CENTRAL BANK
OF BOSNIA AND HERZEGOVINA
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On the basis of Article 50 paragraph (1) of the By-law of the Central Bank of Bosnia and Herzegovina GB Ref: 104-01-1-116/15 dated 28 December 2015, Governor of the Central Bank of Bosnia and Herzegovina has passed

METHODOLOGY
for Compilation of Financial Soundness Indicators

PART ONE - INTRODUCTION

Article 1
(Subject)

(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 2006 (hereinafter: the 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 takes over the data from the Banking Agency of the Federation of Bosnia and Herzegovina and the Banking Agency of Republika Srpska (hereinafter: the 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 are used:

a) BARS Banking Agency of Republika Srpska
b) BH Bosnia and Herzegovina
c) CAR Capital adequacy rate
d) CBBH Central Bank of Bosnia and Herzegovina
e) EU European Union
f) FBA Banking Agency of the Federation of Bosnia and Herzegovina
g) FBH Federation of Bosnia and Herzegovina
h) FSI Financial Soundness Indicators
i) IMF International Monetary Fund
j) IAS International Accounting Standards
k) IFRS International Financial Reporting Standards
l) NPA Non-performing assets
m) NPL Non-performing loans

n) GCR General credit risk
o) OR Operational risk
p) GLLP General loan loss provisions
q) PLL Potential loan losses
r) RWOR Risk- weighted operational risk
s) SPLL Special provisions for loan losses
t) LLP Loan loss provisions
u) ROAA Return on average assets
v) ROAE Return on average equity
w) RS Republika Srpska

Article 3
(Type and Scope of FSI)

(1) Type and scope of FSIs compiled and disseminated differ from one country to another.
(2) FSIs for deposit institutions (core set, in particular) are considered to be the core indicators for the soundness analysis of any financial system.
(3) With the IMF recommendation, the CBBH has commenced to compile the selected FSIs, for banking sector only, primarily because of the biggest share of this sector in the overall financial system, but also because of data availability. On the basis of data provided by the Agencies for individual banks, data are aggregated and FSIs are calculated by the CBBH for the banking sector in BH.

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 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) The Agencies submit data to the CBBH six weeks after the quarter expiry, since banks submit their reports to the Agencies in the deadline of 30 days after the quarter expiry and the Agencies need additional two weeks for data verification. Exceptionally, the year-end data are received by the CBBH after the expiry of the tenth week following the end of the year because of the extended deadline to banks for data submission to the Agencies.
(3) The banks in RS started applying IAS and IFRS from 31 December 2010, and the applicable accounting framework for the banks in RS is based on the Law on Accounting and Audit of RS ("Official Gazette of RS", Ref. 94/15) and the By-law on Chart of Accounts and Contents of Accounts in the Chart of Accounts for Banks and Other Financial Organizations ("Official Gazette of RS", Ref. 106/15). The banks in FBH started applying IAS and IFRS from 31 December 2011, and the applicable accounting framework for the banks in FBH is based on the Law on Accounting and Audit in the Federation of Bosnia and Herzegovina („Official Gazette of FBH", Ref: 83/09) 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", Ref: 82/10).
(4) The legal enactments of the Agencies regulating bank operations defining also in more details the positions from the reporting forms which are the input data for compiling FSIs are stated in Appendix II, which is an integral part of this Methodology.

PART TWO - TYPES OF INPUT DATA

Article 5
(Types of Input Data)

(1) The Agencies submit to the CBBH the data for individual banks from their competences, in KM absolute amounts, for the following positions:
   a) Tier 1 capital,
   b) Net capital,
   c) Average capital,
   d) Total capital,
   e) Total assets,
   f) Average assets,
   g) Total assets risk,
   h) Non-performing assets,
   i) Provisions for non-performing assets,
   j) Provisions for non-performing loans,
   k) Total loans,
   l) Total loans net of interbank loans,
   m) Non-performing loans,
   n) Gross income,
   o) Income before taxes,
   p) Net income,
   q) Net interest income,
   r) Non-interest expenses,
   s) Core liquid assets,
   t) Total financial liabilities,
   u) Short-term financial liabilities,
   v) Deposits,
   w) Foreign currency denominated liabilities,
   x) Indexed and foreign currency loans,
   y) Net foreign exchange position.

(2) The Agencies submit to the CBBH notices on structural changes in banks and methodological changes:
a) Structural changes in banks include: changes of the ownership structure, establishment of a new bank, i.e. issuing operating licences, mergers or acquisitions and revoking of licences (liquidation or bankruptcy),
b) Methodological changes include all the changes that took place in the way of recoding certain categories in FBA and BARS.

