



## Analysis of special credit risk in the function of real financial reporting

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### Abstract

*Banks and banking business are exposed to the influence of numerous risks, of which the importance of credit risk management stands out, because credit risk is the only risk that banks are obliged to measure, record in accounting and report. Banks monitor credit risk through the segmentation of the credit portfolio according to the level of risk. This paper is focused on research related to the management of the riskiest category of the credit portfolio, for which we will use the term special credit risk (SCR) in this paper.*

**Keywords:** *bank, special credit risk, non performing loans, financial result, capital adequacy*

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*SCR includes the credit portfolio classified in the "loss" category, i.e. the portfolio that the bank cannot collect through the agreed method of repayment, but tries to collect it through the realization (sale) of collateral that had the purpose of securing the loan. The aim of the paper is focused on the research of the impact of the application and changes of the regulatory framework regarding the management of SCR, as well as the method of calculation and presentation of the calculated provisions for credit losses in accordance with the requirements of the Law on Accounting and Auditing of the FBiH and the regulatory framework (regulations of the supervisor) of the SCR. Also, the paper presents the analysis procedure of SCR through the parameters that have the greatest influence on the amount of provisions for credit losses and the used write-off rate of exposure to credit risk. For the purposes of the research in this paper, the data published by the Banking Agency of the Federation of Bosnia and Herzegovina, as the supervisor of the banking sector of the Federation of Bosnia and Herzegovina, will be used through its reports/publications with a special focus on data related to the credit risk of the riskiest category of receivables, in order to see whether and what impact it has on the financial result and capital adequacy ratio of banks in the observed period.*

## **1. Introduction**

Banking risk can be defined as any uncertain situation, that is, the probability of loss, as a result of uncertain situations. Uncertain situations mean the uncertainty of the collection of receivables based on principal and interest, and the impact of this uncertainty on the bank's equity, which by definition constitutes credit risk.

We are aware of the fact that banking is a specific activity, an activity that deals with specific type of goods (money), which indicates that there is no practical model to reduce the level of risk to which the bank and the banking activity is exposed to "zero", but that by applying certain techniques and methods of analysis and management of the same, the level of banking risks is reduced to the lowest possible level.

Timely management of banking risks has two basic goals. The first goal is to avoid bank insolvency, and the second goal is to maximize the rate of return on equity (capital adequacy ratio).

In the period 2010-2020, in the banking sector of the Federation of Bosnia and Herzegovina (FBiH) under the influence of the supervisor of the Banking Agency of the Federation of Bosnia and Herzegovina (FBA) and the requirements of the Law on Accounting and Auditing, the legal framework for measuring, monitoring, accounting and reporting on the state of credit risk

multiple times underwent changes, which had an impact on the amount of the provisions for credit losses that banks record in accounting. The amount of the provisions for credit losses is directly influenced by the requirements of the legal/sub-legal framework that is applied to determine credit losses, as well as the selected credit risk assessment model.

In this paper, we will not deal with all categories of receivables. The work is focused on the analysis of the most risky categories of receivables, on receivables that are classified as non-quality assets, that is, claims on the basis of which the bank does not generate revenues. Amendments to the legal framework for measuring credit risk introduced terms that referred to the category of receivables that the bank cannot collect through regular (contractual) means, but only through the use of other mechanisms (reprogramming, restructuring) or by initiating legal action (collection of receivables, activation of credit collateral).

SCR includes the credit portfolio classified in the "E" risk category (in accordance with the Decision on minimum standards for credit risk management and asset classification of banks<sup>1</sup>), that is, part of the credit portfolio classified in credit risk stage 3 (in accordance with the Decision on credit risk management and determination of expected credit losses<sup>2</sup>), the portfolio for which legal action has been initiated for the collection of receivables. Although it is evident that there is a terminological difference through the by-laws, the credit portfolio classified either in the "E" category or in stage 3 (S3) includes the credit portfolio of non-performing loans (NPL), i.e. loans that do not contribute to banks' earnings, but banks based on them, they have the highest provisions for credit losses.

The objectives of the this paper are: to indicate that the change in the legal framework for the calculation of provisions for credit losses has an impact on the amount of the calculated and recorded provisions for credit losses, to indicate that the bank, through the selection of parameters defined through its own methodology, has a direct impact on the amount of the provisions for credit losses and thus the capital adequacy ratio, and point out the important steps that should be taken into account when analyzing/revising SCR.

## **2. The legal framework**

The legal framework for the management and determination of expected credit losses (measurement of credit risk), in the period 2010-2020, in the banking sector on the territory of

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<sup>1</sup> Official Gazette of the Federation of BiH (2010). Decision on minimum standards for credit risk management and asset classification of banks. Sarajevo: Official Gazette of the Federation of BiH No. 86/10, 85/11 i 33/12.

<sup>2</sup> Official Gazette of the Federation of BiH (2019). Decision on credit risk management and determination of expected credit losses. Sarajevo: Official Gazette of the Federation of BiH No. 44/19, 37/20.

the FBiH was changed four times. In this part of the paper, we will give an overview of the legal and by-laws for measuring credit risk, which were applied and which are currently applied.

**Decision on minimum standards for credit risk management and asset classification of banks (Decision FBA 2010<sup>3</sup>).** Decision FBA 2010, for banks on the territory of the FBiH, was the basic, unique and only by-law for credit risk management (measurement), asset classification and for accounting balance and off-balance sheet credit risk records, as of December 31, 2010. The basis for determining the credit risk - loan loss provisions (LLP) were the days of delay and risk percentages defined by the FBA Decision 2010. The bank's assets are categorized using the so-called "credit alphabet" in five categories (A - Good assets, B - Assets with a special note, C - Substandard assets, D - Doubtful assets and E - Loss). In accordance with the FBA Decision 2010, LLP formed for asset items classified as category "A" constituted "General credit risk" (GCR), and LLP formed for assets classified in categories "B" - "E" made up "Potential loan losses" (PLL). Accounting records for credit losses were recorded in the balance sheet (for both balance sheet and off-balance sheet positions), in such a way that the increase in provisions for credit losses was recorded on the debt side of the costs of provisions, and on the credit side of provisions for credit losses, it was recorded on the accounts liabilities. The reduction (release) of provisions was recorded in the accounting records by the decreasing of liabilities and recognising revenue.

