Monetary Authority of Singapore

Response to Feedback Received

P012 – 2020 – 17 December 2020

P003 – 2021 – 25 March 2021

P012 – 2021 – 13 September 2021

P001 – 2022 – 30 March 2022

Draft Standards for Credit Risk, Market Risk, Operational Risk, Output Floor, Leverage Ratio, and Public Disclosure Requirements under MAS Notice 637 for Singapore-incorporated Banks

Contents

1. Preface

1.1. MAS issued the following consultation papers on revisions to MAS Notice 637 on Risk Based Capital Adequacy Requirements for Singapore-incorporated Banks for the implementation of the final Basel III reforms in Singapore:

(a) Consultation paper on draft standards for operational risk capital and leverage ratio requirements on 17 December 2020: *https://www.mas.gov.sg/-/media/MAS/news-and-publications/consultation-papers/consultation-paper-on-draft-standards-for-operational-risk-capital-and-leverage-ratio-requirements.pdf*;

(b) Consultation paper on draft standards for credit risk capital and output floor requirements on 25 March 2021: *https://www.mas.gov.sg/-/media/mas/news-and-publications/consultation-papers/consultation-paper-on-draft-standards-for-credit-risk-capital-and-output-floor-requirements.pdf*;

(c) Consultation paper on draft standards for market risk capital and capital reporting requirements published on 13 September 2021: *https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/Consultation-Paper-on-Draft-Standards-for-Market-Risk-Capital-and-Capital-Reporting-Requirements.pdf;*

(d) Consultation paper on draft public disclosure requirements for regulatory capital published on 30 March 2022: *https://www.mas.gov.sg/-/media/mas/news-and-publications/consultation-papers/consultation-paper-on-draft-public-disclosure-requirements-for-regulatory-capital.pdf*.

1.2. The consultation periods have closed, and MAS would like to thank all respondents for their contributions. The list of respondents for each of the consultations is in Annex A. Full submissions are published in Annex B.

1.3. MAS has considered carefully the feedback received, and has incorporated them into the revised MAS Notice 637 issued today where it has agreed with the feedback. Feedback that are of wider interest, together with MAS' responses are set out below.

1.4. The revised MAS Notice 637 will be effective from 1 July 2024, with the requirements in the revised MAS Notice 637 coming into effect as follows:

(a) for all standards other than the revised market risk and credit valuation adjustment (CVA) standards: with effect from 1 July 2024;

(b) for the revised market risk and CVA standards: with effect from 1 July 2024 for compliance with supervisory reporting requirements, and with effect from 1 January 2025 for compliance with capital adequacy and disclosure requirements; and

(c) for the output floor: to commence at 50% from 1 July 2024 and reach full phase-in at 72.5% on 1 Jan 2029.

2. Credit Risk Capital Requirement

Valuation of real estate exposures for an existing mortgage with a subsequent mortgage equity withdrawal loan under the standardised approach for credit risk (SA(CR))

2.1. MAS had set out, in its response published on 25 March 2021 to feedback received on the consultation paper on the proposed implementation of the final Basel III reforms in Singapore, that MAS will allow banks to use the valuation at the date of loan refinancing for computing the loan-to-value ratio (LTV) for refinanced loans.

2.2. A few respondents asked if the valuation at origination for an existing mortgage may be updated to reflect the valuation at the date of origination of a subsequent mortgage equity withdrawal loan on the same real estate.

MAS' Response

2.3. Banks may use the valuation at the date of origination of a subsequent mortgage equity withdrawal loan for computing the LTV of both the mortgage equity withdrawal loan and the existing mortgage on the same real estate.

Treatment of Residential Real Estate (RRE) under construction in foreign jurisdictions under the SA(CR)

2.4. The draft standards for credit risk capital and output floor requirements issued for consultation on 25 March 2021 set out that banks may treat RRE under construction in a foreign country or jurisdiction as secured by fully completed RRE, where the relevant foreign regulator has exercised the national discretion to similarly do so under its implementation of the final Basel III reforms for RRE under construction in its country or jurisdiction, and where other conditions are met.

