

Management Measures for a Multivalent Risk Administration in a top Romanian Bank

Laurențiu-Mihai TREAPĂȚ

College of Management,

National University of Political Studies and Public Administration, Romania

6 Povernei St., Sector 1, Bucharest, Romania, 010643, Tel.: 0040-724.377.007

laurentiu.treapat@facultateademangement.ro

Biographical information about author:

Laurențiu-Mihai Treapăt is a university lecturer, PhD in Economics, with more than 20 years professional expertise in Banking Risk and Management; participated in International and National Conferences on management and risk administration, lending and leadership; cooperated with the EU Council in Bruxelles, delivering training in risk management; Executive Manager (Head of Risk Division) BCR Head Office – Erste Group.

Abstract: The lethargy that laid over the economy in the years of crisis was also reflected in the banking system, where the non-performance loans punctually exceeded even the level of 25%. Although the macroeconomic situation got better in present, the lending activity had a low sensitivity, remaining in the negative area also between 2014 and 2015. Due to this, the weight of the net banking assets within the GDP decreased, reaching the level this indicator had in 2007, this way the banking system turning back in time, to the level before Romania's adhesion to the European Union.

Key words: bank lending, credit risk, non-performance loans, crisis debut, Romanian banks.

JEL Classification: G210; O16; P34

Summary: The lethargy that laid over the Romanian economy in the crisis years was also reflected in the banking system, where the non-performance loans punctually exceeded the level of 25%. Although currently, the macroeconomic situation improved, the lending activity had a low sensitivity, remaining negative also between 2014 and 2015. Consequently, the weight of the net banking assets within the GDP decreased, reaching the level of 2007, this way the banking system turning back in time, to the level before Romania's adhesion to the European Union.

The continuous lending decrease and the constant deposits increase made that currently, the clients' savings cover the loan portfolios. The big problem is that, the money saved with efforts in Romania finances the non-performance of some banks that is not even well provisioned.

The foreign shareholders who brought additional capital from the mother-banks for covering the losses generated by the non-performance provisioning, slowed down capital infusions. Thus, a major risk for Romania's finances occurs - the foreign banks to reimburse these capitals before admitting the non-performance level, generating serious restructuring within the balance sheet, the erosion of the reliability indicators and of the banking prudence. The solvability decreases and additional capital for meeting Basel III requirements is needed. But, in an environment with such a risk level, we wonder, what shareholder could be still attracted to (re)invest?

A lot of question related to the errors done by many banks, in their boom period, stand still. In the years before the crisis, the credit expansion contributed to achieving so-called high economic growth rates, in the same time generating vulnerabilities whose effects can already be perceived.

1.Introduction

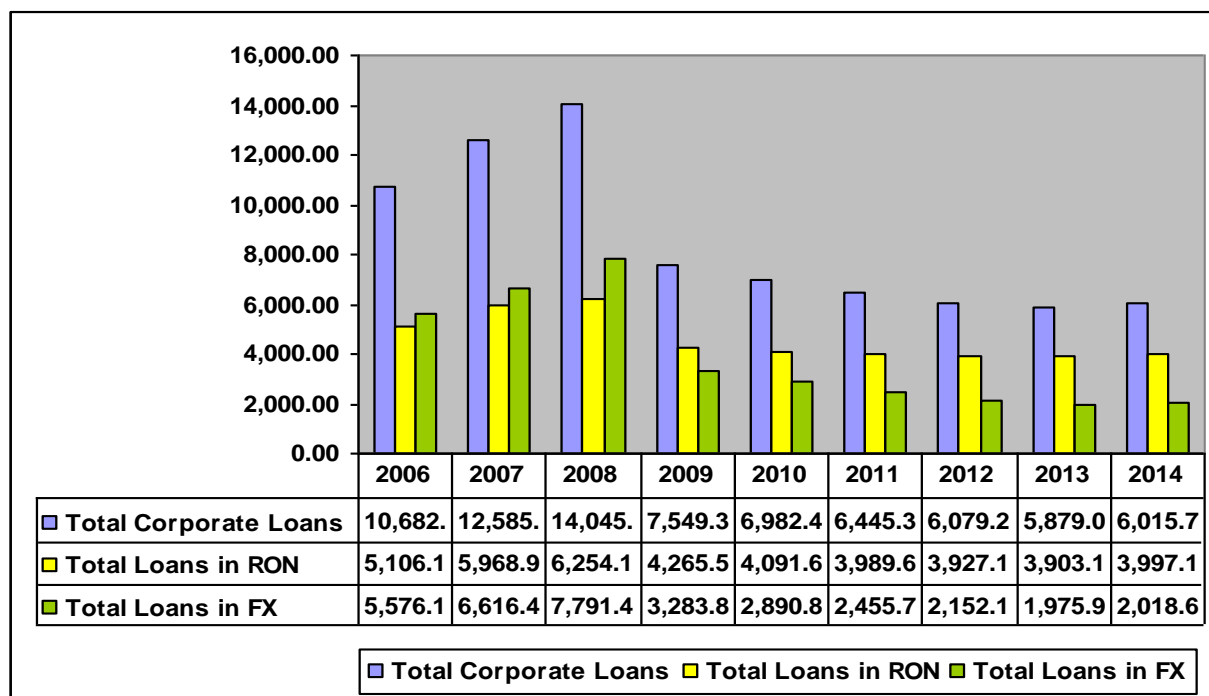
For illustrating the effects of applying the credit risk management measures, we developed a case study for Gamma Commercial Bank - a universal bank ranked within the top 5 banks in Romania, having a balanced exposure towards the corporate and retail client segments - by using the data in the financial balances in between 2006-2014. Certainly, from confidentiality reasons regarding the data within the balance sheet and also of all the other related information, the bank's name was changed but the economic phenomenon and the analyzed trend are real. According to the performed analysis, we acknowledged that the market demand for loans, within the period 2006 – 2009 (until September – October 2008) registered a consistent increase of the loans volume (particularly corporate) in this initial analyzed period, being known that, that period was one of economic catching-up (Codirlaşu *et al*, 2004, p.2) and boom for loans. Starting with the last quarter of 2008, the solvable demand for loans collapsed to levels of 15-25% from the level of the same quarter of the previous year and it stuck to these minimum levels all along 2009. This decreasing trend lingered and even got lower in the second analyzed period, namely 2010 – 2014, (that we will call “crisis after debut”). Some analysts (Bayne, 2009) consider that the crisis was provoked by the private sector. Others, (Benkovskis, *et al*, 2012, p.27-47) state that the countries of Central, Eastern and Southeastern Europe (CESEE) have demonstrated tremendous gains in international competitiveness during their transition from centrally planned to market economies, as there was the Romania's case. After the beginning of the financial crisis, within 2008-2009 and after the crisis debut, between 2010-2014, the lack of the solvable request for loans became general according to Mishkin (2007) and spread into the entire Romanian banking system, that was seriously affected in what the quality of exposures towards loans concerns, in terms of profitability, employees number and the branches network. The analysis we did consists of monitoring the loans portfolio on a long term of namely 9 years, from the point of view of tenors, of the structure on corporate/retail loans and on the foreign currencies, also from the point of view of the exposures on economic fields and not last, of the analysis regarding the quality of the loan portfolio. These indicators equally reflect the status and the evolution of the bank (as representative for the Romanian banking system), but also of the economy, as a whole (Bernanke *et al*, 1995, p.29).

2.Study Case upon the Results of Applying the Management Measures of the Credit Risk – Analysis Performed upon the Loan Portfolio of a Top 5 Commercial Bank in Romania

The used research methodology is the quantitative analysis made upon the evolution of the total non-governmental loans granted by a top 5 bank in Romania, both in RON and foreign currency, between 2006 and 2014. Thus, we acknowledge that, two totally opposed trends are very clearly evidenced. We speak here about a strong, spectacular increase of the loans, between 2006 and Q4 2008 on one hand, and on the other hand, a decreasing trend, that started the same time with the financial crisis and also continues in present. These two different trends are evidenced by the fact that the total of corporate loans increased with 31,5% in 2008 comparing with 2006 and it decreased with 57,2% in 2014 compared with the crisis debut in 2008. All along the analyzed period, namely by the end of 2014 compared with the first year of analysis, namely 2006, we can notice a decrease in the total loans of 43,7% (as it results from the Table no. 1), aspect that highlights the fact that, all the profit (in the balance) accumulated between 2006 – Q3 2008 was wasted between 2009 – 2014.

Graphic no. 1.

The Situation of the Corporate Loans, in RON and Foreign Currency, as Granted by the Gamma Bank (mil .RON)



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

On the background of an accelerated increase of the lending activity towards the companies, the weight of the loans in the total assets increased at Gamma Bank. If at 31.12.2006, the weight of the corporate loans in the balance sheet was of 45,4%, this increased with 3,5 p.p. respectively up to a weight of 48,9% at 31.12.2008 and continued with 11,8 p.p. reaching to a weight of 57,2% at 31.12.2012 and in 2014, at a weight of 69%, as we can see in the Table no. 1.