**International Accounting Standard 39 – Financial instruments: recognition and measurement (IAS 39) / International Accounting Standard 37 – Provisions, Contingent Liabilities and Contingent Assets (IAS 37).** With the entry into force of the Law on Accounting and Auditing of the FBiH (2009), banks were placed in the group of large legal entities and as such were obliged to prepare and present financial statements in accordance with the full set of published, translated and available IAS/IFRS, which affected that Decision FBA 2010 was replaced by IAS 39 for the measurement of credit losses for balance sheet financial asset items, and IAS 37 for the measurement of credit losses for off-balance sheet items by which the bank is exposed to credit risk. According to IAS 39/IAS 37, the bank classified receivables into two groups: group and individual, categorization according to the Decision FBA 2010, although it was not officially in use, it continued to be used. The basis for calculation according to IAS 39/IAS 37 was the internal methodology for measuring credit losses, which

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<sup>3</sup> Official Gazette of the Federation of BiH (2010). Decision on minimum standards for credit risk management and asset classification of banks. Sarajevo: Official Gazette of the Federation of BiH No. 86/10, 85/11 i 33/12.

each bank was obliged to prescribe. IAS introduced new terms for determined credit risk, for balance sheet items the term credit risk was used for value adjustments for balance sheet items, and the term provision for credit losses was used for credit risk based on the exposure of off-balance sheet items. The banks' internal methodology for measuring credit risk, based on the requirements of IAS 39/IAS 37, prescribed the criteria for calculating the allowance.

**International Financial Reporting Standard 9 – Financial instruments (IFRS 9).** From 2018, as a continuation of the application of new regulatory requirements in the FBiH banking sector, IFRS 9 is applied. The application of IFRS 9 in the FBiH banking sector related to the calculation and reporting of credit risk for on-balance sheet and off-balance sheet exposure and replaced the standards that had been applied for the same purpose until then, IAS 39 (on-balance sheet exposure) and IAS 37 (off-balance sheet exposure). Due to the stricter requirements introduced by IFRS 9 with its application, the first application of IFRS 9 had a negative effect for most banks in FBiH in that it required a higher amount of provisions for credit losses compared to the standards that were previously applied. There was no difference in accounting records according to IFRS 9 compared to IAS 39 and IAS 37, while there were changes in the financial reporting segment. IFRS 9 is based on the measurement of expected credit loss (ECL), unlike IAS 39 and IAS 37, which were based on incurred loss model. The application of the IFRS 9 model, which is correlated with the credit risk of banks, also required the determination of variables related to: exposure at default (EAD), loss given default (LGD) and probability of default (PD). According to IFRS 9, a new segmentation of the bank's portfolio was introduced, the categorization of the bank's financial assets into three stages: S1, S2 and S3. In S1, the bank has segmented financial instruments for which there is no significant deterioration in credit quality from the moment of initial recognition or which have a low credit risk on the reporting date. S2 includes financial instruments where there has been a significant deterioration in credit quality, but there is no objective evidence of credit loss. Financial assets for which there is objective evidence of impairment on the reporting date are segmented into S3. Financial instruments of S1 and S2 have a performing status, while financial assets classified in S3 have a non-performing status. For the assessment of asset quality as an assessment of exposure to the credit risk of a bank's placement, IFRS 9 as well as the Decision FBA 2010, IAS 39 and IAS 37 continue to use the terms: general credit risk (GCR) and expected credit loss (ECL).

**Decision on credit risk management and determination of expected credit losses (Decision FBA 2019).** In order to achieve the standardization of credit risk management and measurement of ECL and harmonization with IFRS 9, in 2019, the FBA prescribed the Decision FBA 2019,

with the obligation to apply it from 1st January 2020. In parallel with the Decision FBA 2019, the Instruction for the Classification and Valuation of Financial Assets was also prescribed, which defined in more detail the individual provisions of the Decision FBA 2019, with the aim of ensuring uniform accounting and regulatory treatment of financial assets for all banks in the FBiH. With the beginning of the application of the mentioned the Decision FBA 2019, Decision FBA 2010 ceased to be valid. The most significant change according to the Decision FBA 2019 related to the change in the categorization of assets according to the credit alphabet "A-E" into five categories and the PCL calculation, with the application of the concept of allocation of exposure in three levels of credit risks (S1, S2 and S3) and determination of ECL. The categorization according to the Decision FBA 2019 is similar to the categorization according to IFRS 9, the difference exists because the unified calculation for all banks is the same according to the Decision FBA 2019. According to the Decision FBA 2019, exposures with a low level of credit risk for which the debtor is not late with repayment in a material amount for more than 30 days (for natural persons 200 BAM and 1% of the debtor's total exposure, and for legal entities 1.000 BAM and 1% of the total exposure) are classified into S1. Items with an increased level of credit risk with a past due of a material amount for more than 30 days are assigned to credit risk S2, and items where the debtor is late in repaying overdue obligations for more than 90 days given in a material amount are assigned to credit risk S3 (exposure in the status of non-payment of liabilities). Also, according to the requirements of the FBA Decision, banks are obliged to prescribe an internal methodology that will define the method of classification and valuation of exposures, their distribution into credit risk levels and determination of ECL, and which should be harmonized with the requirements prescribed by Decision FBA 2019 and the Instruction. In addition, during the first application of the Decision, banks were required to perform an accounting write-off of balance sheet exposures (transfer to off-balance sheet records) two years after the bank recorded ECL in the bookkeeping in the amount of 100% of the gross book value of the exposure and declared it fully due. There was no difference in the accounting procedure for recording credit risk according to the requirements of Decision FBA 2019 compared to IFRS 9.

### **3. Credit risk**

In accordance with the operations that the bank performs, it is exposed to various risks, such as: credit risk, foreign exchange risk, risk of high exposure - concentration, currency (foreign exchange) risk, liquidity risk. Regardless of the number of risks to which the bank is exposed, the most pronounced risk to which banks are exposed in their operations is credit risk, which is

analyzed and monitored at the level of individual loans and at the level of the client, as well as at the level of the bank's portfolio.

In addition to the fact that credit risk is the most significant risk for banks, it is important to note that it is the only risk that banks monitor, measure, record in accounting and report. In accordance with IAS/IFRS, banks are required to record asset impairments through expenses, forming value adjustments for balance sheet and off-balance sheet exposures, which means that it is the only risk that has a direct impact on the balance sheet, so that if it increases, it affects the increase in provisions for credit losses (income statement), and through value corrections, it affects the reduction of the bank's assets (balance sheet). If the credit risk is reduced, the reduction is recorded in accounting as a release of previously recorded provisions, in such a way that the reduction has the effect of increasing immediate income (income statement), through the write-off of previously recorded value adjustments for credit losses (balance sheet).

