

Pursuant to Article 21, paragraph 1 of the Law on the National Bank of Serbia (“RS Official Gazette”, No. 72/2003 and 55/2004) and Article 21, paragraph 3, Article 23, paragraph 4 and Article 24, paragraph 2 of the Law on Banks (“RS Official Gazette”, No. 107/2005), the Governor of the National Bank of Serbia hereby issues the following

DECISION ON CAPITAL ADEQUACY OF BANKS

I. GENERAL PROVISIONS

1. This Decision sets out the method of calculating the capital of a bank, as well as its capital adequacy ratio and all elements thereof.

At all times, the bank shall maintain its capital at a level sufficient to cover all risks referred to herein that may arise in the bank’s operations (capital requirement).

2. Capital adequacy ratio of a bank shall equal the ratio between the bank’s capital and the sum of credit risk-weighted assets plus capital requirement relating to foreign exchange risk multiplied by the reciprocal value of the capital adequacy ratio referred to in paragraph 3 hereof plus capital requirements relating to other market risks multiplied by the reciprocal value of the capital adequacy ratio referred to therein.

For the purposes of paragraph 1 hereof, other market risks include:

- 1) price risk (on debt securities and equity securities);
- 2) settlement/delivery risk and counterparty risk.

The bank shall be required to maintain its capital adequacy ratio at the level of at least 12%.

The National Bank of Serbia may set a higher than prescribed capital adequacy ratio to a bank if, in the course of inspection of the bank’s solvency and legality of operations and in view of the type and level of risks involved in such bank’s operations and business activities, the National Bank of Serbia assesses that such ratio is necessary to ensure safe and sound operations of such bank and/or its ability to meet obligations to its creditors. Such capital adequacy ratio shall be set if the type and level of the bank’s risks and business activities have been caused by:

- strong expansion in its lending activity;
- inadequate internal procedures and control mechanisms of the bank;

- inadequate risk management;
- decline in deposit potential;
- expansion of long-term investment into its own fixed assets or in other legal entities;
- inadequate maturity or currency structure of the bank's sources of financing and lending;
- inadequate interest rate policy of the bank, etc.

The capital adequacy ratio referred to in paragraph 4 hereof shall be determined by an increase in the level of capital or a decrease in the level of risk-weighted assets.

II. CAPITAL OF THE BANK

3. The capital of the bank shall be the sum total of its core capital, supplementary capital I and supplementary capital II minus deductions referred to herein. In the course of its operations, the bank shall ensure that its capital never declines below the dinar equivalent value of EUR 10,000,000 at the official middle exchange rate.

For the purposes hereof, deductions shall be:

- 1) direct or indirect investment in banks and other financial sector entities that exceed 10% of the capital of such banks and/or other financial sector entities;
- 2) direct or indirect investment in banks and other financial sector entities up to 10% of their capital, which exceeds 10% of the bank's capital as calculated before deductions specified in provision 1 hereof;
- 3) all claims and potential liabilities of entities related to the bank that were contracted on more favourable terms and conditions than those contracted with entities that are not related with the bank;
- 4) shortfall amount of special provisions against potential losses.

4. The core capital of the bank shall consist of the following elements minus deductions defined herein:

- 1) paid-up share capital of the bank in respect of ordinary and preference shares, excluding cumulative preference shares;
- 2) premium on the issue of ordinary and preference shares, excluding cumulative preference shares;
- 3) all types of bank reserves allocated from earnings after deduction of taxes, excluding reserves from earnings against general banking risks;

4) portion of retained earnings from earlier years and the current year as recorded in the bank's final accounts, which the bank's assembly decided to allocate within core capital;

5) capital gains arising from the acquisition and alienation of the bank's own shares.

For the purposes hereof, deductions shall include:

- 1) losses from earlier years;
- 2) current year losses;
- 3) capital losses arising from acquisition and alienation of own shares;
- 4) intangible investment in the form of goodwill, licenses, patents and trademarks;
- 5) acquired own shares of the bank, excluding cumulative preference shares.

The core capital of the bank must meet the following minimum requirements:

- 1) unconditional irrevocability;
- 2) full availability for covering losses of an operating bank.

5. The supplementary capital I of the bank shall be the sum total of the following elements, minus deductions specified below:

- 1) paid-up share capital in respect of cumulative preference shares of the bank;
- 2) premium on the issue of cumulative preference shares;
- 3) portion of revaluation reserves which refers to fixed assets and shares in capital in the bank's portfolio;
- 4) reserves from earnings against general banking risks – not more than 1.25% of total credit risk-weighted assets calculated in accordance herewith;
- 5) instruments referred to in Section 6 hereof;
- 6) subordinated liabilities.

For the purposes hereof, deductions shall include:

- 1) acquired own cumulative preference shares;
- 2) subordinated liabilities in excess of 50% of the bank's core capital.

6. Instruments included in the bank's supplementary capital I shall be instruments that display characteristics of both capital and liabilities of the bank (hybrid instruments), and which are:

- fully paid-up;

- not backed by any security instruments issued by the bank ;
- eligible for mandatory settlement in the event of bankruptcy or liquidation of the bank only after the settlement of all non-subordinated obligations of the bank and subordinated obligations referred to herein,
- sufficient to cover losses from current operations, and losses arising in the event of liquidation of the bank;
- bearing original maturity of at least five years;
- not payable prior to maturity;
- payable upon maturity only if the bank ensures that its capital and capital adequacy are within prescribed limits.

The bank may postpone payment of interest and dividends on hybrid instruments if, during the maintenance period, it failed to earn any profit and distribute dividends, and/or if its capital adequacy is below the limit prescribed herein.

Hybrid instruments may be included in the bank's supplementary capital I when the National Bank of Serbia, based on submitted documentation and contract, ascertains compliance with the requirements referred to in paragraph 1 hereof.

7. A subordinated obligation of the bank to be included in the bank's supplementary capital I shall mean:

- obligation that is fully paid-up;
- obligation in respect of which the bank issued no security instruments;
- obligation contracted for settlement in the event of bankruptcy or liquidation of a bank only after the settlement of all other non-subordinated obligations of the bank;
- obligation suitable for covering losses only in the event of liquidation of the bank;
- obligation with the original maturity of at least five years;
- obligation of a bank's creditor who is not at the same time a bank's borrower in respect of its subordinated claim;
- obligation against which no payment to creditors or purchase by the bank itself prior to its maturity is permitted, except in cases where these obligations are transformed into the bank's shares other than cumulative preference shares.

A subordinated obligation may be included in the bank's supplementary capital I when the National Bank of Serbia, based on submitted documentation and contract, ascertains compliance with the requirements referred to in paragraph 1 hereof.

During the last four years to maturity, a discount factor of 20% per year will be applied to subordinated obligations eligible for inclusion in the bank's supplementary capital, whereas upon maturity, such subordinated obligations shall no longer be eligible for inclusion in the bank's supplementary capital.

8. The bank's supplementary capital II shall consist of subordinated obligations having the characteristics specified in Section 7, paragraph 1, indents 1 to 3 hereof, with the original maturity of at least two years and not payable prior to maturity.

The bank may not effect payment in respect of obligations referred to in paragraph 1 hereof upon their maturity if such payment would result in the reduction of its capital to a level below total capital requirements set out herein.

The bank shall notify the National Bank of Serbia of each payment of obligations referred to herein without delay, if such payment results in the reduction of its capital to below 120% of total capital requirements specified herein.

The bank may use supplementary capital II only to cover market risks.

9. For the purposes hereof, the bank's core capital shall equal at least 50% of its capital.

Supplementary capital II of the bank may not exceed 250% of the portion of its core capital used to cover market risks but not other risks specified herein.

III. TRADING BOOK AND BANKING BOOK

10. For the purpose of adequate risk assessment and calculation of capital requirements in accordance herewith, the bank shall identify balance sheet and off-balance sheet items and classify them into the trading book and/or the banking book based on their characteristics and purposes for which they were acquired.

11. Trading book contains positions in financial instruments held either with trading intent or in order to hedge positions in other financial instruments on the trading book. Such financial instruments must be free of any restrictions on tradability or suitability for hedging.

The positions referred to in paragraph 1 hereof shall include the bank's proprietary positions, client servicing positions and market making positions.

