

# Finansinspektionen's Regulations

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## Finansinspektionen's Regulations and General guidelines governing capital adequacy and large exposures;

**FFFS 2007:1**

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decided on 22 January 2007.

Finansinspektionen prescribes<sup>1</sup> the following pursuant to sections 32–34 of the Capital Adequacy and Large Exposures Ordinance (2006:1533).

Finansinspektionen also provides *general guidelines* following the respective section of the regulations.

### Part A Scope and definitions

#### Chapter 1 Scope

**Section 1** These regulations and general guidelines shall be applied by the institutions referred to in the Capital Adequacy and Large Exposures Act (2006:1371). The rules also apply to financial groups, unless otherwise specified.

However, the rules in section L shall only be applied by institutions and financial groups that are applying for or have received permission to use advanced methods.

**Section 2** Capital requirements shall be calculated in accordance with the trade day principle. This means that the calculation of the capital requirement shall include all closed trades even if the institution, on the calculation date, has not booked the transactions in its day books.

**Section 3** The provisions for securitisation in the Capital Adequacy Act and these regulations shall not be applied by institutions that during 2007 utilise the possibility in section 6, first paragraph, first sentence of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371). Finansinspektionen may, however, after the application from an institution determine that the institution shall apply the regulations for securitisation during 2007.

**Section 4** An institution that is referred to in section 5 of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371) shall calculate own funds in accordance with the provisions for own funds in the Capital Adequacy Act and these regulations.

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<sup>1</sup> Cf. European Parliament and Council Directive (2006/48/EG) of 14 June 2006 on the taking up and pursuit of the business of credit institutions (recast) (EUT L 177, 30.6.2006, p. 1, Celex 32006L0048) and European Parliament and Council Directive (2006/49/EG) of 14 June 2006 on capital adequacy of investment firms and credit institutions (recast) (EUT L 177, 30.6.2006, p. 201, Celex 32006L0049).

## Chapter 2 Definitions

**Section 1** In these regulations and general guidelines the terms and designations shall mean the following:

*Payment leg:* the payment leg in a transaction with a derivative contract that entails an exchange of a financial instrument for payment, excepting options or other similar instruments. Transactions in which the exchange consists of payment against payment shall be considered to have two payment legs. A payment leg consists of the agreed gross payments, including the transaction's notional amount.

*Clearing organisation:* a company that has permission to operate clearing activities pursuant to Chapter 8 of the Securities and Clearing Operations Act (1992:543) and a foreign clearing organisation that has permission to operate corresponding activities.

*One-sided credit valuation adjustment:* a credit valuation adjustment that only reflects the market value of the counterparty's credit risk for the institution.

*Exposure amount:* the value of an exposure in accordance with either Chapter 15 or 40 depending on whether the standardised approach or IRB approach is used. The exposure amount for large exposures is determined in accordance with Chapters 34–35

*Distribution of exposures:* the forecast probability distribution of net market values generated when forecast net negative market values are set equal to zero in the distribution of market values.

*Financial groups:* in addition to that set out in Chapter 9, section 1 of the Capital Adequacy Act, this also includes that set out in section 9, section 2, first paragraph, lines 1–2a of the same Act.

*Collective Investment Undertaking (CIU):* an investment fund pursuant to the Swedish Investment Funds Act (2004:46) or a foreign equivalent.

*Loss given default (LGD):* the portion of the exposure amount the institution loses in the event of default. LGD is expressed as a percentage.

*Group of associated clients:* the concept referred to in Chapter 7, section 4 of the Capital Adequacy Act.

*Capital Adequacy Ordinance:* Capital Adequacy and Large Exposures Ordinance (2006:1533).

*Capital Adequacy Act:* Capital Adequacy and Large Exposures Act (SFS 2006:1371).

*Capital market-driven transaction:* a contract that confers upon the institution the right to regularly receive margin for any net claim of the contract.

*K<sub>irb</sub>:* 8% of the risk-weighted exposure amounts that would have been calculated for the securitised exposures in accordance with sub-part L1 had they not been securitised plus the expected losses associated with these exposures.

$K_{irbr}$ : the ratio between  $K_{irb}$  and the sum of the exposure amounts of the exposures that have been securitised.  $K_{irbr}$  is expressed in decimals.

*Conversion factor*: the portion of an off-balance sheet commitment drawn in the event of a future default. The conversion factor is expressed as a percentage.

*Cash assimilated instrument*: certificate of deposit issued by the institution with a maximum original maturity of one year.

*Short position*: a position which decreases in value when the value of the instrument or underlying asset increases. A short position also means a position that confers upon or may confer upon an institution the right or obligation to deliver an asset.

Bought put options and sold call options are considered a short position.

*Credit enhancement*: a contractual arrangement whereby the credit quality of a position in a securitisation is improved in relation to what it would be if the enhancement were not provided. This includes the enhancement provided by more junior tranches in the securitisation and other types of credit protection.

*Credit quality step*: the steps in the scales Finansinspektionen uses, in accordance with Chapter 4, section 13 of the Capital Adequacy Act, to assign the credit assessment from eligible credit assessment institutions into classes that correspond to the credit quality. There are different scales, depending on where the credit assessments are used.

*Credit valuation adjustment*: an adjustment to the mid-market valuation of a portfolio of transactions with a counterparty. This adjustment reflects the market value of the current credit risk and it may reflect the market value of the counterparty's credit risk or the market value of the credit risk of both the institution and the counterparty.

*Liquidity facility*: a securitisation position arising from a contractual agreement to provide funding to ensure timeliness of cash flows to investors.

*Long position*: a position which increases in value when the value of the instrument or underlying asset is increases. A long position also means a position that confers upon or may confer upon an institution the right or obligation to acquire an asset.

Bought call options and sold put options are considered a long position.

*Margin agreement*: an agreement between two parties under which one party shall provide collateral to the second party when the exposure of the second party to the first party exceeds a level specified in the agreement, and vice versa.

*Margin agreement's threshold value*: the highest allowable value of an exposure before one party, in accordance with the margin agreement, has the right to call for the other party to provide collateral.

*Margin lending*: a transaction on the capital market in which an institution grants credit in connection with the purchase or sale of securities and where the counterparty provides collateral for this credit.

*Margin period of risk:*

the period of time from the last exchange of collateral covering a netting set of transactions with a defaulting counterparty until that counterparty is closed out and the resulting market risk is re-hedged.

*Market risk:* interest rate, share price, commodities price and foreign exchange rate risks.

*Distribution of market values:* the forecast probability distribution of the net market values of transactions within a netting set for some future date (forecasting horizon).

*Peak exposure:* a high percentile of the distribution of exposures at any time before the maturity date of the longest transaction in a netting set.

*Sponsor:* an institution other than an originator that establishes and manages an ABCP programme or other securitisation scheme that purchases exposures from third party entities.

*Counterparty risk:* the risk that the counterparty to a transaction will default before the final settlement of the transaction's cash flows.

*Netting set:* a group of transactions with a counterparty subject to a bilateral netting agreement that meets the requirements set out in Chapter 26 or 56. For all other transactions, each transaction shall constitute a netting set.

*Originator:*

1. a company which directly or indirectly was involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the exposure being securitised; or
2. a company which purchases a third party's exposures onto its balance sheet and then securitises them.

*Securitisation position:* an exposure to a securitisation.

*Asset-backed commercial paper programme (ABCP-programme):* a securitisation scheme in which the securities issued mainly comprise commercial paper with an original maturity of one year or less.

*Regulated market:*

1. in Sweden: a stock exchange or authorised market place pursuant to the Securities Exchange and Clearing Operations Act (1992:543), or
2. in another country: a stock exchange or other similar market place which is under the supervision of a regulatory authority or other competent body, and with respect to regulation and function substantially corresponds to what applies for a firm as set out under point 1.

*Probability of Default (PD):* the probability that a counterparty or exposure will default over a one-year period. PD is expressed as a percentage.

*Servicer:* a firm, other than the institution, which manages a pool of purchased receivables on a day-to-day basis on behalf of a third party.

*Securitisation special purpose entity*: a corporation or other legal entity created to carry out one or several securitisations. The special purpose entity may not be an institution or carry on activities other than those required to accomplish this special task. Its structure shall be designed to isolate its obligations from those of the originating institution. Holders of beneficial interests in the special purpose entity shall have the right to pledge or exchange those interests without restriction.

*Specific wrong-way risk*: the risk that arises when a positive correlation exists between the size of exposure towards a particular counterparty and the probability of this counterparty defaulting. An institution is exposed to a specific wrong-way risk if the future exposure to a particular counterparty is expected to be large during periods when the counterparty's probability of default is also high.

*Clean-up call option*: a call option held by the originator that gives the right to repurchase or extinguish remaining securitisation positions before all of the underlying exposures have been repaid when the amount of outstanding exposures or the remaining positions fall below a specified level.

*Synthetic securitisation*: a securitisation where tranching is achieved using credit derivatives or guarantees, at the same time that the underlying exposures remain on the balance sheet of the originator.

*Traditional securitisation*: a securitisation involving the economic transfer of the exposures being securitised to a securitisation special purpose entity which issues securities. This shall be accomplished by transferring ownership of the securitised exposures from the originator or through sub-participation. The issued securities shall not entail any payment obligations for the originator.

*Tranche*: a contractually established segment of the credit risk associated with an exposure or pool of exposures, where a position in the segment entails a risk of credit loss greater than or less than a position of the same amount in any other such segment without taking account of credit protection provided by third parties directly to the holders of positions in the segment or in other segments.

*Dilution risk*: the risk that the amount of an acquired receivable is reduced through credits, cash or other form to the obligor.

*Reversed repurchase agreement*: an agreement related to the purchase of a security in which the buyer undertakes to sell back the paper within a certain period at an agreed price.

*Repurchase agreement*: an agreement related to the sale of a security in which the seller undertakes to repurchase the paper within a certain period at an agreed price (repurchase agreement).

*Excess spread*: Finance charge collections and other fee income received in respect of the securitised exposures net of costs and expenses.

*Method based on the internal ratings based approach (IRB approach)*

**Section 3** In these provisions, the method for calculating capital requirements for credit risks referred to as the internal method in Chapter 4, section 7 of the Capital Adequacy Act is called the internal ratings-based approach (IRB approach).

The foundation internal method in accordance with Chapter 4, section 7 of the Capital Adequacy Act means that an institution only estimates the PD risk

parameter. The advanced internal method in accordance with Chapter 4, section 7 of the Capital Adequacy Act means that, in addition to PD, an institution estimates one or more of the following parameters: CF, LGD and M.

#### *Credit derivatives*

**Section 4** Credit derivative refers to a financial contract, usually bilateral, which is designed to transfer the credit risk in a loan, bond or other asset from one party (the protection purchaser/the risk seller) to another (the protection seller/risk purchaser). The different types of credit derivatives are credit default swaps, credit linked notes and total return swaps. *Appendix 1* contains a more detailed description of these types of credit derivatives.

Reference asset refers to the asset, the deteriorating credit quality of which means that the credit derivative becomes due for payment, i.e. the asset for which the credit risk is transferred through the contract. The reference asset may be a loan, a bond or, in some cases, a basket of assets.

Protected asset refers to the asset that the credit derivative is intended to protect, i.e. the asset for which the protection purchaser wants to hedge the credit risk. A protected asset does not necessarily need to be identical to the asset to which the credit derivative refers, i.e. the reference asset.

Credit event refers to an event that affects the reference asset's credit quality and means that the credit derivative becomes due for payment (credit event payment). Items constituting a credit event are agreed in the contract between the parties and may cover one or more events. Examples of credit events are bankruptcy, failure to pay, a payment moratorium, payment rescheduling and a credit rating downgrade.

### **Chapter 3 Trading book and non-trading activities**

#### **What is included in the trading book?**

**Section 1** General provisions regarding the positions that shall be assigned to the trading book are contained in Chapter 1, sections 7–9 of the Capital Adequacy Act. Supplementary provisions are stated below.

#### **Internal hedges**

**Section 2** Internal hedges may be assigned to the trading book in accordance with the conditions contained in section 3. Internal hedge means a position that completely or materially offsets the risk in one or more positions assigned to non-trading activities.

The capital requirement for the position assigned to non-trading activities, i.e. the position to be protected, is not affected by an internal hedge being assigned to the trading book.

**Section 3** In order for a position which is an internal hedge to be assigned to the trading book, the following conditions shall be met:

1. The position shall be held with trading intent in accordance with Chapter 1, section 8 of the Capital Adequacy Act.
2. The primary reason for the position may not be to avoid or reduce the capital requirement.

3. The position shall have been entered into on market conditions.
4. The position shall be valued in accordance with Chapter 12, sections 4–11.
5. The market risk of the position shall be managed and monitored in the same way as other trading book positions and within the set limits.

### **Excess liquidity**

**Section 4** If an institution places its excess liquidity – that is normally managed as a part of the institution’s liquidity management – in financial instruments or commodities and the intent of these investments is to trade in those financial instruments or commodities with the purpose of benefiting from short-term variations in market interest rates/prices in the way that characterises a trading book in accordance with the definition set out in Chapter 1, sections 7-8 of the Capital Adequacy Act, these investments shall be included in the institution's trading book.

If the scope of such investments, on their own or together with holdings in other financial instruments or commodities held with the same intent and therefore also included in the trading book, does not exceed the limits set out in Chapter 2, section 6 of the Capital Adequacy Act, the institution may apply for permission from Finansinspektionen in accordance with the above Act to calculate the capital requirement for such investments in accordance with the provisions on the capital requirement for risks in non-trading activities.

An institution that invests its excess liquidity in financial instruments or commodities where the intent of such investments is not to trade shall assign such investments to its non-trading activities (see section 5) and calculate the capital requirement in accordance with the provisions on capital requirement for risks in non-trading activities.

### **Definition of non-trading activities**

**Section 5** The positions and exposures not assigned to the trading book according to the definition set out in Chapter 1, sections 7-9 of the Capital Adequacy Act are included in the groups of exposures for which the provisions on the capital requirement in Chapter 4, section 1 of the Capital Adequacy Act apply, i.e. for risks in non-trading activities. In these Regulations and General Guidelines such exposures are called “Non-trading activities”.

A position in an individual financial instrument or a commodity cannot be assigned to both the trading book and non-trading activities at the same time. However, the same types of financial instruments or commodities may appear in both the trading book and non-trading activities.

### **Current trading account**

**Section 6** Receivables and liabilities in the current trading account arising in conjunction with trades in the name of the institution but on behalf of a client, i.e. commission transactions, shall be treated in the context of capital adequacy when calculating the capital requirement in the same way as exposures pursuant to the rules on settlement risks and counterparty risks in Chapter 13.

**Documented intent with holdings in the trading book**

**Section 7** The institution shall establish a policy document that shows which financial instruments/commodities or portfolios of such financial instruments/commodities are to be assigned to the trading book and non-trading activities. The policy document shall also indicate in which circumstances internal hedges are permitted.

The intent of the holding of a financial instrument or commodity shall be established by the date of acquisition at the latest. Deviation from this stated policy is only permitted under the circumstances contained in section 8.

The institution's internal audit function shall regularly review the compliance with the policy document.

**Transfers between the trading book and non-trading activities**

**Section 8** Transfers from the trading book to non-trading activities and vice versa shall only occur in exceptional cases and where there is specific cause. Individual positions may only be transferred in or out of the trading book in accordance with a policy document established by the institution. The policy document shall show how completed transfers are to be documented.

The policy document shall show which criteria shall be met to allow transfers between the trading book and non-trading activities.



## **Part B Reporting**

### **Chapter 4 Reporting**

#### **Obligation to report**

**Section 1** An institution or a financial group shall report to Finansinspektionen information about the calculation of own funds, capital requirements and large exposures in accordance with the form in *Appendix 2* that is available on Finansinspektionen's web page.

**Section 2** If a financial group exists in accordance with Chapter 9, section 2, first paragraph, lines 1-2a of the Capital Adequacy Act, the institution referred to in Chapter 9, section 3 of the same Act shall be responsible for the group's reporting as set out in section 1.

#### **Reporting dates**

**Section 3** The information in accordance with section 1 shall be reported as of 31 March, 30 June, 30 September and 31 December (balance sheet dates). Finansinspektionen shall have received the report at the latest by 30 April, 10 August, 31 October and 31 January, respectively. If the balance sheet date coincides with the annual accounting date, Finansinspektionen shall receive the report no later than the twentieth banking day of the second month following the balance sheet date.

Investment firms which according to Chapter 2, section 5, first paragraph, point 2 of the Securities Business Act (1991:981) and Chapter 5, section 1, second paragraph of the same act, shall have own funds corresponding to at least EUR 730,000, and which have not been granted an exemption in accordance with Chapter 2, section 5, second paragraph of the aforementioned act, shall, in addition, as of the last day of every month on reporting dates other than those set out in the previous paragraph, provide information about own funds and the sum of the capital requirements. Finansinspektionen shall have received the report from these investment firms no later than the twentieth banking day in the month after each balance sheet date.

#### **Conversion of assets and liabilities in foreign currency**

**Section 4** The information specified in section 1 shall be provided in SEK.

**Section 5** Conversion of assets, liabilities and provisions as well as off-balance sheet positions and commitments in currencies other than SEK, shall be carried out using the current spot rates at the time of calculation. The conversion of all positions in foreign currency shall be carried out on the same date.

The conversion of positions in non-convertible currencies shall be carried out in consultation with Finansinspektionen.

The institution shall establish and document the principles for the conversion that shall take place in accordance with the first paragraph. The conversion principles established by the institution shall be applied consistently.

**Other**

**Section 6** A financial group that applies Chapter 5, section 2 shall, in the reporting form in Appendix 2, report information about capital requirements for the exposures that arise in the relevant subsidiaries at the appropriate places in the report. Information that falls outside of the areas in the report shall be reported in part B, row B34.

**Basis for reporting**

**Section 7** The data that serves as the basis for reporting to Finansinspektionen shall be documented in a manner that enables control at any time.

**Reporting using data media**

**Section 8** Finansinspektionen's regulations (FFFS 1996:7) regarding reporting using data media may be applied.

## **Part C Financial groups**

### **Chapter 5 Consolidation of financial groups**

#### **Consolidated accounts**

**Section 1** Provisions on consolidated accounts are set out in Chapter 9, section 9 of the Capital Adequacy Act.

##### *General guidelines*

Chapter 9, section 14 of the Capital Adequacy Act states that an exception can be made to the requirements for consolidated accounts, after obtaining the permission of Finansinspektionen, for a subsidiary or firm in which there is a participating interest, if such a firm is of negligible significance. Negligible significance in accordance with credit institution directive (2006/48/EC) means that the firm's total balance sheet total does not exceed EUR ten million or, if the sum is lower, does not exceed one percent of the total balance sheet total of the parent company or of the firm that has a participating interest.

If several firms, which are financial institutions or ancillary firms, separately have balance sheet totals less than EUR 10 million, but together have a balance sheet total exceeding that limit value, these shall be included in the consolidated accounts. However, Finansinspektionen can grant exceptions if the firms' combined balance sheet total does not exceed two percent of the parent firm's own funds and the firms separately are of negligible significance with regard to the objective of the supervision.

Regarding firms which have been granted an exemption from the consolidated accounts, it should be noted that in some cases there may be an obligation to make a deduction from own funds in both the parent company and the financial group in accordance with the provisions contained in Chapter 3, section 5 of the Capital Adequacy Act.

The definition of a participating interest in Chapter 1, section 5 of the Capital Adequacy Act also covers indirect holdings. Indirect holdings refer to the holdings of subsidiaries.

#### **Handling foreign subsidiaries**

**Section 2** A financial group that has foreign subsidiaries shall apply the rules of the Capital Adequacy Act and these provisions for all exposures in the group, unless otherwise indicated below.

A foreign subsidiary within the EEA that is part of a financial group, may, when calculating the group's capital requirements, be treated in accordance with the following provisions. After receiving permission from Finansinspektionen the provisions may also be applied to subsidiaries based in other countries.

The capital requirement for exposures in the foreign subsidiary may be calculated in accordance with the rules of the country in which the company has its registered office if the institution judges that these rules are equivalent to the rules in the Capital Adequacy Act and these provisions. If this opportunity is utilised, that

country's rules regarding the exposures to be assigned to the trading book shall be applied. Netting must not occur for long and short positions in the same financial instrument issued by an issuer outside the financial group and which are held by different firms within the same financial group. The netting is allowed, however, if a position belongs to the trading book in all of the relevant countries. If this method is utilised to include a foreign subsidiary, it shall be used consistently. The method may only be changed in exceptional circumstances if special grounds exist.

For foreign subsidiaries within the EEA that have applied for permission to apply the IRB approach in accordance with Chapter 10, section 5 of the Capital Adequacy Act, the following shall also apply when calculating the capital requirement for credit risk and counterparty risk. When determining the value of prescribed risk parameters, the foreign subsidiary may apply the rules of the country in which the subsidiary has its registered office. The rules that shall otherwise be applied to the subsidiary are determined in accordance with Chapter 10, section 5 of the Capital Adequacy Act.

When calculating own funds, the instruments which are included in the foreign subsidiary's own funds may only be included in the own funds of the financial group if these instruments fulfil the conditions applying to original own funds, additional own funds or ancillary own funds in accordance with the Capital Adequacy Act or these regulations. The calculation of own funds for the financial group thus shall comply with the regulations that apply for the Swedish parent company.

When calculating capital requirements and own funds the customary eliminations shall always be carried out.

#### **Other aspects of consolidation**

**Section 3** A firm's profit and loss statement, balance sheet and off-balance sheet commitments may, if there are special grounds and with the permission of Finansinspektionen, be included in the consolidated accounts on the basis of financial statements referring to another point in time than the reporting date.

**Section 4** When drawing up the consolidated accounts, firms that have shared or predominantly shared management in accordance with Chapter 9, section 1, first paragraph, lines 3 and 4 of the Capital Adequacy Act, shall be fully consolidated. Finansinspektionen can allow consolidation by another method where special grounds exist.

When there is a participating interest in an associated firm in accordance with Chapter 9, section 1, second paragraph of the Capital Adequacy Act and in cases referred to in Chapter 9, section 2, first paragraph, point 1 of the same Act, full consolidation shall take place. However, Finansinspektionen can allow consolidation in accordance with the proportional method or equity method in accordance with the Annual Accounts Act.

#### *General guidelines*

In accordance with Chapter 9, section 10 of the Capital Adequacy Act, subsidiaries that are part of a financial group shall be fully consolidated. However, if there is a participating interest in a firm in which there is shared management and limited liability the proportional method shall be used.

However, in certain cases Finansinspektionen can allow consolidation using the proportional or equity method. Such permission can be given to a firm which is part of the financial group as a result of a participating interest existing in the firm (other than a shared management and limited liability, see Chapter 9, section 1, first paragraph, point 2 of the same Act). Given the aim of the provisions in the Act, it is likely that the proportional method will only be allowable in exceptional circumstances. However, for participating interests in associated firms that are pure data or service companies, the equity method should be permissible.

Permission to use the proportional or equity methods may include more detailed instructions on how to apply the methods in individual cases.

The provisions in the regulations related to the method of consolidation can be summarised as follows.

	Complete consolidation	Proportional method	Equity method
Subsidiary	X		
Participating interest with shared management and limited liability		X	
Other participating interests	X	1)	1) 2)

1) On obtaining Finansinspektionen's permission in each individual case.

2) Participating interests in pure data or service companies.

### Consolidated information

**Section 5** A holding company with mixed operations shall, on the dates and for the accounting periods determined by Finansinspektionen for each individual case, provide the following consolidated information:

- a) Information about the group's consolidated financial position.
- b) Information about the purchase and sale of assets between the holding company and the subsidiaries that are institutions (subsidiaries).
- c) Information about the receivables and liabilities between the holding company and subsidiaries.
- d) Information about agreements between the holding company and subsidiaries (e.g. cooperation or guarantee agreements).
- e) Information about commitments and any contingent liability between the holding company and subsidiaries (e.g. letters of guarantee or intent).
- f) Information in line with b–e regarding subsidiaries.

## Part D Own funds

### Chapter 6 Introductory provisions

**Section 1** Basic provisions regarding own funds are found in Chapter 3 of the Capital Adequacy Act.

This Part gives more detailed rules regarding the calculation of own funds.

**Section 2** The own funds of a parent firm or financial group may not include funds contributed by subsidiaries or firms in which there is a participating interest if the contributing firm is not covered by the consolidated accounts.

This also applies to contributions received from firms that are part of the financial group but which, with the permission of Finansinspektionen, have been excepted from the consolidated accounts.

**Section 3** Regarding the relationship between the different components of own funds, the following applies:

a) Perpetual subordinated loans and such, capital contributions and reserves that on obtaining permission from Finansinspektionen may be counted as additional own funds may be included in own funds up to a maximum of an amount equal to the institution's original own funds after the reductions of the original own funds in accordance with the Capital Adequacy Act and these regulations.

b) Debentures, subordinated loans and other debt securities with an original term of at least 5 years and with a claim subordinated to the institution's other creditors may be included in own funds up to a maximum of half of the institution's original own funds after the reductions of the original own funds in accordance with the Capital Adequacy Act and these regulations.

c) The total of the amount of the amounts included in additional own funds in accordance with a and b may not exceed the original own funds after the reductions of the original own funds in accordance with the Capital Adequacy Act and these regulations.

d) Ancillary own funds and additional own funds combined may at the most total the original own funds after the reductions of the original own funds in accordance with the Capital Adequacy Act and these regulations.

The calculation of the relationship between different parts of own funds in accordance with Chapter 3, section 1, second paragraph of the Capital Adequacy Act and in accordance with letters a–d shall be effected before deductions in accordance with Chapter 3, sections 5 and 7 of the Capital Adequacy Act and Chapter 9, section 11.

### Chapter 7 Original own funds

#### Equity or the equivalent

**Section 1** Only paid-up capital may be included in original own funds.

In a new share issue an institution that is a limited company may also count capital paid-in but not yet registered on the day of the report as equity shares.

## **Unconditional and conditional shareholders' contributions**

**Section 2** Unconditional shareholder contributions may be included in own funds as original own funds. Conditional shareholders' contributions may also be included in own funds as original own funds if their conditions state that the Annual General Meeting decides on the repayment of the contributions.

In order for an institution to include a shareholders' contribution in own funds, it must have been paid in to the institution or otherwise been credited to the institution.

## **Results according to annual accounts**

**Section 3** An institution may include profit as equity in accordance with the board's recommendations to the annual accounts, even if a company, savings bank or members' bank general meeting or equivalent has, on the day of the report, not yet decided that the profit, or part of the profit, shall be added to shareholders' equity or own funds in accordance with the board's recommendation. The institution shall notify Finansinspektionen if the general meeting or equivalent decides on an allocation of profits other than that recommended by the board.

**Section 4** An institution shall deduct the distribution of undistributed profits or other similar allocations of these funds that the board recommends from shareholders' equity.

**Section 5** An institution shall always deduct losses in accordance with the annual accounts from the original own funds even if the general meeting has not adopted the profit and loss statement and balance sheet before the date to which the report refers.

## **Profit in the current financial year**

**Section 6** Profit generated in the current financial year in an institution or financial group may be included in the own funds of the institution or financial group as original own funds, if the institution's external auditors have verified the profit for both the individual institution and the financial group. Profit refers to profit after estimated taxes.

External auditor's verification of profit means that the institution's external auditors, including the auditor appointed by Finansinspektionen, have examined the accounts that form the basis of the capital adequacy report for the institution or financial group. This review shall have at least the same scope as that contained in the recommendations of the Swedish Association of Authorised Public Accountants (FAR) for the General review of semi-annual and other interim reports.

An institution or financial group that later reports a smaller profit than what was most recently verified shall only include the smaller profit in the original own funds.

**Section 7** A deduction shall be made from the verified profit for the current financial year of an institution or financial group for as much of the annual cash dividend, or other similar allocations of these funds, bearing upon the current financial year for the period up to the relevant calculation date.

**Section 8** Losses arising from price adjustments or provisions to valuation reserves in accordance with Chapter 12 shall be deducted from the original own funds.

#### **Untaxed reserves**

**Section 8a** When calculating original own funds, an institution may include as equity 72% of the reserves, funds and untaxed reserves set out in Chapter 3, section 2, first paragraph of the Capital Adequacy Act.

#### **Financial assets available for sale**

**Section 9** Unrealised accumulated profit from equity instruments classified as available-for-sale financial assets may not be included in original own funds. However, those profits may be included in additional own funds.

Unrealised accumulated value changes to loans and receivables or other interest-bearing financial instruments, classified as available-for-sale financial assets, may not affect the size of own funds other than for value changes reported as write-downs or reversed write-downs in the profit and loss statement.

Deferred taxes shall be taken into account when applying the first and second paragraphs.

#### *General guidelines*

Equity instruments are defined in the International Accounting Standards Board's accounting standard IAS 32 Financial Instruments: Disclosure and presentation.

“Loans and receivables” and “available-for-sale financial assets” are defined in the International Accounting Standards Board's accounting standard IAS 39 Financial Instruments: Recognition and measurement.



## **Investment property and tangible non-current assets**

**Section 10** Unrealised accumulated profit from investment property and tangible non-current assets at fair value, may not be included in original own funds. However, these profits may be included in additional own funds.

With regard to investment property and tangible non-current assets measured at cost, positive value changes arising when new accounting rules are first applied and where the fair value is used as the new acquisition value may not be included in original own funds. However, such value change may be included in additional own funds after the depreciation and write-downs of the value change has been taken into account. The new accounting rules refer to Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards.

Deferred taxes shall be taken into account when applying the first and second paragraphs.

## **Unrealised value changes in financial liabilities due to changes in own creditworthiness**

**Section 11** If financial liabilities that are not held for trade or are not the subject of an effective and documented fair value hedge are reported at fair value, accumulated value change which can be assigned to changes in own creditworthiness shall not affect the size of own funds.

### *General guidelines*

This covers financial liabilities valued at fair value on the basis of the “fair value option” in IAS 39.

## **Reclassified items**

**Section 12** Original own funds may include items which according to older accounting rules would have been classified as equity, but under new accounting rules are classified as liabilities.

Original own funds may not include items which according to older accounting rules would have been classified as liabilities, but which according to new accounting rules are classified as equity.

New accounting rules means

1. Finansinspektionen's regulations and general guidelines regarding Annual Reports of Credit Institutions and Investment Firms (FFFS 2004:20) or accounting regulations replacing these regulations, and
2. Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards.

Older accounting rules means those referred to in lines 2-4 on the transitory provisions in Finansinspektionen's regulations and general guidelines regarding Annual Reports of Credit Institutions and Investment Firms (FFFS 2004:20).

*General guidelines*

Examples of reclassified items:

1. Member equity and non-voting equity in economic associations classified as equity according to older accounting rules, but which according to new accounting rules are classified as liabilities.
2. Preference shares classified as equity according to older accounting rules, but which according to new accounting rules are classified as liabilities.
3. An embedded derivative which according to older accounting rules was reported as part of an instrument classified as a liability, but which according to new accounting rules is classified as equity.

**Cash flow hedges**

**Section 13** Original own funds shall be adjusted for reported value changes in shareholders' equity arising from derivative instruments included in cash flow hedges so that value changes do not affect the size of the original own funds. With regard to value changes related to derivative instruments used in the cash flow hedging of available-for-sale financial assets, this adjustment shall only be carried out to the extent that the unrealised value changes of the cash flow hedged assets are not included in own funds after adjustment in accordance with section 10.

**Section 14** Finansinspektionen decides on exemptions from sections 9-13 if special grounds exist.

**Non-voting equity and other capital infusions and reserves**

**Section 15** In order for non-voting equity and other capital infusions set out in Chapter 3, section 4 of the Capital Adequacy Act to be included in own funds, the following general conditions shall be met. This applies to both original own funds and additional own funds.

The contribution shall

- have been paid in cash,
- have been taken up without collateral,
- be undated,
- in principle not be cancellable by the investor and not be repayable without the permission of Finansinspektionen,
- not have a guaranteed yield,
- have subordinated terms of payment, and
- be available to cover losses during current operations so that the institution does not need to enter liquidation.

With regard to Tier 1 capital contributions and other items that can be included in original own funds with the permission of Finansinspektionen, specific requirements are set out in sections 16–27. Specific requirements applying to different items that can be included in the additional own funds are set out in Chapter 8.

## **Specific conditions for Tier 1 capital contributions**

**Section 16** When calculating own funds, Tier 1 capital contributions may represent a maximum of 15 percent of the firm's original own funds after the reductions of original own funds in accordance with the Capital Adequacy Act and these regulations.

To be included in own funds for a financial group, the original own funds contribution shall have been taken up by the parent firm or a subsidiary subject to supervision.

When calculating the financial group's own funds, Tier 1 capital contributions taken up by a parent company and/or subsidiary may be a maximum of 15% of the group's original own funds after the reductions of original own funds in accordance with the Capital Adequacy Act and these regulations.

### *General guidelines*

Reductions of original own funds shall be made for losses during the current financial year, certain items in the net profit of an institution that acts as a securitisation originator, intangible non-current assets, goodwill, deferred tax assets and adjustments arising from the application of new accounting regulations.

**Section 17** Interest payment for Tier 1 capital contributions shall only be made if there are distributable funds available in the institution. If the payment of interest has not been possible because no distributable funds have been available, the payment of interest may, when it is resumed, not cover the period for which interest payments were not made. In other words, the interest conditions for the Tier 1 capital contribution shall not be cumulative.

**Section 18** An agreement for a Tier 1 capital contribution may contain conditions stipulating that the interest can be raised after a period, i.e. step-up conditions. Step-up may, at the earliest, occur ten years after a contribution has been taken up and shall only take place once.

Step-up may not result in the issuer's effective interest cost during the second period being greater than the index on which the interest is based after the step-up (stepped-up-index basis),

– plus the initial interest difference in relation to government borrowing with an equivalent term (initial index basis), i.e. credit spread,  
– minus the initial interest difference between the stepped-up-index basis and initial index basis, i.e. swap spread, plus

- a) 1.0 percentage points, or
- b) 50 percent of the initial credit spread.

### *General guidelines*

Example:

1. A bank initially takes up a Tier 1 capital contribution with fixed interest at an effective borrowing cost of 6.5 percent. After ten years the contribution changes to a variable interest rate based on STIBOR (stepped-up-index

basis). When the contribution is taken up the ten-year government bond (initial index basis) is traded at an effective rate of 5.5 percent and the STIBOR is 5.9 percent. The swap spread is 0.4 percent ( $= 5.9 - 5.5$ ).

Option a) The maximum permissible interest for the period after step-up is STIBOR + the initial credit spread ( $1.0 = 6.5 - 5.5$ ) – the swap spread (0.4) + 1 percentage point = STIBOR + 1.6 percent.

Option b) The maximum permissible interest for the period after step-up is STIBOR + the initial credit spread (1.0) – the swap spread (0.4) + 50 percent of the initial credit spread ( $0.5 \cdot 1.0$ ) = STIBOR + 1.1 percent.

2. A bank initially takes up a Tier 1 capital contribution with fixed interest at an effective borrowing cost of 6.5 percent. After ten years a step-up takes place but the contribution still has a fixed interest rate (stepped-up-index basis). When the contribution is taken up the ten-year government bond (initial index basis) is traded at an effective rate of 5.5 percent and the STIBOR is 5.9 percent. Because both the initial index basis and the stepped up index basis are the ten-year government borrowing cost, the swap spread is zero in this example.

Option a) The maximum permissible interest for the period after the step-up is  
6.5 + 1 percentage points = 7.5 percent.

Option b) The maximum permissible interest for the period after step-up is  
6.5 + 50 percent of the initial credit spread ( $0.5 \cdot 1.0$ ) = 7.0 percent.

**Section 19** The terms of the Tier 1 capital contribution agreement shall state that the contribution has subordinated terms of payment. A Tier 1 capital contribution can be considered equal (*pari passu*) with other such contributions in terms of preferential rights, but it shall be subordinated to all other borrowings or deposits.

**Section 20** The terms of the Tier 1 capital contribution agreement shall state that the contribution is unsecured and, in principle, open term.

**Section 21** For Tier 1 capital contribution to be considered open term, the interest rate may not be unreasonably high at the beginning of the term of the loan only to then fall drastically (step-down). A credit agreement structure with a high interest rate at the beginning of the term of the loan and a large decline in the interest rate later can be seen as a form of hidden amortisation of the loan.

**Section 22** A Tier 1 capital contribution which has been taken up or issued at a discount, may, when it is taken up or issued, be included in the original own funds at the most as the amount that the institution or borrowing received at that time. A Tier 1 capital contribution taken up or issued at a premium, may, when it is taken up or issued, be included in the original own funds at the most as the amount that the institution or borrowing received at that time.

**Section 23** The terms of the Tier 1 capital contribution agreement shall state that the investor has the right to repayment only if the issuer has been declared bankrupt or entered into liquidation.

After an application from the issuer and on obtaining Finansinspektionen's permission, a Tier 1 capital contribution may be repaid or repurchased. Such permission may be given at the earliest five years after the contribution has been taken up or issued. Permission from Finansinspektionen is also required when a

subsidiary of the institution acquires notes pertaining to a Tier 1 capital contribution taken up by the parent undertaking/institution.

Where special cause exists, Finansinspektionen may permit the Tier 1 capital contribution to be repaid or repurchased less than five years after the contribution was taken up or issued.

When applying for permission for the repayment or repurchase of a Tier 1 capital contribution, the institution shall describe how the repayment or repurchase will affect the institution's capital adequacy. In addition, the institution shall specify which capital requirement and own funds changes it expects in the short-term.

Finansinspektionen can give its permission if the institution's capital adequacy ratio is satisfactory in the long-term, even after the Tier 1 capital contribution has been repaid or repurchased. Otherwise, permission cannot be granted unless the Tier 1 capital contribution is replaced by at least an equal amount of capital of the same or higher quality. A new Tier 1 capital contribution may not have better preferential rights than the contribution which is to be repaid or repurchased.

**Section 24** Finansinspektionen can give general permission to an institution to repurchase a portion of an issued Tier 1 capital contribution intended for resale as part of securities-related operations. An institution that has received general permission shall deduct the portion of the contribution repurchased from the original own funds. When later selling the repurchased Tier 1 capital contribution notes, a corresponding amount may again be included in the original own funds.

### **Appropriating Tier 1 capital contributions to cover losses**

**Section 25** The terms of the Tier 1 capital contribution agreement shall state that the Tier 1 capital contribution, including accrued and unpaid interest, can be appropriated to cover losses, so the institution can, by doing so, continue its activities without having to go into liquidation.

**Section 26** An institution, which has drawn up a balance sheet for liquidation purposes and finds that it is thereby liable to go into liquidation, may appropriate all or part of a Tier 1 capital contribution, including accrued interest amounts, in order to restore shareholders' equity to a level equal to the registered share capital. The institution shall first appropriate the Tier 1 capital contribution and its accrued interest. Accrued interest shall be entered as liabilities before they can be appropriated. The Annual General Meeting shall decide whether the Tier 1 capital contribution and accrued interest entered as liabilities shall be appropriated. The decision of the meeting may, however, only be implemented after the auditors have examined the balance sheet and Finansinspektionen has given its permission.

Appropriation shall be irrevocable and final. Provisos regarding the right of lenders to future payment shall only cover cases in which the restitution of the appropriated amount can be made from distributable profits in accordance with an adopted balance sheet.

Interest shall at any time be charged only on the remaining portion of the Tier 1 capital contribution that has not been appropriated.

When the Annual General Meeting decides to appropriate all or part of the Tier 1 capital contribution, including accrued interest, in order to restore shareholders' equity, the General Meeting may also decide to enter a provision into the articles of association with the following content. The institution may not pay dividends or

make other repayment to shareholders before the appropriated Tier 1 capital contribution, including appropriated interest, has been re-entered as a liability.

### **Guarantee fund**

**Section 27** A paid up guarantee fund may, with Finansinspektionen's permission, be included as original own funds in own funds, if the conditions for the fund correspond to those set out in sections 15-26 for Tier 1 capital contributions.

### **Reserves for general banking risk**

**Section 28** Reserves for general banking risk that are openly reported by a foreign subsidiary to an institution and of the same quality as reserves made up of retained profits and that do not include the individually or collectively calculated, established or probable value reduction of specific receivables or groups of receivables may, with the permission of Finansinspektionen, be included in own funds as original own funds.

The reserves shall meet the following conditions.

- The reserves shall be made up of a provision from taxed profits or untaxed funds after the deduction of latent tax calculated in accordance with the tax rate applying in the country in which the subsidiary is taxed.
- The reserves shall be reported separately in the institution's public accounts.
- It shall be possible to, immediately and without limitation, appropriate the reserves to cover losses that arise.

Losses may not be offset directly against reserves and shall be reported openly in the profit and loss statement.

When applying for permission, the institution shall enclose annual accounts for the firm that indicate the method by which the reserves were formed and how these are reported after provision.

## **Chapter 8 Additional own funds**

### **Cumulative preference shares**

**Section 1** An institution may include cumulative preference shares in own funds as additional own funds on obtaining the permission of Finansinspektionen. In the application for permission, the institution shall report on the rules in the institution's articles of association regarding how the accumulation shall occur.

### **Revaluation reserve**

**Section 2** A revaluation reserve that has been formed in conjunction with the write-up of a fixed asset may, on obtaining permission from Finansinspektionen, be included in additional own funds. In the application for permission, the institution shall report on the circumstances that served as the basis for the establishment of the fund.

## **Guarantee funds**

**Section 3** A paid up guarantee fund may, on obtaining permission from Finansinspektionen, be included as additional own funds in own funds if the conditions for the fund correspond to those set out for perpetual subordinated loans in sections 5-16.

## **Expected loss amounts for institutions that apply the internal ratings-based approach**

**Section 4** If the expected loss amounts for exposures to corporates, exposures to institutions, exposures to governments and retail exposures are less than provisions and value adjustments, the difference may be taken into account in accordance with the second paragraph. Provisions and value adjustments shall be calculated in accordance with the accounting rules applied by the institution.

The difference may be included in own funds as additional own funds as a maximum of 0.6% of the total risk-weighted amount calculated in accordance with the internal ratings-based approach. The risk-weighted amount shall not include amounts for securitisation positions that have a risk weight of 1,250%.

## **Specific conditions for perpetual subordinated loans**

**Section 5** The general conditions set out in Chapter 7, section 15, also apply to perpetual subordinated loans.

**Section 6** A perpetual subordinated loan may contain conditions establishing how interest shall be determined during the entire term of the loan. Normally, the interest is given in relation to an interest base, for example STIBOR plus a margin.

**Section 7** If the credit agreement contains conditions that state that the interest shall be raised after a period of time (a step-up condition), such a condition may not result in an increase in the interest rate by more than 1.5 percentage points during the loan's entire term. In order to determine the size of the step-up, the first period's effective rate shall be compared with the subsequent coupon interest rates.

**Section 8** The terms of the perpetual subordinated loan agreement shall state that the issuer of the loan shall be able to defer payment of the interest on the debt, when

- the issuer (the company) reports a negative operating income, or
- the Annual General Meeting has decided not to pay a dividend.

The interest on the deferred amount of interest may at the most be three percentage points above the interest that otherwise applies to the loan.

**Section 9** The terms of the agreement shall state that the loan has subordinated terms of payment. With regards to preferential rights a perpetual subordinated loan can be considered equal (pari passu) to other perpetual subordinated loans, but not with fixed-term subordinated loans.

**Section 10** It shall be stated in the contract terms for a perpetual subordinated loan that the loan is unsecured and that it in principle has an open term.

**Section 11** For a perpetual subordinated loan to be considered open term, the interest rate may not be unreasonably high at the beginning of the term of the loan only to then decline drastically (step-down). A credit agreement structure with a high interest rate at the beginning of the term of the loan and a large decline in the interest rate later can be seen as a form of hidden amortisation of the loan.

**Section 12** A perpetual subordinated loan taken up or issued at a discount may, when it is taken up or issued, be included in the additional own funds to a maximum of the amount that the institution or borrower received at that time. A perpetual subordinated loan, taken up or issued at a premium, may, when it is taken up or issued, be included in the additional own funds to a maximum of the amount that the institution or borrower received at that time.

**Section 13** The terms of the perpetual subordinated loan agreement shall state that the investor has the right to repayment only if the issuer has been declared bankrupt or entered into liquidation.

After an application from the issuer and on obtaining Finansinspektionen's permission, a perpetual subordinated loan may be repaid or repurchased. Such permission may be given at the earliest five years after the loan has been issued. Permission from Finansinspektionen is also required in those cases where a subsidiary of the institution acquires notes pertaining to a perpetual subordinated loan issued by the parent undertaking/institution.

Where special cause exists, Finansinspektionen can permit the perpetual subordinated loan to be repaid or repurchased less than five years after the loan was issued.

When applying for permission for the repayment or repurchase of a perpetual subordinated loan, the institution shall describe how the repayment or repurchase will affect the institution's capital adequacy. In addition, the institution shall specify which short-term changes it expects to the capital requirement and own funds.

Finansinspektionen can give its permission if the institution's capital adequacy ratio is satisfactory in the long-term, even after the perpetual subordinated loan has been repaid or repurchased. Otherwise, permission cannot be given unless the perpetual subordinated loan is replaced by at least a corresponding amount of capital of the same or higher quality. A new perpetual subordinated loan may not have better preferential rights than the loan that is to be repaid or repurchased.

**Section 14** Finansinspektionen can give general permission to an institution to repurchase a portion of an issued perpetual subordinated loan intended for resale as part of securities-related operations. An institution that has received general permission shall deduct that portion of the loan repurchased from the additional own funds. When later selling the repurchased perpetual subordinated loan notes, a corresponding amount may again be included in the additional own funds.

#### **Appropriating additional own funds contributions to cover losses**

**Section 15** The terms of the perpetual subordinated loan agreement shall state that the perpetual subordinated loan, including accrued and unpaid interest, can be appropriated to cover losses so that the institution can, by doing so, continue its activities without having to enter into liquidation.



**Section 16** An institution which has drawn up a balance sheet for liquidation purposes and finds that it is thereby liable to go into liquidation may appropriate all or part of a perpetual subordinated loan, including accrued interest, in order to restore shareholders' equity to a level equal to the registered share capital. The institution shall in the first instance appropriate any Tier 1 capital contributions and their accrued interest. Accrued interest amounts shall be entered as liabilities before they can be appropriated. The Annual General Meeting shall decide whether the perpetual subordinated loan and accrued interest entered as liabilities shall be appropriated. The decision of the meeting may, however, only be implemented after the auditors have examined the balance sheet and Finansinspektionen has given its permission.

Appropriation shall be irrevocable and final. Provisos regarding the right of lenders to future payment shall only cover cases in which the restitution of the appropriated amount can be made from distributable profits in accordance with an adopted balance sheet.

Interest shall be charged only on the portion of the perpetual subordinated loan at any time that has not been appropriated.

The payment of interest, may, like the repayment of the appropriated amount, only be made from distributable profits. With regard to perpetual subordinated loans, the interest on the amount of interest calculated on the fictitious debt may not exceed by more than three percentage points the interest that otherwise applies to the loan.

When the Annual General Meeting decides to appropriate all or part of the perpetual subordinated loan, including accrued interest, in order to restore shareholders' equity, the General Meeting may also decide to enter a provision into the articles of association with the following content. The institution may not pay dividends or make other repayment to shareholders before the appropriated amount of the perpetual subordinated loan, including appropriated interest, has been re-entered as a liability, and the institution has also entered as a liability and paid an amount corresponding to the interest which – if appropriation for covering losses has not taken place – should have accrued and been paid on the loan.

#### **Fixed-term subordinated loans and other similar fixed-term promissory notes**

**Section 17** That indicated below regarding fixed-term subordinated loans with subordinated terms of payment also applies to other similar fixed-term promissory notes with subordinated terms of payment.

**Section 18** Fixed-term subordinated loans may be included in additional own funds if the loans are paid in cash and no collateral is posted for the loans.

**Section 19** The terms of the agreement shall state that the loan has subordinated terms of payment.

**Section 20** For a fixed-term subordinated loan to be included in additional own funds, the period from the issue date of the loan to the date at which the issuer may terminate the loan for early repayment shall be at least five years.

If an institution has issued a fixed-term subordinated loan with the right for the issuer to terminate the loan for early repayment, the date of this right (the call date) must form the basis for the calculation of the loan's effective term. However, this does not apply if agreed early repayment is conditional on Finansinspektionen's permission.

However, the term of a fixed-term subordinated loan issued before 1 January 1995 may be calculated in relation to the original maturity date, even if the loan has conditions allowing the issuer to terminate the loan for early repayment.

**Section 21** Fixed-term subordinated loans with a residual term less than five years, may be included up to a maximum of 20 percent of the notional value for each full year remaining until the maturity date.

**Section 22** The terms of the loan agreement shall state that the investor has the right to repayment before the agreed maturity date only if the issuer has been declared bankrupt or has entered liquidation.

**Section 23** In the event of the early repayment or repurchase of a fixed-term subordinated loan issued before 1 January 1996, Finansinspektionen shall be notified as soon as possible after the loan has been repaid.

With regard to fixed-term subordinated loans issued after 1 January 1996 the following applies. The permission of Finansinspektionen is required for early repayment on a date other than that when the issuer has the right to terminate the loan for early repayment (call date) or in the event of the repurchase of a fixed-term subordinated loan or if the agreement contains conditions stating that early repayment requires Finansinspektionen's permission.

When notifying or applying for permission for the early repayment or repurchase of a fixed-term subordinated loan, the institution shall describe how the repayment or repurchase will affect the institution's capital adequacy position. In addition, in both cases, the institution shall specify which capital requirement and own funds changes it expects in the short-term.

A condition for the repayment or repurchase is that Finansinspektionen judges the institution's capital adequacy ratio to be satisfactory in the long-term, even after the loan has been repaid or repurchased. Otherwise, repayment or repurchase may not take place unless the loan is replaced by at least a corresponding amount of capital of the same or higher quality. A new fixed-term subordinated loan may not have better preferential rights than the loan that is to be redeemed.

**Section 24** Finansinspektionen can give general permission to an institution to repurchase a portion of an issued fixed-term subordinated loan intended for resale as part of securities-related operations. An institution that has received general permission shall deduct the portion of the loan that was repurchased from the additional own funds. When later selling the repurchased subordinated loan notes, a corresponding amount may again be included in the additional own funds.

**Section 25** If a fixed-term subordinated loan is extended, the entire loan shall be considered to be a new loan. The residual term shall after the extension be at least five years in order for the loan, after the extension, to be included in the additional own funds.

**Section 26** Twenty percent of amounts that shall be amortised on a fixed-term subordinated loan may be included for each full year remaining until the amortisation date. A loan with several amortisations may therefore be included on the same conditions as if the corresponding amount had been taken up by several loans maturing on the respective amortisation dates.

**Section 27** If an institution has issued a subordinated loan with a VRN structure (variable rate note) which entails that the institution, in accordance with the terms

of the loan, is liable to redeem the notes of investors which do not accept the interest terms established on the interest fixing date, the institution may also include this subordinated loan in additional own funds, if the institution, in conjunction with the issuing of the subordinated loan, reached an agreement with a third party that it undertakes to take over the notes that the institution, according to the terms of the loan, is liable to redeem. Loans, as referred to here, may be included in additional own funds even if the agreement with the third party, as above, has not been reached, if the first interest rate adjustment date occurs at least five years from the issue date of the loan. The term of the loan shall then be calculated in relation to the first interest rate adjustment date.

**Section 28** Fixed-term subordinated loans, issued at a discount or premium, may, when issued, be included in additional own funds to a maximum of the amount that the institution or borrower received at that time.

## **Chapter 9 Deductions**

### **Negative goodwill**

**Section 1** Shortfalls/negative goodwill shall not be offset against surpluses/goodwill.

### **Net assets goodwill**

**Section 2** Net assets goodwill, for example excess amounts paid when acquiring a loan portfolio where the acquisition included taking over personnel, a register of customers, trademarks etc., shall, in accordance with the Capital Adequacy Act, be deducted from original own funds. If an institution has carried out depreciation and amortisation on the goodwill item over and above planned depreciation and amortisation, consideration must be taken of excess depreciation when calculating the amount to be deducted from the original own funds.

In relation to capital adequacy, goodwill refers to excess amounts that can be considered an intangible asset and cannot therefore be assigned to a specific acquisition asset or derived from a calculated yield from such an asset.

### **Deferred tax assets**

**Section 3** Deferred tax assets reported on the balance sheet shall be deducted from original own funds.

#### *General guidelines*

The Association for the Development of Generally Accepted Accounting Principles recommendation RR9 Income Taxes defines deferred tax assets.

### **Holdings in own shares**

**Section 4** Acquired own shares included in the institution's trading book shall be deducted from original own funds in accordance with the same principles that apply to other holdings of own shares.

### **Contributions**

**Section 5** Contributions in other forms according to Chapter 3, section 5 of the Capital Adequacy Act, refer to other risk-bearing capital than share capital, e.g. subordinated loans and paid-up guarantee funds and shareholder contributions given in the form of solvency contributions, and which, at the firm that provided the contribution, increased the book value of the shares in the firm that received the contribution and are included in the booked shareholders' equity of the latter.

### **Holdings in own subordinated loans and other subordinated promissory notes**

**Section 6** Subordinated loans, Tier 1 capital contributions and other subordinated promissory notes may be included in own funds only to the amounts placed in the market. This means that that portion of the issued subordinated loan or Tier 1 capital contribution not placed in the market, or which the institution has redeemed or repurchased – and where the institution has booked as an asset its own subordinated loan notes or other own debt instruments related to the loan or contribution – shall be deducted from the original or additional own funds when calculating own funds.

### **Equity in insurance companies**

**Section 7** If an institution owns an insurance company, or an equivalent foreign firm, a foreign reinsurance company or an insurance holding company which in turn owns another institution, this institution is covered by the capital requirement for the financial group, but not the insurance company. When making a deduction of the institution's contribution in accordance with the Capital Adequacy Act for both the institution and the financial group, this contribution is reduced by the amount that corresponds to the portion of the institution's book value for shares in the insurance company or equivalent foreign firm, foreign reinsurance company or the insurance holding company, which refers to the other institution. With regard to the financial group, in such cases the reported goodwill referring to that institution is deducted from the original own funds.

### **Plan assets and unreported pension liabilities**

**Section 8** If plan assets or equivalent rights to payment are valued on the balance sheet to an amount which exceeds related pension liabilities or other payments to employees, the difference shall be deducted from the sum of the original and additional own funds, after applicable deferred taxes. However, this does not apply to surpluses in pension foundations that can be appropriated through reimbursements in accordance with the Safeguarding of Pension Commitments etc. Act (1967:531).

The sum of the original and additional own funds shall also be reduced for, in accordance with applied accounting principles, an estimated negative net of actuarial gains and losses and with regard to other calculated increases in liability for payment to employees, which are not reported directly on the balance sheet or covered by related plan assets or corresponding payments in accordance with insurance policies. However, this does not apply if liabilities for pensions or other payments to employees are reported on the balance sheet with an amount of at least that which would have been reported had the institution applied calculation models in accordance with the Safeguarding of Pension Commitments Act etc., or the equivalent foreign rules on the safeguarding of pension commitments. This

exemption applies on condition that the institution's external auditors have verified the amounts.

Finansinspektionen decides on exemptions from the first and second paragraphs where special grounds exist.

#### *General guidelines*

The first paragraph means that surpluses in a defined benefit pension scheme may not be used to cover shortfalls in another pension scheme.

### **Large exposures**

**Section 9** Deductions from own funds shall be made for items for which an institution utilises the possibility set out in Chapter 7, section 6, first paragraph, point 4 of the Capital Adequacy Act.

### **Deductions with regard to securitisation**

**Section 10** Deductions may be made in accordance with Chapter 3, section 7 of the Capital Adequacy Act for securitisation positions that would otherwise be assigned the risk weight 1,250%.

### **Specific deductions when the internal ratings-based approach is used**

**Section 11** A deduction shall be made for the expected loss amount for equity exposures. In addition, a deduction shall be made for the difference if the expected loss amounts for exposures to corporates, exposures to institutions, exposures to governments and retail exposures in accordance with the internal ratings-based approach exceed provisions and value adjustments. Provisions and value adjustments shall be calculated in accordance with the accounting rules applied by the institution.

The deductions in accordance with the first paragraph shall be made as set out in Chapter 3, section 8 of the Capital Adequacy Act.

**Section 12** Chapter 13, section 77 states that a deduction from own funds in some cases shall be made on account of transactions in which the counterparty has not fulfilled its delivery/payment obligation.

## **Chapter 10 Ancillary own funds**

### **Net profit in the trading book**

**Section 1** Net profit, which can be assigned to an institution's trading book, may be included in ancillary own funds only if the same conditions apply as those set out in Chapter 7, sections 6–7 for including profit from the current financial year in original own funds. Net profit in the trading book may be included in ancillary own funds on condition that it has not already been included in original own funds.

When calculating net profit in the trading book, consideration shall also be taken of the costs that must be assigned to the trading book.

Profit and loss arising from price adjustments or provisions to valuation reserves in accordance with Chapter 12 and that have not already affected the original own funds shall influence net profit in the trading book.

### **Conditions for fixed-term subordinated loans**

**Section 2** Ancillary own funds may be comprised of a fixed-term subordinated loan if the subordinated loan is fully paid-up and the terms of the agreement state that the loan

1. has been taken up without collateral,
2. has subordinated terms of payment,
3. has an original term of at least two years,
4. cannot be repaid or repurchased before the agreed repayment date without the permission of Finansinspektionen, and
5. can be retained in the institution if the capital adequacy ratio does not allow the repayment of the loan.

Otherwise see the conditions applying to the loans in question in sections 3-6.

### **Early redemption and non-permitted payment of interest and repayment**

**Section 3** The loan agreement for a fixed-term subordinated loan shall state that the investor has the right to repayment before the agreed maturity date only if the issuer has been declared bankrupt or gone into liquidation. However, the fixed-term subordinated loan may, after application by the issuer and on obtaining the permission of Finansinspektionen, be repaid or repurchased before the agreed maturity date.

When applying for permission for the repayment or repurchase of a fixed-term subordinated loan, the institution shall describe how the repayment or repurchase will affect the institution's capital adequacy. In addition, the institution shall specify which changes it expects to the capital requirement and own funds.

In order for permission to be granted, the institution's capital adequacy ratio must be deemed to be satisfactory in the long-term, even after the loan has been repaid or repurchased.

The principal of a fixed-term subordinated loan may not be repaid, either early or on the maturity date, if the own funds of the institution or financial group would as a result be less than the total capital requirements. The same applies when paying the interest on such a loan. This must be stated in the terms of the agreement.

### **Notification about the repayment of subordinated loans**

**Section 4** An institution shall notify Finansinspektionen of the repayment or repurchase of subordinated loans that are estimated to entail that the own funds of the institution or financial group will be below 120% of the total capital requirements.

## **Other**

**Section 5** A fixed-term subordinated loan which is included in ancillary own funds may, when calculating ancillary own funds, be included at its entire book value throughout the term of the loan, given the limitations set out in section 7.

**Section 6** On the issue date of a fixed-term subordinated loan which, with regards to maturity and conditions, may be included in either additional own funds or ancillary own funds, the institution shall decide in which group the loan shall be included for capital adequacy purposes. After this decision, the loan may not be transferred to the other group without the permission of Finansinspektionen.

A fixed-term subordinated loan with an original term of at least five years and that was issued before 1 January 1996 may be included in ancillary own funds if the loan meets the requirements set out in section 2.

## **Limitations**

**Section 7** Ancillary own funds may equal a maximum of 60 percent of the total capital requirements for those risks in the trading book which may be covered by ancillary own funds, position risks, commodities risk and foreign exchange rate risk. Where special cause exists, Finansinspektionen can allow ancillary own funds in a credit institution to equal a maximum of 71 percent of these total capital requirements. With regard to investment firms, permission can be granted for a maximum of 67 percent.

## Part E External credit assessment

### Chapter 11 Use of external credit assessments

**Section 1** External credit assessments may be used to determine which credit quality step an exposure corresponds to. To determine this, the institution shall use the correspondence tables between the credit assessment institution's credit ratings and the steps in the credit quality scales determined by Finansinspektionen. This information is published on Finansinspektionen's website for all eligible external credit assessment institutions.

**Section 2** An institution may only use external credit assessments from those firms Finansinspektionen has approved as external credit assessment institutions. This applies to external credit assessments carried out on the initiative of the credit assessment institution itself, and to external credit assessments carried out at the behest of borrowers or other interested parties.

**Section 3** When determining the risk weight of an exposure, external credit assessments shall be used consistently and continuously. Credit assessments may not be used selectively.

**Section 4** When determining the credit quality step for an exposure, an institution may use external credit assessments from one or several firms.

**Section 5** An institution which uses external credit assessments for a particular exposure category shall use these credit assessments consistently for all exposures belonging to that category.

**Section 6** An institution may only use external credit assessments that take into account all amounts, i.e. principal and interest amounts, included in an institution's exposure.

**Section 7** If two external credit assessments are available and they correspond to different credit quality steps for one exposure, the worse of the two steps shall be applied.

If more than two external credit assessments are available for one exposure, the two assessments generating the best credit quality step shall be taken into account. If the two are different, the lesser of these shall be used.

**Section 8** If an external credit assessment exists for a specific issuing program or a facility to which the exposure belongs, this credit assessment shall be used to determine the exposure's credit quality step.

**Section 9** If an external credit assessment which can be applied directly to a particular exposure is not available but an external credit assessment exists for a specific issuing program or a facility to which the exposure does not belong, this credit assessment shall be used if

1. it produces a lower credit quality step than would otherwise apply, or
2. it produces a better credit quality step and the relevant exposure is ranked *pari passu* with the issuing program, facility or unsecured exposures of the issuer.

This applies even if a general external credit assessment is available for the issuer.



**Section 10** Sections 8 and 9 shall not preclude the application of the rules in Chapter 16, sections 35-37.

**Section 11** External credit assessments for an issuer within a group may not be used as a credit assessment for another issuer within the same group.

**Section 12** An external credit assessment for an exposure denominated in the obligor's domestic currency may not be used to determine the credit quality step for another exposure on that same party denominated in another currency.

An institution shall not apply this to exposures in the form of participation in loans issued by a multilateral development bank. The bank's preferred creditor status must be recognised in the market.

**Section 13** Short-term external credit assessments may be used for short-term exposures to institutions and corporates.

An institution may only use a short-term external credit assessment for the specific exposure to which it refers. The credit assessment may not be used to derive the credit quality step of other exposures.

**Section 14** When an institution uses a short-term external credit assessment to, with the aid of the exposure's credit quality step, determine the appropriate risk weight for the exposure, the following shall be observed.

Notwithstanding section 13, second paragraph, if an exposure with a short-term external credit assessment is assigned a risk weight of 150%, all unrated and unprotected exposures on that party shall be assigned a risk weight of 150%. This applies irrespective of whether the exposures are short-term or long-term.

Notwithstanding section 13, second paragraph, if an exposure with a short-term external credit assessment is assigned a risk weight of 50%, short-term unrated exposures on that party shall be assigned at least a risk weight of 100%.

## Part F Trading book

### Chapter 12 Management requirements for the trading book

**Section 1** An institution with a trading book in accordance with Chapter 1, sections 7-9 of the Capital Adequacy Act shall apply the provisions in this chapter.

#### Procedures for trading book positions

**Section 2** The institution shall have policy documents setting out the institution's strategy for trading of financial instruments and commodities. The policy document shall also stipulate how the institution shall follow up compliance with this strategy. The institution's management shall approve the strategy.

**Section 3** The institution shall have clear procedures for the management of trading book positions. These procedures shall be set out in the policy document. The policy document shall as a minimum show the following:

1. The limits for risk-taking.
2. In which circumstances the traders are free to enter into positions or manage existing positions.
3. How position-taking shall be regularly reported.
4. That the positions are actively monitored and an assessment is made of the marketability or hedgeability of the position.