In the previous chapter of the paper, we showed that in the observed period 2010-2020, changed the legal framework for measuring, monitoring and recording expected credit losses four times. Each change in the regulations (legal/by-laws) with implementation introduced novelties related to: terminology, classification, division, accounting recording and reporting, and all these novelties required the banks to make adjustments and additional financing costs for their implementation.

As the measurement of credit risk in the banking sector refers to the determination of provisions for credit losses, provisions as an accounting category is defined as an obligation that is uncertain in terms of term and amount. Provisions for credit losses based on the bank's on-balance sheet and off-balance sheet exposure in the banking sector of the FBiH was recorded as a provisions expense and provision liabilities of 2010, since 2011 with the amendment of the Chart of accounts for banks and similar financial institutions, the provisions for on-balance sheet exposures is recorded as a cost of provisions and the value adjustments to the value of the asset items to which the provision relates, and provisions for the bank's off-balance sheet exposures are recorded as an expense and the liability for provisions. Since it is about the accounting recording of provisions for credit losses, it is important to note that the cost of provisions can increase if the uncertainty of collection of receivables is greater, and it can also be reduced if the collection of loans is in accordance with the agreed amortization repayment plan, which means that an increase in credit risk (uncertainty of collection) is recorded in accounting as an increase in costs, and a decrease in risk in favor of income.

The paper deals with the credit risk of the riskiest category of the bank's credit claim, for which we use the term special credit risk, and it includes claims that the bank could not collect through the "regular" - contracted means, but which are tried to be collected through the initiation of permitted legal mechanisms. Given that it is the riskiest category of receivables and provisions for credit losses for this group are calculated at a higher exposure rate, and most often a 100% write-off rate is used for this category.

Credit risk management is the most important segment of the bank's risk management, from which it follows that one of the largest costs is the cost of provisions for credit losses. As we showed in the previous chapter that the method of calculating provisions for credit losses is determined by the legal regulation in force, but regardless of the regulations, from 2011-2020 FBA requires banks to create their own methodology for calculating the impairment of financial placements. Its own methodology implies the application of its own parameters, and its own parameters are applicable only to a specific bank, and from its own parameters comes the possible influence of the bank on the level of the cost of provisions for credit losses, and thus the impact on the financial result.

In the previous part of this paper, we stated that the bank classifies its financial assets into categories/segments according to the degree of collection risk, and that within the defined categories/segments through the application of internal methodology, the bank defines a model/procedure for calculating provisions for credit losses. The following factors have the greatest influence on changes in the category/segment of financial assets: changes in the client's cash flow projections, changes in the value of collateral due to the obsolescence of the assessment or submission of a new assessment by the client, placement of new loans, loan repayments, changes in PD/CR parameters, amendments and additions internal methodologies for impairment of financial assets, etc.

Calculation of credit risk, for the category of bank receivables classified as loss, based on the bank's internal methodology for measuring credit losses with the application of an individual assessment of each exposure separately through the selection of certain, selected parameters, leaves banks space to influence the amount of calculated provisions for credit losses. Changes in the amount of provisions for credit risk for receivables classified as SCR are influenced by the following factors: acquisition of collateral in court and executive proceedings, reduction of the balance for the amount of collected loans, classification of new receivables in the category of special credit risk, increase in debt write-off rate. As it is a risky category of receivables, according to the requirements of IFRS 9, banks use high write-off rates for this category of



receivables due to the impossibility of collection at the expense of provisioning costs for credit losses. Due to the application of an individual assessment to determine the write-off rate, banks have a direct influence on determining the level of the write-off rate. Which means that the bank does not have to apply a 100% write-off rate for receivables that the bank cannot collect, which represent a 100% loss for the bank, but can apply a lower rate based on the parameter assessment. The biggest influence on the change in the write-off rate of receivables that the bank cannot collect is the value of the collateral, which affects the write-off rate and directly on the amount of the calculated provisions for credit losses. The foregoing indicates that from an accounting point of view, credit risk at banks has a significant impact on the balance sheet, and from a reporting point of view, the impact of credit risk is evident on the capital requirements defined by the bank's legal/by-laws, such as the banks' capital adequacy ratio.

#### **4. Special credit risk**

The loan accounts in balance sheet represents the riskiest asset position of banks, and on the other hand, looking at the quality of loans, it represents one of the most significant determinants of the stability and success of banking operations. Asset quality analysis is actually an analysis of exposure to the credit risk of banks' placements, that is, the identification of potential credit losses that are recognized as provisions for credit losses.

Banks are obliged to classify their receivables from clients into the appropriate group (levels) of risk. Currently, banks in the territory of the FBiH use appropriate risk groups for risk classification, aligned with the requirements of the FBA regulatory framework. Until 2017, the classification by credit claim risk categories was used, the so-called „credit alphabet“ (A-E), since 2018, a classification was introduced in accordance with the requirements of the IFRS 9, according to which clients are classified into categories: Stage 1 - low level of credit risk, Stage 2 - increased level of credit risk and Stage 3 - exposure in default status.

Special credit risk includes the riskiest categories of banks' receivables, regardless of the credit risk categorization used, special credit risk includes receivables that are in arrears for more than 365 days and where the reason for the past due is excluded is a technical failure caused by the bank, but the same is the result of the client's insolvency bank and which bank cannot collect through annuity payment by the client.

According to IFRS 9, the conditions for classification in the S3 are: the existence of objective evidence of receivable insurance, entry into default, entry into NPL (subjective) status, 90 days

In addition to the classification into segments S1-S3, IFRS 9 directs its requirements to ECL as well. ECL for S3 – ECL lifetime can be calculated through two approaches:

- Individual approach – when calculating ECL for large exposures;
- Group approach - approach based on collective (statistical) assessment when calculating ECL for small exposures.

The individual method of credit risk assessment is based on:

- Creation of parameters for credit risk assessment for each individual loan;
- Estimates of expected future cash flows for each individual loan (ECL for the entire lifetime);
- Discounting to the present value at the effective interest rate (EIR) for reprogrammed loans at the original EIR - before reprogramming.

All exposures that are in default are assessed on an individual basis, so that a separate analysis of expected cash flows (from business activity and/or collateral and/or a combination thereof) is performed, based on three potential scenarios (realistic, optimistic and pessimistic). ECL represents a probability-weighted estimate of the credit loss based on three potential scenarios, weighted by the probability of occurrence of each scenario, and by discounting them to the present value. The sum of the probabilities of all three scenarios must be equal to 1. After calculating the present value (recoverable amount), the value adjustment is calculated as the difference in exposure at the moment of meeting the conditions for classification into default and the recoverable amount.

Banks in their internal methodology for measuring credit risk, prescribe the minimum amount of value correction on an individual basis, for example, that it amounts to 15%, except for example for receivables that are 100% secured by a cash deposit.

