

DOI: 10.7251/EMC16018J

Datum prijema rada: 1. oktobar 2015.

Datum prihvatanja rada: 1. jun 2016.

UDK: 336.77/.78:330.34(497.7)

Časopis za ekonomiju i tržišne komunikacije

Godina VI • broj I

str. 18-32

PREGLEDNI NAUČNI RAD

# THE IMPORTANCE OF THE RETAIL CREDIT PORTFOLIO FOR ECONOMIC GROWTH OF MACEDONIA

Evica Delova Jolevska | University Amerikan College Skopje, jolevski2001@yahoo.com  
Andovski Ilija | NBRM, iandovski@yahoo.com

**Abstract:** *The aim of this paper is to evaluate the influence of trends in retail loan portfolio on the consumption and economic growth of Macedonia. The consumption of population is one of the components of GDP, and one of its drivers is the retail credit activity. On macroeconomic level, there is wide consensus among researchers that credit activity and quality of portfolio is driven by GDP movements, unemployment ratio and indebtedness of population. Also, vice versa the activities in retail segment influence on consumption and indirectly on GDP. So these two linkages enhance between and can result in negative spiral. Negative movements in GDP influence on the quality of portfolio and higher NPL ratio. And higher NPL ratio results in further decrease in credit activity and has additional negative impact on GDP. Because of that is important to determine the causes of credit activity in this segment. The retail portfolio in the last 4 years in Macedonian banking sector is growing continuously, opposite of other Balkan countries. That is why is important to analyze the past growth of retail portfolio and to determine possible weaknesses because of its future impact on GDP. One of the most important drivers that determine the future credit growth is the quality of retail credit portfolio in the moment. Another important aspect for the portfolio trend will be the interest rate environment. There is clear empirical evidence that low interest environment triggers greater credit activity and vice versa. Another important aspect of the credit growth, is the maturity of the retail credit portfolio as a way to decrease the monthly installments and to accumulate greater risk on longer term. Special focus of this paper will be the trend in retail loan portfolio after 2008, when the banking system of Macedonia felt the impact from financial crisis. The activities that were taken by the banking sector then can be some guidelines for future crisis. The retail credit growth will be analyzed by products in order better to understand bank strategies and reasons that contributed for such a growth. Also, the analyze of NPL ratio by product will give answer whether the quality of portfolio by products was one of the key drivers for credit activity.*

**Keywords:** Retail portfolio, Macedonia, NPL, banking systems, growth rate

**JEL classification:** G21, G01

## INTRODUCTION

Stabile and sound financial system is prerequisite for economic growth for various reasons. There are a lot of studies that confirm the development and efficiency of the financial system to economic growth and vice versa (Ross Levine and Sara Zervos, 1998). Having in mind that consumption is one of the elements that constitute GDP, every fluctuation in consumption affects the GDP performance. Rising levels of consumption expenditure by households generally stimulate the economy, whereas slower growth or declines in aggregate consumption expenditure by households have a dampening effect on economic growth. Off course the credit activity toward retail segment is one key parameter that impacts the consumption expenditure. The other part of the spiral between the GDP and retail credit activity shows that declining in GDP level generally is indicator on bank managers to tighten the credit approval standards which through consumption has further negative influence on GDP. The level of credit activity is important for every policy maker because deviations of credit from its equilibrium often lead to a widening of macroeconomic imbalances, e.g. rising inflation, asset bubbles, booms and bursts or instability of the financial system (ECB, 2012). Moreover, banks are also interested in the relationship between their credit policies and the state of the economy, since macroeconomic instability caused by excessive credit supply usually hits them back by deteriorating their assets. In order to determine the equilibrium, we must first determine the factors that drive the retail credit activity. ECB study shows that most important factors are (i) the lending-deposit interest rate spread, (ii) individual income uncertainty, (iii) individual productivity persistence, and (iv) the generosity of the pension system. The BIS study shows that economic activity, interest rates and property prices may affect credit via both credit demand and supply channels (BIS, 2001). Economic conditions and prospects determine consumption and investment demand, and thus the demand for credit. On the other hand, changes in economic activity are reflected in firms' cash flow position and households' income. Cash flow and income determine the ability of firms and households to repay their debts, so that changes in economic activity may also affect the willingness of banks to extend credit. The state of economic activity may therefore also determine the supply of credit. Financing costs, represented by market interest rates, have a negative effect on credit demand. Higher interest rates and more expensive loans lead to reduced demand. Also if the monetary policy is tightening then the increased interest rates can lead to decreased credit supply. Property prices may also affect both credit demand and credit supply. Properties comprise substantial part of household assets and have a significant effect on the borrowing capacity of the private sector. An increase in property prices increases the value of collateralisable assets and

thus the creditworthiness of firms and households. As a result, banks are more willing to extend loans, so that the supply of credit to the private sector increases.