Financial instruments held with trading intent are those held for the purpose of immediate resale upon acquisition and/or for the purpose of acquiring profit from the actual or expected difference between the buying and selling price in the short run and/or other changes in prices or interest rates.

The intent to acquire financial instruments or conclude contracts relating to such instruments must be announced prior to such acquisition and/or entry into contract.

12. Financial instruments, within the meaning hereof, include:

- debt securities,
- equity securities,
- investment units in investment funds,
- other financial instruments.

For the purposes hereof, debt and equity securities shall also include derivative financial instruments (hereinafter: derivatives).

13. In addition to the positions set out in Section 11 hereof, the trading book shall also include:

- 1) bank's exposure arising from underwriting activities;
- 2) bank's exposure arising from unsettled transactions in trading in financial instruments, mismatch of payment and delivery dates (free deliveries), and over the counter trading in derivatives;
- 3) bank's exposure in respect of repo contracts and contracts on lending of securities included in the trading book;
- 4) bank's exposure in respect of "reverse" repo contracts and contracts on borrowing securities, included in the trading book and complying with the following requirements:

- exposure is carried daily at market value; the value of collateral is reconciled so as to reflect all significant changes to the value of the underlying securities; the contract enables the netting of the bank's claims with counterparty's claims in the event of counterparty default on obligations, or

- counterparty is a foreign bank headquartered in the Republic of Serbia, foreign bank headquartered in a member country of the Organization for Economic Cooperation and Development (hereinafter: OECD) or foreign bank which is not headquartered in an OECD member country but has been granted such treatment by the National Bank of Serbia,

as well as the stock exchange or clearing house referred to in Annex 1 (hereinafter: stock exchange market);

5) other exposures of the bank in respect of fees, commissions, interest, dividends and margins arising from trade in derivatives on the stock exchange market, included in the trading book.

For the purposes hereof, a repo contract is an agreement on sale of securities under obligation to repurchase the same or substantially the same asset at a price set in advance and on a future date set in advance (or yet to be set) by the bank.

For the purposes hereof, a "reverse" repo contract is an agreement on purchase of securities under obligation to re-sell the same or substantially the same asset at a price set in advance and on a future date set in advance (or yet to be specified) by the seller.

The contracts referred to in paragraphs 2 and 3 hereof shall meet the following requirements:

- the bank and/or the counterparty shall transfer title over securities being the subject of the above contracts;
- the bank may transfer or give as collateral the securities being the subject of the above contracts to only one contractual party.

For the purposes hereof, the contract on securities lending to a counterparty shall mean an agreement on securities lending to a counterparty in return for an appropriate security instrument, under obligation for the counterparty to return such securities on a specified date or at bank's request.

For the purposes hereof, the contract on borrowing securities from a counterparty shall mean an agreement on borrowing securities from a counterparty in return for an appropriate security instrument, under obligation for the bank to return such securities on a specified date or at counterparty's request.

If the counterparty from the contract referred to herein defaults on its obligations, the bank shall notify the National Bank of Serbia thereof without delay.

14. On-balance and off-balance sheet items not included in the trading book shall be entered in the banking book.

15. The bank shall disclose the value of positions and exposures in the trading book on a daily basis, in line with the changes in their current market prices obtained from independent sources (marking-to-market).

If the value of positions and exposures cannot be disclosed as specified in paragraph 1 hereof, the bank shall apply alternative valuation methods.

Alternative valuation methods from paragraph 2 hereof shall mean determination of net present value by discounting future cash flows for a given position and exposure and/or determination of the market value of a similar position and exposure.

The bank shall submit to the National Bank of Serbia – Banking Supervision Department (hereinafter: the Department) a brief descriptive note on the selected alternative valuation method by no later than 1 August 2008, as well as a note on any subsequent changes thereto and/or selection of a new valuation method within 15 days from the day of such change and/or selection.

16. The bank shall adopt written internal policies relating to the trading book:

- 1) to describe the types of transactions considered a trading activity;
- 2) to specify the criteria and procedures for the entering of items in the trading book and their exclusion therefrom, as well as to name the persons authorized to perform such entering and/or exclusion;
- 3) to set the limits for positions and exposures in the trading book and the dynamics of their updating;
- 4) to specify the method for monitoring the marketability of positions and exposures in the trading book and the possibilities to protect them against risk;
- 5) to specify the organizational unit to be in charge of entering and/or managing positions in the trading book, and to specify job positions for persons authorized to enter and/or manage positions within the limits set;
- 6) to specify the selected method for calculating the bank's exposure to specific types of risks in compliance herewith.

IV. CAPITAL REQUIREMENTS AND CAPITAL ADEQUACY RATIO

17. The bank shall calculate and cover capital requirements for credit and foreign exchange risk arising from banking book and trading book, if:

- the value of items in the trading book does not exceed 5% of total operations of the bank for longer than three business days in a calendar month;
- the value of items in the trading book does not exceed EUR 15 million in the dinar equivalent value for longer than three business days in a calendar month;
- the value of items in the trading book does not at any time exceed 6% of total bank's operations or the amount of EUR 20 million in the dinar equivalent value.

In addition to capital requirements referred to in paragraph 1 hereof, a bank that does not meet the requirements referred to therein shall calculate and provide cover for capital requirements relating to other market risks arising from trading book items.

The bank from paragraph 2 hereof shall continue to calculate capital requirements for other market risks even after it ensures compliance with requirements from paragraph 1 thereof until such bank receives a written notification from the National Bank of Serbia of being no longer obligated to do so.

For the purposes hereof, total bank operations shall mean the sum of net bookkeeping value of balance sheet assets and carrying value of off-balance sheet items less provisions against losses on off-balance sheet assets and multiplied by credit conversion factors, plus the potential exposure and/or original exposure to credit risk on off-balance sheet items referred to in Section 23 hereof, expressed in dinars. The dinar value of trading book items and/or total bank operations shall be determined by applying the official middle exchange rate of the dinar on the date of calculation.

When calculating total bank operations, debt and equity securities from the trading book shall be expressed at their market value, while derivatives shall be expressed at nominal or market value of the underlying financial instrument. Long and short positions shall be summed up irrespective of the preceding number sign.

The bank which met the requirements referred to in paragraph 1 hereof in the past period may, when calculating total operations in the next maintenance period, disclose debt and equity securities at their carrying value.

18. The bank may not use the portion of capital earmarked for covering a specific capital requirement to cover another capital requirement.

Capital requirement for credit risk

19. Capital requirement relating to credit risk (capital requirement for credit risk) shall be calculated by multiplying total credit risk-weighted assets by 12% and/or by the capital adequacy ratio set to the bank by the National Bank of Serbia.

A bank required to calculate capital requirements for other market risks shall not take into account positions in financial instruments maintained in the trading book (other than derivatives not traded in the stock exchange market) when calculating the capital requirement for credit risk.

20. Credit risk weighted assets of the bank, within the meaning of Section 19 hereof, shall mean the sum total of risk-weighted balance sheet assets, risk-weighted off-balance sheet items and derivatives referred to in Section 23 hereof.

