THE SUPERVISORY RECOGNITION OF NETTING FOR CAPITAL ADEQUACY PURPOSES

Consultative proposal by the

Basle Committee on Banking Supervision

Basle

April 1993

PROPOSAL FOR A CHANGE IN THE SUPERVISORY RECOGNITION OF NETTING UNDER THE 1988 CAPITAL ACCORD

I. INTRODUCTION AND OVERVIEW

One of the most significant advances of the 1988 Capital Accord was its coverage of the credit risks arising from off-balance-sheet items, including foreign exchange and interest rate related transactions. Careful consideration was given to the possibility of recognising various forms of netting, i.e., for risk weighting the net rather than the gross claims arising out of swaps and similar contracts with the same counterparties. However, at that time, only one particular and rather restrictive form - bilateral netting by novation for the same currency and same value date - was found to be sufficiently robust to be given supervisory recognition.

In November 1990 the BIS published the Lamfalussy Report on interbank netting schemes. It recognised that netting arrangements for both interbank payment orders and forward-value contractual commitments such as foreign exchange contracts have the potential to improve both the efficiency and the stability of interbank settlements, by not only reducing costs but also credit and liquidity risks, provided that certain conditions are met. It concluded that some form of bilateral netting was likely to be legally effective in each G-10 country. The report also concluded that multilateral netting of forward foreign exchange contracts through a central counterparty was likely to be legally enforceable in those countries.[1]

The Basle Committee on Banking Supervision agrees with the analysis in the Lamfalussy Report. In this consultative report it proposes that the 1988 Capital Accord should be revised to recognise, in addition to netting by novation, other forms of bilateral netting of credit exposures to the extent that such arrangements are effective under relevant laws and comply with the other minimum standards set forth in the Lamfalussy Report. The minimum standards for netting schemes set out by the Lamfalussy Report are listed in Annex 1. Specific language to amend the Accord is proposed in Annex 2. The revisions would recognise bilateral netting where the

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1 With the exception only of those contracts entered into on the date of a participant's closure in those countries with a "zero-hour" bankruptcy rule.

appropriate national supervisors are mutually satisfied that agreed minimum legal requirements are met.[2] For banks using the current exposure method, the credit exposure on bilaterally netted forward transactions would be calculated as the sum of the net marked-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. For banks now using the original exposure method, a reduction in the credit conversion factors applied to bilaterally netted transactions would be permitted on a temporary basis until the market risk-related capital requirements are implemented. At that time the original exposure method would cease to be available for netted transactions.

The Committee also has considered what might guide its future assessment of credit risk in multilateral netting arrangements. It is premature to make proposals for the treatment of multilateral netting schemes, which must await a further analysis when the operational workings particular to the various schemes under development become clearer. However, a discussion of the issues which might provide a basis for a possible approach at some future date appears in Annex 3.

II. LEGAL REQUIREMENTS FOR THE RECOGNITION OF NETTING

The Committee starts from the Lamfalussy Report's observation that no single form of netting arrangement can be identified as appropriate in all jurisdictions. It is also conscious that it is not possible to be absolutely certain that netting in all cases does reduce risk in the absence of experience with successful defence against litigation. For these reasons, the Committee's proposals are deliberately cautious in respect of their legal requirements.

The Committee's role will be to lay down minimum standards which national supervisors would apply. One such standard would require that a particular form of netting contract be sufficiently robust legally. The language proposed in Annex 2 clarifies this standard.

The Committee has examined the issue of walkaway clauses very carefully. A walkaway clause is a provision which permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the

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2 When implementing this proposal, it would, of course, be for supervisory authorities to determine how to treat banks that are not internationally active.

estate of a defaulter, even if the defaulter is a net creditor. It is argued that this provision is in practice rarely enforced but that it may provide a useful bargaining tool for counterparties dealing with a defaulter. However, walkaway clauses introduce an element of instability and uncertainty which the Committee sees as unsuitable in a netting environment.[3] Therefore, any netting arrangement that contains walkaway clauses would not be considered a qualifying arrangement for the purpose of this proposal.