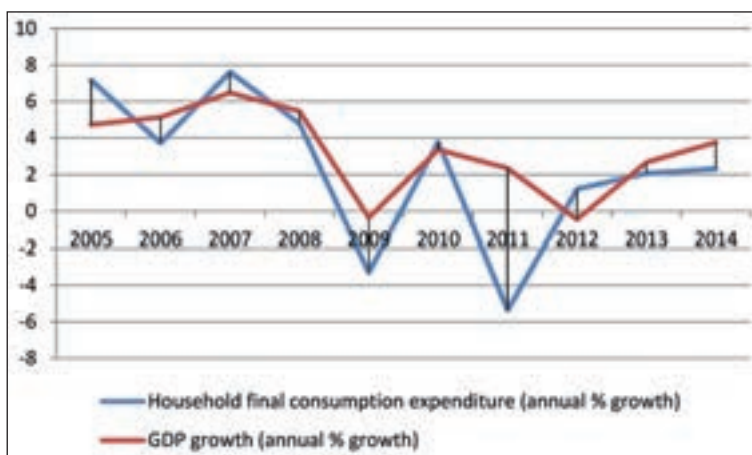
The last fifteen years have witnessed many significant developments in the banking sector in Central Europe and South Eastern Europe (CESEE). This also influenced the banking systems of Balkan countries. Large number of international banks entered in Balkan countries banking system and significantly changed banking practices and contributed to high credit growth in corporate and retail loan portfolio. After 2000, the retail credit portfolio had two digits rate of growth, and there was trend of debiting in circumstances where the risk management of this portfolio was not on the highest level and not all risk was anticipated. Fast credit growth itself is a factor of higher risk and future NPL loans (EIB, 2014). This was the case in Macedonian banking system also. After the fast credit growth, in 2009 the banking sector in Macedonia felt the effects from the financial crisis. This led to deterioration in retail loan portfolio quality in two ways: worsening of the credit ability of households and very low or negative growth, which in combination with the materialization of the past portfolio deteriorated all indicators for quality. After 2012 in the banking system of Macedonia there is trend of intensive growth in the retail segment. This paper will focus on the quality of this growth. In order to achieve this goal it will be analyzed the level of growth by product and also the NPL ratio by product.

## **INFLUENCE ON HOUSEHOLD CONSUMPTION EXPENDITURE ON GDP**

Household final consumption expenditure is typically the largest component of final uses of GDP, representing in general around 60% of GDP. It is therefore an essential variable for economic analysis of demand (OECD, 2009). Consumption expenditures take center stage in the short run macroeconomic analysis of business cycles. Business cycles are the ups and downs of economic activity. The economy expands for several years, then it contracts for a year or two, then it expands again. The total amount of expenditures undertaken by the household sector on gross domestic product can have a profound impact on the business-cycle activity. Should the household sector, in total, decide to spend more or less on goods used for consumption, then the macroeconomic can experience business-cycle expansions and contractions. Still, high levels of consumer spending are a consequence of economic growth, not a cause of it (Casey B. Mulligan, 2014). Economists have been investigating the determinants of economic growth for decades, and conclude that investment is crucial for an economy to grow. High rates of investment in the present make possible future consumer

spending. So the consumption expenditure is a result of economic growth and at the same time fosters the economic growth. In long run there is no economy whose growth can be driven by consumption expenditure.

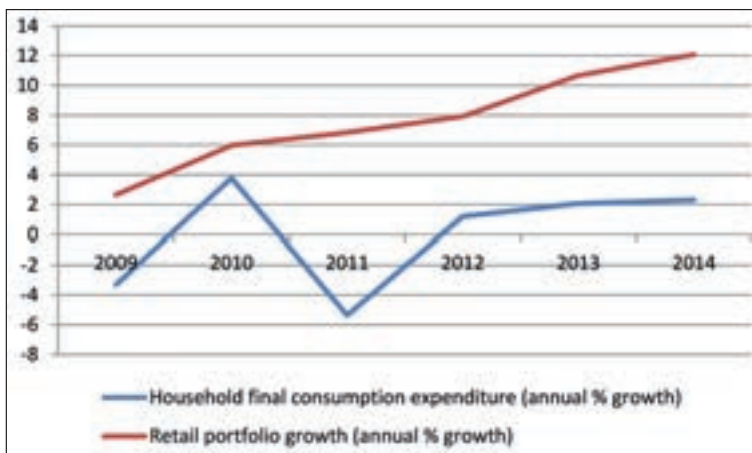
**Figure 1.** Household expenditure and GDP growth in Macedonia



**Source:** World Bank database

As can be seen from Figure 1, the theoretical concepts and interrelations between growth and consumption can be easily confirmed on Macedonian case. Although with more fluctuations, consumer expenditures follow GDP growth. The differences that derive after 2011 can be explained by the drivers of the growth in Macedonia. In the last 4 years the main drivers are the construction industry which is financed mainly by public expenditure and the performance of FDI.

