



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 16.04.1997
COM(97) 71 final

97/0124 (COD)

Proposal for a
EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE

amending Council Directive 93/6/EEC on the capital adequacy
of investment firms and credit institutions

(presented by the Commission)

EXPLANATORY MEMORANDUM

The purpose of this proposal is to amend Council Directive 93/6/EEC on capital adequacy of investment firms and credit institutions with respect to the use of internal risk-management models for the calculation of market risks and the inclusion of measures to have appropriate capital available to cover the market risks inherent in commodities and commodity derivatives business.

First, this is done in response to the requirement in Article 14 of Directive 93/6/EEC to "examine and if necessary revise Directive 93/6/EEC in the light of developments in international fora of regulatory authorities". This provision was intended to ensure that further work on market risk being undertaken at that time in the Basle Committee on Banking Supervision would be taken into account in the EU legislation. The work of the Basle Committee culminated in the January 1996 "Amendment to the Basle Capital Accord to incorporate Market Risks". This introduces into the 1988 Capital Accord (which sets international standards for capital adequacy of international banks) a standardized method for the measurement of market risk which is substantially the same as that already adopted in Council Directive 93/6/EEC. However, it also includes the two new elements, the use of internal models and the inclusion of commodities in the measurement of market risks, which are the subjects of this proposal. The Basle proposal will enter into force on 1 January 1998.

Secondly, Article 13 of Council Directive 93/6/EEC requires that "the Commission shall as soon as possible submit to the Council proposals for capital requirements in respect of commodities trading, commodities derivatives". This task is overdue but had been delayed in order to take account of developments in international fora and to discuss the subject extensively with those mainly concerned. This proposal draws on the work of the Basle Committee in this regard and the European competent authorities responsible for the supervision of credit institutions and investment firms have been widely consulted.

The need for the amendments is twofold.

First, the amendment to allow competent authorities to permit institutions to use their internal models to calculate market risk capital requirements under strict conditions is necessary to bring EC legislation up to date with modern practices. This will encourage institutions to make use of more sophisticated techniques for measuring risk in the context of an improved overall approach to risk management. Such sophisticated internal models are capable of measuring more accurately the risks involved in trading book activities of banks and investment firms and will enable them to adapt more rapidly to changes in their portfolios. They may therefore reduce the capital charge of an institution compared to the standard approach of the present Directive 93/6/EEC. Economically and prudentially these advanced techniques are highly desirable since they enhance the ability to respond in a timely and correct fashion to the risks involved and to apportion the corresponding capital coverage according to the necessary minimum. Not only will they lead to a more efficient use of capital by credit institutions and investment firms generally but they will reduce the need for those institutions to duplicate market risk calculations for internal and regulatory purposes and thus lead to significant cost savings. The Banking Advisory Committee has recommended that the amending Directive should come into force at the same time as the Basle amendment at the end of 1997 to avoid a potential competitive disadvantage to EU institutions when non-EU members of the Basle Supervisory Committee start to allow their institutions to use internal models.

Secondly, commodity and commodity derivatives trading undertaken by investment firms and credit institutions are currently subject to the full credit risk charge under Council Directive 89/647/EEC which is not appropriate to the predominantly market risks involved. It is necessary, therefore, to introduce capital requirements which more accurately reflect these risks. Commodities and commodity derivatives are considered to be highly volatile activities involving considerable risks. Therefore, to the extent that investment firms and credit institutions undertake these activities incidentally to their other authorized activities it is necessary to provide for an adequate capital coverage in order to protect depositors and investors of these institutions. The capital requirements established by this proposed Directive are not intended to provide rules for genuine commodities dealers and traders who should generally not be covered by this Directive because their activities are not included in either of the lists of activities covered by Council Directive 93/22/EEC (the Investments Services Directive) or Council Directive 89/646/EEC (Second Banking Directive) and Council Directive 93/22/EEC specifically exempts institutions whose main business is trading in commodities amongst themselves or with producers or professional users of such products. With regard to the credit risks of over-the-counter derivatives in commodities the Commission has already made a proposal to adapt the Solvency Ratio Directive (89/647/EEC) which, at present, is still under negotiation before the European Parliament and the Council. On the important issue of the market risks inherent in trading positions on commodities and derivatives in commodities this proposal will introduce for investment firms and credit institutions capital requirements considered to be appropriate by the large majority of the corresponding supervisory authorities of the Member States and in the Basle Committee. It must be underlined that these requirements should apply solely to institutions which deal mainly with the deposits or investments of their clients and are therefore subject to special supervisory rules; these rules should not impinge on specialized professional traders who deal mainly for their own account or with other professionals.