The criteria set out in Annex 2 represent the minimum legal requirements for internationally-active banks to receive the benefit of net treatment under the Accord; individual national authorities would be permitted, as always, to impose additional requirements or more restrictive conditions. One case where this might happen is the range of instruments which would be entitled to a supervisory benefit from netting, especially in respect of cross-product netting. Cross-product netting might add technical complexity and raise legal issues requiring careful consideration, especially in those jurisdictions where different legal rules apply for different types of contracts. However, the Committee is not aware of any fundamental legal impediments which would necessitate a general ban.

The Committee will promote consultation between national supervisors to facilitate monitoring of adherence to these minimum standards.

III. THE TREATMENT OF BILATERAL NETTING FOR THE PURPOSE OF CAPITAL MEASUREMENT

(a) Under the current exposure method

The present rules in the Accord permit a choice between two methods of calculating the credit exposure on forward obligations. The method used by most major banks (the current exposure method) is to mark each instrument to market, sum the values of all instruments with positive

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3 This view is to some extent shared by the market itself since the two existing projects for multilateral clearing houses would not accept in their systems contracts with walkaway clauses, and the International Swap Dealers Association has recently excluded such clauses as a standard feature of its master agreements, although they can still be used as an option by counterparties.

values[4] to establish the current replacement cost and add to this an amount (an add-on) for potential future exposure that is based on the notional underlying principal of each contract.

(i) <u>The calculation of replacement costs for netted contracts</u>

The replacement cost for those individual transactions subject to each bilateral netting arrangement will be recorded for capital purposes on a net basis to produce a single credit or debit position for each counterparty. Of course, such treatment does not eliminate management's responsibility for having adequate risk management and control systems in place. For example, the current exposure method does not capture "roll-off" exposures arising from the change over time of the net mark-to-market exposure that can result when some of the contracts mature or are settled early, regardless of any movements in interest or exchange rates. Banks should carefully monitor such changes.

The calculation of replacement costs on a net basis will permit a considerable alleviation of the capital charge on portfolios under a netting agreement. According to a review of the relative proportion of replacement cost and add-ons in the capital charge for a sample of swaps or foreign exchange contracts portfolios in different countries, the replacement cost can often amount to 50% to 80% of the total capital charge (replacement cost plus add-on). Assuming that bilateral netting reduces replacement cost by up to 50%, this could represent an alleviation of 25% to 40% in the capital charge.

(ii) <u>The calculation of add-ons for netted contracts</u>

For netted transactions, the Committee favours retaining the Accord's present approach to calculating add-ons for potential future exposure, i.e., multiplying the total notional amount of each transaction by the appropriate percentage. Various methods have been considered for calculating add-ons in a bilateral netting environment. However, the Committee has not yet identified any evidence suggesting that the need for add-ons declines appreciably in such an environment. Generally, netting would be expected to reduce the level of exposure, but it may not have much of an effect on the likely changes in exposure, leaving potential future exposure essentially unchanged. Although the Committee is open to the

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4 Instruments with positive value are those that have a market value greater than zero.

continuing exploration of alternative easy-to-understand approaches that might achieve better results, the current lack of a compelling case for any of the alternative approaches weighs heavily against their adoption. The Committee recognises some imperfections in the present methodology. For example, netting can reduce potential changes in exposure in particular portfolios, in which case the present approach could be considered too conservative, and it can increase potential changes in exposure in other portfolios, which would suggest the present approach sometimes might not be conservative enough. Nevertheless, the Committee favours retaining the general approach of the Accord unless demonstrably superior alternatives are put forth.

