Margin Requirements for Non-centrally Cleared Derivatives

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Contents

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Introduction

1. The margin requirements are one of the agreed Group of Twenty (G20) reforms to reduce the systemic risk from OTC derivatives.

2. These requirements are issued in accordance with the authority vested in SAMA under the Charter – issued via Royal Decree No. 23 dated 23/5/1377 H, and the Banking Control Law – issued via Royal Decree No. M/5 dated 22/2/1386 H.

3. These requirements supersede SAMA circulars No. 341000134328 dated 25/11/1434 H, 371000101114 dated 15/9/1437 H, and 51226/67 dated 16/8/1440 H.

Objectives

4. Margin requirements for non-centrally cleared derivatives have two main benefits:
    - **Reduction of systemic risk:** Margin requirements for non-centrally cleared derivatives would be expected to reduce contagion and spillover effects by ensuring that collateral is available to offset losses caused by the default of a derivatives counterparty. Margin requirements can also have broader macroprudential benefits, by reducing the financial system's vulnerability to potentially destabilising procyclicality and limiting the build-up of uncollateralised exposures within the financial system.
    - **Promotion of central clearing:** Margin requirements are expected to promote central clearing, making the G20's 2009 reform programme more effective. This could, in turn, contribute to the reduction of systemic risk.

Key Principles and Requirements

Element 1: Scope of Coverage – Instruments Subject to the Requirements

Appropriate margining practices should be in place with respect to all derivatives transactions that are not cleared by Central Counterparties (CCPs)[1].

5. Except for physically settled foreign exchange (FX) forwards and swaps, these margin requirements apply to all non-centrally cleared derivatives. These margin requirements do not apply to physically settled FX forwards and swaps.[2]

6. Initial margin requirements for cross-currency swaps do not apply to the fixed physically settled FX transactions associated with the exchange of principal of cross-currency swaps. In practice, the margin requirements for cross-currency swaps may be computed in one of two ways. Initial margin may be computed by reference to the "interest rate" portion of the standardised initial margin schedule that is described in Element 3 below and presented in the Appendix A. Alternatively, if initial margin is being calculated pursuant to an approved initial margin model, the initial margin model need not incorporate the risk associated with the fixed physically settled FX transactions associated with the exchange of principal. All other risks that affect cross-currency swaps, however, must be considered in the calculation of the initial margin amount[3]. The variation margin requirements that are described below apply to all components of cross-currency swaps.

[1] These margining practices only apply to derivatives transactions that are not cleared by CCPs and do not apply to other transactions, such as repurchase agreements and security lending transactions that are not themselves derivatives but share some attributes with derivatives. In addition, indirectly cleared derivatives transactions that are intermediated through a clearing member on behalf of a non-member customer are not subject to these requirements as long as (a) the non-member customer is subject to the margin requirements of the clearing house or (b) the non-member customer provides margin consistent with the relevant corresponding clearing house's margin requirements.

[2] Banks should, however, adhere to Supervisory Guidance for Managing Risks Associated with the Settlement of Foreign Exchange Transactions (as published by BCBS https://www.bis.org/publ/bcbs241.pdf)

[3] The only payments to be excluded from initial margin requirements for a cross-currency swap are the fixed physically settled FX transactions associated with the exchange of principal (which have the same characteristics as FX forward contracts). All other payments or cash flows that occur during the life of the swap must be subject to initial margin requirements.

Element 2: Scope of Coverage – Scope of Applicability

All covered entities (ie financial firms and systemically important non-financial entities) that engage in non-centrally cleared derivatives must exchange initial and variation margin as appropriate to the counterparty risks posed by such transactions[4].

7. For the purpose of this element, Systemically Important Non-financial Entities will be entities whose aggregate month-end average national amount of non-centrally cleared derivatives for the preceding March, April and May exceeds SAR 30 billion, at a consolidated group wide basis.

8. For purposes of determining whether a group's non-centrally cleared derivatives notional amount exceeds SAR 30 billion, the following shall apply:

    - Inter-affiliates trades should not be counted.
    - All other non-centrally cleared derivatives must be counted.