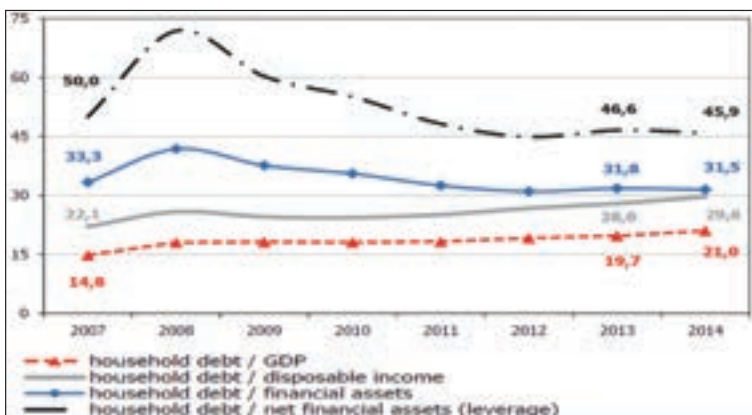
Regarding the linkage between household consumption expenditure and retail exposure, the relationship is not so linear. As can be seen in figure two, the outlier is 2011 when there is growth in retail portfolio and there is fall in household expenditure. Of course a lot of other factors influence on consumption expenditure and the most important is the disposable income. This is the main pillar of Keynesian consumption function. Colander (David Colander, 2001), Jhinhjan (M.Jhinhjan, 2002) and Iyoha (Milton Iyoha, 2001) identified interest rate, relative prices, capital gains, wealth, liquid assets, attitude and expectation and availability of consumer credit among others as determinants of consumption expenditure.

**Figure 2.** Household expenditure and retail portfolio growth in Macedonia 2000-2014

**Source:** World Bank database and Report on risks in the banking system of the Republic of Macedonia for quarters, Central Bank of R. Macedonia

## DEBT REPAYMENT ABILITY OF HOUSEHOLD SECTOR

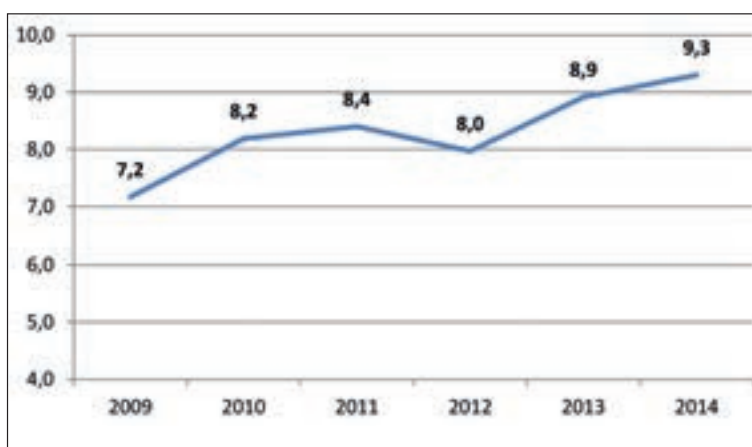
Macedonian banking sector after 2011 is more focused on credit activity in retail segment than corporate segment. In order to fulfill the object of this paper and analyze the retail portfolio growth we must first determine the indebtedness of household sector and its debt repayment ability. The indebtedness will be analyzed through four indicators: household debt/GDP, household debt/disposable income, household debt / financial assets and household debt / net financial assets.

**Figure 3.** Household debt in Macedonia

**Source:** Financial stability report for the Republic of Macedonia in 2014, Central Bank of R. Macedonia

It's evident that all indicators for house have upward trend which is due to the intensive credit activity in this segment which is a lot more dynamic then GDP growth (Figure3). The low level of household debt is particularly evident in the comparative analysis of the share of debt in GDP in Europe countries (NBRM, 2015). Another important indicator that must be taken in to account is the indicator of ability to repay interest and principal together. As can be seen in Figure 4, the ability of households to repay interest and principal is worsening.