Article 6
(Tier 1 Capital)

(1) Tier 1 capital of the bank includes the capital items which are available unconditionally, fully and without restrictions at any time for covering losses and are subordinated to all bank liabilities, decreased by regulatory adjustments and representing the total sum of:
   a) Equity based on the nominal amount of common and permanent preference non-cumulative shares issued upon payments of funds into the bank's equity;

b) Equity based on the nominal amount of common and permanent preference non-cumulative shares issued on the basis of the property and rights invested into the bank's equity;
c) The issue premiums realized at the payment of bank's shares;
d) General legal bank's reserves;
e) Other reserves formed from profit after taxes based on the decision of banks' shareholders;
f) Retained, that is, non-allocated bank profits from the previous years and the profits from the current year, deducted by the total amount of:
    1) Uncovered losses transferred from the previous years;
    2) Current year's loss;
    3) Bookkeeping value of own (treasury) shares in bank's possession regardless of the manner of their acquisition;
    4) Intangible assets, according to the applicable accounting framework,
    5) Deferred tax assets and
    6) Negative revaluation reserves occurring on the basis of the effect of a change in the value of assets, according to the applicable accounting framework.

(2) The calculation of Tier I capital can also include:

a) Profits from earlier years not burdened by any future liabilities, which the competent body of a bank decided to allocate into Tier I capital and

b) Profits of the current year recorded during the business year or in the end of the business year, with the submission of documentation to the Agencies on the fulfilment of the following conditions:

1) That the profit amount has been confirmed by the certified external auditor,
2) That the profit amount has been decreased by the calculated income tax and all the other liabilities from profit (liabilities for dividends and other liabilities on the basis of profit allocation)
3) That the competent body of the bank has made a decision on the allocation of profit into Tier I capital in the amount of audited profit or lower amount than that.

Article 7
(Net Capital)

(1) Net capital of the bank is used for the calculation of bank's capital adequacy rate. Net capital represents the difference between the amount of capital (Tier 1 and Tier 2) and deduction items. The bank is obliged to use its capital to cover risks in its operations by the following order: to cover credit, operative and market risks.

(2) Tier 2 capital of the bank, as a part of net capital, includes:

a) Equity based on the nominal amount of permanent cumulative preference shares issued on the basis of payments of funds into the bank's equity;

b) Equity based on the nominal amount of permanent cumulative preference shares issued on the basis of invested property and rights in the bank's equity;

c) General reserves of the bank for the covering of loan losses for the assets of the bank assessed as category A – Good assets in accordance with Article 22 of the Decision on Minimum Standards for Credit Risk Management and Classification of Bank Assets (as stated in Appendix II), and up to 1.25% of the total assets risk as maximum;

d) The amount of positive revaluation reserves based on the effect of the change of fair value of assets decreased by the effects of tax liabilities, according to the applicable accounting framework;

e) Amount of profit for which the competent Agency has issued decision on temporary cease of allocation;

f) Subordinated debts (loans, issued bonds and other similar instruments), under the following conditions:

1) That a bank has received a prior written consent of the competent Agency relating to the inclusion of subordinated debt into the calculation of Tier 2 capital of the bank;
2) That funds have been fully paid to the bank;
3) That a bank or persons related to it did not provide a creditor with the security instrument for collection on that basis and that it does not have the status of insured debt;
4) That a bank does not have an arrangement with reverse operation with the creditor;
5) That the agreement has set out the maturity period of a debt of at least five years from the payment day;
6) that repayment to creditors or purchase of liabilities by a bank are not possible before the agreed maturity period, except in case of transforming or replacing these liabilities into the capital items with the same or higher quality, with the previous consent of the competent agency,
7) That a debt cannot be repaid even after the expiry of that period, if bank capital would be decreased bellow the defined level due to that activity,
8) That they are available for covering losses only in case of bankruptcy or liquidation of a bank, i.e. they are not available for covering losses from regular bank operations,
9) That debt in case of liquidation or bankruptcy of a bank is in a subordinated position in relation to other bank liabilities,
10) That the amount of subordinated debt of the bank which is included in Tier II bank capital over the last five years before the expiry of the agreed maturity period should be decreased by 20 per cent cumulative annual deduction from its value on the day of calculation of Tier II capital, but during the last year before the expiry of the agreed maturity of subordinated debt, it is not included in Tier II capital.

g) Hybrid, i.e. convertible items – capital instruments, with the prior written consent of the competent Agency for the including of these items – instruments in the calculation of bank's Tier 2 capital. For the purpose of this provision, convertible items - capital instruments mean the items –bank liabilities with the agreed clause on conversion into instruments of (permanent) capital which is to be carried out not later than on the date of the agreed maturity of convertible item – instrument and

h) Other capital instruments, with the previous consent of the competent Agency in writing, if they meet at least the following conditions:

1) That the contracted maturity of debt of at least five years, counting from the payment day,
2) That bank or persons related to it did not give to the creditor the instrument for securing collection on that basis and that it has no status of insured debt
3) That funds were fully paid to the bank
4) That the instrument is entirely available to cover losses from current operations and in case of liquidation or bankruptcy of a bank,
5) That bank has a possibility to delay the payment of interest and compensations based on the instrument.

