BANKING AGENCY OF
REPUBLIKA SRPSKA

BOSNIA AND HERZEGOVINA
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Asset quality in an expected losses model in a post-Covid world

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General activities taken by agencies in implementation period

June 2019

Adopted Decision on credit risk management and expected credit losses

Banking agencies had public discussion with banks and external auditors

January 2020

Application date

From January 2020.

Full implementation of the Decision and reporting

May 2020

Assessment of quantitative impact of first implementation of Decision on asset and capital

August 2020.

IFRS 9 Questionnaire on implementation of Decision on CRM and ECL

December 2020

Questionnaire on updating IFRS 9 macro models in line with projections of Covid-19 pandemic indicators

3Q2021

On site examination

Objective, Purpose and Scope of Regulation

- Abolition of double reporting
- Determining the number of overdue days is compliant with new EU regulations
- Minimum requirements for the harmonized application of the new IFRS 9 standard in banks
- Comparability of the level of non-performing exposures and interest income in the banking system of BiH (accounting write-off, reporting on non-performing loans, recognition of interest income for the level of credit risk 3)
- Compliance with EU banking regulations
- Mitigation of possible effects of the application of the new regulations on the capital of banks and ECL

Objective, Purpose and Scope of Regulation

- Defining minimum rates of expected credit losses for each level of credit risk depending on whether the bank has an adequate internal methodology and data quality
- Defining a minimum recovery period for credit risk exposures
- Establishing separate definitions for exposure modification and restructuring
- Expanding the definition of eligible collateral and defining corrective factors
- Stipulating different dynamics of calculation of expected credit losses for exposures at the level of credit risk 3 depending on whether the same collateral is eligible collateral or not
- Simplified approach to calculating expected credit losses
- Accounting write-off
- Definition of POCI assets
- Interest income treatment for receivables in default status
- Treatment of assets foreclosed in the claims process

Scope of the Regulation

- Credit Risk Management Rules
- Exposure Classification
- Minimum Expected Credit Losses
- Eligible Collateral
- Accounting Treatment of Foreclosed Assets

Scope of regulation – Credit Risk Management Rules

Adequate Internal Policy Framework

Organizational requirements

Loan Process (exposure approval, exposure riskiness monitoring, credit risk exposure analysis, EWS, non-performing exposure treatment, forborne exposure treatment, etc.)

NPL accounting write-off requirement (2 years after 100% impaired)

Scope of regulation – Exposure Classification

Stage 1

- Low risk exposures
- Exposures whose credit risk was not significantly increased after initial recognition
- The debtor is not overdue on a repayment in a material amount for more than 30 days

Stage 2

- The debtor is overdue on a repayment in a material amount for more than 30 days (mandatory)
- SICR indicators

Stage 3

- The debtor is overdue on a repayment in a material amount for more than 90 days (mandatory)
- UTP indicators

Low Risk Exposures:
CBBH, BiH, RS and FBIH Governments, central banks and governments outside BiH - credit quality step 1 or 2.

POCI - initial recognition Stage 3

Can be reclassified into Stage2

Scope of regulation – Stage 2 (SICR indicators)

SICR indicators (internally stipulated), taking into account at least:

- increase of PD parameter under the bank's internal methodology
- deterioration in the debtor's internal or external rating in the manner defined by the bank's internal methodology
- deterioration in the financial indicators of the debtor or related party group to which the debtor belongs (liquidity ratio, significant loss, financial liabilities/EBITDA, etc.), with the bank stipulating through its internal regulations the intervals of deterioration of such indicators
- move to the list of exposures that should be especially monitored by the bank (watch list)
- the debtor's account was blocked

The bank should not limit itself to indicators check list, but it shall also take into account other available information during credit risk assessment, in order to identify significant increase of credit risk situations as prudently as possible.

Scope of regulation – Stage 3 (UTP indicators)

UTP indicators, it shall be considered certain that the debtor will not fully meet their obligations to the bank in the following situations:

- if there is an objective proof that the exposure's value was impaired
- if the debtor is facing significant financial distress
- if the bank sold the same debtor's other exposure at a significant economic loss or if has agreed to modify the exposure due to the debtor's current financial distress or distress that will arise soon, which will likely result in a reduced financial liability of the debtor due to a significant write-off or deferred payment of the principle, interest or, where necessary, the fees
- if bankruptcy proceedings or winding down of the debtor have been initiated
- if the debtor has not met their obligation to the bank no later than within 60 days from the day when the previously issued guarantee was called on

The bank should not limit itself to cases specified above, but should also define precisely through its internal regulations other cases for which it is found that they indicate that it is certain that the debtor would not fully meet their obligations to the bank.

