FUNCTIONAL CORRELATION BETWEEN BANK ASSETS AND INSURED DEPOSITS IN BOSNIA AND HERZEGOVINA – THE PERSPECTIVE OF THE DEPOSIT INSURANCE FUND

1 Gorana Krunić, Deposit Insurance Agency of Bosnia and Herzegovina, Banja Luka, Bosnia and Herzegovina
*Corresponding author's e-mail: gorana_krunic@aod.ba
1 ORCID ID: 0009-0006-3706-5651

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ABSTRACT

The projection of insured deposits level in banks is of the key importance for the financial planning of the Deposit Insurance Fund as an integral part of the deposit insurance system. On the one hand, in a situation when banks fail, Deposit Insurance Fund are used for payouts of insured deposits in those banks or for financing processes of resolution such banks, which represents a real outflow of the Fund. On the other hand, the main regular inflows into the Deposit Insurance Fund are realized from insurance premiums which, as a rule, are calculated on the basis of insured deposits in all banks. The research problem posed in this paper is how to predict changes in the level of insured deposits in banks, that is, how this level in banks changes in relation to the total assets of the banking sector. The research covered the period from 2009 to 2021. The level of insured deposits in banks was set as the dependent variable and the level of bank assets was set as the independent variable. The research was conducted on the banks operating in Bosnia and Herzegovina. The research confirmed the significant conditionality of the growth of insured deposits with the growth of the bank assets, and also opened up some new directions for further research in terms of the influence of other elements on the financial planning of the Deposit Insurance Fund and the presence of moral hazard in the banking sector.

1. INTRODUCTION

The importance of deposit insurance system and deposit insurance fund, as its crucial part, is especially evident in the current environment in which many unpredictable events and risks appear and in which financial crises are much

more frequent than in previous decades. Therefore, proper planning of the Deposit Insurance Fund is very important for the efficient functioning of the deposit insurance system.

In the financial planning of the Deposit Insurance Fund, projections of inflows and outflows of the Fund are very important. The most significant regular inflows are realized from insurance premiums that banks pay as a certain fee for deposit insurance and the most significant outflows of funds are through payouts to depositors in the event of liquidation/bankruptcy of banks or through the financing of bank resolution processes in those countries where such possibility exists.

In the context of the above, planning changes in the level of insured deposits in banks is important for two reasons. The first reason is that the strengthening of the Deposit Insurance Fund is mostly done from insurance premiums which, as a rule, are charged on the basis of total insured deposits in banks, and the second reason is that the level of insured deposits in banks represents the potential exposure of the Deposit Insurance Fund, i.e. in a situation when banks fail, the Fund should have enough available funds to fully protect all insured deposits in banks.

Given that banks use insured deposits as their source of financing, it was researched how the level of insured deposits in the banks operating in Bosnia and Herzegovina changed in relation to the change of the level of total bank assets over a period of 11 years (2009 - 2021). The goal was to determine the dependence of changes in the level of the insured deposits in relation to changes in the total assets of the banks operating in Bosnia and Herzegovina, i.e. in the Republic of Srpska and Federation of Bosnia and Herzegovina[1].

The results of the research could be useful to the deposit insurance system in the process of financial planning of the Deposit Insurance Fund.

Many studies have shown the importance of monitoring the level of insured deposits in banks in the context of determining the optimal amount of the Deposit Insurance Fund.

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1 Bosnia and Herzegovina is a country consisting of two entities, the Republic of Srpska and the Federation of Bosnia and Herzegovina. Given that bank supervision and bank resolution processes are carried out by two institutions in Bosnia and Herzegovina - the Banking Agency of the Republic of Srpska for banks with headquarters in the Republic of Srpska and the Banking Agency of the Federation of Bosnia and Herzegovina for banks with headquarters in the Federation of Bosnia and Herzegovina, and that there are two entity banking laws, in this paper we observed both the entire banking sector in Bosnia and Herzegovina, as well as the separate banking sectors at the entity level.

The amount of the Deposit Insurance Fund at the end of a certain period of time is affected by insured deposits on two grounds. Firstly, in the case of payouts of insured deposits during the observed period, there is an outflow from the Fund, and secondly, the inflow into the Fund based on the charged premium is directly related to the level of insured deposits in banks, which, as a rule, is the basis for calculating the insurance premium.

