IMPACT OF FINANCIAL CRISIS ON BANKING SECTOR STABILITY IN REPUBLIC CROATIA

Igor Živko 1 & Tomislav Kandžija 2

UDC / UDK: 336.71(497.5)

JEL classification / JEL klasifikacija: G01

Review / Pregledni rad

Received / Primljeno: March 15, 2013 / 15. ožujka 2013.

Accepted for publishing / Prihvaćeno za tisak: June 14, 2013 / 14. lipnja 2013.

Summary

In a financial system with a dominant banking sector, banks are the most important channel for financing needs of the economy. Banks have an important role in the process of financial intermediation. In financial crises, credit activities of banks decline, and this has an impact on the availability of resources for financing the economy. Characteristics of the banking sector in Croatia are determined by the process of political and economic transition. Authors analyze the effect of the financial crisis on the stability of the banking sector through a series of indicators of the banking sector: the number of banks, banking intermediation, concentration, foreign ownership, liquidity. The aim of the paper is to analyze financial stability of the banking sector before, during and after the financial crisis and the correlation between banking credit activities and economic growth.

Key word: banking sector, financial stability, GDP, financial crisis, Croatia.

1. INTRODUCTION

The period of transition of banking sectors in Southeast European countries was marked by crucial structural changes which can be described by the entry of foreign capital into the banking system, the growth in credit activities in particular to households, the improvement in profitability, high and satisfactory rate of capital adequacy despite credit expansion and the growth of risk assets and the improvement of supervisory framework. Problems in the functioning of the banking sector

¹ Igor Živko, Ph.D., Assistant Professor, Faculty of Economics, University of Mostar, Bosnia and Herzegovina, E-rmail: igor.zivko@sve-mo.ba

² Tomislav Kandžija, M.Sc., Primorje-Gorski kotar County, Croatia, E-mail:tomislav.kandzija@pgz.hr

can have an impact on macroeconomic (allocation of resources, price stability, international capital markets) and microeconomic effects (functioning of the payment system, development of brokerage functions, development of financial markets). Instability of banks affects other sectors in the financial system (financial stability) and the real economy. Financial stability is defined as the ability of the financial system to absorb shocks that could adversely affect the financial system. Development of the financial system, deepening of the financial structure, and increase in financial intermediation are all prerequisites for development economics. As major financial institutions, banks affect the stability of the financial system. The stability of the banking sector determinates the effectiveness of the monetary policy transmission mechanism of monetary effects on the real economy (Enoch, Green, 1997, 41-51). The connection of the banking sector and economy in a financial system dominated by banks was strongly expressed in the dependence of the economy on bank credits as the source of financing their needs. It is clear that there is no healthy economy without a healthy banking sector. Research shows that the openness of the banking sector and its stability has a positive impact on GDP growth of the national economy (Levine 1997, 2001; Levine, Loayza, Beck, 2000).

Characteristics of the banking sector in Croatia determined by the process of political and economic transition is analyzed in the second part of the paper. In the third part, authors observe the effect of the financial crisis on the condition and stability of the banking sector. The analysis is based on the time series of basic indicators of the banking sector and their behavior in terms of the financial crisis. Analyzed indicators of financial stability of the banking sector include: activities of banks, quality of assets, capital adequacy, profitability and liquidity. Since banks are the main segment of the financial system and a source of financing for the economy, in the fourth part, the authors analyze the role of monetary policy in managing the security and stability of the banking sector in Croatia. In the end of the paper conclusions are given.

2. TRANSITION OF BANKING SECTOR IN CROATIA

The financial system of Southeast European countries until 1990 functioned in the economy that was centrally planned. In this centrally planned economy, banks had a passive role. Financial transactions of banks only satisfied the plans of the national goverment. At that time, the allocation of loans was only an accouting mechanisam of banks for tracking goverment decisions to allocate resources to different businesses and sectors. Up to 1990, the banks of Southeast European countries operated in a mono-banking system, in which the central bank carried out the functions of commercial and central banks. In this mono-banking system banks provided payment services, collected private savings, profits and taxes and transferred them to the state budget or the state institutions, reviewed the implementation of plans and the operation of state institutions. Countries of the former Republic of Yugoslavia had built a "two-tier" banking system which consisted of the central bank and individual commercial banks.

