

**From the Banking Regulation and Supervisory Board:**

**REGULATION ON MEASUREMENT AND EVALUATION OF CAPITAL  
ADEQUACY OF BANKS**

*(Published in Official Journal No 26333 of November 1, 2006)*

**SECTION ONE**

**Purpose and Scope, Legal Basis and Definitions**

**Purpose and scope**

**ARTICLE 1-** (1) The purpose of this Regulation is to regulate the procedures and principles for ensuring that banks hold adequate capital on a consolidated and non-consolidated basis as hedging against potential losses that may be incurred as a result of risks experienced.

**Legal Basis**

**ARTICLE 2-** (1) This Regulation is based on Articles 43, 45, 47 and 93 of Banking Law Nr. 5411 dated October 19, 2005.

**Definitions**

**ARTICLE 3-** (1) The following terms used in this Regulation shall have the meanings expressly designated to them as follows:

- a) Accounts of purchase and sale: Financial instruments banks hold so as to transact purchase and sale transactions in money and capital markets in short term basis; to benefit from expected or actual price differences between purchase and sale prices or other price and interest rate changes; or to mediate purchase and sale or including repo and securities lending due to market making for such sales as well as derivative financial instruments made so as to protection from the risks which stem from the said financial instruments and the related positions or to decrease the risks mentioned and on-balance sheet and off-balance sheet accounts and positions in which speculative derivative financial instruments are monitored,
- b) Bank: Banks as defined by Article 3 of this Law,
- c) Commodity: Precious metals and other commodities subject to the limitations under Article 57 of this Law,

- c) Commodity risk: Potential losses that may be exposed to by a bank depending on position condition concerning commodity and commodity based derivative financial instruments due to fluctuations in commodity prices,
- d) Interest rate risk: Potential losses that may be exposed to by a bank depending on position condition within financial instruments included in accounts of purchase and sale due to fluctuations in interest rates,
- e) Financial institution: Financial institutions as defined by Article 3 of this Law,
- t) General market risk: Potential losses the bank may be exposed to in the values of positions concerning the financial instruments included in accounts of purchase and sale of bank due to interest rate risk and shares position risk,
- g) Shares position risk: Potential losses that may be incurred by a bank due to fluctuations in prices of shares depending on shares position included in accounts of purchase and sale,
- ğ) Law: Banking Law Nr. 5411,
- h) Precious metals: Silver and platinum traded by the Precious Metals Exchanges, for which standards and qualifications are set by the Turkish Treasury or Istanbul Gold Exchange,
- ı) Consolidated own-fund: Consolidated own-funds to be calculated according to the procedures and principles laid down by the Regulation on Own-funds of Banks,
- ı) Consolidated capital adequacy standard ratio: The standard ratio, “equity / (sum as a basis for credit risk + sum as a basis for capital risk+ sum as a basis for operational risk), which is calculated on a consolidated basis
- j) Sum as a basis for credit risk: Sum to be considered in determination of the sum of own-fund required to be maintained for losses that may be incurred due to the credit risk which stem from on-balance sheet assets and non-cash loans, commitments and derivative financial instruments in account of the standard ratio of capital adequacy,
- k) Exchange rate risk: Potential losses that may be incurred by banks as a result of changes in exchange rates due to all of their foreign currency assets and liabilities
- 1) Board: Banking Regulation and Supervision Board,
- m) Agency: Banking Regulation and Supervision Agency,
- n) Operational risk: Potential losses that may be incurred by banks as a result of omission of any errors and irregularities due to problems over internal control, failure by the bank management and staff to take action as required by current times and conditions, errors in the bank management, errors and problems in information technology systems and disasters such as earthquake, fire and flood or acts of terror,

- o) Sum as a basis for operational risk: Sum to be considered in determination of the sum of equity required to be held against losses that may be incurred due to operational risks over calculation of the capital adequacy standard ratio,
- ö) Equity: Equity to be calculated according to the procedures and principles laid down by the Regulation on the Equity of Banks
- p) Market risk: Potential losses that may be incurred by banks due to general market risk, exchange rate risk, specific risk, merchandise risk and swap risk,
- r) Sum as a basis for market risks: Sum to be considered in determination of the sum of equity required to be held against losses that may be incurred due to the market risk with regard to calculation of the capital adequacy standard ratio,
- s) Capital adequacy standard ratio: The “equity / (sum as a basis for credit risk + sum as a basis for capital risk + sum as a basis for operational risk), standard ratio which is calculated on a non consolidated basis,
- ş) Specific risk: Potential losses that may be incurred due to problems likely to arise out of management and financial structures of the institutions issuing or guaranteeing the financial institutions assuming the payment obligations which the positions related to the financial instruments included in the purchase and sale accounts of the banks with regard to such positions, excluding extraordinary market movements,
- t) Swap risk: Potential losses that may be incurred by a bank due to price fluctuations of securities, foreign exchanges or merchandise subject to transactions as a result of failure to realize a swap transaction on its due date in case of transactions which cover delivery of securities, foreign exchanges or merchandise on the basis of prices foresee on a certain due date and foresee that both parties meet their obligations on such due dates,
- u) Organized stock exchanges: Stock exchanges which operate regularly, for which procedures and principles governing their operations, membership and contracts to be traded are determined or approved by the competent authorities in the country of establishment and which are obligated to complement daily guarantees for contracts traded as per the swap mechanism,
- ü) Renewal cost: Value equal to cost required to be incurred as of the date of preparation of balance sheet for replacement of an asset with another asset, which has the same functions and operational life span and a similar nature in respect of elements such as productivity and profitability.