#### Valuation of trading book positions

##### *General principles*

**Section 4** The institution shall have procedures and control systems that ensure that the values of trading book positions correspond to their current market values.

If the market provides easily accessible closing prices independent of the institution, these shall be used to value positions. This type of valuation is referred to as marking to market. Where marking to market is not possible, the institution may use a mark to model valuation, i.e. a valuation that is derived from market prices or other market parameters.

**Section 5** The institution shall specify in the policy document:

1. Which valuation principles the institution shall apply for the trading book positions.
2. From where the market prices and other market parameters that may be needed for the valuation shall be acquired, and when this shall be carried out.
3. Controls to verify that the market prices and other market parameters used in the valuation are correct.
4. How any adjustments to the market prices and market parameters are carried out.
5. How responsibility for the various steps in the valuation process is distributed within the institution.

**Section 6** The unit which is responsible for controlling market prices and other market parameters shall be independent of the position-taking units.

Controls of market prices and market parameters shall occur regularly, at least once every month.

**Section 7** Trading book positions shall be valued every day. An institution which received permission from Finansinspektionen in accordance with Chapter 2, section 6 of the Capital Adequacy Act to calculate capital requirements for trading book positions pursuant to the rules applying to the calculation of capital requirement for risks in non-trading activities are exempt from this rule. However, even if an institution has received such permission, a mark to market shall be carried out on trading book positions when calculating the capital requirement for foreign exchange rate risks in accordance with Chapter 32.

#### *Marking to market*

**Section 8** When marking to market, the more prudent of the bid or offer price shall be used. An institution which is a significant market maker in a particular type of financial instrument and which can close its positions in these instruments at the mid-market price may value these at the mid-market price.

#### *Marking to model*

**Section 9** An institution which marks to model shall meet the following requirements:

1. The institution's management shall know which financial instruments are subject to mark to model and be aware of the uncertainty this creates in the value of these financial instruments.
2. If there are accepted valuation models in the market, these shall be used.
3. If the institution has its own model, it shall have been developed or approved by a unit or function independent of the position-taking units. The assumptions and conditions upon which the model is based shall be evaluated by a person independent of the development process.
4. There shall be a formal procedure for changing the computer system which contains the model. A backup copy of the system shall be available.
5. The institution shall be aware of the weaknesses of the model and, if valuation adjustment is necessary, and if so how this shall be carried out.
6. The model shall be reviewed regularly.

#### *Price adjustments and provisions to value adjustment reserves*

**Section 10** The institution shall have procedures for evaluating the need for price adjustments and provisions to value adjustment reserves. The institution shall document which factors were evaluated.

For positions which the institution marks to model, the institution shall evaluate whether there is a need for price adjustments or provisions to value adjustment reserves due to shortcomings in the model.

**Section 11** In addition to that set out above in section 10, the institution shall consider these factors when determining the need for price adjustments or provisions to value adjustment reserves for positions which are illiquid:

1. How long it would take to close the position.
2. The spread of the bid price and offer price and the volatility of the spread.
3. The availability of market price information.
4. The extent of the trading of this type of financial instruments.
5. Market concentrations.

*Adjusting own funds*

**Section 12** The institution's own funds shall be adjusted for the profit or loss arising from price adjustments and provisions to value adjustment reserves in accordance with that set out in Chapter 7, section 8 and Chapter 10, section 1, third paragraph concerning own funds.

**Chapter 13 Risks in the trading book**

**Exceptions to the main rule regarding the calculation of capital requirements for risks in the trading book**

**Section 1** When calculating the values which form the basis for the granting of exceptions in accordance with Chapter 2, section 6 of the Capital Adequacy Act, all items on the balance sheet which are assigned to the trading book are held at their market value. Items on the balance sheet included in non-trading activities are held at their book value. All items and off-balance sheet commitments are held at their market value. The institution's positions shall be aggregated irrespective of whether they are long or short.

**Ancillary own funds to meet capital requirements for foreign exchange rate risks**

**Section 2** An institution which received permission from Finansinspektionen in accordance with the provisions in Chapter 2, section 6 of the Capital Adequacy Act may use ancillary own funds in addition to original and additional own funds to meet the capital requirement for foreign exchange rate risk which shall be calculated for all the institution's activities. The additional own funds to be used for this purpose may be included in the own funds in accordance with the restrictions in Chapter 10, section 7. The size of the additional own funds shall in this case be calculated only in relation to the capital requirement for foreign exchange rate risk.

**CIUs**

**Section 3** The capital requirement for general and specific risk for positions in CIUs shall, unless otherwise stated in the second and third paragraphs, be calculated by the market value of the position multiplied by 32%.

If there are foreign exchange rate risks in the CIU, the capital requirement for specific and general risk and for foreign exchange rate risk shall be a maximum of 40% of the market value. The capital requirement limitation for positions in CIUs also applies even if the institution uses its own risk calculation model in accordance with Chapter 59.

If the criteria in section 4 are met the institution may, when calculating specific and general risk, treat CIUs in accordance with sections 5-8.

**Section 4** Positions in CIUs may be treated in accordance with sections 5-8 if the following criteria have been met:

1. The CIU shall be managed by a company subject to supervision within the EEA.
2. The CIU's information brochure or equivalent documentation shall include:
  - a) the categories of assets in which the CIU is authorised to invest;

- b) how any investment limits on the CIU shall be calculated;
  - c) the CIU's rules for limiting counterparty risk in repurchase transactions and OTC derivatives if the CIU has the right to make such transactions;
  - d) how comprehensive the leverage may be if the CIU has the right to use leverage in investments.
3. Information about the CIU's activities and assets, liabilities and revenue shall be reported at least every six months.
  4. It shall be possible for CIU units to be redeemed in cash on a daily basis at the request of the unit holder.
  5. The positions in the CIU shall be separate from the fund manager's positions.
  6. The institution shall have evaluated the risks of investing in the CIU.

An institution may receive permission from Finansinspektionen to treat a CIU managed by a firm subject to supervision in a country outside the EEA in accordance with sections 5-8. The criteria in the first paragraph, lines 2-6 shall be met for permission to be granted. If such a CIU is approved in another EEA country and the criteria in the first paragraph, lines 2-6 have been met, the institution does not need to apply for permission in order to handle the CIU in accordance with sections 5-8.

**Section 5** Where the institution is aware of all positions included in the CIU, they may be treated as if they were held directly by the institution.

The netting of such positions against other positions held by the institution may be carried out in accordance with the provisions in sections 9 and 56. A condition for this is that the institution has a sufficient amount of CIU units for these to be converted into holdings in the financial instruments which are part of the CIU.

**Section 6** If a CIU replicates an index or a basket of securities, the institution may treat the holding in the CIU as if it had positions in the securities included in the index or basket. However, the following conditions shall be met.

1. In accordance with the CIU rules, the CIU shall aim to replicate an index or basket of securities.
2. The correlation coefficient between the daily price of the CIU units and the daily price of the index or basket shall be at least 0.9. The correlation coefficient shall be calculated on the basis of a minimum of six months.

**Section 7** If the institution is not aware on a day-to-day basis of the positions included in the CIU, the institution may treat holdings in the CIU as follows.

1. The institution shall assume that the CIU is investing to the maximum extent allowed under the law and fund rules in the asset classes attracting the highest capital requirement for specific and general risk. The institution shall then assume that the CIU is investing to the maximum extent allowed in the asset classes attracting successively lower capital requirement for specific and general risk. When calculating specific and general risk, the institution shall be considered to hold positions in all of these asset classes.
2. If investments are leveraged, the positions in point 1 above shall increase proportionally with the leverage.

Where the institution applies this method, the capital requirement for the position in the CIU shall not be more than it would have been had section 3 been applied.

**Section 8** The institution may allow the manager of the CIU to calculate the capital requirement for the holding in the CIU on behalf of the institution provided that it ensures that the manager correctly carries out the calculations set out in this

chapter. Calculations of capital requirements performed by the manager of the CIU shall be based on the CIUs actual positions.

## **Interest rate risks**

### **Calculating positions and netting long and short positions**

#### *General provisions*

**Section 9** Interest rate risks shall be calculated for positions in interest rate linked financial instruments included in an institution's trading book.

Calculating capital requirements for specific and general risk may be carried out on the institution's net positions in interest rate linked financial instruments. Net position refers to the difference between a long and a short position in financial instruments of the same type and issued by the same issuer. Same issuer refers to the same legal entity.

Financial instruments issued by different issuers may be treated in the same way as instruments issued by the same issuer on condition that a clearing organisation can confirm that bonds issued by these issuers are fully deliverable against one another. However, calculating the net positions for the specific risk may, in this exceptional case, only be carried out for long spot positions against short forward positions and/or positions in options.

Financial instruments are considered to be of the same type if they are denominated in the same currency and their coupons and maturities are the same. An institution may not net positions in financial instruments which are denominated in different currencies. The instruments shall also afford equal rights if the issuer enters liquidation.

Netting long and short positions in financial instruments shall be carried out in accordance with the conditions in this section. Supplementary regulations regarding the treatment of positions in different instruments are contained in sections 10–18.

#### *Treatment of derivative instruments*

**Section 10** Forwards and options shall be treated as combined long and short positions. With regard to the treatment of FRAs and swaps, see sections 13 and 14.

A long position in one of the aforementioned derivative instruments shall be treated as a combination of

- a long position comprised of the underlying debt instruments in the contract, and
- a short position corresponding to a zero coupon bond for which the forward price for forwards or the exercise price of options comprises the amount due of the bond and has a maturity date on the delivery date or exercise date for the contract.

A short position in one of the aforementioned derivative instruments shall be treated as a combination of

- a short position comprised of underlying debt instruments in the contract, and

– a long position corresponding to a zero coupon bond, for which the forward price for forwards or the exercise price of options comprises the amount due of the bond and has a maturity date on the delivery date or exercise date for the contract.

Long and short positions deriving from an option shall be delta-weighted in accordance with section 17.

A zero coupon bond deriving from the partition of derivative instruments into a long and a short position shall in this context be considered to be issued by a central government which qualifies for credit quality step 1, alternatively to have a risk weight of 0% in the standardised approach for credit risks.

Netting long and short positions in zero coupon bonds shall be carried out in accordance with section 9.

The positions which arise from the partitioning into long and short positions shall be included in the calculation of specific and general risk unless otherwise set out in the following sections.

#### *Interest-rate forwards*

**Section 11** The calculation of capital requirements for the specific risk of the underlying financial instrument shall be based on the issuer of the underlying instrument. Irrespective of whether it is long or short position, the capital requirement for specific risk in the zero coupon bond may be calculated in accordance with section 44.

With regard to forwards with a constructed underlying instrument and several deliverable bonds, the underlying instrument shall be made up of the bond which is cheapest to deliver.

#### *Forwards and options based on an index of interest rate linked financial instruments*

**Section 12** Forwards based on an index of interest rate linked financial instruments (including delta-weighted equivalents of options based on an index consisting of interest rate linked financial instruments) shall be treated as combined long and short positions in the same way as other derivative instruments, see section 10. A long or short position in such an index may be split up among the instruments included in the index. These instruments may be netted against opposite positions in the same financial instrument to that extent that the instrument is included in the index. Forwards based on an index consisting of interest rate linked financial instruments not split up among the instruments included in the index shall be treated as individual financial instruments.

The calculation of specific risk for both the underlying financial instrument and the zero coupon bond shall be carried out in accordance with section 10 and 11.

#### *FRA (forward rate agreements)*

**Section 13** A long (sold) position in a FRA shall be treated as a combination of a long position in a zero coupon bond with a maturity date corresponding to the settlement date for the FRA contract plus the number of days which correspond to

the maturity of the contract and a short position in a zero coupon bond which expires on the settlement date.

A short (purchased) position in FRA shall similarly be treated as a short position in a zero coupon bond with a maturity date corresponding to the settlement date coupon for the contract plus the number of days which correspond to the maturity of the contract and a long position in a zero coupon bond which matures on the settlement date.

The amount due for the zero coupon bond with a maturity date corresponding to the settlement date for the contract plus the number of days corresponding to its maturity shall be comprised of the contract's notional amount plus the agreed amount of interest. The amount due for the zero coupon bond which matures on the settlement date of the contract shall be comprised of the contract's notional amount.

These zero coupon bonds shall be considered to be issued by a central government which qualifies for credit quality step 1, alternatively to have a risk weight of 0% in the standardised approach for credit risk. Netting long and short positions in zero coupon bonds shall be carried out in accordance with section 9.

The capital requirement for specific risk in both long and short zero coupon bonds may be calculated in accordance with section 44.

#### *Interest rate and currency swaps*

**Section 14** An interest rate swap shall be considered to be a combination of a short and a long position. For example, an interest rate swap designed to give the holder variable interest while paying fixed interest is treated as a combination of a long position in a financial instrument with a variable interest rate maturing on the next interest rate adjustment date and a short position in a financial instrument with a fixed interest rate and the same maturity that applies to the swap.

A currency swap shall be considered a combination of a short and a long position in each currency. A currency swap in which the holder pays and receives a variable interest rate in different currencies shall be treated as a combination of a long and a short position in financial instruments with a variable interest rate maturing on the next interest rate adjustment date.

Capital requirements for specific risk in both long and short positions may be calculated in accordance with section 44.

#### *Currency forwards*

**Section 15** A currency forward shall be considered to be a combination of a long and a short position in a zero coupon bond in each currency.

The zero coupon bonds shall be considered to be issued by a central government which qualifies for credit quality step 1, alternatively to have a risk weight of 0% in the standardised approach for credit risks. Netting long and short positions in zero coupon bonds shall be carried out in accordance with section 9.

Capital requirements for specific risk in both long and short positions may be calculated in accordance with section 44.



### *Repurchase transactions (repos)*

**Section 16** The transferring party in a repurchase transaction (repo) based on financial instruments assigned to the trading book shall be considered to have a short position in a zero coupon bond maturing when the contract expires. The capital requirement for specific risk for the short position may be calculated in accordance with section 44.

The receiving party in a repurchase transaction (reversed repo) shall be considered to have a long position in a zero coupon bond maturing when the contract expires. The capital requirement for the specific risk for the long position may be calculated in accordance with section 44.

Real repurchase transactions (repos and reversed repos) in which the settlement date for the repurchase/re-selling is three working days or less after the trade day are excepted from the treatment set out this section.

### *Options*

**Section 17** Options based on interest rates, debt instruments, interest rate swaps or other similar interest rate linked financial instruments shall be treated as a combination of long and short positions in the same way as other derivative instruments, see section 10. Both positions shall be converted into delta-weighted positions by multiplying the underlying instrument's market value by the option's delta value. The delta-weighted positions may be netted against any offsetting positions in the same type of underlying financial instruments.

If the exchange which lists the options does not publish the delta values of the options, or if they are OTC options, the institution shall calculate the delta values of its options.

When calculating capital requirements for specific risk for bought and sold options, the underlying debt instruments shall be treated on the basis of the issuer of the instrument.

Calculation of capital requirements for specific risk of the zero coupon bonds arising from options in interest rate swaps or currency swaps (swaptions) and interest rate options (e.g. caps and floors) may be calculated in accordance with section 44.

A bought option does not need to be converted to a delta-weighted position and included in the calculation of specific risk as set out in sections 40-50 or general risk as set out in sections 54 or 55. The capital requirement for such a position may instead be set at equal to the market value of the option. Netting against an offset position in the underlying instrument cannot be carried out in this case.

An institution shall have systems in place and apply protective measures such that account is taken of other risks associated with options trading, such as

- the sensitivity of the delta value to price changes in the underlying financial instrument (gamma)
- the sensitivity of the option price to changes in maturity (theta),
- the sensitivity of the option price to changes in standard deviation (vega), and

– the sensitivity of the option price to changes in the risk-free interest rate ( $\rho$ ).

#### *Warrants*

**Section 18** Warrants entailing rights to the purchase or other acquisition of financial instruments which can be assigned to an ongoing or future new share issue shall be treated in the same way as the financial instruments in the issue. This type of position may be netted against corresponding positions in the opposite direction.

Warrants entailing rights to the purchase or other acquisition of previously issued financial instruments, shall be treated in the same way as options, see section 17.

Warrants entailing rights other than those contained in the first and second paragraphs shall be treated in the same way as options.

#### **How positions in credit derivatives shall be treated when calculating specific and general interest rate risk**

##### *General provisions*

**Section 19** Unless otherwise specified, calculating capital requirements for specific and general risk shall be based on the notional amount of the credit derivative.

**Section 20** Credit derivatives are of the same type if they are denominated in the same currency and have the same maturity at the same time as the reference assets are issued by the same legal entity, afford equal rights if the issuer enters into liquidation and have the same coupon and maturity. In addition, for credit derivatives which are designed so that the risk seller receives payment only in the case of a credit event, the selection of credit event and contractual calculation models for establishing payment shall be identical.

**Section 21** If the risk seller has the right to terminate the credit derivative prematurely and this right is associated with an increase (step-up) in the cost of the derivative, the date of this right shall form the basis of determining the maturity of the credit derivative.

##### *Determining a position for calculation of general risk*

**Section 22** Calculation of capital requirements for general risk may be carried out on the institution's net positions in credit derivatives. Net position refers to the difference between a long and a short position in credit derivatives of the same kind (see Chapter 2, section 4) and the same type.

**Section 23** When calculating capital requirements for general risk the positions in credit derivatives may not be netted against positions in underlying assets.

##### *Determining a position for calculation of specific risk*

**Section 24** The position on which the capital requirement for specific risk shall be based shall be determined in accordance with sections 25-31. When calculating the capital requirement for specific risk, positions in credit derivatives may be netted against other positions in credit derivatives or positions in other assets in accordance with sections 25-26. A reduced capital requirement for specific risk

may also be granted in accordance with sections 27-31 when the institution has credit derivatives which protect other credit derivatives or underlying assets.

**Section 25** Calculation of capital requirements may be carried out on the institution's net positions in credit derivatives. Net position refers to the difference between a long and a short position in credit derivatives of the same kind (see Chapter 2, section 4) and the same type.

**Section 26** An institution which holds a position in a total return swap may net a long/short position in the reference asset against a short/long position in a protected asset on condition that the reference asset and the protected asset are identical. However, the maturity of the swap does not need to coincide with the maturity of the protected asset.

**Section 27** The institution may treat positions in credit derivatives and positions in underlying assets in accordance with that set out in the second paragraph if the following conditions are met:

1. The market value of both positions shall always move in opposite directions.
2. The conditions associated with the credit derivative shall not be designed so that there can be reason to believe that the market value of the credit derivative has changed to a different extent than that of the market value of the underlying asset.
3. The reference asset and the underlying asset shall be identical.
4. The maturity of the credit derivative shall coincide with the maturity of the underlying asset.
5. The credit derivative and the underlying asset shall be denominated in the same currency.

If the conditions in the first paragraph have been met, the institution only needs to calculate capital requirements for the position which gives rise to the highest capital requirement for specific risk. The size of the position is determined by multiplying the market value by 20%. Capital requirements for specific risk for the other position do not need to be calculated.

**Section 28** The institution may treat total return swaps and positions in underlying assets in accordance with that set out in the second paragraph if the following conditions are met:

1. The underlying asset and reference asset shall be issued by the same company.
2. The reference asset shall be ranked pari passu with, or junior to, the protected asset in the event of bankruptcy.
3. There are cross clauses in place between the reference asset and the protected asset which mean that if the borrower defaults (e.g. suspends payments) on other loans, this will also be treated as a default on the reference asset.

If the conditions in the first paragraph have been met, the institution need only calculate capital requirements for specific risk for either the credit derivative or the underlying asset. In this case the institution shall only calculate capital requirements for the position which gives rise to the highest capital requirement for specific risk.

**Section 29** The institution may calculate the capital requirement for specific risk in accordance with section 28, second paragraph if the positions fulfil the requirements set out in section 27, first paragraph, lines 1-3.

**Section 30** The capital requirement for specific risk for short and long positions in credit derivatives which fulfil the requirements for being of the same type as set out in section 20, apart from the requirement of having the same maturity and being denominated in the same currency, may be calculated in accordance with section 28, second paragraph.

**Section 31** The institution may calculate the capital requirement for the specific risk in accordance with section 28, second paragraph if the positions fulfil the requirements set out in section 27, apart from the requirement that the reference asset and the underlying asset be identical. However, the underlying asset must be deliverable in accordance with the conditions of the credit derivative.

#### *Credit default swaps*

**Section 32** A position in a credit default swap shall, when calculating specific risk, be treated as a synthetic position in the reference asset. However, the reference asset shall be considered to have a maturity corresponding to the maturity of the credit derivative. It shall be assumed that the risk seller holds a short position in the reference asset and the risk purchaser a long position.

If the credit event payment is defined as a fixed amount, the size of the position corresponds to the amount received should a credit event occur. If the payment is defined as a notional amount reduced by the recovery value, or alternatively the payment of a notional amount in exchange for a physical delivery of the reference asset, the size of the position corresponds to the notional amount of the reference asset.

If the risk seller, through a credit default swap, has an obligation to pay interest or a periodic premium to the risk purchaser, both parties in the contract shall take this payment into account when calculating the capital requirements for general risk. It shall be assumed that the risk seller holds a short position in a bond issued by a central government and the risk purchaser a long position.

#### *Credit linked notes*

**Section 33** A position in a credit linked note shall be treated as a combination of a bond and a credit default swap.

The risk seller shall treat a position in a credit linked note as

1. a short position corresponding to a notional amount in the bond issued by the risk seller that gives rise to the capital requirement for general risk based on the bond's coupon or interest, and
2. a short position in the reference asset for which capital requirement for specific risk shall be calculated (the reference asset shall however be considered to have a maturity equal to that of the credit derivative).

The risk purchaser shall treat a position in a credit linked note as

1. a long position corresponding to a notional amount in the bond issued by the risk seller which gives rise to the capital requirement for specific risk

based on the issuer of the bond and general risk based on the bond's coupon or interest, and

2. a long position in the reference asset for which capital requirement for specific risk shall be calculated (the reference asset shall however be considered to have a maturity equal to that of the credit derivative).

The provisions in the third paragraph, point 2 do not need to be applied to a credit linked note which has an external credit assessment from an eligible credit assessment institution and which meets the requirements for risk weight assignment in accordance with sections 44-48.

#### *Total return swaps*

**Section 34** The risk seller shall treat a position in a total return swap as a short position corresponding to a notional amount in the reference asset for which the capital requirement for specific and general risk shall be calculated.

The risk purchaser shall treat a position in a total return swap as a long position corresponding to a notional amount in the reference asset for which capital requirement for specific and general risk is to be calculated.

Where the derivative contract includes interest or premium payments, the derivative contract shall be considered a short or alternatively long position in a bond issued by a central government which has a risk weight of 0% in the standardised approach for credit risks. The bond's maturity shall be the period until the next interest or premium payment. The position shall be included in the calculation of the capital requirement for general risk.

#### **Credit derivatives tied to a basket of assets**

**Section 35** Credit derivatives tied to a basket of assets shall be treated in accordance with sections 32-34 unless otherwise stated in sections 36-38.

**Section 36** A credit derivative which refers to more than one asset and where the design of the derivative is such that it becomes due for payment when the first default occurs among the assets in the basket shall when calculating the specific risk be treated as if the institution held positions in all of the reference assets. Each position shall be considered to have a notional amount which corresponds to the notional amounts of the credit derivative.

However, a cap for the capital requirement for specific risk in the reference assets is set that equals to the maximum amount which can be paid out during the contract.

**Section 37** When calculating specific risk, a credit derivative which refers to more than one asset and is designed such that it becomes due for payment when the second default occurs among the assets in the basket shall be treated as if the institution held positions in all of the assets in the basket except for the asset which gives rise to the lowest capital requirement for specific risk. Each position shall be considered to have a notional amount which corresponds to the notional amounts of the credit derivative.

However, a cap for the capital requirement for specific risk in the reference assets is set that equals the maximum amount which can be paid out during the contract.

**Section 38** With regard to a credit linked note which refers to more than one asset and where the yield of these assets is transferred in accordance with their proportion in the basket (green bottle structure), the institution shall be considered to be exposed to all the assets in the basket. The proportion of each asset in the basket determines the size of the exposures. If several debt securities for a particular reference asset are deliverable, the institution shall base the calculation of the specific risk on the debt security which gives rise to the highest capital requirement.

#### **Calculation of capital requirements and conversion to SEK**

**Section 39** An institution shall calculate capital requirements for specific and general interest rate risk separately for each individual currency in which the institution has positions. Positions in foreign currency shall be converted in accordance with Chapter 4, section 5 before the capital requirement is calculated.

#### **Specific risk**

**Section 40** An institution's holdings in their own debt instruments shall be disregarded when calculating capital requirement for the specific risk.

**Section 41** The capital requirement for the specific risk is calculated in two steps. The net position (see section 9) in each financial instrument is first multiplied by the weights set out in sections 42–50. The absolute values of the calculated in this way are then totalled to determine the total capital requirement for specific risk.

If the institution judges that a financial instrument has a higher risk than that indicated in sections 42-49, the institution shall assign the financial instrument a weight of 12%.

**Section 42** A securitisation position which, if it had been included in non-trading activities, would have been deducted from own funds or received a risk weight of 1,250%, shall have a weight for specific risk of 100%.

**Section 43** When applying sections 44-45 and 49-50, an institution which has received permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act to use an IRB approach shall translate its internal grades into credit quality steps in accordance with the eligible credit assessment institutions. In order to be translated into a particular credit quality step, the internal rating shall have a PD equal to or lower than the PD associated with the credit quality step. The PD for a credit quality step shall be determined on the basis of default frequency statistics from an eligible credit assessment institution.

**Section 44** Net positions in the following financial instruments shall have a weight of 0% if they qualify for credit quality step 1:

1. Financial instruments issued or guaranteed by central governments.
2. Financial instruments issued by central banks.
3. Financial instruments issued by international organisations.
4. Financial instruments issued by multilateral development banks.
5. Financial instruments issued by local government and comparable entities within the EEA.
6. Financial instruments issued by authorities within the EEA.

Institutions which have received permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act to use an IRB approach shall assign net positions in

the following financial instruments a weight of 0%, if they have a risk weight of 0% in the standardised approach for credit risks:

1. Financial instruments issued or guaranteed by central governments.
2. Financial instruments issued by central banks.
3. Financial instruments issued by international organisations.
4. Financial instruments issued by multilateral development banks.
5. Financial instruments issued by local government and comparable entities within the EEA.
6. Financial instruments issued by authorities within the EEA.

Institutions that use the standardised approach for credit risks shall, in addition to that set out in section 15 of the Capital Adequacy Ordinance, assign net positions in the following financial instruments a weight of 0% if they have a risk weight of 0% in the standardised approach for credit risk:

1. Financial instruments issued by international organisations.
2. Financial instruments issued by multilateral development banks.
3. Financial instruments issued by authorities within the EEA.

**Section 45** Net positions in the following financial instruments shall have a weight that varies depending on the remaining maturity of the instrument:

≤ 6 months	> 6 ≤ 24 months	> 24 months
0.25%	1.0%	1.6%

The remaining maturity of the instrument refers to the time until the instrument matures.

The following financial instruments shall have a weight in accordance with the first paragraph.

1. Financial instruments issued or guaranteed by central governments that would qualify for credit quality steps 2 or 3.
2. Financial instruments issued or guaranteed by local governments or comparable entities within the EEA that would qualify for credit quality steps 2 or 3.
3. Financial instruments issued or guaranteed by authorities within the EEA that would qualify for credit quality steps 2 or 3.
4. Financial instruments issued by central banks that would qualify for credit quality steps 2 or 3.
5. Financial instruments issued by international organisations that would qualify for credit quality steps 2 or 3.
6. Financial instruments issued by multilateral development banks that would qualify for credit quality steps 2 or 3.
7. Financial instruments issued or guaranteed by institutions or foreign equivalents that would qualify for credit quality steps 1 or 2.
8. Financial instruments issued or guaranteed by firms that would qualify for credit quality steps 1 or 2.

If the financial instruments comprise of covered bonds or corresponding foreign debt securities which fulfil the conditions in Chapter 16, section 35, the following reduction in the capital requirement may be made. If the institution which issued the covered bonds qualifies for creditworthiness steps 1 or 2, they can be assigned a weight of 50% of that set out in the table in the first paragraph.

**Section 46** Financial instruments which do not have a credit assessment from an eligible credit assessment institution may be assigned a weight in accordance with section 45 if the following conditions are met:

1. The institution considers the financial instrument to have high liquidity.
2. The institution considers the financial instrument to have a creditworthiness corresponding to the creditworthiness of the financial instruments set out in section 45.
3. The financial instrument shall be traded on a regulated market within the EEA or, on obtaining the permission of Finansinspektionen, on a regulated market in a country outside the EEA.

**Section 47** Financial instruments issued by an institution or foreign equivalent may be assigned a weight in accordance with section 45 if the following conditions are met:

1. The issuer of the financial instrument must be subject to the capital adequacy rules in the Credit Institutions Directive.
2. The institution has determined that the financial instrument has high liquidity.
3. The institution considers the financial instrument to have a creditworthiness corresponding to the creditworthiness of the financial instruments set out in section 45.

**Section 48** Financial instruments issued by firms conducting activities similar to that of institutions may be assigned a weight in accordance with section 45 if the following conditions have been met:

1. The institution considers the financial instrument to have a creditworthiness corresponding to credit quality step 2.
2. The company shall be subject to regulations equivalent to the Credit Institutions Directive.

**Section 49** Net positions in the following financial instruments shall have a weight of 8%.

1. Financial instruments issued or guaranteed by central governments that would qualify for credit quality steps 4 or 5.
2. Financial instruments issued by local governments or comparable entities within the EEA that would qualify for credit quality steps 4 or 5.
3. Financial instruments issued by authorities within the EEA that would qualify for credit quality steps 4 or 5.
4. Financial instruments issued by central banks that would qualify for credit quality steps 4 or 5.
5. Financial instruments issued by international organisations that would qualify for credit quality steps 4 or 5.



6. Financial instruments issued by multilateral development banks that would qualify for credit quality steps 4 or 5.
7. Financial instruments issued or guaranteed by institutions that would qualify for credit quality steps 3-5.
8. Financial instruments issued or guaranteed by firms that would qualify for credit quality steps 3 or 4.
9. Financial instruments which have no credit assessment from a credit assessment institution.

**Section 50** Net positions in the following financial instruments shall have a weight of 12%.

1. Financial instruments issued or guaranteed by central governments that would qualify for credit quality step 6.
2. Financial instruments issued by local governments or comparable entities within the EEA that would qualify for credit quality step 6.
3. Financial instruments issued by authorities within the EEA that would qualify for credit quality step 6.
4. Financial instruments issued by central banks that would qualify for credit quality step 6.
5. Financial instruments issued by international organisations that would qualify for credit quality step 6.
6. Financial instruments issued by multilateral development banks that would qualify for credit quality step 6.
7. Financial instruments issued by institutions that would qualify for credit quality step 6.
8. Financial instruments issued or guaranteed by companies that would qualify for credit quality steps 5 or 6.

### **General risk**

**Section 51** The method, either maturity-based or duration-based, selected by the institution to calculate the capital requirement for general interest rate risk shall be applied consistently for all interest rate linked financial instruments.

The calculation methods may not be replaced without the permission of Finansinspektionen.

If the maturity-based or duration-based method selected by an institution for calculating the capital requirement proves difficult to apply for certain types of interest rate linked financial instruments, the institution may, after obtaining the permission of Finansinspektionen, use the other method for this type of financial instrument, on condition that this model is applied consistently. Institutions applying for such permission shall justify the application of the other method.

### **Special model for calculating net positions in derivative instruments**

**Section 52** In addition to the conditions applying to netting under section 9, when calculating general interest rate risk, institutions may net positions in derivative instruments in accordance with sections 11–15, 17 and 18 against offsetting positions in derivative instruments, if

1. the positions are denominated in the same currency,
2. the reference interest rates (for floating rate positions) or coupons (for fixed rate positions) do not deviate by more than 0.15 percentage points (fifteen basis points), and
3. the remaining maturity or time until the next interest rate adjustment date corresponds to the following:
  - a) if there is less than one month until maturity/interest rate adjustment, the same day,
  - b) if there is between one month and one year until the maturity/interest rate adjustment, the difference may not exceed seven days, and
  - c) if there is more than one year until the maturity/interest rate adjustment, the difference may not exceed 30 days.

The net positions obtained shall be included when calculating the capital requirement for the general interest rate risk in accordance with sections 54 or 55.

### **Sensitivity models when calculating general interest rate risk**

**Section 53** Institutions which mark to market and calculate the interest rate risk of derivative instruments in accordance with sections 11–15, 17 and 18 on the basis of the present value of future cash flows may, on obtaining Finansinspektionen's permission, use a sensitivity model to calculate the positions. Positions obtained in this way shall be included when calculating the capital requirement for general interest rate risk according to the maturity-based method or duration-based method in accordance with sections 54 or 55.

A sensitivity model shall be used to calculate the present value of all future cash flows that the different instruments give rise to using selected zero-coupon rates. The present value of each cash flow shall then be distributed among the maturity bands set out in section 54. Within each maturity band, short and long positions may be netted so that there is only one position, long or short, per maturity band. These positions shall then be multiplied by the weight for that maturity band.

Alternatively, the interest rate risk, i.e. the sensitivity of the present values of the cash flows to changes in the zero-coupon interest rates, may be calculated directly. The interest rate risk shall be assessed taking into account independent movements in interest rates along the yield curve/zero coupon curve with at least one sensitivity point for each of the maturity bands set out in section 54 and the assumptions about the size of interest rate changes made according to the maturity-based method or the duration-based method. The interest rate risks shall then be distributed among the maturity bands set out in section 54 or the zones set out in section 55.

The model shall be well documented, be used continuously and the institution shall be able to justify the use of the proposed model to Finansinspektionen. An institution's application for permission to apply a sensitivity model shall contain

information about the model's algorithms, underlying assumptions, a justification and explanation of the selection of the zero coupon method and a description of the IT system and control procedures.

### The maturity-based method

**Section 54** When the maturity ladder approach is used to calculate the capital requirement for the general interest rate risk, the subsequent eight steps shall be followed.

Step 1. The institution shall assign net positions, both long and short, in each individual interest rate linked financial instrument to one of the maturity bands in the following table. The factors that determine which maturity band is applied to each financial instrument are the remaining maturity and whether the interest rate according to the coupon is three percent or more. With regard to instruments with variable interest rates, remaining maturity refers to the time remaining until the next interest rate adjustment date.

Zone	Maturity band	Remaining maturity		Weight (%)
		Coupon with 3% interest or more	Coupon with less than 3% interest <sup>2</sup>	
One	1	$0 \leq 1$ month	$0 \leq 1$ month	0.00
	2	$> 1 \leq 3$ months	$> 1 \leq 3$ months	0.20
	3	$> 3 \leq 6$ months	$> 3 \leq 6$ months	0.40
	4	$> 6 \leq 12$ months	$> 6 \leq 12$ months	0.70
Two	5	$> 1 \leq 2$ years	$> 1.0 \leq 1.9$ years	1.25
	6	$> 2 \leq 3$ years	$> 1.9 \leq 2.8$ years	1.75
	7	$> 3 \leq 4$ years	$> 2.8 \leq 3.6$ years	2.25
Three	8	$> 4 \leq 5$ years	$> 3.6 \leq 4.3$ years	2.75
	9	$> 5 \leq 7$ years	$> 4.3 \leq 5.7$ years	3.25
	10	$> 7 \leq 10$ years	$> 5.7 \leq 7.3$ years	3.75
	11	$> 10 \leq 15$ years	$> 7.3 \leq 9.3$ years	4.50
	12	$> 15 \leq 20$ years	$> 9.3 \leq 10.6$ years	5.25
	13	$> 20$ years	$> 10.6 \leq 12$ years	6.00
	14		$> 12 \leq 20$ years	8.00
	15		$> 20$ years	12.50

Step 2. The institution's net position in each individual financial instrument shall be multiplied by the weight that applies to the net position's maturity band. Long and short net positions shall be weighted separately.

Step 3. The weighted long and short net positions are then aggregated individually within each maturity band.

The portion of the sum of the weighted long net positions corresponding to the sum of the weighted short net positions, or vice versa, within each maturity band, is the matched position within the maturity band. The difference between both sums is the unmatched position within the same maturity band.

<sup>2</sup> Discount instruments shall also be assigned to this column.

*General guidelines*

Assume, for example, that an institution has long net positions of SEK 15,000,000 in maturity band 3 and short net positions of SEK 20,000,000 in the same maturity band. These positions shall be weighted by 0.40 percent, which gives weighted sums of SEK 60,000 and 80,000. The matched position in the maturity band is SEK 60,000 and the unmatched position in the same maturity band is SEK 20,000.

The sum of the matched positions in all maturity bands is sum 1 (the sum of column 1 in the form according to the form in *Appendix 3*). This sum is weighted by 10 percent.

Step 4. All weighted long and short unmatched net positions are aggregated separately within each zone. The sum of weighted long and the sum of the weighted short unmatched positions are then matched within each zone. The matched positions resulting from this matching are sum 2 for zone 1 (the sum of column 2), sum 3 for zone 2 (the sum of column 3) and sum 4 for zone 3 (the sum of column 4). Sum 2 is weighted by 40 percent, sum 3 by 30 percent and sum 4 by 30 percent.

Step 5. The remaining unmatched positions, long or short, within each zone after matching in accordance with step 4 shall then be matched between the zones as follows.

First the long (short) unmatched position in zone 1 is matched with the short (long) unmatched position in zone 2. The resulting matched position is sum 5 (the sum of column 5). The remaining long (short) unmatched position in zone 2 is then matched with the short (long) unmatched position in zone 3. The resulting matched position is sum 6 (the sum of column 6). Both sums are weighted by 40 percent.

In the matching process described in the previous paragraph, an institution may instead first match zones 2 and 3 and then zones 1 and 2.

Step 6. The remaining long (short) unmatched position in zone 1 is then matched with the remaining short (long) unmatched position in zone 3. The resulting matched position is sum 7 (the sum of column 7). This sum is weighted by 150 percent.

Step 7. All unmatched positions remaining after the maturity bands and zones are matched are aggregated and are sum 8 (the sum of column 8). This sum is weighted by 100 percent.

Step 8. The weighted sums obtained in steps 3–7 are aggregated and provide the capital requirement for general interest rate risk for interest rate linked financial instruments. (The sum of column 9.)

Matching of positions and calculation of the capital requirement shall be carried out separately for each individual currency.

*General guidelines*

Examples of the distribution of positions among different maturity bands and the matching of positions within maturity bands and within and between zones are contained in *Appendix 3*, page 3. The calculation of capital requirement shall be carried out separately for each individual currency.

## The duration-based method

**Section 55** When the duration-based method is used to calculate the capital requirement for general interest rate risk, the subsequent eight steps shall be followed.

Step 1. With regard to each individual interest rate linked financial instrument with a fixed interest rate, the yield to maturity of the instrument is calculated based on the market value. The yield is calculated in the same way for each individual interest rate linked financial instrument with a variable interest rate but with the assumption that the principal of the instrument falls due on the next interest rate adjustment date.

Step 2. With regard to each interest rate linked financial instrument, the modified duration is calculated on the basis of the yield calculated in step 1. The modified duration shall be calculated using the following formula.

$$\text{Modified duration} = \frac{\text{Duration}}{(1 + r)}$$

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

- r = return to maturity as a percentage
- C<sub>t</sub> = payment at time t
- t = time to payment (years)
- m = time to maturity (years)

Step 3. Each individual net position is assigned to the zone which, according to the table below, can be applied to each financial instrument. The division into zones is based on the modified duration of the individual financial instrument.

Zone	Modified Duration (years)	Assumed change in interest (percentage points)
One	> 0 ≤ 1.0	1.00
Two	> 1.0 ≤ 3.6	0.85
Three	> 3.6	0.70

Step 4. The institution shall calculate the duration-weighted net position of each individual financial instrument by multiplying the instrument's market value by the modified duration and the assumed change in interest rate. The duration-weighted long net positions and duration-weighted short net positions are then aggregated separately within each zone.

The portion of the sum of the weighted long net positions corresponding to the sum of the weighted short net positions, or vice versa, within each zone, comprises the matched position within the zone. The difference between the weighted sums comprises the unmatched position within the zone.

For example, an institution has long duration-weighted positions of SEK 15,000,000 in zone 1 and short duration-weighted positions of SEK 10,000,000 in the same zone. The matched position is SEK 10,000,000 and the unmatched position is SEK 5,000,000 for zone 1.

The matched position comprises sum 1 for zone 1 (the sum of column 10 in the form in appendix 3), sum 2 for zone 2 (the sum of column 11) and sum 3 for zone 3 (the sum of column 12). All sums are weighted by 2 percent.

Step 5. The remaining unmatched duration-weighted positions within each zone after matching in accordance with step 4 shall then be matched between the zones as follows.

First the long (short) unmatched duration-weighted position in zone 1 is matched with the short (long) unmatched duration-weighted position in zone 2.

The resulting matched position is sum 4 (the sum of column 13). The remaining long (short) unmatched position in zone 2 is then matched with the short (long) unmatched position in zone 3. The resulting matched position is sum 5 (the sum of column 14). Both sums are weighted by 40 percent.

In the matching process described in the previous paragraph, an institution may instead first match zones 2 and 3 and then zones 1 and 2.

Step 6. The remaining duration-weighted long (short) unmatched position in zone 1 is then matched with the remaining duration-weighted short (long) unmatched position in zone 3. The resulting matched position is sum 6 (the sum of column 15). This sum is weighted by 150 percent.

Step 7. All remaining unmatched positions after the matching process within and between the zones are aggregated and become sum 7 (the sum of column 16). This sum is weighted by 100 percent.

Step 8. The weighted sums obtained in steps 4–7 are aggregated and provide the capital requirement for general interest rate risk for interest rate linked financial instruments. (The sum of column 17.)

Matching of positions and calculation of capital requirements shall be carried out separately for each individual currency.

#### *General guidelines*

Examples of the distribution of positions among different zones as well as the matching of positions within and between zones are contained in Appendix 3. The calculation of capital requirement shall be carried out separately for each individual currency.

## **Equity price risks**

### **Calculating positions and netting long and short positions**

**Section 56** Equity price risks shall be calculated for positions in equity and equity linked financial instruments included in an institution's trading book.

Capital requirements for equity price risks shall be calculated based on both the institution's gross and net position as they are defined in sections 64 and 65.

Netting of the institution's long and short positions in equity and equity linked financial instruments may be carried out if they are issued by the same legal entity. With regard to netting financial instruments and any underlying instruments, e.g. depository receipt, the underlying instruments shall be issued in the same currency.

Long and short positions in equity and equity linked financial instruments which belong to different series may, however, only be netted against each other if they have equal order of priority, dividend rights or rights in a future issue. In addition, the difference between the equities' voting rights may not exceed ten times that of another share, see Chapter 4, section 5 of the Companies Act (2005:551).

Positions in derivative instruments shall first be treated as positions in underlying financial instruments in accordance with section 57.

### **Treatment of derivative instruments**

**Section 57** Forwards and options shall be treated as combined long and short positions.

A long (purchased) position in a forward or an option shall be treated as a combination of

- a long position comprised of underlying financial instruments in the contract, and
- a short position corresponding to a zero coupon bond, for which the forward price for forwards or the exercise price of options consists of the amount due of the bond, and has a maturity date on the delivery date or exercise date for the contract.

A short (sold) position in a forward or an option shall be treated as a combination of

- a short position comprised of underlying financial instruments in the contract, and
- a long position corresponding to a zero coupon bond, for which the forward price for forwards or the exercise price of options consists of the amount due of the bond, and has a maturity date on the delivery date or exercise date for the contract.

Long and short positions deriving from an option shall be delta-weighted in accordance with section 60.

A zero coupon bond deriving from the partition of derivative instruments into a long and a short position shall be considered to be issued by a central government which qualifies for credit quality step 1, alternatively to have a risk weight of 0%, in the standardised approach for credit risks. When calculating specific and general risk, the zero coupon bond shall be considered to be an interest rate linked financial instrument and be treated in accordance with sections 9-55.

The positions which arise from the partitioning into long and short positions shall be included in the calculation of specific and general risk unless otherwise set out in the following sections.

### **Equity forwards**

**Section 58** Calculating capital requirements for specific risk for zero coupon bonds deriving from equity forwards may be carried out in accordance with section 44. An underlying financial instrument shall be included when calculating the institution's gross position for specific risk, irrespective of whether the position is long or short.

When calculating capital requirements for general risk, the zero coupon bond shall, irrespective of whether the position is long or short, be included when calculating in accordance with sections 54 or 55 matched and unmatched positions in interest rate linked financial instruments. An underlying financial instrument shall be included when calculating the institution's net position for general risk, irrespective of whether the position is long or short.

### **Index-based forwards and options**

**Section 59** Equity index forwards (including delta-weighted equivalents to options on equity index forwards and equity indexes) shall be treated as combined long and short positions in the same way that applies to other derivative instruments, see section 57. A long or short position in such an index may be divided among the shares included in the index. These may be netted against opposite positions in the same share to the extent that the share is included in the index. Equity index forwards not divided among the shares included in the index shall be treated as individual shares.

Calculating capital requirement for specific risk in zero coupon bonds may be carried out in accordance with section 44.

Forwards or options traded on regulated markets and based on a broadly diversified index or its equivalent may be assigned a capital requirement of 0% for specific risk. Eligible indexes are set out in section 64.

When calculating capital requirements for general risk, the zero coupon bond shall, irrespective of whether the position is long or short, be included when calculating in accordance with sections 54 or 55 matched and unmatched positions in interest rate linked financial instruments.

### **Options**

**Section 60** Options based on equity or equity indexes shall be treated as combined long and short positions in the same way as other derivative instruments, see section 57. Both positions shall be converted into delta-weighted positions by multiplying the underlying instrument's market value by the option's delta value. The delta-weighted positions may be netted against any offsetting positions in the same type of underlying financial instrument.

If the exchange which lists the options does not publish the delta values of the options, or if they are OTC options, the institution shall calculate the delta values of its options.

When calculating the capital requirement for specific risk for bought and sold options, the underlying debt instruments shall be included in the calculation of the



institution's gross position. Calculating the capital requirement for specific risk in zero coupon bonds may be carried out in accordance with section 44.

When calculating the capital requirement for general risk for bought and sold options, the underlying debt instruments shall be included in the calculation of the institution's net position. The zero coupon bond shall be included when calculating in accordance with sections 54 or 55 matched and unmatched positions in interest rate linked financial instruments, irrespective of whether the position is long or short.

A bought option does not need to be converted to a delta-weighted position and included in the calculation of specific risk as set out in section 64 or general risk as set out in section 65. The capital requirement for such an option may instead be set equal to the market value of the option. Netting against an offset position in the underlying instrument cannot be carried out in this case.

An institution shall have systems in place and apply protective measures such that sufficient account is taken of other risks associated with options trading, such as

- the sensitivity of the delta value to price changes in the underlying financial instrument (gamma)
- the sensitivity of the option price to changes in maturity (theta),
- the sensitivity of the option price to changes in standard deviation (vega), and
- the sensitivity of the option price to changes in the risk-free interest rate (rho).

## **Warrants**

**Section 61** Warrants entailing rights to the purchase or other acquisition of financial instruments, which can be assigned to an ongoing or future new share issue, shall be treated in the same way as the financial instruments in the issue. Such a position may be netted against corresponding positions in the opposite direction.

Warrants entailing rights to the purchase or other acquisition of previously issued financial instruments shall be treated in the same way as options, see section 60.

Warrants entailing rights other than those contained in the first and second paragraphs shall be treated in the same way as options.

## **Convertible debt instruments**

**Section 62** A convertible debt instrument shall be treated as if the conversion to the underlying instrument has taken place if the intent is that such a conversion shall take place, or if the current market conditions are such that the conversion may be expected to take place. Such a position shall be delta-weighted and may be netted against a short position in an equivalent underlying financial instrument.

A convertible debt instrument that is not treated as if the conversion to the underlying instrument has taken place shall be treated as a debt instrument. Such a position may be netted against a short position in an equivalent underlying financial instrument. The capital requirement for such a position shall be calculated according to the rules for calculating capital requirements for interest rate linked financial instruments.

Alternatively a convertible debt instrument may be treated as a combination of the above alternatives. The portion corresponding to the underlying instrument is comprised of a subscription right or a subscription option and shall be treated in the same way as options, see section 60. The portion corresponding to the debt instrument is comprised of the discounted present value of the portion of the debt instrument in the convertible debt. Such a position may be netted against a short position in an equivalent underlying financial instrument. The capital requirement for such a position shall be calculated according to the rules for calculating a capital requirement for equity linked financial instruments and interest rate linked financial instruments.

### Calculation of capital requirements and conversion to SEK

**Section 63** An institution shall calculate capital requirements for specific and general equity risk separately for each individual currency in which the institution has positions. Positions in foreign currency shall be converted in accordance with Chapter 4, section 5 before the capital requirement is calculated. With regard to depository receipt, the underlying instruments shall be assigned to the currency in which the instrument was issued.

### Specific risk

**Section 64** The capital requirement for specific risk shall be set at 4 percent of the institution's gross position.

In exceptional cases the capital requirement for specific risk may be reduced to 2 percent of the institution's gross position for share portfolios that fulfil the following conditions:

- based on an objective evaluation the shares shall be considered to have a high liquidity,
- shares issued by the same issuer may not exceed five percent of the value of the share portfolio, or 10 percent if the total sum of such individual positions does not exceed 50 percent of the share portfolio,
- the shares may not be issued by an issuer whose interest rate linked financial instruments receive a capital requirement of 8% or 12% in accordance with sections 49-50.

Shares considered to have a high liquidity are those listed in the index below.

Australia	All Ords	Norway	OBX
Belgium	BEL 20	Switzerland	SMI
Denmark	OMXC20	Spain	IBEX 35
Finland	OMXH25	United Kingdom	FTSE 100
France	CAC 40	United Kingdom	FTSE Mid 250
Hong Kong	Hang Seng	Sweden	OMXS30
Italy	MIB 30	Germany	DAX
Japan	Nikkei 225	USA	S&P 500
Canada	TSE 35	Austria	ATX
Netherlands	EOE25		

Gross position refers to the sum of all of the institution's net positions in financial instruments irrespective of whether they are long or short.

#### *General guidelines*

Example:

Sum of long net position (+) in, for example, Ericsson B is SEK 100,000  
Sum of long net position (+) in, for example, Electrolux B is SEK 100,000  
Sum of short net position (-) in, for example, Volvo B is SEK 50,000

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In this example the gross position is SEK 250,000.

### **General risk**

**Section 65** The capital requirement for general risk shall be set to 8 percent of the institution's net position.

Net position refers to the difference between the sum of the institution's long net positions in financial instruments and the sum of the institution's short net positions in financial instruments.

#### *General guidelines*

Example:

Sum of long net position (+) in, for example, Ericsson B is SEK 100,000  
Sum of long net position (+) in, for example, Electrolux B is SEK 100,000  
Sum of short net position (-) in, for example, Volvo B is SEK 50,000

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In this example the net position is SEK 150,000.

## **Underwriting**

### **Scope**

**Section 66** An institution which guarantees the issue of equity and/or interest-bearing financial instruments shall calculate the capital requirement following the same principles which would apply if the financial instruments were part of the institution's trading book (see sections 9-65). Issue refers to, in addition to new share issue, an offer to purchase previously issued financial instruments.

If an institution only guarantees a subscriber will pay cash for an issue or offer for subscribed financial instruments on the settlement date, i.e. payment guarantee, the guarantee is not covered by the provisions regarding the capital requirements for risks in the trading book. The capital requirement for such a guarantee shall instead be calculated in accordance with Chapter 4, section 1 of the Capital Adequacy Act.

### **Alternative method for calculating the capital requirement**

**Section 67** An alternative method that an institution may use on obtaining the permission of Finansinspektionen allows the institution to deduct the portions of the issue or offer subscribed or underwritten by a third party pursuant to a formal agreement from the portion of the issue or offer underwritten by the institution. In

order for an issue or offer to be considered subscribed or underwritten by a third party, the written contract shall contain the third party's unconditional liability for the issue or offer.

After the deduction in accordance with the above paragraph, the institution may reduce the positions by the following reduction factors.

Working day	0	100%
"-	1	90%
"-	2-3	75%
"-	4	50%
"-	5	25%
after working day	5	0%

Working day 0 means the day on which the institution becomes unconditionally obliged to accept a certain quantity of the financial instrument at a price determined in advance. This refers to the first day after the end of the subscription period or another, earlier date when it is clear how large a portion of the issue or offer has not been subscribed and shall therefore be underwritten by the institution.

When the institution's positions have been determined, the institution shall calculate the capital requirement for the underwritten and reduced positions in accordance with the rules which apply to calculating a capital requirement for the holding of such financial instruments.

### Calculation of capital requirement for excess exposure

**Section 68** With regard to excess exposures contained in Chapter 35, section 15, line a, special additional capital requirement applies to the capital requirements normally calculated for the institution's portfolio. When calculating the additional capital requirement, the excess exposure shall be comprised of the individual exposures in the trading book which have the highest capital requirement for specific risk and/or counterparty and settlement risk.

The additional capital requirement is 200 percent of the sum of the capital requirements which apply to the individual exposures included, if ten days or less have passed since an excess exposure has arisen.

If an excess exposure has existed for longer than ten days, the exposures included in the excess exposure shall be entered into the table below. The exposures shall be ranked by the size of the capital requirement referred to in the first paragraph so that the exposure which has the lowest capital requirement as a percentage lands in the lowest interval in the table and the exposure which has the next lowest capital requirement as a percentage follows it and so on.

The limits in the first column of the table refer to the proportion of own funds of the aggregated exposure. Only the exposures included in the excess exposure are to be entered into the table.

Excess exposure	Factor
Up to 40%	200%
40-60%	300%

60–80%	400%
80–100%	500%
100–250%	600%
over 250%	900%

The additional capital requirement for the excess exposure is the sum of the capital requirements which, in accordance with this chapter, apply to the individual exposures after these have been multiplied by the percentages set out in the table.

### *General guidelines*

Example:

1. Own funds: kSEK

An institution's own funds is equal to 100,000

The upper limit for large exposures is therefore kSEK 25,000 (25 percent of own funds)

2. Composition of the institution's large exposure: kSEK

– Non-trading activities:

Lending to bank A 20,000

Sum of exposures in non-trading activities 20,000

The institution therefore meets the first condition in Chapter 35, section 15 that the excess exposure in its entirety shall originate from the trading book. In addition the institution has a margin of kSEK 5,000 which may be filled with exposures from the trading book.

– Trading book: Capital requirement, % kSEK

Long equity position in Bank A 4.00 270,000

Long position in a certificate of deposit issued by Bank A (credit quality step 1) with remaining maturity < 6 months 0.25 11,000

Long position in a mortgage bond, issued by a mortgage institution (credit quality step 1) in the same financial group as Bank A, with a remaining maturity of > 24 months 1.60 20,000

Sum of exposures in the trading book 301,000

Sum of exposures to bank A 321,000

Exposures in the trading book are 301% of the institution's own funds (301,000/100,000). The institution therefore meets the condition in the third point in Chapter 35, section 15.

3. Exposures in the trading book are ranked by the size of the capital requirement as a percentage as contained in the first paragraph:

	Capital requirement, %	kSEK
Long position in a certificate of deposit	0.25	11,000
Long position in a mortgage bond	1.60	20,000
Long equity position	4.00	270,000

4. The excess exposure is calculated:

Exposures in the trading book of kSEK 5,000 are within the limits for large exposures. Of the exposure that has the lowest capital requirement as a percentage, kSEK 5,000 is not included in the excess exposure.

Exposures in the excess exposure	kSEK
Long position in a certificate of deposit	6,000
Long position in a mortgage bond	20,000
Long equity position	270,000

The total excess exposure is kSEK 296,000. If we assume that this is the only excess exposure which the institution has, the condition in the second point in Chapter 35, section 15 is also met.

5. Calculation of capital requirements:

With regard to the excess exposure in existence for ten days or less:

	Capital requirement, kSEK
Long position in a certificate of deposit	$6,000 \cdot 0.25\% = 15$
Long position in a mortgage bond	$20,000 \cdot 1.60\% = 320$
Long equity position	$270,000 \cdot 4.00\% = 10\ 800$
Sum of capital requirement for exposures	11,135
Capital requirement for the excess exposure =	$11,135 \cdot 200\% = 22,270$

With regard to the excess exposure in existence for more than ten days:

The upper limit for the first interval in the table is kSEK 40,000 (100,000 · 40 percent). The corresponding limit for the second interval is 60,000 kSEK, etc.

Of the excess exposure shall 15,000 kSEK (40,000–25,000) be transferred to the first interval, 20,000 kSEK to the second interval, etc.

<u>Interval 1</u>		Capital requirement, kSEK	
Long position in a certificate of deposit		$6,000 \cdot 0.25\% \cdot 200\% =$	30
Long position in a mortgage bond	$9,000 \cdot 1.60\% \cdot 200\% =$		88
<u>Interval 2</u>			
Long position in a mortgage bond	$11,000 \cdot 1.60\% \cdot 300\% =$		528
Long equity position	$9,000 \cdot 4.00\% \cdot 300\% =$		1,080
<u>Interval 3</u>			
Long equity position	$20,000 \cdot 4.00\% \cdot 400\% =$		3,200
<u>Interval 4</u>			
Long equity position	$20,000 \cdot 4.00\% \cdot 500\% =$		4,000
<u>Interval 5</u>			
Long equity position	$150,000 \cdot 4.00\% \cdot 600\% =$		36,000
<u>Interval 6</u>			
Long equity position	$71,000 \cdot 4.00\% \cdot 900\% =$		25,560
Capital requirement for the excess exposure			70,686

## Settlement risks

### Scope

**Section 69** The capital requirements for settlement risks shall be calculated for positions which are included in the trading book of an institution. Repos, reverse repos, lending and securities lending or commodities lending are exempted from this provision.

When calculating the capital requirement for settlement risks, account must be taken of the risk of losses to the institution if a transaction is not completed on the due settlement date. Either the purchaser or seller is assigned the capital requirement in an individual transaction.

### Calculation of capital requirements

**Section 70** With regard to transactions in interest, equity, currency and commodity-linked financial instruments as well as commodities which are not settled on the due settlement date, the institution shall calculate the loss, i.e. the negative difference in price which the institution risks suffering, without regard to potential positive differences in price. Netting of positive and negative differences in price in different transactions may not occur. The negative difference in price is made up of the difference between the agreed price of the financial instrument or commodity and the current market value on the calculation date. If a financial

instrument or commodity is purchased, a negative price difference arises if the current market value of the instrument or commodity exceeds the agreed price. If a financial instrument or commodity is sold, a negative price difference arises if the agreed price exceeds the current market value of the instrument or commodity.

The capital requirement is calculated by multiplying the absolute value of the negative price difference by the applicable factor. See the table below.

Number of working days after due settlement date	Capital requirement (%)
0 – 3	0
4 – 5	75
≥ 6	100

#### *General guidelines*

##### Example:

An institution has purchased Ericsson B for 100,000 and sold Volvo B for 100,000. Four days after the due settlement date the market value of the purchased Ericsson shares is 103,000 and the market value of the sold Volvo shares is 104,000. The institution's negative price difference is -3,000 (=100,000–103,000) and is assigned to the purchase of the Ericsson shares. The institution's capital requirement is 2,250 (= 3,000 · 0.75)

**Section 71** The number of working days after the due settlement date is independent of the settlement cycle in question because capital requirement is calculated as of the fourth day after the agreed settlement date.

#### **Counterparty risks**

##### *General provisions*

**Section 72** The institution shall calculate a risk-weighted exposure amount for counterparty risk in

1. transactions in which the counterparty has not fulfilled its delivery/payment liability,
2. OTC derivatives and credit derivatives,
3. repos, reverse repos, securities or commodities lending or borrowing transactions,
4. margin lending transactions based on securities or commodities.

Calculating a risk-weighted exposure amount shall be carried out in accordance with the standardised approach for credit risks. If the institution has obtained permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act to use the IRB approach, this approach shall be used. The standardised approach for credit risks and the IRB approach shall be adjusted in accordance with that set out in sections 73-82 below.



*Transactions in which the counterparty has not fulfilled its delivery/payment liability*

**Section 73** An institution shall apply the provisions set out in sections 74-77 if the institution has paid for securities, foreign currency or commodities before receiving them, or if the institution has delivered securities, foreign currency or commodities before receiving payment for them.

**Section 74** The institution shall, as of the due settlement date and up to and including the fourth day after the settlement date, treat that component of the transaction which the counterparty has not fulfilled as an exposure, for which the institution shall calculate a risk-weighted amount. With regard to cross-border transactions an exposure shall not be considered to arise before the day after the due settlement date.

**Section 75** An institution that uses the IRB approach shall calculate a risk-weighted exposure amount for the exposure set out in accordance with sections 73-74, in accordance with Chapter 39. The following exceptions from the rules may be made:

1. If the institution does not have additional exposures to the counterparty, the institution may use a PD based on the counterparty's external rating.
2. Institutions which have permission to use own estimates of LGD may use an LGD of 45%. A condition for this is that the institution uses this LGD for all exposures arising in accordance with sections 73-74.

An institution that uses the IRB approach may also calculate a risk-weighted exposure amount for the exposures in accordance with sections 73-74, in accordance with the standardised approach for credit risks, on condition that the institution uses this approach for all such exposures.

**Section 76** If the exposures set out in sections 73-74 are insignificant in relation to the total exposure of the institution, the institution may apply a risk weight of 100%. This may be done on condition that this method is applied for all such exposures.

**Section 77** As of the fifth day after the due settlement date and until the transaction terminates, the institution shall deduct the value of the delivery to the counterparty from own funds. If the transaction has a positive market value, this value shall also be deducted from own funds.

*Credit derivatives*

**Section 78** That set out regarding interest, equity, commodity and currency-linked derivative instruments in Chapter 18 and Chapter 40 shall also be applied to credit derivatives in the form of credit default swaps and total return swaps.

**Section 79** When calculating potential risk change, the credit derivative shall be assigned a risk factor of 10%. If the reference asset is an asset that may be assigned a risk weight for specific risk in accordance with sections 44 or 45, the risk factor may be 5%.

If the credit derivative is a credit default swap, the institution may use a risk factor of 0% if the following requirements have been met:

1. Through the credit default swap the institution shall have a long position in the underlying asset, i.e. the institution has purchased risk.

2. The credit default swap agreement may not contain provisions which entail that the derivative closes in the event of insolvency of the party with a short position in the underlying asset.

When a credit derivative is designed so that it becomes due for payment when the  $n^{\text{th}}$  default occurs in a basket of assets, the risk factor shall be determined as follows. The institution shall base the calculation on the asset in the basket that has the  $n^{\text{th}}$  worst credit quality. If this asset is an asset that may be assigned a risk weight for specific risk in accordance with sections 44 or 45, the risk factor shall be 5%. Otherwise the risk factor shall be 10%.

#### *Financial collateral*

**Section 80** Collateral that meets the conditions in Chapter 25 and Chapter 55 is eligible collateral.

Financial instruments and commodities assigned to the trading book are eligible as collateral if these are also included in repurchase transactions or in securities or commodities lending or borrowing transactions which are also assigned to the trading book.

If the institution uses the prescribed volatility adjustments, collateral eligible according to the second paragraph shall be adjusted for volatility in accordance with the category "Other eligible collateral".

If the institution uses own volatility adjustment estimates, these estimates shall be calculated individually for recognisable collateral in accordance with the second paragraph.

**Section 81** Institutions which calculate a risk-weighted exposure amount using the standardised approach for credit risks may not calculate the effect of financial collateral posted to protect trading book positions in accordance with the simple method in Chapter 25, sections 15-19.