9. Covered entities include all financial firms, and systemically important non-financial firms as defined in paragraph 7 above. Central banks, sovereigns[5], multilateral development banks, the Bank for International Settlements, and non-systemic, non-financial firms are not covered entities[6].

10. Only non-centrally cleared derivatives transactions between two covered entities are governed by these requirements. A transaction between a covered entity and one of the aforementioned entities is not covered by these requirements.

11. All covered entities that engage in non-centrally cleared derivatives must calculate, balance and exchange, on a bilateral basis, the full amount of **variation margin** (ie a zero threshold) on a daily basis. In case of any delay or exception, SAMA should be pre-notified.

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[4] Different treatment is applied with respect to transactions between affiliated entities, as described under Element 6 below.

[5] Public sector entities (PSEs) may be treated as sovereigns for the purpose of determining the applicability of these margin requirements.

[6] Multilateral development banks (MDBs) exempted from this requirement are those that are eligible for a zero risk-weight under the Basel capital framework (as prescribed in the document published by the BCBS and IOSCO https://www.bis.org/bcbs/publ/d475.pdf)

12. All covered entities must exchange, on a bilateral basis, **initial margin** with a threshold not to exceed €50 million. The threshold is applied at the level of the consolidated group to which the threshold is being extended and is based on all non-centrally cleared derivatives between the two consolidated groups[7].

13. All margin transfers between parties may be subject to a de-minimis minimum transfer amount not to exceed €500,000.

Element 3: Baseline Minimum Amounts and Methodologies for Initial and Variation Margin

The methodologies for calculating initial and variation margin that serve as the baseline for margin collected from a counterparty should (i) be consistent across entities covered by these requirements and reflect the potential future exposure (initial margin) and current exposure (variation margin) associated with the particular portfolio of non-centrally cleared derivatives at issue and (ii) ensure that all counterparty risk exposures are covered fully with a high degree of confidence.

14. The applicable netting agreements in these requirements are not allowed in Saudi Arabia until relevant laws are enacted and netting is allowed by SAMA. If netting is enforceable in any jurisdiction, positive and negative mark to market exposures in that jurisdiction will be allowed to net.

Initial Margin

15. For the purpose of informing the initial margin baseline, the potential future exposure of a non-centrally cleared derivatives should reflect an extreme but plausible estimate of an increase in the value of the instrument that is consistent with a one-tailed 99 per cent confidence interval over a 10-day horizon,[8] based on historical data that incorporates a period of significant financial stress. The initial margin amount must be calibrated to a period that includes financial stress to ensure that

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[7] Investment funds that are managed by an investment advisor are considered distinct entities that are treated separately when applying the threshold as long as the funds are distinct legal entities that are not collateralised by or are otherwise guaranteed or supported by other investment funds or the investment advisor in the event of fund insolvency or bankruptcy.

[8] The 10-day requirement should apply in the case that variation margin is exchanged daily. If variation margin is exchanged – at exceptional cases approved by SAMA as prescribed in paragraph 11 of these requirements- at less than daily frequency then the minimum horizon should be set equal to 10 days plus the number of days in between variation margin exchanges; the threshold calculation set out in paragraph 12 should nonetheless be made irrespective of the frequency with which variation margin is exchanged.

sufficient margin will be available when it is most needed and to limit the extent to which the margin can be procyclical.

16. The required amount of initial margin may be calculated by reference to either a quantitative portfolio margin model, or a standardised margin schedule. Banks should use the standardised schedule for initial margin. If a bank wishes to use advanced models, it should be subject to internal governance process, validation, testing and approval by SAMA. Models that have not been granted explicit approval may not be used for initial margin purposes.

17. When initial margin is calculated by reference to an initial margin model, the period of financial stress used for calibration should be identified and applied separately for each broad asset class for which portfolio margining is allowed, as set out below. In addition, the identified period must include a period of financial stress and should cover a historical period not to exceed five years. Additionally, the data within the identified period should be equally weighted for calibration purposes.

18. Quantitative initial margin models must be subject to an internal governance process that continuously assesses the value of the model's risk assessments, tests the model's assessments against realised data and experience, and validates the applicability of the model to the derivatives for which it is being used. The process must take into account the complexity of the products covered.