## **SECTION TWO**

### **Calculation of the Sum as a Basis for Credit Risk**

#### **Sum as a Basis for Credit Risk**

**ARTICLE 4-** (1) The sum as a basis for credit risks is composed of the total of sums as a basis concerning on-balance sheet assets and non-cash loans, commitments and derivative financial instruments.

(2) No sum as a basis for credit risk is calculated for the following:

- a) Shares, investment fund and participation certificates included in the purchase and sale account of the bank, for which capital obligation is calculated for specific risks they bear in establishment of the sum as a basis for market risk, and securities for which yield is indexed to interest rates,
- b) Sums considered as the value reduced from tier-II and capital under the Regulation on Equity of Banks,
- c) Positions concerning the derivative financial instruments traded by organized stock exchanges.

(3) Sums as a basis for credit risks of on-balance sheet assets and non-cash loans, commitments and derivative financial instruments are calculated by applying the risk weights indicated by the analysis forms under Annex 2 and Annex 3 to their credit equivalents.

(4) Credit equivalents refer to:

- a) their values recorded in balance sheets in respect of on-balance sheet assets that are excluded from the funds extended from the participation accounts as well as seventy per cent of their values recorded in balance sheets in respect of such funds,
- b) sums to be computed by multiplying net sums after deduction of reserves allocated for these transactions pursuant to the Regulation on Making Amendments to the Regulation on the Procedures and Principles for Determination of Qualifications of Loans and Other Receivables by Banks and Provisions to be Set Aside, if any, by the ratios of non-performing loans laid down by Article 5(1) in respect of the transactions related to non-cash loans and commitments,

c) Sums to be computed by multiplying nominal values of foreign exchange, interest rates and gold in respect of derivative financial instruments by the ratios of non-performing loans laid down by Article 5(2)

ç) Sums to be computed by adding positive renewal costs to the sum to be found by multiplying nominal values of shares and merchandise in respect of derivative financial instruments by the ratios of non-performing loans laid down by Article 5(3).

(5) Credit equivalents of assets facing depletion and depreciation are calculated after deducting relevant amortizations and reserves.

(6) The sum taken as a basis for calculation of the credit limits of commitments having the nature of unlimited guarantee extended to the authorities of a foreign country pursuant to the legislation of the relevant country as cover for liabilities of affiliates and subsidiaries operating banking operations in foreign countries constitute the value before special provisions in calculation of credit equivalents pursuant to the paragraph 4 (b).

(7) Sale transactions concerning forward asset purchase commitments and bank assets for which risks may be reverted to the bank are weighted on the basis of the risk weight of the asset subject to transaction.

(8) In the event that guarantees are provided for on-balance sheet asset, non-cash loans, commitments and derivative financial instruments, only their guaranteed portions may be subject to risk weight depending on respective guarantees.

(9) Those for which no risk weight has yet been designated in connection with the newly defined items and new financial instruments as a result of amendments made to the relevant legislation is subject to a risk weight of one hundred per cent.

**Ratios of non-performing loans of non-cash loans, commitments and derivative financial instruments**

**ARTICLE 5-** (1) The following ratios of non-performing loans are applicable for non-cash loans and commitments:

a) Non-cash loans and commitments for which a ratio of non-performing loans at one hundred per cent is applicable are:

- 1) Guarantee letters for procurement of cash (guarantee letters given as a guarantee of a financial obligation assumed by a beneficiary),
- 2) Acceptance credits issued as bills of surety,
- 3) Irrevocable guarantee (security) letters of credit and confirmed export letter of credits,
- 4) Endorsements, for which the chain of endorsements does not involve any banks,
- 5) Factoring guarantees,
- 6) Guarantees issued for pre-financing credits without guarantee letters
- 7) Sale transactions concerning bank assets for which risks may be reverted to bank,
- 8) Guarantees issued for cash loans provided from abroad,
- 9) Forward assets purchase commitments,
- 10) Forward deposit sale commitments,
- 11) Commitments of participation in capital of subsidiaries and joint partnerships.

b) Non-cash loans and commitments for which a ratio of non-performing loans at fifty per cent is applicable are:

- 1) Other guarantee letters excluding those issued for procurement of cash,
  - 2) Purchase guarantees in the case of securities issuances,
  - 3) Credit allocation commitments with extension guarantee,
  - 4) Agency commitments for securities issuances,
  - 5) (Abolished sub-paragraph: *OG-221312008-26824*),
  - 6) Letters of credit other than those for which ratio of non-performing loans at zero per cent, twenty per cent and one hundred per cent will be applicable,
  - 7) Any guarantees and sureties for which ratio of non-performing loans has not been yet determined,
- c) Non-cash loans and commitments for which a ratio of non-performing loans at twenty per cent is applicable:
- 1) Payment commitments for checks,
  - 2) Import and export letters of credits with a term of less than one year, for which merchandise to be exported or imported serves as a guarantee
  - 3) Revocable commitments other than those for which a ratio of non-performing loans at zero per cent will be applicable
  - 4) (Additional sub-paragraph: *OG-10/10/2007-26669*) Irrevocable commitments for which ratio of non-performing loans has not been yet determined
  - 5) (Additional sub-paragraph: *OG -221312008-26824*) *Credit* cards limit commitments,
  - 6) (Additional sub-paragraph: *OG -221312008-26824*) *Credit* deposit account limit commitments,

ç) Non-cash loans and commitments for which a ratio of non-performing loans at zero per cent is applicable:

- 1) Acceptance credits for which no bills of surety have been issued
- 2) Letters of credit having no payment obligation on behalf of beneficiary
- 3) Endorsements with a chain of endorsements involving any bank
- 4) Foreign exchange trading commitments with an effective date of up to two days
- 5) (Amended sub-paragraph: OG-10/10/2007-26669) Assets sale commitments, forward deposit purchase commitments
- 6) Revocable and unconditional commitments that may be cancelled by banks discretionally

(2) The ratios of non-performing loans indicated below are applicable for forward, futures and swap trading contracts indexed to foreign exchange, interest rates and gold as well as purchased trading options as per initial dates.

(3) The ratios of non-performing loans are applicable for forward, futures and swap trading contracts based on shares and merchandise and purchased trading options depending on their residual terms.

*According to the Regulation (OG-22/3/2008-26824,) before the amendment: 5) Credit card expense limit commitments, 2 upon the Regulation (OG-10 10/2007-26669/) before the amendment: 5) Asset sale commitments, forward deposit purchase commitments and irrevocable commitments,*

<b>Initial Date</b> <b>(Term on the Contract)</b>	<b>Contracts Based on Interest Rate (%)</b>	<b>Contracts Based on Foreign Exchange and Gold (%)</b>
With a term of up to two weeks	0	0
With a term of one year or less	0,5	2
With a term of one year to two years	1	5
For each additional years after two years	1	3

<b>Period before term</b> <b>(Term on the Contract)</b>	<b>Contracts Based on Stock and Shares (%)</b>	<b>Contracts Based on Precious Metals (%)</b>	<b>Contracts Based on Other Merchandise (%)</b>
Those with a period of one year or less before maturity	6	7	10
Those with a period of one year to five years before maturity	8	7	12
Those with a period of more than five years before maturity	10	8	15

## **SECTION THREE**

### **Calculation of the Sum as a Basis for Market Risk**

#### **Sum as a Basis for Market Risk**

**ARTICLE 6-** (1) The sum as a basis for market risks is calculated by the risk measurement models or standard method.

(2) The sum as a basis for market risk is calculated by those banks for which there is no risk measurement model permitted by the Board for use, risk measurement method is considered inadequate by the Board or the Board is of the opinion that the adequacy and reliability of their models have lost, by multiplying the total of capital adequacy required for general market risk, exchange rate risk, specific risk, merchandise risk, swap risk and options calculated according to the standard method by twelve and a half.

(3) The sum as a basis for market risk is calculated by those banks which have a risk measurement model permitted by the Board for use is found by multiplying the capital adequacy based on the value at risk by twelve and a half.

(4) The procedures and principles for use of the risk measurement model in calculation of the sum as a basis for market risk and calculation of market risk by means of risk measurement model as well as the procedures and principles for calculation of capital adequacy for market risk stemming from options according to standard method are regulated by the Communiqués to be adopted by the Board concerning this Regulation.

(5) **(Additional paragraph: OG-10/10/2007-26669)**<sup>3</sup> In the event that the share of securities available for sale within balance-sheet of the bank exceeds ten per cent, securities available for sale accounts are considered as purchase and sale accounts according to the implementation of this Regulation and capital adequacy for market risk and specific risk is calculated concerning these in determination of the sum as a basis for market risk.

**ARTICLE 7-** (1) General market risk that may arise out of fluctuations in the interest rate concerning the financial instruments having a yield indexed to an interest rate, which are included in purchase and sale accounts of the bank, are calculated by classifying and placing their long and short positions on the maturity ladder table included in Annex 4.

