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**COUNCIL DIRECTIVE 93/6/EEC  
of 15 March 1993  
on the capital adequacy of investments firms and credit institutions**

(OJ L 141, 11.6.1993, p. 1)

Amended by:

		Official Journal		
		No	page	date
► <b><u>M1</u></b>	Directive 98/31/EC of the European Parliament and of the Council of 22 June 1998	L 204	13	21.7.1998
► <b><u>M2</u></b>	Directive 98/33/EC of the European Parliament and of the Council of 22 June 1998	L 204	29	21.7.1998
► <b><u>M3</u></b>	Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002	L 35	1	11.2.2003

Corrected by:

► **C1** Corrigendum, OJ L 248, 8.9.1998, p. 20 (98/31/EC)

NB: This consolidated version contains references to the European unit of account and/or the ecu, which from 1 January 1999 should be understood as references to the euro — Council Regulation (EEC) No 3308/80 (OJ L 345, 20.12.1980, p. 1) and Council Regulation (EC) No 1103/97 (OJ L 162, 19.6.1997, p. 1).

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**COUNCIL DIRECTIVE 93/6/EEC**  
**of 15 March 1993**

**on the capital adequacy of investment firms and credit institutions**

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular the first and third sentences of Article 57 (2) thereof,

Having regard to the proposal from the Commission<sup>(1)</sup>,

In cooperation with the European Parliament<sup>(2)</sup>,

Having regard to the opinion of the Economic and Social Committee<sup>(3)</sup>,

Whereas the main objective of Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field<sup>(4)</sup> is to allow investment firms authorized by the competent authorities of their home Member States and supervised by the same authorities to establish branches and provide services freely in other Member States; whereas that Directive accordingly provides for the coordination of the rules governing the authorization and pursuit of the business of investment firms;

Whereas that Directive does not, however, establish common standards for the own funds of investment firms nor indeed does it establish the amounts of the initial capital of such firms; whereas it does not establish a common framework for monitoring the risks incurred by the same firms; whereas it refers, in several of its provisions, to another Community initiative, the objective of which would be precisely to adopt coordinated measures in those fields;

Whereas the approach that has been adopted is to effect only the essential harmonization that is necessary and sufficient to secure the mutual recognition of authorization and of prudential supervision systems; whereas the adoption of measures to coordinate the definition of the own funds of investment firms, the establishment of the amounts of their initial capital and the establishment of a common framework for monitoring the risks incurred by investment firms are essential aspects of the harmonization necessary for the achievement of mutual recognition within the framework of the internal financial market;

Whereas it is appropriate to establish different amounts of initial capital depending on the range of activities that investment firms are authorized to undertake;

Whereas existing investment firms should be permitted, under certain conditions, to continue their business even if they do not comply with the minimum amount of initial capital fixed for new firms;

Whereas the Member States may also establish rules stricter than those provided for in this Directive;

Whereas this Directive forms part of the wider international effort to bring about approximation of the rules in force regarding the supervision of investment firms and credit institutions (hereinafter referred to collectively as 'institutions');

Whereas common basic standards for the own funds of institutions are a key feature in an internal market in the investment services sector, since own funds serve to ensure the continuity of institutions and to protect investors;

<sup>(1)</sup> OJ No C 152, 21. 6. 1990, p. 6; and  
OJ No C 50, 25. 2. 1992, p. 5.

<sup>(2)</sup> OJ No C 326, 16. 12. 1991, p. 89; and  
OJ No C 337, 21. 12. 1992, p. 114.

<sup>(3)</sup> OJ No C 69, 18. 3. 1991, p. 1.

<sup>(4)</sup> See page 27 of this Official Journal.

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Whereas in a common financial market, institutions, whether they are investment firms or credit institutions, engage in direct competition with one another;

Whereas it is therefore desirable to achieve equality in the treatment of credit institutions and investment firms;

Whereas, as regards credit institutions, common standards are already established for the supervision and monitoring of credit risks in Council Directive 89/647/EEC of 18 December 1989 on a solvency ratio for credit institutions<sup>(1)</sup>;

Whereas it is necessary to develop common standards for market risks incurred by credit institutions and provide a complementary framework for the supervision of the risks incurred by institutions, in particular market risks, and more especially position risks, counterparty/settlement risks and foreign-exchange risks;

Whereas it is necessary to introduce the concept of a 'trading book' comprising positions in securities and other financial instruments which are held for trading purposes and are subject mainly to market risks and exposures relating to certain financial services provided to customers;

Whereas it is desirable that institutions with negligible trading-book business, in both absolute and relative terms, should be able to apply Directive 89/647/EEC, rather than the requirements imposed in Annexes I and II to this Directive;

Whereas it is important that monitoring of settlement/delivery risks should take account of the existence of systems offering adequate protection that reduces that risk;

Whereas, in any case, institutions must comply with this Directive as regards the coverage of the foreign-exchange risks on their overall business; whereas lower capital requirements should be imposed for positions in closely correlated currencies, whether statistically confirmed or arising out of binding intergovernmental agreements, with a view in particular to the creation of the European Monetary Union;

Whereas the existence, in all institutions, of internal systems for monitoring and controlling interest-rate risks on all of their business is a particularly important way of minimizing such risks; whereas, consequently, such systems must be subject to overview by the competent authorities;

Whereas Council Directive 92/121/EEC of 21 December 1992 on the monitoring and control of large exposures of credit institutions<sup>(2)</sup> is not aimed at establishing common rules for monitoring large exposures in activities which are principally subject to market risks; whereas that Directive makes reference to another Community initiative intended to adopt the requisite coordination of methods in that field;

Whereas it is necessary to adopt common rules for the monitoring and control of large exposures incurred by investment firms;

Whereas the own funds of credit institutions have already been defined in Council Directive 89/299/EEC of 17 April 1989 on the own funds of credit institutions<sup>(3)</sup>;

Whereas the basis for the definition of the own funds of institutions should be that definition;

Whereas, however, there are reasons why for the purposes of this Directive the definition of the own funds of institutions may differ from that in the aforementioned Directive in order to take account of

<sup>(1)</sup> OJ No L 386, 30. 12. 1989, p. 14. Directive as amended by Directive 92/30/EEC (OJ No L 110, 28. 4. 1992, p. 52).

<sup>(2)</sup> OJ No L 29, 5. 2. 1993, p. 1.

<sup>(3)</sup> OJ No L 124, 5. 5. 1989, p. 16. Directive as last amended by Directive 92/30/EEC (OJ No L 110, 24. 9. 1992, p. 52).

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the particular characteristics of the activities carried on by those institutions which mainly involve market risks;

Whereas Council Directive 92/30/EEC of 6 April 1992 on the supervision of credit institutions on a consolidated basis<sup>(1)</sup> states the principle of consolidation; whereas it does not establish common rules for the consolidation of financial institutions which are involved in activities principally subject to market risks; whereas that Directive makes reference to another Community initiative intended to adopt coordinated measures in that field;

Whereas Directive 92/30/EEC does not apply to groups which include one or more investment firms but no credit institutions; whereas it was, however, felt desirable to provide a common framework for the introduction of the supervision of investment firms on a consolidated basis;

Whereas technical adaptations to the detailed rules laid down in this Directive may from time to time be necessary to take account of new developments in the investment services field; whereas the Commission will accordingly propose such adaptations as are necessary;

Whereas the Council should, at a later stage, adopt provision for the adaptation of this Directive to technical progress in accordance with Council Decision 87/373/EEC of 13 July 1987 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>(2)</sup>; whereas meanwhile the Council itself, on a proposal from the Commission, should carry out such adaptations;

Whereas provision should be made for the review of this Directive within three years of the date of its application in the light of experience, developments on financial markets and work in international fora of regulatory authorities; whereas that review should also include the possible review of the list of areas that may be subject to technical adjustment;

Whereas this Directive and Directive 93/22/EEC on investment services in the securities field are so closely interrelated that their entry into force on different dates could lead to the distortion of competition,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

1. Member States shall apply the requirements of this Directive to investment firms and credit institutions as defined in Article 2.
2. A Member State may impose additional or more stringent requirements on the investment firms and credit institutions that it has authorized.

**DEFINITIONS**

*Article 2*

For the purposes of this Directive:

1. *credit institutions* shall mean all institutions that satisfy the definition in the first indent of Article 1 of the First Council Directive (77/780/EEC) of 12 December 1977 on the coordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions<sup>(3)</sup> which are subject to the requirements imposed by Directive 89/647/EEC;
2. *investment firms* shall mean all institutions that satisfy the definition in point 2 of Article 1 of Directive 93/22/EEC, which are

<sup>(1)</sup> OJ No L 110, 28. 4. 1992, p. 52.

<sup>(2)</sup> OJ No L 197, 18. 7. 1987, p. 33.

<sup>(3)</sup> OJ No L 322, 17. 12. 1977, p. 30. Directive as amended by Directive 89/646/EEC (OJ No L 386, 30. 12. 1989, p. 1).

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subject to the requirements imposed by the same Directive, excluding:

- credit institutions,
- local firms as defined in 20, and
- firms which only receive and transmit orders from investors without holding money or securities belonging to their clients and which for that reason may not at any time place themselves in debit with their clients;

3. *institutions* shall mean credit institutions and investment firms;
4. *recognized third-country investment firms* shall mean firms which, if they were established within the Community, would be covered by the definition of investment firm in 2, which are authorized in a third country and which are subject to and comply with prudential rules considered by the competent authorities as at least as stringent as those laid down in this Directive;
5. *financial instruments* shall mean the instruments listed in Section B of the Annex to Directive 93/22/EEC;
6. the *trading book* of an institution shall consist of:

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- (a) its proprietary positions in financial instruments, commodities and commodity derivatives which are held for resale and/or which are taken on by the institution with the intention of benefiting in the short term from actual and/or expected differences between their buying and selling prices, or from other price or interest-rate variations, and positions in financial instruments, commodities and commodity derivatives, arising from matched principal broking, or positions taken in order to hedge other elements of the trading book;
- (b) the exposures due to the unsettled transactions, free deliveries and over-the-counter (OTC) derivative instruments referred to in paragraphs 1, 2, 3 and 5 of Annex II, the exposures due to repurchase agreements and securities and commodities lending which are based on securities or commodities included in the trading book as defined in (a) referred to in paragraph 4 of Annex II, those exposures due to reverse repurchase agreements and securities-borrowing and commodities-borrowing transactions described in the same paragraph, provided the competent authorities so approve, which meet either conditions (i), (ii), (iii) and (v) or conditions (iv) and (v) as follows:
  - (i) the exposures are marked to market daily following the procedures laid down in Annex II;
  - (ii) the collateral is adjusted in order to take account of material changes in the value of the securities or commodities involved in the agreement or transaction in question, according to a rule acceptable to the competent authorities;

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- (iii) the agreement or transaction provides for the claims of the institution to be automatically and immediately offset against the claims of its counter-party in the event of the latter's defaulting;
- (iv) the agreement or transaction in question is an interprofessional one;
- (v) such agreements and transactions are confined to their accepted and appropriate use and artificial transactions, especially those not of a short-term nature, are excluded; and
- (c) those exposures in the form of fees, commission, interest, dividends and margin on exchange-traded derivatives which are directly related to the items included in the trading book referred to in paragraph 6 of Annex II.

