

## THE QUALITY OF LENDING ACTIVITY IN BULGARIA

### Introduction

The **object** of this study is the quality of credit exposures provided by the banking system of the Republic of Bulgaria. The **aim** of the study is to give a summarized situational assessment of the quality of bank lending in the period 2009-2014, as results are achieved through solving the following **tasks**:

1. The significance of lending for the banking system in the period 2009-2014 is pointed out by covering bank credit activity<sup>1</sup>;
2. The total share of problematic credit exposures of the banking system in the period 2009-2014 is analyzed;
3. Profitability, provided by credit agreements concluded by companies in the banking sector for the period 2009-2014 is specified.

The thesis defended by the author is as follows: There is 'erosion' in the general credit portfolio of Bulgarian banking system in the period 2009-2014 due to a significant decrease in the amount of new credits in the private sector, the emergence of large amounts of problematic credit exposures, and contraction of bank revenues from lending activity.

#### I.

Based on the importance of credit activity to the development of banking systems worldwide, Bulgarian banks do not differ in regard to the susceptibility of their financial results to the share of their credit portfolios in the total amount of assets<sup>2</sup>. Lending activity of Bulgarian banks constitutes a major share and considerably exceeds the share of investments in securities and other assets which do not generate revenue (see *Table 1*). The main reason for this is the lack of traditions in investment banking and the fact that the main activity of Bulgarian banks is lending.

The impact of the global financial crisis quite negatively affected the activity and behaviour of banks, but did not change the primary importance of credit activity. In the future lending to households and businesses is expected to continue to engage most of the banking resource.

Data in *Table 1* shows that most of the time since 2009<sup>3</sup>, the quota of total credit portfolio of the banking sector has recorded annual decline, as accumulation of this negative effect by the end of 2014 is equal to a reduction of credits, granted by banks, to the amount of 7.67%. The largest decline in credits was in 2012, worth BGN 3.44 m.

The rest of the assets, other than granted loans record a positive increase in their share in the balance sheet of the banking system, as the greatest is the positive change in securities to the amount of 4.69%. On a small scale is the increase in the share of other unprofitable assets for the five-year period – 1.87%. Despite the reduction in the share of loans in the asset of the Bulgarian banking system since 2009, the concluded credit agreements continue to be crucial to the operation of Bulgarian banks.

Data shown in *Table 1* is valuable, but is not comprehensive enough to draw definitive conclusions on the quality of loan receivables. To achieve the main objective of the study, changes in the amount of newly granted bank credits to non-financial enterprises and households<sup>4</sup> must also be traced, as according to the author it is more rational to pay attention to the changes in the new business of banks, rather than to focus only on the residual balance sheet value of the authorized loans.

In this case, in order to gain a complete picture of the quality status of lending activity, 2007 and 2008 are added to the analysis, which helps to supplement and specify the results. The conclusions that can be drawn from the data shown in *Table 2* are the following:

- At the end of 2009, as compared to 2008, there was a negative change of BGN 8,626.0 m in the total amount of new bank credits to non-financial enterprises and households which is a greater decline in lending in relation to the negative growth in 2008 as compared to 2007 when the negative difference was BGN 598.4 m.

<sup>3</sup> Only at the end of 2013 compared to the same period of 2012 banking system accounted for a slight increase of 0.51% in its general credit portfolio.

<sup>4</sup> For more details see: **Pavlova, M.** Finansovi strategii i investitsionna aktivnost na domakinstvata v Bulgaria, Annual almanac. Scientific research of Ph.D. students at D. A. Tsenov Academy of Economics – Svishtov, issue 7, Tsenov Publishing House, 2014, pp. 217-234.

<sup>1</sup> It was specified through analysis of the volume of implemented new credit agreements with non-financial enterprises and households.

<sup>2</sup> For more details see: **Adamov, V.** Upravlenie na kapitalite v targovskata banka, Tsenov Publishing House, Svishtov, 2013, pp. 17-22.