2.5. A few respondents sought clarification on the application of this condition where the foreign country or jurisdiction has yet to implement the final Basel III reforms.

MAS' Response

2.6. MAS has clarified, in paragraph 7.3.17(a)(iii) of the revised MAS Notice 637, that banks may treat RRE under construction in a foreign jurisdiction as secured by fully completed RRE if the bank regulatory agency in the foreign country or jurisdiction allows the exposure to be subject to the same capital treatment as an exposure secured by a fully completed real estate under their prevailing implementation of the SA(CR), subject to other conditions being met.

Assessing if an exposure can be classified as a regulatory retail transactor under the SA(CR)

2.7. The draft standards for credit risk capital and output floor requirements issued for consultation on 25 March 2021 set out, in paragraph 7.3.1(i)(A), the criteria by which a bank is to assess an exposure in the regulatory retail asset class for classification as a regulatory retail transactor. For revolving loans including credit cards or charge cards which can be offered in the form of instalment plans, a few respondents sought confirmation that the criteria would be deemed to be met if the billed balance has been repaid in full at or before each scheduled repayment date for the previous 12 months.

MAS' Response

2.8. MAS agrees to the suggested approach. Paragraph 7.3.1(i)(A) of the revised MAS Notice 637 refers to the "billed balance", instead of "balance", being repaid in full.

Interaction between the junior charge and currency mismatch multipliers under the SA(CR)

2.9. The draft standards for credit risk capital and output floor requirements issued for consultation on 25 March 2021 set out that, for a regulatory real estate exposure secured against a junior charge, a bank must apply a multiplier of 1.25 to the applicable risk weight of the exposure, subject to a cap based on the applicable risk weight assuming that the exposure is in the "other real estate" asset sub-class. Separately, for an exposure which is, among other conditions, denominated in a currency that differs from the currency of the individual's source of income, the abovementioned draft standards set out that a bank must apply a multiplier of 1.5 to the applicable risk weight of the exposure, subject to a cap of 150%. In the case where both multipliers are applicable, one respondent sought clarification on whether the final risk weight for the exposure would be capped at 150%.

MAS' Response

2.10. In the case where both multipliers are applicable, the multiplier for the junior charge is applied first, subject to the relevant cap. Thereafter, the multiplier for currency mismatch is applied, with the resulting risk weight capped at 150%.

Thresholds for exposures excluded from the internal ratings-based approach (IRBA)

2.11. The draft standards for credit risk capital and output floor requirements issued for consultation on 25 March 2021 set out that banks should ensure that exposures excluded from the IRBA within each IRBA asset sub-class or combination of IRBA asset sub-classes do not exceed specified thresholds.

2.12. Some respondents asked if the thresholds would be implemented as hard regulatory limits, which banks are required to meet.

MAS' Response

2.13. The thresholds in paragraph 2.2 of Annex 7Y of the revised MAS Notice 637 are set out as supervisory expectations to provide guidance on the extent of exposures that may be excluded from an IRBA asset sub-class or combination of IRBA asset sub-classes, for which the IRBA has been adopted. These thresholds are intended to facilitate meaningful engagements between supervisors and banks on their IRBA rollout plans. It is not MAS' intent to compel banks to transition portfolios onto the IRBA immediately for the sole purpose of complying with the thresholds.

2.14. Banks are expected to continue monitoring the materiality of portfolios excluded from the IRBA in terms of size and risk profile, and to assess the feasibility of IRBA adoption, as part of their IRBA rollout plans.

Supervisory delta adjustment for interest rate options under the standardised approach for counterparty credit risk (SA-CCR)

2.15. The draft standards for credit risk capital and output floor requirements issued for consultation on 25 March 2021 set out that under the SA-CCR, banks must apply a lambda parameter when calculating the supervisory delta adjustment for interest rate options. The lambda parameter represents the presumed lowest possible extent to which interest rates in a specific currency can become negative and banks must apply the lambda parameter to shift both the underlying prices and strike prices of all interest rate options in the respective currency. Banks must seek MAS' approval for the specification and value of the lambda parameter.

