

Pursuant to Article 161, paragraph (1), item (3) of the Credit Institutions Act (Official Gazette 117/2008, 74/2009 and 153/2009) and Article 43, paragraph (2), item (9) of the Act on the Croatian National Bank (Official Gazette 75/2008), the Governor of the Croatian National Bank hereby issues the

## **Decision on the management of interest rate risk in the non-trading book**

### **General provisions**

#### **Article 1**

(1) This Decision prescribes the procedures and the principles for the management of interest rate risk in the non-trading book, the manner of calculation of changes in the economic value of a credit institution associated with non-trading positions as a result of a standard interest rate shock and reporting to the Croatian National Bank.

(2) The provisions of this Decision shall apply to banks, savings banks and housing savings banks with registered offices in the Republic of Croatia which have obtained authorisation from the Croatian National Bank.

(3) The provisions of this Decision shall apply, *mutatis mutandis*, to branches of credit institutions from Member States providing mutually recognised banking services in the territory of the Republic of Croatia.

(4) The provisions of this Decision shall apply, *mutatis mutandis*, to branches of third country credit institutions which obtained authorisation to provide services from the Croatian National Bank.

(5) The manner of application of this Decision and the forms for calculating exposure to interest rate risk in the non-trading book have been prescribed by the Instructions for uniform implementation of this Decision, which are attached to this Decision and constitute an integral part thereof.

### **Definitions**

#### **Article 2**

For the purposes of this Decision, the following terms shall have the following meaning:

1) **Repricing risk** shall be the risk to which a credit institution is exposed due to a maturity mismatch (for fixed interest rates) and a revaluation of interest rates (for variable interest rates) of non-trading book positions .

- 2) **Yield curve risk** shall be the risk to which a credit institution is exposed due to changes associated with a flattening or steepening of the yield curve.
- 3) **Basis risk** shall be the risk to which a credit institution is exposed due to differences in reference interest rates on instruments with similar characteristics relative to maturity or time to the next interest rate change.
- 4) **Optionality risk** shall be the risk to which a credit institution is exposed due to options embedded in interest sensitive positions (e.g. loans with an early repayment option, deposits with early withdrawal option, etc.)
- 5) **Trading book** shall comprise positions in financial instruments and commodities held either with a trading intent or in order to hedge other elements of the trading book, provided that such positions are either free of any restrictive covenants on their tradability or able to be hedged.
- 6) **Non-trading book** shall comprise all balance-sheet and off-balance sheet items of a credit institution other than those considered to be trading book positions.
- 7) **Economic value of a credit institution** shall be the estimate of the present value of all expected net cash flows of the non-trading book positions of a credit institution, i.e. the expected cash flows of a credit institution's assets reduced by the expected cash flows of a credit institution's liabilities.
- 8) **Major currency** shall be any currency which accounts for over 5 percent of the total balance sheet assets.
- 9) **Standard interest rate shock** shall be a parallel positive or negative shift in interest rates on the reference yield curve of 200 basis points.
- 10) **Basis point** shall be the unit equal to one hundredth of 1 percent.

**Minimum requirements for the establishment of a system for the management of interest rate risk in the non-trading book**

**Article 3**

A credit institution shall set up a system for the management of interest rate risk in the non-trading book which shall be adequate in terms of the type, scope and complexity of its operations and shall, based on a risk profile of a credit institution:

- 1) adopt a strategy for the management of interest rate risk in the non-trading book,
- 2) adopt policies and other internal bylaws for the management of interest rate risk in the non-trading book and ensure their application;
- 3) establish an adequate organisational set up with precisely determined, clear and

unequivocally divided lines of authorities and responsibilities among employees which ensures independence of the interest rate management function from the function of assuming interest-bearing positions in the non-trading book and ensure technical conditions for the measuring, monitoring, and controlling interest rate risk in the non-trading book;

4) set up a system of measuring interest rate risk in the non-trading book which comprises significant sources of interest rate risk;

5) set up a system of reporting on exposure to interest rate risk in the non-trading book which is independent of the function of assuming interest-bearing positions in the non-trading book which will also include regular reporting to the management board and employees or bodies of the credit institution in charge of determining, measuring, monitoring and controlling interest rate risk in the non-trading book;

6) prescribe incoming data of the system (e.g. interest rates, maturities) which will appropriately reflect the effect on the change in the economic value of a credit institution;

