors of the economy are presented in different chapters as follows:

The ***first chapter*** analyzes the real sector of the economy. It presents assessments of the contribution of the main factors to the 2015 growth, as well as of the income distribution within the economy from the perspective

of the national accounts in Bulgaria. The conducted economic policies are assessed from the standpoint of the existing perspectives of growth. The mid-term economic growth expectations are presented and special attention is paid to the planned and other feasible policies, which could have an impact on growth in short, medium and long term.

The ***second chapter*** focuses on internal trade from the standpoint of the 2015 country economic development. The product and geographic structure is traced, as well as the problems relating to the specialization and concentration of export and import. The dynamics of the prices of the main groups of goods in the export list is assessed and is analyzed whether the nominal increases are due to larger volumes or rather to other factors. The trading conditions index is also analyzed. The conclusions in this chapter focus on the economic policy and the short and longer-term possibilities for export to continue stimulating the economy and to lead to a significant increase in growth rates. The risks for the competitiveness of Bulgarian export are identified in a regional aspect.

The ***third chapter*** analyzes the dynamics and structure of budget revenues and expenditures, the fluctuations in budget balance and government debt, the trends in taxation and the financial relations between the levels of governments. The impact of the fiscal policy on macroeconomic activity is also outlined.

The conducted fiscal policy is analyzed not only in relation to the achievement of a stable fiscal position and its influence over aggregate demand in the short-term perspective, but also from the standpoint of its role towards long-term impact over growth. The formulated conclusion is that the targeted utilization of government spending and taxation can have a stimulating effect on economic growth through various channels – investments in physical infrastructure and human capital or creating the right incentives in the tax and social security policy. Attention is paid to the possibilities to stimulate long-term economic growth through government consumption. For this to be realized, government spending needs to be restructured by placing the focus on “productive” expenditures and financing them with taxes, which causes insignificant deformation in the economy. Conclusions are formulated regarding the tendencies towards decentralization/centralization of the main areas of provision of public services in the country.

The revenue side of the state budget is analyzed in two aspects – development of the legal framework and trends in collectability. The focus

of the first aspect of the analysis is paced on the current amendments of tax laws – both enforced ones and those in advanced stages of preparation. Collectability is assessed along two lines – as a tendency over the course of time and in comparison to the dynamics of GDP, as well as in terms of the differences between potential and actual level of tax revenue.

The ***fourth chapter*** reviews the dynamics and the structure of the internal debt of the country with regard to their changes in 2015 and the mid-term expectations.

The ***fifth chapter*** examines the most important tendencies and characteristics of the monetary sector in 2015 from the standpoint of the macroeconomic liquidity and its structure; the supply and demand of monetary, credit and financial resources; the characteristics of the segments of the monetary market and their assessment; the formation of the price of the monetary and credit resources and assessment of the deflation tendencies and their impact on the monetary sector. The role of the monetary, currency and capital markets for the monetary transmission and the transformation of savings into investments is also analyzed. The anticipated orientation of the development of the monetary sector and its segments is substantiated on the basis of the pronounced predominant tendencies, examined during the analysis of the current state of this sector.

The ***sixth chapter*** traces the changes in the banking system of Bulgaria until the end of 2015 and on the basis of this analysis the outlined tendencies in the short and mid-term are highlighted. The dynamics of the structure of assets (credit portfolios, securities, other assets) is analyzed, as well as the dynamics and structure of borrowed funds (in terms of source and maturity structure), and the key parameters of the main business lines and funds to support their activity (norms of interest income, cost of funding, interest margin, fee income, share of administrative costs, indicators of return).

The summary and conclusions highlight the factors, determining the selection of the adopted model of the banking system; the key characteristics of the main business line in the banking sector are enlisted; the main hypotheses about the development of the banking sector, as well as its participation in the economic processes in the country are tested (approved or disapproved); the extent to which new tendencies exist is also examined.

The ***seventh chapter*** focuses on the labour market and presents a quantitative analysis of the dynamics of employment and unemployment in 2015. It highlights the restrictive role of decreasing labour force for the future economic growth. The chapter presents an analysis of the dynamics of labour productivity and wages – in total and by sectors, as well as the factors, which influence this dynamics – current state of the economy and business expectations, the fluctuations in the minimum thresholds and the minimum wage. The dynamics of labour productivity is highlighted as a key factor for the development of the labour market in the short and mid-term perspective.

The ***eighth chapter*** traces the impact of emigration from Bulgaria on the labour market and the role of remittances sent by emigration for supporting consumption, investments and savings. The positive and negative effects of emigration on the Bulgarian labour market, the labour force and its qualitative development are highlighted on the basis of statistical data and results from sociological studies. The analysis of the dynamics and structure of the remittances transferred to the country by emigrants shows that they have a positive influence on personal consumption, but do not transform into a significant investment resource. Recommendations are formulated about feasible action in migration policy of Bulgaria with the aim towards its activation and labour market support.

The ***ninth chapter*** traces the interrelation between regional disparities and the formation of migration attitudes. The intentions for repeated emigration of returning emigrants are highlighted. The diverse “transfer profiles” of the regions (NUTS 2) and districts (NUTS 3) are debated on the basis of their development ranking. The conclusions reaffirm the prediction that the medium and underdeveloped regions more actively participate and respectively depend, to a larger extend, on the migration processes.

The ***second part*** of the report is dedicated to the topic in focus “The Agricultural Sector as a Factor for the Economic Development of Bulgaria”. The development of the sector is presented in relation to its main characteristics and its contribution to the economic development of the country. The price of the reform conducted in the sector is analyzed, as well as the achieved results from the standpoint of the agricultural structure. The main characteristics of the conducted policy are examined, as well as the benefits and losses for the economic development. On the emphasis is on the need for a new public debate on the issues of the erroneous approach to the agriculture reform and the mechanisms via which the sector recreates inefficient incentives and interests regarding the

funds spent. The feasible alternatives for the agricultural sector development are outlined with the aim of increasing its contribution to the country economic development.

The ***third part*** of the report summarizes the conclusions, the mid-term development assessments, and formulates recommendations for theeconomic policies.

PART ONE

ECONOMIC DEVELOPMENT AND MID-TERM FORECASTS

I. ECONOMIC DEVELOPMENT AND MID-TERM FORECASTS

1. Economic Environment in 2015 – Assessment and Short-term Outlook

The past year was relatively quiet without any significant political turmoil. The local elections reconfirmed the established political structure and had no significant impact on economic development.

From a global perspective some of the developed economies managed, to a certain extent, to mitigate the consequences of the global financial crisis (GFC) by going on with the mix of expansionistic macroeconomic policies. However, their effect is exhausted, allowing for the conjecture that the period of low interest rates comes to its end. This conclusion is based on the first, in almost a decade, increase in the interest rate by the Federal Reserve at the end of last year. Although so far the European Central Bank (ECB) has shown no signs it intends to follow suit with this policy, in the medium term it is rather inevitable.

Before the onset of GFC, exports from the developing countries were growing rapidly, which justified pursuing an export-oriented growth policy in these countries. This trend was riding the wave of strong consumer demand in developed economies and above all in USA. Growing consumer demand, on its part, was accompanied by increasing household indebtedness, which makes the overall model rather unstable. The understanding that global economic development is on the verge of a crucial structural change, and countries with strong export dependence should reconsider and revise their strategies, is gaining increasing support. This conclusion has significant implications for the Bulgarian economy, which can be considered among the countries highly dependent on their external sector.

The external environment's impact on the Bulgarian economy was not unequivocal. On the one hand, the signs of recovery in the past year in some of our significant trade partners impacted favourably external demand and physical volumes of exports and continued the positive trend from the previous year. On the other hand, uncertainty remains a distinctive feature of both the global and Bulgarian economies. It may be expected with a high degree of certainty that after the slackening of fiscal restrictions in the recent two years, there will be an attempt at fiscal consolidation in the short term and a strive at compliance with the requirements set out in the Public Finance Act, limiting the deficit under the

Consolidated Fiscal Program (CFP) to 2% of Gross Domestic Product (GDP). The persistent policy of issuing external debt creates new opportunities, but also serious challenges, for the economy. Obviously preventing the dangers of the country diving into a debt spiral is a priority for each government in the short and medium term.

Given Bulgaria's close economic and political relations with other EU member states, the influence of the economic environment on the Bulgarian economy is studied principally through the prism of developments in Europe, and these are sending rather mixed messages. The diffident and often inconsistent actions of the EU leadership for coping with the debt crisis exacerbated the feeling of confusion that makes investors (both big and small) still refrain from initiating new projects, waiting for better times. Actually the more crucial changes occurred at the beginning of 2016 when the ECB announced a new set of unconventional measures aimed at both preventing falling into a deflationary spiral, and stimulating banks' lending activity.

1.1. Economic Activity

Global GDP slowed down its rate from 3.4% in 2014 to 3.1% in 2015, with growth remaining subdued and uneven by groups of countries and regions. Although developing countries contribute most to the increase in global GDP (more than 2/3), the pace has been slowing down for a fifth year in a row. While economic activity shows a definite upward trend in some developed countries (particularly in USA, UK and Japan), the developing countries and emerging markets remain rather weak. This is mainly due to the decelerating growth in India, and the serious problems faced by the economies of Brazil and Russia. China continues to develop at relatively high rates, but even there some deceleration is discerned. Short-term and medium-term expectations are determined by several factors:

- the started rebalancing of China's economy with an effort to achieve greater weight of domestic consumption at the expense of decreasing the importance of investment and exports as major growth factors;

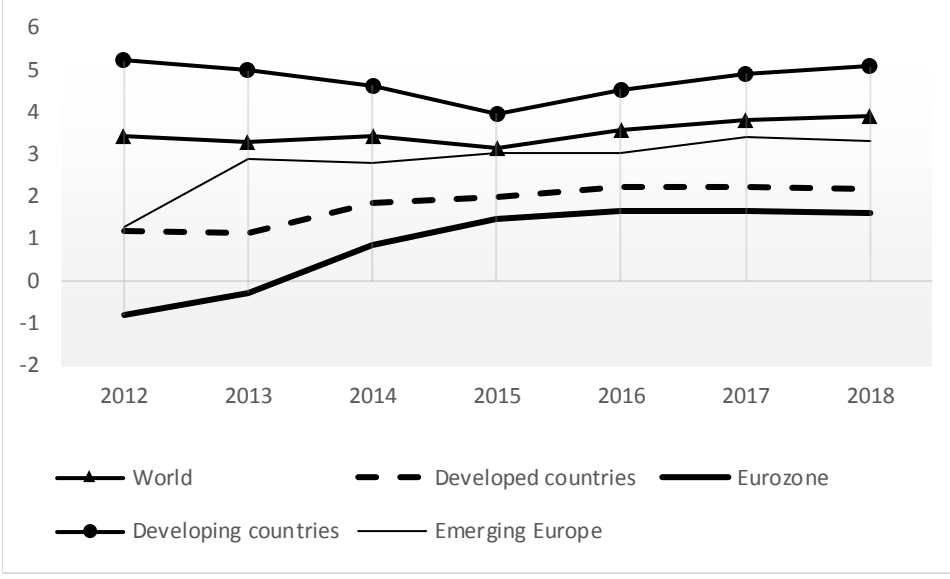
- a continuing decline in prices of energy and basic commodities and materials;

- the USA monetary policy beginning to tighten.

The dynamics of Chinese economy is followed closely by analysts, who are generally unanimous that the deceleration and restructuring of the economy will probably have negative effect on global growth. The reasons for this come along the lines of both trade relations and inflation dynamics and the declining confidence in the financial sector.

Figure 1

Real GDP – global dynamics



Source: IMF, WEO Update, January 2016.

The priorities in setting up the economic policy are mainly related to the continuing threat of entering a period of deflation. From this perspective, the monetary policy pursued by the major financial centers will continue to rely on low, even negative interest rates. The fiscal policy in the developed countries will be targeted also at faster recovery of economic growth rates.

As already noted in the previous reports, global growth remains subdued and the underlying risks rather high. This faces the people in charge, both on national and corporate levels, with new challenges. We see materialized the concerns expressed in our previous forecast that the expected and already launched turn in the monetary policy so far implemented by the US Federal Reserve is reflected in the unexpectedly high growth of the yields on long-term financial instruments. This trend definitely entails a risk for the developing economies, where economic activity is slowing down while the quality of financial assets continues to deteriorate.

Although the decelerating economic dynamics in the emerging and developing economies is expected to be reigned in during this and the next year, growth rates remain lower than in previous years. At the same time, however, growing volatility is noticed in the financial markets and in the capital flows to these countries. More abrupt changes in portfolio investment and outflow of capital are possible in the short term, particularly if the Fed decides to speed up the operation of shrinking reserve money and abandons its unconventional monetary policy instruments. This could be possible, even desirable, if there is no real threat of triggering deflationary processes.

1.2. Trade

For the first time since 2009, in the first half of 2015 foreign trade volumes reported a decrease. This was mainly due to the shrinking demand in the developing countries and many of the emerging markets. The increased demand in the EU member states and USA was not sufficient to compensate the drop evidenced in the rest of the world. The factors most contributing to this decrease can be grouped into three main areas:

- The recession in Brazil and Russia has distinct global dimensions. The sanctions against Russia continuing for a second year also had their implications;

- Rebalancing of growth factors in China;

- Depreciation of the currencies of some great economies.

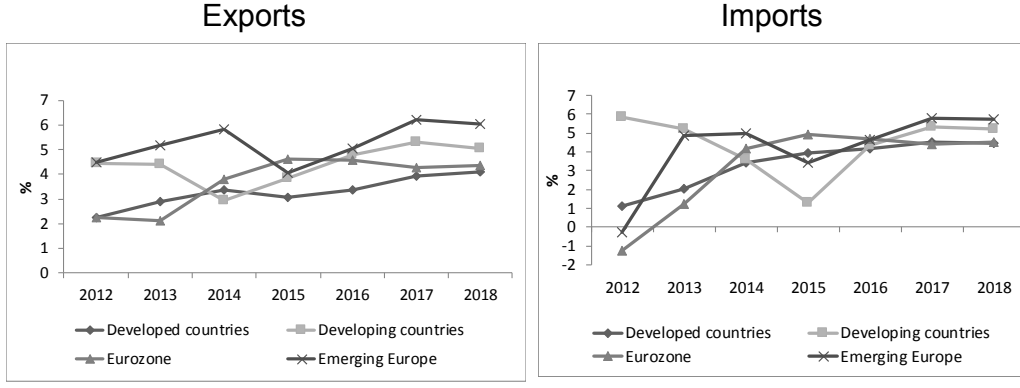
The decline in the world trade rates is an indisputable fact, but the important issue at hand is to properly assess the causes of this decline, to what extent it is accidental or naturally determined, which would allow for more accurate projection of the consequences in terms of both volumes of world trade and global growth.

In the recent years, the growth of world trade decreased both in absolute terms and in terms of global economic activity. It is interesting to note that if before the financial crisis the average ratio of imports growth (globally) to global GDP growth was around 1.8, in 2014 this ratio fell to around 1, and in 2015 went even below 1, and this trend was much more pronounced in the developing countries. Actually, the extent to which trade dynamics corresponds to economic activity depends on what components of demand

impact most strongly GDP growth. In many of the developing countries GDP growth decreased due to the fact that the relevant components of demand (whether of investment goods or inventories) feature a large relative share of imports. What happens in many developed countries, is practically the disappearance of investment growth (in some countries it is even on negative ground), which almost immediately impacted trade, particularly imports. The decline in investment, on its part, is accounted for by the deteriorating business climate and economic uncertainty.

Figure 2

Trade developments



Source: IMF, WEO Update, January 2016.

World trade dynamics in the past year justifies expectations of a slight increase in the growth rates in the short term, generally comparable with the growth of economic activity. The elasticity of trade volumes to economic activity, however, will remain considerably below the pre-crisis levels; this will likely be a more sustainable trend.

1.3. Inflation and Commodity Prices

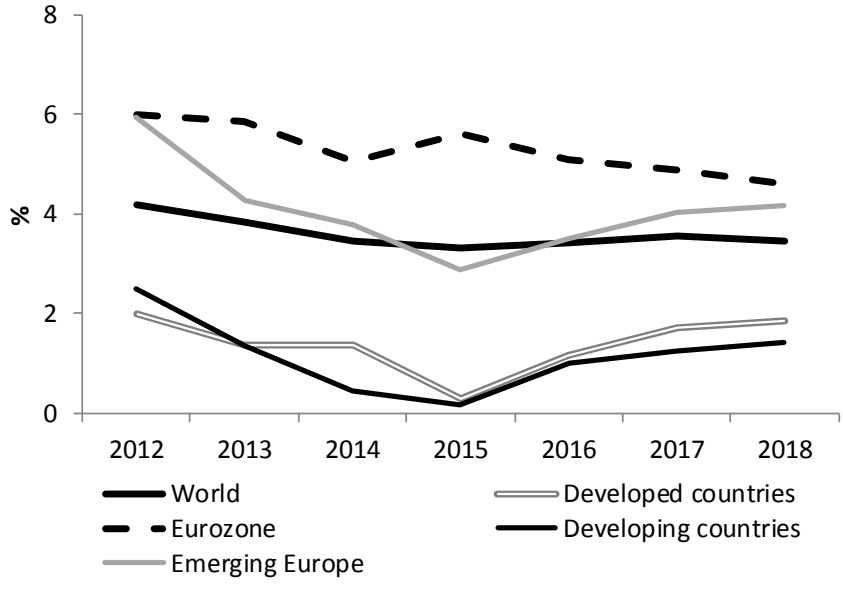
Inflation rates, both globally and regionally, continued to decrease throughout 2015. The only exception is the group of developing countries, where price level growth rates remained relatively high and slightly accelerated in the past year. In the euro area member states the 2015 annual inflation rate decreased yet again compared to the previous year, in spite of the expansionistic monetary policy pursued. The downward trend in inflation rates is due to a great extent to the attempts at fiscal consolidation.

The decrease of some commodity prices was very pronounced in the second half of the year. As of November, the indices of the three major groups – energy resources, metals and raw materials had decreased by 45% on the average against their peak in 2011. During the almost decade long period of price increases of these groups of commodities, considerable investments were made, which increased supply. The combination of high supply and low demand, as well as the appreciation of the US dollar in the recent two years, are the main factors accounting for this downward trend.

Oil prices started their downward trend as early as 2013, and the trend rapidly gained momentum in the second half of 2015. Longer-term forecasts of oil prices are rather risky, as the factors influencing them are by far not only economic in nature. The removal of the sanctions on Iran and resumption of exports from this country, combined with the refusal of OPEC countries to limit their production, are factors that would keep prices relatively low even in the medium term. From the perspective of recovery of global economic growth rates, there are grounds to expect gradual increase of energy prices, in the longer term, bur regional conflicts in the Gulf and the political tension in relation to the conflict in Ukraine can have serious impact towards further price decrease.

Figure 3

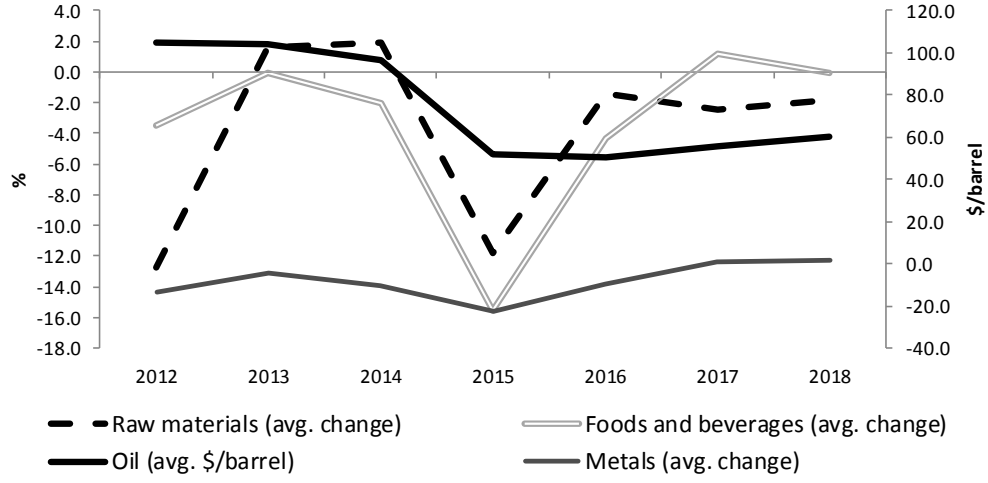
Inflation dynamics



Prices of commodities and materials marked a significant drop in 2015, reflecting the modest rates of economic growth and the still subdued demand in most of the world. Crucially important for Bulgaria are the prices of metals (particularly non-ferrous metals) which have a significant share in Bulgarian exports. According to World Bank data[1], the average price of aluminium in 2015 decreased by 11%, and the downward trend is expected to continue this year, too, with an expected further drop of around 9%. Copper featured an even greater price decrease of 20% in 2015, and a further decrease of 11 % is projected for 2016. Similar is the situation with the prices of iron, lead and zinc.

Figure 4

Prices of main commodities



Source: World Bank Commodity Price Indices, Jan 2016.

Foodstuffs and beverages also marked a price drop (though more modest), but the expectations are the price levels in this segment to stabilize during this and the next year, and to even increase slightly in the coming years.

1.4. Short- and Medium-term Outlook

The economic outlook of Bulgaria for this and the coming two years is more positive than otherwise, but risks remain relatively high. The Bulgarian economy is an open one, and highly dependent on external demand and external financing. Given the predominantly European

[1] World Bank Commodities Price Forecast, January 20, 2016.

orientation of our foreign trade flows, we can hardly rely much on exports as a significant factor of growth, as long as EU member states continue to remain in a condition approximating stagnation. External funding, in the form of foreign direct investment (FDI), will also be far from the levels achieved in the years before the global financial crisis. Having in mind these two factors, we may conclude that both in the short and medium term growth will remain rather low and unstable.

Any further projections in the report are based on the assumption that in 2016 there will be a slight slowdown in economic growth, but in the medium term global GDP rates will gradually but slowly grow, with expectations being based on data indicating certain improvement of the business climate. However, the contribution to the global GDP by region and group of countries is highly uneven. In the developed countries forecasts remain highly uncertain, even in the longer term, given the high level of household indebtedness and the need of a more restrictive fiscal policy, which will subdue economic growth in the foreseeable future. Growth in the developing countries, although lower than in the pre-crisis years, will remain high. What is important for Bulgaria, however, is first and foremost the situation in the EU, and particularly in the euro area, as a main economic and political partner of the country.

From a more global perspective, global economy is in a condition of a gradual recovery of economic activity, but achieving the pre-crisis growth rates is practically impossible in the short term. The moderate optimism is mainly due to the lower energy prices and the quicker than expected recovery of the US economy. At the same time, there are counteracting factors, among which the sanctions against Russia stand out, with their adverse effect not only on the directly affected economy, but with broader implications. The instability of forex markets and the sharp depreciation of the euro are factors with consequences that are hard to predict. These could possibly facilitate (to some extent) the external demand of euro area member states, but it is not clear how this could impact some of the markets in the developing countries. Last but not least, the somewhat disappointing developments in some of the most important developing countries, particularly China, should be noted.

Based on the mentioned factors, a conclusion can be made that global recovery is characterized by a high degree of disproportion, both between developed and developing countries, and within these groups. One can presume with high degree of probability that the prevailing part of the developed countries are in a slightly better position, reflecting their

improving labour market, the eased debt burden and the emerging positive effects of fiscal consolidation in the recent years. The negative consequences of unresolved structural issues and tightening financial markets have been accumulating in the developing countries. To this we can also add the problems caused by the appreciation of the US dollar used by many of the developing countries. All this will impact adversely in the short term both economic activity and likely the volumes of foreign trade flows.

The economic recovery in the euro area made headway in the second half of the year. There are factors that would not only underpin this trend, but would even accelerate it. First among these factors is the sharp decrease in the oil prices, which will surely result in an increase in the disposable income of households, respectively in an increase of aggregate demand. Secondly, there are all reasons to expect that the effects of the depreciated euro will be felt in 2016 and further on. All this will most probably result in certain increase of external demand. The changes in the ECB's monetary policy and the expansion of the broadly-based quantitative easing program are also expected to help not only to avoid the threat of falling into a deflationary spiral, but also to recover economic activity. This would be the natural result of the impact of unconventional measures on interest rates, exchange rate and share prices. More generally, the ECB's expectations and hopes are that the nonconventional measures will also open up new transmission channels of the monetary policy, which so far had not been effective (or had a rather weak effect) in using the conventional monetary policy tools.

2. Macroeconomic Indicators of Bulgaria's Development until 2018

2.1. Key Assumptions

The macroeconomic forecast, developed for the purposes of this report, is based on assumptions about the developments in the medium term (until 2018) of some external for the Bulgarian economy indicators. With respect to international prices, they include estimates of indices of oil, food, metals and raw materials as a whole. The outlook for external demand is also accounted for by the dynamics of the index of international trade and EU's GDP. The forecasts also take into account the underlying economic policies of the government, outlined in the report of the Ministry of Finance (MoF), accompanying the State Budget for 2016. The main assumptions in the macroeconomic forecast up to 2018 are presented in table 1. The forecast itself is developed based on macroeconomic data, available as of March 18th, 2016.

Concerning the assumptions on external demand and international prices, the International Monetary Fund (IMF) World Economic Outlook (WEO) report for October 2015 has been used, which was the most up-to-date data available at the time of the preparation of the forecast data for the international prices and external demand.

The other big set of projection data that are exogenous for the model framework are taken from the medium-term budget forecast for the period 2016-2018, adopted by Decision No 1025 of the Council of Ministers from December 28th, 2015 on Approval of changes to the updated medium-term estimates for the period 2016-2018. With the inclusion of these estimates, we render account of the ability of the government to directly influence the amount of public debt and budget expenditures, assuming that the fiscal deficit target will be achieved mainly by adjustments in the capital expenditures.

Table 1

Key assumptions in the macroeconomic forecast

Indicator	Source of information	Reported data					Preliminary data	Forecast data		
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Crude oil international price (index, 2005=100)	IMF, WEO	148.1	194.9	196.8	195.1	180.4	96.8	94.4	103.9	112.2
Industrial and food products international price (index, 2005=100)	IMF, WEO	161.2	190.0	171.0	169.0	162.3	134.9	128.0	128.4	128.3
Metals international price (index, 2005=100)	IMF, WEO	202.3	229.7	191.0	182.9	164.1	127.5	115.6	116.4	118.0
EU GDP real growth (index, 2005=100)	IMF, WEO	105.4	107.3	106.8	107.1	108.6	110.7	112.8	115.1	117.2
World trade volume (index, 2005=100)	IMF, WEO	122.4	130.6	134.4	138.8	143.5	148.0	154.1	161.2	168.7
Current expenditure (BGN, million)	MoF, mid-term forecast, as of December 2015	22419	23012	23338	25372	26585	26190	27301	28062	28743
EU budget contribution (BGN, million)		669.7	779.2	809.3	934.1	954.9	946.4	1009.7	1000.8	1056.1
Budget balance (% of GDP)		-3.8	-1.9	-0.4	-1.8	-3.7	-2.1	-2.0	-1.4	-1.0
Domestic public debt (EUR, million)		2012	2458	2547	3216	4219	3724	3794	3926	4085
External public debt (EUR, million)		3374	3488	4445	4003	7082	7890	9487	9536	9632

Source: IMF; MoF; own calculations.

2.2. Current Developments and Macroeconomic Outlook up to 2018

From 2013 onwards a gradual acceleration of economic activity in Bulgaria is reported. Although GDP growth is still significantly lower than the rates before 2008, it reached 3% in 2015, supported mainly by positive trends in the external sector. In 2016, however, a slowdown in GDP growth might be expected. Given the positive developments in late 2015, we can expect acceleration of final consumption in 2016. In the third and fourth quarters of 2015 consumption growth rates reached 1.8 and 2.4% on an annual basis, after declining in the first half of the year. Improvements in the labour market give grounds to expect growth in final consumption of around 2% in 2016.

Investments, however, will mark lower growth rates due to the delayed start of the operational programmes of the current EU programming period

(2014-2020). The contribution of the external sector will also significantly decrease, where export growth will still remain slightly higher than that of imports, and the contribution of net exports to economic growth will be low but positive.

In the medium term economic growth in Bulgaria will gradually accelerate to 2.7% in 2018. The increase in investment will depend on the improvement of international and domestic business environment and the progress in the absorption of EU funds under the operational programs for the programming period 2014-2020. The recovery of the labour market will have a positive impact on income, and hence on consumption in the economy. The external sector will have a relatively limited contribution to economic growth in Bulgaria for the period until 2018.

Low international prices, the gradual recovery of domestic demand and low credit activity will have a negative pressure on inflation, where annual average inflation is expected to be around zero in 2016, partly due to base effects from 2015. The GDP deflator will be close to the average annual inflation, where the difference between them is determined mainly by the expected decline in international prices of some key for the Bulgarian export products in 2016 and a smooth recovery in the medium term.

The labour market has already seen improvements, where in 2016 employment is expected to grow by 1% and decelerate in the medium term. Thus, given participation rate on the labour market between 54 and 56%, the employment rate will exceed 51% in 2018. The rate of growth in wages will decline, mainly due to restrictions on their growth in the public sector.

The gradual recovery of domestic demand will determine the declining but positive current account balance in the period up to 2018. The progress in the implementation of the EU operational programmes will be instrumental for the dynamics of the capital account. The financial account developments will depend both on government debt policy and mostly on the gradual increase in FDI inflow and rebalancing the state of excess liquidity in the banking system to an increase in lending. Gross external debt is expected to decline to 75% of GDP in the medium term due to the high liquidity of domestic financial markets.

Table 2

Projections of Bulgaria's macroeconomic development until 2018[2]

Indicators	Reported data			Preliminary data	Forecast data		
	2012	2013	2014	2015	2016	2017	2018
Real sector							
GDP in current prices (BGN million)	81544	81971	83612	86373	88044	91265	95613
Real growths	0	0	0	0	0	0	0
GDP (%)	0.2	1.3	1.5	3.0	1.9	2.2	2.7
Private consumption (%)	3.3	-1.4	2.7	0.8	1.8	2.3	2.6
Public consumption (%)	-0.5	2.3	0.1	0.3	2.9	1.7	0.7
Gross fixed capital formation (%)	1.8	0.3	3.4	2.5	1.1	2.6	5.0
Export of goods and services (%)	0.8	9.2	-0.1	7.6	2.6	3.5	3.8
Import of goods and services (%)	4.5	4.9	1.5	4.4	2.3	3.1	3.6
Prices							
Average annual HICP inflation (%)	2.4	0.4	-1.6	-1.1	0.2	1.0	1.7
End-of-period HICP inflation (%)	2.8	-0.9	-2.0	-0.9	1.1	1.0	1.7
GDP deflator (%)	1.6	-0.7	0.4	0.3	0.1	1.4	2.0
Labour market							
Activity rate (% population aged 15+)	53.1	53.9	54.1	54.1	54.9	55.3	55.8
Employment rate (% population aged 15+)	46.6	46.9	48.0	49.1	50.0	50.6	51.2
Unemployment rate (% labour force)	12.3	12.9	11.4	9.1	8.9	8.5	8.3
Employment, annual growth rate (%)	-1.1	0.0	1.6	1.7	1.1	0.5	0.3
Average monthly salary (BGN)	731	775	822	894	927	980	1046
Average monthly salary, annual growth rate (%)	6.6	6.0	6.0	8.8	3.7	5.8	6.7
Foreign sector							
Current account (EUR million)	-108	765	495	542	398	264	136
Trade balance (EUR million)	-3947	-2891	-2735	-1885	-2035	-2118	-2242
Capital account (EUR million)	546	469	960	1419	382	491	624
Financial account (EUR million)	957	890	183	2758	779	755	760
Foreign direct investments in the country (EUR million)	1321	1384	1285	1575	1646	1712	1815
Gross external debt (EUR million)	37714	36936	39356	34144	35291	35612	36670
Current account (% of GDP)	-0.3	1.8	1.2	1.2	0.9	0.6	0.3
Trade balance (% of GDP)	-9.5	-6.9	-6.4	-4.3	-4.5	-4.5	-4.6
Capital account (% of GDP)	1.3	1.1	2.2	3.2	0.8	1.1	1.3
Financial account (% of GDP)	2.3	2.1	0.4	6.2	1.7	1.6	1.6
Foreign direct investments in the country (% of GDP)	3.2	3.3	3.0	3.6	3.7	3.7	3.7
Gross external debt (% of GDP)	90.5	88.1	92.1	77.3	78.4	76.3	75.0
Financial sector							
Monetary aggregate M3 (BGN million)	61722	67236	68006	73961	76833	82025	88503
Credit to non-financial enterprises and households (BGN million)	55755	55911	51613	50773	50895	51775	53065
Monetary aggregate M3, annual growth rate (%)	8.4	8.9	1.1	8.8	3.9	6.8	7.9
Credit to non-financial enterprises and households, annual growth rate (%)	2.8	0.3	-7.7	-1.6	0.2	1.7	2.5
Foreign currency reserves (EUR million)	15552	14426	16534	20285	24027	26511	29434
Coverage of the imports of goods and non-factor services with foreign currency reserves (%)	6.7	6.1	7.1	8.6	9.8	10.2	10.7
Fiscal sector							
Budget revenues (BGN million)	27469	28977	29409	32205	32489	33795	35634
Budget expenditure (BGN million)	27828	30418	32482	33979	34250	35073	36590
Budget balance (BGN million)	-359	-1441	-3073	-1774	-1761	-1278	-956
Budget balance (% of GDP)	-0.4	-1.8	-3.7	-2.1	-2.0	-1.4	-1.0

Source: NSI; MF; BNB; Eurostat; own calculations.

[2] The presentation format of the macroeconomic projections of the Institute of Economic Research at BAS is changed compared to previous editions of the Annual Report in order to improve the analytical value of the reported indicators and breakdowns.

Low credit demand by the private sector and the expected outcome of the asset quality review of the Bulgarian banks will be an additional factor for the low credit activity and modest growth in broad money. The stability of the currency board in the country, however, will be maintained, where the coverage of imports by international reserves will increase significantly.

In summary, in the medium term economic growth of around 2-3% can be expected with increasing contribution of domestic demand. The growth potential, however, will be limited by the still low lending activity in the country and will remain dependent on the international situation. In the medium term we can expect sustained low inflation and near balanced current account.

II. ANALYSIS OF THE ECONOMIC DYNAMICS AND POLICIES

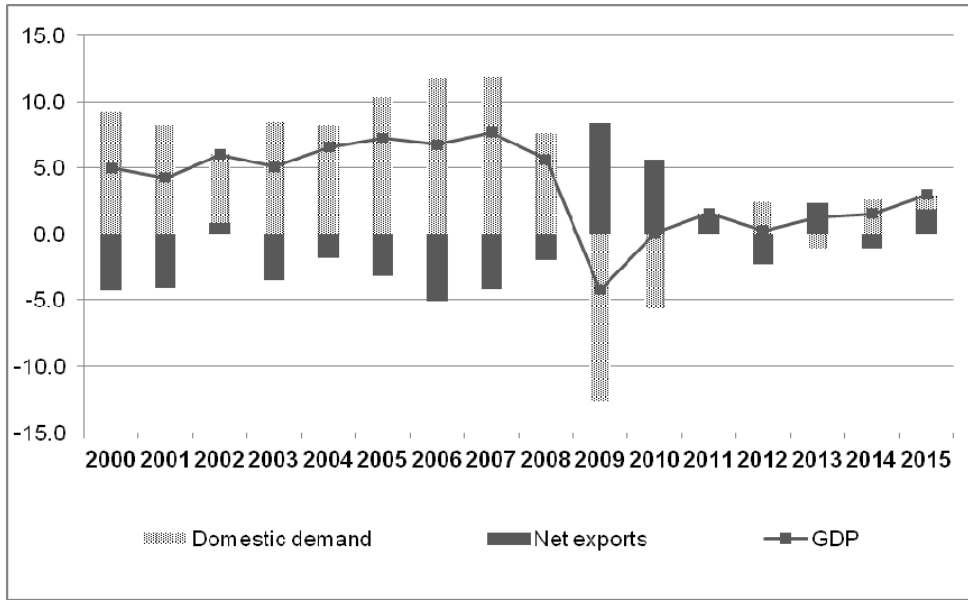
1. Real Sector

1.1. Gross Domestic Product

In 2015, exports had a major contribution to the 3% growth of the Bulgarian economy, increasing by 7.6% in real terms. For the second consecutive year, however, domestic demand also made a positive contribution, which was equally due to private consumption and investment (both components had a 0.5 pp contribution) (see figure 5). Retrospectively, the years of high economic growth were also characterized by high contribution of domestic demand due to the favourable economic environment, growth in employment and incomes, and deepening financial intermediation. In recent years, however, there is no clear trend in the sources of growth. Nonetheless, there is a clear trend of accelerating GDP growth rates.

Figure 5

Contributions of domestic demand and net exports to economic growth in Bulgaria



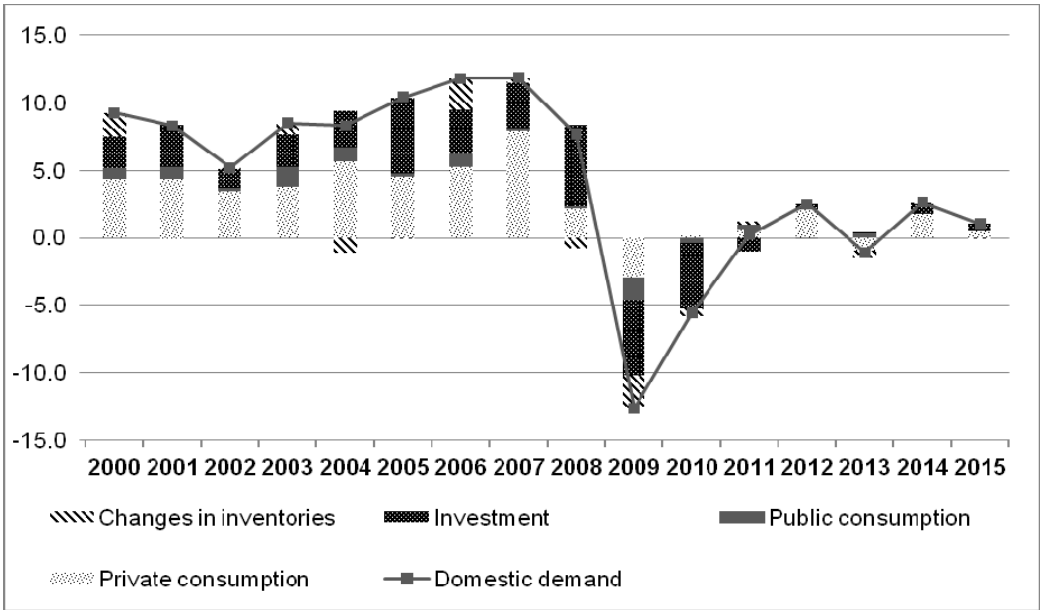
Source: NSI; own calculations.

