Pursuant to Article 50, paragraph (1) of the Bylaw of the Central Bank of Bosnia and Herzegovina, number: UV-104-01-1-1-116/15 of 28 December 2015, UV-122-01-1-1045-11/21 of 28 April 2021 and UV-104-01-1-1425-15/21 of 29 June 2021, Governor of the Central Bank of Bosnia and Herzegovina has passed

METHODOLOGY
for Compilation of Financial Soundness Indicators

PART ONE – INTRODUCTION

Article 1
(Subject Matter)

(1) This Methodology sets out the elements for the compilation of financial soundness indicators. The grounds for the compilation of financial soundness indicators are based on Financial Soundness Indicators Compilation Guide – the International Monetary Fund 2019 (hereinafter: Guide).
(2) Financial Soundness Indicators are indicators reflecting the current financial soundness of financial institutions in a country.
(3) Financial Soundness Indicators are calculated and disseminated for the purpose of supporting macro prudential analysis, which is the assessment of the strength and vulnerabilities of the financial system with the objective of preserving financial stability and, in particular, prevention of potential failure of the financial system.
(4) The Central Bank of Bosnia and Herzegovina receives the data from the Banking Agency of the Federation of Bosnia and Herzegovina and the Banking Agency of Republika Srpska (hereinafter: Agencies) in the form defined by the Central Bank of Bosnia and Herzegovina.

Article 2
(Abbreviations)

For the needs of this Methodology, the following abbreviations shall be used:

a) ABRS Banking Agency of Republika Srpska,
b) Agencies ABRS and FBA,
c) ASF Available Stable Funding,
d) BCBS Basel Committee on Banking Supervision,
e) BH Bosnia and Herzegovina,
f) CBBH Central Bank of Bosnia and Herzegovina,
g) CET1 Common Equity Tier1,
h) COREP The Common Reporting Framework,
i) EU European Union,
j) FBA Banking Agency of the Federation of Bosnia and Herzegovina,
k) FBH Federation of Bosnia and Herzegovina,
l) FSI Financial Soundness Indicators,
m) LCR Liquidity Coverage Ratio,
n) IMF International Monetary Fund,
o) IAS International Accounting Standards,
p) IFRS International Financial Reporting Standards,
q) NPA Nonperforming assets,
r) NPISHs Non-profit institutions serving households,
s) NPL Nonperforming loans,

t) NSFR Net Stable Funding Ratio
u) ROAA Return on Average Assets,
v) ROAE Return on Average Equity,
w) RS Republika Srpska,
x) RSF Required Stable Funding.

Article 3
(Type and Scope of FSI)

(1) Type and scope of FSI compiled and disseminated differ from one country to another.
(2) FSI for deposit institutions (core set, in particular) are considered to be the core indicators for the soundness analysis of any financial system.
(3) The CBBH compiles the FSI for banking sector only, primarily because of the biggest share of this sector in the overall financial system. On the basis of data provided by the Agencies for individual banks, data are aggregated and FSI are calculated by the CBBH for the banking sector in BH.
(4) In accordance with the Guide, the FSI list for depository institutions has been revised and expanded, and international Basel standards for capital and liquidity have been incorporated into the indicators.

Article 4
(Accounting Framework)

(1) Data of the Agencies are presented on the resident basis, as the so-called domestic consolidated data. They are submitted on a quarterly basis, starting from the end of the second quarter of 2003, while the data for 2000, 2001 and 2002 are presented at the annual level.
(2) Agencies submit data to the CBBH six weeks after the end of the quarter, while data for the fourth quarter are submitted after ten weeks from the end of the year.
(3) The current accounting framework for banks in RS is based on the Law on Accounting and Auditing of RS ("Official Gazette of RS", Nos. 94/15 and 78/20) and the Bylaw on Chart of Accounts and Account Contents in the Chart of Accounts for Banks and other Financial Organizations ("Official Gazette of RS", No. 106/15). The current accounting framework for banks in the FBH is based on the Law on Accounting and Auditing in the Federation of Bosnia and Herzegovina ("Official Gazette of the FBH", No. 15/21) and the By-law on Chart of Accounts, Contents of Accounts and the Implementation of the Chart of Accounts for Banks and Other Financial Organizations ("Official Gazette of FBH", No. 81/21).
(4) The valuation and classification of financial assets are in line with International Financial Reporting Standard 9 - Financial Instruments (IFRS 9), which replaced IAS 39 and has been in force since 1 January 2018.
(5) Appendix I, which forms an integral part of this Methodology, lists the legal enactments of the Agencies regulating the bank operations and also defining in more detail the positions from the reporting form which are the input data for compiling FSI.