This first increase of 3,5 p.p. is explained by the fact that Gamma Bank aimed by its strategy, at 31.12.2008, to obtain a balanced weight between the loans granted to the corporate clients and the loans placed in the retail sector (approximately 49% from the total granted loans are in the corporate sector and 51% in retail). The increase with 11,8 p.p. is explained by the fact that Gamma Bank aimed to obtain a higher weight of the loans granted to the corporate clients compared with the retail loans, at 31.12.2012, as these corporate clients are more trustful from the loans reimbursement perspective and bring a higher profit for the bank, due to the following aspects: the borrowed amounts, the transactions volumes and the rollovers. The volumes of the granted corporate loans had by the end of 2012, a weight of 57,20%, as we can see in the Graphic no. 2, weight that continued to increase up to 69% from the total assets. It is remarkable that, the weight of the corporate loans in the total assets continuously increased also due to the dramatic, accelerated decrease of the retail loans. The main reason for this permanent decrease of the retail loans was the more and more difficult access to loans for the individuals and the sale of important packages of doubtful assets to the collection companies. For example, in 2014,

Gamma Bank sold a low quality retail loan package (from the “doubtful and loss” category) amounting 1.400 million RON, to some collection companies. These loan packages sale operations were not done for the loans granted to the corporate clients, whose amount even if decreased, this happened in a slower rhythm, of approximately 200-500 million RON/year.

In what the corporate loans weight granted in RON towards the ones granted in foreign currency concerns, we acknowledge that the ratio was in the favor of the foreign currency loans that represented approximately 56% from the total, at 31.12.2008, while the ones in RON represented, at the same date, approximately 44%. In the last year of the analyzed period, at 31.12.2014, the ratio was totally changed in the favor of the loans in RON, with a weight of approximately 66,5% compared with the total loans in foreign currency that represented approximately 33,5% from the total. By analyzing these weights, there resulted that the decision factors elaborated a strategy to allow the bank to have a balanced exposure, both towards the sector risk and towards the foreign currency risk, as very healthy premises for successfully facing the possible unpredictable disturbing events, as the last financial crisis proved itself to be and still ongoing in the analyzed period. Thus, as we can observe in the Graphic no. 2. that, the relative weight of the loans granted in RON increased year by year starting with 2009 when it was of 35%, reaching over 2/3 from the total granted loans in 2014. This radical change in Gamma Bank’s strategy has significantly decreased the bank’s exposure and respectively, the bank’s risk towards the foreign currencies that were not representative for the usual cash flow of its. In our opinion, the hardening of the lending conditions had as an effect, supporting the clients that respected the eligibility conditions to contract loans in the currency of their incomes, result of the exchange rate volatility. For example, the clients that got a credit in Swiss Francs (CHF) face the situation to pay double monthly installments compared to the period before the crisis, some of them registering big arrears that could not refund anymore. If, before the financial crisis debut, the RON/CHF ratio was of approximately 2 RON for 1 CHF, once the Swiss Central Bank cancelled the maximum support limit for the local currency and Swiss exports, the burden of the people with loans in Swiss currency doubled, the rate reaching just overnight to 4,2 RON for a CHF, as has been demonstrated by Treapăt & Gheorghiu (2015). When they granted loans in Swiss Francs, in 2007 and 2008, the 11 banks that developed operations in Romania, benefited from the fact that the interest rates for this currency were lower than the ones in Euro, without considering the ones in RON that were even prohibitive. From this temporary circumstances, there benefited 2 categories of people: the first category, of the greedy ones or of the FX speculators that wanted to borrow as much money as possible for low interest rates, to exchange them in other currencies and to lend or place it for higher interest rates, thus achieving easy profits. On the other hand, the second category were the ones that had just only one solution for getting loans from the banks as their salaries were too low to access even a modest loan in EURO or RON. Both categories were wrong, as Treapăt & Gheorghiu (2015) demonstrated.

Table no. 1

***The Weight of the Loans in the Total Assets, at Gamma Bank
(mil. Ron)***

Year	Total Assets	Corporate Loans - Total	Retail Loans - Total	% Corporate Loans in the Total	% Retail Loans in the Total
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				Assets	Assets
2006	23,549.5	10,682.3	12,867.2	45.4%	54.6%
2007	26,545.8	12,585.3	13,960.5	47.4%	52.6%
2008	28,704.9	14,045.5	14,659.4	48.9%	51.1%
2009	14,352.4	7,549.3	6,803.1	52.6%	47.4%
2010	12,558.4	6,982.4	5,576.0	55.6%	44.4%
2011	11,427.9	6,445.3	4,982.6	56.4%	43.6%
2012	10,628.0	6,079.2	4,548.8	57,2%	42,8%
2013	10,100.0	5,879.0	4,221.0	58,0%	42,0%
2014	8,800.0	6,015,7	2,784.3	69,0%	31,0%
Difference 31.12.2008-31.12.2006					
Amount	5,155.4	3,363.2	1,792.2	3,5 p.p.	- 3,5 p.p.
%	21.9%	31.5%	13.9%	-	-
Difference 31.12.2014-31.12.2009					
Amount	- 5,552.4	- 1,533.6	- 4,018.8	16,4p.p	- 16,4 p.p
%	- 39%	- 21%%	- 60%%	-	-
Difference 31.12.2014-31.12.2006					
Amount	- 14,749.5	- 4,666.6	- 10,082.9	23,6 p.p	- 23,6 p.p
%	- 63%	- 44%	- 79,0%	-	-

Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

In what the management of the lending risk concerns, as analyzed on exposure types – corporate and retail – the situation was pretty complicated all along these 9 years, subject to analysis. It is well-known that, generally speaking, the risk involved by the economic agents, namely the companies, is higher than of the retail clients’, first, due to the size of the individual exposure. The corporate clients concentrate a considerable higher credit risk compared to the retail clients, case in which the exposure is spread over a larger number of beneficiaries, with smaller individual exposures.

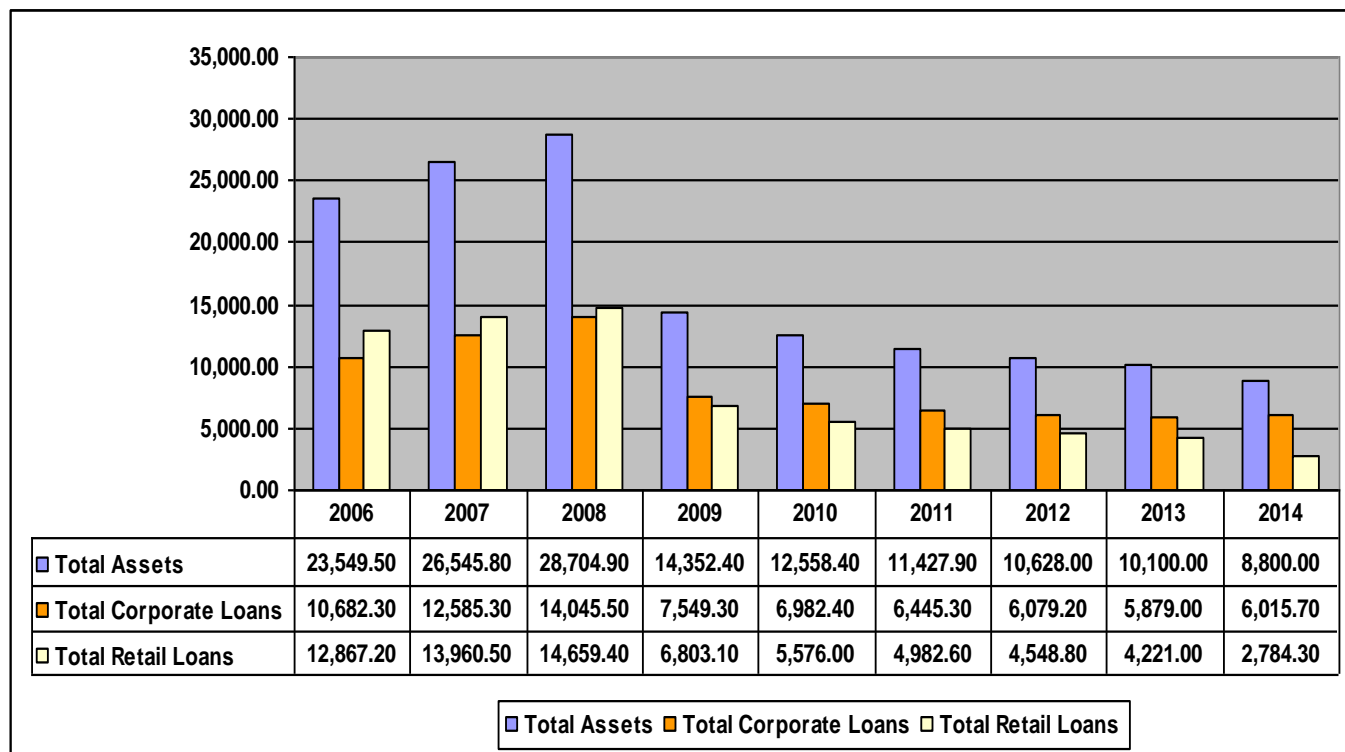
Despite all these principles, the strategy of the Gamma Bank was influenced by the economic realities during the crisis, that left plenty of clients without their refund sources for the loans, namely, without constant incomes. In these conditions, Gamma Bank applied a clear strategy of changing the ratio between the retail loans (that were in majority in 2008, with 51%) and corporate loans whose weight was afterwards increased year by year, starting with 2009. The bank complied with the general trend line of the banking system, of gradually reducing the

exposures on loans, by yearly decreasing the amounts of loans granted to the companies but, particularly, of those granted to the population.