Private consumption is a major factor for the dynamics in domestic demand due to its high share, while the contribution of gross fixed capital formation is mainly due to its high growth. The latter is caused by both high

rates of absorption of European funds at the end of the last programming period and strong volatility, which is typical for investment. In the dynamics of public consumption two trends are observed – pro-cyclicality (i.e. its contribution is higher in the years of high economic growth) and dependence on the political cycle in the country. Finally, changes in stocks should also be given attention, which dynamics does not show a strong correlation with any of the other components of final use, but has a significant contribution to growth in some years.

Figure 6

Contributions of the final expenditure components to domestic demand growth

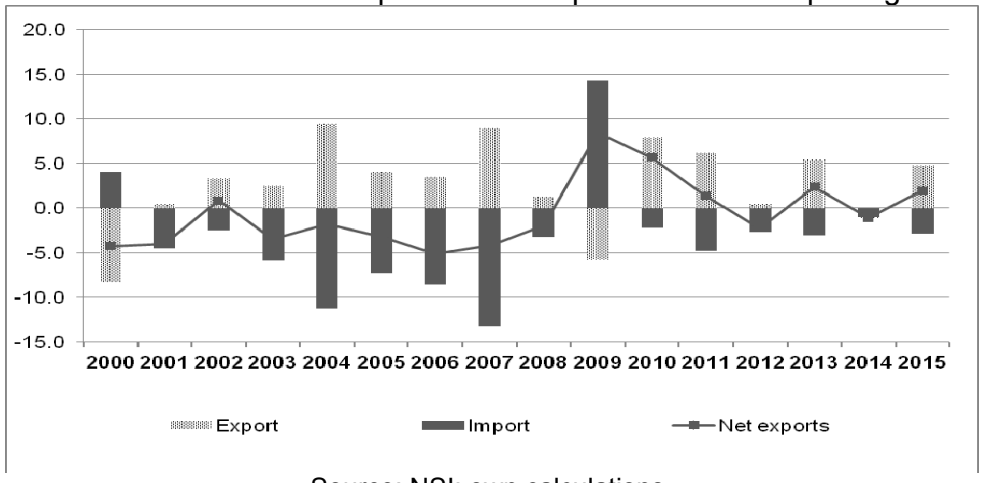


Source: NSI; own calculations.

Net exports have a strong negative correlation with economic growth in the country due to the fact that high GDP growth rates were due mainly to domestic demand, suggesting larger imports. In most of the years under consideration, however, weaker imports had contributed to the improvement in net exports. In certain periods, however, exports had a counterbalancing role, when low domestic demand was observed and exports contributed to the change in the structure of economic growth. This is true especially for the period after the economic crisis in Bulgaria. It is interesting to note that unlike all other components of final demand, exports posted growth on an annual basis in almost all years since 2001, regardless of the phase of the economy business cycle.

Figure 7

Contributions of the final expenditure components to net exports growth

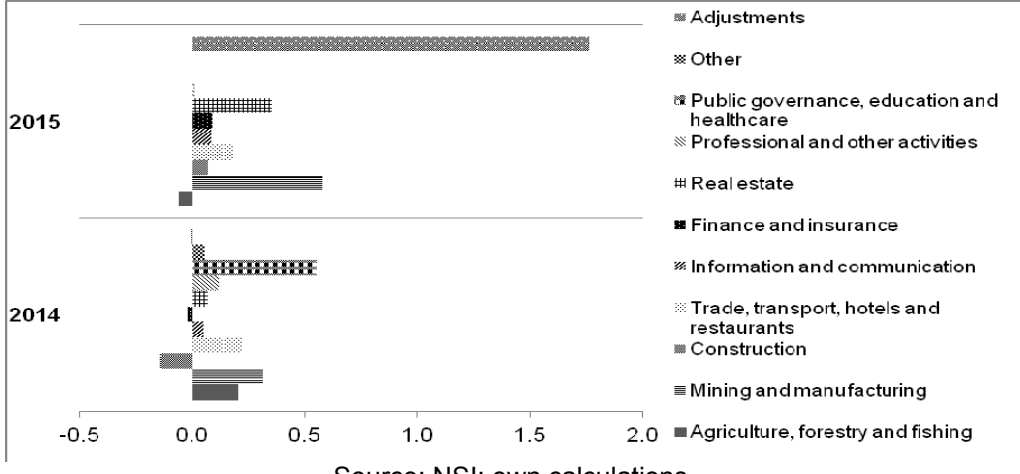


Source: NSI; own calculations.

By economic sectors in 2015 the positive contribution of adjustments are most notable, increasing by 12.7% in real terms. This increase is due to excise duties and VAT revenues growth and negative inflation in the country. Industry and real estate have respectively contributions of 0.6 and 0.4 pp. In 2015, only agriculture, forestry and fishing had a negative contribution to growth. In recent years, three sectors have shown relatively stable growth rates – professional and other activities; trade, transportation, hotels; and information and telecommunications (figure 8).

Figure 8

Contributions to growth (percentage points) by economic sectors



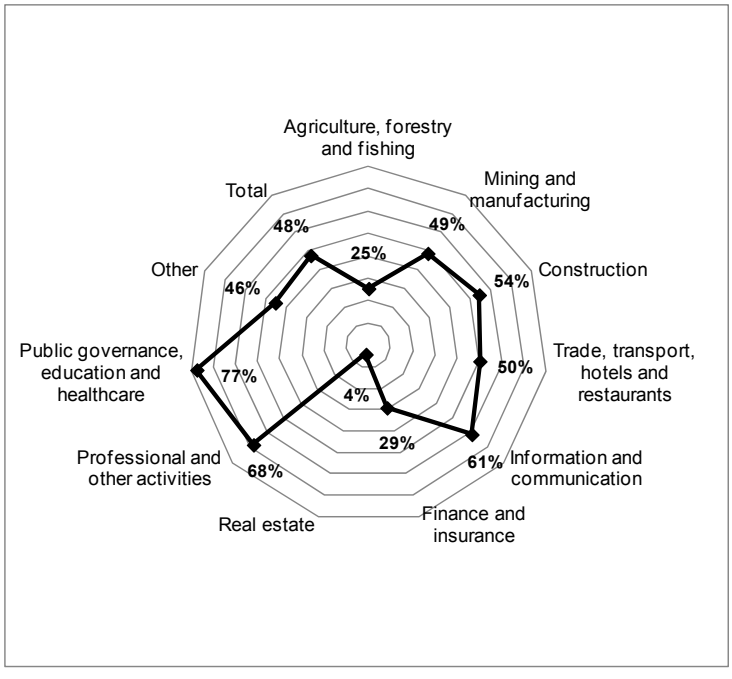
Source: NSI; own calculations.

The distribution of income in the economy by economic sectors is very different. While in government, education and health, professional and other activities, and information and telecommunications, the production factor labour generated over 60% of the income, in real estate and agriculture, forestry and fishing, it remains below 25%. The reasons for the big differences vary. They are linked to the wage gaps by sectors, the profit margin or capital intensity of respective economic activities.

Viewed in statics, significant differences in the share of labour in gross value added (GVA) are observed by economic sectors, but to get the full picture they should also be complemented by dynamics in the corresponding indicator. In the sectors with the lowest share of compensation of employees the largest increase since 1999 is observed. Finance and insurance, where the share of labour is low and has fallen significantly over the past 16 years, constitute an exception. Meanwhile, a decline in the manufacturing is also noticed, which is probably due to the shift to capital-intensive industries. Significant increases are seen in professional and other activities and telecommunication services.

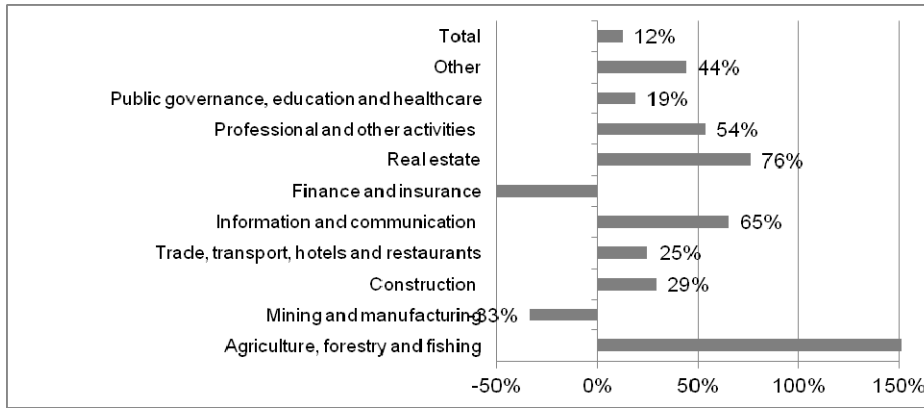
Figure 9

Share of compensation of employees in GVA by sectors



Source: NSI; own calculations.

Figure 10
Cumulative increase in the share of compensation of employees in GVA in 2015 compared to 1999 by economic sectors



Source: NSI; own calculations.

1.2. Economic Policies and Prospects for Economic Growth

Government economic policy in 2016 is again conducted mainly through the state budget. The measures, outlined in the updated government medium-term framework for 2016-2018, are expected to have mainly social and short-term impact on economic growth by creating more demand. They include mainly increases in pensions and minimum wage until 2018.

On the other hand, the increases in social security rates planned for 2017 and 2018 will contribute to improving the long-term sustainability of the public finances. However, they might have a negative impact on labour demand and the share of the informal economy in the country.

The envisaged increase in excise duties will have some pressure on inflation, but should not suppress consumption due to the inelasticity of goods with imposed excise.

The increase in the standards for activities financing education should have a slight but long-term impact. They create prerequisites for improving the quality of education and thus of the human capital in the country.

Medium-term government forecast envisages gradual fiscal consolidation, as the budget deficit is expected to reach 1% of GDP in 2018. The current public expenditures are projected to increase by over 3% nominally in 2016. Given the lower nominal GDP growth (determined by both low real

growth and low deflator), it will lead to an increase in their share in GDP. By the end of the forecast period, however, the budget deficit will decline gradually as a share of GDP.

Meanwhile, public investment will decline in 2016 and 2017, and will post growth only in 2018 to provide co-financing for the EU funds absorption.

Although in recent years a trend of accelerating growth rates of the Bulgarian economy is observed, the continuation of this positive trend will depend on a variety of external and internal factors – recovery of credit activity in the country, improvement of the international situation, absorption of the EU funds allocated to Bulgaria during the 2014-2020 programming period. In this respect, the role of the government is mainly related to maintaining macroeconomic and financial stability and accelerating the pace of absorption of EU funds. The remaining policies in the medium-term fiscal framework for the period 2016-2018 will have mostly short-term effect on the demand side.

2. Foreign Trade

In 2015 *Bulgaria's* export made a record reaching nearly EUR 29 billion[3], thus forming an increase of over EUR 1 billion in comparison with 2014. Based on index of physical volume, compared to 2014, exported goods increased by 7.6% in 2015. The positive development of export in 2015 is accompanied with a slight increase in investments, maintaining final consumption in *Bulgaria* and economic recovery in the *euro area*. Total export of goods to *EU* countries increases by 7.9%, and to third countries – by minimum of 0.6%. Underlying this increase is a growth of export to *Germany, Egypt, Italy, Romania* and others. High US dollar value and permanent low oil prices are in favour of this trend. These factors create prerequisites for release of financial resource so that producers can buy more raw materials and create favourable conditions for euro exporters. Bulgaria plays a successful part in this trend with its traditional export of raw materials.

At the same time, the export to *Russian Federation, Turkey, Singapore* and other third countries declines. The decline in exports to Russia is primarily the result of the international political crisis between *Russia* and *EU* and the difficulties the Federation's economy faces. Another reason for the decrease in exports to third countries is the continuing through 2015 trend towards recovery and growth in exports to *EU* countries and the *Balkan region*. And last but not least, it should be noted that the global deflation of major groups of commodities, such as energy and raw materials, food and beverages, has a significant contribution to the negative values of the export to third countries. These groups of products have very large share in Bulgaria's export and import respectively.

The 2015 import also grows by nearly half a billion EUR or 4.4%, compared to 2014. With nearly a constant domestic consumption, the increase in import is mainly due to the need of imported raw materials for the production of exported goods. The import from *EU* countries increased by 5.5%, while that from third parties dropped by 6%. Foreign trade data show excess of export over import on annual basis.

The estimates in the 2015 report concerning the export growth by 3.1% are lower than what is actually achieved due to the unexpected continuous retention of oil prices at low levels. The deviations from the forecasted

[3] All foreign trade data is from information bases of National Statistical Institute of Bulgaria and Bulgarian National Bank, dated 11th April 2016.

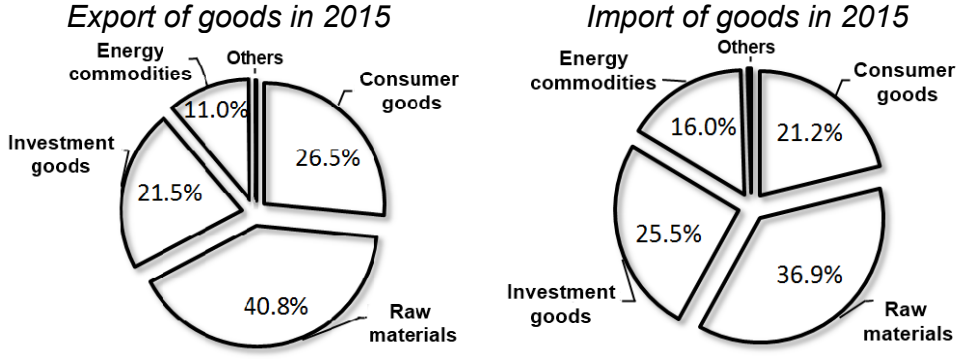
growth of import (3.7%) are minimal (Annual Report – 2015, ERI-BAS, 2015).

2.1. Foreign Trade in Goods

In 2015, goods occupy 76.7% of Bulgaria's total export, as the economy keeps the permanently established predominant raw material export. The relative shares of commodities' export by way of use is graphically depicted on figure 1-a. *"Raw materials"* have highest relative share of export (40.8%). *"Non-ferrous metals"* and *"Raw materials for food production"* have largest contribution in this group (respectively 9.9 and 7.7% of the total commodity exports). The group of products ranked second in terms of their relative share in export in 2015 is *"Consumer goods"* (26.5%). The representatives with highest value of total export of goods in 2015 are *"Clothing and footwear"* and *"Food"* (respectively 6.9 and 5.7%). The third group is *"Investment goods"* (21.5%). *"Spare parts and equipment"* and *"Machines, tools and equipment"* have highest turnover in the group (respectively 5.6 and 5.5% of the country's export). *"Energy commodities"* is fourth (11% of exports). *"Petroleum products"* is predominant in it (8.2% of all exports in 2015). The trend formed after 2008 to reduce the share of *"Raw materials"* goods against the increase of consumer and investment goods by 1-2% annually, continues through 2015. The outlined export structure by way of use shows that in 2015 *Bulgaria* remains primarily an exporter of products with low added value, nearly (52%).

Figure 11

Structure of export and import of goods in 2015 by end-use



Source: Bulgarian National Bank.

In 2015, goods constitute 85.3% of the total import in *Bulgaria,* as the economy keeps the established structure of consumption (see figure 1-b). *"Raw Materials"* have the highest relative share in import (36.9%). *"Plastics and Rubber"* and *"Ores"* have the largest contribution in this group (respectively 5.6 and 5.3% of the total commodity import). The group of goods ranked second in terms of their relative share in 2015 is *"Investment goods"* (25.5%). Representatives with highest value are *"Machines, devices and equipment"* and *"Vehicles"* (respectively 8.5 and 4.8% of the total import of goods in 2015). Third is *"Consumer goods"* (21%). In this group *"Food, drinks and tobacco"* and *"Medicines and Cosmetics"* have highest turnover (respectively 6.6 and 4.6% of the import of goods in the country). Fourth is the group of *"Energy commodities"* (16% of commodity imports). Predominant in it is *"Crude oil and natural gas"* (11.2% of the total import in 2015).

The largest increase in 2015 compared to 2014 has the export of *"Electrical machinery and equipment, electrical materials and parts; sound recorders and reproducers, television image and sound recorders and reproducers, as well as parts and accessories for such devices"* (nearly EUR 390 million or 21%). Second in terms of increase are the goods classified as *"Specific goods and movements"* (EUR 205.5 million increase compared to 2014). Third place is for the goods *"Nuclear reactors, boilers, machinery and mechanical appliances; parts for those machines or apparatus"* with over EUR 113.5 million variance. Fourth and fifth by increase are *"Motor vehicles, tractors, motorcycles and bicycles and other road vehicles, their parts and accessories"* and *"Plastic products"* (respectively with variance of EUR 83 and 73 million). The outlined trend toward increase of the export of machinery, electronics, vehicles and parts is favourable for the export structure due to the fact that these are industries with relatively high added value.

The dynamics of the 2015 export decline is led by *"Mineral fuels, mineral oils and products"* (decrease of EUR 320 million or 11.5%). Second in terms of value decline is *"Iron and steel"* (by nearly EUR 138.5 million). Third place in decline of export value occupies *"Oil seeds and fruits; miscellaneous"* (more than EUR 48 million decrease). On fourth and fifth position are *"Cereal grains"* and *"Milling products: malt; starches; inulin; wheat gluten"* (respectively with a decline of EUR 44.5 million and 25 million). These changes can be considered positive, provided they are accompanied by an increase of the relative share of goods with higher added value.

The import of *"Motor vehicles, tractors, motorcycles and bicycles and other road vehicles, their parts and accessories"* has the highest increase in 2015 compared to 2014 (with nearly EUR 308 million or 19%). Second in terms of increase are the goods classified as *"Electrical machinery and equipment, electrical materials and parts; sound recorders and reproducers, television image and sound recorders and reproducers, as well as parts and accessories for such devices*" (with EUR 229 million increase compared to 2014). Third in terms of import growth in 2015 is *"Specific goods and movements"* (with over EUR 125 million variance). Fourth in terms of value variance in 2015 is the import of *"Nuclear reactors, boilers, machinery and mechanical appliances; parts for those machines or apparatus"* (with nearly EUR 111 million). Fifth place is for *"Miscellaneous chemical products"* (with variance of EUR 92 million).

Compared to 2014, in 2015 there is a decrease in import of *"Mineral fuels, mineral oils and products"* (down with more than EUR 1 billion or 20.8%). Second in value reduction is *"Products of iron and steel"* (with nearly EUR 398 million). Third in import value decline are the goods classified as *"Aeronautics and Space"* (with over EUR 43 million). On fourth and fifth position respectively are *"Sea and river navigation"* and *"Meat and edible meat offal products"* (with a decline of EUR 27 million each).

Thus, we can draw the following conclusions concerning the import structure by means of use:

- To a large extent Bulgarian economy is dependent on imported raw materials, energy resources and investment goods (nearly 80% of all imports).

- The slight increase of investments in 2015 shows that probably there is import of goods for renovation and expansion of Bulgaria's production. This can lead to an expansion of the export production potential. Therefore in the coming years we can expect minimal growth in the physical volume of export compared to the peak in 2015 under favourable international market conditions.

- The high share of imported consumer goods reveals insufficient local production of consumer goods that cannot meet the needs of the internal market.

2.2. Foreign Trade with Services

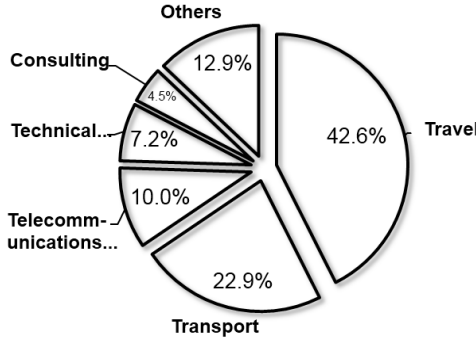
In 2015, the export of services is up to 23.3% of all the country's exports. The structure of services' export is shown on figure 2-a. Among the services, *"Travel"* (including services provided to foreign citizens in Bulgaria) has the largest share (nearly EUR 2.87 billion or 42.6% of services export in 2015). Second largest group is *"Transport"* (with EUR 1.54 billion or 22.9%). Third group is *"Other services"* (29.4%). Their disaggregation shows that *"Telecommunications, computer and information services"* has the largest share (more than EUR 674 million or 10%). It is followed by *"Technical services, trade-related and other business services"* (EUR 482 million or 7.15%) and *"Professional and management consulting services"* (EUR 300 million or 4.45%).

Services form 14.7% of the total import of the country in 2015. The structure of the services' import is presented graphically on figure 2-b. Among the services, *"Other services"* has the largest share (EUR 1.577 billion or 37.6%). The largest sub-headings are *"Technical services, trade-related and other business services"* (EUR 516 million or 12.3%) and *"Telecommunications, computer and information services"* (EUR 295 million or 7%). *"Transport"* services are the second largest group (EUR 1.52 billion or 36.2%). Third in terms of relative share is the group *"Travel"* – the services provided to Bulgarian citizens abroad. The trips took up 24% of the services' import in 2015 (with EUR 1 billion worth).

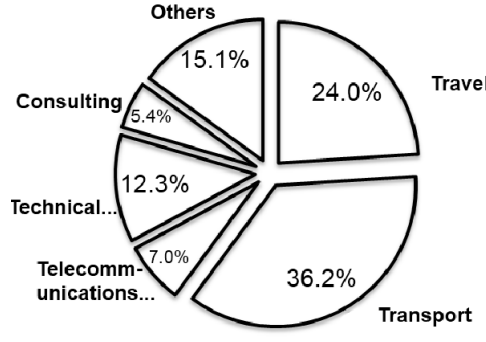
Figure 12

Structure of export and import of services in 2015

Export of services in 2015



Import of services in 2015



Source: Bulgarian National Bank.

In 2015, the export of Bulgarian services declines with EUR 4.2 million (0.06%) compared to 2014. Despite its leadership in terms of relative share, *"Travel"* services decrease with EUR 107 million compared to 2014. There is a decrease of *"Transport"* services with EUR 54.6 million. However, there is an increase of *"Other services"* with EUR 145 million. This increase includes *"Technical services, trade-related and other business services"* (with EUR 120 million) and *"Professional and management consulting services"* (with EUR 50 million).

The import of services in Bulgaria in 2015 decreases by EUR 24.5 million compared to 2014. *"Construction"* services provided abroad have the largest decrease (with EUR 197.7 million). "*Charges for use of intellectual property not included elsewhere*" reduce their value compared to 2014 by EUR 47 million. The import of *"Services related to research and development"* declines with EUR 34.9 million. The import of *"Transport"* services also shows a decrease (by EUR 26.3 million).

In 2015, *"Technical services, trade-related and other business services"* has the highest increase (with EUR 122.7 million). *"Travel"* services of Bulgarians abroad also increase by EUR 103.2 million.

In terms of services, Bulgaria ends 2015 with a positive foreign trade balance of EUR 2.55 billion. The expansion of foreign trade in services shows a serious potential as a factor in accelerating GDP growth. This is due to its higher added value, which will lead to a decrease of the total import intensity of the export.

2.3. Geography of Foreign Trade

Export

In 2015 Bulgaria keeps its main trading partners. Largest part of Bulgarian goods is exported to Germany (almost 12.4%). Other countries with a significant share of the goods' export are Italy (9.2%), Turkey (8.6%), Romania (8.1%), and Greece (6.5%). In total, transactions with EU countries are nearly 64% of the Bulgarian commodity export. Bulgaria's export to CIS countries is 3.3%, and to EFTA countries – 0.7% of goods.

The 2015 trend is for the Bulgarian export to expand its value towards partners with high share against the decrease of export to countries with less presence. The highest growth in terms of absolute volume marks the

export to Germany (EUR 238 million or 9%). The export to Egypt increases as well (with nearly EUR 195 million or 105.6%). Third and fourth place in terms of increase in goods export are for Italy and Romania (with about EUR 150 million).

The largest decline in terms of absolute value compared to 2014 marks the export to Singapore (EUR 226 million or 40%). The export of goods to the Russian Federation also decreases (with EUR 130 million or 25%), as well as the one to Turkey (with EUR 68.5 million or 3.3%). The transactions with the Syrian Arab Republic decrease with nearly EUR 57 million, which is 71% of their size, compared to 2014.

The concentration of the foreign trade to a country or an economic community, as is the case with the European Union, predetermines the dependence of the Bulgarian economy on the economic situation of the partner countries, which poses a high risk of rapid transmission of global economic trends in our country. This can easily be seen from the foreign trade trend setters as early as "2009 – apparently in response to the global financial crisis that began in 2008" (Marinov, 2015) amongst the world's largest economies.

Import

In 2015, Bulgarian import increases its value from countries in the European Union against the shrinking value of third parties – partners. The biggest part of the imported goods comes from Germany (nearly 13%). Second in terms of absolute value of transactions is the Russian Federation (with 12% of import of goods). The other countries with a high proportion of commodity import are Italy (7.6%), Romania (6.8%), and Turkey (5.7%). The transactions with the European Union countries account for more than 64% of import of goods in Bulgaria. Import from OECD countries is 8.9%, while from the countries in the EFTA – 0.8%.

Compared to 2014, in 2015 the import from Germany has the largest growth in terms of absolute volume (about EUR 183.5 million or 5.7%). The import from Italy increases with EUR 156 million (8.5%). Ranked third and fourth in terms of commodity import increase are the Netherlands (with EUR 163 million or 22.7%) and China (with approximately EUR 101.2 million or 11.7%).

Compared to 2014, the import from the Russian Federation has the largest decrease in absolute value (EUR 805 million or 20% of its 2014 value). There is also a drop in the import from Greece (with EUR 69 million or 5.2%), Ukraine (EUR 62.4 million or 11.8%), and others.

2.4. Development of Foreign Trade in the Short and Medium Term

In the years after 2009, the foreign trade has emerged as a major growth factor for the Bulgarian economy. When the respective markets have opened, export industries had the potential to respond. However, the "limited material and human resources and the weak capacities of the Bulgarian economy, combined with its intensive opening, which determines the significant dependence of the economic development and growth of export and import and the global economic situation" represented a high risk for the Bulgarian export (Tasev, 2015). Despite the high dependence on imported raw materials, the export manufactures contribute to GDP growth, since "the current potential of the Bulgarian export in case of good external conditions can provide no more than 2.5% GDP growth" (Annual Report – 2015, ERI-BAS, 2015). Empirical data of 2015 support such a hypothesis. The GDP growth of 3% is mainly the result of growth in exports and, to a lesser extent, of the increase of investments. A study of the export potential indicates that "the average size of a possible increase of export in the current structure of the Bulgarian economy ranges from 11.40 to 20.69%" (Nestorov, 2015). It can be assumed that after the export growth in 2015, the export industries in Bulgaria reach the limit of their production potential. Sustainable expansion could be obtained after additional investment in export industries.

In both short and medium term, the main factors affecting foreign trade are expected to be raw material prices, oil prices and the levels of US dollar. The price forecasts of metals and metal ores, which form a significant part of Bulgarian export of commodities, indicate a downward trend. Even if maintaining the quantities of realized export, the lower prices will lead to a drop in the value of transactions of metals and their ores. The expectations for oil prices are related to the interests of big oil players to increase and establish higher prices of "the black gold". The impact of these prices is stronger considering the value of Bulgarian import. The projections for the US dollar prices are for higher levels. This creates favourable conditions for exporters in euro, including *Bulgaria*. The directions of the different actions of the main factors show that in the next few years we can expect the export of Bulgarian goods to remain close to its 2015 values.

In turn, the forecasts for strong tourist flow during the summer months and the actively implemented policies for identifying the Bulgarian Black Sea coast as an alternative destination create prerequisites for an increase of the export of services provided to foreign citizens.

The government's capacities to further encourage the export activities of the companies are very limited. Bulgaria's trade policy is entirely dependent, on one side, on the single market rules within the European Union, and on the other side, on the common European trade policy with third countries. As a consequence, the Bulgarian government can only indirectly support the foreign trade activities of Bulgarian companies. Such tools are not new. They include activities supporting implementation of international contacts' relief in transport, general advertising at state level, and others.

3. Fiscal Policy and Government Debt

3.1. Budget Update – an Exception or a Rule?

For a third year in a row the country's government budget needs updating, if it is to be executed. If in the previous two years updates were accounted for by a change of government, and of stated priorities, respectively, last year the update was long denied (at least until September), and passed stealthily on the quiet (immediately after the local elections together with budget 2016) with no serious prior debate neither in Parliament nor on expert level. Actually, as early as the first half of the year, a substantial overperformance of the revenue side was outlined, which naturally prompted the desire to spend more. Given the magnitude of the adjustments, this could hardly happen without updating the budget expenditure side, too. Generally, such adjustments to the Budget Act are undesirable and are used rather as a last resort, as they cast doubt over the quality of the forecasting activities of the Ministry of Finance (MoF).

There are vast possibilities for the budget to impact the economic development – effects come both along the line of planning (to the extent the budget is used to send signals to the private sector), and in the process of performance, where it becomes clear how serious and fair the government's intentions were and to what extent they serve any circumstantial political interests of the moment. From this perspective, any comparison between planned budget cash flows and their actual performance is quite informative.[4]

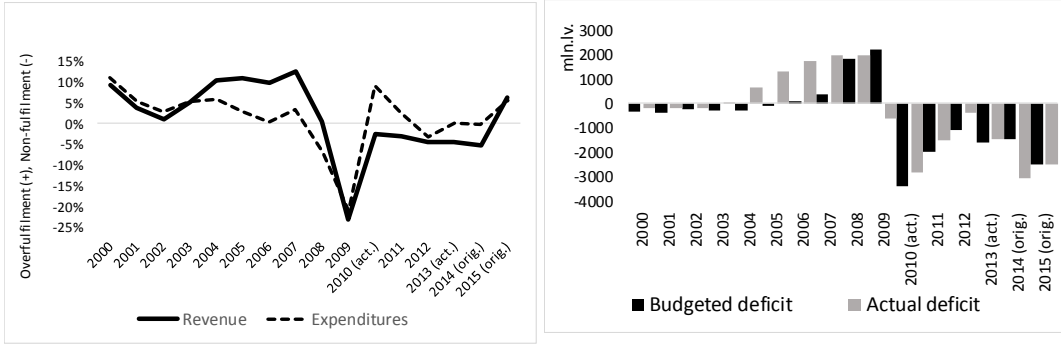
Figure 13 clearly shows that in the recent 15 years the MoF as a whole has failed to perform satisfactorily its forecasting activities. In this period, the average error in forecasting revenues was 7.1% (around BGN 1.5 billion per annum, or 2% of GDP), and in forecasting expenditures – 5.3% (around BGN 1.2 billion per annum, or 1. 8% of GDP). Moreover, some sustainable adverse trends can be clearly discerned. In a situation of economic upswing (2003-2008) revenues were underrated, which provided opportunities, through various mechanisms (as this is not allowed by law), to spend public funds without the authorization of the Parliament. In periods of low economic growth (2009-2014) revenues were overstated,

[4] For 2014 and 2015 original budget data are provided, as the update was made as late as the year-end. The budget updates in 2010 and 2013 were made in mid-year, hence updated data are provided. Had the original budgets been stated, the discrepancy between plans and realization would have been even more drastic.

which allowed for planning a corresponding amount of expenditures that would not have been otherwise planned, as they went beyond the restrictions imposed by compliance with the allowable amount of budget deficit. Notably, the trend of the recent 6 years of lower performance of budget revenues than expected ended as early as 2015. We are still to see if this will set the start of a new cycle of underestimation of the revenue side of the budget, or it will remain an isolated case. The data on figure 13 suggest the first scenario is more probable.

Figure 13

Comparing budget plan with budget execution



Source: MoF.

The budget update at the end of 2015 envisaged an increase of the revenue side by a little more than BGN 830 million (around 1% of GDP), coming mainly from indirect taxes. Irrespective of the improvement on the revenue side and contrary to the declared intentions of consolidation, the budget update envisaged a deterioration of the budget deficit by BGN 50 million, due to the BGN 880 million increase of spending. Admittedly, large part of the new expenditures (close to BGN 490 million) is in fact transfers to funds related to EU resources (the National Fund and State Fund "Agriculture"), i.e. these are funds to co-finance projects at the end of the 2007-2013 programme period. However, the other part of the increased spending (approximately BGN 390 million) is of questionable importance and is rather classical additional outlays of the government, which are traditionally budgeted under the *additional fiscal measures* item. Large part of these funds is channelled to the security ministries, more particularly to staff outlays (i.e. for salaries, bonuses and compensations), including BGN 57 million to the Ministry of Defence (BGN 48 million of which for personnel) and BGN 180 million to the Ministry of Interior (BGN 120 million of which for personnel). Given the relatively high share of expenditures on

the power structures[5], any further increase of expenditures without a tangible result is hardly economically justified. Definitely, this must have been influenced by the last year's migrant wave, which threatens Europe as a whole, but the issue of high outlays in these structures is very old and is being exacerbated rather than seeking a solution for it. The attempts at the end of 2015 to change the manner of funding and to recategorize some of the employees in the sector failed, thus demonstrating the lack of political will for implementing the much needed and long-delayed reforms.

Obviously, the medium-term fiscal policy will face serious challenges, which necessitate making responsible political decisions, many of which will be unpopular. A mandatory priority for the current and any future government should be to refrain from excessive deficit spending and to not permit the economy to enter a debt spiral, the exit from which is difficult and entails a high social price. The most important challenges can be summed up, as follows:

- on the revenue side:
  - low degree of GDP redistribution by the state;
  - maintaining an unfavourable ratio of direct to indirect taxes;
  - refusal to introduce (or at least to seriously discuss) progressive taxation;
  - preserving the flat and low tax rates for leading tax revenues;
  - difficult revenue collection.
- on the expenditure side:
  - public expenditures display a sustainable trend to increase without any clear relation to economic and/or social efficiency;
  - mismatch between annual changes in the government's expenditures and revenues;

[5] According to Eurostat data, Bulgaria ranks first among EU member states in terms of expenditure on *Public Order and Safety* as a share of GDP (around 2.9%, compared to 1.8% on the average for the EU).

- the expenditure side of the budget (particularly regarding municipal budgets) continues to be held hostage by circumstantial political interests.

3.2. Execution of 2015 Budget

The global financial crisis affected the Bulgarian economy with a certain delay and it is already clear it will go away with even greater delay. The past 2015 was the seventh year in a row with a budget deficit, and the third in a row to be closed with an updated budget. These facts *per se* are alarming for the economy operating under a currency board, but what is even more disturbing is that deficits are also underlying the medium-term fiscal framework for the coming three years. This, on its part, highlights again the somewhat forgotten issue of the need of and tolerance to public debt. It is logical to also add to the accumulated budget deficits the so-called hidden deficits, which have already grown to alarming proportions.[6] What makes the picture a bit less gloomy is the fact that public debt in Bulgaria is still low, particularly compared to most of the EU member states. This is an indisputable fact, but it would be wrong to pursue a policy of a "gradual debt increase" in the hope that it would not harm the economy. Such a policy is justified only if it offers serious structural reforms, and no such are seen on the horizon, nor any such are proposed.

The budget revenue and expenditure dynamics in 2015 was radically different in the first and second half of the year. At the beginning of the year, significant revenue overperformance was reported (particularly of indirect taxes, and more specifically VAT[7]), while the expenditure side was more or less developing as planned, which resulted in substantial fiscal surpluses. Not underrating the fact of the achieved budget surpluses (all the more so as they were achieved in a markedly deflation environment) in the first half of the year, and the increased tax collection, it should be said

[6] Here fall the liabilities of the National Electric Company (NEC) (around BGN 3 billion), for which there is a possibility to be nationalized in one form or another; the expenditures for paying out deposits to the depositors of KTB bank (around BGN 1.3 billion); the liabilities of hospitals and the State Railway company are a chronic problem, which cannot be resolved without intervention by the state.

[7] Attention should be paid to the fact that the increase in VAT revenue is entirely due to domestic transactions, while VAT revenue from imports is decreasing compared to the previous year, due to the "imported" deflation, mainly from energy resources, such as oil. The cause can be sought in the higher consumption and investment at the end of last year, which most probably continue at the beginning of the current year.

clearly that the surplus is to a great extent due to the higher amount of aid[8], and the holding up of the investment programme of capital expenditures, of which only 36%[9] were implemented by the end of the first six-month period. As expected, the gathered inertia accumulated in the first half of the year could not be kept further, as large part of the budgeted outlays were behind schedule, while it was obvious they would have to be made with the approach of local elections. Such outlays were the performance of the investment programme and the budgeted grants and the transfers from the state budget. As of the end of the year, budget expenditures sharply increased due to the need to finalize all payments on projects in the past 2007-2013 programme period. Thus, at the end of the year, not only was the full surplus accumulated in the first half of the year spent, but the budget ran a deficit, reminiscent of the pre-crisis period with its usual large surpluses until around November, which dwindled afterwards. It is worth noting that in just one month, in December, more than BGN 5 billion were spent, corresponding to 15% of the full annual expenditure, or twice the normal amount.

3.3. Analysis of the Revenue Side

A comparison of the structure of tax and social security revenues to other EU member states shows that Bulgaria features the highest share of taxes on consumption in the total tax incidence in the whole EU (around 54% against EU average of 34%). The income tax rates are among the lowest in the EU, hence the share of direct taxes in the total tax and social security revenues is one of the lowest (18% compared to EU average of 32%).

The tax revenue/GDP ratio in the EU member states varies within the range of 27 to 48% of GDP, with its value for Bulgaria being one of the lowest (around 28-29%). Another specific feature of the Bulgarian tax system is that a predominant portion of tax incidence is formed by consumption taxes, while the average EU level is around 32-33%. The

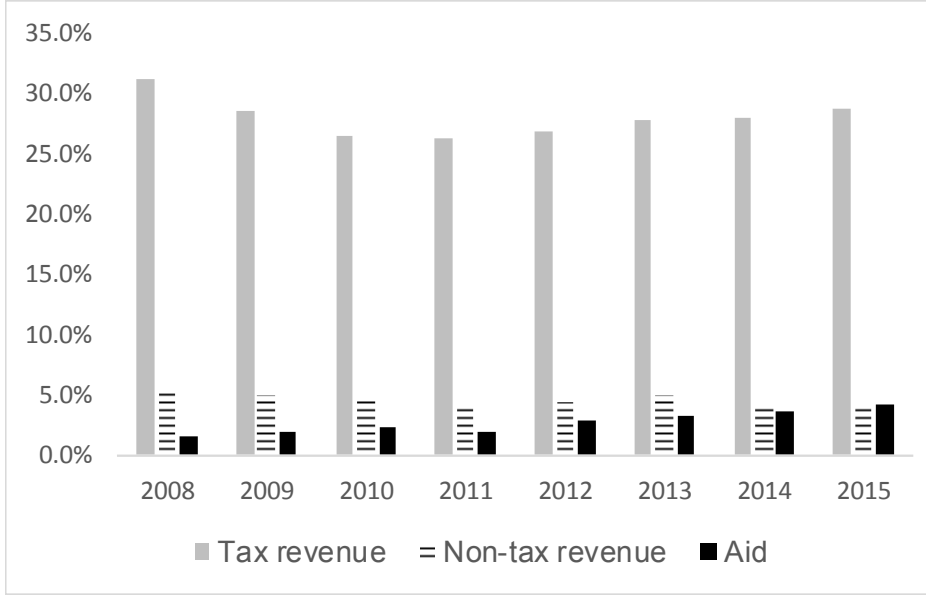
[8] The amount of overdue payments from European funds in 2014 was around BGN 900 million, i.e. these funds should have come in the second half of 2014 but were actually received at the end of the first and the beginning of the second quarter of 2015.

