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EUROZATION IN BOSNIA AND HERZEGOVINA - BARRIES AND OPPORTUNITIES FOR INTEGRATION

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Review

Abstract

Preconditions of the economic growth of the small, open economy are stable and strong currency, favourable business environment and financial stability. Financial and monetary stability is one of the key presumptions of economic growth. Bosnia and Herzegovina in financial system record significant level of eurozation. There are many reasons for eurozation in national economy. Bank deposits and loans are denominated in euro, national currency is fixed to euro through monetary regime currency board. The objective of the paper is to provide conceptual framework of eurozation and to analyse level of eurozation in Bosnia and Herzegovina. Authors in paper will analyses economic development and changes in banking sector in condition of eurozation in period before and after financial crisis.

Keywords: *eurozation, banking sector, economy, B&H, EU*

JEL: E52, E58

1. INTRODUCTION

Over the past 20 years, economies in transition countries has undergone a transformation characterised by reconstruction, privatisation, consolidation and stabilisation. For the most of transition sectors, within former centrally planned economy, mono-bank system was characteristic, with a combination of central bank and commercial bank functions. With process of transition, in Bosnia and Herzegovina also started privatisation in national economy. Bosnia and Herzegovina has a complex social organization. Dayton Peace Agreement from 1995 has organized this country in two entities and in one district.

Currency board system in Bosnia and Herzegovina limits central bank to formulate and implement monetary policy. Central bank of Bosnia and Herzegovina (CBBH) has limited possibility to use monetary policy instruments. CBBH can not provide function of "lender of last resort". In this situation and with undeveloped money market, banks must ensure adequate liquidity and involve best practise in managing liquidity risk. Developed capital markets can protect the economy from some global financial shocks by providing them stable and secure sources of liquidity. Specially, central bank in cooperation with the Ministry of finance and public agencies has important role in developing the domestic money market (treasury bill market) and domestic debit market (government securities market). (Živko and Slijepčević, 2006).

For banking system in Bosnia and Herzegovina because of it characteristic (presence political risks, domination of foreign deposits in bank funds, majority of large banks are doing business over the entire territory of country through networks of branches, the degree of the foreign ownership in the B&H banking system is extremely high) must continue the adoption of the international standards in the supervision domain.

In Bosnia and Herzegovina regulation and supervision of banks has been implemented by the Banking Agencies from two entities, the one in the FB&H and the other in the RS. They conduct financial regulation and supervision in the name of the entities and they are independent in the conduct of financial supervision. Practically Bosnia and Herzegovina has got a dual and a separate system of banking regulation and supervision on entities levels. It is possible, that in this situation, two separate and independent agencies can bring different roles for the regulation and procedures for supervision in banking sector. Impossibility to provide the unique regulation for banks supervision on whole territory of the state is the largest problem. Entity's agencies have been charged to make it only on their own territory.

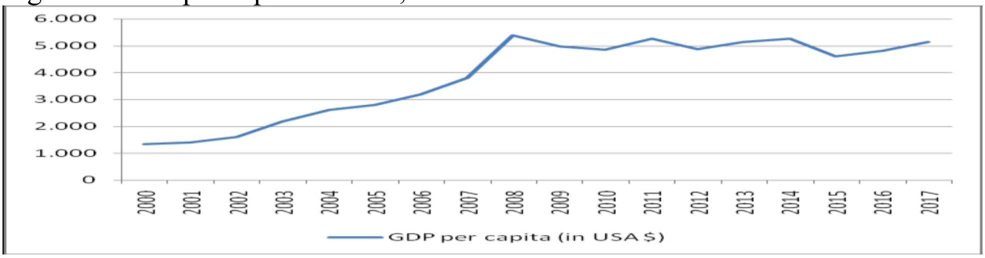
2. MACROECONOMIC ENVIROMENT IN BOSNIA AND HERZEGOVINA

Activities of banking sector are determinate by changing in macroeconomic environment. Between major macroeconomic indicators we can choose: growth rate of gross domestic products, balance of payment, inflation, interest rates, foreign exchange rate, credit expansion, increasing/decreasing financial assets price, effect of contingent (Evens, Leone, Gill, Hilbers, 2000, 10-12). Figure 1, 2, 3, 4 and 5 present macroeconomic indicator for BH in period 2000-2017.

Figure 1: GDP rate in B&H in %, 2000-2017

Source: Central bank of Bosnia and Herzegovina, Annual report 2008, Sarajevo, 2009, pp.162, Central bank of Bosnia and Herzegovina, Annual report 2017, Sarajevo, 2018, pp.107.