Table 1

Share of balance sheet items in the total amount of bank assets for the period 2009-2014 (%) <sup>1</sup>							
Share of balance sheet items in the total amount of assets in the banking sector (%)	Years (as of 31 <sup>st</sup> December)						Cumulate change
	2009	2010	2011	2012	2013	2014	
<b>Credits and receivables</b>	81.53	79.24	78.61	75.17	75.68	73.86	-7.67
<b>Securities*</b>	6.68	8.05	8.59	10.11	10.68	11.37	+4.69
<b>Other assets**</b>	11.79	12.72	12.80	14.72	13.64	14.77	+2.98
<b>Total</b>	100	100	100	100	100	100	

Source: BNB, Financial and supervisory statements – data, Balance sheet and income statement of the banking system, by groups of banks as well as by author's calculations.

<sup>1</sup> [http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS\\_201411\\_BG](http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS_201411_BG).

\* The item includes: Financial assets held for trading, Financial assets determined according to fair value in profit or loss, Financial assets available for sale, Investments held to maturity, Derivatives - Hedge Accounting, Investments in associate companies, subsidiaries and joint ventures (accounted for using the equity method – including goodwill).

\*\* The position includes: cash and cash balances with central banks, tangible and intangible assets, tax assets and non-current assets, and groups of assets for withdrawal, classified as held for sale.

Table 2

New business credits in the banking system (2007–2014)<sup>1</sup>

*New credits without credits to financial institutions (million BGN) *	Years (as of 31.12.)							
	2007	2008	2009	2010	2011	2012	2013	2014
<b>I. Non-financial institutions**</b>	13,758.6	12,953.1	10,097.1	9,192.0	14,235.4	14,686.9	13,945.9	14,183.7
<b>II. Households</b>	8,786.5	8,993.5	3,223.5	3,389.2	3,811.0	3,826.0	4,133.7	4,170.7
<b>Consumer</b>	4,517.2	4,995.0	1,649.6	1,782.4	2,157.6	2,357.6	2,597.6	2,550.8
<b>2. Mortgage</b>	3,487.7	3,222.9	1,206.5	1,308.2	1,282.3	1,171.6	1,242.2	1,330.0
<b>3. Other***</b>	781.5	775.6	367.4	298.5	371.0	296.8	293.9	289.8
<b>Total</b>	22,545.2	21,946.7	13,320.7	12,581.3	18,046.4	18,513.0	18,079.7	18,354.5
<b>Annual change</b>		-598.4	-8,626.0	-739.3	5,465.1	466.5	-433.3	

Source: BNB, Interest rate statistics and author's calculations.

<sup>1</sup> [http://stat.bnb.bg/bnb/dd/IR\\_NBO\\_LOAN\\_NEW.nsf/fsWebIndexBG](http://stat.bnb.bg/bnb/dd/IR_NBO_LOAN_NEW.nsf/fsWebIndexBG).

\* Interest rate statistics of BNB includes information for new business loans to local non-financial enterprises, households and NPISHs

\* Includes credit agreements between banks and enterprises, producing goods, or companies, providing non-financial services

\*\* Includes credits to households other than those shown in sections 1 and 2 in Table 2, including loans intended for training and treatment, and credits to non-profit institutions serving households (NPISHs)

These unfavorable results are a consequence of the contraction in demand and supply of authorized credits. Reported fluctuations at the end of December 2009 towards the same period of 2008 in different segments are as follows: authorized loans lent to non-financial enterprises are less than BGN 2,856.0 m; consumption bank credit financing is BGN 3,345.3m and less than BGN 2,016.4m is the amount of authorized loans against mortgage of immovable property;

➤ The negative for the banking sector trend of slowdown in credit growth continued in 2010. Data in *Table 2* shows that authorized bank loans to non-financial enterprises accounted for at the end of 2010 towards 2009, are BGN 905.0 m less, while total loan portfolio of households marks more new loans in 2010 than in 2009, exceeding the amount of BGN 165.6 m.