[9] It is fair to note that the performance in 2014 was similar (35%), and in 2013 it was even lower – only around 25%. However, comparisons are not very indicative, as in 2013 and 2014 there was a political crisis and caretaker governments, which by rule do not prioritize investment programme performance.

VAT is of the greatest fiscal importance (around 45% of tax revenues), followed by excise duties (with a share of about 24%). Revenue from customs duties has decreased three times after Bulgaria's accession to the EU in 2007, and its share is continuously shrinking already down below 1%. Approximately 1/4 of consolidated tax revenues come from taxation of incomes of physical and legal persons. The two taxes were of almost equal importance until 2008, and then the personal income tax started to grow as a share reaching 16%, while the corporate income tax kept its share at around 9-10%. The rates of both taxes have been equal since 2008, when progressive taxation of personal income of physical persons was abolished and a flat 10% rate was introduced. The dominant effect of the personal income tax is not so much due to the tax reform pursued, after which revenue increased by 9% in nominal terms, as to the shrinkage of the corporate income tax base as a result of the global financial crisis.

Figure 14

Revenue structure of the consolidated fiscal programme (% of GDP)



Source: MoF.

To the extent economic theory postulates that profit and personal income taxation has a more pronounced adverse effect on economic growth than consumption (indirect) taxes, the current structure of tax incidence in Bulgaria can be deemed favourable from the perspective of its impact on economic growth. At the same time, we should reiterate, yet again, that the great disadvantage of indirect taxes is their regressive nature, which does

not allow for greater fairness in the distribution of tax burden. From this perspective, there is a growing need to discuss possible reforms towards increasing the share of direct taxes at the expense of indirect ones and reinstating progressive taxation.

After Bulgaria's accession to the EU, there is a very pronounced trend towards an increase of aid on the revenue side of the budget, which has increased almost threefold in the recent seven years. The total amount of aid, only in 2015, increased by almost 25%, and European funds[10] account for over 90% of the total amount, growing with each year. As a result of the actions taken to speed up absorption, the financial performance of the EU Structural and Cohesion Funds improved significantly in the recent three years.

The allocation of consolidated revenues among the structural units of the *General Government* sector in the recent decade remained almost unchanged. While over 70% of revenues are received at centralized level, with time the relative share of the expenditure on *Social Security Funds* subsector has increased to 39%, at the expense of Central Government expenditures, which share shrank below 40% (i.e. is almost equal to the social security expenditures). Almost half of the social security and health insurance expenditures are financed by transfers from the Central Government, i.e. on account of tax revenues. There is a trend emerging – to finance social security and health insurance payments with tax revenue, rather than to have a self-sufficient health insurance system.

3.4. Analysis of the Expenditure Side

According to MoF preliminary data, the consolidated budget expenditures (including the contribution to the EU budget) in 2015 amounted to almost BGN 34.7 billion, and the Bulgarian state is still the largest employer and consumer in the economy. In recent years, the growth rate of spending under the Consolidated Fiscal Programme (CFP) has sustainably outpaced

[10] These include funds under the EU pre-accession instruments and under operational programmes of the EU Cohesion Fund and Structural Funds (managed by the National Fund under the MoF), the European Agricultural Fund for Rural Development and the European Fishery Fund (managed by the Paying Agency under the State Fund "Agriculture"), as well as other programmes and projects financed by EU funds and institutions. Included in the European funds are also the funds provided as national co-financing.

GDP growth, with the share of spending to GDP increasing from 34.9% in 2007 to 40.1% in 2015.

The dynamics of spending of the *General Government* sector is largely determined by the economic situation. Before the financial crisis, its annual nominal growth was around 10%, while a sizeable deceleration was evidenced in the period 2009-2011. It was most pronounced in 2011, which allows for the conclusion that in 2011 and the following years the fiscal policy was indeed focused on consolidation. In the short term, fiscal consolidation is usually accompanied by deceleration of GDP growth rate. This was also the case in Bulgaria, with growth decreasing from 2% in 2011 to 0.5% in 2012 and 1.1% in 2013. In 2014 and 2015, the opposite process occurred – state expenditures increased respectively by 6.8 and 6.7%, and economic growth rate accelerated respectively to 1.7 and 2.9% in real terms.

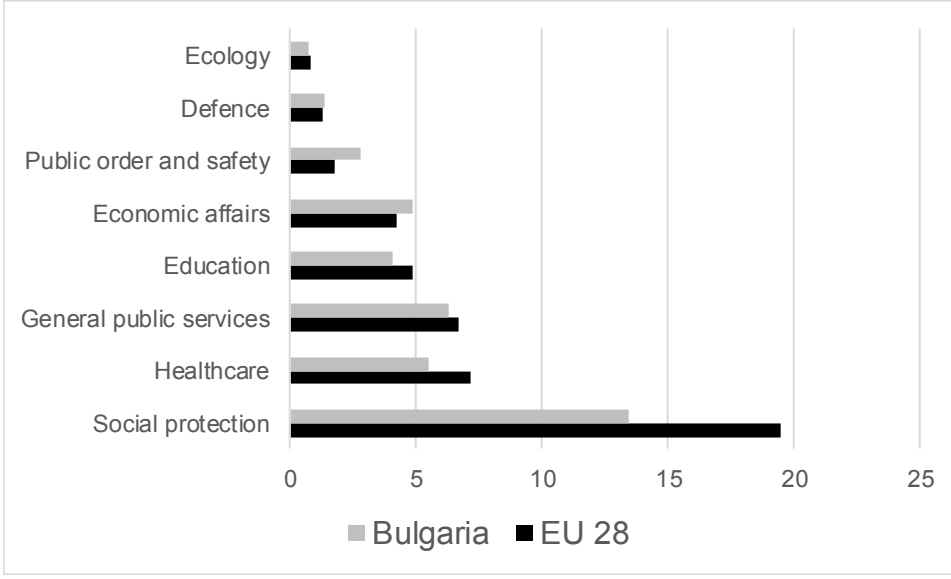
Increased government spending is an important factor for creating a budget deficit and accumulation of government debt, which cause higher interest costs for debt servicing and increased general expenditures in the following years. They affect adversely the sustainability of public finances, which is particularly important in Bulgaria given the financial crisis and its consequences. Besides, various research studies indicate that fiscal consolidation, particularly hand in hand with curbing costs, has a positive effect on economic growth in the longer perspective, due to the increased confidence in the respective economy, capital inflows, reduction of risk premiums on government debt.

The expenditures under the consolidated fiscal programme as a share of GDP in Bulgaria are considerably lower than the EU-28 average. According to Eurostat data for 2014 (figure 15), this ratio in Bulgaria is around 42%, while for the EU-28 it is around 48%. The difference is due to the lower costs in Bulgaria, than in the EU, related to social protection, health care and central government agencies (services), while the relative share of expenditure on public order and security, economic activities and defence is higher for Bulgaria than for the EU.

The expenditures for national/central civil services are lower in Bulgaria (6.3% of GDP) compared to the EU (6.7%), which can be interpreted as an indication that this function costs less to Bulgarian taxpayers, than it costs to European ones. However, a comparison of the quality of the work, which is altogether unsatisfactory, would result in rather different conclusions.

Figure 15

Budget expenditures by functions (% of GDP)



Source: Eurostat.

Bulgaria features some of the highest, in relative terms, expenditures on public order and security – 2.8% of GDP against an average of 1.8% of GDP for the EU. In relative terms the expenditure on health care is considerably lower in Bulgaria (5.5% of GDP), than in the EU (7.2% of GDP). Among the EU member states, only in Cyprus, Latvia and Romania the share of this expenditure is lower than in Bulgaria. This, however, cannot be deemed an excuse for the quality of health services, as in Switzerland, with a better developed health care system than Bulgaria, the government expenditure on this function is only 2% of GDP. In spite of the relatively low amount, there are considerable opportunities for improvement of health services in Bulgaria, while preserving the amount of spending. This could happen by strengthening control over spending funds within the system by both the National Health Insurance Fund (NHIF) and the alternative health organizations, providing health insurance services to the Bulgarian population.

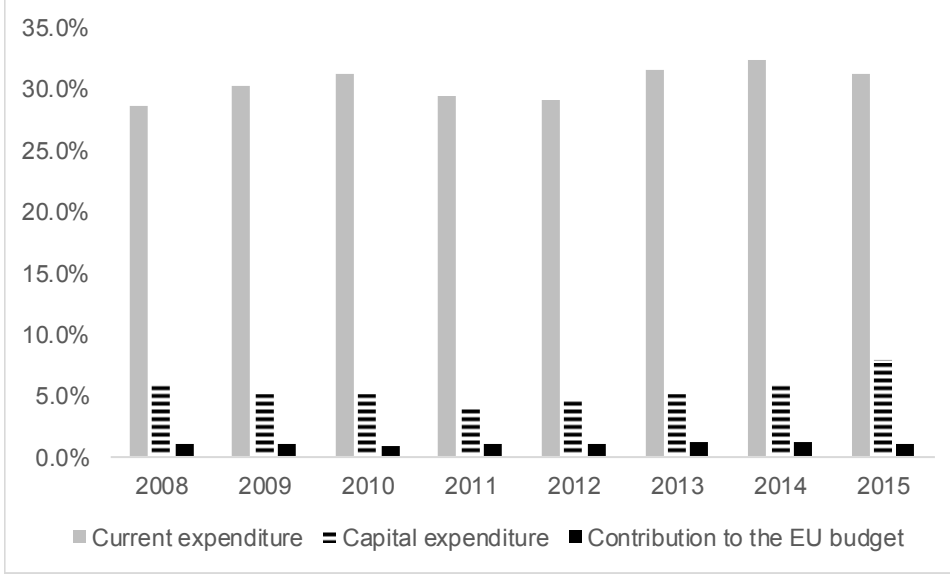
The expenditures on education, positively related to an economy's growth potential, amounted to only 4% of GDP, compared to 5% on the average for the EU. Romania is the only country where spending on education are lower than in Bulgaria. Many international research studies indicate a downward trend of student literacy performance in the subjects of

Bulgarian language and mathematics. The current design of the system under the "*money follows the student*" financing principle creates wrong stimuli for education establishments, thus reducing the value of the obtained diploma, while realization on the labour market is not made easier.

Social expenditures in Bulgaria are 13.4% of GDP, being the highest-ranking among expenditures under CFP. Bulgaria is among the countries with relatively lower social spending in the EU, where its average rate is 19.5% of GDP. They vary within a broad range – from 11.4% of GDP in Lithuania to 25% of GDP in Finland. Problems in Bulgaria are related to the low amount of pensions, early retirement of people of particular professions, large number of disability pensions, insufficient revenue from social security contributions to fund existing pensions. The expenditures for social security, assistance and care, tend to grow with each year, regardless of the economic situation. As a result, their relative share in total expenditures increased, and their share in GDP grew by more than 3 percentage points in the period 2007-2015. Expenditures for economic activities and services in Bulgaria amount to 5% of GDP, against an average of 4.3% of GDP for the EU. In the UK (3.1% of GDP), Slovakia and Germany (3.3% of GDP) these expenditures are considerably lower, which means there are possibilities for cost reduction.

Figure 16

Expenditure structure of the consolidated fiscal programme (% of GDP)



Source: MoF.

Capital expenditures are highly sensitive to changes in the economic and political environment. This confirms the understanding that this type of spending in the Bulgarian economy is practically pro-cyclical and is not used as a tool for encouraging economic activity. Data speak for themselves – their growth in 2010 was minimal (0.6%), while total expenditures increased by 4.2%. In 2011, a 16.1% drop followed, which allowed for an increase of total expenditures by only BGN 111 million. It turns out that coping with the threat of even greater budget deficit on account of expenditures was practically at the expense of capital outlays. As a result of this policy, the share of capital expenditures has dropped significantly. Given the decline of private investment, this contributed to a considerable drop in construction and total investment in the country, which was a cause for slower recovery of the Bulgarian economy. Intensified investment activities were pursued in the following years, leading to increasing growth rates of capital expenditures. Nevertheless, only in 2014 they exceeded their level of the pre-crisis 2008. The upward trend continued in 2015, as a signal that the country was getting out of the stagnation gripping the economy in the recent 5-6 years. As regards to capital expenditures, the pursued policy was towards more and more active use of European funds, with sustainable decrease of national funds in relative terms, after the EU accession of Bulgaria.

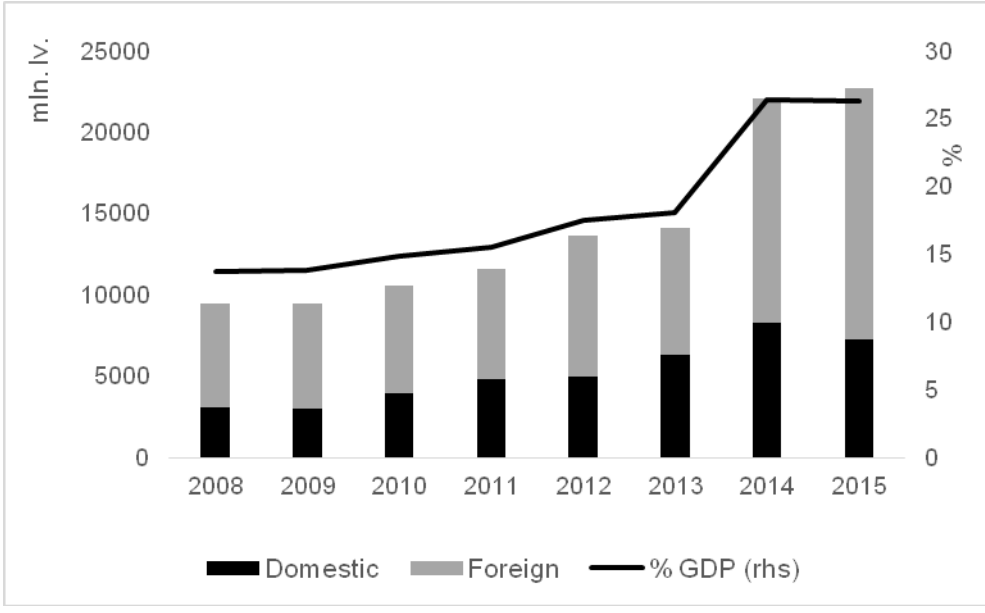
3.5. Government Debt

On the one hand, government debt can be compared to an iceberg, the visible part of which is much smaller than the invisible one. In other words, government debt is only the visible part of the problem – in this particular case the overall fiscal policy. Focusing largely or fully on the issue of growing debt is like treating the symptoms rather than the main ailment. For many years now, various economic studies have shown that the core problem lies in the lack of any reforms in the most cumbersome, expensive and inefficient systems – social security, health care, defence and security. There are no indications, either in budget 2016 or in the medium-term fiscal forecast, that any significant reforms are envisaged in these sectors. From this perspective, a definite projection can be made that, as long as no sharp change to the better is expected in the economic environment (both external and internal), the deficit spending and the growing public debt will be characteristic of the economy in the medium, and most probably in the longer term.

Only a few years ago, the issue of public debt seemed sustainably excluded from the economic and political debate (figure 17). For a whole decade, debt was decreasing both in relative terms (as a ratio to GDP), and in absolute terms. This was accounted for by several consecutive years of realized fiscal surpluses, as well as by the resolute external debt buy-back policy.

Figure 17

Consolidated public debt



Source: MoF.

Problems started six years ago, when the budget ran a deficit again, but in the recent two years the situation sharply deteriorated. At the beginning of 2013 government debt amounted to around 15% of GDP, at the end of the same year it exceeded 18%, and at the end of 2015 it already surpassed 26% of GDP. Our projections show that as of end-2018 government debt will exceed 30% of GDP. Compared to other countries, both in the region and in the EU as a whole, the external debt level is rather low, but its growth rates are worryingly high.

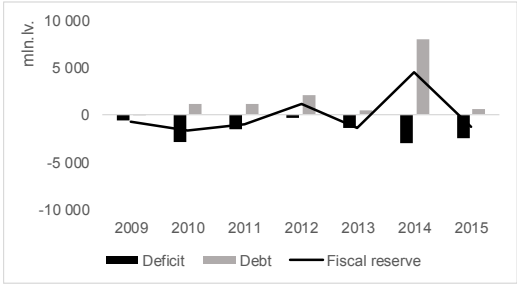
Actually, not only the high rates are worrying, but also the uncertainties as to the manner of spending the newly borrowed funds. As there are no large-scale infrastructure projects declared to be financed by these loans, obviously they will fill current budget gaps. One of the most serious grounds stated (e.g. for 3/4 of the medium-term increase of the debt

burden) is the need to refinance already issued past debt. This poses the question: how long we are to roll over old debt? The logical economic approach is to issue debt when it is expected to stimulate economic dynamics in a way that would enable the economy to repay it with the results of higher economic performance. If new debts do not bring about higher economic growth and outpacing economic dynamics, then the new indebtedness will lead only to financial enslavement.

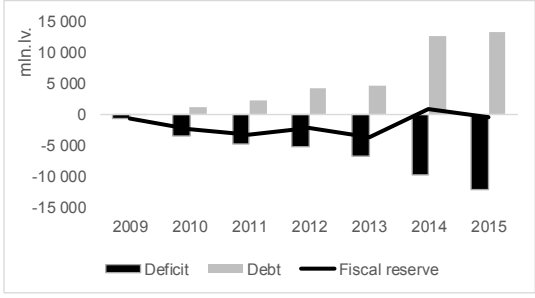
Figure 18

Fiscal statistics

by years



with accumulation



Source: MoF.

Figure 18 compares the dynamics (by year and with accumulation since 2009) of budget deficit, government debt and fiscal reserves. It is clearly seen that in the first years after the onset of the financial crisis and its following impact on the Bulgarian economy, the deficits accumulated were only partially covered by issuing new debt. In the period 2009-2011, the accumulated deficit approximated BGN 5 billion, while in the same period government debt increased by only BGN 2.1 billion. This was obviously on account of the fiscal reserve, which declined by BGN 3.3 billion, almost reaching the “sanitary minimum”. Such “fiscal juggling” should be avoided. It does nothing to help businesses, being only an attempt at blurring political responsibility. Exhausting the possibilities of using the fiscal reserve to finance current deficits quickly proved the untenability of such an approach to public finances. Certain change occurred in 2014, when the fiscal reserve had already reached critically low levels, and the only way-out of the perilous situation was to sharply increase indebtedness to both finance increasing deficits and replenish the fiscal reserve. After the crisis year 2014, there was a reverse trend – the deficit accumulated in the last two years is around BGN 5.6 billion, but this time it is accompanied by an increase of the government debt by BGN 8.6 billion and of the fiscal reserve by 3.2 billion. From this perspective, the fact that the planned deficits of almost BGN 3.7 billion by 2019 will be fully financed by issuing

debt, without using any funds from the fiscal reserves, can be assessed as positive.

It is laid down in the MoF medium-term budget forecast that in assuming new government debt in the coming three-year period, the trend regarding debt structure should be preserved to ensure predictability of budget funds needed to secure debt servicing, also having in mind the structure of the nominal amount of government debt as of end-2015. It is also stated that retaining maximum flexibility in the selection of the structure of financing in terms of markets, instruments and currencies, while recognizing the market situation of issuing debt, will be of priority importance in the period until 2019. Steps are to be taken to extend the maturity of outstanding debt and to develop a balanced maturity structure of the debt portfolio, along with extending the benchmark yield curve. These undertakings are reasonable and should be supported.

3.6. Conclusions and Recommendations

The impact of the global economic crisis on the Bulgarian economy is an indisputable fact. It affected, in various degrees, all sectors of the economy and for more than six years Bulgaria has been in a situation of stagnation. As our financial sector is still underdeveloped and only partially integrated in the global markets, the crisis penetrated though the real sector and subsequently impacted the financial one – opposite to what happened in most of our trade partners. Therefore, even now the “weak external demand” is pointed out as a reason for the economic stagnation. In fact, the pre-crisis volumes of exports and imports have been long since recovered. What has not been recovered (and would hardly be recovered even within a medium-term perspective) are the volumes of foreign investments. No matter how ineffective they were in terms of structure (prevailingly in the real estate and the financial sectors), these investments provided for a relatively high economic growth and good employment level. The economy turned out to be strongly dependent on foreign investment and incapable of generating by itself high and sustainable growth. This, on its turn, poses acutely the question “And now, what are we to do?“. It is more than clear that what is most important for the Bulgarian economy is to achieve long-term and lasting economic growth in the range of 5% per annum. Only this would ensure an abatement of social tensions that have been accumulating for years. The question is what should be the role of the fiscal policy.

The recommendable policies in the medium-term and long-term horizon are to preserve fiscal stability, while clearly stating that the growth-stimulating public expenditures should be investments in education (human capital improvement – knowledge, understanding, skills), health care (increasing labour productivity and life expectancy in good health) and economic infrastructure. From this perspective, an important priority is the restructuring of public (current and investment) expenditures and radical changes along four main lines:

- education (with focus on school education);
- health care (development of primary out-patient medical care and optimization of the hospital network); breaking the monopoly of the NHIS;
- pension reform corresponding to the demographic structure, taking into consideration the strengthening of the role of the second and third pillars and reducing government budget transfers;
- economic infrastructure – mainly water utilities (water supply, sewerage, water treatment and hydro melioration) and transport (national road network, railway infrastructure, ports and airports).

Another important line of reforms to ensure sustainable development of the national economy will require a more equitable and rational tax system. Bold reforms are needed in the tax regulatory framework, which in the medium term will result in:

- gradual increase of the weight of the income tax (including by reconsidering the flat-rate proportional tax on personal incomes, “dynamic development” of corporate income taxation and other measures);
- reducing the burden of indirect taxes on consumption (alternatives are possible also by introducing a differentiated VAT rate[11], increasing the threshold for mandatory registration under the VAT Act and a balanced excise tax policy);

[11] This matter does deserve an in-depth and pragmatic consideration, rather than a doctrinaire approach. Quite recently it became clear that from 1st June 2015 Romania will reduce drastically its VAT rate on foodstuffs from 24 to 9%.

- increasing the importance of property taxation (by expanding the tax base, progressive taxation and reducing tax reliefs).

These important structurally determining reforms should be implemented following a careful “impact assessment “, as it is impossible to expect they could have both a positive fiscal effect and a long-term macroeconomic effect. In some cases, we may have to choose between a temporary higher deficit versus long-term effects. In this regard, it would be very useful if the assessment of the expected actual consequences (costs, benefits and redistribution effects) from the proposed/existing regulatory acts (laws, decrees, ordinances, etc.) is appropriately regulated and institutionalized. This would guarantee:

- better and more responsible and transparent political decisions;

- less and more clearly cut regulatory acts of higher quality;

- commendable (and nationally responsible) participation in the legislative process on EU level.

More specific (and relatively quicker) steps can be taken with a positive fiscal effect, while simultaneously having no negative effect on economic activity. Some of the more important steps are:

- improving the budget projection and planning technology;

- active management of public property and analysis of the activities of the state’s participation in economic activity with a view to minimize it;

- seeking opportunities for cutting current costs (of salaries and current operating costs) in the public sector. This applies practically to all administrative units, but with a greater weight to the national security, defence and law-enforcement agencies, where the costs are unjustifiably high;

- accelerating the process of fiscal decentralization.

4. External Debt

The gross external debt of Bulgaria in 2015 decreased by EUR 5.266 billion and in the end of December it reached EUR 34.091 billion. The leading factor for this change was the reduction of intercompany loans by EUR 3.2 billion at the end of the first half of 2015 and the beginning of the second one (as a result of some unilateral write-off of a foreign creditor receivables). The commercial banks, which debt decreased by EUR 1.3 billion, have a considerable contribution to the debt reduction, as it came mainly at the expense of short-term component (in the end of first half), which was quite understandable amid the drastic fall in local resource price and weakened domestic lending activity. The "government" sector has a relatively small share of the overall debt reduction (EUR 450 million), as in parallel with the decline in its absolute volume, the structure has altered entirely in favour of the long-term component, which grew by EUR 534 million (reaching 5.6 billion at the end of 2015).

Thus the share of long-term debt increased in the compound structure of gross external debt (mainly because of the government debt issue in March), so at the end of 2015 it reached 76.9%. Such a change was pretty expected, as far as the interest rates on international financial markets continued to decrease throughout almost the whole year, as well as the tendency of old debts refinancing.

Most probably these tendencies will remain over the next two years, at least to the extent of consistency with objectives, declared by the MoF in its medium-term 2017-2019 forecast. In the *debt management* section, it explicitly stated that MoF will maintain maximum flexibility in selection of the funding structure in terms of markets, instruments and currencies in compliance with the issuance market conditions. Some steps to extend the maturity of outstanding debt and to build a balanced maturity structure of the debt portfolio are envisaged within the projection period, as they will be undertaken in parallel with the expansion of the reference yield curve.

The slowdown of the debt yield dynamics is noteworthy. Still in the first quarter of 2015 the benchmark securities yield to maturity (issued by the Ministry of Finance – central government and denominated in national currency) on the secondary market, slowed its dynamics down. For a period of six months the interest rate remained within 2.3-2.4% range on the secondary market, yet in the month after it increased briefly reaching almost 3%. At the same time, the interest ratios on the secondary markets of some other countries (like Hungary, Croatia, Ireland, Italy and Spain)

decreased by 0.4-0.5 pp during the second half of 2015. In our northern neighbour country Romania the yield on government securities decreased by 0.39 pp (down to 3.6%) for the same period.

Such a change gives us some grounds to assume that still in the next year the price of Bulgarian external debt will start to grow and outpace most EU countries. It should be stressed out that the mentioned trend can be seen quite clearly still since 2012, when Bulgaria ranked 12th among countries with most inexpensive debt until after the mid-2014, when it took place between 20th and 22nd.

Indeed, the rise of government debt interest in 2014 was largely driven by specific events such as the suspension of KTB license (in the second half), the emerged need for some liquidity support for the banking sector, the adverse findings of the European Commission monitoring reports and others. Besides the impact of those factors, however, some significant influence over the credit rating of Bulgaria (and on the cost of funding as well) was observed by the announcement of the Bulgarian government intention to issue BGN 16 billion of debt during the period 2015-2017.

Besides the surprisingly large amount of projected issuance, the investor sentiment was largely influenced by the manner of announcement of this intention as well. The figures in the original proposal in no way corresponded with the previous estimates and calculations of the Ministry of Finance. Particularly disturbing was the lack of consistency with the updated (just three weeks earlier, on 16th January 2015) macroframe, whereby at the end of 2017 the public debt was projected to reach BGN 23.9 billion, while the number presented in the parliamentary proposal was considerably higher (BGN 27.4 billion).

In addition to the situation described above, during the course of discussions and at a later stage the declaration of issuance policy does not clarify the key priorities, requiring such a significant increase of the debt burden. According to the published content, the policy of public debt management (in 2014-2015) is aimed to "*providing the necessary funding to the state budget and refinancing of the outstanding debt, as a direct consequence of the need to cover the maturing debt, budget deficits, maintaining a targeted level of the fiscal reserves and, if necessary, providing funds for liquidity support*". Pretty similar phraseology could be found in the next year priorities. In other words, it turns out that the growth of government and government-guaranteed debt over the past two years is dictated solely by the budget deficits and the necessity to cover some old

debts (inherited from the former Bulgarian governments) and deficit rising as well, yet not because of following some long-term strategy aimed at stabilizing the domestic economy potential.

Table 3

Gross external debt by institutional sector

	EUR million		Growth	Pace	Share of GDP		Share of GED	
	2015	2016			2015	2016	2015	2016
I. General Government	**6026.5**	**5576.3**	-450.2	-7.5	14.1	12.6	15.3	16.4
Short-term	***984.0***	***0.0***	-984.0	-100.0	2.3	0.0	2.5	0.0
Loans	984.0	0.0	-984.0	-100.0	2.3	0.0	2.5	0.0
Long-term	***5042.5***	***5576.3***	533.8	10.6	11.8	12.6	12.8	16.4
Bonds and Notes	3501.4	5781.5	2280.1	65.1	8.2	13.1	8.9	17.0
Bonds and Notes held by residents	-932.0	-2741.3	-1809.3	194.1	-2.2	-6.2	-2.4	-8.0
Loans	2654.5	2717.6	63.1	2.4	6.2	6.2	6.7	8.0
Negotiable loans held by residents	-181.5	-181.5	0.0	0.0	-0.4	-0.4	-0.5	-0.5
II. Monetary Authorities	**0.0**	**0.0**	0.0		0.0	0.0	0.0	0.0
III. Banks	**5467.2**	**4126.4**	-1340.9	-24.5	12.8	9.3	13.9	12.1
Short-term	***4277.4***	***3066.6***	-1210.8	-28.3	10.0	6.9	10.9	9.0
Money Market Instruments	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Loans	1557.2	314.5	-1242.7	-79.8	3.6	0.7	4.0	0.9
Deposits	2636.0	2662.0	26.0	1.0	6.2	6.0	6.7	7.8
Other debt liabilities	84.2	90.1	5.9	7.0	0.2	0.2	0.2	0.3
Misc.	84.2	90.1	5.9	7.0	0.2	0.2	0.2	0.3
Long-term	***1189.9***	***1059.8***	-130.1	-10.9	2.8	2.4	3.0	3.1
Bonds and Notes	120.1	120.1	0.0	0.0	0.3	0.3	0.3	0.4
Loans	1069.8	939.8	-130.1	-12.2	2.5	2.1	2.7	2.8
IV. Other Sectors	**11984.9**	**11735.9**	-249.0	-2.1	28.0	26.6	30.5	34.4
Short-term	***4707.7***	***4816.0***	108.3	2.3	11.0	10.9	12.0	14.1
Loans	3408.4	3516.7	108.3	3.2	8.0	8.0	8.7	10.3
Commercial credits	1299.3	1299.3	0.0	0.0	3.0	2.9	3.3	3.8
Long-term	***7277.3***	***6919.9***	-357.4	-4.9	17.0	15.7	18.5	20.3
Bonds and Notes	1025.7	1158.1	132.4	12.9	2.4	2.6	2.6	3.4
Loans	6251.5	5761.8	-489.7	-7.8	14.6	13.0	15.9	16.9
V. Direct investment: intercompany lending	**15877.8**	**12652.4**	-3225.5	-20.3	37.1	28.7	40.3	37.1
Payables to related parties	25.6	25.6	0.0	0.0	0.1	0.1	0.1	0.1
Expired	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Other	25.6	25.6	0.0	0.0	0.1	0.1	0.1	0.1
Liabilities to direct investors	15852.2	12626.7	-3225.5	-20.3	37.1	28.6	40.3	37.0
Expired	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Other	15852.2	12626.7	-3225.5	-20.3	37.1	28.6	40.3	37.0
GROSS EXTERNAL DEBT (GED) (I+II+III+IV+V)	***39356.5***	***34090.9***	-5265.5	-13.4	92.1	77.2	100.0	100.0
Long-term external debt	29387.4	26208.4	-3179.0	-10.8	68.7	59.3	74.7	76.9
Short-term external debt	9969.0	7882.6	-2086.5	-20.9	23.3	17.8	25.3	23.1
Public sector external debt	6552.0	5997.7	-554.3	-8.5	15.3	13.6	16.6	17.6
Private sector external debt	32804.4	28093.3	-4711.2	-14.4	76.7	63.6	83.4	82.4

Source: BNB, annual report 2015.

It is well-known that the pursue of such a vision is a sure entrance into a debt spiral, because this way it is not possible to reach a moment when the

value added in the local economy will be sufficient to repay (at least partially) the accumulated debts to the external creditors.

It should be noted that the impact of increasing interest payments over the debt burden will become more tangible as the time passes. For the past 2015, in an environment of extremely low interest rates, these payments reached 0.8% of GDP. According to the Ministry of Finance projection, their volume will increase by only 0.1 pp until 2019 (with the leading role of foreign debt payments, which will increase from 0.5 to 0.7 pp). Even such a forecast to be fulfilled, the interest payments are unlikely to remain near these levels during the next stage when the interest rates start to stabilize.

It can be concluded that the adherence to our current debt policy (characterized by a lack of adequate long-term development targets and extremely low transparency of the accumulated public resource utilization) will gradually bring the Bulgarian economy to a condition, in which the debt will become uncontrollable, and its servicing – impossible. Indeed, at the current level and cost of debt servicing it is still too early to talk about this stage but if keeping trends of the past two years for a foreseeable period (let us say 5-7 years) one could assume that the adverse scenario is more than a possibility.

5. Monetary Sector

In 2015 the monetary sector remains stable, reflecting the processes occurring in the Bulgarian economy and the tendencies in the international environment. The analysis of the sector presents the most important determinants of the supply and demand for money and, as a consequence of that, the price and interest levels. As a whole, under the currency board arrangement, the impacts on the monetary sector are limited in scope. Hence, the influence of the monetary system on the national economy is to a much smaller extent the result of targeted economic policies; rather it is a consequence of the automatism, which is characteristic of the monetary regime.

An important factor for the dynamics of money supply is the country's financial flows. From this standpoint, it is important to briefly identify the tendencies characterizing the individual accounts from the balance of payments, as a means to outline the favourable opportunities and the threats facing the dynamics of foreign exchange reserves – a direct result of the country's financial flows. The foreign exchange reserves not only guarantee the stability of the monetary sector, but are also closely linked with the processes occurring therein. The analysis of the coverage of the monetary base with foreign exchange reserves allows for the formulation of conclusions about the stability of the monetary system. On the other hand, here we analyze the currency in circulation, the quasi money, as well as money supply as a whole, including its structure. Next, the demand for money is analyzed, and domestic credit is used as the indicator for it. Based on the thesis that money supply and demand are the basis of the dynamics and tendencies in the price and interest rate levels, they are also subject to analysis, while the interest rate level is presented via the average nominal interest rates on deposits and loans. Furthermore, this analysis seeks to find a common link between money supply and the growth rate of the economy.

The medium-term prospects of the monetary sector follow the economic tendencies, embedded in the general forecast framework (see table 2).

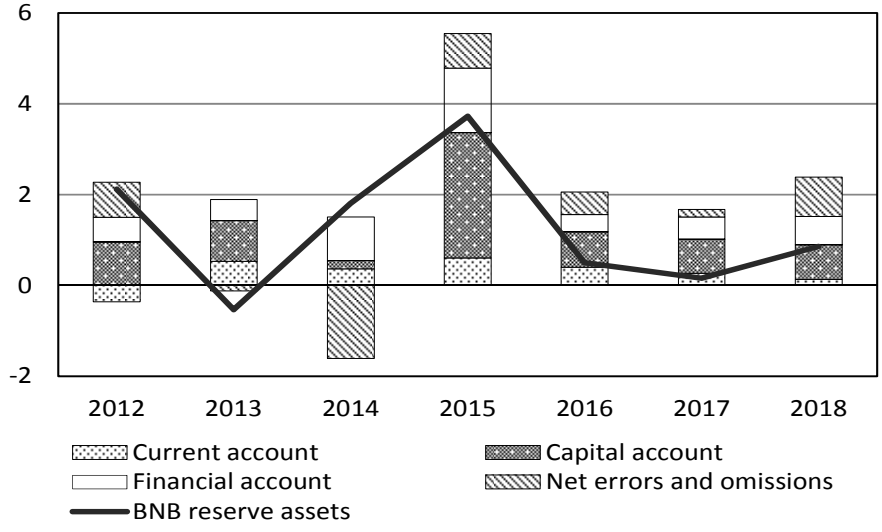
5.1. Foreign Exchange Reserves – a Key Factor of the Monetary System

The balance of payments encompasses the cash flow between the internal environment and the national economy, which is why it has a significant influence on the ongoing processes in the monetary sector. As a result of

the dynamics of the accounts of the balance (current, capital and financial)[12] the reserves of BNB (i.e. without taking into account exchange rate fluctuations and price levels) increase by a total of EUR 5 billion during the period 2012-2015, while the respective dynamics are divergent by both years and individual components. The current and capital accounts significantly and positively contributed to the achievement of this result. In total, the financial account was also positive as a result of foreign investments in the country amounting to around EUR 1.2-1.5 billion per year and attracted funds from emissions of government debt on international markets.

Figure 19

Dynamics of reserve assets of BNB (EUR billion)



Source: BNB, 2016-2018 forecast.

The increase rate of the BNB reserves for the period 2016-2018 is expected to be lower than the forecasted one in this report, because of the anticipated positive balances of the accounts from the balance of payments. More specifically, the current account side of the trade balance is expected to remain strongly negative at levels of around EUR 2 billion per year. Within the current account, this tendency will be largely compensated for, as was the case in recent years.

At the end of 2016 the capital account is expected to have lower balances than the ones registered in the end of 2015. This is due to the anticipated

[12] Also included in “Net errors and omissions”.

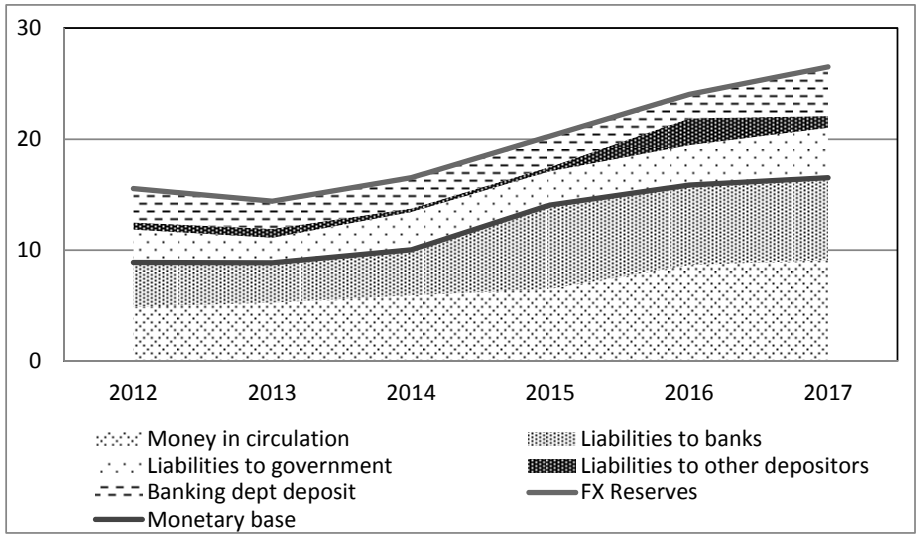
much lower capital transfers (mainly for public expenditures), while they will gradually increase during the next two years at the expense of the funds and programmes of the European Union.