PART TWO - TYPES OF INPUT DATA

Article 5
(Types of Input Data)

(1) Agencies submit to the CBBH data for individual commercial banks falling within their competence, in KM absolute amounts on the reporting form for the FSI compilation. The FSI Compilation Reporting Form is a standard Guide-based reporting form. Based on the input data, the FSI are calculated, while the common reporting form enables comparability of indicators between different countries.
(2) The reporting form contains data from the Income and Expense Statement, Balance Sheet and additional memorandum items. The classification of Balance Sheet items presented in the reporting form and defined in accordance with the Guide differs from the prescribed accounting and regulatory forms of reporting in BH.

Form 1 Depository Institutions

Income Statement	Balance Sheet
1. Interest income	14. Total assets (= 15 + 16 = 23 +31)
i. Gross interest income	15.Non-financial assets
ii.Less provisions for accrued interest on non-performing assets	16. Financial assets
2. Interest expense	17.Currency and deposits
3. Net interest income (= 1 – 2)	18. Loans (after specific provisions)
4. Non-interest income	i. Gross loans
i. Fees and commissions receivable	i.i. Interbank loans
ii. Gains or losses on financial instruments	i.i.i. Residents
iii. Prorated earnings	i.i.ii. Non-residents
iv. Other income	i.ii. Noninterbank loans
5. Gross income (= 3 + 4)	i.ii.i. Central Bank
6. Non-interest expenses	i.ii.ii. General government (central and local government)
i. Personnel costs	i.ii.iii. Other financial corporations
ii. Other expenses	i.ii.iv. Nonfinancial corporations
7. Provisions (net)	i.ii.v. Other domestic sectors
i. Loan loss provisions	i.ii.vi. Non-residents
ii. Other financial asset provisions	ii. Specific provisions
8. Net income before taxes (= 5 – (6 + 7))	19.Debt securities
9. Income tax	20. Equity and investment fund shares
10.Net income after taxes (= 8 – 9)	21. Financial derivatives
11. Other comprehensive income (loss) net of tax	22. Other financial assets
12. Dividends payable	23. Liabilities (= 28 + 29 + 30)
13. Retained earnings (= 10 – 12)	24. Currency and deposits
	i. Customer deposits
	ii. Interbank deposits (including deposits of banks and other financial institutions)
	ii.i. Residents
	ii.ii. Non-residents
	iii. Other currency and deposits
	25. Loans
	26. Debt securities
	27. Other liabilities
	28. Total financial liabilities(= 24 do 27)
	29. Financial derivatives and employee stock options
	30.General and other provisions
	31. Capital and reserves
	32. Balance sheet total **(=23 + 31 = 14)**

Form 1. Depository institutions (continued)
Memorandum items
Regulatory data
33. Tier 1 capital less corresponding supervisory deductions
34. Common Equity Tier 1 (CET 1) less corresponding supervisory deductions
35. Additional Tier 1 capital (AT1) less corresponding supervisory deductions
36. Tier 2 capital less corresponding supervisory deductions
37. Tier 3 capital
38. Other supervisory deductions
39. Total regulatory capital (= 33 + 36+ 37- 38)
40. Total amount of risk exposure
41. Basel III total exposure measure
42. Liquidity buffer
43.Total net liquidity outflows
44. Available amount of stable funding
45.Required amount of stable funding
46. Large exposures
Additional data for FSI calculation
47. Liquid assets
48.Short-term financial liabilities
49. Non-performing assets (NPA)
50. Total financial assets
51. Non-performing loans (NPL)
52. Foreign currency loans and indexed loans
53. Foreign currency liabilities
54. Total net open position in foreign currency
55. Loans to the private sector
56. Loan concentration by economic activity (3 largest exposures excluding exposures by activities K and O)
57. Annualized net income before taxes
58. Annualized net income after taxes
59. Average total assets
60.Average capital and reserves

Article 6
(Income and Expense Statement Data)

(1) The Income and Expense Statement presents data on income, expenses and business results of banks from the beginning of the calendar year to the end of the reporting period.

(2) The basic categories in the Income and Expense Statement are defined as follows:

a) Gross income is the sum of net interest income and operating income,
b) Net interest income is the difference between interest income and interest expense,
c) Operating income represents all the income generated by banks except the interest income,
d) Non-interest expenses consist of operating costs from regular banking operations and include personnel costs, costs of property and equipment, such as regular maintenance and repairs, rent payments and other operating costs.
e) Net income before taxes is the difference between gross income and non-interest expenses and provisions,
f) Net income represents the profit after tax that is available for capitalization and payment of dividends.

Article 7
(Balance Sheet Data)

(1) The Balance Sheet i.e. the financial position report presents data on assets, liabilities and capital of banks at the end of the reporting period.

(2) Total assets defined by the Guide are presented on a net basis and are reduced solely by provisions for non-performing loans allocated to level 3 credit risk (Form 1).

(3) Total assets consist of non-financial and financial assets.