(b) Under the original exposure method

Under the original exposure method of calculating the credit exposure on forward obligations there is no separate assessment of the current and potential future exposure. It is therefore not possible to measure the amounts by which credit exposures can be netted. A large majority of the Committee feels this fact makes the original exposure method inherently unsuitable for assessing credit risk in a netting environment. As a result, this majority believes no internationally active bank should be permitted to receive supervisory recognition of netting contracts if it uses this method. A small minority believes supervisory recognition can be given relying on the expectation that credit risk will be reduced by netting even if it is not precisely measured. The Committee has agreed that supervisory recognition can be given on a temporary basis in the form of lower credit conversion factors. The suggested reductions in credit conversion factors are specified in Annex 2.

ANNEX 1

Minimum standards for netting schemes set out by the Lamfalussy report

I. Netting schemes should have a well-founded legal basis under all relevant jurisdictions.

II. Netting scheme participants should have a clear understanding of the impact of the particular scheme on each of the financial risks affected by the netting process.

III. Multilateral netting systems should have clearly-defined procedures for the management of credit risks and liquidity risks which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.

IV. Multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net-debit position.

V. Multilateral netting schemes should have objective and publicly-disclosed criteria for admission which permit fair and open access.

VI. All netting schemes should ensure the operational reliability of technical systems and the availability of back-up facilities capable of completing daily processing requirements.

Proposed amendment to the 1988 Capital Accord for bilateral netting

In the last sentence of the first paragraph on page 28 (Annex 3) of the 1988 Capital Accord the word "are" would be replaced with "may be"

The language below would replace page 30 (Annex 3) of the 1988 Capital Accord in respect of the recognition of bilateral netting for the purpose of calculating capital requirements. The footnote numbers are as they would appear in the revised Capital Accord.

"Careful consideration has been given to the issue of **bilateral netting**, i.e., weighting the net rather than the gross claims arising out of swaps and similar contracts with the same counterparties.[6] The Committee is concerned that if a liquidator of a failed counterparty has (or may have) the right to unbundle netted contracts, demanding performance on those contracts favourable to his client and defaulting on unfavourable contracts, there is no reduction in counterparty risk.

Accordingly, it has been agreed that:

(a) Banks may net transactions subject to novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.

(b) Banks may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.

(c) In both cases (a) and (b), a bank will need to satisfy its national supervisor that it has:[7]

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6 Payments netting, which is designed to reduce the operational costs of daily settlements, will not be recognised in the capital framework since the counterparty's gross obligations are not in any way affected.

7 In cases where an agreement as described in (a) has already been recognised prior to the effect of this amendment to the Accord, the supervisor will determine whether any additional steps consistent with the requirements below are necessary to satisfy itself of the legal validity of the agreement.

(1) a netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of a counterparty's failure to perform due to default, bankruptcy or liquidation, the bank would have a claim or obligation, respectively, to receive or pay only the net value of the sum of unrealised gains and losses on included transactions;

(2) written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:

- the law of the jurisdiction in which the counterparty is chartered and, if the counterparty is a branch of a foreign bank, then also under the law of the jurisdiction in which the branch is located;
- the law that governs the individual transactions; and
- the law that governs any contract or agreement necessary to effect the netting.

The national supervisor, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions[8];

(3) procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant laws.

Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements pursuant to this Accord.

For banks using the **current exposure** method, credit exposure on bilaterally netted forward transactions will be calculated as the sum of: the net marked-to-market replacement cost, if positive, plus an add-on

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8 Thus, if any of these supervisors is dissatisfied about enforceability under its laws, the netting contract or agreement will not meet this condition and neither counterparty could obtain supervisory benefit.

based on the notional underlying principal.[9] The scale of add-ons to apply will be the same as those for non-netted transactions as set out in this Annex. The Committee will continue to review the scale of add-ons to make sure they are appropriate. In the case of foreign exchange contracts and other similar contracts, in which notional principal is equivalent to cash flows, total notional principal would be determined by reference to the pays or receipts with the netting counterparty on each value date, after taking account of netting of amounts falling due on each value date in the same currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.