21. Risk-weighted balance sheet assets, in the sense of exposure to credit risk, shall be the sum total of gross carrying values of the bank's balance sheet claims minus allowances for impairment and multiplied by the following risk weights:

1) 0% weight:

- vault cash, gyro account balances, gold and other precious metals,
- securities refinaceable with the National Bank of Serbia,
- claims on the National Bank of Serbia or the Republic of Serbia and claims secured by their unconditional guarantees payable on first demand,
- claims secured by unconditional guarantees of legal entities founded by the Republic of Serbia, payable on first demand, if the law sets out that the Republic of Serbia is responsible (a guarantor) for the obligations of such legal entities,
- claims insured with legal entities founded by the Republic of Serbia, up to the insured amount, if the law sets out that the Republic of Serbia is responsible (a guarantor) for the obligations of such legal entities,
- claims on governments and central banks of OECD member countries and claims secured by their unconditional guarantees payable on first demand,
- letters of credit covered by short-term deposits kept in a special account for the purpose of covering such letters of credit up to the amount of such cover,
- claims secured by cash deposits with a bank provided such deposits were agreed to serve as security against such claims of the bank, that the maturity of such deposits matches the maturity of the corresponding

claims, and that only the bank can dispose of such deposits up to the amount of overdue claims, up to the deposit level;

- claims secured by a pledge on gold, other precious metals, short-term securities refinable with the National Bank of Serbia, bonds of the Republic of Serbia or securities issued by governments or central banks of OECD member countries, up to the market value of such pledge,

- deductions from capital referred to in Section 3, paragraph 2, indents 1, 2 and 3, and deductions from core capital referred to in Section 4, paragraph 2, indent 4 hereof;

2) 20% weight:

- claims on banks rated at least BBB in the latest Standard&Poor's or Fitch-IBCA rating or at least Baa3 in the latest Moody's rating, and claims secured by their unconditional guarantees payable on first demand,

- claims on international development financial institutions (IBRD, EBRD, EIB, IFC, etc), claims secured by their unconditional guarantees payable on first demand and claims secured by a collateral of securities issued by such institutions;

3) 50% weight:

- balances in accounts of banks that have not been rated at least BBB in the Standard&Poor's or Fitch-IBCA rating or at least Baa3 in the Moody's rating, except for a portion of funds serving as security for the settlement of undertaken obligations,

- claims in dinars secured by mortgage on a residential property occupied or leased (or to be occupied or leased) by the owner, the value of which, according to the assessment by an authorized appraiser, is not lower than the total amount of the bank's claims and other claims secured by the first right of pledge over the same property, provided that such property is appraised regularly, following each change in the value of property caused by significant price changes in the market or changes in the physical condition of such property, but at least once in the three year-period from the previous assessment, and that not more than 360 days have elapsed since the original maturity of the claim,

- claims in foreign currency or claims in dinars indexed to a foreign currency clause from borrowers with matched foreign currency position, secured by mortgage on a residential property occupied or leased (or to be occupied or leased) by the owner, the value of which, according to the assessment by an authorized appraiser, is not lower than the total amount of the bank's claims and other claims secured by the first right of pledge over the same property, provided that the appraisal of such property is performed

in the manner and deadlines specified in indent 2 hereof and that not more than 360 days have elapsed since the original maturity of the claim,

– claims on agricultural land holdings in the amount of the appraised value of stored goods for which storage receipt was issued by an authorized storage officer, reduced by the storage officer's fee, provided that the storage receipt was transferred to the bank by endorsement and that the bank holds evidence of the transfer of storage receipt to the bank and its entry in the storage register;

4) 75% weight:

– claims in foreign currency or claims in dinars indexed to a foreign currency clause from borrowers with unmatched foreign currency position, secured by mortgage on a residential property occupied or leased (or to be occupied or leased) by the owner, the value of which, according to the assessment by an authorized appraiser, is not lower than the total amount of the bank's claims and other claims secured by the first right of pledge over the same property, provided that the appraisal of property is performed in the manner and deadlines referred to in provision 3, indent 2 hereof, and that not more than 360 days have elapsed since the original maturity of the claim;

5) 100% weight:

– other balance sheet assets not included in any other risk weight category;

6) 125% weight:

– claims in foreign currency or claims in dinars indexed to a foreign currency clause from borrowers with unmatched foreign currency position, not secured by mortgage on property or by a deposit whose maturity corresponds to the maturity of the claim.

For the purposes hereof, borrowers with a matched foreign currency position shall mean borrowers that have inflow in the same foreign currency, and/or with the same type of indexation, during the maturity of their obligations to the bank (foreign inflow, deposit, wages, etc.) and can document such inflow in an appropriate way.

For the purposes hereof, borrowers with an unmatched foreign currency position shall mean borrowers whose expected foreign currency inflows or foreign currency clause indexed dinar inflows cover less than 80% of their foreign currency obligations or foreign currency clause indexed dinar obligations.

In its documents, the bank shall specify the manner of identifying borrowers with matched and/or unmatched foreign currency position, and shall apply such documents when compiling the prescribed reports.

22. Risk-weighted off-balance sheet items of a bank, in terms of credit risk exposure, shall be the sum total of carrying values of the bank's off-balance sheet items minus provisions against losses on off-balance sheet assets, multiplied by the credit conversion factors and then by risk weights that would have been assigned to balance sheet claims on the contractual party to which such off-balance sheet items pertain.

Credit conversion factors, within the meaning of paragraph 1 hereof, shall include:

1) 0% factor:

- unfunded commitments under lines of credit subject to unconditional cancellation by the bank without prior notice,
- bonds issued pursuant to the Law on the Settlement of Public Debt of the FR Yugoslavia Arising from Frozen Foreign Currency Savings Deposits of Citizens ("FRY Official Gazette", No. 36/2002),
- off-balance sheet items secured by cash deposits with the bank – up to the deposit level,
- off-balance sheet items in respect of which no payments can be made;

2) 20% factor:

- unfunded commitments under lines of credit with the original maturity of up to one year,
- documentary letters of credit secured by the pledge on the commodity to be paid by the letter of credit and other similar off-balance sheet items which can be fully settled from the security;

3) 50% factor:

- documentary letters of credit not included in the conversion factor of 20%,
- performance guarantees,
- irrevocable stand-by letters of credit that may not be used as credit substitutes,
- unfunded commitments under lines of credit with the original maturity of over one year,
- off-balance sheet items secured by mortgage on property occupied or leased (or to be occupied or leased) by the owner, the value of which, according to the assessment by an authorized appraiser, is not lower

than the total amount of the bank's claims and other claims secured by the first right of pledge over the same property, provided that the appraisal of such property is performed in the manner and deadlines specified in Section 21, paragraph 1, provision 3, indent 2 hereof, and that not more than 360 days have elapsed since the original maturity of the claim;

4) 100% factor:

– for all other risk-weighted off-balance sheet items, other than the derivatives referred to in Section 23 hereof.

23. Credit risk-weighted assets shall also include the following derivatives not traded in the stock exchange market:

1) interest rate contracts: single-currency interest rate swaps, basis swaps, forward rate agreements, interest rate futures, purchased interest rate options and other similar contracts;

2) foreign currency contracts and contracts relating to gold: cross-currency interest rate swaps, forward foreign-exchange contracts, currency futures, purchased foreign exchange options and other similar contracts;

3) contracts relating to equity securities (including stock exchange indices), precious metals (other than gold), commodities other than precious metals and other similar contracts.

By way of exception to paragraph 1 hereof, credit risk-weighted assets shall not include foreign currency contracts with the original maturity of up to 14 calendar days.

24. To calculate the amount to be included in credit risk-weighted assets for contracts referred to in Section 23, paragraph 1, indents 1 and 2 hereof, banks may choose either the original exposure method or mark-to-market method, while for contracts from indent 3 thereof banks may only apply the mark-to-market method.

A bank which decides to apply the mark-to-market method may no longer apply the original exposure method.

A bank required to calculate capital requirements relating to other market risks shall apply the mark-to-market method.

25. When applying the original exposure method, the notional value of principal on each contract shall be multiplied by the corresponding conversion factor given in the table below. The original exposure obtained in this way shall then be multiplied by the corresponding risk weight which would have been assigned to the balance sheet claim on the contractual party:

<i>Original maturity</i>	<i>Interest rate contracts</i>	<i>Contracts on foreign currencies and gold</i>
1 year or less	0.5%	2.0%
Over 1 year but under 2 years	1.0%	5.0%
Addition for each next year	1.0%	3.0%

The resulting value shall be included in total credit risk-weighted assets of the bank.

By applying the mark-to-market method, the bank shall calculate:

- 1) current exposure of each positive value contract, where current market value of such contract – derivative is equal to such exposure;
- 2) potential credit exposure in the remaining period to maturity of the contractual obligation, by multiplying the notional value of the principal on each contract – derivative by the corresponding conversion factor from the table below:

<i>Period to maturity of the contractual obligation</i>	<i>Interest rate contracts</i>	<i>Contracts on foreign currencies and gold</i>	<i>Equity securities contracts</i>	<i>Contracts on precious metals, other than gold</i>	<i>Contracts on other commodities other than precious metals</i>
1 year or less	0%	1%	6%	7%	10%
From 1 to 5 years	0.5%	5%	8%	7%	12%
Over 5 years	1.5%	7.5%	10%	8%	15%

The sum total of current and potential credit exposure of each contract shall be multiplied by the corresponding risk weight that would have been assigned to the balance sheet claim on the contractual party. The value obtained in this way shall be included in total credit risk-weighted assets of the bank.