(2) The maturity ladder table is prepared individually on the basis of the New Turkish Lira equivalents of each currency to be determined by the Board.

(3) Fixed interest securities are placed on the appropriate tranche of maturities on the maturity ladder table according to the periods before maturity while variable interest securities are placed on the appropriate tranche of maturities on the maturity ladder table according to the periods before the date of re-pricing.

(4) In the event that interest is collected at a variable rate and fixed interest is paid in an interest swap transaction, a long position is written on the maturity ladder table at variable interest rate for the term up to the date of re-pricing; a short position is written at fixed interest rate for the remaining maturity of the swap contract.

*This paragraph, pursuant to the Article 15 of the Regulation (OG-10 102007-26669) enters into force as of January 1, 2008.*

(5) The long and short positions in each tranche of maturities are weighted with the risk weight in the relevant tranche of maturities on the table indicated below. Vertical capital adequacy is calculated at a rate of ten per cent on the basis of the smaller one of the total short and long positions weighted in the same tranche of maturities in terms of absolute values. For the purpose of finding out a single net position for each tranche of maturities, the short and long positions in all the tranche of maturities are netted.

(6) Net short and long positions of the tranche of maturities computed are individually added up for all the three time intervals and in the event of positions with reverse directions in the same time interval, Horizontal Capital Adequacy-I is calculated at a rate of forty per cent for Time Interval I and at a rate of thirty per cent for Time Intervals II and III on the basis of the absolute value of the smaller one of them in terms of absolute values.

(7) Net positions are obtained for each time interval by netting the short and long positions within the three time intervals.

(8) In case of positions with reverse directions in the neighboring time intervals, Horizontal Capital Adequacy-II is calculated at a rate of forty per cent on the basis of the absolute value of the smaller of them in terms of absolute values.

(9) Those time intervals which become equal due to the presence of positions with reverse directions in the neighboring time intervals and for which Horizontal Capital Adequacy-II is calculated are netted. If Time Intervals I and II are netted, the new position value found is accepted as the position of Time Interval I; if Time Intervals II and III are netted, the new position found is accepted as the position of Time Interval III. In case the positions for Time Intervals I and III are the positions with the same directions, Horizontal Capital Adequacy- III is calculated at a rate of one hundred per cent at the absolute value of their sum; it is calculated at a rate of one hundred per cent at the absolute value of the one with a smaller absolute value if one is short and the other is a long position; it is calculated at a rate of one hundred per cent at the absolute value of the position obtained by netting both positions.

<b>Period before maturity</b>	<b>Risk Weight (%)</b>	<b>Assumed Yield Change (%)</b>
<b>I.TIME INTERVAL</b>		
Less than 1 month	0,00	1,00
Between 1 to 3 months	0.20	1,00
Between 3 to 6 months	0.40	1,00
Between 6 to 12 months	0,70	1,00
<b>II. TIME INTERVAL</b>		
Between 1 to 2 years	1,25	0.90
Between 2 to 3 years	1,75	0.80
Between 3 to 4 years	2,25	0.75
<b>III. TIME INTERVAL</b>		

Between 4 to 5 years	2,75	0,75
Between 5 to 7 years	3,25	0,70
Between 7 to 10 years	3,75	0,65
Between 10 to 15 years	4,50	0,60
Between 15 to 20 years	5,25	0,60
20 years and more	6,00	0,60

(10) In the event that there are positions in the same directions in all the tranche of terms or time intervals on the table of thresholds of maturities, Horizontal Capital Adequacy-II is calculated at the absolute value of their sum.

(11) The total of vertical and horizontal capital adequacy indicates capital adequacy necessary for general market risk concerning financial instruments with a yield indexed to an interest rate.

### **Netting**

**ARTICLE 8-** (1) (1) The procedures and principles for netting of the long and short positions of the financial instruments becoming equal with each other such as similar securities included in the purchase and sale accounts of the bank, which are issued by the same person at the same foreign exchange rate, coupon and maturity are established by the Board.

### **Calculation by the standard method of capital adequacy for specific risk concerning financial instruments with a yield indexed to an interest rate**

**ARTICLE 9-** (1) Capital adequacy is calculated for specific risk at the rates in the following table by considering the types and remaining maturities of the securities with a yield indexed to an interest rate, which are included in the purchase and sale accounts, on the basis of the net position amounts.

(2) Qualified securities are composed of securities having received an investable rating from at least two credit rating agencies. Securities which receives an investable rating from only one credit rating agency or is never rated may be accepted as qualified securities in case the issuer of such securities has securities quoted with an organized stock exchange.

(3) No specific risk is calculated for interest and exchange rates swap transactions, forward interest and foreign exchange transactions and interest rate future transactions. In the event that the financial instruments on which transaction is based on a futures contract are securities with a yield indexed to an interest rate, specific risk for such securities is calculated at the principles indicated by the present article.