Positive balances in the financial account can be anticipated in view of the expected increase in FDI, which will, however, remain lower than EUR 2 billion per year by the end of the period. Without being specifically oriented towards the monetary sector, the policy on attracting FDI would, in addition, stabilize the monetary system. In that sense, the structural reforms and, above all, the reforms of the legal and administrative system are essential. In the future the increase of government debt will undoubtedly impact foreign exchange reserves through the cash outflows.

On the basis of the dynamics of the balance of payments, the market value of international reserves, measured at the end of each year via the balance of the "Issue" department, is characterized by a stable tendency of increase – an average per annum rate of increase of 10% for the period 2012-2015.

Figure 20

Dynamics of international reserves (EUR billion)



Source: BNB, 2016-2018, forecast.

The liabilities in the balance of the "Issue" department indicate a structure, dominated by the monetary base, which is the central factor of money supply in the economy. The other main components are "Liabilities to government" and "Deposit of the 'Banking' department", while the so-called

Other liabilities are of secondary importance. The dynamics analysis indicates that the structure of liabilities is characterized by an increase in the relative share of the monetary base by 12.2 pp for the retrospective period, i.e. the average annual rate of increase amounts to 17.7%, which is a far higher increase rate in comparison to foreign exchange reserves as a whole. The factors of this growth were the currency in circulation, which increased by average 10% on annual basis, and, above all, the liabilities to banks, which increased by average 29.3% per annum during the period 2012-2015. This increase in the amount of currency in circulation was influenced by the comparative political stability in the country, the decrease in interest rates on deposits, as well as the problems surrounding KTB and First Investment Bank.

Table 4

Structure of foreign exchange reserves (%, pp)

	2012	2015	2018	∆ 15/12*	∆ 18/15
Monetary base	57.2	69.4	61.3	12.2	-8.1
Liabilities to government	19.1	15.0	17.0	-4.1	2.0
Deposit of “Banking” department	19.7	13.7	17.7	-6.0	4.0
Other	4.0	1.9	4.0	-2.1	2.1

* *Change between 2012 and 2015, and 2015 and 2018, in pp, increase +, decrease -*
Source: BNB, 2016-2018, forecast.

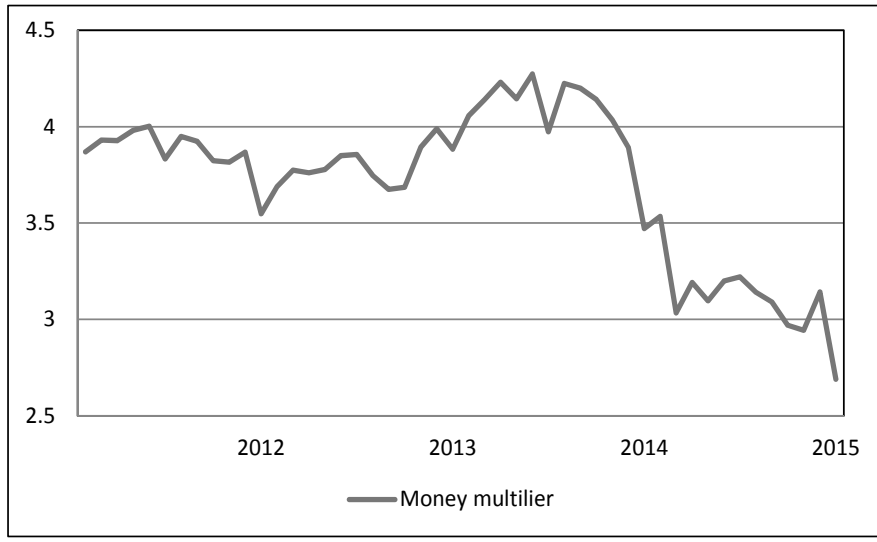
In the case of increasing liquidity, banks keep excess reserves at BNB at zero interest. In the end of the period BNB imposed a negative interest rate on excess reserves. The specificity here is that the negative interest rate is solely imposed on excess reserves in contrast to the policy of other central banks in the EU. The decrease of the interest rates on deposits will continue to stimulate the increase of the amount of currency in circulation, which will moderately support the consumption of the households and will help to discontinue the deflation tendency in the economy. In this respect, there is little further room and available tools to conduct an active monetary policy, because these tendencies are a direct consequence of global deflation processes that the national policy cannot influence.

The dynamics of the monetary base directly influences money supply, measured by the M3 monetary aggregate, via the money multiplier. For the period 2012-2015 the money multiplier varies significantly – between 2.5 and 4.5, registering, as a rule, a decrease in the end of the respective years as a result of the increase of the amount of money in circulation, withdrawn from monetary multiplication. The same applies to the excess reserves of commercial banks at the Central Bank.

Since the mid-2014 the money multiplier registers a tendency towards decrease, which reflects the changes in the monetary base and respectively the increase of the amount of currency in circulation and the excess reserves.

Figure 21

Money multiplier



Source: BNB.

In the short and medium term the money multiplier can be anticipated to stabilize and subsequently increase. This can be explained by the fact that the excess reserves will more likely decrease as it can be expected that in the medium term better opportunities will arise for the banks to trade off their resource. On the other hand, it is rather improbable that the Central Bank will adopt a policy aimed at changing the minimum reserve requirements.

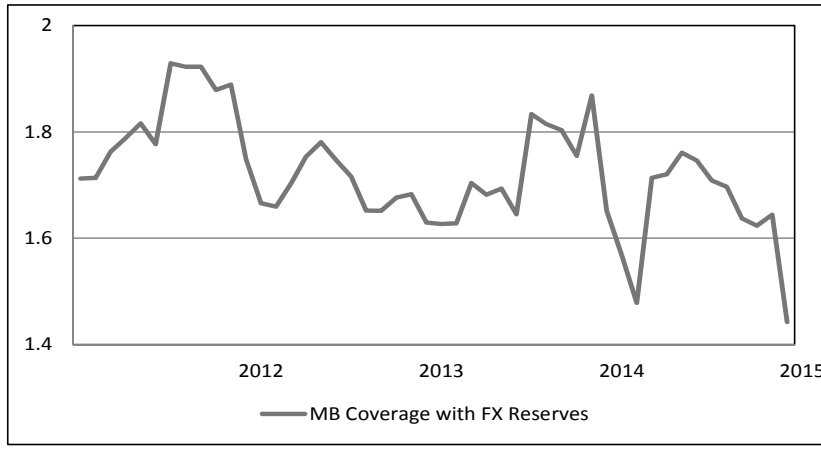
5.2. Indicators for Stability of the Monetary System

The rapid increase of the monetary base logically raises the question about its coverage with reserves, since if this increase is too rapid, it could lead to a decrease of the coverage of the monetary base with foreign exchange reserves. In practice, this coverage is a central indicator for the stability of the monetary arrangement. The required minimum for guaranteeing stability is 100% coverage; for additional security this minimum is increased by an additional buffer of 10-15%.

In actuality, after the coverage of the monetary base with foreign exchange reserves decreased by nearly 40 pp (from 1.87 to 1.48) between December 2014 and February 2015, and as a result of the processes surrounding KTB, which were intensified by the seasonal declines at the end of the year, the coverage stabilized by mid-2015. After that, except for the December decrease, it gradually decreased due to the more rapid increase of the monetary base, conditioned by the increase rate of foreign exchange reserves. Regardless of that, the monetary system remained stable; there are no indications of forthcoming changes towards its development.

Figure 22

Coverage of the monetary base with foreign exchange reserves



Source: BNB, own calculations.

5.3. Money Supply – Tendencies and Expectations

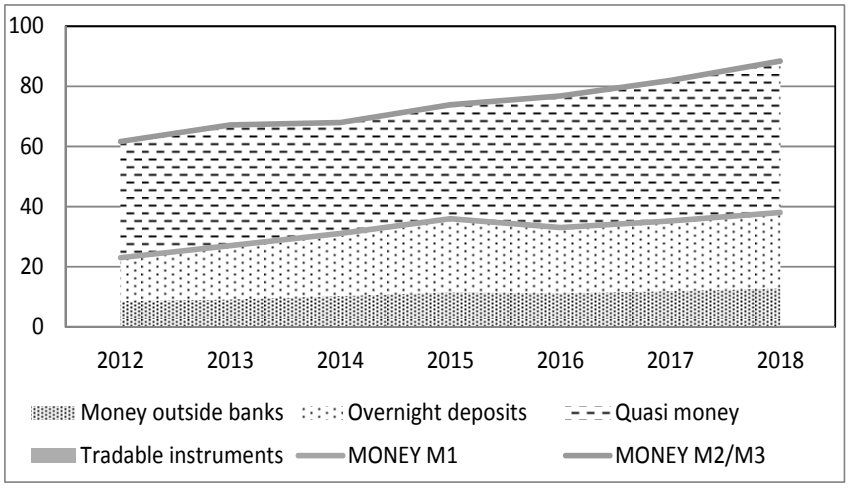
The amount and structure of the liabilities in the balance of the "Issue" department directly influence money supply, measured by M3 (broad money). While the sum of the assets in the balance of foreign exchange reserves is conditioned by the dynamics of the cash inflows and outflows, the structure of the liabilities is the result of a multitude of internal factors: tendency towards cash at hand, amount of deposits, policy of BNB regarding the minimum reserve requirements for commercial banks, decisions of the commercial banks on how much excess reserves to maintain, government fiscal policy and others.

Money supply (measured by the M3 aggregate), which represents the money outside banks, overnight deposits, quasi money and tradable instruments, increased during the period 2012-2015 by BGN 12.3 billion or

19.8% in nominal terms, registering a tendency of gradual increase. On the other hand, its structure underwent changes during the analyzed period: quasi money – a result of the monetary multiplication, decreased (see figure 23); the share of narrow money increased at the expense of an increase of overnight deposits and, to a considerably smaller extend, of the money outside banks.

Figure 23

Dynamics of M3 (BGN billion)



Source: BNB, 2016-2018, forecast.

The lack of sufficient interest bearing opportunities within the national economy, in addition to the high liquidity of commercial banks and the low interest rate levels, supported the increase of the amount of overnight deposits and money outside banks.

Table 5

Structure of money supply (BGN billion, %, pp)

	2012*	2015	2018	Δ 15/12**	Δ 18/15
M3 (BGN billion)	61.7	74.0	88.5	12.3	14.5
Tradable instruments	0.1	0.1	0.1	0.0	0.0
M2	99.9	99.9	99.9	0.0	0.0
Quasi money	62.5	51.3	56.9	-11.2	4.6
M1 (narrow money)	37.3	48.6	43.0	11.3	-5.6
Overnight deposits	23.5	33.3	28.6	9.8	-4.7
Money outside banks	13.8	15.4	14.4	1.6	-1.0

** Data from the end of December of the respective year, from M3 down – in %*
*** Change between 2012 and 2015, and 2015 and 2018, from M3 down – in pp*
Source: BNB, 2016-2018, forecast.

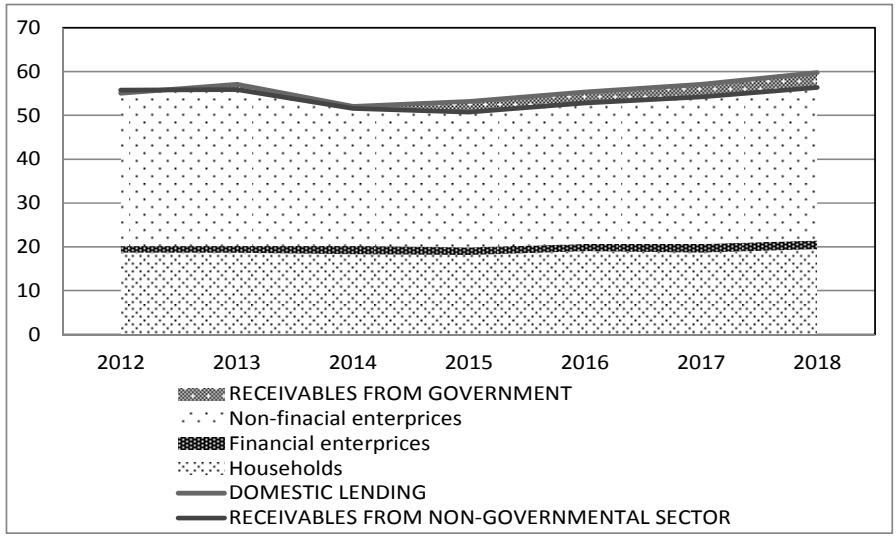
The forecast of monetary aggregates until 2018 is based on the assumption that M3 will increase at a rate, comparable to the one registered during the period 2012-2015. Continuation of the ECB policy for quantitative easing until the middle/end of 2016 will increase money supply in the euro area, from where, indirectly, through the mechanism of cross-border banking, the money supply in the country could also be supported. According to our forecast, the government policy of increase of external indebtedness in 2014 will decrease in intensity over the following years in comparison to the preceding period (table 2). On the other hand, a change in the structure of M3 can be anticipated as a consequence of a slight improvement in lending and, as a result of that, in monetary multiplication. This will lead to a larger relative share of quasi money in M3 at the expense of a decrease of the share of narrow money.

5.4. Money Demand – Driving Factors

While money supply is largely dictated by the global monetary tendencies, money demand depends on a multitude of internal factors: interest rate, income growth, inflation expectations, availability of investment opportunities, business projects, and others. Domestic credit is analyzed as an indicator of the dynamics of money demand for the period. During the analyzed period it decreased by 3.4% or BGN 1.8 billion in comparison to the period 2012-2015.

Figure 24

Domestic credit (BGN billion)



Source: BNB, 2016-2018, forecast.

One of the reasons for this dynamics is the decrease of 7.7% in 2014, which is conditioned by a number of reasons, including de-recognition of the assets of KTB. During the analyzed period the structure of domestic credit is characterized by an increase of the share of credit towards the governmental sector (5.8 pp) and a respective decrease of the share of credit towards the non-governmental sector (-5.8 pp). During that period the relative share of the loans to non-financial enterprises decreased significantly (-6.6 pp), while the shares of the financial enterprises (0.7 pp) and the households (0.1 pp) registered a slight increase. The decrease of the loans to non-financial enterprises, as a whole, reflects the problems of the real sector in the conditions of delayed recovery from the crisis. Against this background, the consequences from the KTB case become clear and explicit; it also influenced the state of domestic credit as a whole.

During the forecast period, domestic credit is expected to recover at a rate, which corresponds with the dynamics of money supply. Against this background, there is no reason to anticipate significant changes in the structure of domestic credit, which will remain similar to the one from the end of 2015.

Table 6

Structure of money demand (BGN billion, %, pp)

	2012*	2015	2018	Δ 15/12**	Δ 18/15
Domestic credit (BGN billion)	55.0	53.2	57.7	-1.8	4.5
Governmental sector	-1.2	4.6	5.7	5.8	1.1
Non-governmental sector	101.2	95.4	94.3	-5.8	-1.1
Non-financial enterprises	64.7	58.1	58.5	-6.6	0.4
Financial enterprises	2.5	3.2	3.2	0.7	0.0
Households	33.9	34.0	32.6	0.1	-1.4

** Data are for the end of the respective year, from "domestic credit" down – in %*
*** Change between 2012 and 2015, and 2015 and 2018, from "domestic landing" down – in pp*
Source: BNB, 2016-2018, forecast.

5.5. Links with the Price and Interest Level and the Rate of Economic Growth

The changes in money supply and demand led to specific changes in the tendencies of fluctuation in the price and interest levels in the period 2012-2015. Hence, in the end of 2012 the harmonized index of consumer prices accounts for 2.8% annual inflation, which was negative as of the end of 2015 (-0.9%). The increase of money supply in the analyzed period amounts to BGN 12.3 billion or 19.8%. The price level decreases and in

2015 deflation is registered. In these conditions money demand is limited and domestic landing decreased by 1.8% or BGN 3.4 billion.

On the other hand, the savings of households and enterprises increased by BGN 11.1 billion, which does not stimulate demand for goods and services, capable of driving the price level up. It can be anticipated that the infusion of liquidity into the European economy on the basis of the ECB policy of quantitative easing will also influence the price level in Bulgaria. The low oil prices also have a deflationary impact; their levels will hardly change significantly until the end of 2016, since the forecasts indicate that the oil market will continue to be dominated by high demand.

Besides the decrease of the price level, the inconsistency in the dynamics of money supply and demand led to a decrease of the nominal interest rate level, while, on the other hand, the margin between the interest on deposits and loans increased from 3.8 to 4.6 pp. Together with the increase of the taxes on financial needs, this enlarged margin allowed for the normal functioning of the banking system against the background of increasing deposits and decreasing amount of loans. It is apparent that in this deflationary environment the decrease of the interest level is not uniform: the real average interest rate on deposits was 1.1% as of December 2012, while as of December 2015 it was 2%; for the loans the respective rates are 4.9 and 6.6%. In other words, the changes in the interest rates do no alleviate the imbalance in money supply and demand.

Table 7

Price and interest level (%, pp)

	2012*	2015	2018	Δ 15/12**	Δ 18/15
Annual inflation	2.8	-0.9	1.7	-3.7	2.6
Average nominal interest rate on deposits	3.9	1.1	1.0	-2.8	-0.1
Average nominal interest rate on loans	7.7	5.7	5.0	-2.0	0.7
Average interest margin	3.8	4.6	4.0	0.8	-0.6

** Data are for the end of December of the respective year*
*** Change between 2012 and 2015, and 2015 and 2018, in pp, increase +, decrease –*
Source: BNB, 2016-2018, forecast.

The expectations are for a slight decrease of the margin of negative real interest rates on deposits, which will change with the forecasted low level of inflation towards the end of the medium-term period. Hence, the banking sector will continue to accumulate liquidity in conditions of intensified competition between the banks and increasing number of regulations. On the other hand, the real economy, which faces a series of serious structural

problems, will continue to operate at a low speed in anticipation of being swept up by a new global business cycle. The monetarization the economy in the period 2012-2015 reflects the positive economic growth. In the period 2016-2018 the increase of money supply is forecasted to reflect the projected real growth of the economy. The stimulation of the growth of the real economy on the basis of an increase of its monetarization will continue to be a positive tendency in the development of the monetary sector.

5.6. Summary and Recommendations

- The monetary sector remains stable in 2015. Money supply increased during the period 2012-2015 by BGN 12.3 billion or 19.8% in nominal terms, while money demand decreases by BGN 1.8 billion or 3.4%.

- The imbalance in money supply and demand reflects the deflationary tendencies, which condition a decrease of domestic lending and an increase of savings.

- The discrepancy in the dynamics of money supply and demand led to a decrease of the nominal interest rate level and an increase of the spread between the interest rates on deposits and loans.

- The current and capital account reflect the positive tendencies, resulting from the increase of foreign exchange reserves.

- In the end of 2015 BNB introduced a negative interest rate on excess reserves, which is expected to impact their growth rate in the medium term. This step of BNB is consistent with the policy of the ECB and the Central Banks of the EU member states. The specificity lies in the fact that, in contrast to the policy of other Central Banks in the EU, the negative interest of BNB applies solely to excess reserves.

- The policy aimed at attracting FDI, without being specifically oriented towards the monetary sector, would in addition further stabilize the monetary system.

6. Banking Sector – Estimates and Expectations

In the past 2015 there were largely overwhelmed the negative consequences of the bankruptcy of one of the largest Bulgarian banks. Confidence in the banking system gradually recovered and the financial institutions returned to their *status quo ante*. The same cannot, however, be said about the local business environment, which performance remained unstable, and this circumstance blocked further stabilization of the financial sector activities. Some signs of recovery were observed in the first half of 2015, but although the banks reported increasing demand for loans, the domestic lending activity remained relatively weak and the total volume of new business loans to non-financial corporations was noticeably lower than in the previous year.

The reported increase of loans demand can be explained mainly by the larger banks pricing policy, as being particularly aggressive in deposit interest rate cuts they succeeded to offer some more competitive interest rates on loans to their customers. The final effect of their actions was expressed primarily in motivating the local economic agents to refinance their old debts (but not to take on new ones), which in turn led mostly to a redistribution of the market shares, but not to any growth of the gross loan portfolio. The main part of financial institutions' new business over the past year came precisely by this kind of activities – as a result of emerging "credit tourism" and not (as expected) by financing some new business projects. The local entities are still unwilling to commit new investments into an uncertain economic environment (neglecting the entire ground for positive expectations in previous year) and the result is obvious. At the end of 2015 the amount of receivables from the non-government sector decreased by 1.6% (in comparison to the end of 2014), with the annual decrease of receivables from non-financial corporations and households reaching respectively 1.6 and 1.3%.

The behaviour of the financial institutions over the past year was strongly influenced by the continued quantitative easing policy of ECB. Interest rates across the European Union continued to follow a downward trend, with the leading role of interest rates on deposits (falling below 1% in Bulgaria at the end of the 2015). In the regular bank lending survey of BNB, the decline in cost of funds was invariably pointed as the most important factor influencing the terms of lending. The weighted balance of opinion in favour of this factor reached 60% in the year-end.

Some significant change can hardly be expected in the established situation, as far as it became quite clear that the ECB monetary stimulus programme has some extremely limited impact over the real economy (in terms of investment activity, consumer spending, etc.). The behaviour of NSI indices, tracking the local business tendencies, is pretty indicative for the weak optimism in expectations. Particularly striking is the dynamics of export industry expectations index, which in the second half fell from 14 down to 3.9. Such a behaviour shows that the export sector expects no recovery (which is a necessary precondition for a stronger investment activity in this sector, and hence for some increase of the loans demand). Despite the increase of exports by BGN 2.14 billion, the investors' optimism stepped out and the loans to manufacturing industry decreased by 3.4% yoy. The behaviour of other indicators characterizing the trends in industry did not give any ground for optimism either. Already in the first quarter of 2015 the index of new orders discontinued the upward trend from the beginning of 2013 and remained within 5.5-5.7 range, while the index of spare production capacities keeps its tentative behaviour as well.

Materialization of the earlier positive expectations (from the beginning of 2015) was quite weak. There was no significant impact upon the local banks, since an insufficiently recovered manufacturing sector on a limited market can hardly be a source of profit for the lenders. The unfavourable business environment in Bulgaria was reported in many influential reports, as well as in publications in recognized international media, which has a strong negative impact on the investors' decisions. Generally, the conservatism in attitudes persisted in both the financial intermediaries and their clients as well.

It should be noted that the comparison of the current state of banking sector indicators to the previous years is somewhat hindered. The problem comes from one side, due to the remodelled format of BNB supervisory reports since the beginning of 2015, and on the other hand, due to reshaped criteria of loans provisioning and classification at the year-end. Differences in definitions and the span of the new reporting form (about the regular and non-performing exposures) do not permit a proper comparison with the BNB data published by the end of 2014. Strong impact on the result (when making comparisons with earlier periods) is experienced also by the act of detaching of the KTB figures out of *"other monetary-financial institutions"*, since that bank was reclassified as *"other financial intermediaries"*. It led to substantial changes in the banking sector statistics – in November 2014 all the cash, deposit and credit in local banking

system printed noticeable decreases (of purely mechanical nature), strongly distorting the results of the analyses.

Generally, the key trends, emerged at the beginning of great recession, retained over the past year, and in particular the price reduction of domestic resource, the increase of population's savings and the substitution of parent-banks resources (to their local subsidiaries) with local deposits. The continuing growth of residential deposits amid the decreasing yield rates on the interbank money markets continued to encourage the commercial banks to lower the deposit interest rates during the past year. At the end of 2015 the average interest rate on new fixed term deposits both in *non-financial enterprises* and *households* sectors reached 1.1% (from 2.1% in December 2014), with more substantial downturn in the retail segment. The printed paces were more intensive in the first half of 2015, as it applies to both sectors.

As for the substitution of the foreign resource (provided by foreign parent banks to their Bulgarian subsidiaries) with local deposits, there are no significant changes since 2011. This process is easily traceable by the dynamics of net foreign liabilities of monetary-financial institutions (MFIs) (credit institutions and money market funds). In 2015, the receivables from local MFIs decreased by BGN 3.012 billion. Indeed, one has to note that the change on a net level was in the opposite direction, as the receivables decreased even faster (by BGN 4.645 billion). In this case, however, this dynamics is shaped by the withdrawal of local banks' deposits from abroad in early 2015, as a response to the ECB deposit facility rate cuts (down to -0.2% in the end of the first half of 2014). These steps led to lower yields on deposits in the banks in the euro area, which in turn motivated our local banks to shift the spare resources elsewhere.

The savings continued to increase, albeit at a decelerating pace amid falling interest rates, which in turn is symptomatic for the adverse conditions of the domestic economy. Maintaining a high propensity to save, despite the continuing reduction in interest yield, is indicative of the lack of adequate investment alternatives. The reason is both the relatively low profitability of those alternatives and the high risk related to the uncertain economic environment in Bulgaria. The latter creates problems for both economic agents and banks, as far as the latter have now very limited opportunity to utilize the accumulated financial resource.

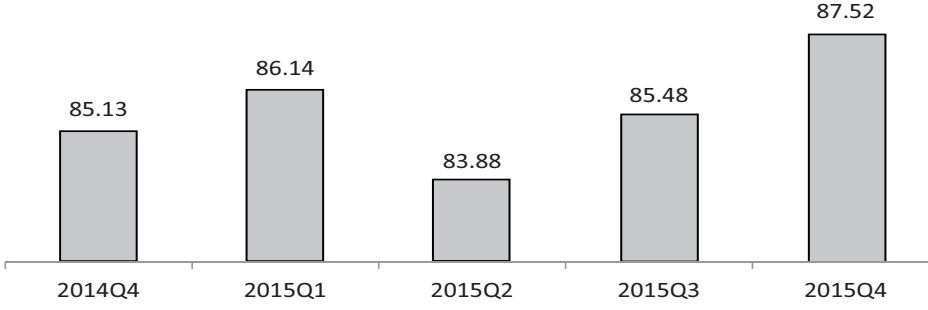
6.1. Assets Structure and Dynamics

The weak lending activity and the lack of alternatives with sufficient risk/return ratio forced the banks to place the surplus of their available financial resource at the central bank accounts. As a result, the least profitable asset class (cash and balances with central banks) printed some considerable positive growth rates throughout 2015. According to the BNB reports, their value reached BGN 13.5 billion still in the end of first quarter. Over the next two quarters they increased by BGN 2.6 billion, and in the last quarter of 2015 their volume increased by additional BGN 2.1 billion.

It is well-known that in most of the crisis years (after 2008) there were very high positive growth rates in the least-profitable asset class (as an expression of limited lending opportunities), as by the end of 2015 its share increased almost twice – up to 20.9% of the total banking system assets. There was limited number of reversal attempts since 2008, as the last significant decrease of the share of these assets was observed in 2013 (down to 10.4% of total assets). Such a dynamics is usually indicative of a reshape of the banks' risk profile, as with increase of their risk appetite they usually redistribute their assets towards the riskier (and more profitable) classes at the expense of excess reserves in the central bank. In 2014 and 2015, however, the cash and balances with central bank rose back, reaching 1/5 of the total banks' assets, which is indicative of the unfavourable economic environment, and also of the upholding conservatism in the intermediaries' attitudes and expectations.

Figure 25

Assets of commercial banks (BGN billion)



Source: BNB. Banking Supervision. Regulatory and financial reports.

The most profitable asset segment (loans and receivables) shrank down to 62% in 2015, as the most intensive dynamics was observed in the second and fourth quarter (respectively 3.9 and 1.9%). It is noteworthy that there is a significant contrast between the values of these indicators in 2014 and

2015. If compared to the previous year data (yet on a comparable basis, after excluding the figures for the detaching KTB reports), the growth pace of this group of assets for the banking system in 2014 would reach high levels (5.9%), which in turn is indicative of the deterioration of lending conditions in the banking sector in 2015, despite the particular recovery of domestic economic growth.

Pretty indicative of the local banks' short to medium term expectations (especially on the interest rates in 2016) is the dynamics of investments held to maturity. While in 2013 (for the first time in four years) some decrease of the debt instruments portfolio was recorded (by 4% yoy as an indication of the resumed optimism and improved lending activation expectations), now this group of assets is growing again – from BGN 1.690 billion up to BGN 2.281 billion at the end of 2015 (see table 8). In addition to the lack of adequate opportunities for offsetting the depreciation of the loan portfolio, such amendment is indicative of the reinforced expectations for increase of the local interest rates (especially in the second half of 2015). Assignment of the debt instruments as "*held for trading*" would lead to the risk of some negative revaluations, in case the interest rates discontinue their downward trend so the price of fixed income securities starts to decline. Obviously, the local financial intermediaries prefer to get insured against this risk, by displacing the debt securities in their investment portfolios, which value is not affected by the market prices volatility and is normally generating an income equal to the one fixed in advance at the moment of purchase.

The intensified expectations for a possible increase of market interest rates can be traced in the regular survey[13] of the Ministry of Finance as well – through the answers about the expected change in policy rates. The weighted index follows upward trend throughout 2015. It increased from -0.2 in the first quarter to 0.2 in the fourth quarter. Such a dynamics can hardly be linked to inflation expectations, as the weighted index of price expectations (in the same poll) remains unchanged throughout the year. It is noteworthy that this behaviour does not correspond quite adequately to the local banks' forecasts about the nominal currency rate. The index demonstrates strengthening expectations for a rise of the US dollar price, which would reflect in an increase of the import prices. Most probably, in the commercial banks' forecasts the trend of exchange rate is offset by some further fall in energy prices.

[13] Ministry of Finance. Financial sector: estimates and expectations. Available at http://www.minfin.bg/bg/page/871.

Table 8

Assets of commercial banks (BGN billion)

	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4
Cash and cash balances at central banks	9.779	13.521	13.812	16.150	18.261
Financial assets held for trading	1.518	2.102	1.616	1.362	1.420
Derivatives	0.176	0.245	0.178	0.166	0.170
Equity instruments	0.096	0.107	0.117	0.121	0.121
Debt securities	1.247	1.750	1.320	1.075	1.128
Financial assets designated at fair value in PnL	0.702	0.738	0.478	0.328	0.262
Equity instruments	0.002	0.002	0.002	0.002	0.002
Debt securities	0.700	0.735	0.475	0.325	0.260
Loans and advances	0.000	0.000	0.000	0.000	0.000
Available-for-sale financial assets	5.442	7.086	7.347	7.180	7.150
Equity instruments	0.172	0.212	0.213	0.214	0.258
Debt securities	5.270	6.875	7.134	6.966	6.891
Loans and receivables	62.885	57.559	55.291	55.296	54.258
Debt securities	1.795	1.525	0.175	0.183	0.188
Loans and advances	61.089	56.034	55.116	55.112	54.070
Held-to-maturity investments	1.690	1.817	1.922	1.872	2.281
Debt securities	1.690	1.817	1.922	1.872	2.281
Loans and advances	0.000	0.000	0.000	0.000	0.000
Derivatives – Hedge accounting	0.004	0.005	0.033	0.018	0.017
Tangible assets	1.961	1.997	2.052	2.055	2.599
Property, Plant and Equipment	1.736	1.776	1.823	1.831	2.057
Investment property	0.225	0.221	0.228	0.223	0.542
Intangible assets	0.163	0.163	0.160	0.160	0.171
Invested in subsidiaries, joint ventures and associates	0.322	0.322	0.322	0.332	0.337
Tax assets	0.031	0.019	0.032	0.027	0.026
Other assets	0.357	0.509	0.530	0.404	0.417
Non-current assets classified as held for sale	0.281	0.303	0.292	0.301	0.326
TOTAL ASSETS	85.135	86.139	83.884	85.483	87.524

Source: BNB, Banking Supervision – "regulatory and financial reports".

Not least, it should be noted that the weighted answers indices (in the same survey of MoF) for interest ratios of deposits and loans in BGN and EUR reached quite similar values at the end of 2015 (-0.5). These results are indicative of the local banks' expectations for continuation of the current downward trend in interest rates on deposits and loans. Most likely, the expected increase of interest rates on debt securities (amid the decreasing price of local deposits) can be explained primarily by the strong increase of the government debt during the last two years and the associated risk premium increase (and hence the required rate of return on these assets).

The intense purchases of debt securities by the local banks are quite indicative of the weak lending market during 2015. The securities presence increased not only in investment portfolios but in *"trading"* and *"for sale"* portfolios as well (their total growth in 2015 reached over BGN 2 billion). One should consider the fact that the dynamics of debt securities in the second quarter was strongly influenced by the sell-out of the entire debt securities portfolio (BGN 1.8 billion) by one of the local branches of a Greek bank. If one excludes this portfolio from the overall calculations, the annual growth would reach almost twice bigger amount.

The maturing of three of the Bulgarian government securities had strong impact on their asset class. As a result, the debt securities portfolio decreased by BGN 464 million in 2015Q3. It should be noted that the local financial institutions showed strong appetite for bonds in 2015, yet the purchasing opportunities were limited due to the endorsed issuance policy of the Bulgarian government (aimed at debt issuance primarily on foreign markets). In this way, the Bulgarian government is using the issuance policy as a substitute for monetary one, as far as limitations of the domestic issuances induce some significant decrease of the local rates. Unfortunately, the effect of this policy upon lending was more than limited, so actually the whole burden was suffered by depositors.

Banks, especially the larger ones with highly developed branch networks and good image before the Bulgarian depositors, have launched aggressive reductions of deposit interest rates, thereby offsetting the decreased profitability of their assets. Thus, the interest spread (the main factor for the financial institutions profitability) increased. Despite the smaller volumes and lower profitability of their loan portfolios (resulting in a decrease of the gross interest income by 7.9%), the local banks managed to increase their net interest income by BGN 138.9 million (5.28%), as a result of drastic reduction of the borrowed funds cost (by 33.9%). At the same time, some additional sources of revenue were found, so the gross income from fees and commissions increased by BGN 75.7 million (7.9%) up to BGN 1.027 billion.

The increase of equities in the trading portfolio remains high. In 2015 they increased by 25% (up to BGN 121 million). However, the value of debt instruments in this portfolio decreased by BGN 118 million (9.48% yoy), which was not affected by the mentioned bank portfolio selloff. Most likely, some part of this decrease is related to the reclassification of some of the low-profitable securities in the banks' investment portfolio, which is also indicative of the amplified expectations for a rise of the policy rates.

The debt instruments in the portfolio of assets available for sale also increased (by BGN 1.621 billion), reaching BGN 6.891 billion at the year-end. The reported increase is twice bigger than in the previous year (BGN 874 million) and is also indicative of the limited lending opportunities, as far as the intensive purchases of fixed income assets are typical of the depression stages. Since the start of the great recession their volume has quadrupled.

The data on fixed assets dynamics in 2015 show quite clearly that the banks continue to follow the accounting policies (adopted about three years ago) concerning the acquired collaterals on bad loans. After a record increase of the fixed assets in 2012 (which, amid the restricted banks' lending activities, most probably represents some assignment of fixed assets acquired in exchange of bad loans), this category maintained its volume almost unchanged over the next two years.

In 2015 it increased by BGN 638 million (32.5%) and in December its share reached 2.96% of the compound structure. However, there is a continuing slowdown in the dynamics of *non-current assets and disposal groups classified as held for sale*, as in the previous year their growth reached 16.05% (respectively 35.9 and 21.7% in 2013 and 2014). This dynamics is likely to be determined by the retention of unfavourable market conditions. The acquired assets are usually recognized as regular fixed assets, in order to avoid reporting of a loss from negative revaluation, because otherwise (if the banks were able to resell them in less than 12 months) these assets would be classified in the *"disposal"* category. In other words, the expectations for marketing of this group of assets remained unchanged, which is indicative of the banks' pessimism on the medium term economic growth.

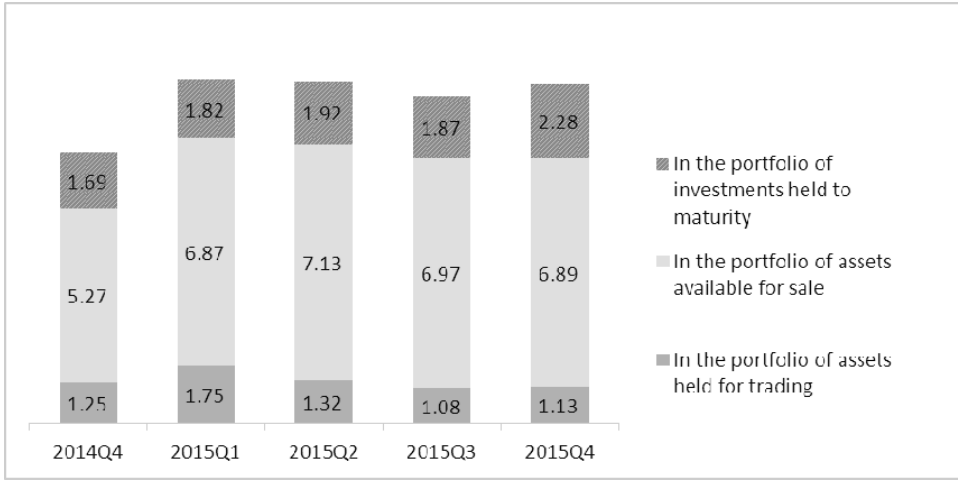
The dynamics of intangible assets is also indicative of restrained expectations. Their volume decreased until September (by BGN 3.3 million), and then increased only in the last quarter (fully on the count of group I banks), which probably can be explained by purchases of a software needed for the new procedures of asset quality review.

Outlining some general trend on the local loan market during 2015 is difficult, except for the continuing deadlock that drove down the lending activity, which in turn led to a contraction of total receivables from households and non-financial institutions (especially in the last quarter). As mentioned, the gross loans (excluding central banks and credit institutions) during this period decreased by BGN 1.466 billion, as the most intensive

decline was observed at the beginning of 2015 due to the reduction of "state government" claims.

Figure 16

Debt securities in the banking system (BGN billion)



Source: BNB. Banking Supervision. Regulatory and financial reports.

When compared to the figures reported a year earlier, such a decline represents actually deterioration, because then (if one excludes the November KTB figures from total amounts) the gross loans increased by about 5%, as almost half of the reported growth is aimed at corporate customers. In 2015, the loans decreased, although the conditions for lending were more noticeably eased than in the previous year. For example, the weighted balance of conditions on lending to non-financial entities in the first and second quarter reached 8-10 points, while in the previous year (2014) the index fluctuated around zero and ended in positive (11). Similar situation is observed concerning households and individuals, where the consumer segment index reached -12 in the third quarter and the mortgage one reached -10 in the end of the second half of the year. As mentioned, these relieves were actively used by the borrowers in the credit tourism process. For this reason, despite maintaining the volume of new business close to the previous year's level, the corporate loan portfolio decreased by 1.6%, and the retail had shrunk by 1.3%.[14]

To some extent, this decline was offset by the increase of claims from non-credit financial institutions (by 15.2% just in the last quarter), reaching BGN

[14] Besides the reduced credit activity, the net sale of loans by commercial banks also influences the dynamics of non-government sector receivables in 2015.