19. Quantitative initial margin models may account for risk on a portfolio basis. More specifically, the initial margin model may consider all of the derivatives that are approved for model use that are subject to a single legally enforceable netting agreement. Derivatives between counterparties that are not subject to the same legally enforceable netting agreement must not be considered in the same initial margin model calculation.

20. Derivative portfolios are often exposed to a number of offsetting risks that can and should be reliably quantified for the purposes of calculating initial margin requirements. At the same time, a distinction must be made between offsetting risks that can be reliably quantified and those that are more difficult to quantify. Accordingly, initial margin models may account for diversification, hedging and risk offsets within well defined asset classes such as currency/rates,[9,10] equity, credit, or commodities, but not across such asset classes and provided these instruments are covered by the same legally enforceable netting agreement. However, any such incorporation of diversification, hedging and risk offsets by an

[9] Currency and interest rate derivatives may be portfolio margined together for the purposes of these requirements. As an example, an interest rate swap and a currency option may be margined on a portfolio basis as part of a single asset class.

[10] Inflation swaps, which transfer inflation risk between counterparties, may be considered as part of the currency/rates asset class for the purpose of computing model-based initial margin requirements, and as part of the interest rate asset class for the purposes of computing standardised initial margin requirements.

initial margin model will require approval by SAMA. Initial margin calculations for derivatives in distinct asset classes must be performed without regard to derivatives in other asset classes.

21. For entities using standardised margin schedule, the required initial margin should be computed by referencing the standardised margin rates in Appendix A, and by adjusting the gross initial margin amount by an amount that relates to the net-to-gross ratio (NGR) pertaining to all derivatives in the legally enforceable netting set.

22. The required initial margin amount should be calculated in two steps. First, the margin rate in the provided schedule would be multiplied by the gross notional size of the derivatives contract, and then this calculation would be repeated for each derivatives contract. This amount may be referred to as the gross standardised initial margin. Second, the gross initial margin amount is adjusted by the ratio of the net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

Net standardised initial margin = 0.4 * Gross initial margin + 0.6 * NGR * Gross initial margin

23. Where NGR is defined as the level of net replacement cost over the level of gross replacement cost for transactions subject to legally enforceable netting agreements. The total amount of initial margin required on a portfolio according to the standardised margin schedule would be the net standardised initial margin amount.

24. Derivatives transactions between covered entities with zero counterparty risk require no initial margin to be collected and may be excluded from the initial margin calculation.

25. In a case where bank is allowed by SAMA to use an approved quantitative portfolio margin model, it will not be allowed to switch between model- and schedule- based margin calculations in an effort to "cherry pick" the most favourable initial margin terms. Accordingly, the choice between model- and schedule-based initial margin calculations should be made consistently over time for all transactions within the same well defined asset class and, it should comply with any other requirements imposed by SAMA. However, a bank may be allowed –upon SAMA's approval- to use a model-based initial margin calculation for one class of derivatives in which it commonly deals and a schedule-based initial margin in the case of some derivatives that are less routinely employed in its trading activities.

26. Initial margin should be collected at the outset of a transaction, and collected thereafter on a routine and consistent basis upon changes in measured potential future exposure, such as when trades are added to or subtracted from the portfolio.

27. The build-up of additional initial margin should be gradual so that it can be managed over time. Moreover, margin levels should be sufficiently conservative, even during periods of low market volatility, to avoid procyclicality. The specific requirement that initial margin be set consistent with a period that includes stress is meant to limit procyclical changes in the amount of initial margin required.

28. Parties to derivatives contracts should have rigorous and robust dispute resolution procedures in place with their counterparty before the onset of a transaction. In particular, the amount of initial margin to be collected from one party by another will be the result of either an approved model calculation or the standardised schedule. The specific method and parameters that will be used by each party to calculate initial margin should be agreed and recorded at the onset of the transaction to reduce potential disputes. Moreover, parties may agree to use a single model for the purposes of such margin model calculations subject to bilateral agreement and appropriate approval by SAMA. In the event that a margin dispute arises, both parties should make all necessary and appropriate efforts, including timely initiation of dispute resolution protocols, to resolve the dispute and exchange the required amount of initial margin in a timely fashion.