**Figure 4.** Indicator of ability of households to repay interest and principal



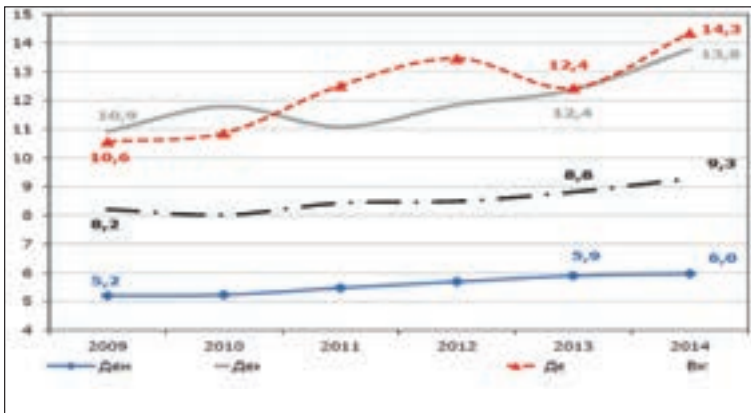
**Source:** Financial stability report for the Republic of Macedonia in 2014, Central Bank of R. Macedonia

Still the share of principal and interest in disposable income is at a low level. What is important to mention, although this indicator has low value, is that it doesn't reflect the indebtedness of low income households but on total households. In the absence of data for indebtedness and credit exposure by level of income, although this indicator is low there is a risk that greater part of the debt to derive from low income household. This means that their ability to repay interest and principal is much worse.

Another important aspect from risk perspective is the maturity structure of the loans. Theoretically speaking, longer maturity bears higher risk because of greater period of uncertainty from the future. As can be seen from Figure 5 there is upward trend in the maturity of retail exposure. This trend makes banks more vulnerable in changes in wages, living expenses and disposable income. This partially is due on growth in mortgage loan portfolio. But what concerns now and can result in materialization of credit risk is the growth maturity of consumer loans. In order to compete on the market and to seize larger share, most of the banks made modifications on their consumer loans by increasing the maximum maturity of the product. This resulted in lower

monthly annuity and qualified greater part of low income households for larger loans on longer period. This part of the consumer loan portfolio, where banks took risk on longer period and the monthly instalment is very high compared to monthly salary, is especially vulnerable of unemployment rate and changes in wages and living expenses. Also, the data for maturity, especially for consumer loans is not accurate. Having in mind that only 8% of new exposure toward household sector in 2014 is exposure to new individuals, the conclusion is that existing borrowers permanently refinance their debt (NBRM, 2015). This ofcourse is due on more favorable interest rates but also through this operation there is constant increase in maturity in order to fulfill the condition monthly instalment/salary for greater credit exposure. This requires careful monitoring of these clients because their ability to repay the loans is worsening. Also as their capacity for new loans is tighten, we can expect lower growth rate on retail loans in the future.

**Figure 5.** Residual maturity of retail loan portfolio by currency in banking sector in Macedonia



**Source:** Financial stability report for the Republic of Macedonia in 2014, Central Bank of R. Macedonia

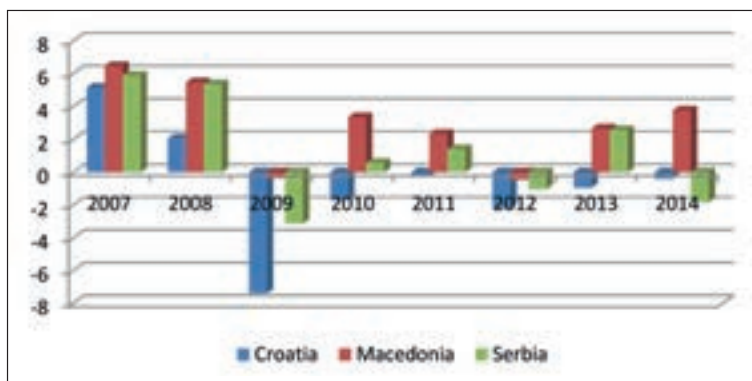
## DETERMINANTS OF QUALITY OF RETAIL PORTFOLIO

Among the academic community there is almost consensus about the most important variables that affect the quality of retail portfolio. Most of the researches have empirically confirmed the relationship between the GDP movement and quality of retail portfolio (Rajiv Ranjan and Sarat Chandra Dhal, 2003). Also, the unemployment rate (Nir Klein, 2013) is another factor that influence on NPL loans. The influence on these factors can be easily confirmed through the influence on financial crises. If we compare three sample countries: Macedonia, Croatia and Serbia and the movements in GDP and unemployment rate and the quality of retail portfolio it is evident



that these factors besides the quality of portfolio can explain the growth of the retail portfolio, opposite of the deleveraging trend in other sample countries (Figure 6).