2.16. Respondents sought further clarification on the specification and value of the lambda parameter.

MAS' Response

2.17. MAS has provided a specification of the lambda parameter within paragraph 3.31 of Annex 7D of the revised MAS Notice 637. Banks are required to apply the lambda parameter when calculating the supervisory delta adjustment for all interest rate options in a specific currency, where there are options whose ratios of underlying prices over strike prices (i.e. Pi/Ki) are zero or negative, or whose strike prices are zero.

2.18. The lambda parameter is specified by the following formula (Threshold – L) for each currency, where L is the lowest value of the underlying prices and strike prices of all interest rate options that the bank has exposure to, in a specific currency, and the value of Threshold is to be set by the bank at a value greater than zero, and smaller or equal to 10 basis points.

2.19. The revised approach ensures that banks apply a consistent approach for specifying the lambda parameter when calculating the supervisory delta adjustments for interest rate options. With the specification set out in the revised MAS Notice 637, MAS will also no longer require banks to seek approval for their individual specifications of the lambda parameter.

3. Market Risk Capital Requirement

Residual risk add-on (RRAO) under the standardised approach for market risk (SA(MR)) for Volatility and Variance Derivatives and Constant Maturity Swaps (CMS) Spread Options

3.1. The draft standards for market risk capital and capital reporting requirements issued for consultation on 13 September 2021 set out that banks are required to calculate an RRAO for instruments with an exotic underlying exposure and instruments that bear other residual risks. Instruments with an exotic underlying exposure are subject to an RRAO risk weight of 1%, while instruments that bear other residual risks are subject to a RRAO risk weight of 0.1%.

3.2. One respondent sought clarity on the treatment of volatility and variance derivatives and CMS spread options. The respondent suggested that volatility and variance derivatives be subject to a 0.1% RRAO risk weight instead of a 1% RRAO risk weight on the basis that much of their risk can be hedged via vanilla options. The respondent also suggested that CMS spread options be considered plain vanilla instruments and therefore be exempt from the RRAO.

MAS' Response

3.3. Volatility and variance derivatives are considered instruments with exotic underlying exposure as the underlying of volatility and variance derivatives would not fall within the scope of the risk classes under the SA(MR). Hence, such instruments are subject to a 1% RRAO risk weight, notwithstanding that some of their risks can be hedged via vanilla options. CMS spread options are exposed to other residual risks which are not captured under the SA(MR), such as correlation risk. CMS spread options therefore cannot be exempt from the RRAO and are subject to a RRAO risk weight of 0.1%.

Assignment of liquidity horizons to risk factors of credit and equity indices under the internal models approach (IMA)

3.4. Under the draft standards for market risk capital and capital reporting requirements issued for consultation on 13 September 2021, when assigning liquidity horizons to risk factors corresponding to credit and equity indices where different risk factor categories are involved, banks using the IMA must assign to the risk factors the shortest liquidity horizon (out of 10, 20, 40, 60 and 120 days) that is equal to or longer than the weighted average liquidity horizon of the index. The weighted average liquidity horizon is calculated by multiplying the liquidity horizon of each of the underlying instruments of the index by its weight in the index and summing across all underlying instruments.

3.5. One respondent stated that the assignment of the shortest liquidity horizon that is equal to or longer than the weighted average liquidity horizon of a credit or equity index, to such risk factors would penalise indices whose weighted average liquidity horizon are less than the specified liquidity horizons of 10, 20, 40, 60 or 120 days. For example, banks would need to assign a liquidity horizon of 20 days to a risk factor corresponding to an index with a weighted average liquidity horizon of only 15 days. The respondent suggested that the liquidity horizon for risk factors of equity indices be set to 10 days, and the liquidity horizon for risk factors of credit indices be set to 20 days for sovereign indices and 40 days for corporate indices.