26. If the bank's claims arising from the contract – derivative referred to in Section 23 hereof are secured by guarantees, the credit risk weight to be applied is the weight that would have been assigned to balance sheet claims on the issuer of the guarantee, and to the amount in which such claim is secured by such guarantee.

When the potential credit exposure arising from the contracts – derivatives referred to in Section 23 hereof is fully secured, they shall be assigned either 0% or 20% credit risk weight, depending on the quality of security instruments.

Capital requirement for foreign exchange risk

27. Capital requirement relating to foreign exchange risk (capital requirement for foreign exchange risk) shall be calculated by multiplying the sum total of the net open foreign currency position and the absolute value of net open position in gold by 12% and/or by the capital adequacy ratio set to the bank by the National Bank of Serbia.

Total net open foreign currency position shall represent the higher of the absolute value of total long or total short foreign currency position.

Total long foreign currency position represents the sum total of all long foreign currency positions of the bank in individual currencies.

Total short foreign currency position represents the sum total of all short foreign currency positions of the bank in individual currencies.

28. Open foreign currency position in a specific currency and/or open position in gold shall include:

1) net “spot” position, as the difference between foreign currency assets (less allowances for impairment) and foreign currency liabilities in such currency (including undue interest), and/or the difference between assets and liabilities in gold;

2) net “forward” position, as the difference between all amounts to be received and all amounts to be paid out in respect of forward foreign-exchange contracts (or forward gold contracts), including currency futures (or gold futures) and principal on foreign currency swaps not included in the “spot” position;

3) irrevocable guarantees, uncovered letters of credit and similar off-balance sheet items under which the bank shall be required to effect payment, but will most likely not be able to receive compensation for such assets;

4) net delta equivalent of all foreign exchange options and gold options;

5) market value of options that are neither foreign exchange options nor gold options, where the underlying asset is expressed in a foreign currency.

The bank may exclude deductions from capital referred to in Section 3, paragraph 2 hereof from the calculation of open foreign currency position provided that such deductible items are not traded in and provided the bank is consistent in excluding such items from open foreign currency position.

29. The bank shall have a long position in a specific currency or in gold when the sum total of all elements referred to in Section 28 hereof in such currency or gold is positive. When such sum total is negative, the bank shall have a short position.

In addition to assets and liabilities denominated in a foreign currency, foreign exchange assets and foreign exchange liabilities, within the meaning hereof, shall mean assets and liabilities which are denominated in dinars but are foreign currency clause indexed. Foreign currency clause means the contractual provision subject to which the agreed amount in dinars is linked to the value of another currency.

The dinar equivalent value of assets and liabilities denominated in foreign currency shall be determined by applying the official middle exchange rate of the dinar on the day of calculating the bank's foreign currency position.

The dinar value of assets and liabilities in gold shall be determined according to the most recent price of a fine ounce of gold on the London Stock Exchange.

Capital requirement for price risks

30. Capital requirement relating to price risks (capital requirement for price risk) shall include the capital requirement for price risk on debt securities and capital requirement for price risk on equity securities.

For the purpose of calculating the capital requirement for price risk, the net position in each individual security in the trading book shall be calculated as the difference between the long (intermediation or buying) and short (borrowing or sale) position in such security. Netting between short and long positions in a given security shall be allowed for securities issued by the same issuer, denominated in the same currency, with the same coupon rate, maturing on the same date and subject to the same treatment in the event of bankruptcy or liquidation.

Positions in derivatives shall be disclosed in compliance with Sections 31 to 39 hereof.

All net positions in securities denominated in foreign currency shall be converted into dinars by applying the official middle exchange rate of the dinar on the date of calculation.

Derivatives and other financial instruments in the trading book

31. Derivatives are financial instruments whose value derives, directly or indirectly, from the set interest rate level, price of the underlying security, foreign currency or index.

When calculating the capital requirement for price risks, positions in derivatives referred to in paragraph 1 hereof shall be disclosed as a mix of hypothetical long and short positions or distributed across positions in underlying securities.

32. In case of future or forward contracts on debt securities (interest rate futures or forward rate agreements), the long position shall represent the position in which the bank receives the agreed interest rate, while the short position shall be the position in which the bank pays the agreed interest rate. Long or short position shall be shown as a mix of hypothetical long and short positions in underlying securities with appropriate maturity, as follows:

- for interest rate futures and/or forward rate agreements, as a mix of long and short positions in government bonds without coupons;
- for forward obligation to buy or sell debt securities, as a mix of long positions in government bonds without coupons and short positions in underlying debt security and/or as a mix of short positions in such bonds and long positions in such securities.

Hypothetical positions in underlying securities which resulted from the distribution of long or short positions in the contracts referred to herein shall be taken into account when calculating capital requirements relating to specific and general risks (capital requirements for specific and general risks) on debt securities, to the amount of the market value of the underlying security. When calculating capital requirements for a specific risk, hypothetical positions in government bonds without coupons shall be included in the category of items awarded the specific risk weight of 0%.

33. Positions in equity forward contracts and equity future contracts shall be disclosed as the mix of long/short hypothetical positions in underlying equity securities and short/long hypothetical positions in government bonds without coupons with appropriate maturity.

Hypothetical positions in equity securities referred to in paragraph 1 hereof shall be taken into account when calculating capital requirements for specific and general risk arising from equity securities, in the amount of the market value of such securities. Hypothetical positions in government bonds without coupons shall be included in the calculation of capital requirements for implicit interest rate risk in line herewith.

34. Positions in forward foreign-exchange contracts shall be disclosed as the combination of hypothetical long positions in government bonds without coupons with appropriate maturity in the purchased currency and short positions in such bonds with appropriate maturity in the sold currency.

Hypothetical positions in government bonds without coupons shall be included in the calculation of capital requirements for general price risks on debt securities.

35. Positions in swap contracts shall be disclosed as the combination of hypothetical positions in underlying securities with appropriate maturity, as follows:

1) in case of interest rate swaps, as the combination of long and short position in non-risk government bonds with variable or fixed interest rate;

2) in case of cross-currency interest rate swaps – as the combination of long position in non-risk government bonds in a specific currency with fixed or variable interest rate (depending on which one applies to such currency) and short positions in non-risk government bonds in another currency with fixed or variable interest rate;

3) in case of equity swaps, as the combination of:

- long/short position in equity security (portfolio of equity securities or stock exchange indices) in respect of which the bank receives/pays an amount based on change in the price of such security (portfolio of equity securities or stock exchange indices) and
- short/long position in equity security (portfolio of equity securities or stock exchange indices) and/or in non-risk government bond in respect of which the bank pays/receives an amount based on change in the price of such security (portfolio of equity securities or stock exchange indices) and/or change in the price of such bond.

Hypothetical positions in underlying securities and resulting from division of swaps shall be taken into account when calculating capital requirements for price risks on debt or equity securities, in the amount of the market value of such securities. When calculating capital requirements for a specific risk, positions in government bonds shall be included in the category of items to which the specific risk weight of 0% is awarded.

36. Positions in stock exchange indices shall be disclosed as positions in individual equity securities making up this index. Positions in such securities may be netted against opposite positions in substantially the same securities.

Positions in stock exchange indices shall be included in the calculation of capital requirements for general and specific price risks on equity securities.

Positions in forward or future contracts relating to stock exchange indices shall be disclosed as the mix of long/short position in equity securities comprising the underlying index and short/long hypothetical position in government bond without coupon of appropriate maturity.

Positions in stock exchange indices which are traded in the stock exchange market and represent widely diversified indices may be excluded from the calculation of capital requirements for specific risks if such indices are not divided into their constituent equity securities. These positions shall be included in the calculation of capital requirements for general risks on equity securities, by each country individually, as distinctive positions in such index.

37. Positions in investment units of investment funds shall be included in the calculation of capital requirements for credit risk, but shall not be included in the calculation of capital requirements for price risk.

38. Positions in convertible securities shall be disclosed as positions in equity securities when:

- the period to the first date of conversion is less than three months or, if such first date has already passed, the period to the next date of conversion is less than one year;
- the market value of the debt security is less than 10% above the corresponding market value of the equity security to be obtained through conversion.