(4) The Guide defines the classification of financial assets and liabilities as follows: currency and deposits, loans, equity shares and units in investment funds (assets), financial derivatives and other assets/liabilities.
(5) Currency consists of banknotes and coins of fixed denomination.
(6) Deposits in the bank's assets include all claims on central banks and other depository institutions. Claims of one deposit taker on another are excluded from deposits and are instead recorded as interbank loans.
(7) Net loans (item 18, Form 1) are reduced by provisions for non-performing loans, i.e. for expected credit losses calculated for credit exposures allocated to level 3 credit risk.
(8) Provisions for non-performing loans represent provisions for loans allocated to level 3 credit risk. For exposures allocated to level 3 credit risk banks shall calculate expected credit losses until the maturity date of the exposure.
(9) Debt securities are financial instruments that entitle the holder to the collection of principal and interest.
(10) Deposits in the bank liabilities consist of deposits that include all deposits of residents and non-residents except deposits of financial corporations, interbank deposits and other deposits.
(11) General and other provisions are recorded on the liabilities side (item 30, Form 1).
(12) Total capital represents the difference between the total assets and liabilities of the bank.

Article 8
(Memorandum Items)

(1) Memorandum items refer to data that are not directly available from the financial statements, and are needed for the calculation of FSI indicators. They are divided into supervisory data and additional data for FSI calculation.
(2) Supervisory data are defined in the applicable enactments of the agencies and are reported according to the Common Reporting Framework (COREP).
(3) The Common Reporting Framework for banks in BH includes reports on capital adequacy, credit, operational and market risk, leverage ratio, liquidity risk and large exposures.
(4) Supervisory data required for the calculation of capital adequacy, credit, operational and market risk, leverage ratios, liquidity risk and large exposures are in line with the standards and minimum requirements of Basel III international regulatory framework.

SUPERVISORY DATA

Article 9
(Tier 1 Capital)

Tier 1 capital is a sum of the Common Equity Tier 1 after regulatory adjustment and the Additional Tier 1 after regulatory adjustment.

Article 10
(Common Equity Tier 1 - CET1)

The bank's Common Equity Tier 1 – CET 1 consists of items that are available to cover the risk or loss of the bank during its regular operations, in case of bankruptcy or liquidation. Common Equity Tier 1 is the highest quality layer of capital and consists of share capital, share premium account related to Common Equity Tier 1 instruments, retained earnings, accumulated other comprehensive income, other reserves and reserves for general banking risks, after deductions for regulatory adjustments.

Article 11
(Additional Tier 1 - AT 1)

Additional Tier 1 consists of issued capital instruments after deduction for regulatory adjustments, which do not belong to Common Equity Tier 1. This capital consists of capital instruments issued and paid in and the purchase of which was not directly or indirectly financed by the bank and the share premium account relating to the Additional Tier 1 instruments.

Article 12.
(Tier 2 Capital - T2)

(1) The bank's Tier 2 capital (T2) consists of the bank's Tier 2 items after deduction for regulatory adjustments.
(2) The bank's Tier 2 items consist of capital instruments and subordinated loans that do not meet the requirements for items of Common Equity Tier 1 and Additional Tier 1, share premium accounts related to Tier 2 instruments and general value adjustments for credit losses of up to 1.25% of the risk-weighted exposures.
(3) Tier 2 capital may not exceed one third of the Tier 1 capital.

Article 13.
(Regulatory Capital)

(1) The bank's regulatory capital is the amount of funding sources the bank is obliged to maintain for the purpose of safe and stable operations, i.e. fulfilment of obligations to creditors.
(2) Regulatory capital is the sum of Common Equity Tier 1 and Tier 2 capital, after regulatory adjustments.

Article 14
(Total Risk Exposure Amount)

The total risk exposure amount is the sum of risk-weighted exposures for credit risk, market risk (position risk, foreign exchange and commodity risk), operational risk, settlement/free delivery risk and risk associated with large exposures arising from trading book items.

Article 15
(Financial Leverage Exposure Measure)

Total financial leverage exposure measure is the value of the exposure of assets of balance sheet items less value adjustments and off-balance sheet items less provisions for credit losses to which conversion factors are applied in accordance with the level of risk to which off-balance sheet items are exposed.

Article 16
(Liquidity Buffer)

(1) The liquidity buffer consists of level 1 liquid assets that participate with a minimum of 60% in the liquidity buffer and level 2 liquid assets that participate with a maximum of 40% in the liquidity buffer.
(2) Level 1 liquid assets are assets of extremely high liquidity and credit quality which include cash, receivables from the CBBH, surplus above the required reserve held by banks in the CBBH, receivables from the general government (central government of BH, FBH government, RS government and the Brčko District government), exposures to other central banks and central governments, exposures in the form of coverage of high quality bonds and other items prescribed by the agencies' enactments.
(3) Level 2 liquid assets are assets of high liquidity and credit quality which consist of liquid assets of level 2a and liquid assets of level 2b. The market value of level 2 liquid assets is subject to corrective factors prescribed by enactments of the agencies.