MAS' Response

3.6. Setting a fixed horizon of 10 days, 20 days and 40 days for risk factors of equity indices, sovereign credit indices and corporate credit indices respectively, ignores the risk factors of the underlying instruments of the index which may entail longer liquidity horizons. This may understate the liquidity horizon of such indices. Consistent with the Basel standards, MAS will retain the assignment of the shortest liquidity horizon out of 10, 20, 40, 60 and 120 days, that is equal to or longer than the weighted average liquidity horizon of the index.

4. Leverage Ratio Requirement

Treatment of Cash Pooling Arrangements

4.1. The draft standards for operational risk capital and leverage ratio requirements for Singapore-incorporated banks issued for consultation on 17 Dec 2020 set out that exposures to cash pooling transactions may be calculated on a net basis where the balances of the participating accounts are physically pooled into a single account at least daily, and if this is not the case, cash pooling transactions may nevertheless be calculated on a net basis where certain conditions are met. MAS had also clarified, in paragraph 3.7 of its response published on 17 Dec 2020 to feedback received on the consultation paper on the proposed implementation of the final Basel III reforms in Singapore, that arrangements where the bank never physically pools the individual balances of participating account into a single account, do not qualify for the calculation on a net basis.

4.2. One respondent asked MAS to reconsider allowing exposures to notional cash pooling arrangements where the bank never physically pools the individual balances of the participating accounts into a single account balance to be calculated on a net basis.

MAS' Response

4.3. MAS maintains the position that arrangements where the bank never physically pools the individual balances of participating accounts into a single account, do not qualify for exposure measurement on a net basis. The leverage ratio serves as a back-stop to the risk-based capital requirements. As a non-risk based requirement, the leverage ratio, as a general principle, measures exposure without recognition of credit risk mitigation or netting between assets and liabilities. The exception in LEV30.12 of the Basel standards is to allow cash pooling arrangements which are deemed to be extinguished and transformed into a single account balance to be treated on a net basis. For notional cash pooling transactions to be deemed to be extinguished and transformed into a single account balance, the Basel standards set out stringent conditions, including that the cash pooling arrangement provides for a single account, into which the balances of all individual participating customer accounts can be transferred and thus extinguished, and that the frequency by which balances of individual participating customer accounts are transferred to the single account is not deemed as inadequate. Similarly, MAS has provided for exposure measurement of notional cash pooling transactions to be treated on a net basis in paragraph 2.12 (b) of Annex 4C of the revised MAS Notice 637. This is subject to stringent conditions being met, including that the individual balances of all participating accounts are physically pooled on at least a quarterly basis.

5. Public Disclosure Requirement

Disclosure Template on Asset Encumbrance

5.1. Under Table 11-48 of the draft public disclosure requirements for regulatory capital issued for consultation on 30 March 2022, banks are required to disclose information on their encumbered and unencumbered assets.

5.2. Some respondents requested MAS to provide more guidance on the definition of asset encumbrance in this table.

5.3. In addition, a respondent sought to clarify whether the disaggregation of assets under Table 11-48 of the draft public disclosure requirements for regulatory capital issued for consultation is at a total asset level or to provide a breakdown of the assets. If the bank is required to provide a breakdown of assets, the respondent asked for the asset classification that should be followed.

MAS' Response

5.4. MAS would like to clarify that the purpose of Table 11-56 of the revised MAS Notice 637 (Table 11-48 of the consultation paper) is to provide an overview on the extent to which a bank's assets remain available to creditors in the event of insolvency. Hence, examples of "Encumbered assets" reported under Table 11-56 of the revised MAS Notice 637 (Table 11-48 of the consultation paper) include "Assets Pledged" as defined under MAS Notice 610 Appendix B3 Annex 6, covered pools as defined under MAS Notice 648, as well as underlying assets from securitisation structures, where the financial assets have not been de-recognised from the bank's financial assets.