The proposed new capital charges to cover the market risks on commodities and commodity derivatives will, in general, be lower than those required at present under the application of the Solvency Ratio Directive (which is designed to capture credit risk) in conjunction with Council Directive 93/6/EEC which is to be amended. The proposed Directive provides for three methods:

- a simplified method imposing a very conservative flat capital requirement which should ensure that regulated institutions that engage incidentally in such risky and complex activities have a comfortable capital cushion,
- a maturity ladder approach, which - under present circumstances and in the case of regulated investment firms and credit institutions is the most appropriate answer in terms of the necessary capital coverage with regard to the risks inherent in such activities. The capital charge will generally be lower than under the first method,
- the internal models which - at present - are not yet sufficiently developed for all aspects of derivatives activities. Notably, appropriate techniques have to be developed for options which constitute a large element of commodities derivatives activity. However, the proposed Directive is deliberately intended to encourage such developments.

The proposal takes into account the fact that in some Member States investment firms dealing primarily in commodities and commodity derivatives may not yet be able to use internal models and that the increase in capital requirements resulting from the other calculation methods is rather considerable and abrupt. In order to give those firms sufficient time to adapt or upgrade their risk-management systems in order to be able to use internal models, a transitional period may be afforded to them by their Member State to use alternative rates subject to some additional prudential and transparency conditions. At the same time, it is expected that there will be progress in the further development of these internal models so that they become more cost effective for such firms and at the same time acceptable to the competent authorities, notably with regard to the capture of the non-linear risks related to the options trade in commodities.

ARTICLE I

Point 1(a) brings commodities and commodity derivatives into the definition of the trading book which constitutes the element of an institution's activities on which market risk capital charges are levied.

Point 1(b) broadens the definition of "warrant" so that the term may also relate to commodities. In some markets a commodity warrant is understood to be an ownership instrument rather than a right to purchase. For the purposes of this Directive the meaning of a warrant in the context of commodities will be as defined in this text. The definition of "covered warrant" is deleted because the definition of warrant includes covered warrants and the capital adequacy treatment is identical. Stock financing is defined in order to clarify the exemption of stock financing from the capital requirements for commodities in Annex VII(3).

Point 1(c) and (d) ensures that commodities are treated consistently with securities with regard to capital requirements for repos/reverse repos and borrowing/lending transactions.

Point 2 incorporates the option to use models for the calculation of capital charges for market risk in the trading book, while point (ii) includes commodities in the calculation of capital charges for market risk on all business activities and incorporates the option to use models.

Point 3 ensures that all institutions, including those which use internal models to calculate capital requirements for trading book business, are subject to the large exposures requirements for exposures to individual clients which arise on the trading book irrespective of whether those large exposures are identified under the internal models approach or the standardized approach.

Point 4 brings capital requirements calculated under the internal models approach and charges for commodity positions calculated according to Annex VII under the consolidation provisions of this Article. Commodity positions may be offset against opposite commodity positions in consolidated third country undertakings under the same conditions that such foreign-exchange positions may be offset.

Point 5 brings commodities into the reporting requirements.

Points 6 inserts Article 12a which contains a transitional clause allowing competent authorities to exempt investment firms from the application of Annex VII until 31 December 1999.

Point 7 refers to the amendments to Annexes I to VI.

Point 8 adds Annexes VII and VIII.