This way, the total assets of the bank decreased yearly, but the relative weight of the two types of loans turned upside down. The retail loans decreased year by year, both in absolute amounts, as we can see in the Graphic no. 2, and also as relative weights, by comparison with the corporate loans towards the total assets (as it can be seen in the Graphic no. 3). Although they started having an advance of over 51% at the moment the crisis began, the loans granted to the population were drastically diminished, down to one third from the total amount of loans, by the end of 2014. The reason why the bank applied this strategy of twisting was the lack of sustainability with sure incomes from the side of an important part of the population, the unemployment and the salary decreases for some social categories, etc.

Graphic no. 2.

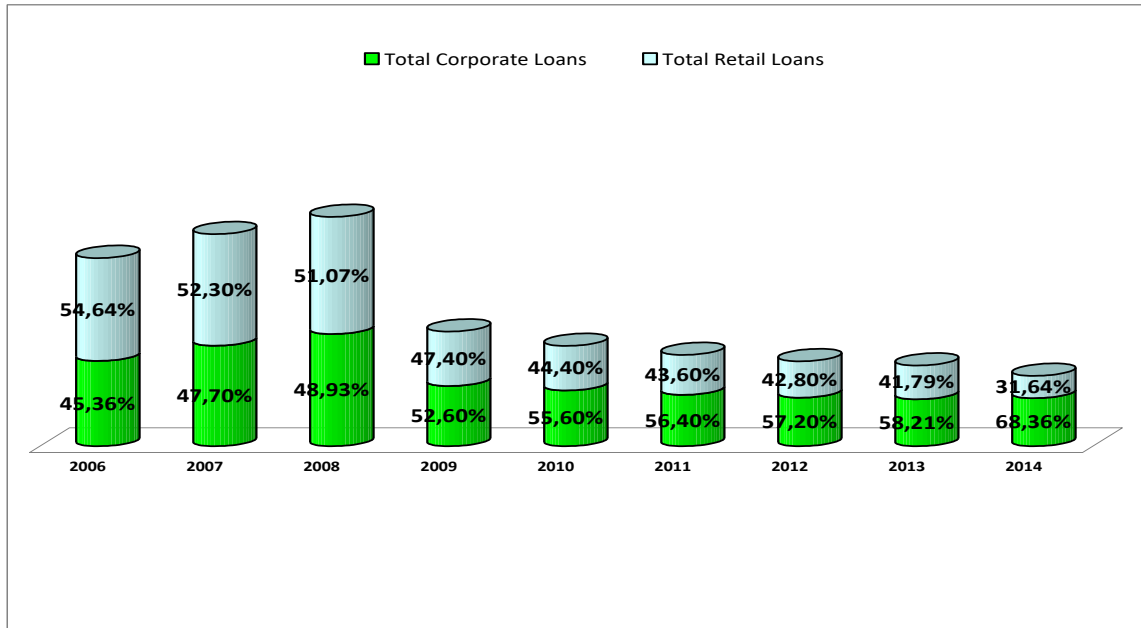
***The Situation of the Retail/Corporate Loans
Granted by Gamma Bank (mil .RON),
within 31.12.2006-31.12.2014***



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no. 3.

***The Situation of the Ratios between the Retail and the Corporate Loans
Granted by Gamma Bank within 31.12.2006-31.12.2014***



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

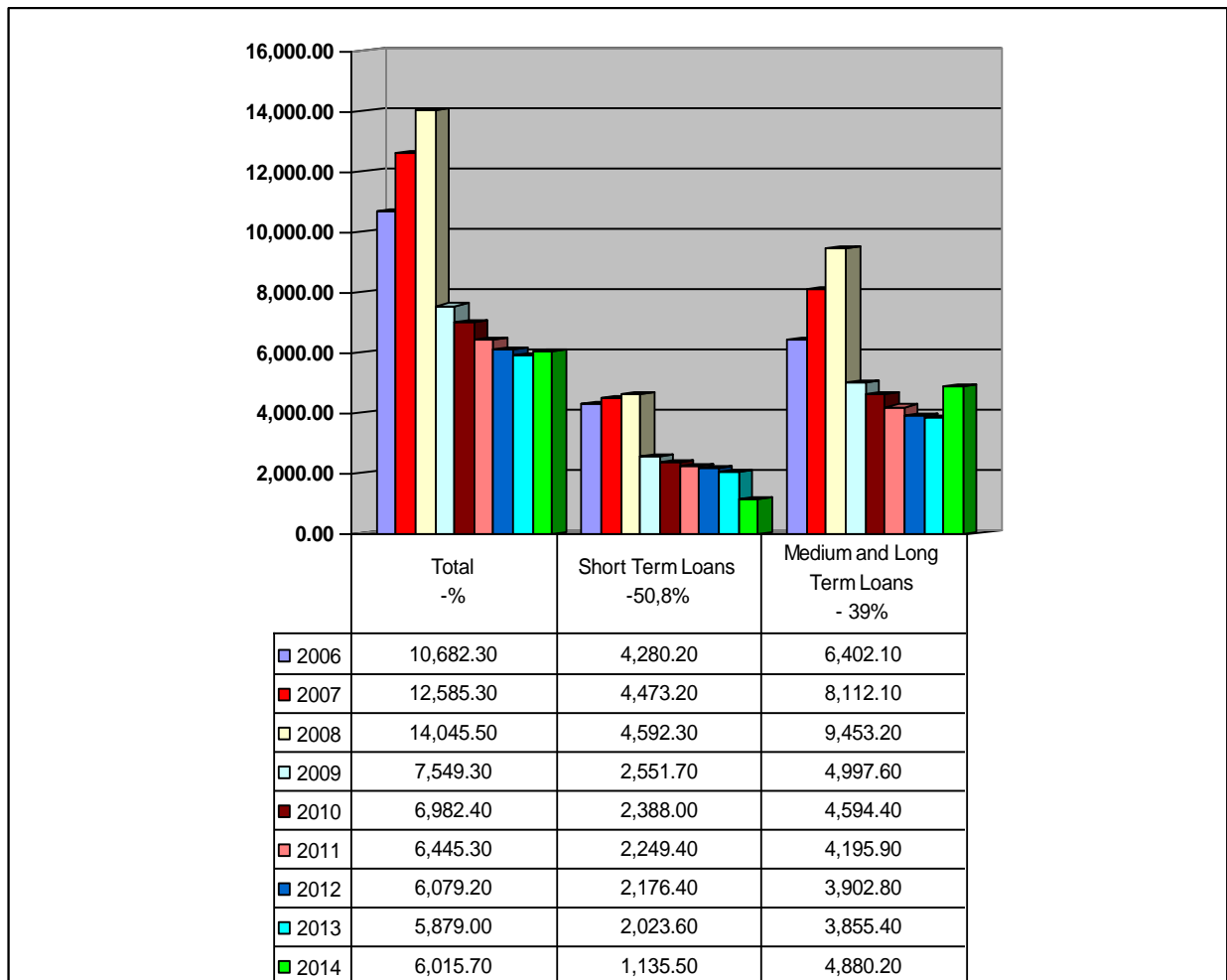
The analysis of the credit risk from the perspective of the loans' maturities. The research made upon the way the macroeconomic factors influenced the demand for loans in the case of the analyzed bank, led to the following conclusions: in the first analyzed period, the dynamics of the medium and long term loans (+ 48% by the end of 2008 towards 2006) exceeded with 41 p.p. the increase of the short term loans (+ 7% by the end of 2008 towards 2006). This aspect is translated into the great appetite the companies have towards investments and the banks towards the medium and long term lending. Even the increase with 7% of the short term loans is not without importance. In the second analyzed period, the short term loans had a crush immediately after the financial crisis started, they almost being stopped by the banks in the respect of new approvals. For this reason, their amount decreased with more than 55% compared with 2008, so that, by the ending of the analyzed period, in 2014, their total amount was only a of quarter compared with the starting moment of the financial crisis, as we can see in the Graphics no. 4 and 5.

If we analyze the weight of the loans granted on medium and long term, so for investment purposes or for purchasing houses, we can notice that these immediately decreased after the debut of the financial crisis, namely with approximately 50% in total amount, compared with 2008. Yet, this low level of almost half of the previous loan volume remained relatively unchanged or registered just small variations, in other words we can say that this type of loan did not stop existing.

The demand for medium and long term loans, according to our analyses, was fed on one hand, by the private companies in the field of industry, trade, transportation, constructions, that, although did not dramatically increase, yet presented a certain appetite for investments and development. On the other hand, that bank sporadically financed the activity of building and purchasing houses with mortgage loans and also within the governmental program “Prima Casa”. This is the dimension of the solvable demand of loans on a short term and respectively on medium and long term, as we can see in the Graphics no. 4 and 5.

Graphic no. 4.