5.5. In addition, banks must report the breakdown of encumbered and unencumbered assets in Table 11-56 of the revised MAS Notice 637 (Table 11-48 of the consultation paper). Banks have the discretion to decide whether aligning the asset classification to its financial statements or MAS Notice 610 would be more useful to users.

Annex A

List of respondents to the consultation paper on Credit Risk, Market Risk, Operational Risk, Output Floor, Leverage Ratio, and Public Disclosure Requirements under MAS Notice 637 for Singapore-incorporated Banks

Consultation paper on draft standards for operational risk capital and leverage ratio requirements on 17 December 2020

1. DBS Bank Ltd

2. International Swaps and Derivatives Association, Inc. and Asia Securities Industry and Financial Markets Association

3. Standard Chartered Bank (Singapore) Limited

4. United Overseas Bank Limited

Four other respondents requested confidentiality of identity.

Consultation Paper on draft standards for credit risk capital and output floor requirements on 25 March 2021

1. International Swaps and Derivatives Association, Inc. and Asia Securities Industry and Financial Markets Association

2. United Overseas Bank Limited

Seven other respondents requested confidentiality of identity.

Consultation paper on draft standards for market risk capital and capital reporting requirements published in September 2021

1. DBS Bank Ltd

2. International Swaps and Derivatives Association, Inc.

3. United Overseas Bank Limited

Three other respondents requested confidentiality of identity.

Consultation paper on draft public disclosure requirements for regulatory capital published on 30 March 2022

1. DBS Bank Ltd

2. Maybank Singapore Limited

3. United Overseas Bank Limited

Two other respondents requested confidentiality of identity.

Please refer to Annex B for the submissions.

Annex B

Submissions from respondents to the consultation paper on Credit Risk, Market Risk, Operational Risk, Output Floor, Leverage Ratio, and Public Disclosure Requirements under MAS Notice 637 for Singapore-incorporated Banks

Consultation paper on draft standards for operational risk capital and leverage ratio requirements on 17 December 2020

- ***Question 1.*** *MAS seeks comments on the draft provisions for Part III (Scope of Application) and draft provisions relating to the operational risk capital requirement in Part II (Definitions), Part IX (Operational Risk) and Part XII (Reporting Schedules) of MAS Notice 637 in Annex B.*
- ***Question 2.*** *MAS seeks comments on the draft provisions relating to the leverage ratio requirement in Part II (Definitions), Part IV (Capital Adequacy Ratios and Leverage Ratio), Part VII (Credit Risk), and Part XII (Reporting Schedules) of MAS Notice 637 in Annex B.*

S/N	Respondent	Response from Respondent
1	International Swaps and Derivatives Association, Inc. and Asia Securities Industry and Financial Markets Association	**A. Introduction** The Asia Securities Industry & Financial Markets Association ("ASIFMA")[1] and the International Swaps and Derivatives

[1] ASIFMA is an independent, regional trade association with over 140 member firms comprising a diverse range of leading financial institutions from both the buy and sell side, including banks, asset managers, law firms and market infrastructure service providers. Together, we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia. ASIFMA advocates stable, innovative, competitive and efficient Asian capital markets that are necessary to support the region's economic growth. We drive consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice. Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the United States and AFME in Europe, ASIFMA also provides insights on global best practices and standards to benefit the region.

		Association, Inc. ("ISDA")[2] (together, the "Associations") are grateful for the opportunity to respond to the consultation paper on draft standards relating to operational risk capital and leverage ratio requirements for Singapore-incorporated banks (P012-2020) ("Consultation") published by the Monetary Authority of Singapore ("MAS") on 17 December 2020[3]. The Associations appreciate the work that MAS is completing in this area, and for the opportunity to respond to the Consultation. The Associations are also grateful for the opportunity to respond to the MAS consultation on the proposed implementation of the final Basel III reforms in Singapore published on 7 May 2019[4], and are appreciative of MAS's efforts in taking on board much of the Associations' feedback relating to operational risk capital and leverage ratio requirements[5] in formulating the proposals in the Consultation. We have looked at the proposals set out within the Consultation and, broadly, do not have any significant new comments at this stage, while noting that our previously communicated concern regarding a variable Internal Loss Multiplier (ILM) remains relevant. In light of the ongoing pandemic situation, the Associations would urge the MAS to continue to monitor implementation of the Basel III final reform in other key jurisdictions and avoid front-running in case of delay. We are nevertheless supportive of the MAS working towards the 1 January 2023 deadline,

[2] Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 925 member institutions from 75 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org.