Article 17
(Net Liquid Outflows)

(1) Net liquid outflows are the sum of liquidity outflows less the sum of liquidity inflows.
(2) Liquidity outflows are calculated by multiplying the remaining balances of different on-balance sheet and off-balance sheet liabilities by the rates at which they are expected to expire or be withdrawn. Balance sheet and off-balance sheet liabilities on which liquidity outflows are calculated refer to the outstanding amount of stable retail deposits and other retail deposits, outstanding amounts of other liabilities maturing in the next 30 calendar days, maximum amount of unused contracted credit and liquidity lines that can be withdrawn in the next 30 calendar days, and on other items as determined in the enactments of the agencies.
(3) Liquidity inflows include only contractual inflows arising from exposures that are not past due, and for which the bank has no reason to expect non-fulfilment of obligations within the next 30 calendar days.

Article 18.
(Available Stable Funding)

(1) Available Stable Funding (ASF) is the part of a bank's capital and liabilities that is expected to be stable and will remain with the bank over a one-year period.
(2) The amount of available stable funding is calculated by multiplying the book value of various types of liabilities and regulatory capital by the corresponding ASF factors, which take into account the remaining contractual maturity.
(3) Available stable sources of funding (capital, long-term loans taken, stable deposits) must be higher than the required stable sources, which are estimated on the basis of maturity of assets and off-balance sheet liabilities.

Article 19
(Required Stable Funding)

Required stable funding (RSF) is calculated by multiplying the bank's asset items and off-balance sheet exposures by appropriate corrective factors. Those forms of assets that are characterized by a higher degree of liquidity or marketability are assigned a lower correction factor.

Article 20
(Large Exposures)

Large exposure is defined as the bank's exposure to one person or group of related parties if its value is equal to or greater than 10% of recognized or regulatory capital. Exposure is any asset and off-balance sheet item without the application of a risk weight as defined for the purpose of calculating capital requirements for credit risk under the standardized approach.

ADDITIONAL DATA FOR CALCULATION OF FSI

Article 21
(Core Liquid Assets)

Core liquid assets, i.e. liquid assets in the narrower sense, consist of cash and deposits and other financial assets with a maturity of less than three months, without the interbank deposits.

Article 22
(Short-term Financial Liabilities)

Short-term financial liabilities are liabilities with a remaining maturity equal to or less than three months increased by the net market value of financial positions of derivatives (liabilities less assets), including liabilities to other banks.

Article 23
(Non-performing Assets)

(1) Non-performing assets consist of on-balance sheet and off-balance sheet exposures of the bank that are in the status of default, i.e. which are allocated to the level 3 credit risk.
(2) Non-performing assets or exposures in the status of default are those exposures in which the debtor is late with the repayment of due obligations to the bank for more than 90 days in a substantial amount and/or for which the bank is certain that the debtor will not fully settle its obligations to the bank, its parent company or any of its subsidiaries of the legal entity without taking into account the possibility of collection from collateral.

Article 24.
(Non-performing Loans)

Non-performing loans are loans in the status of default, i.e. loans that are allocated to the level 3 credit risk.

Article 25
(Indexed and Foreign Currency Loans)

Indexed loans or loans with a currency clause are loans in KM, the debt repayment of which is linked to a foreign currency. Such loans are placed to protect the lender from inflation or foreign exchange risk. Loans in foreign currencies are loans placed in foreign currency and their repayment shall also be made in foreign currency. Until the end of the fourth quarter of 2011, these loans were presented on a net basis, i.e. reduced by the value adjustment and since the first quarter of 2012 they have been presented on a gross basis.

Article 26
(Foreign Currency Denominated Liabilities)

Foreign currency denominated liabilities are those liabilities that are payable in a currency other than the domestic currency, and liabilities that are payable in a local currency, wherein the amount to be paid is linked to the foreign currency.

Article 27
(Net Foreign Exchange Position)

(1) "Individual foreign exchange position" (open position) represents the difference between the items that relate to a particular foreign currency (hereinafter: items) in assets and liabilities of the bank's balance sheet (gold and other precious metals are regarded as foreign currency), denominated in KM, with potential profit or loss (positive or negative foreign exchange difference). Potential profit or loss occurs in case when foreign exchange rate, at which book recording of items was carried out, (in business books of the bank) differs from the foreign exchange rate, published by the CBBH, on the day when their foreign exchange position is determined.

(2) Individual foreign exchange position is calculated as a sum of the amounts of assets items taken with the sign + (plus) and liabilities items taken with the sign – (minus), and the calculation must include off-balance sheet liabilities of the bank as well.

(3) Bank has a "long position" of a particular currency if the value of assets items exceeds the value of liabilities items, that is, if their difference is with the sign + (plus).

(4) Bank has a "short position" of a particular currency, if the value of assets items is lower than the value of liabilities items, that is, if their difference is with the sign – (minus).

(5) "Foreign exchange position" of the bank represents the sum of the values of all long and all short individual foreign exchange positions of the bank.