#### *Netting agreements*

**Section 82** Institutions which, in accordance with Chapter 26 or Chapter 56 take account of netting agreements when calculating a risk-weighted exposure amount, shall take the following into consideration with regard to repurchase transactions, securities or commodities lending or other capital market driven transactions. With regard to this type of transaction, netting between transactions that are on the trading book and non-trading activities, respectively, may only take place when the following conditions have been met:

1. All transactions shall be marked to market daily.
2. All financial instruments or commodities borrowed, purchased or received as part of the transactions shall be recognisable collateral in accordance with the provisions in Chapter 25 or Chapter 55.

## **Part G Non-trading activities**

### **Chapter 14 Scope**

**Section 1** This section shall – unless Finansinspektionen has granted permission to use an advanced approach in accordance with Part L – be applied by an institution when calculating risk-weighted exposure amounts for credit risk in non-trading activities.

## **Sub-part G1 Standardised approach for credit risk**

### **Chapter 15 Calculating a risk-weighted exposure amount**

**1 §** For each exposure, the risk weighted exposure amount shall be calculated by multiplying the exposure amount in accordance with sections 2 or 3 by the risk weight that applies for the exposure.

**2 §** In the following situations, an institution may calculate a risk-weighted exposure amount in accordance with the rules governing securitisation set out in sub-part G2:

1. when the institution has carried out a traditional securitisation of exposures for which the institution would otherwise calculate a risk-weighted exposure amount in accordance with the standardised approach for credit risk, and
2. when the institution has carried out a synthetic securitisation of exposures for which the institution would otherwise calculate a risk-weighted exposure amount in accordance with the standardised approach for credit risk.

An institution which has to calculate a risk-weighted exposure amount for exposures which shall be assigned to the exposure class securitisation positions shall, if the underlying securitised exposures are such that the institution would otherwise calculate a risk-weighted exposure amount for them in accordance with the standardised approach for credit risk, apply the rules governing securitisation in sub-part G2.

Securitisation positions also refer to exposures arising from interest rate or currency derivative contracts included in the structure of the securitisation.

An institution which provides credit protection for positions in a securitisation is considered to have a direct position in the securitisation.

The first and second sections shall also be applied to other structures with the same economic substance as traditional or synthetic securitisations.

**3 §** The exposure amount for items on the balance sheet shall be the written-down value.

In a leasing transaction, the exposure amount for the leasing object shall be the book value.

In a leasing transaction, the exposure amount for the minimum lease charges shall be their present value. The minimum lease charges are the payments during the

lease term that the leasee is or can be required to pay, and all favourable call options, which are likely to be exercised.

When calculating the capital requirement for risks in non-trading activities, receivables and liabilities may only be netted in those cases set out in Chapter 26. This applies irrespective of what applies to external accounting.

The exposure amount for off-balance sheet commitments shall consist of the nominal amount multiplied by a conversion factor as set out in Chapter 17.

The exposure amount for counterparty risk in derivative contracts shall be calculated in accordance with Chapter 18.

For counterparty risk in derivative instruments, repurchase transactions, margin lending transactions and securities and commodities lending and borrowing transactions, the exposure amount may be set to 0 (zero) if the following requirements are met:

1. The exposures shall be to a clearing organisation.
2. Participants in the clearing organisation shall post collateral on a daily basis for the exposure they represent to the clearing organisation.
3. The collateral shall cover both current exposure and any potential future exposure.

Counterparty risk for derivative contracts, repurchase transactions, margin lending transactions and securities and commodities lending or borrowing transactions may instead, after receiving permission from Finansinspektionen, be calculated in accordance with sub-part L6.

**4 §** Each exposure shall be assigned to one of the following exposure classes:

1. Exposures to governments and central banks
2. Exposures to local governments and comparable associations and authorities
3. Exposures to administrative bodies, non-commercial undertakings and religious communities
4. Exposures to multilateral development banks
5. Exposures to international organisations
6. Exposures to institutions
7. Exposures to corporates
8. Retail exposures
9. Exposures secured on residential property
10. Past due items
11. High-risk items
12. Exposures in the form of covered bonds
13. Securitisation positions
14. Exposures to CIUs
15. Other items.

**5 §** When the leasing agreement is designed such that the institution carries the financial risk associated with the leasing object, the leasing object shall be treated as a tangible asset.

The present value of the minimum lease charges shall be considered an exposure to the leasee and be assigned to the leasee's exposure class. .

**6 §** Sales and repurchase agreements and outright forward purchases shall be assigned to the exposure class that applies to the assets in question and not to the counterparty.

**7 §** Exposures that are deducted from own funds shall, regardless of which exposure class they are assigned to, be assigned a 0% risk weight in calculations of risk-weighted exposure amounts.

**8 §** An institution's risk-weighted exposure amounts for exposures to parent companies, subsidiaries and subsidiaries of the parent company may, regardless of which exposure class they are assigned to, be assigned a risk-weight of 0%, if the following requirements are fulfilled. The exceptions to this approach are equity exposures or exposures in the form of other items that can be included in the issuing institution's own funds.

1. The counterparty is an institution or a financial holding firm. The counterparty shall have its registered office in Sweden and be fully consolidated in the same financial group as the institution.
2. The counterparty is subject to the same risk evaluation, measurement and control procedures as the institution.
3. There are no current or foreseen material practical or legal impediments to the prompt transfer of own funds or repayment of liabilities from the counterparty to the institution.

**9 §** When calculating a risk-weighted exposure amount for an exposure, the institution may take into account any credit protection in accordance with sub-part G3.

## **Chapter 16 Exposure classes and risk weights**

**Section 1** Where an external credit assessment can be used to determine the risk weight of the exposure, the risk weight may be assigned based on the exposure's credit quality step in accordance with the rules for using external credit assessments as set out in Section E.

### **Exposures to governments and central banks**

**Section 2** Exposures to governments and central banks shall be assigned a risk weight in accordance with section 2 of the Capital Adequacy Ordinance.

### **Exposures to local governments and comparable associations**

**Section 3** Exposures to local governments and comparable associations shall be assigned a risk weight in accordance with section 8 of the Capital Adequacy Ordinance.

**Section 4** Exposures to religious communities shall be assigned a risk weight of 100%. When exposures to a religious community are treated by a supervisory authority within the EEA as exposures to governments and central banks, such exposures may be assigned the same risk weight as central governments and central banks.

**Exposures to administrative bodies (including public sector entities) and non-commercial firms**

**Section 5** Exposures to administrative bodies (including public sector entities) and non-commercial firms shall be assigned a 100% risk weight.

**Section 6** Where exposures to public sector entities are treated by supervisory authorities within the EEA as exposures to governments and central banks, such exposures may be assigned the same risk weight as central governments and central banks.

Where supervisory authorities within the EEA treat exposures to public sector entities as exposures to institutions, such exposures may be assigned the same risk weight as exposures to institutions.

Where supervisory authorities in a country outside the EEA treat exposures to public sector entities as exposures to institutions, such exposures may, with the permission of Finansinspektionen, be assigned the same risk weight as exposures to institutions.

**Exposures to multilateral development banks**

**Section 7** Exposures to multilateral development banks shall be assigned the same risk weight as exposures to institutions.

**Section 8** Exposures to Inter-American Investment Corporation, Black Sea Trade and Development Bank and Central American Bank for Economic Integration shall be assigned the same risk weight as exposures to institutions.

**Section 9** Exposures to the following multilateral development banks shall be assigned a 0% risk weight:

1. the International Bank for Reconstruction and Development
2. the International Finance Corporation
3. the Inter-American Development Bank
4. the Asian Development Bank
5. the African Development Bank
6. the Council of Europe Development Bank
7. the Nordic Investment Bank
8. the Caribbean Development Bank
9. the European Bank for Reconstruction and Development
10. the European Investment Bank
11. the European Investment Fund
12. the Multilateral Investment Guarantee Agency.

**Section 10** A risk weight of 20% shall be assigned to the portion of unpaid capital subscribed to the European Investment Fund.

## Exposures to international organisations

**Section 11** Exposures to the following international organisations shall be assigned a 0% risk weight:

1. the European Community
2. the International Monetary Fund
3. the Bank for International Settlements.

## Exposures to institutions

**Section 12** If an institution applies the method set out in section 10 of the Capital Adequacy Ordinance, the risk weight shall be assigned in accordance with Table 1. Otherwise, a 100% risk weight shall be used.

*Table 1*

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	100%	150%

**Section 13** Exposures to institutions or foreign equivalents in countries where external credit assessments for the central government are not available shall be assigned a 100% risk weight.

**Section 14** Exposures to institutions or foreign equivalents with an original maturity of three months or less shall be assigned a 20% risk weight.

### *Short-term exposures to institutions*

**Section 15** Short-term exposures to institutions for which an external credit assessment for the specific exposure is available may be assigned a risk weight in accordance with Table 2.

*Table 2*

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	150%	150%	150%

### *Investments in regulatory capital instruments*

**Section 16** Investments in equity or other instruments issued by other institutions or foreign equivalents that may be included in own funds shall be risk weighted at 100%. This applies on the condition that a deduction in accordance with Chapter 3, section 5 of the Capital Adequacy Act is not due.

## Exposures to corporates

**Section 17** Exposures to corporates for which an external credit assessment is available may be assigned a risk weight in accordance with Table 3. Otherwise, a 100% risk weight or the risk weight of the central government where the firm has its registered office shall be used, whichever is the higher.

**Table 3**

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

**Section 18** Exposures to corporates for which an external credit assessment is not available shall be assigned a 100% risk weight or the risk weight of the central government where the company has its registered office, whichever is the higher.

*Short-term exposures to corporates*

**Section 19** Short-term exposures to corporates for which an external credit assessment for the specific exposure is available may be assigned a risk weight according to Table 4.

**Table 4**

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	150%	150%	150%

**Retail exposures**

**Section 20** Retail exposures shall be assigned a risk weight of 75%.

**Section 21** Retail exposures refers to exposures to natural persons and exposure to small or medium-sized legal entities where the total exposure of the institution and, where applicable the financial group, to those natural persons or legal entities is not more than EUR 600,000.

In determining total exposure, all exposures, with the exception of exposures secured by mortgages on residential properties or tenant-owner's rights, to a client or group of clients with reciprocal relations shall be taken into account. The institution shall have taken reasonable measures to ensure that the total exposure does not exceed the stated limit.

To be eligible for the retail exposure class, the exposure shall be one of a significant number of exposures with similar characteristics such that the risks associated with such lending are substantially reduced.

**Section 22** Securities shall not be eligible for the retail exposure class.

**Exposures secured on residential property**

**Section 23** Exposures that are secured by mortgages on other real estate property than residential properties or tenant-owner's rights shall be assigned a risk weight of 100%.

*Exposures secured by mortgages on residential properties or tenant-owner associations*

**Section 24** Exposures or any part of exposures secured by mortgages on residential property or tenant-owner's rights shall be assigned a risk weight of 35%



for the portion that, combined with prior liens, at the most corresponds to 75% of the residential properties' or the value of the tenant-owner's rights. The exceeding portion shall be assigned a risk weight of 75%.

**Section 25** Residential property refers to real estate that in its entirety is assessed as a single or multi family unit or rental property. This includes property for seasonal and secondary use and undeveloped sites intended for the building of single-family residential units. Real estate with completed buildings which are or will be occupied or let by the borrower and which, with regard to location, design and planning, may be utilised, as residential buildings are included in this class if at least fifty percent of the building's floor space may be utilised for residential use. Property shall also refer to buildings on a third party's property.

**Section 26** Residential property in Sweden is eligible as collateral if the value of the real estate is not significantly dependent on the creditworthiness of the counterparty. This condition does not include situations where purely macroeconomic factors affect both the value of the property and the creditworthiness of the counterparty.

**Section 27** Residential property outside of Sweden is eligible as collateral if the following conditions are met:

1. The value of the real estate must not significantly depend on the creditworthiness of the counterparty. This condition does not include situations where purely macroeconomic factors affect both the value of the property and the creditworthiness of the counterparty.
2. The primary source of repayment of the loan may not be the income generated by the real estate.

Exceptions from condition 2 are real estate properties situated within the EEA for which the supervisory authorities of the country in question do not apply the condition.

Residential property shall also refer to holdings in Finnish residential housing companies operating in accordance with the Finnish Housing Company Act.

**Section 28** Exposures shall be treated as secured by mortgages on residential property or tenant-owner's rights only if the following conditions are met:

1. The grant of collateral shall be legally binding in all relevant jurisdictions and any registration requirements must have been met. It shall be possible for the institution to make a claim for payment from the value of the collateral without undue delay.
2. The value of the property and tenant-owner's right shall be monitored on a regular basis. For residential real estate as specified in sections 25-27, this verification shall be carried out at least every three years. Verification shall be carried out more frequently if there are significant changes to the economic factors affecting the real estate market. A valuation of each individual property or tenant-owner's right is not necessary. The institution may use statistical methods to monitor the value of the property and thereby identify which properties should be revalued. However, if the institution receives indication that a property has declined materially in value relative to general market prices, it shall conduct an individual valuation. For loans exceeding EUR 3

million, or 5% of the institution's own funds, an independent valuer shall assess the value of the property at least every three years.

Independent valuer shall refer to a person who possesses the relevant competence and experience and is independent from the credit decision process.

3. The institution shall establish in its policies which types of real estate properties it judges to be eligible collateral.
4. Residential properties and tenant-owner's rights shall be fully insured. The institution shall have procedures to monitor that such insurance is in place.

#### *Valuation of real estate properties*

**Section 29** The value of residential properties and tenant-owner's rights is the market value. Market value means the price that would be reached if a sale were carried out under market conditions where reasonable time was allowed for negotiation. The market value shall be assessed without regard to speculative and temporary circumstances.

For real estate properties in countries where there are established provisions for determining the mortgage lending value, this value may be used instead of the market value.

#### *Exposures secured by mortgages on commercial real estate*

**Section 30** Exposures secured by mortgages on commercial real estate located in an EEA member country other than Sweden may be assigned a 50% risk weight under the condition that the supervisory authority in the country where the property is located allows these exposures to be assigned a risk weight of 50%.

#### **Past due items**

**Section 31** Past due item shall refer to an exposure where interest or principal are more than 90 days past due, calculated from the original agreed payment date.

The unsecured part of any item that is past due shall be assigned the following risk weight:

1. 150% if value adjustments are less than 20% of the unsecured part of the exposure gross of value adjustments.
2. 100% if value adjustments are more than 20% of the unsecured part of the exposure gross of value adjustments.

**Section 32** Exposures secured by mortgages on residential properties and tenant-owner's rights in accordance with sections 24-29 shall be assigned a risk weight of 100% net of value adjustments if they are more than 90 days past due. If the value adjustments are 20% or more of the exposures, gross of value adjustments, the risk weight assigned to the remainder of the exposure may be set at 50%. The part of

the exposure that exceeds 75% of the value of the residential property or value of the tenant-owner's rights may not be treated as collateralised in this regard.

### **High-risk items**

**Section 33** Exposures associated with particularly high risks such as investments in venture capital firms and other private equity investments shall be assigned a risk weight of 150%.

**Section 34** With the exception of past due items, exposures assigned a 150% risk weight, and for which value adjustments have been established shall be assigned the following risk weight:

1. 100% if value adjustments are at least 20% of the exposure value, gross of value adjustments.
2. 50% if value adjustments are at least 50% of the exposure value, gross of value adjustments.

### **Exposures in the form of covered bonds**

**Section 35** Covered bonds as defined in the Covered Bonds (Issuance) Act (2003:1223) and equivalent foreign debt commitments shall be assigned to this exposure class if the bond comprises any of the following.

1. Exposures to or guaranteed by central governments and central banks within the EEA.
2. Exposures to or guaranteed by central governments, central banks, multilateral development banks and international organisations that meet the requirements for credit quality step 1.
3. Exposures to or guaranteed by public sector entities, local authorities and comparable associations and associations within the EEA.
4. Exposures to or guaranteed by public sector entities, local authorities and comparable associations, as well as authorities, which are assigned a risk weight as exposures to governments and central banks or institutions and meet the requirements for credit quality step 1.

Exposures to or guaranteed by public sector entities, local authorities and comparable associations, as well as authorities, which are assigned a risk weight as exposures to governments and central banks or institutions and meet the requirements for credit quality step 2 on condition that these exposures do not exceed 20% of the notional amount of the issuing institution's outstanding covered bonds.

5. Exposures to institutions that meet the requirements for credit quality step 1. Total exposure of this type shall not exceed 15% of the notional amount of the issuing credit institution's outstanding covered bonds or equivalent foreign debt commitments. Exposures

caused by transmission and management of payments by the obligors of, or liquidation proceeds in respect of, loans secured by real estate to the holders of covered bonds or equivalent foreign debt commitments shall not be included by the 15% limit. It is sufficient for exposures to an institution in the EEA with a maturity not exceeding 100 days to qualify for credit quality step 2.

6. Exposures secured by liens on real estate properties or tenant-owner's rights according to sections 24-29, if the liens combined with any prior liens for each of the exposures amount to a maximum of 80% of the value of the pledged property. Exposures secured with the equivalent foreign collateral within the EEA may also be included here on condition that the relevant supervisory authorities permit it.
7. Exposures secured by liens on commercial properties, if the liens combined with any prior liens for each of the exposures amount to a maximum of 60% of the value of the pledged property. Exposures secured with the equivalent foreign collateral within the EEA may also be included here on condition that the relevant supervisory authorities permit it.
8. Loans secured by ships where liens combined with any prior liens are at the most 60% of the value of the pledged ship.

*General guidelines*

Equivalent foreign collateral in 6 and 7 mean the French Fonds Communs de Créances or equivalent organisations for securitisation.

**Section 36** Covered bonds or equivalent foreign debt commitments issued prior to 31 December 2007 are, regardless of that stated in section 35, entitled to preferential treatment according to section 37 up to and including the maturity date.

**Section 37** Covered bonds or equivalent foreign debt commitments shall be assigned a risk weight on the basis of the risk weight assigned to unsecured exposures to the institution which issues them. The risk weights shall have the following relationships:

1. If the exposure to the institution is assigned a risk weight of 20%, the covered bond or equivalent foreign debt commitment shall be assigned a risk weight of 10%.
2. If the exposure to the institution is assigned a risk weight of 50%, the covered bond or equivalent foreign debt commitment shall be assigned a risk weight of 20%.
3. If the exposure to the institution is assigned a risk weight of 100%, the covered bond or equivalent foreign debt commitment shall be assigned a risk weight of 50%.
4. If the exposure to the institution is assigned a risk weight of 150%, the covered bond or equivalent foreign debt commitment shall be assigned a risk weight of 100%.

## Exposures to CIUs

**Section 38** Exposures to CIUs shall be assigned a risk weight of 100%.

**Section 39** Exposures to CIUs for which an external credit assessment is available may be assigned a risk weight in accordance with Table 5.

**Table 5**

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

**Section 40** Where the institution is aware of all of the underlying exposures of a CIU, exposures to a CIU may be assigned a risk weight as if the underlying exposures were owned directly by the institution.

**Section 41** If the institution is not aware of the underlying exposures of a CIU, the institution may calculate an average risk weight for the CIU. This assumes that the CIU first invests, to the maximum extent allowed under its mandate in the exposure classes attracting the highest risk weights, and then continues making investments in descending order in the remaining exposure classes.

**Section 42** An institution may rely on a third party to calculate a risk weight for the CIU in accordance with the methods set out in sections 40-41, provided the correctness of the calculation may be adequately ensured.

**Section 43** To assign a risk weight for a CIU in accordance with sections 40-42, the following criteria shall be met:

1. The CIU is administered by a company subject to supervision within the EEA.
2. The CIU's information brochure or equivalent document includes
  - a) the categories of assets in which the CIU is authorised to invest, and
  - b) if investment limits apply, i.e. the threshold values and the methods to calculate them.
3. The business of the CIU shall be reported on at least an annual basis to enable an assessment of the assets, liabilities, income and operations.

**Section 44** Finansinspektionen may grant the institution permission to treat a CIU managed by a firm subject to supervision in a country outside the EEA in accordance with sections 40-42. The criteria in section 43, lines 2-3, shall be met for permission to be granted.

If a supervisory body within the EEA approves treating a CIU as set out in the first paragraph, the institution may make use of this recognition without obtaining permission from Finansinspektionen.

## Other items

**Section 45** Tangible assets shall be assigned a risk weight of 100%.

**Section 46** Deferred expenditures and accrued income for which an institution is unable to determine the counterparty, or if it would be unrealistically burdensome for the institution to determine the counterparty, shall be assigned a risk weight of 100%.

**Section 47** Holdings of equity and other participations shall be assigned a risk weight of 100%.

**Section 48** Cash in hand and equivalent items shall be assigned a risk weight of 0%.

**Section 49** Gold bullion held in own vaults or at an assigned location to the extent the institution has bullion liabilities shall be assigned a 0% risk weight.

**Section 50** Where a credit institution provides credit protection for a number of exposures under terms that the *n*th default among the exposures shall trigger payment and that this credit event shall terminate the contract, and where the product has an external credit assessment, the risk weight prescribed according to the rules of securitisation shall be assigned.

If an external credit assessment is not available, the risk weights of the exposures will be aggregated, excluding *n-1* exposures, up to a maximum of 1,250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted exposure amount. The *n-1* exposures to be excluded from the aggregation shall include those exposures which produce lower risk-weighted exposure amounts than the risk-weighted exposure amount of any of the exposures included in the aggregation.

**Section 51** Exposures in the form of other items for which risk-weighted amounts are not provided in sections 45-50 shall be assigned a risk weight of 100%.

## **Chapter 17 Calculating exposure amounts for off-balance sheet items**

**Section 1** All off-balance sheet commitments shall be multiplied by a conversion factor.

### **Full risk commitments**

**Section 2** A conversion factor of 100% applies to the following commitments.

1. Guarantees having the character of credit substitutes and other similar commitments:
  - a) Guarantees associated with credit giving, other guarantees financial in character and acceptances. The nominal amount shall be the amount the guarantee applies to.
  - b) Guarantees issued by institutions to VPC AB which entail that the institution shall upon request pay a maximum amount to VPC AB pursuant to the guarantee as an issuer in the VP system (issuer guarantee) and/or as a partner in VPC AB (owner guarantee).
2. Endorsements on bills, irrevocable standby letters of credit, etc.:
  - a) Endorsements on bills not bearing the name of another institution and transactions with recourse.

- b) Irrevocable standby letters of credit having the character of credit substitutes and forward deposits agreements.
  - c) Agreements concerning the assignment of credit with residual credit risk and agreements where credit risk remains with the institution through an assignment combined with an issued put option.
  - d) Commitments in connection with investor leasing where the commitment includes a defined credit risk.
3. Repurchase transaction:
- a) In a repurchase agreement the transferring party shall calculate the capital requirement for counterparty risk with regard to the transferred asset.
  - b) An institution which is the seller at the spot phase of an optional repurchase agreement and which is obliged at a later date to repurchase a previously sold asset shall, for the agreed exercise price, be assigned the risk weight applying to the underlying asset in the transaction.
4. Securities lending, etc.:
- a) The risk weight for lent assets is based on which party is the counterparty.
  - b) The risk weight for collateral for borrowed assets is based on which party is the counterparty.
5. Margin lending
6. Commitments to make payments, etc.:
- a) Commitments such as the unpaid portion of shares and other securities that sellers upon request may require to be settled and other full risk items.
  - b) Where an institution on the settlement date receives from the seller a delivery commitment instead of the purchased security, the capital requirement is calculated from the delivery commitment. The delivery commitment shall be assigned a risk weight based on the issuer of the commitment.
7. Guaranteed liquidity management:
- a) Investments associated with liquidity management with guaranteed repayment of the principal.

### **Medium risk commitments**

**Section 3** A conversion factor of 50% applies to the following commitments.

- 1. Issued and confirmed documentary credits, excluding those subject to section 4, point 1.

2. Guarantees not having the character of credit substitutes:
  - a) Warranties and indemnities (e.g. tender, performance, customs and tax bonds) and guarantees neither having the character of credit substitutes nor being financial in character.
  - b) Irrevocable standby letters of credit not having the character of credit substitutes.
  - c) A guarantee issued by a bank on behalf of a third institution which entails that the bank shall be responsible for the fulfilment of the institution's obligations to OM Stockholmsbörsen AB.
3. Undrawn credit facilities, etc.:
  - a) Undrawn credit facilities (e.g. commitments to lend or provide guarantees/acceptances) which have an original maturity of more than one year and are legally binding for the institution, i.e. the institution does not have an unconditional right to cancellation. With respect to credit card firms, this includes the credit card credit unutilised by the customer according to the firm's financial accounts on the reporting day.
  - b) Guarantees for commercial paper programs or other domestic borrowing programs with an original maturity of more than one year and for which the institution is bound in accordance with point a.
4. Guarantees for borrowing facilities:
  - a) Commitments in the form of Note issuance facilities (NIFs) and Revolving underwriting facilities (RUFs).

#### **Medium-low risk commitments**

**Section 4** A conversion factor of 20% applies to the following commitments.

1. Documentary credits, etc.:
  - a) Documentary credits in which underlying shipments act as collateral.
2. Undrawn credit facilities, etc.:
  - a) Undrawn credit facilities (e.g. agreements to lend or provide guarantees/acceptance facilities) with an original maturity of at the most one year that may not be cancelled unconditionally at any time without notice or that do not effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. This includes the borrower's undrawn part of extended credit with the above maturity.
  - b) Guarantees for commercial paper programs or other domestic borrowing programs with an original maturity of at the most one year for which the institution is bound in accordance with point a.



## **Low risk commitments**

**Section 5** A conversion factor of 0% applies to the following commitments.

1. Undrawn credit facilities, etc.:
  - a) Undrawn credit facilities (e.g. agreements to lend or provide guarantees/acceptance facilities) which may be cancelled unconditionally at any time without notice. Retail credit may be considered as unconditionally cancellable if the terms permit the institution to cancel them to the full extent allowable under consumer protection and related legislation.

Guarantees for commercial paper programs or other domestic borrowing programs that may be unconditionally cancelled at any time without notice.

## **Chapter 18 Calculating the exposure amount for derivative contracts**

**Section 1** An institution which has not received permission in accordance with Chapter 4, section 4 of the Capital Adequacy Act to use an advanced risk method for calculating exposure amounts for counterparty risk in interest rate, equity, commodity, and exchange rate derivative contracts shall apply either the marking to market or risk approach.

Within a financial group, the marking to market and risk approaches may be combined. An individual legal entity shall, with the exception of that set out in section 27, only use one approach.

**Section 2** Derivative contracts based on different types of indices shall be classified as interest rate, equity, commodity or exchange rate derivative contracts depending on the relevant type of index in each individual case.

**Section 3** An institution that purchases credit protection through credit derivatives for an exposure that is not assigned to the trading book or for an exposure to counterparty risk may set the exposure amount for the credit derivative to zero (0).

**Section 4** The exposure amount for counterparty risk in sold credit default swaps, i.e. the institution has issued credit protection that is included in non-trading activities, shall be set to zero.

**Section 5** The institution may take netting agreements into account when establishing exposure amounts in accordance with the provisions in Chapter 26.

### **Mark-to-market approach**

**Section 7** The exposure amount is the sum of the current replacement cost on the balance sheet date according to section 8 and the amount of possible risk change according to section 9. For interest rate swaps where both legs are denominated in the same currency and are based on floating rates, the exposure amount shall only constitute replacement cost.

**Section 8** Current replacement cost for an existing contract refers to the cost which the institution would incur for acquiring an equivalent new contract on the balance sheet date. Where the contract is of a type regularly traded on the market, replacement cost may be set at current market value. Where current market prices

are not available, the contract's present value shall be calculated using current market interest rates and exchange rates. The calculation shall be based on current quotations which are professionally assessed to be correct for the currencies and maturities of the contract. For contracts with negative market value, the replacement cost shall be deemed to be zero.

**Section 9** Amount for possible risk change refers to an amount which expresses the possibility that the replacement cost increases during the residual term of the contract calculated from the balance sheet date. Possible risk change is calculated for each contract (even for contracts that have a negative market value on the balance sheet date) by multiplying the contract's notional principal amount by a risk factor as set out in Table 6.

*Table 6*

Residual maturity	Interest rate contracts	Contracts concerning foreign exchange rates and gold	Contracts concerning equities	Contracts concerning precious metals except gold	Contracts concerning commodities except precious metals
≤1 year	0%	1%	6%	7%	10%
> 1 ≤5 years	0.5%	5%	8%	7%	12%
> 5 years	1.5%	7.5%	10%	8%	15%

Contracts which do not fall within one of the five categories specified in the table shall be treated as Contracts concerning commodities except precious metals.

For contracts where outstanding exposures are settled periodically so that the market value of the contract is reset to zero on each such occasion, the residual maturity shall be equal to the time until the next reset date.

**Section 10** Notional principal refers to the amount in the reporting currency which the original contract covers. When determining a contract's notional amount where the reporting currency is not included at any stage, the value shall be calculated in accordance with the applicable spot rates at the time of calculation. The notional amount shall be the higher of the two values obtained as a result of the translation to the reporting currency.

The institution shall ensure that the notional amounts that may be used are relevant for the risk the contract entails.

**Section 11** Institutions which have received permission from Finansinspektionen to calculate commodities risk in accordance with Chapter 33, section 8 may use the risk factors presented in Table 7 instead of those presented in Table 6.

*Table 7*

Residual maturity	Contracts concerning precious metals except gold	Contracts concerning base metals	Contracts concerning agricultural products	Contracts concerning other commodities (incl. energy)
< 1 year	2.0%	2.5%	3.0%	4.0%
≥ 1 < 5 years	5.0%	4.0%	5.0%	6.0%
≥ 5 years	7.5%	8.0%	9.0%	10%

## Risk approach

**Section 12** A risk approach may only be used for derivative contracts.

**Section 13** An exposure amount shall be calculated separately for each netting set taking into account any collateral as follows:

exposure amount =

$$\beta * \max \left( CMV - CMC; \sum_j \left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right| * CCRM_j \right)$$

where

$CMV$  = the current market value of all transactions within the netting set with a counterparty gross of collateral, where

$$CMV = \sum_i CMV_i$$

$CMV_i$  = the current market value for the transaction  $i$ ,

$CMC$  = the current market value of the collateral assigned to the netting set, where

$$CMC = \sum_l CMC_l$$

$CMC_l$  = the current market value of collateral  $l$ ,

$i$  = refers to the transaction,

$l$  = refers to the collateral,

$j$  = refers to hedging set category.

These hedging sets correspond to risk factors for which risk positions of opposite sign may be offset to yield a net risk position on which the exposure measure is then based.

$RPT_{ij}$  = Risk position from transaction  $i$  with respect to hedging set  $j$ ,

$RPC_{lj}$  = Risk position from collateral  $l$  with respect to hedging set  $j$ ,

$CCRM_j$  = Multiplier set out in section 26 for counterparty credit risk with respect to hedging set  $j$ , and

$\beta = 1.4$ .

Collateral that is recognisable with this approach is limited to the collateral that is eligible under Chapter 25 and commodities assigned to the trading book.

*General guidelines*

An example of how an institution calculates the exposure amount according to the risk approach is presented in *Appendix 4*.

**Risk position**

**Section 14** For a credit default swap, the risk position consists of the notional value of the reference debt instrument multiplied by the remaining maturity of the credit default swap.

**Section 15** For options or other similar instruments (e.g. swaptions), the risk position consists of the delta equivalent market value of the underlying financial instrument for the transaction except in the case of an underlying debt instrument.

Where the underlying instrument is a debt instrument or a payment leg, the risk position consists of the delta equivalent market value of the financial instrument or payment leg multiplied by the modified duration for the debt instrument or the payment leg.

**Section 16** For other derivative contracts the risk position is the market value of the underlying financial instrument (also commodities) converted to SEK.

For debt instruments and payment legs, however, the risk position is the market value of the outstanding gross payments (including notional amounts), converted to SEK and multiplied by the modified duration of the debt instrument or payment leg, respectively.

Where the underlying financial instruments are equity (also equity index) or commodities, these shall be allocated a risk position for the respective equity (or equity index) or commodity and an interest rate risk position for the payment leg. If the payment leg is expressed in foreign currency the currency shall also be allocated a risk position.

Where the underlying instrument is a debt instrument, one interest rate risk position shall be allocated for the debt instrument and another for the payment leg. Where payment shall take place against payment (including foreign currency forwards), an interest rate risk position is allocated for each payment leg. Where the underlying debt instrument is expressed in foreign currency, a risk position is allocated for the foreign currency. Where a payment leg is expressed in foreign currency, this is also allocated a risk position for the currency concerned. The exposure amount assigned to an interest basis swap is zero.

**Section 17** For the determination of risk positions, collateral received from a counterparty shall be treated as a long position that is due today whereas collateral posted shall be treated as a short position that is due today.

**Section 18** For payment legs with a remaining maturity of less than a year, the institution shall disregard the interest rate risk. For transactions that consist of two payment legs denominated in the same currency, for example interest rate swaps, the institution may treat the transaction as a single transaction.

**Section 19** The institution shall use the following formulae to determine the amount and sign of its risk position.

1. For all other instruments than debt instruments:

market value, or

$$\text{delta equivalent market value} = P_{ref} \frac{\partial V}{\partial p}$$

where

$P_{ref}$  = the price of the underlying instrument, expressed in the reference currency,

$V$  = the option price for an option or the value of the underlying instrument for other transactions, and

$p$  = the price of the underlying instrument expressed in the same currency as  $V$ .

2. For the debt instrument and payment legs for all transactions:

market value multiplied by the modified duration, or

delta equivalent market value multiplied by the modified duration

$$\frac{\partial V}{\partial r}$$

where

$V$  = the option price for an option or the value of the underlying instrument or payment leg for other derivative instruments, and

$r$  = interest rate.

If  $V$  is expressed in another currency than the reference currency the derivative shall be converted to the reference currency.

### Hedging sets

**Section 20** For the calculation of the exposure amount, risk positions shall be grouped in hedging sets. The net risk position shall be calculated for each hedging set, i.e. the absolute value of the sum of the resulting risk positions. The net risk position is calculated in section 13 by the following.

$$\left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right|$$

**Section 21** For interest rate risk positions from payment legs, money deposits received from the counterparty as collateral as well as underlying debt instruments, which in accordance with Chapter 13, sections 44-48 shall be assigned a capital requirement of a maximum of 1.6%, there are six hedging sets set out in the following table. The hedging amount shall be calculated for each separate currency.

	Government referenced interest rates	Non-government referenced interest rates
Maturity	$\leq 1$ year	$\leq 1$ year
Maturity	$>1 \leq 5$ years	$>1 \leq 5$ years
Maturity	$> 5$ years	$> 5$ years

**Section 22** For interest rate risk positions from payment legs or underlying debt instruments with interest rates linked to a reference interest rate that represents a general market interest level, the remaining maturity is equivalent to the time interval up to the next adjustment of the interest rate. In all other cases the maturity is the remaining life of the underlying debt instrument or, in the case of a payment leg, the remaining life of the transaction.

**Section 23** There is one hedging set for each issuer of a reference debt instrument underlying a credit default swap.

**Section 24** In the case of interest rate risk positions from money deposits that are posted with a counterparty as collateral, when that counterparty has no outstanding debt obligations with low specific risk and from underlying debt instruments, which according to Chapter 13, section 42 and sections 49-50 shall be assigned a capital requirement of over 1.6%, there is a hedging set for each issuer. When a payment leg emulates such a debt instrument, there is also a hedging set for each issuer.

Credit institutions may assign risk positions arising from debt instruments of a certain issuer or from reference debt instruments of the same issuer that are emulated by payment legs or that underlie a credit default swap to the same hedging set.

**Section 25** Underlying financial instruments other than debt instruments shall be assigned to the same hedging sets only if they are identical or similar instruments. In all other cases, they shall be assigned to separate hedging sets.

The similarity of instruments is established as follows:

- For equities, similar instruments are those of the same issuer. An equity index is treated as a separate issuer.
- For precious metals, similar instruments are those of the same metal. A precious metal index is treated as a separate precious metal.
- For electric power, similar instruments are electricity supply rights and obligations that refer to the same peak and off-peak load interval over 24 hours.
- For commodities, similar instruments are those of the same commodity. A commodity index is treated as a separate index.

### **Multipliers for counterparty risk**

**Section 26** Multipliers for counterparty risk (CCRM) for the different hedging set categories shall be assigned as follows:

	Hedging set categories	CCRM
1.	Interest rates	0.2%
2.	Interest rates for risk positions from a reference debt instrument that underlies a credit default swap and which, in accordance with Chapter 13, sections 44-48, shall be assigned a capital requirement of a maximum of 1.6%	0.3%
3.	Interest rates for risk positions from a debt instrument or reference instrument and which, in accordance with Chapter 13, section 42 and sections 49-50, shall be assigned a capital requirement of over 1.6%	0.6%
4.	Exchange rates	2.5%
5.	Electric power	4.0%
6.	Gold	5.0%
7.	Equity	7.0%
8.	Precious metals (except gold)	8.5%
9.	Other commodities (except precious metals and electric power)	10.0%
10.	Underlying financial instruments of derivative contracts that are not in any of the above categories	10.0%

The underlying instruments of derivative contracts according to point 10 in the above table shall be assigned to separate individual hedging sets for each category of underlying financial instrument.

**Section 27** For transactions with options where an institution cannot establish a delta value or modified duration, the institution may instead use the marking to market approach to determine the exposure amount. In this case netting may not be taken into account, i.e. the exposure amount shall be determined as if there was a netting set which only contains the individual transaction.

## **Sub-part G2 Securitisation when the standardised approach is used**

### **Chapter 19 Securitised exposures**

**Section 1** In a traditional securitisation, the originator may exclude the securitised exposures when calculating risk-weighted exposure amounts in accordance with the standardised approach for credit risk in sub-part G1 if the transaction transfers a significant portion of the credit risk originating from the securitised exposures to a third party and if the following conditions are met.

1. The securitisation documentation reflects in the economic substance of the transaction.
2. The securitised exposures are put beyond the reach of the originator and its creditors, including in the originator's bankruptcy or receivership. This shall be supported by a legal opinion from an external legal adviser highly experienced in this field.
3. The issued securities shall not entail any payment obligation for the originator.
4. The transferee is a securitisation special purpose entity.

5. The originator does not maintain effective or indirect control over the transferred exposures. An originator shall be considered to have maintained effective control if it has the right to repurchase from the transferee the previously transferred exposures in order to realise the gains or if it is obligated to re-assume transferred risk. The originator's retention of servicing rights or obligations in respect of the exposures shall not of itself constitute indirect control of the exposures.
6. The securitisation documentation contains no clauses that
  - a) other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator, or
  - b) increase the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool.

Where there is a clean-up call option, the following conditions shall also be met.

1. The clean-up call option is exercisable at the discretion of the originator.
2. The clean-up call option may only be exercised when 10% or less of the original value of the exposures securitised remains unamortized.
3. The clean-up call option may not be structured to avoid allocating losses to credit enhancement positions or other positions held by investors or in any other way be structured to provide credit enhancement.

**Section 2** If the originator transfers a significant portion of the credit risk and chooses to exclude the securitised exposures in accordance with section 1, risk-weighted amounts shall be calculated in accordance with Chapters 20-22 for any own positions in the securitisation.

If the originator, pursuant to section 1, may not refrain from calculating risk-weighted exposure amounts for the securitised exposures in accordance with the standardised approach for credit risk in sub-part G1, the risk-weighted amount does not need to be calculated for any own positions in the securitisation.

**Section 3** In a synthetic securitisation the originator may, instead of calculating risk-weighted exposure amounts for the securitised exposures in accordance with the standardised approach for credit risk in sub-part G1, report its own positions in the securitisation in accordance with Chapters 20-22 and otherwise apply the rules for credit risk in sub-part G3 if the transaction transfers a significant portion of the credit risk originating from the securitised exposures to a third party and if the following conditions are met.

1. The securitisation documentation reflects the economic substance of the transaction.
2. The credit protection through which the credit risk is transferred meets the requirements set out in the credit protection rules in sub-part G3.



In this regard, special purpose entities shall not be accepted as providers of guarantees or un-financed credit derivatives.

3. The instruments used to transfer credit risk may not contain provisions or conditions that
  - a) stipulate significant thresholds for when credit protection shall be deemed to be triggered if a credit event occurs,
  - b) allow for the termination of the protection due to deterioration of the credit quality of the underlying exposures,
  - c) other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator, or
  - d) increase the originator's cost of credit protection or the yield payable to holders of securitisation positions if the credit quality of the underlying pool deteriorates.
4. A legal opinion is obtained from an external legal counsel with considerable experience in the field confirming the enforceability of the credit protection in all relevant jurisdictions.

**Section 4** If the originator chooses to calculate risk-weighted exposure amounts for the securitised exposures in accordance with section 3, the originator shall take account of any maturity mismatches between the securitised exposures and the credit protection through which division into tranches is achieved, except for tranches assigned a 1,250% risk weight. The maturity of the securitised exposures shall be taken to be the longest maturity of any of those exposures subject to a maximum of 5 years. The maturity of the credit protection shall be determined in accordance with the regulations concerning credit protection in sub-part G3.

When account is taken of the maturity mismatch in accordance with the first paragraph, the treatment of the maturity mismatch set out in the regulations concerning credit protection in sub-part G3 shall be applied in accordance with the following formula.

$$RW^* = [RW(SP) \times (t-0.25)/(T-0.25)] + [RW(ASS) \times (T-t)/(T-0.25)]$$

where

$RW^*$  is the risk-weighted exposure amount that shall be included in the calculation of the institution's capital requirements,

$RW(ASS)$  is the risk-weighted exposure amount that would have applied to exposures had they not been securitised, calculated on a pro-rata basis,

$RW(SP)$  is the risk-weighted exposure amount that would be calculated in accordance with Chapter 20 if no maturity mismatch was found,

$T$  is the maturity of the underlying exposures, expressed in years, and

$t$  is the maturity of the credit protection, expressed in years.

**Section 5** If the originator, pursuant to section 3, may not refrain from calculating risk-weighted exposure amounts for the securitised exposures in

accordance with the standardised approach for credit risk in sub-part G1, the risk-weighted amount does not need to be calculated for any own positions in the securitisation.

An originator or a sponsor who applies section 1 or 3 shall not provide any form of support to the securitisation in addition to their contractual obligations, with the purpose of reducing potential or actual losses for other parties.

If an institution provides support contrary to the first paragraph, a capital requirement shall in future be calculated for the securitised exposures as if no securitisation had taken place. The institution shall also promptly notify Finansinspektionen, which may decide to take appropriate measures.

## **Chapter 20 Risk-weighted exposure amounts for securitisation positions**

### **Regulations covering all securitisations**

**Section 1** For each securitisation position, the risk weighted exposure amount shall be calculated by multiplying the exposure amount in accordance with section 6 by the risk weight that applies for the position.

**Section 2** Where there is an exposure to different tranches in a securitisation, the exposure to each tranche shall be considered a separate securitisation position.

Where an institution has two or more overlapping positions in a securitisation, to the extent that they overlap, it shall only be required to calculate risk-weighted amounts for the position or portion of a position that produces the higher risk-weighted exposure amount.

"Overlapping" means that the positions, wholly or partially, represent an exposure to the same risk such that to the extent of the overlap there is a single exposure.

#### *General guidelines*

For example, overlapping positions may arise when a certain securitisation structure has two different liquidity facilities which completely or partially cover the same tranches and it is unclear which will actually be drawn. Where the overlapping positions are held by separate institutions, both must provide capital coverage for the risk but if the positions are held by the same institution the risk does not need to have double capital coverage.

**Section 3** When determining a risk-weighted exposure amount for a securitisation position, the institution may take into account credit protection in accordance with the regulations concerning credit protection in sub-part G3.

**Section 4** As an alternative to calculating a risk-weighted exposure amount for a position in a securitisation that should be assigned a 1,250% risk weight, an institution may deduct the exposure amount from own funds. For this purpose the institution may take collateral into account in a manner consistent with section 3.

If an originator or a sponsor applies the first paragraph, the deducted amount multiplied by 12.5 shall be subtracted from the amount specified pursuant to section 5 as the maximum risk-weighted exposure amount to be calculated.

**Section 5** For the originator or sponsor, the risk-weighted exposure amounts calculated for its positions in a securitisation may be limited to the risk-weighted exposure amount that would have been calculated for the securitised exposures if they had not been securitised. In this context, all past due items and high-risk categories among the securitised exposures shall be assigned a 150% risk weight.

**Section 6** The exposure amount of an on-balance sheet securitisation position shall be its written-down value.

The exposure amount for a securitisation position that is an off-balance sheet commitment shall be its nominal value multiplied by a conversion factor in accordance with Chapter 22.

The exposure amount arising as a result of a derivative contract shall be calculated in accordance with Chapter 18.

### **Securitisation of revolving exposures subject to provisions for early amortisation**

#### *Additional risk-weighted exposure amount*

**Section 7** In addition to the risk-weighted exposure amounts calculated for its securitisation positions, the originator shall also calculate a risk-weighted exposure amount for both the originator's interest and the investors' interest in accordance with sections 8-17 in the case of revolving exposures within the framework of a securitisation containing provisions for early amortisation.

Revolving exposure means an exposure for which a customer can, within agreed limits, vary the amount drawn. Provisions for early amortisation refers to a contractual clause which requires, on the occurrence of defined events, investors' positions to be redeemed before the originally stated maturity of the securities issued.

Where the securitisation comprises both revolving and non-revolving exposures, the originator shall only calculate an additional risk-weighted exposure amount for the portion of the underlying pool containing revolving exposures.

**Section 8** The exposure of the originator, in respect of the originator's interest, shall not be considered a position in a securitisation but a pro rata exposure to the securitised exposures as if they had not been securitised.

**Section 9** Originator's interest refers to the exposure amount of that notional part of a pool of drawn amounts sold into a securitisation, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash flows generated by principal and interest collections and other associated amounts which are not available for payments to those having securitisation positions in the securitisation. To qualify in this context as the originator's interest, the rights to the amounts may not be subordinate to the investors' interest.

Investors' interest refers to the exposure amount of the remaining notional part of the pool of drawn amounts.

*Exemptions from requirements for additional risk-weighted exposure amounts*

**Section 10** In the following types of securitisation, the originator is exempt from calculating the risk-weighted exposure amount in accordance with section 7.

1. Securitisations of revolving exposures whereby investors remain fully exposed to all future draws by borrowers so that the risk on the underlying facilities does not return to the originator after an early amortisation event has occurred.
2. Securitisations where any early amortisation provision is solely triggered by events not related to the performance of the securitised assets or the originator, such as material changes in tax laws or other legislation.

*Calculation of additional risk-weighted exposure amount*

**Section 11** The additional risk-weighted exposure amount under section 7 shall be derived by multiplying the investors' interest by the product of a risk accumulation factor in accordance with sections 12-15 and the weighted average risk weight that would have applied to the securitised exposures had they not been securitised.

**Section 12** In the case of securitisations subject to an early amortisation provision of retail exposures which are uncommitted and unconditionally cancellable without prior notice where the early amortisation is triggered by the excess spread level falling to a specified level, the institution shall compare the three-month average excess spread level with the excess spread levels at which excess spread is required to be trapped.

Where the contractual terms do not require excess spread to be trapped, the trapping level is deemed to be 4.5 percentage points greater than the excess spread level at which an early amortisation is triggered.

**Section 13** The risk accumulation factor in these cases shall be derived in accordance with Table 1 based on the level of the actual average excess spread over three months and whether the early amortisation is controlled or non-controlled. In this context, an early amortisation shall be deemed to be controlled if the following conditions are met.

1. The originator has an appropriate plan to ensure access to adequate capital and liquidity in the event of an early amortisation.
2. Payments of interest and principal, expenses, losses and recoveries are shared between the originator's interest and the investors' interest throughout the duration of the transaction based on the balance of receivables outstanding at one or more predefined points per month.
3. The amortisation period is considered sufficient for 90% of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default.

4. The rate of repayment is no faster than would be achieved by straight-line amortisation over the period set out in point 3.

*Table 1*

	Securitisation subject to controlled early amortisation	Securitisation subject to non-controlled early amortisation
Three-month average excess spread	Risk accumulation factor	Risk accumulation factor
Above level A	0%	0%
Level A	1%	5%
Level B	2%	15%
Level C	10%	50%
Level D	20%	100%
Level E	40%	100%

“Level A” refers to levels of excess spread less than 133% of the trapping level of excess spread but not less than 100% of that trapping level.

“Level B” refers to levels of excess spread less than 100% of the trapping level of excess spread but not less than 75% of that trapping level.

“Level C” refers to levels of excess spread less than 75% of the trapping level of excess spread but not less than 50% of that trapping level.

“Level D” refers to levels of excess spread less than 50% of the trapping level of excess spread but not less than 25% of that trapping level.

“Level E” refers to levels of excess spread less than 25% of the trapping level of excess spread.

**Section 14** All other securitisations of revolving exposures subject to a controlled early amortisation provision shall be consistently subject to a risk accumulation factor of 90%.

**Section 15** All other securitisations of revolving exposures subject to a non-controlled early amortisation provision shall be consistently subject to a risk accumulation factor of 100%.

*Maximum risk-weighted exposure amount*

**Section 16** For an originator which shall calculate an additional risk-weighted exposure amount in accordance with section 7, the total of the risk-weighted exposure amounts calculated for positions in the investors' interest and the risk-weighted exposure amounts calculated in accordance with section 7 shall be limited to the greater of

1. the risk-weighted exposure amounts calculated in respect of its positions in the investors' interest, or
2. the risk-weighted exposure amounts which would have been calculated for the securitised exposures had they not been securitised in an amount equal to the investors' interest.

**Section 17** Where relevant, the deduction which in accordance with Chapter 3, section 2, second paragraph, point 3 of the Capital Adequacy Act shall be made for net profit arising from the capitalisation of future revenues, shall not be considered when determining the maximum amount as specified in section 16.

## Chapter 21 Risk weights

**Section 1** When the risk weight for a securitisation position can be determined based on an external credit assessment, the risk weight may be assigned on the basis of the position's credit quality step in accordance with the rules for using external credit assessments in section E. Otherwise, the position shall be assigned a risk weight in accordance with section 3.

**Section 2** A securitisation position with an external credit assessment shall be assigned a risk weight in accordance with Table 2 or, with regard to a short-term credit assessment, in accordance with Table 3.

*Table 2* Positions with a credit assessment

Credit quality step	1	2	3	4	Other quality steps
Risk weight	20%	50%	100%	350%	1250%

*Table 3* Positions with a short-term credit assessment

Credit quality step	1	2	3	Other quality steps
Risk weight	20%	50%	100%	1250%

**Section 3** If section 4 cannot be applied, a position without a credit assessment shall be assigned a 1,250% risk weight.

**Section 4** A position without credit assessment may be assigned a risk weight based on the weighted average risk weight that would have been applied to the securitised exposures in accordance with the standardised approach for credit risk in sub-part G1, provided the composition of the pool of securitised exposures is known by the institution at all times.

The weighted average risk weight shall be multiplied by a concentration factor equal to the sum of the nominal amounts of all tranches divided by the sum of the nominal amounts of the tranches junior or equal to the tranche in which the position is held, including that tranche itself. The resulting risk weight shall not be higher than 1,250% or lower than any risk weight applicable to a rated, more senior tranche.

*Certain positions in an ABCP programme*

**Section 5** Where the conditions set out in section 6 are met, the institution, unless it applies a more advantageous treatment in accordance with section 7, with respect to positions in an ABCP programme may apply a risk weight which is the higher of

1. 100%, or
2. the highest risk weight that would have been applied to any of the securitised exposures in accordance with the standardised approach for credit risk in sub-part G1.

**Section 6** In order for section 5 to be applied, the following conditions must be met.

1. The position shall be in a tranche which is economically in a second loss position or better and the first loss tranche must provide meaningful credit enhancement to the second loss tranche.
2. The position's quality shall at least correspond to credit quality step 3.
3. The institution may not hold a position in the first loss tranche

*Positions in liquidity facilities considered to represent a particularly low risk level*

**Section 7** The risk weight for a position in a liquidity facility which can be deemed to represent a particularly low risk shall be the highest risk weight the institution would have applied to any of the securitised exposures in accordance with the standardised approach for credit risk in sub-part G1.

A liquidity facility shall be deemed to represent a particularly low risk if the following conditions are met:

1. the liquidity facility documentation shall clearly identify and restrict the circumstances in which the facility may be drawn,
2. it shall not be possible for the facility to be drawn to provide credit support by covering losses already incurred at the time of draw – for example, by providing liquidity in respect of exposures in default at the time of draw or by acquiring assets at more than fair value,
3. The facility may not be used to provide permanent or regular funding for the securitisation.
4. repayment of draws on the facility shall not be subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments and it must not be possible to waive or defer it,
5. It shall not be possible for the facility to be drawn after all applicable credit enhancements from which the liquidity facility would benefit are exhausted, and

6. the facility must include a provision that results in an automatic reduction in the amount that can be drawn by the amount of exposures that are in default, or where the pool of securitised exposures consists of rated instruments, which terminates the facility if the average quality of the pool falls below credit quality step 3.

## **Chapter 22 Conversion factors for off-balance sheet commitments**

**Section 1** Off-balance sheet commitments shall as a rule be assigned a conversion factor of 100%.

**Section 2** Liquidity facilities which meet the conditions in Chapter 21, section 7, second paragraph, shall be assigned a conversion factor of 20% if the original term is a maximum of one year and 50% if it is more than one year.

**Section 3** Liquidity facilities in accordance with section 2 which may only be drawn in the event of a general disruption in the market may be assigned a conversion factor of 0%. A general disruption in the market shall be deemed to exist if more than one securitisation special purpose entity across different transactions are unable to roll over maturing commercial paper and that inability is not the result of an impairment of the special purpose entity's credit quality or the credit quality of the securitised exposures.

**Section 4** Liquidity facilities in accordance with section 2 which are unconditionally cancellable may be assigned a conversion factor of 0% if repayment of draws on the facility are senior to any other claims on the cash flows arising from the securitised exposures.

## **Sub-part G3 Credit protection when the standardised approach for credit risk is used**

### **Chapter 23 Credit protection**

**Section 1** An institution intending to utilize the effect of credit protection when calculating a risk-weighted exposure amount shall apply this sub-part.

**Section 2** The institution may only consider the effect of recognisable protection. Protection is recognisable if the form is eligible and if the institution meets the specific requirements related to the management of each respective form of protection.

**Section 3** Where the protection covers less than the entire risk of an exposure and potential losses are not shared proportionately, the rules for securitisation shall be applied.

#### *General guidelines*

A basic feature of securitisations is a structure in which two or more parties share the credit risk originating from one or more specified exposures in a way that is not proportionate to the size of the parties' notional positions. An



example of such a structure is when an institution buys a guarantee that does not cover the entire exposure and where the institution and the issuer of the guarantee hold different risk positions.

**Section 4** Where an individual exposure has more than one type of recognisable credit protection the institution shall distribute the exposure among the different types of credit protection. A risk-weighted exposure amount shall be calculated separately for each component.

## **Chapter 24 Guarantees and credit derivatives**

**Section 1** Guarantees and credit derivative are recognisable if they are eligible in accordance with section 2 and the institution meets the management requirements set out in section 13.

### **Eligible guarantees and credit derivatives**

**Section 2** Guarantees and credit derivative are eligible if they are issued by an eligible protection provider in accordance with section 3 and meet the conditions pursuant to sections 4-12.

### **Eligible issuers**

**Section 3** Eligible issuers of guarantees and credit derivatives are issuers whose commitments are assigned to one of the following exposure classes:

1. exposures to governments and central banks,
2. exposures to local authorities and comparable associations, as well as authorities
3. exposures to public sector entities treated as governments and central banks or institutions,
4. exposures to multilateral development banks,
5. exposures to international organisations, or
6. exposures to institutions.

In addition, firms with an external credit rating corresponding to credit quality step 2 or better are deemed to be eligible issuers of guarantees and credit derivative. This also applies to firms included in the same group as the institution.

### **Eligible forms of protection**

**Section 4** In order for a guarantee or a credit derivative to provide eligible protection, the following requirements shall be met:

1. the protection is direct,
2. the protection applies to clearly defined and identifiable claims, and
3. the protection agreement is legally enforceable in all relevant jurisdictions.

**Section 5** The protection agreement may not contain conditions outside the control of the institution that entail that

1. the issuer of the guarantee or credit derivative has a unilateral right to revoke the protection
2. the cost of the protection increases due to the deteriorating quality of the protected asset,

3. the issuer of the guarantee or credit derivative is not obliged to pay out in a timely manner in the event the obligor fails to make payments due, or
4. it is possible for the issuer of the guarantee or credit derivative to reduce the maturity of the guarantee or credit derivative.

The following shall also apply:

1. Protection in the form of guarantees shall meet the conditions set out in section 7.
2. Protection in the form of credit derivatives must meet the conditions in sections 8-12.

**Section 6** In order for a counter-guarantee, i.e. a guarantee that guarantees another guarantee, to be eligible, the following requirements must be met:

1. The issuer of the counter-guarantee is a counterparty whose commitments are assigned to one of the following exposure classes:
  - a) governments and central banks,
  - b) local authorities and comparable associations as well as agencies,
  - c) public sector entities treated as governments and central banks or institutions, or
  - d) multilateral development banks assigned a 0% risk weight.
2. The counter-guarantee covers all credit risk elements in the exposure (not just counterparty risk, but also dilution risk, transfer risk, etc.).
3. The direct guarantee meets the conditions in sections 4-5.
4. The counter-guarantee meets the conditions in sections 4-5, except that protection does not need to be direct.

A counter-guarantee which does not meet the requirement in the first paragraph, point 1 may be eligible if the counter-guarantee in its turn has a direct guarantee which meets the requirement, provided that all other conditions in the first paragraph have been met.

The institution shall notify Finansinspektionen that it has a counter-guarantee before the institution takes it into account when calculating risk-weighted exposure amounts. In this notification, the institution shall certify that the counter-guarantee meets the requirements contained in the first paragraph and that there is no evidence that the counter-guarantee is inferior to a direct guarantee from the issuer. If the institution has several counter-guarantees from the same issuer, the institution only needs to give notice for each issuer if the conditions in the counter-guarantees are similar.

#### *Specific conditions for guarantees*

**Section 7** In the event of a failure to pay, the institution shall have the right to, without undue delay, make a claim for payment against the protection issuer, without first being required to make a claim against the obligor.

This requirement does not need to be met for counter-guarantees which are eligible pursuant to section 6, or guarantees issued by credit guarantee associations or guarantors specified in section 6, on condition that one of the following conditions have been met.

1. the terms of the contract give the institution the right to, without undue delay, receive a provisional payment corresponding to a reliable estimate

of the amount constituting the guaranteed portion of the institution's expected financial loss, including losses arising from the non-payment of interest and other amounts for which the borrower is obligated to make, or

2. the institution can demonstrate that the loss-protecting effects, including losses resulting from non-payment of amounts for which the borrower is liable, justify the above.

Guarantees which protect exposures using collateral in residential real estate or tenant-owner property are also eligible where the period before the institution can demand payment from the issuer is up to 24 months.

#### *Specific conditions for credit derivatives*

**Section 8** The following type of credit derivatives are eligible:

1. credit default swaps,
2. total return swaps, and
3. credit linked note for the amount paid in.

Financial instruments composed of or financially equivalent to these types of credit derivatives are also eligible.

A total return swap is not eligible if the institution books the net payments from this credit derivative as income but does not take up a corresponding reduction in the value of the asset which the credit derivative protects as a cost.

**Section 9** Events that mean that the credit derivative becomes due for payment (credit events) shall at least include:

1. the obligor defaults on amounts due,
2. the obligor stops payments or applies for bankruptcy, and
3. a grace period for the obligor in which to pay instalments due and interest due or other change to the terms of payment causes a financial loss for the institution.

Where in accordance with the underlying debt security, the obligor can obtain a grace period regarding the payment of amounts due, the definition of the credit event pursuant to the first paragraph, point 1 must take account of this.

Where the credit event does not include that set out first paragraph, point 3, the credit derivative may still be taken into account, although the protected amount shall be reduced in accordance with section 16.

It shall be clearly defined which parties are responsible for deciding if a credit event has occurred. This decision may not rest solely with the protection issuer. The protection purchaser shall have both the right and possibility to inform the protection issuer if a credit event occurs.

**Section 10** For credit derivatives with cash settlement, the institution shall have procedures for reliably estimating losses. A period shall be set during which the institution may obtain post-credit event assessments of the reference exposure.

If the cash settlement is conditional on the protection purchaser's transfer of the reference exposure to the issuer of the protection, the contract shall provide that any required permission between the parties to such a transfer may not unduly delay the transfer.

**Section 11** Even if the reference exposure of a credit derivative does not exactly correspond to the exposure that the institution wishes to protect, the credit derivative is eligible if the following conditions are met:

1. The reference exposure refers to the same counterparty.
2. The reference exposure is ranked equal to or junior to the protected asset in the event of bankruptcy.
3. There are cross clauses in place between the reference asset and the protected asset that mean that if the borrower defaults (e.g. stops payments) on other loans the borrower has taken, this will be treated as a default on the reference asset as well.

**Section 12** Where the institution creates an internal hedge using a credit derivative, such that it hedges the credit risk of an exposure in non-trading activities with a credit derivative in the trading book, the credit risk transferred to the trading book shall be transferred to a third party as set out in section 3 for the protection to be eligible.

### **Management requirements**

**Section 13** The institution shall have set guidelines regarding the use of guarantees and credit derivatives related to the institution's overall risk management strategy. The institution shall have procedures and systems for following up and managing potential concentrations of credit risk arising as a result of this protection.

### **The effect of recognisable guarantees and credit derivatives**

**Section 14** When a recognisable credit derivative is available for an exposure, the obligor's risk weight may be replaced by the protection issuer's risk weight for the protected amount.

When a guarantee is available for an exposure, the obligor's risk weight may be replaced by the protection issuer's risk weight for the protected amount in accordance with section 11–13 of the Capital Adequacy Ordinance.

When an institution has a guarantee or credit derivative for off-balance sheet commitments, the effect of these shall be included before the institution applies the relevant conversion factor.

#### *General guidelines*

Example:

Assume that the institution has an off-balance sheet liability that totals SEK 100. The liability has a conversion factor of 75%. The institution has a guarantee for the liability worth SEK 75. The portion of the liability protected by the guarantee and the portion of the liability not protected by the guarantee are calculated first. The guarantee covers 75% of the liability, i.e. SEK 75. The remaining SEK 25 is therefore unprotected. When these calculations are completed, the conversion factor is applied.

The exposure amount for the protected portion is 56.25 (= 75 \* 75%). This amount may be assigned the same risk weight as the guarantee issuer.

The exposure amount for the unprotected portion of the liability is 18.75 (= 25 \* 75%).

**Section 15** Protected amount refers to the maximum amount that the protection provider has undertaken to pay, reduced by the adjustments specified in this paragraph.

Where the protection does not cover all types of payment that can arise from the exposure, the protected amount shall be adjusted in order to take account of this.

Where the protection is denominated in a currency other than that of the direct exposure, the protected amount shall be reduced by the factor  $H_{fx}$ .  $H_{fx}$  shall be determined in accordance with Chapter 25, sections 20-44.

**Section 16** Where a credit derivative pursuant to the terms of the contract cannot be redeemed because the obligor received a grace period to pay instalments due and interest due or other changes to the terms of payment that result in a financial loss, in cases in which the protection does not exceed the exposure amount, the protected amount shall be reduced by 40%. If the protection exceeds the exposure amount, the protected amount may be considered to be a maximum of 60% of the exposure amount.