(3) For the purpose of the capital adequacy calculation, the amount of Tier 2 capital cannot exceed the amount of one third of Tier 1 capital of the bank, where the Tier 1 capital is at least 9% of the total assets risk.

(4) Deduction items for net capital calculation include:

a) A part of the invested equity which, according to the assessment of the Agencies, represents the difference between the actually received and booked overestimated value;
b) deposits (investments) of the bank into the capital of other legal entities which exceed 5% of the amount of Tier 1 capital of the bank;
c) All claims on shareholders that have a significant ownership interest in the bank (over 10% of voting-right shares, i.e. votes) approved by the bank contrary to the provisions of the Law, regulations of the Agencies and business policy of the bank;
d) All large exposures of bank to the credit risk (over 15% of the amount of Tier 1 capital of the bank) towards the shareholders with significant ownership interest in the bank, carried out without a prior written consent of the competent Agency. When giving consent, in respect of this provision, the Agency will not estimate the quality of the loan application but only check if the bank has respected regulations and its internal regulations related to the procedure of approving such loans and
e) The amount of lacking loan loss provisions, under the regulatory requirements.

Article 8
(Average Capital)

(1) Average capital represents the average balance of the total capital, defined by Article 9 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 and the third and the fourth quarter of the current year.

Article 9
(Total Capital)

The total capital is a difference between the total assets and liabilities of a bank. The total capital includes: permanent preference shares, common shares, the issue premium, unallocated profit and capital reserves, exchange rate differences, other capital and loan loss provisions from profit according to regulatory requirement.

Article 10
(Total Assets)

The total assets are a sum of all the balance sheet positions of assets from the prescribed form of BS – balance sheet, and they are presented on net basis, which means that they are decreased by the valuation adjustment. Valuation adjustment of the balance sheet assets and the provisions for losses in off-balance sheet items are calculated by the application of the internal methodology for measuring the value impairment of the loans and other financial assets held to maturity in line with the IAS.

Article 11
(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,
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 12
(The Total Assets Risk)

(1) The total assets risks represent the sum of risks of balance and off-balance sheet assets, risk- weighted operational risk and risks- weighted market risk.
(2) In respect of this Article, the bank's balance and off-balance sheet assets mean the total net bookkeeping value of balance sheet assets and credit equivalents of its off-balance liabilities that represent its contingent balance sheet assets. The net bookkeeping value of assets is a book value of assets deducted by any deductions, i.e. deduction items.
(3) Risk of assets of the bank's balance and off-balance sheet is a sum of products (of multiplication) of the relevant rates (weights) of risks and the balance sheet items, and credit equivalents of off -balance sheet items (the amount obtained by the multiplication of the bookkeeping- nominal value of off-balance sheet liabilities with the relevant conversion coefficients) exposed to risk, in accordance with the overview provided in Appendix 1, which is an integral part of this Methodology.
(4) A zone countries are the member countries of the Organization for Economic Cooperation and Development (OECD).
(5) Operational risk (OR) represents a possibility of a loss for the bank and negative effects on bank capital due to inadequate internal systems, procedures and controls, weaknesses and errors in performing business activities, illegal actions and external events which can expose the bank to a loss. For the potential losses on the basis of exposure to OR, the bank is obliged to create and maintain the amount of minimal adequate capital for protection against losses on the basis of OR (hereinafter: MCAOR). The bank is obliged to calculate and form the amount of MCAOR – by „the Basic Indicator Method“ which is 15% of the average amount of gross profit realized in the last three business years. The calculation is performed according to the following formula:

$$K_{OR}= [\Sigma (G_{BD1...n}*\alpha)]/n$$

Where:

K_{OR}= the needed minimal amount of capital for bank exposure to OR

G_{BD} = annual gross profit representing a difference between items Total Revenue (sum of net interest and similar revenues and operative revenues) and Other Business and Direct Costs, from the Form of Profit and Loss Statement

n = number of years in the previous three years when the profit was positive

α = 15% representing a factor determined by the Basel Committee for Bank Supervision.

(6) In calculating the average in the formula from the previous paragraph of this Article, the amount for any of the previous three years in which the annual gross profit was negative or zero (the bank did not record profit) should be excluded both from numerator and denominator of the formula.

(7) With purpose of calculation and reporting on the total amount of its assets risk, the bank is obliged to perform a special additional calculation of WOR of the bank by multiplying the amount of MCAOR obtained in the way described in Article 12. Paragraph (6) of this Methodology with the number 8.33 (reciprocal value of the minimal rate of net capital obtained by the formula 100%: 12% = 8.33). The amount of WOR of the bank obtained in such way, has to be added by the bank to the amount of risk of assets of balance sheet and off-balance sheet in calculation of capital adequacy rate.

