CHANGES IN BANK MARKET STRUCTURE UNDER FINANCIAL CRISIS IN BOSNIA AND HERZEGOVINA

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Abstract

Having on mind specific features of financial system in Bosnia and Herzegovina as bank dominate financial system we will analyses changes in structure of banking sector and their behaviour in financial crisis and after. Bank’s stability and managing in conditions of financial crises has requested continues review of elements in banking structure which could have impact on stability of banking sector and possible sources of instability and negative impact on national economy. Author in this paper will analyse structure of banking sector in Bosnia and Herzegovina and their elements concentration, competition, internationalisation, capital, development of products and services, profitability and liquidity.

Key words: banking sector, structure, financial crisis, Bosnia and Herzegovina

INTRODUCTION

Functions of financial system of Southeastern European countries to 1990 were determined by goals of central planning economy. In central planning economy, banks had a passive role. Fulfillment plan of national government determined the financial functions of banks. The allocation of loans at that time for banks was only accounting mechanism for tracking government decisions to allocate resources to different business and sectors. Banks of Southeastern European countries to 1990 operated in mono-banking system, system in which central bank carried out the functions of commercial and central bank. In mono-banking system banks providing payment services, collecting private saving, profits and taxes and transferred them to the state budget or state institutions, reviewed achieving plan and operation of state institutions. Countries of former Republic of Yugoslavia had built a “two-tier” banking system which was consisted of central bank and individual commercial banks.

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

Early stage of banking sector transition in Southeastern European countries supposed restructuring of state banks and abandoning direct financing. Reconstructing leads to bank privatization and growth of financial markets. The last period of banking sector had significant structural change that outlines some basic features:

1. high share of foreign capital into the banking system
2. decreasing in domestic lending in particular household sector
3. increasing exposure to credit risk and risk of liquidity
4. decreasing profitability and declining rate of capital adequacy
5. credit expansion and growth of risk assets
6. improving the supervisory framework
7. implementing of regulatory standards
BANKING STRUCTURE IN BOSNIA AND HERZEGOVINA

The period of transition of banking sectors in Southeastern European countries was marked by crucial structural changes which can be described by: the entry of foreign capital into the banking system, growth in credit activities particular to sector of households, improving profitability, high and satisfy rate of capital adequacy despite the credit expansion and growth risk assets and improving supervisory framework. Market structure of the banking sector of BiH has been analyzed through a series of indicators of banking sector:

- the number of banks
- banking intermediation
- concentration
- foreign ownership
- liquidity

Banks are dominant segment of the financial system with low competition from other financial institutions and financial markets. The structure of financial system of BH and the importance of banks as financial intermediaries is shown in figure 1. Assets of banks present 87% of total assets of financial system. The institutional framework of the banking sector enhanced. EBRD index of banking sector reform (quality of banking regulation and supervision, banking competition and financial depth) review the BH banking sector with good prospects.

Consolidation of banking sector lead to reduction of banks numbers from 55 in 2000 to 27 banks at the end of 2014. Consolidation of the banking industry has a significant impact on the banking market structure and organization of banks, and exposes the market to dominance of large banks.

Figure 1: Number of banks in Bosnia and Herzegovina, 2000-2014

Sources: CB BiH, Annual Report, Sarajevo, different years.

Banking intermediation indicates the role of banks in achieving the core functions – the accumulation and allocation of money resources. The share of domestic bank's claims on the private sector of banking sector assets and GDP is the most common approach in the financial literature when we measure and compare degree of banking intermediation. Bank intermediation, together with data on the number of banks, offices, branches of a country is indicators of financial development. Intensive banking intermediation is result of combined structural factors (restructuring and privatization of the banking sector, entry of foreign banks, improving the legal framework, the excess liquidity in the
banking market) macroeconomic and financial policies (monetary policy, fiscal consolidation of the sector) and cyclical factors (cost reduction borrowing, the progress in macroeconomic stabilization, lower interest rate in global financial markets and prices of securities). For banking intermediation is equally important „catch-up effect“ of countries with lower levels of financial development and economic development with developed countries. Analyzing banking intermediation in BH we can see trend of financial deepening and intensive banking activities. Financial crisis has slowed down banking intermediation in period from 2008 to 2011.