Particular items shall be included in or excluded from the trading book in accordance with objective procedures including, where appropriate, accounting standards in the institution concerned,

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such procedures and their consistent implementation being subject to review by the competent authorities;

7. *parent undertaking, subsidiary undertaking* and *financial institution* shall be defined in accordance with Article 1 of Directive 92/30/EEC;
8. *financial holding company* shall mean a financial institution the subsidiary undertakings of which are either exclusively or mainly credit institutions, investment firms or other financial institutions, one of which at least is a credit institution or an investment firm;
9. *risk weightings* shall mean the degrees of credit risk applicable to the relevant counter-parties under Directive 89/647/EEC. However, assets constituting claims on and other exposures to investment firms or recognized third-country investment firms and exposures incurred to recognized clearing houses and exchanges shall be assigned the same weighting as that assigned where the relevant counterparty is a credit institution;

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10. *over-the-counter (OTC) derivative instruments* shall mean the off-balance-sheet items to which according to the first subparagraph of Article 6(3) of Directive 89/647/EEC the methods set out in Annex II to the said Directive shall be applied;

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11. *regulated market* shall mean a market that satisfies the definition given in Article 1 (13) of Directive 93/22/EEC;
12. *qualifying items* shall mean long and short positions in the assets referred to in Article 6 (1) (b) of Directive 89/647/EEC and in debt instruments issued by investment firms or by recognized third-country investment firms. It shall also mean long and short positions in debt instruments provided that such instruments meet the following conditions: such instruments must firstly be listed on at least one regulated market in a Member State or on a stock exchange in a third country provided that that exchange is recognized by the competent authorities of the relevant Member State; and secondly both be considered by the institution concerned to be sufficiently liquid and, because of the solvency of the issuer, be subject to a degree of default risk which is comparable to or lower than that of the assets referred to in Article 6 (1) (b) of Directive 89/647/EEC; the manner in which the instruments are assessed shall be subject to scrutiny by the competent authorities, which shall overturn the judgment of the institution if they consider that the instruments concerned are subject to too high a degree of default risk to be qualifying items.

Notwithstanding the foregoing and pending further coordination, the competent authorities shall have the discretion to recognize as qualifying items instruments which are sufficiently liquid and which, because of the solvency of the issuer, are subject to a degree of default risk which is comparable to or lower than that of the assets referred to in Article 6 (1) (b) of Directive 89/647/EEC. The default risk associated with such instruments must have been evaluated at such a level by at least two credit-rating agencies recognized by the competent authorities or by only one such credit-rating agency so long as they are not rated below such a level by any other credit-rating agency recognized by the competent authorities.

The competent authorities may, however, waive the condition imposed in the preceding sentence if they judge it inappropriate in the light of, for example, the characteristics of the market, the issuer, the issue, or some combination of those characteristics.

Furthermore, the competent authorities shall require the institutions to apply the maximum weighting shown in Table 1 in paragraph 14 of Annex I to instruments which show a particular risk because of the insufficient solvency of the issuer or liquidity.

The competent authorities of each Member State shall regularly provide the Council and the Commission with information concerning the methods used to evaluate the qualifying items, in

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particular the methods used to assess the degree of liquidity of the issue and the solvency of the issuer;

13. *central government items* shall mean long and short positions in the assets referred to in Article 6 (1) (a) of Directive 89/647/EEC and those assigned a weighting of 0 % in Article 7 of the same Directive;
14. *convertible* shall mean a security which, at the option of the holder, can be exchanged for another security, usually the equity of the issuer;

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15. 'warrant' shall mean a security which gives the holder the right to purchase an underlying at a stipulated price until or at the warrant's expiry date. It may be settled by the delivery of the underlying itself or by cash settlement;
16. 'stock financing' shall mean positions where physical stock has been sold forward and the cost of funding has been locked in until the date of the forward sale;
17. 'repurchase agreement' and 'reverse repurchase agreement' shall mean any agreement in which an institution or its counter-party transfers securities or commodities or guaranteed rights relating to title to securities or commodities where that guarantee is issued by a recognised exchange which holds the rights to the securities or commodities and the agreement does not allow an institution to transfer or pledge a particular security or commodity to more than one counter-party at one time, subject to a commitment to repurchase them (or substituted securities or commodities of the same description) at a specified price on a future date specified, or to be specified, by the transferor, being a repurchase agreement for the institution selling the securities or commodities and a reverse repurchase agreement for the institution buying them.

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A reverse repurchase agreement shall be considered an interprofessional transaction when the counter-party is subject to prudential coordination at Community level or is a Zone A credit institution as defined in Directive 89/647/EEC or is a recognized third-country investment firm or when the agreement is concluded with a recognized clearing house or exchange;

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18. 'securities or commodities lending' and 'securities or commodities borrowing' shall mean any transaction in which an institution or its counter-party transfers securities or commodities against appropriate collateral subject to a commitment that the borrower will return equivalent securities or commodities at some future date or when requested to do so by the transferor, that transaction being securities or commodities lending for the institution transferring the securities or commodities and being securities or commodities borrowing for the institution to which they are transferred.

Securities or commodities borrowing shall be considered an interprofessional transaction when the counter-party is subject to prudential coordination at Community level or is a Zone A credit institution as defined in Directive 89/647/EEC or is a recognised third-country investment firm or when the transaction is concluded with a recognised clearing house or exchange;

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19. *clearing member* shall mean a member of the exchange or the clearing house which has a direct contractual relationship with the central counterparty (market guarantor); non-clearing members must have their trades routed through a clearing member;
20. *local firm* shall mean a firm dealing only for its own account on a financial-futures or options exchange or for the accounts of or making a price to other members of the same exchange and guaranteed by a clearing member of the same exchange. Responsibility for ensuring the performance of contracts entered into by such a firm must be assumed by a clearing member of the same exchange, and such contracts must be taken into account in the calculation of

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- the clearing member's overall capital requirements so long as the local firm's positions are entirely separate from those of the clearing member;
21. *delta* shall mean the expected change in an option price as a proportion of a small change in the price of the instrument underlying the option;
  22. for the purposes of paragraph 4 of Annex I, *long position* shall mean a position in which an institution has fixed the interest rate it will receive at some time in the future, and *short position* shall mean a position in which it has fixed the interest rate it will pay at some time in the future;
  23. *own funds* shall mean own funds as defined in Directive 89/299/EEC. This definition may, however, be amended in the circumstances described in Annex V;
  24. *initial capital* shall mean items 1 and 2 of Article 2 (1) of Directive 89/299/EEC;
  25. *original own funds* shall mean the sum of items 1, 2 and 4, less the sum of items 9, 10 and 11 of Article 2 (1) of Directive 89/299/EEC;
  26. *capital* shall mean own funds;
  27. *modified duration* shall be calculated using the formula set out in paragraph 26 of Annex I.

## INITIAL CAPITAL

*Article 3*

1. Investment firms which hold clients' money and/or securities and which offer one or more of the following services shall have initial capital of ECU 125 000:

- the reception and transmission of investors' orders for financial instruments,
- the execution of investors' orders for financial instruments,
- the management of individual portfolios of investments in financial instruments,

provided that they do not deal in any financial instruments for their own account or underwrite issues of financial instruments on a firm commitment basis.

The holding of non-trading-book positions in financial instruments in order to invest own funds shall not be considered as dealing for the purposes set out in the first paragraph or for the purposes of paragraph 2.

The competent authorities may, however, allow an investment firm which executes investors' orders for financial instruments to hold such instruments for its own account if:

- such positions arise only as a result of the firm's failure to match investors' orders precisely,
- the total market value of all such positions is subject to a ceiling of 15 % of the firm's initial capital,
- the firm meets the requirements imposed in Articles 4 and 5, and
- such positions are incidental and provisional in nature and strictly limited to the time required to carry out the transaction in question.

2. Member States may reduce the amount referred to in paragraph 1 to ECU 50 000 where a firm is not authorized to hold clients' money or securities, to deal for its own account, or to underwrite issues on a firm commitment basis.

3. All other investment firms shall have initial capital of ECU 730 000.

4. The firms referred to in the second and third indents of Article 2 (2) shall have initial capital of ECU 50 000 in so far as they benefit



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from freedom of establishment or provide services under Articles 14 or 15 of Directive 93/22/EEC.

5. Notwithstanding paragraphs 1 to 4, Member States may continue the authorization of investment firms and firms covered by paragraph 4 in existence before this Directive is applied the own funds of which are less than the initial capital levels specified for them in paragraphs 1 to 4. The own funds of such firms shall not fall below the highest reference level calculated after the date of notification of this Directive. That reference level shall be the average daily level of own funds calculated over a six-month period preceding the date of calculation. It shall be calculated every six months in respect of the corresponding preceding period.

6. If control of a firm covered by paragraph 5 is taken by a natural or legal person other than the person who controlled it previously, the own funds of that firm must attain at least the level specified for it in paragraphs 1 to 4, except in the following situations:

- (i) in the case of the first transfer by inheritance after the application of this Directive, subject to the competent authorities' approval, for not more than 10 years after that transfer;
- (ii) in the case of a change in the composition of a partnership, as long as at least one of the partners at the date of the application of this Directive remains in the partnership, for not more than 10 years after the date of the application of this Directive.

7. In certain specific circumstances and with the consent of the competent authorities, however, in the event of a merger of two or more investment firms and/or firms covered by paragraph 4, the own funds of the firm produced by the merger need not attain the level specified in paragraphs 1 to 4. Nevertheless, during any period when the levels specified in paragraphs 1 to 4 have not been attained, the own funds of the new firm may not fall below the merged firms' total own funds at the time of the merger.

8. The own funds of investment firms and firms covered by paragraph 4 may not fall below the level specified in paragraphs 1 to 5 and 7. If they do, however, the competent authorities may, where the circumstances justify it, allow such firms a limited period in which to rectify their situations or cease their activities.

#### PROVISIONS AGAINST RISKS

##### *Article 4*

1. The competent authorities shall require institutions to provide own funds which are always more than or equal to the sum of:

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- (i) the capital requirements, calculated in accordance with Annexes I, II and VI and, as appropriate, Annex VIII, for their trading-book business;
- (ii) the capital requirements, calculated in accordance with Annexes III and VII and, as appropriate, Annex VIII, for all of their business activities;

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- (iii) the capital requirements imposed in Directive 89/647/EEC for all of their business activities, excluding both their trading-book business and their illiquid assets if they are deducted from own funds under paragraph 2 (d) of Annex V;
- (iv) the capital requirements imposed in paragraph 2.

Irrespective of the amount of the capital requirement referred to in (i) to (iv) the own-funds requirement for investment firms shall never be less than the amount prescribed in Annex IV.

2. The competent authorities shall require institutions to cover the risks arising in connection with business that is outside the scope of both this Directive and Directive 89/647/EEC and considered to be similar to the risks covered by those Directives by adequate own funds.