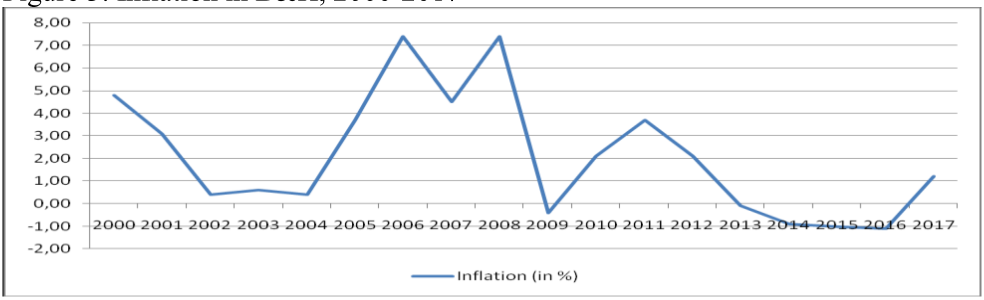
Figure 2: GDP per capita in B&H, 2000-2017



Source: Central bank of Bosnia and Herzegovina, Annual report 2008, Sarajevo, 2009, pp.162, Central bank of Bosnia and Herzegovina, Annual report 2017, Sarajevo, 2018, pp.107.

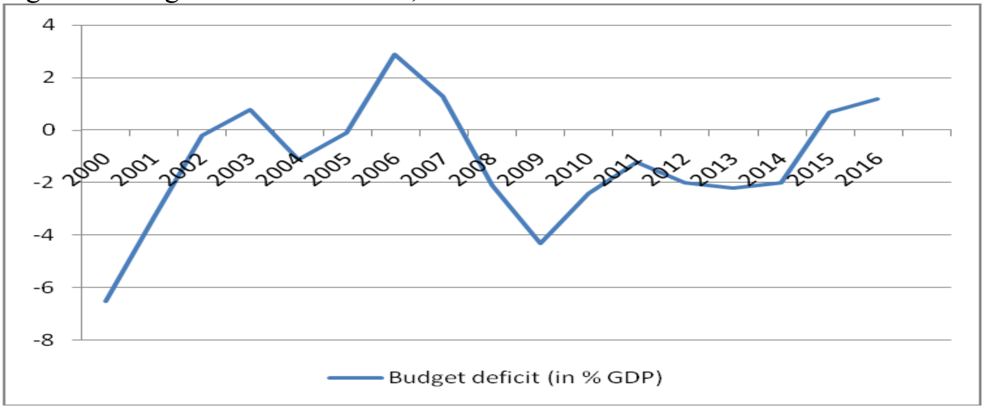
From graph 2 we can see sharp decreasing of GDP growth rate in 2009. After 2009 B&H passed through unstable period and fluctuation of economic activities.

Figure 3: Inflation in B&H, 2000-2017



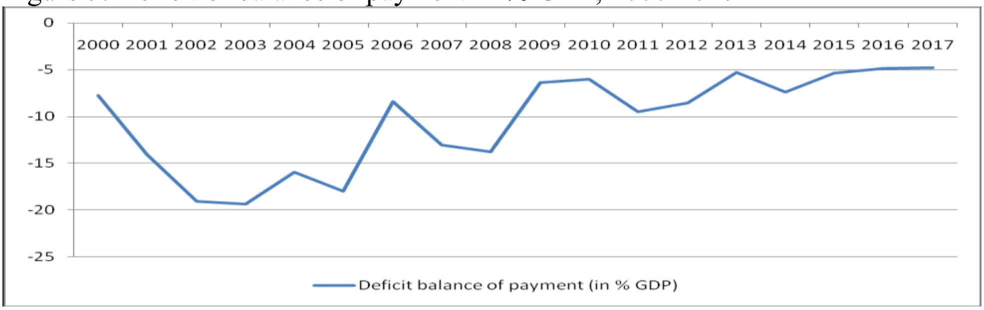
Source: Central bank of Bosnia and Herzegovina, Annual report 2008, Sarajevo, 2009, pp.162, Central bank of Bosnia and Herzegovina, Annual report 2017, Sarajevo, 2018, pp.107.

Figure 4: Budget deficit in % GDP, 2000-2016



Source: Central bank of Bosnia and Herzegovina, Annual report 2008, Sarajevo, 2009, pp.162, Central bank of Bosnia and Herzegovina, Annual report 2017, Sarajevo, 2018, pp.107.

