# FINANCIAL COMPARISON OF WESTERN BALKAN AND BALTIC SEA STATES USING THE CAMEL APPROACH

# PORÓWNIANIE SYTUACJI W SEKTORACH BANKOWYCH W REGIONIE BAŁKANÓW ZACHODNICH I KRAJÓW BAŁTYCKICH PRZY WYKORZYSTANIU METODY CAMEL

#### Katarzyna Kubiszewska

Politechnika Gdańska

Wydział Zarządzania i Ekonomii, ul. G.Narutowicza 11/12, 80-233 Gdańsk

katarzyna.kubiszewska@zie.pg.gda.pl

#### Abstract

- The aim This article aims to compare the situation in the banking sectors of two regions, which due to their political and economic history have much in common. These are the Western Balkan States of Serbia, Croatia and Macedonia, and the Baltic Sea States of Lithuania, Estonia, and Latvia.
- Methods It presents three approaches to defining banking stability that can be found in the literature and carries out an initial analysis of the financial performance of the chosen banking sectors using the CAMEL approach.
- Outcomes: Although in 2010, the banking sectors from the Baltic Sea States were in a relatively worse shape than the Western Balkan States, it was proved that the banking sectors in countries where economic transformation is recognized as completed could achieve a faster recovery from the crisis in comparison to states which are still undergoing this process
- Conclusions The transformation process is essential for further building a market economy and the
  quicker is completed the quicker the banking sector can develop and the easier it is to recover from a
  possible crisis or external shocks.

Keywords: banking sector stability, CAMEL approach, Baltic Sea States, Western Balkan States

#### Abstrakt

- Cele Celem artykułu jest porównanie sytuacji sektorów bankowych w dwóch regionach, które ze względu na doświadczenia polityczne i gospodarcze, moją wiele wspólnych cech. Są to Serbia, Chorwacja i Macedonia z regionu Europy Bałkańskiej oraz Litwa, Łotwa i Estonia z regionu nadbałtyckiego.
- Metody Opierając się na literaturze, zaprezentowano trzykierunkowe podejście do definiowania stabilności sektora bankowego, jak również dzięki użyciu systemu CAMEL, przeprowadzono wstępną analizę sytuacji finansowej wybranych sektorów bankowych.
- Wyniki Mimo, iż w 2010 roku sektory bankowe z państw znad Morza Bałtyckiego były w relatywnie gorszym stanie niż państw Bałkanów Zachodnich, udowodniono, że sektor bankowy w krajach, w których transformacja gospodarcza została zakończona mógłby szybciej wyjść z kryzysu w porównaniu do państwami, które są jeszcze w trakcie tego procesu
- Wnioski Proces transformacji ma zasadnicze znaczenie dla dalszego budowania gospodarki rynkowej i im szybciej zostanie zakończony tym szybciej sektor bankowy może się rozwijać a jednocześnie tym łatwiej będzie odbudować pozycję po ewentualnym kryzysie lub wstrząsie zewnętrznym.

**Slowa kluczowe:** stabilność sektora bankowego, system CAMEL, kraje Bałtyckie, Bałkany Zachodnie **JEL Classification:** G10, G20, G21

# Introduction

The banking sector plays a crucial role in the economy. It supports the economy with funds that are essential for development and growth. Therefore, its stability is vital for the economy as a whole. There are various definitions of banking sector stability, which all explain the basic requirements which must be met in order for the banking sector to be stable. There is no universal definition of this

concept, but the existing explanations can be divided into three groups: stability in terms of the sector's influence on the macroeconomic situation, stability determined by the quality of the banking sector, and stability understood as the absence of a crisis.

The aim of this article is to compare the stability of two groups of banking sectors. The first group comes from the Western Balkan States and includes the countries of Macedonia, Croatia, and Serbia. The other group consists of the Baltic Sea States of Estonia, Latvia, and Lithuania. The tools used to analyse the financial situation in the selected countries are the CAMEL system and an adapted version of the Macroeconomic Stabilisation Pentagon. The preparation of the article was also based on the study of documents, and a critical analysis of the literature.

# 1. The issue of banking sector stability as discussed in literature

## 1.1. Banking stability affecting the macroeconomic situation

Banking stability can be defined as being influenced by the links between financial stability and the macroeconomic situation. The impact of the development of the banking sector on economic development is the subject of many studies. Many accept the thesis on the importance of finance for economic growth [King and Levine, 1993]. Others do not overestimate the influence of finance [Lucas, 1988]. However, it seems reasonable to claim that ensuring the stability of the financial system is a prerequisite for the implementation of all traditionally perceived purposes of the economy. The literature on the real effects of banking sectors focuses on the importance of their development for economic growth [Claessens and Laeven, 2003; Levine, 2005; Larrain, 2006; Raddatz, 2006]. The authors study various issues, e.g. turbulences in banking markets impact negatively economic growth through reductions in lending [Kroszner et al., 2007; Dell'Ariccia et al., 2008] and changes in the type of investments [Fernández et al. 2013]. However, banking instability transmitted from other jurisdictions present a considerable risk to the domestic economy [Kalemli-Ozcan et al., 2013], particularly as problems in banking markets are often noticeable to precede even more costly currency and debt crises [Reinhart and Rogoff, 2009; Laeven and Valencia, 2013].