[3] *https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/Consultation-Paper-on-Draft-Standards-for-Operational-Risk-Capital-and-Leverage-Ratio-Requirements.pdf*, MAS, Consultation paper on draft standards for operational risk capital and leverage ratio requirements for Singapore-incorporated banks (P012-2020).

[4] *http://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Consultation%20Papers/Consultation%20Paper%20on%20Proposed%20Implementation%20of%20the%20Final%20Basel%20III%20Reforms.pdf*, MAS, Consultation Paper on the Proposed Implementation of the Final Basel III Reforms in Singapore.

[5] *https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/Response-to-Feedback_Proposed-Final-BIII-Reforms_Ops-Risk-Capital-and-Leverage-Ratio-Requirements.pdf*, MAS, MAS' response to feedback on proposed implementation of the final Basel III reforms in Singapore – operational risk capital and leverage ratio requirements.

		however, would recommend that it keep the option to put local implementation "on hold" should delay in other key jurisdictions materialise. The Associations take this opportunity to convey our support and desire for continued constructive ongoing dialogue between MAS and market participants to assist MAS in developing and finalising the remaining elements of final Basel III implementation, including working with the MAS if it seeks opportunities to canvas planning and thinking on future prudential requirements and how they might interact with international capital markets, as well as the post-Covid recovery globally and in the region. **B. Other Comments** **a. Market risk framework ("FRTB"):** The Associations are grateful for the MAS announcement on 7 April, 2020 indicating a delay in the implementation of FRTB due to COVID-19[6]. The Associations wish to reiterate that it is important that international standards such as FRTB are applied consistently across jurisdictions, enabling banks to operate on a global level-playing field whilst also reflecting the specific financial and economic circumstances of Singapore and the Asia Pacific region. The Associations request that MAS should continue to monitor the timeline for implementation of FRTB in the European Union and United States, and not front-run implementation compared to these and other key jurisdictions. There is the real risk of regulatory fragmentation, and consequently implementation challenges for globally active banks, and unlevel playing field for local banks, if MAS implements the FRTB framework ahead of these key jurisdictions. Furthermore, the recent COVID-19 stress period has highlighted areas of procyclicality in the existing market risk framework,

[6] *https://www.mas.gov.sg/news/media-releases/2020/mas-takes-regulatory-and-supervisory-measures-to-help-fis-focus-on-supporting-customers*, MAS, MAS Takes Regulatory and Supervisory Measures to Help FIs Focus on Supporting Customers.

		and we recommend that the calibration of the FRTB framework is monitored and assessed at an international level to address areas of conservatism. **b. Credit valuation adjustment risk ("CVA") framework:** The Associations understand that proposals for the revisions to the CVA framework are not within the scope of the Consultation, and MAS intends to publish a separate consultation paper on CVA risk in due course. The Associations welcome the opportunity to provide MAS with detailed feedback on MAS's proposals on revisions to the CVA framework at such time. However, the Associations would like to highlight that the BCBS published the targeted revisions to the credit valuation adjustment risk framework in July 2020[7] ("Revised CVA Framework"), which reflects some of the industry feedback[8]. The Associations are supportive of the MAS aligning with the Revised CVA Framework, including with respect to: • SA-CVA multiplier - the Revised CVA Framework introduces a reduction in the SA-CVA multiplier from 1.25 to 1. • BA-CVA scaler - the Revised CVA Framework also introduces a scaler of 0.65 for the overall BA-CVA requirement, to ensure there is an appropriate level of calibration between BA-CVA and SA-CVA approaches. • Exclusion of certain SFTs and CCTs - the Revised CVA Framework also excludes certain SFTs and client cleared transactions ("CCTs") from CVA capital requirements, under specific circumstances. Losses incurred on SFTs and client cleared transactions due to a default already fully covered by the counterparty credit risk ("CCR") framework, and better alignment of the CVA and CCR rules will help to prevent a potential double count in capital charges. • Reduction in MPOR for SFTs and CCTs - the reduction in the supervisory floor for the margin period of risk ("MPOR") in the Revised CVA Framework for certain SFTs and CCTs from ten to five business days ensures better alignment between regulatory CVA and accounting practices (although the MPOR of 10