Although relatively low, in 2010 mortgage and consumer loans succeeded in anticipating their growth in 2009 with BGN 101.7 m and BGN 132.8 m respectively, as only other loans to households recorded a negative growth of BGN 68.9 m;

➤ In 2011, bank lending activity in the 'Non-financial enterprises' sector marked significant progress compared to the previous 2010. This was mainly due to the increase in new loan agreements between banks and companies outside the financial sector, which were BGN 5,043.3 m more than in 2010, and the slight, but greater growth in total loan portfolio of households as compared to 2010. Residential lending, heavily affected by the financial crisis, marked weaker activity in 2011 than in 2010;

➤ There was no significant change in the volume of new loan commitments entered into by enterprises and household sector in the period 2012-2014. The amount of new bank credits intended for the private sector over the three years was slightly larger than in 2011 (18,513.0 at the end of 2012, 18,079.7 in 2013, and 18,354.5 at the end of 2014).

For the first time at the end of 2013, there was a weaker lending activity on an annual basis for non-financial companies. Contracts for loans with enterprises recorded at the end of 2013 were BGN 741 m less than in 2012. However, there was animation in 2013 with households, as the total amount of consumer, residential and other loans was BGN 307.7 m more than in 2012.

After analyzing data generated by the statistics of the Bulgarian National Bank it may be concluded that since the beginning of 2009 the banking system in the country has experienced a significant slowdown in its lending activity. This is mainly due to declines in consumer and residential loans, which had a major role in the development of bank credit intermediation in Bulgaria prior to the financial crisis.

## II

Credit risk is traditional and is the most common in the mix of risks which 'attack' the business of banks. Accurate assessment of the status of banking system's loan portfolio requires its risk profile<sup>1</sup> to be traced. Prevention against taking unjustified risks is part of an effective and well-defined credit policy of banks<sup>2</sup>. In case that in the development of credit standards there are errors or negligence, borrowers who are not reliable are attracted, or economic situation destabilize creditworthiness of customers, the bank suffers losses and contraction of revenues from lending activity. Executive officers as well as employees in subdivisions of banks are responsible for problem loans within the bank.

After careful analysis of information provided in *Table 3*, which gives an idea of credit exposures of over a month overdue principal and interest servicing (those outside the regular), it can be argued that since 2009 statistics has been disturbing, especially in regard to claims on loans classified as **loss**<sup>3</sup>. With these credit exposures it is almost not likely to recover amounts owed by customers. If we compare the acceptable theoretical values of about 1% of loans within the group 'loss'<sup>4</sup> with their actual amount, it can be concluded that the banking system as a whole does not manage well its loan portfolio.

Data in *Table 3* shows that the contraction of the banking system's loan portfolio was accompanied by a significant increase in loans overdue for over 6 months. Only in 2010 loans classified as 'loss' increased by 3.63%, and the total percentage increase in these exposures in the period 2009-2014 was 9.37%.

The problem related to the occurrence of a large amount of non-performing loans in Bulgarian banking sector was generated prior to 2009, but the high credit growth in 2005-2008 was able to absorb the formation of 'pollution' of loan portfolios. In risk management immediately prior to the financial crisis, banks relied

<sup>1</sup> For more details see: **Vatev, Zh., Bozhinov, B.** *Analiz na bankovata deynost*, Tsenov Publishing House, Svishtov, 2013, pp. 73-75

<sup>2</sup> For more details see: **Angelov, G.** *The Challenges of bank management in a globalizing world (Predizvikaestva pred bankoviya menidzhmant v globalizirashitiya se svyat)*, Проблемы развития внешнеэкономических связей и привлечения иностранных инвестиций: региональный аспект : Сборник научных трудов - Донецк, ДонНУ, 2014 г., pp. 6-8

<sup>3</sup> According to Instruction № 9, active until the end of April 2014, on the assessment and classification of risk exposures of banks and formation of provisions for impairment losses.