The equation used for "dynamic" planning of the Deposit Insurance Fund, which takes into account changes in the level of insured bank deposits, can be represented as (International Association of Deposit Insurers, 2011, p. 14):

$$B_t = B_{t\text{-}1} - D_t + I_t + P_t + R_t$$

Where

B_t – denotes Deposit Insurance Fund at the end of period t,

D_t – denotes the total payout to depositors over period t,

I_t – denotes the investment income of the Deposit Insurance Fund over period t,

P_t – denotes insurance premiums received over period t,

R_t – denotes the recoveries received over period t.

Data on deposits and bank liabilities should be available from quarterly bank financial statements that banks file with their regulators. Estimates of insured deposits are often reported by banks as well, sometimes directly to the deposit insurer and other times to the central bank. The accuracy of self-reported insured deposits varies with the complexity of deposit insurance coverage rules, with more complex rules yielding worse estimates. The percentage of deposits that are insured will vary with bank type within the country, and insurance exposures depend heavily on the deposit insurance thresholds relative to average depositor wealth levels as well as wealth distributions (O'Keefe & Ufier, 2017, p. 28).

The impact of the growth of deposits onto the Deposit Insurance System's funds and its pay out capacity are as follows – the payout capacity is always larger at lower covered deposits' annual growth rate. Authorities should take into account the growth of deposits' impact when deciding on an annual premium level, especially if the country experienced a significant growth of deposits (Ognjenović, 2017, p. 123)

Empirical research conducted in order to assess the relationship between the Deposit Insurance Fund and total deposits and loans showed that the volume of total deposits and total loans and advances were negatively and statistically

significant to the Deposit Insurance Fund in the long run (Ebiaghan & Jeroh, 2020).

Research on changes in the level of insured deposits is also important for planning the target amount of the deposit insurance fund.2 In the literature, two approaches can be found in determining the target amount of the deposit insurance fund, namely: the Loss Distribution Approach and the Credit Portfolio Approach (O'Keefe & Ufier, 2017, p. 5). It is also possible to use the so-called discretionary approach. The discretionary approach refers to the situation when the target fund size is not determined according to specific methodology. Instead, arbitrary decision and judgments are made when establishing the target fund size (Ognjenović, 2017, p. 160). Regardless of which method was used in the planning process of the Deposit Insurance Fund, the key information is the level of insured deposits in banks, i.e. what the potential liability of the Deposit Insurance Fund is in the event that the bank encounters problems in its operations.

In order to determine the optimal level of the Deposit Insurance Fund, if the credit portfolio approach is applied, in addition to the probability of default, the loss rate per default, the overall exposure at default is a key factor. Expected Losses in state of world $t = PD_t \times LGD_t \times EAD_t$ (O'Keefe & Ufier, 2017, p. 12).

In the research of the methodological approach for the development of the Target Deposit Insurance Fund Model, it is determined the importance of reporting regarding the level of insured deposits. Research regarding changes in insured deposits in an earlier period determines how the movement of the level of insured deposits will be predicted in the developed model. The percentage of deposits that are insured tends to depend heavily upon bank type (O'Keefe & Ufier, 2016, p. 20).

For the purposes of assessing the adequacy of the Deposit Insurance Fund using the credit risk model, the relationship between gross domestic product and inflation, interest rate changes and deposit growth was researched (Doss, 2017).

Research conducted by the International Association of Deposit Insurers showed that it is necessary to continuously review the target amount of the deposit insurance fund, taking into account the factors that influence its determination, which constantly change. One of the factors is the structure and characteristics of

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2 The target amount of Deposit Insurance Fund is the desired (target, optimal) level of the "coverage ratio", expressed as the ratio of the total required amount of Deposit Insurance Fund and the total exposures of Deposit Insurance Fund to the member banks of deposit insurance program - total insured deposits in banks. Deposit insurance coverage ratio is a measure for the Deposit Insurance System's 'compensation power' or its 'payout capacity'. It is, somewhat, similar to the concept of bank's capital adequacy ratio (CAR) (Ognjenović, 2017, p. 109).

http://www.ae.ef.unibl.org/

the financial system, an integral part of which are insured deposits (International Association of Deposit Insurers, 2018, p. 12).