Scope of regulation – Stage 3 (Significant financial distress)

Significant financial distress indicators (internally stipulated), taking into account at least:

- the debtor's revenue sources have significantly decreased, which may affect their ability to meet their obligations to the bank
- the collateral realization process has been initiated
- the bank has filed a lawsuit against the debtor at a competent court
- the debtor lost their operating license (e.g. bank, insurance company, microcredit organization, leasing company etc.)
- in case of exposure to newly established corporates, as well as exposure under project financing, if estimated future cash flows during any period of the settlement of obligations to the bank are inadequate, as well as if there is a significant departure from the initial business plan, i.e. planned project implementation, during the repayment of claims
- significant decrease in the debtor's capital
- significant deterioration in other financial indicators (liquidity ratio, significant loss, financial liabilities/EBITDA, etc.), with the bank stipulating through its internal regulations the intervals of deterioration of such indicators
- the debtor is a co-signer or guarantor under a loan in default, and the instalment is so high that it may significantly affect their ability to pay
- cases of fraud occurred
- the debtor is over indebted
- in case of natural persons: if a corporate or individual entrepreneurship is owned by the debtor in default, and the debtor guarantees with personal assets for the liabilities of such corporate or individual entrepreneurship
- the debtor's account has been blocked continuously over the period longer than 60 days, credit risk stage in other bank etc.

Scope of regulation – POCI indicators

POCI indicators (internally stipulated), taking into account at least:

- whether it is an exposure that is classified into Stage 3, in case of significantly modified exposures
- whether it is a financial asset purchased at an economic loss (discount) greater than 5% of net carrying value, save for cases where the seller is selling financial assets in cases that are not credit risk related
- whether it is a purchased financial asset or refinanced exposure (in part or in full) that had been classified into Stage 3 in other bank

Exception - mergers and acquisitions of banks

In case of a purchase of a loan portfolio, each individual sub-account shall be assessed and identified as a POCI if had been classified into Stage 3 in other bank

Scope of regulation – Reclassification of Exposures into Lower Stages

Stage 2-1

- Reasons that indicated a significant increase of credit risk ceased to exist
- Timeliness in repayment during the recovery period:
  - forborne exposures in S2– six months
  - forborne exposures reclassified from S3 – 24 months
  - non-forborne exposures – 3 months

Stage 3-2

- when all requirements for S3 cease to be applicable,
- Timeliness in repayment during the recovery period:
  - forborne exposures and POCI – 12 months
  - non-forborne exposures – 6 months

Reclassification directly from to Stage 1 is not allowed

Timeliness in repayment: if not overdue on repayment for 30 and more days in a material amount during the defined recovery period

Scope of regulation – Minimum Expected Credit Loss Coverage Rates

Stage 1

- ✓**0,1%:** low risk exposures; central banks and govern. (credit quality step 3 and 4); banks and other financial sector entities (credit quality step 1, 2,3)
- ✓**0,5%:** other exposures
- ✓**1%:** bank does not have an adequate time series, quality of relevant historical data, and is unable to establish the value of PD parameter using its model in an adequate and documented manner

Stage 2

- ✓**5%:** all exposures
- ✓**8%:** bank does not have an adequate time series, quality of relevant historical data, and is unable to establish the value of PD parameter using its model in an adequate and documented manner

If the coverage rate calculated in accordance (at the level of individual exposure) with the bank's IFRS 9 methodology is higher than minimum rate, the higher rate is applied

Stage 3

- **15%-100%** depending on days overdue on a repayment in a material amount for more than 30 days
- **100%:** over 1460 days in case of collateralized exposures and over 456 days in case of uncollateralized exposures
- **not above 80%:** bank has taken relevant legal actions and can document the certainty of realization of the collateral in three years

Scope of regulation – Expected Credit Losses

- Banks are obliged to develop Internal IFRS 9 Methodologies, taking into account guidance stipulated in Instruction on classification and valuation of financial assets.

✓ Individual assessments: Stage 3 exposures which are greater than:

FBiH higher

- BAM 30,000 (bank's net assets amount to BAM 500 million);
- BAM 50,000 KM (bank's net assets amount to BAM 500 million to one billion BAM);
- BAM 100,000 KM (bank's net assets amount to over one billion BAM).

✓ If the Bank does not have an adequate time series, quantity and/or quality of relevant historical data, and is not able to determine the value of the credit risk parameters using its model in an adequate and documented manner:

- LGD: 45% for exposures secured by eligible collateral; 75% for exposures not secured by eligible collateral;
- CCF: Basel CCF in acordance with the Decision on capital calculation.