[7] *https://www.bis.org/bcbs/publ/d507.pdf*, BCBS, Targeted revisions to the credit valuation adjustment risk framework.
[8] *https://www.isda.org/a/72oTE/ISDA_GFMA_IIF_CVA_Consultation_Response.pdf*, ISDA/GFMA/IIF, Industry response - BCBS consultation - Credit Valuation Adjustment risk: targeted final revisions.

		business days for all other derivatives transactions remains unchanged). • Index hedges - given the lack of liquidity in many single-name credit default swap contracts, firms typically use indices as a proxy to hedge their CVA risk at the portfolio level. The Revised CVA Framework replicate the market risk framework by introducing new index buckets in the counterparty credit spread risk class, the reference credit spread risk class and the equity risk class for SA-CVA. For credit and equity indices that satisfy certain liquidity and diversification conditions, firms will now have the ability to calculate CVA capital based on the index buckets rather than looking through to the underlying names. • Changes in Supervisory Risk Weights - align with the changes to supervisory risk weights in the Revised CVA framework for SA-CVA to align with the revised market risk framework. However, the Revised CVA Framework did not consider some feedback provided by the industry, including: • further granularity in the risk buckets for financial institutions to better reflect differences in the risk profile between different types of organizations (for example, pension funds and hedge funds); and • further amendments to the index buckets, aggregation formula and a reduced MPOR for all derivatives to better reflect the economic risks of CVA and to incentivize prudent hedging practices. We would be grateful if MAS would consider these additional points when formulating the consultation on CVA risk, and the Associations will be happy to provide additional information on these areas as part of the consultation process.

Consultation Paper on draft standards for credit risk capital and output floor requirements on 25 March 2021

- ***Question 1.*** *MAS seeks comments on the draft provisions relating to credit risk capital requirements in Part II (Definitions), Part VI (Definition of Capital), Part VII (Credit Risk), and Part XII (Reporting Schedules) of MAS Notice 637 in Annex B.*
- ***Question 2.*** *MAS seeks comments on the draft provisions relating to the output floor requirements in Part II (Definitions), Part IV (Capital Adequacy Ratios and Leverage Ratio), Part V (Output Floor), and Part XII (Reporting Schedules) of MAS Notice 637 in Annex B.*

S/N	Respondent	Response from Respondent
1	International Swaps and Derivatives Association, Inc. and Asia Securities Industry and Financial Markets Association	**A. Introduction** The Asia Securities Industry & Financial Markets Association ("ASIFMA")[9] and the International Swaps and Derivatives Association, Inc. ("ISDA")[10] (together, the "Associations") on behalf of their members welcome this opportunity to comment on the Monetary Authority of Singapore's ("MAS") consultation paper on Draft Standards for Credit Risk Capital and Output Floor Requirements for Singapore-incorporated Banks ("Consultation")[11] published in March 2021. The industry supports finalisation of the Basel Committee on Banking Supervision's ("BCBS") post-crisis reforms and appreciates

[9] ASIFMA is an independent, regional trade association with over 140 member firms comprising a diverse range of leading financial institutions from both the buy and sell side, including banks, asset managers, law firms and market infrastructure service providers. Together, we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia. ASIFMA advocates stable, innovative, competitive and efficient Asian capital markets that are necessary to support the region's economic growth. We drive consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice. Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the United States and AFME in Europe, ASIFMA also provides insights on global best practices and standards to benefit the region.