The concept of lifetime monitoring (Lifetime ECL) based on a collective (statistical) assessment is calculated using the following formula:

$$ECL_{lifetime} = LGD \times EAD$$

Where:

- ECL = expected credit loss,
- LGD = loss given default,
- EAD = exposure at default.

The parameters that need to be taken into account when calculating Lifetime ECL are: reference date, transaction (numbers of transactions), status (performing or non-performing), exposure (amount), guarantee (secured or non-secured), obligor category (group or individuals), product type (mortgage or cash deposit), EIR, LGD and maturity date.

Categories C, D, E are considered bad risk ratings, because they include assets that are not of good quality, the bank does not generate income on the basis of them, the collection is overdue for more than 90 days, credit claims have NPL status, the client is under a special monitoring measure.

### **5. Analysis of special credit risk**

When analyzing SCR, it is first necessary to look at how much of the total balance of loans classified as SCR was recorded in the bank's business books on the observed date, looking at the balance of the balance sheet and the off-balance sheet records. Once the amount of the loan classified as a SCR is known, important information, from the recorded amount, how much is related to the principal, how much to the regular and default interest.

The next step in the SCR analysis process is to review the situation in order to get answers to the following questions:

- Number of loans classified as SCR on the observed date?
- Based on which parameters are future cash flows estimated (eg. based on collateral, regular, business activities)?
- What is the average rate of value adjustments for loans classified in the category of SCR?
- For how many loans in SCR status is the reduction rate 100% and how much credit risk exposure is in BAM?

IFRS 9 does not directly specify the definition of default, but it requires that the definition used for internal credit risk measurement needs be used. Since IFRS 9 did not specify the definition of default, the Basel Committee recommended that the definition of default applied for accounting purposes should be adapted to the requirements of the regulatory framework, which for banks in the FBiH territory are the requirements of the FBA. According to FBA requirements, when applying IFRS 9 to measure credit losses, the categorization of all receivables into three segments (S1-S3) was used, and further, due to simpler monitoring of defaults, within each segment, categorization was performed into five groups using the so-

Analysis of special credit risk is performed on the basis of:

- Data from banks' information systems. The basis for performing this analysis is analytical data from the general ledger and the information system relating to the record of loans;
- Data recorded in written notes on each loan taken as a sample for analysis;
- Review of documentation from credit files;
- Reviews of quarterly and annual reports of the bank's department dealing with non-performing asset management and the department for legal affairs, general affairs and human resources;
- Conducting interviews with employees of the service/department for management of non-performing assets who are in charge of monitoring and recording risky loans, i.e. monitoring legal actions at the competent courts.

The purpose of the SCR analysis is to assess the reality of the calculation of provisions for credit losses, that is, to determine whether the calculated amount of provisions for credit losses reflects the actual amount of credit risk for all loan accounts. In the process of determining the reality of calculated provisions - the reality of financial reporting, it is necessary to consider the following:

- **Parameter ATR (average time realization).** When analyzing SCR, it is of particular importance to look at the ATR parameter, which tells about the average time of realization of collateral in the procedure of collection of risky receivables. ATR must be reviewed for all loan accounts that are classified as risky receivables, especially for loan accounts for which impairment is done on the basis of the realization of collateral and where it is evident that the bank did not apply an adequate write-off rate in relation to exposure to credit risk. Banks define the ATR parameter through their internal methodologies, defining the same in years, for example, that the valid ATR for a certain bank is 11 years. The reason why it is necessary to analyze the ATR parameter is that it prescribes the period in which the bank expects to collect the receivable from the realization of the collateral. If the prescribed ATR parameter is 12 years, and if the actual time from the initiation of legal actions to the moment of collection is analyzed based on the bank's historical data, it is possible that it is the same and greater than 12 years. However, the key to the analysis should be in the way these procedures are conducted (it often happens that the bank postpones the execution for several years),

where it cannot be determined with certainty whether the defined 12 years are really necessary until the moment of collection from the collateral. According to the FBA recommendation, it is necessary for banks to take into account the practice of using ATR of 7 years.

- **Individual assessment of credit risk for special credit exposures.** The key to the present enormous growth of missing provisions by loan accounts classified as the most risky category, which usually represents a 100% loss for the bank, is the individual assessment of credit risk, where the projection is based on the realization of collateral and/or a combination of collateral parameters and regular business activities, which creates the possibility for banks to influence on the amount of calculated provisions for credit losses, which calls into question the reality of them as well as realistic financial reporting.
- **Receivable balance in SCR status.** When analyzing SCR, it is first necessary to look at how much of the total balance of credit receivables classified as SCR is recorded in the bank's business books on the day of the analysis, looking at the overall state of exposure, that is, the balance of the balance sheet of off-balance sheet records. Once the amount of the loan classified as SCR is known, the important information that the analysis should contain is how much of the SCR relates to the principal, how much to the regular and default interest.
- **Write-off of receivables in the SCR status.** After the analysis of the documentary basis selected for the analysis of the state of SCR, it is necessary to state whether there was a case of write-off of receivables classified as SCR, and if so, state the cases in which the write-off occurred. The write-off of receivables classified as SCR is allowed only in the event that the bank's supervisory board makes a decision on the permanent write-off of receivables if the same receivables are determined to be uncollectible. Reasons for the impossibility of collection can be: initiated bankruptcy, cessation of registered activity/deletion from the court register and the like.
- **Initiation of legal action.** The next step in the analysis of SCR is the need to see how many clients in SCR status have legal action initiated, and that clients in SCR status for whom legal action has not been initiated have a reprogramming/restructuring contract.
- **Loan reprogramming.** The loan reprogramming considered a legal instrument, which, in the case of credit receivables classified as credit risk S3, is contracted with the aim of helping the client resolve his insolvency and continue the orderly repayment of the

loan, before initiating legal action (court proceedings for collection of receivables), or activation of loan collateral. In cases where receivables classified as SCR have been reprogrammed, it is necessary to look at loan reprogramming agreements in order to see whether the reprogramming agreement covers the entire amount of receivables classified as SCR or only a certain amount, e.g. the reprogrammed amount includes only the principal balance loan, and the amount of receivables based on regular and default interest has not been reprogrammed. For the record, the client does not get a "new" amount of money with the reprogramming, but the terms of the receivables that are the subject of the reprogramming change, most often the interest rate (higher interest rate due to the greater risk assumed) and a longer repayment period (smaller annuities to help the client).