7) prescribe assumptions of the system for interest rate risk management that are adequate, documented and stable through time; any major changes in assumptions shall be documented, explained and approved by the credit institution's management board;

8) set up a system of internal controls of the process of management of interest rate risk in the non-trading book;

9) disclose all prescribed quantitative and qualitative information on the exposure to interest rate risk in the non-trading book; and

10) minimum once a year conduct stress testing in connection with interest rate risk in the non-trading book and use the results of such stress testing in decision-taking and in the revision of policies, internal bylaws and limits relating to interest rate risk. When conducting stress testing, a credit institution shall take into account all significant sources of interest rate risk.

## **Sources of interest rate risk**

### **Article 4**

Interest rate risk in the non-trading book can have a negative effect on earnings (net interest income) or economic value of the non-trading book of a credit institution. A credit institution shall assess the different forms of interest rate risk to which it may be exposed. They include:

- 1) repricing risk,
- 2) yield curve risk,
- 3) basis risk, and
- 4) optionality risk.

**Simplified calculation of the estimate of change in the economic value of the  
non-trading book  
Article 5**

(1) For the purposes of reporting to the Croatian National Bank on exposure to interest rate risk in the non-trading book, a credit institution shall use a simplified calculation of the estimate of change in the economic value of the non-trading book, by applying a standard interest rate shock to the non-trading book positions in all major currencies individually and to those in other currencies on an aggregate basis.

(2) For the purposes of simplified calculation of the estimate of change in the economic value of the non-trading book, interest rate sensitive positions have been distributed into 13 time zones in the manner shown in the Table below. The weights are based on an estimated interest rate shock of 200 basis points over time and estimated modified duration for each time zone.

**Table: Weights by time zones**

<b>Time zone</b>	<b>Midpoint time zone</b>	<b>Estimated modified duration</b>	<b>Estimated interest rate shock in basis points (b.p.)</b>	<b>Weight</b>
	1	2	3	4
to 1 month	0.5 month	0.04 year	200 b.p.	0.08%
from 1 to 3 months	2 months	0.16 year	200 b.p.	0.32%
from 3 to 6 months	4.5 months	0.36 year	200 b.p.	0.72%
from 6 to 12 months	9 months	0.71 year	200 b.p.	1.43%
from 1 to 2 years	1.5 years	1.38 year	200 b.p.	2.77%
from 2 to 3 years	2.5 years	2.25 years	200 b.p.	4.49%
from 3 to 4 years	3.5 years	3.07 years	200 b.p.	6.14%
from 4 to 5 years	4.5 years	3.85 years	200 b.p.	7.71%
from 5 to 7 years	6 years	5.08 years	200 b.p.	10.15%
from 7 to 10 years	8.5 years	6.63 years	200 b.p.	13.26%
from 10 do 15 years	12.5 years	8.92 years	200 b.p.	17.84%
from 15 do 20 years	17.5 years	11.21 years	200 b.p.	22.43%
over 20 years	22.5 years	13.01 years	200 b.p.	26.03%

(3) Positions with fixed interest rate shall be distributed into time zones according to the remaining maturity.

(4) Positions with variable interest rate shall be distributed into time zones according to the time to the next interest rate change.

(5) A credit institution shall distribute into appropriate time zones the positions whose time to maturity, i.e. time to interest rate change is not known or cannot be determined with certainty (e.g. current accounts, savings deposits, used current account overdraft loans, revolving loans, etc.), in the manner determined under the Instructions for the implementation of this Decision.

(6) A credit institution shall report separately positions where interest rates change based on a decision of a credit institution's management board (hereinafter: administered interest rate).

(7) A credit institution shall distribute into appropriate time zones the positions with an administered interest rate, based on estimated volatility probability and frequency of change in interest rates. Such estimate shall as a minimum be based on:

- past changes and frequency of interest rate changes of underlying positions,
- past changes and frequency of market interest rate changes and their correlation with interest rate changes of underlying positions; and
- estimates of other internal (e.g. net interest spread, credit institution business and placement financing strategy) and external factors (e.g. reputational risk, competition) which can affect the setting of interest rates.