ARTICLES 2, 3 AND 4

These Articles contain administrative arrangements regarding the adoption of this Directive and its implementation by Member States.

ANNEX I

Point 1(a) brings the internal models approach into this provision which allows capital requirements for an exchange-traded future to be equal to the margin required by the exchange if the competent authority is satisfied that this provides an accurate measure of the associated risks and that the method used to calculate the margin is equivalent to either the standardized or internal models approach in Annex I or Annex VIII of the revised Directive.

Point 1(b) brings the internal models approach into this provision which relates to capital requirements for options.

Point 1(c) is consequential to the amendment to the definition of "warrant" and the deletion of the definition of "covered warrant".

Point 1(d) corrects the unintended effect of the existing wording which excludes from the concessionary specific risk charge in this provision highly rated issuers who have issued subordinated debt.

Point 2(a), (b) and (c) brings commodities under the settlement/delivery and counterparty risk-capital requirements.

Point 3(a), (b) and (c) brings gold into the capital regime set out in Annex III. This is consistent with the Basle decision to treat gold as a foreign-exchange position because its volatility is more in line with foreign currencies and institutions manage it in a similar manner to foreign currencies. Point 3(a) also introduces more stringent capital requirements by converting the 2% "free zone" into a 2% "threshold". A minor adjustment to the wording regarding irrevocable guarantees is also included in point 3(b).

Point 3(d) amends the alternative calculation of foreign-exchange risk in Annex III paragraph 7 of the Council Directive 93/6/EEC requiring the necessary analysis to be done by competent authorities on the basis of the standards required for internal models under Annex 1, paragraph 20, of the Directive.

Point 4(a), (b) and (c) extends the use of and limits on Tier 3 capital (subordinated loan capital with an initial maturity of at least two years and meeting the requirements set out in Annex V to Directive 93/6/EEC) for meeting commodity risks and trading book risks calculated by internal models.

Point 5(a) and (b) ensures that all institutions, including those that use models to calculate trading book positions, are subject to the large exposure requirements on exposures to individual clients which arise on the trading book irrespective of whether those exposures are identified by a model or by the standardized approach.

ANNEX II

Commodities risk

A new Annex VII is added which sets out methods for calculating market risk on positions in commodities and commodity derivatives. The main risks the methods are designed to capture are the "directional risk" arising from a change in the spot price, "basis risk" arising from potential changes in the relationship between prices of similar commodities over time, "interest-rate risk" arising from potential changes in the cost of funding forward positions and options, and "forward gap risk" arising from other potential changes in the forward price.

A maturity ladder method sets capital charges against matched positions within maturity bands and between maturity bands to capture basis risk, interest-rate risk and forward gap risk and on the residual unmatched position to capture directional risk. An alternative simplified method sets a capital charge on the overall net position to capture directional risk and on the gross positions in each commodity to capture basis, interest rate and forward gap risks. A third method available is the internal models approach described in Annex VIII.

It is not the purpose of this Directive to cover the markets for commodities and derivatives in commodities and operators in these markets in general. Commodities and derivatives on commodities are not on the list of activities to be covered under the Second Banking Coordination Directive or the Investment Services Directive (ISD). It is also explicitly indicated in Article 2(2) of the ISD that it "shall not apply to: ... (i) persons whose main business is trading in commodities amongst themselves or with

producers or professional users of such products and who provide investment services only for such producers and professional users to the extent necessary for their business"; therefore the major part of business in commodities markets need not be covered and hence need not be affected by the proposed changes to the Capital Adequacy Directive.

This Directive should, however, apply to the commodities and derivative commodities business done by credit institutions and investment firms since they operate on behalf of or with the money of their clients. As in other areas prudential regulation should ensure the financial stability and protect the customers of these institutions. Commodities and derivatives on commodities business is extremely risky and volatile so if authorized credit institutions or investment firms want to deal in these activities for their own account or on behalf of their clients, there is a need for special protection in order to limit a possible negative impact from such business on the institution's solvency and overall stability. Annex VII deals with these problems in introducing internationally recognised capital requirements for credit institutions and investment firms. It follows closely the approach adopted in the amendment to the Basle Capital Accord and its introduction will contribute to a level regulatory playing field both within the EU and in the wider international marketplace.