Variation Margin

29. For variation margin, the full amount necessary to fully collateralise the mark-to-market exposure of the non-centrally cleared derivatives must be exchanged.

30. To reduce adverse liquidity shocks and in order to effectively mitigate counterparty credit risk, variation margin should be calculated and exchanged for non-centrally cleared derivatives subject to a single, legally enforceable netting agreement with sufficient frequency.

31. Parties to derivatives contracts should have rigorous and robust dispute resolution procedures in place with their counterparty before the onset of a transaction. In the event that a margin dispute arises, both parties should make all necessary and appropriate efforts, including timely initiation of dispute resolution protocols, to resolve the dispute and exchange the required amount of variation margin in a timely fashion.

Element 4: Eligible Collateral for Margin

To ensure that assets collected as collateral for initial and variation margin purposes can be liquidated in a reasonable amount of time to generate proceeds that could sufficiently protect collecting entities covered by the requirements from losses on non-centrally cleared derivatives in the event of a counterparty default, these assets should be highly liquid and should, after accounting for an appropriate haircut, be able to hold their value in a time of financial stress. The set of eligible collateral should take into account that assets which are liquid in normal market conditions may rapidly become illiquid in times of financial stress. In addition to having good liquidity, eligible collateral should not be exposed to excessive credit, market and FX risk (including through differences between the currency of the collateral asset and the currency of settlement). To the extent that the value of the collateral is exposed to these risks, appropriately risk-sensitive haircuts should be applied. More importantly, the value of the collateral should not exhibit a significant correlation with the creditworthiness of the counterparty or the value of the underlying non-centrally cleared derivatives portfolio in such a way that would undermine the effectiveness of the protection offered by the margin collected (ie the so-called "wrong way risk"). Accordingly, securities issued by the counterparty or its related parties should not be accepted as collateral. Accepted collateral should also be reasonably diversified.

32. SAMA only considers eligible collaterals, which are allowed under the standardised approach for credit risk under the Risk-based Capital Framework adopted by SAMA, subject to appropriate haircuts described below.

33. Potential methods for determining appropriate haircuts include either internal or third-party quantitative model-based haircuts or schedule-based haircuts. Banks should apply standardised schedule-based haircuts as defined in Appendix B. If higher haircuts are proposed by different regulators in international jurisdictions, the higher haircut should be applied.

34. Risk-sensitive quantitative models, both internal or third-party, could be used to establish haircuts provided that the model is approved by SAMA and subject to appropriate internal governance standards.

35. Banks should not selectively apply the method for determining appropriate haircuts that would produce a lower haircut, banks should consistently adopt either the standardised tables approach or the internal/third-party models approach for all the collateral assets within the same well defined asset class.

36. In addition to haircuts, other risk mitigants should be considered when accepting non-cash collateral. In particular, banks should ensure that the collateral collected is not overly concentrated in terms of an individual issuer, issuer type and asset type.

37. In the event that a dispute arises over the value of eligible collateral, both parties should make all necessary and appropriate efforts, including timely initiation of dispute resolution protocols, to resolve the dispute and exchange any required margin in a timely fashion.

38. Collateral that is posted by a counterparty to satisfy margin requirements may, at some point in time before the end of the derivatives contract, be needed by the counterparty for some particular reason or purpose. Alternative collateral may be substituted or exchanged for the collateral that was originally posted provided that both parties agree to the substitution and that the substitution or exchange is made on the terms applicable to their agreement. When collateral is substituted, the alternative collateral must meet all the requirements outlined above. Further, the value of the alternative collateral, after the application of haircuts, must be sufficient to meet the margin requirement.

Element 5: Treatment of Provided Initial Margin

Because the exchange of initial margin on a net basis may be insufficient to protect two market participants with large gross derivatives exposures to each other in the case of one firm's failure, the gross initial margin between such firms should be exchanged. Initial margin collected should be held in such a way as to ensure that (i) the margin collected is immediately available to the collecting party in the event of the counterparty's default, and (ii) the collected margin must be subject to arrangements that protect the posting party to the extent possible under applicable law in the event that the collecting party enters bankruptcy.