In the countries of former Yugoslavia and other countries of the region, the period until 1991 was marked by administrative regulation of business, loss in bank operation, negative real interest rate – inflationary financing, difficulties in maintaining liquidity due to excessive exposure to the economy, lending decisions that were influenced by policy, and addiction of the economy to banks. The accumulation of bad loans and inadequate regulation and supervision of the banking system resulted in a banking crisis. Rehabilitation of failed banks was carried out in two ways: by designing different models of bank rehabilitation and by opening the banking sector to foreign strategic partners (privatization). The process of rehabilitation lead to their nationalization, and the average cost of rehabilitation was about 10% of GDP.

The early stages of banking sector transition in Southeastern European countries consisted in the restructuring of state banks and in abandoning direct financing. Reconstruction leads to bank privatization and growth of financial markets. The period of transition of the banking sector included significant structural changes which had some basic features:

- 1. Entry of foreign capital into the banking system:
- 2. Growth in domestic lending in particular to the household sector;
- 3. Increase in the exposure to foreign currency risk;
- 4. Increase in profitability and a satisfying rate of capital adequacy;
- 5. Credit expansion and growth of risk assets;
- 6.Improvement of the supervisory framework;
- 7. Implementation of accounting standards.

Total value of mergers and acquisitions in the period between 1991-2005 in Central and Southeast European countries was more than USA \$ 20 billion (Domanski, 2005, 71). In the next period banks must work on revising business policy, improving corporate governance, establishing a reliable system of management and accounting, risk management as well as internal control and audit.

3. MARKET STRUCTURE OF BANKING SECTOR IN CROATIA

After finishing process of transition in the 1990s of the last century, the banking sector of Croatia has not recorded any significant changes. In the last ten years the banking sector has recorded growth in performance and significant changes in the market structure of the banking sectors (consolidation, concentration, foreign ownership, and competition). Banks are a dominant segment of the financial system with low competition from other financial institutions and financial markets. The structure of the financial system of Croatia and the importance of banks as financial intermediaries are shown in Graph 1.

7%

Open-end invesment funds

Close-end invesment funds

Veterans fund

Insurance companies

Building society

Mandatory pension funds

Voluntary pension funds

Leasing

Graph 1: Structure of the financial system in Croatia 2009.

Source: CNB, Annual report, different years

The institutional framework of the banking sector has enhanced constantly. The EBRD index of banking sector reform (quality of banking regulation and supervision, banking competition and financial depth) has reviewed the Croatian banking sector with good prospects.³

Indicators	2005	2006	2007	2008	2009	2010	2011	2012
Number of banks	34	33	33	34	34	33	32	32
Banking intermediation	110.4		122.3	105.9	113.9	121.2	123.89	32
	110.4	119.4				,		- 00.4
Foreign capital in total capital	96.6	95.8	90.4	90.6	90.9	90.3	90.6	90.4
CR4	64.9	64.0	63.9	65	65	65.3	66.4	66.4
HHI	1 250	1 207	1 279	1 308	1 366	1 361 7	1406.6	1406.5

Table 1: Indicators of market structure of banking sector in Croatia

Source: CNB, Annual reports, different years

After cleaning the bad loans in bank's assets, banks started with strengthening the capital for normal operation. The process of capitalization in transition countries was aimed at improving capital adequacy and liquidity of banks at the national level. Higher capital requirements put banks at the front of the process of mergers and ac-

³ EBRD, Transition Report 2009, 2010.

quisitions. Consolidation of the banking sector led to the reduction of the number of banks from 43 in 2000 to 32 banks at the end of 2012. Consolidation of the banking industry has had a significant impact on the banking market structure and organization of banks, and has exposed the market to the dominance of large banks. Because of the dominance of large banks, and as the result of consolidation and disappearance of a large number of small banks, the question of access to finance for small and medium enterprises is raised.

