

Completion Instructions

Return of Capital Adequacy Ratio Part IIIf – Risk-weighted Amount for CVA Form MA(BS)3(IIIf)

Introduction

1. Form MA(BS)3(IIIf) of Part III should be completed by all authorized institutions incorporated in Hong Kong using the *advanced CVA method* or the *standardized CVA method* to calculate *CVA capital charge* under Division 3 of Part 6A of the Banking (Capital) Rules (BCR).
2. Reporting institutions should report in this Form the CVA capital charge calculated for all their counterparties (including *clearing members* or *clients* in respect of transactions or contracts cleared by *central counterparties*, where applicable) in respect of the following contracts and transactions booked in the institutions' *banking book* and *trading book*:
 - (a) *derivative contracts* (including *long settlement transactions*); and
 - (b) *securities financing transactions* (including long settlement transactions) if required by the Monetary Authority (MA) under section 10A(6) of the BCR.
3. Reporting institutions are not required to calculate CVA capital charge for items specified in Schedule 1A to the BCR.
4. The Form is divided into two divisions:
 - (a) Reporting institutions that are eligible to use the advanced CVA method (see section 10A(3) and (4) of the BCR) should complete Division A in respect of contracts and transactions for which the CVA capital charge is calculated under the advanced CVA method.
 - (b) Where a reporting institution that is eligible to use the advanced CVA method is required to use the standardized CVA method to calculate the CVA capital charge for certain transactions or counterparties (see section 10C of the BCR), the institution should report the transactions or counterparties concerned in Division B.
 - (c) All other reporting institutions (i.e. those that are required to use the standardized CVA method) should complete Division B, including reporting institutions that are no longer eligible to use the advanced CVA method (see section 10D of the BCR).
5. This Form and its completion instructions should be read in conjunction with the BCR and the relevant supervisory policy/guidance related to the revised capital adequacy framework.

Specific Instructions

6. A reporting institution should not include a CVA hedge in its CVA capital charge calculation unless the hedge is an *eligible CVA hedge* (see section 226T of the BCR).
7. For the calculation of EAD_i^{total} under Formula 23J in section 226S(1) of the BCR, a reporting institution that concurrently uses –
 - (a) the *IRB approach* to calculate its *credit risk* for *non-securitization exposures* to the counterparty, and
 - (b) the *current exposure method* or the methods referred to in section 10A(1)(b) of the BCR for the calculation of its *default risk exposures* in respect of derivative contracts or securities financing transactions, as the case may be,

may recognise the credit risk mitigating effect of *recognized collateral*¹ by applying Formula 19 and in accordance with section 160(3) of the BCR, and take the resulting net credit exposure (E*) as the basis for determining the EAD_i^{total} of a *netting set* in accordance with other applicable provisions of section 226S of the BCR.

8. To avoid double-counting, the institution should ensure that the *expected exposures* (EEs) (in the case of advanced CVA method) or EAD_i^{total} (in the case of standardized CVA method) used in the CVA capital charge calculations have not been adjusted for the credit risk or CVA risk mitigation effect of any eligible CVA hedges that the institution intends to use to reduce its CVA capital charge.
9. Recognized credit derivative contracts purchased for hedging default risk exposures to counterparties should be included in the CVA capital charge calculation in the manner mentioned in section 226P(5) or 226S(7) of the BCR, as the case requires.

Division A: Advanced CVA Method

10. The reporting institution should generate the VaR and stressed VaR by using the VaR model approved by the MA for calculating the specific risk for interest rate exposures under the *IMM approach* and in accordance with sections 226P, 226Q and 226T of the BCR.

Item I – VaR

11. Item I refers to the VaR calculated based on EEs that are estimated using parameters calibrated to current market data.
12. Report in the column “End of quarter” the VaR as at the last trading day of the reporting quarter.
13. Report in the column “Average VaR” the average VaR for the last 60 trading days. The

¹ See definition of “recognized collateral” in section 139(1) of the BCR.

VaR of each trading day should be generated as mentioned in paragraph 10 above.