Article 28
(Loans to Private Sector)

Loans to the private sector include gross loans to private non-financial corporations, households and non-profit institutions serving households (NPISHs).

Article 29
(Concentration of Loans by Economic Activity)

Concentration of loans by economic activity includes loans to companies from the three economic activities to which banks are most exposed.

Article 30
(Average Assets)

(1) Average assets represent average balance of assets in the observed period.
(2) Average assets are calculated:

a) in the first quarter as the average balance of the total assets at the end of the fourth quarter of the previous year and the first quarter of the current year,
b) in the second quarter as the average balance of the total assets at the end of the fourth quarter of the previous year and the first and the second quarter of the current year,
c) in the third quarter as the average balance of the total assets at the end of the fourth quarter of the previous year and the first, the second and the third quarter of the current year, and
d) in the fourth quarter as the average balance of the total assets at the end of the fourth quarter of the previous year and the first, the second, the third and the fourth quarter of the current year.

Article 31
(Average Capital)

(1) Average capital represents the average balance of the total capital, defined by Article 7 (12) of this Methodology.
(2) Average capital is calculated:

a) in the first quarter as the average balance of the total capital at the end of the fourth quarter of the previous year and the first quarter of the current year,
b) in the second quarter as the average balance of the total capital at the end of the fourth quarter of the previous year and the first and the second quarter of the current year,
c) in the third quarter as the average balance of the total capital at the end of the fourth quarter of the previous year and the first, the second and the third quarter of the current year,
d) in the fourth quarter as the average balance of the total capital at the end of the fourth quarter of the previous year and the first, the second, the third and the fourth quarter of the current year.

PART THREE – FINANCIAL SOUNDNESS INDICATORS

Article 32
(Financial Soundness Indicators)

(1) The CBBH compiles all 17 (seventeen) core indicators and 6 (six) out of a total of 12 (twelve) recommended indicators provided by the Guide, and two additional FSI.
(2) Starting from the fourth quarter of 2021, the scope of FSI has been expanded and they are reported in accordance with the availability of data for the period 2018-2021. Previously reported indicators covered by methodological changes have been recalculated for previous periods.
(3) Financial soundness indicators are grouped into five categories, as follows:

a) FSI for capital
b) FSI for asset quality,
c) FSI for profitability,
d) FSI for liquidity and
e) FSI for market risk.

Article 33
(FSI for Capital)

(1) The indicators measuring the capital adequacy are the following:

a) Tier 1 capital ratio,
b) Total regulatory capital ratio,
c) Common Equity Tier 1 capital ratio,
d) Financial leverage ratio,
e) NPLs net of provisions to regulatory capital,
f) Large exposures to capital.

(2) The Tier 1 capital ratio is an indicator from the core set of FSI based on the core capital (Tier 1) concept defined by the Basel Committee on Banking Supervision (BCBS). The indicator measures how much capital a bank has immediately available so that it can absorb unexpected losses and remain solvent. Capital adequacy measured by this indicator is calculated as the ratio of core capital (Tier 1) to total risk exposure amount. The capital requirement or the minimum prescribed Tier 1 capital ratio that banks must meet at all times is 9%.

(3) Total regulatory capital ratio is an indicator from the core set of FSI that reflects the capital strength or ability of the bank to withstand shocks and cover unexpected losses. Capital adequacy measured by this indicator is calculated as the ratio of regulatory capital to total risk exposure. The capital requirement or the minimum prescribed total regulatory capital ratio that banks must meet at all times is 12%.

(4) Common Equity Tier 1 – CET 1 capital ratio is a new FSI from the core set of indicators based on the highest quality capital layer. Capital adequacy measured by this indicator is calculated as the ratio of the common equity - tier 1 to the total amount of risk exposure. The capital requirement or the minimum prescribed rate of the Common Equity Tier 1 capital ratio that banks must meet at all times is 6.75%.

(5) The financial leverage ratio is an FSI from the set of core financial soundness indicators based on the Basel III framework concept and is calculated as the ratio of core capital (Tier 1 capital) to the measure of the bank's total exposure. This indicator serves as an additional indicator of capitalization that is not based on a risk sensitivity measure. Banks have an obligation to maintain a financial leverage ratio of at least 6%.

(6) Non-performing loans (NPLs) less provisions to regulatory capital is an indicator from the core set of FSI that shows the capacity of bank capital to absorb losses arising from non-performing loans not covered by provisions. It is calculated as the ratio between non-performing loans less provisions and regulatory capital.

(7) Large exposures to capital is a new FSI from the set of recommended financial soundness indicators and identifies vulnerabilities arising from credit risk concentration. It is calculated as the ratio of large exposures and core capital (Tier 1 capital). The indicator measures the potential negative impact on capital in the event that one or more clients to whom the bank has large exposures encounter difficulties in servicing their liabilities.

Article 34
(FSI for Asset Quality)

(1) For measuring the asset quality, the CBBH compiles the following FSI:

a) Non-performing assets (NPA) to total assets,
b) Non-performing loans (NPLs) to total loans,
c) Provisions for NPLs to non-performing loans,
d) Loan concentration by economic activity.