1.864 billion at the year-end (see table 9). Once again it confirms the foregoing summary, namely that lending to the real economy is still far from its potential.

Table 9

Gross loans (BGN billion)

	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4
Central banks	0.000	0.003	0.010	9.969	13.284
Government	1.549	0.564	0.620	0.611	0.660
Credit institutions	10.977	7.832	6.835	7.853	7.053
Other financial corporations	1.432	1.735	1.586	1.619	1.864
Non-financial corporations	34.319	33.939	33.862	34.176	33.285
Households	18.290	18.233	18.559	18.531	18.312
Loans and advances – total	**66.567**	**62.307**	**61.471**	**72.758**	**74.457**
Including gross loans (less financial institutions and Central Banks)	55.590	54.472	54.627	54.937	54.121

Source: BNB. Banking Supervision. Regulatory and financial reports.

The retail segment dynamics showed that one of the main incentives for stimulating the domestic market recovery and hence the investor sentiment is still missing. Just as in 2014, now this segment again reported a contraction of its total exposure, despite the increased volume of new business. For example, the volumes of new business in consumer segment increased by BGN 353 million (up to BGN 2.9 billion), and in the mortgage segment – by BGN 541 million (up to BGN 1.9 billion). The absence of a positive growth in total balance sheet value of these segments, despite the strong increase in new business volume, is indicative of the large share of renegotiation and refinancing deals (of some old debts). There is still weak demand of new solvency by the Bulgarian population. Reports show that in the past year the receivables in retail segment decreased down to BGN 18.312 billion, and it was probably one of the factors that still hinders the revival of local consumption.

The volume of new business in the corporate segment is indicative of preserving the conservative attitudes of local entities during the past year. The monetary statistics data showed that the new loans to non-financial enterprises (BGN 13 billion) decreased by 8% compared to the previous year (2014), when the new loans amounted to BGN 14.2 billion. The preference for longer maturities retained – the average monthly volume of new loans with maturity longer than five years amounted to 55.6% of all new loans in 2015 (48.4% in the previous year), and this is indicative of the absence of promising projects with quick return. In terms of the currency structure, the amount of new business, denominated in BGN, continued to

increase its share (in the corporate segment) at the expense of shrinking the share of new loans in single European currency and US dollars as well. The share of new business, denominated in local currency, reached 46% in 2015 (35.3% in 2014), and the EUR denominated volume fell from 61.4 to 52%. Briefly, we can conclude that in the current circumstances neither the population has sufficient motivation to get credit (for increased consumption), nor the business (to finance its current activities or to launch investment projects), despite the relaxed lending conditions and falling interest rates.

Even the brief comparison of the loans sectoral structure with the one of GDP provides the possibility to get some idea of the impact of credit on the economic growth (see table 10). It should be noted again that the comparison with the pre-November 2014 period is somewhat misleading, as the official data for this period are twisted, due to the presence of KTB report.

The analysis of data by sectors shows that the whole mechanism of transmission of the effects from financial sector to the real economy is not yet stable. It is notable, for example, that one of the sectors, which has witnessed the most intense lending activity in 2015 (agriculture), reported smaller physical volume (by 1.4%) than in the previous year, although the loans to this sector rose by 12.57%. This discrepancy can hardly be explained by some lags (necessary to fully implement the planned investments and to move them into functioning mode), since such intensive pace in lending to agriculture is recorded still in 2011 and 2012. Most probably, the product decrease can be explained with some reallocation to the lower value added activities due to the active EU agricultural policy.

There is a discrepancy in the direction of changes in *mining and processing* industry also. The loans in this sector decreased by 2.64% in 2015, while the physical product increased by 3.1%. The same sector, however, is well funded in 2010-2012, and probably the observed positive growth is a result of some invoke of projects financed at an earlier stage.

Particularly interesting situation is observed in the construction branch, where the loans have been declining steadily since the beginning of crisis. The past 2015 made no exception and the total balance sheet exposure to this sector decreased by 11.14% yoy, reaching BGN 2.984 billion. Meanwhile, the physical product has altered in the opposite direction and at the end of 2015 it has increased by 1.4% compared to the previous year. The most likely cause of such a dynamics is the increase of the share

of customers with own financial participation on the real estate market. This is quite understandable, because amid falling deposit interest rates, most of the households are switching to alternative forms of keeping their savings, and (as far as the purchase of financial assets has still insufficient popularity in the domestic market) they prefer real estate market.

Table 10

Credit and economic growth

	EACT[15]	Pace of gross loans						Pace of physical volume to previous year					
		2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Agriculture, forestry and fishing	A	1.28	16.29	13.40	5.11	5.79	12.57	93.52	98.38	92.73	103.16	105.18	98.60
Mining, manufacturing and energy industries; Utilities	B_E	4.45	7.76	10.72	-1.27	-3.08	-2.64	98.09	109.08	102.53	100.03	101.67	103.10
Construction	F	-10.66	-1.84	-5.71	-2.44	-13.83	-11.14	81.76	95.86	94.11	101.09	97.38	101.40
Trade; Transportation and storage; Hotels and restaurants	G_I	0.18	2.29	4.21	1.06	-15.08	0.59	112.14	100.62	100.37	104.11	101.23	101.00
Information and creative products; Telecommunications	J	6.11	21.28	-17.98	-32.93	-2.74	7.04	103.78	102.85	97.28	101.86	101.09	101.90
Real estates	L	50.78	4.07	1.81	17.62	-13.26	0.00	104.86	99.01	102.24	97.97	100.68	103.50
Professional and administrative activities; Research	M_N	3.14	21.80	13.11	-7.90	-26.82	-4.26	93.14	105.56	97.10	102.70	102.42	100.30
Non-financial corporations – total	-	2.48	5.45	4.96	0.13	-11.48	-1.57	100.13	101.80	99.28	101.10	101.81	101.50

Source: BNB. Banking Supervision. Regulatory and financial reports.

One could say that in sectors, related to trade, hotel and restaurant business, there is a stable and clearly defined relation between bank lending and growth. For the period since 2011, the active lending to these sectors is invariably associated with positive growth in the physical product, though the relation is not always proportional. Most likely the cause of observed disproportions is related to some time, required to accomplish the initiated projects (hotels, warehouses, shopping areas), and to invoke their normal exploitation. The drastic decline of lending for this branch in 2014 can be explained entirely by the exclusion of KTB from statements (as long as the observed decline in absolute terms is comparable to the scale of this bank). This act has no impact on the borrowers' activities, so the physical volume increased by 1.23% in 2014 and by 1% in 2015.

The data from table 10 show unambiguously that the mechanisms of transmission between the banking system and the real sector still do not

[15] The letters A, B, C, ..., etc. denote the sector of economic activity, according to NACE.BG-2008 (National Statistical Institute of Bulgaria, 2008).

work properly, since even in years with positive rates of lending to the real sector the change of manufactured production is mostly void.

6.2. Structure and Dynamics of the Liabilities

As mentioned, the tendencies in the funding of the banking system sustained in general during the past year. The local deposits continued to get cheaper, the households savings continued to grow (albeit at a slower pace), and the local deposits continued to substitute the funding by foreign parent banks.

It is known that the mentioned process has been launched at the beginning of the GFC (2007-2008), when the share of deposits from credit institutions was about 1/5 of the total borrowed funds, but due to their withdrawal from the local subsidiaries this share began to decline, reaching 7% at the end of 2015. The other conditions being equal, such actions would lead to a serious escalation of the resource price, but as a result of aggressive interest rate adjustments now the price is lower than in the period before the start of this process. In 2008, when the system had a high proportion of deposits from parent banks, the average cost of funds was 3.4%. Over the next two years it rose slightly (due to withdrawal of external resources), and then gradually decreased, reaching 2% in the end of 2015 (as a result of aggressive interest adjustments).

This tendency is manifested especially in the second quarter, when foreign liabilities of public financial institutions (PFIs) decreased by BGN 2.098 billion (to BGN 8.233 billion). These liabilities are mostly to foreign banks and the record of deposits shows a significant decrease of deposits from banks (by BGN 1.98 billion), while the resource from other sources gradually increases. Indeed, the change on a net level is in the opposite direction, as the foreign assets of PFIs in the past year decreased even more intensively (especially in the first half, when this category of liabilities decreased by average of BGN 2.2 billion per quarter). As a result of these repayments, the net foreign assets of banking sector decreased by BGN 1.563 billion still in the first half, as the total growth in the entire 2015 remained close to this value. Most likely the reported changes are driven by some motives of assets restructuring for profitability reasons, as far as the decreased ECB policy rates led to a considerable decrease of deposit interest rates among the banks in the euro area, so this fact motivated Bulgarian local banks to withdraw their deposits from abroad and redirect the resource elsewhere.

In 2015 hardly any specific events had any material effect on the dynamics of funding, unlike in the previous year, when as a result of discontinuing of the KTB activities, the deposits decreased by BGN 5 billion (during the third quarter), and after that their volume rebounded by BGN 3.5 billion due to repayment of deposits covered by the Deposit Insurance Fund.

As mentioned, throughout 2015 the volume of banking system funding continued to grow, as the major contribution belongs to the local households. Their deposits reached BGN 42.6 billion at the year-end (8.5% higher than in 2014). The households' preferences were directed towards the fixed maturity deposits with longer maturities, which somewhat offsets the overall interest rates decrease. An increase was also reported in products without a fixed maturity, while the middle segment (up to 12 months) reduced significantly its share, which led to deterioration in the liabilities maturity structure. The deposits of non-financial corporations increased even more intensively (by 18.7% up to BGN 18.2 billion at the end of 2015). Most of them were displaced as overnight deposits, while the corporate deposits with fixed maturity decreased. In terms of currency structure, both business and households showed a preference for deposits denominated in local currency.

As a result of growing liabilities, the commercial banks increased strongly the excess reserves displaced at BNB. At the end of 2015, the estimated excess of funds above the required minimum of reserve assets (according to reg. 21) reached 127.8% (56.5% at the end of 2014).

Table 11

Borrowed funds (BGN billion)

	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4
Deposits	73.529	72.888	71.064	72.392	74.346
Central banks	0.000	0.000	0.000	0.000	0.000
Government	0.000	2.950	2.681	2.374	1.843
Credit institutions	7.962	7.568	5.588	5.248	5.070
Other financial corporations	0.000	2.877	2.987	3.223	3.302
Non-financial corporations	23.189	17.279	17.325	18.563	19.724
Households	41.003	42.213	42.483	42.985	44.407

Source: BNB. Banking Supervision. Regulatory and financial reports.

The dynamics of savings volume amid the falling interest rates speaks unfavourably of the local economy. The sustained high propensity to save can be explained mainly by the lack of investment alternatives, which means that both the population and business have no alternatives for realization of available funds. One reason could be the low profitability of

these alternatives, and the higher risk arising from uncertainty in the country as well. This creates a problem for the economic agents and the banks, because it limits the opportunity for realization of spare resources.

6.3. Summary

The processes of redistribution of financial services market continued in 2015. The restructuring of liabilities, stimulated by the withdrawal of external funding, has not affected noticeably the banks with foreign owner, because the aggressive lowering of interest rates and the deposits oversupply led to a price convergence of local and external resources. Most probably the interest rates adjustments will continue this year, but this will not lead to noticeable decline of loans prices due to the preservation of relatively high risk premium.

Despite expectations of a further decrease of the funding cost, its dynamics is likely to slow down significantly, which will motivate the local banks to look for other ways to improve their profitability, mostly by improving their loans-to-deposit ratio.

The main problem for most of the local banks amid the ongoing slack of local economy and high shares of bad loans will remain their low profitability. Although the sector profits increased for third consecutive year, it must be taken into account that most of the financial result is reported by several big banks, mostly at the expense of lowered interest rates on deposits and some deterioration of the maturity structure of liabilities. Most of the small banks continued to report poor results, and this circumstance is going to increase the pressure, so they will look for opportunities to merge into the structure of some more profitable institutions. This tendency had specific materializations in the last three years, and it is expected to continue in 2016. It is quite possible that the disclosure of the assets quality review and the planned stress tests results will act as a further incentive to reinforce that tendency.

The contraction of loan portfolios amid relatively preserved lending activity volumes and reported increase of loan demand suggest that the *"credit tourism"* will continue in 2016. This will lead to additional pressure to decrease the credit interest rates, and to increase the sector concentration (which in turn will have hard to predict long-term consequences).

Any improvement of the lending activities is hardly to be expected before 2017. Significant factors for the continuing stagnation in 2016 will be, on the one hand, the involvement of most of the human resource in banks within the procedures of asset quality review and the forthcoming stress tests. On the other hand, the ongoing slack in the real sector will continue. So, the recovery can be expected at some later stage (2017-2019), by a slow pace (2-3%), where most of the local banks' efforts will remain towards the improvement of the portfolios quality.

As expected, the aspiration to optimize the cost of funds has led to a pressure to increase the deposits maturity structure imbalance. Most likely this trend will continue in 2016, as the cost decreasing pursue (especially in the unprofitable banks) will increase the share of current accounts, and the deformation of the maturity structure of their liabilities. At the same time, the borrowers' preferences will remain focused on longer maturities, which will lead to further imbalance between the structure of assets and liabilities.

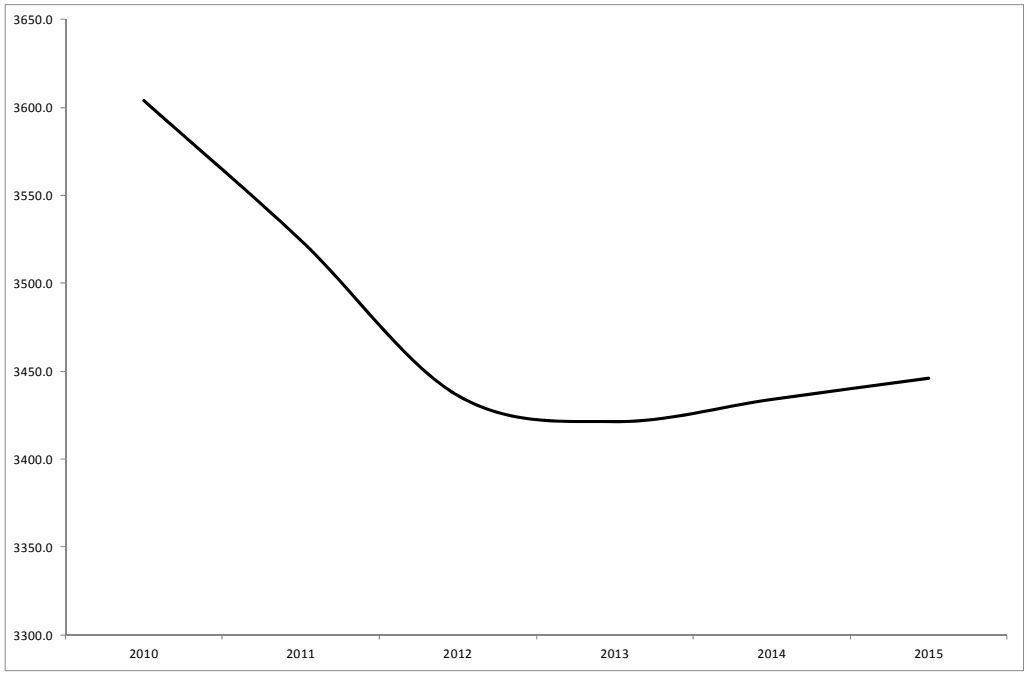
The only factor stabilizing this process in 2015 was the migration of products without a fixed maturity to ones with fixed maturity as a result of aggressive interest rates cuts. It can be expected, however, that this factor will continue to act this year, as the convergence of market interest rates to zero threshold will motivate investors to seek other alternatives for storing the value (real estate, valuable metals etc.).

7. Labour Market

7.1. Employment and Unemployment

For the second consecutive year Bulgarian economy observed improvement on the labour market. The employment grew by 0.3% (according to data from the System of National Accounts (SNA)) and the unemployment rate significantly decreased to 9.2% (according to the Labour Force Survey (LFS), age group 15-64). According to the SNA, the number of employed in the economy in 2015 was 3 446 200 people, and increased by 12 000 people compared to the previous year. In all major economic sectors (industry, construction and services) there is a simultaneous growth of employment and volume of GVA, decreasing only in agriculture. As a result of the substantial decrease of unemployment in Bulgaria in 2015 its level is already equal to the average EU-28. The activity rate of population continued to grow and in 2015 reached 69.3% (age group 15-64). The acceleration of economic growth in 2015 is the main factor for the good development of the labour market, which is the highest since 2009.

Figure 27
Employment dynamics in Bulgaria, 2010-2015 (age group 15-64, thousand people)



Data from the LFS show that in 2015 employment growth was entirely due to the increase of the number of employees in the private sector. The number of employees in the private sector increased by 3.4%, and the one in the public sector fell by 0.9%. The other categories of employed persons (employers, self-employed and unpaid family workers) also decreased by 2% compared to 2014. Fiscal public sector seeks to reduce employment in order to optimize expenditures on labour and thus to limit the deficit of state budget.

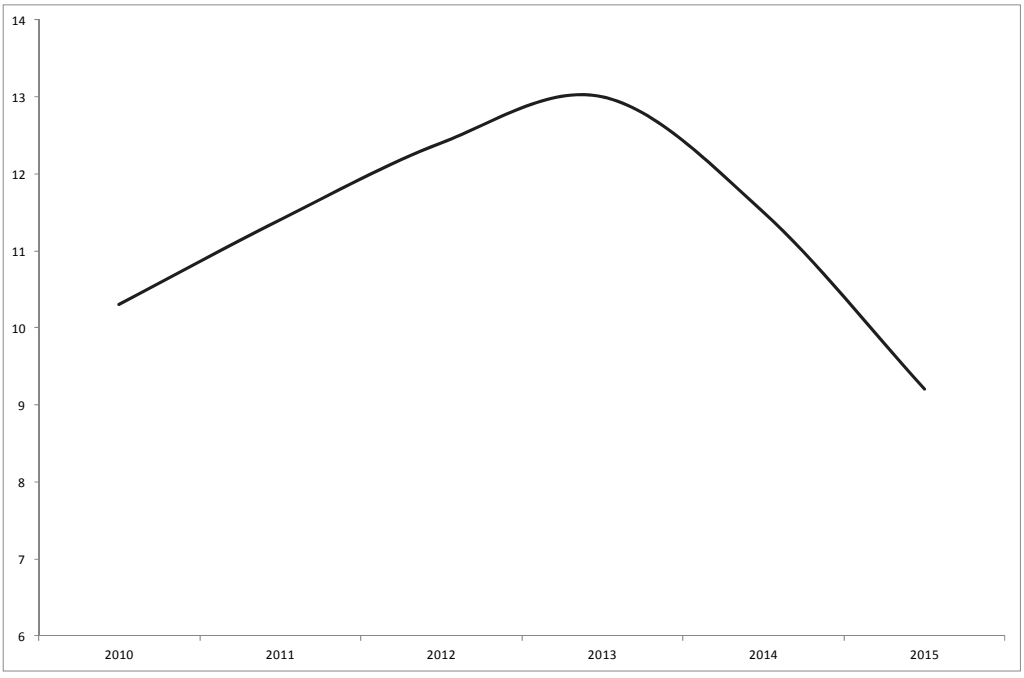
The dynamics of the number of employees by education level once again shows that people with low education level benefit in the least from the improved business conditions in the country. According to the LFS, the number of employed increased among people with higher and upper secondary education, while employed with primary or lower education decreased. The difference in employment rates by educational level has deepened. People with higher education have employment rate of 84% in 2015 (aged 15-64). It is an increase by 2.3 pp compared to the previous year. People with upper secondary education also have relatively high employment rate of 67.2% (65.2% in 2014). Similar is the employment rate of people with secondary vocational – 70.3%. Matters are quite different in the two groups of people with low educational attainment. In both groups, the number of employed people and the employment rate decrease in 2015, despite the overall increase of employment during the year. Secondly, in both groups the employment rate is extremely low. Among people with lower secondary education this ratio in 2015 is 32.1% (compared with 32.2% in 2014), and among people with primary or lower education – 18.6% (compared with 19.2% in 2014). Among people with lower secondary education, every third person has a job, and among those with primary or lower education employment – barely every fifth person. These data actually show that one of the preconditions for employment status is the presence of at least upper secondary education.

One of the most remarkable phenomena on the labour market in 2015 was the rapid decrease of the unemployment rate (average annual 9.2% in 2015 – a decrease of 2.3 pp compared to the previous year). For the second consecutive year unemployment decreased and in 2015 this decrease accelerated compared with 2014. The unemployment rate fell below its value registered in 2010. A lower level of unemployment in Bulgaria is observed only in 2007-2008, when there were signs of overheating on the labour market in the country.

According to LFS, the main reason for the decrease of the number of unemployed people is the increase of jobs in the country. About 2/3 of this decrease was due to higher employment during the year, while the remaining 1/3 is due to people who have left the labour force.

Figure 28

Unemployment dynamics in Bulgaria, 2010-2015 (age group 15-64, %)



Though slowly, the proportion of long-term unemployed (with a period of unemployment over 1 year) continues to increase. In 2015, it reached 61.8% of the total number of unemployed (compared with 61% in 2014) – its highest value since 2005. Most of the long-term unemployed are people with low education and/or without qualification, which substantially reduces their opportunity on the labour market. Furthermore, people identified as vulnerable groups (such as persons with disabilities, elderly people before retirement, young people just left the education system without enough experience, single mothers, etc.) have less chance of finding a job than the usual case.

The government has elaborated a set of active labour market measures and programmes, aimed at the successful inclusion of vulnerable groups in the market. However, the formation of a group of people who permanently have no chance to start work, despite the revived economic activity in the

country, is an indicator of the presence of a skill mismatch on the labour market and the existence of structural unemployment, which can be estimated around 5% of the labour force. According to the Country Report of EC on the Bulgarian macroeconomic imbalances, the share of long-term unemployment in Bulgaria is one of the highest in the EU, and only 14% of those who have been long-term unemployed in 2013 have managed to find work (or every seventh person) (European Commission, 2016, p. 26).

Although Bulgaria registers economic growth in all years of the period 2010-2015, this is only the second year in a row when this growth materializes as employment growth. In 2014 and 2015 employment growth is practically identical as rate and increase of the number of jobs. As a result of these dynamics, in 2014 was reached the physical volume of GDP recorded in 2008 (the peak year before the financial and economic crisis), and in 2015 already exceeded pre-crisis level by over 3% in real terms. At the same time, the number of employees in 2015 remained about 10% lower than their number in 2008. The main factor for growth during this period was the increase of labour and total factor productivity.

Taking into consideration only the number of employees would somewhat underestimate the recovery of employment in the country over the past years. Bulgaria would hardly restore the number of employees, registered in 2008, due to ongoing demographic processes and shrinking population. If employment remains far below its pre-crisis levels, the employment and activity rates of population are growing at a relatively fast pace. The economic activity rate of both total population and age group 15-64 already exceeds its highest levels recorded in 2008. As in the case of the age group 15-64, the population activity rate in 2015 (69.3%) is by 1.5 pp higher than the one recorded in 2008 (67.8%). The employment rate (again, both of the total population and the age group 15-64) reached the level of 2006, and if the Bulgarian economy sustain the economic growth and the employment recovery of the past two years, in 2017 the indicator might reach the value registered in 2008 (maximum of the transition period so far).

The national target of employment rate for the population aged 20-64 is to reach 76% by 2020 (Ministry of Finance, 2015, p. 55). For the successful realization of this objective, under the current trends in demographic development of the country, the net number of new jobs has to be at least

40 000 each year until the end of the decade.[16] According to the LFS, a similar increase was observed only in 2014 and 2015, which means that the implementation of the national target for employment by 2020 is necessary to maintain and even accelerate the dynamics of employment in the last two years.

Concentrating on the absolute number of employees not only underestimated the speed of employment recovery in the country, but possibly masked some issues that will be essential in the coming years for the Bulgarian economy, namely the need to increase the productivity of all production factors to offset the growing influence of extensive increase of the labour force as a constraint to economic growth.

7.2. Labour Productivity and Wages

According to preliminary data, the annual wage in 2015 was BGN 11 161. The annual wage in the public sector amounted to BGN 10 713, and in the private sector – BGN 10 581. The highest wage growth in 2015 was registered in economic activities like accommodation and food service activities; administrative and support service activities; wholesale and retail trade; repair of motor vehicles and motorcycles. In these economic activities the nominal wage growth is in the range of 12-15%. The economic activities with the lowest wage growth (2-2.5%) are electricity, gas, steam and air conditioning supply; water supply, sewerage, waste management and remediation activities; financial and insurance activities; public administration; mining and quarrying.

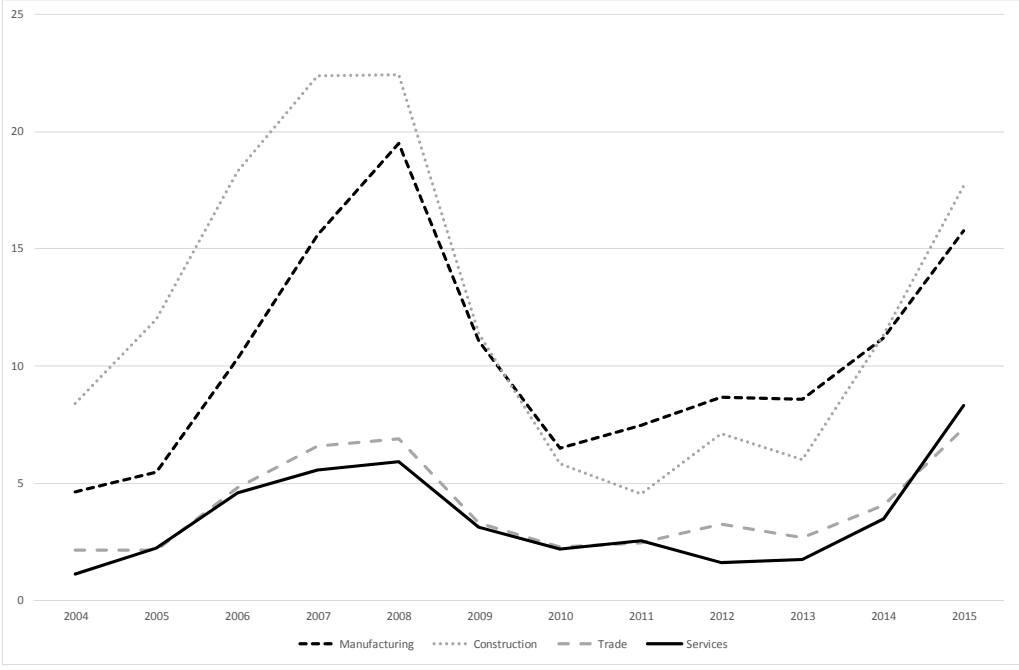
In 2015 the wage growth accelerated. If in 2012-2014 its annual growth was in the range of 6-6.5%, in 2015 it reached 8.8%. The main factors influencing the dynamics of wages in the country are the recovery of the economy, which led to a recovery of labour demand; as well as the minimum wage changes during the year. The deflation did not offset the effects of the factors influencing the dynamics of wages upwards. An additional factor with influence mainly on wage dynamics in the budget sector is the government's effort to limit the growth of budget expenditures and reduce the budget deficit.

[16] This national target concerns the population aged 20-64, which has higher employment rate compared to the total population and the population aged 15-64. It is due to the relatively low economic activity of the young people because of their ongoing education, and other reasons as well (childcare, etc.).

The main factor that influenced the dynamics of wages in 2015 was the restoring of the labour demand in the country. According to the LFS data, there are three sectors of services with very high employment growth during the last quarter of 2015 compared to the same quarter of 2014: "Information and communication", "Real estate activities", and "Professional, scientific and technical activities". In all three branches the wage growth exceeded that of the average wage for the economy. Moreover, the average salary in "Information and communication" and "Professional, scientific and technical activities' is substantially higher than the average wage in the country, and registered high growth in recent years. With a great deal of certainty it may be argued that the dynamics of the average labour cost in these economic activities is influenced by increased demand for labour, which cannot immediately be met by the respective labour supply with the relevant skill and education characteristics.

Figure 29

Shortage of labour, business surveys (% of firms)



Business surveys of NSI also suggest that finding a suitable labour force is becoming increasingly an obstacle to the development of companies. In 2015, entrepreneurs from all sectors of the economy reported that the shortage of labour is a growing problem limiting their future activity. Data

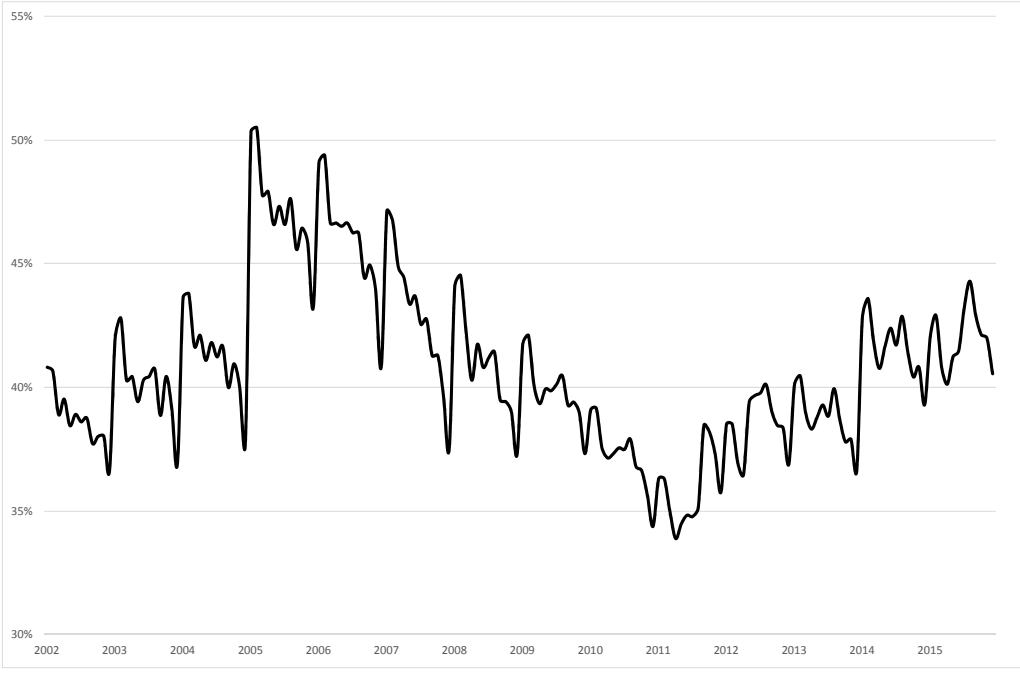
from business surveys for the past ten years show that the highest shortage of skilled labour is reported by entrepreneurs in manufacturing and construction. During 2010-2013 the labour demand decreased due to the crisis in 2008-2009, but after its overcoming in 2014-2105 the labour shortage again increased its importance as a factor limiting the opportunities for expansion of the firms. In 2015 this problem was reported by entrepreneurs in manufacturing and construction (respectively by 15.8 and 17.7%). These figures are still below the peak indicator in 2007-2008, but the trend of the last year clearly shows that they will be achieved probably in 2016. In trade, the share of entrepreneurs reporting a shortage of labour as a problem for their future development is 7.3%, and in services – 8.3%. In trade this average 2015 figure is nearly twice higher than the one in 2014, and in the services its value has increased even more than twice. Moreover, in both sectors these values exceed the ones reported in 2007 and 2008, and are the highest for the entire period of conducting business surveys. According to the EC report, the major reason for the skill mismatch in many branches (IT specialist, engineers, doctors, nurses, etc.) is the lack of available qualified labour force. The demand for computer specialists exceeds the supply by three times (European Commission, 2016, p. 30). In the current demographic trends, in the coming years the problem of "labour force shortage" is expected to increasingly reinforce its importance for the entrepreneurs.

The second factor influencing the dynamics of the average nominal wage in the country is the actualization of the minimum insurance thresholds (MIT) and the minimum wage.

In 2015, for the first time since 2001, two updates of the minimum wage were carried out within a calendar year. Since the beginning of January, its level was increased from BGN 340 to 360, and since the beginning of July it was further increased to BGN 380. Both updates were announced back in the fourth quarter of the previous year, providing sufficient time for companies to adapt. Thus, for a calendar year, the minimum wage was increased by 11.8%. Similar and even higher annual growth rates of the minimum wage have been observed in previous years. In 2007 it was raised by 12.5%, and in 2008 (a period of rapid growth of average wages due to high labour demand) – by over 22%. In September 2011 the minimum wage was also increased once by 12.5% after more than two and a half years of no updates.

Figure 30

Ratio of minimum to average wage (%)



The change in the minimum wage affects most of the branches, where the average salary is relatively the lowest. Among the three sectors with the highest growth of average wages in 2015, two have the lowest average salary in the country, and we can assume that they are among the branches with the strongest impact of the minimum wage actualization on their annual wage dynamics. According to government estimates, cited in the EC report, about 360 000 people (12% of the labour force) were influenced by the change in the minimum wage (European Commission, 2016, p. 28). However, the update of the minimum social security payments and the minimum wages also aims at shrinking the share of the informal sector in the wages, which according to a number of studies is relatively high in comparison with the other EU countries. Therefore we can assume that some of the reported wage increase as a result of updating the minimum wage is "accounting" and not real one, and is related to the exposure of previously hidden income.

After the actualizations, the share of the minimum wage is permanently within the range of 40-45% of the average wage. Historically, its share reached the highest values in 2005 and 2006 (between 45-50% of the

average wage), but in the next years this share followed downward trend, determined at the beginning (2007-2008) of the rapid growth of the average wage in the country (due to high labour demand) and then due to the freezing of the minimum wage at the same level for a relatively long period (from 2009 to September 2011), conditioned by the economic crisis in the country and the overcoming of its impact on reduced labour demand. As a result, the ratio between minimum and average wage fell to about 35% at the end of 2011.

In the following years there has been a striving to restore the ratio of minimum to average wage, which would protect the lowest paid workers (and would limit the magnitude of the phenomenon of so-called working poor) and would also limit the avoidance of direct taxes owed by people declaring wages close to the minimum level. As a result, the minimum wage, as a ratio to the average wage, increased steadily in the second half of 2015 to approximately 42.5%.

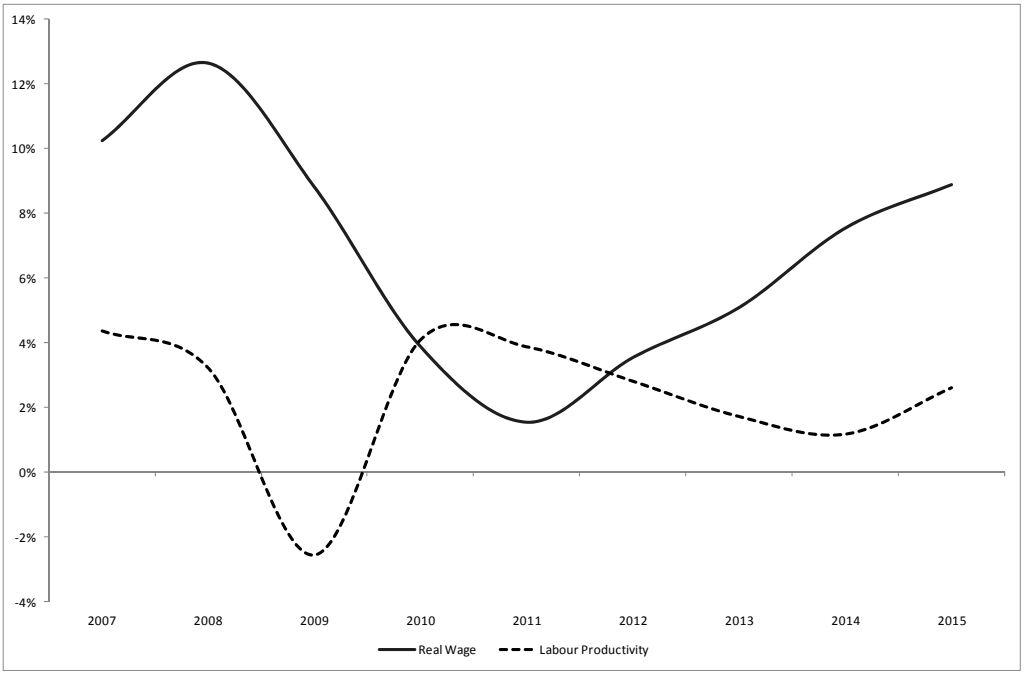
The comparison with other countries shows that Bulgaria does not differ substantially from the other EU-28 members. In 2014, in countries with a minimum wage undifferentiated by sectors, regions or any other sign, this ratio is between 33% (Czech Republic) to 52.9% (Slovenia). In almost half of the cases it is in the range of 42-47% of the average wage. Such ratio between the minimum and average wage allows enough room for differentiation of the relative wages (salaries close to the average level are between 2 and 2.5 of the minimum wages). At the same time, when the minimum wage is sufficiently distant from the different social safety net payments, it creates enough incentives for low-skilled people to be active on the labour market, to seek and accept salaries close to the minimum. However, the increase of the minimum wage to over 45% the average one (and especially to more than 50%) should be done with caution, as it can compress relative wages too narrow (especially those below the average in the economy) and would undermine their ability to equilibrate supply and demand for labour in different occupations and economic activities.

In 2015, labour productivity (measured as GDP per employed at constant prices) increased by 2.6%. Over the last three years the growth in real wages seriously exceeded the one of the real labour productivity. This is partly due to deflation, observed in the last couple of years, but another factor is the relatively rapid growth of average wages, which was not supported by a corresponding increase of productivity of the relevant factors. Over the past four years there was a steady rise of the share of the

compensation of employees in total GVA (from 43.0% in 2012 to 47.8% in 2015).

Figure 31

Growth of real wage and real labour productivity (%)



The high growth of wages will likely continue in the coming years. The problem with labour supply will increasingly deepen because of the current demographic processes, and if Bulgarian entrepreneurs manage to maintain sustainable production. If in the coming years economic growth remains relatively stable, this will lead to increased demand for labour and growing mismatch between demand and supply of labour by qualification, professional and educational characteristics. In Bulgaria the latter problem is particularly pronounced in the EU context, since the country is further characterized by a high level of dropouts from the education system (above the EU average) and relatively low level of people following a lifelong learning. The skill mismatch in Bulgaria is the second largest among the EU countries (Kiss, Vandeplas, 2015).

The problem with labour supply, including of skilled employees, further exacerbated by the migration of people to the more developed labour markets, especially the old member states. Bulgarian labour market is part

of the common EU market and Bulgarian entrepreneurs almost freely compete with the other for the available labour resources.

Therefore, achieving high growth of labour productivity becomes a key issue for the Bulgarian economy and a top priority of government economic policy. The high growth rate of labour productivity, on the one hand, will be a major factor of economic growth, compensating declining labour force. On the other hand, this is the basic foundation ensuring that the wage growth will not undermine the macroeconomic balance.