**Section 17** Where a credit derivative covers several exposures and the credit derivative is designed so that it becomes due for payment when the first exposure occurs, the institution may only include protection for the exposure which in the absence of protection would give rise to the lowest risk weighted exposure amounts, provided that the protection at least covers the exposure.

Where a credit derivative covers several exposures and the credit derivative is designed so that it becomes due for payment when the nth default occurs, the institution may apply the method specified in the first paragraph, appropriately tailored, provided that either another protection has been obtained for default 1 to n-1 or that n-1 default has already occurred.

**Section 18** Where there is a maturity mismatch, i.e. when the residual maturity of the credit protection is less than that of the protected exposure, the credit protection may not be taken into account when calculating risk-weighted exposure amounts if the residual maturity of the credit protection is less than three months or if the original term is less than one year.

**Section 19** The residual maturity of the protected exposure refers to the time until the obligor must have fulfilled its obligations. However, the residual maturity shall be subject to a maximum of five years.

**Section 20** Subject to this paragraph, the residual maturity of the credit protection shall be the time to the earliest point of time at which the protection expires or may be terminated.

Where the protection seller has the option to terminate the agreement the residual maturity of the protection shall be considered to be the time to the earliest date at which that option may be exercised.

Where the credit protection buyer has the right to terminate the agreement, and the original agreement terms contain a positive incentive for the buyer to terminate the protection before contractual maturity, the residual maturity of the protection shall be considered to be the time to the earliest date at which this option may be exercised.

The residual maturity shall be reduced by the amount of the grace period for credit derivatives which become repayable without consideration for the possibility that the protected asset may be subject to a grace period before default is considered to have occurred.

**Section 21** Where there is a maturity mismatch the protected amount shall be reduced by multiplying it by the following expression:

$$(t-0.25)/(T-0.25),$$

where

T is the residual maturity of the protected exposure, though a maximum of five years,

t is the residual maturity of the credit protection, though a maximum of T.

**Section 22** Recognisable credit linked notes issued by the institution may be treated as cash collateral in accordance with Chapter 25.

## **Chapter 25 Financial collateral**

**Section 1** Collateral is recognisable if it is eligible as set out in sections 2-4 and the institution fulfils the management requirements in accordance with sections 5-9.

### **Eligible financial collateral**

**Section 2** The following financial collateral are eligible:

1. Cash deposited with the institution and cash assimilated instruments issued by and deposited with the institution.
2. Debt securities assigned to exposures to governments and central banks which have an external credit assessment or a credit assessment by an export credit agency corresponding to credit quality steps 4 or better.
3. Debt securities issued by local authorities and comparable associations, states, authorities or public sector entities which may be treated as exposures to their central government.
4. Debt securities which are issued by a multilateral development bank or international organisation and are assigned a 0% risk weight.
5. Debt securities issued by an institution or other legal entity or have an external credit assessment corresponding to credit quality step 3 or better for the relevant type of counterparty.
6. Debt securities issued by local authorities or comparable associations with an external credit assessment corresponding to credit quality step 3 or better.
7. Debt securities issued by public sector entities with the same risk-weight as exposures to institutions and

- with an external credit assessment corresponding to credit quality step 3 or better.
8. Debt securities issued by a multilateral development bank not assigned a 0% risk weight with an external credit assessment corresponding to credit quality step 3 or better.
  9. Debt securities which have an external credit assessment corresponding to credit quality 3 or better for short-term exposures.
  10. Equity and convertibles included in one of the indexes set out in *Appendix 5*.
  11. Gold.

In addition to the collateral listed above, financial collateral is eligible in accordance with that set out in Chapter 13, section 80.

**Section 3** Debt securities issued by credit institutions and investment firms licensed under Chapter 3, section 4, first paragraph, lines 4 and 5 of the Securities Business Act (1981:981) and corresponding foreign firms which do not have an external credit assessment are still eligible provided that the following conditions are met.

1. They are traded on a regulated market.
2. They are not subordinated.
3. Where there are other debt securities issued by the same counterparty with the same seniority for which there is an external credit assessment, all of these interest-bearing securities' external credit assessments shall correspond to credit quality 3 or better.
4. The institution has no information to suggest that the liquidity of the debt security is insufficient.

**Section 4** CIU units are eligible if the following conditions are met

1. The price of units in CIUs is updated and made public daily.
2. The fund rules only allow the fund to invest in the securities specified in sections 2-3. However, this does not prevent the CIU from using derivative instruments to hedge investments in such securities.

### **Management requirements**

**Section 5** The creditworthiness of the counterparty and the value of the collateral may not have a material positive correlation.

Securities issued by the counterparty or by other firms within the same group as the counterparty are not recognisable. However, covered bonds and equivalent foreign debt securities issued by the counterparty in accordance with Chapter 16, sections 35-36 are recognisable if they have been used as collateral under a repurchase transaction and if the bonds meet the condition set out in the first paragraph.

**Section 6** The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.

Where a third party holds the collateral, the institution shall take all necessary steps to ensure that the third party segregates the collateral from its own assets.

**Section 7** The forms of the grant of collateral shall be documented, including the procedures for timely liquidation of collateral.

The institution shall have policy documents that regulate the type and volumes of assets that the institution accepts as collateral.

**Section 8** The institution shall have well-functioning procedures and processes for verifying the risks arising due to the utilisation of the collateral, including:

1. Risk of failed or reduced credit protection, for example the risk that the institution cannot immediately freely dispose of or liquidate the collateral.
2. The risk of incorrect valuations.
3. Concentration risk arising from the utilisation of financial collateral, and its effect on the institution's collective risk profile.

**Section 9** The institution shall perform a new mark-to-market of collateral when there is reason to believe that a material change has occurred with a minimum frequency of six months.

#### **The effect of recognisable financial collateral**

**Section 10** Where there is a maturity mismatch, i.e. when the residual maturity of the credit protection is less than that of the protected exposure, the institution shall take into account section 15 or section 21 when calculating risk-weighted exposure amounts.

**Section 11** The institution may disregard maturity mismatches if the following requirements are met:

1. The protected exposure and the collateral are valued daily.
2. The collateral agreement specifies that the collateral shall be delivered without undue delay if a collateral deficit has arisen.
3. Where the financial collateral consists of debt securities, the collateral agreement shall imply that if the security expires the funds shall be paid into an account at the institution which the counterparty cannot utilise without the permission of the institution.

**Section 12** The residual maturity of the protected exposure refers to the time until the obligor must have fulfilled its obligations. However, maturity shall never be longer than five years.

**Section 13** Subject to this chapter, the residual maturity of the credit protection shall be the time to the earliest date at which the protection expires or can be terminated.

**Section 14** When determining risk-weighted exposure amounts the institution may use recognisable financial collateral by using either the simple method pursuant to sections 15-19 or the comprehensive method pursuant to sections 20-44.

#### *Financial Collateral Simple Method*

**Section 15** If the institution applies the simple method, the residual maturity of the protection must be at least as long as the residual maturity of the exposure, otherwise the credit protection may not be considered when calculating risk-weighted exposure amounts.



**Section 16** When an exposure has recognisable financial collateral, the risk weight of the counterparty may be replaced by the risk weight of the collateral instrument for the portion that the collateral covers. However, the new risk weight for the portion of the exposure covered by the collateral shall be at least 20%, except when applying sections 17-19.

When the institution has financial collateral for off-balance sheet commitments, the effect of these shall be used before the institution applies the relevant conversion factor, refer also to the general guidelines in Chapter 24, section 14.

The remainder of the exposure shall be assigned the risk weight that would be assigned to an unsecured exposure to the counterparty.

**Section 17** The value of the financial collateral shall be the market value. A 0% risk weight shall be assigned to the collateralised portion of an exposure arising from transactions which meet the criteria set out in section 23. If the counterparty to the transaction is not a counterparty in accordance with section 23, line 8 a-f, the portion shall be assigned a 10% risk weight.

**Section 18** Derivative contracts subject to daily marking-to-market and collateralised by cash deposited with the institution or cash assimilated instruments and where there is no currency mismatch, shall be assigned, to the extent of the collateralization, a 0% risk weight.

Derivative contracts collateralised by debt securities issued by central governments or central banks assigned a 0% risk weight shall be assigned a 10% risk weight.

Debt securities issued by governments or central banks also include the following:

1. Debt securities issued by local authorities and comparable associations, states, and authorities must be treated in the same way as exposures to their central government.
2. Debt securities issued by multilateral development banks assigned a 0% risk weight.
3. Debt securities issued by international organisations assigned a 0% risk weight.

**Section 19** Where the exposure and the collateral are denominated in the same currency a 0% risk weight may be assigned if one of the following conditions is met:

4. The collateral is cash on deposit with the institution or a cash assimilated instrument.
5. The collateral is in the form of debt securities issued by central governments or central banks assigned a 0% risk weight and its market value has been discounted by 20%.

For the purposes of applying the first paragraph, point 2, debt securities issued by governments or central banks shall include those securities specified in section 18, third paragraph.

#### *Financial Collateral Comprehensive Method*

**Section 20** Under the Financial Collateral Comprehensive Method, the institution shall calculate volatility-adjusted amounts to be applied to the exposure amount

and the collateral to determine the extent to which the collateral is considered to cover the exposure.

$E_{\text{unsec}}$  is the portion of the exposure not considered protected by the collateral and is calculated as follows:

$$E_{\text{unsec}} = \max\{0, (E_{\text{VA}} - C_{\text{VA}})\}$$

$$E_{\text{VA}} = E^* \times (1 + H_E)$$

$$C_{\text{VA}} = C \times (1 - H_C - H_{\text{fx}})$$

$C$  is the market value of the collateral.

$E^*$  is an adjusted exposure amount where off-balance sheet commitments are included, i.e. conversion factors are not taken into account.

$E_{\text{VA}}$  and  $C_{\text{VA}}$  are the volatility-adjusted amounts of the exposure and collateral respectively. Where there is a maturity mismatch,  $C_{\text{VA}}$  shall be adjusted in accordance with section 21.

$H_E$  and  $H_C$  are factors for the volatility adjustment of the amounts of the exposure and collateral, respectively, with regard to changes in market prices. Both  $H_E$  and  $H_C$  will henceforth be called  $H$ .

$H_{\text{fx}}$  is a factor for volatility adjustment with regard to changes in exchange rates.

When determining the volatility adjustment factors, the institution may use either prescribed volatility adjustments according to sections 23-33 or after approval from Finansinspektionen use own estimates of volatility adjustments according to sections 34-36 and 44, if the requirements in sections 37-43 are met.

**Section 21** Where there is a maturity mismatch, the value of the collateral shall be reduced according to the following formula:

$$C_{\text{VAM}} = C_{\text{VA}} \times (t-0.25)/(T-0.25)$$

where

$C_{\text{VAM}}$  is  $C_{\text{VA}}$  adjusted for the maturity mismatch,

$C_{\text{VA}}$  is the value of the credit protection in accordance with section 20,

$T$  is the residual maturity of the protected exposure, though a maximum of five years,

$t$  is the residual maturity of the credit protection, though a maximum of  $T$ .

$C_{\text{VAM}}$  replaces  $C_{\text{VA}}$  when calculating  $E_{\text{unsec}}$  pursuant to section 20.

Where the residual maturity of the credit protection is less than three months or if the original term is less than one year, credit protection may not be taken into account.

**Section 22** Where several different financial collateral are recognisable for an exposure, the volatility adjustment factor shall be a weighted average of the factors applying to each individual collateral. The portion of the aggregated market value that each individual collateral represents is used as the weight.

*Application of prescribed volatility adjustments*

**Section 23** The volatility adjustment may be set to 0% if the following conditions are met:

1. The exposure and its collateral are debt securities issued by governments and central banks and assigned a 0% risk weight.
2. The exposure and its collateral are denominated in the same currency.
3. The maturity of the transaction is a maximum of one day, alternatively that the marking-to-market for both the exposure and collateral is set daily and that the mark to market margin is set daily.
4. The institution judges that the time between the last market valuation and liquidation of the collateral has not exceeded four business days in situations where the counterparty fails to discharge its obligation to set a mark-to-market margin.
5. The transaction is cleared and settled in a clearing and settlement system suitable for this type of transaction.
6. The agreement governing the transaction is a standard market agreement for repurchase transactions and securities lending transactions.
7. Pursuant to the agreement, the transaction may be terminated immediately if the counterparty fails to satisfy its obligation to deliver cash or securities or to provide collateral or if the counterparty in any other way fails to discharge its obligations.
8. The counterparty is one of the following:
  - a) Governments and central banks assigned a 0% risk weight.
  - b) A credit institution or securities firm licensed in accordance with Chapter 3, section 4, first paragraph, lines 4 and 5 of the Securities Business Act (1991:981) and equivalent foreign firms.
  - c) Other financial institutions or insurance companies assigned a 20% risk weight.
  - d) Mutual fund companies or equivalent foreign companies that are obligated under law to meet capital adequacy standards.
  - e) Pension institutions.
  - f) Clearing organisations.

**Section 24** Volatility adjustments for changes in market prices do not need to be made for cash deposited with the institution and cash assimilated instruments deposited with and issued by the institution. Volatility adjustments for changes in market prices do not need to be made for cash lent by the institution.

**Section 25** The values of  $H$  in sections 26-29 apply to collateral and exposures for which mark-to-market revaluations are conducted daily. If marking to market is less frequent, the values for  $H$  shall be adjusted upwards in accordance with section 33.

**Section 26** Debt securities issued by counterparties referred to in section 2, lines 2-4 shall be adjusted for volatility in accordance with Table 1.

*Table 1*

$H$ in %		Liquidation period		
Credit quality step	Residual maturity in years	20 days	10 days	5 days
1	$\leq 1$ year	0.707	0.5	0.354
1	$> 1$ year $\leq 5$ years	2.828	2	1.414
1	$> 5$ years	5.657	4	2.828

2-3	≤ 1 year	1.414	1	0.707
2-3	> 1 year ≤ 5 years	4,243	3	2,121
2-3	> 5 years	8.485	6	4,243
4		21,213	15	10.607
Debt securities with an external credit assessment for short-term exposures				
1		0.707	0.5	0.354
2-3		1.414	1	0.707

**Section 27** Debt securities issued by counterparties set out in section 2, lines 5–8 shall be adjusted for volatility in accordance with Table 2. Irrespective of the issuer, the debt securities referred to in section 3 shall be adjusted for volatility based on credit quality steps 2–3 in accordance with Table 2.

Table 2

<i>H</i> in %	Residual maturity in years	Liquidation period		
		20 days	10 days	5 days
1	< 1 year	1.414	1	0.707
1	> 1 year < 5 years	5.657	4	2.828
1	> 5 years	11,314	8	5.657
2-3	< 1 year	2.828	2	1.414
2-3	> 1 year < 5 years	8.485	6	4,243
2-3	> 5 years	16.971	12	8.485
Debt securities with an external credit assessment for short-term exposures				
1		1.414	1	0.707
2-3		2.828	2	1.414

**Section 28** Other types of exposures or recognisable financial collateral shall be adjusted for volatility in accordance with Table 3.

Table 3

<i>H</i> in %	Liquidation period		
Type of exposure or collateral	20 days	10 days	5 days
Shares included in one of the eligible indexes specified in Appendix 5	21,213	15	10.607
Other eligible collateral	35,355	25	17.678
Gold	21,213	15	10.607

**Section 29** For volatility adjustment of units in CIUs which are recognisable collateral, a weighted average *H* is calculated for the assets in which the CIU has invested. When adjustments are being made, the liquidation period for each transaction type must be applied. If the assets are not known to the institution, the institution shall use the maximum value of *H* that would apply to one of the assets permitted in accordance with fund regulations.

**Section 30** The factor for volatility adjustment for changes in exchange rates,  $H_{fx}$ , is expressed as a percentage in Table 4 and applies to collateral and exposures which are subject to daily mark-to-market. If marking to market is less frequent, the value for  $H$  shall be adjusted in accordance with section 33.

*Table 4*

Liquidation period		
20 days	10 days	5 days
11,314	8	5.657

**Section 31** With regard to OTC derivatives, volatility adjustments for changes in exchange rates shall be carried out if the collateral currency is different from the settlement currency.

With regard to OTC derivatives for which the institution has recognisable netting agreements, volatility adjustments for currency fluctuations shall be applied if there is a mismatch between the collateral currency and the settlement currency. Only a single volatility adjustment shall be applied even if the netting agreement includes transactions in multiple currencies.

**Section 32** The liquidation period used to determine  $H$  and  $H_{fx}$ , respectively, is the following:

1. 5 business days for securities loans and for repurchase transactions that do not include the transfer of commodities or commodities or guaranteed rights relating to title to commodities,
2. 10 business days for capital market-driven transactions other than those indicated in point 1,
3. 20 business days for other exposures.

**Section 33** If the institution does not mark to market its collateral and exposures daily,  $H$  and  $H_{fx}$ , which are defined in sections 26–30, shall be adjusted upwards according to the following formula.

$$H_A = H_M \sqrt{\{N_R + (T_M - 1)\} / T_M}$$

$H_A$  is the factor for the final volatility adjustment after adjustment for the frequency of the market valuation carried out by the institution. It is this value that is used in the calculation in section 20.

$H_M$  refers to the volatility adjustment that is specified in sections 26-30.

$N_R$  refers to the number of business days between each valuation.

$T_M$  is the liquidation period for the relevant security in accordance with section 32.

#### *Application of own estimates of volatility adjustments*

**Section 34** The institution may, on obtaining the permission of Finansinspektionen, calculate its own estimate of  $H$  for changes in the market value of collateral and exposures.

For debt securities with a credit rating of credit quality step 3 or better, the institution may calculate  $H$  as a group for different categories of securities. During

categorisation the institution shall take account of the security issuer, credit assessment, residual maturity and modified duration. The value of  $H$  shall be representative for the securities in each category.

For other securities  $H$  shall be calculated individually.

**Section 35** The institution shall calculate  $H_{fx}$  for changes in the exchange rates of each relevant currency pair.

**Section 36** When calculating  $H$  and  $H_{fx}$  the institution may not take account of any correlation effect between the exposure, the collateral and/or the exchange rates.

### Quantitative requirements

**Section 37** Volatility adjustments shall be calculated with a one-tailed confidence interval of 99%.

**Section 38** The liquidation period for calculations shall be set in accordance with section 32. If the institution uses a longer liquidation period than that specified in section 32 in its internal risk management, the internal liquidation period shall be used.

**Section 39** Volatility adjustments may be calculated based on liquidation periods other than those set out in section 32. However, the institution must then adjust them upwards or downwards according to the following formula:

$$H_M = H_N \sqrt{T_M/T_N}$$

$H_M$  is the factor for volatility adjustment after correction for a deviating liquidation period. It is this value that is used in the calculation in section 20.

$T_M$  is the liquidation period for the relevant security in accordance with section 32.

$T_N$  is the liquidation period on which the calculation of the volatility adjustment is originally based.

$H_N$  is the volatility adjustment factor based on liquidation period  $T_N$ .

**Section 40** If the instrument's liquidity is such that the liquidation period will in all probability exceed the grace periods specified in section 32, the liquidation period shall be adjusted upward to an appropriate value.

**Section 41** Estimates of volatility adjustments shall be based on a historical period of observation of at least one year. Where an institution uses a method in which the input data is weighted, the effective period of observation shall be at least one year, i.e. the average weighted period of the individual observations may not be less than six months.

The historical period of observation, and therefore the volatility adjustments, shall be updated at least every three months or on each significant change in market conditions.

Finansinspektionen can decide that a historical period of observation shorter than one year be used if price volatility has increased considerably.

The institution shall analyse whether historical data in certain cases underestimates the potential volatility, for example where exchange rates are fixed/locked. In such cases the institution shall calculate the volatility adjustment based on stress scenarios.

### **Qualitative requirements**

**Section 42** The institution shall use volatility adjustments based on own estimates for day-to-day risk management, including the management of internal limits.

**Section 43** The institution shall have policy documents or the equivalent that describe in detail the institution's procedures for calculating volatility adjustments and how these are integrated into day-to-day risk management.

As part of its regular internal review process the institution shall conduct a review of its procedures, methods and systems for calculating volatility adjustments. The institution shall review the entire system at least once a year.

#### *Adjusting the volatility adjustment upwards*

**Section 44** If the institution does not mark to market its collateral and exposures daily,  $H$  and  $H_{fx}$ , which are defined in sections 26–30, shall be adjusted upwards according to section 33.

## **Chapter 26 Netting agreements**

**Section 1** Bilateral netting agreements are recognisable if they are eligible under sections 2–6 and the institution fulfils the requirements for managing them contained in sections 7–11.

### **Eligible netting agreements**

**Section 2** The agreement shall be legally binding in all relevant jurisdictions. The agreement shall provide that the party which has not defaulted pursuant to the terms of the contract may terminate all contracts covered by the agreement without delay when a credit event occurs. Credit events shall include the insolvency or bankruptcy of the counterparty.

The agreement shall create a single obligation covering all receivables/liabilities contained in the agreement and covered by netting, so that, if the institution or counterparty do not fulfil their payment obligations, are declared bankrupt, go into liquidation, become the subject of public composition proceedings or start any other insolvency proceedings, the liability of the party is only for the net sum of the receivables/liabilities.

The agreement may not contain conditions that would permit a non-defaulting party to make limited payments only, or no payments at all, to the defaulting party, even if the defaulter is a net creditor.

**Section 3** The institution shall have written and reasoned legal opinions in its possession that demonstrate that the agreed netting would, in all probability, be recognized by the relevant courts and administrative authorities in the relevant jurisdictions. The legal opinions shall show that even if a netting agreement is terminated as a result of an event such as those set out in section 2, a legal review

by the relevant courts and administrative authorities would, in all probability, find the institution's receivables and liabilities limited to the net sum of the positive and negative market values of all the contracts included in the agreement and covered by netting, or limited to the net sum of all the receivables/liabilities covered by netting. The evaluation of the outcome of the legal review must be based on

1. governing law in the jurisdiction in which the parties have their respective registered offices and, if the commitments of the counterparty or institution were entered into through a foreign branch office, governing law in the jurisdiction in which the branch office is situated, pursuant to that set out in section 4,
2. governing law which pursuant to the agreement regulates the individual contracts and receivables/liabilities covered by the agreement, and
3. governing law regulating every contract or agreement necessary to effect the netting agreement.

**Section 4** In cases where the parties have entered into a netting agreement in which several foreign branch offices are included, the legal opinions indicated in section 3 shall be requested from all the jurisdictions in which the branch offices are situated. If it is not possible to obtain a legal opinion pursuant to section 3 for one of the branch offices, this branch office can still be included in the agreement on condition that a legal opinion is available that finds that the netting agreement will not be declared null and void in its entirety merely for the reason that such agreements do not have any legal standing for the contracts and receivables/liabilities entered into with such a branch office. Agreements that include branch offices situated within the jurisdiction where the netting agreement is not legally binding may not be considered.

**Section 5** A legal opinion pursuant to section 3 shall include the following

4. a judgement that states that the netting agreement and the contracts and receivables/liabilities covered by the agreement do not breach laws, regulations or court judgements in the relevant jurisdictions,
5. reference to existing netting agreements and a reference to the netting provisions contained in each such agreement, and
6. a judgement that states that the netting agreement will in all probability be deemed legally binding in the situations specified in section 2 in the relevant jurisdictions, if action is taken by an administrator, liquidator, receiver or the equivalent in other jurisdictions.

**Section 6** Legal opinion shall be issued by an external, independent legal adviser with considerable experience in the field. The opinion can be either given directly to the institution or to the organisation behind the netting agreement that the institution has utilised. The opinion can also be a common legal opinion for a specific netting agreement for several institutions together or an organisation representing the institution. The opinion can have been drawn up for different types of netting agreement.



## **Management requirements**

**Section 7** Before a netting agreement can influence the calculation of a risk-weighted amount for the first time, the institution shall notify Finansinspektionen that a legally binding netting agreement exists.

The institution shall certify

7. that all conditions pursuant to section 2 are met,
8. that the institution has legal opinions pursuant to sections 3-6,
9. that the institution has the necessary technical systems or manual procedures for calculating counterparty exposures as a net amount instead of a gross amount, and
10. that the institution has the necessary technical systems or manual procedures for calculating the risk arising when the counterparty's contracts or liabilities cease.

**Section 8** The institution is responsible for documenting each individual netting agreement and legal opinion. Netting agreements and legal opinions must be kept well arranged.

**Section 9** The institution shall continuously verify

11. that its netting agreements have legal standing with respect to the relevant counterparties, contracts, receivables/liabilities and jurisdictions, with regard to amendments to law and case law, and
12. that the conclusions of the legal opinions obtained are legally valid and no older than twelve months.

If a legal opinion is older than twelve months, the institution shall request a new legal opinion stating that the conclusions of the previous opinion still apply.

**Section 10** If an institution learns that the competent authorities in a counterparty's homeland do not consider a netting agreement to have legal standing in accordance with existing law in that country, the agreement may not be considered. This applies irrespective of the legal opinions obtained.

**Section 11** If a legal opinion is missing a piece of significant information regarding the sustainability of a netting agreement, the institution must assess whether an eligible netting agreement exists. If the institution judges the requirements have not been met, the exposure amount may not be adjusted.

## **The effect of netting agreements for repurchase transactions, securities and commodities lending or borrowing transactions and other capital market-driven transactions**

**Section 12** Institutions which use the Financial Collateral Comprehensive Method pursuant to Chapter 25 may take account of recognisable netting agreements for repurchase transactions, securities and commodities lending or borrowing transactions and capital market-driven transactions in accordance with either the prescribed method subject to sections 14-15 or an internal method pursuant to

sections 16-24. Institutions that use an internal method may also take account of recognisable netting agreements for margin lending transactions.

**Section 13** The collateral received and assets borrowed under the netting agreement shall be eligible financial collateral in accordance with Chapter 25, sections 2–4.

*Prescribed method*

**Section 14** The management requirements in Chapter 25, sections 5–9 shall be met for the assets covered by the netting agreement.

**Section 15** For the repurchase transactions, securities and commodities lending or borrowing transactions and other capital market-driven transactions covered by a recognisable netting agreement, a net amount,  $E^*$ , shall replace the individual exposure amounts for these transactions.

$$E^* = \max \{0, \sum E - \sum C + \sum T_{net} \times H_T + \sum E_{fx} \times H_{fx}\}$$

$E^*$  therefore cannot be a negative amount.

$E$  is the exposure amount for each separate exposure without regard to credit protection.

$C$  is the market value of the assets that the institution has borrowed, purchased or received as collateral under the netting agreement.

$T_{net}$  is the amount of the net position (whether positive or negative) of each asset type. Asset type refers to securities which have been issued by the same legal entity, have the same issue date, the same terms of contract and liquidation period in accordance Chapter 25, section 32.

$H_T$  is the volatility adjustment factor for changes in market value,  $H$ , for each asset and is calculated in accordance with Chapter 25, sections 25-29.

$E_{fx}$  is the amount of the net position (whether positive or negative) in each currency that is not the settlement currency.

$H_{fx}$  is the volatility adjustment factor for changes in foreign exchange rates and shall be calculated in accordance with Chapter 25, section 30.

*Internal method*

**Section 16** An institution which has received permission to calculate the capital requirement for market risks in accordance with Chapter 5, section 3 of the Capital Adequacy Act may apply an internal method for calculating net amounts if the requirements in sections 18–21 have been met.

**Section 17** An institution which has not received permission to calculate the capital requirement of market risk in accordance with Chapter 5, section 3 of the Capital Adequacy Act may apply for Finansinspektionen's permission to apply the internal method. One condition for permission is that the requirements in sections 18-22 are met.

**Section 18** The internal method shall provide an estimate of possible future changes in the value of the unprotected exposure amount ( $\sum E - \sum S$ ).

**Section 19** When calculating the possible change in value, the following requirements shall be met:

13. The calculation shall be carried out daily.
14. A one-tailed confidence interval of 99% shall be used.
15. For repurchase transactions and securities and commodities lending or borrowing transactions, a ten-day liquidation period shall be used. For other transactions, a five-day liquidation period shall be used.
16. The effective historical observation period shall be at least one year except in cases where a shorter observation period may be justified based on a recent increase in price volatility.
17. The historical time series shall be updated at least every three months.

**Section 20** The internal method shall take account of all material risk factors.

**Section 21** Historical correlation may be utilised within and across the main risk categories (interest, equity, commodity and foreign exchange rate risk) on condition that the institution's system for measuring them is satisfactory.

**Section 22** An institution that has not received permission to calculate the capital requirement for market risks pursuant to Chapter 5, section 3 of the Capital Adequacy Act must meet the following requirements in order to apply an internal method:

18. The internal method shall be fully integrated into the daily risk management of the institution and serve as the basis for reporting of exposures to the senior management of the institution.
19. The institution shall have a function responsible for the design and implementation of the institution's risk management systems and which reports directly to senior management. This function must be independent of position-taking units.

This function shall have sufficient personnel skilled in the internal method.

The function shall produce and analyse daily reports based on the internal method. The function shall also analyse if it is necessary to implement measures regarding position limits.

20. The daily reports produced by the independent function shall be reviewed by personnel with sufficient authority to enforce reductions of individual positions taken and the institution's overall risk exposure.
21. The institution shall have established policy documentation for the operation of the risk management system. The institution shall have procedures to ensure compliance with the policy documentation.
22. The internal method shall satisfactorily measure risk. The institution shall be able to verify this by regularly conducting backtesting of the model based on historical data for one year.

23. The institution shall regularly conduct rigorous stress tests and the results of these tests shall be reviewed by senior management and reflected in the design of risk policies and limits.

24. The institution shall have procedures and methods to validate the model. The institution shall have validated the method before it is brought into use and shall validate it regularly thereafter. The method shall also be validated if the institution implements fundamental changes to the model or if changes have occurred in the institution's position-taking, or in the market, which could mean that the model is no longer suited to its purpose.

Validation shall evaluate whether the method captures all significant risks and that the assumptions made in the method do not lead to the over or underestimation of risk.

As part of the validation process, the valuation models used when calculating counterparty exposure shall be evaluated.

The institution shall regularly conduct backtesting. If a backtesting indicates that the model is not sufficiently accurate, Finansinspektionen can revoke its permission or decide that the institution shall take measures to improve the model.

25. The institution shall conduct, as part of its regular internal review process, an independent review of its risk management system. This review shall include both the business units and the independent function responsible for the design and implementation of the risk management system.

26. The institution shall conduct a review of its risk management system at least once a year.

**Section 23** A net amount shall replace the individual exposure amounts according to the following formula:

$$E^* = \max \{0, [(\sum E - \sum C) + F]\}$$

where

$E$  is the exposure amount each individual exposure would have if it did not have credit protection.

$C$  is the market value of the assets that the institution has borrowed, purchased or received as collateral under the netting agreement.

$\sum E$  is the sum of all  $E$ s covered by the netting agreement.

$\sum C$  is the sum of all  $C$ s covered by the netting agreement.

$F$  is the potential future change to the exposure amount according to the internal method.

**Section 24** When calculating capital requirements, the previous day's calculation of potential exposure shall be used.

## Effect of netting agreements for derivative contracts

**Section 25** The institution may adjust the exposure amount in line with sections 26-27 in order to take account of recognisable netting agreements for derivative contracts.

**Section 26** When calculating the sum of the current replacement cost in accordance with Chapter 18, section 7, the institution may reduce it by the sum of the negative market values which the institution has with the same counterparty.

**Section 27** For derivative contracts covered by a recognisable netting agreement, the amount for potential change in risk is calculated in accordance with the following formula.

$$PCE_{\text{red}} = 0.4 * PCE_{\text{gross}} + 0.6 * NGR * PCE_{\text{gross}}, \text{ where}$$

$PCE_{\text{red}}$  = the reduced amount for potential future credit exposure for all contracts with a given counterparty included in a netting agreement.

$PCE_{\text{gross}}$  = the sum of the figures for potential change in risk for all contracts with a specific counterparty included in a netting agreement and calculated by multiplying their notional value with a risk factor in accordance with Table 6 in Chapter 18.

NGR = “net-gross ratio”: the ratio between the net replacement cost for all contracts included in a netting agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a netting agreement with that counterparty (denominator).

If netting leads to a net debt when calculating the net replacement cost, the net replacement cost should be set at zero in the above formula.  $PCE_{\text{red}}$  may therefore never be less than  $0.4 * PCE_{\text{gross}}$ .

## Effect of netting agreements for other receivables and liabilities

**Section 28** The institution may adjust the exposure amount in accordance with section 29 to take account of recognisable netting agreements for other receivables and liabilities in the balance sheet.

Recognisable netting agreements for other liabilities and receivables are limited to mutual cash receivables between the institution and the institution's counterparty that constitute loans or deposits with the institution.

**Section 29** With regard to receivables covered by the netting agreement, a net amount,  $E_{\text{unsec}}$ , may replace the individual exposure amounts when determining a risk-weighted exposure amount.

$$E_{\text{unsec}} = \max \{0, (\sum E - \sum C_{VA})\}$$

$$C_{VA} = C \times (1 - H_{fx})$$

E is the net book value of the receivables.

C is the net book value of the liabilities.

$C_{VA}$  is the volatility-adjusted amount of the liabilities.

$H_{fx}$  is a factor for volatility adjustment with regard to changes in exchange rates.

## **Chapter 27 Other credit protection**

### **Life insurance policies**

**Section 1** Life insurance policies pledged or assigned to the institution can be recognisable collateral if the conditions in sections 2-3 are met.

**Section 2** The insurance provider meets the criteria for an eligible issuer pursuant to Chapter 24, section 3.

**Section 3** The following conditions shall be met:

1. The insurance provider shall have been notified of the pledge or assignment. The insurance provider may not make any payments under the terms of its contract without the permission of the institution.
2. The insurance must have a declared surrender value that cannot be reduced.
3. The institution must have the right to cancel the insurance and obtain the surrender value without undue delay if the counterparty defaults.
4. The institution shall be given information concerning any premiums unpaid by the policyholder.
5. The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.

In addition, the credit protection must be valid throughout the entire underlying exposure's maturity.

**Section 4** Recognisable life insurance policies shall be considered to be a guarantee issued by the insurance provider. The protected amount shall consist of the surrender value of the insurance policy and adjusted in accordance with Chapter 24 where applicable.

### **Cash on deposit with another institution**

**Section 5** Cash on deposit with another institution (third party), or cash assimilated instruments held by a third party, in a non-custodial arrangement can be considered to be recognisable collateral if the following conditions have been met.

1. The borrower's claim against the third party institution is pledged or assigned to the institution.
2. The third party shall have been notified of the pledge or assignment.
3. It may not be possible for the third party to make payments to any party other than the institution without the permission of the latter.
4. The pledge or assignment shall be unconditional and irrevocable.
5. The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.

Collateral pursuant to the above shall be treated as a guarantee issued by a third party.

## **Part H Operational risk**

### **Chapter 28 Scope**

**1 §** This part shall be applied by institutions when calculating the institution's capital requirement for operational risk in accordance with Chapter 2, section 8 and Chapter 6 of the Capital Adequacy Act and section 10 of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371) and by some investment firms when calculating the total capital requirement in accordance with Chapter 2, section 9 of the Capital Adequacy Act.

### **Chapter 29 The basic indicator approach**

#### **Calculation of capital requirements**

**Section 1** The capital requirement for operational risk under the basic indicator approach is equal to 15% of the income indicator calculated in accordance with section 2.

#### **Income indicator**

**Section 2** The income indicator consists of the average operating income of the three most recent financial years in accordance with section 3.

Where an institution terminates a large portion of its operations and as a consequence the income indicator no longer provides a fair view of its operating income, the institution may, after receiving permission from Finansinspektionen, during a transition period, calculate the capital requirement for operational risk based on a different indicator.

Where the operating income is negative or zero for any of the three financial years in question, these years shall not be included when calculating the income indicator. The income indicator shall be calculated as the sum of the positive financial years divided by the number of positive financial years.

If any of the three most recent financial years was shortened or extended, the operating income shall be recalculated to a twelve-month basis using simple proportions.

Where an institution has been in business for less than one year, the income indicator shall correspond to the operating income given in the institution's business plan for the first year.

**Section 3** Operating income is calculated as the balance of the following items:

1. interest receivable and lease income,
2. interest payable and lease costs,
3. dividends received,
4. commissions receivable,
5. commissions payable,
6. net income on financial transactions, and
7. other operating income.

The income indicator shall be calculated before deductions for provisions and operating expenses. Operating expenses shall include fees paid for outsourced services rendered by third parties which are not a parent or subsidiary of the institution or a subsidiary of a parent which also a parent of the institution. Expenditure for outsourced services rendered by third parties may be deducted from operating income if they were paid to a company subject to the supervision of Finansinspektionen.

The following items shall not be taken into account when calculating operating income:

- lease costs for leases not included in the leasing operation,
- dividends from associated and group companies,
- realised profits/losses from the sale of assets in non-trading activities, and
- income from insurance operations.

Commissions from the sale of insurance products shall be included in commissions receivable and therefore in operating income.

**Section 4** Institutions that apply Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards shall calculate operating income in the manner that is most consistent with the definition in section 3.

### **Chapter 30 The standardised approach**

**Section 1** In accordance with Chapter 6, section 3 of the Capital Adequacy Act, an institution, after notifying Finansinspektionen, may calculate the capital requirement for operational risk in accordance with the standardised approach rather than the basic indicator approach.

#### **Eligibility requirements**

**Section 2** In order to calculate the capital requirement in accordance with the standardised approach, the following requirements must be met.

1. The institution shall have policy documents approved by the board of directors for management and assessment of its exposure to operational risks, including extreme events with significant impact on the activities of an institution. In addition to stating the institution's applied definition of operational risk, the policy documents shall state which forms of operational risk are relevant in the operations.
2. The institution shall have processes for handling its exposure to operational risks.
3. The institution shall have contingency and business continuity plans in place to ensure its ability to operate on an ongoing basis and limit losses in the event of a severe business disruption.
4. The institution shall have documented risk management for operational risks with a clear allocation of responsibilities. The institution shall identify and assess its exposure to operational risks and track relevant data in an organized and structured manner. The risk management shall be regularly subject to an independent review.



5. The operational risk management shall be part of the institution's risk management process. The risk management outcome shall be an integral part of the monitoring and control of the institution's operational risk profile.
6. The institution shall have an internal reporting structure for operational risks reaching the board of directors that provides operational risk reports to relevant institution functions. Procedures shall be in place to take appropriate action according to the information in these reports.
7. The institution shall have policy documents and documented criteria for assigning operations and the income indicator to the appropriate business lines. These policy documents and criteria shall be regularly reviewed by an independent review function. The criteria shall be updated regularly and adjusted for new and changing business activities, products and risks. The managing director of the institution shall approve the policy document.

### **Calculation of capital requirements**

**Section 3** An institution's operations shall be divided into business lines in accordance with section 7. The capital requirement for each such line is calculated using the income indicator in accordance with section 4, multiplied by the percentage that applies for each business line in accordance with section 8.

### **Income indicator**

**Section 4** The income indicator for each business line shall be calculated as an average of the operating income for the last three financial years. Operating income is calculated in accordance with Chapter 29, section 3.

Where the operating income is negative for any of the three financial years in question, the operating income for each business line during the year in question shall be set as zero when calculating the income indicator. Where the operating income for a certain business line is negative, though the operating income for the entire year is not negative, the negative figure may be used.

Where an institution terminates a large portion of its operations and as a consequence the income indicator no longer provides a fair view of its operating income, the institution may apply for permission to calculate, during a transition period, the capital requirement for operational risk based on a different indicator.

If any of the three most recent financial years was shortened or extended, the operating income shall be recalculated to a twelve-month basis using simple proportions.

Where an institution has been in business for less than one year, the income indicator shall correspond to the operating income given in the institution's business plan for the first year.

**Section 5** Institutions that apply Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, shall calculate operating income in the manner that is most consistent with the definition in Chapter 29, section 3.

**Section 6** Under the standardised approach, the capital requirement for operational risk is the sum of the capital requirements calculated across the business lines.

## Division of operations

**Section 7** The following conditions apply for the division of operations into business lines:

1. All of an institution's operations shall be consistently assigned to one of the eight business lines.
2. An operation that cannot be assigned to a specific business line but which represents an ancillary function to an activity shall be allocated to the same business line to which that activity is assigned. Where the ancillary function supports more than one business line, the division shall be made on objective criteria.
3. If an activity or an ancillary function for an activity cannot be assigned to a specific business line in accordance with point 2 above, the activity shall be assigned to the business line with the highest percentage.
4. An institution may use internal methods to allocate income between business lines. Costs generated in one business line which can be attributed to another line may be reassigned to the business line to which they pertain, for example by using internal pricing between two business lines.

**Section 8** The following table presents the business lines and the percentage for calculating the capital requirement, as well as examples of activities within each business line.

<i>Business line</i>	<b>%</b>	<b>Activity</b>
Corporate finance	18%	<ul style="list-style-type: none"> <li>– Advisory services, etc., for mergers and acquisitions, privatisation, securitisation, new issues, initial offerings, as well as to owners, boards of directors and management.</li> <li>– Underwriting in connection with corporate financing and acquisitions.</li> <li>– Investment in shares in unlisted firms (private placement).</li> <li>– Capital raising.</li> <li>– Venture capital.</li> </ul>

Trading and sales	18%	<ul style="list-style-type: none"> <li>- Trade, brokerage and analysis with respect to transferable securities and other financial instruments such as interest, currency and commodity-related instruments, shares and derivatives.</li> <li>- Commitment as market maker.</li> <li>- Management of long-term/strategic own securities.</li> <li>- Security lending transactions and repurchase agreements.</li> <li>- Own financing and liquidity management (treasury).</li> <li>- Operation of multilateral trading facilities (MTF)</li> </ul>
Retail banking	12%	<ul style="list-style-type: none"> <li>- Banking services for the mass market and wealthy private clients (e.g., deposits, lending, advisory services, payment services, cash management, brokerage and sale of savings products, excl. private brokerage, etc.)</li> <li>- Card services.</li> </ul>
Commercial banking	15%	<ul style="list-style-type: none"> <li>- Lending and borrowing as well as other financing to the commercial market (such as traditional loans, guarantees, export financing, project financing, factoring, leases, etc.)</li> <li>- Factoring.</li> </ul>
Payment and settlement	18%	<ul style="list-style-type: none"> <li>- Money transmission services.</li> <li>- Clearing and settlement.</li> </ul>
Agency services	15%	<ul style="list-style-type: none"> <li>- Custodial services, management of securities and associated services (corporate actions).</li> <li>- Board management and trust services.</li> <li>- Administration of securities lending.</li> </ul>
Asset management	12%	<ul style="list-style-type: none"> <li>- Discretionary asset management.</li> <li>- CIU management.</li> <li>- Other forms of asset management.</li> </ul>
Retail brokerage	12%	<ul style="list-style-type: none"> <li>- Brokerage and advisory services with respect to transferable securities and other financial instruments such as interest, currency and commodity-related instruments, shares, derivatives and securities lending with a focus on the mass market and private clients.</li> </ul>

### The alternative standardised approach

**Section 9** An institution can only receive permission in accordance with Chapter 6, section 5 of the Capital Adequacy Act to calculate the capital requirement in accordance with the alternative standardised approach if the following requirements are met.

1. The institution shall primarily carry on operations in retail banking and commercial banking. These two business lines shall together comprise at least 90% of operating income.

2. The institution must be able to show Finansinspektionen that a significant proportion of its business within retail banking and/or commercial banking is comprised of exposures with a high probability of default. The institution shall also be able to show that the alternative standardised approach provides a better way of calculating the capital requirement for operational risk than the standardised approach.

### **Eligibility requirements**

**Section 10** In order to be allowed to calculate the capital requirement for operational risk in accordance with the alternative standardised approach the institution shall meet the same qualifying criteria as in the standardised approach.

### **Calculation of capital requirements**

**Section 11** Calculating the capital requirement using the alternative standardised approach is the same as for the standardised approach in Chapter 30 with the following exceptions. For retail and commercial banking the institution shall use the average of the last three years' total notional amounts for loans and advances instead of the income indicator. This shall then be multiplied by 3.5% in order to obtain the relevant indicator for the two business areas.

The total lending in the retail banking business line shall consist of retail lending.

The total lending in the commercial banking business line shall consist of the lending in other portfolios. Securities assigned to non-trading activities shall also be included.

**Section 12** The sum of the capital requirement per business line is the total capital requirement for operational risk under the alternative standardised approach.

### **Chapter 31 Expenditure-based risks**

**Section 1** When calculating capital requirements in accordance with Chapter 2, section 9 of the Capital Adequacy Act and when calculating the capital requirement for operational risk in accordance with Chapter 2, section 8 of the Capital Adequacy Act, fixed overhead expenses shall refer to

1. personnel costs such as wages and salaries (including commissions and bonus payments), social security fees, pension obligations,
2. costs for buildings and premises and associated costs,
3. other contractual costs such as for computers and other equipment, and
4. depreciation and amortisation.

If the firm has operated for less than one year, expenditure-based risks shall be calculated as 25% of the fixed overhead expenses set out in the business plan.

Where the operations have changed significantly since the previous year, Finansinspektionen can decide to amend the capital requirement.

**Section 2** Investment firms which, after obtaining Finansinspektionen's permission, calculate the capital requirement for operational risks in accordance with section 10 of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371) shall use the following shares for each respective year.

Year	Share
2007	12/88
2008	31/88
2009	50/88
2010	69/88
2011	88/88

## **Part I Foreign Exchange Rate Risk**

### **Chapter 32 Foreign exchange rate risk**

#### **Scope**

**Section 1** Capital requirement for foreign exchange rate risk shall be calculated for positions in foreign currency and for positions in gold.

**Section 2** An institution shall calculate the capital requirement for foreign exchange rate risk that it is exposed to throughout the business, i.e. in the trading book and non-trading activities. The calculation shall cover all assets, liabilities, provisions and off-balance sheet commitments. This calculation shall include gold and every individual currency in which the institution has positions except in the reporting currency.

#### **Valuation and conversion to SEK**

**Section 3** When calculating capital requirements with regard to foreign exchange rate risk, all assets, liabilities, provisions, positions and off-balance sheet commitments shall be valued at their market value. With regard to non-trading activities or instruments included in own funds, if market values do not provide a fair picture, or market values are not available, book values may be used or, if relevant, hedge accounting can be applied when calculating the capital requirement. Regarding hedge accounting, see Finansinspektionen's accounting regulations.

Regarding the conversion to SEK of assets, liabilities, provisions and off-balance sheet commitments in foreign currency, see Chapter 4, section 5.

#### **Options**

**Section 4** Options based on currencies shall be treated as combined long and short positions. Both positions shall be converted into delta-weighted positions by multiplying the notional amounts in each currency by the option's delta value. The net delta in a currency is made up of the net of the delta-weighted short and long positions in the currency, see section 10.

If the exchange which lists the options does not publish the delta values of the options, or if they are OTC options, the institution shall calculate the delta values of its options.

An institution shall have systems in place and apply protective measures that take sufficient account of other risks associated with options trading, such as

- the sensitivity of the delta value to price changes in the underlying financial instrument (gamma)
- the sensitivity of the option price to changes in maturity (theta),
- the sensitivity of the option price to changes in standard deviation (vega), and
- the sensitivity of the option price to changes in the risk-free interest rates (rho) in both countries.

### **CIUs**

**Section 5** If the institution is aware of all currency positions included in the CIU, these shall be included in the calculation of the net position and total net position in accordance with section 10. The netting of such currency positions against other currency positions may be carried out in accordance with the regulations in section 10.

**Section 6** If the institution is not aware of all of the currency positions included in the CIU, the institution shall use the following method:

1. The institution shall assume that the CIU's currency position is the maximum currency exposure that it can have by law and under CIU rules.
2. The institution shall then take into consideration whether the CIU uses derivatives to leverage investments by increasing the currency position in accordance with point 1 proportionally to the leverage.
3. The currency position calculated in this way shall be treated as a separate currency and may not be netted against another currency.

**Section 7** The manager of the CIU may calculate the currency positions in the CIU, provided that the institution ensures that the manager can carry out the calculations in accordance with that set out in this chapter. The netting of such currency positions against other currency positions may be carried out in accordance with the regulations in section 10.

### **Composite currencies**

**Section 8** Net positions in composite currencies or baskets of currencies may be distributed across the component currencies following the quotas of these currencies in force. Alternatively, such currencies may be treated as one currency. Institutions shall apply either of these methods consistently over time.

### **Collateral in a third country's currency**

**Section 9** If a claim denominated in foreign currency is classified as doubtful according to Finansinspektionen's regulations and general guidelines on financial reporting for credit institutions and investment firms and the collateral for such a claim is denominated in a third country's currency, the calculation of the position shall be based on the currency in which the collateral is denominated.

The calculation of positions with regard to current claims shall be based on the lending currency.

## **The two-step method**

**Section 10** An institution shall use the two-step method when calculating capital requirements for foreign exchange rate risks. When using this method, the calculation of the institution's total net position (long or short) in foreign currency is carried out in two steps. In addition, the net position in gold is calculated. Positions in the reporting currency shall not be included in the calculations.

### Step 1, net position in individual currency and in gold

First, the institution's open net position, long or short, in each currency and in gold, in which the institution has positions is calculated. The net position in each currency and in gold is calculated as the net of the positive and negative items respectively, in accordance with 1–7 below.

1. The net spot position, i.e. all asset items less all liability items and provisions, including accrued income/expenses and deferred expenses/income, or, for gold, the net spot position in gold.
2. The net forward position, i.e. all outstanding amounts less all liabilities in currency and gold forwards transactions and the principal on currency swaps not included in the net spot position.
3. Irrevocable guarantees and similar instruments that are certain to be called and for which repayment most likely will not take place.
4. Net future income/expenditure not yet accrued but already fully hedged (application shall be carried out consistently over time).
5. The net delta corresponding to the total holding in foreign currency and gold options.
6. The market value of other options and forwards based on financial instruments in foreign currency or gold.
7. Other off-balance sheet commitments.
8. The net position (long or short) in each currency and in gold shall be converted into SEK in accordance with section 3.

If an institution conducts activities abroad through subsidiaries/associated companies/participating undertakings, profits shall continuously be taken into account when calculating the position (after deductions for taxes in accordance with applicable national tax rates) in the relevant currency.

### Step 2, total net position in foreign currency

The converted long net positions in currency shall then be aggregated. The sum of the short net positions in currency shall be calculated in the same way. The higher of these sums shall be the institution's total net foreign currency position.

## **Calculating the capital requirement**

**Section 11** The institution shall aggregate the absolute values of the following positions:

1. Total net position in foreign currency in accordance with section 10.
2. The net position in gold in accordance with section 10.
3. Currency positions in CIU units in accordance with section 6.

If the sum in the first paragraph exceeds an amount equivalent to two percent of the institution's own funds, the capital requirement for foreign exchange rate risk shall comprise eight percent of this sum. If the sum does not exceed two percent of the institution's own funds, the institution does not need to calculate a capital requirement for foreign exchange rate risk.

**Section 12** With regard to matched positions in closely correlated currencies, a capital requirement corresponding to four percent of the value of the matched position may be applied.

In addition, a lower capital requirement may be applied for currencies covered by legally binding intergovernmental exchange rate agreements. The capital requirement for matched positions in such currencies shall comprise of half of the maximum permitted exchange rate fluctuation variation set by the governments in question for the currencies. Unmatched positions in those currencies shall be treated in the same way as other currencies.

### **Exceptions**

**Section 13** If an institution has hedged the exchange rate for a result or forecast result in another institution within the same financial group, the institution may take into consideration both the exchange rate hedge and the other institution's result or forecast result when calculating the net position. However this applies only to results or forecast results in the current financial year.

**Section 14** Any positions which an institution has deliberately taken to hedge against the adverse effect of the exchange rate on its capital adequacy ratio may, on obtaining Finansinspektionen's permission, be excluded from the calculation of net open currency positions. Such positions shall be of a structural nature and not intended for trading. Every change in the conditions for excluding such positions requires the permission of Finansinspektionen.

In addition, on obtaining the permission of Finansinspektionen, such structural positions comprised of units/equity in associated companies and/or in which the institution has a participating undertaking and which shall be deducted from the own funds may be excepted.

In order for the structural positions to be excepted from the calculation of the open net position, they must be treated consistently.



## **Part J Commodities risk**

### **Chapter 33 Commodities risk**

#### **Scope, calculating positions and netting long and short positions**

**Section 1** Capital requirements for commodities risk shall be calculated for positions in commodities and commodity-linked financial instruments throughout the business, i.e. positions in the trading book and non-trading activities.

Positions in gold and gold derivatives are excepted when calculating a capital requirement for commodities risk. Capital requirements for positions in gold and gold derivatives are instead calculated in accordance with Chapter 32. In addition, positions which entail pure stock financing are excepted when calculating capital requirements for commodities risk. Pure stock financing means that stock has been sold forward and the cost of funding has been locked in until the date of the forward sale.

Each position in commodities or commodity derivatives shall be expressed in terms of standard units of measurement (barrel, MWh, kg, etc.).

Capital requirements for commodities risk shall be calculated on the basis of the institution's long and short net positions in each individual commodity. When determining long and short net positions, positions in contracts maturing the same day and contracts maturing within ten days of each other may be netted if they are traded on markets which have daily delivery dates. Supplementary information regarding the treatment of derivative instruments is contained in sections 2–5.

In addition to positions in identical commodities, the following positions are also considered to be positions in the same commodity:

- positions in different categories of commodity if they can be delivered instead of each other, or
- positions in similar commodities, if they are close substitutes and if a minimum correlation of 0.9 between price movements can be clearly established over a minimum period of one year.

#### **Treatment of derivative instruments**

**Section 2** Forwards and options shall be treated as combined long and short positions.

A long (purchased) position in a forward or option shall be treated as a combination of

- a long position made up of underlying commodities or financial instruments in the contract, and
- a short position corresponding to a zero coupon bond for which the forward price for forwards or the exercise price of options comprises the amount due of the bond and has a maturity date on the delivery date or exercise date for the contract.

A short (sold) position in a forward or option shall be treated as a combination of

- a short position comprised of underlying financial instruments in the contract, and
- a long position corresponding to a zero coupon bond, for which the forward price for forwards or the exercise price of options comprises the amount due of the bond and has a maturity date on the delivery date or exercise date for the contract.

Long and short positions deriving from an option shall be delta-weighted in accordance with section 5.

A zero coupon bond deriving from the partition of derivative instruments into a long and a short position shall be considered to be issued by a central government which qualifies for credit quality step 1, alternatively to have a risk weight of 0% in the standardised approach.

When calculating specific and general risk, the zero coupon bond shall be considered to be an interest rate linked financial instrument and treated in accordance with Chapter 13.

### **Commodity forwards**

**Section 3** Commodity forwards and forward commitments to buy or sell individual commodities shall be incorporated into the maturity ladder approach as notional amounts in terms of the standard units of measurement and assigned a maturity corresponding to the period until the maturity date.

### **Commodity swaps**

**Section 4** Commodity swaps where one leg of the transaction is a fixed price and the other leg the current market price shall be incorporated into the maturity ladder approach as a series of positions equal to the notional amount of the contract, with each position corresponding to each payment in the swap and slotted into the maturity ladder in accordance with this. The positions are long if an institution pays a fixed price and receives a floating price and short if the institution receives a fixed price and pays a floating price.

Each leg of a commodity swap where the legs of the transaction are in different commodities shall be placed in the relevant category of commodities in the maturity ladder approach.

### **Commodity options**

**Section 5** Options based on commodities or commodity derivatives shall be treated as combined long and short positions in the same way that applies to other derivative instruments. Both positions shall be converted into delta-weighted positions by multiplying the underlying asset's market value by the option's delta value. The delta-weighted positions may be netted against any offsetting positions in the same underlying commodities.

If the exchange which lists the options does not publish the delta values of the options, or if they are OTC options, the institution shall calculate the delta value of its options.

An institution shall have systems in place and apply protective measures that take sufficient account of other risks associated with options trading, such as

- the sensitivity of the delta value to price changes in the underlying financial instrument (gamma)
- the sensitivity of the option price to changes in maturity (theta),
- the sensitivity of the option price to changes in standard deviation (vega), and
- the sensitivity of the option price to changes in the risk-free interest rate (rho).

**Commodities lending, repurchase transactions, etc.**

**Section 6** Institutions which transfer or guarantee the title of commodities in a repurchase agreement and lend commodities in a commodities lending agreement shall include such positions when calculating the capital requirement for commodities risk.

**The maturity-based method**

**Section 7** When the maturity-based method is used to calculate the capital requirement for commodities risk, the steps below shall be followed for each individual commodity.

Step 1. All positions in a commodity and positions which, in accordance with section 1, are considered positions in the same commodity shall be expressed in terms of the standard units of measurement (barrel, kWh, kg, etc.).

Step 2. Long and short net positions in a commodity are calculated in accordance with that prescribed in section 1, fourth paragraph.

Step 3. The long and short net positions in the commodity are multiplied by the spot price and placed in the relevant maturity band in the following table. Physical stocks of commodities shall be assigned to the first maturity band.

Maturity band	Spread rate (%)
0 ≤ 1 month	1.50
> 1 ≤ 3 months	1.50
> 3 ≤ 6 months	1.50
> 6 ≤ 12 months	1.50
> 1 ≤ 2 years	1.50
> 2 ≤ 3 years	1.50
> 3 years	1.50

Step 4. Long and short net positions within each maturity band shall be aggregated.

Step 5. Matched long and short positions within a maturity band comprise the matched position within a maturity band. The matched long and short positions in each maturity band are aggregated and multiplied by the spread rate set out in column 2 in the above table.

Step 6. Unmatched long or short positions in each maturity band comprise the unmatched position within a maturity band. Unmatched long (short) positions within a maturity band may be moved to a higher maturity band in order to match short (long) positions in those maturity bands.

The portion of an unmatched position within a maturity band moved in order to match positions in a higher maturity band comprises the matched position between two maturity bands. This position is multiplied by a carry rate of 0.6 percent for

each maturity band the position is moved forward. The matched position arising in the higher maturity band due to an opposing position being moved from a lower maturity band is treated in the same way as matched long and short positions in step 5.

Step 7. Remaining long or short positions which cannot be matched within a maturity band or between two maturity bands comprise the unmatched position. This position is multiplied by an outright rate of 15 percent.

The institution's total capital requirement for commodities risk is calculated by aggregating the capital requirements calculated in steps 5, 6 and 7 for each individual commodity.

### *General guidelines*

Example:

Maturity band	Positions kSEK		Calculations	Capital requirement
	Long	Short		
1	1,000	800	$(800 + 800) \cdot 1.5\% =$ $200 \cdot 15\% =$	24 30
2	1,400	1,200	$(1,200 + 1,200) \cdot 1.5\% =$ $100 \cdot 2^3 \cdot 0.6\% =$ $100 \cdot 15\% =$	36 1.2 15
3				
4	1,400	1,500	$(1,400 + 1,400) \cdot 1.5\% =$ $(100 + 100) \cdot 1.5\% =$	42 3
5				
6				
7	500	500	$(500 + 500) \cdot 1.5\% =$	15

Total capital requirement for the commodity: 166.2

**Section 8** Institutions may, after receiving permission from Finansinspektionen, use the values of the spread rate, carry rate and outright rate set out in the following table instead of those set out in section 7.

	Precious metals (except gold)	Base metals	Agricultural products	Other (incl. energy)
Spread rate (%)	1.0	1.2	1.5	1.5
Carry rate (%)	0.3	0.5	0.6	0.6
Outright rate (%)	8.0	10.0	12.0	15.0

In order to obtain permission, the institution must

1. conduct extensive trading in commodities,

<sup>3</sup> Is multiplied by 2 because it is moved forward two maturity bands in order to match positions in a higher maturity band.

2. have a diversified commodities portfolio and
3. have good procedures, methods and systems for measuring and monitoring commodities risk.

### Simple method

**Section 9** When the simple method is used to calculate the capital requirement for an institution's commodities risk, the following steps shall be applied to each individual commodity.

Step 1. The institution's net position in the commodity shall be calculated in terms of the standard units of measurement (barrel, MWh, kg, etc.). The net position in each commodity equals the difference between an institution's long and short net positions in the commodity. Long and short net positions in a commodity are calculated in accordance with that prescribed in section 1, fourth paragraph.

Step 2. 15 percent of the net position is multiplied by the spot price.

Step 3. The institution's gross position in the commodity shall be calculated in terms of the standard units of measurement (barrel, MWh, kg, etc.). The gross position is calculated as the sum of an institution's long and short net positions in the commodity.

Step 4. Three percent of the gross position is multiplied by the spot price.

The institution's total capital requirement for commodities risk is calculated by aggregating the capital requirements calculated in steps 2 and 4 for each individual commodity.

#### *General guidelines*

Example:

Positions (kSEK)	Capital requirements
Long = 4,300 Short = 4,000	
Net position = 300	$300 \cdot 15\% = 45$
Gross position = 8,300	$8\,300 \cdot 3\% = 249$
	Total capital requirement for the commodity: 294 (45 + 249)

## Part K Large exposures

### Chapter 34 Scope

**Section 1** An institution shall apply these regulations when determining its large exposures. However, the regulations do not apply to Svenska Skeppshypotekskassan.

**Section 2** An institution shall have sound administrative and accounting procedures and adequate internal control procedures for the purpose of identifying and recording all large exposures in order to be able to monitor them using the institution's own exposure strategy.

**Section 3** When an exposure to a client is protected by a third party through a recognisable guarantee or credit derivative, except credit linked notes, the exposure may be treated as if it referred to the third party rather than the client.

If the risk weight for an exposure, when calculating a risk-weighted exposure amount in accordance with the rules for the standardised approach for credit risk, is determined on the basis of the protection provider, this provider shall be considered a counterparty also when calculating large exposures.

### Chapter 35 Establishing large exposures

**Section 1** Provisions regarding large exposures are contained in Chapter 7 of the Capital Adequacy Act.

#### *General guidelines*

According to Chapter 10, section 15, second paragraph of the Capital Adequacy Act, an institution or firm which shall draw up consolidated accounts, shall, without delay, notify Finansinspektionen if the exposures of the institution or financial group exceed permitted threshold values in accordance with Chapter 7, sections 3 and 5, first paragraph of the Capital Adequacy Act. In conjunction with such a report, the institution may apply for an extension in which to reduce the exposures. The institution should enclose a plan outlining when and how these exposures can be reduced to the permitted threshold values with the application.

Institutions and financial groups should ensure that their total exposures are not so close to the threshold values for permitted exposures that there is a risk that these will be exceeded in the course of normal business activities and price changes.

#### **Determining exposure amounts in non-trading activities**

**Section 2** When determining large exposures, the exposure amount shall be the following.

1. On-balance sheet items shall be taken at the net accounting value in accordance with Chapter 15, section 3, lines 1–4.
2. Off-balance sheet commitments shall consist of the nominal amount.

3. Derivative contracts shall be calculated in accordance with Chapter 15, section 3, lines 6–7.
4. Derivative contracts, repurchase transactions, margin lending transactions and securities and commodities lending or borrowing transactions may be handled in accordance with Chapter 15, section 3, lines 7–8.

When calculating exposure amounts, the institution may take into account any netting agreements in accordance with Chapter 26.

### **Determining exposure amounts in the trading book**

**Section 3** An institution shall calculate exposure to individual clients by aggregating the following items:

1. The sum, if it is positive, of the net positions in interest and equity-linked financial instruments issued by the client. The net position in each instrument is calculated in accordance with the methods set out in Chapter 13, sections 9–38 and 56–62.
2. Net positions arising due to underwriting commitments in conjunction with issues, reduced by the reduction factors set out in Chapter 13, section 67.
3. Exposures in activities exposed to settlement and counterparty risks are calculated in accordance with Chapter 13, sections 69–82. Exposures arising from transactions not settled on the due settlement date shall not be multiplied by the factors set out in Chapter 13, section 70. Transactions that are assigned a capital requirement of zero in accordance with Chapter 13, section 70 may be excepted when determining large exposures.