(2) Non-performing assets (NPA) to total assets measure the quality of the banking sector's assets, i.e. the share of non-performing assets in total financial assets. This indicator is not

included in either the core or the recommended set of financial soundness indicators in the Guide, but it was created because it makes a good basis for analysing the quality of assets of the banking sector. The value of the indicator is calculated as the ratio of on-balance sheet and off-balance sheet exposures allocated to level 3 credit risk in relation to total on-balance sheet and off-balance sheet exposures representing total financial assets. The values of the indicators, harmonized with the current regulatory framework, have been retroactively recalculated for the periods starting from the first quarter of 2020, since when the indicator has been calculated in relation to total financial assets.
(3) Non-performing loans (NPLs) to total loans is an indicator from the core set of FSI from the Guide. It is calculated as the ratio between non-performing loans and total loans. This indicator is a basic measure of the quality of the loan portfolio.
(4) The provision for NPLs to non-performing loans is a new FSI from the core set of indicators that measures the amount of future losses that would occur in the event that all non-performing loans are written off. It is calculated as the ratio of the amount of provisions for NPLs to total NPLs.
(5) Loan concentration by economic activity is a new FSI from the core set of indicators that measures credit risk associated with excessive loan concentration in certain economic activities. High exposure to individual economic activities can signal the banks' vulnerability to the level of activity, price or profitability of that sector or activity. If the situation in sectors where banks have excessive credit concentration deteriorates, the quality of the loan portfolio will also deteriorate. The indicator is calculated as the ratio of the loan concentration to the 3 economic activities to which banks are most exposed and total loans to non-financial corporations.

Article 35
(FSI for Profitability)

(1) For measuring profitability, the CBBH compiles the FSI as follows:
a) Return on average assets (ROAA),
b) Return on average equity (ROAE),
c) Net interest income to gross income,
d) Trading income to gross income,
e) Non-interest expenses to gross income,
f) Personnel expenses to non-interest expenses.

(2) Return on Average Assets (ROAA) is an FSI from the set of core financial soundness indicators and is intended to measure the efficiency of banks in using their assets. This FSI provides an estimate of the profit that can be used to cover losses in relation to the assets. ROAA is calculated as the ratio of net income before taxes to average assets, with the value of the indicator expressed on an annual basis. The denominator uses the average balance of assets in the observed period.
(3) Return on Average Equity (ROAE) is an FSI from the set of core indicators of financial soundness and measures the efficiency of banks in the use of capital. This FSI provides an estimate of the average profit that can be used to cover losses in relation to equity. The calculation of the ROAE indicator is in line with the Guide and is calculated as the ratio of net income after taxes to average capital, with the value of the indicator expressed on an annual basis. The denominator uses the average balance of total capital in the observed period.
(4) Net interest income to gross income is an FSI from the set of core financial soundness indicators and is calculated as the ratio of net interest income to gross income. Net interest income represents the difference between total interest income and total interest expense.
(5) Trading income to gross income is one of the recommended indicators of financial soundness in the Guide, which aims to capture the share of income from banks' activities in

financial markets, including income from currency trading, in gross income of banks and this helps to assess the risks from the business model. The indicator represents the ratio between income from trading in financial instruments and gross income.
(6) Non-interest expenses to gross income is an FSI from the set of core financial soundness indicators that measures the share of non-interest expenses in gross income. Non-interest expenses include only the operating expenses (personnel expenses, business premises and other fixed assets expenses and overheads and other operating expenses), as the indicator provides insight into how much gross income is enough to cover operating expenses.
(7) Personnel expenses to non-interest expenses is an indicator from the set of recommended financial soundness indicators in the Guide and measures the share of personnel costs in non-interest expenses.

Article 36
(FSI for Liquidity)

(1) The liquidity FSI consists of:

a) Liquid assets to total assets,
b) Liquid assets to short-term financial liabilities,
c) Liquidity coverage ratio (LCR),
d) Net Stable Funding Ratio (NSFR),
e) Short-term financial liabilities to total financial liabilities,
f) Customer deposits to total (noninterbank) loans.