**Calculation by the standard method of capital adequacy for general market risk and specific risk concerning the positions of stocks, investment funds and participation certificates**

**ARTICLE 10-** (1) Banks have to calculate capital adequacy for specific risk and general market risk on the basis of the financial instruments affected price changes in shares included in their purchase and sale accounts by considering:

- a) Current market prices of futures and forward transactions indexed to individual shares,
- b) Current market price of the share portfolio forming the basis for transaction in futures transactions associated with a share index.

<b>Security Type</b>	<b>Rate (%)</b>
Public securities	0.00
Qualified securities:	
Those with a period of 6 months or less before maturity	0.25
Those with a period of 6 – 24 months before maturity	1.00
Those with a period of more than 24 months before maturity	1.60
Other Securities	8.00

(2) In share swap transactions, the positions forming each step of the transaction are evaluated separately. If one of the steps of swap transaction is related with a fixed or variable interest rate, this position is considered within the account of capital adequacy for the interest risk according to the procedure determined within the Article 7.

(3) The positions held relating to shares as well as the capital adequacy for specific risks and general are calculated separately based on organized stock-markets.

(4) The long and short positions related to shares exported by the same company are included to the calculation after that they are clarified.

(5) The capital adequacy to be allocated for specific risk carried by share positions is the eight percent of the total absolute value of short and long positions related to shares. This ratio is applied as four percent for liquid and well diversified portfolios. The specific risk ratio for the contracts based on the indexes given within the table below is two percent, and is four percent for the contracts in which other indexes are subject.

(6) The portfolios composed by the shares included within the indexes determined in the table above are considered as liquid and well diversified if;

- a) the amount of a the position held for a share does not exceed ten percent of the amount of position held in each country's markets (country portfolio),
- b) total share positions amount which does not exceed ten percent of country portfolio and which composes at least five percent of country portfolio does not exceed fifty percent of all the shares portfolio of the bank.

(7) The capital adequacy which is required to be allocated for the general market risk carried by share positions is eight percent of the difference between total long positions and short positions related to shares.

(8) The funds of investment and participation certificates within the banks' purchase and sales accounts are included to the calculations of capital adequacy for specific risk and general market risk by adding the position related to each asset within the portfolio to the net position amount related to the asset mentioned.

INDEX	COUNTRY
ISE-100	Turkey
S8cP500	U.S.A
NIKJKEI 225	Japan
DAX	Germany
FTSE 100 and FTSE -Mid 250	England
CAC 40	France
TSE35	Canada
SMI	Swiss
OMX	Sweden
IBEX 35	Spain
EOE 25	Netherlands
BEL 20	Belgium
ATX	Austria

### **Calculation of capital adequacy for exchange rate risk with the standard method**

**ARTICLE 11- (1)** The banks are obliged to calculate the capital adequacy for exchange rate risk upon their whole FX assets and liabilities as well as their derivative financial instruments including exchange rate risk. In the calculation of own funds, the capital adequacy for the exchange rate related to FX assets discounted from main capital and capital is not calculated.

(2) Within the aim of calculating the capital adequacy, net position related to all FX assets and liabilities within the active and passive accounts by each FX type having a TRY equivalent,

net position related to FX irrevocable non-cash and net position related to derivative financial instruments are to be found. Net short positions and net long positions found for each FX type are accumulated separately and among these, capital adequacy by 8% is calculated based on the total of the biggest one by absolute value and net gold position by absolute value.

(3) In including the net position related to FX irrevocable non-cash loans to the calculation of capital adequacy, if the claim relating to liability which has not transformed to liquidity yet is by the same monetary type as non-cash loan, the amount of claim is considered as long position. Nevertheless, if the claim is by a different monetary type, the amount of the claim is showed among the FX assets as long position by its own monetary type. In considering the claim related to non-cash loans as long position, it is fundamental that the claim is documented or guaranteed.

(4) The creditworthiness and the solvency of non-cash loan debtor is determined within the framework of Regulation on the Principles and Procedures Relating to Determination of the Quality of Loans and Other Receivables by Banks and the Provisions to be Allocated for Them. The long position to be used in the calculation of net position as a result of the evaluation made this way is found by subtracting from the amount of receivable created by non-cash loan customer, the amount of special provision allocated for the customer within the passive accounts if it's available.

(5) The FX indexed assets and liabilities are shown as FX assets and liabilities based on the FX type they are indexed by, without considering the account they are followed in the calculation of net position.

(6) By each FX type, on condition that;  
a) a hundred percent of the own funds of the highest one as absolute value among the total long position amount not clarified and total short position amount not clarified,  
b) the difference between total long position amount not clarified and total short position amount not clarified does nor exceed two percent of the own funds; the banks may not calculate capital adequacy for the exchange rate risk relating to the period that these rates are provided.