Numerous studies draw attention to the close relationship between the stability of the banking system and monetary and economic policy. Djiwandono (1998) claims that both an efficient monetary policy, as well as a well-executed economic policy cannot be properly implemented without a healthy banking system. It is also argued that banking stability should be treated as a focus of monetary policy, as well as price. Guitian (1997) also believes that the systemic stability of the banking system is seen as a component of monetary and economic policy. At the same time, as a matter of policy, the banking system should strive for economic balance and stability. In the case of an unhealthy banking system, the monetary transmission will be weak and, therefore, the effectiveness of the monetary policy will not be achieved [Lingren et. al, 1996]. Banking instability may appear in an unsustainable monetary environment, as the activities of banks in an economy struggling with inflation are not efficient. It also means that a healthy banking system is essential for the effective transmission of signals between monetary policy and market participants. The effectiveness of central bank operations depends on how the banking system transfers funds to borrowers and lenders. The impact of the central bank on market and financial stability was also studied by Żywiecka (2013), and Gemzik-Salwach (2013) studied the stability of the banking sector in the context of the impact of a public finance crisis.

The dependence of other sectors of the economy on the banking system proves its importance for the whole economy. Stability and a healthy banking system, combined with a balance of public finances, may contribute to the stability of the whole economic system. Additionally, the influence of the insolvency of countries on the situation of banking sectors [Smaga, 2012] illustrates the important role played by the banking sector in terms of the economy.

#### 1.2. Banking stability determined by the quality of a banking sector



The stability of the banking system can also be determined by the quality of the sector. Since banks constitute the basis of the financial system, the security and well-being of a country depend largely on the stability of the banking system. Problems encountered by banks are expensive for the state, both from a financial as well as economic perspective, because the banking problems of a single country can spread very easily to other countries and their markets. Moreover, the stability of the banking system corresponds to the fulfilment of its basic functions, which ensures an efficient cash flow between the participants thanks to the proper valuation of assets, the stability of prices, and the security and efficiency of payment runs. A healthy banking system is one in which individual banks mediate effectively in financial transactions and at the same time meet the capital requirements set by the law. If the banking system is to remain stable and solvent in the long term, individual banks must be profitable, well managed and effective.

The literature abounds with discussions on the impact of banking sector stability. In some part of the literature, there is a view that too much competition may destabilise financial markets and credit institutions, although competition as such does not create instability. Systemic risk may appear irrespective of the character of competition and in different market structures [Vives, 2010; Staikouras and Wood, 2000; Fernández and Garza-Garcia, 2015]. It is also increasingly emphasised that it is not always the case that stronger competition causes only stability and efficiency to deteriorate, as an adequate deposit protection policy (e.g. the creation of a deposit protection fund) may have a stabilising effect on the relationship between competitiveness and stability. The existing literature discuss also the potential conditions which may affect positively banking stability, namely stronger regulatory capital [Acharya et al., 2010; Berger and Bouwman, 2013; Cole, 2012; Miles et al., 2013], the size of the banking sector and higher market concentration [Allen and Gale, 2000; Beck et al., 2006; Bretschger et al., 2012; Mirzaei et al., 2013], and reduced activity in the shadow banking sector [De Jonghe, 2010; Lepetit et al., 2008].

### 1.3. Banking stability understood as the absence of a crisis

Banking stability is most frequently defined in the literature as the absence of a financial crisis. However, even such a narrow definition raises a lot of doubts, due to the heterogeneity in the understanding of "financial crisis". On the one hand, the classical literature on financial crises virtually does not contain a definition, and on the other hand, the literature on empirical studies of crises indicates the existence of many different definitions, the synthesis of which must, therefore, be of a fairly general character.

There are two approaches to financial crises. In the narrower one, shaped by monetarists, a financial crisis is associated with a bank run. A bank run results in disturbances in the money supply, which leads to a decline in economic activity. Lower asset prices and a rising number of corporate bankruptcies are not - in themselves - a financial crisis. Such a state is referred to in the literature as a "financial pseudo-crisis". The wider approach to financial crises defines the concept as a situation in which there occurs at least one of the following factors: falling asset prices, bankruptcy of large financial and non-financial institutions, deflation or lower inflation, and foreign exchange market turmoil. Bordo and Eichengreen (1999) deem a financial crisis as episodes of rapid changes in the financial market, connected with the scarcity of liquidity and insolvency of market participants, as well as the possibility of government intervention designed to prevent a financial crisis. Allen and Wood (2006) defines a crisis as a situation in which the debtor is unable to repay their debts and cannot in any way obtain additional financing. The spread of a financial crisis from a single entity to many participants is reflected in the disturbance in the performance of the basic functions of the system. As a consequence, disturbances in the payment system and in the process of allocating financial resources and the sudden unpredictable changes in asset prices in the market occur. Davis (2002) considers a financial crisis as a process leading to macroeconomic depression, the mass



bankruptcy of financial institutions and the disfunctioning of the payment system. On the other hand, Crockett (1997) claims that the absence of banking stability should not be confused with a crisis. He defines the notion of banking stability as a state in which economic activity is not affected by changes in asset prices or by the problems of financial institutions in meeting their obligations. He notes that periods of rises or falls in asset prices, as well as the bankruptcy of individual institutions, are an inherent feature of economic life.