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3. If the own funds held by an institution fall below the amount of the own funds requirement imposed in paragraph 1, the competent authorities shall ensure that the institution in question takes appropriate measures to rectify its situation as quickly as possible.
4. The competent authorities shall require institutions to set up systems to monitor and control the interest-rate risk on all of their business, and those systems shall be subject to overview by the competent authorities.
5. Institutions shall be required to satisfy their competent authorities that they employ systems which can calculate their financial positions with reasonable accuracy at any time.
6. Notwithstanding paragraph 1, the competent authorities may allow institutions to calculate the capital requirements for their trading-book business in accordance with Directive 89/647/EEC rather than in accordance with Annexes I and II to this Directive provided that:
  - (i) the trading-book business of such institutions does not normally exceed 5 % of their total business;
  - (ii) their total trading-book positions do not normally exceed ECU 15 million; and
  - (iii) the trading-book business of such institutions never exceeds 6 % of their total business and their total trading-book positions never exceed ECU 20 million.
7. In order to calculate the proportion that trading-book business bears to total business as in paragraph 6 (i) and (iii), the competent authorities may refer either to the size of the combined on- and off-balance-sheet business, to the profit and loss account or to the own funds of the institutions in question, or to a combination of those measurements. When the size of on- and off-balance-sheet business is assessed, debt instruments shall be valued at their market prices or their principal values, equities at their market prices and derivatives according to the nominal or market values of the instruments underlying them. Long positions and short positions shall be summed regardless of their signs.
8. If an institution should happen for more than a short period to exceed either or both of the limits imposed in paragraph 6 (i) and (ii) or to exceed either or both of the limits imposed in paragraph 6 (iii), it shall be required to meet the requirements imposed in Article 4 (1) (i) rather than those of Directive 89/647/EEC in respect of its trading-book business and to notify the competent authority.

**MONITORING AND CONTROL OF LARGE EXPOSURES***Article 5*

1. Institutions shall monitor and control their large exposures in accordance with Directive 92/121/EEC.

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2. Notwithstanding paragraph 1, those institutions which calculate the capital requirements for their trading-book business in accordance with Annexes I and II, and as appropriate Annex VIII, shall monitor and control their large exposures in accordance with Directive 92/121/EEC subject to the modifications laid down in Annex VI to this Directive.

**▼B****VALUATION OF POSITIONS FOR REPORTING PURPOSES***Article 6*

1. Institutions shall mark to market their trading books on a daily basis unless they are subject to Article 4 (6).
2. In the absence of readily available market prices, for example in the case of dealing in new issues on the primary markets, the compe-

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tent authorities may waive the requirement imposed in paragraph 1 and require institutions to use alternative methods of valuation provided that those methods are sufficiently prudent and have been approved by competent authorities.

**SUPERVISION ON A CONSOLIDATED BASIS***Article 7***General principles**

1. The capital requirements imposed in Articles 4 and 5 for institutions which are neither parent undertakings nor subsidiaries of such undertakings shall be applied on a solo basis.

2. The requirements imposed in Articles 4 and 5 for:

- any institution which has a credit institution within the meaning of Directive 92/30/EEC, an investment firm or another financial institution as a subsidiary or which holds a participation in such an entity, and
- any institution the parent undertaking of which is a financial holding company

shall be applied on a consolidated basis in accordance with the methods laid down in the abovementioned Directive and in paragraphs 7 to 14 of this Article.

3. When a group covered by paragraph 2 does not include a credit institution, Directive 92/30/EEC shall apply, subject to the following adaptations:

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- ‘financial holding company’ shall mean a financial institution, the subsidiary undertakings of which are either exclusively or mainly investment firms or other financial institutions, at least one of which is an investment firm, and which is not a mixed financial holding company within the meaning of Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate<sup>(1)</sup>,
- ‘mixed-activity holding company’ shall mean a parent undertaking, other than a financial holding company or an investment firm or a mixed financial holding company within the meaning of Directive 2002/87/EC, the subsidiaries of which include at least one investment firm,

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- *competent authorities* shall mean the national authorities which are empowered by law or regulation to supervise investment firms,
- every reference to *credit institutions* shall be replaced by a reference to *investment firms*,
- the second subparagraph of Article 3 (5) of Directive 92/30/EEC shall not apply,
- in Articles 4 (1) and (2) and 7 (5) of Directive 92/30/EEC each reference to Directive 77/780/EEC shall be replaced by a reference to Directive 93/22/EEC,
- for the purposes of Articles 3 (9) and 8 (3) of Directive 92/30/EEC the references to the *Banking Advisory Committee* shall be substituted by references to the Council and the Commission,
- the first sentence of Article 7 (4) of Directive 92/30/EEC shall be replaced by the following: ‘Where an investment firm, a financial holding company or a mixed-activity holding company controls one or more subsidiaries which are insurance companies, the competent authorities and the authorities entrusted with the public task of supervising insurance undertakings shall cooperate closely’.

<sup>(1)</sup> OJ L 35, 11.2.2003.

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4. The competent authorities required or mandated to exercise supervision of groups covered by paragraph 3 on a consolidated basis may, pending further coordination on the supervision of such groups on a consolidated basis and where the circumstances justify it, waive that obligation provided that each investment firm in such a group:

- (i) uses the definition of own funds given in paragraph 9 of Annex V;
- (ii) meets the requirements imposed in Articles 4 and 5 on a solo basis;
- (iii) sets up systems to monitor and control the sources of capital and funding of all other financial institutions within the group.

5. The competent authorities shall require investment firms in a group which has been granted the waiver provided for in paragraph 4 to notify them of those risks, including those associated with the composition and sources of their capital and funding, which could undermine their financial positions. If the competent authorities then consider that the financial positions of those investment firms is not adequately protected, they shall require them to take measures including, if necessary, limitations on the transfer of capital from such firms to group entities.

6. Where the competent authorities waive the obligation of supervision on a consolidated basis provided for in paragraph 4 they shall take other appropriate measures to monitor the risks, namely large exposures, of the whole group, including any undertakings not located in a Member State.

7. Member States may waive the application of the requirements imposed in Articles 4 and 5, on an individual or subconsolidated basis, to an institution which, as a parent undertaking, is subject to supervision on a consolidated basis, and to any subsidiary of such an institution which is subject to their authorization and supervision and is included in the supervision on a consolidated basis of the institution which is its parent company.

The same right of waiver shall be granted where the parent undertaking is a financial holding company which has its head office in the same Member State as the institution, provided that it is subject to the same supervision as that exercised over credit institutions or investment firms, and in particular the requirements imposed in Articles 4 and 5.

In both cases, if the right of waiver is exercised measures must be taken to ensure the satisfactory allocation of own funds within the group.

8. Where an institution the parent undertaking of which is an institution has been authorized and is situated in another Member State, the competent authorities which granted that authorization shall apply the rules laid down in Articles 4 and 5 to that institution on a individual or, where appropriate, a subconsolidated basis.

9. Notwithstanding paragraph 8, the competent authorities responsible for authorizing the subsidiary of a parent undertaking which is an institution may, by a bilateral agreement, delegate their responsibility for supervising the subsidiary's capital adequacy and large exposures to the competent authorities which authorized and supervise the parent undertaking. The Commission must be kept informed of the existence and content of such agreements. It shall forward such information to the competent authorities of the other Member States and to the Banking Advisory Committee and to the Council, except in the case of groups covered by paragraph 3.

#### **Calculating the consolidated requirements**

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10. Where the rights of waiver provided for in paragraphs 7 and 9 are not exercised, the competent authorities may, for the purpose of calculating the capital requirements set out in Annexes I and VIII and the exposures to clients set out in Annex VI on a consolidated basis, permit positions in the trading book of one institution to offset posi-

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tions in the trading book of another institution according to the rules set out in Annexes I, VI and VIII.

In addition, they may allow foreign-exchange positions in one institution to offset foreign-exchange positions in another institution in accordance with the rules set out in Annex III and/or Annex VIII. They may also allow commodities positions in one institution to offset commodities positions in another institution in accordance with the rules set out in Annex VII and/or Annex VIII.

11. The competent authorities may also permit offsetting of the trading book and of the foreign-exchange and commodities positions, respectively, of undertakings located in third countries, subject to the simultaneous fulfilment of the following conditions:

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- (i) those undertakings have been authorized in a third country and either satisfy the definition of credit institution given in the first indent of Article 1 of Directive 77/780/EEC or are recognized third-country investment firms;
- (ii) such undertakings comply, on a solo basis, with capital adequacy rules equivalent to those laid down in this Directive;
- (iii) no regulations exist in the countries in question which might significantly affect the transfer of funds within the group.

12. The competent authorities may also allow the offsetting provided for in paragraph 10 between institutions within a group that have been authorized in the Member State in question, provided that:

- (i) there is a satisfactory allocation of capital within the group;
- (ii) the regulatory, legal or contractual framework in which the institutions operate is such as to guarantee mutual financial support within the group.

13. Furthermore, the competent authorities may allow the offsetting provided for in paragraph 10 between institutions within a group that fulfil the conditions imposed in paragraph 12 and any institution included in the same group which has been authorized in another Member State provided that that institution is obliged to fulfil the capital requirements imposed in Articles 4 and 5 on a solo basis.

#### **Definition of consolidated own funds**

14. In the calculation of own funds on a consolidated basis Article 5 of Directive 89/299/EEC shall apply.

15. The competent authorities responsible for exercising supervision on a consolidated basis may recognize the validity of the specific own-funds definitions applicable to the institutions concerned under Annex V in the calculation of their consolidated own funds.

### **REPORTING REQUIREMENTS**

#### *Article 8*

1. Member States shall require that investment firms and credit institutions provide the competent authorities of their home Member States with all the information necessary for the assessment of their compliance with the rules adopted in accordance with this Directive. Member States shall also ensure that institutions' internal control mechanisms and administrative and accounting procedures permit the verification of their compliance with such rules at all times.

2. Investment firms shall be obliged to report to the competent authorities in the manner specified by the latter at least once every month in the case of firms covered by Article 3 (3), at least once every three months in the case of firms covered by Article 3 (1) and at least once every six months in the case of firms covered by Article 3 (2).

3. Notwithstanding paragraph 2, investment firms covered by Article 3 (1) and (3) shall be required to provide the information on a consolidated or subconsolidated basis only once every six months.

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4. Credit institutions shall be obliged to report in the manner specified by the competent authorities as often as they are obliged to report under Directive 89/647/EEC.

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5. The competent authorities shall oblige institutions to report to them immediately any case in which their counter-parties in repurchase and reverse repurchase agreements or securities and commodities-lending and securities and commodities-borrowing transactions default on their obligations. The Commission shall report to the Council on such cases and their implications for the treatment of such agreements and transactions in this Directive not more than three years after the date referred to in Article 12. Such report shall also describe the way that institutions meet those of conditions (i) to (v) in Article 2(6)(b) that apply to them, in particular condition (v). Furthermore it shall give details of any changes in the relative volume of institutions' traditional lending and their lending through reverse repurchase agreements and securities-borrowing or commodities-borrowing transactions. If the Commission concludes on the basis of this report and other information that further safeguards are needed to prevent abuse, it shall make appropriate proposals.