39. Initial margin should be exchanged on a gross basis and held in a manner consistent with the principle above.

40. The collateral arrangements should be effective under relevant laws and supported by periodically updated legal opinions.

41. Cash and non-cash collateral collected as variation margin may be re-hypothecated, re-pledged or re-used.

42. Except where re-hypothecated, re-pledged or re-used in accordance with paragraph 43 below, cash and non-cash collateral collected as initial margin should not be re-hypothecated, re-pledged or re-used.

43. Cash and non-cash collateral collected as initial margin from a customer may be re-hypothecated, re-pledged or re-used (henceforth re-hypothecated) to a third party only for purposes of hedging the initial margin collector's derivatives position arising out of transactions with customers for which initial margin was collected and it must be subject to conditions that protect the customer's rights in the collateral, where applicable. In any event, and upon approval from SAMA on a case by case basis, the customer's collateral may be re-hypothecated only if the conditions described below are met:

- The customer, as part of its contractual agreement with the initial margin collector and after disclosure by the initial margin collector of (i) its right not to permit re-hypothecation and (ii) the risks associated with the nature of the customer's claim to the re-hypothecated collateral in the event of the insolvency of the initial margin collector or the third party, gives express consent in writing to the re-hypothecation of its collateral. In addition, the initial margin collector must give the customer the option to individually segregate the collateral that it posts.

- The initial margin collector is subject to regulation of liquidity risk.
- Collateral collected as initial margin from the customer is treated as a customer asset, and is segregated from the initial margin collector's proprietary assets until re-hypothecated. Once re-hypothecated, the third party must treat the collateral as a customer asset, and must segregate it from the third party's proprietary assets. Assets returned to the initial margin collector after re-hypothecation must also be treated as customer assets and must be segregated from the initial margin collector's proprietary assets.
- The collateral of customers that have consented to the re-hypothecation of their collateral must be segregated from that of customers that have not so consented.
- Where initial margin has been individually segregated, the collateral must only be re-hypothecated for the purpose of hedging the initial margin collector's derivatives position arising out of transactions with the customer in relation to which the collateral was provided.
- Where initial margin has been individually segregated and subsequently re-hypothecated, the initial margin collector must require the third party similarly to segregate the collateral from the assets of the third party's other customers, counterparties and its proprietary assets.
- Protection is given to the customer from the risk of loss of initial margin in circumstances where either the initial margin collector or the third party becomes insolvent and where both the initial margin collector and the third party become insolvent.
- Where the initial margin collector re-hypothecates initial margin, the agreement with the recipient of the collateral (ie the third party) must prohibit the third party from further re-hypothecating the collateral.
- Where collateral is re-hypothecated, the initial margin collector must notify the customer of that fact. Upon request by the customer and where the customer has opted for individual segregation, the initial margin collector must notify the customer of the amount of cash collateral and the value of non-cash collateral that has been re-hypothecated.
- Collateral must only be re-hypothecated to, and held by, an entity that is regulated in a jurisdiction that meets all of the specific conditions contained in this section and in which the specific conditions can be enforced by the initial margin collector.
- The customer and the third party may not be within the same group.
- The initial margin collector and the third party must keep appropriate records to show that all the above conditions have been met.

44. Banks should disclose the level and volume of re-hypothecation as required in section “Reporting to SAMA” below.

Element 6: Treatment of Transactions with Affiliates

Transactions between a firm and its affiliates should be subject to these initial and variation margin requirements.

45. Banks should apply standardised schedule-based haircuts as defined in Appendix B for transactions between the bank and its affiliates.

Element 7: Interaction of National Regimes in Cross-border Transactions

Regulatory regimes would interact so as to result in sufficiently consistent and non-duplicative regulatory margin requirements for non-centrally cleared derivatives across jurisdictions.