According to the existing demographic projections, the population (and, respectively, the working age population) will decrease by 1% annually in the period 2015-2050. If the real GDP growth remains to at least 3% in the next years, the labour productivity should grow by at least 4% annually, to compensate the decline of employment and to contribute to achieving the targeted real GDP growth. If we look at the period 2001-2015, we will see that similar labour productivity growth has been achieved in only five of the fifteen years.

Therefore, the future government policy should have a priority not so much on unemployment reduction but on increasing productivity. The state should provide better conditions for business and human capital development (general educational system, health care, business climate, efficient legal system) and should promote the inclusion of those active people, who for some reason feel detached from the labour market, by providing programmes for inclusion and employment to specific vulnerable groups. The emphasis of the ongoing active measures on the labour market should shift from "direct job creation" or subsidized employment to education and training for developing human capital. The programmes of employment promotion must be specifically defined according to the characteristics of the vulnerable group. The more mobile and active people, who remain outside the labour market due to lack of experience, must be engaged in programmes for temporary employment or apprenticeship with any subsequent permanent employment contract. For vulnerable groups with characteristics, which would permanently discriminate them on the labour market, like people with disabilities, elderly persons, etc., the appropriate targeted measures should be subsidized employment programmes, and in some cases training programmes.

Workers and employers must also be an active part of the process of raising labour productivity. Even their responsibility for it is more essential. Employees must have a proactive role in raising their own qualifications,

and employers should provide appropriate conditions and environment for increasing the qualification of employees (external training courses or on-job-training) and should actively invest in advanced technology and manufacturing processes.

7.3. Forecast for 2016-2018

Over the next three years we expect the labour demand to increase mainly because of the expected economic growth in the range of 2-2.7%. Over the next three years the average number of employees will increase by about 20 000 people per year, and the employment rate (population aged 15 and over) will reach 49.8% of the labour force. Along with rising employment, the process of unemployment reduction will continue, although the pace of this process will slow down compared to 2014-2015. Average annual unemployment rate in 2016 will be 8.4%.

According to our forecast, the growth of nominal wages will slow down and even fall below the levels of the period 2012-2014. In 2016, the average monthly wage will be around BGN 920, while in 2017 and 2018, due to the acceleration of the pace of economic growth and real labour productivity, growth in nominal wages will recover to levels of about 6% per year.

7.4. Conclusions

For the second consecutive year the trend of increased employment continues due to the jobs created in the private sector. The significant decline of the unemployment rate is another feature of the labour market and is mainly due to increased employment, but also to the unemployed people leaving the labour force. At the same time, there is an increase of the share of long-term unemployed, which highlights the problems for their reintegration into employment.

The trends make achievable the target, set in strategic documents, for employment rate of 76% by 2020, but also outline the major strategic problems on the labour market due to the limited supply of labour. The entrepreneurs more clearly outline the shortage of skilled labour as impediment for future business expansion.

There was some acceleration of the growth of nominal wages compared to previous years. Factors are both legal (raising the minimum wage and MIT)

and fundamentally economic (increased demand for labour and growing discrepancy in the structure of labour demanded and supplied by qualification, occupation, education and others).

Essential tool for achieving sustainable economic growth is to reach high rate of productivity factor, including the labour one. The high growth rate of labour productivity will offset the expected high growth of the average wage in the coming years. From this perspective, priority of government policy should be to improve the efficient use of labour resources rather than to reduce the level of unemployment in the country (if these two objectives are alternative in some cases).

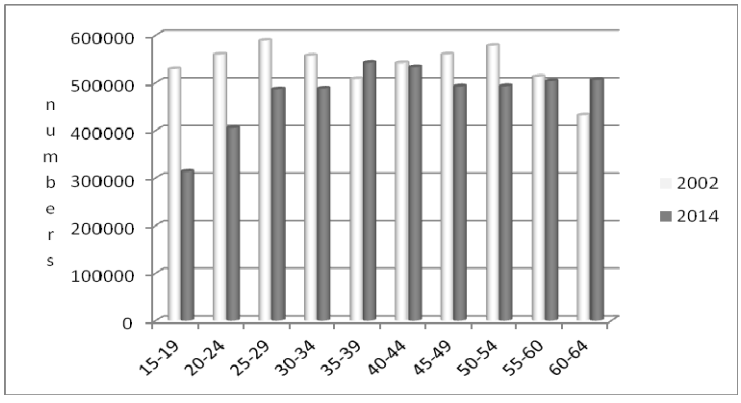
8. The Effects of the Bulgarian Emigration over the Labour Market and the Role of Remittances

While the effects of remittances on the socio-economic development of Bulgaria are largely reflected by consumption and, to a lesser extent, by savings and investments, the effects of emigration on the labour market are more direct, clearly discernible and visible in the short term, with a very sustainable negative effect in medium- and long-term horizon.

- *Emigration contributes to a decrease of the population of the country and continuously exhausts the country's labour resources.* During the period 2002-2014 the population within the age group 15-64 has decreased by 602 429 people and amounts to 4 763 673 people as of 2014. The data indicate that population growth is only registered in two age groups – people aged 35-39 (33 546 persons) and 60-64 (75 000 persons). In all other age groups the population number decreases, *particularly in the three youth groups* (in age group 15-19 the decrease amounts to 216 000 persons, in age group 20-24 – 154 000 persons, and in age group 25-29 – 101 000 persons) (see figure 32).

Figure 32

Changes in the number of working age population by age groups 2014 vs. 2002



Source: NSI. Demographic and social statistics, www.nsi.bg

The insufficiently systematized statistical information does not allow for the quantification of the contribution of emigration to the decrease of the working age population, but if one bears in mind that the population number varies depending on birth rate (positive effects), mortality rate and emigration (both with negative effects), we can assume that the significant decrease of the Bulgarian population in the three youngest age groups is

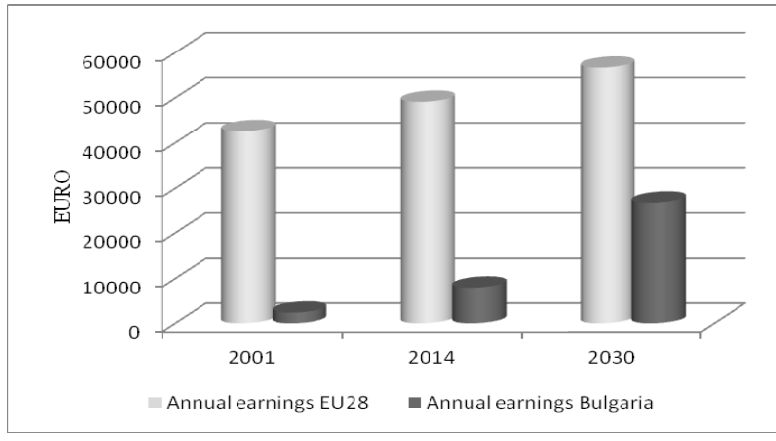
due to emigration, including emigration of children leaving the country with their parents. The increase of the population in the highest age group indicates the fact that more numerous generations had entered it in the last 10 years, as well as the lower emigration activity of this age group. This process reflects the aging of the population, the decrease of the mortality rate and the increase of the average life span.

The rates of decrease of the labour force are exceptionally high, which indicates that in the near future *growth in Bulgaria will face an increasing number of restrictions*, *stemming from that decrease of available labour resources*. Our previous research indicates that at an unemployment level of 5%, and under the two scenarios for the level of economic activity of 75 and 80% respectively, the labour force shortage will reach 250-440 thousand persons in 2030 (Dimitrov, 2015, p. 74).

While job opportunities and higher incomes are ever more likely to remain the main reason for emigration, it is reasonable to consider the foreseeable perspective of decrease of the significance of this factor.

Figure 33

Annual net earnings (per household with two adults employed full-time and two children) in Bulgaria and EU-28



Source: Eurostat, http://ec.europa.eu/eurostat/data/database, Annual net earnings [earn_nt_net] Last update: 18-12-2015 (last date of access: 6.01.2016).

The data on figure 33 indicate that in 2001 the level of net earnings of a family of two adults employed full-time and two children in Bulgaria had been 19 times lower than the average European level for the same type of family. In 2014, this ratio decreases to 6.2 times, i.e. for this fifteen-year period there is a clearly outlined process of catching up concerning the

earnings. This catching up process could be due, to some extent, to the delayed net earnings growth in the EU because of the new members that joined the Union (registered increase of 15%), but it also reflects the dynamics of net earnings in Bulgaria (216%). Despite that, as of 2014, the net level of earning in Bulgaria comprises less than 1/5 of the EU-28 average. If we assume that these increase rates will remain unchanged, in 2030 the average level of earning in Bulgaria will comprise nearly 50% of the EU-28 average. In that sense, there are no realistic chances for this factor, motivating emigration, to disappear in the foreseeable future.

- Another important aspect of the effects of *emigration on the labour market concerns the quality of human capital*. As mentioned, the role of emigration for the increase of human capital quality and its effectiveness requires an additional condition of return of the emigrants to their home country and continue to work there.

In the scientific literature the positive effect of emigration on the labour force is associated with *an increase of the labour force quality* and their income level. This statement is only valid in cases, when low skilled labour force emigrates, receives education and increases its qualification in the accepted country and returns to its home country as more highly qualified. The reality of the matter of the Bulgarian emigrants indicates that during the first few years upon emigration many of them perform labour, which requires lower qualification than the educational and professional level they attained in their home country. For some of the emigrants this practice remains valid throughout their entire professional lives; they lose qualification and competitive positions on specific labour markets. Studies on Bulgarian emigrants indicate that "among the so-called cyclical migrants there are also people with higher qualification, such as teachers, engineers and medical workers, and the main factor driving them to leave their home country is higher remuneration abroad, even at positions requiring lower qualification. As a means to find temporary employment, they are forced to take positions of unqualified workers".[17]

Marina Richter indicates that a study among Bulgarian emigrants in Switzerland, including a wide range of professional profiles (from agricultural workers to the musicians playing in the philharmonic), highlights cases, in which highly qualified Bulgarian specialists take the jobs of low-skilled personnel. Not only it discontinues the process of their professional development, but it also conditions a decrease of their

[17] http://www.dw.com/bg/ползата-от-българите-в-чужбина-а-17451967, 23.02.2014.

income. Besides the fact that their development stops, the remittances they send to their home country are smaller in comparison to the ones of Bulgarians working in the same area of expertise.[18] Beatrice Kner, Economics professor at the University of Kassel, indicates that Germany is among the favourite destinations for Bulgarian specialists. "We urgently need highly qualified specialists – mathematicians, engineers, programmers, chemists, because our progress is built on innovations. The need for foreign workers is further due to the fact that many of the German specialists leave the country to work in other countries, such as Switzerland, Great Britain and the USA, because of higher salaries". However, Prof. Kner underlines the fact that: "A problem for Germany stems from the fact that, for example, the doctors and nurses, who come in to replace our specialists, do not always speak German well."[19]

The analysis of the positions (previous and current), assumed by Bulgarian emigrants in Spain, allows several authors to conclude that "a considerable share of Bulgarian emigrants in Spain lose their qualification". The comparison between the previously (prior to emigration) assumed position within the overall job structure and the one assumed following emigration indicates that the majority of employees work in the service sector as vendors and in agriculture (24% are low-qualified workers). Qualified workers in the industry as machine operators, clerks, are around 18% (Zareva, 2012, p. 398, 400).

The presented examples are only a part of the multitude of facts, which support the thesis that *the emigration of the Bulgarian labour force does not lead to its development as human capital. On the other hand, the emigrants abroad receive higher labour remuneration in comparison to the one they would receive in Bulgaria*. This is due to the higher price of labour in the EU countries, USA and Canada, and the higher standard of living. Hence, it can be anticipated that catching up to the EU average level of earnings would play the role of a factor, which decreases the stimuli for emigration.

- *In the short term* emigration *contributes to a decrease of the pressure over the labour market and of the unemployment level*. Bulgaria has felt this impact in numerous occasions during different periods of its development, when for one reason or another (economic reforms or crisis periods) emigration saved the country from severe social crises,

[18] Ibid.
[19] Ibid.

but stripped the labour market from the supply labour by specific professions.

In the early years of the transition period, when the initial reforms began (price liberalization, liquidation of inefficient enterprises, privatization), and a number of sectors carried out mass lay-offs of labour force (mechanical engineering, steel production, cement industry), the emigration of highly qualified labour resources, such as designers, engineers, technicians, chemists, was their sole alternative if they were to continue their working life. This was also the initial wave of outflow from employment of the qualified labour force and of specific specialists. 20 years later the demand for labour in the country faces a shortage of engineers, medium technical personnel, welders, fitters, etc. Consequently, depending on which sectors were privatized (frequently privatization was a step towards liquidation), mass emigration occurred in other professional fields, and one of the last waves in recent years was that of doctors, nurses and other medical personnel. This disrupts the balances between the supply and demand for labour on individual labour markets; for example health care, education, construction, electronic industry, mechanical engineering, and others. The outflow of the segment of the labour force with medium qualification further strongly disrupted the process of transmission of management decisions and practices from the managerial module towards the executive one and contributed to a decrease of the effectiveness of the ongoing economic and social changes.

In the short term emigration decreases the social tension and the overloading of the unemployment benefit system, but in the medium and long term the consequences of emigration for the supply of labour are negative, since they further the imbalance in the professional structure of the labour market and cause the subsequent deficit of certain specialists on the labour market.

- *Emigration decreases the size of the labour force*. According to 2011 census data, during the period 1992-2001 this decrease amounts to 22 000 people per annum. Since the beginning of the 21st century, this process continues at lower levels, but covers important groups of the population, which are of structure-determining significance for the labour force – the youth (boys and girls) and labour force segments with a medium level of qualification. In this way, Bulgaria also loses part of its qualitative fertile contingents (future mothers), as well as part of the qualitative youth work force, which would otherwise implement the technological transfer of the Bulgarian economy to the industry and the

development of the services. The loss of labour resources restricts the development of modern technologies and the technological reequipping of the economy.

- The fact that emigrants abroad assume positions requiring low qualification but providing higher wages *disrupts the professional continuity in families and discourages the professional development of the children*. Finding work abroad, which requires lower qualification but earns a higher salary, decreases the motivation for career development and training among the family members. Furthermore, parents who work abroad show their children a practice that they should follow, namely that by working abroad they too can receive a higher level of remuneration than in Bulgaria, without having to study or further develop as professionals. The remittances, sent by emigrants, discourage the professional development and economic activity of the family members who have remained in the country, including the children. In the long term, a significant problem is posed not so much by the quantitative effect of emigration on the labour, but rather by the *structural effect on the population and the labour resources*. More and more attention is being paid to this fact not only in economic studies, but also in the public space.[20] It is an indisputable fact that emigration contributes to a decrease of the intellectual and academic potential, to an outflow of a considerable part of the middle class, as well as to a continued outflow of some of the best adolescent students and pupils. The ethnic structure of the population changes; the share of illiterate, uneducated and those with low education and qualification increases. The data indicate that the number of children, who left school, increases over the years and is higher in comparison to the average European level.

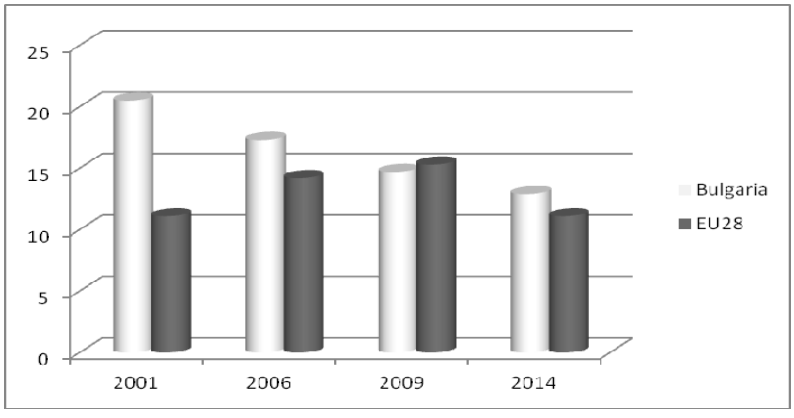
Since emigration is a worldwide phenomenon and a process towards the establishment of closer links between labour markets, one should not even ponder on restricting the opportunities of people to live and work where they feel would be best for them. However, this process is subject to external impacts and some of the EU countries have elaborated a long-term vision about the types of emigrants they welcome into their countries. The massive refugee wave, which swept over Europe in 2015 and 2016, clearly highlighted the national policies of some countries – for example, Germany welcoming young people from the East as a means to support the aging German nation and to ensure the availability of a qualified labour force in the future, the selective policy of other European countries, and

[20] http:// www.assa-m.com/katalog1111.php.

even the protectionist policy of yet a third group of countries (such as Hungary). Unfortunately, in this respect, *Bulgaria does not have a clear and* coherent vision and policy, or a system for selection of immigrants in the country. There are no policies aimed at encouraging the more qualitative segment of the labour force to settle in the country, nor stimuli to keep in the country the labour force that uses Bulgarian citizenship as a document granting access to the Schengen area.

Figure 34

Relative share of early school leavers in Bulgaria and EU-28
(% of total number of children in school)



Source: Eurostat, http://ec.europa.eu/eurostat/data/database (last entry 6.04.2016).

These and other questions need to be raised and become a subject to a public debate in both scientific circles and among politicians, so that they may receive clear answers and reasonable courses of action not only in the short-term, but also in the long-term perspective.

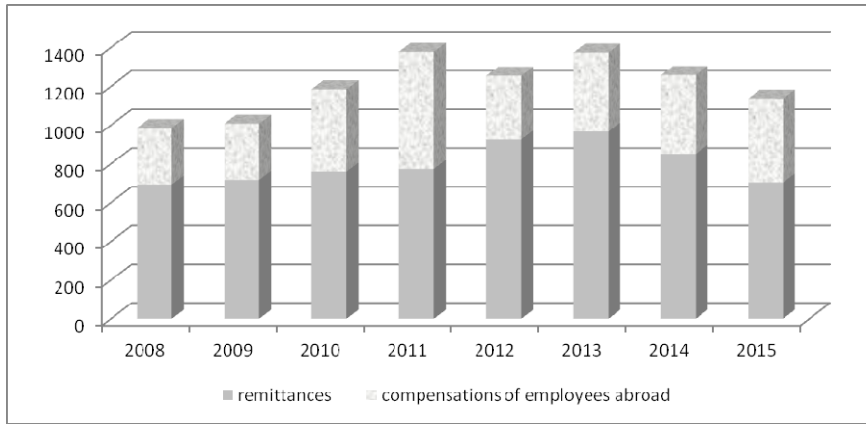
8.2. Remittances of Emigrants in Bulgaria as a Source of Supporting Household Budgets and Private Consumption

As a socio-economic phenomenon, emigration is not new for Bulgaria. However, in the period of changes of the socio-economic system in the end of the 20th century, it possesses specific characteristics highlighting its sustainability and dynamics. In this context, the practice of sending remittances is characterized by increasing sustainability and a tendency towards increase. A statistical system, capable of more fully encompassing and registering remittances, further contributes to this development. Despite the likelihood that some of these transfers remain “hidden” from the public, in the period after 1998 transfers from abroad increase from

USD 230.1 million to more than USD 1200 million in 2011 (NSI, 2001, p. 90).

As of 2000, the money transfers to Bulgaria by individuals from abroad amount to about EUR 300 million. They increase to EUR 600 million in 2007 and to more than EUR 1300 million in 2015 (Balance of payments of the Bulgarian National Bank). The tendency towards an increase of remittances as a percentage of GDP is clearly pronounced – 2.7% in 2008, 3.2% in 2011, 5.2% in 2012, and 5.7% in 2013. These data illustrate the fact that emigration from Bulgaria and working abroad for supporting the household budgets is now characterized by a sustainable tendency and increasingly *being transformed from a model for "survival" of Bulgarian families into a model for employment abroad* (see figure 35).

Figure 35
Remittances from abroad by Bulgarians and employee compensations for the period 2008-2015* (EUR millions)



* 2015 data until October, inclusive.
Source: BNB, balance of payments, www.bnb.bg.

The role of the money transfers from abroad by Bulgarian emigrants for the socio-economic development of the country is also due to the fact that the *share of these resources in the key macroeconomic indicators constantly increases*. According to assessments of several authors, in the period 1998-2003 remittances as a share of the country's exports increase by more than 3.2 times and reach 6.5%; as a percentage of imports they increase by 3.2 times reaching 5.5%, while as a percentage of FDI they increase from 36 to 49% (Kostadinova, 2005, p. 6).

This trend is not only characteristic of Bulgaria, but also of other countries from Central and Eastern Europe with comparable socio-economic

transformations. These transfers play a significant role for their economic development as well. For example, in Romania the share of money transfers by emigrants as a percentage of FDI exceeds 90% in 2003.

The remittances, transferred by Bulgarian emigrants, undoubtedly have a *stabilizing effect on incomes*, both at macro level and at the level of household budgets. This effect is particularly clearly pronounced during the period after the crisis in 2008, when the money received from the emigrants partially or entirely covered the wage lost as a result of the crisis. For numerous households the remittances became a sole source of income. The public and the mass media commented numerous times on the fact that not only individual households, but also entire families have made a living with the money sent by their members who had emigrated abroad.

Another effect of remittances of emigrants concerns the *dynamics of savings* and their use *as investment capital*. No systematic studies of this field have been conducted in Bulgaria. The analysis of the amount of resources sent indicates that they cannot have a strong impact on savings. A study from the beginning of the century indicates that 43% of the emigrants, who return to Bulgaria, invest their savings into developing own business, while another 31% use these savings for purchasing real estate (Vladimirov et al., 2000, p. 98-99). About 10 years later another study reported that investment intentions are insignificant among the Bulgarian emigrants (Christova-Balkanska, 2013, p. 350-352). Taking into consideration the motivation of the emigrants (mainly to make money to feed their families and fund the education of their children), their investment intentions clearly remain in the background. Furthermore, it should be noted that over time some of the emigrants decide to permanently settle in the receiver country and take their families with them. Thus, such emigrants practically give up any investment intentions or business initiatives in their home country, if they had any to begin with.

In support of the above conclusions comes the analysis of the amounts and destinations of the sums transferred by emigrants. The majority of money transfers of Bulgarians are from Spain, Italy and Greece. According to data from a study of Bulgarian emigrants in Spain, the average transferred sums amount to EUR 500-600 per month, while the share of total earnings that they transfer home varies significantly – from 1/2 of total earnings (7% of respondents) to a 1/4 of total labour income (73% of respondents). More than 1/2 of the emigrants in Spain, interviewed in 2011, state that they do not send any money to their home country

(Christova-Balkanska, 2013, p. 349). The discontinuation of these money transfers indicates that over time most Bulgarians settle abroad with their entire families and spend money on necessities there.

This author also reported that the intended uses of the resources, transferred from Spain, are as follows: on consumption (71%), education (11%), savings (6%), purchase of real estate (5%), medical needs (3%). The more detailed data indicate that the money sent to relatives are used to cover current monetary needs, such as loans (according to 10.2% of interviewed emigrants), education of a family member (according to 9.4% of male respondents and 12% of female respondents), health care (according to 16.7% of male respondents and 35% of female respondents).

The presented data highlight the *consumption characteristics of money transfers, sent mainly for the purposes of meeting basic necessities, educational and health care needs and a low level of investment intentions*. This observation contrasts aforementioned conclusions from a study by Vladimirov et al. (2000), according to which during the new millennium nearly 40% of emigrants have declared investment intentions, while in 2011 just 1% of men and 0.6% of women had such investment intentions. One of the reasons for this could be the unsuccessful development of small and medium-sized businesses in Bulgaria and, above all, the lack of competitiveness and transparency of the market.

8.3. Conclusions and Recommendations

The following conclusions could be made from the analysis of the impacts of emigration on the socio-economic development of Bulgaria:

The significant emigration from Bulgaria during the last 25 years and the continuous emigration intentions require the general public's attention to be focused on the reasons for the process and their negative effects on the labour market and the environment of raising and educating children. The change in the economic environment, and, above all, the increase of the number of available jobs and the improvement of the employment quality and the quality of life, should be supported, since they are means to keep human capital and labour resources in Bulgaria. The designation of a clear concept of managing such issues is also necessary.

Bulgaria lacks a clear and consistent vision and policy, as well as a system for selection of immigrants in the country, such that would allow the country

to compensate for the loss of labour resources due to emigration and will balance the demand and supply of labour. This makes the country insufficiently prepared to address the increased migration pressure in a way that would be best for the needs of the country.

It should be pointed out that all analyses and assessments are based on episodic studies and are not the result of systematic observations. Therefore the analyses and conclusions drawn on that basis are characterized by a certain degree of conditionality. The need for systematic observations is rather pressing and hence the elaboration and introduction of a system for a regular monitoring of migration processes should be recommended.

The remittances sent by emigrants to their home country, in this case to Bulgaria, mainly support household incomes and consumption, while their contribution to an increase of investments and savings is insignificant.

Regarding the impact of emigration on the labour market, the existing assessments are predominantly negative and boil down to a decrease of the population number, including working age population, to worsening of the reproductive capability of the population and to negative structural changes. As a result of the emigration, labour resources decrease significantly, including of the more qualitative segments of the labour force – the youth, qualified labour resources. Emigration does not contribute to an increase of the quality of the labour force for many Bulgarians, since abroad they take jobs, requiring lower qualification in comparison to the one they have acquired and to the profession they had in Bulgaria. In other words, there is an ongoing process of de-qualification of the labour force and if such people were to return to the country, they would, as a part of the labour force, have worse qualitative parameters.

The emigration of the parents has lasting negative consequences for the children in those families, including breakage of the direct links “children – parents”, succession and authority, sustainability and stability of the development of the children.

9. Regional Disparities, Emigration Intentions, Return Migrants and Remittances

This section examines the correlation between regional disparities and migration.[21] The regional specificity of the formation of migration intentions is examined both among people with no migration experience and those who have lived abroad. The diverse "transfer profile" model of regions (NUTS2) and districts (NUTS3), ranked according to their level of development, is subject to debate. The used data is from a study, conducted in 2013 within the framework of project "Migration and Transnationalism between Switzerland and Bulgaria: Assessing Social Inequalities and Regional Disparities in the Context of Changing Policies"/ IZEBZO-142979 sociological survey (Richter, Ruspini, Mihailov, Mintchev and Nollert, forthcoming).

9.1. Assessment of Socio-Economic Disparities between NUTS2 Regions

For the purposes of the study[22] the socio-economic disparities between the six regions from Level 2 (the so-called NUTS2) are analyzed and assessed. The analysis uses 15 indicators, grouped as follows:

Demographic conditions:

1. *Natural growth rate* – ratio of the difference between the number of live birth and deaths during the year and the average population number during the same year, calculated per 1000 persons. The indicator characterizes the condition of the demographic system.

2. *Migration coefficient* (mechanical growth) – difference between the number of persons settling and those emigrating[23], per 1000 persons

[21] Ever since the formulation of Ravenstein's laws (1885, 1889) on migration, the links between the differing levels of regional development and the migration processes become one of the main components of migration theories. Neoclassical functionalists interpret migration as an efficient mechanism of allocation of resources, while for the historical structuralists migration processes increase the regional disparities. On the other hand, the so-called migration transition views migration merely as an inevitable characteristic of development (de Haas, 2010).

[22] The disparities between the regions from Level 2 and the districts are assessed using a model, based on a taxonomic method (Yankova, et al., 2003, p. 9, 166-168).

[23] As of 2007, the mechanical movement of the population includes not only internal migration, but also movement of people to and from the country.

from the average population. This demographic indicator is highly sensitive to the condition of the socio-economic and political environment, opportunities for career realization and for ensuring decent incomes and living standards.

3. *Age dependency ratio* – ratio of the number of people aged 65+ and those aged 15-64, in %. The indicator characterizes the demographic "load" on the working age population (independent adults) by the aging population (dependent adults).

4. *Share of the persons with higher education in the total population* – the indicator reflects the educational attainment of the local population.

State of the labour market:

5. *Coefficient (rate) of employment* – ratio of the number of employed individuals to the share of the population aged 15+, in %. The indicator reflects the degree, to which individuals of working age manage to find work, and, in more general terms, the existence of a balance between the local economy (the demand for labour) and the economically active individuals (the supply of labour).

6. *Coefficient (level) of unemployment* – ratio of the number of unemployed persons to the labour force, in %. This indicator, similarly to the previous one, incorporates economic and social characteristics. It reflects the state of the economic system, as well as the social problems it creates.

State of the local economy:

7. *GDP per capita* – the indicator with the most integral characteristics and significance. It reflects the cumulative result of the functioning of the economic system, respectively of the quantity of produced goods and services per capita of the population within the respective territorial unit. The higher the value of the indicator is, the stronger and more developed the economy of the respective territorial unit and the higher the living standard of the local population is.

8. *Labour productivity* – measured by the ratio between GVA and the number of employed individuals, calculated per one employee. The indicator reflects the efficiency of the local economy.

State of the transport infrastructure:

9. *Availability of transport infrastructure* – the indicator reflects the density of transport infrastructure, measured as the length of the railway and road network per 1000 km^2. Under the conditions of intensified mobility, all sectoral and territorial systems strongly depend on the availability and quality of the roads.

Poverty and household incomes:

10. *Income per household member* – as much an economic indicator as a social one. On the one hand, it reflects the results of the labour/ economic activity, while, on the other hand, has an impact on the standard of living.

11. *Population at risk of poverty or social exclusion* – a combined indicator, which includes 3 indicators – risk of poverty, intensity of economic activity and material deprivation.

Education and health care:

12. *Share of pupils (grades 1-12) in total population* – this indicator reflects their relative share in the total number of inhabitants of the respective territorial unit.

13. *Share of university students in total population* – the availability of higher learning institutions and the access to them are major factors for increasing the educational level of the population.

14. *Doctors per 100 000 inhabitants* – the availability of medical doctors is one of the main qualitative indicators, which characterizes the state of health care and the standard of living of the population.

15. *Number of hospital beds per 100 000 inhabitants* – the degree of availability of hospitals is one of the main qualitative indicators, which characterizes the state of health care in the respective territorial unit.

In this way, the socio-economic disparities between the NUTS2 regions are analyzed and evaluated on the basis of a matrix of 90 indicators. The study is for 2011 and uses data from the NSI.

The integral scores for the level of socio-economic development of the six NUTS2 regions are presented in table 12.

Table 12

Ranking of the regions according to their level of socio-economic development

Region	Rank	Integral score
Southwestern	1	0.4622
Southcentral	2	0.7303
Northeastern	3	0.7496
Southeastern	4	0.7625
Northcentral	5	0.8559
Northwestern	6	0.8894
Bulgaria	*x*	*0.5627*

The analysis of the results allows for the formulation of the following *conclusions and assessments*:

- The Southwestern region (SWR) strongly stands out as the region in the best socio-economic condition – its integral score is lowest (i.e. it is close to the "benchmark" territorial unit) and furthermore it exceeds the average for the country. The leading position of SWR is confirmed by a multitude of other studies, as well as by the data from Eurostat.[24]

- The Northwestern region (NWR) and Northcentral region (NCR) are at the other extreme – their integral scores are far from the "benchmark" region and are considerably lower than the average for the country.

- The three remaining regions are in the middle of the ranking – the Southcentral region (SCR), the Northeastern region (NER) and the Southeastern region (SER). Their scores are comparable, but, on the other hand, they are significantly different from the ones of the other three regions.

- On that basis, several "clusters" can be conditionally designated:

  - SWR, which assumes the leading position from a socio-economic point of view;

  - regions in the "golden middle" – SER, NER and NCR, which scores are lower than the average for the country, but are considerably better than the ones of the underdeveloped regions.

[24] Yankova et al., 2010, p. 20; Eurostat regional yearbook – 2012. p. 18-21.

- regions, which lag behind – NCR and NWR.

9.2. Territorial Socio-Economic Disparities and Potential Migration of the Population by NUTS 2 Regions

It is logical to assume that the social and economic potential of the settlements and regions, within which they are located, influences the migration behaviour of the population. In that sense, when comparing the integral assessments of the socio-economic development (IASED) of the regions and the groups of districts with their potential migration coefficients (PMC)[25], a parallel is sought between the territorial disparities and the development of the migration processes.

Out of the designated six NUTS2 regions, NER has the highest intensity of potential migration. This region has a PMC of 25.2%. It falls in the middle (rank 3) among the other regions concerning its integral score of level of social and economic development. Similar in terms of level of development and potential migration is SER (rank 4), with a PMC of nearly 23%. The population of these two regions most frequently declares intentions of emigration from the country. Within each of these two regions falls one of the most developed districts in country, with a positive influence over their scores of the level of socio-economic development. However, underdeveloped districts with worsened labour market conditions and economic development indicators also fall therein. The potential short-term migration coefficients for the two regions range between 5-6%.

NCR and SCR, with significantly different scores of the level of their development (NCR – rank 5, SCR – rank 2), have analogous characteristics of the intensity of potential migration – 19.7%. The favourable position of SCR in the ranking of the level of economic development is entirely due to the indicators of the one of the most developed districts in the country with administrative center Plovdiv. To a large extend, this district ensures employment of the population in the region. The social and economic indicators of the other districts within this region are below the country average. The value of the indicator of short-term potential migration is 6.5%.

[25] Potential migrants per 100 persons of the population aged 15-65 years (in %). The coefficient is calculated (in total) for all potential migrants, since the examination of migrants by groups at the regional level is not feasible due to the small number of observed cases.

NCR includes relatively poorly developed districts; it is a reason why it lags behind the other regions in its development. This region is characterized by a significant decrease of the population number, while the level of potential short-term migration there is 5.7%.

NWR is the most economically underdeveloped region in the country (rank 6). There are no highly developed economic centers in this region. The intensity of potential migration is very low compared to the other regions – 14.3%. The low value of the indicator can be explained by the significant decrease of the population number and the worsened age structure. The region is characterized by "migration exhaustion", i.e. *decrease of the population from the age groups most commonly participating in migration processes*. This is important to take into consideration, particularly concerning internal migration, characterized by higher level of selectivity – age, education (acquired or aspired to), professional qualification and skills, individual mobility, and others. NWR has lowest short-term migration coefficient – 3.7%.

As already mentioned, SWR is the most highly developed region in the country. There the level of potential migration is lowest (13.1%). The regional labour market ensures a high level of employment of the labour force, while the comparatively developed social infrastructure ensures favourable living conditions and opportunities to receive education to the majority of the local population. The capital city of Sofia is the reason for that. The region also encompasses districts with lower levels of development, but their population number is relatively low. In this region the intensity of short-term migration is highest (8.6%). To a large extent it is due to the high educational and qualification level of the labour force, as well as the opportunities for temporary employment, which, despite the crisis, neighbouring Greece provides.

Within the structure of potential migration flows in all regions of the country, relative share of men is anticipated to be larger than the one of women. SCR has the largest share of men among potential migrants (62%), followed by SWR (60%). In the other regions the values range between 52% (SER) and 59% (NER).

The largest number of young people below the age of 29 will participate in the migration flows of SER (48%) and of NWR (46%). This will worsen the demographic situation in the latter region even further. The relative share of young migrants in NCR and SCR is around 43%, while in the remaining two regions – NER and SWR – it is 39%.

People aged 30-44 will comprise around 40% of total potential migrants in NCR and SWR. In the other regions these relative shares will range between 33 and 36%, with the exception of NWR (28%). In the next age group (45-49), the largest share of migrants will be registered in NWR and in NER (nearly 25%). In the other regions the relative share of the migrants from this age group will fall within the range of 16-19%. In all regions, the share of potential migrants from the highest age group (60-65) will be below 2%.

There are disparities in the educational structure of potential migrants between the different regions. Of the respondents declaring intentions to emigrate from SER, currently 37% have higher education. In SWR the value of this indicator is comparatively lower (28%); the same applies to SCR (23%). Within the emigration flow from NWR, people with higher education can be anticipated to comprise 8%, while for NCR and NER they comprise respectively 19 and 14%.[26]

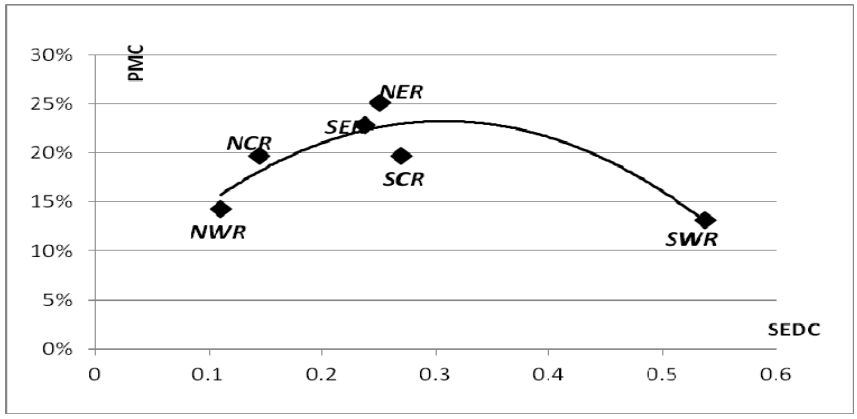
Most of the country's population within the analyzed age group has secondary education. That is why the share of people with secondary education is expectedly highest among potential migrants. This share is highest in NWR, NER and SCR (around 62%). This share is lower in NCR (55%) and lowest in SER (47%).

The educational structure of potential migrants from the different regions is supplemented by the people with elementary or lower education.

The examination of the values of the integral scores of socio-economic development of the regions and the level of potential internal migration therein (see figure 36) indicates that there is a correlation between the level of development of the region and the emigration intentions – namely, as the socio-economic development coefficient (SEDC) increases, the value of PMC decreases (correlation coefficient -0.37). This correlation does not apply to NWR, where the comparatively low level of socio-economic development is accompanied by a low coefficient of potential migration.

[26] For the purposes of comparison, we would like to point out that, according to data from the Census of the Bulgarian population from 2011, the relative share of the population aged 15-64 is 24.5%, while that of the population with secondary education – 54%.

Figure 36
Correlation between the level of socio-economic development (SEDC – NUTS2 regions) and the potential migration coefficient (PMC)



Of course, it should be taken into consideration that the migration behaviour of the population is not solely determined by economic factors. There are other circumstances and factors of significance to its formation, such as marital status, value orientation, inclination towards mobility, individual level of household and housing provision, friendly environment, awareness and adaptability to other living conditions, etc. All these factors influence the decision to migrate.

9.3. Return Emigrants and Remittances from Abroad by NUTS2 Regions

The share of return emigrants (*persons, who have lived abroad for more than 1 month during the last 5 years*) is highest in the two NUTS2 regions with medium level of development (rank 3 and 4) – NER and SER (respectively 17.9% and 15%). As mentioned above, these are the regions with the highest level of potential migration. The situation in SCR (rank 2) and NCR (rank 5) is again analogous, despite the fact that the share of emigrants returning to SCR is nearly 2% higher in comparison to NCR. The lowest relative shares of return emigrants (as well as levels of potential migration) are registered in the most underdeveloped and the most highly developed region – NWR and SWR (respectively 11 and 9.4%) (table 13).