**Section 4** After a calculation in accordance with section 3 exposures with regard to individual clients shall be aggregated to the group of connected clients to which the individual client belongs.

### **Shares in CIUs**

**Section 5** Exposures in the form of shares in CIUs shall be reported as an exposure to the CIU. The holdings in various CIUs do not need to be aggregated if they are administered by the same CIU.

### **Exposures excluded when determining large exposures**

**Section 6** In addition to the exceptions treated in the Capital Adequacy Ordinance, the following exposures shall also be excepted when determining an institution's large exposures.

1. Exposure amounts for exposures to international organisations or multilateral development banks which attract a 0% risk weight in accordance with Chapter 16.

Exposure amounts for exposures covered by recognisable financial collateral in the form of debt securities issued by the counterparties referred to in the first paragraph.

2. Exposure amounts for exposures to public sector entities which attract a 0% risk weight in accordance with Chapter 16.

Exposure amounts for exposures covered by recognisable financial collateral in the form of debt securities issued by the counterparties referred to in the first paragraph.



3. Exposure amounts for exposures for which there is adequate collateral in the form of cash on deposit with the lending institution or with an institution which is the parent undertaking or a subsidiary of the lending institution, or in the form of cash received for a credit linked note issued by the institution and loans received from a counterparty to the institution that are included in an netting agreement for on-balance sheet items approved in accordance with Chapter 26.

Exposure amounts for exposures for which there is adequate collateral in the form of certificates of deposit issued by the lending institution or an institution which is the parent undertaking or a subsidiary of the lending institution and lodged with either of them.

4. Exposure amounts for exposures with a residual term of a maximum of one year to credit institutions in Sweden, investment firms which have Finansinspektionen's permission to accept funds on deposit in accordance with Chapter 3, section 4, first paragraph, point 4 of the Securities Business Act (1991:981) or foreign credit institutions with their registered office in a country within the EEA. In no case may the item constitute the issuing institution's own funds.

Exposure amounts for exposures to foreign credit institutions registered in a country outside the EEA may, on obtaining the permission of Finansinspektionen, be excepted in accordance with the first paragraph.

### **Exposures included with a reduced value when determining large exposures**

**Section 7** An institution shall include the following exposures using the values set out below when determining large exposures:

1. Exposure amounts for exposures with a residual term of more than one year but a maximum of three years to a credit institution in Sweden, investment firms which have Finansinspektionen's permission to accept funds on deposit in accordance with Chapter 3, section 4, first paragraph, point 4 of the Securities Business Act (1991:981) or a foreign credit institution with its registered office in a country within the EEA shall be included at 20 percent of their value. Debt securities issued in accordance with the Covered Bonds (Issuance) Act (2003:1223) and equivalent foreign debt securities with residual terms of more than one year but a maximum of three years shall be included at 10 percent of their value. In no case may the items constitute the issuing institution's own funds.

Exposure amounts for exposures to foreign credit institutions registered in a country outside the EEA may, on obtaining the permission of Finansinspektionen, be treated in accordance with the first paragraph.

2. Exposure amounts for exposures covered by recognisable financial collateral in the form of debt securities issued by a credit institution in Sweden shall be included at 20 percent of their value if the value of the collateral is at least 150 percent of the value of the exposure and there is no maturity mismatch in accordance with Chapter 25, section 10 between the exposure and collateral. In no case may the item constitute the issuing institution's own funds.

3. Exposure amounts for exposures in the form of holdings of bonds issued by a credit institution in Sweden, an investment firm which has Finansinspektionen's permission to accept funds on deposit in accordance with Chapter 3, section 4, first paragraph, point 4 of the Securities Business Act (1991:981) or a foreign credit institution with its registered office in a country within the EEA shall be included at 50 percent of their value on condition that the bonds have a residual maturity of more than three years and are effectively negotiable on a market comprised of professional operators and are subject to daily quotation on that market. Exposure amounts for exposures in the form of holdings of debt securities issued in accordance with the Covered Bonds (Issuance) Act (2003:1223) and equivalent foreign debt securities with a residual term of more than three years shall be included at 25 percent of their value. In no case may the items constitute the issuing institution's own funds.

Exposure amounts for exposures to foreign credit institutions with a registered office in a country outside the EEA may, on obtaining the permission of Finansinspektionen, be treated in accordance with the first paragraph.

4. Documentary credits of a medium to low risk character for which delivered goods constitute the collateral shall be included at 50 percent of the nominal amount.

**Section 8** An institution which applies netting agreements for derivative contracts in accordance with Chapter 26 with regard to exposures to counterparties set out in section 6, point 4 and section 7, point 1, may be included at 20 percent of the exposure amount irrespective of the term of the exposures.

**Section 9** An institution may, as an alternative to section 6, point 4 and section 7, lines 1 and 3, instead apply the following method.

Exposure amounts for exposures to a credit institution in Sweden, investment firms which have received Finansinspektionen's permission to accept funds on deposit in accordance with Chapter 3, section 4, first paragraph, point 4 of the Securities Business Act (1991:981) or a foreign credit institution registered in a country within the EEA may be included at 20 percent of its value, irrespective of maturity.

Exposure amounts for exposures to foreign credit institutions registered in a country outside the EEA may, on obtaining the permission of Finansinspektionen, be treated in accordance with this paragraph.

**Section 10** Exposure amounts for trading book exposures to investment firms, clearing organisations and exchanges within the EEA may be exempted or reduced in accordance with section 6, line 4 and section 7, lines 1 and 3 or alternatively be treated in accordance with section 9.

Correspondingly, institutions may, after receiving permission from Finansinspektionen, exempt or reduce trading book exposures to foreign investment firms, clearing organisations and exchanges other than those set out in the first paragraph.

**Section 11** Exposure amounts for exposures secured by liens on residential properties or shares in tenant-owner associations according to Chapter 16, sections 24-29 and exposure amounts for exposures secured by liens on commercial real

estate properties in accordance with Chapter 16, section 30 may be reduced by 50%.

### **Alternative method for determining large exposures**

**Section 12** After receiving permission from Finansinspektionen, institutions which apply Chapter 25, sections 20-43 or Chapter 55, sections 11-30 may rather than completely or partially excepting exposures in accordance with section 6, lines 1-3 and section 7, point 2 when determining exposure amounts in accordance with Chapter 7, sections 3 and 5 of the Capital Adequacy Act use an adjusted exposure amount. The adjusted exposure amount shall be a minimum of  $E_{unsec}$  calculated in accordance with Chapter 25, section 20.

**Section 13** An institution which has obtained permission to use own estimates of LGD and conversion factors in accordance with the IRB approach in sub-part L1 may, instead of completely or partially excepting exposures in accordance with section 6, lines 1-3 and section 7, point 2 or calculating the exposure amount in accordance with section 12, after receiving permission from Finansinspektionen, use own estimates when determining large exposures in accordance with Chapter 7, sections 3 and 5 of the Capital Adequacy Act.

In order for such permission to be given, the institution must be able to estimate the effect of the financial collateral on the relevant exposures separately from other LGD-related aspects.

**Section 14** An institution which has received permission to use one of the methods set out in sections 12-13 when determining large exposures in accordance with Chapter 7, sections 3 and 5 of the Capital Adequacy Act shall conduct periodic stress tests of their credit-risk concentrations, including for the realisable value of any collateral taken.

These stress tests shall address risks arising from potential changes in market conditions that could adversely impact the institution's capital adequacy and risks arising from the hurried realisation of collateral.

The institution shall be able to demonstrate that the stress tests carried out are adequate and appropriate for the assessment of such risks.

In the event that such a stress test indicates a lower realisable value of collateral taken than would be permitted to be taken into account under sections 12-13, the value of collateral permitted to be recognised in calculating the value of exposures in accordance with Chapter 7, sections 3 and 5, first paragraph of the Capital Adequacy Act shall be reduced accordingly.

An institution shall include the following in its strategy for addressing concentration risk:

1. Strategies and procedures for addressing risks arising from maturity mismatches between exposures and any credit protection on those exposures.
2. Strategies and procedures in cases where a stress test indicates a lower realisable value of collateral than taken into account under sections 12-13.

3. Strategies and procedures relating to concentration risk arising from credit protection and, in particular, large indirect credit exposures (for example to a single issuer of securities taken as collateral).

### **Exceeding the threshold values for large exposures in the trading book**

**Section 15** An institution can apply to Finansinspektionen for general permission to exceed the threshold values for the large exposures set out in Chapter 7, sections 3 and 5 of the Capital Adequacy Act within the framework set out in paragraphs 3-5 below and on condition that additional capital requirement is met. The portion of a large exposure which exceeds the threshold values is designated as an excess exposure.

The additional capital requirement for an excess exposure shall be calculated in accordance with Chapter 13, section 68.

An excess exposure may only arise due to positions included in the trading book. The institution's total exposure in non-trading activities to a client or group of connected clients, may not exceed the threshold values set out in Chapter 7, sections 3 and 5 of the Capital Adequacy Act.

The total amounts of excess exposure in existence for more than ten days may not exceed 600% of the institution's own funds.

Where 10 days or less has elapsed since an excess exposure arose, the sum of the exposures to the particular client or group of connected clients included in the trading book may not exceed 500 percent of the institution's own funds.

At the end of every quarter the institution shall notify Finansinspektionen of all cases where the threshold values for large exposures set out in Chapter 7, sections 3 and 5 of the Capital Adequacy Act have been exceeded during the previous three months.

**Section 16** Investment firms which in accordance with section 8 of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371) request permission from Finansinspektionen to exceed the threshold values set out in Chapter 7, sections 3 and 5 of the Capital Adequacy Act without calculating an additional capital requirement in accordance with section 15 must fulfil the following conditions.

1. The investment firm may not provide investment services or investment activities as referred to by the financial instruments set out in lines 5-7 and 9-10 in section C in Appendix 1 in Directive 2004/39/EC to private individuals or on behalf of private individuals.
2. Breaches of threshold values in Chapter 7, sections 3 and 5 of the Capital Adequacy Act shall arise in conjunction with exposures that
  - a) result from contracts that are financial instruments as listed in lines 5-7 and 9-10 in Section C of Appendix I to Directive 2004/39/EC and refer to commodities or underlying variables set out in point 10, Section C of Appendix I to Directive 2004/39/EG and are calculated in accordance with Appendices III and IV to the Credit Institution Directive, or
  - b) are the result of agreements which cover the supply of commodities or emission allowances.

## **Part L Advanced methods**

### **Sub-part L1 Internal ratings based approach (IRB approach)**

#### **Chapter 36 General provisions**

**Section 1** This section sets out the requirements and conditions which shall be met in order for an institution in accordance with Chapter 4, section 7 of the Capital Adequacy Act to be granted permission to use an IRB approach to calculate the capital requirement for credit risk.

Subsidiaries within a financial group are not required to meet the minimum requirements individually, rather they may be met considered together with the parent company and other subsidiaries within the group. However, the aforesaid shall not apply to Chapter 44, sections 39-42.

#### **Chapter 37 Exposure class assignment**

**Section 1** Each exposure shall be assigned to one of following exposure classes:

1. exposures to governments,
2. exposures to institutions,
3. exposures to corporates,
4. retail exposures,
5. equity exposures,
6. securitisation positions, and
7. non credit-obligation assets.

The procedures for assigning exposures to different exposure classes shall be appropriate to the task and consistent over time. The procedures shall be documented.

Institutions shall assign exposures in accordance with sections 2-9.

**Section 2** Exposures to governments refers to exposures to governments and central banks. This exposure class also includes exposures to

1. a Swedish local authority or comparable entity,
2. a foreign local authority or comparable entity where such are treated as government exposures in the country in question,
3. a multilateral development bank or international organisation which attracts a risk weight of 0% under the standardised approach for credit risk, and
4. a public body which according to the standardised approach for credit risk may be treated as exposures to governments.

**Section 3** Exposures to institutions refer to exposures to credit institutions and investment firms which are licensed in accordance with Chapter 3, section 4, first paragraph, lines 4 and 5 of the Securities Operations Act(1991:981) and equivalent foreign companies. This exposure class also includes exposures to

1. a foreign local authority or comparable association if it is not treated as a government exposure in the country in question,

2. a public body which according to the standardised approach for credit risk may be treated as exposures to institutions.
3. a multilateral development bank which does not attract a risk weight of 0% under the standardised approach for credit risk, and
4. Sveriges Allmänna Hypoteksbank.

**Section 4** Retail exposures refers to exposures to natural persons and exposure to small or medium-sized legal entities where the total exposure of the institution and, where applicable the financial group, to such legal entities is less than EUR 600,000. Where special cause exists, exposures to small or medium-sized legal entities up to a maximum of EUR 1 million may be assigned to the retail exposure.

When determining total exposure, all exposures to a client or group of connected clients with reciprocal relations shall be taken into consideration. When determining the total exposure, exposures where clients are late with payments shall also be included. However, exposures, which are secured by liens on residential property or site-leasehold rights to such real estate, collateral in properties intended for residential use on a third party's site or collateral in the form of shares in a tenant-owner association do not need to be included in the total exposure. The institution shall have taken reasonable measures to ensure that the total exposure does not exceed the stated limit. In this context, off-balance sheet commitments do not need to be included as exposures.

To be eligible for the retail exposure class, exposures shall in addition be treated by the institution in its credit processes risk management in a manner consistent with other retail exposures. The institution shall not treat the exposure individually as exposures to corporates. The exposure shall also be included in a portfolio consisting of a large number of exposures that are similarly managed.

**Section 5** Within retail exposures, the sub-group exposures secured by residential property and qualifying revolving retail exposures shall be distinguished from other retail exposure. An exposure is revolving when outstanding balances are permitted to fluctuate based on the counterparty's decisions to borrow and repay up to a limit established by the institution.

Exposures secured by real estate collateral refers to retail exposures for which the institution's estimation of LGD is affected by recoveries from mortgages on real estate, site-leasehold rights, buildings constructed on property of a third party or collateral in the form of shares in a tenant-owner association. An exposure may be divided into two parts and treated as two separate exposures. Assignment to the sub-group shall be consistent.

Exposures shall be regarded as qualifying revolving retail exposures if they meet the following conditions:

1. The exposure is to an individual person or persons.
2. The exposure is unsecured. This condition does not need to be met for exposures resulting from credit facilities linked to transaction accounts. Where security exists for the exposure, the institution shall not take into consideration recovery attributable to this security when estimating LGD.
3. In the qualifying revolving exposures sub-group, the maximum credit facility to a single counterparty is EUR 100,000.
4. The institution can unconditionally and immediately cancel any undrawn portion of the credit facility. This requirement is fulfilled if the institution meets the requirement to the full extent allowable under consumer protection legislation.

5. The institution shall be able to demonstrate that the portfolios in which the exposures are included have low volatility of loss rates relative to the average level of loss rates. This condition shall also be met individually for the grades for which the institution's expected default rate is low.

**Section 6** The exposure class equity exposures is assigned the following exposures:

1. Exposures recorded as equity by the issuer conveying a subordinated, residual claim on the assets or income of the issuer.
2. Exposures recorded as debt in the issuing institution but that have properties and conditions that result in similar economic implications as exposures specified in point 1.

**Section 7** Assets which do not require deliveries from a counterparty are assigned to the non credit-obligation exposure class.

If the institution leases assets and the leasing agreement is designed such that the institution carries the financial risk associated with the assets, the residual value is assigned to this exposure class.

**Section 8** Securitisation positions are assigned to securitisation positions exposure class.

Securitisation positions also refer to exposures arising from interest rate or currency derivative contracts included in the structure of the securitisation.

Institutions which provide credit protection for positions in a securitisation are considered to have a direct position in the securitisation.

**Section 9** Any exposures not assigned to any of the other exposure classes shall be assigned to corporate exposure.

**Section 10** Within corporate exposures, specialised lending exposures shall be distinguished. Specialised lending refers to exposures that have all of the following characteristics:

1. The exposure is to a legal entity created specifically to finance or manage physical assets.
2. The contractual arrangements give the lender a substantial degree of control over the assets and the income they generate.
3. The primary source of repayment of the obligation is the income generated by the financed assets.

**Section 11** In leasing agreements, the present value of the minimum lease charges shall be considered an exposure to the lessee and be assigned to the lessee's exposure class.

The minimum lease charges are the payments during the lease term that the lessee is or can be required to pay, and all favourable call options, the exercise of which is reasonably certain.

A leasing transaction that contains a guaranteed residual value may only be included as part of the minimum lease charges, i.e. the exposure to the lessee, if the guarantor of the residual value can be assigned to one of the issuers of credit protection referred to in Chapter 53, section 3 and if the requirements in Chapter 53, sections 4-6 and section 14 are met. If these conditions are not met, the guaranteed residual value of the leasing object shall be assigned to non credit-obligation assets.

## **Chapter 38 Approach for calculation of risk-weighted exposure amount and expected loss amount for each exposure class**

### **General provisions**

**Section 1** Risk-weighted exposure amounts and expected loss amounts for exposures to institutions, government exposures and corporate exposures, retail exposures and non-credit obligation assets shall be calculated in accordance with Chapter 39.

The calculation of risk-weighted exposure amounts and expected loss amounts is based on the three risk parameters, exposure amount, PD and LGD. Maturity (M) is also added with respect to exposures to governments, institutions and corporates.

In the following situations, an institution may calculate a risk-weighted exposure amount in accordance with the rules governing securitisation set out in sub-part L2:

1. when the institution has carried out a traditional securitisation of exposures for which the institution would otherwise calculate a risk-weighted exposure amount and expected loss amount in accordance with the IRB approach, and
2. when the institution has carried out a synthetic securitisation of exposures for which the institution would otherwise calculate a risk-weighted exposure amount and expected loss amount in accordance with the IRB approach.

An institution, which shall calculate a risk-weighted exposure amount for exposures that should be assigned to the securitisation positions exposure class, shall if the underlying securitised exposures are such that the institution should calculate a risk-weighted exposure amount and expected loss amounts in accordance with the IRB approach apply sub-part L2.

The third and fourth paragraphs shall also be applied to other structures with the same economic substance as traditional and synthetic securitisations.

**Section 2** Risk-weighted exposure amounts and expected loss amounts shall be calculated for dilution risk of purchased retail and corporate receivables.

Risk-weighted exposure amount and expected loss amounts for dilution risk are determined by the risk parameters exposure amount, PD and LGD. The risk-weighted exposure amount is also affected by the parameter maturity (M).

Institutions that can evidence negligible dilution risk in its purchased receivables do not need to calculate any risk-weighted exposure amount for dilution risk.

**Section 3** The institution shall fulfil the operational requirements in Chapter 46, sections 1-5 for all purchased receivables.

**Section 4** A group of purchased receivables may be treated as an exposure to the seller secured by the purchased receivables if the following requirements are met:

1. the institution shall have recourse that addresses credit risk and dilution risk in the purchased receivables, and
2. the requirements for receivables set out in Chapter 54, sections 6 and 10 shall be met.



An institution which treats purchased receivables in accordance with the first paragraph is not required to apply the provisions set out in sections 2-3.

**Section 5** Purchased corporate and retail receivables, for which there are measures in the form of refundable purchase discounts, collateral or partial guarantees that provide first-loss protection for credit risk and dilution risk, may be treated as first-loss positions in accordance with sub-part L2.

### **Exposures to governments, institutions and corporates**

**Section 6** The value of the risk parameters for exposures to governments, institutions and corporates shall be determined as follows. The exposure amount shall be determined in accordance with Chapter 40, PD is calculated in accordance with Chapter 41, LGD in accordance with Chapter 42 and M in accordance with Chapter 43.

As of 1 January 2008, Finansinspektionen may permit the institution to calculate own estimates of LGD provided the requirements in Chapter 42 are met.

As of 1 January 2008, Finansinspektionen may permit the institution to calculate its own estimate of conversion factors, which are included in the calculation of the exposure amount, provided the requirements in Chapter 40 are met.

Permission may be granted only where the institution uses own estimates of both LGD and conversion factors for all of its exposures.

**Section 7** For eligible purchased corporate receivables, the institution may apply the rules for rating systems and estimating risk parameters that apply for retail exposures. Purchased corporate receivables are eligible provided the following requirements are met:

- Treating the purchased receivables in the same way as other corporate exposures shall be associated with great difficulty.
- The institution shall have purchased the receivables from an unrelated third-party seller and the purchased receivables may not directly or indirectly originate from the institution.
- The purchased receivables must have originated at market rates.
- The receivables may not be inter-group accounts receivables or receivables subject to contra-accounts between firms that buy and sell receivables from and to one another.
- The institution shall have a claim on all proceeds from the purchased receivables or a proportional share of the proceeds.
- The portfolio of purchased receivables shall be well diversified.

### **Retail exposures**

**Section 8** Own estimates for retail exposures shall be calculated as follows: The exposure amount is calculated in accordance with Chapter 40, PD in accordance with Chapter 41 and LGD in accordance with Chapter 42.

### **Equity exposures**

**Section 9** The risk-weighted exposure amount for equity exposures shall be calculated by one of the approaches specified in Chapter 39, sections 16-23. The

risk-weighted exposure amount for equity exposures to ancillary services undertakings that are included in the financial group may be calculated in accordance with the rules for non credit-obligation assets.

Institutions may obtain permission to calculate risk-weighted exposure amounts in accordance with Chapter 39, section 23. Institutions must meet the requirements in Chapter 45 in order to receive such permission.

An institution may use different approaches for different portfolios of shareholdings if the following requirements are met:

1. the institution shall internally apply different approaches to different equity portfolios,
2. the choice of approaches for calculating capital requirements may not be influenced by the desire of the institution to receive a lower capital requirement,
3. the approaches that the institution wishes to apply to calculate capital requirements shall be used consistently.

## CIUs

**Section 10** Risk-weighted exposure amounts for exposures to a CIU shall be calculated as if the underlying exposures were held directly by the institution provided the following conditions are met:

1. The CIU is managed by a company subject to supervision within the EEA.
2. The institution is aware of all underlying exposures of the CIU.
3. The CIU's prospectus or equivalent document includes
  - a) the categories of assets in which the CIU is authorised to invest, and
  - b) if investment limits apply, the relative limits and the methodologies to calculate them.
4. The business of the CIU shall be reported on at least an annual basis to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period.

Finansinspektionen may grant the institution permission to treat a CIU managed by a company subject to supervision in a country outside the EEA in accordance with the first paragraph. The criteria in the first paragraph, lines 3-4 shall be met for permission to be granted. If a supervisory authority within the EEA approves a third country CIU as eligible, the institution may make use of this recognition without permission from Finansinspektionen.

**Section 11** Where the institution does not meet the conditions in these regulations for using the IRB approach for the CIU's underlying exposures, the following approach shall be used:

1. For equity exposures included in the CIU, risk-weighted exposure amount shall be calculated in accordance with Chapter 39, sections 16-18. If the institution does not know what categories of equities the exposures comprise, it shall for this purpose treat them as other equity exposures.
2. Risk-weighted exposure amounts for all other exposures included in the CIU shall be calculated in accordance with the standardised approach for credit risks, with the modification that the applied risk weight shall be one step immediately above that which would normally be applied to an equivalent exposure not included in a CIU. If a risk weight of 150% would normally be assigned, a risk weight of 200% shall be applied instead.

**Section 12** Risk-weighted exposure amounts for exposures to a CIU that does not meet the criteria set out in section 10, lines 1 and 3-4 or where the institution is not aware of all of the underlying exposures of the CIU shall be calculated in accordance with one of the following approaches:

1. The institution shall use the CIU rules and assume that the CIU first invests to the maximum extent allowed under its mandate, in exposures attracting the highest capital requirement in accordance with the standardised approach for credit risks and then continues making investments in descending order in exposures with lower capital requirements. Risk-weighted exposure amounts for exposures established in this way shall then be calculated in accordance with the standardised approach for credit risks, with the modification that the applied risk weight shall be the one step immediately above that which would have been used for an equivalent exposure not included in a CIU. If a risk weight of 150% would normally be assigned, a risk weight of 200% shall be applied instead.
2. If sufficient information is not available to identify the exposures as set out in point 1 with reasonable certainty, the institution shall calculate risk-weighted exposure amounts in accordance with Chapter 39, sections 16-18. If the institution does not know to which of the three categories of equities the CIU's equity exposures belong, it shall treat the exposures concerned as other equity exposures. Exposures for which the institution cannot identify the category shall also be treated as other equity exposures. Exposures that are not equity exposures shall be assigned to one of the three categories of equities.
3. The institution may allow the manager of the CIU to calculate the capital requirement for the holding in the CIU on behalf of the institution provided that the institution is ensured that correctness of the calculation is adequately ensured. The calculations shall be carried out in the manner prescribed in section 11.

**Section 13** The expected loss amount for exposures to CIUs shall be calculated in accordance with Chapter 39 and the calculation methods which relate to the method used for calculation of risk-weighted exposure amounts.

### **Implementation and application of the IRB approach**

**Section 14** The institution may calculate the risk-weighted exposure amount in accordance with the standardised approach for credit risks if the value of the exposures excepted in accordance with this rule does not exceed 0.5 percent of the institution's balance sheet total.

**Section 15** The institution may receive permission to calculate risk-weighted exposure amounts for exposures to the Swedish government, the Swedish Central Bank and Swedish local authorities in accordance with the standardised approach for credit risks.

**Section 16** The institution may calculate risk-weighted exposure amounts for exposures to a subsidiary, a parent undertaking or a subsidiary of its parent undertaking in accordance with the standardised approach for credit risks provided that the counterparty is an institution, a financial holding company, financial institution, asset management company, ancillary services undertaking or an equivalent foreign undertaking.

**Section 17** The institution may calculate risk-weighted exposure amounts for equity exposures in accordance with the standardised approach for credit risks if those equity exposures are to legal entities who receive a 0% risk weight under the standardised approach for credit risks.

**Section 18** The institution may calculate the capital requirement for all equity exposures in accordance with the standardised approach for credit risks if the aggregate value of the equity exposures is less than 10% of the institution's own funds, calculated as an average over the past year. If the number of equity exposures is less than 10 individual holdings, the threshold shall be 5% of the institutions' own funds. Such equity exposures that apply to companies as referred to in section 16 as well as equity exposures referred to in section 17 may be excluded from the calculation of the aggregate value.

In conjunction with the application for permission to use the IRB approach, the institution may obtain permission to exclude, until 31 December 2017, equity exposures that the institution holds on 31 December 2007 from the IRB approach in addition to what is set out in the first paragraph.

**Section 19** The institution may be permitted to phase in the IRB approach or own estimates of conversion factors and LGD per exposure class and in respect of retail exposures per sub-group of exposures or business line. A gradual implementation may take place over a period not exceeding three years from the date on which the institution was granted permission. This section shall not apply to equity exposures. Permission may only be granted where the following conditions are met:

1. The institution applies the IRB approach for at least 30% of the total exposure amount at the group level calculated in accordance with Chapter 40.
2. The institution can demonstrate that the determinative factor for the manner in which implementation is taking place is the institution's ability to comply with minimum requirements and not the manner which results in the lowest capital requirement.
3. The institution has submitted to Finansinspektionen a realistic timetable regarding implementation of the IRB approach or own estimates of conversion factors and LGD.

**Section 20** The institution may be granted a time-limited permission to apply the standardised approach for credit risks for portfolios of insignificant size. This provision does not apply to equity exposures. Permission may only be granted under the following conditions:

1. The total risk-weighted exposure amount for the exposures for which the longer implementation period is used is less than 15% of the total risk-weighted exposure amount on a group basis calculated in accordance with the standardised approach for credit risks.
2. It would be unreasonably burdensome for the institution to implement the IRB approach or own estimates of conversion factors and LGD for the exposures in question within the prescribed three-year period.

Upon expiry of the permission the institution may apply for a new time-limited permission to use the standardised approach for credit risks. Permission may be granted provided the above conditions are met.

**Section 21** The institution may be permitted to apply the standardised approach for credit risks for the exposure classes, exposures to governments or exposures to institutions provided the following conditions are met:

1. The exposure class or classes for which the standardised approach for credit risks is used in accordance with this section do not represent the greater part of the institution's total exposure.

2. The number of material counterparties within the exposure class is limited.
3. It would be unreasonably burdensome for the institution to implement the IRB approach for the exposure class.

**Section 22** The institution may be permitted to continue to apply the standardised approach for credit risks for exposures to institutions that the institution has as a consequence of requirements on minimum reserves from the ECB or from a member state's central bank. In addition, the following requirements must be met:

1. Reserves held in compliance with Regulation (EC) No 1745/2003 of the European Central Bank of 12 September 2003 on the application of minimum reserves (or a later amending regulation, or in compliance with a national regulation which is equivalent in all material respects).
2. In the event of bankruptcy or insolvency in the institution in which the reserves are kept, the reserves may not be used to cover the institution's other commitments. It shall be possible to repay the reserves in full without delay.

## **Chapter 39 Risk-weighted exposure amounts and expected loss amounts**

**Section 1** This chapter sets forth the manner in which risk-weighted exposure amounts and expected loss amounts are calculated for the various exposure classes based on the risk parameters exposure amount, PD, LGD and M. The institution shall determine the value of the risk parameters in accordance with Chapters 40-43.

### **Calculation of risk-weighted exposure amounts for exposures to governments, institutions and corporates**

**Section 2** The risk-weighted exposure amount for non-defaulted exposures to governments, institutions and corporates shall be calculated as follows unless stated otherwise in sections 3-4.

Risk-weighted exposure amount = Risk weight \* Exposure amount

$$\text{Risk-weight} = \{ \text{LGD} * N [ (1-R)^{-0.5} * G(\text{PD}) + (R/(1-R))^{0.5} * G(0.999) ] - \text{PD} * \text{LGD} \} * (1 - 1.5 * b)^{-1} * (1 + (M - 2.5) * b) * 12.5 * 1.06$$

The parameters  $R$  and  $b$  in the formula are determined based on PD in accordance with the following:

$$R = 0.12 * (1 - \text{EXP}(-50 * \text{PD})) / (1 - \text{EXP}(-50)) + 0.24 * [1 - (1 - \text{EXP}(-50 * \text{PD})) / (1 - \text{EXP}(-50))]^2$$

$$b = (0.11852 - 0.05478 * \ln(\text{PD}))^2$$

$N(x)$  denotes the cumulative standardised normal distribution function.

$G(z)$  denotes the inverse of this function.

**Section 3** Within the exposure class exposures to corporates the following correlation function may be used when calculating the risk-weighted exposure amount for exposures to companies with sales of less than EUR 50 million:

$$R = 0.12 * (1 - EXP(-50 * PD)) / (1 - EXP(-50)) + 0.24 * [1 - (1 - EXP(-50 * PD)) / (1 - EXP(-50))] - 0.04 * (1 - (S-5)/45)$$

In this formula, the parameter S denotes the company's total sales in accordance with the most recently adopted and available annual accounts, expressed in EUR million, if S lies within the range 5-50. Where total sales are less than EUR 5 million, the constant S = 5 is used. For a pool of purchased receivables, the total sales shall be calculated as an exposure weighted average of the individual exposures of the pool.

Where the counterparty firm is included in a group, the group's aggregate sales shall be used as a measure of size.

When total sales are not a meaningful indicator of size, total assets shall be used if this measure is a more meaningful indicator.

**Section 4** For the following exposures and where the institution meets the requirements below, the institution may be permitted to calculate risk-weighted exposure amounts according to the formula in the third paragraph:

1. exposures to a foreign public body or foreign state which cannot be classified as exposures to governments,
2. exposures to a public body that cannot be classified as exposures to governments,
3. exposures to corporates, excluding exposures to insurance and reinsurance companies,

Institutions shall have eligible credit protection for the exposure in accordance with Chapter 58. The exposure shall not belong to the same group as the credit protection provider. The seller of purchased receivables shall not belong to the same group of firms as the issuer of credit protection.

Risk-weighted exposure amount = Risk weight \* Exposure amount \* (0.15 + 160 \* PDpp).

PDpp is PD for the credit protection provider.

Risk weight shall be calculated using the formula set out in section 2. The following shall be observed with respect to the parameters:

1. PD shall refer to the underlying exposure.
2. LGD shall either be LGD for an unsecured exposure to the credit protection provider or an unsecured exposure to the obligor. The determining factor for which LGD shall be used is whether the recoverable amount in a default depends on the financial situation of the credit protection provider or the obligor, if these should default simultaneously. For this assessment, the institution shall consider the formulation of the credit protection as well as other pertinent information or conditions.
3. Maturity (M) refers to the maturity of the credit protection, but shall never be less than a period of one year.
4. When calculating parameter *b*, use the PD value that is the lower of:
  - a) PD for the underlying exposure and
  - b) PD for the credit protection provider.

**Section 5** For non-defaulted exposures to corporates constituting specialised lending, institutions that cannot demonstrate that their PD estimates meet the

requirements set out in Chapters 41 and 44 shall calculate the risk weights as follows.

Institutions shall assign specialised lending exposures to corporates to five categories. Categories 1-4 shall refer to non-defaulted exposures and category 5 to defaulted exposures. Assignment to categories 1-4 shall be based on the increasing risk level of the exposures. The institution shall have policy documents, systems and procedures to consistently assign the exposures.

The institution's criteria for categories 1-4 shall consider the following factors:

1. financial strength,
2. political and legal factors,
3. distinctive characteristics of transactions and/or assets,
4. strength of the sponsor and developer, including any public and private partnership income stream, and
5. collateral.

Each category shall be assigned risk weights in accordance with the following table.

Remaining maturity	Category 1	Category 2	Category 3	Category 4	Category 5
Less than 2.5 years	50%	70%	115%	250%	0%
Equal to or more than 2.5 years	70%	90%	115%	250%	0%

The institution may be granted permission for maturities of 2.5 years or more to assign risk weights of 50% and 70% for categories 1 and 2, respectively. For such permission to be granted, the institution must be able to verify that underwriting characteristics and other risk characteristics are substantially strong for the relevant category.

**Section 6** Risk-weighted exposure amounts for dilution risk of purchased corporate receivables shall be calculated using the formula in section 2.

**Section 7** An institution which does not use own estimates of LGD shall in respect of defaulted exposures to governments, institutions and corporates, set the risk-weighted exposure amount to 0 (zero).

**Section 8** An institution which received permission in accordance with Chapter 38, section 6 to use own estimates of LGD shall, in the respect of defaulted exposures to governments, institutions and corporates, calculate the risk-weighted exposure amount in accordance with the following:

Risk-weighted exposure amount = Risk weight \* Exposure amount

Risk weight = max[0; (LGD - LGD<sub>f</sub>) \* 12.5]

LGD refers to the exposure's LGD value, which shall be calculated in accordance with the regulations for non-defaulted credits set out in Chapter 42. LGD<sub>f</sub> is the value that results from Chapter 42, section 15.

### Calculation of the risk-weighted exposure amount for retail exposures

**Section 9** The risk-weighted exposure amount for non-defaulted retail exposures shall be calculated as follows:

Risk-weighted exposure amount = Risk weight \* Exposure amount

$$\text{Risk-weight} = \{ \text{LGD} * N [ (1-R)^{0.5} * G(\text{PD}) + (R/(1-R))^{0.5} * G(0.999) ] - \text{PD} * \text{LGD} \} * 12.5 * 1.06$$

The correlation parameter R is determined here as follows:

- For exposures secured by real estate collateral, R shall be 0.15.
- For qualifying revolving exposures R shall be 0.04.
- For other retail exposures  $R = 0.03 * (1 - \text{EXP}(-35 * \text{PD})) / (1 - \text{EXP}(-35)) + 0.16 * [1 - (1 - \text{EXP}(-35 * \text{PD})) / (1 - \text{EXP}(-35))]$ .

N(x) and G(z) have the same meaning as in section 2.

**Section 10** Risk-weighted exposure amounts for legal entities which in accordance with Chapter 37, section 4 may be assigned to retail exposures, and for which in accordance with Chapter 58 the institution has recognisable credit protection may be calculated in accordance with section 4.

**Section 11** Where a pool of purchased retail receivables includes exposures secured by real estate collateral and/or qualifying revolving exposures and the institution cannot separate these from other retail exposures, the institution shall use the risk weight function that gives the highest capital requirements.

**Section 12** Risk-weighted exposure amounts for dilution risk in purchased retail receivables shall be calculated using the formula in section 2.

**Section 13** The exposure-weighted average LGD used when calculating risk-weighted exposure amounts for credits secured by real estate properties where the security consists of shares in a tenant-owner association, collateral in properties for residential purposes on a third party's site, liens on residential property or site-leasehold rights to such real estate, may not be lower than 10%. Where the average is lower than 10% an adjustment must be made such that the average is not lower than 10%. This adjustment shall be made using the same factor for all LGD classes.

This section does not apply to exposures benefiting from government guarantees.

These provisions shall be apply up to and including 31 December 2010.

**Section 14** Risk-weighted exposure amounts for defaulted retail exposures shall be calculated in accordance with section 8.

### Calculation of risk-weighted exposure amounts for non credit-obligation assets

**Section 15** The risk weight for non credit-obligation assets is 100%. The formula for risk-weighted exposure amounts is as follows:

Risk-weighted exposure amount = 100% \* Exposure amount



For a leasing transaction where the institution carries the financial risk in the asset or where there is a guaranteed residual value that does fulfil the requirements set out in Chapter 37, section 11 to be assigned to the leasee, the risk-weighted exposure amount for the residual value is determined in accordance with the following. When the leasing agreement starts, the risk-weighted exposure amount is calculated in accordance with the following formula:

$$\text{Risk-weighted exposure amount} = 1/t * 100\% * \text{Exposure amount}$$

where t is the maturity of the leasing contract.

Risk-weighted exposure amounts shall then increase linearly over time until the agreement expires, at which point the risk-weighted exposure amount shall total  $100\% * \text{Exposure amount}$ .

### **Calculation of the risk-weighted exposure amount for equity exposures**

#### *Risk weight approach*

**Section 16** Risk-weighted exposure amounts shall be calculated using the following formula:

$$\text{Risk-weighted exposure amount} = \text{Risk weight} * \text{Exposure amount}$$

The risk weight shall have the following values:

1. for equity exposures traded on a regulated market the risk weight is 290%,
2. for equity exposures in venture capital firms not traded on a regulated market, but included in a well-diversified portfolio, the risk weight is 190%,
3. for other equity exposures the risk weight is 370%.

**Section 17** Short equity positions in the bank portfolio may offset long positions in the same equities, provided that the short positions were specifically acquired to hedge specific equity holdings and that they provide a hedge for at least one year.

Other short positions in the bank portfolio shall be treated as long positions. The absolute value of the position shall be multiplied by the relevant risk weight.

**Section 18** When calculating risk-weighted exposure amounts the institution may take into account the effect of guarantees and credit derivatives where they meet the requirements for being recognisable in accordance with Chapter 53. If there is a recognisable guarantee or credit derivative the risk-weighted exposure amount may be calculated as if the exposure were against the credit protection provider. However, LGD shall be determined based on the equity exposures in accordance with Chapter 42, section 8.

#### *PD/LGD approach*

**Section 19** Risk-weighted exposure amounts shall be calculated in accordance with sections 1, 2 and 7.

**Section 20** An institution that does not have sufficient information to apply the definition of default set out in Chapter 41, sections 7-10, shall multiply the risk-weighted exposure amount by 1.5.

**Section 21** For an individual exposure, the sum of the expected loss amount multiplied by 12.5 and risk-weighted exposure amount shall not exceed the exposure amount multiplied by 12.5.

**Section 22** When calculating risk-weighted exposure amounts, the institution may take into consideration the effect of guarantees and credit derivatives in accordance with the provisions of Chapter 53.

*Internal method*

**Section 23** An institution may obtain permission to calculate risk-weighted exposure amounts using a Value-at-Risk model (VaR model) which meets the requirements set forth in Chapter 45.

Risk-weighted exposure amounts shall be calculated by multiplying VaR by 12.5.

For an individual exposure, the risk-weighted exposure amount shall not be less than the sum of the risk-weighted exposure amount required under the PD/LGD approach and the expected loss amount in accordance with section 33 multiplied by 12.5. When calculating risk-weighted exposure amounts, PD and LGD shall have the following values:

1. PD shall be 0.09%.
2. LGD for equity exposures in venture capital firms not traded on a regulated market but are included in a well-diversified portfolio shall be 65%. LGD for all other equity exposures shall be 90%.

**Calculation of expected loss amount for exposures to governments, institutions, corporates and retail exposures**

**Section 24** The expected loss amounts for non-defaulted and defaulted exposures to corporates, institutions, governments and retail exposures shall be calculated as follows:

$$\text{Expected loss amount} = \text{EL} * \text{Exposure amount}$$
$$\text{EL} = \text{PD} * \text{LGD}$$

**Section 25** Institutions which have been permitted in accordance with Chapter 38, section 6, to use their own estimates of LGD shall in respect of defaulted exposures to governments, institutions and corporates, calculate the expected loss amount as follows:

$$\text{Expected loss amount} = \text{EL} * \text{Exposure amount}$$
$$\text{EL} = \text{PD} * \text{LGD}_e$$

**Section 26** For exposures to corporates and institutions and retail exposures for which the institution calculates risk-weighted exposure amounts in accordance with Chapter 39, section 4 or section 10, EL shall be zero (0).

**Section 27** For specialised lending exposures to corporates for which the risk weights are calculated in accordance with section 5, EL shall not be calculated in accordance with the formulae in sections 24 and 25 but shall instead be determined in accordance with the following method.

The institution shall assign the exposures to one of the five categories set out in section 5. Based on its assignment category, each exposure will have an EL in accordance with the following table.

Remaining maturity	Category 1	Category 2	Category 3	Category 4	Category 5
Less than 2.5 years	0%	0.4%	2.8%	8%	50%
Equal to or more than 2.5 years	0.4%	0.8%	2.8%	8%	50%

If the institution received permission in accordance with section 5 to assign risk weights of 50% to exposures in category 1 and 70% to exposures in category 2 for maturities of 2.5 years or more, the expected loss amount for these categories shall be 0% and 0.4%, respectively.

**Section 28** The expected loss amount for defaulted retail exposures shall be calculated in accordance with section 25.

**Section 29** The institution shall deduct from the sum of all expected loss amounts in accordance with sections 24-25 and section 28 the sum of all specific and general provisions or partial write-offs which reduce the book value of the exposures.

A positive price difference due to the fact that a defaulted claim may have been purchased at a rebate shall be treated as a provision.

The amount calculated in this manner constitutes the institution's adjusted expected loss amount.

*Expected loss amount for dilution risk in purchased receivables*

**Section 30** The expected loss amounts for dilution risk of purchased retail and corporate receivables shall be calculated as follows:

$$\text{Expected loss amount} = \text{EL} * \text{Exposure amount}$$

$$\text{EL} = \text{PD} * \text{LGD}$$

### **Calculation of expected loss amount for non credit-obligation assets**

**Section 31** No expected loss amount shall be calculated for non credit-obligation assets.

### **Calculation of expected loss amount for equity exposures**

**Section 32** The expected loss amounts for equity exposures where the risk-weighted exposure amounts are calculated according to the methods set out in sections 16-18 shall be calculated according to the following formula:

$$\text{Expected loss amount} = \text{EL} * \text{Exposure amount}$$

EL shall have the following values:

1. for equity exposures traded on a regulated market, EL is 0.8%,

2. for equity exposures in venture capital firms that are not traded on regulated markets but are included in well-diversified portfolios, EL is 0.8%,
3. for all other equity exposures EL is 2.4%.

**Section 33** The expected loss amounts for equity exposures where the risk-weighted exposure amounts are calculated in accordance with the methods set out in sections 19-22 shall be calculated using the following formula:

Expected loss amount = EL \* Exposure amount, where  
EL = PD \* LGD

**Section 34** For exposures where the risk-weighted exposure amount is calculated in accordance with section 23, the expected loss amount shall be 0.

## Chapter 40 Determination of the risk parameter Exposure amount

### General provisions

**Section 1** Exposure amounts for exposures including off-balance sheet commitments, shall be determined in accordance with this chapter. For some exposures the exposure amount may also be determined in accordance with the regulations regarding netting agreements set out in Chapter 56 or the advanced risk approach for counterparty risk in Chapter 61.

**Section 2** For counterparty risk in derivative instruments, repurchase transactions, commodity and security borrowing and lending transactions as well as margin lending, the exposure amount may be set to 0 (zero) if the following requirements are met:

1. The exposures shall be to a clearing organisation.
2. Participants in the clearing shall secure the exposures on a daily basis.
3. The security shall cover both current exposure and any future exposure.

### On-balance sheet exposures

**Section 3** With the exception of exposures referred to in sections 6-10, the exposure amount parameter for on-balance sheet exposures shall be measured gross without taking into consideration impairment reserves or any other valuation adjustments which have affected the book value.

With respect to assets purchased at a price different than the amount owed, the exposure amount shall also be increased by the relevant price difference when positive and decreased when negative. In this context, the relevant price difference refers to the difference between the amount of the claim and the book value of the claim increased by any specific impairment reserves or any other specific value adjustments.

When calculating the capital requirement, claims and liabilities may only be netted in accordance with that set out in Chapter 56. This applies irrespective of what applies to external accounting.

**Section 4** The exposure amount for purchased receivables shall be the book value reduced by the capital requirement for dilution risk. When determining the exposure amount for purchased receivables, the capital requirement for dilution risk may not be reduced using credit protection.

**Section 5** When calculating a risk-weighted exposure amount and the expected loss amount for the dilution risk of purchased receivables, the exposure amount shall be the book value.

**Section 6** In a leasing transaction, the exposure amount for the minimum lease charges shall be their present value.

In a leasing transaction where the institution carries the financial risk associated with the leasing object, the exposure amount for the leasing object shall consist of the present value of the calculated residual value when the term of the lease expires. This also applies to a guaranteed residual value that does not fulfil the requirements in Chapter 37, section 11 to be assigned to the lessee.

**Section 7** The exposure amount of equity exposures shall be the book value.

**Section 8** The exposure amount of non credit-obligation assets shall be the book value.

**Section 9** The exposure amount of securities or commodities included in a repo transaction, marginal lending or in an equity or a commodities borrowing/lending transaction shall be the book value.

#### *Derivative contracts*

**Section 10** Institutions which have not been permitted in accordance with Chapter 4, section 4 of the Capital Adequacy Act to use an advanced risk method for calculating exposure amounts for counterparty risk in interest, equity, commodity, and exchange rate derivative contracts shall either apply the marking to market or risk method.

Within a financial group the marking to market, risk approach and advanced risk approach may be combined. An individual legal entity shall, with the exception of that set out in section 30, only use one approach.

Derivative contracts based on different types of indices shall be classified as interest, equity, commodity or exchange rate derivative contracts depending on the relevant type of index in each individual case.

**Section 11** An institution that purchases credit protection through credit derivatives for an exposure that is not assigned to the trading book or for an exposure to counterparty risk may set the exposure amount for the credit derivative to zero (0).

**Section 12** The exposure amount for counterparty risk in issued credit default swaps, i.e. the institution has provided credit protection, included in non-trading activities shall be set to zero (0).

#### *Mark-to-market method*

**Section 13** The exposure amount for interest, equity, commodity and exchange rate derivative contracts is the sum of current replacement cost as per the balance sheet date and an amount for the potential risk change. For interest rate swaps where both legs are denominated in the same currency and are based on variable interest, the exposure amount shall only constitute replacement cost.

Current replacement cost for an existing derivative contract refers to the cost which the institution would incur for acquiring an equivalent new instrument on the balance sheet date. Where the contract is of a type regularly traded on the market, replacement cost may be set at current market value. Where current market prices are not quoted, the instrument shall be calculated to present value using current market interest rates and exchange rates. The calculation shall be based on current quotations which are professionally assessed to be correct for the currencies and maturities of the instrument. For contracts with negative market value, the replacement cost shall be deemed to be zero.

Amount for potential risk change refers to an amount which expresses the possibility that the replacement cost increases during the residual maturity of the instrument calculated from the balance sheet date. Potential risk change is calculated for each contract (even for a contract that has a negative market value) by multiplying the contract's notional amounts by a risk factor determined in accordance with the following table.

The contract's residual maturity	Interest rate linked derivative instruments	Currency and gold-linked derivative instruments	Equity-linked derivative instruments	Derivative instruments based on precious metals other than gold	Derivative instruments based on commodities other than precious metals
< 1 year	0%	1%	6%	7%	10%
≥ 1 < 5 years	0.5%	5%	8%	7%	12%
≥ 5 years	1.5%	7.5%	10%	8%	15%

Derivative instruments which are not covered by any of the five categories specified in the table below shall be treated as instruments based on commodities other than precious metals.

For contracts where outstanding exposures are settled periodically so that the market value of the contract is reset to zero on each such occasion, the residual maturity shall be equal to the time until the next settlement date.

Notional amount refers to the amount in the reporting currency which the original contract covers. Where the reporting currency is not included at any stage, the value shall be calculated in accordance with the applicable spot prices at the time of calculation. For currency forwards, interest rate and currency swaps as well as other similar contracts, notional amount refers to the higher of the two values reached during conversion.

**Section 14** An institution which has received permission from Finansinspektionen to calculate commodities risk in accordance with Chapter 33, section 8 may use the risk factors in the table below instead of the risk factors in section 13.

	Precious metals (except gold)	Base metals	Agricultural products	Other commodities (incl. energy)
< 1 year	2.0%	2.5%	3.0%	4.0%
≥ 1 < 5 years	5.0%	4.0%	5.0%	6.0%
≥ 5 years	7.5%	8.0%	9.0%	10%

#### *Risk approach*

**Section 15** A risk approach may only be used for derivative contracts.

**Section 16** An exposure amount shall be calculated separately for each netting set with regard to any collateral as follows:

exposure amount =

$$\beta * \max \left( CMV - CMC; \sum_j \left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right| * CCRM_j \right)$$

where

$CMV$  = the current market value of all transactions within the netting set with a counterparty gross of collateral, where

$$CMV = \sum_i CMV_i$$

$CMV_i$  = the current market value for the transaction  $i$ ,

$CMC$  = the current market value of the collateral assigned to the netting set, where

$$CMC = \sum_l CMC_l$$

$CMC_l$  = the current market value of collateral  $l$ ,

$i$  = refers to the transaction,

$l$  = refers to the collateral,

$j$  = refers to hedging set category.

These hedging sets correspond to risk factors for which risk positions of opposite sign may be offset to yield a net risk position on which the exposure measure is then based.

$RPT_{ij}$  = Risk position from transaction  $i$  with respect to hedging set  $j$ ,

$RPC_{lj}$  = risk position from collateral  $l$  with respect to hedging set  $j$ ,

$CCRM_j$  = Multiplier set out in section 29 for counterparty risk with respect to hedging set  $j$ , and

$\beta = 1.4$ .

Collateral eligible under this method is confined to the collateral that is eligible under Chapter 25 and commodities assigned to the trading book.

#### *General guidelines*

An example of how an institution calculates the exposure amount according to the risk method is presented in *Appendix 4*.

#### *Risk position*

**Section 17** For a credit default swap, the risk position consists of the notional value of the reference debt instrument multiplied by the remaining maturity of the credit default swap.

**Section 18** For options or other similar instruments (e.g. swaptions), the risk position consists of the delta equivalent market value of the underlying financial instrument for the transaction except in the case of an underlying debt instrument.

Where the underlying instrument is a debt instrument or a payment leg, the risk position of the delta equivalent market value of the financial instrument or payment leg multiplied by the modified duration for the debt instrument or the payment leg.

**Section 19** For other derivative contracts the risk position is the market value of the underlying financial instrument (also commodities) converted to the SEK.

For debt instruments and payment legs, however, the risk position is the market value of the outstanding gross payments (including notional amounts), converted to SEK and multiplied by the modified duration of the debt instrument or payment leg, respectively.

Where the underlying financial instruments are equity (also equity index) or commodities, these shall be allocated a risk position for the respective equity (or equity index) or commodities and an interest risk position for the payment leg. If the payment leg is expressed in foreign currency the currency shall also be allocated a risk position.

Where the underlying instrument is a debt instrument, one interest rate risk position shall be allocated for the debt instrument and another for the payment leg. Where payment shall take place against payment (including foreign currency forwards), an interest rate risk position is allocated for each payment leg. Where the underlying debt instrument is expressed in foreign currency, a risk position is allocated for the foreign currency. Where a payment leg is expressed in foreign currency, this is also allocated a risk position for the currency concerned. The exposure amount assigned to an interest basis swap is zero.

**Section 20** For the determination of risk positions, collateral received from a counterparty shall be treated as a long position that is due today whereas collateral posted shall be treated as a short position that is due today.

**Section 21** For payment legs with a remaining maturity of less than a year, the institution shall disregard the interest rate risk. For transactions that consist of two payment legs denominated in the same currency, for example interest rate swaps, the institution may treat the transaction as a single transaction.

**Section 22** The institution shall use the following formulae to determine the amount and sign of its risk position.

1. For all other instruments than debt instruments:

market value, or

$$\text{delta equivalent market value} = P_{ref} \frac{\partial V}{\partial p}$$

where



$P_{ref}$  = the price of the underlying instrument, expressed in the reference currency,

$V$  = the option price for an option or the value of the underlying instrument for other transactions, and

$p$  = the price of the underlying instrument expressed in the same currency as  $V$ .

2. For the debt instrument and payment legs for all transactions:

market value multiplied by the modified duration, or

delta equivalent market value multiplied by the modified duration

$$\frac{\partial V}{\partial r}$$

where

$V$  = the option price for an option or the value of the underlying instrument or payment leg for other derivative instruments, and

$r$  = interest rate.

If  $V$  is expressed in another currency than the reference currency the derivative shall be converted to the reference currency.

### *Hedging sets*

**Section 23** For the calculation of the exposure amount, risk positions shall be grouped in hedging sets. The net risk position shall be calculated for each hedging set, i.e. the absolute value of the sum of the resulting risk positions. The net risk position is calculated in section 16 with

$$\left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right|$$

**Section 24** For interest rate risk positions from payment legs, money deposits received from the counterparty as collateral as well as underlying debt instruments, which in accordance with Chapter 13, sections 44-48 shall be assigned a capital requirement of a maximum of 1.6%, there are six hedging sets set out in the following table. The hedging set shall be calculated for each separate currency.

	Government referenced interest rates	Non-government referenced interest rates
Maturity	≤ 1 year	≤ 1 year
Maturity	>1 – =5 years	>1 – =5 years
Maturity	> 5 years	> 5 years

**Section 25** For interest rate risk positions from payment legs or underlying debt instruments with interest rates linked to a reference interest rate that represents a general market interest rate level, the remaining maturity is equivalent to the time

remaining to the next adjustment of the interest rate. In all other cases the maturity is the remaining life of the underlying debt instrument or, in the case of a payment leg, the remaining life of the transaction.

**Section 26** There is one hedging set for each issuer of a reference debt instrument underlying a credit default swap.

**Section 27** There is one hedging set for each issuer of interest rate risk positions from money deposits that are posted with a counterparty as collateral, when that counterparty has no outstanding debt obligations with low specific risk and from debt instruments, which according to Chapter 13, section 42 and sections 49-50 shall be assigned a capital requirement of over 1.6%. When a payment leg emulates such a debt instrument, there is also a hedging set for each issuer.

Institutions may assign risk positions arising from debt instruments of a certain issuer or from reference debt instruments of the same issuer that are emulated by payment legs or that is an underlying instrument of a credit default swap to the same hedging set.

**Section 28** Underlying financial instruments other than debt instruments shall be assigned to the same hedging sets only if they are identical or “similar instruments”. In all other cases, they shall be assigned to separate hedging sets.

Similar instruments refers to the following:

- For equities, similar instruments are those of the same issuer. An equity index is treated as a separate issuer.
- For precious metals, similar instruments are those of the same metal. A precious metal index is treated as a separate precious metal.
- For electric power, similar instruments are delivery rights and obligations that refer to the same peak or off-peak load intervals over 24 hours.
- For commodities, similar instruments are those of the same commodity. A commodity index is treated as a separate index.

#### *Multipliers for counterparty risk*

**Section 29** Multipliers for counterparty risk (CCRM) for the different hedging set categories shall be assigned as follows:

	Hedging set categories	CCRM
1.	Interest rates	0.2%
2.	Interest rates for risk positions from a reference debt instrument that is an underlying instrument of a credit default swap and which, in accordance with Chapter 13, sections 44-48, shall be assigned a capital requirement of a maximum of 1.6%	0.3%
3.	Interest rates for risk positions from a debt instrument or reference instrument and which, in accordance with Chapter 13, section 42 and sections 49-50, shall be assigned a capital requirement of over 1.6%	0.6%

4.	Exchange rates	2.5%
5.	Electric power	4.0%
6.	Gold	5.0%
7.	Equities	7.0%
8.	Precious metals (except gold)	8.5%
9.	Other commodities (except precious metals and electric power)	10.0%
10.	Underlying financial instruments of derivative contracts that are not in any of the above categories	10.0%

The underlying instruments of derivative contracts according to point 10 in the above table, shall be assigned to separate individual hedging sets for each category of underlying financial instrument.

**Section 30** For transactions with options where an institution cannot establish a delta value or modified duration, the institution may instead use the marking to market method to determine the exposure amount. In this case netting may not be taken into account, i.e. the exposure amount shall be determined as if there was a netting set which only contains the individual transaction.

#### **Off-balance sheet commitments**

**Section 31** All off-balance sheet commitments shall be recalculated using a conversion factor. The exposure amount is determined by multiplying the undrawn amount which the counterparty has the possibility to utilise pursuant to the contract terms with a conversion factor.

Where an off-balance sheet commitment refers to another off-balance sheet commitment, the lower of the two conversion factors shall be used.

**Section 32** The conversion factor for exposures to governments, institutions and corporates shall be determined in accordance with section 33. However, if the institution obtained permission to calculate its own estimates of conversion factors in accordance with Chapter 38, section 6, the conversion factor shall be determined in accordance with sections 34-44.

The conversion factor for retail exposures shall be determined in accordance with sections 34-44.

#### **Prescribed values for conversion factors**

**Section 33** The conversion factor for each exposure type shall be set in accordance with the rules in the standardised approach subject to the following exceptions:

Credit facilities, including guarantees for loan programmes, shall have a conversion factor of 75%.

A credit facility may be ascribed a conversion factor of 0% only where the following requirements are met:

1. The credit facility may be unconditionally cancellable at any time without any prior notice of termination or the conditions for the credit facility are such that the facility terminates automatically in the event of a deterioration of the counterparty's creditworthiness.

2. The institution actively monitors the counterparty's creditworthiness in order to immediately detect any deterioration.

The above regulations for credit facilities also apply to commitments to purchase retail or corporate receivables.

For issued and confirmed letters of credit with a remaining maturity of a maximum of one year and similar commitments that arise as a consequence of the sale of goods, the conversion factor shall be 20%.

### **Own estimates of conversion factors**

#### *Risk grading or product grading*

**Section 34** The institution shall grade its exposures, i.e. divide them into different grades. The institution can choose between making a product grading or risk grading. When carrying out product grading, the exposures are divided up into gradings which shall contain products of similar structures and conditions. When carrying out risk grading, the grades shall show homogeneity from a risk perspective. An institution carrying out grading shall meet all the requirements that apply to risk grading and estimation of PD and LGD with the exception of the requirements set out in Chapter 44, sections 15-17.

With respect to retail exposures, the institution may elect to use a pooling of the exposures which reflects the risk in conversion factor as well as PD and LGD instead of a separate grading for each risk parameter. Such a pooling shall capture both counterparty-specific and transaction-specific characteristics.

**Section 35** All exposures shall be product graded or risk graded.

**Section 36** The number of exposures in each product grade or risk grade shall be sufficiently large to allow for meaningful quantification and validation of the conversion factor.

#### *Quantification*

**Section 37** The institution shall calculate an estimation of a conversion factor by product grade or risk grade on the basis of the average realised conversion factor per grade.

However, an institution that treats retail exposures in accordance with section 34, second paragraph, may reflect future drawings of credit facilities or in their LGD estimates.

All defaults during the observation period shall be used in the calculations.

**Section 38** Where the value of the conversion factor during periods of economic downturn is higher than the average conversion factors, the conversion factor shall be estimated on the basis of these higher values. The institution shall analyse and be able to report a difference between these and the average conversion factors.

**Section 39** Estimates of conversion factors shall reflect the possibility of additional drawings of the credit facilities by the obligor up to and after the time of default. When conversion factors are estimated, institutions shall consider their internal policies and strategies in respect of monitoring credit facilities and payment

processing. Institutions shall also consider their ability and willingness to prevent further drawings of credit facilities by the obligor shortly before the default.

**Section 40** To the extent that unpaid late fees have been recorded as income in the institution's income statement, they shall also be included in the institution's calculation of the conversion factor.

**Section 41** Institutions shall have satisfactory systems and procedures in place to on a daily basis monitor facility amounts, current drawn amounts of the facilities and changes in drawn amounts per obligor and per grade.

**Section 42** The institution shall use the same definition of default for estimation of conversion factors as for estimation of PD.

**Section 43** With respect to retail exposures, the estimates shall be based on data over a minimum of five years. If relevant data prior to the five-year requirement is available, the estimates shall also be based on this data. However, institutions need not accord equal weight to historic data if it can demonstrate that, as regards conversion factors, the more recent data has greater predictive power than historic data.

For retail exposure, the institution can, during a transition period, be granted permission to base its estimates for conversion factors on less than five years' data. However, the estimates must be based on at least two years' data. The data on which the estimates are based must be updated with at least one year of new data for each year that passes after permission was granted. Permission to derogate from the requirement of five years' data is conditional on the institution having a safety margin in its estimates which compensates for the uncertainty resulting from the lack of data.

**Section 44** With respect to exposures to governments, institutions and corporates, own estimates of conversion factors shall be based on data over a minimum of seven years from at least one of the data sources. However, from the time the institution is permitted to use the IRB approach the estimates may be based on five years' of data. The institution shall thereafter gradually base the estimate on data from an increasingly longer period of time until the requirement for seven years of data is met. If relevant data prior to the seven-year requirement is available, estimates shall also be based on this data.

### **General provision**

**Section 45** The institution shall meet the minimum requirements in Chapter 44 with respect to conversion factors.

## **Chapter 41 Determination of the risk parameter PD**

### **Risk grading**

**Section 1** The institution shall have an internal rating system containing at least one rating scale which exclusively reflects the risk of default.

With respect to retail exposures, institutions may elect to use a pooling of exposures which reflects risk in LGD as well as PD and conversion factors instead of a separate grading for each risk parameter. Such a pooling shall capture all relevant obligor and transaction characteristics.

**Section 2** Each obligor or exposure shall be assigned to a risk grade.

The risk grades shall be assigned by counterparty. Each separate legal entity shall be separately graded. With respect to retail exposures, the grade may be assigned by exposure.

Exposures to the same counterparty may be assigned different risk grades in the following cases:

1. Where legislation on consumer protection, bank confidentiality or other legislation prohibit the exchange of client data.
2. Where an exposure is subject to increased risk that the payment of the exposure will be prevented by restrictions imposed on the export of currency from a country (country transfer risk).

**Section 3** The risk differentiation between grades shall be appropriate. The exposures or counterparties in each grade shall demonstrate sufficient homogeneity from a risk perspective. Distribution across grades shall be such as to avoid excessive concentrations of exposures or counterparties within a few grades in the absence of any convincing empirical support for such concentrations. However, the number of exposures or obligors in each grade shall be sufficient to allow for meaningful quantification and validation of the default risk. Risk differentiation shall be sufficient within each separate significant business line.

With respect to exposures to governments, institutions, corporates and equity exposures, the obligor rating scale shall have a minimum of seven grades for non-defaulted obligors and at least one for defaulted obligors.

**Section 4** With respect to retail exposures, the counterparties' performance on their obligations to the institution shall affect the risk grading unless the institution can demonstrate that its payment history is not a material driver of risk of default.