2. MATERIALS AND METHODS

In this paper, regression and correlation analysis was applied. The relationship between bank assets and insured deposits was determined using a simple linear regression analysis. Bank assets represent an independent variable, whereas insured deposits in banks are a dependent variable and they are observed in the total amount in the banks operating in Bosnia and Herzegovina, as well as at the level of the banking sector of the Republic of Srpska and the banking sector of the Federation of Bosnia and Herzegovina. The functional connection between bank assets and insured deposits in banks was analyzed and it is shown as:

$$Y = f\,(def,\,X)$$

The simple linear regression model can be written as:

$$Y_i = \beta_0 + \beta_1 x_i + \varepsilon_i \quad i = 1, 2, \ldots, N$$

Where:

- Y_i: means dependent variable, in this analysis, insured deposits in banks;
- x_i: means independent variable, in this analysis, bank assets;
- β_0 i β_1 are unknown constants or regression parameters;
- ε_i is a stochastic member or a disorder, or an accidental error and
- N means the size of the base set.

The estimates of the parameters in the regression equation are obtained on the basis of the least squares method and it is shown as:

$$b_1 = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - \left(\sum x\right)^2}$$

$$b_0 = \bar{y} - b_1 \bar{x}$$

The parameter b0 shows the expected value of the dependent variable Y, if the independent variable X has the value of zero, while the parameter b1 shows the average change of the dependent variable with a unit increase of the independent variable.

For the needs of the analysis, the econometric program EViews was used. The obtained coefficient of determination shows that the applied model is representative and that there is a strong connection between the observed variables, as well as that the applied model is good at forecasting trends.

3. RESULTS

The following table shows the results of the regression analysis of bank assets and bank insured deposits at the level of the entire banking sector of Bosnia and Herzegovina.

Table 1. The influence of bank assets on the level of insured deposits in the banking sector in Bosnia and Herzegovina [3]

Dependent Variable: ID
Method: Least Squares
Date: 02/16/23 Time: 11:04
Sample: 2009Q4 2021Q4
Included observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3428777.	644695.9	-5.318441	0.0000
ASSETS	0.428631	0.024955	17.17639	0.0000
R-squared	0.862585	Mean dependent var		7449269.
Adjusted R-squared	0.859661	S.D. dependent var		2253648.
S.E. of regression	844258.7	Akaike info criterion		30.17027
Sum squared resid	3.35E+13	Schwarz criterion		30.24748
Log likelihood	-737.1715	Hannan-Quinn criter.		30.19956
F-statistic	295.0284	Durbin-Watson stat		0.082625
Prob(F-statistic)	0.000000			

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.), Reports on the situation in the banking sector of the Republic of Srpska (2022) and Reports on the situation in the banking sector of the Federation of Bosnia and Herzegovina (2022)

Regression analysis showed that the coefficient of determination (r^2) is 0.86, i.e. 86% of changes in insured deposits are explained by changes in the level of bank assets. Therefore, the growth of insured deposits in banks is significantly conditioned by the growth of bank assets. The coefficient for the independent variable (bank assets) which is 0.43 showed that an increase/decrease in the amount of bank assets by one observed unit leads to an increase/decrease in the amount of insured deposits in banks by 0.43 units.
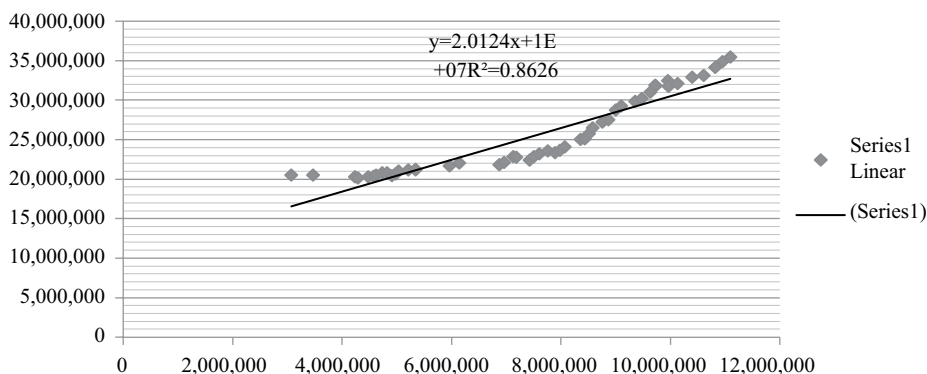
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3 Data from Appendix 1

Chart 1. Regression equation of bank assets and insured deposits
of the banking sector in Bosnia and Herzegovina

Source: Author's calculation

Bearing in mind that banks in Bosnia and Herzegovina operate in accordance with two entity banking laws, a separate research was carried out for the banking sector of the Republic of Srpska and the banking sector of the Federation of Bosnia and Herzegovina.