(8) Market risk is a possibility of a loss for the bank on the basis of the change of the price of financial instrument or with derivative in case of a change of the price of the related instrument, risk which appears due to the possibility of a change of the currency exchange rate and/or change of the gold price or the risk arising from the change of the price of goods. The calculation of the total assets risk still does not include the market weighted risk. Capital requirement for market risk will be applied by the entry into effect of regulations regulating the management of market risks in banks.

Article 13
(Non-performing Assets)

(1) Non-performing assets represent assets, which as a rule, do not generate income. Non-performing assets are the assets' items when the principal and/or interest are due and are not collected for longer than 90 days from the day of their initially agreed maturity, i.e., when they are classified in the categories C, D and E or when the liabilities of users relating to the interest, for which the debtor (user) is late with the payment for more than 90 days from the day of their initially agreed maturity, are capitalized.

(2) In accordance with the Decisions on Amendments and Supplements of the Decisions on Minimum Standards for Credit Risk Management, the banks in RS are obliged, as of 31 December 2010, and banks in FBH as of 31 December 2011, to report in the balance sheet all items of assets classified in E category, for which the valuation adjustment was carried out in the overall amount, until the final write-off or collection. For earlier periods, category E was presented in off-balance sheet and it was not included in item of non-performing assets.

Article 14
(Provisions for Non-performing Assets and Provisions for Non-performing Loans)

(1) Provisions for non-performing assets represent provisions which the bank is obliged to create for the assets items and off-balance sheet items that are exposed to collection risk, i.e., the risk of possible losses on approved loans, other placements, performed investments and potential off-balance sheet liabilities, individually for each user, i.e. a group of connected persons.

(2) Banks assets exposed to the credit risk include the following items:

a) in the balance sheet of the bank: loans, lendings, advance payments, investments, debt securities, claims related to inter-bank balances and all other items with which the bank is exposed to risk of impossible collection, that is, business failure;

b) in the off-balance sheet records of the bank: issued guarantees, other issued types of guarantees, letters of credit, irrevocably approved and still not used credits and all other items that constitute potential liabilities of the bank.

(3) For the general credit risk (GCR) and potential loan losses (PLL) a bank creates LLP which, once the conditions are met, are used for the write off of assets classified in low categories, partly or entirely.

(4) LLP for the assets items classified as A category constitute “general loan loss provisions” (GLLP), while LLP created for the items of assets classified as categories B, C, D and E constitute “special provisions for loan losses” (SPLL).

(5) Banks carry out the classification of assets into five categories and accordingly, provisions for each category, in the following manner:

a)	A Category	Performing assets:	2% GLLP for GCR
b)	B Category	Special mention:	5-15% of SPLL for PLL
c)	C Category	Sub-standard assets:	16-40% SPLL for PLL
d)	D Category	Doubtful Assets:	41-60% SPLL for PLL
e)	E Category	Loss:	100% SPLL for PLL

(6) Banks are obliged to perform regular calculation of the LLP for estimated losses that may arise on the basis of the assets items that are classified. The base for the calculation of loan losses provisions is the gross book value of claims.

(7) The items of the assets which are classified are the following:

a) In the balance sheet of the bank: loans, deposits with banks, interest and fees, securities held to maturity, securities available for sale, bank share in other legal entities capital and other balance sheet assets other than balance sheet assets that are not classified; and

b) In the off-balance sheet of the bank: issued guarantees, guarantees of bills, acceptances of bills and other forms of guarantees, letters of credit, uncovered letters of credit, irrevocably granted and unused loans and all other items that represent potential liabilities of the bank.

(8) Assets that are not classified include the following items:

a) Cash in the cash office and in the vault, the funds in reserve accounts with the CBBH, gold and other precious metals;

b) Sight deposits and time deposits up to a month at the accounts with banks that were rated at least BBB- according to the latest ranking conducted by Standard & Poor's or Fitch IBCA, or at least Baa3 according to the latest Moody's ranking;

c) Tangible and intangible assets;

d) Financial and tangible assets gained in the process of collection of claims during a year from the date of acquisition;
e) Own (treasury) shares;
f) Claims for the paid tax liabilities, and
g) Securities intended for trading.

(9) If the amount of LLP is higher than the sum of the amounts of the valuation adjustment of the balance sheet assets and provisions for losses related to off-balance sheet items and the already formed LLPs, the difference is treated as the insufficient LLP.

Article 15
(Total Loans)

The total loans are presented on gross basis. According to the Decisions on Amendments and Supplements of the Decisions on Minimum Standards for Credit Risk Management, from 31 December 2010, in banks in RS, and from 31 December 2011 in banks in FBH, the balance sheet position of the total loans includes also the loans classified in E category.

Article 16
(Total Loans Net of Interbank Loans)

The total loans net of interbank loans represent the total loans, defined in Article 15 of this Methodology, excluding the loans to the institutions engaged in receiving deposits, i.e. loans to other banks.