14. Report in the column “Multiplication factor for VaR” the multiplication factor (m_c) determined in the same manner as in section 319(1) of the BCR. The minimum value of the multiplication factor is 3.
15. Report in the column “Risk-weighted Amount” the *CVA risk-weighted amount* calculated based on the following formula:

$$\begin{aligned} \text{CVA risk-weighted amount} = \\ \text{Max [VaR as at the last trading day of the reporting quarter; Average VaR for the} \\ \text{last 60 trading days} \times m_c] \times 12.5 \end{aligned}$$

Item 2 – Stressed VaR

16. Item 2 refers to the stressed VaR calculated based on EEs that are estimated using a stress calibration as set out in section 3(f)(i) of Schedule 2A of the BCR. The period of stress should be the most severe 1-year stress period within the 3-year period used for the stress calibration.
17. Report in the column “Latest available” the reporting institution’s latest available stressed VaR.
18. Report in the column “Average Stressed VaR” the average stressed VaR for the last 60 trading days. The stressed VaR of each trading day should be generated as mentioned in paragraph 10 above.
19. Report in the column “Multiplication factor for Stressed VaR” the multiplication factor (m_s) determined in the same manner as in section 319(4) of the BCR. The minimum value of the multiplication factor is 3.
20. Report in the column “Risk-weighted Amount” the CVA risk-weighted amount calculated based on the following formula:

$$\begin{aligned} \text{CVA risk-weighted amount} = \\ \text{Max [Latest available stressed VaR; Average stressed VaR for the last 60 trading} \\ \text{days} \times m_s] \times 12.5 \end{aligned}$$

Division B: Standardized CVA Method

Item 3

21. The column “Default Risk Exposures” refers to the sum of the default risk exposures of all the reporting institution’s netting sets (i.e. EAD_i^{total} in Formula 23J in section 226S of the BCR) that are subject to the CVA capital charge requirement. The amount reported in the column should be the amount before applying the discount factor as required by section 226S(1)(c) of the BCR.
22. The column “Capital Charge” refers to the CVA capital charge for a portfolio of

counterparties calculated in accordance with sections 226S and 226T of the BCR.

23. When using Formula 23J,

- (a) if the reporting institution has more than one netting set with counterparty “i”, the institution should multiply the default risk exposure (EAD_i) (after applying the discount factor mentioned in section 226S(1)(c)(i) of the BCR, if applicable) of each of the netting sets by the netting set’s effective maturity (M_i) and then aggregate the product obtained (i.e. $M_i \cdot EAD_i$) for each netting set, and use the aggregate as the input for $M_i \cdot EAD_i^{total}$ in Formula 23J;
- (b) if the reporting institution has purchased more than one single-name CDS for hedging the *CVA risk* in respect of counterparty “i”, the institution should multiply the notional amount (B_i) (after applying the discount factor mentioned in section 226S(1)(d) of the BCR) of each CDS by the maturity of the CDS (M_i^{hedge}) and then aggregate the product obtained (i.e. $M_i^{hedge} \cdot B_i$) for each CDS, and use the aggregate as the input for $M_i^{hedge} \cdot B_i$ in Formula 23J;
- (c) if the reporting institution has purchased more than one index CDS for hedging CVA risk, the institution should multiply the notional amount (B_{ind}) (after applying the discount factor mentioned in section 226S(1)(e)(i) of the BCR) of each index CDS by the maturity of the CDS (M_{ind}) and then aggregate the product obtained (i.e. $M_{ind} \cdot B_{ind}$) for each CDS, and use the aggregate as the input for $M_{ind} \cdot B_{ind}$ in Formula 23J; and
- (d) if the reporting institution falls within the description of paragraph 7(a) and (b), it may take into account the credit risk mitigating effect of collateral in the calculation of EAD_i^{total} in accordance with that paragraph.

24. Report in the column “Risk-weighted Amount” the CVA risk-weighted amount calculated based on the following formula:

$$\text{CVA risk-weighted amount} = \text{CVA capital charge} \times 12.5$$

Hong Kong Monetary Authority
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