(2) Liquid assets to total assets is an FSI from the set of core indicators that shows how sensitive the banking sector is to the liquidity crisis, i.e. how much it is able to meet expected and unexpected cash demand. This FSI is calculated as the ratio between liquid assets and total assets. Liquid assets consist of cash and deposits and other financial assets with a maturity of less than three months, not counting the interbank ones.
(3) Liquid assets to short-term financial liabilities is an FSI from the set of core indicators which shows the extent to which banks can withstand the withdrawal of short-term funds without facing a liquidity problem. This FSI is calculated as the ratio between liquid assets and short-term financial liabilities.
(4) The liquidity coverage ratio (LCR) is an FSI from the set of core indicators that shows the ability of banks to withstand a thirty-day liquidity stress scenario. This FSI is calculated as the ratio between the liquidity buffer, which are assets that would be liquid in times of stress, and the net liquid outflows calculated in accordance with the established scenario parameters over the next 30 calendar days. Liquidity buffer and net liquid outflows are defined in part two of this Methodology. Banks are required to maintain an LCR of at least 100%.
(5) The Net Stable Funding Ratio (NSFR) is an FSI from the set of core indicators that shows banks' ability to withstand market disruptions over a period of one year. The FSI is calculated as the ratio of available stable funding to required stable funding. Available and required stable funding are defined in part two of this Methodology. The minimum required level of the net stable funding ratio according to the Basel Committee is at least 100% on a daily basis.
(6) Short-term financial liabilities to total financial liabilities is an indicator that is not stated in the FSI set in the Guide. The reason for including this indicator in the set of CBBH indicators is to measure the share of short-term financial liabilities in total financial liabilities, as it is a measure of liquidity risk caused by an unexpected increase in the share of short-term financial liabilities in total financial liabilities. It is calculated as the ratio of short-term financial liabilities to total financial liabilities.
(7) Customer deposits to total (noninterbank) loans indicator belongs to the set of recommended indicators of financial soundness in the Guide and is calculated as the ratio of total deposits reduced by the amount of deposits of banks and other financial institutions to

total loans reduced by interbank loans. Deposits to loans is an indicator from the recommended set of financial soundness indicators that shows the percentage of loans financed from customer deposits. The lower the ratio, the more pronounced the reliance on volatile sources of funding is and the higher the liquidity risk.

Article 37
(FSI for Market Risk)

(1) FSI that measure exposure to market risk are FSI that monitor the sensitivity of the financial sector to market risks, i.e. sensitivity to movements in foreign exchange rates, interest rates and capital markets.
(2) The CBBH compiles FSI that measure market risk, as follows:
- a) Indexed and foreign currency loans to total loans,
- b) Foreign currency denominated liabilities to total financial liabilities,
- c) Net open position in foreign currency to capital.

(3) Indexed and foreign currency loans to total loans are part of the set of recommended financial soundness indicators in the Guide. This indicator shows the share of loans in foreign currencies and indexed loans in total loans. In countries where foreign currency lending is allowed, it is particularly important to monitor the share of foreign currency residents' loans in total loans, due to the increased risk of repaying such loans in the context of large devaluations or lack of foreign currency earnings. Until the third quarter of 2016, the value of indexed loans and loans in foreign currencies in the numerator of the indicator was shown on a net basis, i.e. reduced by value adjustment. As of the fourth quarter of 2016, the calculation of indicators has been harmonized with the Guide and is calculated as the ratio of foreign currency loans and indexed loans to total loans, with the value of loans in numerator and denominator expressed on a gross basis. The values of the indicators harmonized with the Guide were calculated retroactively for the periods starting from the first quarter of 2012.
(4) Foreign currency denominated liabilities to total financial liabilities are part of the set of recommended financial soundness indicators in the Guide and measure the relative importance of foreign funding within total liabilities. This indicator should be observed together with the indicator referred to in paragraph (3) of this Article, because the foreign exchange exposure of banks is lower if loans placed in foreign currencies are financed through sources in foreign currencies. It is calculated as the ratio of liabilities in foreign currencies to total financial liabilities. It shows the share of liabilities in foreign currencies in total financial liabilities increased by financial derivatives liabilities and reduced by financial derivatives that make up the bank's assets.
(5) The net open position in foreign currency relative to capital belongs to the set of core FSI. It is calculated as the ratio of net foreign exchange position to regulatory capital. The net foreign exchange position is calculated as the sum of the values of all long individual bank positions and the sum of the values of all short individual bank positions. An individual foreign exchange position (open position) is the difference between items related to a particular foreign currency (including gold and other precious metals) in the assets and liabilities of the bank's balance sheet, denominated in domestic currency (KM), including potential profit or loss. The individual foreign exchange position is calculated as the sum of the amounts of asset items taken with a plus sign and liabilities items taken with a minus sign, whereby the bank's off-balance sheet liabilities must be included in the calculation.

PART FOUR – FSI PRESENTATION AND DISSEMINATION

Article 38
(FSI Presentation and Dissemination)

(1) The FSI and the data used to calculate the FSI are regularly published on the CBBH website (http://statistics.cbbh.ba/Panorama/novaview/SimpleLogin_bs_html.aspx) and in the IMF database (https://data.imf.org/regular.aspx?key=63174545).
(2) The frequency and dates of publication of the FSI can be found in the calendar of statistics on the CBBH website.

Article 39
(Repeal)

On the day this Methodology enters into force, the Methodology for Compiling Financial Soundness Indicators, number: 122-17-2-521/17 DS dated 08 March 2017, shall cease to be valid.

Article 40
(Entry into Force)

This Methodology shall enter into force on the day following that of its publication on the intranet site.