Article 17
(Non-performing Loans)

Non-performing loans are the loans classified in the categories C, D and E, i.e. the loans whose due principal and/or interest is not collected for longer than 90 days from the day of their agreed maturity or the loans with which the liabilities based on interest not collected in that period, have been capitalized. In accordance with the Decisions on Amendments and Supplements of the Decisions on Minimum Standards for Credit Risk Management, as of 31 December 2010, the banks in RS are obliged to report in the balance sheet the loans classified in E category until the final write-off or collection, while the banks in FBH are obliged to do that from 31 December 2011. For earlier periods, the loans classified in E category were reported in off-balance sheet records and they were not included in item of non-performing loans.

Article 18
(**Gross Income, Income before Taxes, Net Income, Net Interest Income and Non-interest Expenses)**

Five categories are defined by the Instruction for Preparation of Income Statement of FBA and the Instruction for Preparation of Income Statement of BARS, as it follows:

a) Gross income represents a sum of net interest income and similar kinds of income and operating income,
b) Income before taxes is a difference between the gross income and non-interest expenses,
c) Net income is a difference between the gross income and non-interest expenses, after tax.

d) Net interest income represents the difference between interest income and interest expenses,

e) Non-interest expenses include business and direct expenses and operating expenses.

Article 19
(Core Liquid Assets)

Core liquid assets, that is, narrow liquid assets include cash and deposits and other financial assets with maturity period shorter than three months, excluding interbank deposits.

Article 20
(Total Financial Liabilities)

The total financial liabilities include:

a) Deposits and due unsettled off-balance sheet liabilities,
b) Borrowings from other banks,
c) Liabilities towards the government,
d) Liabilities related to taken loans and other borrowings,
e) Subordinated debts and subordinated bonds, and
f) Other financial liabilities.

Article 21
(Short-term Financial Liabilities)

Short-term financial liabilities represent the total financial liabilities with the remaining maturity up to one year.

Article 22
(Deposits)

Deposits include the balance of all the deposits, as it follows: sight deposits, savings deposits, time deposits, special and other deposits, excluding deposits of banks and other financial institutions.

Article 23
(Foreign Currency Denominated Liabilities)

Foreign currency denominated liabilities are the liabilities payable in a currency other than the domestic currency and the liabilities payable in the domestic currency with the amount to be paid tied to a foreign currency.

Article 24
(Indexed and Foreign Currency Loans)

Indexed loans or loans with the currency clause are loans provided in KM, whose repayment is tied to a foreign currency. Such loans are provided because of the protection of the lender from inflation or foreign exchange risk. Loans in foreign currencies represent loans extended in a foreign currency, which are also repaid in a foreign currency. Until the end of the fourth quarter of 2011, these loans were presented on net basis, i.e. decreased by valuation adjustment, and from the first quarter of 2012, they have been presented on gross basis.

Article 25
(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.

PART THREE - FINANCIAL SOUNDNESS INDICATORS

Article 26
(Financial Soundness Indicators)

(1) For purpose of calculating the financial soundness indicators, the data for individual banks sent by the Agencies to the CBBH are used. On the basis of the data sent by the Agencies, the mentioned FSIs are calculated in the CBBH for the entire banking sector of BH. The CBBH compiles 11 (eleven) out of the total of 12 (twelve) basic indicators and 4 (four) of the total of 13 (thirteen) recommended indicators envisaged by the Guide and three additional FSIs.

(2) 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 27
(FSI for Capital)

(1) The indicators measuring the capital adequacy are the following:
a) Tier 1 to total assets risk,
b) Net capital to total assets risk,
c) Capital to assets.

(2) Tier 1 to total assets risk is used in order to define how much the indicator of net capital to total assets risk is subject to changes in Tier 2 and regulatory deductions. Capital adequacy measured by this indicator is calculated as the ratio of the Tier 1 and

the total assets risk which is comprised of assets risk of balance sheet and of off-balance sheet and risk- weighted operational risk.
(3) The capital adequacy ratio measured by this indicator is calculated as the ratio of net capital and the total assets risk. The minimum defined rate of capital adequacy in BH is 12%.
(4) Capital to assets indicates the extent to which the banking sector assets are financed by own capital. It is calculated as the ratio between the total capital and the total assets of the banking sector. The CBBH started publishing the value of this indicator from the fourth quarter of 2013, and the values of the indicator are calculated also for the periods starting from the first quarter of 2009.

Article 28
(FSIs for Asset Quality)

(1) For measuring the asset quality, the CBBH compiles the following FSIs:
a) Non-performing assets (NPA) to total assets,
b) Non-performing assets (NPA) net of provisions to Tier 1,
c) Non-performing loans (NPL) to total loans,
d) Non-performing loans (NPL) net of provisions to Tier 1.

(2) Non-Performing Assets (NPA) to total assets measures the quality of the assets of the banking sector, i.e. the share of non-performing assets in total assets. This indicator is not included in the basic or the recommended set of financial soundness indicators in the Guide, but it has been created as it represents a good base for the analysis of the situation of the banking sector assets quality. Non-performing loans account for the largest part of non-performing assets, so this indicator provides a good picture of the loan portfolio quality.