Banking intermediation indicates the role of banks in achieving the core functions - the accumulation and allocation of monetary resources. When we measure and compare the degree of banking intermediation, the most common approach in financial literature is the share of domestic bank's claims in the private sector of banking sector assets and GDP. Bank intermediation, together with data on the number of banks, offices, branches of a country is an indicator of financial development. Intensive banking intermediation is the result of combined structural factors (restructuring and privatization of the banking sector, entry of foreign banks, improving the legal framework, excess liquidity in the banking market) macroeconomic and financial policies (monetary policy, fiscal consolidation of the sector) and cyclical factors (cost reduction borrowing, progress in macroeconomic stabilization, lower interest rate in global financial markets and prices of securities). For banking intermediation the "catch-up effect" of countries with lower levels of financial and economic development is equally important. By analyzing banking intermediation in Croatia we can see the trend of financial deepening and intensive banking activities. The financial crisis slowed down banking intermediation in 2008.

A high share of foreign capital is the result of the process of privatization in the banking sector. One solution in the attempts to rescue the banking sector was to open the banking sector to foreign banks (liberalization) and to build a strong and stable banking sector and help national governments to create legal regulation and institutional infrastructure. According to the research conducted in Croatia (Galac, Kraft, 2001), the main competitive advantages of foreign banks in Croatia are: cheaper funding costs of foreign banks, lower interest rates, quality of personnel etc. Also, research conducted in new EU member states (Bulgaria - Bitzenis, 2004; Hungary, Czech Republic, Poland, Slovakia, Slovenia - Mėrő, Valentinyi, 2003) record similar benefits of the entry of foreign capital for the domestic banking system. In 2012, 90.4% of the total capital in the banking sector was in foreign ownership. More than 60% of the banking sector is owned by Austrian banking groups. A high share of foreign ownership determines a stronger relationship between the "parent" banks and "daughter" banks in Croatia through credit lines. The share of banks in foreign ownership in the assets of the total banking sector was 90% at the end of 2012. This indicates the dependence and sensitivity of the domestic sector to change in business policy and decisions of foreign-owned banks. Research indicates the correlation between foreign ownership and the instability of the banking sector in the period 1990-2006 (Demirguç-Kunt and etc., 1999; Bart and etc., 2002).

Concentration can be defined as mergers, acquisition of control or owner influence through majority shares or voting rights in the assembly of the bank. Con-

centration is one of the basic elements in the analysis of competitiveness, market structure and market power in banking. The issue of concentration of the banking market is interesting from the point of view of competition. The degree of concentration in the banking sector is usually assessed by the share of assets held by one or three or five largest banks in the assets of the banking sector (CR3, CR5) or the Herfindahl-Hirschman Index (HHI). Measurement of concentration ratios is carried out for the simple determination of the characteristics of the banking market. However, high values of concentration ratios recorded in the banking market do not necessarily indicate decreasing competitiveness. According to research (Beck, Kunt, Levine, 2003), concentration in the banking market has a stabilizing effect. There is a lower likelihood of a systemic banking crisis, i.e. the fragility of the sector in the banking market with a high concentration. Research has not proved the negative impact of concentration on competition (Claessen, Leavin, 2003). HHI for the banking sector in Croatia indicates the growth of concentration and shows significant concentration on the banking market. Concentration ratios of four largest banks in the banking sector indicate exposure of the banking sector to a small number of banks. Specifically, national economy depends on the activity of four largest Croatian banks in the sector.