### **Simplified calculation procedure**

#### **Article 6**

(1) When using a simplified calculation of exposure to interest rate risk in the non-trading book, a credit institution shall:

- 1) for each major currency on an individual basis and for other currencies on an aggregate basis, sum up assets and liabilities positions and derivative financial instruments (or off-balance sheet assets and liabilities items) in each time zone to obtain one net position per zone;
- 2) multiply the obtained total net position referred to in item (1) of this paragraph in each time zone with the prescribed weights given in the Table in Article 5 of this Decision for each major currency on an individual basis and for all other currencies on an aggregate basis;
- 3) sum up the obtained weighted positions in all time zones to obtain a net long or a net short position for each major currency individually and for all other currencies on an aggregate basis; and
- 4) sum up net long and net short positions in all currencies to obtain a total net weighted position in the non-trading book.

(2) The total net weighted position of the non-trading book referred to in paragraph (1) item (4) of this Article shall be expressed in an absolute amount and shall represent a change in the economic value of a non-trading book as a result of application of the standard interest rate shock.

(3) A credit institution shall calculate the ratio of the change in the economic value of the non-trading book and own funds of the credit institution. This ratio shall not exceed 20%.

### **Derivative financial instruments**

#### **Article 7**

(1) A credit institution using a non-trading book derivative financial instrument to manage interest rate risk in the non-trading book shall include such a derivative financial instrument in the calculation of a change in the economic value of a credit institution in the non-trading book.

(2) A credit institution shall treat the derivative financial instrument referred to in paragraph (1) of this Article as of the moment of establishing a hedging relationship, as an internal hedge in terms of part 2.2. Title III of the Decision on the capital adequacy of credit institutions and shall meet the conditions referred to in that part of the Decision.

### **Reporting to the Croatian National Bank**

#### **Article 8**

(1) A credit institution shall include in the report on interest rate risk exposure in the non-trading book all non-trading book positions which are sensitive to interest rate changes.

(2) A credit institution shall regularly report to the Croatian National Bank on exposure to interest rate risk in the non-trading book.

(3) A credit institution shall report on exposure to interest rate risk in the non-trading book on an individual and consolidated basis, reporting major currencies individually and all other currencies on an aggregate basis.

(4) A credit institution shall draw up unconsolidated unaudited reports on a quarterly basis with balance as at reporting dates as follows: 31 March, 30 June, 30 September, and 31 December and submit them until 30 April, 31 July, 31 October of the current year, i.e. 31 January of the following year.

(5) Consolidated unaudited interim reports with balance as at 30 June, shall be submitted to the Croatian National Bank until 30 September of the current year at the latest.

(6) A credit institution shall submit unconsolidated and consolidated audited reports

with balance as at 31 December within 15 days from the date of issue of the audit report and at the latest until 30 April of the current year for the previous year.

### **Transitional and final provisions**

#### **Article 9**

(1) The Governor of the Croatian National Bank shall issue instructions which will govern the manner of delivery of reports of credit institutions by telecommunication channels (or in a magnetic media) based on this Decision.

(2) As of the date of entry into force of this Decision, the Decision on the management of interest rate risk in the non-trading book shall cease to be valid (Official Gazette No. 1/2009, 41/2009 and 75/2009.).

(3) This Decision shall be published in the Official Gazette and shall enter into force on 31 March 2010, except for the provision of Article 1, paragraph (3) of this Decision which shall enter into force on the date of accession of the Republic of Croatia to the European Union.

No. 9-020/01-10/ŽR  
Zagreb, 4 January 2010

Croatian National Bank  
Governor

Željko Rohatinski

**Instructions for uniform implementation  
of the Decision on the management of interest rate risk in the non-trading book**

## **1 General provisions**

These Instructions prescribe the manner of uniform implementation of the Decision on the management of interest rate risk in the non-trading book (hereinafter: the Decision).

Reports in terms of these Instructions shall be submitted for all major currencies individually and for other currencies on an aggregate basis, using the following forms:

1. Change in the economic value of the non-trading book for fixed interest rate items (form EVKI FKS),
2. Change in the economic value of the non-trading book for variable interest rate items (form EVKI PKS),
3. Change in the economic value of the non-trading book for administered interest rate items (form EVKI AKS), and
4. Total weighted position (form EVKI ZBR).

The forms are given in annex to these Instructions and constitute an integral part thereof. A credit institution shall submit to the Croatian National Bank the reports prescribed under this Decision in a paper format and through telecommunication channels (or in a magnetic media), fully complying with the format prescribed for each individual report. By way of exception, the report Total weighted position 1 (form EVKI ZBR) shall be submitted in a paper format only.