Internal models

A new Annex VIII is added which sets out conditions for the use of internal models for calculating market risk capital requirements for all trading book activities. Thus, to the extent that models are sufficiently developed to capture the relevant risks, they may be used for commodities and commodity derivatives as well. The objective is to encourage the use of more accurate techniques for measuring risk in the overall context of improved risk management in credit institutions and investment firms.

The Annex makes the use of internal models conditional upon the explicit approval of the financial institution's competent supervisory authority and sets strict quantitative and qualitative standards for such approval. It specifies the minimum market risk factors which must be covered and requires that the "value at risk" produced each day be multiplied by a minimum factor of 3 to account for potential weaknesses in modelling techniques. In addition a plus factor of between 0 and 1 must be added to the "value at risk" based on a regular back-testing programme to verify the model's accuracy.

This Annex also follows closely the approach adopted in the amendment to the Basle Capital Accord and its introduction will contribute to a level regulatory playing field both within the EU and in the wider international market place.

Proposal for a
EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE

amending Council Directive 93/6/EEC on the capital adequacy
of investment firms and credit institutions

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

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

Having regard to the proposal from the Commission¹,

Having regard to the opinion of the Economic and Social Committee²,

Having regard to the opinion of the European Monetary Institute³,

Acting in accordance with the procedure referred to in Article 189b of the Treaty⁴,

Whereas the risks associated with commodities trading and commodity derivatives are currently subject to Council Directive 89/647/EEC of 18 December 1989 on a solvency ratio for credit institutions⁵, as last amended by Directive 96/10/EC of the European Parliament and of the Council⁶; whereas, however, the market risks associated with those positions are not captured accurately by Directive 89/647/EEC; whereas it is necessary to extend the concept of the "trading book" to positions in commodities or commodity derivatives which are held for trading purposes and are subject mainly to market risks; whereas institutions must comply with this Directive as regards the coverage of commodity risks on their overall business;

Whereas Council Directive 93/6/EEC of 15 March 1993 on the capital adequacy of investment firms and credit institutions⁷ lays down a standardized method for the calculation of capital requirements for market risks incurred by investment firms and credit institutions; whereas institutions have developed their own risk-management systems (internal models), designed to measure more accurately than the standardized method the market risks incurred by investment firms and credit institutions; whereas the use of more accurate methods of measuring risks should be encouraged;

¹ OJ No C

² OJ No C

³ OJ No C

⁴ OJ No C

⁵ OJ No L 386, 30.12.1989, p. 14.

⁶ OJ No L 85, 3.4.1996, p. 17.

⁷ OJ No L 141, 11.6.1993, p. 1.

Whereas the use of such internal models for the purpose of calculating capital requirements requires strict internal control mechanisms and should be subject to authorization and supervision by the competent authorities; whereas the continued reliability of the results of the internal model calculation should be verified by a back-testing procedure;

Whereas the rules adopted at the wider international level may, in order to encourage more sophisticated risk-management methods based on internal models, lower capital requirements for credit institutions from third countries; whereas those credit institutions compete with investment firms and credit institutions incorporated in the Member States; whereas for investment firms and credit institutions incorporated in the Member States, only an amendment of Directive 93/6/EEC can provide similar incentives for the development and use of internal models;

Whereas for the purpose of calculating market-risk-capital requirements, positions in gold and gold derivatives should be treated in a similar fashion to foreign-exchange positions;

Whereas the issue of sub-ordinated debt should not automatically exclude an issuer's equity from being included in a portfolio qualifying for a 2% specific-risk weighting according to point 33 of Annex I to Directive 93/6/EEC;

Whereas this Directive is in accordance with the work of another international forum of banking supervisors on the supervisory treatment of market risk and of trading-book positions in commodities and commodity derivatives;