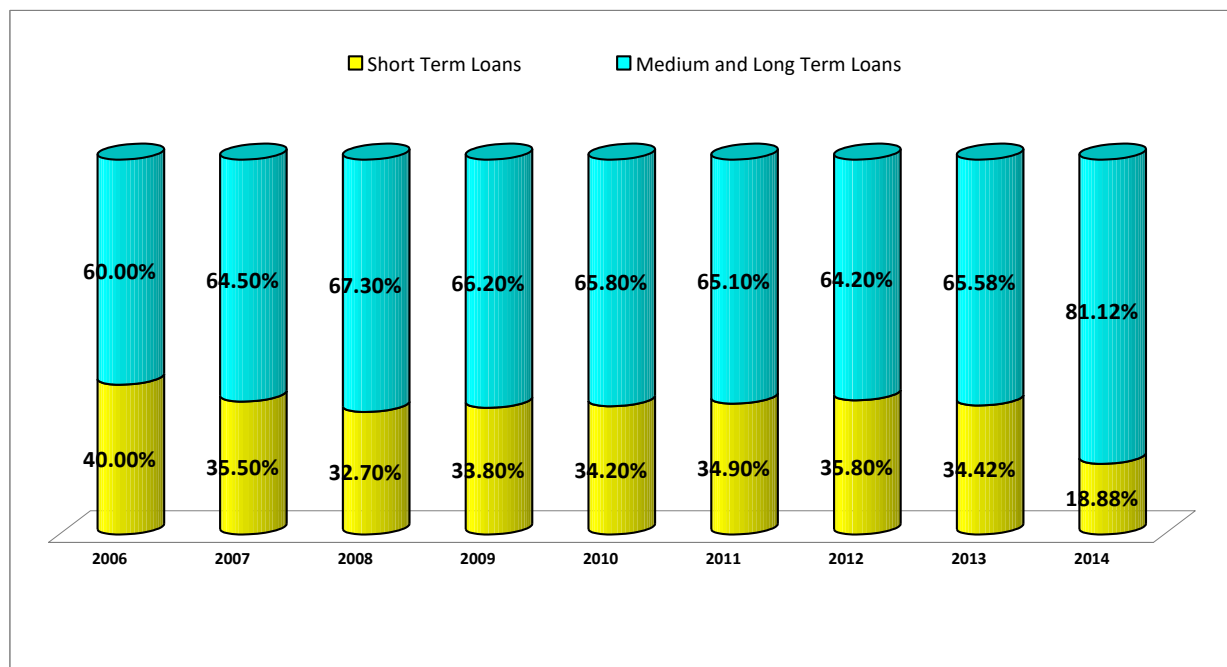
***The Situation of the Corporate Loans by Tenors, within 31.12.2006 – 31.12.2014
(mil .RON)***



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no. 5.

The Weight of the Corporate Loan on Maturities, between 31.12.2006 – 31.12.2014



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

In our opinion, from the macro economical point of view, the bigger increase in the respect of the medium and long term loans within 2006 – 2008, is due to the growing needs for financing the investments, in an economy in a full development process, in which the economic raise must be naturally sustained both from governmental sources and also from banking loans. Or, within the analyzed period, Gamma Bank knew how to value the financing opportunities that existed on the market, preferring to place the attracted funds from the clients, mainly in medium and long term loans granted to the corporate clients, as the situation of the resources attracted from the clients on a medium term and also the subordinated loans received from the mother-bank with a long term renewal clause, allowed Gamma Bank to adopt this policy.

In the circumstances in which, granting loans for financing the working capital increased with 7% in 3 years and, in the same period of time, the financing of the investments increased with 48% at Gamma Bank, this fact clearly indicates, in our opinion, that this bank's policy of placing funds into loans, had the corporate clients in the industrial field as main target, clients that the bank supported, in principal, with loans for investment. In what the period 2009-2014 concerns, we can notice that, while relatively maintaining the balance of the medium and long term loans between 3900-4900 million RON, their specific weight in the total granted loans after the crisis debut increased from 67% to over 80% in 2014, on the background of stricter and stricter lending conditions, of the companies' cautiousness to indebt on a long term, but also of big investors' retreating from Romania. This trend clearly indicates the preferred orientation Gamma Bank had towards the strategic lending on a medium and long term.

Deepening the analysis for thus seeing which sectors the loans were mainly directed towards, we depicted the conclusion that the respective bank oriented between 1/3 and 2/3 from its corporate loans to industry and constructions, while other economy sectors were financed in smaller proportions (trade, approximately 10-12%, transportation approximately 2-3%, other economy branches 1,5–2%), as we can see in the Table no. 2 and in the Graphics no.6. and 7.

Table no. 2.

Corporate Loans, on Economy Branches (mil. RON)

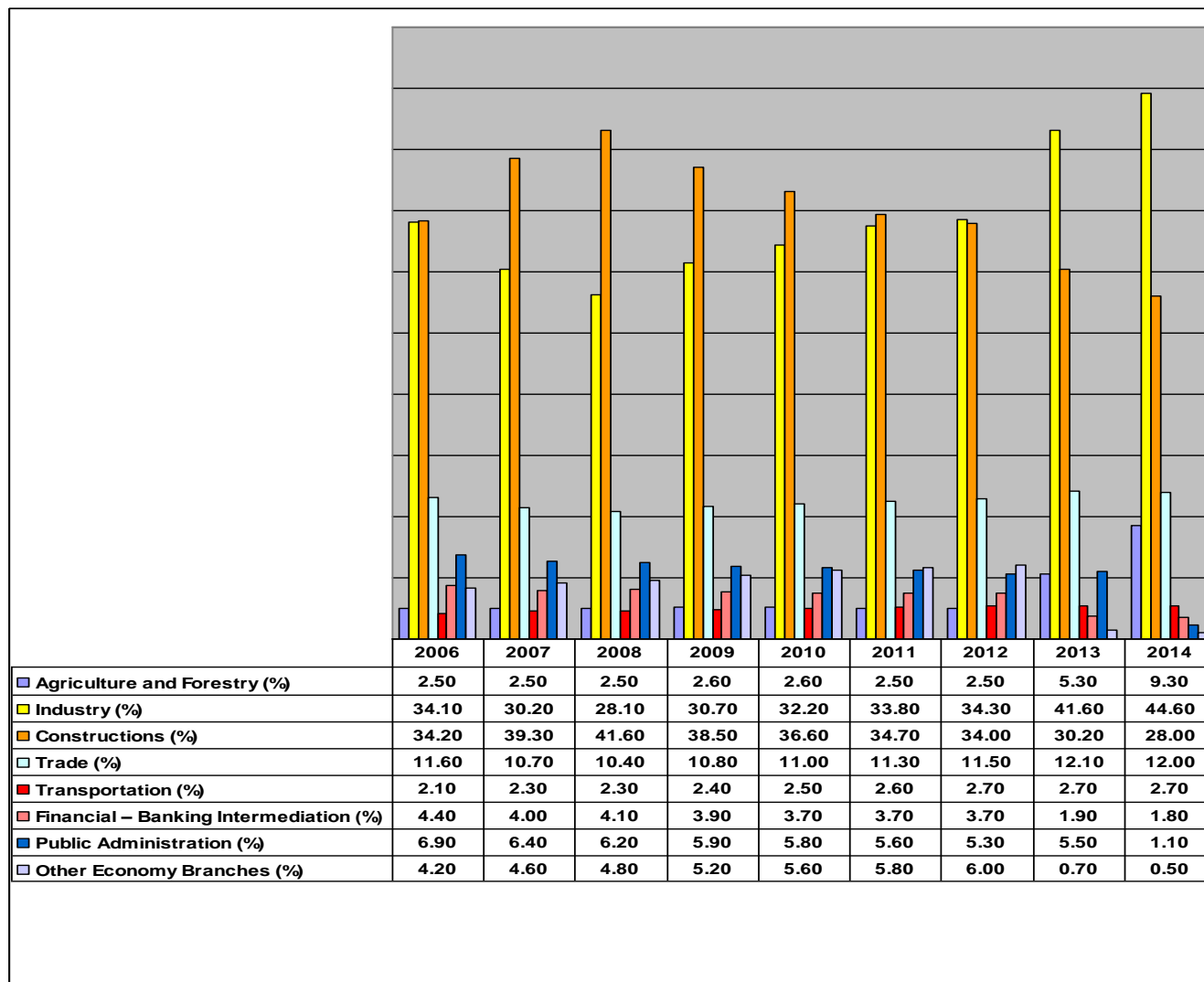
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	10.682,3	12.585,3	14.045,5	7549,3	6.982,4	6.445,3	6.079,2	5879	6015,7
%	100	100	100	100	100	100	100	100	100
Agriculture and Forestry	271,6	310,8	351,7	196,3	181,5	161,1	152,0	312,5	564,7
%	2,5%	2,5%	2,5%	2,6%	2,6%	2,5%	2,5%	5,3	9,3
Industry	3.642,2	3.804,5	3.937,8	2.317,6	2.248,4	2.236,5	2.085,2	2.445,6	2.689,6
%	34,1	30,2	28,1	30,7	32,2	33,8	34,3	41,6	44,6
Constructions	3654,3	4941,4	5849,4	2906,5	2.555,6	2.236,5	2.067,0	1.777,2	1.688,7
%	34,2	39,3	41,6	38,5	36,6	34,7	34,0	30,2	28,0
Trade	1.242,8	1.345,8	1.463,7	815,3	768,1	728,3	699,1	714,3	722,4
%	11,6	10,7	10,4	10,8	11,0	11,3	11,5	12,1	12,0
Transportation	216,0	290,7	320,3	181,2	174,5	167,6	164,1	164,0	160,5
%	2,1	2,3	2,3	2,4	2,5	2,6	2,7	2,7	2,7
Financial – Banking Intermediation	469,0	502,6	579,9	294,4	258,3	238,5	225,0	111,8	108,9
%	4,4	4,0	4,1	3,9	3,7	3,7	3,7	1,9	1,8
Public Administration	734,7	810,7	870,6	445,4	405,0	361,0	322,2	325,0	71
%	6,9	6,4	6,2	5,9	5,8	5,6	5,3	5,5	1,1
Other Economy Branches	451,7	578,8	672,1	392,6	391,0	373,8	364,8	28,6	9,9
%	4,2	4,6	4,8	5,2	5,6	5,8	6,0	0,7	0,5

Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets,

financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no. 6.

