# CALCULATING CAPITAL REQUIREMENTS FOR SETTLEMENT AND COUNTERPARTY CREDIT RISK

## **Introduction**

- 1. Settlement and counterparty risk arises in both the banking book and the trading book.
  - A capital charge, as defined below, applies for settlement/delivery risk in the case of 'unsettled transactions' and counterparty risk in the case of 'free deliveries', during the life of those transactions involving the delivery of an instrument against receipt of cash whether or not these transactions occur in either the banking book or the trading book. Hence, this Annex introduces new capital requirements for the treatment of 'unsettled transactions' and 'free deliveries' in the banking book which effectively brings it in line with the trading book treatment.
- 2. For the purposes of this Annex, and for the calculation of counterparty risk in the trading book and for the calculation of minimum capital requirement for credit risk under Banking Rule BR/04, and without prejudice to paragraph 6 of Annex IV of Banking Rule BR/04, exposures to recognised third-country investment firms and exposures to recognised clearing houses and exchanges shall be treated as exposures to institutions.
- 3. The authority does not plan to publish a list of investment firms (inside or outside the E.E.A.) that qualify for 20% risk weighting. It expects institutions' credit departments to know the status of their counterparties.

#### Settlement/Delivery Risk (Applicable for both trading and banking books)

4. In the case of transactions in which debt instruments, equities, foreign currencies 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, foreign currency 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 Table 1 in order to calculate its capital requirement.

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<sup>&</sup>lt;sup>1</sup> The implementation of this Annex does not require the introduction of capital charges in respect of settlement/delivery risk on spot and forward foreign exchange transactions.

Table 1

Number of working days after due settlement date	Column A (%)
0 - 4	0
5 - 15	8
16 - 30	50
31 - 45	75
46 or more	100

#### Free deliveries

- 5. A credit institution shall be required to hold own funds, as set out in Table 2, if:
  - (i) it has paid for securities, foreign currencies or commodities before receiving them or it has delivered securities, foreign currencies 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.

Table 2

Capital Treatment for Free Deliveries

Transaction Type	Up to first contractual payment or delivery leg	From first contractual payment or delivery leg up to four days after second contractual payment or delivery leg	From 5 business days post second contractual payment or delivery leg until extinction of the transaction
Free delivery	No capital charge	Treat as an exposure	Deduct value transferred plus current positive exposure from own funds

6. In applying a risk weight to free delivery exposures treated according to column 3 of Table 2, institutions using the approach set out under the Internal Ratings Based (IRB) Approach, may assign Probability of Defaults to counterparties, for which they have no other non-trading book exposure, on the basis of the counterparty's external rating. Credit institutions using own estimates of Loss Given Defaults (LGD) may apply the LGD set out in the

IRB Approach of Banking Rule BR/04 to free delivery exposures treated according to column 3 of Table 2 provided that they apply it to all such exposures. Alternatively, institutions using the approach set out under the IRB Approach in Banking Rule BR/04 may apply the risk weights, as set out under the Standardised Approach in Banking Rule BR/04 provided that they apply them to all such exposures or may apply a 100% risk weight to all such exposures.

If the amount of positive exposure resulting from free delivery transactions is not material, institutions may apply a risk weight of 100% to these exposures.

7. In cases of a system wide failure of a settlement or clearing system, competent authorities may waive the capital requirements calculated as set out in paragraphs 4 and 5 above until the situation is rectified. In this case, failure of counterparty to settle a trade shall not be deemed a default for purposes of credit risk.

# **Counterparty Credit Risk (CCR)**

- 8. An institution shall be required to hold capital against the CCR arising from exposures due to the following:
  - (a) OTC derivative instruments and credit derivatives;
  - (b) Repurchase agreements, reverse repurchase agreements, securities or commodities lending or borrowing transactions based on securities or commodities included in the trading book;
  - (c) margin lending transactions based on securities or commodities; and
  - (d) long settlement transactions.
- 9. Subject to paragraphs 10 to 13, exposure values and risk-weighted exposure amounts for such exposures shall be calculated in accordance with the provisions of Banking Rule BR/04 with references to 'credit institutions' in that Rule interpreted as references to 'institutions', references to 'parent credit institutions' interpreted as references to 'parent institutions', and with concomitant terms interpreted accordingly.
- 10. For the purposes of paragraph 9:

Annex III of Banking Rule BR/04 shall be considered to be amended to include derivative instruments for the transfer of credit risk;

Annex IV of Banking Rule BR/04 shall be considered to be amended to include, after the footnotes of Table 1, the following text:

"To obtain a figure for potential future credit exposure in the case of total return swap credit derivatives and credit default swap credit derivatives, the nominal amount of the instrument is multiplied by the following percentages:

- where the reference obligation is one that if it gave rise to a direct exposure of the institution it would be a qualifying item for the purposes of Annex III: 5%; and
- where the reference obligation is one that if it gave rise to a direct exposure of the institution it would not be a qualifying item for the purposes of Annex III: 10%.

However, in the case of a credit default swap, an institution the exposure of which arising from the swap represents a long position in the underlying shall be permitted to use a figure of 0% for potential future credit exposure, unless the credit default swap is subject to closeout upon insolvency of the entity the exposure of which arising from the swap represents a short position in the underlying, even though the underlying has not defaulted, in which case the figure for potential future credit exposure of the institution shall be limited to the amount of premia which are not yet paid by the entity to the institution.".

Where the credit derivative provides protection in relation to  $n^{th}$  to default' amongst a number of underlying obligations, which of the percentage figures prescribed above is to be applied is determined by the obligation with the  $n^{th}$  lowest credit quality determined by whether it is one that if incurred by the institution would be a qualifying item for the purposes of Annex III.

- 11. For the purposes of paragraph 9 above, in calculating risk-weighted exposure amounts, institutions shall not be permitted to use the Financial Collateral Simple Method, set out in Appendix 2 Section III.4 1.4.1 to 1.4.6 of Banking Rule BR/04 for the recognition of the effects of financial collateral.
- 12. For the purposes of paragraph 9 above, in the case of repurchase (a) transactions and securities or commodities lending or borrowing transactions booked in the trading book, all financial instruments and commodities that are eligible to be included in the trading book may be recognised as eligible collateral. For exposures due to OTC derivative instruments booked in the trading book, commodities that are eligible to be included in the trading book may also be recognised as eligible collateral. For the purposes of calculating volatility adjustments where such financial instruments or commodities which are not eligible under Appendix 2 Section III of Banking Rule BR/04 are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise under such a transaction, and the institution is using the Supervisory volatility adjustments approach under Appendix 2 Section III.4, such instruments and commodities shall be treated in the same way as non-main index equities listed on a recognised exchange.
  - (b) Where institutions are using the Own Estimates of Volatility Adjustments Approach under Appendix 2 Section III.4 of Banking Rule BR/04 in respect of financial instruments or commodities which are not eligible under Credit Risk Mitigation purposes under BR/04 volatility adjustments must be calculated for each individual item.

Where institutions are using the Internal Models Approach defined at Appendix 2 Section III.4 of Banking Rule BR/04, they may also apply this approach in the trading book.

- 13. For the purposes of paragraph 9 above, in relation to the recognition of master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions netting across positions in the trading book and the non-trading book will only be recognised when the netted transactions fulfil the following conditions:
  - (a) all transactions are marked to market daily;
  - (b) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral for Credit Risk Mitigation purposes in BR/04 without the application of paragraph 12 of this Annex.
- 14. Where a credit derivative included in the trading book forms part of an internal hedge and the credit protection is recognised under Banking Rule BR/04, no counterparty risk shall be deemed to arise from the position in the credit derivative. Alternatively, an institution may consistently include for the purposes of calculating capital requirements for counterparty credit risk all credit derivatives included in the trading book forming part of internal hedges or purchased as protection against a CCR exposure where the credit protection is recognised under Banking Rule BR/04.
- 15. The capital requirement shall be 8% of the total risk-weighted exposure amounts.

## **Other Counterparty Risk**

16. For the purposes of the calculation of minimum capital requirements for counterparty risk under this Rule, and for the calculation of minimum capital requirements for credit risk under Banking Rule BR/04, and without prejudice to the provisions of paragraph 6 Annex IV to BR/04, exposures to recognised third-country investment firms and exposures incurred to recognised clearing houses and exchanges shall be treated as exposures to institutions.