**Section 5** The institution may use an external credit ratings institution's ratings in conjunction with the internal rating. However, an external rating must not be the only factor affecting the grade.

**Section 6** Institutions that apply the provisions for specialised lending in Chapter 39, section 5, are exempt from the provisions in section 1.

### **Definition of default**

**Section 7** An exposure to a certain counterparty shall be deemed defaulted where any of the following criteria are met:

1. The institution considers that it is likely that the obligor will not be able to meet its obligations to the institution without the institution being forced to realise a security or any similar measures.
2. The obligor is past due more than 90 days on any material credit obligation to the institution.

The following events shall be seen as strong indications that default has occurred:

1. the institution begins to treat the exposure in accordance with its criteria for bad claims, e.g. it places the credit obligation on non-accrued status,
2. the institution makes a provision or write-off for the claim due to a decline in the counterparty's creditworthiness,

3. the institution sells the claim at a material loss, which wholly or partly reflects a projected credit loss,
4. the institution consents to a restructuring of the counterparty's liabilities which are likely to result in a diminished financial obligation caused by the material reduction, or postponement, of payments by the counterparty, or where
5. the institution has filed for the counterparty's bankruptcy or a similar order or the counterparty has sought bankruptcy on its own accord.

The institution shall be able to justify why it has chosen to disregard such events when assessing whether a default has occurred.

**Section 8** If the counterparty is located in an EEA country, when applying section 7, first paragraph, point 2 in relation to retail exposures and exposures to publicly-owned organisations, an institution may rely on the period of time which the competent authorities in the country in question have decided upon for the purpose. However, this period of time may never exceed 180 days. This exception shall also apply with respect to exposures to corporates up to and including 31 December 2011.

Where an exposure is in the form of a loan limit or other credit facility which the counterparty may utilise, each such utilisation which takes place without the institution's permission shall be deemed to constitute a delayed payment. The time period in section 7, first paragraph, point 2 shall be calculated from the day the prohibited utilisation commenced.

The institution shall document all cases in which a counterparty has been more than 90 days late with a payment but where the delay was not registered as a default due to the fact that the transaction referred to an insignificant amount.

**Section 9** If any exposure to a particular counterparty is in default, all of the institution's exposures to the same counterparty shall be deemed defaulted. The aforesaid shall apply to exposures of another institution in the same financial group to such counterparty. An institution which has chosen to assign its exposures in the retail portfolio to grades per exposure and not per counterparty shall, however, make individual default assessments regarding such exposures.

**Section 10** A counterparty or exposure that has been default graded but no longer meets the definition of default shall be rated and treated as other non-defaulted exposures. This also implies that, should the same counterparty or exposure go into default again, it should be treated as a new default.

### **Risk quantification**

**Section 11** Institutions shall estimate PD based on the long run default frequency per grade and year. To the extent that an institution uses statistical default prediction models it is allowed to estimate PDs for the grade as the unweighted average of individual PD estimates in a given grade.

An institution which treats retail exposures in accordance with section 1, second paragraph may calculate the PD estimates for retail exposures based on realised losses and the institution's estimate of LGD.

**Section 12** For eligible purchased corporate receivables the institution may determine PD in accordance with the following methods.

The institution shall calculate an estimate of EL from long-run averages of realised losses for each block of purchased receivables. PD is calculated by dividing EL by LGD.

An institution that does not have permission to use own estimates of LGD shall use the following values for LGD. If the purchased group of receivables exclusively consists of receivables without subordination, LGD shall be assumed to be 45%. For others groups of purchased receivables LGD shall be 100%, i.e. PD shall equal EL.

An institution that has permission to use own estimates of LGD shall use these when PD is determined in accordance with the second paragraph.

**Section 13** For exposures to institutions and corporates and retail exposures PD shall be at least 0.03%.

Equity exposures shall use the following minimum values for PD:

1. for equities traded on regulated markets and in which the holding is part of a long-term business relationship, PD shall be at least 0.09%,
2. for equities that are not traded on regulated markets and in which the yield is expected to come from regular dividend income and not an increase in the value of the shares, PD shall be at least 0.09%,
3. for shares traded on regulated markets, PD shall be at least 0.4%,
4. for others equity exposures PD shall be at least 1.25%.

PD for counterparties and exposures in default shall be 100%.

**Section 14** For the retail exposures class the institution shall analyse whether certain types of exposures can be expected to have a substantially higher default frequency during a part of the exposure's life cycle for which the institution still lacks data. The institution shall consider these possible effects in the PD estimate for these exposures and counterparties.

**Section 15** The PD estimate shall be based on data over a minimum of five years. Where earlier data is available and relevant, such data shall also be used. With respect to retail exposures, however, an institution may give less importance to historic data if it can demonstrate that results in a better predictor of default.

**Section 16** With respect to retail exposures in connection with an application for permission to use the IRB approach, the institution may be permitted to base the estimates of PD on less than five years of data under the conditions given in the second paragraph. The aforesaid shall also apply to exposures to institutions, governments and corporates where the institution does not use own estimates of conversion factors and LGD for such exposures. However, for all exposure classes, the PD estimates must be based on at least two years' data. The data on which the estimates are based must be updated with at least one year of new data for each year that passes after permission was granted. Derogation from the requirement of five years' data is conditional on the institution having a safety margin in its estimates which compensates for the uncertainty resulting from the lack of data.

**Section 17** With respect to exposures to governments, institutions and corporates and equity exposures, the institution may map its internal grades to an external rating institution's ratings and use realised default frequencies from the external rating institution's rating classes as the basis for the institution's own PD estimates, provided the following conditions are met:

1. The external rating institution's methodology must only reflect the default risk among the counterparties.



2. The institution shall compare the classification criteria applied by the institution internally and the external rating institution's rating criteria as well as conduct an analysis of the significance of any differences with respect to default frequency.
3. The institution shall compare of how the institution and the external rating institution rate the same counterparties.
4. The institution shall analyse any differences in the definitions of default between these provisions and the definition used by the external rating institution as well as the significance of any differences with respect to the default frequency.
5. The above conditions have been documented.

**Section 18** Institutions which cannot estimate PD for dilution risk in purchased retail and corporate receivables may be permitted to determine PD by estimating EL for the dilution risk. PD shall be equal to this estimate of EL.

### **Calculation of the effect of guarantees and credit derivatives**

**Section 19** With respect to the exposures for which the institution is not permitted to calculate own estimates of LGD and conversion factors, the institution may take into consideration the effects of guarantees, credit derivatives, life insurances and cash on deposit with another institution on its PD estimates in accordance with that set out in Chapters 53 and 57.

When PD is adjusted to take into account credit protection in accordance with the first paragraph, the risk-weighted exposure amount for the protected portion of the underlying exposure is calculated with the formula set out in Chapter 39 for the exposure class to which the issuer of the guarantee or credit derivative belongs.

**Section 20** With respect to the exposures for which the institution is permitted to calculate own estimates of LGD and conversion factors, the institution may take into consideration the effects of guarantees and credit derivatives in its PD estimates in accordance with that set out below.

Where there is a valid guarantee or credit derivative in accordance with Chapter 42, sections 23-27 for an exposure, PD may be adjusted to take this into account. However, an adjustment may not take place in a way that the risk weight for the protected exposure ends up being lower than that of a comparable, direct exposure to the guarantor. The provisions set out in Chapter 42 with respect to the adjustment of LGD also apply to the adjustment of PD.

When PD is adjusted to take into account a guarantee or credit derivative, the risk-weighted exposure amount for the protected portion of the underlying exposure is calculated with the formula set out in Chapter 39 for the exposure class to which the issuer of the guarantee or credit derivative belongs.

### **General provision**

**Section 21** The institution shall comply with the provisions set out in Chapter 44 with respect to PD.

## **Chapter 42 Determination of the LGD risk parameter**

**Section 1** LGD for exposures to institutions, governments and corporates shall be determined in accordance with sections 2-7 and section 9. However, where the

institution has been permitted to calculate its own estimate of LGD in accordance with Chapter 38, section 6, LGD shall be determined in accordance with sections 10-28.

LGD for equity exposures shall be calculated in accordance with section 8.

LGD for retail exposures shall be calculated in accordance with sections 7 and 10-28.

### **Prescribed values of LGD**

**Section 2** With respect to senior exposures without subordination, an LGD value of 45% shall be used. For subordinated exposures, the value shall be 75%.

**Section 3** The value of LGD for covered bonds under the Covered Bonds (Issuance) Act (2003:1223) and equivalent foreign debt commitments shall be 12.5% if collateralised by any of the following assets:

1. Exposures to or guaranteed by governments and central banks within the EEA.
2. Exposures to or guaranteed by governments, central banks, multilateral development banks and international organisations that meet the requirements for credit quality step 1.
3. Exposures to or guaranteed by public bodies, local authorities and comparable entities and local authorities within the EEA.
4. Exposures to or guaranteed by public sector entities, local authorities and/or comparable entities, as well as authorities that are assigned a risk weight as exposures to governments and central banks or institutions and meet the requirements for credit quality step 1.

Exposures to or guaranteed by public bodies, local authorities and comparable associations, as well as authorities that are assigned a risk weight as exposures to governments and central banks or institutions and meet the requirements for credit quality step 2 on condition that exposures do not exceed 20% of the notional amount of the issuing institution's outstanding covered bonds.

5. Exposures to institutions that meet the requirements for credit quality step 1. Total exposure of this type shall not exceed 15% of the notional amount of the issuing credit institution's outstanding covered bonds or equivalent foreign debt commitments. Exposures caused by transmission and management of payments by the obligors of or liquidation proceeds in respect of, loans secured by real estate to the holders of covered bonds or equivalent foreign debt instruments shall not be encompassed by the 15% limit. It is sufficient for exposures to an institution in the EEA with a maturity not exceeding 100 days to qualify for credit quality step 2.
6. Exposures secured by liens on real estate properties or shares in tenant-owner associations according to chapter 54, if the liens combined with any prior liens amount to a maximum of 80% of the value of the pledged property. Exposures secured with the equivalent foreign collateral within

the EEA may also be assigned here on condition that the relevant supervisory authorities permit it.

7. Exposures secured by liens on commercial properties, if the liens combined with any prior liens amount to a maximum of 60% of the value of the pledged property. Exposures secured with the equivalent foreign collateral within the EEA may also be assigned here on condition that the relevant supervisory authorities permit it.
8. Loans secured by ships where liens combined with any prior liens amount to a maximum of 60% of the value of the pledged ship.

#### *General guidelines*

Equivalent foreign collateral in 6 and 7 mean the French Fonds Communs de Créances or equivalent organisations for securitisation.

**Section 4** LGD for covered bonds under the Covered Bonds Issuance Act (2003:1223) and equivalent foreign debt commitments which were issued before 31 December 2007 shall, irrespective of what is set out in section 3, also be 12.5%.

**Section 5** Up to and including 31 December 2010, an LGD of 11.25% may be used for those bonds and debt commitments referred to in sections 3-4 if the following conditions are met:

1. the exposures set out in section 3, lines 1-5 shall be assigned credit quality step 1.
2. exposures in accordance with section 3, lines 6-7 may be a maximum of 10% of the outstanding notional value of the bonds.
3. exposures in accordance with section 3, line 8 may not be used as collateral.

If conditions 1-3 are not met, an LGD of 11.25% may still be used if the bond and debt instruments have the best credit quality step from an eligible credit assessment institution which this credit assessment institution can assign covered bonds and equivalent foreign debt commitments.

#### *Purchased corporate receivables*

**Section 6** With respect to eligible purchased corporate receivables, which without exception consist of senior receivables, an LGD of 45% shall be used. For other eligible purchased corporate receivables an LGD of 100% shall be used.

#### *LGD for dilution risk*

**Section 7** An institution that does not use own estimates of LGD for dilution risk in purchased retail and corporate receivables shall use an LGD of 75%. However, an institution which in accordance with Chapter 41, section 18 uses EL as a measure of PD shall use an LGD of 100%.

#### *Equity exposures*

**Section 8** With respect to equities in venture capital companies that are not traded on regulated markets, but are included in a well diversified portfolio, LGD shall be 65%. For all other equity exposures LGD shall be 90%.

*Secured exposures*

**Section 9** With regards to exposures for which recognisable securities have been pledged, the value of LGD may be adjusted as set out in Chapter 54 and 55.

**Own estimates of LGD**

*Rating*

**Section 10** The institution shall have an internal rating system with a grading of exposures that exclusively reflects LGD.

With respect to retail exposures, the institution may elect to use a pooling of the exposures which reflects the risk in LGD as well as a PD and conversion factor instead of a separate grade for each risk parameter. Such a pooling shall capture obligor as well as transaction-specific factors.

An exposure may be divided into two or more parts which are rated separately, for example one part with collateral and one without.

**Section 11** All exposures shall be assigned to a risk grade.

**Section 12** The exposures in each grade shall exhibit sufficient homogeneity from a risk perspective. Distribution across grades shall be such as to avoid excessive concentrations of exposures within a few grades in the absence of any convincing empirical support for such concentrations. The number of exposures in each grade shall, however, be sufficient to allow for meaningful quantification and validation.

*Quantification*

**Section 13** Institutions shall estimate LGDs by grade on the basis of the average realised values in the grade. An institution which treats retail exposures in accordance with section 10, second paragraph may, however, derive the LGD estimates from the average realised loss level and the institution's estimate of PD for the grade.

All defaults within the data sources shall be used for the calculations.

**Section 14** If LGD estimates appropriate for an economic downturn period are higher than/more conservative than the long-run average LGD estimates, the LGD estimates shall be based on the higher estimates. The institution shall analyse and be able to report the difference between these and the average LGD values.

**Section 15** With respect to defaulted exposures, the institution shall make a new estimation of LGD for each specific exposure. This LGD shall be based on information regarding current financial circumstances on the market and the individual exposure.

**Section 16** Unpaid late interest and fees shall be included in the institution's calculation of LGD to the extent that they have been capitalised in the institution's income statement.

**Section 17** The institution shall use the same definition of default in the calculations of the LGD estimates as for the PD estimates.

**Section 18** In this context, loss means financial loss and includes all significant direct and indirect costs associated with the handling of an exposure in default. Potential recoveries shall be calculated at present value to the date of the default. The applied discount rate shall reflect uncertainty on the date of default, regarding the size of potential recoveries.

**Section 19** With respect to exposures to institutions, governments and corporates, own estimates of LGD shall be based on data over a minimum of seven years. However, when the institution is permitted to use the IRB approach the estimate may be based on data over a period of five years. The institution shall thereafter gradually base the estimate on data from an increasingly longer period of time until the requirement for seven years of data is met. Where earlier data is available and relevant, the estimates shall also be based on this data.

**Section 20** With respect to retail exposures, the estimates shall be based on data over a minimum of five years. Where earlier data is available and relevant, the estimates shall also be based on this data. However, the institution does not need to accord equal weight to older data as to newer data where it can be shown that, as regards LGD, the newer data has greater predictive power than older data.

With respect to retail exposures in conjunction with its application for permission to use the IRB approach, the institution may be permitted to base the LDG estimates on less than five years' data. However, the LGD estimates must be based on at least two years' data. The data on which the estimates are based must be updated with at least one year of new data for each year that passes after permission was granted. Derogation from the requirement of five years' data is conditional on the institution having a safety margin in its estimates which compensates for the uncertainty resulting from the lack of data.

#### **Calculation of the effect of collateral**

**Section 21** Recoveries from financial and non-financial collateral may be considered in the calculation of the LGD estimates if the provisions set out in Chapter 55, sections 6 to 10 and Chapter 54, sections 9-13 are met. However, the institution can make exceptions to the provisions if it can justify why it is not appropriate or reasonable to follow a particular provision. In this case the institution shall also document the exceptions made and their reasons.

**Section 22** An institution shall in a safe manner consider any material correlation between the creditworthiness of the obligor/counterparty and the value of the collateral.

The LGD estimates shall not be based solely on the estimated market value of the collateral. Account must also be taken of the effect of the potential inability of institutions to expeditiously gain control of the collateral or be able to liquidate the collateral.

If the currency is expressed in a different currency than the exposure, the foreign exchange rate risk shall be taken into account by a margin of conservatism when the LGD estimate is calculated.

#### **Calculation of the effect of guarantees and credit derivatives**

**Section 23** Where a qualified guarantee or credit derivative exists for an exposure in accordance with sections 24-27, LGD may be adjusted to take this into account. However, the adjustment may not result in a lower risk weight for the protected

exposure than would have been the case for an exposure directly to the issuer of the protection.

When LGD is adjusted to take into account a guarantee or credit derivative, the risk-weighted exposure amount for the protected portion of the underlying exposure is calculated with the formula set out in Chapter 39 for the exposure class to which the issuer of the guarantee or credit derivative belongs.

**Section 24** Institutions shall have clear rules for the adjustment of LGD. Such rules must be consistent with the requirements of these provisions concerning the manner in which assignment to grades shall take place. The instructions must also contain criteria regarding the manner in which the adjustment is affected by the following factors:

1. The ability and the willingness of the guarantor to comply with its obligations under the contract.
2. The connection between the payment capability of the direct counterparty and that of the guarantor.
3. The period of time within which receipt of any payments under the guarantee may be expected. In particular, consideration shall be given to the payout structure of credit derivatives.
4. Whether a complete risk transfer is believed to have taken place or whether any residual risk remains with the original obligor.
5. The manner in which the risk transfer is affected by the fact that the maturity of the protection does not coincide with that of the exposure.

**Section 25** Adjustment of LGD may take place only where the guarantor is rated in accordance with the provisions regarding risk-weighting for direct counterparties. The institution shall document its internal criteria regarding cases in which adjustment shall take place.

**Section 26** Adjustment of LGD may take place only where the protection meets the following criteria:

1. There is a contract in writing.
2. The protection is legally enforceable in all relevant jurisdictions.
3. The protection is unconditional, i.e. the validity thereof is not dependent on any circumstances which are extraneous to the original debt relationship.

**Section 27** Even though a credit derivative's reference exposure does not exactly correspond to the exposure that the institution wishes to protect, the credit derivative may be taken into consideration provided the following conditions are met:

1. The reference exposure is to the same counterparty.
2. The reference asset shall be ranked *pari passu* with, or junior to, the protected asset in the event of bankruptcy.
3. There shall be cross clauses in place between the reference asset and the protected asset so that, in the event of the borrower's default (e.g. suspension of payments) on other loans taken by the borrower, such default will be treated also as a default with respect to the reference asset.

### **General provision**

**Section 28** The institution shall meet the minimum requirements in Chapter 44 with respect to LGD.

## Chapter 43 Determination of the risk parameter M

**Section 1** With respect to exposures to institutions, governments and corporates, M shall be determined in accordance with sections 2-3. However, where the institution has been permitted to calculate its own estimate of LGD or conversion factors in accordance with Chapter 38, section 6, M shall be calculated in accordance with sections 6-9.

With respect to dilution risk in purchased corporate and retail receivables, M shall always be determined in accordance with section 4.

With respect to equity exposures, M shall be determined in accordance with section 5.

M is stated in years and fractions of years.

### Prescribed values of M

**Section 2** M shall be 2.5 years for all exposures with the exception of repurchase transactions and securities or commodities lending or borrowing transactions. For exposures arising from repurchase transactions and securities or commodities lending or borrowing transactions, M shall be 0.5 years.

**Section 3** An institution that uses own estimates of PD for eligible purchased corporate receivables shall calculate M in accordance with the following methods. M shall be calculated as the exposure-weighted average of the individual exposure's maturity. However, M may never be less than 90 days. This same value of M shall also be used for undrawn amounts covered by the commitment to purchase receivables on condition that the commitment includes conditions that protect the institution against a significant deterioration in the quality of the future receivables that it purchases. If such conditions are not included in the commitment, for an undrawn amount, M shall be calculated as the sum of the maturity of the commitment and the term of the longest-dated potential receivable under the commitment. In this case the effective maturity shall be at least 90 days.

**Section 4** When calculating the risk-weighted exposure amount for the dilution risk in purchased corporate and retail receivables, M shall be one (1) year.

**Section 5** M assigned to all types of equity exposures shall be 5 years.

### Internal calculations

**Section 6** With respect to exposures with contractual payment flows, M shall be calculated individually in accordance with the following:

M = 1 where the estimated maturity is less than one year.

M = 5 where the estimated maturity exceeds five years.

M = Calculated maturity, where such is between one and five years.

$$\text{Calculated maturity} = \frac{\sum t * CF_t}{\sum CF_t}$$

Here,  $CF_t$  denotes the cash flows (amortisation/repayment, interest payments and fees) contractually payable by the obligor in period  $t$  years calculated from the calculation date.

**Section 7** With respect to derivative exposures to the same counterparty and where a netting agreement which meets the requirements in Chapter 56 is available, the calculated maturity shall be determined as a weighted average of the remaining maturities of the individual instruments in accordance with the corresponding formula set out in section 6. The notional amount of each exposure shall be used for the weighting.

**Section 8** With respect to derivative exposures subject to a netting agreement that meet the requirements in Chapter 56 and are collateralised, and margin lending which is also subject to a netting agreement in accordance with the aforementioned provisions, the calculated maturity shall be the weighted average of the individual instruments' remaining maturity in accordance with an equivalent formula as set out in section 6. The notional amount of each exposure shall be used for the weighting. In such cases M shall be at least ten days.

**Section 9** For any exposure other than those mentioned in sections 6-8, the calculated maturity shall be the maximum remaining time that the counterparty is permitted to take to fully discharge its contractual obligations. However, maturity may never be less than one year. This shall also apply where the institution with respect to such exposures as referred to in section 6 is not in a position to carry out the calculation prescribed therein.

**Section 10** The institution may disregard the restrictions set out in sections 6-7 and section 9 regarding how short the maturity may be if the following requirements are met:

1. The exposure shall consist of securitised derivative instruments, margin lending, repurchase transactions, and securities or commodity borrowing and lending transactions.
2. The securitisation agreement shall
  - a. stipulate that the security requirement shall be calculated daily based on daily valuation of the exposure and the collateral,
  - b. stipulate that collateral shall be posted/pledged on a daily basis,
  - c. contain provisions that permit fast realisation or clearing of collateral in the event of default or if the counterparty is not pledging/posting collateral.

However, maturity may never be shorter than one day.

**Section 11** An institution which in accordance with Chapter 61, section 1 have been permitted to use an advanced risk approach for calculating exposure amounts for counterparty risk, shall, for the exposures which are covered by the permission, calculate the maturity in accordance with the following provisions:

Where an exposure in a netting amount has a maturity that exceeds one year, the maturity of the netting amount shall be calculated in accordance with the following formula:

$$MIN \left[ \frac{\sum_{k=1}^{tk \leq 1 \text{ year}} EEEk * \Delta tk * dfk + \sum_{tk > 1 \text{ year}}^{maturity} EEk * \Delta tk * dfk}{\sum_{k=1}^{tk \leq 1 \text{ year}} EEEk * \Delta tk * dfk}; 5 \right]$$

where

dfk = the risk-free discount factor for the future period tk,

and other parameters are determined in accordance with Chapter 61.



After receiving permission from Finansinspektionen, an institution that has a model for one-sided credit valuation adjustment may, instead of the above formula, use the effective credit duration calculated in the model as a measurement of the maturity.

For other exposures the provisions in section 6 shall be applied.

## **Chapter 44 General provisions for the IRB approach**

**Section 1** This chapter sets forth general provisions regarding the institution's internal rating system. An internal rating system shall comprise all of the different methods, work and decision processes, control mechanisms, policies, IT systems and processes and routines that support the institution's product ratings, risk grading and the quantification of credit risk.

### **Structure of the rating system**

**Section 2** If an institution uses multiple product or risk grading methods for the same risk parameter, there shall be clear criteria for which method that shall be used for a certain type of exposure or counterparty. These criteria must take the risk profile of the exposures and obligors into account.

**Section 3** The institution shall periodically review the choice of risk grading methods to determine whether they are appropriate with respect to the risk profile of the exposures and the development of the external conditions.

**Section 4** The institution bears responsibility for compliance with the provisions of this chapter where, for example, it participates in a co-operation with other institutions regarding method development or pooling of data. The same also applies where the institution uses an externally developed model for assignment of grades and estimation of parameters.

### **Rating**

**Section 5** An institution shall have instructions with specific descriptions, criteria, and procedures for assigning exposures and counterparties to grades within a rating system.

The instructions shall be sufficiently detailed to allow for the risk grading/rating to be performed consistently within the institution. The institution shall have descriptions and criteria for each individual grade. The documentation of the rating process shall allow third parties to evaluate the application of grades in specific cases.

The criteria shall also be consistent with the institution's internal lending standards and its policies for handling troubled obligors and exposures.

**Section 6** An institution shall take all relevant information into account when assigning obligors and exposures to grades. Information shall be current and shall enable the institution to forecast the future performance of the exposure or the obligor. The less relevant information an institution has regarding a certain exposure or obligor, the more conservative its assignments of exposures to grades should be.

## Quantification

**Section 7** The estimates of the risk parameters (CF, PD and LGD) shall be derived using both historical experience and empirical data, and not based purely on qualitative considerations. The institution shall be able to demonstrate that its estimates are representative of its loss experience. Before the estimates are confirmed, the institution shall assess whether they are reasonable.

**Section 8** The estimates of PD and LGD must be based on the most important explanatory factors for the risk. The institution shall be able to provide a breakdown of its loss experience for PD and LGD per explanatory factor.

**Section 9** The institution shall regularly, at least once per year, review its estimates as new information becomes available.

**Section 10** The institution's estimation methods shall reflect the implications of technical advances and new methodologies as such become available.

**Section 11** The portfolio of exposures on which the estimates of the risk parameters are based shall be comparable with the institution's current portfolio. The aforesaid shall also apply to routines and practices in the credit process as well as other factors of relevance to the value of the risk parameters. When the institution estimates the risk parameters, it shall take into account any changes in routines and practices in the credit process which may be expected to affect the risk. The institution shall also demonstrate that the economic or market conditions during the period the estimates are based on are relevant to its current economic and market conditions.

**Section 12** The number of exposures in the portfolios the estimates are based on and the data period used for quantification shall be sufficient to allow for accurate and robust estimates. The institution shall add to its estimates a safety margin reflecting the expected range of estimation errors. The less data an institution has in terms of both length of the observation period and number of observations, the wider the safety margin shall be.

**Section 13** The requirements of this section shall apply irrespective of whether the institution uses internal or external data. Where pooled data is used, the institution shall particularly ensure that the criteria of the other participating institutions uses in the risk grading in all material respects are similar to its own.

**Section 14** Estimates for purchased receivables shall be based on all available relevant data regarding the quality of the underlying receivables. Institutions must critically review data about the receivables provided by the seller.

## Independence in the rating process

**Section 15** Each assignment to a grade, whether new or a re-assignment, must be approved by a function that does not directly benefit economically from decisions to approve the credit. With respect to retail exposures, however, it is sufficient that such a function carries out a retroactive control of the ratings on an aggregated basis.

**Section 16** Where the institution obtains new information which significantly affects the assessment of the credit risk of the counterparty or the exposure, the institution shall make a new grade assignment.

With respect to exposures to institutions, governments and corporates, the institution shall have an effective process to regularly obtain and update relevant information that may materially affect the risk grading of obligors and exposures.

The institution shall always at least annually re-evaluate all risk grade assignments. With respect to retail exposures, this may take place through a review of a representative sample of exposures or obligors within each grade as a means of ensuring that the risk grading is stable.

Risk grading of high-risk obligors and exposures shall be subject to more frequent review.

**Section 17** The institution shall have documented principles for when it is permitted to override a mechanically calculated rating as well as for the approval procedures for such departures. Institutions shall individually document all overrides from the mechanically calculated risk grade. The institution shall in particular analyse and document the outcome of these overrides in accordance with the same principles as prescribed in section in Section 28.

With respect to exposures to governments, institutions and corporates, the credit officer shall at all times make a qualitative assessment of the suitability of the grade indicated by the mechanical method.

### **Documentation of the rating system**

**Section 18** The institution shall document the design and operational details of their rating systems. The documentation shall evidence compliance with these provisions. The institution shall also document all major changes in the risk rating system.

**Section 19** The institution shall document the relationship between its choice of risk grades, the estimates for each risk grade and the criteria used to assign counterparties and exposures to those risk grades. The institution shall also document the rationale for and analysis supporting its choice of rating criteria.

The institution shall document that which characterises the different product ratings with regard to the structure, condition and other properties of products. The institution shall also document the estimates for each product class.

The institution shall also document the organisation and processes related to product and risk rating assignment and the internal control structure.

**Section 20** If the institution employs statistical models in the rating process, those shall be specifically documented. The documentation shall provide a detailed description of the theory, assumptions and the data used to build the model. In addition, the process for validating the model shall be documented in detail, including a description of conditions that may reduce the model's predictive power.

**Section 21** The institution shall document the specific definitions of default and loss used internally and demonstrate consistency with the definitions set out in these provisions.

### **Data processing**

**Section 22** Institutions shall collect and store the data required to meet the provisions in Finansinspektionen's regulations and guidelines for the obligation to

disclose information about capital adequacy and risk management as well as the provisions in section 23.

**Section 23** In respect of all of its exposures, the institution shall collect and store the following data regarding the risk dimensions where the institution has been permitted to use own estimates:

1. A complete rating history of product and risk classifications for exposures or obligors, including guarantors.
2. The date for product rating and risk rating.
3. The data and methodology used to derive the rating.
4. The person responsible and decision level for the product rating and risk rating.
5. Which obligors and exposures that defaulted as well as the date and circumstances of such defaults.
6. PD estimates and realised default rates associated with each PD rating grades and ratings migration.

With respect to exposures where the institution uses prescribed values of LGD and conversion factors, it shall collect and store data on both the prescribed and realised LGD and conversion factors for each risk and product grade.

With respect to the exposures where the institution has been permitted to use own estimates of LGD and conversion factors, it shall collect and store:

1. The estimates of LGD and conversion factors as well as realised values for each risk and product grade. Where the institution gives consideration to the effects of guarantees or credit derivatives through LGD estimates, this applies both before and after these.
2. All components of the realised losses.

#### **Stress testing and scenario analysis**

**Section 24** The institution shall in a suitable way test what effects potential future events and external changes may have on its credit risks and capital adequacy. The tests shall be carried out regularly and at least once a year. They shall cover a majority of the institution's exposures. The tests shall be meaningful and based on reasonably conservative assumptions.

The tests shall involve at least the effects of an economic downturn and an analysis of migration in the ratings as a result of the assumed future events and external changes.

The tests shall result in an assessment of the institution's ability to withstand such events and external changes.

**Section 25** An institution that calculates risk-weighted exposure amounts for exposures to corporates or retail exposures pursuant to Chapter 39, section 4 or 10 shall take into consideration, as part of the tests to be carried out under section 24, any deterioration of the creditworthiness of the provider of the credit protection. The stress tests shall also include an evaluation of the effects of a source of credit protection that no longer meets the requirements of Chapter 58, section 3.

## **Validation**

**Section 26** Institutions shall have robust systems in place to validate the risk rating systems and the estimates of the risk parameters. The validation process shall enable a consistent and meaningful analysis of whether the risk rating system measures risk in a satisfactory manner. The validation process shall be performed consistently.

**Section 27** Validation shall take place regularly, at least once per year.

An institution shall compare realised values with the estimated risk parameters in those dimensions - PD, LGD, conversion factors - where own estimates are used. The analysis shall cover the most recent period as well as the entire period the institution has available data.

Regarding the PD dimension, institutions shall also analyse the strengths of the rating system's discriminatory power, i.e. how well the institution's assignment of grades distinguishes counterparties and exposures that default during the period from other counterparties and exposures.

**Section 28** Validation in accordance with section 27 shall take place on such a level that it provides a basis for judging how well the rating system functions specifically for the institution's various types of exposures and counterparties and for different markets.

**Section 29** The validation of estimates shall take place on such a detailed level that it can also be used as a basis for analysing whether the product and risk rating is done in a consistent manner in all parts of the institution. In the absence of a sufficient quantity of outcome data, the last-mentioned analysis shall take place in another manner.

**Section 30** If external data exists that is relevant for the institution's portfolio and the current time period, institutions shall regularly make comparisons with this data as a step in the validation process.

**Section 31** Before the institution employs a statistical model in the rating process, a rigorous validation process must be in place. This validation process shall test the predictive power of the model on out-of-time and out-of-sample data.

**Section 32** If an institution uses statistical models or other mechanical methods for its risk grade assignments, the institution must be able to demonstrate that the methods are free of any systematic errors.

**Section 33** The institution shall at all times apply appropriate measures when the validation process demonstrates that the results deviate more than expected from the institution's estimates and ratings. The institution shall outline the measures to be taken in an appropriate document. The analysis shall take account of business cycles and similar systematic variability in realised default and losses. The institution shall revise its estimates upwards where realised values show risk parameters to be higher than the estimated values during a longer time period.

**Section 34** Institutions shall regularly carry out a qualitative assessment of the quality of the structure and use of the rating system. Institutions shall document the qualitative assessments and resulting measures.

### **Use of the rating system**

**Section 35** The institution's internal product and risk ratings and estimates of risk parameters shall be used as an integrated part of the governance process, credit process, risk management and internal capital allocation. The estimates shall be accepted by the business organisation.

Each new obligor or exposure shall be assigned a product and risk rating as part of the credit approval process.

**Section 36** If the institution does not use the same risk parameter values in its business processes as in its calculation of the capital requirement, the institution shall be able to demonstrate that the values which are used internally are reasonable. The institution shall also document cases where it uses different values in its business processes and in calculating the capital requirement.

**Section 37** The person at the institution responsible for the credit decision shall, when the credit decision is made, be aware of the rating of the counterparty and the exposure, the product rating of the exposure as well as the information regarding the counterparty and the exposure on which the product and risk grade is based. The aforesaid shall also apply where statistical models are used for calculating grades.

**Section 38** A condition for permission being granted is that the institution shall demonstrate that it has been using an internal rating system which is broadly consistent with the provisions of these regulations for the number of years stated below. The requirement applies to all risk dimensions in respect of which the institution wishes to be permitted to use own estimates.

An institution which does not use own estimates of LGD and conversion factors for its exposures to institutions, governments and corporates must have used its rating system for at least one year in 2007, at least two years in 2008 and 2009, and at least three years commencing 2010.

An institution which uses own estimates of LGD and conversion factors for its exposures to governments, institutions and corporates must have used its rating system for at least two years in 2008 and at least three years commencing in 2009.

### **Governance and independent risk control**

**Section 39** All material aspects of the rating systems shall be approved by the institution's board of directors or a designated committee thereof. Board members and the managing director shall possess a good general understanding of the institution's rating systems and detailed comprehension of its associated management reports.

**Section 40** The managing director shall provide notice to the board of directors or a designated committee thereof of any material changes or exceptions from established policies that materially impact the design and operation of the institution's rating systems.

**Section 41** The managing director shall have a good understanding of the design and use of the rating systems and ensure, on an ongoing basis, that the rating systems are operating properly. The managing director shall be regularly updated by the central unit for independent control and analysis of credit risk. The information shall cover the conclusions from the validation process, the areas that

need improvement and how previously decided improvement measures are progressing.

**Section 42** The central component of the regular reporting of credit risk to the board of directors and the managing director shall be based on the institution's risk rating, product rating and risk estimates. Reporting shall include at least the assignment of counterparties and exposures by grade, risk estimates by each risk grade and product grade, comparison between estimates and realised outcome for each product grade and risk grade, migration across risk grades and stress-test information and results. Reporting frequencies shall depend on the significance and type of information and the level of the recipient.

### **Credit risk control**

**Section 43** The institution shall have in place a central unit for independent credit risk control and analysis. The unit shall report to the board of directors, senior management and other parties in need of the information. Reporting shall provide a comprehensive and objective picture of the institution's credit risks and contain analyses of trends in the institution's credit risks. The unit shall also propose changes in policies, instructions and procedures resulting from the function's observations regarding credit risk management.

**Section 44** The unit for independent credit risk control and analysis shall report directly to the managing director. Alternately, the unit could report to another senior executive who reports directly to the managing director, is not responsible for the daily credit or commercial operations but possesses good knowledge of credit risks. The unit's duties shall not be performed by personnel who are engaged in the ongoing credit management or other business activities. The unit shall have sufficient resources for its duties and personnel with good knowledge of credit risks.

**Section 45** The unit for independent credit risk control and analysis shall be responsible for the design, implementation, oversight and follow-up of the institution's rating system. The unit's duties shall include the following.

1. Responsibility for ensuring that the institution has a validation process which complies with the provisions of these regulations.
2. Regular review of the rating criteria to evaluate if they remain predictive of risk.
3. Regular review of the criteria used for product rating.
4. Responsibility for the documentation of the rating system as stipulated in these provisions.
5. Production of reports from the rating system.
6. Active participation in the design, implementation, continuing oversight and modification of models used in the rating process and the estimation of risk parameters.

**Section 46** An institution which uses pooled data for its grade rating and estimates of risk parameters may outsource the following duties to the entity which organises the data pooling:

1. Production of information relevant to validation of grades and risk estimates.
2. Production of reports from the rating system.
3. Production of information relevant to regular review of the rating criteria to evaluate if they remain predictive of risk.
4. Documentation of all changes to the rating process, including the criteria used for the risk grading.

5. Production of information relevant to ongoing review and modifications to models used in the rating process and estimation of risk parameters.

An institution which outsources duties pursuant to this provision shall ensure that

1. Finansinspektionen has access to all information from the organiser of the data pooling which Finansinspektionen deems necessary for the supervision of the rating system, and that
2. Finansinspektionen is entitled to carry out investigations to the same extent as at the institution.

### **Reporting requirements**

**Section 47** In order to receive permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act, the institution must be able to prove that it can properly calculate and report the capital requirement in accordance with the IRB approach.

The institution shall, before receiving permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act and in addition to the ordinary capital adequacy reporting, report to Finansinspektionen in a separate report the capital requirement in accordance with the IRB approach. The reporting shall take place four times at one financial quarter intervals. The reporting shall be executed at the group level and include the exposures for which the institution intends to calculate the capital requirement in accordance with the IRB approach from the date permission is granted.

The requirement for this reporting also applies for the exposures that are included in the implementation plan in accordance with Chapter 38, section 19. For these exposures, the reporting shall be executed four times at one financial quarter intervals before the institution may calculate the capital requirement in accordance with the IRB approach for the relevant exposures. However, the institution may apply for permission to report a fewer number of times or not at all for these exposures. Permission in accordance with this paragraph may only be granted if Finansinspektionen judges that the permission does not decrease Finansinspektionen's possibilities for determining if the institution fulfils the provisions related to the IRB approach. Permission may be granted per exposure class, for retail exposures per subgroup, and business line.

### **Internal audit**

**Section 48** The internal auditors of the institution shall review the institution's rating systems and its use thereof at least once a year. Areas of review shall include adherence to all applicable provisions in these regulations.

## **Chapter 45 Provisions for internal models approach for calculating risk-weighted exposure amounts for equity exposures**

### **Requirements for the VaR model**

**Section 1** The VaR model (the model) shall calculate the potential loss on the institution's equity portfolio defined as the difference between the equities' returns and the risk-free rate subject to a 99th percentile, one-tailed confidence interval.



**Section 2** VaR shall be based on a one quarter holding period. When calculating the return of the equities, the institution may use price data from a period shorter than one quarter and convert it to a quarterly equivalent using an analytically appropriate method supported by empirical evidence. This method shall be applied consistently over time.

**Section 3** The historical observation period shall be as long as possible and take into account the availability of relevant price data.

**Section 4** The model shall adequately capture all of the material risks in the institution's portfolio of equities. Both the general and specific equity price risk must be captured. The institution shall use empirically supported analyses to demonstrate the suitability of the selected risk factors as well as their ability to capture both specific and general risk.

**Section 5** Price data quality shall be sufficient to provide statistically reliable and robust estimates of losses. If only a limited quantity of relevant data is available, the institution shall add appropriate margins of conservatism.

Data used in the model shall have been subjected to an independent review.

Positions lacking market prices may be mapped against other market prices, e.g. general indexes. There must be good reason to assume that the price trend for such positions is in agreement with the market prices against which they are mapped.

**Section 6** When calculating VaR, the effect of credit protection in the form of credit derivatives and guarantees shall be considered.

**Section 7** The model shall be suitable in relation to the institution's risk profile and the complexity of its equity portfolio. Where the institution has material holdings in positions with non-linear risks, the model shall appropriately capture such risks.

**Section 8** The institution shall have routines for stress testing and regularly conduct comprehensive stress testing.

## **Risk management and risk control**

**Section 9** The institution shall have policies stating how risk management is organised, i.e. which measurement methods to use and procedures for risk control and reporting. The policies shall explain how the model is integrated with the institution's management of its equity portfolio. Responsibility for the model design, including parties authorized to approve modifications, shall be documented.

**Section 10** The institution shall have control and reporting procedures to ensure the high quality of risk calculation.

**Section 11** The institution shall have systems and procedures for monitoring the equity price risk and the usage of investment limits in the equity portfolio.

**Section 12** The model shall be fully integrated into the institution's management of its equity portfolio.

**Section 13** The units or functions that are responsible for the design and application of the model shall be functionally independent from the units responsible for managing individual investments.

**Section 14** Units or functions responsible for developing the model or any part of its applications shall be adequately qualified. Management shall allocate sufficiently skilled and competent resources to the modelling function.

**Section 15** The institution shall, as a component of its internal review, regularly analyse how the model calculates risk. The review shall as a minimum include how revisions to the model are approved, that the calculations are correct and that input to the model is complete and accurate. The review shall also evaluate the possibility of limiting the effect of known weaknesses in the model and identifying previously unknown weaknesses.

#### **Documentation of the model and assessment of the model's reliability**

**Section 16** The model shall be documented.

**Section 17** The institution shall have procedures for evaluating the reliability of the model. Such evaluations shall be conducted on a regular basis, at least once per year. Procedures, methods and data used in the evaluation must be documented.

**Section 18** The methods and the type of data used for quantitative validation shall be consistent over time. Changes in the method or data sources and when the institution changes time period for the data on which the evaluation is based shall be documented.

**Section 19** As a component of the evaluation in section 17, the institution shall conduct backtesting, which compares the equity portfolio's actual return with the model's VaR value. This comparison shall be based on as long a period as possible.

The institution shall also evaluate the reliability of the model using other quantitative methods.

**Section 20** The institution shall have guidelines for situations where the results of the quantitative evaluation call the validity of the model into question.

**Section 21** Model revisions resulting from the evaluation shall be documented.

#### **Chapter 46 Operational requirements for purchased receivables**

**Section 1** The institution shall have legal right to all payments from the purchased receivables. If the obligor(s) pay(s) the seller of the receivables instead of the institution, the institution shall regularly verify that payments occur in accordance with the agreed conditions. The aforementioned also applies where the obligor(s) make(s) payments to a servicer.

**Section 2** The institution shall monitor the quality of the receivables as well as the financial strength of the seller and, where applicable, the servicer. At a minimum, the institution shall meet the following requirements:

- The institution shall evaluate any relationships between the quality of the receivables and the financial strength of the seller. If there is a servicer the relationship between the quality of the receivables and the financial strength of the servicer shall also be evaluated.
- The institution shall have clear policies and procedures for determining seller and servicer eligibility. The institution shall regularly ensure that the seller and servicer comply with the established requirements. These reviews shall be documented.

- The institution shall assign grades to both the seller of the receivables and the servicer.
- The institution shall evaluate the characteristics of the purchased receivables pools.
- The institution shall have policies and procedures for monitoring on an aggregated basis single-obligor exposures both within and across purchased receivables pools.
- The institution shall ensure that it receives from the servicer timely and sufficiently detailed reports of receivables' ageing and dilutions to ensure compliance with the credit institution's eligibility criteria and advancing policy for purchased receivables and to monitor the seller's terms of sale and dilution.

**Section 3** The institution shall have policies, procedures and systems for detecting deterioration of the seller's financial position and the quality of the purchased receivables. The institution shall have policies and procedures for addressing emerging problems.

**Section 4** The institution shall have clear policies and procedures governing the handling and monitoring of purchased receivables.

**Section 5** The institution shall have internal processes for assessing compliance with all policies and procedures regarding purchased receivables. The process shall include regular audits of the institution's management of purchased receivables.

## **Sub-part L2 Securitisation when the IRB approach is used**

### **Chapter 47 Treatment of securitised exposures**

**Section 1** In a traditional securitisation, the originator may exclude the securitised exposures when calculating risk-weighted exposure amounts and expected loss amounts in accordance with the IRB approach in sub-part L1 if the transaction transfers a significant portion of the credit risk originating from the securitised exposures to a third party and if the following conditions are met:

- 1) The securitisation documentation reflects in the economic substance of the transaction.
- 2) The securitised exposures are put beyond the reach of the originator and its creditors, including in the originator's bankruptcy or receivership. This shall be supported by a legal opinion from an external legal adviser highly experienced in this field.
- 3) The issued securities shall not entail any payment obligation for the originator.
- 4) The transferee is a securitisation special purpose entity.
- 5) The originator does not maintain effective or indirect control over the transferred exposures. An originator shall be considered to have maintained effective control if it has the right to repurchase from the transferee the previously transferred exposures in order to realise the gains or if it is obligated to re-assume transferred risk. The originator's retention of servicing rights or obligations

in respect of the exposures shall not of itself constitute indirect control of the exposures.

- 6) The securitisation documentation contains no clauses that
  - a) other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator, or
  - b) increase the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool.

When there is a clean-up call option, the following conditions shall also be met:

- 1) The clean-up call option is exercisable at the discretion of the originator.
- 2) The clean-up call option may only be exercised when 10% or less of the original value of the exposures securitised remains unamortized.
- 3) The clean-up call option may not be structured to avoid allocating losses to credit enhancement positions or other positions held by investors or in any other way be structured to provide credit enhancement.

**Section 2** If the originator transfers a significant portion of the credit risk and chooses to exclude the securitised exposures in accordance with section 1, risk-weighted amounts shall be calculated in accordance with Chapters 48-51 for any own positions in the securitisation.

If the originator, pursuant to section 1, may not refrain from calculating risk-weighted exposure amounts and expected loss amounts for the securitised exposures in accordance with the IRB approach in sub-part L1, the risk-weighted amount does not need to be calculated for any own positions in the securitisation.

**Section 3** In a synthetic securitisation, the originator may, instead of calculating risk-weighted exposure amounts and expected loss amounts for the securitised exposures in accordance with sub-part L1, report its own positions in the securitisation in accordance with Chapters 48-51 and otherwise apply the regulations concerning credit protection-IRB in sub-part L3 if the transaction transfers a significant portion of the credit risk originating from the securitised exposures to a third party and the following conditions are met:

1. The securitisation documentation reflects the economic substance of the transaction.
2. The credit protection through which the credit risk is transferred meets the requirements set out in the credit protection-IRB regulations in sub-part L3. In this regard, special purpose entities shall not be accepted as providers of guarantees or unfunded credit derivatives.
3. The instruments used to transfer credit risk may not contain provisions or conditions that

- a) stipulate significant thresholds for when credit protection shall be deemed to be triggered if a credit event occurs,
  - b) allow for the termination of the protection due to deterioration of the credit quality of the underlying exposures,
  - c) other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator, or
  - d) increase the originator's cost of credit protection or the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool.
4. A legal opinion is obtained from an external legal counsel with considerable experience in the field confirming the enforceability of the credit protection in all relevant jurisdictions.

**Section 4** If the originator chooses to calculate risk-weighted exposure amounts and expected loss amounts for the securitised exposures in accordance with section 3, the expected loss amounts for such exposures shall be zero. The originator shall take account of any maturity mismatch between the securitised exposures and the credit protection through which division into tranches is achieved except for tranches assigned a 1,250% risk weight. The maturity of the securitised exposures shall be taken to be the longest maturity of any of those exposures subject to a maximum of 5 years. The maturity of the credit protection shall be determined in accordance with the regulations concerning credit protection-IRB in sub-part L3.

When account is taken of the maturity mismatch in accordance with the first paragraph, the treatment of the maturity mismatch set out in the regulations concerning credit protection-IRB in sub-part L3 shall be applied in accordance with the following formula.

$$RW^* = [RW(SP) \times (t-0.25)/(T-0.25)] + [RW(ASS) \times (T-t)/(T-0.25)]$$

where

$RW^*$  is the risk-weighted exposure amount that shall be included in the calculation of the institution's capital requirements,

$RW(SP)$  is the risk-weighted exposure amount that would have applied to the exposures had they not been securitised, calculated on a pro-rata basis,

$RW(ASS)$  is the risk-weighted exposure amount that would be calculated in accordance with Chapter 48 if no maturity mismatch was found,

$T$  is the maturity of the underlying exposures, expressed in years, and

$t$  is the maturity of the credit protection, expressed in years.

**Section 5** If the originator, pursuant to section 3, may not refrain from calculating risk-weighted exposure amounts and expected loss amounts for the securitised exposures in accordance with the IRB approach in sub-part L1, the risk-weighted exposure amounts do not need to be calculated in accordance with the rules in this sub-part for any own securitisation positions.

**Section 6** An originator or a sponsor who applies section 1 or 3 shall not provide any form of support to the securitisation in addition to their contractual obligations, with the purpose of reducing potential or actual losses for other parties.

If an institution provides support contrary to the first paragraph, a capital requirement shall in the future be calculated for the securitised exposures as if no securitisation had taken place. The institution shall also promptly notify Finansinspektionen, which may decide to take appropriate measures.

## **Chapter 48 Risk-weighted exposure amounts for securitisation positions**

### **Regulations covering all securitisations**

**Section 1** For each securitisation position, the risk weighted exposure amount shall be calculated by multiplying the exposure amount in accordance with section 10 by the risk weight that applies for the position.

**Section 2** Where there is an exposure to different tranches in a securitisation, the exposure to each tranche shall be considered a separate securitisation position.

Where an institution has two or more overlapping positions in a securitisation, to the extent that they overlap, it shall only be required to calculate risk-weighted amounts for the position or portion of a position that produces the higher risk-weighted exposure amount.

Overlapping means that the positions, wholly or partially, represent an exposure to the same risk such that to the extent of the overlap there is a single exposure.

#### *General guidelines*

For example, overlapping positions may arise when a certain securitisation structure has two different liquidity facilities which completely or partially cover the same tranches and it is unclear which will actually be drawn. Where the overlapping positions are held by separate institutions, both must provide capital coverage for the risk but if the positions are held by the same institution the risk does not need to have double capital coverage.

**Section 3** When determining a risk-weighted exposure amount for a securitisation position, the institution may take into account credit protection in accordance with sub-part L3 in combination with Chapter 51.

**Section 4** The risk-weighted exposure amount of a securitisation position to which a 1,250% risk weight is assigned may be reduced by 12.5 times the amount of any value adjustments made by the institution in respect of the securitised exposures. To the extent that value adjustments are taken account of for this purpose, they shall not be taken account in the calculation set out in Chapter 3, section 9 of the Capital Adequacy Act.

**Section 5** The risk-weighted exposure amount of a securitisation position may be reduced by 12.5 times the amount of any value adjustments made by the institution in respect of the position.

**Section 6** As an alternative to calculating a risk-weighted exposure amount for a position in a securitisation that should be assigned a 1,250% risk weight, an institution may deduct the exposure amount from own funds.

**Section 7** When section 6 is exercised, the following shall apply:

- a) the exposure amount of the position may be derived from the risk-weighted exposure amount taking account of any reductions made in accordance with sections 4-5,
- b) the calculation of the exposure amount may include collateral and funded credit derivatives in a manner consistent with section 3, and
- c) where the formula based method in accordance with Chapter 49, section 14 is applied to calculate risk-weighted exposure amounts and if the credit enhancement level corresponding to the value  $K_{irbr}$  does not coincide with the limits between two tranches, the calculation must be carried out as if there was a further tranche in the securitisation with a credit enhancement level equal to  $K_{irbr}$  for the position which has higher priority.

**Section 8** If an institution chooses to deduct the exposure amount of the position from own funds in accordance with section 6, 12.5 times that amount shall be deducted from the amount which for the purposes of applying section 9 is given as the maximum risk-weighted exposure amount which shall be calculated by institutions referred to therein.

**Section 9** An institution which can calculate  $K_{irb}$  may limit the total risk-weighted exposure amounts calculated for its positions in a securitisation to the amount which would entail a capital requirement equal to 8% of the risk-weighted exposure amounts if the securitised exposures had not been securitised and were on the institution's balance sheet plus the expected loss amounts for these exposures.

**Section 10** The exposure amount of an on-balance sheet securitisation position shall be measured gross of value adjustments.

The exposure amount for a securitisation position that is an off-balance sheet commitment shall be its nominal value multiplied by a conversion factor in accordance with Chapter 50.

The exposure amount arising as a result of a derivative contract shall be calculated in accordance with Chapter 40.

### **Securitisation of revolving exposures subject to provisions for early amortisation**

#### *Additional risk-weighted exposure amount*

**Section 11** In addition to the risk-weighted exposure amounts calculated for its securitisation positions, the originator shall also calculate a risk-weighted exposure amount for both the originator's interest and the investors' interest in accordance with sections 12-21 in the case of revolving exposures within the framework of a securitisation containing provisions for early amortisation.

Revolving exposure means an exposure in which a customer can, within agreed limits, vary the amount drawn. Provisions for early amortisation refers to a

contractual clause which requires, on the occurrence of defined events, investors' positions to be redeemed before the originally stated maturity of the securities issued.

Where the securitisation comprises both revolving and non-revolving exposures, the originator shall only calculate an additional risk-weighted exposure amount for the portion of the underlying pool containing revolving exposures.

**Section 12** For the purpose of these provisions, the originator's interest shall be the sum of

- 1) the exposure amount of the notional part of a pool of drawn amounts sold into a securitisation, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having securitisation positions in the securitisation; plus
- 2) the exposure amount of the part of the pool of undrawn amounts of the credit lines, the drawn amounts of which have been sold into the securitisation, the proportion of which to the total amount of such undrawn amounts is the same as the proportion of the exposure amount described in point 1 to the exposure amount of the pool of drawn amounts sold into the securitisation.

To qualify in this context as the originator's interest, the rights to the amounts may not be subordinate to the investors' interest.

Investors' interest refers to the amount of the notional part of the pool of drawn amounts not falling within point 1 plus the amount of the part of the pool of undrawn amounts of credit lines, the drawn amounts of which have been sold into the securitisation not falling within first paragraph, point 2.

**Section 13** The exposure of the originator associated with its rights in respect of the originator's interest as described in section 12, first paragraph, point 1 shall not be considered a securitisation position but a pro rata exposure to the securitised exposures as if they had not been securitised. The originator shall also be considered to have a pro rata exposure to the part of the undrawn amounts of the credit lines for which the drawn amounts have been sold into the securitisation described in section 12, first paragraph, point 2.

*Exemptions from requirements for additional risk-weighted exposure amounts*

**Section 14** In the following types of securitisation, the originator is exempt from calculating the risk-weighted exposure amount in accordance with section 11.

1. Securitisations of revolving exposures whereby investors remain fully exposed to all future draws by borrowers so that the risk on the underlying facilities does not return to the originator after an early amortisation event has occurred.
2. Securitisations where any early amortisation provision is solely triggered by events not related to the performance of the securitised assets or the originator, such as material changes in tax laws or other legislation.



### *Calculation of additional risk-weighted exposure amount*

**Section 15** The additional risk-weighted exposure amount under section 11 shall be derived by multiplying the investors' interest by the product of a risk accumulation factor in accordance with sections 16-19 and the weighted average risk weight that would have applied to the securitised exposures had they not been securitised.

**Section 16** In the case of securitisations subject to an early amortisation provision of retail exposures which are uncommitted and unconditionally cancellable without prior notice, where the early amortisation is triggered by the excess spread level falling to a specified level, the institution shall compare the three-month average excess spread level with the excess spread levels at which excess spread is required to be trapped.

Where the contractual terms do not require excess spread to be trapped, the trapping level is deemed to be 4.5 percentage points greater than the excess spread level at which an early amortisation is triggered.

**Section 17** The risk accumulation factor in these cases shall be derived in accordance with Table 1 based on the level of the actual average excess spread over three months and whether the early amortisation is controlled or non-controlled. In this context, an early amortisation shall be deemed to be controlled if the following conditions are met:

- 1) The originator has an appropriate plan to ensure access to adequate capital and liquidity in the event of early amortisation.
- 2) Payments of interest and principal, expenses, losses and recoveries are shared between the originator's interest and the investors' interest throughout the duration of the transaction based on the balance of receivables outstanding at one or more predefined points per month.
- 3) The amortisation period is considered sufficient for 90% of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default.
- 4) The rate of repayment is no faster than would be achieved by straight-line amortisation over the period set out in point 3.

*Table 1*

	Securitisation subject to controlled early amortisation	Securitisation subject to non-controlled early amortisation
Three-month average excess spread	Risk accumulation factor	Risk accumulation factor
Above level A	0%	0%
Level A	1%	5%
Level B	2%	15%
Level C	10%	50%
Level D	20%	100%

Level E	40%	100%
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“Level A” refers to levels of excess spread less than 133% of the trapping level of excess spread but not less than 100% of that trapping level.

“Level B” refers to levels of excess spread less than 100% of the trapping level of excess spread but not less than 75% of that trapping level.

“Level C” refers to levels of excess spread less than 75% of the trapping level of excess spread but not less than 50% of that trapping level.

“Level D” refers to levels of excess spread less than 50% of the trapping level of excess spread but not less than 25% of that trapping level.

“Level E” refers to levels of excess spread less than 25% of the trapping level of excess spread.

**Section 18** All other securitisations of revolving exposures subject to a controlled early amortisation provision shall be consistently subject to a risk accumulation factor of 90%.

**Section 19** All other securitisations of revolving exposures subject to a non-controlled early amortisation provision shall be consistently subject to a risk accumulation factor of 100%.

#### *Maximum risk-weighted exposure amount*

**Section 20** For an originator which shall calculate an additional risk-weighted exposure amount in accordance with section 11, the total of the risk-weighted exposure amounts calculated for positions in the investors' interest and the risk-weighted exposure amounts calculated in accordance with section 11 shall be limited to the greater of

1. the risk-weighted exposure amounts calculated in respect of its positions in the investors' interest, or
2. the risk-weighted exposure amounts which would have been calculated for the securitised exposures had they not been securitised in an amount equal to the investors' interest.

**Section 21** Where relevant, the deduction which in accordance with Chapter 3, section 2, second paragraph, point 3 of the Capital Adequacy Act shall be made for net profit arising from the capitalisation of future revenues, shall not be considered when determining the maximum amount as specified in section 20.

## **Chapter 49 Risk weights**

### **Hierarchy of methods**

**Section 1** A securitisation position shall be assigned a risk weight in accordance with sections 2-5.

**Section 2** Positions with a credit assessment may be assigned a risk weight in accordance with the ratings-based method in sections 9-13. The same applies for positions where an inferred credit assessment in accordance with section 6 or a derived assessment in accordance with sections 7–8 may be applied.

**Section 3** Positions which are not treated in accordance with the ratings-based method shall be assigned a risk weight in accordance with the supervisory formula method set out in section 14.

**Section 4** An institution other than an originator or a sponsor may only apply the supervisory formula method after receiving Finansinspektionen's permission in each individual case.

**Section 5** An originator or sponsor which cannot calculate  $K_{irb}$ , and other institutions which have not been granted permission to use the supervisory formula method shall, unless they have received Finansinspektionen's permission in accordance with section 15, assign a 1,250% risk weight for positions without a credit assessment, an inferred credit assessment or derived credit assessment.

### **Determining an inferred credit assessment**

**Section 6** Where the following operational minimum requirements are met, a position without a credit assessment shall be assigned an inferred assessment equal to the assessment for those positions with credit assessments (reference positions) which are the most senior positions that are in all respects subordinate to the specific position without credit assessment:

- 1) The maturity of the reference positions must be equal to or longer than that of the position without a credit assessment in question.
- 2) An inferred credit assessment must be updated on an ongoing basis to reflect any changes in the credit assessment of the positions used as reference positions in the securitisation.

### **Internal assessment methodology for derived credit assessments in ABCP programmes**

**Section 7** An institution which received Finansinspektionen's permission to use an internal method to calculate the credit risk of certain positions in an ABCP programme may, when the following conditions are met, use the method to assign their positions a derived credit assessment in accordance with section 8.

- 1) Positions in the commercial paper issued from the programme shall be positions with credit assessments.
- 2) The institution can verify that its internal assessment of the credit quality of the position reflects the publicly available assessment methodology of one or more credit assessment institutions for the rating of securities backed by the exposures of the type securitised. The requirement that the assessment methodology of the credit assessment institution shall be publicly available may be waived if Finansinspektionen is satisfied that due to the specific features of the securitisation - for example its unique structure - there is as yet no assessment methodology publicly available.

- 3) Those credit assessment institutions which have provided an external credit assessment for the commercial paper issued from the programme shall be included among the credit assessment institutions referred to in point 2. Quantitative elements, such as stress factors, used in assessing the position to a particular credit quality must be at least as conservative as those used in the assessment methodology of the credit assessment institutions in question.
- 4) In developing its internal assessment methodology the institution shall take into consideration relevant published ratings methodologies of the credit assessment institutions that rate the commercial paper from the ABCP programme. This consideration shall be documented and updated regularly, as outlined in point 7.
- 5) The institution's internal assessment methodology shall include risk grades that correspond to the credit ratings of credit assessment institutions. This correspondence shall be explicitly documented.
- 6) The internal assessment methodology shall be used in the institution's internal risk management processes, including its decision-making, management information and capital allocation processes
- 7) Internal or external auditors, a credit assessment institution, or the institution's internal credit review or risk management function shall perform regular reviews of the internal assessment process and the quality of the internal assessments of the credit quality of the institution's exposures to ABCP programmes. If the institution's internal functions perform the review, these functions shall be independent of the business line ABCP programmes as well as the customer relationship.
- 8) The institution shall track the performance of its internal gradings over time to evaluate the performance of its internal assessment methodology and shall make adjustments as necessary when the performance of the exposures regularly diverges from that indicated by the internal grading.
- 9) The ABCP programme shall incorporate underwriting standards in the form of credit and investment guidelines. When deciding to purchase an asset, the programme administrator shall consider the type of asset being purchased, the type and monetary value of the exposures arising from the provision of liquidity facilities and credit enhancements, the loss distribution, and the legal and economic isolation of the transferred assets from the entity selling the assets. A credit analysis of the risk profile of the asset seller shall be carried out. This shall include analysis of past and expected future financial performance, current market position, expected future competitiveness, leverage, cash flow, interest coverage and debt rating. In addition, a review of the seller's underwriting standards, servicing capabilities, and collection processes shall be performed.
- 10) The minimum criteria of the ABCP programme for which assets may be accepted shall

- a) exclude the purchase of assets that are significantly past due or defaulted,
  - b) limit concentration with regard to individual obligors or geographical areas, and
  - c) limit the term of the assets to be purchased.
- 11) The ABCP programme shall have collections policies and processes that take into account the operational capability and credit quality of the servicer. The programme shall mitigate seller/servicer risk through various methods, such as triggers based on current credit quality that would preclude commingling of funds.
  - 12) The aggregated estimate of loss on an asset pool that the ABCP programme is considering purchasing must take into account all sources of potential risk, such as credit and dilution risk. If the size of the seller-provided credit enhancement is based solely on credit-related losses, a separate reserve shall be established for dilution risk, if dilution risk is material for the particular pool. In addition, in sizing the required enhancement level, the programme shall review several years of historical information, including losses, delinquencies, dilutions and the turnover rate of the receivables.
  - 13) The ABCP programme shall incorporate structural features - for example wind down triggers - into the purchase of exposures in order to mitigate potential credit deterioration of the underlying portfolio.