At the end of 2012, the total assets of the banking sector in Croatia amounted to 55.5 billion euros, and in comparison with the situation at the end of 2011 this is an increase of 4.2%. The structure of assets is dominated by loans in the amount of 67.1% (33 billion euros), which indicates a decrease of 5.4% in comparison with 2011. In the last few years, banks face a reduced demand for loans as the result of the financial crisis which has reduced creditworthiness of existing and potential new customers. During 2008 and 2009 there was a weak decrease in demand, savings and term deposits in domestic currency, but an increasing amount of deposits in foreign currency was recorded in the same year. All categories of deposits recorded an increase in 2011. Borrowings from foreign financial institutions was reduced by 1.6% and amounted to 7.2 billion euros in 2009. After 2009, banks have again been using credit from abroad in financing their credit activities.

Table 2: Balance sheet of the Croatian banking sector in 2012 (in million euro)

Assets		Liability			
Bank reserves with central bank	6.722,6	Deposits	4.794,8		
Foreign assets	5.322,2	Savings and time deposits	5.522,4		
Claims on central government	8.277,3	Foreign currency deposits	20.768,6		
Claims on other domestic sector	33.716,2	Bonds and money market instruments	2.417,5		
Claims on other financial institutions	1.274,4	Foreign liabilities	10.023,8		
Claims to other institutions	178	Capital accounts	10.979,7		
		Other positions	655,5		
Total	55.490,8	Total	51.581,4		

Source: CNB, Statistics of Credit Institutions, 2012.

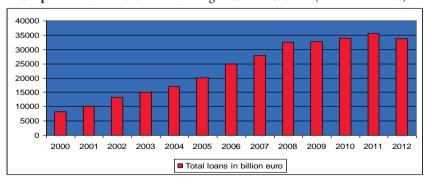
The structure of assets and liabilities indicate the importance of loans in assets and deposits in the banking sources in the banking sector of Croatia. The loan structure is dominated by loans to other sectors (households), while deposits in foreign currency dominate in the structure of the source. The structure of assets and liabilities are visible sources of risk for banks – credit risk and liquidity.

The financial crisis has decreased the domestic loans demand due to lost consumer confidence and stricter credit conditions. Decreasing activity and worsening credit quality of loan portfolios has an impact on banks' profitability. Banks maintain public confidence, and aren't faced with the withdrawal of deposits. In such conditions regarding the security and stability of banks, the relationship and actions of monetary policy are crucial, as well as careful management of banks by owners and managers.

4. INDICATORS OF FINANCIAL STABILITY OF BANKING SECTOR IN CROATIA

The banking sector with a 51.6% share in the total assets of the financial sector is the dominant source of financing which satisfies demand from the economy and households. Therefore, it is important to have a stabile banking sector. The stability of the banking sector increases the possibility that it will not get into a situation of insolvency⁴ in the future. So it is important to review the distribution of assets and liabilities of the banking sector through different indicators.

Lending activities of banks in Croatia have increased in recent years with a significant share of loans to households. The rate of credit growth recorded a value of over 25% annually. Bank loan activities showed a slow growth in the period 2008-2010 Reason for this slow growth is in banks reserving in additional exposure to credit risk (Graph 2). Impact of the financial crisis on bank loan activities reflects on the quality of assets and the share of non-performing loans in total loans of the banking sector.



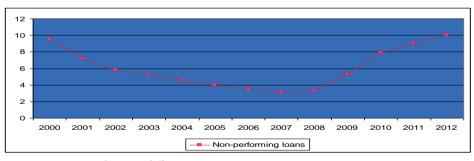
Grapf 2: Total loans of the banking sector in Croatia (in billion euros)

Source: CNB, Annual reports, Zagreb, different years.

⁴ Assets of banking sector aren't enough to cover all liabilities.

