

THE TRADING BOOK AND HEDGING EXPOSURES

1.0 The Trading Book

A consistent approach must be adopted in relation to those positions in financial instruments which are capable of being included in the *trading book* always subject to the "Internal Hedges" clauses (see 2.0 below). Trading intent shall be evidenced on the basis of the strategies, policies and procedures set up by the institution to manage the position or portfolio in accordance with section 1.1 below. For this purpose positions may be considered as held with a trading intent if:-

- (a) they are marked-to-market on at least a daily basis as a part of the internal risk management processes including the recognition of accruing interest, dividends and other benefits as appropriate;
- (b) the position takers have autonomy in entering into transactions within predetermined limits; or
- (c) they satisfy any other criteria which the credit institution applies to the composition of its trading book on a consistent basis.

Each credit institution shall draw up a policy statement which lays down which activities are normally considered trading and constitute part of the trading book.

1.1 Trading Intent

Credit institutions are required to have, and discuss with the authority, a policy statement¹ on the subject of valuing positions, which in particular should address the valuation process for those items where market prices are not readily available. This policy statement should be devised in conjunction with the credit institution's internal auditors or another qualified independent group and, if necessary, external experts such as external auditors.

Positions/portfolios held with trading intent shall comply with the following requirements:

- (a) there must be a clearly documented trading strategy for the position/instrument or portfolios, approved by senior management, which shall include expected holding horizon;
- (b) there must be clearly defined policies and procedures for the active management of the position, which shall include the following:
 - (i) positions entered into on a trading desk;
 - (ii) position limits are set and monitored for appropriateness;

¹ Refer to paragraph 30 of the Rule.

- (iii) dealers have the autonomy to enter into/manage the position within agreed limits and according to the agreed strategy;
 - (iv) positions are reported to senior management as an integral part of the institution's risk management process including the recognition of accruing interest, dividends and other benefits as appropriate;
 - (v) positions are actively monitored with reference to market information sources and an assessment made of the marketability or hedge-ability of the position or its component risks, including the assessment of, in particular, the quality and availability of market inputs to the valuation process, level of market turnover, sizes of positions traded in the market;
- (c) there must be clearly defined policy and procedures to monitor the position against the institution's trading strategy including the monitoring of turnover and sale positions in the institution's trading book.

1.2 Systems and Controls

Institutions shall establish and maintain systems and controls sufficient to provide prudent and reliable valuation estimates.

Systems and controls shall include at least the following elements:

- (a) documented policies and procedures for the process of valuation, including clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, guidelines for the use of unobservable inputs reflecting the institution's assumptions of what market participants would use in pricing the position, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, month end and ad-hoc verification procedures;
- (b) clear and independent (i.e. independent of front office) reporting lines for the department accountable for the valuation process.

The reporting line shall ultimately be to a main board executive director.

1.3 Prudent Valuation Methods

Trading Book Requirements

A credit institution must value its positions on a prudent and consistent basis; the applied policy must reflect the points noted below:-

- (a) A credit institution may mark-to-market positions using either a close out valuation based on two way prices (a long position shall be valued at its current *bid* price and a short position at its current *offer* price) or alternatively using a mid-market price but making a provision for the spread between *bid*

and *offer* prices for different instruments. The credit institution must have due regard to the liquidity of the position concerned and any special factors which may adversely affect the closure of the position;

- (b) Where the prices for a credit institution's options positions are not published, a bank must determine the market value as:-
 - (i) for purchased options, the mark-to-market value must be the product of:-
 - the "in the money amount"; and
 - the quantity underlying the option;
 - (ii) for written options, the mark-to-market value must be the initial premium received for the option plus the product of:-
 - the amount by which the current "in the money amount" exceeds either the "in the money amount" at the time the contract was written, or zero if the contract was "out of the money" at the time that it was written; and
 - the quantity underlying the option;
- (c) A credit institution must calculate the value of a swap contract, or an FRA, having regard to the net present value of the future cashflows of the contract, using current interest rates relevant to the periods in which the cashflows will arise;
- (d) In the event that a credit institution is only able to access indicative prices then, having regard to the fact that they are a guide only, such prices may have to be adjusted to some degree in order to arrive at a prudent valuation;
- (e) In the event that the credit institution is only able to access mid-market or single values it should have regard to the fact that these prices will have to be adjusted to some degree in order to arrive at a prudent valuation;
- (f) Where a credit institution has a long position and a short position in an exactly offsetting instrument, as in the case of a security and an American Depository Receipt representing the same security, they may both be valued on a mid-market basis subject to the following conditions:
 - (i) the strategy should have been entered into as a specific arbitrage opportunity and should have the certainty of a locked-in profit (or loss) representing a worst case outcome;
 - (ii) the profit (or loss) must be realisable instantly, subject to a reasonably short conversion period, and at any time. Thus at no time should there be restrictions on the ability to convert;

(iii)

- (iii) positions which are not part of the arbitrage should be valued at their respective bid or offer prices as appropriate;
- (iv) the underlying positions should be of reasonable liquidity and held in quantities which are not so large that they would affect their marketability; and
- (v) any conversion costs and foreign exchange costs should be provided for at the appropriate time and should be separately monitored over the life of the arbitrage.