#### Research methodology

The CAMEL approach has been chosen to carry out a comparative analysis of the financial situation of banks in the selected groups of banking sectors. CAMEL is a system of ratios created in the US in the 1980s (Bauer et al., 1998). These ratios are related to the studied market's capital, quality of assets, management, profitability and liquidity (Cox and Cox, 2006). This approach has not been used in studies of the banking sectors of the Western Balkan States or the Baltic Sea States. Therefore, the purpose of this article is to fill this gap in the literature and use the CAMEL approach to compare two groups of sectors which had to face relatively similar problems on their path from a centrally planned economy to a market one. For the analysis which will be conducted in this paper, the following ratios have been chosen: Capital Adequacy Ratio, Non-performing Loans to Total Loans, Personnel Expenses to Non-interest Expenses, Return on Assets, and Liquid Assets to Total Assets. The analysis will cover a period of five years between 2010 and 2015, since this was a time of transformation within the banking sectors, and the countries were coping with a financial crisis which affected the local banking sectors through indirect channels.

To present the results of the analysis in a more transparent way, the concept of the Macroeconomic Stabilisation Pentagon, created by the Institute for Market, Consumption, and Business Cycles Research, has been used and adapted. As shown in Figure 1, each of the vertices of the pentagon, which display the main macroeconomic indicators in the Macroeconomic Stabilisation Pentagon, have been replaced with the ratios from the CAMEL system, each representing one crucial part of the analysis: Regulatory Capital to Risk-Weighted Assets (representing Capital), Non-performing Loans to Total Gross Loans (representing Assets), Personnel Expenses to Non-interest Expenses (representing Management), Return on Assets (representing Earnings) and Liquid Assets to Total Assets (representing Liquidity).

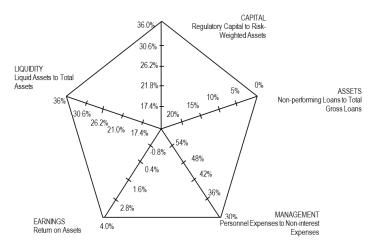


Figure 1 Pentagon of the CAMEL system

Reference: own preparation

#### 3. The characteristic of the studied states

The study refers to the comparison of countries from two regions of the South Europe. These are Macedonia, Serbia, and Croatia from the Western Balkan States and Estonia, Lithuania and Latvia from the Sea Baltic States. The countries can be characterized by common features. They had to fight for their identity and build their statehood from scratch. In the case of the Baltic Sea States, this process was relatively peaceful, but for many years in the 1990s, the Western Balkan countries remained in conflict.

Simultaneously all of them decided to transform their economies into market economies. The term transformation comes from Latin and it means conversion. [Marsalek, 1993, p.8]. Since the literature does not clearly define the concept of transformation, it must be stressed that the issue refers to the transformation of civilization and not only to the economic system; this means that the economy as a whole will be rebuilt, and not only the economic system [Chołaj, 1998, p. 342]. In the economic dimension, the transformation includes measures to create entities that operate in market conditions and that accomplish their objectives in the spirit of freedom and respect for individual rights [Bałtowski, Miszewski, 2006, p. 24]. The transformation may be also identified with the infrastructure of a system that is characteristic of a market. [Bromley, 1993]. In the article the transformation is associated with privatization, establishing a new legal system and creating institutions governing the market principles. This obviously affected the banking sectors as well.

Apart from common history, the studied countries are the fact that all of them can see their future connected with the European Union. The Sea Baltic States have not only been State Members since 2004, but they joined the Euro Zone recently (Estonia in 2011, Latvia in 2014, and Lithuania in 2015). Adopting the common currency these countries have decided to give up on independent monetary policy and they largely depend on the ECB's policy. The Sea Baltic States joined the Eurozone when EBC's actions were concentrated on the stability of the banking sector and not price stability. Interest rate rises were revoked - in November and December 2011 they were reduced to the record levels. They were also lowered in July and May 2013 and June and September 2014. The ECB continued buying euro zone bonds whose yields began to rise sharply, within the new Outright Monetary Transactions and introduced the credit facilities packages. In 2014, the ECB's monetary policy was focused on two directions: creating an appropriately expansive attitude within low inflation and economic stagnation as well as the recovery of the transmission process to make it felt at enterprises and households.