The **original exposure** method may also be used for transactions subject to netting agreements which meet the above legal requirements until market risk-related capital requirements are implemented, at which time the original exposure method will cease to be available for netted transactions. The conversion factors to be used during the transitional period when calculating the credit exposure of bilaterally netted transactions will be as follows:

Maturity	Interest rate contracts	Exchange rate contracts
Less than one year	0.35%	1.5%
One year and less than two years	0.75%	3.75% (i.e. 1.5% + 2.25%)
For each additional year	0.75%	2.25%

These factors represent a reduction of approximately 25% from those on page 29 of the Accord."

9 Supervisors will take care to ensure that the add-ons are based on effective rather than apparent notional amounts.

ANNEX 3

Multilateral netting

Possible approach for supervisory treatment at some future date

(a) General considerations

Multilateral netting is designed to extend the benefits of netting to cover contracts which originate with any of a group of counterparties that participate in the netting arrangement, instead of with just a single counterparty as in bilateral netting. This can be achieved in practice by netting all transactions that originate bilaterally through a central counterparty - a clearing house. The legal techniques for achieving this netting may vary, but the result will be that for every eligible transaction agreed by a pair of members, the clearing house would be interposed as the common legal counterparty to each member, and the members would have no obligations towards each other under the deal. For each member, the clearing house would maintain a running, legally binding net position in each currency and each value date eligible for netting, all subject to a binding netting agreement between the member and the clearing house. Thus, for each member of the clearing house, multiple transactions that originate with many counterparties can be amalgamated and netted. As a result, in a well-designed multilateral netting scheme, exposures would generally be a fraction of those that would arise in a non-netting environment.[1]

If a clearing house member defaults, a foreign exchange clearing house would have to replace the cash flows that the defaulting member's portfolio of foreign exchange contracts would have produced. It would establish immediately how much it should pay to, or claim from, the

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1 For example, according to market participants, simulations suggest that multilateral foreign exchange netting would reduce replacement costs by about 80% to 85% for a given set of transactions conducted in the absence of netting, and would reduce settlement flows by about 75% compared with the payments that would be needed to settle the corresponding gross obligations. (Estimates of the benefits of multilateral netting can vary somewhat depending on the specific aspects of the simulations, such as the nature of the transactions netted, the number of clearing-house members and the patterns of trading.) Consistent with the Accord, this paper is concerned only with capital requirements for exposures related to replacement costs.

defaulting member, which would be the replacement value of the member's portfolio. In the event of a claim on the defaulter, clearing house members would have to cover the shortfall, since the clearing house may have very limited resources of its own.

Losses could be recovered from the membership in different ways. In a defaulter-pays (or centralised) clearing house, each member would be obliged to post collateral equal to its own net debit with the clearing house. In the event of a member's default, the clearing house would seize the defaulting member's collateral to cover the amount in default. In a survivors-pay (or decentralised) clearing house, a loss allocation rule would apply to the non-defaulting, surviving members. For example, losses could be allocated in proportion to a measure of the surviving members' bilateral relationship to the defaulting member, such as notional bilateral exposures to the defaulting member.[2]

However, as a practical matter, it could be misleading to make a strong distinction between the survivors-pay and the defaulter-pays models. In practice, multilateral netting schemes could be a hybrid of these models. That is, members would be obliged to reimburse the clearing house for losses according to a predetermined loss allocation rule, but losses to be allocated to survivors would be reduced in the first instance by collateral posted by the defaulting member. In addition, even nominal defaulter-pays schemes must include an allocation rule for losses in the event that a defaulter's posted collateral is inadequate to cover its net debit, for whatever reason.