(7) As long as they do not exceed the amount of own funds and net long position in FX in which they are followed, the long position amount including the compound of FX and FX indexed assets is exempt from the capital adequacy for exchange rate risk brought pursuant this Regulation. For the FX and FX indexed assets composing the mentioned structural long position, the capital adequacy is not calculated.

(8) The FX and FX indexed assets which may enter to the scope of structural position, the qualities to be carried for being considered as structural position as well as conditions for providing from the exemption from capital adequacy for structural position are determined by the Board.

#### **Calculation of capital adequacy for swap risk by the standard method**

**ARTICLE 12-** (1) Banks have to calculate capital adequacy in case the contractual prices of securities (excluding those subject to repo, reserve repo and security lending transactions), foreign exchanges or merchandise, which are not delivered to them on deadline, are lower than the market price and the contract prices of any securities or merchandise not delivered by them on deadline are higher than the market rates. The capital adequacy for swap risk is computed by multiplying the absolute value of the difference between the contractual price and current market price by the appropriate rates among those designated according to the number of work days following the maturity in the following table. No capital adequacy for swap risk is calculated in respect of the initial four days following the date of the maturity of the unrealized transaction.

#### **Calculation of capital adequacy for commodity risk by standard method**

**ARTICLE 13-** (1) The banks are obliged to calculate the capital adequacy for commodity risk for derivative financial instruments based on commodities and precious metals, regardless of the account they are followed in.

(2) Each position related to derivative financial instruments based on commodities is expressed in terms of standard measurement unit.

(3) In the event that derivative financial transactions based on merchandise involve any exchange rate risk or interest rate risk, capital adequacy is also calculated for exchange rate risk or interest rate risk in addition to merchandise risk.

(4) Merchandise risk is calculated on the basis of each type of merchandise individually. In calculation of the position related to merchandise;

a) The positions of different sub products of the same merchandise which may be inter-used in meeting the liability,

b) The positions related to similar merchandise with a correlation of minimum nine tenth between the price movements in a period of the last one year and contracts based on them are deemed the position for the same merchandise.

(5) The capital adequacy for merchandise risk is computed by adding up fifteen per cent of the value to be found by multiplying the absolute value of the net position concerning merchandise by the current market price of merchandise and three per cent of the value to be computed by multiplying the sum of the absolute values of long and short positions of merchandise by the current market prices of merchandise.

<b>Number of Work Days After the Maturity</b>	<b>Rate (%)</b>
Between 5 and 15 days	<b>8</b>
Between 16 and 30 days	50
Between 31 and 45 days	75
46 days and more	100

#### **PART FOUR**

##### **Calculation of the Amount Subject to Operational Risk**

###### **Amount Subject to Operational Risk**

**ARTICLE 14-** (1) The sum as a basis for operational risk is calculated by the method of basic indicators, standard method or alternative method. It is obligatory to receive permission from the Board to use the standard method or alternative method in such calculation.

### **Method of basic indicators**

**ARTICLE 15–** (1) The value to be computed by multiplying the average of fifteen per cent of the sums of the end of the year gross amount of income of the bank realized in the last three years by twelve and half is considered the sum as a basis for operational risk.

(2) Annual gross income as in the financial statements included in income statement regulated according to the Articles 37 and 38 and published pursuant to the Article 39 of the Law; is calculated by adding net interest incomes to net fees and commission incomes, default incomes, commercial profit/loss (net) and other operating incomes, and by decreasing profit/loss stemming from securities monitored in securities available for sale and securities held for trading accounts and extraordinary incomes (including the sale profits of subsidiaries and affiliates shares and real estate) and the sums collected from insurance.

(3) **(Amended paragraph: OG- 10/10/2007-26669)** Average is calculated without including in calculation the sum of gross revenues for the year when the sum of annual gross revenues to be calculated subject to the second clause is negative or zero. No sum as a basis for operational risks is calculated in case the sum of annual gross revenues is negative or zero throughout the last three years. Gross income concerning the year in which annual gross income amount to be calculated pursuant to the paragraph two is negative or zero is averaged out without including it into the calculation. In the event that annual gross income amount is negative or zero, this amount is not considered in nominator and denominator in calculation of average. In the event that annual gross income amount is negative or zero during the last three years, the sum as a basis for operational risk is not calculated.

### **Standard method and implementation criteria**

**ARTICLE 16–** (1) **(Amended Article: OG-10/10/2007-26669)** Under the standard method, the sum as a basis for operational risk is calculated by multiplying the three year average of the total of the sums of capital liability to be found on the basis of branches of operation by years by twelve and a half. The total of capital adequacy on the basis of branches of operation by years is calculated by adding up individually for each year the values to be found by multiplying the annual gross incomes for each branch of operation the rates in the following table corresponding to such a branch of operation.

*Before the amendment pursuant to the Regulation (OG-10/10/2007-26669):* (2) Annual gross income is composed of the total of net amounts of interest incomes and non-interest incomes realized as of the end of the year. Provisions and operating costs inclusive of the payments made to the persons or institutions from which the bank received support services are included to this amount. Profit/loss derived from the sale of the securities monitored in securities available for sale and securities held to maturity accounts as well as extraordinary incomes and amounts to be collected from insurance are decreased from this amount.