(3) Non-Performing Assets (NPA) net of provisions to Tier 1 shows the size of the share of non-performing assets not covered by the provisions in the Tier 1, and it gives indication of the additional provisions which should be allocated for the existing NPA level. This indicator is calculated as a ratio of NPA net of provisions and Tier 1 capital.

(4) Non-Performing Loans (NPL) to total loans represent the indicator from the basic set of the FSIs from the Guide. It is calculated as a ratio between non-performing loans and the total loans. This indicator represents a basic measure of the loan portfolio quality.

(5) Non-performing loans (NPL) net of provisions to Tier 1 show the size of the share of non-performing loans not covered by the provisions in Tier 1 and indicates the level of additional provisions which might be created on the existing level of NPLs. This indicator shows the bank ability to absorb from the capital the losses arising from non-performing loans. The CBBH starts publishing the value of this indicator from the basic set of FSIs from the fourth quarter of 2013, and the values of indicator are calculated also for the periods starting from the fourth quarter of 2009. It is calculated as ratio between non-performing loans net of provisions and Tier 1. In calculating this indicator, there is a deviation compared to the Guide as the value of Tier 1 is used in denominator instead of the value of capital and reserves.

Article 29
(FSIs for Profitability)

(1) For measuring the profitability, the Agencies and the CBBH compile the following FSIs:

a) Return on Average Assets (ROAA),
b) Return on Average Equity (ROAE),
c) Net interest income to gross income,
d) Non-interest expenses to gross income.

(2) Return on Average Assets (ROAA) is the indicator from the set of the basic indicators of financial soundness and it is intended to measure the bank efficiency in using own assets. This FSI estimates the profit which can be used to cover losses in relation to assets. Until the end of the third quarter of 2016, ROAA was calculated as the ratio of net income after taxes and the average assets, which was a deviation from the Guide, which recommends the use of the value of net income before taxes, and the value of the indicator was not presented at the annual level. From the fourth quarter of 2016, the calculation of ROAA has been harmonized with the Guide and it has been calculated as the ratio of income before taxes and average assets, with the value of the indicator presented at the annual level. The values of the indicator, harmonized with the Guide were retroactively calculated for the periods starting from the first quarter of 2012, since when all the needed data have been available. In the denominator, the average asset balance over the observed period is used.

(3) Return on Average Equity (ROAE) measures the bank efficiency in using the capital. This FSI provides the assessed average profit which can be used to cover losses related to capital. Until the end of the third quarter of 2016, ROAE was calculated as the ratio of net income after taxes and the average equity, while the value of the indicator not presented at the annual level. From the fourth quarter of 2016, the calculation of ROAE has been harmonized with the Guide and calculated as the ratio of income before taxes and average equity, with the value of the indicator presented at the annual level. The values of the indicator, harmonized with the Guide were retroactively calculated for the periods starting from the first quarter of 2012.

(4) Net interest income to gross income is calculated as the ratio of net interest income and the gross income. Net interest income represents a difference between the total interest income and the total interest expenses.

(5) Non-interest expenses to gross income measure the share of non-interest expenses costs in the gross income. The non-interest expenses include business and direct expenses (costs of valuation adjustment of risky balance sheet items and provisions for risky off-balance sheet items and other business and direct costs) and operative expenses (costs of salaries and contributions, costs of business premises, other fixed assets and utilities costs and other operative costs).

Article 30
(FSIs for Liquidity)

(1) FSIs for liquidity include:

a) Liquid assets to total assets,
b) Liquid assets to short-term financial liabilities,
c) Short-term financial liabilities to total financial liabilities,
d) Deposits to loans.

(2) Liquid assets to total assets shows how much banking sector is vulnerable to liquidity crisis, i.e. how capable it is to meet the expected and unexpected demand for cash. This FSI is calculated as a ratio between liquid assets and the total assets. Liquid assets are defined in Part Two of this Methodology.

(3) Liquid assets to short-term financial liabilities is the indicator measuring the liquidity mismatch of assets and liabilities, i.e. gives an indication to which extent

banks can tolerate the withdrawal of short-term assets without facing a liquidity problem. This FSI is calculated as a ratio between liquid assets and short-term financial liabilities. Liquid assets and short-term financial liabilities are defined in Part Two of this Methodology.

(4) Short-term financial liabilities to total financial liabilities is the indicator which is not included either in basic or in the recommended set of financial soundness indicators in the Guide. The reason for including this indicator is measuring the share of short-term liabilities in the total financial liabilities, and it represents a measure of the liquidity risk brought about by the unexpected increase of the share of short-term liabilities in the total financial liabilities. It is calculated as a ratio of short-term financial liabilities and the total financial liabilities.