Non-trading book positions shall be reported as at the last day of the quarter. A credit institution shall be deemed to have submitted the reports within the prescribed deadlines where the reports have undergone formal and logical control prescribed in the Instructions for the delivery of credit institutions' reports by means of telecommunication.

The cover page of the unconsolidated unaudited interim report (NP), consolidated unaudited interim report (KP), unconsolidated audited report (NR) and consolidated audited report (KR) shall be signed and dated in the designated place by the authorised management official and one member of the credit institution's management board.

Any subsequent changes to the unconsolidated unaudited interim report (NP) and consolidated unaudited interim report (KP) shall be verified and signed by the authorised management official. Any subsequent changes to the unconsolidated

unaudited report (NR) and consolidated audited report (KR) shall be verified and signed by the authorised management official and one member of the credit institution's management board.

In the heading of each report under these Instructions, the following data shall be given:

Name of credit institution – give a full or abbreviated name of the credit institution and in the consolidated audited separate report, give a full or abbreviated name of the parent credit institution and add a word "group".

Personal identification number of a credit institution (OIB) – give the personal identification number assigned to the credit institution by the Ministry of Finance, pursuant to the Act on the Personal Identification Number.

Type of report – indicate one of the following types, as relevant:

"NP" for unconsolidated unaudited interim report,

"NR" for unconsolidated audited report,

"KP" for consolidated unaudited interim report and

"KR" for consolidated audited report.

Date – state the last day of the reporting period using the following format DDMMYYYY.

When the reports are submitted in a magnetic media, all the amounts in monetary units shall be listed in the full amount of the monetary unit in which they are expressed (e.g. if the value of the position is HRK 100,000.60, the amount to be entered in the form shall be 100,000.60, which means that the amount in lipa shall be given too).

All the monetary amounts in the reports delivered in a paper format and prepared in accordance with these Instructions shall be stated in thousand kuna. The balance amounting to HRK 500 or more shall be rounded off to one thousand kuna, while any balance below HRK 500 shall be disregarded. Where an individual report item amounts to less than HRK 500, it shall be shown in the report as a zero.

As regards rounding off to thousand kuna of the amounts entered into report forms in a paper format, a credit institution shall take particular care to conduct this rounding off with precision. This means that a credit institution shall first prepare all the reports under these Instructions in their full amounts (in kuna and lipa) and then round off the final amounts to be entered in individual lines of the report.

The distribution of positions into time zones shall be determined in accordance with the

remaining number of days to maturity, i.e. until the next interest rate change counting from the reporting date.

The amounts expressed in foreign currencies shall be converted into kuna by applying the midpoint exchange rate of the Croatian National Bank applicable on the reporting date. The amounts expressed in foreign currencies which are not shown in the exchange rate list of the Croatian National Bank, shall be converted into euro or the American dollar by applying the midpoint exchange rates of the reference markets and then into kuna by applying the midpoint exchange rate of the Croatian National Bank applicable on the reporting date.

Items in kuna with an agreed currency clause in relation to a specific currency shall be treated as positions in that currency.

Grey-marked positions in the forms shall not be completed.

A credit institution shall submit reports in a paper format to the following address:

Hrvatska narodna banka  
Off-Site Supervision Department  
p.p. 603  
10002 Zagreb

Reports submitted through telecommunication channels (or in a magnetic media) shall be prepared in the manner prescribed by the Instructions for the delivery of credit institutions' reports by means of telecommunication.

## **2 CALCULATION OF EXPOSURE TO INTEREST RATE RISK IN THE NON-TRADING BOOK**

### **2.1 Forms EVKI FKS, EVKI PKS and EVKI AKS**

In the form EVKI FKS, fixed interest rate positions shall be entered and distributed into time zones in accordance with the remaining maturity.

In the form EVKI PKS, variable interest rate positions shall be entered and distributed into time zones in accordance with the remaining time left to the next interest rate change.

In the form EVKI AKS, positions shall be entered the interest rate of which is variable based on a decision of the management board (administered interest rate) in accordance with the provisions of Article 5 of the Decision.