**▼B****COMPETENT AUTHORITIES***Article 9*

1. Member States shall designate the authorities which are to carry out the duties provided for in this Directive. They shall inform the Commission thereof, indicating any division of duties.
2. The authorities referred to in paragraph 1 must be public authorities or bodies officially recognized by national law or by public authorities as part of the supervisory system in operation in the Member State concerned.
3. The authorities concerned must be granted all the powers necessary for the performance of their tasks, and in particular that of overseeing the constitution of trading books.
4. The competent authorities of the various Member States shall collaborate closely in the performance of the duties provided for in this Directive, particularly when investment services are provided on a services basis or through the establishment of branches in one or more Member States. They shall on request supply one another with all information likely to facilitate the supervision of the capital adequacy of investment firms and credit institutions, in particular the verification of their compliance with the rules laid down in this Directive. Any exchange of information between competent authorities which is provided for in this Directive in respect of investment firms shall be subject to the obligation of professional secrecy imposed in Article 25 of Directive 93/22/EEC and, as regards credit institutions, to the obligation imposed in Article 12 of Directive 77/780/EEC, as amended by Directive 89/646/EEC.

*Article 10*

Pending adoption of a further Directive laying down provisions for adapting this Directive to technical progress in the areas specified below, the Council shall, acting by qualified majority on a proposal from the Commission, in accordance with Decision 87/373/EEC, adopt those adaptations which may be necessary, as follows:

- clarification of the definitions in Article 2 in order to ensure uniform application of this Directive throughout the Community,
- clarification of the definitions in Article 2 to take account of developments on financial markets,
- alteration of the amounts of initial capital prescribed in Article 3 and the amount referred to in Article 4 (6) to take account of developments in the economic and monetary field,

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- the alignment of terminology on and the framing of definitions in accordance with subsequent acts on institutions and related matters.

**TRANSITIONAL PROVISIONS***Article 11*

1. Member States may authorize investment firms subject to Article 30 (1) of Directive 93/22/EEC the own funds of which are on the day of the application of this Directive lower than the levels specified in Article 3 (1) to (3) of this Directive. Thereafter, however, the own funds of such investment firms must fulfil the conditions laid down in Article 3 (5) to (8) of this Directive.

2. Notwithstanding paragraph 14 of Annex I, Member States may set a specific-risk requirement for any bonds assigned a weighting of 10 % under Article 11 (2) of Directive 89/647/EEC equal to half the specific-risk requirement for a qualifying item with the same residual maturity as such a bond.

**▼M1***Article 11a*

Until 31 December 2006, Member States may authorise their institutions to use the minimum spread, carry and outright rates set out in the following table instead of those indicated in paragraphs 13, 14, 17 and 18 of Annex VII provided that the institutions, in the opinion of their competent authorities:

- (i) undertake significant commodities business,
- (ii) have a diversified commodities portfolio, and
- (iii) are not yet in a position to use internal models for the purpose of calculating the capital requirement on commodities risk in accordance with Annex VIII.

*Table*

	Precious metals (except gold)	Base metals	Agricultural products (softs)	Other, including energy products
Spread rate (%)	1,0	1,2	1,5	1,5
Carry rate (%)	0,3	0,5	0,6	0,6
Outright rate (%)	8	10	12	15

Member States shall inform the Commission of the use they make of this Article.

**▼B****FINAL PROVISIONS***Article 12*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary for them to comply with this Directive by the date fixed in the second paragraph of Article 31 of Directive 93/22/EEC. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions they shall include a reference to this Directive or add such a reference on the occasion of their official publication. The manner in which such references are to be made shall be laid down by the Member States.

2. Member States shall communicate to the Commission the main provisions of national law which they adopt in the field covered by this Directive.

**▼B***Article 13*

The Commission shall as soon as possible submit to the Council proposals for capital requirements in respect of commodities trading, commodity derivatives and units of collective-investment undertakings.

The Council shall decide on the Commission's proposals no later than six months before the date of application of this Directive.

**REVIEW CLAUSE***Article 14*

Within three years of the date referred to in Article 12, acting on a proposal from the Commission, the Council shall examine and, if necessary, revise this Directive in the light of the experience acquired in applying it, taking into account market innovation and, in particular, developments in international fora of regulatory authorities.

*Article 15*

This Directive is addressed to the Member States.



**▼B***ANNEX I***POSITION RISK****INTRODUCTION****Netting**

1. The excess of an institution's long (short) positions over its short (long) positions in the same equity, debt and convertible issues and identical financial futures, options, warrants and covered warrants shall be its net position in each of those different instruments. In calculating the net position the competent authorities shall allow positions in derivative instruments to be treated, as laid down in paragraphs 4 to 7, as positions in the underlying (or notional) security or securities. Institutions' holdings of their own debt instruments shall be disregarded in calculating specific risk under paragraph 14.
2. No netting shall be allowed between a convertible and an offsetting position in the instrument underlying it, unless the competent authorities adopt an approach under which the likelihood of a particular convertible's being converted is taken into account or have a capital requirement to cover any loss which conversion might entail.
3. All net positions, irrespective of their signs, must be converted on a daily basis into the institution's reporting currency at the prevailing spot exchange rate before their aggregation.

**Particular instruments**

4. Interest-rate futures, forward-rate agreements (FRAs) and forward commitments to buy or sell debt instruments shall be treated as combinations of long and short positions. Thus a long interest-rate futures position shall be treated as a combination of a borrowing maturing on the delivery date of the futures contract and a holding of an asset with maturity date equal to that of the instrument or notional position underlying the futures contract in question. Similarly a sold FRA will be treated as a long position with a maturity date equal to the settlement date plus the contract period, and a short position with maturity equal to the settlement date. Both the borrowing and the asset holding shall be included in the Central government column of Table 1 in paragraph 14 in order to calculate the capital required against specific risk for interest-rate futures and FRAs. A forward commitment to buy a debt instrument shall be treated as a combination of a borrowing maturing on the delivery date and a long (spot) position in the debt instrument itself. The borrowing shall be included in the central government column of Table 1 for purposes of specific risk, and the debt instrument under whichever column is appropriate for it in the same table.

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The competent authorities may allow the capital requirement for an exchange-traded future to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the future and that it is at least equal to the capital requirement for a future that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. Until 31 December 2006 the competent authorities may also allow the capital requirement for an OTC derivatives contract of the type referred to in this paragraph cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the derivatives contract and that it is at least equal to the capital requirement for the contract in question that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII.

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5. Options on interest rates, debt instruments, equities, equity indices, financial futures, swaps and foreign currencies shall be treated as if they were positions equal in value to the amount of the underlying instrument to which the option refers, multiplied by its delta for the purposes of this Annex. The latter positions may be netted off against any offsetting positions in the identical underlying securities or derivatives. The delta used shall be that of the exchange concerned, that calculated by the competent authorities or, where that is not available or for OTC options, that calculated by the institution itself, subject to the competent authorities' being satisfied that the model used by the institution is reasonable.

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However, the competent authorities may also prescribe that institutions calculate their deltas using a methodology specified by the competent authorities.

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The competent authorities shall require that the other risks, apart from the delta risk, associated with options are safeguarded against. The competent authorities may allow the requirement against a written exchange-traded option to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement against an option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. Until 31 December 2006 the competent authorities may also allow the capital requirement for an OTC option cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement for an OTC option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. In addition they may allow the requirement on a bought exchange-traded or OTC option to be the same as that for the instrument underlying it, subject to the constraint that the resulting requirement does not exceed the market value of the option. The requirement against a written OTC option shall be set in relation to the instrument underlying it.

6. Warrants relating to debt instruments and equities shall be treated in the same way as options under paragraph 5.

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7. Swaps shall be treated for interest-rate risk purposes on the same basis as on-balance-sheet instruments. Thus an interest-rate swap under which an institution receives floating-rate interest and pays fixed-rate interest shall be treated as equivalent to a long position in a floating-rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument with the same maturity as the swap itself.
8. However, institutions which mark to market and manage the interest-rate risk on the derivative instruments covered in paragraphs 4 to 7 on a discounted-cash-flow basis may use sensitivity models to calculate the positions referred to above and may use them for any bond which is amortized over its residual life rather than via one final repayment of principal. Both the model and its use by the institution must be approved by the competent authorities. These models should generate positions which have the same sensitivity to interest-rate changes as the underlying cash flows. This sensitivity must be assessed with reference to independent movements in sample rates across the yield curve, with at least one sensitivity point in each of the maturity bands set out in Table 2 of paragraph 18. The positions shall be included in the calculation of capital requirements according to the provisions laid down in paragraphs 15 to 30.
9. Institutions which do not use models under paragraph 8 may instead, with the approval of the competent authorities, treat as fully offsetting any positions in derivative instruments covered in paragraphs 4 to 7 which meet the following conditions at least:
  - (i) the positions are of the same value and denominated in the same currency;
  - (ii) the reference rate (for floating-rate positions) or coupon (for fixed-rate positions) is closely matched;
  - (iii) the next interest-fixing date or, for fixed coupon positions, residual maturity corresponds with the following limits:
    - less than one month hence: same day,
    - between one month and one year hence: within seven days,
    - over one year hence: within 30 days.
10. The transferor of securities or guaranteed rights relating to title to securities in a repurchase agreement and the lender of securities in a securities lending shall include these securities in the calculation of its capital requirement under this Annex provided that such securities meet the criteria laid down in Article 2 (6) (a).
11. Positions in units of collective-investment undertakings shall be subject to the capital requirements of Directive 89/647/EEC rather than to position-risk requirements under this Annex.

**▼B****Specific and general risks**

12. The position risk on a traded debt instrument or equity (or debt or equity derivative) shall be divided into two components in order to calculate the capital required against it. The first shall be its specific-risk component — this is the risk of a price change in the instrument concerned due to factors related to its issuer or, in the case of a derivative, the issuer of the underlying instrument. The second component shall cover its general risk — this is the risk of a price change in the instrument due (in the case of a traded debt instrument or debt derivative) to a change in the level of interest rates or (in the case of an equity or equity derivative) to a broad equity-market movement unrelated to any specific attributes of individual securities.

**TRADED DEBT INSTRUMENTS**

13. The institution shall classify its net positions according to the currency in which they are denominated and shall calculate the capital requirement for general and specific risk in each individual currency separately.

**Specific risk**

14. The institution shall assign its net positions, as calculated in accordance with paragraph 1, to the appropriate categories in Table 1 on the basis of their residual maturities and then multiply them by the weightings shown. It shall sum its weighted positions (regardless of whether they are long or short) in order to calculate its capital requirement against specific risk.