**Section 8** The position shall be classified to one of the risk grades referred to in section 7, paragraph 5. The position shall be assigned a derived credit assessment the same as the credit assessments corresponding to the selected risk grade in accordance with section 7, paragraph 5. If the derived credit assessment at the beginning of the securitisation is credit quality step 3 or better, it shall be considered equivalent to a credit assessment from a credit assessment institution when calculating risk-weighted exposure amounts.

### **Ratings-based method**

**Section 9** When the risk weight for a securitisation position is determined by external credit assessments, the risk weight may be assigned on the basis of the position's credit quality step in accordance with the rules for external credit assessments in part E.

**Section 10** A securitisation position with an external credit assessment shall be assigned a risk weight in accordance with Table 2 or, with regard to short-term credit assessments, in accordance with Table 3. When calculating risk-weighted exposure amounts in accordance with Chapter 48, section 1, these risk weights shall be multiplied by a factor of 1.06.

*Table 2* Positions with a credit assessment

Credit quality step	Risk weight		
	A	B	C
1	7%	12%	20%

2	8%	15%	25%
3	10%	18%	35%
4	12%	20%	35%
5	20%	35%	35%
6	35%	50%	50%
7	60%	75%	75%
8	100%	100%	100%
9	250%	250%	250%
10	425%	425%	425%
11	650%	650%	650%
Other quality steps	1,250%	1,250%	1,250%

Table 3 Positions with a short-term credit assessment

Credit quality step	Risk weight		
	A	B	C
1	7%	12%	20%
2	12%	20%	35%
3	60%	75%	75%
Other quality steps	1,250%	1,250%	1,250%

**Section 11** Subject to the second paragraph or section 12, the risk weights in column A in each table shall be applied where the position is in the most senior tranche of a securitisation. When determining whether a tranche is the most senior for this purpose, it is not required to take into consideration amounts due under interest rate or currency derivative contracts, fees due, or other similar payments.

A position in the most senior tranche of the securitisation may be assigned a risk weight of 6% if this tranche in all respects is more senior than another tranche in the same securitisation which has been assigned a risk weight of 7% in accordance with section 10, provided that

1. this may be deemed justified because of the ability of the less senior tranches to absorb upcoming losses in the securitisation, and
2. the position either has an external credit assessment that corresponds with credit quality step 1 in Table 2 or 3 or, if it does not have a credit assessment, the requirements in section 6 are met where reference positions are interpreted as positions in the subordinate tranche which would be assigned a risk weight of 7% in accordance with section 10.

**Section 12** The risk weights in column C in the two tables shall be applied if the position is in a securitisation where the effective number of exposures securitised is less than six. In calculating the effective number of exposures securitised multiple exposures to one obligor must be treated as one exposure. The effective number of exposures is calculated as:

$$N = \frac{\left( \sum_i \text{Exposure amount}_i \right)^2}{\sum_i \text{Exposure amount}_i^2}$$

Where Exposure amount<sub>i</sub> represents the sum of the exposure amounts for all exposures to the *i*<sup>th</sup> obligor. In the case of resecuritisation (securitisation of securitisation exposures), the institution must look at the number of securitisation exposures in the pool and not the number of underlying exposures in the original pools from which the underlying securitisation exposures stem. If the portfolio share associated with the largest exposure, C<sub>1</sub>, is available, the credit institution may compute N as 1/C<sub>1</sub>.

**Section 13** The risk weights in column B shall be applied to all other positions.

### Supervisory formula method

**Section 14** When the risk weight for a position in a securitisation is calculated in accordance with the supervisory formula method, it shall be the greater of 7% or the risk weight calculated based on the S function as follows. Risk-weight = 12.5 x (S[L+M] – S[L]) / T

where

$$S [x] = \begin{cases} x & \text{when } x \leq Kirbr \\ Kirbr + K[x] - K[Kirbr] + (d \cdot Kirbr / \omega) \left( 1 - e^{\omega(Kirbr - x) / Kirbr} \right) & \text{when } Kirbr < x \end{cases}$$

where

$$K [x] = (1 - h) \cdot ((1 - Beta [x; a, b]) x + Beta [x; a + 1, b] c)$$

$$h = (1 - Kirbr / ELGD)^N$$

$$c = Kirbr / (1 - h)$$

$$v = \frac{(ELGD - Kirbr) Kirbr + 0.25 (1 - ELGD) Kirbr}{N}$$

$$f = \left( \frac{v + Kirbr^2}{1 - h} - c^2 \right) + \frac{(1 - Kirbr) Kirbr - v}{(1 - h) \tau}$$

$$g = \frac{(1 - c)c}{f} - 1$$

$$a = g \cdot c$$

$$b = g \cdot (1 - c)$$

$$d = 1 - (1 - h) \cdot (1 - Beta [Kirbr; a, b]).$$

$$\tau = 1000,$$

$$\text{and } \omega = 20.$$

In these expressions, Beta [x; a, b] refers to the cumulative beta distribution with parameters a and b evaluated at x.

L (the credit enhancement level) is measured as the ratio of the nominal amount of all tranches subordinate to the tranche in which the position is held to the sum of the exposure amounts of the exposures that have been securitised. Capitalised future income shall not be included when calculating L. Amounts due by counterparties with regard to derivative instruments may, when representing tranches that are more junior than the tranche in question, be measured at their current replacement cost (without potential future credit exposures) when calculating the enhancement level.

T (thickness of the tranche in which the position is held) is measured as the relationship between the notional value of the tranche and the sum of the exposure amount for the exposures that have been securitised. In this context, the exposure amount with regard to derivative instruments, shall, if the current replacement cost is not a positive value, be the potential future credit exposure calculated in accordance with Chapter 40.

N is the effective number of exposures calculated in accordance with section 12.

ELGD, the exposure-weighted average loss-given-default, is calculated as follows:

$$ELGD = \frac{\sum_i LGD_i \cdot Exponeringsbelopp_i}{\sum_i Exponeringsbelopp_i}$$

$LGD_i$  represents the average LGD associated with all exposures to the  $i^{\text{th}}$  obligor and LGD is determined in accordance with the sub-part L1. In the case of resecuritisation, an LGD of 100% shall be applied to the securitised positions. When default and dilution risk for purchased receivables are treated in an aggregate manner within a securitisation (e.g. a single reserve or over-collateralisation is available to cover losses from either source), the LGD input shall be constructed as a weighted average of the LGD for credit risk and the 75% LGD for dilution risk. The weights shall be the stand-alone capital requirements for credit risk and dilution risk respectively, without consideration to credit protection.

#### *Simplified inputs*

If the biggest securitisation exposure  $C_1$  is not greater than 3% of the securitised exposures' collective exposure amount, when using the supervisory formula method the institution may set  $LGD = 50\%$  and N to either:

$$N = \left( C_1 C_m + \left( \frac{C_m - C_1}{m - 1} \right) \max \{1 - m C_1, 0\} \right)^{-1}$$

or

$$N = 1 / C_1.$$



$C_m$  here represents the ratio between the sum of the  $m$  largest exposures' exposure amounts and the total amount of the securitised exposures. The level of  $m$  may be set by the institution.

In the case of securitisations involving retail exposures, the institution may apply the supervisory formula method with the simplifications  $h = 0$  and  $v = 0$ .

### **Exceptional treatment where $K_{irb}$ cannot be calculated**

**Section 15** Where it is not practical for an institution with a position without a credit assessment in a liquidity facility that can be considered to represent a particularly low risk level to calculate  $K_{irb}$  for the facility, the institution may in exceptional cases and only after receiving permission from Finansinspektionen temporarily apply the highest risk weight which an institution that held the exposures would have applied to any of the securitised exposures in accordance with the sub-part G1.

A liquidity facility shall be deemed to represent a particularly low risk if the following conditions are met:

1. the liquidity facility documentation shall clearly identify and restrict the circumstances in which the facility may be drawn,
2. it shall not be possible for the facility to be drawn to provide credit support by covering losses already incurred at the time of draw – for example, by providing liquidity in respect of exposures in default at the time of draw or by acquiring assets at more than fair value,
3. the facility may not be used to provide permanent or regular funding for the securitisation.
4. repayment of draws on the facility shall not be subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments and it must not be possible to waive or defer it,
5. It shall not be possible for the facility to be drawn after all applicable credit enhancements from which the liquidity facility would benefit are exhausted, and
6. the facility must include a provision that results in an automatic reduction in the amount that can be drawn by the amount of exposures that are in default, or where the pool of securitised exposures consists of rated instruments, which terminates the facility if the average quality of the pool falls below credit quality step 3.

## **Chapter 50 Conversion factors for off-balance sheet commitments**

**Section 1** Off-balance sheet commitments shall as a rule be assigned a conversion factor of 100%.

**Section 2** Liquidity facilities which meet the conditions in Chapter 49, section 15 shall be assigned a conversion factor of 50% if the original term is a maximum of one year.

**Section 3** Liquidity facilities which may only be drawn in the event of a general disruption in the market and which fulfil the conditions in Chapter 49, section 15, may be assigned a conversion factor of 20%. A general disruption in the market shall be deemed to exist if more than one securitisation special purpose entity across different transactions are unable to roll over maturing commercial paper and that inability is not the result of an impairment of the special purpose entity's credit quality or the credit quality of the securitised exposures.

**Section 4** Liquidity facilities which are unconditionally cancellable and which meet the conditions in Chapter 49, section 15 may be assigned a conversion factor of 0%, on condition that repayment of draws on the facility are senior to any other claims on the cash flows arising from the securitised exposures.

## **Chapter 51 Credit protection for positions in a securitisation**

**Section 1** When determining the risk-weighted exposure amount for a securitisation position, the institution may include credit protection in accordance with the regulations concerning credit protection-IRB in sub-part L3 taking into account sections 2-7.

### **Ratings-based method**

**Section 2** Where risk-weighted exposure amounts are calculated using the ratings based method, the exposure amount and/or the risk weight for a position in respect of which credit protection has been obtained may be changed in accordance with the provisions in the regulations concerning credit protection in sub-part G3.

### **Supervisory formula method - full credit protection**

**Section 3** Where risk-weighted exposure amounts are calculated using the supervisory formula method, the institution shall establish an effective risk weight by dividing the position's risk-weighted exposure amount by the position's exposure amount and multiplying the result by 100.

**Section 4** When collateral and/or funded credit derivatives have been received, the position's risk-weighted exposure amounts shall be determined by multiplying the effective risk weight of the exposure by Eunsec calculated in accordance with Chapter 25.

**Section 5** When guarantees and/or un-funded credit derivatives have been received, the position's risk-weighted exposure amount shall be determined by first multiplying the protection provider's risk weight by the protected amount calculated in accordance with Chapter 24. This amount shall then be added to the sum of the exposure's effective risk weight multiplied by the position's unprotected amount.

### **Supervisory formula method - partial protection**

**Section 6** If the credit protection covers a first loss or losses on the securitisation position proportionally, the institution may apply sections 3-5 when calculating risk weights.

**Section 7** The institution shall otherwise treat the securitisation position as two or more positions with the uncovered portion representing the lower credit quality. When calculating risk-weighted exposure amounts for this position, the provisions in Chapter 49, section 14 shall be applied with the following amendments:

“T” shall be changed to  $e^*$  for collateral and funded credit derivatives and to  $T-g^*$  for guarantees and/or unfunded credit derivatives,

where

$e^*$  is the ratio between that part of the position not considered protected by the assets pledged as collateral ( $E_{unsec}$  calculated in accordance with Chapter 25 and the total notional amount for the underlying exposure pool, and

$g^*$  denotes the ratio between the credit protection's notional value (adjusted for any currency or maturity mismatch in accordance with the regulations concerning credit protection in sub-part G3) and the sum of the securitised exposure amounts.

For guarantees and un-funded credit derivatives, the protection provider's risk weight shall be applied on the part of the position which does not fall within the adjusted value of T.

## **Sub-part L3 Credit protection when the IRB approach is used**

### **Chapter 52 General provisions**

**Section 1** An institution intending to include the effect of credit protection when calculating the capital requirement shall apply the provisions in sub-part L3 in accordance with that set out below.

An institution which has not received permission to use own estimates of LGD and CF for exposures to governments, exposures to institutions and exposures to corporates shall apply Chapters 52-57.

An institution that has received permission to use own estimates of LGD and CF for exposures to governments, exposures to institutions and exposures to corporates, shall apply Chapter 54 sections 9-13, Chapter 55 sections 6-10, Chapter 56 and Chapter 57, sections 1 and 5.

An institution which applies the PD/LGD approach to equity exposures but has not received permission to use own estimates of LGD for these exposures shall apply Chapter 53.

An institution that applies the internal method to equity exposures shall apply Chapter 53, section 14.

For retail exposures, Chapter 56 and Chapter 57, sections 1 and 5 shall be applied. The provisions in Chapter 54, sections 9-13 and Chapter 55, sections 6-10 shall be followed in accordance with that contained in the estimate of LGD in Chapter 42, section 21.

Institutions which calculate the risk-weighted exposure amount in accordance with Chapter 39, sections 4 or 10 shall meet the provisions contained in Chapter 58.

**Section 2** Institutions may only include the effect of recognisable protection. Protection is recognisable if the form is eligible and if the institution meets the specific requirements related to the management of each respective form of protection.

If the protection does not cover the entire risk of an exposure and potential losses are not shared proportionally, the securitisation rules shall be applied.

#### *General guidelines*

A basic feature of securitisations is a structure in which two or more parties share the credit risk originating from one or more specified exposures in a way that is not proportionate to the size of the parties' notional positions. An example of such a structure is when an institution buys a guarantee that does not cover the entire exposure and where the institution and the issuer of the guarantee hold different risk positions.

#### **Calculating the effect on LGD when there is recognisable financial and non-financial collateral**

**Section 3** Where for an exposure there is both recognisable financial and non-financial collateral, the effect on LGD shall be calculated according to this paragraph.

The institution shall first calculate that part of the exposure that is not protected by financial collateral ( $E_{\text{unsec}}$ ) according to Chapter 55, sections 11-15.  $E_{\text{unsec}}$  shall then be distributed across the non-financial collateral based on how great a proportion of each collateral covers the exposure. Calculating the effect on the LGD is then carried out in accordance with Chapter 54, sections 14–17 and/or Chapter 55, section 11.

#### **Rules for credit protection and protected asset maturities**

**Section 4** Where the credit protection comprises a guarantee, a credit derivative or financial collateral, the provisions in sections 5-9 should be applied.

The institution can disregard the provisions in sections 5-9 if the following requirements are met:

1. The credit protection is comprised of financial collateral.
2. The protected asset and collateral shall be valued daily.
3. The collateral agreement shall specify that the collateral shall be delivered without undue delay if a collateral deficit has arisen.
4. Where the financial collateral consists of debt securities, the collateral agreement shall indicate that if the security expires the funds shall be paid into an account at the institution which the counterparty cannot utilise without the permission of the institution.

### *Definition of maturity*

**Section 5** The maturity of the protected asset shall be the time remaining until the obligor must have fulfilled its obligations under the agreement. However, maturity shall be no longer than five years.

**Section 6** Subject to this paragraph, the maturity of the credit protection shall be the period to the earliest date at which the protection expires or can be terminated.

Where the protection seller has the option to terminate the agreement, the maturity of the protection shall be the period to the earliest date at which this option may be exercised.

Where the credit protection buyer has the right to terminate the agreement and the original agreement terms contain a positive incentive for the buyer to terminate the protection before contractual maturity, the maturity of the protection shall be considered to be the time to the earliest date at which this option may be exercised.

A reduction of the maturity shall be made for credit derivatives that become repayable without regard to the possibility that the protected asset may have a payment extension period before default is considered to have occurred. The maturity of the credit derivative shall be reduced by the extension period.

### *Maturity mismatches*

**Section 7** A maturity mismatch exists when the maturity of the credit protection is shorter than the maturity of the protected asset.

**Section 8** In the event of a maturity mismatch, the credit protection may not be taken into account when calculating risk-weighted exposure amounts if

1. the remaining maturity of the credit protection is less than three months, or
2. the original maturity of the credit protection is less than one year, or
3. the protected asset is an exposure of the type specified in Chapter 43, section 10.

**Section 9** Other provisions related to the calculation of risk-weighted exposure amounts in circumstances where there is a maturity mismatch are contained in Chapter 53, section 18 and Chapter 55, section 12.

## **Chapter 53 Guarantees and credit derivatives**

**Section 1** The institution can adjust the value of the PD and LGD in line with sections 15-18 in order to include recognisable guarantees and credit derivatives. Guarantees and credit derivatives are recognisable if they are eligible under section 2 and the institution fulfils the management requirements contained in section 14.

When PD is adjusted to take into account a guarantee or credit derivative, the risk-weighted exposure amount for the protected portion of the underlying exposure is calculated with the formula set out in Chapter 39 for the exposure class to which the issuer of the guarantee or credit derivative belongs.

### **Eligible guarantees and credit derivatives**

**Section 2** Guarantees and credit derivatives are eligible if issued by a qualifying issuer of protection pursuant to section 3 and meets the conditions pursuant to sections 4-13.

*Eligible issuer of guarantees and credit derivatives*

**Section 3** The following protection issuers are eligible, on condition that the institution has rated them in accordance with the rules applying to direct counterparties:

1. an issuer whose liabilities are assigned to exposures to governments,
2. an issuer whose liabilities are assigned to exposures to institutions,
3. an issuer whose liabilities are assigned to exposures to corporates and has a credit assessment from an eligible credit assessment institution corresponding to credit quality step 2 or better,
4. other issuers for which the institution has assigned an internal grade or pool and has a PD corresponding to or lower than the PD of the credit assessment of an eligible credit assessment institution corresponding to credit quality step 2.

*Eligible forms of protection*

**Section 4** In order for a guarantee or a credit derivative to provide eligible protection, the following requirements shall be met:

1. the protection is direct, and
2. the protection covers clearly defined and identifiable claims.

The protection agreement may not contain conditions outside the control of the institution that would mean that

1. the issuer of the guarantee or credit derivative has a unilateral right to revoke the protection,
2. the cost of the protection increases due to the deteriorating quality of the protected asset,
3. the issuer of the guarantee or credit derivative is not obliged to pay out in a timely manner in the event the obligor fails to make payments due, or
4. it is possible for the issuer of the guarantee or credit derivative to reduce the maturity of the guarantee or credit derivative.

The protection agreement shall be legally binding in all relevant jurisdictions.

In addition, the following shall apply:

1. Protection in the form of guarantees shall meet the conditions set out in section 6.
2. Protection in the form of credit derivatives must meet the conditions in sections 7-13.

**Section 5** In order for a counter-guarantee, i.e. a guarantee that guarantees another guarantee, to be eligible, the following requirements must be met:

1. The issuer of the counter-guarantee is a counterparty whose liabilities are assigned to exposures to governments or a public sector entity whose liabilities may be assigned either to exposures to government or exposures to institutions according to the standardised approach for credit risks.
2. The counter-guarantee covers all aspects of credit risk in the exposure, not just counterparty risk, but also dilution risk, transfer risk, etc.
3. The direct guarantee meets the conditions in section 4.

4. The counter-guarantee meets the conditions in section 4, except the first paragraph, first point.

A counter-guarantee which does not meet the requirement in the first paragraph, point 1 may be eligible if the counter-guarantee in its turn has a direct guarantee which meets the requirement, provided that all other conditions in the first paragraph have been met.

The institution shall notify Finansinspektionen that it has a counter-guarantee before the institution takes it into account when calculating risk-weighted exposure amounts. In its notification, the institution shall certify that the counter-guarantee meets the requirements contained in the first paragraph and that there is no evidence that the counter-guarantee is inferior to a direct guarantee from the issuer. If the institution has several counter-guarantees from the same issuer, the institution only needs to give notice for each issuer if the conditions in the counter-guarantees are similar.

#### *Specific conditions for guarantees*

**Section 6** In the event of a failure to pay, the institution has the right to, without undue delay, make a claim for payment against the issuer of the protection without first being required to make a claim against the obligor.

However, the requirement in the first paragraph does not need to be met for counter-guarantees that are eligible pursuant to section 5, or guarantees issued by credit guarantee associations or the guarantors specified in section 5 on condition that one of the following conditions have been met:

1. the terms of the contract give the institution the right to, without undue delay, receive a preliminary payment corresponding to a reliable estimate of the amount constituting the guaranteed portion of the institution's expected financial loss, including losses arising from the non-payment of interest and other amounts for which the borrower is liable, or
2. the institution can demonstrate that the loss protection effects justify this treatment.

Guarantees which protect exposures using collateral in residential real estate or tenant-owner property are also eligible where the period before the institution can demand payment from the issuer is up to 24 months.

#### *Specific conditions for credit derivatives*

**Section 7** The following types of credit derivatives are eligible:

1. Credit swaps.
2. Total return swap.
3. Credit linked note, for the amount paid in.

Financial instruments composed of or financially equivalent to these types of credit derivatives are also eligible.

A total return swap is not eligible if the institution books the net payments from this credit derivative as income but does not take up a corresponding reduction in the value of the asset which the credit derivative protects as a cost.

**Section 8** Events that mean that the credit derivative becomes due for payment (credit event) shall at least include

1. the obligor defaults on amounts due,
2. the obligor stops payments or applies for bankruptcy,
3. the obligor receives a grace period in which to pay instalments due and interest due, on condition that the period of grace represents a financial loss,
4. there is a change in the terms of payment other than that specified in 3, which means a financial loss for the institution.

Where in accordance with the underlying debt security the obligor can obtain a grace period regarding the payment of amounts due, the definition of the credit event pursuant to point 1 must take account of this. The credit event must not have a longer period than that applicable under the underlying debt security.

If the credit event does not include that specified in the first paragraph point 3, the credit derivative may still be taken into account, however the protected amount shall be reduced in accordance with section 17 third paragraph.

It shall be clearly defined which parties are responsible for deciding if a credit event has occurred. This decision may not rest solely with the protection issuer. The protection purchaser shall have both the right and possibility to inform the protection issuer if a credit event occurs.

**Section 9** For credit derivatives with cash settlement, the institution shall have procedures for reliably estimating losses. A period shall be set during which the institution may obtain post-credit assessments of the reference exposure.

If the cash settlement is conditional on the protection purchaser's transfer of the reference exposure to the issuer of the protection, the contract shall provide that any required permission between the parties to such a transfer may not unduly delay the transfer.

**Section 10** Even if the reference exposure of a credit derivative does not exactly correspond to the exposure that the institution wishes to protect, the credit derivative is eligible if the following conditions are met:

1. The reference exposure refers to the same counterparty.
2. The reference exposure is ranked equal to, *pari passu*, or inferior to the protected asset in the event of bankruptcy.
3. There are cross clauses in place between the reference asset and the protected asset that mean that if the borrower defaults (e.g. stops payments) on other loans, this will be treated as a default on the reference asset as well.

**Section 11** If the institution creates an internal hedge using credit derivatives by hedging the credit risk of an exposure in its non-trading activities with a credit derivative in the trading book, the credit risk transferred to the trading book shall be transferred to one or more third parties for the protection to be eligible.

**Section 12** If a credit derivative covers a group of exposures and the credit derivative is designed so that it becomes due for payment as soon as the first default occurs, the institution may only include protection for the exposure which in the absence of protection would give rise to the lowest risk-weighted exposure amount on condition that the protection at least covers the exposure.

**Section 13** If a credit derivative covers a group of exposures and the credit derivative is designed so that it becomes due for payment when the  $n^{th}$  default occurs, the institution must apply the method, appropriately tailored, specified in



section 12. However, this is only permitted if the institution also has protection for defaults 1 to  $n-1$  or if default  $n-1$  has already occurred.

### **Management requirements**

**Section 14** The institution shall have set guidelines regarding the utilisation of guarantees and credit derivatives related to the institution's overall risk management strategy. The institution shall have procedures and systems for following up and managing potential concentrations of credit risk arising as a result of this protection.

### **The effect of recognisable guarantees and credit derivatives on the risk parameters PD and LGD**

**Section 15** When there is a recognisable guarantee or credit derivative for an exposure, the obligor's PD may be replaced by the protection issuer's PD for the protected amount. If the institution determines that a complete risk transfer has not occurred, the PD shall be set with a conservative value between the counterparty's PD and the protection issuer's PD.

Where the exposure is subordinated and the protection is not, the LGD for non-subordinated loans may be used for the protected amount.

**Section 16** When an institution has a guarantee or credit derivative for an off-balance sheet liability, the effect of these shall be included before the institution applies the relevant conversion factor.

#### *General guidelines*

Assume that the institution has an off-balance sheet liability that totals SEK 100. The liability has a conversion factor of 75%. The institution has a guarantee for the liability worth SEK 75. The portion of the liability that is protected/not protected by the guarantee is calculated first. The guarantee covers 75% of the liability, i.e. SEK 75. The remaining SEK 25 is therefore unprotected. When these calculations are completed, the conversion factor is applied. The exposure amount for the protected portion is 56.25 ( $= 75 * 75\%$ ). This amount may be assigned the same PD as the issuer of the guarantee. The exposure amount for the unprotected portion of the liability is 18.75 ( $= 25 * 75\%$ ).

An institution which received permission in accordance with Chapter 4, section 7 of the Capital Adequacy Act to use an IRB approach shall, in the cases where the institution received permission to use the standardised approach for credit risks for exposures to the protection issuer, use conversion factors in accordance with the IRB approach.

**Section 17** Protected amount refers to the maximum amount that the issuer of the protection has undertaken to pay, reduced by the adjustments specified in this paragraph.

Where a guarantee does not cover all types of payment that can arise as a result of the exposure, for example payment of interest or penalty fees, the protected amount shall be adjusted in order to take account of this.

Where a credit derivative pursuant to the terms of the contract cannot be claimed even though the obligor has received a grace period in which to pay instalments due and interest due or other changes to the terms of payment that result in a financial loss, the protected amount shall be reduced by a further 40%.

Where the protection is in a currency other than that of the direct exposure, the protected amount shall be reduced by the factor  $H_{fx}$ . This factor shall be determined in accordance with Chapter 55, sections 16-31.

**Section 18** Where there is a maturity mismatch in accordance with Chapter 52, section 7, the protected amount must be reduced by multiplying it by the following expression:

$$(t-0.25)/(T-0.25)$$

where

T is the residual maturity of the protected exposure, though a maximum of five years,

t is the remaining maturity of the credit protection, however a maximum of T.

**Section 19** Recognised credit linked notes issued by the institution may be managed as cash collateral pursuant to Chapter 56.

## **Chapter 54 Non-financial collateral**

**Section 1** The institution may adjust the value of the LGD in line with section 14–17 in order to take account of recognisable collateral in the form of accounts receivable, pledged leasing and hire-purchase agreements, real estate and other assets that are not of a financial nature. In certain circumstances, collateral in the form of real estate can be included pursuant to section 19.

Collateral are recognisable if they are eligible under sections 2-8 and the institution fulfils the requirements for managing them contained in sections 9-13.

Exposures in the form of counterparty leasing of different types of objects are treated in the same way as exposures to this counterparty with collateral in the same type of asset as the leasing objective. Apart from the management requirements applicable to the leasing object, the institution shall meet the management requirements in section 13.

If for an exposure there is both recognisable financial and non-financial collateral, the effect on LGD shall be calculated as specified in Chapter 52, section 3.

### **Eligible non-financial collateral**

#### *Real estate*

**Section 2** Real estate refers to that specified in Chapter 1, section 1 of the Swedish Land Code and its foreign equivalents. Real estate also covers site-lease hold rights, buildings on the land of third parties and equity in Finnish residential housing companies.

**Section 3** Residential property means real estate that in its entirety is assessed as a one- or two-dwelling unit or multi-dwelling and commercial building. This

includes property for seasonal and secondary use and undeveloped sites intended for the building of single-family residential units. Real estate with completed buildings which are or will be occupied or let by the borrower and which, with regard to location, design and planning, may be utilised as residential buildings are included in this class if at least fifty percent of the building's floor space may be utilised for residential use.

**Section 4** Residential property in Sweden are eligible as collateral if the value of the real estate is not significantly dependent on the creditworthiness of the counterparty. The condition that the value of the real estate is not significantly dependent on the creditworthiness of the counterparty does not include situations in which macroeconomic factors alone affect both the value of the real estate and the creditworthiness of the counterparty.

**Section 5** Other real estate is eligible as collateral if the following conditions are met.

1. The value of the real estate must not materially depend on the creditworthiness of the counterparty. This condition does not include situations where purely macroeconomic factors affect both the value of the property and the creditworthiness of the counterparty.
2. The ability of the counterparty to repay the loan may not significantly depend on the income flows generated by the real estate.

Real estate within the EEA and for which the country it is located in does not apply the condition is exempt from condition 2 in the previous section.

#### *Accounts receivable*

**Section 6** Collateral in accounts receivable is eligible if the receivables originate from business transactions with an original maturity of a maximum one year. Receivables linked to securitisation, sub-participations or credit derivatives, and amounts receivable related to closely related parties are not eligible collateral.

#### *Pledged leasing and hire-purchase agreements*

**Section 7** Collateral in pledged leasing and hire-purchase agreements are eligible if the following requirements are met.

1. The institution must have collateral in all of the receivables contained in the agreement and in the underlying asset.
2. The institution shall have the right to pursue its claims directly with the customer if the customer does not make its contractual payments.
3. The institution shall have the right to compensation for credit losses from the borrower.
4. All of the customer's payments shall be made to the institution.
5. The maturity of the contract shall correspond to the financial lifetime of the underlying financed objects.

#### *Other non-financial assets*

**Section 8** The institution may be permitted to include other non-financial assets than accounts receivable and real estate as eligible collateral if the following conditions are met:

1. There is a liquid second hand market for the asset.
2. There are publicly available, well-established market prices for the asset.

3. The institution can demonstrate that the prices for which the institution liquidates the asset are not significantly different to the market price.

## **Management requirements**

### *Real estate*

**Section 9** For a grant of collateral in real estate to be recognised, the grant shall meet the requirements in the second paragraph and the institution shall take account of the content of the third to sixth paragraphs. That specified below for real estate also applies to tenant-owner associations.

The grant of collateral shall be legally binding in all relevant jurisdictions and any registration requirements must have been met. It shall be possible for the institution to make a claim for payment from the value of the collateral without undue delay.

### Verification of real estate value

The institution shall regularly verify the value of real estate. For residential real estate as specified in sections 3-4, and for tenant-owner association, this verification shall be carried out at least every three years. For other real estate, the verification shall be carried out at least every year. Verification shall be carried out more frequently if there are significant changes to the economic factors affecting the real estate market. An individual valuation of each individual property is not necessary. The institution may use statistical methods to verify the real estate value and in that way identify the property that should be revalued. However, if the institution is concerned that property has dropped in value significantly more than the rest of the real estate market, it shall carry out an individual valuation. For loans exceeding an amount corresponding to EUR 3 million, or 5% of the institution's own funds, the institution shall have an independent valuer assess the value of the building at least every three years.

Here independent valuer means a person with the relevant expertise and experience and independent of the credit decision-making process.

### Documentation

The institution shall establish which types of real estate it judges to be eligible collateral in a policy document.

### Insurance

The real estate shall have adequate insurance. The institution shall have procedures to monitor that the property is adequately insured.

### *Accounts receivable*

**Section 10** For collateral in accounts receivable to be recognised, the grant of accounts receivable as collateral shall be legally binding in all relevant jurisdictions and all registration requirements must have been met.

The institution shall also meet the following conditions:

The institution shall have a sound process for assessing the credit risk of accounts receivable. This assessment shall be based on an analysis of the borrower's

activities, industry and type of customer. If the institution relies on the borrower's assessment of the creditworthiness of their customers, the institution must ensure that the borrower's procedures for doing this are sound and reliable.

The risk-reducing effect that the institution attaches to the accounts receivable must reflect all essential factors, including the costs of liquidating accounts receivable, concentrations within the portfolio of accounts receivable and the effect that accounts receivable have on the institution's total concentration risk. The institution shall have a continuous process for monitoring accounts receivable and shall regularly review the borrower's adherence to the terms of the contract and other legal requirements.

Accounts receivables granted as collateral shall be diversified, and the creditworthiness of customers must not be unduly correlated with the creditworthiness of the borrower. Where there is a significant correlation, this shall be taken into account when determining the amount of the accounts receivable in line with section 18. The accounts receivable of parties (firms or persons) closely related to the borrower are not recognised.

The institution shall have a proven process for controlling the cash flows from accounts receivable. If the institution normally delegates the management of cash flows to the borrower, it is not exempted from this requirement.

#### *Pledged leasing and hire-purchase agreements*

**Section 11** For collateral in pledged leasing and hire-purchase agreements to be recognised, the institution shall meet the requirements equivalent to those for accounts receivable specified in section 10. In addition, the following requirements must be met for the underlying asset in the contract:

1. The agreement regarding the grant of collateral shall contain a detailed description of the asset.
2. The agreement regarding the grant of collateral shall allow the institution to obtain payment from the value of the collateral without undue delay in the relevant jurisdictions.
3. The institution shall have policy documents that regulate the type of assets that the institution accepts as collateral.
4. The assets shall have adequate insurance.

#### *Other non-financial collateral*

**Section 12** For collateral in other non-financial assets to be recognised, the institution must comply with that contained in this paragraph. However, if the collateral consists of a tenant-owner association mortgage the institution shall comply with that specified in section 9.

1. The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.
2. The agreement regarding the grant of collateral shall allow the institution to obtain payment from the value of the collateral without undue delay in the relevant jurisdictions.
3. The institution shall have the prime mortgage in the asset
4. The institution shall verify the value of the asset regularly and at least once a year. If fundamental changes occur in the market verification must be carried out more often. The institution shall have policy documents indicating how often and how the asset is to be valued.

5. One of the credit documents shall contain a detailed description of the asset. Credit documents refer to debt instruments, contracts or similar documents as well as their related general conditions and enclosed or separate hypothecation documents.
6. The institution shall have policy documents that regulate the type of assets that the institution accepts as collateral as well as an appropriate value for each asset type in relation to the size of exposure.
7. The policy documents regulating the credit process shall contain requirements for the collateral for different exposure sizes that apply to the institution's ability to liquidate the collateral without undue delay, the institution's basis for objectively establishing a market value, the frequency at which the market value can be established and the volatility of the market.
8. In its valuation the institution shall take account of the risk that the asset has deteriorated or become obsolete at the time of the counterparty's default. In its valuation the institution shall also take particular account of the risk of the value of the asset dropping due to obsolescence (such as the passage of time or trends in demand).
9. The institution shall have the right to inspect the asset on location. The institution shall have policy documents that regulate how this right is to be utilised.
10. The assets shall have adequate insurance. The institution shall have procedures to monitor that the insurance is in place.

### *Leasing*

**Section 13** If a leasing object shall be included as collateral for the exposure, the institution must, in addition to the requirements applying to the same type of asset used as collateral, also meet the following requirements:

1. The institution shall have functional systems for managing risk regarding the location of the leasing object, how it is used, its age and when it is planned to take it out of use.
2. The institution shall have dynamic property rights over the leasing object and can freely dispose of and liquidate it without undue delay.

### **Calculation of the effect of recognisable non-financial collateral for the LGD risk parameter**

**Section 14** Eligible non-financial collateral may be included by adjusting the LGD parameter for the protected exposure as follows. Pledged leasing and hire-purchase agreements shall be treated as accounts receivable.

If there are mortgages on the collateral with better preferential rights than those of the institution, the provisions in section 17 shall be applied.

For the collateral to be recognised, its value must cover at least 30% of the amount of the exposure. Multiple collateral of the same type may fulfil the condition together. Receivables may be taken into account even if their value does not cover 30% of the amount of the exposure.

The value of the collateral is determined in accordance with section 18.

**Section 15** When the institution has non-financial collateral for an off-balance sheet liability, the effect of these shall be included before the institution applies the relevant conversion factor (refer also to the general guidelines in Chapter 53, section 16).

**Section 16** The institution shall calculate an adjusted collateral value by dividing the value of the collateral by  $C/E_{\text{limit}}$  from the following table. The value of  $LGD_{\text{protection}}$  specified in the table may be used on the part of the exposure covered by the adjusted collateral value. However,  $LGD_{\text{protection}}$  may only be used for the part of the exposure secured with liens. The remaining part of the exposure is assigned the LGD that would apply to an equivalent exposure without collateral.

	$LGD_{\text{protection}}$ fully included, for non-subordinated exposures	$LGD_{\text{protection}}$ fully included, for subordinated exposures	Fully included requires that the C/E ratio is at least ( $C/E_{\text{limit}}$ )
Accounts receivable	35%	65%	125%
Real estate and tenant-owner property	35%	65%	140%
Other non-financial collateral	40%	70%	140%

The following LGD values may be used up to 31 December 2012:

1. 30% for non-subordinated exposures with collateral in residential real estate.
2. 35% for non-subordinated exposures in the form of equipment leasing.

#### *General guidelines*

The institution has an exposure of SEK 100. The institution has mortgage deeds with the best preferential rights worth SEK 60 in a piece of real estate valued at SEK 60.

$S/E$  is  $100/100 = 100\%$ .  $100\% > 30\%$  which is why the collateral may be taken into account.

The adjusted collateral value is 71.4 SEK ( $=100/140\%$ ).  $LGD_{\text{protection}}$ , i.e. 35%, shall only be applied to SEK 60 since the lien is only for this amount. For the remaining part of the exposure, SEK 40, an LGD of 45% (non-subordinated loan) shall be used.

It is also possible to calculate an average LGD for the total exposure:  $LGD_G = (0.6) \cdot 35\% + (1-0.6) \cdot 45\% = 39\%$ . 39% is the average LGD value for the entire exposure.

**Section 17** If the collateral is property in which a third party has better preferential rights than those of the institution, the following provisions shall be observed when determining the value of  $LGD_{\text{protection}}$ . Collateral with better preferential rights than those of the institution shall be adjusted upwards by 120%. If the institution knows the amount of the exposure with better preferential rights the institution may instead adjust the amount of the exposure upward by 120%. The adjusted collateral value, calculated pursuant to section 16, shall then be reduced by the adjusted amount. If the difference is positive, i.e. the adjusted collateral value exceeds the size of the listed mortgages,  $LGD_{\text{protection}}$  may be applied to this differential amount. If the institution has second-hand pledges there must be capacity in the mortgage deed after the first-hand pledgee's exposure has been deducted.

*General guidelines*

A property has a market value of 1,000. An institution has granted a loan of 300 against collateral in the real estate, however there is also an underlying mortgage deed for 500. The institution shall use the following calculation. The adjusted collateral value is calculated by dividing 1,000 by 140%. The adjusted collateral value is 714. Mortgages with better preferential rights are then adjusted upwards to 600 (=500\*120%). The amount that receives full adjustment by the LGD is 114 (=714-600). The institution may therefore apply full protection to 114 and no protection at all to 186 (=300-114).

A property has a market value of 1,000. Two other creditors have mortgages of 500 each in the real estate. The institution has lent 200 with collateral in the form of a second-hand pledge in the mortgage with the superior preferential rights. The adjusted collateral value is calculated by dividing 1,000 by 140%. The adjusted collateral value is 714. The institution knows that the credit provider which has the superior preferential rights only has an exposure of 300. The institution can then adjust the amount of the exposure with better preferential rights upward so the adjusted amount is 360 (=300\*120%). The adjusted collateral value exceeds this amount, and in this case there is still 140 (=500-360) left after the deduction of the first-hand pledge. The institution may apply a full adjustment of the LGD to 140. The institution may not apply any protection to 60.

**Section 18** The value of the real estate is the market value. For real estate in countries where there are established provisions for establishing the collateral value of real estate, this value may be used instead of the market value.

The value of accounts receivables is their amount.

The value of other non-financial collateral is the market value.

Market value refers to the estimated price that would be reached if a sale were carried out under market conditions where reasonable time was allowed for negotiation. The market value shall be assessed without regard to speculative and temporary circumstances.

**Section 19** Collateral in real estate in a country within the EEA that applies the provisions of the Credit Institution Directive, Appendix VII-3:74 may be included if the institution uses a risk weight of 50% for that part of the exposure that is protected. One condition is that the institution meets the conditions and provisions applied by that country.

## **Chapter 55 Financial collateral**

**Section 1** The institution can adjust the value of the LGD in line with sections 11-31 in order to take account of recognisable financial collateral.

Collateral are recognisable if they are eligible under sections 2-5 and the institution fulfils the requirements for managing them contained in sections 6-10.

### **Eligible financial collateral**

**Section 2** The following financial collateral are eligible:



1. Cash deposited with the institution and cash assimilated instruments deposited with the institution.
2. Debt securities issued by legal persons in the exposure class exposures to governments which have an external credit assessment from an eligible credit assessment institution or an export credit agency corresponding to credit quality step 4 or better.
3. Debt securities issued by a public sector entity which may be treated as states under the standardised approach for credit risks.
4. Debt securities issued by legal persons which have an external credit assessment from an eligible credit assessment institution corresponding to credit quality 3 or better for the relevant type of counterparty.
5. Debt securities with short maturities which have an external credit assessment from an eligible credit assessment institution corresponding to credit quality step 3 or better for short-term exposures.
6. Debt securities issued by a multilateral development bank or international organisation which have been assigned a risk weight of 0% in accordance with the standardised approach credit risks, which have an external credit assessment from an eligible credit assessment institution corresponding to credit quality step 4 or better.
7. Equity and convertibles included in one of the eligible indexes set out in Appendix 5.
8. Gold.

In addition to the collateral listed above, financial collateral is eligible in accordance with that set out in Chapter 13, section 80.

**Section 3** Debt securities issued by credit institutions and investment firms licensed under Chapter 3, section 4, first paragraph, lines 4 and 5 of the Securities Business Act (1991:981) and corresponding foreign firms that have not been subject to an external credit assessment by an eligible credit assessment institution, are still eligible if the following conditions are met.

1. They are traded on a regulated market.
2. They are not subordinated.
3. Where there are other debt securities issued by the same counterparty with the same seniority for which there is an external credit assessment from an eligible credit assessment institution, all of the external credit assessments shall correspond to credit quality step 3 or better.
4. The institution has no information to suggest that the liquidity of the debt security is insufficient.

**Section 4** If a debt security has more than one credit assessment, the rules in Chapter 11 shall be applied.

**Section 5** Units in CIUs are eligible as collateral if the following conditions are met:

1. The price of units in CIUs is updated and made public daily.
2. The fund rules only allow the fund to invest in the securities specified in sections 2-3. However, this does not prevent the investment fund from using derivative instruments to secure investments in such securities.

### **Management requirements**

**Section 6** The creditworthiness of the counterparty and the value of the collateral must not have a material positive correlation.

Securities issued by the counterparty itself or a unit within the same group are not recognised. However, covered bonds and equivalent foreign debt securities in accordance with Chapter 42, section 3 issued by the counterparty are recognisable if they have been used as collateral under a repurchase transaction and if the bonds meet the condition set out in the first paragraph.

**Section 7** The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.

Where the collateral is held by a third party, the institution shall take all necessary steps to ensure that the third party segregates the collateral from its own assets.

**Section 8** The forms of the grant of collateral shall be documented, including the procedures for rapidly liquidating the collateral.

The institution shall have policy documents that regulate the type and volumes of assets that the institution accepts as collateral.

**Section 9** The institution shall have well-functioning procedures and processes for verifying the risks arising due to the utilisation of the collateral, including:

1. Risk of failed or reduced credit protection, for example the risk that the institution cannot immediately freely dispose of or liquidate the collateral.
2. The risk of incorrect valuations.
3. Concentration risk arising from the utilisation of financial collateral and its effect on the institution's overall risk profile.

**Section 10** The institution shall calculate the market value of the collateral when it has reason to believe that a significant change has occurred, although at least every six months.

#### **Calculation of the effect of recognisable financial collateral for the LGD risk parameter**

**Section 11** When calculating the capital requirement according to Chapter 39, the institution may, for exposures which have recognisable financial collateral, use an adjusted LGD value,  $LGD_A$ , instead of the value that would otherwise apply,  $LGD_{orig}$ . The adjusted value is calculated as follows:

$LGD_A = LGD_{orig} \times (E_{unsec} / \text{Exposure amount})$ , where

The exposure amount shall be determined in accordance with the rules in Chapter 40. However, the exposure amount for off-balance sheet commitments shall be 100%, i.e. without taking into account conversion factors.  $E_{unsec}$  is the portion of the exposure not considered protected by financial collateral and is calculated as follows:

$$E_{unsec} = \max\{0, (E_{VA} - C_{VA})\}$$

$$E_{VA} = \text{Exposure amount} \times (1 + H_E)$$

$$C_{VA} = C \times (1 - H_C - H_{fx})$$

C is the market value of the collateral.

Exposure amount\* is an adjusted exposure amount and the off-balance sheet items are included at 100%, i.e. without account being taken of the conversion factors set out in Chapter 40.

$E_{VA}$  and  $C_{VA}$  are the volatility-adjusted amounts of the exposure and collateral, respectively. Where there is a maturity mismatch,  $S_{VA}$  must be adjusted in line with section 12.

$H_E$  and  $H_C$  are factors for the volatility adjustment of the amounts of the exposure and collateral, respectively, with regard to changes in market prices. Both  $H_E$  and  $H_C$  will henceforth be called H.

$H_{fx}$  is a factor for volatility adjustment with regard to changes in exchange rates.

The various factors for volatility adjustment are determined in accordance with sections 14-19. The institution may obtain permission to use its own estimates if the requirements in sections 20-31 are met.

**Section 12** Where there is a maturity mismatch in line with Chapter 52, section 7, the value of the collateral shall be reduced according to the following formula:

$$C_{VAM} = C_{VA} \times (t-0.25)/(T-0.25)$$

where

$C_{VAM}$  is  $C_{VA}$  adjusted for the maturity mismatch,  
 $C_{VA}$  is the value of the credit protection in accordance with section 11,  
T is the residual maturity of the protected exposure, though a maximum of five years,  
t is the remaining maturity of the credit protection, however a maximum of T.

$C_{VAM}$  replaces  $C_{VA}$  when calculating  $E_{unsec}$  pursuant to section 11.

**Section 13** Where several different financial collateral are recognisable for an exposure, the volatility adjustment factor shall be a weighted average of the factors applying to each individual collateral. The portion of the aggregated market value that each individual collateral represents is used as the weight.

**Section 14** An institution which does not use the internal method in accordance with Chapter 56, sections 15-24, may set the volatility adjustment at 0% if the following conditions are met:

- 1) Both the exposure and its collateral are securities as specified in section 2, paragraph 2.
- 2) The maturity of the transaction is a maximum of one day, alternatively the mark-to-market margin for both the exposure and collateral is set daily.
- 3) The exposure and collateral are expressed in the same currency.
- 4) The institution considers that the time between the last market valuation and realisation of the collateral will not exceed 4 business days, if the counterparty fails to discharge its obligation to set a mark to market margin.
- 5) The transaction is cleared and settled in a clearing and settlement system suitable for this type of transaction.
- 6) The agreement governing the transaction is a standard market agreement for repurchase transactions and securities lending transactions.
- 7) Pursuant to the agreement, the transaction may be terminated immediately if the counterparty fails to satisfy its obligation to deliver cash or securities or to provide collateral or if the counterparty in any other way fails to discharge its obligations.

- 8) The counterparty is one of the following:
- Counterparties specified in section 2, point 2 and whose liabilities have a 0% risk weight in the standardised approach for credit risks.
  - A credit institution or securities firm licensed in accordance with Chapter 3, section 4, first paragraph, lines 4 and 5 of the Securities Business Act (1991:981) and equivalent foreign companies.
  - Other financial institutions or insurance companies having liabilities with a 20% risk weight in the standardised approach for credit risks or, if the counterparty does not have an external credit assessment by an eligible credit assessment institution, having liabilities assigned to an internal grade with a PD equal to the PD from the credit assessment of an eligible credit assessment institution corresponding to credit quality step 2.
  - Mutual fund companies or equivalent foreign companies that are obligated under law to meet capital adequacy standards.
  - Pension institutions.
  - Clearing organisations.

**Section 15** For cash deposited with the institution and cash assimilated instruments deposited with and held by the institution, volatility adjustments for changes in market prices do not need to be carried out. Volatility adjustments for changes in market prices do not need to be made for cash lent by the institution.

*Prescribed volatility adjustments*

**Section 16** The values of  $H$  in this paragraph apply to collateral and exposures which are marked to market daily. If they are marked to market less frequently, the values for  $H$  shall be adjusted upwards in accordance with section 31.

Table 1: Debt securities issued by counterparties as specified in section 2, point 2.

$H$ in %		Liquidation period		
Credit quality step	Residual maturity in years	20 days	10 days	5 days
1	≤ 1 year	0.707	0.5	0.354
1	> 1 year ≤ 5 years	2.828	2	1.414
1	> 5 years	5.657	4	2.828
2–3	≤ 1 year	1.414	1	0.707
2–3	> 1 year ≤ 5 years	4.243	3	2.121
2–3	> 5 years	8.485	6	4.243
4	all	21.213	15	10.607
<b>Debt securities with an external credit assessment for short maturities</b>				
1		0.707	0.5	0.354
2–3		1.414	1	0.707

Table 2: Debt securities issued by counterparties as specified in section 2, point 4.

<i>H in %</i>		Liquidation period		
Credit quality step	Residual maturity in years	20 days	10 days	5 days
1	≤ 1 year	1.414	1	0.707
1	> 1 year ≤ 5 years	5.657	4	2.828
1	> 5 years	11.314	8	5.657
2–3	≤ 1 year	2.828	2	1.414
2–3	> 1 year ≤ 5 years	8.485	6	4.243
2–3	> 5 years	16.971	12	8.485
<b>Debt securities with an external credit assessment for short maturities</b>				
1		1.414	1	0.707
2–3		2.828	2	1.414

Table 3: Other types of exposure or recognisable financial collateral

<i>H in %</i>		Liquidation period		
Type of collateral		20 days	10 days	5 days
Shares included in one of the eligible indexes specified in Appendix 5		21.213	15	10.607
Other eligible collateral		35.355	25	17.678
Gold		21.213	15	10.607

The debt securities specified in section 3 shall have H for credit quality steps 2-3 in Table 2.

For the volatility adjustment of units in CIUs that are recognisable collateral, a weighted average H is calculated for the assets in which the CIU has invested, given the liquidation period applied to the transaction type. If the assets are not known to the institution, the institution shall use the maximum value of H that would apply to one of the assets permitted in accordance with fund regulations.

**Section 17** The factor for volatility adjustment for change in exchange rates,  $H_{fx}$ , is expressed as a percentage in Table 4 and applies to collateral and exposures which are subject to daily mark-to-market. If they are marked to market less frequently, the value for H shall be adjusted in accordance with section 31.

Table 4

Liquidation period		
20 days	10 days	5 days
11,314	8	5.657

**Section 18** For OTC derivatives, the volatility adjustment for changes in exchange rates,  $H_{fx}$ , is carried out if the currency of the collateral is different than the settlement currency.

For OTC derivatives for which the institution has a netting agreement, which are recognisable in accordance with the provisions in Chapter 56, the volatility adjustment for changes in exchange rates is carried out if the currency of the collateral is different than the settlement currency of the netting agreement. Only a

single volatility adjustment shall be applied even if the netting agreement includes transactions in multiple currencies.

**Section 19** The liquidation periods used to determine the size of  $H$  and  $H_{fx}$  are the following:

1. 5 business days for repurchase transactions that do not include the transfer of commodities or guarantee rights relating to title to commodities and for securities lending,
2. 10 business days for capital market-driven transactions other than those indicated in the first point,
3. 20 business days for other exposures.

*Own estimates of volatility adjustments*

**Section 20** The institution shall calculate a volatility adjustment,  $H$ , for changes in the market value of collateral and exposures. The volatility adjustment shall be calculated on the basis of the assumption that both the exposure and collateral are marked to market daily.

For debt securities with a credit rating from an eligible credit assessment institution of credit quality step 3 or better, the institution may calculate  $H$  as a group for different categories of securities. When determining the categories, the institution shall take account of the security's type of issuer, external rating, residual maturity and modified duration. The value of  $H$  shall be representative for the securities in each category.

For other securities  $H$  shall be calculated individually.

**Section 21** The institution shall calculate a volatility adjustment,  $H_{fx}$ , for changes in the exchange rates of each relevant currency pair.

**Section 22** When calculating volatility adjustments  $H$  and  $H_{fx}$  the institution may not take account of any correlation effect between the value of the exposure, the value of the collateral and the exchange rates.

*Quantitative requirements*

**Section 23** Volatility adjustments shall be calculated with a one-tailed confidence interval of 99%.

**Section 24** The liquidation period shall be set in accordance with section 17 for calculations. If the institution uses a longer liquidation period in its internal risk management than that specified in section 17, the internal liquidation period shall be used.

**Section 25** Volatility adjustments may be calculated based on liquidation periods other than those specified in section 24. However, the institution must then adjust them upwards or downwards according to the following formula:

$$H_M = H_N \sqrt{T_M/T_N}$$

$H_M$  is the factor for the volatility adjustment that is used in the calculation in accordance with section 11.

$T_M$  is the liquidation period for the relevant security in accordance with section 24.

$T_N$  is the liquidation period on which the calculation of the volatility adjustment is originally based.

$H_N$  is the volatility adjustment factor based on liquidation period  $T_N$ .

**Section 26** If the security's liquidity is such that the liquidation period will in all probability exceed the periods of grace specified in section 17, the liquidation period shall be set to a suitably extended.

**Section 27** Volatility adjustments shall be based on a historical period of observation of at least one year. If an institution uses a method in which the input data is weighted, the effective period of observation must be at least one year, i.e. the average weighted period of the individual observations may not be below six months.

The historical period of observation, and therefore the volatility adjustments, shall be updated at least every three months or on each significant change in market conditions.

Finansinspektionen may require that a historical period of observation shorter than one year be used if price volatility has increased considerably.

The institution shall analyse whether historical data in certain cases underestimates the potential volatility, for example where exchange rates are fixed. In such cases the institution shall calculate the volatility adjustment based on stress scenarios.

#### *Qualitative requirements*

**Section 28** The institution shall use volatility adjustments based on their own estimates for everyday risk management, including the management of internal limits.

**Section 29** The institution shall have drawn up a policy document or the equivalent describing in detail the institution's procedures for calculating volatility adjustments and how these are integrated into everyday risk management.

**Section 30** As part of its regular internal review process, the institution shall conduct a review of its procedures, methods and systems for calculating volatility adjustments. The institution shall review the entire system at least once a year.

#### *Calculating the volatility adjustment*

**Section 31** If the institution does not mark to market its collateral and exposures daily,  $H$  and  $H_{fx}$  set out in sections 16-17 and 20-21, shall be adjusted upwards according to the following formula:

$$H_j = H_M \sqrt{\{N_R + (T_M - 1)\} / T_M}$$

$H_j$  is the factor for the volatility adjustment after the institution's market valuation is adjusted for frequency. This volatility adjustment that shall be used in the calculation in section 11.

$H_M$  refers to the volatility adjustment set out in sections 16-17 and 20-21.

$N_R$  refers to the number of business days between each valuation.

$T_M$  refers to the liquidation period for the relevant collateral or exposure according to section 19 and 24.

## Chapter 56 Netting agreements

**Section 1** The institution may take account of bilateral netting agreements when establishing the exposure amount in accordance with the provisions in this chapter.

Bilateral netting agreements are recognisable if they are eligible under sections 2–6 and the institution fulfils the requirements for managing them contained in sections 7–11. To be able to recognise netting agreements for repurchase transactions, securities lending and capital market-driven transactions, the requirements in sections 12–13 shall also be met.

### Eligible netting agreements

**Section 2** A netting agreement shall meet the following conditions.

The agreement shall be legally binding in all relevant jurisdictions. The agreement must make it possible for the party that has not defaulted pursuant to the terms of the contract to terminate all contracts without delay when a credit event occurs. Credit events shall include the insolvency or bankruptcy of the counterparty.

The agreement shall create a single obligation covering all receivables/liabilities contained in the agreement and covered by netting, so that, if the institution or counterparty do not fulfil their payment obligations, are declared bankrupt, go into liquidation, become the subject of public composition proceedings or start any other insolvency proceedings, the liability of the party is only for the net sum of the receivables/liabilities.

The agreement may not contain conditions that would permit a non-defaulting party to only make limited payments, or no payments at all, to the defaulting party, even if the defaulter is a net creditor.

**Section 3** The institution shall have written and reasoned legal opinions in its possession that demonstrate that the agreed netting would, in all probability, be recognized by the relevant courts and administrative authorities in the relevant jurisdictions. The legal opinions must show that even if a netting agreement is terminated because of an event such as those set out in section 2, a legal review by the relevant courts and administrative authorities would, in all probability, find that the institution's receivables and liabilities were limited to the net sum of the positive and negative market values of all the contracts included in the agreement and covered by netting or limited to the net sum of all the receivables/liabilities covered by netting. The evaluation of the outcome of the legal review must be based on

1. governing law in the jurisdiction in which the parties have their respective registered offices and, if the commitments of the counterparty or institution were entered into through a foreign branch office, governing law in the jurisdiction in which the branch office is situated, pursuant to that set out in section 4,



2. governing law which pursuant to the agreement regulates the individual contracts and receivables/liabilities covered by the agreement, and
3. governing law regulating every contract or agreement necessary to effect the netting agreement.

**Section 4** In cases where the parties have entered into a netting agreement in which several foreign branch offices are included, the legal opinions indicated in section 3 must be requested from all the jurisdictions in which the branch offices are situated. If it is not possible to obtain a legal opinion pursuant to section 3 for one of the branch offices, this branch office can still be included in the agreement on condition that a legal opinion is available that finds that the netting agreement will not be declared null and void in its entirety merely for the reason that such an agreement does not have any legal standing for the contracts and receivables/liabilities entered into with this branch office. Agreements that include branch offices situated within the jurisdiction where the netting is not legally binding may not be considered in accordance with section 1.

**Section 5** A legal opinion pursuant to section 3 shall contain the following:

1. a judgement that states that the netting agreement and the contracts and receivables/liabilities covered by the agreement do not breach laws, regulations or court judgements in the relevant jurisdictions,
2. reference to existing netting agreements and a reference to the netting provisions contained in each such agreement, and
3. a judgement that states that the netting agreement will, in all probability, be deemed legally binding in the situations specified in section 2 in the relevant jurisdictions, if action is taken by an administrator, liquidator, receiver or the equivalent in other jurisdictions.

**Section 6** A legal opinion shall be issued by an external, independent legal adviser with experience in the field. The opinion can be either given directly to the institution or to the organisation behind the netting agreement that the institution has utilised. The opinion can also be a common legal opinion for a specific netting agreement for several institutions together or an organisation representing the institution. The opinion can have been drawn up for different types of netting agreement.

#### *Management requirements*

**Section 7** The institution shall, before capital adequacy is calculated, notify Finansinspektionen that a legally binding netting agreement exists between the institution and a counterparty.

The institution shall certify

1. that all conditions pursuant to section 2 are met,
2. that the institution has legal opinions pursuant to sections 3-6,
3. that the institution has the necessary technical systems or manual procedures for calculating CCR exposures as a net amount instead of a gross amount, and

4. that the institution has the necessary technical systems or manual procedures for calculating the risk arising when the counterparty's contracts or liabilities cease.

**Section 8** The institution is responsible for documenting each individual netting agreement and legal opinion. Netting agreements and legal opinions must be kept well arranged.

**Section 9** The institution shall continuously verify

1. that its netting agreements have legal standing for the relevant counterparties, contracts, receivables/liabilities and jurisdictions, with regard to amendments to law and case law, and

2. that the conclusions of the legal opinions obtained are legally valid and no older than twelve months.

If a legal opinion is older than twelve months, the institution shall request a new legal opinion stating that the conclusions of the previous opinion still apply.

**Section 10** If an institution learns that the competent authorities in a counterparty's homeland have reported, either directly to the institution or to Finansinspektionen, that the authorities do not consider a netting agreement to have legal standing in accordance with existing law in that country, the exposure amount may not be adjusted in accordance with section 1. This applies irrespective of the legal opinions obtained.

**Section 11** If a legal opinion lacks information of significance to whether a netting agreement may be used, the institution must evaluate whether a legally binding netting agreement exists. If the institution considers that the requirements for a valid netting agreement have not been met, the exposure amount may not be adjusted in accordance with 1.

### **Netting agreements for repurchase transactions, securities and commodities lending or borrowing transactions and capital market-driven transactions**

#### *Eligible netting agreements*

**Section 12** Over and above the fulfilment of provisions contained in sections 2-11, the collateral received and assets lent under the agreement must be of the type specified in Chapter 55, sections 2-5.

#### *Management requirements*

**Section 13** The requirements in Chapter 55, sections 6-10 shall be met for the assets covered by the agreement.

#### *Calculating the effect of a netting agreements on the exposure amount*

**Section 14** For repurchase transactions, securities and commodities lending or borrowing transactions and other capital market-driven transactions covered by a recognisable netting agreement, a net amount, E, shall replace the individual exposure amounts for these transactions.

$$E = \max \{ 0, \sum(\text{Exposure amount}) - \sum(C) + \sum(T_{\text{net}}) * H_T + \sum E_{\text{fx}} * H_{\text{fx}} \}$$

E therefore cannot be a negative amount.

Exposure amount refers to each separate exposure in accordance with Chapter 40, without regard to collateral or other steps for credit risk mitigation.

C is the market value of the assets that the institution has borrowed, purchased or received as collateral under the netting agreement.

$T_{net}$  is the amount of the net position of each asset type. Asset type refers to securities which have been issued by the same legal entity, have the same issue date, the same terms of contract and liquidation period in accordance Chapter 55, section 16.

$H_T$  is the volatility adjustment for changes in market value, H, for each asset and is calculated in accordance with Chapter 55, section 16.

$E_{fx}$  is the amount of the net position (whether positive or negative) in each currency that is not the settlement currency.

$H_{fx}$  is the volatility adjustment for changes in foreign exchange rates, H, for each asset and is calculated in accordance with Chapter 55, section 17.

### **Internal method for calculating net amounts**

*In general*

**Section 15** When calculating the net amount for repurchase transactions, securities and commodities lending or borrowing transactions, margin lending transactions and capital market-driven transactions covered by netting agreements, an institution may use an internal method instead of the method specified in section 14. Derivative contracts may not be covered by the internal method.

**Section 16** An institution which in accordance with Chapter 5, section 3 of the Capital Adequacy Act has received permission to utilise an internal method for the calculation of capital requirement for market risk can use the internal method if the institution meets the requirements contained in sections 18-21.

**Sections 17** An institution which does not have permission in accordance with Chapter 5, section 3 of the Capital Adequacy Act can apply for permission to use the internal method. A condition for permission is that the requirements contained in sections 18-21 and 22 have been met.

*Requirements for the internal method*

**Section 18** The internal method shall provide an estimate of the potential change in the exposure amount ( $\sum E - \sum C$ ).

**Section 19** When calculating the potential value change the following requirements must be met.

1. The calculation of the potential change in the exposure amount shall be carried out daily.
2. A one-tailed confidence interval of 99% shall be used.

3. For repurchase transactions and securities and commodities lending or borrowing transactions, a five-day holding period shall be used. For other transactions a ten-day holding period shall be used.

4. The effective historical period of observation must be at least one year except in cases where a shorter period of observation can be justified based on a recent increase in price volatility.

5. The historical time series shall be updated at least every three months.

**Section 20** The internal method shall take account of all fundamental risk factors.

**Section 21** Historical correlation may be utilised within and between the different main types of risk category (interest, equity, commodity and foreign exchange rate risk) on condition that the institution's system for measuring them is satisfactory.

*Requirements for the risk management system*

**Section 22** An institution that does not have permission pursuant to Chapter 5, section 3 of the Capital Adequacy Act must meet the following requirements in order to apply an internal method.

1. The internal method shall be fully integrated into the daily risk management of the institution and serve as the basis for reporting of exposures to the senior management of the institution.