Loans to households dominated in the structure of total loans, which in 2009 recorded the first decline for retail loans in the last twelve years. Consumer loans recorded the biggest decrease (personal consumption) as well as loans for car purchase. Only slow growth is recorded in mortgage loans. In the period before the financial crisis, banks recorded a strong growth of the loan portfolio funded by foreign sources (credit lines from "parent" bank to "daughter" bank). In the period 2008-2009, there was a growth in credit activities of the banking sector to the public sector, in order to finance the budget deficit. Special attention should be given to domestic loans linked to foreign currencies, which may represent a source of risk to macroeconomic stability in the case of inconsistency of monetary policy and exchange rate policy. Correlation between credit activities of banks and the deepening current account deficit is also an important characteristic of the banking sector.

Credit risk dominates in the banking sector in Croatia and is the basic source of risk for financial stability. Weak economic activity and increasing unemployment result in demand for loans, while banks are faced with new macroeconomic conditions which influence the operation of banks. All this determines rigorous conditions for loan approval. Financial crisis affect the quality of bank assets and increase the share of bad loans in the total loans of the banking sector as well as the share of bad loans in the total assets of the banking sector. Bad loans recorded a trend of growth in the period 2008-2012.



Graph 3: Non-performing loans in the total loans of the banking sector of Croatia

Source: CNB, Annual report, different years.

Compared to 2008, in 2009 the growth rate of non-performing loans in relation to total loans of the banking sector in Croatia on an annual basis was 61%. The reason for the increase is a change in the structure of quality risk assets, with the growth of group B and it subgroup B1 (substandard loans) with probability of loss 1-30%. The increase in bad loans and provisions can have direct and indirect macroeconomic effects on the fiscal side (collection on income taxes) and monetary side (credit to economy).

 $^{^{5}}$ There is no unique definition of bad loans, according to G-10 countries bad loans are all loans with the delay of 90 days.

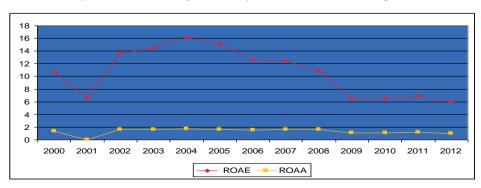
In 2009, the total capital of 33 banks in the banking sector amounted to 77 million euro and in the same year recorded a 5.6% growth due to an increase in retained earnings and increase in position of statutory and other capital reserves. The capital adequacy ratio shows the ability of the bank to cover risk weighted assets with their capital. In 2009, the banking sector recorded a 2.9% rise of risk weighted assets on an annual level.

Graph 4: Capital adequacy rate of the banking sector in Croatia

Source: CNB, Annual report, different years.

The capital adequacy rate in 2009 grew by 0.6% as the result of capital increase in the banking sector and a decrease in capital requirement to cover credit and market risks. Banks try to raise capital to absorb anticipated losses in coming years.

Bank profits fell in 2009 and amounted to 63 million euros. Decrease in profit was reflected in the deterioration of profitability indicators of the banking sector. In 2009, all banks recorded an increase in the provision for credit losses as the result of the impact of the financial crisis. Net income of the banking sector recorded a growth due to an increase in non-interest income, while net interest income decreased as the result of increasing the cost of funding.

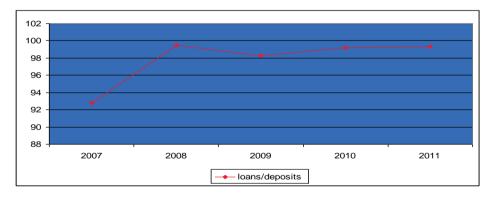


Graph 5: Indicators of profitability in the Croatian banking sector

Source: CNB, Annual report, different years.

Indicators of bank profitability show the biggest decline in last years. Research analyzes the impact of the market structure, ownership structure and management, structure of the balance sheet and risks related to its position, and macroeconomics (Demirgüc-Kunt, Huizinga, 1998). Deterioration of profitability is the result of reduced lending activities and asset quality of banks which resulted in increasing the cost of provision and change in the classification of assets. Profitability of the banking sector means a safer financial system and a better performance of the credit function with positive effects on the economy.