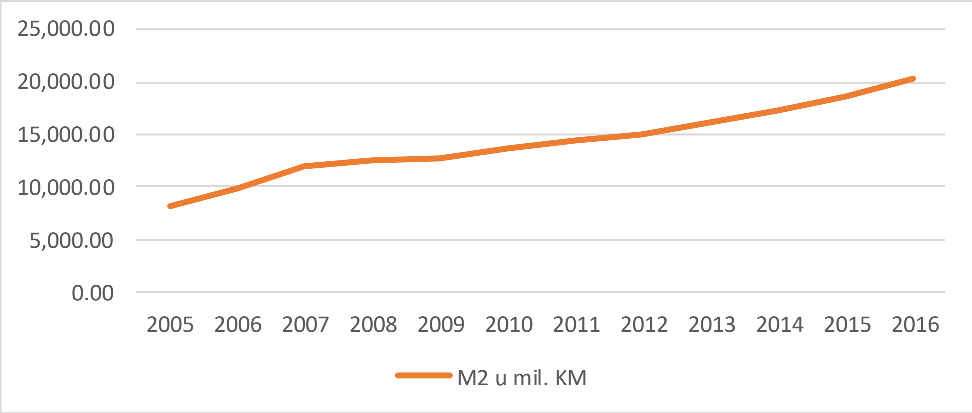
Figure 5: Deficit of balance of payment in % GDP, 2000-2017



Source: Central bank of Bosnia and Herzegovina, Annual report 2008, Sarajevo, 2009, pp.162, Central bank of Bosnia and Herzegovina, Annual report 2017, Sarajevo, 2018, pp.107.

Through macroeconomic analyses, we can determinate problems, risks or benefits and possibilities for financial sector operating. Decreasing rate of GDP growth can mean decreasing credit standing bank's clients or increasing credit risks in bank's balance sheet. Same effect had failure problems in individual industrial sector. Domestic risk for financial sector also is identified in B&H fiscal position, significant rise of budgetary beneficiaries and a current account deficit financing. In B&H as result of financial crises, we identified problems in metal industry, industry of lather and etc. Increasing deficit in balance of payment indicate foreign capital inflows and indirectly credit booms. Financial stability in country can be determinate by structure and maturity of direct foreign investments. With inflation in country, we have volatility of financial assets prices, credit standings borrowers and volatility of collateral value. These entire events can result with problems in financial institutions liquidity and solvent position.

Figure 6: Monetary supply – M2 in period 2005-2016 (in million KM)



Source: Central bank of Bosnia and Herzegovina, Annual report, different years

Money supply increased in Bosnia and Herzegovina as result of foreign direct investment, capital transfer in balance of payment and through monetary policy decrease of requirement reserve rate.

3. MONETARY POLICY IN BOSNIA AND HERZEGOVINA

The Parliament of Bosnia and Herzegovina established Central bank of Bosnia and Herzegovina (CBBH) in 1997. The main goals and tasks of the Central Bank are defined by the Law and in accordance with the General Peace Agreement in Bosnia and Herzegovina. The CBBH maintains monetary stability by issuing domestic currency according to the Currency Board Arrangement with full coverage in freely convertible foreign exchange funds under fixed exchange rate 1 KM: 0.51129 euro. The CBBH must achieve the stability of domestic currency. The basic tasks of the CBBH are (Low, 1997):

- formulate, adopt, and control the monetary policy of Bosnia and Herzegovina
- hold and manage the official foreign exchange reserves of the central bank in a safe and profitable way
- support and maintains appropriate payment and settlement systems
- co-ordinate the activities of the BH Entity Banking Agencies which are in charge of bank licensing and supervision.

With aim to formulate and implement monetary policy the CBBH do not have possibility to manage with monetary policy instruments in relation to other central banks. Reason for that position of the CBBH is pure (orthodox) currency board system. A currency board is a monetary institution that issues notes and coins fully backed by a foreign "reserve" currency and fully convertible into the reserve currency at a fixed rate and on demand. The reserve currency is a convertible foreign currency or a commodity chosen for its expected stability. The country that issues the reserve currency is called the reserve country. Table 4 lists differences between currency board and a typical central bank.