**Table 1**

Central government items	Qualifying items			Other items
	Up to 6 months	Over 6 and up to 24 months	Over 24 months	
0,00 %	0,25 %	1,00 %	1,60 %	8,00 %

**General risk****(a) Maturity-based**

15. The procedure for calculating capital requirements against general risk involves two basic steps. First, all positions shall be weighted according to maturity (as explained in paragraph 16), in order to compute the amount of capital required against them. Second, allowance shall be made for this requirement to be reduced when a weighted position is held alongside an opposite weighted position within the same maturity band. A reduction in the requirement shall also be allowed when the opposite weighted positions fall into different maturity bands, with the size of this reduction depending both on whether the two positions fall into the same zone, or not, and on the particular zones they fall into. There are three zones (groups of maturity bands) altogether.
16. The institution shall assign its net positions to the appropriate maturity bands in column 2 or 3, as appropriate, in Table 2 appearing in paragraph 18. It shall do so on the basis of residual maturity in the case of fixed-rate instruments and on the basis of the period until the interest rate is next set in the case of instruments on which the interest rate is variable before final maturity. It shall also distinguish between debt instruments with a coupon of 3 % or more and those with a coupon of less than 3 % and thus allocate them to column 2 or column 3 in Table 2. It shall then multiply each of them by the weighing for the maturity band in question in column 4 in Table 2.
17. It shall then work out the sum of the weighted long positions and the sum of the weighted short positions in each maturity band. The amount of the former which are matched by the latter in a given maturity band shall be the matched weighted position in that band, while the residual long or short position shall be the unmatched weighted position for the same band. The total of the matched weighted positions in all bands then be calculated.
18. The institution shall compute the totals of the unmatched weighted long positions for the bands included in each of the zones in Table 2 in order to derive the unmatched weighted long position for each zone. Similarly the sum of the unmatched weighted short positions for each band in a particular zone shall be summed to compute the unmatched weighted short

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position for that zone. That part of the unmatched weighted long position for a given zone that is matched by the unmatched weighted short position for the same zone shall be the matched weighted position for that zone. That part of the unmatched weighted long or unmatched weighted short position for a zone that cannot be thus matched shall be the unmatched weighted position for that zone.

Table 2

Zone	Maturity band		Weighting (in %)	Assumed interest rate change (in %)
	Coupon of 3 % or more	Coupon of less than 3 %		
(1)	(2)	(3)	(4)	(5)
One	0 ≤ 1 month	0 ≤ 1 month	0,00	—
	> 1 ≤ 3 months	> 1 ≤ 3 months	0,20	1,00
	> 3 ≤ 6 months	> 3 ≤ 6 months	0,40	1,00
	> 6 ≤ 12 months	> 6 ≤ 12 months	0,70	1,00
Two	> 1 ≤ 2 years	> 1,0 ≤ 1,9 years	1,25	0,90
	> 2 ≤ 3 years	> 1,9 ≤ 2,8 years	1,75	0,80
	> 3 ≤ 4 years	> 2,8 ≤ 3,6 years	2,25	0,75
Three	> 4 ≤ 5 years	> 3,6 ≤ 4,3 years	2,75	0,75
	> 5 ≤ 7 years	> 4,3 ≤ 5,7 years	3,25	0,70
	> 7 ≤ 10 years	> 5,7 ≤ 7,3 years	3,75	0,65
	> 10 ≤ 15 years	> 7,3 ≤ 9,3 years	4,50	0,60
	> 15 ≤ 20 years	> 9,3 ≤ 10,6 years	5,25	0,60
	> 20 years	> 10,6 ≤ 12,0 years	6,00	0,60
		> 12,0 ≤ 20,0 years	8,00	0,60
	> 20 years	12,50	0,60	

19. The amount of the unmatched weighted long (short) position in zone one which is matched by the unmatched weighted short (long) position in zone two shall then be computed. This shall be referred to in paragraph 23 as the matched weighted position between zones one and two. The same calculation shall then be undertaken with regard to that part of the unmatched weighted position in zone two which is left over and the unmatched weighted position in zone three in order to calculate the matched weighted position between zones two and three.
20. The institution may, if it wishes, reverse the order in paragraph 19 so as to calculate the matched weighted position between zones two and three before working out that between zones one and two.
21. The remainder of the unmatched weighted position in zone one shall then be matched with what remains of that for zone three after the latter's matching with zone two in order to derive the matched weighted position between zones one and three.
22. Residual positions, following the three separate matching calculations in paragraphs 19, 20 and 21, shall be summed.
23. The institution's capital requirement shall be calculated as the sum of:
  - (a) 10 % of the sum of the matched weighted positions in all maturity bands;
  - (b) 40 % of the matched weighted position in zone one;
  - (c) 30 % of the matched weighted position in zone two;
  - (d) 30 % of the matched weighted position in zone three;
  - (e) 40 % of the matched weighted position between zones one and two and between zones two and three (see paragraph 19);
  - (f) 150 % of the matched weighted position between zones one and three;
  - (g) 100 % of the residual unmatched weighted positions.
- (b) *Duration-based*
24. The competent authorities in a Member State may allow institutions in general or on an individual basis to use a system for calculating the capital requirement for the general risk on traded debt instruments which reflects

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duration instead of the system set out in paragraphs 15 to 23, provided that the institution does so on a consistent basis.

25. Under such a system the institution shall take the market value of each fixed-rate debt instrument and thence calculate its yield to maturity, which is implied discount rate for that instrument. In the case of floating-rate instruments, the institution shall take the market value of each instrument and thence calculate its yield on the assumption that the principal is due when the interest rate can next be changed.
26. The institution shall then calculate the modified duration of each debt instrument on the basis of the following formula:

$$\text{modified duration} = \frac{\text{duration (D)}}{(1+r)},$$

where:

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

where:

r = yield to maturity (see paragraph 25),

C<sub>t</sub> = cash payment in time t,

m = total maturity (see paragraph 25).

27. The institution shall then allocate each debt instrument to the appropriate zone in Table 3. It shall do so on the basis of the modified duration of each instrument.

**Table 3**

Zone	Modified duration (in years)	Assumed interest (change in %)
(1)	(2)	(3)
One	> 0 ≤ 1,0	1,0
Two	> 1,0 ≤ 3,6	0,85
Three	> 3,6	0,7

28. The institution shall then calculate the duration-weighted position for each instrument by multiplying its market price by its modified duration and by the assumed interest-rate change for an instrument with that particular modified duration (see column 3 in Table 3).
29. The institution shall work out its duration-weighted long and its duration-weighted short positions within each zone. The amount of the former which are matched by the latter within each zone shall be the matched duration-weighted position for that zone.
- The institution shall then calculate the unmatched duration-weighted positions for each zone. It shall then follow the procedures laid down for unmatched weighted positions in paragraphs 19 to 22.
30. The institution's capital requirement shall then be calculated as the sum of:
- 2 % of the matched duration-weighted position for each zone;
  - 40 % of the matched duration-weighted positions between zones one and two and between zones two and three;
  - 150 % of the matched duration-weighted position between zones one and three;
  - 100 % of the residual unmatched duration-weighted positions.

## EQUITIES

31. The institution shall sum all its net long positions and all its net short positions in accordance with paragraph 1. The sum of the two figures shall be its overall gross position. The difference between them shall be its overall net position.

**▼B****Specific risk**

32. It shall multiply its overall gross position by 4 % in order to calculate its capital requirement against specific risk.
33. Notwithstanding paragraph 32, the competent authorities may allow the capital requirement against specific risk to be 2 % rather than 4 % for those portfolios of equities that an institution holds which meet the following conditions:

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- (i) the equities shall not be those of issuers which have issued only traded debt instruments that currently attract an 8 % requirement in Table 1 appearing in paragraph 14 or that attract a lower requirement only because they are guaranteed or secured;

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- (ii) the equities must be adjudged highly liquid by the competent authorities according to objective criteria;
- (iii) no individual position shall comprise more than 5 % of the value of the institution's whole equity portfolio. However, the competent authorities may authorize individual positions of up to 10 % provided that the total of such positions does not exceed 50 % of the portfolio.

**General risk**

34. Its capital requirement against general risk shall be its overall net position multiplied by 8 %.

**Stock-index futures**

35. Stock-index futures, the delta-weighted equivalents of options in stock-index futures and stock indices collectively referred to hereafter as 'stock-index futures', may be broken down into positions in each of their constituent equities. These positions may be treated as underlying positions in the equities in question; therefore, subject to the approval of the competent authorities, they may be netted against opposite positions in the underlying equities themselves.
36. The competent authorities shall ensure that any institution which has netted off its positions in one or more of the equities constituting a stock-index future against one or more positions in the stock-index future itself has adequate capital to cover the risk of loss caused by the future's values not moving fully in line with that of its constituent equities; they shall also do this when an institution holds opposite positions in stock-index futures which are not identical in respect of either their maturity or their composition or both.
37. Notwithstanding paragraphs 35 and 36, stock-index futures which are exchange traded and — in the opinion of the competent authorities — represent broadly diversified indices shall attract a capital requirement against general risk of 8 %, but no capital requirement against specific risk. Such stock-index futures shall be included in the calculation of the overall net position in paragraph 31, but disregarded in the calculation of the overall gross position in the same paragraph.
38. If a stock-index future is not broken down into its underlying positions, it shall be treated as if it were an individual equity. However, the specific risk on this individual equity can be ignored if the stock-index future in question is exchange traded and, in the opinion of the competent authorities, represents a broadly diversified index.

**UNDERWRITING**

39. In the case of the underwriting of debt and equity instruments, the competent authorities may allow an institution to use the following procedure in calculating its capital requirements. Firstly, it shall calculate the net positions by deducting the underwriting positions which are subscribed or sub-underwritten by third parties on the basis of formal agreements; secondly, it shall reduce the net positions by the following reduction factors:

— working day 0:	100 %
— working day 1:	90 %
— working days 2 to 3:	75 %
— working day 4:	50 %
— working day 5:	25 %

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— after working day 5: 0 %.

Working day zero shall be the working day on which the institution becomes unconditionally committed to accepting a known quantity of securities at an agreed price.

Thirdly, it shall calculate its capital requirements using the reduced underwriting positions. The competent authorities shall ensure that the institution holds sufficient capital against the risk of loss which exists between the time of the initial commitment and working day 1.

**▼B***ANNEX II***SETTLEMENT AND COUNTER-PARTY RISK**

## SETTLEMENT/DELIVERY RISK

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1. In the case of transactions in which debt instruments, equities and commodities (excluding repurchase and reverse repurchase agreements and securities or commodities lending and securities or commodities borrowing) are unsettled after their due delivery dates, an institution must calculate the price difference to which it is exposed. This is the difference between the agreed settlement price for the debt instrument, equity or commodity in question and its current market value, where the difference could involve a loss for the institution. It must multiply this difference by the appropriate factor in column A of the table appearing in paragraph 2 in order to calculate its capital requirement.

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2. Notwithstanding paragraph 1, an institution may, at the discretion of its competent authorities, calculate its capital requirements by multiplying the agreed settlement price of every transaction which is unsettled between 5 and 45 working days after its due date by the appropriate factor in column B of the table below. As from 46 working days after the due date it shall take the requirement to be 100 % of the price difference to which it is exposed as in column A.

Number of working days after due settlement date	Column A (%)	Column B (%)
5 — 15	8	0,5
16 — 30	50	4,0
31 — 45	75	9,0
46 or more	100	see paragraph 2

## COUNTER-PARTY RISK

**Free deliveries****▼M1**

- 3.1. An institution shall be required to hold capital against counterparty risk if:
  - (i) it has paid for securities or commodities before receiving them or it has delivered securities or commodities before receiving payment for them; and
  - (ii) in the case of cross-border transactions, one day or more has elapsed since it made that payment or delivery.
- 3.2. The capital requirement shall be 8 % of the value of the securities or commodities or cash owed to the institution multiplied by the risk weighting applicable to the relevant counterparty.