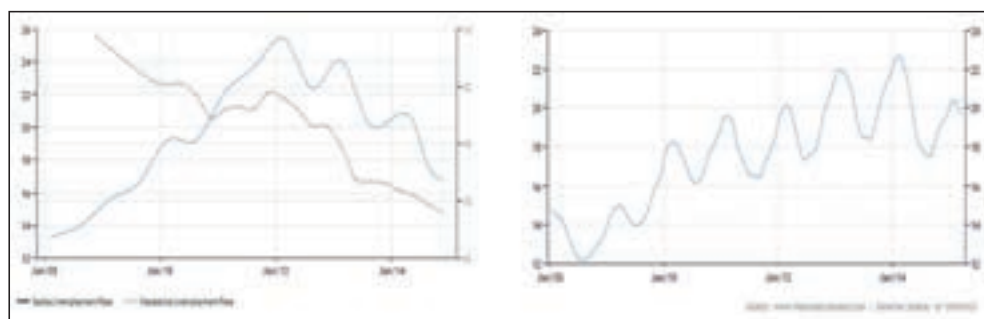
**Figure 6.** Annual GDP growth in sample countries



**Source:** World Bank database

The second important macroeconomic indicator that can influence the quality of the portfolio is the unemployment rate. The trend of unemployment rate is different in all sample countries (Figure 7).

**Figure 7.** Unemployment rate in sample countries



**Source:** www.tradingeconomics.com

The trend is upward in Serbia and Croatia and the unemployment rate has a trend of decreasing in Macedonia (Figure 7). Because only employed persons are eligible for loan granting it is clear why the unemployment rate has influence on the quality of portfolio. The effects on the two main macroeconomical factors are evident. The quality of retail portfolio analyzed by product shows better performance of Macedonian banking system in all products which will be analyzed at the end of this paper. Also macroeconomic trends have great influence in creating

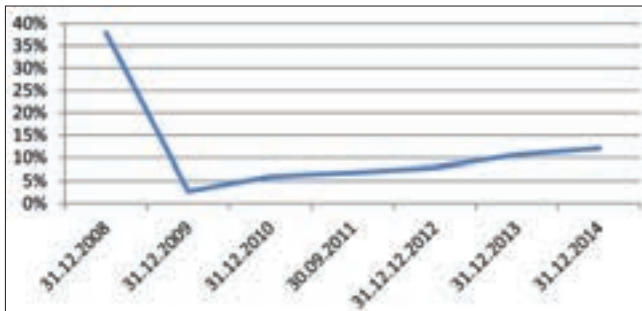


bank strategies for the future so it is not surprising why there is constant growth in retail portfolio in Macedonian banking system and why there is deleveraging in the retail portfolio another sample countries.

## RETAIL PORTFOLIO DEVELOPMENTS IN MACEDONIAN BANKING SYSTEM AFTER THE FINANCIAL CRISIS

What is common for the banking system in Balkan countries after 2000 is the ownership transition mostly towards western foreign banks and also relatively low level of indebtedness of population. After the transition period like in all Balkan countries, the retail portfolio in Macedonian banking system marked two digits growth rate in the period before 2008. The first effects from the financial crisis were felt at the end of 2008 when still there was trend of credit boom towards retail segment. In 2009 the retail portfolio growth was decreased to 3% after 38% growth in 2008. This was year for stabilization of the banking system after rapid growth (Figure 8). Still the banking system recovered after 2 years of low growth toward the retail segment and after 2011, and especially in 2013 and 2014, the growth in non financial loans was driven mainly from retail loans.

**Figure 8.** Rates of change of retail loan portfolio in Macedonian banking system

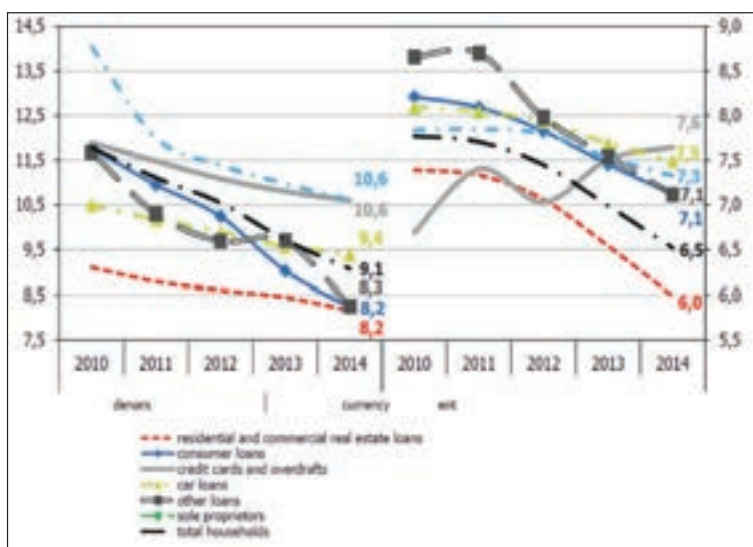


**Source:** Report on risks in the banking system of the Republic of Macedonia for quarters, Central Bank of R. Macedonia