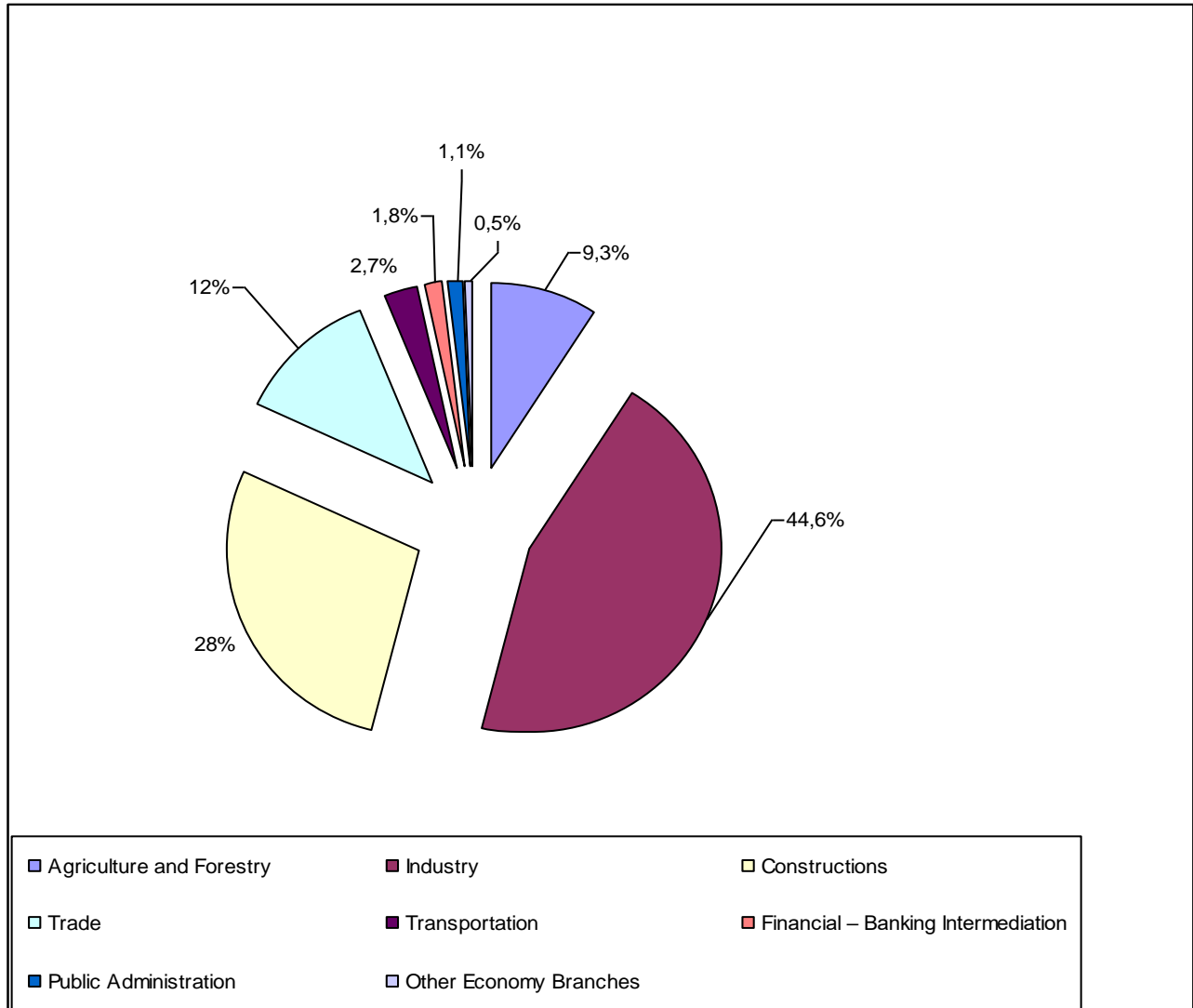
Corporate Loans, on National Economy Branches



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no.7.

Corporate Loans, on National Economy Branches, in 2014



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

The crisis affected most of the economy branches, thus noticing certain decreases in the loan volumes, in all sectors, mainly due to consumption attempering, according to Table no. 2. If we are to analyze the evolution of the corporate loans on economy branches as weight in their total, we can notice a trend mainly towards the industrial sector, that, otherwise, exceeded the construction sector as weight in GDP, between 2012 – 2014, according to the National Institute of Statistics in the Economic Sector.

The investments materialized in new construction works decreased year by year. We acknowledge that, the only sector that considerably increased is industry, while the public

administration and constructions registered decreases within 2009 – 2014. The rest of the branches maintained or slightly increased/decreased their weights, as it can be noticed in the Graphics no. 6 and 7.

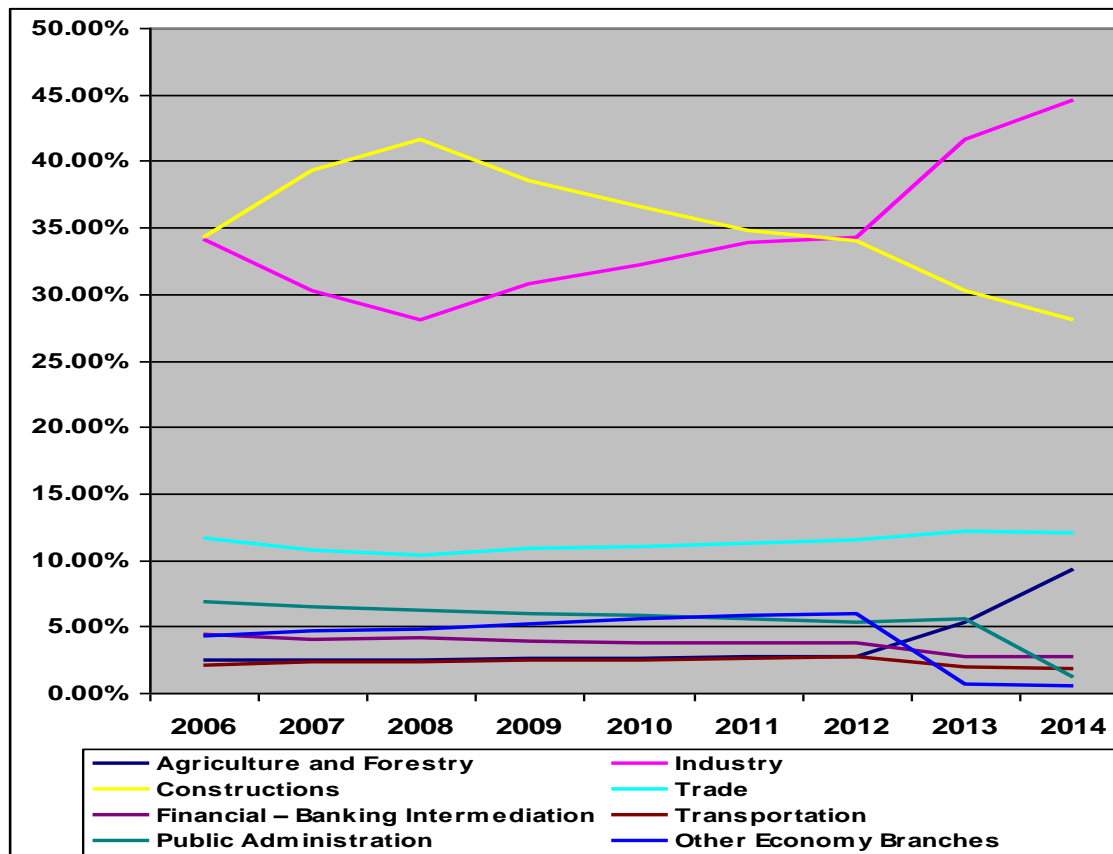
In our opinion, the decrease of the loans' weight granted to the companies activating in the construction filed is due to the financial crisis that debuted by the end of 2008, in the last quarter, that also affected the real estate sector and implicitly, this particular branch. The productive sectors that were more severely affected by the crisis are the ones that have a larger development period, as the construction field does, and that also have a significant influence upon the entire economy.