If the requirements referred to in paragraph 1 hereof have not been met, positions in convertible securities shall be shown as positions in debt securities.

Positions in convertible securities may be netted against the opposite positions in debt or equity securities only if the bank has sufficient capital to cover losses that may arise in case of conversion.

39. Positions in securities form the trading book which are the subject of repo contracts or contracts on lending securities to a counterparty shall be disclosed as the combination of long position in a temporarily sold or lent debt or equity security and hypothetical short position in the government bond of appropriate maturity whose coupon rate equals the yield rate on such contracts.

Positions in debt or equity securities and hypothetical positions in government bonds referred to in paragraph 1 hereof shall be taken into account when calculating capital requirements for price risks on debt and equity securities, in the amount of the market value of the underlying securities. When calculating capital requirements relating to specific risk, positions in government bonds shall be included in the category of items awarded the specific risk weight of 0%.

Positions in securities being the subject of repo contracts or contract on lending securities to a counterparty may be netted against opposite positions in substantially the same securities.

Positions in securities from the trading book which are the subject of reverse repo contracts or contracts on borrowing securities from a counterparty shall be disclosed as hypothetical long positions in government bonds of appropriate maturity whose coupon rates equal the yield rate on the reverse repo contract.

Hypothetical positions in government bonds referred to in paragraph 4 hereof shall be taken into account when calculating capital requirements for price risk on debt securities. When calculating capital requirements relating to specific risk, positions in government bonds shall be included in the category of items awarded the specific risk weight of 0%.

Price risk in respect of debt securities

40. Price risk on debt securities is the risk of change in prices of debt securities caused by change in interest rates and may be either general or specific price risk.

General price risk on debt securities is the risk of change in the price of debt securities caused by a change in the general level of interest rates.

Specific price risk on debt securities is the risk of change in the price of debt securities caused by factors relating to their issuer.

41. Debt securities, within the meaning hereof, shall mean bonds and other debt securities and derivatives on interest rates or debt securities.

42. Capital requirement for price risk on debt securities shall equal the sum total of capital requirement for general price risk on debt securities and capital requirement for specific price risk on debt securities.

43. The bank shall classify net positions in each debt security with reference to the currency in which they are denominated and calculate capital requirement for general and specific price risk on debt securities in each currency separately.

All net positions in debt securities must be expressed in dinars on a daily basis, by applying the official middle exchange rate of the dinar on the date of calculation.

***General price risk
in respect of debt securities***

44. To calculate general price risk, the bank shall apply the maturity method or, subject to prior approval of the National Bank of Serbia, the duration method.

The bank shall consistently apply either of the methods referred to in paragraph 1 which it decides to adopt.

45. Capital requirement calculated by applying either the maturity or the duration method shall be calculated separately for each individual currency. Total capital requirement for general price risk on debt securities shall equal the sum total of capital requirements for each individual currency converted in the dinar equivalent value by applying the official middle exchange rate of the dinar on the date of calculation.

46. When calculating capital requirements for general price risk, but before dividing positions in derivatives into positions in underlying securities, the bank may net long against short positions in substantially the same derivatives if the following requirements are met:

- 1) positions are of the same notional value and denominated in the same currency;
- 2) reference interest rates for variable rate positions and/or coupon rates for fixed rate positions are identical or similar;
- 3) periods to maturity for fixed rate securities or periods to the date of the next setting of the interest rate for variable rate securities:

– do not differ – if these periods are shorter than 1 month,

- do not differ by more than seven days – if these periods last from one month to one year,
- do not differ by more than 30 days – if these periods are longer than one year.

Maturity method

47. The bank shall classify all net positions in debt securities into maturity classes and zones, according to the period to maturity (and/or period to the next setting of the interest rate on variable rate securities) and coupon (interest) rate, in line with the following table:

Zone	Maturity class		Weight in %
	Interest rate of 3% and more	Interest rate less than 3%	
One	0 ≤ 1 month	0 ≤ 1 month	0.10
	>1 ≤ 3 months	>1 ≤ 3 months	0.20
	>3 ≤ 6 months	>3 ≤ 6 months	0.40
	>6 ≤ 12 months	>6 ≤ 12 months	0.70
Two	>1 ≤ 2 years	>1 ≤ 1.9 years	1.25
	> 2 ≤ 3 years	> 1.9 ≤ 2.8 years	1.75
	> 3 ≤ 4 years	> 2.8 ≤ 3.6 years	2.25
Three	> 4 ≤ 5 years	>3.6 ≤ 4.3 years	2.75
	> 5 ≤ 7 years	>4.3 ≤ 5.7 years	3.25
	> 7 ≤ 10 years	>5.7 ≤ 7.3 years	3.75
	>10 ≤ 15 years	>7.3 ≤ 9.3 years	4.50
	>15 ≤ 20 years	>9.3 ≤ 10.6 years	5.25
	>20 years	>10.6 ≤ 12 years	6.00
		>12 ≤ 20 years	8.00
	>20 years	12.50	

48. The bank shall multiply each position (net long or net short) by the weight appropriate for that particular maturity class. For each individual maturity class, all weighted long positions and all weighted short positions shall be summed up separately. Matched weighted position of a maturity class shall be the lower of (a) sum total of weighted long positions and (b) sum total of weighted short positions within such maturity class, while unmatched weighted position of the maturity class shall be the difference between such values.

49. The bank shall calculate the sum total of all long unmatched weighted positions for each zone and the sum total of all short unmatched weighted positions for each zone. The value of the (a) sum total of all long unmatched weighted positions matched against the (b) sum total of all short unmatched weighted positions in the same zone (whichever is lower) shall be deemed to

represent the matched weighted position of such zone. The remaining amount (the difference between the two values) shall be deemed the (long or short) unmatched weighted position of such zone.

50. The bank shall match unmatched long and short positions in the following order of priority: between zones 1 and 2, between zones 2 and 3 and between zones 1 and 3, and shall then calculate the residual unmatched position. The matched weighted position between the zones shall be the lower of (a) unmatched weighted long and (b) unmatched weighted short position in different zones, while the residual unmatched weighted position shall be the sum total of all unmatched positions between the zones.

51. Capital requirement for general price risk on debt securities shall be calculated as the sum total of:

- 10% of the sum total of matched weighted positions in all maturity classes,
- 40% of the matched weighted position in zone 1,
- 30% of the matched weighted position in zone 2,
- 30% of the matched weighted position in zone 3,
- 40% of the matched weighted position between zones 1 and 2,
- 40% of the matched weighted position between zones 2 and 3,
- 150% of the matched weighted position between zones 1 and 3,
- 100% of the remaining unmatched weighted positions.

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the calculated capital requirement referred to in paragraph 1 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

Duration method

52. By applying the duration method, the bank shall calculate the yield to maturity for debt securities based on their market value. The maturity date of these variable rate securities shall be assumed to be the date of the next interest rate setting.

53. The bank shall calculate modified duration of each debt security by applying the following formula:

$$D_{\text{mod}} = \frac{D}{(1+r)}$$

$$D = \frac{\sum_{t=1}^m \frac{tC_t}{(1+r)^t}}{\sum_{t=1}^m \frac{C_t}{(1+r)^t}}$$

where:

D_{mod} = modified duration,

D = duration,

r = yield to maturity,

C_t = cash payment at a given time t,

M = overall maturity,

t = time.

54. The bank shall classify all debt securities in appropriate zones based on the table below:

Zone	Modified duration (in years)	Assumed interest rate change (in %)
1	> 0. ≤ 1	1.00
2	> 1. ≤ 3.6	0.85
3	> 3.6	0.70

The bank shall calculate the duration weighted position for each debt security by multiplying its market value by its modified duration and the assumed interest rate change.

55. The bank shall calculate long duration weighted positions and short duration weighted positions for each zone. The value of the (a) sum total of all long duration weighted positions matched against the (b) sum total of all short duration weighted positions in the same zone, whichever is lower, shall be deemed to represent the matched duration weighted position for such zone. The difference between the two values shall be the unmatched long/short duration weighted position for such zone.

56. The bank shall match unmatched long and short positions in the following order of priority: between zones 1 and 2, between zones 2 and 3 and between zones 1 and 3, and shall calculate unmatched duration weighted positions. The matched duration weighted position between the zones shall be the lower of (a) unmatched long duration weighted position and (b) unmatched short duration weighted position in different zones. The residual unmatched duration weighted position shall be the sum total of all unmatched duration weighted positions in all zones.