Table 1 Differences between typical currency board and central bank

Typical currency board	Typical central bank
Fixed exchange rate with reserve currency	Pegged or floating exchange rate
Foreign reserves of 100 per cent	Variable foreign reserves
Full convertibility	Limited convertibility
Rule-bound monetary policy	Discretionary monetary policy
Not a lender of last resort	Lender of last resort
Does not regulate commercial banks	Often regulates commercial banks

Source: adopted from Hanke, S., Schuler, K., Currency Board for Developing Countries – A Handbook, Institute for Contemporary Studies, San Francisco, USA, 1994, Access from http://www.users.erols.com/kurrency/icegrev.html

The CBBH has limited possibility to use monetary policy instruments. CBBH can not provide function of the "lender of last resort". Only reserve requirement is instrument of the CBBH available for managing bank's liquidity and restrict its credit activities. Through reserve requirement rate manipulation and changing requirement base in process of calculating reserve requirements the CBBH manage with financial stability in banking sector of B&H. Increasing in reserve requirements can be useful in one-off sterilisation of excess or otherwise inject liquidity. In table 5 we show changing in reserve requirement rate in BH in period 2000-2009.

Table 2: Manipulation of reserve requirement rate in BH 2000-2018

month, year of change	Reserve requirement rate - % change Reserve requirement base
1. January 2000.	5
1. January 2001.	5
1. January 2002.	10↑
1. June 2003.	5↓ expanding base on deposits in foreign currency
1. September 2004.	7,5↑
1. December 2004.	10↑
30. November 2005.	15↑
1. January 2008.	18↑
18. October 2008.	14↓
1. January 2009.	Differential reserve requirement

	14 – for deposits with maturity to 1 year 10 – for deposit with maturity from 1 year
1. May 2009.	Differential reserve requirement 14 – for deposits with maturity to 1 year 7 – for deposit with maturity from 1 year From reserve requirement base exclude state deposits for development
1. February 2011.	Differential reserve requirement 10 – for deposits with maturity to 1 year 7 – for deposit with maturity from 1 year From reserve requirement base exclude state deposits for development
1. July 2016.	10

Source: Central bank of Bosnia and Herzegovina, statistical portal

In the table 2 we can see activities of the CBBH in the period 2004-2008 in purpose to restrict credit expansion in B&H through increasing reserve requirements rate. Having in mind currency board limitation in using instruments for monetary policy as a solution for credit expansion, it is necessary to use combination of required reserve and prudential regulation:

- expression of concern in official letters to commercial bank
- informal contact with bank management
- thin cooperation with other supervisors
- grow sharp roles about providing «bad» loans
- prescribe or decrease loan to household to total loan ratio
- prescribe implicit credit limits (condition for hypothecs, loans in foreign currency etc.)

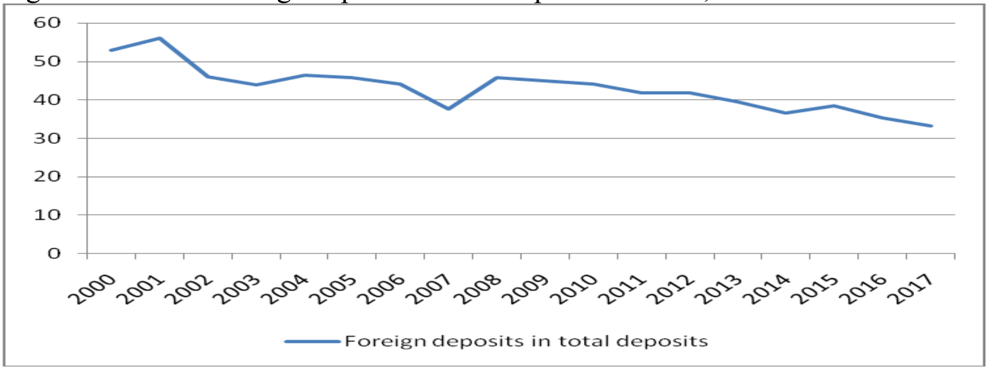
In addition, with financial crises developing the CBBH start to decrease reserve requirement rate and on that way make easy to commercial bank to deal with increasing need in liquidity. Last change of reserve rate is result of attempt to ensure through banks cheaper money to real economy.

In this situation and with undeveloped money market, banks must ensure adequate liquidity and involve best practise in managing liquidity risk. The CBBH must supervise situation with significant reduction of foreign exchange reserves which can negatively impact bank solvency. Developed capital markets can protect the economy from some global financial shocks by providing them stable and secure sources of liquidity. Specially, central bank in cooperation with the Ministry of Finance and public agencies has important role in developing the domestic money market (treasury bill market) and domestic debit market - government securities market (Živko, Slijepčević, 2006, pp. 137). The CBBH with Banking Agency on entity level must continuously supervise expose of domestic banking system to condition on home banking markets "contingent risk" and calculate stress test.

4. EUROZATION IN BOSNIA AND HERZEGOVINA - BARRIERS AND OPPORTUNITIES

Eurozation in transition countries was initially explained by the unstable macroeconomic conditions, a high inflationary environment, a loss of confidence in the domestic currency and a high degree of foreign ownership in the banking sectors. Figure 7 shows increasing dollarization ratios for Bosnia and Herzegovina between 2000 and 2017. The degree of dollarization is measured by deposits in foreign currency as percentage of total deposits.