The main reasons for shifting of banks strategies toward credit activities in retail segment may be required in relatively low indebtedness of population which was mentioned before, the good quality of retail portfolio which was with much better NPL rate than corporate portfolio and the low interest rate environment. The analysis of NPL ratio trend by product will be done in different section. Regarding the influence on interest rate on credit activity, many researches have confirmed that low interest rates encourage the credit activity and vice versa (Alessandro Calza, 2001). The trend in interest rates at retail loans is downward in

the last four years (Figure 9). This is due on the easing on monetary policy but also on good quality of this segment of the portfolio and the excess of liquidity in banking system which force the banks in order to increase their market share in retail segment to decrease interest rates. Off course the growth in environment with low interest rates creates risk interest induced credit risk when the interest rates will increase. This risk is especially present have in mind that the interest rates are fixed for maximum of five years and after that period can be changed by decision taken by the bank.

**Figure 9.** Average interest rate by product and currency for retail portfolio in Macedonia for the period 2010-2014



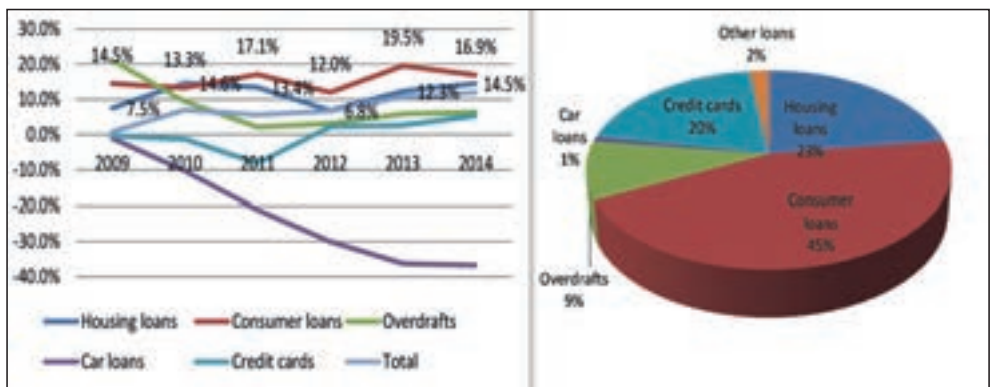
**Source:** Financial stability report for the Republic of Macedonia in 2014, Central Bank of R. Macedonia

## STRUCTURE OF RETAIL LOAN PORTFOLIO IN MACEDONIAN BANKING SYSTEM

In order to assess the quality of credit growth in retail segment one of the important aspects is the structure of the portfolio and its features. Macedonian retail portfolio is dominated by consumer loans which are dominant with 44% share, and the second largest portfolio is the housing loans with 22% share (Figure 10). This is completely different structure from the structure of retail portfolio in EU countries and Balkan countries were dominant portfolio with more than 40% share are the housing loans. Also significant difference from other countries is the share of credit cards with 21%. The growth that was achieved in the last 3 years was due on consumer and housing loans. There are different explanations about

the reasons for growth in these two portfolios. The growth in housing loans is due on promotional low interest rates from 3-5 years which were quite lower from the previous period and the decrease of prices of residential property. Also the good quality of this portfolio contributed for low premium for credit risk. Regarding the growth in consumer loan portfolio, there are different drivers. Low interest rate is common driver for growth in consumer loans also. But in the last two-three years, in order to increase their market share, banks eased the granting criteria measured through monthly instalment/salary ratio. Also, there is trend of continuously increasing the maturity of consumer loans and in the last 2 years the maturity is increased from 66 to 75 months average maturity. Another important fact is that 92% of the growth that is achieved in 2014 is due on existing clients and only 8% of the exposure is due on new clients (NBRM, 2015). The share of exposure toward new clients in total new exposure was low in 2013 also and was 9%. The long maturity and loans created in low interest rate environment, especially those toward low income segments, create a risk for further materialization of credit risk. There are two possible explanations for the growth in consumer loans. Either the low interest rates attracted clients that didn't like to raise consumer loans before or the low rates with easing of approval criteria regarding maturity period, made clients that were not suitable for granting loan before as clients that meet the approval criteria. Because there was not tremendous movement in employment rate we can conclude that new jobs aren't explanation for retail growth. This underpins the fact that above 90% of the growth is toward existing clients. Probably the answer is some mixture of the two possibilities but the second one creates risk especially because of the long maturity period.