For a repurchase, or equivalent, transaction to be considered to be part of the trading-book the securities being repurchased, lent, or contributing collateral for such a transaction, must be in the trading book.

Positions and exposures which are not in the trading book are deemed to be in the banking book. Positions and exposures in the latter are subject to credit risk weighting capital requirements under the Capital Requirements Rule BR/04.

Instruments held in the trading portfolio but which are eligible for deduction directly in the computation of Own Funds shall not be subject to any market related capital requirements. Therefore, the total charge on such positions can in no circumstances exceed 100% of deduction from capital.

Wherever a credit institution or subsidiary acts as principal (even in the context of activity described as "broking" or "customer business"), positions should be allocated to the trading book where the underlying intent is "trading". This applies even if the nature of the business means that the only risks deemed to be incurred by the credit institution or subsidiary is counterparty risks (i.e. no market risk charges apply).

Cash items having a residual maturity of one month or less are exempt from the daily marking-to-market in the trading book.

Appendix D gives a list of Instruments which qualify for inclusion in the trading book of a credit institution.

Institutions shall mark their positions to market whenever possible. Marking to market is the daily valuation of positions at readily available close out prices that are sourced independently. Examples include exchange prices, screen prices, or quotes from several independent reputable brokers.

When marking to market, the more prudent side of bid/offer shall be used unless the institution is a significant market maker in the particular type of financial instrument or commodity in question and it can close out at mid market. Having arrived at a valuation mechanism for a single position or group of similar positions then the valuation approach must be applied consistently.

Where marking to market is not possible, institutions shall conservatively mark to model their positions/portfolios before applying trading book capital treatment. Marking to model is defined as any valuation which has to be benchmarked,

extrapolated or otherwise calculated from a market input.

The following requirements must be complied with when marking to model:

- (a) senior management shall be aware of the elements of the trading book or of other fair-valued positions which are subject to mark to model and shall understand the materiality of the uncertainty thereby created in the reporting of the risk/performance of the business;
- (b) market inputs shall be sourced, where possible, in line with market prices, and the appropriateness of the market inputs of the particular position being valued and the parameters of the model shall be assessed on a frequent basis;
- (c) where available, valuation methodologies which are accepted market practice for particular financial instruments or commodities shall be used;
- (d) where the model is developed by the institution itself, it shall be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process;
- (e) there shall be formal change control procedures in place and a secure copy of the model shall be held and periodically used to check valuations;
- (f) risk management shall be aware of the weaknesses of the models used and how best to reflect those in the valuation output;
- (g) the model shall be subject to periodic review to determine the accuracy of its performance (e.g. assessing the continued appropriateness of assumptions, analysis of P&L versus risk factors, comparison of actual close out values to model outputs).

For the purposes of point (d), the model shall be developed or approved independently of the front office. It shall be independently tested. This includes validating the mathematics, the assumptions and the software implementation.

Independent price verification should be performed in addition to daily marking to market or marking to model. This is the process by which market prices or model inputs are regularly verified for accuracy and independence. While daily marking to market may be performed by dealers, verification of market prices and model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). Where independent pricing sources are not available or pricing sources are more subjective, prudent measures such as valuation adjustments may be appropriate.

Valuation Adjustments

Institutions shall establish and maintain procedures for considering valuation adjustments.

General Standards

The authority shall require the following valuation adjustments to be formally considered: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, future administrative costs and, where relevant, model risk.

Standards for Less Liquid Items

Less liquid positions could arise from both market events and institution-related situations e.g. concentrated positions and/or stale positions.

Institutions shall establish and maintain procedures for calculating an adjustment to the current valuation of less liquid positions. Such adjustments shall, where necessary, be in addition to any changes to the value of the position required for financial reporting purposes and shall be designed to reflect the illiquidity of the position. Under those procedures, institutions shall consider several factors when determining whether a valuation adjustment is necessary for less liquid positions. Those factors include the amount of time it would take to hedge out the position/risks within the position, the volatility and average of bid/offer spreads, the availability of market quotes (number and identity of market makers) and the volatility and average of trading volumes including trading volumes during periods of market stress, market concentrations, the aging of positions, the extent to which valuation relies on marking-to-model, and the impact of other model risks.

When using third party valuations or marking to model, institutions shall consider whether to apply a valuation adjustment. In addition, institutions shall consider the need for establishing adjustments for less liquid position and on an ongoing basis review their continued suitability.