The Western Balkan countries are also engaged in the integration process. Croatia joined EU in June 2013, but it has been a Candidate State since 2003. In June 2011, negotiations in the area of 35 chapters were closed and according to the Croatia, 2011 Progress Report [SEC, 2011] in the area of financial market infrastructure Croatia's legislation already fulfilled the acquis requirements. Macedonia earned this status in 2006 while Serbia – in 2012. It means that these states need to adjust their system of law, including banking, to the European requirements. By 2013 the Central Bank of Macedonia introduced a procedure for determining the banking stability index and developed a methodology for identifying systemically important banks. In 2015 it was developed a new methodology for assessment of Bank's Internal Capital Adequacy Assessment Process (ICAAP). The legislation was amended in the area of on capital adequacy and requirements liquidity risk management while in 2016 the law was amended to comply with the new Basel principles of effective banking supervision and on specifying capital buffers [Macedonia Progress Report, 2014, 2015, 2016]. Serbia adjusts step by step the financial system to the European standards, including accountancy of a bank, the Law on Deposit Insurance and the Law on the Deposit Insurance Agency, as well as a plan for the implementation of Basel III standards by 2017. The administrative capacity of the Banking Supervision Department of the NBS was strengthened [Serbia Progress Report, 2014, 2015, 2016]. What else, the monetary regimes of the Balkan countries are just as different as those of the EU



members: Croatia and Serbia introduced a managed float; Macedonia pegs against the euro [EBRD online databases].

The other similar characteristic of the studied countries is the structure of the banking sectors. Not only these operate a relatively similar number of credit institutions (around 30 banks in most of the studied countries, apart from 15 banks which operated in Macedonia and Lithuania each), but also very similar process could be observed in reference to the banking sectors. Foreign investors penetration in every of the studied country is high. What else, they are highly concentrated, e.g. CR5 in Latvia reached 72% in 2015, while in Lithuania and Estonia – 98%. The situation in the Western Balkan States is not so similar, in Serbia CR5 amounted to 62% while in Croatia - CR5 was 76% and in Macedonia - 82%. The only difference is the source of the foreign capital. In the case of the Sea Baltic States, the investors come from Scandinavia, while in the Western Balkan these are financial institutions which have the roots in Italy, Austria, and Germany. This is the heritage of the previous economic relationships, dated even in the 70ties. The Yugoslavian Republic has been willingly cooperating with neighbor countries, e. g. Austria and Italy [Jovanovic, 1972, p. 587]. Such a strong dependence on the foreign investors resulted in the spillover of the financial global crisis which reached the Western Balkan region through indirect channels [Bartlett and Monastiriotis, 2010; Sen, Atlay, 2012]. The annual rate of credit growth in these countries dropped significantly. The new wave of turbulences in the region resulted from 2011 euro zone crisis risk aversion that followed. Great hopes were put in the Vienna II initiative launched in March 2012. Unfortunately, it could only reduce the pace of the withdrawal of funds from the region but not prevent. Within three years, 2011 - 2014, around 8% of the region's GDP was transferred to the European headquarters of local banks in external bank funds. The investing banking groups have continued operating in the region but on a smaller scale than earlier [Sanfey, Milatović, and Krešić, 2016, p. 36].

It proves that the structures of the banking markets in the studied countries are similar although the key difference is the size of the sectors which is the consequence of the delayed beginning of the transformation process in the Western Balkan comparing to the Seat Baltic States.

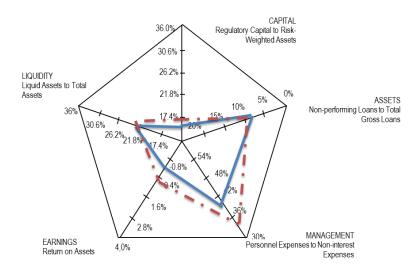
#### 4. Results of empirical research

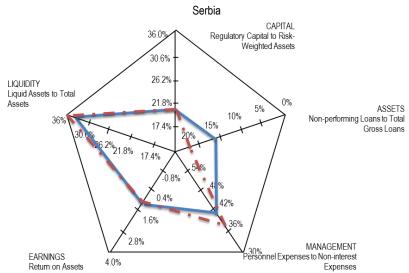
Figure 2 presents the performance of the studied countries in 2010 and in 2015 as well as the average values of indices for both studied regions of Europe: the Western Balkan as well as the Sea Baltic States.