Number: 122-17-2-852-8/22
Sarajevo, 15 April 2022

GOVERNOR
Senad Softić, PhD

Appendix I

Supervisory data and additional data for the calculation of FSI provided by agencies are defined by the following subordinate enactments:

1. Decision on Calculation of the Bank's Capital ("Official Gazette of the Federation of **BH**", No. 81/17),
2. Decision on Amendments to the Decision on Calculation of the Bank's Capital ("Official Gazette of the Federation of **BH**", No. 37/20),
3. Decision on Amendments to the Decision on Calculation of the Bank's Capital ("Official Gazette of the Federation of **BH**", No. 50/19),
4. Decision on Amendments to the Decision on Calculation of the Bank's Capital, ("Official Gazette of the Federation of **BH**, No. 81/20"),
5. Decision on Calculation of the Bank's Capital ("Official Gazette of RS", No. 74/17),
6. Decision on Amendments to the Decision on Calculation of Banks' Capital ("Official Gazette of RS", No. 114/17),
7. Decision on Reporting on the Bank's Capital Adequacy, ("Official Gazette of RS", No. 116/17),
8. Decision on Amendments to the Decision on Calculation of the Banks' Capital ("Official Gazette of RS", No. 48/19),
9. Decision on Amendments to the Decision on Reporting on the Bank's Capital Adequacy, ("Official Gazette of RS", No. 48/19),
10. Decision on Amendments to the Decision on Calculation of the Bank's Capital ("Official Gazette of RS", No. 114/20),
11. Decision on Amendments to the Decision on Calculation of the Bank's Capital ("Official Gazette of RS", No. 120/21),
12. Decision on Credit Risk Management and Determination of Expected Credit Losses, ("Official Gazette of the Federation of **BH**", No. 44/19),
13. Decision on Amendments to the Decision on Credit Risk Management and Determination of Expected Credit Losses, ("Official Gazette of the Federation of **BH**", No. 37/20),
14. Instruction for Classification and Valuation of Financial Assets of **FBH**, 5 July 2019
15. Decision on Credit Risk Management and Determination of Expected Credit Losses, ("Official Gazette of RS", No. 48/19),
16. Decision on Amendments to the Decision on Credit Risk Management and Determination of Expected Credit Losses, ("Official Gazette of RS", No. 109/19),
17. Decision on Amendments to the Decision on Credit Risk Management and Determination of Expected Credit Losses, ("Official Gazette of RS", No. 73/21),
18. Instruction for Classification and Valuation of Financial Assets of RS, Banja Luka, June 2019,
19. Decision on Large Exposures of the Bank, ("Official Gazette of the Federation of **BH**", No. 81/17),
20. Decision on Large Exposures, ("Official Gazette of RS", No. 89/17),
21. Decision on Amendments to the Decision on Large Exposures ("Official Gazette of RS", No. 117/17),
22. Instructions for Filling in the Reporting Forms for Large Exposures, RS 20/12/2017,
23. Decision on Bank Liquidity Risk Management, ("Official Gazette of the Federation of **BH**", No. 39/21),
24. Instructions for Filling in the Reporting Forms for Large Exposures, RS 20/12/2017,
25. Decision on Bank Liquidity Risk Management ("Official Gazette of the Federation of **BH**", No. 39/21),

26. Instructions for Reporting on the NSFR, **FBH**, Sarajevo, September 2021,
27. Decision on Liquidity Risk Management, (“Official Gazette of RS”, No. 62/21),
28. Instructions for Reporting on the Liquidity Coverage Ratio, (“Official Gazette of RS”, No. 73/21),
29. Guidelines for Reporting on LCR in RS, Banja Luka, August 2020,
30. Instructions for Reporting on the Net Stable Funding Ratio, (“Official Gazette of RS”, No. 97/21),
31. Decision on Foreign Exchange Risk Management of the Bank ("Official Gazette of the Federation of **BH**", No. 81/17),
32. Decision on Amendments to the Decision on Foreign Exchange Risk Management of the Bank ("Official Gazette of the Federation of **BH**", No. 37/20),
33. Decision on Amendments to the Decision on Minimum Standards for Foreign Exchange Risk Management of Banks, (“Official Gazette of RS”, No. 74/17),
34. Decision on Amendments to the Decision on Minimum Standards for Foreign Exchange Risk Management of Banks, (“Official Gazette of RS”, No. 56/20),
35. Decision on Reports Submitted by the Bank to the **FBH** Banking Agency under the Common Reporting Framework (COREP), (“Official Gazette of the **FBH**”, No. 86/20),
36. Decision on Amendments to the Decision on Reports Submitted by the Bank to the **FBH** Banking Agency under the Common Reporting Framework (COREP), (“Official Gazette of the **FBH**”, No. 61/21),
37. Decision on the Form and Content of Reports Submitted by Banks to the Banking Agency of Republika Srpska (“Official Gazette of RS”, No. 120/21).