**Repurchase and reverse repurchase agreements, securities or commodities lending and borrowing**

- 4.1. In the case of repurchase agreements and securities or commodities lending based on securities or commodities included in the trading book the institution shall calculate the difference between the market value of the securities or commodities and the amount borrowed by the institution or the market value of the collateral, where that difference is positive. In the case of reverse repurchase agreements and securities or commodities borrowing, the institution shall calculate the difference between the amount the institution has lent or the market value of the collateral and the market value of the securities or commodities it has received, where that difference is positive.

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The competent authorities shall take measures to ensure that the excess collateral given is acceptable.

Furthermore, the competent authorities may allow institutions not to include the amount of excess collateral in the calculations described in the



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first two sentences of this paragraph if the amount of excess collateral is guaranteed in such a way that the transferor is always assured that the excess collateral will be returned to it in the event of defaults of its counter-party.

Accrued interest shall be included in calculating the market value of amounts lent or borrowed and collateral.

- 4.2. The capital requirement shall be 8 % of the figure produced in accordance with paragraph 4.1, multiplied by the risk weighting applicable to the relevant counter-party.

**OTC derivative instruments****▼M2**

5. In order to calculate the capital requirement on their OTC derivative instruments, institutions shall apply Article II to Directive 89/647/EEC. The risk weightings to be applied to the relevant counterparties shall be determined in accordance with Article 2(9) of this Directive.

Until 31 December 2006, the competent authorities of Member States may exempt from the application of the methods set out in Annex II OTC contracts cleared by a clearing house where the latter acts as the legal counterparty and all participants fully collateralise on a daily basis the exposure they present to the clearing house, thereby providing a protection covering both the current exposure and the potential future exposure. The competent authorities must be satisfied that the posted collateral gives the same level of protection as collateral which complies with Article 6(1)(a)(7) of Directive 89/647/EEC and that the risk of a build-up of the clearing house's exposures beyond the market value of posted collateral is eliminated. Member States shall inform the Commission of the use they make of this option.

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6. The capital requirements of Directive 89/647/EEC shall apply to those exposures in the form of fees, commission, interest, dividends and margin in exchange-traded futures or options contracts which are neither covered in this Annex or Annex I nor deducted from own funds under paragraph 2 (d) of Annex V and which are directly related to the items included in the trading book

The risk weightings to be applied to the relevant counter-parties shall be determined in accordance with Article 2 (9) of this Directive.

**▼B***ANNEX III***FOREIGN-EXCHANGE RISK****▼M1**

1. If the sum of an institution's overall net foreign-exchange position and its net gold position, calculated in accordance with the procedure set out below, exceeds 2 % of its total own funds, it shall multiply the sum of its net foreign-exchange position and its net gold position by 8 % in order to calculate its own-funds requirement against foreign-exchange risk.

Until 31 December 2004, the competent authorities may allow institutions to calculate their own-funds requirement by multiplying by 8 % the amount by which the sum of the overall net foreign-exchange position and the net gold position exceeds 2 % of the total own funds.

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2. A two-stage calculation shall be used.

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- 3.1. Firstly, the institution's net open position in each currency (including the reporting currency) and in gold shall be calculated. This position shall consist of the sum of the following elements (positive or negative):
  - the net spot position (i. e. all asset items less all liability items, including accrued interest, in the currency in question or, for gold, the net spot position in gold),
  - the net forward position (i. e. all amounts to be received less all amounts to be paid under forward exchange and gold transactions, including currency and gold futures and the principal on currency swaps not included in the spot position),
  - irrevocable guarantees (and similar instruments) that are certain to be called and likely to be irrecoverable,
  - net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting institution and with the prior consent of the competent authorities, net future income/expenses not yet entered in accounting records but already fully hedged by forward foreign-exchange transactions may be included here). Such discretion must be exercised on a consistent basis,
  - the net delta (or delta-based) equivalent of the total book of foreign-currency and gold options,
  - the market value of other (i. e. non-foreign-currency and non-gold) options,
  - any positions which an institution has deliberately taken in order to hedge against the adverse effect of the exchange rate on its capital ratio may be excluded from the calculation of net open currency positions. Such positions should be of a non-trading or structural nature and their exclusion, and any variation of the terms of their exclusion, shall require the consent of the competent authorities. The same treatment subject to the same conditions as above may be applied to positions which an institution has which relate to items that are already deducted in the calculation of own funds.
- 3.2. The competent authorities shall have the discretion to allow institutions to use the net present value when calculating the net open position in each currency and in gold.

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- **M1** 4. Secondly, net short and long positions in each currency other than the reporting currency and the net long or short position in gold shall be converted at spot rates into the reporting currency. ◀ They shall then be summed separately to form the total of the net short positions and the total of the net long positions respectively. The higher of these two totals shall be the institution's overall net foreign-exchange position.
5. Notwithstanding paragraphs 1 to 4 and pending further coordination, the competent authorities may prescribe or allow institutions to use alternative procedures for the purposes of this Annex.
6. Firstly, the competent authorities may allow institutions to provide lower capital requirements against positions in closely correlated currencies than those which would result from applying paragraphs 1 to 4 to them. The competent authorities may deem a pair of currencies to be closely correlated only if the likelihood of a loss — calculated on the basis of daily exchange-rate data for the preceding three or five years — occurring on equal and opposite positions in such currencies over the following 10 working days, which is 4 % or less of the value of the matched position in question (valued in terms of the reporting currency) has a probability of

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at least 99 %, when an observation period of three years is used, or 95 %, when an observation period of five years is used. The own-funds requirement on the matched position in two closely correlated currencies shall be 4 % multiplied by the value of the matched position. The capital requirement on unmatched positions in closely correlated currencies, and all positions in other currencies, shall be 8 %, multiplied by the higher of the sum of the net short or the net long positions in those currencies after the removal of matched positions in closely correlated currencies.

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7. Secondly, until 31 December 2004, the competent authorities may allow institutions to apply an alternative method to those outlined in paragraphs 1 to 6 for the purposes of this Annex. The capital requirement produced by this method must be sufficient to exceed 2 % of the net open position as measured in paragraph 4 and, on the basis of an analysis of exchange-rate movements during all the rolling 10-working-day periods over the preceding three years, to exceed the likely loss 99 % or more of the time.

The alternative method described in the first subparagraph may only be used under the following conditions:

- (i) the calculation formula and the correlation coefficients are set by the competent authorities, based on their analysis of exchange-rate movements;
- (ii) the competent authorities review the correlation coefficients regularly in the light of developments in foreign-exchange markets.

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8. Thirdly, the competent authorities may allow institutions to remove positions in any currency which is subject to a legally binding intergovernmental agreement to limit its variation relative to other currencies covered by the same agreement from whichever of the methods described in paragraphs 1 to 7 that they apply. Institutions shall calculate their matched positions in such currencies and subject them to a capital requirement no lower than half of the maximum permissible variation laid down in the intergovernmental agreement in question in respect of the currencies concerned. Unmatched positions in those currencies shall be treated in the same way as other currencies.

Notwithstanding the first paragraph, the competent authorities may allow the capital requirement on the matched positions in currencies of Member States participating in the second stage of the European monetary union to be 1,6 %, multiplied by the value of such matched positions.

9. The competent authorities shall notify the Council and Commission of the methods, if any, that they are prescribing or allowing in respect of paragraphs 6 to 8.
10. The Commission shall report to the Council on the methods referred to in paragraph 9 and, where necessary and with due regard to international developments, shall propose a more harmonized treatment of foreign-exchange risk.
11. Net positions in composite currencies may be broken down into the component currencies according to the quotas in force.

**▼B***ANNEX IV***OTHER RISKS**

Investment firms shall be required to hold own funds equivalent to one quarter of their preceding year's fixed overheads. The competent authorities may adjust that requirement in the event of a material change in a firm's business since the preceding year. Where a firm has not completed a year's business, including the day it starts up, the requirement shall be a quarter of the fixed overheads figure projected in its business plan unless an adjustment to that plan is required by the authorities.

**▼B***ANNEX V***OWN FUNDS**

1. The own funds of investment firms and credit institutions shall be defined in accordance with Directive 89/299/EEC.

For the purposes of this Directive, however, investment firms which do not have one of the legal forms referred to in Article 1 (1) of the Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies<sup>(1)</sup> shall nevertheless be deemed to fall within the scope of Council Directive 86/635/EEC of 8 December 1986 on the annual accounts and consolidated accounts of banks and other financial institutions<sup>(2)</sup>.

2. ►**M1** Notwithstanding paragraph 1, the competent authorities may permit those institutions which are obliged to meet the own-funds requirements laid down in Annexes I, II, III, IV, VI, VII and VIII to use an alternative definition when meeting those requirements only. ◀ No part of the own funds thus provided may be used simultaneously to meet other own-funds requirements. This alternative definition shall include the following items (a), (b) and (c) less item (d), the deduction of that item being left to the discretion of the competent authorities:
  - (a) own funds as defined in Directive 89/299/EEC excluding only items (12) and (13) of Article 2 (1) of the same Directive for those investment firms which are required to deduct item (d) of this paragraph from the total of items (a), (b) and (c) of this paragraph;
  - (b) an institution's net trading-book profits net of any foreseeable charges or dividends, less net losses on its other business provided that none of those amounts has already been included in item (a) of this paragraph under item 2 or 11 of Article 2 (1) of Directive 89/299/EEC;
  - (c) subordinated loan capital and/or the items referred to in paragraphs 5, subject to the conditions set out in paragraphs 3 to 7;
  - (d) illiquid assets as defined in paragraph 8.
3. The subordinated loan capital referred to in paragraph 2 (c) shall have an initial maturity of at least two years. It shall be fully paid up and the loan agreement shall not include any clause providing that in specified circumstances other than the winding up of the institution the debt will become repayable before the agreed repayment date, unless the competent authorities approve the repayment. Neither the principal nor the interest on such subordinated loan capital may be repaid if such repayment would mean that the own funds of the institution in question would then amount to less than 100 % of the institution's overall requirements.

In addition, an institution shall notify the competent authorities of all repayments on such subordinated loan capital as soon as its own funds fall below 120 % of its overall requirements.

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4. The subordinated loan capital referred to in paragraph 2(c) may not exceed a maximum of 150 % of the original own funds left to meet the requirements laid down in Annexes I, II, III, IV, VI, VII, and VIII and may approach that maximum only in particular circumstances acceptable to the relevant authorities.

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5. The competent authorities may permit institutions to replace the subordinated loan capital referred to in paragraphs 3 and 4 with items 3 and 5 to 8 of Article 2 (1) of Directive 89/299/EEC.

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6. The competent authorities may permit investment firms to exceed the ceiling for subordinated loan capital prescribed in paragraph 4 if they judge it prudentially adequate and provided that the total of such subordinated loan capital and the items referred to in paragraph 5 does not exceed 200 % of the original own funds left to meet the requirements imposed in Annexes I, II, III, IV, VI, VII and VIII or 250 % of the same amount where investment firms deduct item 2(d) referred to in paragraph 2 when calculating own funds.