Following the boom period, in which the prices for the houses registered the maximum levels the exchange rate was increasing and consequently, the installments the people had to pay to the bank got higher, many clients found themselves in incapacity to pay their loans back, so the bank started the hard collection, thus getting to own some toxic assets. This affected the construction sector as the prices of the buildings were decreasing, thus many companies registering losses and other disappearing from the market. Just like in a domino game, the fall of the house prices had an impact upon the banking market (besides the debtors that lost their properties and also, beside the real estates market, as a whole), they all awakening without their real estate collaterals, just overnight. The mortgages did not vanish physically, they still exist, but what it does not exist anymore is their market value. For this reason, the loans remained practically uncovered and a new value (a real one) must be brought in the devalued collateral's place. For identifying the best risk management measures, Gamma Bank's management analyzed the situation of the Romanian banking system at the beginning of 2015 and, from the solvability point of view, acknowledged that, this stayed at a comfortable level of 17%, substantially over the the required level by the international norms in the field. Yet, looking at this high level of the solvability indicator, we can easily understand why the banking system suffers when it comes to profitability (the loss in the banking system exceeded the equivalent of 1 Billion Euro), as the money must be directed towards the economy, towards the ones producing added value and not left to stand still, just for proving high levels in terms of reliability indicators.

From the analysis made upon the indicators, joint for the entire banking system level, we can see that the liquidity, from the point of view of the concordance of the assets maturities with the liabilities, is in accordance. The coverage degree of the non-performance loans (NPL) with risk provisions is of 70%, calculated as an average of the entire system, aspect that is not bad as the market does not recognize the fixed assets values anymore. The NPL indicator calculated in the first trimester of 2015 is of 13,9%, much better than one year before, when it exceeded the level of 22%. At this NPL level, it can be estimated that the potential loss from unrecovered loans is situated under 5% from the total portfolio. The most sensitive part of these analyses is that, from the total unhealthy loans portfolios, approximately 2/3 of these are exposures related to some insolvent clients, and from these ones, the cash recovery rate is situated at 10%, in the best case. Within a market that is not sensitive to the real intrinsic value of the real estates collaterals, the recovery rate is however more under 10%, and for this reason, the banks must come with real money (out of provisions), to replace the valueless collaterals.

Figure no. 1.

The Evolution of the Corporate Loans Weights as Granted by Gamma Bank, split on Economy Branches, within 2006 – 2014



Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

The management of the loan portfolio quality. One of the most relevant indicators for the loan portfolio quality, evidencing the potential risk of loss-making out of the lending activity at the analyzed bank, is the weight of the non-performance loans in the total loans granted to the clients (NPL/Total Loans(%)). Within the analyzed period, the trend of this indicator accurately followed the evolution that most of the banks in the Romanian banking system had, namely, the non-performance loans indicator knew a slight decrease (showing an improvement in the quality of the loans portfolio) in 2007 compared with the previous year. The non-performance loans granted to the corporate clients decreased from 2,8% to 1,8% for afterwards to significantly increase by the end of 2008, due to the deterioration of overall refund capacity on the clients' side, starting with the fourth quarter of 2008, when the financial crisis showed its effects in Romania as well. In the Tabel no. 3. and Graphic no. 8 to follow, we can notice that, the initial favourable trend (the decrease with 1 p.p. of the weight the non-performance loans had in the total loans in 2007 compared with 2006) was interrupted in 2008 when, due to the first signs of debts refund incapacity registered by the banks' clients, the provisions started to significantly

increase, starting the fourth trimester of 2008. In the case of the bank where we made the research, the weight of the corporate loans included in the doubtful and loss categories increased with 2,2 p.p. compared with the previous year, by the end of 2008, thus reaching to 4% for the total amount of corporate loans.

This level, still reasonable, illustrates the increasing risk caused by the non refundment of the due loans and of the corresponding interests, due to the overall deterioration of the economic situation starting with the fourth quarter of 2008, a difficult situation that generated significant delays in paying their debts, for most of the economic agents. This chain economic blocking spread very fast, leading, by the ending of 2008 and particularly by the beginning of 2009, to a generalized incapacity of payment for the companies that were selling upon commercial credit (due to not cashing their invoices in, at tenor). This phenomenon of almost generalized economic blocking started to create delays in cashing and to significantly affect the financial situations of the banks, that thus were forced to clean their ballance sheets from bad payer clients, either by selling their accounts receivable for a discount, or by executing their collaterals where this was possible and it was considered to be the last option for recovering the due money or at least, part of it.

The beginning of the worst relation between the banks and their clients was in October 2008 and lasts for 5 – 6 years already. Compared with 2008, in 2009 there was registered a significant increase in the weight of the loans granted to the corporate clients qualified as doubtful or loss, namely with 6,5 p.p. In the following years, the increase in this weight was not that significant anymore, but continued year by year, the increase rate for the non-performance loans being of 1,8 p.p., 1,5 p.p, and respectively 1,2 p.p. compared with the previous years, getting to 17,60 % from the total corporate loans in 2012 and reaching its highest level, of 20%, in 2013. These successive worsenings of the loan portfolio quality led to an increase in the provisions level that thus reduce the banks's profit. In our opinion, the decline of the indicator that measures the quality of the loan portfolio is due to the economic situation our country faces. The bankruptcy of the well-known institution Lehman Brothers, that was declared in 2008 due to the crisis on the loan market in the USA and whose assets were taken over by other banks, generated a collapse in the entire financial system. The unemployment rate increased and so the public debt, while 200 banks bankrupted. Many of the stock markets did not succeed in covering the loss caused by the crush of the Lehman Brother Bank, whose shares went down with up to 90% while the panic was spreading.

Just as a domino effect, many sectors were affected on international level, also Romania. As the consumption decreased, many companies could not re-launch their activities, bankrupted or restricted their activity. The number of the payment delays these companies had towards the banks increased, according to the Table no. 3. Consequently, the bank hardened the lending conditions that thus reduced the access to loans, generated an increase in the respect of financing costs resulting in higher interest rates that, in their turn led to a decrease in the total amount of granted loans and to non-performance loans. Consequently, the main causes of such an evolution are the low demand, result of the increasing interest rates, of the concerns in what the future incomes concern and of the decreasing purchase power but also of the limited offer, since the banks became more cautious in granting loans to the private business environment, already overloaded with debts.

Table no. 3.

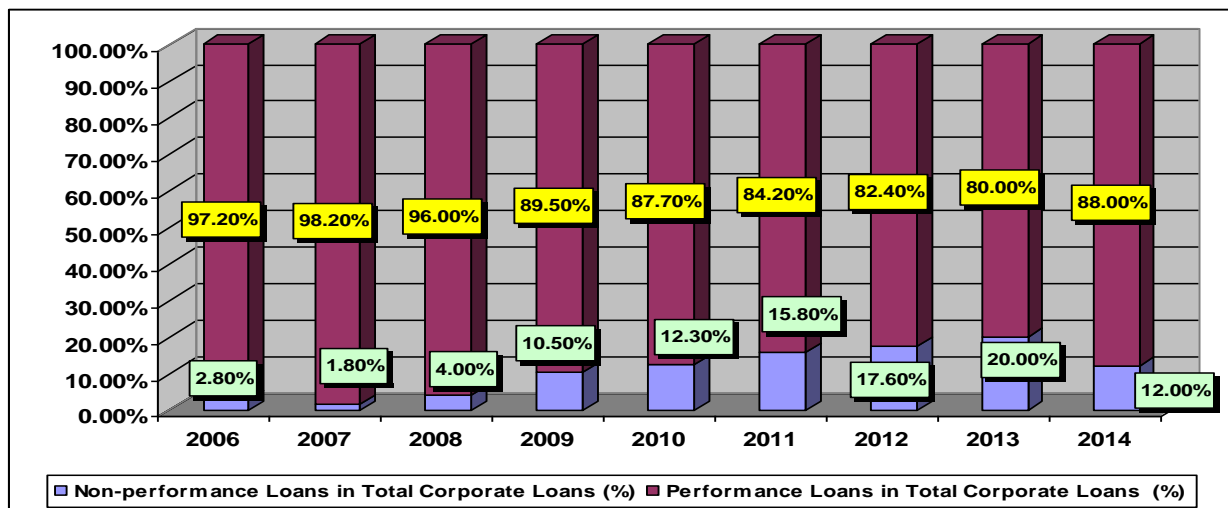
The Evolution of the Corporate Loans (Performance/Non-performance) at Gamma Bank, within 2006 – 2014 (mil. RON)