Link on relevant regulations: Decision on Credit Risk Management and Determination of Expected Credit Losses | Banking Agency of Republika Srpska (abrs.ba); FBA - Agencija za Bankarstvo Federacije Bosne i Hercegovine

Report - impact of the first application of regulation

- It was required from banks to calculate the effects of the first application as of December 31, 2019, i.e., initial balance record in CET 1 on 01/01/2020.

- During the first application, banks were required to write off balance sheet exposures that was two years provisioned in amount of 100%

- Banks were also required to provide the agencies with updated internal methodologies for measuring impairment of loans and other financial assets in accordance with IFRS 9, as well as internal documents defining the types of eligible collateral and minimum corrective factors applied

RESULTS - Changes in the balance sheet

- The total effects as of 01.01.2020 - differences in the level of ECL recognized in capital reserves amounted EUR 124 million in FBiH (EUR 28,2 million in the RS), of which differences in the level of ECL for balance sheet items were EUR 116 million (EUR 26,8 million in the RS) and for off-balance sheet items were EUR 8 million (1,4 million in the RS)

- The overall differences in the level of ECL for risk off-balance sheet were not material, and it can be concluded that the implementation of the Decision in this segment did not have a significant effect on the capital of the banking system in FBiH and RS

- Impairment at the level of the banking system in the FBiH before the accounting write-offs increased by 19.1% (12,9% in the RS)

- Total effects based on changes in the level of ECL for securities accounted at fair value through Accumulated other comprehensive income was EUR 570 thousand, which is recorded as an increase and decrease in capital reserves (zero effect)

RESULTS - Changes in exposure and expected credit losses

- Changes in credit risk levels and associated expected losses for balance sheet exposures are result of accounting write-offs, but also redistributions (redeployments) between credit risk levels in accordance with the Decision

- The greatest impact on the increase of total balance sheet exposures in the level of credit risk 1 of EUR 115 million and the decrease in exposure in the level of credit risk 2 in the amount of EUR 127 million had the redistribution of securities of BiH entities (government bonds) in the amount of EUR 116 million from credit risk level 2 to credit risk level 1 (low credit risk exposures)

- The greatest impact on decrease of exposure at credit risk level 3 in the amount of EUR 99.4 million (EUR 80,3 in the RS) had the accounting write-off, followed by the redistribution between credit risk levels in accordance with the Decision

- The coverage for exposures at credit risk level 1 increased from 0.57% to 0.73% (0,61% to 0,69% in the RS) ,credit risk level 2 from 6.9% to 10.2% (9,5% to 9,9% in the RS) and at credit risk level 3 from 72.7% to 80.2 % (79,3% to 84,6% in the RS)

RESULTS - Regulatory capital and capital adequacy

- Out of 15 banks in the banking system, nine banks recorded the effects of the first application of the Decision relating to financial asset items valued at amortized cost through the reserve account, and the remaining six banks through the retained earnings or accumulated losses account (in the RS all banks recorded the effects of the first application of the Decision through the retained earnings)

- All banks recorded the effects of the first application of the Decision relating to financial assets items at fair value through accumulated other comprehensive income through the revaluation reserve account

- In accounting record the effects of the first application of the Decision did not significantly reduce the rate of capital (CET 1 capital ratio and Tier 1 capital ratio decreased by 1.36 percentage points, and the regulatory capital adequacy ratio decreased by 0.70 percentage points) in case of the banking system in FBiH (in the RS, CET 1 capital ratio and Tier 1 capital ratio decreased by 0.6 percentage points and the regulatory capital adequacy ratio decreased by 0.2 percentage points)

RESULTS - Conclusion

Conclusions of the conducted impact analysis:

- Total effects of differences in the level of ECL recognized in capital reserves amount to EUR 124 million (EUR 28,2 million in the RS)
- Total gross loans decreased by 1.3% (0,8% in the RS) due to the write-off, and impairments, excluding the effect of the accounting write-off, increased by 19.1% on 01.01.2020 (12,9% in the RS)
- ECL on 01.01.2020. increased in the amount of EUR 4.9 million as a result of an increase in ECL in the amount of EUR 116.9 million based on the differences in the level of ECL for balance sheet exposures and their accounting write-off in the amount of EUR 112 million (in the RS the increase of EUR 4,6 million was recorded)
- ECL coverage rates increased as a result of the first application of the Decision, with coverage for exposures at S1 increased from 0.57% to 0.73% (0,61% to 0,69% in the RS) , S2 from 6.9% to 10.2 % (9,5% to 9,9% in the RS) and S3 from 72.7% to 80.2% (79,3% to 84,6% in the RS)
- As a result of the application of the Decision, the total coverage of corporate loans increased from 8.1% to 8.9% (in the RS from 7,4% to 8,1%), while the coverage of retail loans decreased from 7.0% to 6.5% (in the RS from 7,2% to 6,7%)
- CAR at the level of the FBiH banking system as of 01.01.2020. was 17.20%, which is in comparison to CAR from the end of 2019. decreased by 0.7 percentage points (in the RS CAR decreased by 0.2%)