With regard to complex products including, but not limited to, securitisation exposures and n-th-to-default credit derivatives, institutions shall explicitly assess the need for valuation adjustments to reflect the model risk associated with using a possibly incorrect valuation methodology and the model risk associated with using unobservable (and possibly incorrect) calibration parameters in the valuation model.

1.4 Policy Statements

1. Institutions shall have clearly defined policies and procedures for overall management of the trading book. Compliance with these policies and procedures shall be fully documented and subject to periodic internal audit. At a minimum, these policies and procedures shall address:
 - (a) the activities the institution considers to be trading and as constituting part of the trading book for capital requirement purposes;
 - (b) the extent to which an position can be marked-to-market daily by reference to an active, liquid two-way market;
 - (c) for positions that are marked-to-model, the extent to which the

institution can:

- (i) identify all material risks of the position;
 - (ii) hedge all material risks of the position with instruments for which an active liquid two-way market exists; and
 - (iii) derive reliable estimates for the key assumptions and parameters used in the model;
- (d) the extent to which the institution can, and is required to, generate valuations for the position that can be validated externally in a consistent manner;
- (e) the extent to which legal restrictions or other operational requirements would impede the institution's ability to effect a liquidation or hedge of the position in the short term;
- (f) the extent to which the institution can, and is required to, actively risk manage the position within its trading operation; and
- (g) the extent to which the institution may transfer risk or positions between the non-trading and trading books and the criteria for such transfers.
2. Term trading-related repo-style transactions that an institution accounts for in its non-trading book may be included in the trading book for capital requirement purposes so long as all such repo-style transactions are included. For this purpose, trading-related repo-style transactions are defined as those that meet the requirements of Appendix C Section 1.1 and paragraph 27 of the Rule, and both legs are in the form of either cash or securities includable in the trading book. Regardless of where they are booked, all repo-style transactions are subject to a non-trading book counterparty credit risk charge.

2.0 Internal Hedges

The Rule provides for trading book exposures to be hedged by the taking of positions which, in their own right, would not normally qualify for inclusion in the trading book. Such positions must be subject to the daily mark-to-market discipline and will attract both general market risk and counterparty risk capital requirements.

There are occasions when, in order to hedge exposures in the banking book, positions are taken in certain instruments which would normally be expected to fall within the trading book, e.g. interest rate swaps. Such instruments are not, however, part of the trading book and should be excluded in calculating the capital requirement for the trading book. They will, however, be subject to the credit risk capital requirement for the banking book. The basis on which the hedging transactions in this and the above paragraph will be identified should be covered by the policy statement agreed with the authority for the allocation of positions between the banking and trading books.

The transactions entered into to hedge exposures in the banking book, as outlined in the previous paragraph, may be transacted either with external counterparties or, internally, with the trading book as effective counterparty.

The authority, in calculating the capital requirement for the trading book, would propose to take account of such internal transactions provided they satisfy the following conditions:-

- (i) the arrangements for carrying out internal hedging transactions must be the subject of the policy statement agreed with the authority which should ensure that no abusive switching designed to minimise capital charges can take place;
- (i) a clearly identifiable and designated exposure exists in the banking book which it is deemed prudent to hedge;
- (iii) the exposure must be hedged by the use of a financial instrument which would normally fall within the trading book;
- (iv) the transaction must be effected according to normal market practice and must be priced at arms length; and
- (v) a clear audit trail must be created at the time the transaction was entered into.

An internal hedge is a position that materially or completely offsets the competent risk element of a non-trading book position or a set of positions. Positions arising from internal hedges are eligible for trading book capital treatment, provided that they are held with trading intent and that the general criteria on trading intent and prudent valuation specified above in the sections relating to Trading Intent and Systems and Controls are met. In particular:

- (a) internal hedges shall not be primarily intended to avoid or reduce capital requirements;
- (b) internal hedges shall be properly documented and subject to particular internal approval and audit procedures;
- (c) the internal transaction shall be dealt with at market conditions;
- (d) the bulk of the market risk that is generated by the internal hedge shall be dynamically managed in the trading book within the authorised limits;
- (e) internal transactions shall be carefully monitored.

Monitoring must be ensured by adequate procedures.

The treatment referred to in the previous paragraph applies without prejudice to the capital requirements applicable to the “non-trading book leg” of the internal hedge.

By way of derogation from the above, when an institution hedges a non-trading book credit risk exposure using a credit derivative booked in its trading book (using an internal hedge), the non-trading book exposure shall not be deemed to be hedged for the purposes of calculating capital requirements unless the institution purchases from an eligible third party protection provider a credit derivative meeting the requirements set out in Appendix 2 Section III.3 paragraph 2.3.2 of Banking Rule BR/04 with regard to the non-trading book exposure. Without prejudice to the second sentence of paragraph 14 in Annex II, where such third party protection is purchased and recognised as a hedge of a non-trading book exposure for the purposes of calculating capital requirements, neither the internal nor external credit derivative hedge shall be included in the trading book for the purposes of calculating capital requirements.