- **Court and out-of-court settlement.** One of the possibilities for collecting credit receivables classified as SCR is to conclude a court/out-of-court settlement. Concluding a settlement on debt settlement implies agreeing on new repayment terms (term, grace period, interest rate, collateral, etc.), with the client's obligation to pay all costs based on legal actions taken by the bank up to the moment of settlement. The conclusion of an out-of-court settlement in practice means that if the client does not adhere to the settlement, the document - the notarized settlement, represents an enforceable document in the enforcement procedure, because any conclusion of the settlement in an already initiated enforcement proceeding can only be in the form of an out-of-court settlement, taking into account the differences in application legal basis for concluding one or another type of settlement. Court settlement is regulated by the current Civil Procedure Law, while out-of-court settlement is regulated by the current Obligations Law.

As the assessment of credit risk for the riskiest category of loans is done on the basis of an individual assessment, this leaves space for banks to influence the provisions for credit losses, which needs to be reviewed. If the analysis determines a large amount of missing provisions (provisions that are considered necessary using the calculation of value corrections based solely on the past due) in relation to the recorded provisions for all loan accounts, it can be concluded that these are unrealistic individual assessments for loans that are classified as SCR categories. Most often, an unrealistic individual assessment is based on incorrect or insufficient parameters for the assessment of cash flows, for example that the projection is made only on the basis of the realization of collateral and/or a combination of collateral and regular business activities.

The objective of the analysis of SCR is to look at the reality of the calculated amount of credit risk for loans classified under S3, especially credit accounts classified in the category of SCR, because unrealistic (reduced) assessments of credit risk are most often observed in this category, which has a direct impact on the amount of the provision cost, which results in an impact on the financial result which is understated, then on the bank's equity, assets which are overvalued in the net amount and finally on the capital adequacy ratio.

## 6. Statistical analysis of collected data on special credit risk

In this part of the work, based on the data published by the FBA, through publications for the FBiH banking sector that are available on the FBA website, we will analyze the state of SCR and the analysis of the capital adequacy ratio in the observed period of 2010-2020.

### 6.1. Analysis of the state of special credit risk at banks in FBiH

We will analyze the state of special credit risk by looking at the data related to the amount of the "E" category, the amount of SCR/ECL and the % of PLL/ECL. The labels S3 (2020) and ECL (2020) that we will use in the analysis refer to the terms of the riskiest category of receivables according to the Decision FBA 2019, because the FBA has been using the specified terminology for publishing data since 2020.

*Table 1. Classification of loans in the "E" category in the period 2010-2020*

Description	2010. (Decision FBA)	2011. (IAS 39/37)	2012. (IAS 39/37)	2013. (IAS 39/37)	2014. (IAS 39/37)
Amount „E“/S3 (2020)	3.847	685.725	710.094	810.055	872.735
Amount PLL/S3 (2020)	3.847	685.725	710.079	809.779	872.039
Rate PLL/ECL (2020)	100,00%	100,00%	100,00%	99,97%	99,92%

Description	2015. (IAS 39/37)	2016. (IAS 39/37)	2017. (IAS 39/37)	2018. (IFRS 9)	2019. (IFRS 9)	2020. (Decision FBA)
Amount „E“/S3 (2020)	856.707	881.786	889.293	837.965	750.223	1.017.814
Amount PLL//S3 (2020)	856.701	881.786	889.292	837.964	750.223	795.903
Rate PLL/ECL (2020)	100,00%	100,00%	100,00%	100,00%	100,00%	78,20%

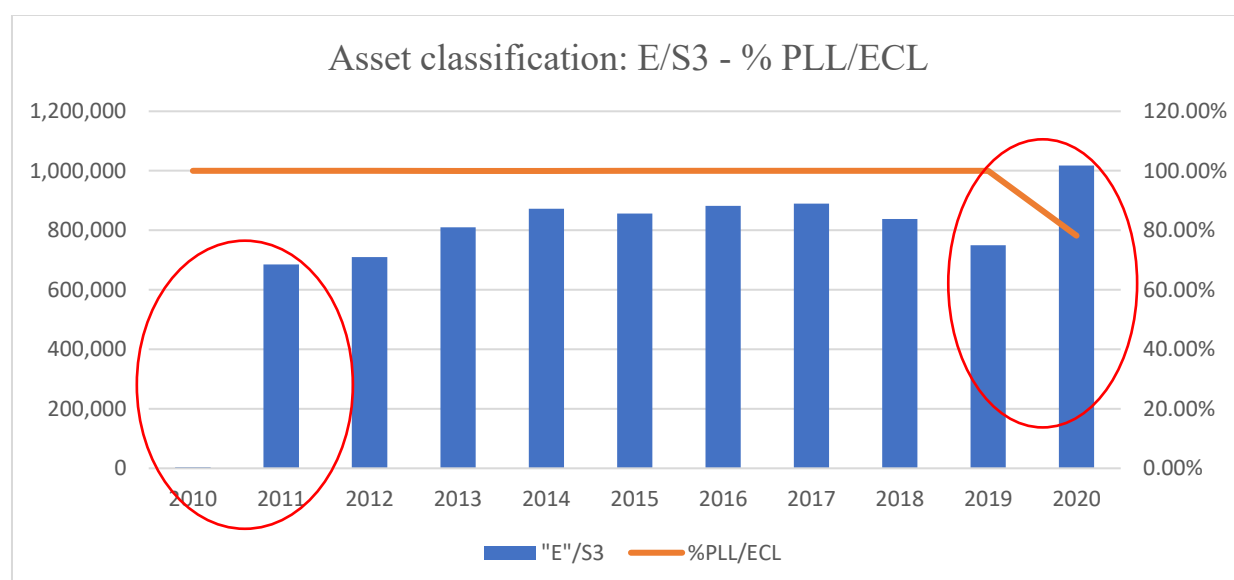
*Source: processing by the authors based on data from the FBA report<sup>4</sup>*

<sup>4</sup> FBA reports: *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2010, 31/12/2011, 31/12/2012, 31/12/2013, 31/12/2014, 31/12/2015, 31/12/2016, 31/12/2017, 31/12/2018, 31/12/2019, 31/12/2020.* Available on: <http://www.fba.ba> [accessed 17.04.2023.].

The data presented in Table 1 clearly show that the impact of the change in the legal framework for determining credit losses in the observed period for the FBiH banking sector is evident on the category of receivables classified as "E" category - loss. According to the data from Table 1, special deviations in the amounts of receivables as "E" category can be observed in the periods of transition from the local Decision FBA 2010 to IAS 39/IAS 37 standards and in the period of transition from IFRS 9 to the Decision FBA 2019.

The data presented in Table 1 will also be presented through the following graphic representation.