<sup>(1)</sup> OJ No L 222, 14. 8. 1978, p. 11. Directive as last amended by Directive 90/605/EEC (OJ No L 317, 16. 11. 1990, p. 60).

<sup>(2)</sup> OJ No L 372, 31. 12. 1986, p. 1.

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7. The competent authorities may permit the ceiling for subordinated loan capital prescribed in paragraph 4 to be exceeded by a credit institution if they judge it prudentially adequate and provided that the total of such subordinated loan capital and the items referred to in paragraph 5 does not exceed 250 % of the original own funds left to meet the requirements imposed in Annexes I, II, III, VI, VII and VIII.

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8. Illiquid assets include:

- tangible fixed assets (except to the extent that land and buildings may be allowed to count against the loans which they are securing),
- holdings in, including subordinated claims on, credit or financial institutions which may be included in the own funds of such institutions, unless they have been deducted under items 12 and 13 of Article 2 (1) of Directive 89/299/EEC or under paragraph 9 (iv) of this Annex.

Where shares in a credit or financial institution are held temporarily for the purpose of a financial assistance operation designed to reorganize and save that institution, the competent authorities may waive this provision. They may also waive it in respect of those shares which are included in the investment firm's trading book,

- holdings and other investments, in undertakings other than credit institutions and other financial institutions, which are not readily marketable,
  - deficiencies in subsidiaries,
  - deposits made, other than those which are available for repayment within 90 days, and also excluding payments in connection with margined futures or options contracts,
  - loans and other amounts due, other than those due to be repaid within 90 days,
  - physical stocks, unless they are subject to the capital requirements imposed in Article 4 (2) and provided that such requirements are not less stringent than those imposed in Article 4 (1) (iii).
9. Those investment firms included in a group subject to the waiver described in Article 7 (4) shall calculate their own funds in accordance with paragraphs 1 to 8 subject to the following modifications:
- (i) the illiquid assets referred to in paragraph 2 (d) shall be deducted;
  - (ii) the exclusion referred to in paragraph 2 (a) shall not cover those components of items 12 and 13 of Article 2 (1) of Directive 89/299/EEC which an investment firm holds in respect of undertakings included in the scope of consolidation as defined in Article 7 (2) of this Directive;
  - (iii) the limits referred to in Article 6 (1) (a) and (b) of Directive 89/299/EEC shall be calculated with reference to the original own funds less those components of items 12 and 13 of Article 2 (1) of Directive 89/299/EEC described in (ii) which are elements of the original own funds of the undertakings in question;
  - (iv) those components of items 12 and 13 of Article 2 (1) of Directive 89/299/EEC referred to in (iii) shall be deducted from the original own funds rather than from the total of all items as prescribed in Article 6 (1) (c) of the same Directive for the purposes, in particular, of paragraphs 4 to 7 of this Annex.



ANNEX VI

**LARGE EXPOSURES**

1. Institutions referred to in Article 5 (2) shall monitor and control their exposures to individual clients and groups of connected clients as defined in Directive 92/121/EEC, subject to the following modifications.
2. The exposures to individual clients which arise on the trading book shall be calculated by summing the following items (i), (ii) and (iii):
  - (i) the excess — where positive — of an institution's long positions over its short positions in all the financial instruments issued by the client in question (the net position in each of the different instruments being calculated according to the methods laid down in Annex I);
  - (ii) in the case of the underwriting of a debt or an equity instrument, the institution's exposure shall be its net exposure (which is calculated by deducting those underwriting positions which are subscribed or sub-underwritten by third parties on the basis of a formal agreement) reduced by the factors set out in paragraph 39 of Annex I.  
Pending further coordination, the competent authorities shall require institutions to set up systems to monitor and control their underwriting exposures between the time of the initial commitment and working day one in the light of the nature of the risks incurred in the markets in question;
  - (iii) the exposures due to the transactions, agreements and contracts referred to in Annex II with the client in question, such exposures being calculated in the manner laid down in that Annex, without application of the weightings for counter-party risk.
3. Thereafter, the exposures to groups of connected clients on the trading book shall be calculated by summing the exposures to individual clients in a group, as calculated in paragraph 2.
4. The overall exposures to individual clients or groups of connected clients shall be calculated by summing the exposures which arise on the trading book and the exposures which arise on the non-trading book, taking into account Article 4 (6) to (12) of Directive 92/121/EEC. In order to calculate the exposure on the non-trading book, institutions shall take the exposure arising from assets which are deducted from their own funds by virtue of paragraph 2 (d) of Annex V to be zero.
5. Institutions' overall exposures to individual clients and groups of connected clients calculated in accordance with paragraph 4 shall be reported in accordance with Article 3 of Directive 92/121/EEC.
6. That sum of the exposures to an individual client or group of connected clients shall be limited in accordance with Article 4 of Directive 92/121/EEC subject to the transitional provisions of Article 6 of the same Directive.
7. Notwithstanding paragraph 6 the competent authorities may allow assets constituting claims and other exposures on investment firms, on recognized third-country investment firms and recognized clearing houses and exchanges in financial instruments to be subject to the same treatment accorded to those on credit institutions in Article 4 (7) (i), (9) and (10) of Directive 92/121/EEC.
8. The competent authorities may authorize the limits laid down in Article 4 of Directive 92/121/EEC to be exceeded subject to the following conditions being met simultaneously:
  1. the exposure on the non-trading book to the client or group of clients in question does not exceed the limits laid down in Directive 92/121/EEC, calculated with reference to own funds as defined in Directive 89/299/EEC, so that the excess arises entirely on the trading book;
  2. the firm meets an additional capital requirement on the excess in respect of the limits laid down in Article 4 (1) and (2) of Directive 92/121/EEC. This shall be calculated by selecting those components of the total trading exposure to the client or group of clients in question which attract the highest specific-risk requirements in Annex I and/or requirements in Annex II, the sum of which equals the amount of the excess referred to in 1; where the excess has not persisted for more than 10 days, the additional capital requirement shall be 200 % of the requirements referred to in the previous sentence, on these components.  
As from 10 days after the excess has occurred, the components of the excess, selected in accordance with the above criteria, shall be allocated to the appropriate line in column 1 of the table below in ascending order

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of specific-risk requirements in Annex I and/or requirements in Annex II. The institution shall then meet an additional capital requirement equal to the sum of the specific-risk requirements in Annex I and/or the Annex II requirements on these components multiplied by the corresponding factor in column 2;

Table

Excess over the limits (on the basis of a percentage of own funds)	Factors
(1)	(2)
Up to 40 %	200 %
From 40 % to 60 %	300 %
From 60 % to 80 %	400 %
From 80 % to 100 %	500 %
From 100 % to 250 %	600 %
Over 250 %	900 %

3. where 10 days or less has elapsed since the excess occurred, the trading-book exposure to the client or group of connected clients in question must not exceed 500 % of the institution's own funds;
4. any excesses which have persisted for more than 10 days must not, in aggregate, exceed 600 % of the institution's own funds;
5. institutions must report to the competent authorities every three months all cases where the limits laid down in Article 4 (1) and (2) of Directive 92/121/EEC have been exceeded during the preceding three months. In each case in which the limits have been exceeded the amount of the excess and the name of the client concerned must be reported.
9. The competent authorities shall establish procedures, of which they shall notify the Council and the Commission, to prevent institutions from deliberately avoiding the additional capital requirements that they would otherwise incur on exposures exceeding the limits laid down in Article 4 (1) and (2) of Directive 92/121/EEC once those exposures have been maintained for more than 10 days, by means of temporarily transferring the exposures in question to another company, whether within the same group or not, and/or by undertaking artificial transactions to close out the exposure during the 10-day period and create a new exposure. Institutions shall maintain systems which ensure that any transfer which has this effect is immediately reported to the competent authorities.
10. The competent authorities may permit those institutions which are allowed to use the alternative definition of own funds under paragraph 2 of Annex V to use that definition for the purposes of paragraphs 5, 6 and 8 of this Annex provided that the institutions concerned are required, in addition, to meet all of the obligations set out in Articles 3 and 4 of Directive 92/121/EEC, in respect of the exposures which arise outside their trading books by using own funds as defined in Directive 89/299/EEC.



▼ **M1***ANNEX VII***COMMODITIES RISK**

1. Each position in commodities or commodity derivatives shall be expressed in terms of the standard unit of measurement. The spot price in each commodity shall be expressed in the reporting currency.
2. Positions in gold or gold derivatives shall be considered as being subject to foreign-exchange risk and treated according to Annex III or Annex VIII, as appropriate, for the purpose of calculating market risk.
3. For the purposes of this Annex, positions which are purely stock financing may be excluded from the commodities risk calculation only.
4. The interest-rate and foreign-exchange risks not covered by other provisions of this Annex shall be included in the calculation of general risk for traded debt instruments and in the calculation of foreign-exchange risk.
5. When the short position falls due before the long position, institutions shall also guard against the risk of a shortage of liquidity which may exist in some markets.
6. For the purpose of paragraph 19, the excess of an institution's long (short) positions over its short (long) positions in the same commodity and identical commodity futures, options and warrants shall be its net position in each commodity. The competent authorities shall allow positions in derivative instruments to be treated, as laid down in paragraphs 8, 9 and 10, as positions in the underlying commodity.
7. The competent authorities may regard the following positions as positions in the same commodity:
  - positions in different sub-categories of commodities in cases where the sub-categories are deliverable against each other,
  - and
  - 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.

**Particular instruments**

8. Commodity futures and forward commitments to buy or sell individual commodities shall be incorporated in the measurement system as notional amounts in terms of the standard unit of measurement and assigned a maturity with reference to expiry date. The competent authorities may allow the capital requirement for an exchange-traded future to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the future and that it is at least equal to the capital requirement for a future that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. Until 31 December 2006 the competent authorities may also allow the capital requirement for an OTC commodity derivatives contract of the type referred to in this paragraph cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the derivatives contract and that it is at least equal to the capital requirement for the contract in question that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII.
9. Commodity swaps where one side of the transaction is a fixed price and the other 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 one position corresponding with each payment on the swap and slotted into the maturity ladder set out in the table appearing in paragraph 13. The positions would be long positions if the institution is paying a fixed price and receiving a floating price and short positions if the institution is receiving a fixed price and paying a floating price.
 

Commodity swaps where the sides of the transaction are in different commodities are to be reported in the relevant reporting ladder for the maturity ladder approach.
10. Options on commodities or on commodity derivatives shall be treated as if they were positions equal in value to the amount of the underlying to which the option refers, multiplied by its delta for the purposes of this Annex. The latter positions may be netted off against any offsetting positions in the

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identical underlying commodity or commodity derivative. The delta used shall be that of the exchange concerned, that calculated by the competent authorities or, where none of those is available or for OTC options, that calculated by the institution itself, subject to the competent authorities being satisfied that the model used by the institution is reasonable.

However, the competent authorities may also prescribe that institutions calculate their deltas using a methodology specified by the competent authorities.