Bulgarians returning from abroad can be grouped in accordance with their future intentions – to stay in the country or to emigrate again. Hence, among the people with migration experience we can differentiate between those, who have permanently returned, and the ones who intend to

emigrate again. The latter can be defined as "circular" migrants. In this way, we find that the share of those intending to leave is once again highest in NER and SER, and lowest in NWR. It is only there than more than 1/2 of the return migrants would not leave again.

Table 13

Return migrants by NUTS2 regions (% of the population)

Region	Return migrants	of them	
		Staying	Leaving again
SWR	9.4	36.7	63.3
SCR	14.0	26.4	73.6
NER	17.9	23.7	76.3
SER	15.0	17.9	82.1
NCR	12.3	30.4	69.6
NWR	11.0	53.2	46.8
Bulgaria	12.8	29.7	70.3

Source: Country representative sociological study, conducted in 2013 among the population aged 15-65 by the research team, engaged in the implementation of Bulgarian-Swiss project "Migration and Transnationalism between Switzerland and Bulgaria: Assessing Social Inequalities and Regional Disparities in the Context of Changing Policies" / IZEBZO-142979.

The data from the cited study allow for assessments of the remittances from abroad, both by NUTS2 regions and district groups. Of course, these are sample estimations, which conditionality should also be taken into consideration. The study indicates that 1/4 of the remittances are transferred to SCR (rank 2), while 19% of them are transferred to NER (rank 3) and SER (rank 4), i.e. 63% of the remittances from abroad are transferred to these three regions (with medium level of development). NWR ranks next with 17% of the transfers. The most developed region (SWR), where the capital city is located, is next with 12% of the transfers. The lowest share of total transfers of remittances is registered in NCR (8%).

In absolute figures this means that if on average per year around EUR 690 million enter the country, more than 170 million are transferred to SCR, and only EUR 56 million – to NCR.

The assessment, based on the data from BNB, looks more conservative, since it is conducted solely on the basis of "Bulgarian citizens returning from abroad", without taking into consideration the possible transfers made by the so-called "current" migrants, i.e. members of the surveyed

households, who were outside the border at the time of the study being conducted.

The identified disparities are primarily the result of the different behaviour concerning the transfers of the residents of the different regions. Hence, the assessments of the average annual transfers per person (who has lived abroad and is currently in Bulgaria) range from more than EUR 4000 in SCR, NWR and SWR, to a little over EUR 2500 in NCR.

On the other hand, while on average for the country the share of the income generated abroad, which is transferred to relatives in Bulgaria, is around 43%, in NWR it is 54%, and in NCR – only 32%.

The utilization of the remittances is, if not the most important, at the very least the most visible effect of emigration.

Without going into the popular debate on the so-called “altruistic” and/or “business” intended use of the remittances (Rapoport and Docquier, 2005; Christova-Balkanska, 2010), we see that in practice they are not utilized for business initiatives in the country (only 6 respondents of 361 people declaring receive of remittances have responded affirmatively to this question).

Figure 37

Remittances from abroad by NUTS2 regions (% to the total)

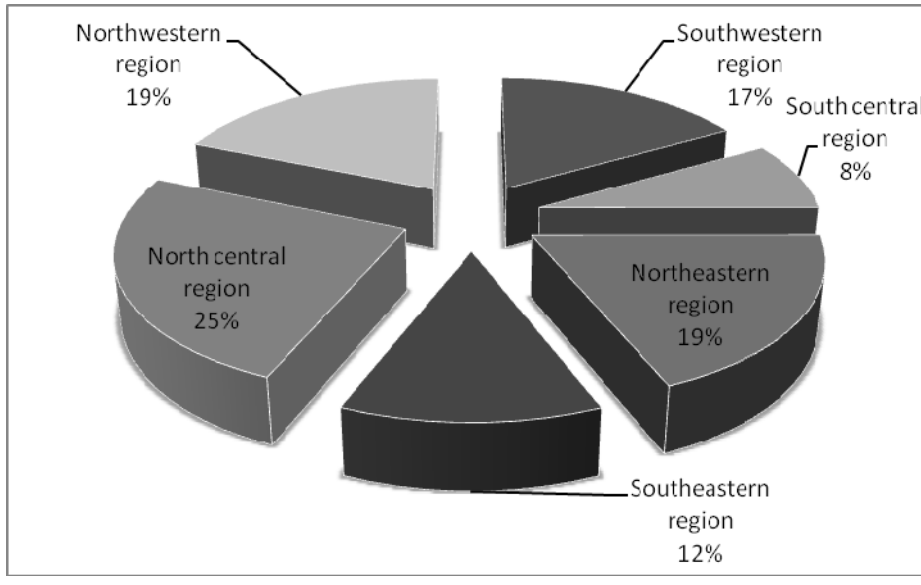
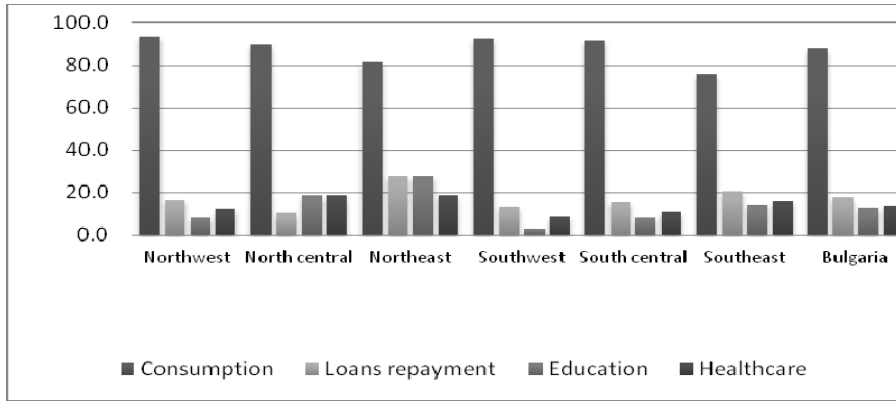


Figure 38
Utilization of remittances from abroad by NUTS2 regions (%)



In the NUTS2 regions that participate more intensively in the migration processes – NER (rank 3) and SER (rank 4), characterized by the highest coefficients of potential migration and the largest shares of return emigrants, the remittances are to the smallest extent utilized for the purposes of consumption (in comparison to the other NUTS2 regions) – respectively 81.5 and 75.5%. In the underdeveloped NWR the share of remittances, used for the purposes of consumption, reaches 94%.

These resources are most commonly used to pay loans in NER and SER (respectably 27 and 21%), while they are most rarely used for that purpose in NCR (around 10%), given 18% country average. The transfers from abroad are most commonly used for education and health care in NER and NCR. On the other hand, in the most highly developed region (SWR) slightly less than 3% of the transferred resources are used for education and 9% – for healthcare, while the country average is 13-14%.

9.4. Disparities in the Socio-Economic Development of the Districts in Bulgaria

Another aspect of the correlation between potential external migration and socio-economic development at the regional level can be identified on the basis of the **districts** typology. The difference lies in the fact that the analyzed regions and district groups are formed on a different principle. The regions are geographical units formed on an administrative-territorial principle of linking districts, which neighbour in territory but have different levels of development.

The typology of the districts into four groups is based on the obtained integral scores of their socio-economic development. The same 15 indicators, described in section 9.1, are used for that purpose. The integral scores of socio-economic development of the 28 districts (NUTS3) and their grouping are presented in table 14.

Table 14

Ranking and grouping of the districts according to their level of socio-economic development

Rank	District	Region	Score
Group I			
1	Sofia (capital)	SWR	0.5332
2	Varna	NER	0.6279
3	Stara Zagora	SER	0.6438
4	Plovdiv	SCR	0.6785
Group II			
5	Vratsa	NWR	0.7467
6	Gabrovo	NCR	0.7593
7	Ruse	NCR	0.7618
8	Sofia	SWR	0.7625
9	Burgas	SER	0.7775
10	Veliko Turnovo	NCR	0.7909
11	Pleven	NWR	0.8014
Group III			
12	Blagoevgrad	SWR	0.8182
13	Dobrich	NER	0.8398
14	Shumen	NER	0.8419
15	Smolyan	SCR	0.8446
16	Kurdjali	SCR	0.8447
17	Pazardjik	SCR	0.8458
18	Sliven	SER	0.8464
19	Kustendil	SWR	0.8465
20	Yambol	SER	0.8499
21	Turgovishte	NER	0.8519
22	Haskovo	SCR	0.8578
23	Lovech	NWR	0.8587
24	Pernik	SWR	0.8856
Group IV			
25	Razgrad	NCR	0.9026
26	Montana	NWR	0.9092
27	Silistra	NCR	0.9549
28	Vidin	NWR	0.9747
	Bulgaria		0.6543

According to the level of socio-economic development, four groups of districts can be differentiated.

The first group includes four districts with scores higher than the country average. These are the districts with highest level of socio-economic development in 2011. One district in each of these four regions falls in this group – SWR, NER, SER and SCR. Sofia (capital) assumes the first place, as it concentrates a significant part of the economic potential of the country, including companies, population and labour resources. The score of this district is closest to the territorial unit benchmark and is significantly different from the scores of the other districts.

The second group includes seven districts with comparatively high levels of socio-economic development. One district in SWR, two in NWR, three in NCR and one in SER fall within this group.

Two districts from the most underdeveloped region in the country – NWR, fall within this second group. This peculiarity can be explained by the fact that (a) the regions are territorial units of differing sizes and hence with different values of the analyzed indicator, which in turn form a different "benchmark"; (b) the more favourable values of the analyzed indicators, registered by the leading districts in NWR – Vratsa and Pleven, are neutralized by the extremely unfavourable values of the same indicators of other districts in this region, such as Vidin and Montana; (c) "Kozloduy" NPP is situated in Vratsa district, which currently neutralizes the poor state of many other municipalities in the district (for example, Borovan, Krivodol, Roman, Hajredin).

Burgas district also falls in this group. One of the most dynamically developing municipalities – Burgas, is situated there, as well as a number of Black Sea municipalities, which rely on tourism as a structure-determining sector. However, a few underdeveloped municipalities also fall there, such as Malko Turnovo, Ruen, Sredets.

The third group consists of districts lagging behind in their development, and is most numerous. Of the 28 districts in country, 13 fall into this group. The smallest number of districts in this group (only two) is from SWR, while the largest number of districts is from SCR.

The fourth group includes districts, which level of socio-economic development can conditionally be characterized as "critical". The scores of the districts in this group are not only significantly lower than the country

average, but are also quite far from the scores of the districts from the preceding group. During the last 15-20 years, Montana and Vidin (from NWR), Razgrad and Silistra (from NCR), are invariably among the territorial units strongly affected by negative processes of depopulation and aging of the population; they have inefficient structure of the local economy, few competitive enterprises, low levels of income, high levels of unemployment and poverty.

On that basis, it can be asserted that the groups of districts (clusters) are more homogeneous, regardless of their location.

9.5. Potential Migration of the Population by Types of Districts

The intensity of potential migration (measured by PMC) of the population of the districts with high (group I) and comparatively high (group II) scores is approximately equal – around 17% (see table 15). The PMC of these two groups of districts is lower than the country average value of the indicator. It should, however, be taken into consideration that the first group consists of the four most highly developed districts with the largest Bulgarian cities as administrative centers. Large district centers, as well as large industrial or tourist complexes, also fall within the districts from the second group. That is why, on the one hand, the developed production and social structure there limit the emigration intentions, while, on the other hand, larger share of the population living in those districts is young and educated, and also more mobile. Those factors explain the identified level of potential migration among the population of these types of districts.

Table 15

Intensity of potential migration by groups of districts (%)

Groups of districts	PMC
Group I	17.2
Group II	16.8
Group III	21.5
Group IV	14.5
Bulgaria	18.3

In the third group, which includes the largest number of districts, identified as underdeveloped, the intensity of potential migration is highest. In these districts an average of 22% of the population has potential migration intentions. The population of these districts has a comparatively sound age

and educational structure, but apparently the local labour market does not meet the requirements of the labour force.

The districts in the last group face serious difficulties in their economic development. The demographic situation there is very unfavourable (particularly in districts Vidin and Montana from NWR and districts Silistra and Razgrad from NCR). They are characterized by rapid aging of the population, resulting, among other factors, of previous internal and external migration processes. The critical economic condition can be expected to act as a push factor. The low value of PMC (14.5%) in these districts reflects the limited demographic potential.

More significant intentions for short-term stay in another country is registered among the surveyed population from the first and third group of districts – above 7%. For the other two groups the value of this indicator is slightly below 5%.

Men predominate in the structure of potential migrants. In the second and third group their relative share is 60%. In the first group it is 56%. In contrast, in the fourth group the share of men is smaller in comparison to that of women (men comprise 49%, while women – 51%).

People with higher education comprise the largest share in the potential migration flow to be recruited from the first group of districts (29%). In the next two groups of districts people with such level of education comprise around 22%. This share is very small among migrants from the last group (slightly less than 3%).

In the first, third and fourth groups of districts, the potential migrants with secondary level of education range between 60 and 63%. This share is lower among the migrants from the second group – 53%. The other potential migrants have elementary or lower education.

9.6. Return Emigrants and Remittances from Abroad by Districts

The share of return migrants is highest in the underdeveloped districts (group IV) and in the districts with a low level of development (group III) – respectively nearly 17 and 15%, while the country average is 13%. This share is lowest in the group of the districts with medium level of development (group II, which includes districts like Burgas (SER), Ruse and Veliko Turnovo (NCR), Vratsa (NWR) where “Kozloduy” NPP is

located, etc.). From the standpoint of the categorization “staying” or “leaving again”, two “extremes” can be identified – developed districts (group I, namely Sofia – capital (SWR), Varna (NER), Stara Zagora (SER) and Plovdiv (SCR)) and underdeveloped districts (group IV – Vidin and Montana (NWR) and Silistra and Razgrad (NCR)).

Table 16

Return migrants by groups of districts (% of the population)

Groups of districts	Return migrants	of them	
		Staying	Leaving again
Group I	12.9	25.0	75.0
Group II	8.3	35.1	64.9
Group III	15.0	28.6	71.4
Group IV	16.9	46.5	53.5
Bulgaria	12.8	29.7	70.3

In the first group, only every fourth person, who has lived abroad, would stay permanently; this percentage is significantly higher in the districts from the fourth group, where nearly 1/2 of the respondents (46.5%) would not emigrate again.

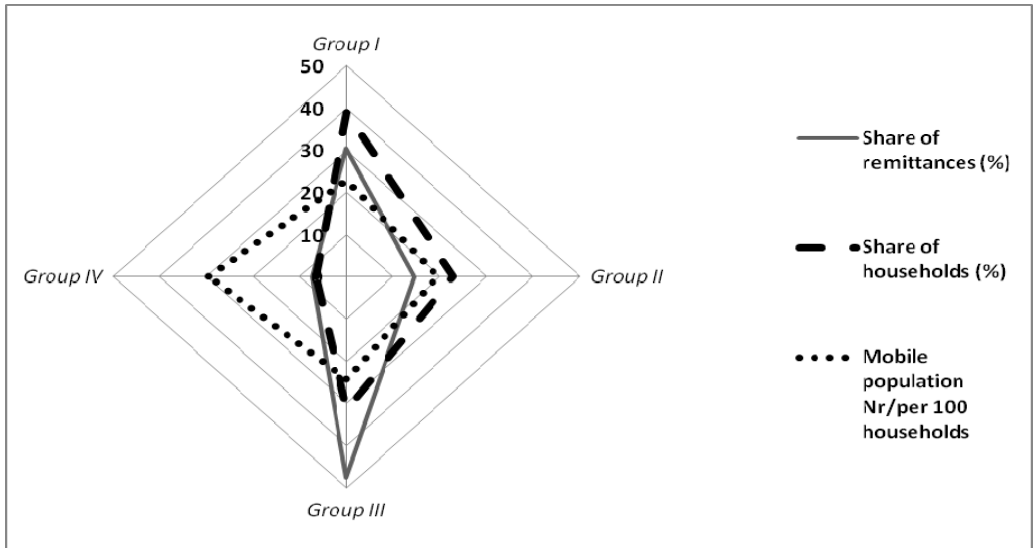
The largest share of remittances from abroad are transferred to the districts with lower levels of development (droup III, where, as mentioned above, falls the greatest number of districts (13), among which are Blagoevgrad (SWR), Dobrich (NER), Shumen (NER), etc.). The assessments on the basis of the cited study indicate that nearly 48% of the remittances are transferred to this group of districts. Furthermore, in terms of indicators like share of households and mobile population per 100 households, this district falls behind the leading group of districts (in the first case) and the underdeveloped districts from group IV (in the second case) (see figure 39). It can be estimated that of the EUR 690 million transferred to the country on average per annum, EUR 330 million are received by the 13 districts with lower levels of development. Apparently, these resources compensate for the shortage of resources there. On the other hand, however, it can be anticipated that the dependence of the population of these districts on incomes from abroad will increase.

The dependence on remittances from abroad seems to be lowest in the group of districts with medium level of development (group II) – the share of households in these districts reaches 23% of all Bulgarian households, while the share of transfers from abroad that they receive does not exceed 15%. The lower number of mobile population (*persons who have lived abroad for more than 1 month during the last 5 years*) is typical of this

group – 19 mobile persons per 100 households. Regarding the value of this indicator, the situation in the group of underdeveloped districts (group IV) is contrasting. There nearly 30 persons per 100 households have previous migration experience.

Figure 39

Relative share of remittances from abroad and households (%), and mobile population per 100 households (number) by groups of districts



Despite the conditionality of such assessments, it can be concluded that there are disparities between the individual groups of districts concerning the transfer behaviour of the residents. People from underdeveloped districts (group IV) have sent more than 1/2 of what they have earned abroad to their families and relatives back home, while the residents of the districts with medium level of development (group II) have sent 38%. On the other hand, it should be pointed out that the residents of the districts with low level of development (group III) have sent more than EUR 4500 (on average, per annum, per person) to their families and relatives, which is considerably more in comparison to the residents of the other districts.

Regarding the utilization of the remittances from abroad by groups of districts, the observations are extremely diverse. The remittances are most commonly used for the purposes of consumption in the developed (group I) and underdeveloped (group IV) districts; for payment of loans again in the developed districts, but also in the ones with lower levels of development (group III) – in more than 20 and 18% of the cases, respectively (given a country average of 17%). The share of remittances, used for educational

purposes, is almost the same everywhere in the country. In contrast, the utilization of remittances for health care purposes occurs significantly more often in the underdeveloped districts (group IV) than anywhere else (in more than 18% of the cases, given a country average of 13%).

Figure 40

Remittances from abroad by groups of districts (% of total)

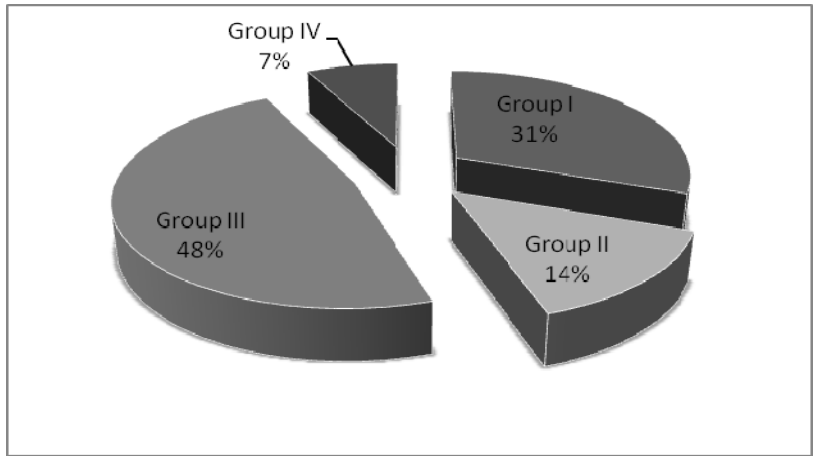
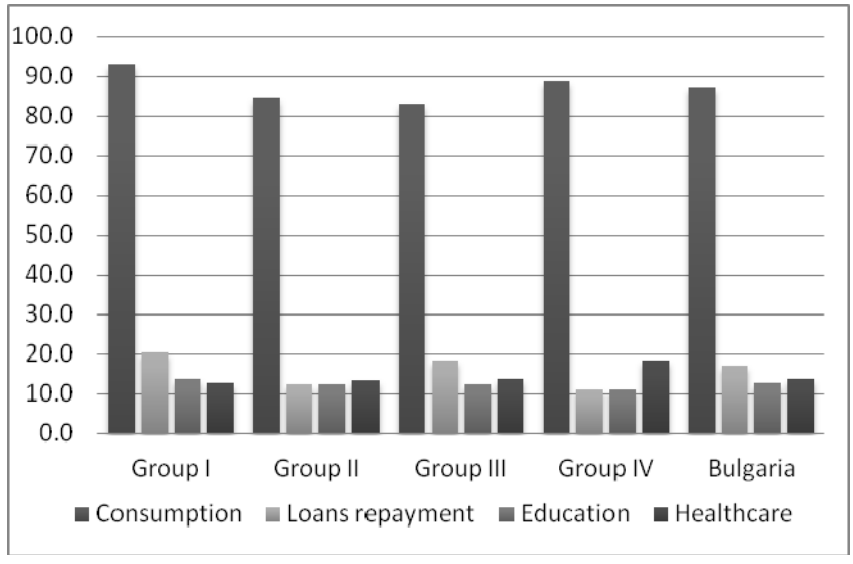


Figure 41

Utilization of remittances from abroad by groups of districts (%)



9.7. Summary

The analysis of the correlation between the level of development of the regions (NUTS2) and the districts, on the one hand, and the intensity of potential and actual migration (assessed on the basis of the number of return emigrants), as well as the regional specificity of remittances transferred from abroad, on the other hand, confirm the expectations that the regions with medium and low level of development participate most actively in and respectively depend to the largest extend on the migration processes. However, the situation is quite ambiguous. The analysis of this correlation at the level of the NUTS2 regions and districts ranked by their integral scores and accounting for a wide array of indicators, highlights diverse, sometimes even contradictory, aspects of the phenomena.

The regions with medium level of development – NER and SER (rank 3 and 4), are characterized by the highest intensity of potential and actual migration (25.1 and 17.9%, respectively for the first region, and 15% for the second region). On the contrary, the underdeveloped NWR (rank 6) and the highly developed SWR (rank 1) register the lowest values of these indicators (14.3 and 11% for NWR, and 13.1 and 9.4% for SWR). At district level the situation is more diverse. The 13 districts with low level of development (group III) register the highest potential migration coefficient (21.5%), while the underdeveloped districts (group IV) register the lowest (14.5%). The intensity of actual migration is again highest in these two groups of districts, but the order is reversed – 16.9% for group IV and 15% for group III.

Furthermore, it can be anticipated that there will be a significant decrease of the young population of NUTS2 regions SER and NWR (respectively 48 and 46% of the potential emigrants from these regions are below the age of 29). Also expected is an outflow of persons with higher education, mainly from SER and from SWR (respectively 37 and 28% of the people willing to emigrate from these regions have higher education). Similarly, at district level, the outflow (loss) of educated people can be expected to be most significant in the group of the developed districts (group I).

The greatest number of remittances from abroad are transferred to SCR (rank 2), followed by NER (rank 3) and SER (rank 4) – a total of 63% of the remittances from abroad are transferred to these regions. They are most commonly used for the purposes of consumption, particularly in the NWR (94%), characterized by a comparatively low level of development. The analysis of the remittances from the standpoint of the groups of districts

indicates that the greatest number of transfers go to the 13 districts with low level of development (48% of all remittances from abroad). In the four underdeveloped districts (group IV) these resources are more commonly used for health care purposes than usual. All this suggests the need for re-orientation of the migration policies of the country at the regional level.

PART TWO

FOCUS: AGRICULTURAL SECTOR AS A FACTOR FOR THE ECONOMIC DEVELOPMENT OF BULGARIA

Considering the significant challenge of analyzing in complete the processes in the agricultural sector in Bulgaria over the last 25 years, the goal here is to outline just the main characteristics of the sector as a factor for the economic development of Bulgaria and the effect of the implemented economic policies on the sector development.

Conditionally, the periods in the development of the agricultural sector can be divided into three sub-periods:

- until the accession of Bulgaria as a full member of the European Union (EU) in 2007;
- first programming period of the full membership (2007-2013);
- second programming period (2014-2020).

From the start it should be pointed out that the agricultural sector in the Bulgaria is characterized by ongoing paradoxical economic processes, not characteristic of the other EU members, including the member states from Central and Eastern Europe with comparable historical backgrounds.

Quite broadly and in a fragmented way these phenomena can be presented in the following way:

First. Large share of big consolidated agricultural holdings (farms). In 2007 utilized agricultural areas (UAA) in Bulgaria range between 5.3-5.9 million hectares (ha), while arable land is 4.6 million ha.

According to the system of calculating the number of farms, adopted by Eurostat, they can be divided into two main groups – below 100 ha and above 100 ha.

In Bulgaria farms of more than 100 ha predominate. They comprise 78% of the utilized agricultural areas. Their average size is 624 ha.

The average amount of arable land per farmer is 2430 ha. A mere 477 farmers cultivate 1.16 million ha, which comprises 38% of total arable land.

In the EU, the average size of farms above 100 ha is 250. There are no farms with sizes of 2400 ha at all. Even in the USA, the country with the most large-scale farm agriculture, the group of most profitable farms comprises of sizes below 1200 ha. In other words, they are two times

smaller than Bulgarian ones and occupy a mere 16% of utilized agricultural land (Ministry of Agriculture and Foods, 2015, p. 7).

Second. Development of monoculture agriculture. As of 2009, several legal entities, registered at the State Fund "Agriculture", manage 494 664 decare (daa) of land, which allows them to absorb enormous subsidies. This leads to monoculture agriculture and cultivation predominantly of grain, neglecting the livestock, fruits and vegetables, which are traditional for this geographic region.

Third. Decrease of the production of traditional products. During the period 2007-2013, the average annual agricultural production for consumption per person was only 7% of all apples, 22% of tomatoes, 33% of meat, and 44%. Even grain, which the country exports, was just 78% of the consumption per capita. The remaining 22% are imported bread baking mixes and pastry.

In a macroeconomic aspect, the analysis of the agricultural sector and the policy of the Republic of Bulgaria are motivated by the significance, place and characteristics of the agricultural sector, food production and the rural economy in the broad framework of the economic development of Bulgaria.

1. Cost of the Agricultural Policy

The impact of the agricultural sector on the growth rate of the Bulgarian economy depends on the agricultural policy. It should be pointed out that the agricultural policy of the country is the most expensive economic policy. The analysis of the agricultural policy costs over the last 25 years includes the cost of the agrarian reform, which began in the early 1990s, the cost of supporting agricultural production in the form of direct and indirect subsidies, and the expenditure for state co-financing allocated within the framework of the Common Agricultural Policy of the European Union. Another element of the agricultural policy costs linked to the expenditures for the operation of the state administration in the area of this policy. The conducted research depicts the following:

First. For the period 1992-1998 the land reform in Bulgaria cost more than USD 400 million of the budget. These resources were used only for elaborating plans for land division at the corresponding average exchange rate of USD to BGN. Also, the salaries of more than 300 officials, working on land division issues at the Ministry of Agriculture, and of more than 900

officials, working in land commissions, should be added to the above sum. The amount of resources spent over these nine years is sufficient to replace the physically obsolete agricultural equipment. Unlike other former socialist states, where the land reform was completed in 1993, in Bulgaria it continued almost until 1998, and there are pending ongoing lawsuits about unresolved problems even to this day.

Second. After the accession of Bulgaria as a full member of the EU, significant financial resources were absorbed by the agricultural sector – within the framework of the EU pre-accession funds, PHARE and SAPARD programmes, as well as within the framework of the Common Agricultural Policy (CAP) of EU. In addition, the absorption of resources from the European funds is linked to co-financing from the state budget and from municipal budgets and the budgets of beneficiaries (agricultural producers). All resources along the CAP lines are paid from the state budget, while the approved projects are implemented with resources of the beneficiaries. The EU actually pays only for implemented projects or payments transferred to the beneficiaries.

About 50% of the EU budget is allocated to the Common Agricultural Policy. Approximately 50% of the resources of the European funds for Bulgaria are direct payments per unit area and funds for the Rural Regions Development Programme (the two pillars of the CAP).

Third. The Ministry of Agriculture and Food (MAF) is the largest ministry in the economic bloc of the Government in terms of its budget, number of employees, number of administrations and other units under the authority of the Minister.

As of March 1st, 2016, MAF includes[27]:

- Headquarters of the Ministry in Sofia, employing 700 officials. Also, 28 regional directorates and 285 municipal units “Agriculture” with 2300 full-time employees should be added. Hence, the administration of the ministry alone employs a total of 3000 people.

- State Fund “Agriculture”, with functions of a “quasi” bank and Payment Agency, employs 1600 people.

[27] Information from the Administrative Register, under the Administration Act, as of 01.03.2016, http://ar2.government.bg/ras/.

- Six executive agencies, also part of MAF structure:

    1. Bulgarian Food Safety Agency – the largest administrative structure in Bulgaria, it has 2300 full-time employees;

    2. Executive Agency "Hail Suppression" with 760 full-time employees;

    3. Executive Agency for Vine and Wine with 100 employees on the payroll;

    4. Executive Agency for Fisheries and Aquaculture with 250 employees on the payroll;

    5. Executive Agency for Selection and Reproduction in Animal Breeding with 100 employees on the payroll;

    6. Executive Agency Plant Variety Testing, Approbation and Seed Control with 144 employees on the payroll.

- Control and Technical Inspection with 100 employees on the payroll;

- Agricultural Academy, with central administration, 26 research institutes, 18 experimental research stations, 1 museum, and a total of 3340 employees on the payroll, from which about 2000 engaged in scientific research;

- National Agricultural Advisory Service with 70 employees; in practice, this administrative structure duplicates some of the functions and responsibilities of the Agricultural Academy;

- as of the end of 2016, 100 secondary vocational and technical schools are enlisted in the National Administrative register; they have 3200 employees on the payroll;

- the administration in the forestry sector and other state structures linked to the policy in this sector comprise another 2290 employees on the payroll.

Hence, MAF has a total of more than 17 000 employees on the payroll. This number does not include the state enterprises. “Napoitelni Sistemi” EAD (melioration systems) is such an organization – the largest dams and highway mains in Bulgaria, large administrative buildings in district towns

and others are among the assets of this company. According to data of the Ministry of Finance, the net book value of this state enterprise exceeds the accounting value of the assets of "Kozloduy" NPP.

Hence, in terms of the number of employees, this is the largest state administrative machinery in the economic bloc of the Council of Ministers of the Republic of Bulgaria.

Regarding the budget expenditures, the Ministry of Agriculture and Foods is third largest and comprises around 25% of the resources allocated for financing the individual ministries.

2. Agricultural Sector and the Economic Development of the Country

The significance of the agricultural sector to the economic development of the country at a macro level is represented by its share in indicators, such GDP, GVA, total employment, total export, as well as by a series of other economic and social impacts (migration, environment).

In absolute terms, the average annual GDP generated by the Agriculture, Forestry and Fishery sector, is around BGN 4 billion.[28] In comparison to the fluctuations in total GDP after 2011 (including the growth registered prior to the GFC, the decrease after its onset and the subsequent relative stabilization), the amount of the product generated by the agricultural sector is characterized by insignificant fluctuations (see figure 1).

Until the accession of the country as a full member of the EU, agricultural projects for around BGN 6000 million were implemented within the framework of the EU pre-accession funds and SAPARD Program. After 2007 and the EU accession, the annual average level of absorption of resources along the lines of the CAP is around BGN 2 billion (figure 4). Apparently these immense financial resources do not directly influence the GDP, generated by the agricultural sector.

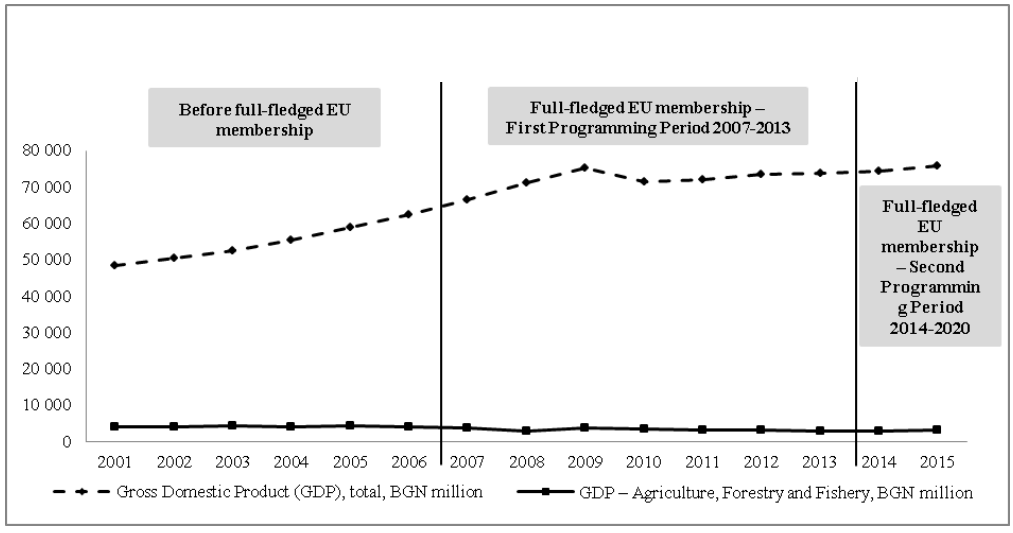
Since 2008 the value added generated by the agricultural sector has decreased. The GVA in comparable prices has decreased as a whole. In 2015 it reaches levels lower by 1/4 than the average for the period 1988-2006. Hence, the share of agriculture in the total generated GVA has

[28] At constant prices in 2010.

decreased to less than 5% for a first time since statistical data about GVA, generated in the country, is available (see figures 2 and 3).

Figure 1

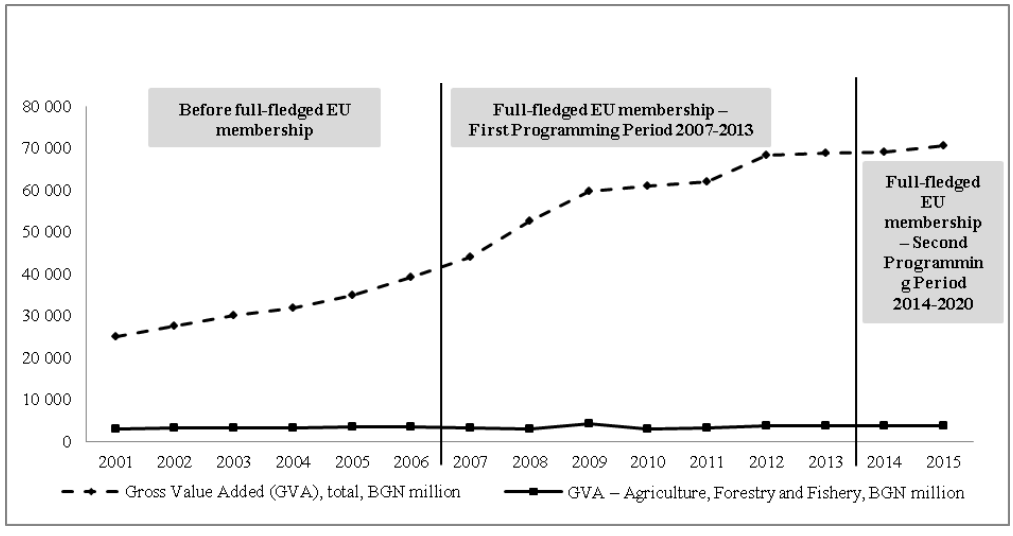
Total GDP for the country and for the Agriculture, Forestry and Fishery sector



Source: Data from the national accounts for agriculture of NSI as of November 2015. www.nsi.bg.

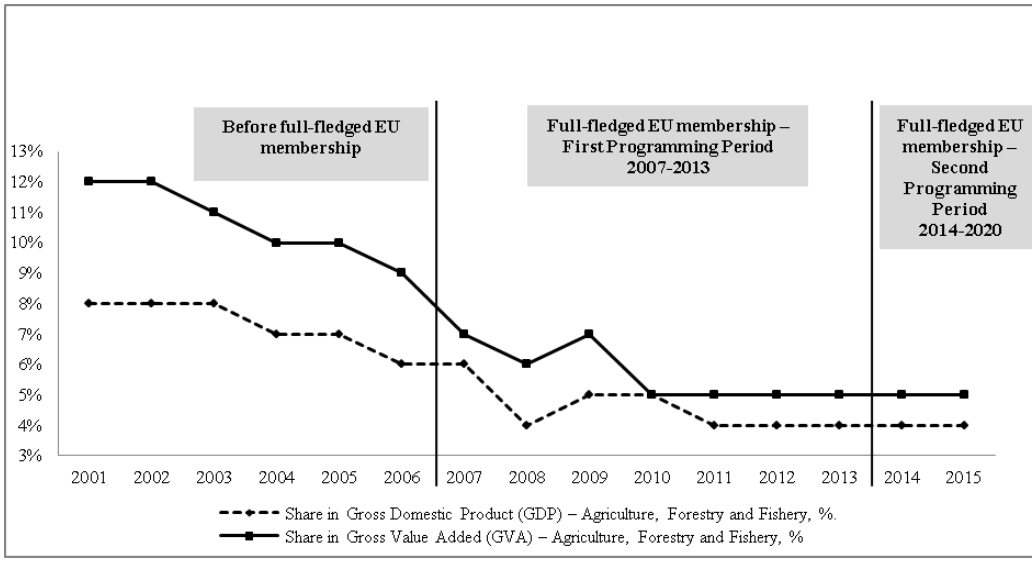
Figure 2

Total GVA for the country and for the Agriculture, Forestry and Fishery sector



Source: Data from the national accounts for agriculture of NSI as of November 2015. www.nsi.bg.