57. Capital requirement for general price risk on debt securities shall be calculated as the sum total of:

- 2% of the matched duration weighted position for each zone,
- 40% of matched duration weighted positions between zones 1 and 2,
- 40% of matched duration weighted positions between zones 2 and 3,
- 150% of matched duration weighted positions between zones 1 and 3,
- 100% of the remaining unmatched duration weighted positions.

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the calculated capital requirement referred to in paragraph 1 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

***Specific price risk
in respect of debt securities***

58. Capital requirement for specific price risk on debt securities shall be the sum total of absolute values of weighted positions in debt securities, calculated in compliance with Section 59 hereof.

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the calculated capital requirement referred to in paragraph 1 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

59. The bank shall calculate capital requirement for specific price risk by classifying all net long and net short positions in debt securities in appropriate categories, depending on their issuer and period to maturity, and by multiplying them by appropriate risk weights from the table below:

Items bearing no specific risk	Qualifying items			Other items
	Up to 6 months	Between 6 and 24 months	Over 24 months	
0.00%	0.375%	1.50%	2.40%	12.00%

Items bearing no specific risk shall mean positions in debt securities issued or fully guaranteed by persons awarded credit risk weight of 0% in compliance herewith.

Qualifying items shall mean positions in debt securities issued or fully guaranteed by persons awarded the credit risk weight of 20% in compliance herewith.

60. When calculating capital requirements for specific price risk on debt securities, the bank shall not take into account positions in debt securities of its own issue.

Price risk in respect of equity securities

61. Price risk on equity securities shall be the risk of change in prices of equity securities and may be either general or specific.

General price risk on equity securities shall be the risk of change in the price of an equity security caused by a change in the general level of prices of such securities.

Specific price risk on equity securities shall be the risk of change in the price of an equity security caused by factors relating to its issuer or, in case of derivatives, by factors relating to the issuer of the underlying equity security.

62. For the purposes hereof, equity securities shall mean: shares, certificates of deposit, stock exchange indices, convertible bonds qualifying under Section 38, paragraph 1 thereof and derivatives relating to shares or stock exchange indices.

63. Capital requirement for price risk on equity securities shall equal the sum total of capital requirements for general and specific price risk on equity securities and capital requirements for implicit interest rate risk embedded in derivatives.

64. Capital requirement for specific price risk on equity securities shall equal 12% of the bank's total gross position in equity securities, calculated in accordance herewith.

65. Capital requirement for general price risk on equity securities shall equal 12% of the total net position in equity securities, calculated in accordance herewith.

66. If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the capital requirements referred to in Section 64 and 65 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

67. Bank's total gross position in equity securities shall equal the sum total of absolute values of net long and net short positions of the bank in such securities.

Bank's total net position in equity securities shall equal the absolute value of the difference between net long and net short positions of the bank in such securities.

68. Equity securities shall be classified by country on whose national market they are listed and/or traded in. Derivatives shall be classified by country on whose national market underlying equity securities are listed and/or traded in.

Capital requirements for price risk on equity securities shall be calculated separately for each country and each currency.

69. The bank shall calculate separately the net long and the net short position in each equity security.

The bank may net long and short positions in equity securities only if such securities are identical.

Identical securities, within the meaning hereof, shall mean securities issued by the same issuer, subject to same treatment in case of liquidation or bankruptcy and denominated in the same currency.

70. The bank shall calculate capital requirement for implicit interest rate risk embedded in derivatives on equity securities by multiplying the hypothetical long/short positions in non-risk government bonds without coupons (obtained by the division of positions in such derivatives) with the factors given in the table below:

Period to expiration of the contract	Factor (%)
> 0. ≤ 3 months	0.20
> 3. ≤ 6 months	0.40
> 6. ≤ 12 months	0.70
> 1. ≤ 2 years	1.25
> 2. ≤ 3 years	1.75
> 3. ≤ 4 years	2.25

> 4. ≤ 5 years	2.75
over 5 years	3.75

Total capital requirement for implicit interest rate risk referred to herein shall be calculated as the sum total of absolute values of the amounts calculated in compliance with paragraph 1 thereof.

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to the bank, the calculated capital requirement referred to in paragraph 1 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

Options

71. Positions in options include options on interest rates, debt and equity securities, stock exchange indices, futures, swaps and foreign currencies traded in the stock exchange or over-the-counter market, as well as securities similar to options – warrants, caps, floors, collars, etc.

To calculate capital requirements for price and foreign exchange risk on positions in options, the bank shall apply a simplified method when only buying options and/or the delta-plus method when selling options.

Simplified method

72. The bank shall use the simplified method to calculate capital requirements for purchased options on securities or foreign currency and/or gold (hereinafter: options on securities or foreign currency) and capital requirements for the mix of positions in securities or foreign currency and positions in purchased options intended to hedge positions in securities or foreign currency.

The bank shall not take into account positions in securities or foreign currency being the subject of options when calculating capital requirements for price risks and foreign exchange risk.

73. For purchased call or put options, the capital requirement shall be the lower of the following two figures:

- market value of the underlying security or foreign currency multiplied by the sum total of weights for specific and general risks relating to the underlying asset of the option, while for options with foreign currency as the underlying asset, the market value of the underlying asset shall be multiplied by 12%;

- market value of the option.

74. For options which represent a mix of purchased put options and long positions in the underlying security or foreign currency, and for positions which are the combination of purchased call options and short positions in the underlying security or foreign currency, the capital requirement shall be calculated by multiplying the market value of the underlying security or foreign currency with the sum total of weights for specific and general risk relating to the underlying asset (in case of foreign exchange options, the sum total of weights for specific and general risk shall be 12%) and reducing it by the amount of income earned by the buyer of the option (in the money).

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the calculated capital requirement referred to in paragraph 1 hereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

Delta-plus method

75. When calculating capital requirements for price and foreign exchange risk, positions in options shall be disclosed as the combination of hypothetical long and short position, and/or divided into positions in underlying securities or foreign currencies. Positions in such securities or foreign currencies multiplied by the delta coefficient of the option shall represent the delta weighted value in such security and/or foreign currency.

The delta coefficient shall be calculated in the stock exchange market, or, when such coefficient is not available (in case of over-the-counter trading), it shall be calculated by the bank itself, only if the National Bank of Serbia had given prior approval for the bank's model to be applied in calculating the coefficient.

76. The delta weighted value of the position in the underlying security or foreign currency shall be included in the calculation of capital requirements for price and foreign exchange risks in the following way:

- call options purchased as long positions,
- call options sold as short positions,
- put options purchased as short positions,
- put options sold as long positions.

The delta value of positions in an underlying security or foreign currency may be netted by the opposite position in a substantially the same security or foreign currency. The bank shall include the net positions obtained in this way in the calculation of capital requirements for price risks and foreign exchange risk.

77. The bank shall calculate additional capital requirements for other risks relating to options, as follows:

- *gamma* risk (parameter of sensitivity reflecting the rate of change of the delta caused by incremental changes in the price of the underlying security or foreign currency);
- *vega* risk (parameter of sensitivity measuring the sensitivity of option price to incremental change in the volatility of the price of underlying security or foreign currency).

Gamma and *vega* coefficients shall be calculated in the stock exchange market or, when such coefficients are not available (in case of over-the-counter trading), they shall be calculated by the bank itself, only if the National Bank of Serbia had given prior approval for the bank's model to be applied in calculating such coefficients.

The bank shall calculate capital requirements for gamma and vega risks based on positions in options in the manner set out in Annex 2.

Underwriting activities

78. To calculate capital requirements for price risks, the bank shall take into account positions from underwriting contracts whereby the bank committed to act as underwriter of the issue of new debt or equity securities or previously issued debt or equity securities it places into a new market.

Net positions in securities arising from the bank's contractual obligation to repurchase these securities shall be included in the calculation of capital requirements for specific and general price risks, depending on the type of such securities. Net position shall represent the difference between the bank's total obligations in respect of underwriting contracts and the part of the position transferred to third persons which subscribed and/or purchased such securities.