2. The institution shall have a function responsible for the design and implementation of the institution's risk management systems and which reports directly to senior management. This function must be independent of position-taking units.

This function shall have sufficient personnel skilled in the internal method.

The function must produce reports based on the internal method daily as well as analysing these reports. The function shall also determine whether it is necessary to take steps to limit exposure.

3. The daily reports produced by the independent function shall be analyzed by personnel who have sufficient authority to decide on decreases in individual positions and the institution's total risk exposure.

4. The institution shall have established policy documentation for the operation of the risk management system. The institution shall have procedures to ensure compliance with the policy documentation.

5. The internal method shall satisfactorily measure risk. The institution shall be able to verify this by carrying out regular backtesting of the model based on historical data for one year.

6. The institution shall regularly and frequently implement rigorous stress tests and the results of these tests shall be analyzed by the executive management and be taken into consideration during formulation of risk policies and limits.

7. The institution shall have procedures and methods to validate this model. The institution shall have validated the method before it is brought into use and shall

validate it regularly thereafter. The method shall also be validated if the institution implements fundamental changes to the model or if changes have occurred in the institution's position-taking, or in the market, which could mean that the model is no longer suited to its purpose.

Validation shall evaluate whether the method captures all significant risks and that the assumptions made in the method do not lead to the over or underestimation of risk.

As part of the validation process, the valuation models used when calculating counterparty exposure shall be evaluated.

The institution shall regularly conduct backtesting. If backtesting indicates that the model is not sufficiently accurate, Finansinspektionen can revoke its permission or decide that the institution shall take measures to improve the model.

8. The institution must conduct, as part of its regular internal review process, an independent review of its risk management systems. This review shall include both the business units and the independent function responsible for the design and implementation of the risk management system.

9. The institution shall conduct a review of its risk management system at least once a year.

#### *Calculating the effect of netting agreements on the exposure amount*

**Section 23** A net amount shall replace the individual exposure amounts according to the following formula:

$$E = \max \{0, [(\sum E - \sum C) + F]\}$$

where

E is the exposure amount each individual exposure would have if it had credit protection.

C is the market value of the assets that the institution has borrowed, purchased or received as collateral under the netting agreement.

$\sum E$  is the sum of all Es covered by the netting agreement.

$\sum C$  is the sum of all Cs covered by the netting agreement.

F is the potential future change to the exposure amount according to the internal method.

**Section 24** When calculating capital requirements, the previous day's calculation of potential exposure should be used.

#### **Netting agreements for derivative contracts**

**Section 25** The institution can adjust the value of the exposure amount in line with sections 26-27 in order to take account of recognisable netting agreements for derivative contracts.

*Calculating the effect of netting agreements on the exposure amount*

**Section 26** When calculating the sum of the positive market values in accordance with Chapter 40, section 13, the institution may reduce this sum by the sum of the negative market values that the institution has with the same counterparty.

**Section 27** When calculating the amount for the potential risk change in accordance with Chapter 40, section 13, the institution may replace this amount with a reduced amount  $PCE_{red}$  from the following formula:

$$PCE_{red} = 0.4 * PCE_{gross} + 0.6 * NGR * PCE_{gross}, \text{ where}$$

$PCE_{red}$  = the reduced amount for potential future credit exposure for all contracts with a given counterparty included in a recognisable netting agreement.

$PCE_{gross}$  = the sum of the figures for potential risk change in accordance with Chapter 40, section 13 of the regulations governing the internal ratings-based approach for all contracts with a given counterparty that are included in a recognisable netting agreement and calculated by multiplying their notional amounts by the percentage in the table in Chapter 40, section 13 of the regulations governing the internal ratings-based approach.

NGR = "net-gross ratio": the ratio between the net replacement cost for all contracts included in a netting agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a netting agreement with that counterparty (denominator).

If netting leads to a net debt when calculating the net replacement cost, the net replacement cost should be set at zero (0) in the formula above.  $PCE_{red}$  may therefore never be less than  $0.4 * PCE_{gross}$ .

**Netting agreements for other liabilities and receivables**

**Section 28** The institution may adjust the value of the exposure amount in line with section 29 in order to take account of recognisable netting agreements for liabilities and receivables on the balance sheet if the provisions contained in sections 2-11 have been met.

Netting agreements for other liabilities and receivables are limited to mutual cash receivables between the institution and its counterparties that constitute loans or deposits with the institution.

*Calculation of the effect of netting agreements on the exposure amount*

**Section 29** For the receivables covered by the netting agreement the exposure amount may be replaced with  $E_{unsec}$  when calculating capital adequacy in accordance with Chapter 39.

$$E_{unsec} = \max \{0, (\sum \text{Exposure amount} - \sum C_{VA})\}$$

$$C_{VA} = C \times (1 - H_{fx})$$

The exposure amount is calculated in accordance with Chapter 5.

C is the book value of the liabilities.

$C_{VA}$  is the volatility-adjusted amount of the liabilities.

$H_{fx}$  is the factor for volatility adjustment with regard to changes in exchange rates and is determined in accordance with Chapter 55.

## **Chapter 57 Other credit protection**

### **Life insurance policies**

**Section 1** Life insurance policies pledged or assigned to the institution may be considered to be recognisable collateral if the conditions in sections 2-3 have been met.

**Section 2** The insurance company shall meet the criteria for an eligible issuer pursuant to Chapter 53, section 3.

**Section 3** The following conditions must have been met:

1. The insurance provider shall have been notified of the pledge or assignment. The insurance company may not make any payments under the terms of its contract without the permission of the institution.
2. The insurance must have a declared surrender value that cannot be reduced.
3. The institution must have the right to cancel the insurance and obtain the surrender value without undue delay if the counterparty to which the institution is exposed defaults.
4. The institution shall be given information concerning any defaulted payments by the policyholder.
5. The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.

In addition, the credit protection must be valid throughout the entire underlying exposure's maturity.

**Section 4** Recognised life insurance policies shall be considered to be a guarantee issued by the insurance company. When calculating the capital requirement in accordance with Chapter 39, the insurance policy shall be taken into account in accordance with Chapter 53. The protected amount shall be comprised up of the surrender value of the insurance policy.

### **Cash on deposit with another institution**

**Section 5** Cash on deposit with another institution (third party), or cash assimilated instruments held by a third party, in a non-custodial arrangement may be considered recognisable collateral if the following conditions have been met.

1. The agreement regarding the grant of collateral shall be legally binding in all relevant jurisdictions.
2. The borrower's claim against the third party institution is pledged or assigned to the institution.
3. The third party shall have been notified of the pledge or assignment.
4. It may not be possible for the third party to make payments to any party other than the institution without the permission of the latter.
5. The pledge or assignment shall be unconditional and irrevocable.

**Section 6** Collateral pursuant to section 5 shall be considered as a guarantee issued by a third party. When calculating the capital requirement in accordance with

Chapter 39, the credit protection shall be taken into account in accordance with Chapter 53.

## **Chapter 58 Credit protection for calculating risk-weighted exposure amounts**

**Section 1** The provisions in this chapter shall be applied by institutions calculating a risk-weighted exposure amount in accordance with Chapter 39, sections 4 and 10.

### **Eligible credit protection**

**Section 2** Guarantees and credit derivatives are eligible for calculating risk-weighted exposure amounts in accordance with Chapter 39 sections 4 and 10 if issued by an eligible issuer of protection pursuant to section 3 and meet the conditions pursuant to sections 4 -11.

#### *Eligible issuer of guarantees and credit derivatives*

**Section 3** Eligible issuers of protection shall meet the following requirements:

1. The issuer shall be an institution, insurance company or reinsurance company. The issuer can also be an export credit agency although in this case must not be covered by a counter-guarantee from the state.
2. The institution must rate the issuer in accordance with the same rules applying to direct counterparties.
3. The issuer shall have sufficient expertise in the provision of guarantees and credit derivatives.

In addition, one of the following requirements shall have been met:

1. The issuer shall be covered by regulations corresponding to the provisions contained in the Credit Institution Directive or shall, on the date of the provision of the credit protection, have had a credit assessment from an eligible credit assessment institution corresponding to credit quality step 3 or better for exposures to corporates.
2. On the date of the provision of the credit protection, or at some point after that date, the issuer shall have had an internal grade with a PD equivalent to or lower than that associated with credit quality step 2 for exposures to corporates.
3. The issuer shall have an internal rating with a PD equivalent to or lower than that associated with credit quality step 3 for exposures to corporates.

#### *Eligible forms of protection*

**Section 4** A guarantee or credit derivative provides eligible protection if

1. the protection is direct, and
2. the protection covers clearly defined and identifiable receivables.

The protection agreement may not contain conditions outside the control of the institution that would mean that

1. the issuer of the guarantee or credit derivative has a unilateral right to revoke the protection,
2. the cost of the protection increases due to the deteriorating quality of the protected asset,
3. the issuer of the guarantee or credit derivative is no longer liable to pay, without undue delay, if the obligor does not pay on time, or



4. it is possible for the issuer of the guarantee or credit derivative to reduce the maturity of the guarantee or credit derivative.

The protection agreement shall be legally binding in all relevant jurisdictions.

**Section 5** The following type of credit derivatives and guarantees are eligible:

1. Credit derivatives and guarantees that only cover one exposure.
2. Credit derivatives and guarantees that cover a group of exposures. However, the institution shall only include protection for the exposure within the group that has the lowest risk weight.
3. Credit derivatives and guarantees that cover a group of exposures and designed so that they become due for payment when the  $n^{\text{th}}$  default occurs. However, such credit derivatives and guarantees are only eligible if the institution also has another eligible credit protection for defaults 1 to  $n-1$  or if default  $n-1$  has already occurred. If this is the case, the institution shall only include protection for the asset within the group that has the lowest risk weight.

**Section 6** The credit derivative or guarantee shall cover all credit losses arising when one of the events that mean that the credit protection becomes due for payment occur.

**Section 7** There must be a written agreement between the institution and the party that issued the guarantee or credit derivative in which the provisions and conditions for the credit protection are specified.

#### *Specific conditions for guarantees*

**Section 8** In the event of failure to pay, the institution has the right to, without undue delay, make a claim for payment against the issuer of the guarantee without first being required to make a claim against the obligor.

#### *Specific conditions for credit derivatives*

**Section 9** Events that mean that the credit derivative becomes due for payment (credit event) shall at least include

1. the obligor defaults on amounts due,
2. the obligor stops payments or applies for bankruptcy,
3. the obligor receives a grace period in which to pay instalments due and interest due on condition that the period of grace represents a financial loss.
4. there is a change in the terms of payment other than those specified in point 3, on condition that the change represents a financial loss.

If, in accordance with the underlying debt security, the obligor can obtain a defined grace period regarding the payment of amounts due, the credit event pursuant to 1 must take account of this. The credit event must not have a longer period than that applicable under the underlying debt security.

If the credit event does not include that specified in the first paragraph point 3, the credit derivative may still be taken into account, however the protected amount shall be reduced in accordance with Chapter 53, section 17, third paragraph.

It shall be clearly defined which parties are responsible for deciding if a credit event has occurred. This decision may not rest solely with the protection issuer.

The protection purchaser shall have both the right and opportunity to inform the protection issuer if a credit event occurs.

**Section 10** The institution shall have procedures for credit derivatives with cash settlement so that a reliable assessment can be made of the risk of losses. A period must be set during which the institution can obtain assessments of the reference exposure after the credit event has occurred.

If the cash settlement is conditional on the protection purchaser's transfer of the reference exposure to the issuer of the protection, the contract shall provide that any required permission between the parties to such a transfer may not unduly delay the transfer.

**Section 11** Even if the reference exposure of a credit derivative does not exactly correspond to the exposure that the institution wishes to protect, the credit derivative is eligible if the following conditions are met:

1. The reference exposure refers to the same counterparty.
2. The reference exposure is ranked equal to, pari passu, or less than the protected asset in the event of bankruptcy.
3. There are cross clauses in place between the reference asset and the protected asset that mean that if the borrower defaults (e.g. stops payments) on other loans, this will be treated as a default on the reference asset as well.

**Section 12** If the credit derivative allows or dictates a physical settlement, the agreement shall regulate which loans, bonds or contingent liabilities must be delivered. If the institution intends to deliver an obligation other than the underlying exposure, it shall ensure that this obligation is sufficiently liquid for the institution to be able to acquire it.

### **Management requirements**

**Section 13** The institution shall have set guidelines regarding the utilisation of guarantees and credit derivatives related to the institution's overall risk management strategy. The institution shall have procedures and systems for following up and managing potential concentrations of credit risk arising as a result of the use of this protection.

**Section 14** The institution shall have a process for detecting whether the correlation between the creditworthiness of the issuer of the credit protection and the creditworthiness of the obligor to the underlying exposure is too high due to non-systematic risk factors.

## **Sub-part L4 Value at Risk (VaR model)**

### **Chapter 59 VaR model**

#### **General provisions**

**Section 1** This section sets out the requirements and conditions which shall be met in order for an institution in accordance with Chapter 5, section 3 of the Capital Adequacy Act to calculate the capital requirement using the VaR model.

An application to use a VaR model may apply to part(s) of the operation which are subject to the calculation of capital requirement for market risk.

### **Risk factors**

**Section 2** The number of risk factors which the VaR model takes into account shall be proportionate to the activity and risks that the institution holds in different markets. As a minimum the following risk factors shall be taken into account:

– With regard to interest rate risk, the model shall contain a set of risk factors corresponding to the market interest rates in each currency in which the institution has a position. With regard to currencies in which the interest rate risks are significant, the yield curve shall be divided into a least six segments to account for variations along the yield curve. With regard to high risk currencies and where the positions of the institution are valued on the basis of different yield curves, the method shall also take account of the risk that there is insufficient correlation between the movements of these yield curves.

– With regard to foreign exchange rate risk, the model shall take account of the individual currencies (including gold) in which the institution holds significant positions. Positions in CIUs which have foreign exchange rate risk shall be treated in accordance with Chapter 13, section 5 or, if this is not possible, in accordance with Chapter 13, sections 6–7.

– With regard to equity price risk, the model shall contain at least one separate risk factor for each market in which the institution holds significant positions.

– With regard to commodities risk, the model shall take account of at least one separate risk factor for each commodity in which the institution holds significant positions. In the case of significant exposures, the model shall also take account of the risk of an imperfect correlation between similar commodities and exposures to changes in forward prices arising from poor correspondence between periods of maturity.

### **Quantitative requirements**

**Section 3** The following quantitative requirements shall be met before a VaR model may be used when calculating capital requirement.

1. VaR shall be calculated daily using a one-tailed confidence interval of at least 99 percent.

2. A holding period of ten business days shall be used for calculations. The institution may use a VaR value calculated on the basis of a shorter holding period if this is adjusted upwards to correspond to a holding period of ten days.

3. The historical period of observation shall be at least one year except in cases where a shorter period of observation can be justified based on a recent increase in price volatility. If data series do not exist for an entire year, the institution may use synthetic time series. If an institution uses a method in which the input data is weighted, the effective period of observation shall be at least one year, i.e. the average weighted period of the individual observations may not be less than six months.

4. The historical time series shall be updated at least every three months or after each significant change in market conditions.

5. Historical correlation may be utilised within and between the different main types of risk categories (interest, equity, commodity and foreign exchange rate risk) on condition that the institution's systems, procedures and methods for measuring them is satisfactory.

6. With regard to positions in options, the following conditions also apply:

a) the model shall also cover the non-linear change of option prices,

b) with regard to option positions, the model shall cover volatility in the underlying asset price (vega risk).

### **Qualitative requirements**

**Section 4** The following requirements shall be met before a VaR model may be used when calculating capital requirement.

#### Risk management systems

Institutions shall have well-developed risk management systems covering documented limits for risk exposure at different levels within the institution, clear risk and result reports, responsibility descriptions for the relevant personnel, preparedness to deal with extraordinary stress situations in the market, etc. An established risk policy or other corresponding documentation set by the institution shall fully and in detail report the institution's routines for risk management as well as how risk management is distributed.

The institution shall have adequate computer systems and procedures for checking business management, risks and limits in order to obtain necessary information about when developments in a business area start to deviate from the established guidelines.

There shall be a unit within the institution that verifies business confirmation, interest rates, equity prices, commodity prices and foreign exchange rates and other values recorded in the computer system and which can affect market valuation and risk measurement. This unit shall be independent of position-taking units.

#### Documentation of the model

The institution shall have drawn up written documentation which shall contain a comprehensive description of the model.

#### Integration of the model into the institution's activities

The model shall be well integrated into the institution's day-to-day marking to market and risk control systems and form the basis of the reporting of market risk to the senior management of the institution. The institution shall have used the model for at least one year.

#### The board of directors and executive management

The institution's board of directors and executive management shall be actively involved in the formulation of the institution's risk management system and the follow-up of market risk. The daily market risk reports shall be analysed by

responsible persons with sufficient authority to decide on reduction in both the individual traders' positions and the institution's total risk exposure.

#### Risk control function

The institution shall have a function which is responsible for the design and implementation of the institution's risk management systems and which shall report directly to senior management within the institution. This function shall also be responsible for validating the VaR model.

This function shall be independent of position-taking units.

#### Stress tests

The institution shall regularly and frequently implement rigorous stress tests and the results of these tests shall be analyzed by the executive management and be taken into consideration when formulating risk policies and limits. Stress tests shall be relevant to the type of position held by the institution. Stress tests shall particularly take into account risks captured only partially, or not at all, in the VaR model. Stress tests must be in place which take into account the time it takes to hedge or manage positions in difficult market conditions.

#### Internal audit and review

As part of its regular internal auditing process, the institution shall conduct a review of its procedures, methods and systems for calculating and reporting market risk. This review shall include the activities of the business units, back-office units and the independent risk control units.

The institution shall review the entire risk management system at least once a year. This review shall as a minimum cover

- the documentation of the risk management system,
- the organisation of risk control,
- the integrity of the computer systems used,
- the method of approving risk measurement models and valuation systems for front, middle and back-office operations,
- which market risks are captured by the risk measurement models,
- which documented evaluation are carried out when important changes have been implemented for risk measurement models,
- the extent to which data regarding positions is accurate and complete,
- assumptions related to correlation and volatility made in the model,
- the accuracy of valuations and risk measurement,
- the reliability and independence of the sources of information used in the model,
- and
- the principles of how backtesting is carried out.

The institution's internal auditors shall also review compliance with all provisions, including the integration of the VaR model in the day-to-day risk management, in this chapter.

#### **Specific risk**

**Section 5** To obtain Finansinspektionen's permission to calculate the capital requirement for specific risk in interest rate or equity linked financial instruments, the requirements in sections 6-10 must be met. An institution which has a VaR

model that does not meet these requirements shall calculate the capital requirement for the specific risk in accordance with the standardised approaches contained in Chapter 13.

**Section 6** With regard to calculating specific risk, the model shall

1. explain the historical price variation in the portfolio,
2. capture the concentration in terms of the magnitude and change of composition of the portfolio,
3. be robust to an adverse market environment;
4. be sensitive to significant idiosyncratic differences between similar but not identical positions,
5. capture the risk of unforeseen events, and
6. be validated by conducting backtesting to evaluate whether the specific risk has been captured.

If there is a risk that the institution will be subject to unforeseen events that will not be captured by the VaR model due to a holding period of ten days and a 99 percent confidence interval, the institution shall take account of these events in its internal capital adequacy assessment.

**Section 7** The institution's model may not underestimate the risk in illiquid positions and positions for which there are no well-established and available prices. If there is insufficient reliable price data for such positions, the price data for other financial instruments may be used. However, this shall only take place if the model is unlikely to underestimate the risk.

**Section 8** When calculating the capital requirement, the institution shall also have a method of calculating a supplement to the risk of default which the VaR model does not capture. The institution's method and associated procedures shall ensure that the risk of default is calculated in a satisfactory manner.

#### *General guidelines*

In order for the approach and procedures to be considered satisfactory, the relevant provisions of the chapter on the IRB approach shall be met.

**Section 9** If an institution does not have a approach for calculating the supplement to the default risk that meets the provisions in section 8, the institution shall calculate the supplement using either the standardised approach for credit risks or the IRB approach.

**Section 10** For a securitisation position which, if it had been included in non-trading activities, would have been assigned a risk weight of 1,250% or deducted from own funds, the following provisions apply when calculating the supplement for default risk.

The supplement for the default risk in such a securitisation position shall be comprised of a capital requirement of 100%. However, the institution may use an alternative method to calculate the supplement if the institution meets the provisions in sections 6-8 and the following requirement are also met:

1. The institution shall actively trade in securitisations.
2. The institution shall be able to demonstrate that there are liquid two-way prices (bid/offer) for exposures in securitisations.

3. With regard to securitisations which are only based on credit derivatives, it is sufficient if there are similar prices for all inherent risk components. The institution shall have sufficient price data to ensure that the institution's method captures the risk of default in the positions.

## **Validation**

**Section 11** The institution shall have procedures and methods for validating the VaR model. The institution shall have validated the model before it is used. The institution shall then regularly monitor the model. The model shall also be validated if the institution implements fundamental changes to the model, or if changes have occurred in the institution's position-taking, or in the market, which could mean that the model is no longer suited to its purpose.

**Section 12** Validation shall evaluate whether the model captures all significant risks and that the assumptions made in the model do not lead to the over or underestimation of risk.

Validation shall cover backtesting in accordance with section 14. The institution shall also draw up its own validation methods adapted to the institution's risks and types of position.

As part of the validation, the institution shall use hypothetical portfolios in order to evaluate how the model captures circumstances that may arise in position-taking.

**Section 13** An institution which has obtained permission to use its VaR model to calculate specific risk and which, in accordance with section 8, uses its own method to calculate the supplement for default risk shall have procedures to validate this method.

## **Backtesting**

**Section 14** The institution shall control the VaR model's accuracy by conducting backtesting. For each banking day, backtesting shall provide a comparison between the value-at-risk generated by the institution's model for the portfolio's end-of-day positions and the result that these positions give rise to at the end of the following banking day.

The institution shall be able to implement backtesting for both actual and hypothetical results. The actual result may not contain commissions, fees and net interest income. Backtesting of hypothetical results is based on a comparison between the end-of-day value of the portfolio, and, assuming unchanged positions, its value at the end of the next day.

Finansinspektionen determines which of the two types of backtesting the institution shall use when establishing the multiplier in accordance with section 16.

## **Calculation of capital requirements**

**Section 15** An institution's capital requirement shall be whichever is the higher of

1. the previous day's VaR value calculated in accordance with sections 2–3, and

2. the mean value of the daily VaR value, which, in accordance with the provisions in sections 2–3, have been calculated from the preceding sixty banking days multiplied by a multiplier individually determined for the institution.

The principles for how the multiplier is determined are set out in section 16.

If the institution has obtained permission to use its VaR model for calculating a capital requirement for specific risk, the supplement for default risk, calculated in accordance with sections 8-10, shall be added to the values set out in 1 and 2.

### The multiplier

**Section 16** The lowest multiplier an institution may have is determined by how well the institution meets the qualitative requirements set out in section 4. The lowest possible multiplier is 3.

The institution's multiplier then increases by a plus factor which depends on the results of daily backtesting. This plus factor can vary from 0 to 1 and is determined in accordance with the table below on the basis of the number of overshootings established by backtesting in the previous 250 banking days. An overshooting is the change in the value of the portfolio in one day which exceeds the VaR value for that day in accordance with the model. The institution shall calculate overshootings based on either actual or hypothetical changes in the value of the portfolio in a consistent manner. In order to determine the plus factor, the number of overshootings shall as a minimum be calculated quarterly.

Number of overshootings	Plus factor
Less than 5	0.00
5	0.40
6	0.50
7	0.65
8	0.75
9	0.85
10 or more	1.00

If the number of overshootings indicates that the model is not sufficiently accurate, Finansinspektionen can revoke its permission or decide that the institution shall take measures to improve the model.

To allow Finansinspektionen to continuously monitor the suitability of the plus factor, the institution shall, as soon as possible and at the latest within five working days, notify Finansinspektionen of overshootings established through backtesting by the institution.

### Development of the VaR model

**Section 17** If new methods and techniques for designing or validating VaR models are identified, the institution shall take these into consideration.

## Sub-part L5 Internal measurement approach for operational risk



## **Chapter 60 Internal measurement approach for operational risk**

**Section 1** An institution, after receiving permission from Finansinspektionen, may calculate the capital requirement for operational risk in accordance with an internal measurement approach.

### **Qualifying criteria**

**Section 2** Permission to calculate the capital requirement in accordance with an internal measurement approach presumes that the requirements set out in this section are met.

**Section 3** The institution shall have policy documents approved by the board of directors for management and assessment of its exposure to operational risks. Policy documents shall also cover tail risk events with severe impact on the activities of the institution. In addition to stating the institution's applied definition of operational risk, the policy documents shall state which forms of operational risk are relevant in the operation.

**Section 4** The institution's internal measurement approach for operational risk shall be well integrated into its day-to-day risk management procedures. The purpose and application of the internal measurement approach may not be solely to meet Finansinspektionen's requirements. The institution's internal measurement approach shall

1. provide support and opportunity to improve operational risk management,
2. be useful for governance and control of operational risk,
3. be refined and improved as the institution gains more experience in managing operational risks.

**Section 5** The institution shall have an independent risk management unit for operational risk to ensure the adequacy of the institution's risk management and risk measurement systems. The risk management unit shall be independent of the institution's business units, in order to ensure that the risk management unit can function impartially and efficiently without any conflict of interest.

**Section 6** The institution shall have an internal reporting structure up to and including the board of directors and management. This structure shall be designed such that the involved functions in the institution receive regular and pertinent information about exposures to operational risks and about losses related to operational risks. The institution shall have procedures in place to take appropriate corrective actions based on this information.

**Section 7** The institution shall have contingency and business continuity plans in place to ensure its ability to operate on an ongoing basis and limit losses in the event of severe business disruption.

**Section 8** The institution's risk management system shall be documented. The documentation shall evidence compliance with this section.

The institution shall have procedures to ensure that the risk management system complies with these provisions, as well as guidelines for handling situations in which the risk management system is not in agreement with internal procedures.

**Section 9** The risk management and risk measurement systems shall be subject to regular review by internal and/or external auditors.

**Section 10** The institution shall regularly conduct internal validation of the risk measurement system, taking account of both quantitative and qualitative factors.

This validation shall be documented.

### **Calculation of capital requirements**

**Section 11** Determination of the capital requirement for operational risk shall take account of both expected and unexpected loss. Finansinspektionen can permit exclusions from this requirement if the institution can demonstrate that expected loss is adequately captured.

Expected loss may be excluded from the calculation provided that

1. the institution can show that the expected loss level is predictable and reasonably stable over time,
2. the institution is able to cover the expected losses with the expected profits during the upcoming one year period, and
3. the institution documents how the expected losses are estimated and how they are taken into account.

**Section 12** When calculating operational risks, potentially severe tail events shall be taken into account to achieve a soundness standard comparable with a confidence interval of 99.9% over a one-year period. An institution which does not directly estimate the confidence interval at 99.9% may calculate at a lower confidence level and then scale up the capital requirement to 99.9%. An institution that uses scaling shall be able to demonstrate that the methodology is credible and reliable.

**Section 13** The institution's operational risk measurement system shall include certain basic elements to meet the statistical soundness standard in section 12. These elements shall include the use of internal data, external data, scenario analysis and factors reflecting the business environment and internal control systems as set out in sections 17-29.

The institution shall have a well-documented method for combining these four elements in the operational risk measurement system.

**Section 14** The risk measurement system shall capture the major drivers of risk affecting the shape of the tail of the loss estimates.

**Section 15** Assumptions regarding correlations in operational risk losses across individual operational risk estimates may be used if credit institutions can demonstrate that their systems for measuring correlations are sound, implemented with integrity, and take into account the uncertainty surrounding any such correlation estimates, particularly in periods of stress. The institution shall validate its correlation assumptions using appropriate quantitative and qualitative techniques.

**Section 16** The risk measurement system shall be systematic and consistent, and its intrinsic components shall not be contradictory nor give rise to the double counting of capital requirements or risk reducing measures.

## Internal data

**Section 17** Internally generated operational risk data shall be based on a minimum historical observation period of five years. When a credit institution first moves to an internal measurement approach, a three-year historical observation period is acceptable the first year and a four-year period is acceptable the second year.

**Section 18** The institution shall be able to attribute its internal loss data to the business lines defined in Chapter 30, section 8 and the event types defined in Table 1.

### *General guidelines*

Internally, the institution may classify losses by some other means, but losses shall also be able to be classified in accordance with the predefined business lines and event types.

*Table 1*

<i>Event type</i>	<b>Definition</b>
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding losses due to diversity/discrimination events, which involve at least one internal party.
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party.
Employment Practices and Workplace Safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, including losses due to diversity/discrimination events.
Clients, Products & Business Practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.
Damage to Physical Assets	Losses arising from loss or damage to physical assets from natural disaster or other events.
Business disruption and system failures	Losses arising from disruption of business or system failures

Transaction processing & Process Management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors.
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**Section 19** Upon request from Finansinspektionen the institution shall provide the information specified in section 18. The institution shall have documented criteria to attribute losses to the specified business lines and event types.

Operational risk losses expressed in the form of credit losses and previously included in the internal credit risk databases shall be recorded in the operational risk database and be separately identified. Such losses will not be subject to the operational risk capital requirement as long as they are treated as credit risk when calculating capital requirements. However, operational risk losses expressed as market risks shall be included in the scope of the capital requirement for operational risk.

**Section 20** The institution's internal loss data shall capture all material activities and exposures. The institution shall be able to justify that the exclusion of certain activities or exposures, either individually or in combination, would not have a material impact on the overall risk estimates. The institution shall establish appropriate threshold values for reporting internal loss data. The independent review function shall regularly review that internal loss information is sufficiently comprehensive.

**Section 21** Aside from information on gross loss amounts, the institution shall also record the date of the event, any recoveries of gross loss amounts, as well as some descriptive information about the drivers or causes of the loss event.

#### *General guidelines*

While an if the institution is not required to collect data about incidents, Finansinspektionen believes such data would be useful for increasing awareness of the institution's risk profile and possibilities for improving risk management.

**Section 22** There shall be specific criteria for allocating losses arising from an event in a centralised function or an activity that spans more than one business line. There shall also be criteria to allocate losses resulting from multiple associated losses that occur over time.

**Section 23** The institution shall have documented procedures for assessing the ongoing relevance of recorded loss data. The institution shall take account of situations where individual judgement, scaling and other adjustments may be used, to what extent they may be used and who is authorised to make such decisions.

#### **External data**

**Section 24** The institution shall use pertinent external data in its operational risk measurement system, particularly when there is reason to believe that the institution could be exposed to infrequent but potentially severe losses. The institution shall systematically determine situations for which external data shall be used and methodologies to be used to enter information into the risk measurement system. The conditions and procedures for using external data shall be subject to regular review, documented and reviewed by the independent review function.

### *General guidelines*

External data from consortia may be relevant external data provided that the data is homogeneously classified, comprehensive and reliable. In cases where external data from consortia is insufficient for obtaining information about tail events, publicly available data may provide usable information.

Institutions which only use publicly available data should be particularly cautious that the data is appropriate, representative and relevant to the institution's business focus and risk profile.

### **Scenario analysis**

**Section 25** The institution shall use scenario analysis based on expert opinions in conjunction with external data to evaluate its exposure to tail risk events. The plausibility of the analyses shall be regularly reviewed through comparison with actual losses.

### *General guidelines*

A scenario analysis may also be used to provide information about the institution's overall exposure to operational risks.

### **Business environment and internal control systems**

**Section 26** The institution's internal risk assessment methodology shall capture key business environment and internal control factors that can change its operational risk profile.

**Section 27** The institution shall be able to justify its choice of each meaningful driver of risk based on experience and involving the expert judgment of the affected business lines.

**Section 28** The sensitivity of risk drivers to changes and the relative weighting of the various factors shall be well reasoned. In addition to capturing changes due to improvements in risk controls, the institution shall also capture potential increases in risk due to greater complexity of activities or increased business volume.

**Section 29** The use of these risk drivers shall be documented and subject to independent review. This process and the outcomes shall be validated and re-assessed continuously through comparison to actual internal loss experience and relevant external data.

### **Insurance and other third-party risk transfer mechanisms**

**Section 30** The institution may recognise insurance as risk transfer, subject to the conditions set out in sections 31-38.

**Section 31** The insurer shall have authorization from a supervisory authority to provide insurance or reinsurance and also have a claims paying ability assigned a rating corresponding to credit quality step 3 or better.

**Section 32** The insurance policy shall have an initial term of no less than one year. For policies with a residual term of less than one year, the institution shall make gradually greater haircuts reflecting the declining residual term of the policy, up to a full haircut for policies with a residual term of 90 days or less.

The insurance policy shall have a minimum notice period for cancellation of the contract of 90 days.

**Section 33** The insurance policy may not have any exclusions or limitations triggered by supervisory actions. Nor may the insurance policy include any exclusions or limitations that, if the institution should enter into bankruptcy, preclude the receiver or liquidator from recovering damages suffered or expenses incurred by the institution. However, this does not apply to events occurring after initiation of the receivership or the liquidation process.

The insurance policy may exclude fines, penalties, or punitive damages resulting from actions by the competent authorities.

**Section 34** The calculations of the effect of the insurance policy shall reflect the insurance coverage in a manner that is transparent in its relationship to, and consistent with, the actual likelihood and impact of loss used in the overall determination of the capital requirement for operational risk.

**Section 35** The insurance shall be provided by a third party. In the case of insurance through captives and affiliates, the exposure shall be transferred to an independent third party, for example through re-insurance which meets the eligibility criteria.

**Section 36** The institution shall have policy documents for recognising risk transfer through insurance.

**Section 37** In order to recognise risk transfer through insurance policies, the institution shall use deductions or haircuts of the insurance amount to capture the following factors:

1. The residual term of the insurance policy, where less than one year, as noted in section 32.
2. The policy's cancellation terms, where less than one year.
3. Uncertainty of payment and the risk of mismatches in coverage of insurance policies.

**Section 38** The capital alleviation arising from the recognition of insurance shall not exceed 20% of the capital requirement for operational risk before the recognition of risk mitigation techniques.

**Section 39** The institution may use other mechanisms for risk transfer to third parties if it can demonstrate that a noticeable risk mitigating effect is achieved. Outsourcing of an activity may not be considered as another mechanism for risk transfer.

#### **Application to use an internal measurement approach on a group-wide basis**

**Section 40** If an EEA parent institution or financial holding company intends to use an internal measurement approach together with its subsidiaries, the application

shall include a description of the methodology used for allocating capital requirements for operational risk among the different entities of the group.

The application shall indicate whether and how diversification effects are intended to be factored into the risk measurement system.

### **Combination of approaches**

**Section 41** An institution may use an internal measurement approach in combination with either the basic indicator approach or the standardised approach provided that the following conditions are met.

1. All of the institution's operational risks shall be covered. Finansinspektionen shall have approved the method to be applied to cover various activities, geographic locations, legal entities or other relevant divisions determined on an internal basis.
2. The qualification criteria shall be met for those portions of the operation covered by the standardised approach or internal measurement approach, respectively.
3. An internal measurement approach shall cover from the start a considerable portion of the institution's operational risks.
4. The institution shall gradually implement the internal measurement approach for a substantial portion of the activity in accordance with a timetable approved by Finansinspektionen.

**Section 42** In exceptional situations, permission can be given to an institution to apply an internal measurement approach together with either the basic indicator approach or the standardised approach, even though section 41, lines 3 or 4 are not met.

## **Sub-part L6 Advanced risk approach for counterparty risk**

### **Chapter 61 The advanced risk approach for counterparty risk**

#### *General provisions*

**Section 1** The institution may obtain permission to use an internal method to calculate a risk-weighted exposure amount for the counterparty risk in the following types of transactions:

1. Derivative contracts.
2. Repurchase transactions.
3. Securities and commodities lending or borrowing transactions.
4. Margin lending.

The permission may refer to the following combinations of transactions:

1. All types of transactions as per the first paragraph.
2. Repurchase transactions, securities and commodities lending or borrowing transactions as well as margin lending.
3. Only derivative contracts.

**Section 2** In order for the institution to obtain permission to use an internal method, the requirements and terms and conditions in this chapter shall be satisfied.

**Section 3** The institution may obtain permission to gradually implement the internal method for the various transaction types. During the introduction period, the mark-to-market approach or the risk approach shall be used.

**Section 4** An institution which has obtained permission, in accordance with section 1, to use an internal model to calculate the risk-weighted exposure amount for counterparty risk may not then revert to the mark-to-market approach or risk approach without Finansinspektionen's permission.

**Section 5** An institution which has obtained permission to use an internal method shall calculate the maturity of the netting amounts in accordance with Chapter 43, section 11.

#### *Calculation of exposure amount*

**Section 6** For each netting amount the exposure amount shall be calculated in accordance with sections 7–14.

**Section 7** The institution's model shall specify the market value at different times as a consequence of changed market prices.

The institution may include financial collateral when the market value distributions are determined. Only financial collateral eligible in accordance with Chapter 55, Chapter 25 and Chapter 13 may be included. A precondition for taking into account collateral is that the requirements in sections 15-19 are met for this collateral.

A model that takes into account margin agreements shall consider both the current volume of collateral and future collateral. The model shall take into account the specific terms and conditions in the margin agreements.

**Section 8** The institution shall calculate the distribution of risk exposures on the basis of the market value distributions. These distributions shall take into account the possibility that they are not distributed normally. On the basis of the distribution of exposures, the institution shall calculate the expected risk exposure (net market value) for different dates over the future period (EEt). The EE shall be calculated along a time profile of forecasting horizons that reflects the dates for future cash flows and the maturity of the contracts and is consistent with the materiality and composition of the relevant exposure.

**Section 9** On the basis of the current exposure (EEt<sub>0</sub>), the institution shall calculate the effective expected exposure on the different dates over the future period (EEE) as follows:

$$EEE_{tk} = \max(EEE_{t_{k-1}}, EE_{tk})$$

**Section 10** The effective expected positive exposure shall be calculated in accordance with the formula:

$$EEPE = \sum_{k=1}^{\min(1\text{year}; \text{maturity})} EEE_{tk} * \Delta_k$$



where  $t$  is expressed in years and  $\Delta t_k = t_k - t_{k-1}$ , which makes it possible to calculate EEE for different periods.

EEPE shall be calculated one year in advance. If all contracts in the netting amount mature within less than one year, EEPE shall be calculated for a period of time corresponding to the longest contract's maturity term.

**Section 11** For each netting amount, the exposure amount shall be calculated in accordance with the following formula:

$$\text{Exposure amount} = \alpha * \text{EEPE}$$

where  $\alpha = 1.4$ .

Finansinspektionen may require a higher  $\alpha$  if sufficient grounds exist.

**Section 12** For netting amounts subject to margin agreements, one of the following measurements of EEPE may be used to calculate the exposure amount in accordance with section 11:

1. EEPE calculated without regard to the effect of the margin agreement.
2. The margin agreement's threshold value plus a supplement that shall reflect the possible change in the netting set's market value during the marginal risk period. The calculation of the supplement shall assume the netting set's market value is zero (0). The supplement shall then be calculated as the expected increase in the market value during the marginal risk period. For netting amounts which only consist of repurchase transactions subject to daily mark-to-market and for which collateral is posted daily, the marginal risk period may not be less than five days. For other netting sets the marginal risk period may not be less than ten days.
3. EEPE calculated with account taken of the effect of the margin agreement.

**Section 13** Instead of calculating the exposure amount in accordance with section 11, the institution may use the internal method. A precondition is that this does not entail an underestimation of the exposure amount.

**Section 14** After permission from Finansinspektionen the institution may use its own estimate of  $\alpha$ . However, the institution may not use a  $\alpha$  that is less than 1.2.

The institution's estimate of  $\alpha$  shall be calculated as the ratio between the counterparty risk exposure (the numerator) for all counterparties, calculated through a complete simulation, and the expected positive exposure, EPE, (denominator). EPE is the average of the EEt that is calculated in accordance with section 8.

The institution shall be able to show that the simulation of the counterparty risk (numerator) takes into account material sources of stochastic dependence between distributions of market values for transactions or portfolios of transactions across counterparties. The institution's estimate of  $\alpha$  shall take into account the diversification of the portfolios.

The calculations of counterparty risk (the numerator) and EPE (the lowest common denominator) shall take place consistently with respect to methodology, parameter specifications and portfolio composition. The method used shall be based on the institution's internal method for counterparty risk, well-documented and subject to independent validation. The institution shall also assess if there is any model risk.

The institution shall also review its estimates at least every quarter and more frequently when there is variation in the portfolio's composition.

*Integrity of the risk calculation process*

**Section 15** The institution's calculation of the counterparty risks with the internal method shall be based on complete information on the transactions and, where appropriate, agreements concerning net estimate, margin agreements and collateral. The institution shall have procedures that guarantee this, e.g. a procedure that reconciles transaction data between systems that supply information about transactions and the system that calculates the counterparty risk.

**Section 16** The institution shall utilize current price information when the value of the risk exposures is determined.

**Section 17** When calculating correlations and volatilities, a historical observation period shall cover a full business cycle. The historical observation period shall be at least three years.

The historical time series shall be updated at least every three months. The institution shall be able to update the time series more frequently where substantial changes in market conditions occur.

**Section 18** The market prices used in the internal method shall be acquired and stored independently of the position-taking units. Within the institution there shall be a unit responsible for validating the market prices used in the internal method. Procedures shall be in place to handle incorrect market prices or the absence of market prices.

The unit that is responsible for validating market prices shall be independent of the position-taking units.

**Section 19** Where a sufficient historical time series with market prices for certain contracts is lacking, the institution may map these to other market prices or in some other way derive the market prices. For this to be permitted, the institution must indicate in its risk management policies how this shall be done. It must also be able to demonstrate that this approach does not lead to an underestimation of risk where difficult market conditions arise.

**Section 20** The institution shall have procedures in place to adjust its estimation of EE where there are substantial risks not sufficiently considered in the model. These procedures shall at least cover the need for adjustments as a consequence of

1. existing specific wrong-way risk,
2. exposure values for certain contracts reaching maximum values after one year.

**Section 21** Valuation models for options shall take into account the fact that there exists a non-linear relationship between the market risk factors and the option value.

*Integration in the business*

**Section 22** A precondition enabling Finansinspektionen to grant permission is that the institution internally, during at least one year, has used a model for calculating

the distribution of exposures that substantially meets the provisions in these regulations.

**Section 23** The institution's internal method shall be an integrated part of the institution's management, measurement, control, reporting and internal capital evaluation of counterparty risks. This requirement may be met even where the institution uses a measurement of counterparty risk other than EEPE. The internal measurement must, however, be based on the same model as used for calculating EEPE.

**Section 24** The institution shall have the systems capability to calculate the expected exposure (EE) on a daily basis. Where the institution is able to demonstrate that the existing counterparty risks do not necessitate such frequent follow-up, the institution does not need to fulfil this requirement.

**Section 25** The institution's limits for counterparty risks shall be based on the internal method. These limits shall be applied when integrated with the institution's other credit limits.

#### *Risk management system*

**Section 26** The institution shall have a properly functioning risk management system for counterparty risks. The risk management system shall include all important aspects of managing counterparty risks, e.g. identification of risks, risk classification, credit decision process, descriptions of liability, measurement and reporting.

The risk management system shall take account of any market and liquidity factors as well as legal and operational risks associated with counterparty risks.

**Section 27** The institution shall have risk management policies for each part of the risk management system.

**Section 28** The institution shall have allocated sufficient resources to maintain a properly functioning risk management system.

**Section 29** The daily reports concerning the counterparty risks shall be reviewed by persons with sufficient authority to enforce reductions in both individual traders' positions and the institution's total counterparty exposure.

**Section 30** The institution shall review the counterparty risk limits both at the end of each day and during the day. The counterparty risks shall be measured gross and net of collateral received.

**Section 31** The institution shall calculate and monitor either the maximum exposure or the potential future exposure for a given confidence interval at both counterparty level and portfolio level.

**Section 32** The institution shall follow up and monitor different types of exposure concentrations.

**Section 33** The counterparty exposures shall be measured, monitored and controlled during their entire duration. The institution shall have in place procedures for monitoring counterparty risk in those cases where the exposure is greatest beyond the one-year horizon.

**Section 34** The institution shall have procedures for identifying, monitoring and controlling cases of specific wrong-way risk through the life of the transaction. The institution shall also take into account exposures that give rise to a substantial level of general wrong-way risk. General wrong-way risk is the risk that arises when there is a positive correlation between the probability of default of a counterparty and general market risk factors.

*The board of directors and executive management*

**Section 35** The institution's board of directors and executive management shall be actively involved in the design of the risk management system.

**Section 36** The institution's senior management shall be aware of the assumptions and preconditions that the internal method is based on, as well as the impact these may have on the reliability of this approach.

*Risk control unit*

**Section 37** Within the institution there shall be a unit responsible for designing and implementing the institution's procedures, systems and methods for managing counterparty risks. The unit shall also be responsible for validating the internal method for counterparty risk.

The unit shall be independent of credit and business operations. The unit shall report to the institution's senior management.

The unit shall have sufficient resources for its tasks and personnel with good knowledge of counterparty risks.

*Stress tests*

**Section 38** The institution shall have introduced a regular and strict program of suitable stress tests for counterparty risk.

**Section 39** The stress tests shall take into account events and financial circumstances that would signify a negative influence on the institution's counterparty exposures. The stress tests shall also consider credit risk factors and changed market prices. In addition, stress tests shall take account of concentration risks and the risk of the market being affected if the institution closes its positions towards a particular counterparty.

**Section 40** The results of the stress tests shall be compared with the results of the internal method.

Where the stress tests reveal particular vulnerability to certain types of conditions the institution shall immediately adopt appropriate measures for managing these risks.

The result of the stress tests shall be taken into account in preparing the risk management policies and limits for counterparty risks.

**Section 41** The board of directors and senior management shall receive regular reporting on the stress tests.

### *Validation*

**Section 42** The institution shall have in place procedures and methods to validate the model. The institution shall have validated the model before it is brought into use and shall validate it regularly thereafter. The model shall also be validated if the institution implements fundamental changes to the model, or if changes have occurred in the institution's position-taking, or in the market, which could mean that the model is no longer suited to its purpose.

**Section 43** The validation shall assess if the model captures all substantial risks and whether the assumptions made in the model lead to the risks being over- or underestimated.

**Section 44** The model used to forecast the market risk factors shall be validated over a long period of time.

**Section 45** As part of the validation process the valuation models used when calculating the counterparty exposure shall be evaluated.

**Section 46** The institution shall regularly conduct backtesting. Backtesting shall be carried out on a number of representative portfolios with counterparties. The portfolios may comprise both actual and hypothetical counterparties. The portfolios shall be selected on the basis of their sensitivity to the most essential risk factors and the correlations that the institution is exposed to.

Where backtesting indicates that the model is insufficiently correct, Finansinspektionen may revoke the permission or decide that the institution shall adopt measures to improve the model.

### *Internal audit*

**Section 47** The institution's internal auditors shall regularly review the institution's system, procedures and methods for managing counterparty risks and that the institution follows the provisions on internal method set out in this chapter. The review shall include both the business units and the unit for independent control of counterparty risk.

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## **Entry into force provisions**

These regulations and general guidelines enter into force on 1 February 2007, whereupon Finansinspektionen's regulations and general guidelines (FFFS 2001:7) regarding securitisation, Finansinspektionen's regulations and general guidelines (FFFS 2003:10) regarding capital adequacy and large exposures, Finansinspektionen's regulations (2005:19) regarding methods for measuring and managing operational risk and Finansinspektionen's regulations and general guidelines (2005:20) regarding the internal ratings based approach shall be repealed.

The institutions that apply section 6 of the Act (2006:1372) regarding the introduction of the Capital Adequacy and Large Exposures Act (2006:1371) shall where appropriate apply FFFS 2003:10 during 2007.

## **FFFS 2007:1**

Institutions which received permission to use a Value at Risk model before 1 February 2007, may until 31 December 2009 apply the provisions concerning VaR models set out in Chapter 10 of Finansinspektionen's regulations and general guidelines (FFFS 2003:10) regarding capital adequacy and large exposures.

INGRID BONDE

Charlotte Elsnitz

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## TABLE OF CONTENTS

FFFS 2007:1

<b>Part A Scope and definitions</b>	<b>1</b>
<b>Chapter 1 Scope</b>	<b>1</b>
<b>Chapter 2 Definitions</b>	<b>2</b>
<b>Chapter 3 Trading book and non-trading activities</b>	<b>6</b>
What is included in the trading book?	6
Internal hedges	6
Excess liquidity	7
Definition of non-trading activities	7
Current trading account	7
Documented intent with holdings in the trading book	8
Transfers between the trading book and non-trading activities	8
<b>Part B Reporting</b>	<b>9</b>
<b>Chapter 4 Reporting</b>	<b>9</b>
Obligation to report	9
Reporting dates	9
Conversion of assets and liabilities in foreign currency	9
Other	10
Basis for reporting	10
Reporting using data media	10
<b>Part C Financial groups</b>	<b>11</b>
<b>Chapter 5 Consolidation of financial groups</b>	<b>11</b>
Consolidated accounts	11
Handling foreign subsidiaries	11
Other aspects of consolidation	12
Consolidated information	13
<b>Part D Own funds</b>	<b>14</b>
<b>Chapter 6 Introductory provisions</b>	<b>14</b>
<b>Chapter 7 Original own funds</b>	<b>14</b>
Equity or the equivalent	14
Unconditional and conditional shareholders' contributions	15
Results according to annual accounts	15
Profit in the current financial year	15
Untaxed reserves	16
Financial assets available for sale	16
Investment property and tangible non-current assets	17

Unrealised value changes in financial liabilities due to changes in own creditworthiness	17
Reclassified items	17
Cash flow hedges	18
Non-voting equity and other capital infusions and reserves	18
Specific conditions for Tier 1 capital contributions	19
Appropriating Tier 1 capital contributions to cover losses	21
Guarantee fund	22
Reserves for general banking risk	22
<b>Chapter 8 Additional own funds</b>	<b>22</b>
Cumulative preference shares	22
Revaluation reserve	22
Guarantee funds	23
Expected loss amounts for institutions that apply the internal ratings-based approach	23
Specific conditions for perpetual subordinated loans	23
Appropriating additional own funds contributions to cover losses	24
Fixed-term subordinated loans and other similar fixed-term promissory notes	25
<b>Chapter 9 Deductions</b>	<b>27</b>
Negative goodwill	27
Net assets goodwill	27
Deferred tax assets	27
Holdings in own shares	27
Contributions	28
Holdings in own subordinated loans and other subordinated promissory notes	28
Equity in insurance companies	28
Plan assets and unreported pension liabilities	28
Large exposures	29
Deductions with regard to securitisation	29
Specific deductions when the internal ratings-based approach is used	29
<b>Chapter 10 Ancillary own funds</b>	<b>29</b>
Net profit in the trading book	29
Conditions for fixed-term subordinated loans	30
Early redemption and non-permitted payment of interest and repayment	30
Notification about the repayment of subordinated loans	30
Other	31
Limitations	31
<b>Part E External credit assessment</b>	<b>32</b>
<b>Chapter 11 Use of external credit assessments</b>	<b>32</b>
<b>Part F Trading book</b>	<b>34</b>
<b>Chapter 12 Management requirements for the trading book</b>	<b>34</b>
Procedures for trading book positions	34
Valuation of trading book positions	34
<b>Chapter 13 Risks in the trading book</b>	<b>36</b>
Exceptions to the main rule regarding the calculation of capital requirements for risks in the trading book	36



Ancillary own funds to meet capital requirements for foreign exchange rate risks	36
CIUs	36
<b>Interest rate risks</b>	<b>38</b>
Calculating positions and netting long and short positions	38
How positions in credit derivatives shall be treated when calculating specific and general interest rate risk	42
Credit derivatives tied to a basket of assets	45
Calculation of capital requirements and conversion to SEK	46
Specific risk	46
General risk	49
Special model for calculating net positions in derivative instruments	50
Sensitivity models when calculating general interest rate risk	50
The maturity-based method	51
The duration-based method	53
<b>Equity price risks</b>	<b>54</b>
Calculating positions and netting long and short positions	54
Treatment of derivative instruments	55
Equity forwards	56
Index-based forwards and options	56
Options	56
Warrants	57
Convertible debt instruments	57
Calculation of capital requirements and conversion to SEK	58
Specific risk	58
General risk	59
<b>Underwriting</b>	<b>59</b>
Scope	59
Alternative method for calculating the capital requirement	59
<b>Calculation of capital requirement for excess exposure</b>	<b>60</b>
<b>Settlement risks</b>	<b>63</b>
Scope	63
Calculation of capital requirements	63
Counterparty risks	64
<b>Part G Non-trading activities</b>	<b>67</b>
<b>Chapter 14 Scope</b>	<b>67</b>
<b>Sub-part G1 Standardised approach for credit risk</b>	<b>67</b>
<b>Chapter 15 Calculating a risk-weighted exposure amount</b>	<b>67</b>
<b>Chapter 16 Exposure classes and risk weights</b>	<b>69</b>
Exposures to governments and central banks	69
Exposures to local governments and comparable associations	69
Exposures to administrative bodies (including public sector entities) and non-commercial firms	70
Exposures to multilateral development banks	70
Exposures to international organisations	71
Exposures to institutions	71
Exposures to corporates	71
Retail exposures	72

Exposures secured on residential property	72
Past due items	74
High-risk items	75
Exposures in the form of covered bonds	75
Exposures to CIUs	77
Other items	77
<b>Chapter 17 Calculating exposure amounts for off-balance sheet items</b>	<b>78</b>
Full risk commitments	78
Medium risk commitments	79
Medium-low risk commitments	80
Low risk commitments	81
<b>Chapter 18 Calculating the exposure amount for derivative contracts</b>	<b>81</b>
Mark-to-market approach	81
Risk approach	83
Risk position	84
<b>Sub-part G2 Securitisation when the standardised approach is used</b>	<b>87</b>
<b>Chapter 19 Securitised exposures</b>	<b>87</b>
<b>Chapter 20 Risk-weighted exposure amounts for securitisation positions</b>	<b>90</b>
Regulations covering all securitisations	90
Securitisation of revolving exposures subject to provisions for early amortisation	91
<b>Chapter 21 Risk weights</b>	<b>94</b>
<b>Chapter 22 Conversion factors for off-balance sheet commitments</b>	<b>96</b>
<b>Sub-part G3 Credit protection when the standardised approach for credit risk is used</b>	<b>96</b>
<b>Chapter 23 Credit protection</b>	<b>96</b>
<b>Chapter 24 Guarantees and credit derivatives</b>	<b>97</b>
Eligible guarantees and credit derivatives	97
Eligible issuers	97
Eligible forms of protection	97
Management requirements	100
The effect of recognisable guarantees and credit derivatives	100
<b>Chapter 25 Financial collateral</b>	<b>102</b>
Eligible financial collateral	102
Management requirements	103
The effect of recognisable financial collateral	104
Quantitative requirements	110
Qualitative requirements	111
<b>Chapter 26 Netting agreements</b>	<b>111</b>
Eligible netting agreements	111
Management requirements	113

The effect of netting agreements for repurchase transactions, securities and commodities lending or borrowing transactions and other capital market-driven transactions	113
Effect of netting agreements for derivative contracts	117
Effect of netting agreements for other receivables and liabilities	117
<b>Chapter 27 Other credit protection</b>	<b>118</b>
Life insurance policies	118
Cash on deposit with another institution	118
<b>Part H Operational risk</b>	<b>119</b>
<b>Chapter 28 Scope</b>	<b>119</b>
<b>Chapter 29 The basic indicator approach</b>	<b>119</b>
Calculation of capital requirements	119
Income indicator	119
<b>Chapter 30 The standardised approach</b>	<b>120</b>
Eligibility requirements	120
Calculation of capital requirements	121
Income indicator	121
Division of operations	122
The alternative standardised approach	123
Eligibility requirements	124
Calculation of capital requirements	124
<b>Chapter 31 Expenditure-based risks</b>	<b>124</b>
<b>Part I Foreign Exchange Rate Risk</b>	<b>125</b>
<b>Chapter 32 Foreign exchange rate risk</b>	<b>125</b>
Scope	125
Valuation and conversion to SEK	125
Options	125
CIUs	126
Composite currencies	126
Collateral in a third country's currency	126
The two-step method	127
Calculating the capital requirement	127
Exceptions	128
<b>Part J Commodities risk</b>	<b>129</b>
<b>Chapter 33 Commodities risk</b>	<b>129</b>
Scope, calculating positions and netting long and short positions	129
Treatment of derivative instruments	129
Commodity forwards	130
Commodity swaps	130
Commodity options	130
Commodities lending, repurchase transactions, etc.	131
The maturity-based method	131
Simple method	133

<b>Part K Large exposures</b>	<b>134</b>
<b>Chapter 34 Scope</b>	<b>134</b>
<b>Chapter 35 Establishing large exposures</b>	<b>134</b>
Determining exposure amounts in non-trading activities	134
Determining exposure amounts in the trading book	136
Shares in CIUs	136
Exposures excluded when determining large exposures	136
Exposures included with a reduced value when determining large exposures	137
Alternative method for determining large exposures	139
Exceeding the threshold values for large exposures in the trading book	140
<b>Part L Advanced methods</b>	<b>141</b>
<b>Sub-part L1 Internal ratings based approach (IRB approach)</b>	<b>141</b>
<b>Chapter 36 General provisions</b>	<b>141</b>
<b>Chapter 37 Exposure class assignment</b>	<b>141</b>
<b>Chapter 38 Approach for calculation of risk-weighted exposure amount and expected loss amount for each exposure class</b>	<b>144</b>
General provisions	144
Exposures to governments, institutions and corporates	145
Retail exposures	145
Equity exposures	145
CIUs	146
Implementation and application of the IRB approach	147
<b>Chapter 39 Risk-weighted exposure amounts and expected loss amounts</b>	<b>149</b>
Calculation of risk-weighted exposure amounts for exposures to governments, institutions and corporates	149
Calculation of the risk-weighted exposure amount for retail exposures	152
Calculation of risk-weighted exposure amounts for non credit-obligation assets	152
Calculation of the risk-weighted exposure amount for equity exposures	153
Calculation of expected loss amount for exposures to governments, institutions, corporates and retail exposures	154
Calculation of expected loss amount for non credit-obligation assets	155
Calculation of expected loss amount for equity exposures	155
<b>Chapter 40 Determination of the risk parameter Exposure amount</b>	<b>156</b>
General provisions	156
On-balance sheet exposures	156
Off-balance sheet commitments	163
Prescribed values for conversion factors	163
Own estimates of conversion factors	164
General provision	165
<b>Chapter 41 Determination of the risk parameter PD</b>	<b>165</b>
Risk grading	165
Definition of default	166
Risk quantification	167

Calculation of the effect of guarantees and credit derivatives	169
General provision	169
<b>Chapter 42 Determination of the LGD risk parameter</b>	<b>169</b>
Prescribed values of LGD	170
Own estimates of LGD	172
Calculation of the effect of collateral	173
Calculation of the effect of guarantees and credit derivatives	173
General provision	174
<b>Chapter 43 Determination of the risk parameter M</b>	<b>175</b>
Prescribed values of M	175
Internal calculations	175
<b>Chapter 44 General provisions for the IRB approach</b>	<b>177</b>
Structure of the rating system	177
Rating	177
Quantification	178
Independence in the rating process	178
Documentation of the rating system	179
Data processing	179
Stress testing and scenario analysis	180
Validation	181
Use of the rating system	182
Governance and independent risk control	182
Credit risk control	183
Reporting requirements	184
Internal audit	184
<b>Chapter 45 Provisions for internal models approach for calculating risk-weighted exposure amounts for equity exposures</b>	<b>184</b>
Requirements for the VaR model	184
Risk management and risk control	185
Documentation of the model and assessment of the model's reliability	186
<b>Chapter 46 Operational requirements for purchased receivables</b>	<b>186</b>
<b>Sub-part L2 Securitisation when the IRB approach is used</b>	<b>187</b>
<b>Chapter 47 Treatment of securitised exposures</b>	<b>187</b>
<b>Chapter 48 Risk-weighted exposure amounts for securitisation positions</b>	<b>190</b>
Regulations covering all securitisations	190
Securitisation of revolving exposures subject to provisions for early amortisation	191
<b>Chapter 49 Risk weights</b>	<b>194</b>
Hierarchy of methods	194
Determining an inferred credit assessment	195
Internal assessment methodology for derived credit assessments in ABCP programmes	195
Ratings-based method	197
Supervisory formula method	199
Exceptional treatment where $K_{irb}$ cannot be calculated	201

<b>Chapter 50 Conversion factors for off-balance sheet commitments</b>	<b>201</b>
<b>Chapter 51 Credit protection for positions in a securitisation</b>	<b>202</b>
Ratings-based method	202
Supervisory formula method - full credit protection	202
Supervisory formula method - partial protection	202
<b>Sub-part L3 Credit protection when the IRB approach is used</b>	<b>203</b>
<b>Chapter 52 General provisions</b>	<b>203</b>
Calculating the effect on LGD when there is recognisable financial and non-financial collateral	204
Rules for credit protection and protected asset maturities	204
<b>Chapter 53 Guarantees and credit derivatives</b>	<b>205</b>
Eligible guarantees and credit derivatives	205
Management requirements	209
The effect of recognisable guarantees and credit derivatives on the risk parameters PD and LGD	209
<b>Chapter 54 Non-financial collateral</b>	<b>210</b>
Eligible non-financial collateral	210
Management requirements	212
Calculation of the effect of recognisable non-financial collateral for the LGD risk parameter	214
<b>Chapter 55 Financial collateral</b>	<b>216</b>
Eligible financial collateral	216
Management requirements	217
Calculation of the effect of recognisable financial collateral for the LGD risk parameter	218
<b>Chapter 56 Netting agreements</b>	<b>224</b>
Eligible netting agreements	224
Netting agreements for repurchase transactions, securities and commodities lending or borrowing transactions and capital market-driven transactions	226
Internal method for calculating net amounts	227
Netting agreements for derivative contracts	229
Netting agreements for other liabilities and receivables	230
<b>Chapter 57 Other credit protection</b>	<b>231</b>
Life insurance policies	231
Cash on deposit with another institution	231
<b>Chapter 58 Credit protection for calculating risk-weighted exposure amounts</b>	<b>232</b>
Eligible credit protection	232
Management requirements	234
<b>Sub-part L4 Value at Risk (VaR model)</b>	<b>234</b>
<b>Chapter 59 VaR model</b>	<b>234</b>
General provisions	234
Risk factors	235
Quantitative requirements	235

Qualitative requirements	236
Specific risk	237
Validation	239
Backtesting	239
Calculation of capital requirements	239
The multiplier	240
Development of the VaR model	240
<b>Sub-part L5 Internal measurement approach for operational risk</b>	<b>240</b>
<b>Chapter 60 Internal measurement approach for operational risk</b>	<b>241</b>
Qualifying criteria	241
Calculation of capital requirements	242
Internal data	243
External data	244
Scenario analysis	245
Business environment and internal control systems	245
Insurance and other third-party risk transfer mechanisms	245
Application to use an internal measurement approach on a group-wide basis	246
Combination of approaches	247
<b>Sub-part L6 Advanced risk approach for counterparty risk</b>	<b>247</b>
<b>Chapter 61 The advanced risk approach for counterparty risk</b>	<b>247</b>
<b>Entry into force provisions</b>	<b>253</b>
<b>Appendix 1 Description of credit derivatives</b>	
<b>Appendix 2 Capital adequacy and large exposures form</b>	
<b>Appendix 3 Basis and examples for calculating interest rate risk</b>	
<b>Appendix 4 Example: Risk approach</b>	
<b>Appendix 5 Index</b>	