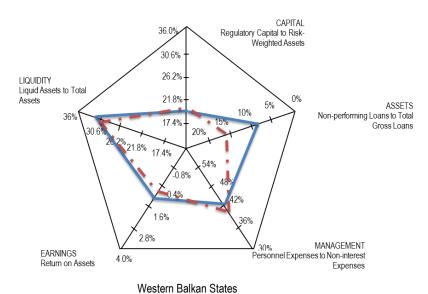
The first general conclusion which can be drawn from the analysis is the relatively bigger progress in transformation and development of the banking sectors made by the Baltic Sea States (BSS) compared to the Western Balkan States (WBS). In 2010, the banking sectors in the BSS were in a relatively worse shape than the Western Balkan States. All of them suffered from losses (indicated by a negative Return on Assets [ROA] ratio). In comparison to the WBS, in terms of quality of assets, the ratio of non-performing loans (NPL) to total loans was on average higher (by 5 p.p.). Liquidity was lower by 50%, and personnel expenses increased by 4 p.p. in relation to non-interest expenses. However, after five years, the achievements of the banking sectors in the BSS were significant and comparable to the situation in the WBS. In terms of earnings, quality of assets and quality of capital, the Baltic Sea States overtook the other region. The difference in results is not very significant but still visible: 1 p.p. in ROA, 8 p.p. in ratio of NPL to total loans and 4 p.p. in capital adequate ratios (CARs). The other two indices remained better in the Western Balkan countries: the ratio of personnel expenses to non-interest expenses was lower by almost 12 p.p. and liquidity was higher by 4 p.p. Unfortunately the progress achieved by the studied WBS cannot be considered as significant.

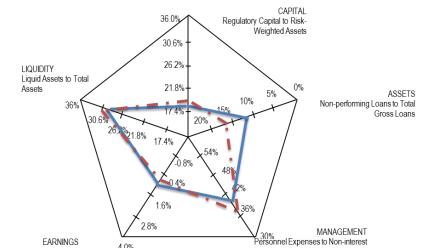


**—** 2010 **—** • **—** 2015 Macedonia Croatia









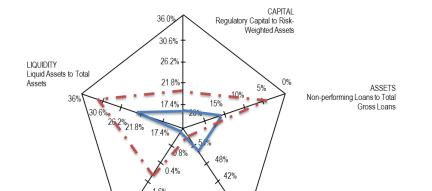
Expenses

**EARNINGS** 

Return on Assets

4.0%





MANAGEMENT

Personnel Expenses to Non-interest

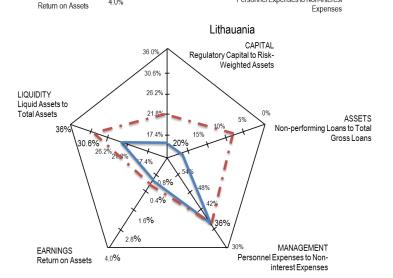
Latvia

**EARNINGS** 

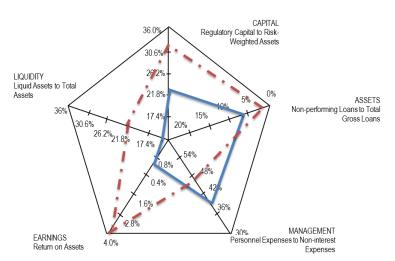
4.0%

**—** 2010

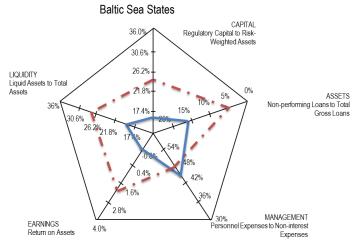
- · - 2015



Pentagon of CAMEL system Figure 2 Reference: own preparation, based on data from the central banks



Estonia





In Croatia and Serbia, the CARs achieved a level of around 20%. Only in Macedonia was this ratio below 17%. The quality of banking assets evaluated though looking at the ratio of NPL to total loans is rather poor, which proves the increasing risk of no repayment the credits by the creditors most probably because of their unfavorable performance in the economy. Moreover, this ratio increased in Macedonia by 14% and in Croatia nearly it doubled. The highest level of the ratio, exceeding 22% in 2015, was recorded in Serbia. In terms of management, the falling share of personal expenses to noninterest expenses, on one hand, shows the positive effect of the financial policies of the institutions, but on the other it can be considered as a tool used to improve the overall situation in the sector while the final effect of such changes is moot. However, the important thing is that throughout the whole studied period, the banking sectors in the WBS were profitable but with a lowering ratio of ROA. They also remained liquid, measured with a liquid asset ratio at the high level of 30%.

In each Baltic Sea State, the situation in 2010 was much poorer compared to the WBS, but through fiscal policy, these banking sectors were able to restore fiscal sustainability. Latvia can be considered as having the best practice for recovering from deep economic crisis, including honest communication of the real situation to the population; early action to restore confidence; implementation of fiscal adjustment; expenditure cuts instead of tax increases; letting expenditure cuts drive structural reforms; requiring equity, and obtaining international rescue financing. The advantage of Estonia's economy is transparency and economic freedom which ranked the country 6th globally and 2nd in Europe in this [https://www.transparency.org/news/feature/corruption perceptions index 2016]. independent and efficient judicial system monitors the rule of law. Another benefit is a simplified tax system, flat rates of taxes, law indirect taxation and liberal trade regime which attract foreign investors [Cole, Pomerleau, 2015]. Engagement in IT sector, implementation its solution in practice e.g. public service thanks to what filing a tax return takes less than five minutes and 98% of banking transactions are conducted through the internet. Estonia is recognized as the third lowest business bribery risk in the world [https://www.traceinternational.org/trace-matrix].