*Before the amendment pursuant to the Regulation (RG-10/10/2007-26669):* (3) Gross income amount concerning the year in which the annual gross income amount to be calculated according to paragraph two is negative or zero is averaged out without including it to the calculation. In the event that annual gross income amount is negative or zero during the last three years, the sum as a basis for operational risk is not calculated.

*Before the amendment pursuant to the Regulation (RG-10 10/2007-26669):* (1) Under the standard method, the sum as a basis for operational risk is calculated by multiplying the three year average of the total of the sums of capital liability to be found on the basis of branches of operation by years by twelve and a half. The total of capital adequacy on the basis of branches of operation by years is calculated by adding up individually for each year the values to be found by multiplying the annual gross incomes for each branch of operation the rates in the following table corresponding to such a branch of operation.

(2) In the event that the sum of capital adequacy calculated on the basis of branches of operation for any year proves negative, the sum of capital adequacy for that year is considered zero in calculation of the three year average of the total of the sums of capital adequacy to be found on the basis of branches of operation by years.

(3) As the Board gives permission for use of this method, the following are considered:

a) If the following are implemented by the Bank Executive Board:

1) if policy and implementation procedures for operational risk management have been established,

2) if implementations regarding operational risk management are controlled periodically,

b) If the bank's internal control, internal audit and risk management systems are adequate,  
 c) if the bank has written accounting implementations or instructions matching the gross revenues generated through present operations with operations indicated by the first sub-paragraph,

ç) (Amended sub-paragraph: OG-10/10/2007-26669) if the bank's information systems are of a structure ensuring regular monitoring of gross income arising out of the operations indicated by the first sub-paragraph<sup>7</sup>

<sup>7</sup> Before the amendment (OG-10 10/2007-26669): ç) if the bank's information systems are of a structure ensuring regular monitoring of profit or loss arising out of the operations indicated by the first sub-paragraph.

<b>Activity Branches</b>	<b>Activities</b>	<b>Ratio (%)</b>
Corporate Banking	Counseling and intermediation services related to the exportation of capital market instruments, securitization of assets, extension of syndication loans and company mergers and take over as well as acceptance of partnership interest obtained within this scope and loans given to public institutions by direct or purchased debt issues and deposit or participation fund excluded from activity branches of retail banking.	18
Purchase and Sale	Purchase and sale of monetary and capital markets instruments and repurchase or resale commitment transactions, FX transactions including effective, purchase and sale of precious metal and contracts based on these or to commodities.	18
Retail Banking	Being Euro 1 million or an equivalent monetary unit or in a less amount, all cash and non-cash loans extended to natural persons and legal entities as well as deposit and participation fund acceptance, transaction based on credit cards.	12
Retail	Intermediation activities outside of corporate banking	12

Intermediation		
Commercial banking	Cash and non-cash loan extensions amounting one million Euros or an equivalent money or in a higher amount, factoring, forfeiting, financial leasing and external trade transactions.	15
Clearing and Payments	Intermediation transactions in bill payments, money transferring services, clearing services.	18
• Agency Services	Insurance agency and individual pension intermediation services as well as safe deposit box and maintenance activities	15
Asset Management	Fund management	12

(4) In matching by the bank of the sums of gross revenues as per sub-paragraph (c) of the third paragraph;

a) Where it is not possible to do direct matching with the operations indicated by the first paragraph, whether there are any operations supporting such operations is evaluated and it is included in revenues generated from such operations.

b) If it is revenue generated from several branches of operation, it is included in calculation as the revenue generated from operation having the biggest contribution.

#### **Alternative method and implementation criteria**

**ARTICLE 17- (1) (Amended article :OG-10/10/2007-26669)** *The sum as a basis for operational risks under the alternative method is calculated by taking as basis three and a half per cent of year-end balances of loans and other receivables covered by the scope of retail and commercial banking for each year instead of annual gross income amount of the said activity branches relating to each year pursuant to the procedures and principles stipulated in the first and second paragraphs of Article 16.8*

(2) The criteria indicated by the third paragraph of Article 16 are considered over evaluation of permission applications made to the Agency for use of this method. To be eligible for making an application for permission, the bank must have generated minimum ninety per cent of annual gross revenues to be calculated subject to the procedures and principles indicated by the second paragraph of Article 15 through the operating branches of retail and commercial banking and this must be certified by an independent audit report.

## **PART FIVE**

### **Capital Adequacy Standard Ratio and Consolidated Capital Adequacy Standard Ratio**

#### **Calculation of Capital adequacy standard ratio**

**ARTICLE 18- (1)** It is obligatory to affix and sustain the capital adequacy standard ratio to minimum eight percent.

(2) Capital adequacy standard ratio is calculated based on the principles determined in the Capital Adequacy Analysis Form within Annex-2 and considering the explanations given within the Annex-1. In calculating the capital adequacy standard ratio, data arranged according to the principles and procedures determined within the regulations entered into force pursuant the Law.