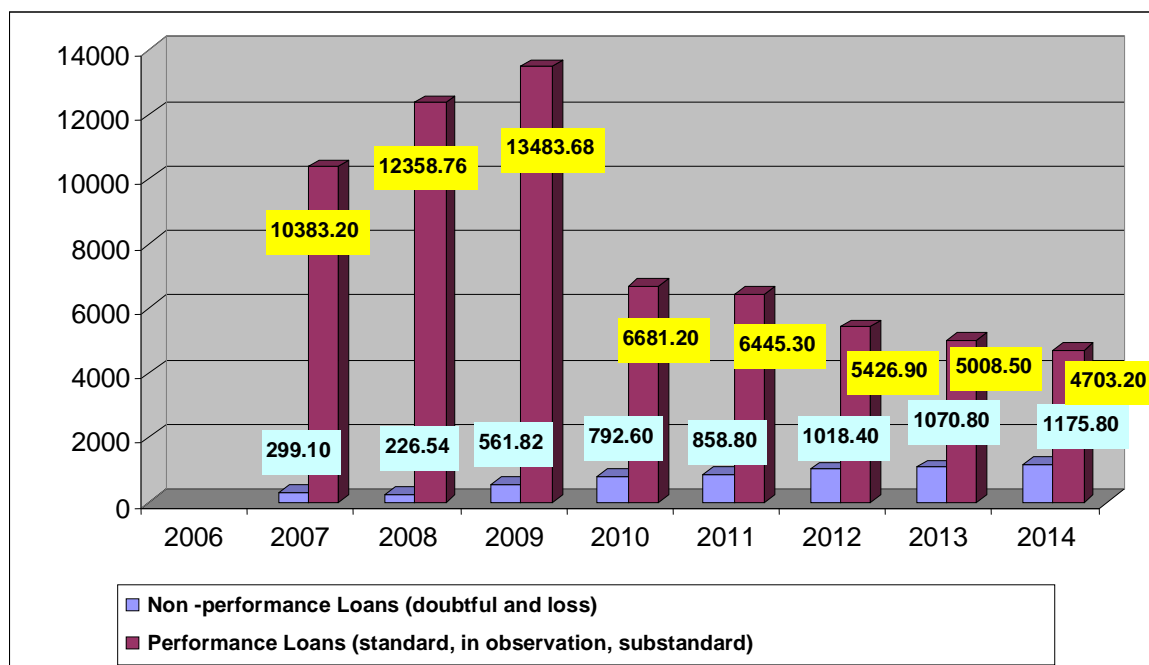
Year	Corporate Loans Total	Non - performance Loans (doubtful and loss)	Performance Loans (standard, in observation, substandard)	Non-performance Loans in Total Corporate Loans (%)	Performance Loans in Total Corporate Loans (%)	Corporate Loans - Total (%)
2006	10.682,30	299,10	10.383,20	2,80%	97,20%	100,00%
2007	12.585,30	226,54	12.358,76	1,80%	98,20%	100,00%
2008	14.045,50	561,82	13.483,68	4,00%	96,00%	100,00%
2009	7.549,30	792,60	6.681,20	10,50%	89,50%	100,00%
2010	6.982,40	858,80	6.445,30	12,30%	87,70%	100,00%
2011	6.445,30	1018,40	5.426,90	15,80%	84,20%	100,00%
2012	6.079,30	1070,80	5008,50	17,60%	82,40%	100,00%
2013	5.879,0	1.175,80	4.703,20	20,00%	80,00%	100,00%
2014	6.015,7	721,88	5.293,82	12,00%	88,00%	100,00%

Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no. 8.

The Evolution of the Weight of the Non-Performance Corporate Loans in the Total Corporate Loans, within 2006 - 2014 (mil .RON)





Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

3. Analysis of the loan portfolio quality

In the ending of the case study made at Gamma Bank, we considered that it was necessary to extend the analysis upon the loan portfolio quality also upon the bank's placements into the retail sector, for thus being able to better analyze and understand whether the trend registered for the corporate loans case was also maintained for the case of retail loans or not. From this perspective, we evidenced within the following table and graphic, the evolution of the loans granted to the retail clients along the same period of time (2006-2014), and also the weight the non-performance loans that were registered, as an image of the problems some clients face in paying back their loans and related interests at tenor.

Table no. 7.

The Evolution of the Retail Loans (Performance/Non-performance) at Gamma Bank, within 2006 – 2014 (mil. RON)

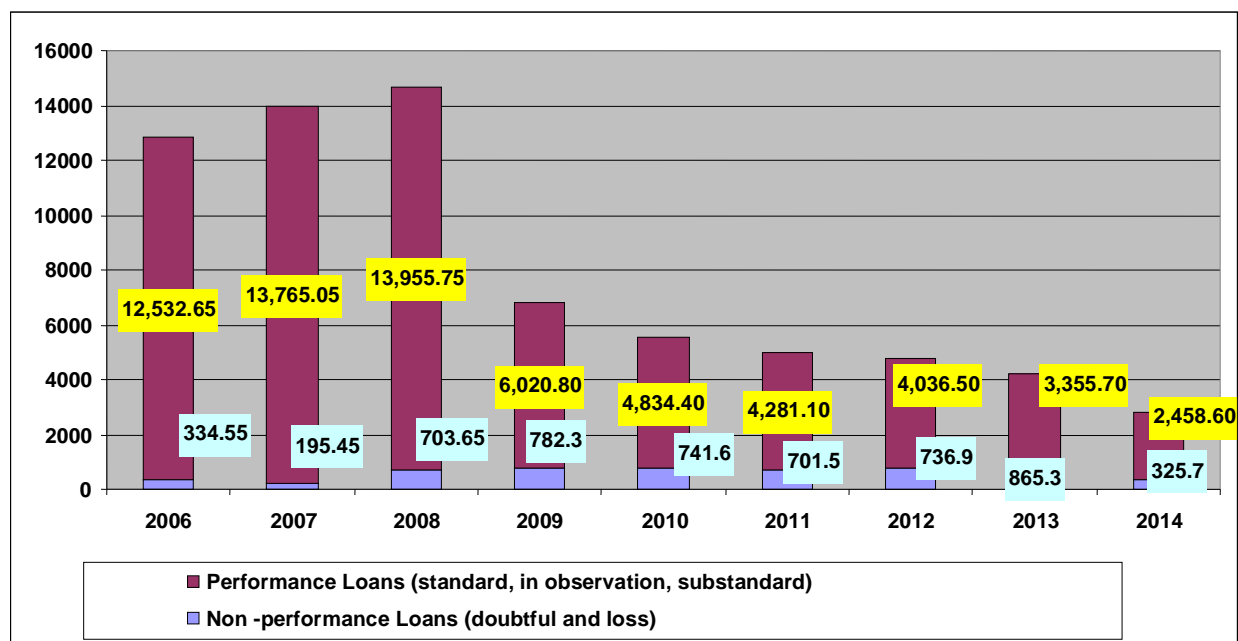
Year	Retail Loans - Total	Non-performance Loans (doubtful and loss)	Performance Loans (standard, in observation, substandard)	Non-performance Loans in Total Retail Loans (%)	Performance Loans in Total Retail Loans (%)	Retail Loans - Total (%)
2006	12,867.20	334.55	12,532.65	2.60%	97.40%	100.00%
2007	13,960.50	195.45	13,765.05	1.40%	98.60%	100.00%

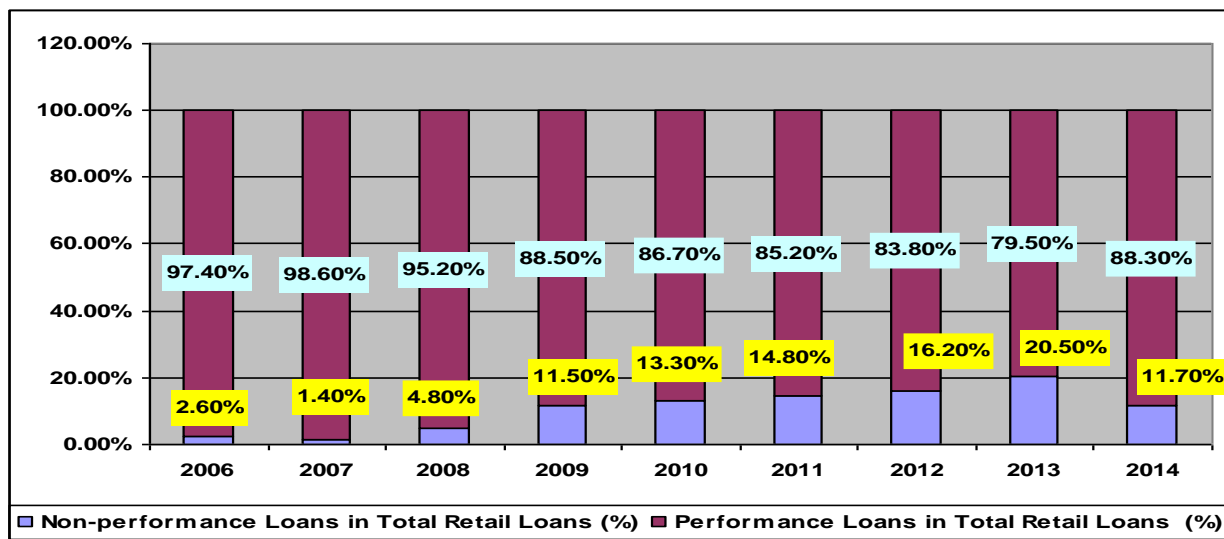
2008	14,659.40	703.65	13,955.75	4.80%	95.20%	100.00%
2009	6,803.10	782.30	6,020.80	11.50%	88.50%	100.00%
2010	5,576.00	741.60	4,834.40	13.30%	86.70%	100.00%
2011	4,982.60	701.50	4,281.10	14.80%	85.20%	100.00%
2012	4,548.80	736.90	4,036.50	16.20%	83.80%	100.00%
2013	4,221.00	865.30	3,355.70	20,5%	79,50%	100,00%
2014	2,784.30	325.70	2,458.60	11,7%	88,30%	100,00%

Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

Graphic no.9.

The Evolution of the Weight of the Non-Performance Retail Loans in the Total Retail Loans, within 2006 - 2014 (mil. RON and percentage)





Source: The information presented in this graphic were elaborated based on the analyses made upon the information sources at the bank where the research was developed (norms, procedures, reports, balance sheets, financial statements, etc). From confidentiality reasons the figures were modified, but the author maintained the trend of the analyzed phenomenon.

From the above graphics, we can see that the trend the non-performance loans followed was approximately the same for the retail clients with the trend followed in the corporate case.