Figure 3
Relative shares of Agriculture, Forestry and Fishery sector in total GDP and GVA for the country



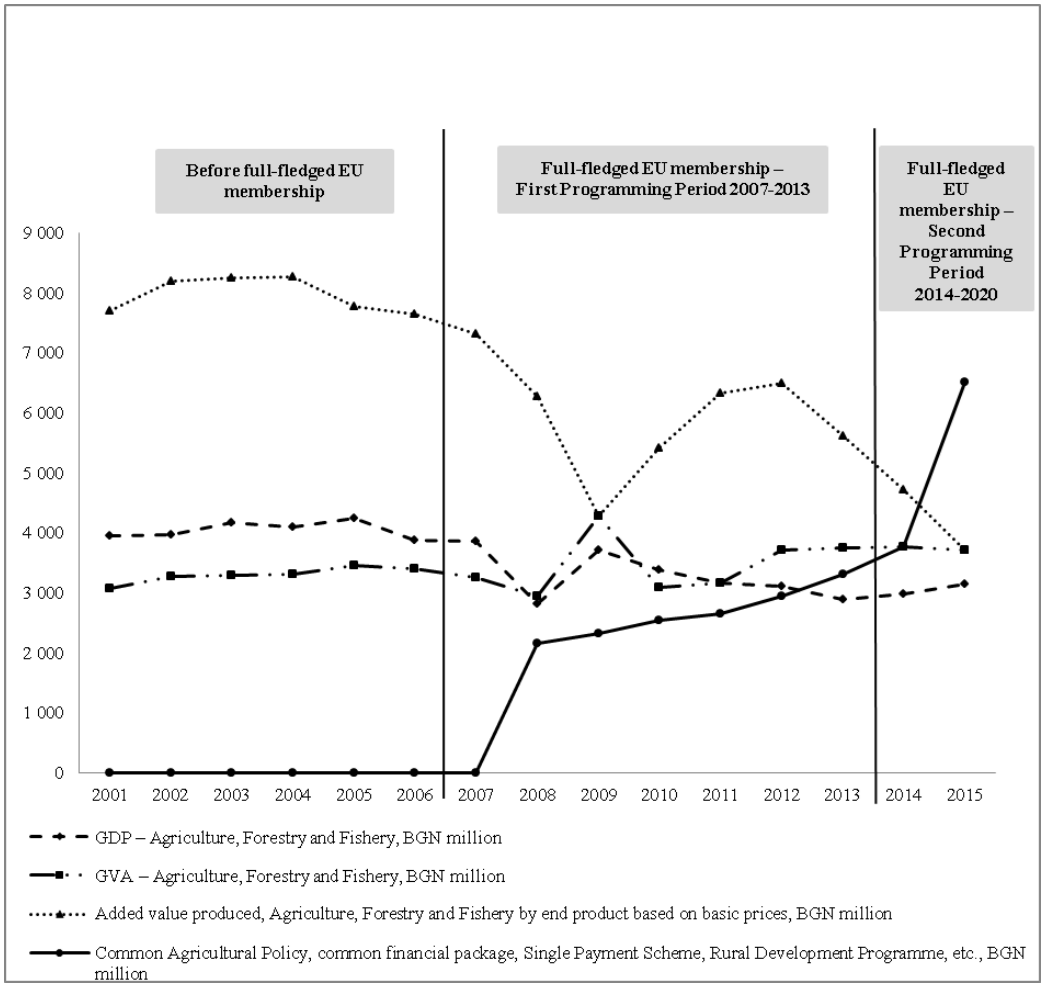
Source: Data from the national accounts for agriculture of NSI as of November 2015. www.nsi.bg.

During the 8-year period of the full EU membership, the **Gross Value Added** level at base producer prices has a clear tendency of regress. On the other hand, the consumption of fixed capital increases. This is due to, above all, the modernization of the sector as a result of the CAP implementation (2007-2013).

The analysis of these indicators should take into account the lack of a direct relationship between resources, absorbed under the first pillar of CAP – direct payments, and the consumption of fixed capital. The reason is that this subsidy goes to the income of agricultural producers and turning it into an investment is of their own choice. Hence, there is no way to measure its effect on investments and fixed capital.

The **net value added** at base producer prices is characterized by an uneven, but still noticeable decrease, mainly as a consequence of the increase of intermediary consumption, the depreciation and the lower labour costs. The foundation of this process is the structural changes in Bulgarian agriculture – mostly the significant decrease of the number of functioning small agricultural holdings, as well as the changes in the production structure.

Figure 4
GDP, GVA, added value produced, and common financial package of EU CAP in the Agriculture, Forestry and Fishery sector



Source: Data from the national accounts for agriculture of NSI as of November 2015. www.nsi.bg.

The period of absorption of EU resources from the European Funds coincides with a pronounced regress and stagnant economic growth, measured via the relative share of the agricultural sector in GDP and GVA.

Until the first EU membership year, the subsidies for production in the country are at a low level, after that they rapidly increase. In 2006 they amount to EUR 69.4 million, which comprises 2.12% of the total production

of the sector. In 2011, the subsidies for production already amount to EUR 567.0 million, which comprises 13.13% of the value of agricultural production and 37% of GVA of the sector.

3. Characteristics of the Agricultural Structure and Policy in Bulgaria

As mentioned, in Bulgaria 1.5% of all registered agricultural holdings cultivate 82% of the land. The main financial resources are concentrated there, both in terms of the value of their production and the subsidies they receive.

In practice, the participation of Bulgaria in the CAP indicates the following:

Under Pillar I (Direct Payments 2007-2013) – 75% of the subsidy is received by 3700 physical and legal entities, which, in practice, represent 100 related entities.

Under Pillar II (Development of Rural Regions) – out of EUR 3242 million, around EUR 2609 million have been absorbed; 67% of this sum have been absorbed by the aforementioned 100 related entities.

These deformations highlight several lasting tendencies during the last 20 years:

- concentration of land and capital;
- formation of a monopoly in the leasing of agricultural land;
- severed link between agricultural producers and consumers;
- invasion of multinational commercial chains;
- declining livestock breeding, fruit and vegetable production;
- production with low value added, mainly grain and other raw agricultural products;
- almost completely discontinued production of traditional Bulgarian foods;
- lack of integration of agricultural production and the production of food products as a priority sector.

A simplified answer is that this is the result of the CAP and the organization and regulation of the direct payments under Pillar I. This really is the logical answer, because while for grain production the amount of BGN 20 per daa (the average size of the subsidy per 1 daa of agricultural land) comprises around 30% of production costs, in the case of vegetable production, horticulture and viticulture this sum does not exceed 1-2% of the production costs. Hence, in practice, the European subsidy is transformed into an economic stimulus for the production of intensive crops – grain and technical crops, with immense concentration of land and capital. However, it should be stressed that CAP outlines only the framework of the general goals, rules and instruments of the European agricultural policy, while the rest is a matter of a national policy, which should fit within this broader framework.

In all EU members, where the scheme for "Single payment per unit of arable land" is adopted, with the exception of Bulgaria and the Czech Republic, there is a modulation of the size of the subsidy. This is a mechanism, whereby the size of the subsidy per unit area is decreased after a certain level of land use, and not paid at all above a certain amount of area a subsidy. For example, in Germany the subsidy per unit is paid by the following scheme:

- up to 50 ha – 100%;
- from 50 to 100 ha – 80%;
- from 100 to 300 ha – 60%;
- above 300 ha – no subsidy.

There is no modulation by the amount of land in the Czech Republic, because the main type of holding there is the modernized cooperation, which is large in size, while in Bulgaria the policy aims at stimulating the large leased agricultural holdings and, in practice, at the establishment of monopolistic structures of land use.

The system of Single payment per unit of arable land is not applied in the majority of the old EU members. Agriculture is subsidized on the basis of an agricultural holding, taking into consideration the availability of livestock breeding and other types of agricultural production with a larger share in the value added.

Hence, a model for implementation of CAP in Bulgaria is selected, as a result of which the traditional structure of Bulgarian agricultural production is disrupted.

This choice can be illustrated by the historical reality of the agricultural sector in Bulgaria 30 years ago. In 1987 Bulgaria produced annually more than 10 million tons of grain, which ranked the country amongst the 20 leading agricultural producers in the world. The question is why during this period Bulgaria exported no more than 450 000 tons, while today, when grain production does not exceed 4.5 million tons, more than 2 million of them are exported.

The simple answer, known by all specialists and people in the villages, is that grain is used to produce forage, which is used to feed the livestock, which in turn produces milk and meat, and they are used to produce dairy and meat products. A lot of these products, besides ensuring the rational nutrition of Bulgarians, were exported not solely along the lines of the former Council for Mutual Economic Assistance (CMEA), but also to Western Europe (the so-called Old Europe) and many other countries all over the world. A significant part of this production went to the plates of tourists along the Black Sea coast and the mountain resorts. This complicated chain can be represented economically by one single indicator –value added or newly generated value.

In 2015 our country ranks 10th in Europe in grain export.[29] According to NSI data, Bulgaria mainly exports grain to the EU countries.

Bulgarian grain has low gluten content and is extremely valuable in the Arab countries due to the specificity of the bread produced there. The exporters to these countries are mainly companies, predominantly registered in Europe. They have headquarters in Geneva, Paris, London. These are companies that do not have warehouses, trucks or commercial vessels. Their activities are limited to logistics. They buy from Bulgaria and solely on paper sell to the Arab countries. The question is why Bulgaria and its Arab partners cannot organize the trading process between each other, and why there is a need to use the logistic services of third parties. This is a market, on which Bulgaria used to export large quantities of live animals, meat and dairy products, canned vegetables and other products with a large share of value added, significantly larger in comparison to grain.

[29] Eurostat, http://ec.europa.eu/eurostat/web/agriculture.

We can definitely state that Bulgaria was not able to specify a national goal and a respective policy for achieving growth in the agricultural sector, which is so important for the social and economic development of the country.

The problems are not as much related to the mechanisms of absorbing the resources from the European Funds, as they are related to the formulation and positioning of national priorities for the development of the agriculture and food production, as well as for the rural regions development in the country.

The geographic location of Bulgaria makes its territory suitable for the production of products from the so-called Mediterranean area. This conditions the supply of grapes, fruits and vegetables for fresh consumption, wine, sheep and goat meat, sheep milk and products thereof, essential oil products, or, in other words, production of the traditional Bulgarian food products with high value added. The integration in the EU presumes production of products with high value added. The reality in the last 20 years shows precisely the opposite – the sub-sectors of agriculture being developed do not provide competitive advantages to the country. There are favourable conditions and opportunities for the development of such type of agriculture in Dobrudja and several other regions in Northern Bulgaria.

The intensive type of agricultural production is concentrated in countries with large territories, such as the USA, Russia, Ukraine, Germany, France. They can afford to export unprocessed grain.

The countries from our geographic group also cultivate grain, but they do it as a prerequisite for the development of livestock breeding. The grains turn into milk and meat, which are in turn processed into high-quality and expensive dairy and meat products. And they are famous on the market precisely for these goods.

4. What Is Bulgaria Losing from the Current Model of Agricultural Policy and What Are the Feasible Alternatives?

When grain is processed into flour, the value added is nearly twice higher in comparison to the grain, produced and exported as a raw agricultural

product. Unfortunately, Bulgaria has almost no flour export. Hence, the value added is lost.[30]

Table 1

Relative share of added value and jobs created along the chain "grain-flour-forage-consumption products"

Product groups	Relative share of added value in the total market value (%)	Ratio of value added to that of grain	Relative available jobs for production and processing of 2 million tons of grain
Grain	5	1.0	35 000
Flour	9	1.8	+10 000
Bread, bread products and pastry	11	2.2	+18 000
Forage	15	3.0	+5 000
Milk	41	8.2	+25 000
Meat	45	9.0	+18 000
Dairy products	65	13.0	+20 000
Meat products	68	13.6	+10 000
Products on the tourists' plates	100	20.0	

Source: ERI at BAS. (2016). Prerequisites for integration of the agricultural and food production policies. Research project with authors Assoc. Prof. Sasha Grozdanova, Assoc. Prof. Darina Ruscheva, Assoc. Prof. Petko Todorov, Assoc. Prof. Ognyan Boyukliev.

If that flour were processed into bread, bread products and pastry, the value added increases significantly (by 2.2 times). If forage is produced, the value added increases by more than 3 times. If this forage is used to feed animals, milk and meat would be produced, which value added is nearly 9 times higher in comparison to the one of grain exported. If the produced meat and milk is processed into dairy and meat products, the value added increases nearly 13 times. If this production, or at least part of it, reaches the plate of the tourists, the value added would be 20 times higher than the value of the raw product in the beginning of the chain, namely grain.

Of course, all of the above is very theoretical and very conditional, despite the fact that according to the methodology of Food and Agriculture Organization (FAO) and Eurostat[31] not only grain has an influence on the

[30] ERI at BAS. (2016). Prerequisites for integration of the agricultural and food production policies. Research project with authors Assoc. Prof. Sasha Grozdanova, Assoc. Prof. Darina Ruscheva, Assoc. Prof. Petko Todorov, Assoc. Prof. Ognyan Boyukliev.

[31] http://ec.europa.eu/eurostat/web/agriculture and http://www.fao.org.

value added. The factors for that are numerous – technology, other sectors, etc. Precisely because of them, the effect would be even more significant, if a mathematical model for calculation of the value added is thoroughly followed. This effect would amount to approximately BGN 1.5-2.5 billion of value added per annum.

Unfortunately, the effect does not consist solely of value added. Besides it, Bulgaria and Bulgarians lose also about 200 000 jobs in the processing of grain from a raw into a final product.

Hence, during the period of Bulgaria being an EU member, theoretically because of the model of excessively consolidated monoculture agriculture, the country has lost around BGN 10 billion of value added and around 500 000 (conditional year-long) employment in comparison to the model of traditional Bulgarian agricultural production!

5. Conclusions

Based on the conducted study of the agricultural policy and the agricultural sector, the following conclusions could be made:

1. Bulgaria underwent an exceptionally severe and very expensive agricultural reform, which, in the end, led to negative results, such as monopolization of land use.

2. The pre-accession funds, the resources from the SAPARD programmes, and the ones along the CAP lines, comprise an exceptionally immense financial resource, unparalleled in size in the historic development of the Bulgarian agricultural sector. The effect of these resources has not yet found a reciprocal economic dimension. In some respects, this effect is even negative. This is a paradox that needs to be reassessed.

3. Concerning number of employees the administrative system of the Ministry of Agriculture and Food is the largest within the economic bloc at the Council of Ministers of the Republic of Bulgaria. Concerning budget expenditures, Ministry of Agriculture and Food has the third largest budget (about 25% of the resources, allocated to the purposes of financing the ministries). However, this fact does not correspond with the results from the functioning of the sector and its influence over the economic and social development of the country during the last 20 years.

4. The model of agricultural policy in Bulgaria is very expensive and ineffective.

These conclusions allow for the formulation of the following recommendations:

1. There is a need for reforms, which would restore the traditional lines of production, as a basis for the realization of the significant natural and geographic potential and the competitive advantages of Bulgarian agriculture and achieving real economic growth.

2. The schemes of the CAP in Bulgaria need to be reformatted to make use of better instruments and practices – a scheme for redistributive payments, introduction of progressive decrease in payments, tying production with direct support, special preferences for young farmers, allocation of direct payments to active farmers only, etc.

3. Production of foods with high value added should be stimulated, i.e. supply of expensive foods that could make Bulgarian agriculture competitive.

4. The structural policy in agriculture needs to provide a priority support for the establishment of a wide sector of viable family farms as the basis for sustainable production. Such policy would not only create prerequisites for stabilization of agricultural production, but would further contribute to the development of rural regions.

These schematically presented conclusions and recommendations on the agricultural policy of Bulgaria, aiming at strengthening the role of the agricultural sector for the purposes of stimulating the economic development of the country, make the discussion about the future agricultural policy in the context of global development in the long-term especially relevant.

The issue is much deeper – what will be the agricultural policy model over the next decades in Bulgaria; what structure will the agriculture and food production sector assume?

Two main models of structuring the agriculture and food production sector can be differentiated:

- Ultra-intensive model of industrial or rather over-intensive post-industrial production of foods.

- "Mediterranean diet" model[32], which is an organization of production and trade in foods in the context of the requirements determined by it.

The ultra-intensive model of structuring the agriculture and the food production sector is the result of the "nutritional revolution", the biggest economic revolution of our time. The productivity of industrial agriculture is measured by the yield per unit area, rather than by the total harvest. And the only indicator is maximum production at minimum cost. Another main indicator here is labour, as productivity per person. The utilization of land and nature, as well as the environment, are significant to the extent that their "market" value is part of the production costs and influences the amount of profit. The industrial model conditions maximal utilization of the intensive production factors, of chemistry, biotechnology, genetically modified organisms (GMO) methods, and other scientific achievements.

The content and structure of the "Mediterranean diet" model reveal the specific structure and organization of this production model:

First. The requirement of this diet is the consumption of fresh vegetables of local varieties. This suggests the development of vegetable production, which is territorially positioned in the proximity of large consumption centres. This also requires a conventional type of production, ensuring the availability of seasonal vegetables and in the seasons when they cannot be cultivated with traditional technologies – respective storage, conservation or processing applying traditional methods. The traditional local vegetables also require a different type of trade – namely, creating markets and food chains along short distances from local producers.

Second. Meat and milk also need to be mostly fresh, merely refrigerated with minimal primary processing, without chemical or other non-traditional methods. Meat from poultry and sheep and goats has priority. As a rule, the dairy and meat products need to be produced from milk and meat acquired in close proximity to the producer and from breeds of domestic animals. There are further requirements to feed the animals with predominantly natural forage, free range breeding and prevalence of the natural grazing in

[32] Despite the word "diet" in the term "Mediterranean diet model", it is rather a nutritional structure than a diet. The menu completely excludes the consumption of non-natural food products. Proteins (fish, meat, cheese) comprise 10% of the food, fats (vegetable oil, olive oil and olives) – 30%, and unrefined carbohydrates (whole grain food and cereals) – 60%. Vegetables need to be consumed on a daily basis and they should be fresh; as a rule, there should be not more than 72 hours between the time they are picked and the time they are served to consumers.

the respective territory. All of that requires a different type of organization and structuring of production and trade.

Third. Apparently, two economic policies are mixed, otherwise being independent – agricultural policy and food production policy.[33] Assuming that the "Mediterranean diet" model is adopted, the food production policy becomes the leading and determining one for the agricultural policy.

Fourth. The "Mediterranean diet" model cannot be developed and effective if not based on scientific achievements and technical progress. However, it has to exclude GMO technologies, chemical methods and other instruments with questionable benefits to humans and environment. On the other hand, in the absence of the development and application of modern genetics and chemistry, as well as the other natural sciences, there is no way to preserve traditional food products and production methods!

Fifth. Production of "bio foods" is a part of the "Mediterranean diet" model. However, not all foods, encompassed by this model, are bio, because most of them are produced using conventional methods. However, in this case, it is important that ecologically clean territories still predominate in the Mediterranean region, where Bulgaria is located. This provides Bulgaria with unquestionable advantages in the production of expensive food products!

No country in the world has a single development model of the agricultural sector in its pure form. In the USA, Canada, and Latin America the ultra-intensive model of industrial, or, more specifically, ultra-intensive post-industrial production of food products prevails. China also moves towards this model of structuring the agricultural sector.

In Europe and the EU, the food model is rather mixed. Nevertheless, within the EU there are a series of restrictions regarding GMO technologies, chemicals and biotechnological production methods. However, the "Mediterranean diet" model is the predominant one in the European countries in the Mediterranean region. These countries are also the most developed tourist destinations in Europe and the world. Food, particularly traditional food, is part of the tourism industry in most of the developed tourist countries.

The choice of agricultural policy model is a National Question!

[33] The problems of the food production policy of Bulgaria, Europe and the world, are subject to studies in ERI at BAS, covering several decades.

It is a question about the future of Bulgaria!

It is part of the national priorities and the National Doctrine for Development of Bulgaria. In order to select the right agricultural policy model, the national priorities should be defined.

If tourism is a priority, then what kind of tourism? Mass tourism, industrialized tourism, tourism for clients with average or below average purchasing power, or expensive, boutique type tourism, or a combination between preserved environment, culture, tradition and others?

If Bulgaria is to be developing as a producer and exporter of agricultural products, which model of agricultural policy would ensure a higher efficiency? Would it be a model with production and export of raw agricultural products, such as grain, or would it be a model with production and export of traditional Bulgarian food products?

The studies of the value added of the produced agricultural goods indicate that the production of traditional Bulgarian foods generates several times higher value added.

Hence, Bulgaria should strive towards the adoption of the “Mediterranean diet” model and towards such model of organization of production and trade of food products.

However, this cannot be an independent solution out of context of the general development strategy of the other economic sectors and of Bulgaria as a whole.

PART THREE

CONCLUSIONS AND RECOMMENDATIONS FOR THE ECONOMIC POLICY

The 2016 report presents the status and the economic development of Bulgaria in 2015, identifies the problematic areas, while outlining the current and new risks for the development of the economic sectors in Bulgaria. The forecast assessments reflect the potential mid-term possibilities for the economic sectors to contribute to the improvement of the economic development of the country during the next three years.

1. In 2015, the ambiguous external environment had both positive and restraining influence on the economic development of Bulgaria. On the one hand, the signs of recovery in the past year in some of the significant trade partners impacted favourably the external demand and physical volumes of exports. On the other hand, uncertainty remains a distinctive feature of both the global and the Bulgarian economy, and discourages investors from initiating new projects in anticipation of better times.

2. 2015 can be characterized as a year of continued recovery of the economy at accelerating economic growth rate (3%) in comparison to the preceding two years. Export had the main contribution to this growth (increase of 7.6%), while the increase of import is mainly a consequence of the need to ensure the import capacity of export. For a second consecutive year, **internal demand** has a positive contribution to growth. To equal extents it is stimulated by private consumption and investments in projects implemented during the first programming period of the operational programs. By **economic sectors**, the contribution of the adjustments registered the highest increase in real terms in 2015. This increase is due to the growth in generated revenue from excise duties and VAT, and to the negative inflation rate. The contributions of industry (0.6) and real estate (0.4) should also be pointed out. In 2015, the agriculture, forestry and fishery sector solely has a negative growth contribution. Three sectors (professional and other activities; commerce, transport and hotel management; and information and broadcasting) register comparatively stable growth rates in recent years.

3. The 2015 revision of the country's state budget (for a third consecutive year) allows for the formulation of conclusions regarding the need for improvement of the forecasting activity of the Ministry of Finance. The revision includes an increase of the revenue side by around 1% of GDP, mainly from indirect taxes. The current structure of the tax burden in Bulgaria is favourable from the standpoint of its impact over the economic growth. At the same time, however, we should keep in mind

that the significant downside of indirect taxes is their regressive nature, which does not allow for a higher level of equity in the distribution of the tax burden. *From this standpoint, it is increasingly imperative to discuss potential reforms towards increase of the share of direct taxes at the expense of indirect ones and return to the scheme of progressive taxation.*

4. Regarding stage budget expenditures, we can conclude that in recent years the growth rate of expenditures for the consolidated fiscal programme continually exceeds GDP growth, as the share of expenditures in GDP increases from 34.9% in 2007 to 40.1% in 2015. Attention is paid to the fact that capital expenditures in the Bulgarian economy are, in practice, pro-cyclical and not utilized as an instrument for encouraging economic activity. Based on these data, we can conclude that, *in practice, handling the danger of running an even greater budget deficit on the expenditure side has been done at the expense of capital expenditures.*

5. The report highlights the fact that as of the end of 2015, government debt already exceeds 26% of GDP. In comparison to other countries from the region and the EU as whole, the level of external indebtedness is rather low. However, the increase rates are alarmingly high. Based on the analysis of the dynamics of budget deficit, government debt and financial reserve, we conclude that during the first years after the economic crisis and its impact over the Bulgarian economy the accumulated deficits are only partially covered by issuing new debt. In the period 2009-2011, the accumulated deficit amounts to nearly BGN 5 billion, while during that same period government debt increases by only BGN 2.1 billion. Apparently, this is at the expense of the fiscal reserve, which decreases by BGN 3.3 billion, and nearly reaches the “sanitary minimum”. Such “fiscal balancing acts” neither help the economy as a whole, nor the business in particular. They represent a mere attempt to transfer and blur political responsibility regarding government debt. The reverse tendency is evidenced after (the crisis year) 2014 – the accumulated deficit for the last two years is around BGN 5.6 billion. However, this time it is accompanied by an increase of government debt to BGN 8.6 billion and increase of the fiscal reserve to BGN 3.2 billion. *From this standpoint, a positive assessment can be given to the fact that the financing of the planned deficits with nearly BGN 3.7 billion until 2019 is entirely ensured through the issuing of debt, without the utilization of resources from the fiscal reserve.*

6. In 2015 Bulgaria's gross external debt decreases, reaching EUR 34.091 billion by the end of December. The main leading factor for this fluctuation is the decrease of intercompany loans. Commercial banks also contribute to the decrease of gross debt, since their debt decreases mainly at the expense of the short-term component. The share of long-term debt in the country's gross external debt increases, and in the end of 2015 reaches 76.9%. This fluctuation is largely anticipated. In the conditions of decreasing interest rates on the international financial markets, the tendency of improving the access to new financial resources and re-financing old liabilities is evidenced almost throughout the entire year. *It should also be pointed out that the continuing policy of issuing external debt creates new possibilities for the Bulgarian economy, but also poses significant challenges.*

7. The monetary sector remains stable in 2015. The existing imbalance in the monetary supply and demand reflects the deflation tendencies, characterized by decrease of domestic credits and increase of savings. *The discrepancy in the dynamics of monetary supply and demand has led to a decrease of the nominal interest level and widening of the spread between interest rates on deposits and loans.* The current and capital account reflect the positive tendencies from the increase of foreign exchange reserves. In the end of 2015, the BNB introduces a negative interest rate on excess reserves, which is expected to impact their mid-term growth rate. This step of the BNB is consistent with the policy of the ECB and the central banks of the EU member states. *The specificity lies in the fact that, in contrast to the policy of other central banks in the EU, the negative interest applies solely to excess reserves.*

8. In 2015 the tendencies in the labour market development are positive, since employment increases for the second consecutive year, though insignificantly (0.3%), while unemployment decreases by 2 pp (from 11.4% in 2014 to 9.2% in 2015). *The increase of employment is entirely due to the increase of the number of people employed in the private sector. The main factor contributing to the decrease of unemployment is the increase of the number of available jobs in the country, as well as the decrease of the labour force, which is an alarming tendency. It can be explained by both the demographic processes and the outflow of the labour force from the labour market.* In 2015 the increase rate of nominal wage registers certain acceleration. While in the period 2012-2014 its annual growth ranges between 6-6.5%, in 2015 alone it increases to 8.8%. The main factors influencing the dynamics of labour remuneration in the country are as follows: the recovery of the economy,

which leads to the recovery of labour demand, as well as the change in the minimum wage. At the same time, the shortage of labour force with suitable qualification is an obstacle to the further development of the enterprises. In 2015, the entrepreneurs from all economic sectors report the shortage of labour force being an increasingly significant problem, which restricts their future activity.

9. In 2015, labour productivity (measured as GDP per employee) increases by 2.6%. In the last three years, the increase of the real wage significantly exceeds the growth rate of real labour productivity. This is partly due to the deflation in the last two years, as well as the relatively rapid increase of average labour remuneration, which, during this period, is further supplemented by an increase of the productivity of the respective factor of production. During the last four years, a constant increase of the share of labour compensations in total GVA is registered (from 43.0% in 2012 to 47.8% in 2015).

10. The problem with labour force supply, including qualified labour force, is additionally worsened by the ongoing demographic processes in the country and the migration of people to more highly developed labour markets, mostly in the older EU member states. Hence, the formulated conclusions outline *mainly the negative impact of emigration from Bulgaria on both the labour force and the equilibrium between the demand and supply of labour*. In the context of the impacts of emigration, the role of remittances (money transfers to the country) is assessed as an important resource for supporting household budgets of Bulgarians.

11. The examination of the correlation between the level of economic development of regions (NUTS2) and districts, on the one hand, and the intensity of potential and actual migration, assessed on the basis of the number of return emigrants and the regional specificity of the transfers from abroad, on the other hand, reasserts the expectation that *regions with medium and low level of development participate more actively and hence depend to a larger extent on the migration processes.*

12. The conclusions about the development of the agricultural sector highlight the role of the predominant share of highly consolidated agricultural holdings, the development of monoculture agriculture and the decrease of the production of products, traditional for the country. The assessment of the investments in the sector during the last 25 years from the standpoint of the achieved results (share in GDP and

GVA) clearly indicates the inefficiency of the selected model for development of the sector with regard to the generated interests and behaviour among farmers and the potential of the sector for long-term development as a significant factor for economic development and growth.

Prospects for Development of Bulgaria in the Mid-Term

1. The economic prospects for Bulgaria's development during this and the following two years are rather positive, but the associated risks remain relatively high. In the medium term, *economic growth* is expected to vary between 2 and 3% (2.7% in 2018). These rates will reflect both the inertia in the development of the system and the increasing contribution of internal demand as a result of the recovery of the labour market and the investment projects, implemented within the frameworks of the operational programmes for the programming period 2014-2020. However, the growth potential will be restricted by the persistently low level of credit activity in the country and will remain dependent on the international environment. In the medium term, it can be anticipated that inflation will remain low and the current account deficits will be close to the balancing levels.

2. In view of the predominantly European orientation of *foreign trade flows,* it is unlikely that export will become a significant growth factor, because the economic development of EU countries continues to stagnate. External financing in the form of FDI is also far from the levels achieved during the years before the GFC. Taking these two factors into consideration, we can conclude that the growth rate will remain rather low and unstable in both short and medium term.

3. Regarding the *fiscal policy*, the tendency of moderate increase of the country's indebtedness will continue. In the medium term, the fiscal policy will face serious challenges, which necessitate responsible political decisions, many of which unpopular. A priority for the current and each future government should be the avoidance of excessive deficit spending and the ensuring that the country's economy does not enter a debt "spiral", which would be difficult to escape and would have a high social cost.

4. Over time, interest payments on the debt will play a more apparent role for the increase of the *debt burden*. In 2015, in the conditions of extremely low interest rates, they reach 0.8% of GDP. According to the forecast of Ministry of Finance, by 2019 they will increase by a mere 0.1 pp (with foreign debt payments playing the leading role and increasing by 0.5 to 0.7 pp). Even if this forecast proves to be exact, it is unlikely that the interest payments will remain close to these levels, when stabilization of the interest rate level can be anticipated.

5. In the *monetary sector* a slight decrease of the spread can be anticipated, at negative real interest rates on deposits, which will change the forecasted low level of inflation in the end of the medium term. Hence, the banking sector will continue to accumulate liquidity in conditions of intensified competition between the banks and increasing number of regulations. At the same time, the real economy, facing serious structural problems, will continue to operate at a low speed until it becomes part of a new global business cycle. The monetarization of the economy in the period 2012-2015 reflects positively on the economic growth. In the period 2016-2018, the increase of money supply is expected to reflect the projected real growth of the economy. The stimulation of economic growth based on an increase of its monetization will continue to be a positive tendency in the development of the monetary sector.

6. Regarding the *labour market*, the prospects concern the growing risk for the balance of labour resources, given the existing demographic forecasts for decrease of the population number (and respectively the working age population). Our calculations indicate that at 1% average annual increase of the working age population the *labour productivity* needs to increase by at least 4% on average per annum, as a means to achieve and maintain a real GDP growth rate of at least 3% in the period 2015-2050 and to compensate for the employment decrease and to contribute to the desired real growth rate of GDP. If we examine the period 2001-2015, we can see that such a rate of increase of labour productivity has only been registered in five of the fifteen years.

7. In the next three years the demand for labour is expected to increase with the projected growth rate of the economy (between 2 and 2.7%). The average annual number of employees will increase by around 20 000 people, while the employment level is expected to reach 49.8% of the labour force (the age group 15+). Alongside the increase of employment, the process of decrease of unemployment will also

continue; however, at lower rates in comparison to the period 2014-2015. The average unemployment level in 2016 is expected to be around 8%.

8. Due to the low level of inflation in the country and increase rate of GVA of around and above 2%, our forecast is that in 2016 the increase of the *nominal wage* will slow down and decrease to the rates, characteristic of the period 2012-2014. In 2016, the average monthly wage will be at a level of around BGN 920. In 2017 and 2018, as result of the acceleration of the rates of economic growth and the real labour productivity, the growth rate of the nominal wage will be around 6% per annum.

9. Regarding the *emigration flows*, no significant changes in their intensity and structure are expected, since no such changes occur in the economic environment. From this point of view, the imbalance on the labour market between the supply and demand for labour will become increasingly large, both from a quantitative and qualitative standpoint. In the future, the economy will be again “fed” by money transfers from Bulgarians living abroad, and this will continue to be a significant factor for the balancing of household budgets.

10. At the regional level, the relation between *emigration intentions and development of the regions* will continue to encourage the mobility of the labour force, particularly of the regions with an unfavourable economic environment.

11. The prospects for the development of the *agricultural sector*, given its current structure and organization, include significant risks and obstacles to the realization of its potential as a significant factor of growth and economic development.

The conducted analyses and assessments, and the identified risks to the economic development of the country, allow for the following recommendations, addressing the economic policies:

1. Regardless of the fact that in the last few years there is a tendency towards acceleration of the growth rates of the Bulgarian economy, the continuation of this favourable tendency depends upon a multitude of internal and external factors: recovery of the credit activity of the country; improvement of the international environment; absorption of

European funds, allocated to Bulgaria during the programming period 2014-2020. In that respect, there is a consensus that the role of the government is mainly towards maintaining the macroeconomic and financial stability and accelerating the rates of absorption of European resources. However, this is a necessary but not sufficient condition for accelerating growth.

2. The measures, formulated by the updated 2016-2018 framework of the government, are anticipated to have mainly a social effect and short-term influence over economic growth by creating higher demand. The increase of pensions and minimum wage during the period until 2018 are the main measures of this type. On the other hand, the increase of social contributions, envisioned in 2017 and 2018, will contribute to the improvement of the long-term sustainability of public finance. However, they could have a negative impact on the demand for labour, as well as the share of the informal economy in the country.

3. There are grounds to assert that the med-term policies, envisioned by the fiscal framework, will not lead to significant changes in the internal environment with regard to the factors of growth. The arguments for that are as follows:

   a) The policies planned by the med-term fiscal framework for the period 2016-2018, such as increase of excise duties, increase of financing standards for education, etc., will have a rather short-term effect on the demand side.

   b) The envisioned increase of excise duties will exert a certain amount of pressure on the inflation in the country, but should not suppress consumption as result of the inelasticity of the goods, on which excise duties are imposed.

   c) The increase of the standards for financing educational activities will create premises for improvement of the quality of education and consequently of the quality of human capital in the country.

   d) The mid-term budget forecast of the government envisions gradual fiscal consolidation, while the budget deficit is expected to reach 1% of GDP in 2018. Current public expenditures are projected to increase by more than 3% (nominally) in 2016, which, given the low inflation level, will lead to an increase of their share in GDP. In the next years, however, the budget deficit will gradually decrease as a

share in GDP. However, public investments will decrease in 2016 and 2017, and will only register an increase in 2018, merely as a means to ensure co-financing of operational programme 2014-2020.

e) The recommended policy in the fiscal sector in the medium and long term is for preservation of the fiscal stability, accompanied by a clear designation of the types of public expenditures, which stimulate growth, such as investments in education (improvement of the human capital quality through knowledge, cognitive and other skills), health care (increase of the labour productivity and life duration in good health) and the economic infrastructure.

4. That is why this report emphasizes the restructuring of public (current and investment) expenditures and radical changes as an important priority along four main lines:

- education (with focus on school education);
- health care (development of primary out-patient medical care and optimization of the hospital network); breaking the monopoly of the NHIS;
- pension reform corresponding to the demographic structure, taking into consideration the strengthening of the role of the second and third pillars and reducing government budget transfers;
- economic infrastructure – mainly water utilities (water supply, sewerage, water treatment and hydro melioration) and transport (national road network, railway infrastructure, ports and airports);
- more equitable and rational tax system is another important line of reforms to ensure sustainable development of the national economy. Bold reforms are needed in the tax regulatory framework, which in a medium term will result in:
  - gradual increase of the weight of the income tax (including by reconsidering the flat-rate proportional tax on personal incomes, “dynamic development” of corporate income taxation and other measures);
  - reducing the burden of indirect taxes on consumption (alternatives are possible also by introducing a differentiated VAT

rate, increasing the threshold for mandatory registration under the Vat Act and a balanced excise tax policy);

- increasing the importance of property taxation (by expanding the tax base, progressive taxation and reducing tax reliefs).

5. The described important reforms should be implemented following a careful impact assessment, as it is impossible to expect that they could have both a positive fiscal effect and a long-term macroeconomic one. In some cases, we may have to choose between a temporary higher deficit and long-term effects. In this regard, it would be very useful if the assessment of the expected actual consequences (costs, benefits and redistribution effects) from the proposed/existing regulatory acts (laws, decrees, ordinances, etc.) is appropriately regulated and institutionalized. This would guarantee:

   - better and more responsible and transparent political decisions;
   - fewer and clearer regulatory acts of higher quality;
   - commendable (and nationally responsible) participation in the legislative process on EU level.

6. More specific (and relatively quicker) steps can be taken, which would have a positive fiscal effect, with no negative effect on economic activity. Some of the more important steps are:

   - improving the budget forecast and planning technology;
   - active management of public property and analysis of the activities of the state's participation in the economic activity with a view to minimizing it;
   - seeking opportunities for cutting current costs (salaries and current operating costs) in the public sector; this practically applies to all administrative units, but to a greater extent to the national security, defence and law-enforcement agencies, where the costs are unjustifiably high;
   - accelerating the process of fiscal decentralization.

7. The policy of attracting FDI, without being specifically oriented towards the monetary sector, would in addition further stabilize the monetary system.

8. The following of the current policy on foreign debt, characterized by a lack of adequate goals for long-term development and a low level of transparency of the utilization of the accumulated public resource, would gradually lead the Bulgarian economy into a state of the debt being beyond control, and its servicing – impossible. Indeed, given the current level of the expenditures for the purposes of servicing the debt, it is still too early to discuss this stage, but if the tendencies from the previous two years continue over a foreseeable period (5-7 years), the unfavourable scenario will become more than likely.

9. One of the primary means to achieve sustainable economic growth is a high growth rate of productivity of the utilized production factors, including the labour resources. Given the identified lasting imbalances in the supply and demand for labour in specific professions and economic activities, only the rapid growth in labour productivity can compensate for the increase of the average wage in the next years.

10. A priority of the government policy should be the increase of the efficient utilization of the labour resource, rather than the decrease of the unemployment level in the country (if these two goals are alternatives to each other in some cases).

11. Bulgaria does not have a long-term vision or strategy on migration. It is necessary to clearly designate the priority policies and mechanisms for limiting emigration intentions among the Bulgarian population and for permanent employment integration of immigrants.

12. Creating better conditions for professional realization at regional level by decreasing the existing regional imbalances is a step towards keeping workers in the country.

13. The selection of a better model for the agricultural policy requires a clear position on national priorities, since the agricultural model is part of the national doctrine for the development of Bulgaria. The development of the country as a producer and exporter of agricultural products needs clear insight on the question which model of the agricultural policy would be the most efficient. Would that be the production and export of

agricultural raw products, such as grain, or the production and export of traditional Bulgarian foods?

14. The studies focusing on the produced agricultural goods prove that the production of traditional Bulgarian foods ensures several times higher added value generated. Consequently, Bulgaria should strive towards the adoption of “Mediterranean diet” model, towards organization of production and trade in food products.

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