<sup>4</sup> **Vatev, Zh., Bozhinov, B.**, op. cit., p.76

Table 3

**Percentage growth in gross loans and quota of classified loans of the banking sector (2009-2014)<sup>1</sup>**

Banking sector	Years (as of 31.12.)					
	2009	2010	2011	2012	2013	2014
<b>Growth in gross loans (%)</b>	5.12	2.77	4.62	0.58	5.23	-2.27
<b>Overdue &gt; 30 ≤ 90 (%)</b>	6.05	7.95	7.22	6.37	5.49	4.79
<b>Overdue &gt; 90 ≤ 180 (%)</b>	1.71	2.69	2.77	2.55	1.95	2.10
<b>Overdue &gt; 180 (%)</b>	3.61	7.24	10.23	12.30	12.54	11.98

Source: BNB, Financial and supervisory reports – data, Information on credit quality, impairment and specific provisions for credit risk, and author's calculations.

<sup>1</sup> [http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS\\_201411\\_BG](http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS_201411_BG).

more on favorable values of the regular / bad credits ratio (loans overdue more than 90 days) rather than focusing on high-risk profile of part of the business customers and individual borrowers.

Another aspect in assessing the quality of bank lending in Bulgaria is the analysis of revenue generated from loan portfolios of banks. The information provided in Table 4 shows that profitability of loans in the private sector in the period 2009-2014 decreased continuously. Negative results were valid for both segments – non-financial enterprises and retail exposures (consumer and mortgage loans).

Although the annual reduction of bank revenue from interest made by credit contracts is relatively slow such is observed throughout the five-year period of this study. The most noticeable is the reduction of revenue from interest made by business lending – BGN 838 m, as revenue from interest made by mortgage and consumer lending have similar reduction for the period 2009–2014, respectively BGN 153 m and BGN 150 m. The negative growth in revenue from interest made by bank credit operations is a logical consequence of the limitation of new businesses and the occurrence of a large amount of problem credits after 2009.

Table 4

**Revenue from interest on loans, authorized by Bulgarian banking sector (2009–2014)<sup>1</sup>**

Revenue from interest on loans in the banking sector (m BGN)	Years (as of 31.12.)						Cumulate change
	2009	2010	2011	2012	2013	2014	
<b>I. Non-financial enterprises</b>	2,752	2,713	2,688	2,550	2,468	1,914	-838
<b>II. Retail exposures</b>	1,915	1,945	1,865	1,754	1,674	1,612	-303
<b>1. Mortgage loans</b>	793	786	790	728	673	640	-153
<b>2. Consumer credits</b>	1,122	1,159	1,075	1,026	1,000	972	-150
<b>Total revenue</b>	4,667	4,658	4,553	4,304	4,142	3,526	-1,141

Source: BNB, data on banking system and groups of banks, Securities. Loans and advances. Borrowings of the banking system and by groups of banks, Loans and Advances (gross) by types of currencies, information on specific provisions for impairment losses and revenue from interest, and author's calculations.

<sup>1</sup> [http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS\\_201412\\_BG](http://bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS_201412_BG).

The profile of Bulgarian banks can give a clear answer to the question what the sources of income are, which in turn determines the ability of banks to look for effective ways of restructuring and diversification of investments and the maximization of profit. With high informative significance in assessing the quality of bank lending are the indicators net (pure) interest margin and return on assets in the sector, given in *Table 5*.

*Table 5*. Having in mind the high share of loans to the private sector (excluding financial institutions), net interest margin can be formed as a ratio between the difference of revenue from interest generated by loan agreements with businesses and households, the cost of deposits of companies and individuals, and the total amount of the banking system's assets.

Table 5

Net interest margin and profitability of the banking system's assets (2009–2014)							
Banking sector	Years (as of 31.12.)						Cumulate change
	2009	2010	2011	2012	2013	2014	
Net interest margin (%)	4.16	3.94	3.65	2.99	2.75	2.74	-1.42
ROA (%)	1.1	0.84	0.76	0.69	0.68	0.88	-0.22

Source: BNB, Data on banking system and groups of banks, Balance sheet and income statement of the banking system, Securities, Loans and advances. Borrowed funds in the banking system and by groups of banks, Loans and Advances (gross) by types of currencies, information on specific provisions for impairment losses and revenue from interest, and author's calculations

Data in *Table 5* for the period 2009-2014 clearly shows the gradual but continuous decline in annual values of the banking sector's pure interest margin. This is a signal for a weaker opportunity for revenues from credit bank operations to cover their interest expenses on borrowed by companies and citizens deposits at a certain level of the banking system's assets. Provided that assets of the sector increase throughout the five-year period covered in the analysis, the inability of interest income from credit operations to absorb the paid by banks costs of their deposit taking activity is evidence of the emergence of a growing volume of poor credit exposures and of general reduction in the scale of lending.