*Graph 1. Asset classification: "E"/"S3" category - % PLL/ECL in the period 2010-2020.*



*Source: processing by the authors based on data from the FBA report<sup>5</sup>*

In 2011, due to the transfer of category E (written-off loans) from the off-balance sheet to the bank's balance sheet, asset quality indicators were worse in 2011 compared to the previous year, especially the share of non-performing loans, as a result of the increase in total non-performing loans by 37%.

<sup>5</sup> FBA reports: *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2010, 31/12/2011, 31/12/2012, 31/12/2013, 31/12/2014, 31/12/2015, 31/12/2016, 31/12/2017, 31/12/2018, 31/12/2019, 31/12/2020.* Available on: <http://www.fba.ba> [accessed 17.04.2023.].



In the period of application of IAS/IFRS for measuring credit risk (2011-2019) from the data shown in Table 1, no significant deviations are noticeable, both in the amount of receivables classified as special credit risk "E" category, in the amount of PLL nor in the special credit risk write-off rate.

In 2020, due to the transition from IFRS 9 to the Decision FBA 2019 for measuring credit losses, the introduction of a new categorization of credit risk, the transfer of riskiest categories of loans from the balance sheet to the off-balance sheet of banks and the introduction of the obligation to calculate ECL, we do not have data for the riskiest category of loans, but the data in Table 1 for 2020 include all claims classified as S3. However, from Table 1, we can see that the impact of the Decision FBA 2019 on the classification of assets had an impact, both from the aspect of the amount of receivables classified in level S3, and from the aspect of reducing the used exposure rate %PLL/ ECL 2020 (78.20% is the rate write-off of S3 in 2020).

## **6.2. Analysis of the state of special credit risk on the capital adequacy ratio**

One of the most important indicators of the strength and adequacy of banks' capital is the capital adequacy ratio. The capital adequacy ratio in the FBiH banking sector until 2017 was calculated as the ratio of net capital to risk-weighted assets, from 2018, with the application of the new Law on Banks and the entry into force of the new Decision on the calculation of bank capital, the bank capital adequacy ratio is calculated as a ratio regulatory capital and the total amount of risk exposure.

The minimum ratio of capital adequacy in the FBiH banking sector did not change in the observed period, 2010-2020, and is 12%, prescribed by the Law on Banks, and the Decision on calculating bank capital introduces additional stricter measures to maintain it at the prescribed level. These additional measures prescribed by the Decision on the calculation of the bank's capital<sup>6</sup> were related to the fact that the bank must at all times meet the capital requirements regarding the regular basic capital rate of 6.75%, the basic capital rate of 9% and the regulatory capital rate of 12%. Also, the bank is required to maintain a protective layer for the preservation of capital as regulatory capital in the form of regular basic capital in the amount of 2.5% of the total amount of risk exposure.

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<sup>6</sup> Official Gazette of the Federation of BiH (2019). Decision on calculation of bank capital. Sarajevo: Official Gazette of the Federation of BiH No. 81/17, 50/19, 37/20.

Given that exposure to credit risk constitutes the bank's greatest exposure to total risks, in order to assess the impact of credit risk on the capital adequacy ratio in the period of frequent changes to the legal basis for measuring credit risk, 2010-2020. in the following table, we will present financial data related to the capital adequacy ratio, through:

- Net capital / regulatory capital – Table 2. (1). Until 2017, the capital adequacy ratio was calculated as the ratio of net capital/total risk-weighted assets. From 2018, with the entry into force of the Decision on the calculation of bank capital, the capital adequacy ratio is replaced by the regulatory capital ratio, which is calculated as the ratio of regulatory capital/total bank risk. Net capital (regulatory capital) represent the numerator of the capital adequacy ratio indicator.
- Risk-weighted exposures for credit risk - Table 2. (2). The total risk-weighted assets/total riskiness of the bank includes the bank's total exposure (weighted balance sheet risk + weighted off-balance sheet risk) to all risks to which the bank is exposed. Of all the risks to which the bank is exposed, the weighted exposure to credit risk is significantly the largest.
- Exposures to weighted operational risk (WOR) - Table 2. (3). In the total risk assets, the amount of WOR is second in terms of participation.
- Exposure to market risk (position and currency risk) - Table 2. (4). With the entry into force of the Decision on the calculation of bank capital, banks are obliged to take into account the bank's exposure to positional and currency risk in addition to credit and operational risk when calculating the regulatory capital ratio.
- Total amount of risk exposure - Table 2. (5). This amount includes the sum of amounts (2), (3) and (4) from Table 3 and represents the denominator of the capital adequacy ratio indicator.

*Table 1. Net/regulatory capital, total weighted risks and capital/regulatory capital adequacy ratio*

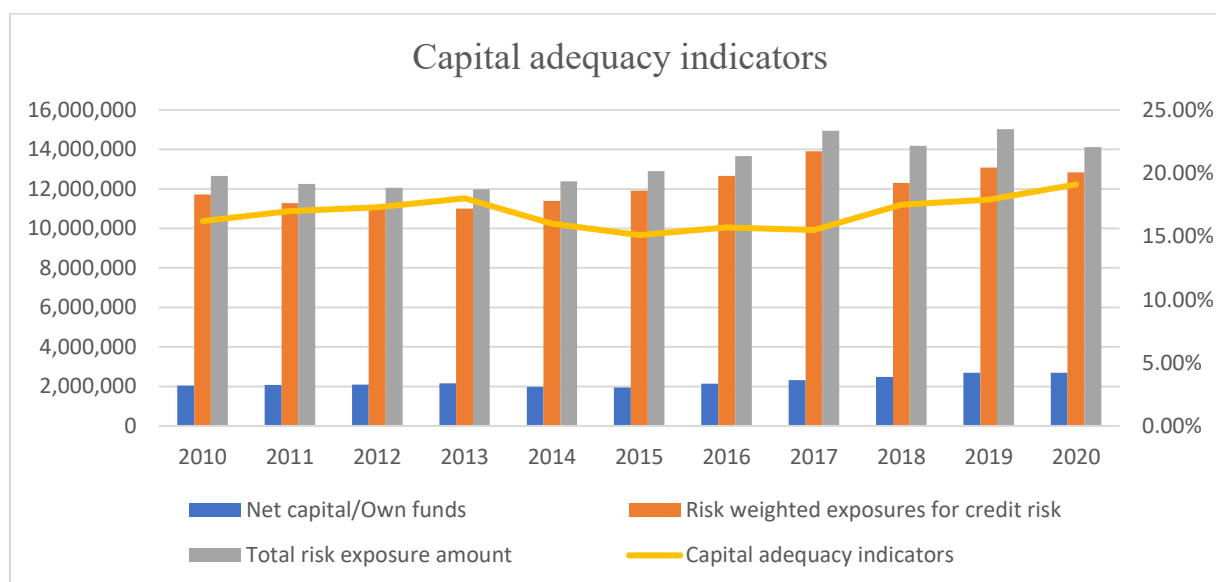
Description	2010. (Decision FBA)	2011. (IAS 39/ IAS37)	2012. (IAS 39/ IAS37)	2013. (IAS 39/ IAS37)	2014. (IAS 39/ IAS37)
(1)	2.045.886	2.083.295	2.090.789	2.157.896	1.981.641
(2)	11.713.173	11.286.997	11.078.498	10.998.977	11.394.469
(3)	942.707	965.932	974.201	981.318	982.250
(4)	-	-	-	-	-
(5)	12.665.880	12.252.929	12.052.699	11.980.295	12.376.719
%	16,20%	17,00%	17,30%	18,00%	16,00%