Whereas some investment firms dealing primarily in commodities and commodity derivatives may not yet be able to use internal models or to comply with the capital requirements for commodities risk as laid down in this Directive; whereas it is expected that appropriate, cost-effective internal models for investment firms on the risk management of commodities and commodities derivatives, in particular for options, will be available shortly; whereas, in order to give those firms sufficient time to upgrade their risk-management systems, competent authorities, under certain conditions, should not be obliged to prescribe the capital charges for commodities referred to in Annex VII to Directive 93/6/EEC for investment firms before 1 January 2000;

Whereas adoption of this Directive constitutes the most appropriate means of attaining the desired objectives; whereas this Directive is limited to the minimum necessary to attain these objectives and does not go beyond what is needed for this purpose;

Whereas this Directive concerns the European Economic Area (EEA) and whereas the procedure under Article 99 of the Treaty on the European Economic Area has been complied with;

Whereas the Banking Advisory Committee has been consulted on the adoption of this Directive;

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Directive 93/6/EEC is amended as follows:

1. Article 2 is amended as follows:

(a) Point 6(a) and (b), the introductory phrase and (i) and (ii) are replaced by the following:

“(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 the 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;”

(b) Points 15 and 16 are replaced by the following:

“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.”

(c) Point 17, first sentence, is replaced by the following:

“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.”

(d) Point 18 is replaced by the following:

“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 counterparty 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 recognized clearing house or exchange.”

2. Article 4(1), first subparagraph, points (i) and (ii), are replaced by the following:

“(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.”

3. Article 5(2) is replaced by the following:

“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.”

4. Article 7(10) and (11), first sentence, are replaced by the following:

“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 net positions in the trading book of one institution to offset positions 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:”

5. Article 8(5) is replaced by the following:

“5. The competent authorities shall oblige institutions to report to them immediately any case in which their counterparties 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 reports 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.”

6. Article 12a is inserted:

“Article 12a

1. Member States whose investment firms, in the opinion of their competent authorities, 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 may, until 31 December 1999, prescribe alternative spread, carry and outright rates from those indicated in Annex VII, paragraphs 13 and 16.

2. The alternative rates described in paragraph 1 are subject to the following conditions:
 - (i) the alternative rates are set by the competent authorities;
 - (ii) the competent authorities review the alternative rates regularly in the light of developments in commodities markets;
 - (iii) the alternative rates are in no case lower than half the rates prescribed in paragraphs 13 and 16 of Annex VII;
 - (iv) the competent authorities notify the Commission of the alternative rates and make available to the Commission and to other Member States the data on the basis of which the alternative rates have been calculated."
7. Annexes I, II, III, V and VI are amended in accordance with Annex I to this Directive.
8. Annexes VII and VIII set out in Annex II to this Directive are added.

Article 2

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1997 at the latest. They shall immediately inform the Commission thereof.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 3

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

Article 4

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President

1. Annex I is amended as follows:

- (a) In paragraph 4, the last sentence is replaced by the following:

“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 the method used to calculate the margin is equivalent to the method of calculation set out in the remainder of this Annex or in Annex VIII.”

- (b) In paragraph 5, the third subparagraph is replaced by the following:

“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 the method used to calculate the margin is equivalent to the method of calculation set out in the remainder of this Annex or in Annex VIII for such options. 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.”

- (c) Paragraph 6 is replaced by the following:

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

- (d) Paragraph 33(i) is replaced by the following:

“(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.”

2. Annex II is amended as follows:

(a) Paragraph 1 is replaced by the following:

“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.”

(b) Paragraph 3 is replaced by the following:

“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.”

(c) The heading to paragraph 4 and the first subparagraph of paragraph 4.1 are replaced by the following:

“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.”

3. Annex III is amended as follows:

(a) Paragraph 1 is replaced by the following:

"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."

(b) Paragraph 3 is replaced by the following:

"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.”

(c) Paragraph 4, first sentence, is replaced by the following:

“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.”

(d) Paragraph 7 is replaced by the following:

“7. Secondly, 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 this paragraph 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.”