Table 2 shows the results of the regression analysis of bank assets and insured deposits at the banking sector of the Republic of Srpska and Table 3 shows the results of the regression analysis of bank assets and insured deposits at the banking sector of the Federation of Bosnia and Herzegovina.

Table 2. The influence of bank assets on the level of insured deposits in the banking sector of the Republic of Srpska[4]

Dependent Variable: ID
Method: Least Squares
Date: 02/16/23   Time: 15:19
Sample: 2009Q4 2021Q4
Included observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2344066.	230122.8	-10.18615	0.0000
ASSETS	0.642242	0.033000	19.46163	0.0000
R-squared	0.889608	Mean dependent var		2076385.
Adjusted R-squared	0.887259	S.D. dependent var		770355.9
S.E. of regression	258661.6	Akaike info criterion		27.80439
Sum squared resid	3.14E+12	Schwarz criterion		27.88161
Log likelihood	-679.2075	Hannan-Quinn criter.		27.83369
F-statistic	378.7552	Durbin-Watson stat		0.134346
Prob(F-statistic)	0.000000			

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.) and Reports on the situation in the banking sector of the Republic of Srpska (2022)

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4 Data from Appendix 2

Regression analysis showed that the coefficient of determination (r2) is 0.89, i.e. 89% of changes in insured deposits are explained by changes in the level of bank assets in banking sector of the Republic of Srpska. Therefore, the growth of insured deposits in banks is significantly conditioned by the growth of bank assets. The coefficient for the independent variable (bank assets) which is 0.64 showed that an increase/decrease in the amount of bank assets by one observed unit leads to an increase/decrease in the amount of insured deposits in banks by 0.64 units.

The coefficient of 0.64 showed that in the banking sector of the Republic of Srpska there is a greater correlation of changes in insured deposits conditioned by bank assets compared to the entire sector of Bosnia and Herzegovina.
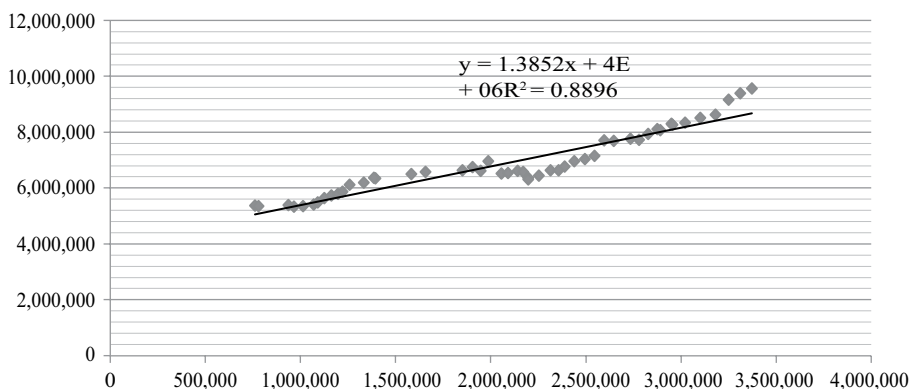

$$y = 1.3852x + 4E + 06 \quad R^2 = 0.8896$$

Chart 2. Regression equation of bank assets and insured deposits
of the banking sector of the Republic of Srpska
Source: Author's calculation

Regression analysis for banks based in the Federation of Bosnia and Herzegovina showed that the coefficient of determination (r2) is 0.83, i.e. 83% of changes in insured deposits are explained by changes in the level of bank assets in banking sector of the Federation of Bosnia and Herzegovina. Therefore, the growth of insured deposits in banks with headquarters in the Federation of Bosnia and Herzegovina is significantly conditioned by the growth of bank assets, although this conditionality is partly smaller compared to banks with headquarters in the Republic of Srpska.