Subject to prior approval of the National Bank of Serbia, the bank may reduce the net position calculated in the manner referred to in paragraph 2 hereof by applying the discount factors given in the table below:

	Discount factors for debt and equity securities (specific risks)
Business day 0	100%
Business day 1	90%
Business day 2 or 3	75%
Business day 4	50%
Business day 5	25%
After business day 5	0%

Business day zero given in the table from paragraph 3 hereof shall be the date when the bank is vested with an unconditional obligation to purchase the set amount of securities at the agreed price.

The bank shall calculate the capital requirement for positions arising from underwriting contracts by applying the methodologies referred to in Sections 40 to 70 hereof, using reduced positions from underwriting activities.

Capital requirement for settlement/delivery risk and capital requirement for counterparty risk

79. Settlement/delivery risk shall arise when transactions relating to debt or equity securities (other than repo and reverse repo contracts and contracts on lending/borrowing securities) have not been settled after the due delivery date agreed on by the bank and the counterparty.

Counterparty risk shall arise in respect of all undue receivables from the trading book.

Settlement/delivery risk and counterparty risk shall represent risks relating to the other contractual party and not the issuer of securities.

If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank, the calculated capital requirement relating to the settlement/delivery risk (capital requirement for the settlement/delivery risk) referred to in Sections 80 and 81 hereof and the capital requirement relating to counterparty risk (capital requirement for the counterparty risk) referred to in Sections 82 to 86 thereof shall be increased by the percentage by which the capital adequacy ratio set for such bank exceeds the minimum prescribed capital adequacy ratio.

The bank shall calculate the capital requirements referred to herein by calculating net positions in individual securities in compliance with Section 30, paragraph 2 hereof and disclosing positions in derivatives in compliance with Sections 31 to 39 thereof.

Settlement/delivery risk

80. If in trading book transactions (relating to debt or equity securities) the contractual party of the bank fails to settle its obligation within five or more business days following the date of delivery, the bank shall calculate the exposure to the settlement/delivery risk.

The exposure to the settlement/delivery risk shall be calculated as the difference between the agreed settlement price for a given debt or equity security and its current market value, if such difference represents losses for

the bank. Losses for the bank shall arise when the current market price of a security at the time of its buying is higher than the agreed price and/or when the current market price of the security at the time of its selling is lower than the agreed price.

81. Capital requirement for the settlement/delivery risk shall be calculated by multiplying the bank's exposure calculated in accordance with Section 80, paragraph 2 hereof by an appropriate percentage given in the table below:

Number of business days elapsed from the delivery date or the date specified for settling the obligation	Price difference percentage (%)
5 – 15	12
16 – 30	50
31 – 45	75
46 or more	100

The bank shall not calculate the exposure to the settlement/delivery risk in case of repo and reverse repo contracts, or in case of contracts on lending/borrowing of securities.

Counterparty risk

82. In addition to calculating the capital requirement relating to settlement/delivery risk, the bank shall calculate the capital requirement relating to counterparty risk for the same item, if the conditions referred to in Sections 83 to 86 hereof have been met.

83. The bank shall calculate the capital requirement for counterparty risk arising from the mismatch between the moment of payment and the moment of delivery (free delivery), as follows:

- if it had paid for the securities before receiving them or delivered the securities before they were paid, or
- if at least one day had elapsed from the day when the payment was made or delivery from indent 1 hereof effected, for international transactions.

Capital requirement for counterparty risk shall equal 12% of the value of securities or cash owed to the bank multiplied by credit risk weight that would have been assigned to the balance sheet claim on the contractual party.

84. In case of repo contracts and contracts on lending of securities to a counterparty, the bank shall calculate the difference between the market value of sold and/or lent securities and the amount received and/or the

market value of security instruments received from the counterparty, if such difference is a positive value.

In case of reverse repo contracts and contracts on borrowing securities from a counterparty, the bank shall calculate the difference between the amount it paid and/or the market value of security instruments it delivered to the counterparty and the market value of purchased and/or borrowed securities which it received from the counterparty, if such difference is a positive value.

The market value of the amount borrowed or lent and the market value of security instruments shall be inclusive of interest.

Capital requirement for counterparty risk arising from repo and reverse repo contracts, and contracts on lending/borrowing of securities, shall equal 12% of the value calculated in accordance herewith and multiplied by credit risk weight that would have been assigned to the balance sheet claim on the contractual party.

85. In case of over-the-counter trading in derivatives exempt from daily margin measurement requirements, capital requirement for counterparty risk shall equal 12% of the total replacement costs (sum of current and potential credit exposure) calculated in compliance with Section 25 hereof and multiplied by credit risk weight that would have been assigned to the balance sheet claim on the contractual party.

86. The bank shall calculate the capital requirement for counterparty risk for exposures in respect of fees, commissions, interest, dividends and margins for derivatives traded in the stock exchange market, relating to items included in the trading book but not taken into account when calculating capital requirement for price risks or counterparty risk.

The capital requirement for counterparty risk referred to in paragraph 1 hereof shall equal 12% of the sum total of the exposures specified therein, multiplied by credit risk weight that would have been assigned to the balance sheet claim on the contractual party.

V. CONSOLIDATED CAPITAL ADEQUACY OF THE BANKING GROUP

87. A bank which is a member of a banking group and which, subject to regulations on consolidated supervision of a banking group, prepares and submits consolidated financial statements to the National Bank of Serbia,

shall, in compliance herewith, calculate the consolidated capital adequacy ratio of the banking group.

If the bank referred to in paragraph 1 hereof is not required to calculate capital requirements for other market risks on an individual basis, and the banking group does not meet the requirements set out in Section 17 hereof, such bank shall calculate and comply with capital requirements for other market risks on a consolidated basis only.

88. The calculation of individual elements of consolidated capital of the banking group shall be performed based on data from consolidated financial statements of the banking group, by applying the full consolidation method.

In addition to elements specified in Section 4, paragraph 1 hereof, core capital of the banking group shall also include minority interest arising from ownership of third parties in subsidiary companies. In addition to deductions specified in Section 3, paragraph 2 hereof, deductions from the capital of the banking group shall also include participation in associated and subsidiary companies disclosed in consolidated financial statements by applying the participation method and/or net capital value method (insurance companies, investment fund management companies and voluntary pension fund management companies).

89. Credit risk weighted assets of the banking group shall be calculated by applying the full consolidation method, in the manner specified by the decision on consolidated supervision of the banking group.

Consolidated capital requirement for credit risk shall equal 12% of the credit risk weighted assets of the banking group and/or, if the National Bank of Serbia set a higher than prescribed capital adequacy ratio to the bank referred to in Section 87 hereof, the capital requirement shall be obtained by applying the increased capital adequacy ratio to credit risk weighted assets of the banking group.

90. Total open foreign currency position of the banking group for which the consolidated capital requirement for foreign exchange risk is calculated shall be set by applying the aggregation method. By way of exception, the full consolidation method can be applied in this case if the National Bank of Serbia ascertains beforehand full compliance with the following requirements:

- 1) ultimate parent company of the banking group identifies, measures and manages the foreign exchange risk at the level of the entire group (centralized foreign exchange risk management);

- 2) all subordinated companies maintain their capital adequacy ratio at the prescribed level;

3) ultimate parent company of the banking group has sufficient personnel and technical resources to apply the full consolidation method.

Consolidated capital requirement for foreign exchange risk shall equal 12% of total net open foreign currency position of the banking group (including the absolute value of net open position in gold). If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to a bank referred to in Section 87 hereof, such capital requirement shall be obtained by applying such increased capital adequacy ratio to the total net open foreign currency position of the banking group (including the absolute value of net open position in gold).

91. Consolidated exposure of the banking group to price risks shall be calculated by applying the aggregation method, but netting of net long and short positions between group members is not allowed. By way of exception, the full consolidation method can be applied in this case if the National Bank of Serbia ascertains beforehand full compliance with the following requirements:

- 1) ultimate parent company of the banking group identifies, measures and manages price risks at the level of the entire group (centralized price risk management);
- 2) all subordinated companies maintain their capital adequacy ratio at the prescribed level;
- 3) ultimate parent company of the banking group has sufficient personnel and technical resources to apply the full consolidation method.