#### **Standard ratio and calculation of consolidated capital adequacy**

**ARTICLE 19- (1)** It is essential hat the standard ratio of consolidated capital adequacy is achieved and maintained at minimum eight per cent.

(2) After balance sheet and extra balance sheet accounts of partnerships subject to consolidation are combined by the banks having the status of a parent shareholder as per the law and relevant sub-arrangements and an obligation to prepare consolidated financial sheets in accordance with the principles for preparation of consolidated financial sheets, with any elimination operations having also been conducted, the standard rate of consolidated capital adequacy is calculated by considering the explanations provided under Annex 1 according to the principles laid down by the Consolidated Capital Adequacy Analysis Form in Annex 3.

8 Before the amendment (OG-10/10/2007-26669): (1) The sum as a basis for operational risks under the alternative method is calculated multiplying the value found adding three and a half per cent of the last three year average to be established on the basis of the year end balances of credits and other credits covered by the scope of retail and commercial banking to the average of the sums of annual gross revenues for the last three years to be calculated subject to the procedures and principles indicated by Article 16, excluding the branches of operation listed by the first paragraph of Article 16.

(3) Factoring receivables of non-banking financial organizations subject to consolidation and items concerning various loans and funds lent are indicated as part of the items of credits on the subject analysis form.

### **Notification period and authorization for diversification**

**ARTICLE 20-** (1) (Amended article: OG-10/10/2007-26669) (1) Sheets concerning the capital adequacy standard ratio and consolidated capital adequacy standard ratio are drawn up on the basis of the periods of calculations of equity and consolidated equity indicated by the Regulation on Equity of Banks published in the Official Gazette dated November 01, 2006 and Nr. 26333 and the statement relating to capital adequacy standard ratio is sent to the Agency within thirty days following the period and the statement relating to the consolidated capital adequacy standard ratio is sent to the Agency within seventy-five days following the period.<sup>9</sup>

(2) The Board may decide to increase the minimum ratio of capital adequacy and minimum ratio of consolidated capital adequacy by considering internal systems and asset and financial structures of banks, to implement different ratios on the basis of individual banks and differentiate the periods of calculation and submission.

## **SECTION SIX**

### **Miscellaneous and Final Provisions**

#### **Non-Compliance with proportional limits**

**ARTICLE 21-** (1) In the event that either of the standard rate of capital adequacy and standard rate of consolidated capital adequacy falls below the minimum limit, it is essential

that the minimum limit be ensured within a time limit of not more than six months as determined by the Board from the period of calculation.

(2) In the event that it is established during inspections to be made that fictitious transactions have been made for the purpose of meeting the standard rates regulated by this Regulation, the standard rates concerning the relevant period is re-calculated by deducting any sums corresponding to such transactions off the assets and obligations retrospectively.

### **Transactions, accounts and financial instruments of a particular nature**

**ARTICLE 22-** (1) The procedures and principles for consideration of any transactions, accounts and financial instruments in calculation of the standard rates of consolidated and non consolidated capital adequacy are regulated by communiqués.

### **Regulation**

**abolished**

*9 Before the amendment (OG-10/10/2007-26669): (1) Sheets concerning the standard rate of capital adequacy and standard ratio of consolidated capital adequacy are drawn up on the basis of the periods of calculations of equity and consolidated equity indicated by the Regulation on Equity of Banks and sent to the Agency within one month following the indicated dates at the latest.*

**ARTICLE 23-** (1) Regulation on the Measurement and Evaluation of the Banks' Capital Adequacy, published within the Official Gazette Nr. 24657 dated January 31, 2002 is abrogated.

### **Transitory and Definitive Guarantee Letters and Letters of Credit**

**TRANSITORY ARTICLE 1-** (1) In application of Annex-2 and Annex-3, until the date of January 1<sup>st</sup> 2008;

a) Transitory and definitive guarantee letters are exposed to risk weight by twenty percent,

b) Letters of credit are exposed to risk weight,

excluding the ones which may be exposed to a lower risk weight.

## **Enforcement**

**ARTICLE 24-** (1) Articles 14, 15, 16 and 17 of this Regulation will become operative on June 1<sup>st</sup>, 2007.

## **Execution**

**ARTICLE 25-** (1) The provisions of this Regulation are conducted by the Chairman of Banking Regulation and Supervision Agency.

## **Official Gazette in which the Regulation was published**

## **Official Gazette in which the Legislation amended by the Regulation was published**

<b>Date</b>	<b>Number</b>
1/11/2006	26333

<b>Date</b>	<b>Number</b>
1- 10/10/2007	26669
2- 22/3/2008	26824