(5) Deposits to loans indicator is calculated as a ratio of the total deposits, excluding deposits of banks and other financial institutions and the total loans excluding interbank loans. Deposits to loans is an indicator from the recommended set of financial soundness indicators and it shows the percentage of loans which is financed from customer deposits. The lower the ratio, the bigger the reliance on volatile sources of assets and the higher the liquidity risk. The CBBH started publishing the value of this indicator from the fourth quarter of 2013, and the values of the indicator were calculated also for the periods starting from the second quarter of 2003.

Article 31
(FSIs for Market Risk)

(1) FSIs measuring the exposure to market risk are FSIs monitoring the sensitivity of the financial sector to market risks, i.e. sensitivity to the trend of foreign exchange rates, interest rates and capital market.

(2) The CBBH compiles FSIs measuring the market risk, as it 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 exchange to capital.

(3) Indexed and foreign currency loans to total loans is indicator calculating the share of the loans in foreign currencies and indexed loans in the total loans. In the countries where lending in foreign currencies is allowed, it is particularly important to monitor the share of loans of residents denominated in foreign currencies in the total loans, due to the increased risk of repayment of such loans in the context of high depreciation or lack of earnings in foreign currencies.

Until the third quarter of 2016, the value of indexed loans and loans in foreign currencies in the numerator of the indicator was presented on net basis, i.e. decreased by value adjustment. From the fourth quarter of 2016, the calculation of the indicator has been harmonized with the Guide and it has been calculated as the ratio of loans in foreign currencies and indexed loans to the total loans, with the value of loans in the numerator and denominator presented on gross principle. The values of the indicator adjusted to the Guide have been calculated retroactively for the periods starting from the first quarter of 2012.

(4) Foreign currency denominated liabilities to total financial liabilities are included in the set of auxiliary indicators of financial soundness in the Guide and they measure the relative significance of foreign sources of financing within the total liabilities. This indicator needs to be observed together with the indicator from paragraph 3 of this Article, as banks foreign exchange exposure is lower if loans extended in foreign currencies are financed by sources in foreign currencies. It is calculated as a ratio of

liabilities in foreign currencies and the total financial liabilities. It shows the size of the liabilities share in foreign currencies in the total financial liabilities.
(5) Net open position in foreign exchange to capital is included in the core set of FSIs. It is calculated as a ratio of net foreign exchange position and Tier 1. Tier 1 is used in denominator, instead of capital and reserves as stated in the Guide. Net foreign exchange position is calculated as sum of all the long and the sum of the values of all the short individual positions of banks. Individual foreign exchange position is calculated as a sum of the amounts of assets items with the sign plus and liabilities items with the sign minus. Individual foreign exchange position (open position) is a difference between items which are related to the particular foreign currency (including gold and other precious metals) in assets and liabilities of the bank balance sheet denominated in the domestic currency (KM), including a potential profit or loss.

PART FOUR - PRESENTING AND DISSEMINATING FSIs

Article 32
(Presentation and Dissemination of FSIs)

(1) FSIs and the data used for calculating FSIs are regularly published on the web site of the CBBH. FSIs are submitted to the IMF, the Agencies and other users in BH and abroad.

(2) Frequency and dates of publishing the FSIs are included in the calendar of publishing the statistical data on the CBBH web site.

Article 33
(Entry into Force)

This Methodology shall take effect on the date of its adoption.

Article 34
(Repeal)

When this Methodology enters into force, the Methodology for Compilation of Financial Soundness Indicators, Ref: 122-17-2-183/14 as of 15 January 2014 ceases to be valid.

GOVERNOR
Senad Softić, Ph.D.

Appendix I

<table>
<tr><th colspan="2">ASSETS AND OFF-BALANCE SHEET LOAN EQUIVALENTS</th><th></th></tr>
<tr><th colspan="2">Assets of Balance Sheet</th><th>RATE (WEIGHT) OF RISK</th></tr>
<tr><td rowspan="5">1.</td><td>Cash;</td><td rowspan="5">0%</td></tr>
<tr><td>Receivables from central governments in A zone countries, receivables from FBH Government, RS Government and BH Government; Securities issued by the central governments of A zone countries, FBH Government, RS Government and BH Government and receivables secured by their unconditional guarantees payable at first call;</td></tr>
<tr><td>Receivables from CBBH and central banks in A zone countries and receivables secured by their unconditional guarantees payable on first call;</td></tr>
<tr><td>Fixed assets secured in the full amount (construction buildings, equipment and land property);</td></tr>
<tr><td>Placements or part of bank placements secured by collateral in the form of cash deposit with the same bank, provided that is defined under the agreement that the cash deposit as collateral is tied to a specific loan relationship until the receivables of the bank are collected;</td></tr>
<tr><td rowspan="6">2.</td><td>Receivables from banks from in A zone countries, except on the basis of subordinated debt</td><td rowspan="6">20%</td></tr>
<tr><td>Receivables from banks seated in B zone countries with current maturities up to one year, except on the basis of subordinated debt</td></tr>
<tr><td>Receivables from international development banks</td></tr>
<tr><td>Receivables from regional governments /governments at lower levels from A zone countries</td></tr>
<tr><td>Receivables from institutions financed from the budget of FBH/BH/RS and the budget of the central governments of A zone countries;</td></tr>
<tr><td>Financial instruments in the process of collection</td></tr>
<tr><td>3.</td><td>Receivables from banks in BH</td><td>50%</td></tr>
<tr><td>4.</td><td>All outstanding assets.</td><td>100%</td></tr>
<tr><th colspan="2">Off-balance Sheet Positions</th><th>CONVERSION COEFFICIENT</th></tr>
</table>