4. Annex V is amended as follows:

(a) Paragraph 2, first sentence, is replaced by the following:

“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.”

(b) Paragraph 4 is replaced by the following:

“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.”

(c) Paragraphs 6 and 7 are replaced by the following:

“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.

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.”

5. Annex VI is amended as follows:

(a) Paragraph 2(i) is replaced by the following:

“(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;”

(b) Paragraph 8(2), second subparagraph, is replaced by the following:

“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 of specific-risk requirements in Annex I and/or, if applicable, Annex VIII 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, Annex VIII, if applicable, and/or the Annex II requirements on these components multiplied by the corresponding factor in column 2.”

*"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.

Netting

6. For the purpose of paragraph 17, 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 authority may permit offsetting between different sub-categories of commodities in cases where the sub-categories are deliverable against each other or between similar commodities if they are close substitutes and a minimum correlation between them of 90% over a minimum of one year can be clearly established. No offsetting may be permitted, however, where the two legs of a commodity swap are in different commodities which do not belong to the same sub-category as defined above.

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 the method used to calculate the margin is equivalent to the method of calculation set out in this Annex or 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 (Table 4) accordingly. 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 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 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 the method used to calculate the margin is equivalent to the method of calculation set out in the remainder of this Annex or in Annex VIII for such options. 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 assign all positions to the appropriate maturity bands in Table 4, with physical stocks being assigned to the first maturity band. For markets which have daily delivery dates, any contracts maturing within ten days of each other may be offset.

Table 4

Maturity band	Spread rate (in %)
(1)	(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
over 3 years	1.50

14. 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 (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.
15. 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.
16. The institution's capital requirement shall be calculated as the sum of:
- (i) the sum of the matched long and short positions, multiplied by the appropriate spread rate as indicated in the second column of Table 4 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.

(b) Simplified approach

17. The institution's capital requirement shall be calculated as the sum of:
- (i) 15% of the net position, long or short, in each commodity, multiplied by the spot price for the commodity;
 - (ii) 3% of the gross position, long plus short, in each commodity, multiplied by the spot price for the commodity.

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 approval of the use of models by the competent authority shall be required in each case.
2. Approval 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 is 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 conducts 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.
3. The competent authorities shall also be satisfied that the institution's models continue to be reasonably accurate, as evidenced by a regular back-testing programme to be conducted by the institution.
4. The institution must conduct, as part of its regular internal auditing process, an independent review of the 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:
- (i) the adequacy of the documentation of the risk-management system and process and the organisation of the risk-control unit;
 - (ii) the integration of market risk measures into daily risk management and the integrity of the management information system;
 - (iii) the process the institution employs for approving risk-pricing models and valuation systems that are used by front and back-office personnel;
 - (iv) the scope of market risks captured by the risk-measurement model and the validation of any significant changes in the risk-measurement process;
 - (v) 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;
 - (vi) 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
 - (vii) the verification process the institution uses to evaluate back-testing that is conducted to assess the model's accuracy.
5. Notwithstanding paragraph 1, institutions using models shall be subject to a separate capital charge to cover the specific risk of traded debt instruments and equities as described in Annex I to the extent that the competent authorities consider that this risk is not incorporated sufficiently into their models. The competent authorities shall in any case set a minimum specific risk charge of 50% of the charge as calculated according to Annex I for institutions using models.
6. For the purpose of paragraph 8(ii) the results of the institution's own calculation shall be scaled up by a multiplication factor of 3.

7. For the same purpose and in addition to the multiplication factor, a "plus"-factor of between 0 and 1 shall be applied to the results of the institution's own calculation in accordance with Table 5, depending on the outcome of the backtesting procedure outlined below.

The value-at-risk number calculated by means of the model shall be compared with the actual change in value of the portfolio. Backtesting shall be carried out daily on the basis of both effective and, assuming unchanged end-of-day positions, hypothetical changes in the portfolio value.

If the change in portfolio value exceeds the value-at-risk calculated using the model, the target has been overshoot. The number of overshootings, as set out in Table 5, shall be based on a spot check of 250 values.