The banking sectors of the BSS did not adequately support the recovery of the economy but profited from the improved situation. Latvia and Lithuania had CARs below 14%, what was still due to the capital requirements but which were much lower compared to other studied banking sectors. Over the five years, the situation changed as the ratio increased to a level of 20%, proving that the situation had improved in terms of protection for depositors' savings and the stability and efficiency of the banking sectors in this region. The quality of banking assets measured with the ratio of NPL to total loans in 2010 was very poor as a result of the unfavorable economic situation in the period after the financial crisis of 2008. The highest ratio - over 23% - was recorded in Lithuania. After five years, the overall economic situation improved and the ratio dropped to the accepted level of 1.2% in Estonia and 8.2% in Lithuania.

The relative value of personal spending was higher than in the region of the Western Balkan States by 3 p.p. and in Latvia and Estonia, the share increased even more, from 52% to over 60% in Latvia and from 39% to 46% in Estonia. The other negative performance was unprofitability of the sectors in 2010. In each country, the banking sectors recorded a negative ROA, which in Estonia was -0.3% while in Latvia was over -1.8%. The undertaken recovery plans improved the economic situation, which resulted in the ratio of ROA increasing by over 3 p.p. to 1.35% in Latvia and 3.6% in Estonia. In terms of liquidity, the liquid asset ratio increased by almost 40% in each country in the region over the studied period. The work done in 2009-2012 to improve credit quality in lending portfolios and strengthen the capital base in the Baltic Sea State banks made these countries more resilient to financial difficulties'.

In 2010 the average CARs reach very close levels. In each group of banking sectors, there is one country where the value of the CAR is relatively higher. In the Western Balkan States, it is Serbia with the average of the CAR at 20% and in the Baltic Sea States, the average of the same ratio for Estonia



is over 23%. The same situation occurs in the results of 2015 but the ratios are significantly higher. In Estonia, the ratio rose to over 33%, while in the Western Balkan region, two countries achieved over 20%. In terms of quality of assets, the ratio of NPL to total gross loans still increased in the Western Balkan States. In Macedonia and Croatia, the value of NPL never exceeded 17%, and a significant rising tendency in terms of the value of NPL can be seen in all studied countries from this region. The highest ratios were reached in Serbia, manifesting the worst economic situation of all studied countries'. This demonstrates that the economic situation, as a consequence of the global crisis, is not favorable there and may affect the situation of the banking sectors. The factors which worsen the supply conditions are banks' capital and non-performing loans. Domestic factors play the less important role as barriers of credit supply compared to the global factors. Among domestic causes are listed regulatory environment and bank's capital. The global factors include global market outlook, EU regulation, the group-level NPLs and the group-level capital constraints.

The situation in this field has become relatively better in the BSS over the five year period. Moreover, the average value of the ratio in the BSS is lower, although at the beginning of the studied period the values of the ratio in Latvia and Lithuania were significantly higher than in other countries almost 16% in Latvia and 24-25% in Lithuania in 2010. Estonia is the only country where the ratio never exceeded 6.5% in the analyzed period. The non-performing loans value which reached a very high immediate post-crisis peak in BBS was reduced relatively quickly thanks to comprehensive reforms.

When it comes to management of employees, the ratio of personal expenses to non-interest expenses can be used to present the quality and skills of the staff working in the banking sectors. The higher the ratio, the more is spent on employees. Latvia is ranked as the leader in this aspect, because spending on employees there amounts to more than half of the non-interest expenses, increasing from 52% in 2010 to 60% in 2015. Macedonia is an example where these expenses not only are the lowest (close to 31% in 2015) but also present a falling tendency (37% in 2010). In the other two Balkan countries the ratio decreased as well, by 2 p.p. in Croatia and by 4 p.p. in Serbia. In Estonia, the ratio increased by 7 p.p. while in Lithuania it remained very stable, at a level between 37-38%.

Comparing the performance of the banking sectors in the studied countries, it can be concluded that better achievements characterize the sectors in the BSS. The ROA ratio shows how efficiently the management of an institution is able to transfer resources into effects. This ratio increased more significantly in the BSS, from a negative value of -0.8% to 1.7%, while in the WBS it decreased by 0.11 p.p. from 0.88% to 0.77%. It shall be mentioned that Latvia is a country which suffered from the global financial crises the most [Klyviene, Tranberg, 2010, pp. 7-27], even comparing to the Balkan States. The performance ratios (ROE, ROA) reached negative values in 2010 and in 2011. They were also significantly lower than in the other countries. The indicator shows how effective the banks earn the income. The diversification of banking operations results in the increase of profitability of banking sectors in the BBS.