1.	Contingent liabilities of the bank secured by collateral in form of cash deposit with the same bank, provided that it is defined under the agreement that the cash deposit is tied to a specific guarantee business as long as the contingent liability exists	**0.0**
2.	Irrevocable payment guarantees issued by a bank	**1.0**
3.	Irrevocable guarantees (except for payment) issued by a bank	**0.5**
4.	Irrevocable credit liabilities of up to one year	**0.5**
5.	Documentary letters of credit opened or confirmed by a bank	**0.5**
6.	Liabilities accepted by a bank arising from the sale agreement with the repurchase right	**1.0**
7.	Foreign exchange and KM currency purchased under the agreements on foreign exchange swaps, futures and currency options and liabilities of customers accepted by a bank that arise from foreign exchange rates under the agreements with one currency foreign exchange swap, exchange rate forward deals and purchased options.	**0.1**

Appendix II

The compilation of the data submitted by the Agencies is regulated by the following subordinate enactments:

a) Decision on Minimal Standards for Bank Capital Management and Capital Buffers (Official Gazette of FBH, 46/14),
b) Decision on Minimal Standards for Bank Capital Management and Capital Buffers (Official Gazette of RS, 57/14),
c) Instruction on Amended Manner for Creating, Recording and Reporting on Loan Loss Provisions (Banking Agency of FBH, 03-235/11 dated 22 January 2011 and Ref: 03-235-1/11 dated 06 December 2011),
d) Instruction on Amended Manner for Creating, Recording and Reporting on Loan Loss Provisions (Banking Agency of RS, 01-D-1/11 dated 11 January 2011),
e) Instruction for Creating Banks' Balance Sheets and the Accompanying Forms (FBH Banking Agency, 01-574/00, 12 July 2000 and 01-2-1669/07 dated 10 October 2007),
f) Instruction for Creating Banks' Balance Sheets and the Accompanying Forms (Banking Agency of RS, D-5/99, 28 December 1999),
g) Decision on Minimal Standards for Credit Risk Management and Classification of Banks Assets (Official Gazette of FBH, 85/11- revised text, 33/12-correction and 15/13),
h) Decision on Minimal Standards for Credit Risk Management and Classification of Banks Assets (Official Gazette of RS, 49/13 and 1/14),
i) Decision on Minimal Standards for Managing Operative Risk in Banks (Official Gazette of FBH, 6/08 and 40/09),
j) Decision on Minimal Standards for Managing Operative Risk in Banks (Official Gazette of RS, 61/08 and 09/10),
k) Instructions for Creating Profit and Loss Statements of Banks (FBH Banking Agency, 01-575/00, 12 July 2000),
l) Instructions for Creating Profit and Loss Statements of Banks (RS Banking Agency, D-3/99 dated 28 December 1999),
m) Decision on Minimal Standards for Managing Liquidity Risk in Banks (Official Gazette of FBH, 48/12 –revised text, 110/12 and 46/14),
n) Decision on Minimal Standards for Managing Liquidity Risk in Banks (Official Gazette of RS, 12/03, 31/04 and 111/07),
o) Decision on the Form of Report Submitted by Banks to the Banking Agency of the Federation of BH (Official Gazette of FBH, 110/12, 15/13, 46/14, 62/14 and 26/16),
p) Decision on the Form and Contents of Report Submitted by Banks to the Banking Agency of Republika Srpska (Official Gazette of RS, 61/08, 91/11, 123/12 and 57/14),
q) Decision on Minimal Standards for Managing Foreign Exchange Risk in Banks (Official Gazette of FBH, 48/12 – revised text),
r) Instructions for the Implementation of Decision on Minimal Standards for Managing Foreign Exchange Risk in Banks (FBH Banking Agency, 01-2-1350-1/03 dated 29 July 2003),
s) Decision on Minimal Standards for Managing Foreign Exchange Risk in Banks (Official Gazette of RS, 12/03, 53/03 and 85/04),

t) Instructions for the Implementation of Decision on Minimal Standards for Managing Foreign Exchange Risk in Banks (RS Banking Agency, 01-1174/2003 dated 29 July 2003 and 01-1810/2003 dated 17 November 2003).