![Figure 2: Banking intermediation in Bosnia and Herzegovina, 2000-2013](image)

Sources: CBBH, Annual report, Sarajevo, different years

A high share of foreign capital is the result of the privatization process in the banking sector. In attempts to rescue the banking sector a solution was open banking sector to foreign banks (liberalization) for build strong and stable banking sector and help national governments to create institutional infrastructure. In 2011, 87% of total capital in banking sector was held by foreign banks. More than 62% of the banking sector is owned by Austrian banking groups. The share of foreign owned banks in total banking sector assets at the end of 2013 was 90% which indicates the dependence and sensitivity of the domestic sector to change in policy and decisions of foreign-owned banks.

Concentration can be defined as mergers, acquiring of control or owner influence through majority shares or voting rights in the assembly of the bank. Concentration is one of the basic elements in the analysis of competitiveness and market structure in banking. The issue of concentration of the banking market is interesting from the stand point 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 banking sector assets (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 stabilizing effect. Research has not shown the negative impact of concentration on competition (Claessen, Leavin, 2003). HHI for banking sector BH indicates the growth of concentration and show a significant concentration. Concentration ratios for three or five largest banks in banking sector indicate exposure of banking sector to small number of banks. National economy depends by the activity of five largest banks in the BH banking sector.
Total assets of the banking sector in BH at the end of 2013 amounted to 12 billion euro and compared with the situation at the end of 2010 recorded increase 5.1%. In assets structure dominate loans in amount of 69.96% (8.39 billions) and increased in compilation with 2012 for 3%. Bank in last period are faced with reduced demand for loans as result of financial crisis which has reduced creditworthiness of existing and potential new customers. During 2013 there has been a strong increase in deposit by 6% and amounted 7.3 billion Euros. The position of borrowings from foreign financial institutions was reduced. The structure of assets and liabilities indicate importance of loans in assets and deposits in the banking sources in the banking sector of BH. The loan structure is dominated by loans to other sectors (household), while in the structure of the source dominate deposits in foreign currency. The structure of assets and liabilities are visible sources of risk for banks – credit risk and liquidity.
Banks lending activities in BH was grown in recent years with significant share of loans to household. Rate of credit growth recoded a value of over 25% annually. Banks loan activities shows slow growth in period 2008.-2010. Rate of loan growth in 2009 first time from 2000 had negative sing of -3.1%. In 2010 banking sector shows slight improvement by a low rate of credit growth of only 2.5% while in 2011 loans increased for 6.3%. Reason for slow growth is in banks reserving in additional exposure to credit risk (Figure 3). Impact of financial crisis on bank’s loan activities is reflecting on assets quality and share non-performing loans in total loans of the banking sector.

In structure of total loans dominated loans to households which in 2013 record share in total loans 44.25% and increasing for 1.18%. The biggest loans were recorded for consumer loans (personal consumption) and mortgage loans. Banks are in the period before financial crisis recorded strong growth of the loan portfolio funded foreign sources (the credit lines from bank “parent” to bank “daughter”). In period 2008-2011 growth credit activities of the bank’s sectors to public sector, to finance budget deficit. The largest increase for this sector was record in 2007 and 2008.

Credit risk dominates in banking sector in BH and is based source of risk for financial stability. Weak economic activity and increasing unemployment resulting in demand for loans and banks faced with new macroeconomic conditions which determinate banks operating. All this determinates rigorous conditions for loan approval. Financial crisis effect banks assets quality and increase share of bad loans\(^1\) in the total loans of the banking sector and share of bad loans in total assets of the banking sector. Bad loans recorded growth trend in the period 2008-2014.