**Figure 10.** Structure of retail loan portfolio by product on 12.2014 in Macedonian banking system and growth rates



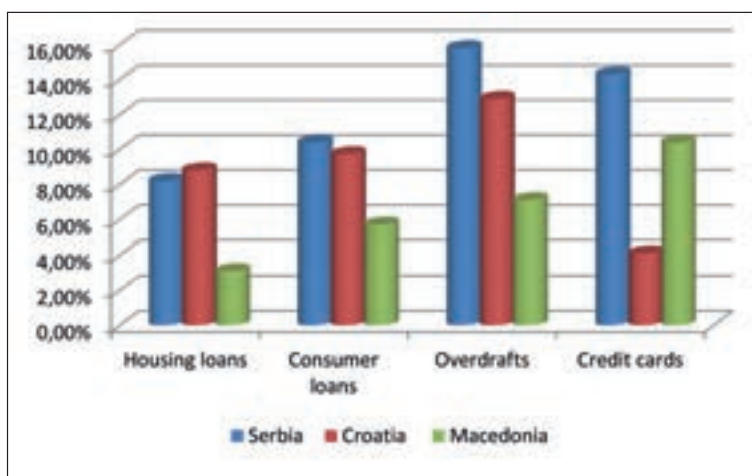
**Source:** Report on risks in the banking system of the Republic of Macedonia in 2014, Central Bank of R. Macedonia

## NPL RATIOS AT RETAIL PORTFOLIO IN MACEDONIAN BANKING SYSTEM

The NPL ratio is very important for making future decisions in banking industry. The linkage with growth is inversely proportional. Higher NPL level through higher impairment and also through increased premium for credit risk in the margin result in decreased credit activity. The lower credit activity further worsens the economic situation and creates new NPL loans. According to Moinescu and Codirlaşu (Bogdan Moinescu and Adrian Codirlaşu, 2013), large swings in credit flow (deleveraging or excessive financing) are associated with high levels of non-performing loans rate two years later, as the consequences of extreme values in both sides of the distribution of credit growth are similar in terms of risk level in the medium term. The feedback effects deepens recession through bank financing channel, as the credit elasticity dynamics to the change in non-performing loans ratio is slightly higher than one. Another thing that is important in NPL ratio analazy is the growth rate. If the growth rate is low, because of the natural rate of aging, the NPL ratio will be higher over time.

The comparative analazy of the quality of retail portfolio in Macedonia and two other sample countries shows much better quality of Macedonian retail portfolio (Figure 11).

**Figure 11.** NPL ratio by product in sample countries banking systems



**Source:** Reports on Central banks on sample countries

Housing portfolio in Macedonia with NPL ratio of 3% is the product with best quality. In the last two years this is the portfolio with second highest rates of

growth. The difference in NPL ratio at consumer loans is not as great as housing loans. Still, the NPL ratio for consumer loans in Macedonian banking system is 4.7 and 4.1 pp below the other two sample countries. The main reasons are: the high growth in exposure towards consumer loans in Macedonia which absorbs the natural rate of aging, the growth in maturity which contributes to lower monthly burden and maintaining the unemployment rate against the increase in the other two sample countries.

## CONCLUSION

Consumption is one of the elements that constitute GDP. Every fluctuation in consumption affects the GDP performance. Of course the credit activity toward retail segment is one key parameter that impacts the consumption expenditure. The other part of the spiral between the GDP and retail credit activity shows that declining in GDP level generally is indicator on bank managers to tighten the credit approval standards which through consumption has further negative influence on GDP. Household final consumption expenditure is typically the largest component of final uses of GDP, representing in general around 60% of GDP. Interrelations between growth and consumption can be easily confirmed on Macedonian case. Although with more fluctuations, consumer expenditures follow GDP growth. The differences that derive after 2011 can be explained by the drivers of the growth in Macedonia. Regarding the linkage between household consumption expenditure and retail exposure, the relationship is not so linear. This is due on other factors that influence consumption expenditure and the most important is the disposable income.

Regarding the debt repayment ability of household sector in Macedonia, all indicators show good repayment capacity. The low level of household debt is particularly evident in the comparative analysis of the share of debt in GDP in Europe countries. Another important indicator that must be taken in to account is the indicator of ability to repay interest and principal together which is at a low level. What is important to mention, although this indicator has low value, is that it doesn't reflect the indebtedness of low income households but on total households. In the absence of data for indebtedness and credit exposure by level of income, although this indicator is low there is a risk that greater part of the debt to derive from low income household. This means that their ability to repay interest and principal is much worse.