Description	2015. (IAS 39/ IAS37)	2016. (IAS 39/ IAS37)	2017. (IAS 39/ IAS37)	2018. (IFRS 9)	2019. (IFRS 9)	2020. (Decision FBA)
(1)	1.951.342	2.140.399	2.321.164	2.478.985	2.690.298	2.698.829
(2)	11.918.650	12.667.026	13.904.675	12.296.292	13.085.560	12.843.833
(3)	976.734	1.001.018	1.042.691	1.657.561	1.705.834	1.150.236
(4)	-	-	-	223.778	228.011	119.065
(5)	12.895.384	13.668.044	14.947.366	14.177.631	15.019.405	14.113.134
%	15,10%	15,70%	15,50%	17,50%	17,90%	19,10%

Source: processing by the authors based on data from the FBA report<sup>7</sup>

The data shown in Table 2 will also be presented graphically, with the aim of a more detailed overview of the capital adequacy ratio and whether the impact of the change in regulations related to credit risk on capital adequacy was present in the observed period 2010-2020.

Graph 2. Capital adequacy rate indicators in the period 2010-2020



Source: processing by the authors based on data from the FBA report<sup>8</sup>

<sup>7</sup> FBA reports: *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2010, 31/12/2011, 31/12/2012, 31/12/2013, 31/12/2014, 31/12/2015, 31/12/2016, 31/12/2017, 31/12/2018, 31/12/2019, 31/12/2020*. Available on: <http://www.fba.ba> [accessed 17.04.2023.].

<sup>8</sup> FBA reports: *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2010, 31/12/2011, 31/12/2012, 31/12/2013, 31/12/2014, 31/12/2015, 31/12/2016, 31/12/2017, 31/12/2018, 31/12/2019, 31/12/2020*. Available on: <http://www.fba.ba> [accessed 10.04.2023.].

Based on the data presented in Table 2 and the presentation of Graph 2, we can see that the influence of the change in the regulation related to the measurement of credit risk on the movement of the capital adequacy ratio is present. In the period of the first amendment of the legal framework for credit risk, 2012-2017 (transition from Decision FBA 2010 to IAS 39/IAS 37) the capital adequacy ratio increased from 16.20% (2010) to 17.00% (2011), because according to the new regulations in 2011, in the deductible items of regulatory capital, is an item of missing reserves<sup>9</sup>. Another reason for the increase in the capital adequacy rate in 2011 is also directly related to the change in regulations and the application of IRS, when the net capital, as well as the regulatory capital due to the inclusion of the audited profit for 2011, increased by 2%.

In the period of application of IAS 39/IAS 37 (2012-2017), the capital adequacy ratio had milder oscillations in movement, at the beginning of the observed period there was an evident increase in the adequacy ratio, after that there was a decline in it. In 2018, with the application of the new regulatory framework and the requirements of IFSR 9 (transition to IFSR 9 from IAS 39/IAS 37), the capital adequacy rate is 17.50% and is the same compared to the adequacy rate in 2017 (15.50%) increased by 2%. Changes in regulatory capital in 2018 have the greatest influence on the distribution of profits from 2017, the transfer of reserves for credit losses formed from profits to the core capital in accordance with the decisions of bank assemblies, the recapitalization of banks, as well as the effect of the first application of IFSR 9.

The implementation of the Decision FBA 2019 had the greatest effect on the growth of the capital adequacy ratio in the observed period. Looking at the data shown in Table 2, the capital adequacy ratio increased from 17.90% (2019) to 19.10% (2020). The result of the increase in the capital adequacy ratio is a change in the structure of regulatory capital by reducing the share of base capital and increasing the share of supplementary capital. In accordance with the FBA Decision 2019, banks were obliged to calculate the effects of the application of this Decision with the balance as of 31st December, 2019, i.e. the initial balance on 1st January, 2020, record them in the equity accounts and show them in the regular basic capital. The presentation of the effects of the application of the aforementioned FBA Decision 2019 resulted in a reduction of

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<sup>9</sup> Note: Missing reserves represent the difference between the total calculated reserves according to the regulatory requirement (Decision FBA 2010) and the sum of the amount of balance sheet asset value correction and provisions for losses according to off-balance sheet items (IAS 39 and IAS 37).

regular core and base capital, and an increase in the share of supplementary capital as a result of the abolition of the missing FBA regulatory reserves as a deductible item from supplementary capital.

The foregoing indicates that the impact of changes in the legal framework for determining and measuring credit risk, in all observed years and periods of application of the amended regulations, on the capital adequacy rate was evident, and that the capital adequacy ratio in the FBiH banking sector is significantly above the prescribed legal minimum rate.

## **Conclusion**

The paper shows one of the applicable techniques for analyzing the riskiest exposure category of the bank, which produces the highest cost for the bank, but at the same time the exposure on which the bank has the greatest influence through the prescribed internal methodology and defined parameters, on the amount of the cost of provisions for credit losses. One of the ways on the basis of which we can draw conclusions as to whether the prescribed parameters through the internal methodology for measuring credit risk have been achieved and are realistic is by considering: whether the provisions for credit losses were formed on time (non too late) and whether the provisions for credit losses are adequate (non too little), with the thinking that a larger amount of provisions contributes to greater stability.

In the paper, we have shown how the legal framework for measuring the bank's credit losses based on its exposures has often changed, considering the period 2010-2020, and that each new regulation introduced stricter requirements. The requirements of each new regulation were aimed mainly at: eliminating the shortcomings of the previous regulation, early recognition of credit risk and the formation of a larger amount of provisions for credit losses.