Liquidity is one of the most important financial objectives not only of any legal entity but also of banking sectors analyzed as whole markets. The situation of the compared countries in this scope is rather clear. The BSS have lower liquidity than the WBS. The exception here is Latvia, which faced the most serious consequences of the global financial crisis. The deposit value continues to increase with increasing speed, also thanks to decreasing its outflow. The higher and higher deposit offset the decrease in foreign bank funding (e.g. in Croatia, and Latvia). As the result, the ratio LTD (loan - to deposit) fell below 100% in the region, what indicates that the domestic deposit has become the main source of banking funding of local lending.

This proves that the banking sectors in the WB need further reforms, especially it refers to the supervision of financial institutions, crisis resolution, financial safety nets, and the introduction of the Basel Framework. Not only the WB countries cannot keep pace with the EU State Members like BSS



but the improving the enforcement power is unavoidable for their EU membership hopes [Murgasova et al., 2015].

#### Conclusion

Concluding, it must be stressed that there is no universal definition of banking stability. The literature proposes three approaches to presenting the issue: by the impact of the banking sector on other sectors and the macroeconomic situation, by the quality of its functioning, and by the lack of crisis.

The article proves that despite the deep crisis in the Baltic States which was the consequence of the global financial crisis, the banking sectors in this region recovered very fast and regained the conditions prior the crisis. The reasons for such prompt improvement shall be searched among both international as well as domestic conditions. The Baltic States created statehood in the peaceful neighbourhood, introduced transformation process of the economy, have been the EU Member States for over a decade with deepening the integration through Euro adoption. Among the domestic condition shall be pointed out the quick and successful economic reform and transparency of policies. Simultaneously the Western Balkan representatives had to deal with the consequences of the global financial crisis but the postponed economic transformation, various speed of EU integration process and delayed recovery process have not contributed to the impressive improvement of the banking performance. The situation has not changed much over the studied period.

# Literature

Acharya V.V., Drechsler I., Schnabl P., 2014, A pyrrhic victory? Bank bailouts and sovereign credit risk, Journal of Finance, no. 69 (6).

Allen F., Gale D., 2000, Financial contagion, Journal of Political Economy, no. 108 (1).

Allen W., Wood G., 2006, *Defining and achieving financial stability*, Journal of Financial Stability.

Bałtowski M., Miszewski M. 2006. Transformacja gospodarcza w Polsce, Wydawnictwo Naukowe PWN.

Bartlett W., Monastiriotis V., 2010, South east Europe after the economic crisis: a new dawn or back to business as usual?, London School of Economics and Political Science: LSE European Institute, pp. 242-251.

Bauer P.W., Berger A.N., Ferrier G.D., Humphrey D.B., 1998, Consistency conditions for regulatory analysis of financial institutions: A comparison of frontier efficiency methods, Journal of Economics and Business, Vol. 50. http://dx.doi.org/10. 1016/s0148-6195(97)00072-6

Beck T., Demirguc-Kunt A., Levine R., 2006, Bank concentration, competition, and crises: first results, Journal of Banking Finance, no. 30 (5).

Berger A.N., Bouwman C.H., 2013, How does capital affect bank performance during financial crises?, Journal of Financial Economy, no. 109 (1).

Barker D., Holdsworth D., 1993, The Causes of Bank Failures in the 1980s. Research Paper no. 9325.

Barr R., 2002, Evaluating the Productive Efficiency and Performance of U.S. Commercial Banks, Engineering Management, vol. 28, no. 8. http://dx.doi.org/10.1108/03074350210767988

Bordo M., Eichengreen B., 1999, Is Our Current International Economic Environment Unusually Crisis Prone? (w:) D.Gruen, eds. L.Gower, Capital Flows and the International Financial System, Sydney: Reserve Bank of Australia.

Bretschger L., Kappel V., Werner T., 2012, Market concentration and the likelihood of financial crises, Journal of Banking Finance, no. 36 (12).

Bromley D.W.1993. Reconstituing Economic Systems: Institutions in national Development, "Development Policy Rewiev", No. 2 <a href="https://doi.org/10.1111/j.1467-7679.1993.tb00033.x">https://doi.org/10.1111/j.1467-7679.1993.tb00033.x</a>

Chołaj H. 1998. Transformacja systemowa w Polsce: szkice teoretyczne, Lublin.