In 2009, sources were more expensive for banks in comparison to 2008. Amount of deposits stayed stable, while banks used sources borrowed from foreign banks. In countries with a market-oriented financial system, the banking sector recorded an increase in liquidity because investors directed investments from the financial market into deposits in banks insured by the state. However, the banking crisis dominated the financial system and had the greatest effect on the liquidity of banks, opening the question of deposit security. Although the deposit insurance system existed, it recorded withdrawal of deposits because of lack of confidence. The reasons for the loss of trust can be founded in limited amounts of insurance deposits, withdrawal of deposits for healthy banks, time required to dispose of deposits in failed banks, doubts about the credibility of the state etc.



Graph 6: Liquidity indicators for Croatian banking sector

Source: CNB, Annual report, different years.

Indicators of liquidity recorded a decline in the Croatian banking sector. The deterioration is the result of a faster growth in credit activities than the growth of deposit base. Deterioration in interbank position is the consequence of the growth of foreign liabilities above banks' foreign assets.

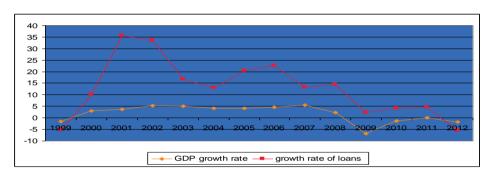
5. FINANCIAL STABILITY OF BANKING SECTOR AND ITS EFFECT ON REAL ECONOMY

There is a significant relationship between macroeconomic variables and the financial stability sector. Today, research confirms that a financial crisis can be predicted by macroeconomic data. Macroeconomic indicators that can be used for assessing financial stability include: economic growth, balance of payments, inflation, interest rate, exchange rate, rising price of financial assets, the effect of contingency (contingent effects, such as the transmission of crisis through a network of banks and foreign exchange markets) and other factors (Evens, Leone, Gill, Hilbers, 2000, 10-12).

The analysis of macroeconomic indicators is particularly important in order to project certain difficulties, risks and benefits, and possibilities for normal operation of the banking sector in a financial crisis. Decrease in the growth rate of GDP reduce creditworthiness and increase credit risk. Similar effects is recorded when a problem appears in an economic sector. Increase of the deficit in the current payment balance means an increase in the inflow of foreign capital which can cause a credit boom. Decrease in the ratio between reserve and debit of a country, changing the maturity structures of foreign investments may be valid indicators of the vulnerability of the financial sector of individual countries. Volatility has a dual effect on the financial sector. Inflation affects the price volatility of financial assets, the creditworthiness of borrowers and the decline in the value of collateral (credit risk), and therefore liquidity and solvency of financial institutions is affected as well. Changes in the exchange rate may cause more exposure to foreign currency risk due to the currency imbalance in the balance sheet of financial institutions. Interest rate growth or decline could have consequences on the outflow of foreign capital or the worsening of creditworthiness of borrowers. Foreign direct investments have a strong contribution to GDP growth in emerging economies. The mentioned macroeconomic risks are typically associated with "overheating the economy", increase in demand, consumption and investment which lead to an inflationary process.

Inadequate credit expansion in a given macroeconomic environment affects the financial stability. In the countries of Southeast Europe the process of increasing banking intermediation by credit expansion to the private sector is interesting. Credit expansion has a positive impact on the macroeconomic environment through the growth of investments and economic growth. Theoretical and empirical research suggests that credit expansion has a positive correlation to macroeconomic risks. Inadequate credit expansion can create macroeconomic imbalance. Reasons for intensive credit activities include: one group of factors affect banks as holders of supply of loans, while the private sector is the holder of the demand for loans. High foreign capital inflow and external factors (higher interest rate than on the international markets) are factors that affect credit expansion on the supply side. Primarily optimistic expectations (credit activities increase with pro-cyclical economy and felling with her drop) and positive shocks (technology) are factors which affect credit expansion on the demand side.