Referring to the existing correlation between the contribution of lending to the final financial bank results (in this case measured by the ROA ratio) one can see that the main source of income for banks – lending, reduces its effectiveness. ROA decreased from 1.1% in 2009 to 0.88% at the end of 2014.

\* \* \*

The survey results confirm the thesis, previously set by the author. There was a significant deterioration of indicators, forming the final assessment of the quality of banking sector's lending activity in the Republic of Bulgaria in the period 2009-2014. Data provided by the Bulgarian National Bank explicitly shows the gradual and sustained slowdown in bank lending in the country and the continued accumulation of poor quality credit exposures within the five-year period covered in this study.

The study of credit intermediation among business and household sectors shows a significant restriction of the possibilities for revenue realization,

whilst the volume of problem loans has been growing rapidly since 2009. Especially negative is the fact that during the period, risk exposures classified as 'loss' increase their share in relation to pass loans. Practically, for these loan commitments there are no real chances even for a partial recovery of the cost of a loan.

Substantial reduction in interest income on loans, especially those made by credit business financing, must naturally be uncomfortable for banks as non-financial enterprises are the engine of the economy and their investment needs for credit resources are the greatest.

The effectiveness of bank credit operations also decreases, which is mainly testified by the constant contraction of revenue from interest by the end of 2014 and the contraction of the net interest margin, as the annual decline in the latter compared to a prior period is at a faster pace.

In conclusion, one of the main challenges facing banks is to find ways to prevent high credit risk, arising primarily from impaired solvency of a great part of the population and enterprises in the country in recent years. A great problem turns out to be the more conservative attitude of businesses and households to credit financing as a tool for development and improvement of the general welfare of economic agents. The latter limits at a great extent the possibility of placing credit products and expanding the market share of commercial banks.

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#### **Маринов І. Якість позикової діяльності у Болгарії**

Фінансовий результат банків залежить від здатності їх кредитних портфелів, щоб робити досить доходу в ризику, який кредитні установи знаходять прийнятним. Для того, щоб досягти стабільності і бажаного зростання ринку, банки прагнуть підтримувати добротність зобов'язань по позиках, виданих їх клієнтах. В цьому відношенні, експертиза і оцінка придатності банківського надання є великим інформаційним значенням до структур управління і успішного розвитку комерційних банків.

*Ключові слова:* комерційні банки, акціонерний капітал власників, достатність основного капіталу, глобальна фінансова криза.

#### **Маринов И. Качество заемной деятельности в Болгарии**

Финансовый результат банков действительно зависит от способности их кредитных портфелей, чтобы производить достаточно дохода в риске, который кредитные учреждения находят приемлемым. Для того, чтобы достичь стабильности и желательного роста рынка, банки стремятся поддерживать добротность обязательств по ссудам, выданным их клиентам. В этом отношении, экспертиза и оценка пригодности банковского предоставления являются большим информационным значением к структурам управления и успешному развитию коммерческих банков.

*Ключевые слова:* коммерческие банки, акционерный капитал владельцев, достаточность основного капитала, глобальный финансовый кризис.

#### **Marinov I. The Quality of Lending Activity in Bulgaria**

Financial result of banks is strongly dependent on the ability of their credit portfolios to generate enough revenue at risk which credit institutions find acceptable. In order to achieve stability and desirable growth of market share, banks aim to maintain a good quality of loan commitments undertaken by their clients. In this regard, expert analysis and evaluation of the suitability of bank lending are of great information significance to the management structures and successful development of commercial banks.

*Keywords:* commercial banks, owners' equity, capital adequacy, global financial crisis

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