Questionnaire on - implementation of the regulation on CRM and determination of ECL

- The purpose of Questionnaire was to collect data on credit risk parameters used to calculate expected credit losses in banks, forward - looking components in terms of data used in development, technical capacity, platforms used for calculation, methodological approach, validation, etc.

- Additionally, aim was to gather information for future analysis and prepare capacity building for the assessment of internal models for IFRS 9

- The result of the Questionnaire is assessment of the level of implementation of the Decision in terms of technical capacity, modalities used and the approach used by banks to calculate ELCs

Questionnaire results

Based on submitted data from banks on the Questionnaire on the implementation regulation on credit risk management and determination on ECL , additional reconciliations and corrective activities, the following conclusion is drawn

PD LT

- 14 banks have developed PD lifetime models based on cumulative default TTC probabilities, 1 bank uses the PD parameter calculated based on the simplified methodology for credit risk level I
- 3 banks state that they use only internal resources by modeling PD LT parameters, 6 banks used external advisors (vendors), 5 banks have a model developed by the parent bank, while 1 bank uses a combination of its own resources / parent bank and other sources modeling data sources,
- 9 banks use only internal data, while the remaining 6 use a combination of internal and external data

LGD

- 6 banks implement benchmark parameter values in the calculation of OKG (45% for secured and 75% for unsecured exposures)
- Of the remaining 9 banks, 6 banks developed LGD models using their own data while 3 banks used a combination of internal and external data
- In the case of external data, macroeconomic indicators are used, while one bank uses a model developed by the parent bank based on data from network banks and the parent bank for segments where there is not enough data.

Macroeconomic models

- 14 banks developed a macroeconomic model as a forward - looking component that they apply to credit risk parameters (PD lifetime). 1 bank applies EBA / ECB stress test coefficients - EU Regulator publishes multipliers for Baseline and Adverse scenarios which are then used to determine Best scenarios and PD and LGD parameters.
- For 6 banks, the macroeconomic model was developed by the parent bank, with 5 banks using vendor services. 3 banks developed models using their own capacities while 1 bank applied EBA / ECB benchmark coefficients.

ECL

- For the methodology of calculating ECL for Credit Risk Level I, 10 banks calculation ECL on annually basis while remaining 5 banks ECL represent sum of 12 or less monthly expected losses.
- The calculation of ECL for the under-performing category of receivables, 4 banks are based on monthly lifelong losses while the remaining 11 banks apply, lifelong expected account losses on an annual basis till final maturity.
- For default exposures, banks apply individual and collective assessment, depending on whether the receivables are secured by acceptable or unacceptable collateral.

Decision on temporary measures of banks to ensure recovery from negative economic consequences caused by „COVID-19"

- For the approval of special measures to the Bank's clients whose income or sources of funding are still reduced, Decision defined when assessing the modification materiality for the approval of special measures, it is not a hindrance to the bank acting in a manner as required regulation for credit risk management and determination of ECL

- Bank may (but it is not required to) designate as POCI the exposures approved within special measures from the Decision on the Temporary Measures, if they meet the following requirements:
  - at the moment of the modification, they are classified in credit risk level under Article 20(3) of the Decision on Credit Risk Management;
  - they meet the requirements from Article 21(2) of the Decision on Credit Risk Management

On site examination of banks - challenges in practice

During on site examination, key challenges for banks in implementing the regulatory framework for credit risk management and determining expected credit losses

- Recording and recognition of modifications resulting in inadequate exposure classification
- Failure to calculate POCI assets and declaring that they are not in the bank's portfolio
- Recovery period of restructured exposures to the level of credit risk 2 - Banks with international Groups do not recognize this recovery period while the same is defined by local regulations (recovery period of 3 months)
- Bank retention on the minimum prescribed SICR criteria from the decision
- Absence of defining all UTP criteria which are stipulated by the Decision
- Inadequate calculation of credit risk parameters (PD and LGD) in terms of inadequate data series as well as time series required by the Instruction was found at certain banks, which resulted in applying higher minimum rates in credit risk levels 1 and 2 (Option provided by the Decision)
- Irregular appraisal of collateral, absence of monitoring of collateral values and timely re-assessments, etc.

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Thank you for your attention!