46. These margin requirements are applicable to legal entities established in Saudi Arabia, which includes locally established subsidiaries of foreign entities, in relation to the initial and variation margins that they collect. SAMA may permit a bank to comply with the margin requirements of a host-country margin regime with respect to its derivatives activities, provided that SAMA considers the host-country margin regime to be consistent with the margin requirements described in this framework.

47. For subsidiaries of Saudi banks in host jurisdictions, they should follow the requirements of the host country.

48. A branch is part of the same legal entity as the headquarters; it may be subject to either the margin requirements of the jurisdiction where the headquarters is established or the requirements of the host country. Foreign Bank Branches (FBB) operating in the Saudi Arabia should be deemed compliant with these requirements if:

- The FBB is required to comply with, and has complied with, the margin requirements of that foreign jurisdiction (home regulator) that have been implemented through Published laws, rules or regulations; and
- The FBB has documentary evidence that the margin requirements of the foreign jurisdiction (home regulator) are comparable to SAMA’s or BCBS-IOSCO’s margin requirements for non-central cleared derivatives.

Element 8: Phase-in of the Requirements

These requirements are phased in so that the systemic risk reductions and incentive benefits are appropriately balanced against the liquidity, operational and transition costs associated with implementing the requirements.

49. These requirements are applicable in a phased manner from 1 September 2016 as described in Margin requirements for Non-centrally Cleared Derivatives paper issued by Basel Committee on Banking Supervision (BCBS) and Board of the International Organization of Securities Commissions (IOSCO)[11].

50. The remaining phases –at the time of issuance of this document- to apply the requirement to exchange two-way initial margin with a threshold of up to €50 million are staged as follows:

- From 1 September 2021 to 31 August 2022, any covered entity belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives for March, April, and May of 2020 exceeds €50 billion will be subject to the requirements when transacting with another covered entity (provided that it also meets that condition).
- On a permanent basis (ie from 1 September 2022), any covered entity belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives for March, April, and May of the year exceeds €8 billion will be subject to the requirements described in this document during the one-year period from 1 September of that year to 31 August of the following year when transacting with another covered entity (provided that it also meets that condition). Any covered entity belonging to a group whose aggregate month-end average notional amount of non-centrally cleared derivatives for March, April, and May of the year is less than €8 billion will not be subject to the initial margin requirements described in this document.

[11] Margin Requirements for Non-centrally Cleared Derivatives (https://www.bis.org/bcbs/publ/d499.pdf).

51. For the purposes of calculating the group aggregate month-end average notional amount for determining whether a covered entity will be subject to the initial margin requirements described in this document, all of the group's non-centrally cleared derivatives, including physically settled FX forwards and swaps, should be included.

52. Initial margin requirements should apply to all new contracts entered into during the periods described above. Applying the initial margin requirements to existing derivatives contracts is not required.[12]

Reporting to SAMA

53. All Banks should report relevant initial and variation margin details as prescribed in these requirements in SAMA Q17 returns.

[12] Genuine amendments to existing derivatives contracts do not qualify as a new derivatives contract. Any amendment that is intended to extend an existing derivatives contract for the purpose of avoiding margin requirements will be considered a new derivatives contract.

Appendix A

Standardised initial margin schedule

Asset class	**Initial margin requirement** (% of notional exposure)
Credit: 0–2 year duration	2
Credit: 2–5 year duration	5
Credit: 5+ year duration	10
Commodity	15
Equity	15
Foreign exchange	6
Interest rate: 0–2 year duration	1
Interest rate: 2–5 year duration	2
Interest rate: 5+ year duration	4
Other	15

Appendix B

Standardised haircut schedule

Asset class	**Haircut** (% of market value)
Cash in same currency	0
High-quality government and central bank securities: residual maturity less than one year	0.5
High-quality government and central bank securities: residual maturity between one and five years	2
High-quality government and central bank securities: residual maturity greater than five years	4
High-quality corporate\covered bonds: residual maturity less than one year	1
High-quality corporate\covered bonds: residual maturity greater than one year and less than five years	4
High-quality corporate\covered bonds: residual maturity greater than five years	8
Equities included in major stock indices	15
Gold	15
Additional (additive) haircut on asset in which the currency of the derivatives obligation differs from that of the collateral asset	8