\(^1\) There isn't unique definition of bad loans, according to G-10 countries bad loan present all loans with delay to 90 days.
Figure 5: Non-performing loans in banking sector of BiH, 2000-2014

Sources: CBBH, Annual report, different years.

The growth rate of non-performing loans to total loans of the banking sector in BiH on an annual basis was in 2010 compared to 2009 51% a year. The reason for the increase is a change in the structure of quality risk assets, with the growth of groups C, D and E.

Total capital of 29 banks in the banking sector of in 2014 amounted 1.26 billion euro and in record decreasing. The banking sector in 2014 recorded loss. The capital adequacy ratio shows bank ability that with their capital cover risk weighted assets. In 2014 the banking sector recorded rise of capital adequacy rate on 14% or decreasing 1% compared to 2013.

Figure 6: Capital adequacy rate of the banking sector BH

Source: CBBH, Annual report, different years.
The banking sector in BH 2014 finished with negative financial results. Decrease in profit had effect on deterioration profitability indicators. In 2009 all banks in banking sector record increase in provision for credit risk losses as a result of the impact of financial crisis. Net income of the banking sector increasing as result of rising non-interest income, while net interest income decline as consequence of increasing price of source of funding. In 2011 return on average assets increased from -0.6% to 0.7% while return on average equity increase from -5.5% to 5.9%.

Figures 7: Indicators of profitability in the banking sector BH

![Figures 7: Indicators of profitability in the banking sector BH](source)

Source: CBBH, Annual report, different years.

Indicators of profitability shows first decline in last eight years. There are different factors which can have impact on profitability as market structure, ownership structure and management, structure of balance sheet and risks related to its position, and macroeconomics (Demirgüc-Kunt, Huizinga, 1998).

Figure 8: Structure of bank’s income and cost in Bosnia and Herzegovina, 2000-2013

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Deterioration of profitability is result of reduced lending activities and assets quality of banks which had resulted in increasing cost of provision and change in classification of assets.

Figure 9: Foreign capital in banking sector of Bosnia and Herzegovina, 2000-2013

Sources: CBBH, Annual Report, Sarajevo, different years.

In countries with market-oriented financial system, banks liquidity increased because investors their money hold in deposit insure by state instead invest on financial markets. But in bank-dominated financial system financial crisis have stronger impact on banks’ liquidity. In this situation question of deposit safety is open. Even deposit insurance system exist, banks record withdrawal of deposit as result of losing confidence in stability of banking sector. Reasons for losing confidence are: limited amount of insurance deposit, withdrawal deposits from healthy banks, time need for dispose deposits if banks record failure, suspicion in state credibility and etc. Liquidity in banking sector of Bosnia and Herzegovina is on satisfied level, basic indicators of liquidity, as ratio of liquid to total assets and liquid to short-term assets recorded increasing in relation to 2012.
High level of liquid indicators especially in current macroeconomic conditions shows bank unwillingness of bank to financing domestic economy and retail. At the end of 2013 liquid assets present 26.4% of banking sector assets, while 46.2% of short term liabilities are covered by liquid assets.

CONCLUSION

Banking sector with 81% share in total assets of financial sector is dominate source of financing through which is satisfied demand from economy and households. So it is important to have stabile banking sector. Analysing banking structure in Bosnia and Herzegovina by several indicators we can conclude how banking structure is influenced by the global financial crisis. Banking sector records: future process of consolidation, high concentration ratio for five the biggest banks in system, slowing down of banking intermediation as result of global economic crisis and recession, slow recovery of bank sources and credit activities, decreasing profitability as result of increasing bad loans and cost of loan loss provision, decreasing capital adequacy.

Stability of banking sector presents possibility that it will not get into a situation of insolvency in the future. So it is important to review structure of banking sector and it changes.

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