According to the results obtained through the research for the paper, we can conclude that the public is insufficiently informed about the analysis and management of special credit risk as the riskiest category of receivables that the bank has, especially in the conditions of application of local regulations for measuring credit risk when there is no specially published information on which amount refers to claims that have been written off 100% because they represent a loss for the bank. Also, that we should be aware that the position of the most risky receivables is also the position where banks have the greatest influence on the level of provisions for credit losses due to the application of an individual approach to measuring provisions for credit losses. Furthermore, the results of this work suggest that, considering the level of risk, the analysis of

SCR should be carried out frequently, at least once a year, because these are receivables for which ECL Lifetime is calculated, that these are receivables that the bank cannot collect with a regular procedure, that such receivables are most often collected through the realization of collateral (court or out-of-court settlement), and that the procedure for collecting these receivables is very slow and lengthy.

The goal of this paper is focused on the realistic calculation and recording of credit risk, which directly affects the realistic financial reporting of banks. The amount of calculated and recorded provisions for credit losses does not bring with it a guarantee that every bank that has a sufficient, realistic, high amount of provisions, that the actual losses of that bank will be at the expected level.

## References

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2010). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2010*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2011). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2011*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2012). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2012*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2013). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2013*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2014). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2014*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2015). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2015*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2016). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2016*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2017). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2017*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2018). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2018*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2019). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2019*. Retrieved from: <http://www.fba.ba> [Accessed 10.04.2023.].

Banking Agency of the Federation of Bosnia and Herzegovina (FBA). (2020). *Publications for banks: Information on entities of the FBiH banking system with the balance as of 31/12/2020*. Retrieved from: <http://www.fba.ba> [Accessed 10.11.2022.].

Odluka o izračunavanju kapitala banke. (Službene novine Federacije BiH, 81/17, 50/19, 37/20). Retrieved from: <https://www.fba.ba/eng/decision-on-calculation-of-bank-capital-official-gazette-of-the-federation-of-bih-number-8117> [Accessed 10.04.2023.].

Odluka o minimalnim standardima za upravljanje kreditnim rizikom i klasifikaciju aktive banaka (Službene novine Federacije BiH, 86/10, 85/11, 33/12). Retrieved from: <https://www.fba.ba/bs/odluka-o-minimalnim-standardima-za-upravljanje-kreditnim-rizikom-i-klasifikaciju-aktive-banaka-br-sluzbene-novine-federacije-bih-broj-8511> [Accessed 10.04.2023.].

Odluka o upravljanju kreditnim rizikom i utvrđivanju očekivanih kreditnih gubitaka. (Službene novine Federacije BiH, 44/19, 37/20). Retrieved from: <https://www.fba.ba/eng/decision-on-credit-risk-management-and-determination-of-expected-credit-losses-official-gazette-of-the-federation-of-bih-number44-19> [Accessed 10.04.2023.].

Savez računovođa, revizora i finansijskih djelatnika FBiH. (2017). MRS 39 - Finansijski instrumenti: priznavanje i mjerenje. Retrieved from: <https://www.srr-fbih.org/mrs-39-finansijski-instrumenti-priznavanje-i-mjerenje-192> [Accessed 15.04.2023.].

Savez računovođa, revizora i finansijskih djelatnika FBiH. (2017). MRS 37 - Rezervisanja, potencijalne obaveze i potencijalna imovina. Retrieved from: <https://www.srr-fbih.org/mrs-37-rezervisanja-potencijalne-obaveze-i-potencijalna-imovina> [Accessed 15.04.2023.].

Savez računovođa, revizora i finansijskih djelatnika FBiH. (2017). MSFI 9 - Finansijski instrumenti. Retrieved from: <https://www.srr-fbih.org/msfi-9-financijski-instrumenti-235> [Accessed 15.04.2023.].

Zakon o bankama. (Službene novine Federacije BiH, 27/17). Retrieved from: <https://www.fba.ba/eng/banking-law-br-official-gazette-of-the-federation-of-bih-number> [Accessed 10.04.2023.].

Zakon o računovodstvu i reviziji u Federaciji Bosne i Hercegovine. (Službene novine Federacije BiH, 15/21). Retrieved from: <http://www.pufbih.ba/v1/public/upload/zakoni/8ff22-zak-o-racunovodstvu-i-reviziji-u-fbih-hrv.pdf> [Accessed 10.04.2023.].

## Sažetak

*Banke i bankarsko poslovanje izloženi su uticaju brojnih rizika, od kojih se značaj upravljanja kreditnim rizikom posebno izdvaja, jer je kreditni rizik jedini rizik koji banke imaju obavezu da mjere, računovodstveno evidentiraju i izvještajno prikazuju. Banke kreditni rizik prate kroz segmentaciju kreditnog portofolija prema stepenu rizičnosti. Predmetni rad je usmjeren na istraživanja koja se odnose na upravljanje najrizičnijom kategorijom kreditnog portofolia, za koju ćemo u ovom radi koristiti termin specijalni kreditni rizik. Specijalni kreditni rizik obuhvata kreditni portofolio klasifikovan u kategoriju „gubitka“, odnosno portofolio koji banka ne može naplatiti ugovorenim načinom otplate, već isti pokušava naplatiti kroz realizaciju (prodaju) kolaterala koji je imao svrhu osiguranju kreditnog plasmana. Cilj rada je usmjeren na istraživanje uticaja primjene i izmjene zakonskog i regulatornog okvira u pogledu upravljanja specijalnim kreditnim rizikom, te način obračuna i iskazivanja obračunatih rezervisanja/ispravki vrijednosti u skladu sa zahtijevima Zakona o računovodstvu i reviziji FBiH i regulatornog okvira (propisa supervizora) specijalnog kreditnog rizik. Također, u predmetnom radu prikazan je postupak analize specijalnog kreditnog rizika kroz parametre koji imaju najveći uticaj na visinu rezervisanja za kreditne gubitke i korištenu stopu otpisa izloženosti prema kreditnom riziku. Za potrebe istraživanja u predmetnom radu biće korišteni podaci koje je Agencija za bankarstvo Federacije BiH kao supervizor bankarskom sektora Federacije Bosne i Hercegovine objavile kroz svoje izvještaje/publikacije s posebnim fokusom na podatke koje se odnose na kreditni rizik najrizičnije kategorije potraživanja, kako bi sagledali da li i kakav uticaj isti ima na finansijski rezultat i stopu adekvatnosti kapitala banaka u posmatranom periodu.*

**Ključne riječi:** banka, specijalni kreditni rizik, NPL, finansijski rezultat, adekvatnost kapitala