When calculating a change in the economic value of the non-trading book, a credit institution shall complete the forms in the following manner:

1. depending on the type of interest rate, a credit institution shall complete the forms EVKI FKS, EVKI PKS and EVKI AKS for each major currency individually and for all other currencies on an aggregate basis. In these forms, assets and liabilities positions (balance and off-balance sheet) shall be summed up, taking account of the signs preceding each time zone, to obtain a net position per zone "Total net position". For the purposes of "Total net position" calculation, asset positions shall be deemed to have a (+) sign while liabilities positions shall be deemed to have a (-) sign;
2. the obtained total net position per each time zone shall be multiplied by weights given in the forms under "Weights" to obtain a "Weighted position" for each time zone;
3. sum up the obtained weighted positions in all time zones to obtain a net long or a net short position "Net weighted position by currency - EVKI FKS/PKS/AKS" for each type of interest rate per currency.

Individual positions in the forms EVKI FKS, EVKI PKS and EVKI AKS shall be treated as follows:

1. standard off-balance sheet items: guarantees, letters of credit, bills of exchange, lines of credit, financing obligations and other standard off-balance sheet items shall not be considered interest sensitive positions;
2. derivative financial instruments except options referred to in Article 7 of this Decision shall be entered in accordance with part 3.2.1 of Title III of the Decision on the capital adequacy of credit institutions; options shall be included in delta equivalents or in the nominal amount of the underlying variable in accordance with part 6 of Title III of the Decision on the capital adequacy of credit institutions;
3. received and given sight deposits of the participants in the money market; current accounts and giro accounts and funds available on demand shall be distributed into time zones up to one month;
4. received sight deposits and savings deposits, except funds of the participants in the money market, used current account overdraft loans and revolving loans shall be distributed into time zone between 6 and 12 months;
5. foreign currency reserve requirements set aside with the Croatian National Bank shall be reported in the form EVKI PKS in time zone up to 1 month;
6. kuna reserve requirements set aside with the Croatian National Bank shall be reported in the form EVKI PKS in time zone between 6 and 12 months;
7. repo/reverse repo transactions and securities lending and borrowing transactions shall be reported as underlying positions in a given/received loan;
8. holdings in debt securities shall be distributed into time zones in the nominal amount of the principal in accordance with the agreed dynamics;
9. holdings in other debt securities shall also include securities held in the loans and receivables portfolio;

10. holdings in investment funds shall be distributed in accordance with the structure of the fund's holdings in interest rate sensitive instruments; where a credit institution is not familiar with the actual structure of the fund's holdings, it shall estimate the share and the structure of interest rate sensitive items on the basis of the fund's prospectus;
11. value adjustments against collectively assessed risk category A placements shall not be reported in the said forms;
12. items where a credit institution has made provisions/value adjustments, i.e. placements classified into risk category B, shall be reported in time zones in the amounts and in accordance with the dynamics of the expected principal repayment as determined in the determination of the recoverable amount of these placements; placements classified into risk category C shall not be considered interest sensitive items and shall not be reported in the reports;
13. items where a credit institution has made provisions/value adjustments and where it cannot determine the amounts and the dynamics of the expected principal repayment, shall be distributed into time zone from 2 to 3 years;
14. assets and liabilities with instalment payments shall be distributed into time zones in accordance with the agreed repayment plan in the amount of the principal repayment rate, i.e. principal annuity;
15. due non-trading book positions shall not be considered interest sensitive.

## **2.2 Form EVKI ZBR – Total weighted position**

A credit institution shall complete the form EVKI ZBR by entering the amounts given in forms EVKI FKS, EVKI PKS and EVKI AKS.

The obtained net weighted positions (net long and net short positions) by individual types of interest rates in forms EVKI FKS, EVKI PKS and EVKI AKS, calculated for each major currency individually and for all other currencies on an aggregate basis, shall be summed so as to obtain a net weighted position by currency. The obtained net weighted position by currency shall be entered in the form EVKI ZBR in lines under number 1 for each major currency individually and for all other currencies on an aggregate basis. Net long and net short positions by different currencies given in the form EVKI ZBR in lines under number 1 shall be summed up to obtain a total weighted position of the non-trading book of a credit institution which constitutes a change in the economic value of the non-trading book of a credit institution and is shown in an absolute amount under number 2 of the form EVKI ZBR.

In the form EVKI ZBR, in line 4, the ratio of the change in the economic value and own funds of a credit institution shall be calculated.