The competent authorities shall require that the other risks, apart from the delta risk, associated with commodity options are safeguarded against. The competent authorities may allow the requirement for a written exchange-traded commodity option to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement against an option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. Until 31 December 2006 the competent authorities may also allow the capital requirement for an OTC commodity option cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement for an OTC option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex VIII. In addition they may allow the requirement on a bought exchange-traded or OTC commodity option to be the same as that for the commodity underlying it, subject to the constraint that the resulting requirement does not exceed the market value of the option. The requirement for a written OTC option shall be set in relation to the commodity underlying it.

11. Warrants relating to commodities shall be treated in the same way as commodity options under paragraph 10.
12. The transferor of commodities or guaranteed rights relating to title to commodities in a repurchase agreement and the lender of commodities in a commodities lending agreement shall include such commodities in the calculation of its capital requirement under this Annex.

(a) *Maturity ladder approach*

13. The institution shall use a separate maturity ladder in line with the following table for each commodity. All positions in that commodity and all positions which are regarded as positions in the same commodity pursuant to paragraph 7 shall be assigned to the appropriate maturity bands. Physical stocks shall be assigned to the first maturity band.

Maturity band (1)	Spread rate (in %) (2)
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

14. Competent authorities may allow positions which are, or are regarded pursuant to paragraph 7 as, positions in the same commodity to be offset and assigned to the appropriate maturity bands on a net basis for:
  - positions in contracts maturing on the same date,
  - and
  - positions in contracts maturing within 10 days of each other if the contracts are traded on markets which have daily delivery dates.
15. The institution shall then work out the sum of the long positions and the sum of the short positions in each maturity band. The amount of the former

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- (latter) which are matched by the latter (former) in a given maturity band shall be the matched positions in that band, while the residual long or short position shall be the unmatched position for the same band.
16. That part of the unmatched long (short) position for a given maturity band that is matched by the unmatched short (long) position for a maturity band further out shall be the matched position between two maturity bands. That part of the unmatched long or unmatched short position that cannot be thus matched shall be the unmatched position.
  17. The institution's capital requirement for each commodity shall be calculated on the basis of the relevant maturity ladder as the sum of the following:
    - (i) the sum of the matched long and short positions, multiplied by the appropriate spread rate as indicated in the second column of the table appearing in paragraph 13 for each maturity band and by the spot price for the commodity;
    - (ii) the matched position between two maturity bands for each maturity band into which an unmatched position is carried forward, multiplied by 0,6 % (carry rate) and by the spot price for the commodity;
    - (iii) the residual unmatched positions, multiplied by 15 % (outright rate) and by the spot price for the commodity.
  18. The institution's overall capital requirement for commodities risk shall be calculated as the sum of the capital requirements calculated for each commodity according to paragraph 17.

(b) *Simplified approach*
  19. The institution's capital requirement for each commodity shall be calculated as the sum of:
    - (i) 15 % of the net position, long or short, multiplied by the spot price for the commodity;
    - (ii) 3 % of the gross position, long plus short, multiplied by the spot price for the commodity.
  20. The institution's overall capital requirement for commodities risk shall be calculated as the sum of the capital requirements calculated for each commodity according to paragraph 19.

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## ANNEX VIII

## INTERNAL MODELS

1. The competent authorities may, subject to the conditions laid down in this Annex, allow institutions to calculate their capital requirements for position risk, foreign-exchange risk and/or commodities risk using their own internal risk-management models instead of or in combination with the methods described in Annexes I, III and VII. Explicit recognition by the competent authorities of the use of models for supervisory capital purposes shall be required in each case.
2. Recognition shall only be given if the competent authority is satisfied that the institution's risk-management system is conceptually sound and implemented with integrity and that, in particular, the following qualitative standards are met:
  - (i) the internal risk-measurement model is closely integrated into the daily risk-management process of the institution and serves as the basis for reporting risk exposures to senior management of the institution;
  - (ii) the institution has a risk control unit that is independent from business trading units and reports directly to senior management. The unit must be responsible for designing and implementing the institution's risk-management system. It shall produce and analyse daily reports on the output of the risk-measurement model and on the appropriate measures to be taken in terms of trading limits;
  - (iii) the institution's board of directors and senior management are actively involved in the risk-control process and the daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce both reductions of positions taken by individual traders as well as in the institution's overall risk exposure;
  - (iv) the institution has sufficient numbers of staff skilled in the use of sophisticated models in the trading, risk-control, audit and back-office areas;
  - (v) the institution has established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of the risk-measurement system;
  - (vi) the institution's models have a proven track record of reasonable accuracy in measuring risks;
  - (vii) the institution frequently conduct a rigorous programme of stress testing and the results of these tests are reviewed by senior management and reflected in the policies and limits it sets;
  - (viii) the institution must conduct, as part of its regular internal auditing process, an independent review of its risk-measurement system. This review must include both the activities of the business trading units and of the independent risk-control unit. At least once a year, the institution must conduct a review of its overall risk-management process. The review must consider:
    - the adequacy of the documentation of the risk-management system and process and the organisation of the risk-control unit,
    - the integration of market risk measures into daily risk management and the integrity of the management information system,
    - the process the institution employs for approving risk-pricing models and valuation systems that are used by front and back-office personnel,
    - the scope of market risks captured by the risk-measurement model and the validation of any significant changes in the risk-measurement process,
    - the accuracy and completeness of position data, the accuracy and appropriateness of volatility and correlation assumptions, and the accuracy of valuation and risk sensitivity calculations,
    - the verification process the institution employs to evaluate the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources, and
    - the verification process the institution uses to evaluate back-testing that is conducted to assess the model's accuracy.
3. The institution shall monitor the accuracy and performance of its model by conducting a back-testing programme. The back-testing has to provide for each business day a comparison of the one-day value-at-risk measure generated ►C1 by the institution's model for the portfolio's end-of-day positions to the one-day change of the portfolio's value ◀ by the end of the subse-

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quent business day. Competent authorities shall examine the institution's capability to perform back-testing on both actual and hypothetical changes in the portfolio's value. Back-testing on hypothetical changes in the portfolio's value is based on a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. Competent authorities shall require institutions to take appropriate measures to improve their back-testing programme if deemed deficient.

4. For the purpose of calculating capital requirements for specific risk associated with traded debt and equity positions, the competent authorities may recognise the use of an institution's internal model if in addition to compliance with the conditions in the remainder of this Annex the model:
  - explains the historical price variation in the portfolio,
  - captures concentration in terms of magnitude and changes of composition of the portfolio,
  - is robust to an adverse environment,
  - is validated through back-testing aimed at assessing whether specific risk is being accurately captured. If competent authorities allow this back-testing to be performed on the basis of relevant sub-portfolios, these must be chosen in a consistent manner.
5. Institutions using internal models which are not recognised in accordance with paragraph 4 shall be subject to a separate capital charge for specific risk as calculated according to Annex I.
6. For the purpose of paragraph 10(ii) the results of the institution's own calculation shall be scaled up by a multiplication factor of at least 3.
7. The multiplication factor shall be increased by a plus-factor of between 0 and 1 in accordance with the following table, depending on the number of overshootings for the most recent 250 business days as evidenced by the institution's back-testing. Competent authorities shall require the institutions to calculate overshootings consistently on the basis of back-testing either on actual or on hypothetical changes in the portfolio's value. An overshooting is a one-day change in the portfolio's value that exceeds the related one-day value-at-risk measure generated by the institution's model. For the purpose of determining the plus-factor the number of overshootings shall be assessed at least quarterly.

Number of overshootings	Plus-factor
Fewer than 5	0,00
5	0,40
6	0,50
7	0,65
8	0,75
9	0,85
10 or more	1,00

The competent authorities can, in individual cases and owing to an exceptional situation, waive the requirement to increase the multiplication factor by the plus-factor according to the above table, if the institution has demonstrated to the satisfaction of the competent authorities that such an increase is unjustified and that the model is basically sound.

If numerous overshootings indicate that the model is not sufficiently accurate, the competent authorities shall revoke the model's recognition or impose appropriate measures to ensure that the model is improved promptly.

In order to allow competent authorities to monitor the appropriateness of the plus-factor on an ongoing basis, institutions shall notify promptly, and in any case no later than within five working days, the competent authorities of overshootings that result from their back-testing programme and that would according to the above table imply an increase of a plus-factor.

8. If the institution's model is recognised by the competent authorities in accordance with paragraph 4 for the purpose of calculating capital requirements for specific risk, the institution shall increase its capital requirement

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calculated pursuant to paragraphs 6, 7 and 10 by a surcharge in the amount of either:

- (i) the specific risk portion of the value-at-risk measure which should be isolated according to supervisory guidelines; or, at the institution's option,
- (ii) the value-at-risk measures of sub-portfolios of debt and equity positions that contain specific risk.

Institutions using option (ii) are required to identify their sub-portfolio structure beforehand and should not change it without the consent of the competent authorities.

9. The competent authorities may waive the requirement pursuant to paragraph 8 for a surcharge if the institution demonstrates that in line with agreed international standards its model accurately captures also the event risk and default risk for its traded debt and equity positions.
10. Each institution must meet a capital requirement expressed as the higher of:
  - (i) its previous day's value-at-risk number measured according to the parameters specified in this Annex;
  - (ii) an average of the daily value-at-risk measures on each of the preceding 60 business days, multiplied by the factor mentioned in paragraph 6, adjusted by the factor mentioned in paragraph 7.
11. The calculation of value-at-risk shall be subject to the following minimum standards:
  - (i) at least daily calculation of value-at-risk;
  - (ii) a 99th percentile, one-tailed confidence interval;
  - (iii) a 10-day equivalent holding period;
  - (iv) an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility;
  - (v) three-monthly data set updates.
12. The competent authorities shall require that the model captures accurately all the material price risks of options or option-like positions and that any other risks not captured by the model are covered adequately by own funds.
13. The competent authorities shall require that the risk-measurement model captures a sufficient number of risk factors, depending on the level of activity of the institution in the respective markets. As a minimum, the following provisions shall be respected:
  - (i) for interest rate risk, the risk-measurement system shall incorporate a set of risk factors corresponding to the interest rates in each currency in which the institution has interest rate sensitive on- or off-balance sheet positions. The institution shall model the yield curves using one of the generally accepted approaches. For material exposures to interest-rate risk in the major currencies and markets, the yield curve shall be divided into a minimum of six maturity segments, to capture the variations of volatility of rates along the yield curve. The risk-measurement system must also capture the risk of less than perfectly correlated movements between different yield curves;
  - (ii) for foreign-exchange risk, the risk-measurement system shall incorporate risk factors corresponding to gold and to the individual foreign currencies in which the institution's positions are denominated;
  - (iii) for equity risk, the risk-measurement system shall use a separate risk factor at least for each of the equity markets in which the institution holds significant positions;
  - (iv) for commodity risk, the risk-measurement system shall use a separate risk factor at least for each commodity in which the institution holds significant positions. The risk-measurement system must also capture the risk of less than perfectly correlated movements between similar, but not identical, commodities and the exposure to changes in forward prices arising from maturity mismatches. It shall also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions.
14. The competent authorities may allow institutions to use empirical correlations within risk categories and across risk categories if they are satisfied that the institution's system for measuring correlations is sound and implemented with integrity.