Table 5

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, waive the requirement to add a plus factor if, owing to an exceptional situation, an increase in the multiplication factor would be unjustified and the model is basically sound. In this context, the institution has to prove that an increase would be unjustified.

In the event of numerous overshootings, the competent authority shall revoke the model's recognition or impose appropriate measures to ensure that the model is improved promptly.

The institution is to record all overshootings ascertained by back-testing, together with the reasons for them, and to notify the competent authorities immediately of the extent of the overshootings and the reasons for them.

8. 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; and
 - (ii) an average of the daily value-at-risk measures on each of the preceding sixty business days, multiplied by the factors mentioned in paragraph 6, adjusted by the factor mentioned in paragraph 7.

9. 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 ten-day equivalent holding period;
 - (iv) an effective historical observation period of at least one year;
 - (v) three-monthly data set updates;
10. The competent authorities shall also require that the model captures accurately all the material price risks of options or option-like positions.
11. 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. At a minimum, the following provisions shall be respected:
- (i) For interest-rate risk, the risk-measurement system shall model the yield curve using one of a number of 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 the individual foreign currencies in which the institution's positions are denominated. A separate risk factor shall be used for gold.
 - (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.
12. 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."

FINANCIAL STATEMENT

The proposal has no cost implications for the budget of the European Union

IMPACT ON COMPETITIVENESS AND EMPLOYMENT

I. What is the main justification for the measure?

The purpose of the proposed Directive is to refine the EU rules on the capital adequacy of investment firms and credit institutions with regard to the use of internal risk-management models ("internal models") for the calculation of capital requirements and with regard to capital requirements for commodities and commodity derivatives.

II. Characteristics of the enterprises concerned

The proposed Directive concerns investment firms and credit institutions in the European Union.

III. What are the obligations imposed directly on enterprises?

The proposal introduces new capital requirements only for commodities and commodity derivatives of credit institutions and investment firms subject to Council Directive 93/6/EEC. These instruments will be subject to a refined supervisory treatment requiring a capital cover better reflecting commodity price risks. As a result, the total amount of compulsory capital cover will not necessarily be higher than under current legislation, but depends on the portfolio composition of each institution which may change frequently. The proposed Directive furthermore enables Member States to allow credit institutions and investment firms to use internal models for the purpose of calculating capital requirements. If Member States do so the more accurate risk-measurement may result in a reduction of capital charges.

IV. What obligations are likely to be imposed on enterprises through local authorities?

None

V. Are there any special measures for SMEs? If so, what type of measures are they?

None

VI. What is the likely effect on:

(a) the competitiveness of enterprises?

(b) employment?

(a) The introduction of the internal models method will preserve the competitiveness of EU investment firms and credit institutions which engage in direct competition with credit institutions from non-EU countries already allowing the use of internal models for calculating capital requirements. The use of internal models for the calculation of capital requirements furthermore reduces the need to duplicate calculations for internal and regulatory purposes, which is expected to result in

significant cost savings for investment firms and credit institutions. The use of more accurate calculation methods may also lead to lower capital requirements for investment firms and credit institutions, thus releasing capital which may increase the amount of credit available for enterprises.

For commodities and commodity derivatives the proposed Directive introduces a refined supervisory treatment. The proposed measures are closely in line with regulations by another international forum of banking supervisors in the wider context of G-10 countries, thereby furthering the goal of a level playing field world-wide.

Furthermore, an improved awareness and control of the risks run by investment firms and credit institutions contributes to the strength and, thus, to the competitiveness of financial institutions.

- (b) In anticipation of the introduction of internal models institutions are increasing their hiring of highly qualified IT personnel.

VII. Have the two sides of industry been consulted? What are their views?

No. The proposed measures affect only the prudential legislation governing investment firms and credit institutions.

ISSN 0254-1475

COM(97) 71 final

DOCUMENTS

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Catalogue number : CB-CO-97-156-EN-C

ISBN 92-78-18693-7

Office for Official Publications of the European Communities

L-2985 Luxembourg