The coefficient for the independent variable (bank assets) which is 0.36 showed that an increase/decrease in the amount of bank assets by one observed unit leads to an increase/decrease in the amount of insured deposits in banks by 0.36

units. At the same time, this coefficient showed that in the banking sector of the Federation of Bosnia and Herzegovina there is a significantly lower correlation of changes in insured deposits conditioned by bank assets compared to the entire banking sector of Bosnia and Herzegovina and especially in relation to the banking sector of the Republic of Srpska.

Table 3. The influence of bank assets on the level of insured deposits in the banking sector of the Federation of Bosnia and Herzegovina[5]

Dependent Variable: ID
Method: Least Squares
Date: 02/16/23   Time: 15:34
Sample: 2009Q4 2021Q4
Included observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1192334.	447405.4	-2.664998	0.0105
ASSETS	0.354958	0.023704	14.97486	0.0000
R-squared	0.826726	Mean dependent var		5372884.
Adjusted R-squared	0.823039	S.D. dependent var		1484890.
S.E. of regression	624644.5	Akaike info criterion		29.56771
Sum squared resid	1.83E+13	Schwarz criterion		29.64493
Log likelihood	-722.4090	Hannan-Quinn criter.		29.59701
F-statistic	224.2463	Durbin-Watson stat		0.084651
Prob(F-statistic)	0.000000			

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.) and Reports on the situation in the banking sector of the Federation of Bosnia and Herzegovina (2022)
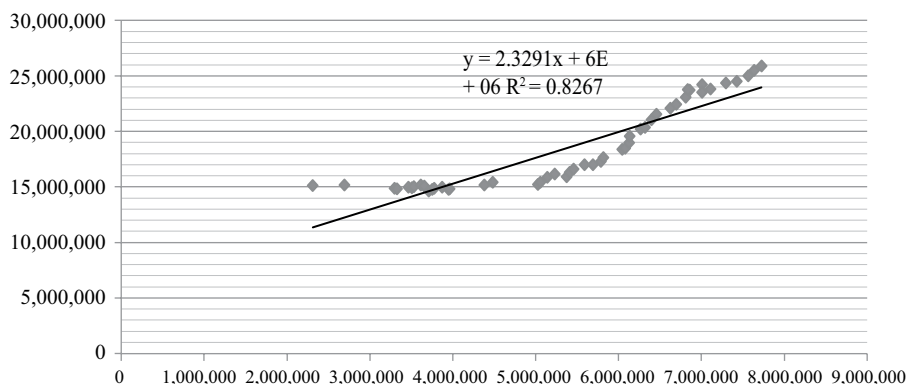

$y = 2.3291x + 6E + 06$ $R^2 = 0.8267$

Chart 3. Regression equation of bank assets and insured deposits of the banking sector of the Federation of Bosnia and Herzegovina
Source: Author's calculation

5 Data from Appendix 3

4. DISCUSSIONS

The research conducted on the entire banking sector of Bosnia and Herzegovina showed that there is a high degree of connection between insured deposits and bank assets, i.e. the growth of insured deposits in banks is significantly conditioned by the growth of bank assets. However, there are differences between the banking sector of the Republic of Srpska and the banking sector of the Federation of Bosnia and Herzegovina regarding the unit change in the amount of insured deposits in relation to bank assets. There is a significantly smaller change for banks with headquarters in the Federation of Bosnia and Herzegovina (0.36) compared to banks with headquarters in the Republic of Srpska (0.64).

The above coefficients show that the banks with headquarters in the Republic of Srpska use insured deposits as sources of financing more than in the case of banks with headquarters in the Federation of Bosnia and Herzegovina. One of the reasons may be the fact that banks based in the Republic of Srpska offer higher interest rates on deposits than banks in the Federation of Bosnia and Herzegovina and thus become more competitive in terms of collecting insured deposits. Given that banks determine the price of their placements, among other things, two questions can be asked on the basis of the cost of financing sources.

First, do banks based in the Republic of Srpska achieve lower profitability compared to banks based in the Federation of Bosnia and Herzegovina? In order to be more competitive, the banks based in the Republic of Srpska should not have higher interest rates on credit placements than banks based in the Federation of Bosnia and Herzegovina. On the other hand, if the sources of financing for the banks based in the Republic of Srpska are more expensive, then maintaining a competitive position in terms of lending damages profitability.