The Lamfalussy Report sets out six minimum standards for netting schemes (see Annex 1). For example, multilateral netting arrangements will be expected to have, among other things, safeguards to address settlement risk in a responsible manner, including risk controls such as internal limits, adequate and reliable liquidity support, and appropriate technical back-up facilities. The adherence of multilateral schemes to these standards will be monitored by central banks and other relevant

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2 Notional bilateral exposures arise from the bilateral transactions that originating members submit to the clearing house for netting, and represent the bilateral positions that would have resulted in the absence of multilateral netting. They are notional (and have no legal standing) since once the transaction is accepted for netting by the clearing house, it becomes the legal counterparty to each member.

authorities. However, each national supervisor whose banks belong to a multilateral netting arrangement should be satisfied that the standards are met before extending supervisory recognition to the netting performed under the scheme.

(b) Capital requirements under multilateral netting

(i) Capital requirements for current exposure

Under any multilateral netting arrangement, there must be an agreed formula whereby any losses suffered by the clearing house from the default of any of the members would be allocated to other members, even if the possibility of loss for the clearing house is remote as a result of comprehensive collateral arrangements. This formula will provide the current exposure for each member. It appears that the multilateral foreign exchange netting arrangements now being developed will rely on procedures that would allocate the sharing of a loss pro rata according to the pattern of notional bilateral claims on the defaulting member. That is, if a member's default (or close-out) caused a replacement loss to the clearing house, a bank would be allocated a loss share in proportion to its notional bilateral exposure to the defaulting (or closed-out) member. If the clearing house requires collateral the loss to be allocated would be the residual loss (the amount by which the replacement loss exceeded the value of the collateral).

A starting-point would be to regard a bank's current exposure as the sum of the loss shares that it would be allocated in the event of the default (or close-out) of each clearing house member to which it had a notional bilateral exposure, after factoring in the use of collateral available to the clearing house.[3] The sum of the loss shares provides an analogous treatment with non-netted contracts. In the case of non-netted contracts, the exposure is the sum of the exposure to the potential default

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3 In the case of a clearing house that on a daily basis marks all outstanding contracts to market and collects from its members daily losses and pays out to its members daily gains (i.e., collects and pays variation margin), the capital treatment would be consistent with that of exchange-traded instruments in footnote 3 of Annex 3 of the Accord. Specifically, no capital would be required. In cases where a clearing house requires its members to collateralise fully or partially potential losses, but does not collect or pay variation margin, the present treatment of collateral in Section II(iv) of the Accord would apply.

of each counterparty. Of course, the effect of multilateral netting will tend to lower this exposure.

At this time, the Committee has not reached conclusions about the level of the capital requirements that should be attached to this measure of current exposure. This question will be kept under review in the light of the continuing development of the multilateral foreign exchange netting initiatives and their oversight by central banks and other relevant authorities. In due course, further consultation will be needed.

(ii) Capital requirements for potential future exposure

The capital requirements under consideration by the Committee would also require a charge for potential future exposure. However, potential future exposure for a member of a multilateral netting facility would be determined by a combination of the evolution of underlying rates and prices, the changing pattern of clearing house exposure to other members, and the loss allocation procedure in place. A highly simplified approximation will be required to determine the add-ons needed to cover the resulting exposure.

(c) Risk weights for the clearing house

Banks will have exposure to the clearing house for example through funding and liquidity back-up, to which a risk weight would need to be applied. Consistent with the Accord, the weight applicable to claims on a clearing house would be the normal 100% private-sector weighting, unless the clearing house is incorporated as a bank and becomes subject to bank supervisors' rules, in which case a 20% weight would be appropriate, or the host government or central bank has given a clear and unequivocal guarantee for all of its obligations, in which case a zero weight would be justified.

(d) Summary questions

(i) If multilateral netting arrangements are recognised, the Committee would intend to apply the same legal requirements as is proposed for the recognition of bilateral netting arrangements. If market participants think different standards should apply, please explain why.

(ii) The Committee would welcome comments and suggestions regarding the capital requirements for current exposure under multilateral netting discussed in Section (b)(i) above.

(iii) The Committee would welcome comments and suggestions regarding the capital requirements for potential future exposure under multilateral netting discussed in Section (b)(ii) above.