- Claessens S., Laeven, L., 2003, Financial development, property rights, and growth, Journal of Finance, no. 58.
- Cole R., 2012, How did the financial crisis affect small business lending in the United States?, Technical Report 399, US Small Business Administration.
- Cole A., Pomerleau K., 2015, International Tax Competitiveness Index, Tax Foundation.
- Cox D., Cox M., 2006, The Mathematics of Banking and Finance.
- Crockett A., 1997, Why is Financial Stability a Goal of Public Policy?, in Maintaining Financial Stability in a Global Economy, Symposium Proceedings, Federal Reserve Bank of Kansas City.
- Davis E.P., 2002, A typology of Financial Instability, (w:) Financial Stability Report nr 2, Austria.
- Dell'Ariccia G., Detragiache E., Rajan R., 2008, The real effects of banking crises, Journal of Financial Intermediation, no. 7.
- De Jonghe O., 2010, Back to the basics in banking? A micro-analysis of banking system stability, Journal Financial Intermediation, no. 19 (3).
- Djiwandono S., 1998, Banking System Soundness And Macroeconomic Management: The Recent Indonesian Experience, przemowa na symposium Towards the Restoration of Sound Banking Systems in Japan - Its Global Implication, International Monetary Fund.
- Fernández R.O., Garza-García J.G., 2015, The relationship between bank competition and financial stability: a case study of the Mexican banking industry, Ensayos Revista de Economía-Volumen XXXIV, No.1, 2015.
- Fernández A.I., González F., Suárez N., 2013, The real effect of banking crises: finance or asset allocation effects?, Some international evidence, Journal of Banking Finance, no. 37.
- Gemzik-Salwach A., 2013, Wpływ kryzysu finansów publicznych na stabilność sektora bankowego, Nierówności społeczne a wzrost gospodarczy, nr 30.
- Guitian M., 1997, Banking soundness: The other dimension of Monetary Policy, (w:) Banking Soundness and Monetary Policy, International Monetary Fund.
- Jovanovic M., 1972, Yugoslav Trade With EEC and Comecon Countries, Law and Contemporary Problems, p. 586-591 https://doi.org/10.2307/1191142
- Kalemli-Ozcan S., Papaioannou E., Perri F., 2013, Global banks and crisis transmission, Journal of Intnational Economy, no. 89 (2).
- King R.G., Levine R., 1993, Finance and Growth: Schumpeter Might Be Right, The Quarterly Journal of Economics, no. 108 (3). doi:10.2307/2118406
- Klyvienė V., Tranberg Rasmussen L., 2010, Causes of financial Crisis: The Case of Latvia, Ekonomika Vol. 89(2), pp. 7-27.
- Kroszner R.S., Laeven L., Klingebiel D., 2007, Banking crises, financial dependence and growth, Journal of Financial Economy, no 84.
- Laeven L., Valencia F., 2013, Systemic banking crises database, IMF Economic Review, no. 61 (2).
- Larrain B., 2006, Do banks affect the level and composition of industrial volatility? Journal of Finance, no. 61.
- Lepetit L., Nys E., Rous P., Tarazi, A., 2008, Bank income structure and risk: an empirical analysis of European banks, Journal of Banking Finance, no. 32 (8).
- Levine, R., 2005, Finance and growth: theory and evidence [w:] Handbook of Economic Growth, P. Aghion, eds. S. Durlauf, Elsevier Science, The Netherlands.
- Lingren C.J., Garcia G., Saal M., 1996, Banking System and Macroeconomic Policy, IMF.
- Lucas R.E., 1988, On the mechanics of economic development, Journal of Monetary Economics, no. 22(1).
- Marsalek A. 1993. Transformacja systemowa w Polsce: wybrane problemy, Poznań.
- Miles D., Yang J., Marcheggiano G., 2013, *Optimal bank capital*, Economic Journal, no. 123 (567).



- Mirzaei A., Moore T., Liu G., 2013, Does market structure matter on bank's profitability and stability? Emerging vs. advanced economies, Journal of Banking Finance, no. 37 (8).
- Murgasova, Z., Ilahi N., Miniane J., Scott A., Vladkova-Hollar I., 2015, The Western Balkans: 15 Years of Economic Transition, Washington, DC: International Monetary Fund.
- Progress Reports, 2011 2016 Croatia, Bosnia and Hercegovina, Macedonia
- Raddatz C., 2006, Liquidity needs and vulnerability to financial underdevelopment, Journal of Financial Economy, no. 80.
- Reinhart C.M., Rogoff K.S., 2009, This Time is Different: A Panoramic View of Eight Centuries of Financial Crises, Princeton, New Jersey.
- Sanfey P., Milatović J., Krešić A., 2015, How can the Western Balkan catch up, EBRD
- Sen A., Atlay H., 2012, The Channels of Contagion in the Global Crisis: The Case of the Southeastern Europe (SEE-7) Countries, Journal of Economic and Social Studies, Vol 2, no. 2. https://doi.org/10.14706/jecoss112212
- Smaga P., 2012, Powiązania między sektorem bankowym a kryzysem zadłużeniowym w strefie euro, Bezpieczny Bank, Nr 3(48).
- Staikouras C., Wood G., 2000, Competition and banking stability in the euro area: The cases of Greece and Spain. The Journal of International Banking Regulation 2.
- Vives X., 2010, Competition and stability in banking, IESE Working Paper No. 852.
- Żywiecka H., 2012, Stabilność finansowa jako cel współczesnego banku centralnego, Bezpieczny Bank. Nr 3(48).