Another question would be whether, in order to achieve better profitability, the banks based in the Republic of Srpska place funds at higher interest rates on loans than banks based in the Federation of Bosnia and Herzegovina, in which case the risky clients who are ready to pay higher interest rates on the obtained funds could appear as their clients.

The deposit insurance system is very interested in all of the above due to the exposure of the Deposit Insurance Fund to insured depositors, but there is also an interest of the complete financial safety net.

The significant reliance of banks on insured deposits, as a source of their own financing, also raises the question of the possible effect of moral hazard caused by the deposit insurance system. Deposit insurance, like any other insurance, by its nature, causes possible hazardous behavior of certain participants in the

system (Krunić, 2016). This especially occurs if the deposit insurance system, as well as the entire financial safety-net, does not have sufficiently good protective mechanisms to mitigate such effects of moral hazard (Krunić, 2012).

Due to limited data availability, this research focuses on the entire banking sector in Bosnia and Herzegovina, i.e. in its entities, the Republic of Srpska and the Federation of Bosnia and Herzegovina. The same research could be conducted on individual banks, where it would be determined how individual banks rely on insured deposits as a source of financing, which is particularly useful for planning of the Deposit Insurance Fund. In the process of planning the Deposit Insurance Fund, taking into account the quality of banks in the entire banking sector with a special emphasis on systemically important banks, is of additional importance.

In this paper, we researched the changes of one factor - insured deposits - which affects the financial planning of the Deposit Insurance Fund. In addition to insured deposits, for the planning of the Deposit Insurance Fund, assessments of the sensitivity of individual banks to crisis situations, possible compensation of insured deposits, as well as the percentage of the recovery, are of a key importance. Everything mentioned in this part of the discussion points to possible new directions of research.

5. CONCLUSIONS

In the process of financial planning of the Deposit Insurance Fund the projections of the level of insured deposits in banks are very important. This is because insured deposits represent the Fund's potential exposure to banks facing failure. At the same time, the level of insured deposits is also important from the point of view of the deposit insurance premium, which represents the most significant regular inflow of funds into the Deposit Insurance Fund.

This paper researched the dependence of changes in the level of insured deposits in banks in relation to bank assets. The research confirmed a significant relationship between bank assets and the level of insured deposits in banks in Bosnia and Herzegovina, where there is a difference in the degree of change within the entity's banking sectors. A significantly smaller unit change in the amount of insured deposits is present for the banks with headquarters in the Federation of Bosnia and Herzegovina compared to the banks with headquarters in the Republic of Srpska. This indicates that the banks with headquarters in the Republic of Srpska use insured deposits as a source of financing more than it is the case with the banks based in the Federation of Bosnia and Herzegovina.

This research also opened up some new directions of research in terms of the impact of other elements on the financial planning of the Deposit Insurance Fund, as well as in terms of presence of moral hazard in the banking sector.

Conflict of interests

The author declares there is no conflict of interest.

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APPENDICES

APPENDIX 1:Total bank assets and total insured deposits in Bosnia and Herzegovina (in thousands of BAM)

PERIOD	ID	ASSETS
12/31/2009	3,070,927	20,508,838
03/31/2010	3,470,165	20,545,005
06/30/2010	4,234,691	20,270,722
09/30/2010	4,291,463	20,174,541
12/31/2010	4,476,555	20,331,235
03/31/2011	4,574,866	20,357,094
06/30/2011	4,623,943	20,526,217
09/30/2011	4,736,895	20,805,326
12/31/2011	4,819,378	20,838,125
03/31/2012	4,910,583	20,429,847
06/30/2012	4,974,224	20,685,482
09/30/2012	5,031,580	21,035,477
12/31/2012	5,208,438	21,186,269
03/31/2013	5,345,958	21,144,574
06/30/2013	5,346,136	21,225,064
09/30/2013	5,963,811	21,669,387
12/31/2013	6,137,946	22,023,581
03/31/2014	6,878,250	21,861,648
06/30/2014	6,958,909	22,157,035
09/30/2014	7,127,201	22,841,628
12/31/2014	7,179,572	22,772,464
03/31/2015	7,426,969	22,450,020
06/30/2015	7,500,614	22,844,521
09/30/2015	7,599,284	23,245,507
12/31/2015	7,760,738	23,582,049
03/31/2016	7,888,494	23,389,821
06/30/2016	7,985,629	23,643,050
09/30/2016	8,065,645	24,088,541
12/31/2016	8,354,769	25,013,801
03/31/2017	8,434,390	25,133,007