The entry of foreign capital in the banking sectors in Southeast European countries is the major source of intensive credit expansion. The relationship between foreign capital and bank lending is evident from the simple analysis of the share of foreign capital in the ownership structure and of the growth rate. Financial sectors in the countries of Southeast Europe are no longer just "bank dominated" but "foreign-owned bank dominated" sectors with credit expansion in intensity and direction determinate by ownership in order of profitability.



Graph 7: GDP growth rate and growth rate of credit in Croatia

Source: CNB, Annual report, different years.

Graph 7 presents the pro-cyclical lending behavior of banks. The dependence of economic activities on the provision of financial resources (lending) by banks is also obvious. Credit expansion at first has been financed exclusively from domestic sources (deposits) and later by borrowing from aboard. Growth in demand of household for loans are affected by: expectations of growth in earnings of the population, low debt, reduced expectation of inflation, migration from villages to towns, population boom, change towards a lifestyle of "living on credit", change in the national policy to stimulate domestic demand⁶, decrease in interest rates.

Inadequate credit expansion creates macroeconomic imbalances by deepening the current account deficit in payment balance (an increase in imports as a substitute for the lack of domestic production) and external debt (insuring funds for new loans to banks by borrowing aboard).

⁶ Changes in national policy can have several forms: preferential tax treatment of the mortgage interest rate, preferential program of housing, flexible mortgage loans and promotion of the culture of using credit cards.

others government units
1% 12%
financial institutions
3%
corporate
40%

Graph 8: Sectoral structure of loans in Croatia in 2012

Source: CNB, Statistics of Credit Institutions, 2012

The loan portfolio is dominated by loans to households. Lending to households in transitional countries ensure better managing credit risk expose.

- 1. Lower concentration of credit risk in banks' assets:
- 2. Diversification of credit risk among a large number of borrowers;
- 3. Earnings on those loans are stable and high
- 4. Existence of implicit or explicit deposit insurance;
- 5. Risk of insolvency in economy.

The problems in financing the economy and its formal approach to the financial sector are determined by high risks and transaction costs related to commercial lending. The risk of financing the economy is a key element determining the cost of capital. Makers of economic policy need to think about the solution that will motivate banks to finance the economy more intensively. Additional risks to the economy include making bank management decisions acceptable in bank branches on the domestic market. Problems in complying with local requirements and business conditions appear, and difficulty of access to the finance of small and medium enterprises.

On the other hand, it is necessary to create or reverse the macroeconomic policy which must include the credibility of monetary policy and appropriate fiscal policy which will create an environment for economic growth and further improvement of the business environment, in order to ensure the process of capital accumulation and to stimulate research and development.

6. CONCLUSION

The Croatian banking sector has entered a different phase of transition and acquired new characteristics determined by the dominant position of foreign capital and changes in the market structures of the banking sector. Despite the trend of development of financial markets and non bank financial institutions, banks in Croatia play a key role in providing financial services to the real sector. Characteristics of Croatian banking sector include: dominance of foreign ownership, extensive banking intermediation, retail lending, and high profitability. However, the banking sector is exposed to the risk that determines the structure of banks' operation.

In the conditions of the global financial crisis, banks as financial institutions face difficulties managing their assets and risks associated with lending, capital, liquidity and profitability. Based on the data presented in the paper and on the analyses of time series, it can be concluded that although the Croatian banking sector is exposed to the financial crisis, it has stayed safe and stable in the conditions of the financial crisis. It has recorded a decrease in all indicators of financial stability of the banking sector. Impact of the financial crisis is reflected in the declining profitability of banks as a consequence of reducing lending activities and of deteriorating liquidity position of banks. The Croatian banking sector is stable.

Despite the retained stability of the banking sector, banks do not show interest in financing all sectors of the economy. Unfavorable structure of bank loans by sector is determined by the risk of economy and is historically present in bank lending. The economy is faced with the problem of ensuring funding for managing liquidity and investment projects.