Figure 7: Share of foreign deposits in total deposits in B&H, 2000-2017



Source: Central bank of Bosnia and Herzegovina, Annual reports, different years

From figure 7 it is clearly how B&H citizens use euro as store of value. This situation can be defined as assets submision as a form of eurozation. Assets submision describes the allocation of portfolios in assets denominated in foreign currency. By using euro, local residents try to avoid the negative impact of macroeconomic instability, inflation and depreciation of the currency. We can see from data how citizens decrease the use euro from 2001 to 2007, but as results of negative effect of financial cirsis they again intensivly use euro as store of value in banks. For this situation explanation we can find in hystorical facts unstable value of yugoslavian dinar in ex-Yugoslavia and problems in banks and their failor in period of war which lead to distrust to the national currency.

Degree of eurozation depends on the limitations that monetary authorities impose on the circulation of foreign currency, its use in domestic transactions, alternative financial instruments in foreign currency and capital flows. In the absence of such restrictions, local residents can hold foreign currency in three ways: foreign currency in circulation, foreign currency deposits held in domestic financial institutions, and foreign currency deposits held abroad.

One of the expected benefits of full eurozation in the short run is the decline inflation rates and inflation expectations. When we analyse inflation rate in Bosnia and Herzegovina it is obvious that inflation is under control. That is result of monetary regime which limited monetary authority in increasing monetary supply. Another benefit of eurosation is the perceived enhancement of economic policy credibility. By giving up control of the money supply, eurozation encourages fiscal discipline; however, it also restricts any stabilizing response of fiscal policy to negative external or domestic shocks. Another implication of full eurosation is the restriction imposed on the monetary authority's role as the lender of last resort to the domestic banking system. An expected benefit from full eurosation is the reduction of the cost of borrowing. However, sovereign or default risk is still present and investors still respond to financial crises—real shocks as well as political and social conditions specific to a country.

Even if banks offer only deposits and not loans in foreign currency, a currency depreciation risk results from the currency mismatch of bank assets and liabilities. Another source of vulnerability for the financial system is the mismatch in the maturities of deposits and loans in foreign currency. Monetary and exchange rate policies should include the presence of foreign currency deposits.

5. CONCLUSION

Functions and operation of central bank are primarily determined with existing monetary regime in these countries. However, the CBBH has different role in banking system than other central banks in the South-eastern European region. The CBBH operates in system of currency board and has limits in its discretion monetary policy. Reserve requirement is only instrument in monetary policy in B&H. Reserve requirements present channel for managing liquidity of commercial banks and financial stability.

Paper content data about financial system structure, major indicator for banking and non-banking sector, list of internal and external risk in banks operating environment with macroeconomic environment at the end historical review of manipulation reserve requirement rate. Managing financial stability in B&H is limited. National authorities must work on improvement of existing monetary regime or creating additional channels for helping banking sector. Also solution for problem in regulation and supervision must be found. Commercial banks in such environment must carefully supervise their liquidity position and keep excess liquidity on their own or central bank accounts.

REFERENCES

1. Banking Agency of Federation Bosnia and Herzegovina, Report of current situation in banking sector of F BiH 2008, Sarajevo, 2009
2. Banking Agency of Republika Srpska, Report of current situation in banking sector of RS 2008, Sarajevo, 2009

3. Central bank of Bosnia and Herzegovina, Annual Report 2008, Sarajevo, 2009.
4. Central bank of Bosnia and Herzegovina, Financial Stability Report 2008, Sarajevo, 2009.
5. Low of Central Bank of Bosnia and Herzegovina, The Official Gazette, No. 1, 1997.
6. Hanke, S., Schuler, K., Currency Board for Developing Countries – A Handbook, Institute for Contemporary Studies, San Francisco, USA, 1994, Access from http://www.users.erols.com/kurrency/icegrev.html
7. Gadžić. M., Slijepčević, S., Živko, I.: Challanges for Bank Supervision in Countries of Southeastern Europe, An Enterprise Odyssey, Faculty of Econmics and Business Zagreb, Croatia, June 2008,
8. Živko, I., Slijepčević, S.: Upravljanje likvidnosti banaka u tranzicionim zemljama, Ekonomski anali, Ekonomski fakultet Beograd, 2006,
9. Quispe-Agnoli, M., Cost and Benefits of Dollarization, Federal Bank of Atlanta, 2002.