PERIOD	ID	ASSETS
06/30/2017	8,515,497	25,753,207
09/30/2017	8,575,833	26,527,838
12/31/2017	8,761,191	27,248,816
03/31/2018	8,863,222	27,513,202
06/30/2018	8,996,308	28,750,315
09/30/2018	9,100,186	29,251,866
12/31/2018	9,359,418	29,853,834
03/31/2019	9,478,086	30,180,877
06/30/2019	9,632,538	31,021,246
09/30/2019	9,730,254	31,853,625
12/31/2019	9,954,705	32,509,432
03/31/2020	9,726,348	31,870,052
06/30/2020	9,959,865	31,777,763
09/30/2020	10,126,318	32,131,470
12/31/2020	10,392,961	32,905,011
03/31/2021	10,606,711	33,145,052
06/30/2021	10,814,742	34,153,088
09/30/2021	10,947,188	34,883,089
12/31/2021	11,094,799	35,442,081

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.), Reports on the situation in the banking sector of the Republic of Srpska (2022) and Reports on the situation in the banking sector of the Federation of Bosnia and Herzegovina (2022)

APPENDIX 2: Total assets and total insured deposits in the banks with headquarters in the Republic of Srpska (in thousands of BAM)

PERIOD	ID	ASSETS
12/31/2009	760,187	5,371,717
03/31/2010	778,538	5,353,902
06/30/2010	935,838	5,382,803
09/30/2010	965,723	5,333,324
12/31/2010	1,012,890	5,340,267
03/31/2011	1,068,730	5,403,210
06/30/2011	1,091,941	5,483,844
09/30/2011	1,124,680	5,634,562
12/31/2011	1,163,625	5,731,790
03/31/2012	1,197,961	5,781,132
06/30/2012	1,220,196	5,871,162
09/30/2012	1,257,312	6,118,710

PERIOD	ID	ASSETS
12/31/2012	1,333,571	6,195,503
03/31/2013	1,393,164	6,337,067
06/30/2013	1,384,703	6,356,757
09/30/2013	1,582,244	6,494,131
12/31/2013	1,657,581	6,576,920
03/31/2014	1,852,151	6,623,653
06/30/2014	1,905,102	6,735,392
09/30/2014	1,985,801	6,962,097
12/31/2014	1,946,873	6,615,647
03/31/2015	2,054,644	6,505,974
06/30/2015	2,090,475	6,535,376
09/30/2015	2,142,262	6,613,299
12/31/2015	2,170,507	6,575,166
03/31/2016	2,197,296	6,351,244
06/30/2016	2,197,658	6,307,920
09/30/2016	2,251,582	6,430,092
12/31/2016	2,313,386	6,631,767
03/31/2017	2,355,504	6,628,503
06/30/2017	2,388,404	6,760,363
09/30/2017	2,439,483	6,947,275
12/31/2017	2,495,043	7,038,965
03/31/2018	2,545,142	7,146,694
06/30/2018	2,596,762	7,700,197
09/30/2018	2,645,518	7,681,394
12/31/2018	2,733,059	7,760,073
03/31/2019	2,780,070	7,724,378
06/30/2019	2,826,116	7,938,975
09/30/2019	2,873,541	8,111,725
12/31/2019	2,948,503	8,297,662
03/31/2020	2,890,256	8,066,699
06/30/2020	2,955,423	8,259,899
09/30/2020	3,020,418	8,324,711
12/31/2020	3,101,450	8,508,573
03/31/2021	3,180,418	8,618,003
06/30/2021	3,249,049	9,149,929
09/30/2021	3,309,771	9,389,823
12/31/2021	3,372,324	9,551,253

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.) and Reports on the situation in the banking sector of the Republic of Srpska (2022)

APPENDIX 3: Total assets and total insured deposits in the banks with headquarters in the Federation of Bosnia and Herzegovina (in thousands of BAM)