REFERENCES:

- 1. Barth, J. R., Caprio, G. Jr., Levine, R.: Bank Regulation and Supervision: What Works Best?, NBER Working Papers 932, 2002.
- 2. Beck, T., Kunt, A., Levine, R.: Bank Concentration and Crises, WB, 2003.
- Demirgüç-Kunt, A., Huizinga, H., Determinants of Commercial Bank Interest Margins and Profitability, World Bank Policy Research, Working Paper, No 1900., 1998
- 4. Demirguc-Kunt, A., Levine, R., Hong-Ghi, Min, Foreign banks: efficiency, stability and growth, in The Implications of Globalization of World Financial Markets, 1999.
- 5. Domanski, D.: Foreign Banks in Emerging Market Economies: changing players, changing issues, Quarterly Review, BIS, Basel, 2005.
- 6. Enoch, C., Green, J. H.: Banking Soundness and Monetary Policy Issues and Experience in the Global Economy, IMF, Washington, 1997.
- 7. Galac, T., Kraft, E.: Što znači ulazak stranih banaka u Hrvatsku, HNB, Zagreb, 2001.

- 8. Hrvatska narodna banka, Izvještaj o financijskoj stabilnosti 2009, Zagreb, 2010.
- 9. Hrvatska narodna banka, Godišnji izvještaji, različita godišta.
- 10. http://www.hnb.hr/statistika/hstatistika.htm (pristupljeno: 16. 02.2013.)
- 11. IMF.: Financial Soundness Indicators Compilation Guide, Washington, USA, 2006.
- 12. Jose, S. A., Georgiou, A.: Financial Soundness Indicators (FSIs) framework and implementation, IFC Bulletin 31, 2009.
- 13. Levin, L., Claessens, S.: What Drives bank Competition? Some International Evidence, 2003
- 14. Levine, R.: Financial Development and Economic Growth: Views and Agenda, Journal of Economic Literature, 35, 1997.
- 15. Levine, R.: International Financial Liberalization and Economic Growth, Review of International Economics, 9, 2001.
- 16. Levine, R., Loayza, N., Beck, T.: Financial Intermediation and Growth: Causality and Causes, Journal of Monetary Economics, 35, 2000.
- 17. Ljubalj, I.: Indeks koncentracije bankarskog sektora u RH, HNB pregled, 2005

UTJECAJ FINANCIJSKE KRIZE NA STABILNOST BANKARSKOG SEKTORA REPUBLIKE HRVATSKE

Igor Živko 7 & Tomislav Kandžija 8

Sažetak

U financijskim sustavima sa dominantnim bankarskim sektorom, banke su najznačajniji izvor financiranja potreba u ekonomiji. Banke imaju važnu ulogu u procesu financijske intermedijacije. Financijska kriza smanjuje kreditnu aktivnost banaka što utječe na raspoloživost izvora financiranja za gospodarstvo. Obilježja bankarskog sektora Republike Hrvatske određena su političkom i ekonomskom tranzicijom. Autori analiziraju utjecaj financijske krize na okruženje i stabilnost bankarskog sektora kroz niz pokazatelja: broja banaka, bankarsku intermedijaciju, koncentraciju, strano vlasništvo, profitabilnost, likvidnost. Cilj rada je analizirati financijsku stabilnost bankarskog sektora prije, za vrijeme i poslije krize te promatrati vezu između kreditne aktivnosti banaka i ekonomskog rasta.

Ključne riječi: bankarski sektor, financijska stabilnost, GDP, financijska kriza, Hrvatska.

JEL klasifikacija: G01

Dr.sc. Igor Živko, docent, Ekonomski fakultet, Sveučilište u Mostaru , Bosna I Hercegovina, E-mail:igor. zivko@sve-mo.ba

⁸ Mr.sc.Tomislav Kandžija, Županija Primorsko-goranska Hrvatska, E-mail:tomislav.kandzija@pgz.hr