If the bank applies the full consolidation method for calculating consolidated capital requirements for price risks, when determining general price risk each company which is a member of the banking group can calculate net positions in the substantially the same security instead of including long and short position in such security in the consolidation. If one company uses this approach, all other companies making up the banking group must use the same approach.

Consolidated capital requirement for price risk shall equal 12% of total exposure to price risks. If the National Bank of Serbia set a higher than prescribed capital adequacy ratio to the bank referred to in Section 87 hereof, such capital requirement shall be obtaining by applying such increased capital adequacy ratio to total exposure to price risks of the banking group.

92. Consolidated capital requirements for settlement/delivery risk and counterparty risk shall be calculated by applying the aggregation method.

93. Consolidated capital adequacy ratio of the banking group shall be equal to the ratio of such capital and the sum of consolidated credit risk weighted assets plus consolidated capital requirements for foreign exchange risk and other market risks multiplied by the reciprocal value of the prescribed capital adequacy ratio and/or the reciprocal value of the capital adequacy ratio set by the National Bank of Serbia.

94. Bank, and/or bank being a member of the banking group subject to the NBS consolidated supervision shall prepare and submit to the National Bank of Serbia reports on the capital adequacy ratio, capital requirements and daily balance and elements of the trading book of such bank, and/or banking group in the manner and within the timeframe prescribed by the NBS guidelines.

95. Annexes hereto are enclosed herewith and are integral thereto.

VI. TRANSITIONAL AND CLOSING PROVISIONS

96. The bank shall submit the adopted internal policies referred to in Section 16 hereof to the Department by no later than 31 August 2008, and in the event of any changes thereto by no later than 15 days from the day such changes were adopted.

97. As of the day of entry into force hereof, the Decision on Bank Capital Adequacy ("RS Official Gazette", No. 57/2006, 116/2006 and 56/2007) shall cease to be valid.

98. This decision shall be published in the "RS Official Gazette" and shall enter into force on 1 July 2008.

Dec. No. 105
28 December 2007
B e l g r a d e

G o v e r n o r
of the National Bank of Serbia

Radovan Jelasic, sign.

Stock exchanges and clearing houses

1. American Securities Exchange
2. Athens Stock Exchange (ASE)
3. Australian Securities Exchange
4. Banjalučka berza
5. Barcelona Stock Exchange (Bolsa de Barcelona)
6. Beogradska berza
7. Berlin Stock Exchange (Berliner Börse)
8. Bilbao Stock Exchange (Bolsa de Valores de Bilbao)
9. Bolsa de Madrid
10. Borsa Italiana
11. Börse Düsseldorf
12. Börse Hannover
13. Budapest Stock Exchange
14. Canadian Venture Exchange (CDNX)
15. Cassa di Compensazione e Garanzia S. p. A (CCG)
16. Chicago Board of Trade
17. Chicago Board Options Exchange
18. Copenhagen Stock Exchange (Københavns Fondsbørs)
19. Deutsche Börse
20. Euronext Amsterdam
21. Euronext Brussels
22. Euronext Lisbon
23. Euronext Paris
24. Finnish Options Exchange
25. Hamburger Börse
26. Hong Kong Exchanges and Clearing Limited
27. Irish Stock Exchange
28. LCH Clearnet
29. Ljubljanska borza
30. London Securities and Derivatives Exchange (OMLX)
31. London Stock Exchange
32. Luxembourg Stock Exchange (Société de la Bourse de Luxembourg SA)
33. Madrid Stock Exchange (Bolsa de Valores de Madrid)
34. Macedonian Stock Exchange (Македонска берза)
35. MEFF Renta Fija
36. MEFF Renta Variable
37. Montenegroberza
38. Montreal Stock Exchange (Bourse de Montreal)
39. Munich Stock Exchange (Bayerische Börse in München)
40. Nagoya Stock Exchange
41. National Association of Securities Dealers Incorporated (NASDAQ)
42. New York Stock Exchange

43. Oesterreichische Kontrollbank Aktiengesellschaft (OeKB)
44. OMX Nordic Exchange Copenhagen A/S
45. OMX Nordic Exchange Helsinki Oy
46. OMX Nordic Exchange Iceland
47. OMX Nordic Exchange Stockholm AB
48. Osaka Securities Exchange
49. Oslo Stock Exchange (Oslo Bors)
50. Philadelphia Stock Exchange
51. Riga Stock Exchange
52. Russian Trading System Stock Exchange (Фондовая биржа
Российская Торговая Система)
53. Singapore Exchange Limited (SGX)
54. Stuttgart Stock Exchange (Baden-Württembergische Wertpapierbörse zu
Stuttgart)
55. SVX Swiss Exchange
56. Tallinn Stock Exchange
57. The Clearing Corporation
58. The Depository Trust and Clearing Corporation
59. The Norwegian Futures and Options Clearinghouse (Norsk
Opsjonssentral A.S.)
60. The Options Clearing Corporation
61. Tokyo Financial Exchange
62. Tokyo Stock Exchange
63. Toronto Stock Exchange
64. TSX Venture Exchange
65. Valencia Stock Exchange (Bolsa de Valores de Valencia)
66. Vienna Stock Exchange
67. Vilnius Stock Exchange
68. Zagrebačka burza

Capital charges for gamma and vega risks on option positions

A bank selling options should calculate capital charges for risks associated with such options by using the Delta-plus method. As the Delta-plus method does not cover all risks, the bank must calculate additional capital charges for gamma and vega risks – for each individual position in options, as well as for hedged positions.

To calculate capital charges for gamma and vega risks of the total position in options, the bank should classify individual positions in options into risk categories. Gamma and vega impact of individual positions can be netted only within an individual risk category.

The following constitutes a separate risk category:

- each pair of foreign currencies and gold – for foreign currency options or gold options;
- each national market - for options on equities, and if the equity is listed on several national markets, the reference market is determined based on the country where the registered seat of the security issuer is located;
- each maturity class (maturity method), and/or each maturity zone (duration method) – for options on debt securities and interest rates.

Delta risk

Delta (δ) of an option is the percentual change in the option value due to incremental change in the price of the underlying security or foreign currency. In mathematical terms, delta is the first partial derivative of the option price function per underlying price.

$$\delta = \delta \text{ option price} / \delta \text{ underlying price}$$

Gamma risk

Gamma (γ) of an option is the rate of change in the delta due to incremental change in the price of underlying security or foreign currency. In mathematical terms, gamma is the second partial derivative of the option price function per underlying price. To calculate capital charges for gamma risk on total position in options, the bank must calculate the so-called gamma impact for each individual option by approximating option value according to a Taylor series expansion:

$$\text{Gamma impact} = \frac{1}{2} \text{Gamma} * N * (\Delta B)^2,$$

where:

ΔB – variation in price of the underlying,

N – quantity of the underlying.

Variation of the underlying of the option (ΔB) is calculated as follows:

- for options on debt securities or interest rates - the market value of the underlying should be multiplied by the risk weights set out in the table from Section 47 of this decision or by appropriate changes in interest rates set out in the table from Section 54 of that Decision, depending on the type of approach used by the bank;
- for options on equities – the market value of the underlying should be multiplied by 12%;
- for foreign currency or gold options – the market value of the underlying should be multiplied by 12%.

To calculate capital charges for gamma risk on the total position in options, the bank should first sum up gamma impacts within individual risk categories. Thus obtained net gamma impacts for each risk category may be either positive or negative. Only those net gamma impacts that are negative will be included in the capital calculation. The total gamma capital charge will be the sum of the absolute value of the net negative gamma impacts as calculated above.

Vega risk

Vega (Λ) of an option is the percentual change in the option price caused by incremental change in the volatility of the price of the underlying security or foreign currency.

In mathematical terms, vega is the first partial derivative of the function of the option price function relative to volatility of the underlying price. To calculate capital charges for vega risk on total position in options, the bank must calculate

the so-called vega impact for each individual option by approximating option price according to a Taylor series expansion:

$$\text{Vega impact} = \text{Vega} * N * \text{volatility} / 4$$

where

N – quantity of the underlying.

Implied volatility is one quarter of current volatility (+/-25%).

To calculate capital charges for vega risk on the total position in options, the bank should first sum up vega impacts within individual risk categories. Thus obtained net vega impacts for each risk category may be either positive or negative. The total vega capital charge will be the sum of the absolute value of the net negative vega impacts as calculated above.