After an initial improvement of the retail loan portfolio quality, that evolved from a level of 2,6% non-performance loans in the total loans granted to the retail sector in 2006, to a level of 1,4% in 2007 (representing an improvement with 1,2 p.p. that, for the total amount of non-performance loans meant a reduction with 139,1 thousand RON), there followed (as for the corporate loans case) a significant increase of the doubtful or loss loans during 2008 and also following the crisis debut, within the period 2009-2013. In 2009 the increase was very high, of 6,77 p.p., following with annual steps of 1,8 p.p. in 2010, 1,5 p.p. in 2011, 1,4 p.p. in 2012, compared with the previous years.

There are pertinent opinions according to which the loans for consumption should be granted on periods of maximum 5-7 years, although in their run for market share, some banks adventured to grant such loans even for 20 years. The banks that granted these loans on very long terms had the most non-performance loans. In our opinion, implementing a lending strictness is an act of normality, consequently, in the current NBR Regulation, the loans for consumption cannot be granted for a longer period of 5 years.

About the general causes that generated this phenomenon we explained when we analyzed the evolution of the non-performance loans for the corporate loans, but, in this moment, we consider it is necessary to add one more argument to the present analysis. The reason which is overlapping the already described causes, together with these leading to bigger and bigger delays in refunding the loan installments and the corresponding interests to the banks in the case on individuals, is the occurrence of the payment incapacity and even the personal insolvency phenomenon. Or, as there resulted from the performed analyses within Gamma Bank, if in the case of some companies already insolvent, the degree of due loans recovery is not even 10%, a level of provisioning of 90% being necessary in the respect of the exposure towards these companies for thus being able to hope for a reasonable recovery, the case is even more serious in the case of individuals. When personal insolvency is declared, it is obvious that the bank will not

recover anything; this is why a prudent/ cautious risk management requires a total provisioning for these exposures. And this is a sufficient reason for understanding why Gamma Bank adopted, in 2014, an aggressive strategy for selling these retail loan portfolios to specialized companies in insolvency management and receivables recovery.

The main cause of payment incapacity among the individuals is losing the income sources by one or more family members, for an increasing number of families, as a result of a substantial reduction of salaries or even due to unemployment. The economic crisis affected Romania harder and harder, starting with September - October 2008 and ending with 1st and 2nd trimester of 2009, when the economic recession led to many companies closing, mainly in the private sector and particularly among the small and medium enterprises. This concerning phenomenon consequently led to a very high increase of the unemployment rate, that reached 8-9% during 2009. The immediate effect of this scourge was the strong increase of the debts towards the banks, particularly when it came to consumption loans, without collaterals. In the case of Gamma Bank, these increased with 508,2 million RON in 2008 compared with the previous year, namely with 3,4 p.p. (from 1,4% from the total retail loans in 2007 to 4,8, in 2008). All along 2009, this negative phenomenon fed the lack of mutual trust between the clients and the banks, the clients dramatically reducing their demand for loans (due to their concerns that they might become jobless and thus lose the income sources that allow them to pay back their loans) while the banks became more and more selective with the few remaining clients asking for loans.

The weight of the non-performance loans in the total granted loans represents a particularly important indicator for any bank's management, as it offers a relevant image upon the quality of the credit risk management system, as a resultant of more accumulated factors, from which we can mention: the quality of the credit files analysis, the quality of the credit administration process after granting and, not last, the quality of the client-bank relation.

What we acknowledged from the case study we documented within Gamma Bank is that, the credit risk certainly represents one of the most dangerous risks that threaten the banks and also that, the force of the risk that may severely affect one bank's financial situation depends on more factors. Among the endogenous factors, we can mention: the quality of the personnel that perform the analysis of the loan files and of the specialists that make the decision of granting or rejecting them, the quality of the internal norms and procedures in the lending field and also of the credit risk management, the viability of the lending policy, etc.

But, beyond all these internal requirements that we assume a bank would succeed in fulfilling, we would like to underline that, always in the lending activity, unexpected disturbing factors may occur, strongly or even decisively influencing the future of a bank. Here, we do not particularly refer to exogenous factors that may affect some banks, such as the operational risk manifested as losses due to robbery, fraud, IT systems breakdown or phishing. These events, even if cannot be predicted, can be foreseen, evaluated and correspondingly budgeted, by using measures for covering the effects by internal management or assurance.

Another finding of this study is, that the general economic environment dramatically influences the future of the economic agents and also of their employees, of their families and consequently the effects are perceived due the cascading phenomenon, that eventually reaches to the lending banks. When the effects upon the economic environment are unfavorable, these symptoms are felt by everybody and the dimension of their consequences is very difficult to be estimated and, most importantly, to be avoided. In these circumstances, the possibility of defense against a crisis or any other economic instability is smaller and smaller, stated researchers of

globalization (Zaharia, 2004). A major role should be played by the international organizations as demonstrated by the international diplomacy specialists (Ilie, 2014)

The scope of this case study is even to analyze, from as many angles as possible (multivalent risk management), how the risk management in an universal bank (re)acts to the economic consequences generated by the financial crisis.

Conclusions and Outlook

A lot of question related to the errors done by many banks, in their boom period, stand still. In the years before the crisis, as also shown in our graphics, the credit expansion contributed to achieving so-called high economic growth rates, in the same time generating vulnerabilities whose effects can already be perceived. Three quarters from the total amount of the non-performance loans were granted in 2007 and 2008, according to the NBR statistics. The loans in foreign currency – sold by bankers while matching relaxed granting conditions within the boom period, when they received cheap financing from the mother-banks abroad – have the highest non-performance rate.

In the same time, the high non-performance in the SME sector was generated by the wave of insolvencies registered in the economy, in the last years. For the insolvent companies, the medium recovery rate is of 6-7%. If a data base containing the administrators and the shareholders who brought the companies in insolvency could be generated, the number of insolvencies will decrease. One out of seven companies gets insolvent and only 2% get out of this procedure, the rest are the sure victims of bankruptcy. Like other recent studies using European SME data (Carbó-Valverde et al, 2012), there were found significant evidence of a general credit crunch in the SME sector during the crisis.

If, during the crisis years, when the economic increase was missing, the banking assets increased, in 2013, 2014 and this year – when the economy started to revive – the assets started to decrease. The total assets administrated by the banks amounted 351,4 billion RON (approximately 80 billion Euro) by the end of September 2014, decreasing with 108,1 billion RON compared with the end of 2013, according the NBR data. The 2013 year was the first year during the crisis period in which the banking assets broke down, while the lending activity fell down even before, in 2009-2010.

Regardless what the bankers say, the performed analyses but also the empirical interpretation of the graphics in this paper, prove that we cannot speak about a serious restart of the lending activity before cleaning the balance sheets, this being the reason why, nowadays, the Central Bank supports the activity of a rapid cleaning. Comparing this negative results with The Great Depression of the 1930s (Bernanke, 1983), explained the unusual length and depth of the current crisis. For now, the banks keep on affirming that there is no sustainable loan request from the companies' side. The foreign shareholders of the local banks brought additional capital into the system in the past few years, for thus covering the generated losses by the expenses made on making provisions for the non-performance loans but, in the last period of time, the capital infusions slowed down.

The continuous lending decrease registered in the past few years as well as the constant increase of the deposits made that, in present, the clients' savings to totally cover the loan portfolios, while in the economic boom period the financing lines granted by the mother-banks represented a real support for the business of the local branches. The big problem is that, the money saved with efforts in Romania, at such a low income level, finances the non-performance of some banks, non-performance that is not even well provisioned. The banks owned by

foreigners, that control 80% of the assets and that gained a place on the market starting from the premises that the banking system and the economy cannot develop without money from abroad, practically got nowadays to roll almost only local funds, after they lost a third from the financing lines granted by the mother-banks in five years' time, and after the loan portfolios were equalized by the deposits made by the clients.

In this context, a major risk for Romania's finances could be represented by the situation in which, the foreign banks would reimburse the financing sources they attracted from the mother-banks abroad even before admitting the corresponding non-performance level, when the liquidity and solvability were still looking good due to the fact that the necessity of the risk provisions was not recognized by that time. The consequence would be the reimbursement of several billion Euros and, in the aftermath, changing the liabilities structure in the balance sheet by attracting local financing resources in return and evidencing the real need of a serious provisioning, for a portfolio acknowledged as damaged, all of a sudden.

The first consequence is the erosion of the reliability indicators and of the banking prudence. The solvability decreases and there comes the need for additional capital for meeting Basel III requirements, but, in an environment with such a risk level, we get to wonder, what kind of shareholder could be still attracted to (re)invest? For this reason, we consider the Central Bank's measures of rapidly cleaning the banking portfolios and correctly evidencing the real quality of the exposures, as a welcomed main priority to fix, until the crisis calms down.

The phenomenon that we have previously described in a slight caustic manner is as real as possible and same risky, particularly as we have to consider that the weight of the net banking assets in the GDP got under 60% for the first time since 2007, marking a step back in time for the performance of the banking system in Romania. Adjusting the banks' balance sheets pushed the banking sector to the status before Romania's adhesion to the European, when the difference towards the developed markets was extremely big. In the years of crisis, the weight of the banking assets in the GDP decreased with almost 10 p.p., from almost 70%, while considering that, the loss in the GDP provoked by the recession in 2009-2010 followed to be recovered only in 2016.

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