PERIOD	ID	ASSETS
12/31/2009	2,310,740	15,137,121
03/31/2010	2,691,627	15,191,103
06/30/2010	3,298,853	14,887,919
09/30/2010	3,325,740	14,841,217
12/31/2010	3,463,655	14,990,968
03/31/2011	3,506,136	14,953,884
06/30/2011	3,532,002	15,042,373
09/30/2011	3,612,215	15,170,764
12/31/2011	3,655,753	15,106,335
03/31/2012	3,712,622	14,648,715
06/30/2012	3,754,028	14,814,320
09/30/2012	3,774,268	14,916,767
12/31/2012	3,874,867	14,990,766
03/31/2013	3,952,794	14,807,507
06/30/2013	3,961,433	14,868,307
09/30/2013	4,381,567	15,175,256
12/31/2013	4,480,365	15,446,661
03/31/2014	5,026,099	15,237,995
06/30/2014	5,053,807	15,421,643
09/30/2014	5,141,400	15,879,531
12/31/2014	5,232,699	16,156,817
03/31/2015	5,372,325	15,944,046
06/30/2015	5,410,139	16,309,145
09/30/2015	5,457,022	16,632,208
12/31/2015	5,590,231	17,006,883
03/31/2016	5,691,198	17,038,577
06/30/2016	5,787,971	17,335,130
09/30/2016	5,814,063	17,658,449
12/31/2016	6,041,383	18,382,034
03/31/2017	6,078,886	18,504,504
06/30/2017	6,127,093	18,992,844
09/30/2017	6,136,350	19,580,563
12/31/2017	6,266,148	20,209,851
03/31/2018	6,318,080	20,366,508
06/30/2018	6,399,546	21,050,118
09/30/2018	6,454,668	21,570,472

PERIOD	ID	ASSETS
12/31/2018	6,626,359	22,093,761
03/31/2019	6,698,016	22,456,499
06/30/2019	6,806,422	23,082,271
09/30/2019	6,856,713	23,741,900
12/31/2019	7,006,202	24,211,770
03/31/2020	6,836,092	23,803,353
06/30/2020	7,004,442	23,517,864
09/30/2020	7,105,900	23,806,759
12/31/2020	7,291,511	24,396,438
03/31/2021	7,426,293	24,527,049
06/30/2021	7,565,693	25,003,159
09/30/2021	7,637,417	25,493,266
12/31/2021	7,722,475	25,890,828

Source: Deposit Insurance Agency of Bosnia and Herzegovina (n.d.) and Reports on the situation in the banking sector of the Federation of Bosnia and Herzegovina (2022)

ФУНКЦИОНАЛНА ПОВЕЗАНОСТ АКТИВЕ БАНАКА И ОСИГУРАНИХ ДЕПОЗИТА У БОСНИ И ХЕРЦЕГОВИНИ – ПЕРСПЕКТИВА ФОНДА ЗА ОСИГУРАЊЕ ДЕПОЗИТА

1 Горана Крунић, Агенција за осигурање депозита Босне и Херцеговине, Бања Лука, Босна и Херцеговина

САЖЕТАК

Пројекција нивоа осигураних депозита у банкама је од кључног значаја за финансијско планирање Фонда за осигурање депозита као саставног дијела система осигурања депозита. Са једне стране, у ситуацији када долази до пропасти банака, средства Фонда за осигурање депозита се користе за исплату осигураних депозита у тим банкама или за финансирање процеса реструктурисања таквих банака, што представља реалан одлив средстава из Фонда, док, са друге стране, главни редовни приливи средстава у Фонд за осигурање депозита се остварују из премија осигурања које се, по правилу, обрачунавају на основицу осигураних депозита у свим банкама. Истраживачки проблем који се поставља у овом раду јесте: како предвиђати промјене нивоа осигураних депозита у банкама, односно како се тај ниво у банкама мијења у односу на укупну активу банкарског

сектора. Истраживање је обухватило период од 2009. до 2021. године. Као зависна промјењива постављен је ниво осигураних депозита у банкама, а као независна промјењива актива банака. Истраживање је проведено код банака које послују у Босни и Херцеговини. Истраживање је потврдило значајну условљеност раста осигураних депозита растом активе банака, а отворило је и неке нове правце за даља истраживања у погледу утицаја других елемената на финансијско планирање Фонда за осигурање депозита и присутности моралног хазарда у банкарском сектору.

Кључне ријечи: *Фонд за осигурање депозита, осигурани депозити.*