After the impact from financial crisis, Macedonian banking sector showed sighs

of recovery in 2011. The growth in non financial loans in 2013 and 2014 was driven mainly from retail loans. The main reasons for shifting of banks strategies toward credit activities in retail segment may be required in relatively low ineptness of population which was mentioned before, the good quality of retail portfolio which was with much better NPL rate than corporate portfolio and the low interest rate environment. Off course the growth in environment with low interest rates creates risk interest induced credit risk when the interest rates will increase. This risk is especially present having in mind that the interest rates are fixed for maximum of five years and after that period can be changed by decision taken by the bank.

Also, there is trend of continuously increasing the maturity of consumer loans and in the last 2 years the maturity is increased from 66 to 75 months average maturity. In order to compete on the market and to seize larger share, most of the banks made modifications on their consumer loans by increasing the maximum maturity of the product. This resulted in lower monthly annuity and qualified greater part of low income households for larger loans on longer period. This part of the consumer loan portfolio, where banks took risk on longer period and the monthly instalment is very high compared to monthly salary, is especially vulnerable of unemployment rate and changes in wages and living expenses. This requires careful monitoring of these clients because their ability to repay the loans is worsening. Also as their capacity for new loans is tighten, we can expect lower growth rate on retail loans in the future.

## REFERENCES

- BIS. (2001). *The determinants of private sector credit in industrialized countries: do property prices matter?*. Monetary and Economic Department, Basel.
- Calza, A. (2001). "Modelling the demand for loans to the private sector". *WORKING PAPER NO.5, ECB*.
- Casey, B.M. (2012). "Redistribution Recession: How Labor Market Distortions Contracted the Economy." *London, Oxford University Press; 1 edition*.
- Central Bank of Croatia. (2013). *Financial stability report for 2012*. (No.11, VII 2013). Zagreb: Publishing Department.
- Central Bank of Croatia. (2014). *Banks Bulletin for 2013*. (No.26, VIII 2014). Zagreb: Publishing Department.
- Central Bank of Croatia. (2014). *Financial stability report for 2013*. (No.13, VII 2014). Zagreb: Publishing Department.
- Central Bank of Croatia. (2014). *Financial stability report for 2014*. (No.14, II 2015).

- Zagreb:Publishing Department.
- Central Bank of Macedonia. (2015). *Report on risks in the banking system of the Republic of Macedonia in 2014*. Skopje.
- Central Bank of Macedonia.(2015). *Financial stability report for the Republic of Macedonia in 2014*.Skopje.
- Central Bank of Serbia. (2014). *Banking sector of Serbia, Fourth Quarter Report 2013*. Belgrade:Publishing Department.
- Central Bank of Serbia. (2015). *Banking sector of Serbia, Fourth Quarter Report 2014*. Belgrade:Publishing Department.
- Central Bank of Serbia.(2014). *Annual Financial Stability Report – 2013*.(ISSN 2217-6942). Belgrade:Publishing Department.
- Colander, D. (2001). “Macroeconomics”. *Mishawaka, McGraw – Hill publishers, 4th Edition*.
- ECB. (2012). Determinants of credit to households in a life-cycle model.Frankfurt am Main.
- ECB. (2013). *Non-performing loans - What matters in addition to the economic cycle?*(No.1515). Frankfurt am Main.
- EIB. (2014). CESEE Bank Lending Survey.Vienna.
- Iyoha, M. (2002). “An econometric model of the Nigerian economy”. *Ibadan: Mindex Publishers*.
- Jhingan, M.L. (2003). “Macroeconomics Theory”.*New Delhi, 12th enlarged revised edition*.
- Keynes, J.M. (1936). “The General Theory of Employment, Interest and Money”.*London Press*.
- Klein N. (2013). “Non-Performing Loans in CESEE: Determinants and Impact on Macroeconomic Performance”. *IMF Working Paper, European Department*.
- Levine, R., and Zervos, S. (1998). “Stock Markets, Banks, and Economic Growth”.*American Economic Review*.
- Moinescu, B., and Codirlaşu, A. (2013). “Lending, economic growth and nonperforming loans: empirical evidences from the new EU member states.”*Working Paper, Project “PN-II-ID-PCE-2011-3-1054 - Uncertainty, Complexity and Financial Stability*.
- Rajan, R., and Dahl, S.C. (2003). “Non-performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment.”*Occasional Papers, 24:3 Reserve Bank of India*.
- World Banka database (<http://data.worldbank.org/>)