[10] Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 925 member institutions from 75 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org.

[11] *https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/Consultation-Paper-on-Draft-Standards-for-Credit-Risk-Capital-and-Output-Floor-Requirements.pdf*, MAS, Consultation Paper on Draft Standard for Credit Risk Capital and Output Floor Requirements for Singapore-incorporated Banks.

		ongoing work by the MAS to adopt the standards, which not only helped to improve the banking sector's ability to withstand shocks, but also helps ensure a level playing field for local and international banks. We have looked at the proposals set out within the Consultation and, broadly, do not have any significant new comments at this stage. Some high-level comments to the Consultation are set out below. **Credit risk:** There are several areas of the revised Basel credit risk framework which would require clarifications of terminology and guidance on interpretation to support an effective and efficient local implementation while avoiding unintended consequences. Examples include: diligence requirements on external credit rating for banks and corporates exposures; categorisation of bank exposures; definition of the "movement of goods", granularity criterion on retail exposures; currency mismatch multiplier to unhedged retail exposures; supervisory expectations on mandatory move from Advanced to Foundation model approach; revenue threshold for large corporate; Internal Ratings-based ("IRB") coverage ratio. We would encourage the MAS to engage the industry on those areas before finalising the local requirements. There are also areas of the final Basel III framework which should be recalibrated, ideally at the international level. This includes, for instance, the increase of the probability of default ("PD") floor to all asset classes except sovereigns from 0.03% to 0.05%, including for financial institutions which are already subject to a conservative multiplier of 1.25x under the current framework. Another issue is the 10% credit conversion factor ("CCF") floor on off balance sheet items or the 50% CCF applicable to low-risk trade finance off balance sheet items such as bonds and guarantees. **Output floor:** The Associations support MAS' adoption of the BCBS phase-in arrangement for the output floor calibration, which has been extended by one year in view of the deferral of the Basel III

		implementation timeline. With the ongoing COVID pandemic, the transitional arrangements provided for implementation of the output floor provides the industry with additional operational capacity to respond to the impact of the pandemic. We also highlight the importance for the output floor to be implemented consistently with other major jurisdictions to ensure comparability of the outcome and avoid any instance where Singapore-incorporated banks are disadvantaged compared to international banks. **Conclusion** The Associations take this opportunity to convey our support and desire for continued constructive ongoing dialogue between MAS and market participants to assist MAS in developing and finalising the remaining elements of final Basel III implementation, including working with the MAS if it seeks opportunities to canvas planning and thinking on future prudential requirements and how they might interact with international capital markets, as well as the post-Covid recovery globally and in the region.

Consultation paper on draft standards for market risk capital and capital reporting requirements published in September 2021

- ***Question 1.*** *MAS seeks comments on the draft provisions relating to market risk capital requirements in Part II (Definitions), Part V (Output Floor), Part VI (Definition of Capital), Part VIII (Market Risk), and Part XII (Reporting Schedules) of MAS Notice 637 in Annex B.*

S/N	Respondent	Response from Respondent
1	International Swaps and Derivatives Association	**A. Introduction** The International Swaps and Derivatives Association, Inc ("ISDA")[12] is grateful for the opportunity to respond to the consultation paper on market risk capital and Credit Valuation Adjustment ("CVA") risk framework ("Consultation") published by the Monetary Authority of Singapore ("MAS") on 13 September, 2021[13]. ISDA appreciates the work that MAS is completing in this area, and for the opportunity to respond to the Consultation. We summarise our high-level response to the Consultation in section 2. Timing and alignment with global jurisdictions, and have provided detailed comments on MAS' proposals in section 3. Market risk framework comments and section 4. CVA risk framework comments. The comments provided by ISDA is this response are globally established positions on both Market and CVA risk frameworks, with input also derived from the industry responses to the European Commission's ("EC") consultation on the CRR3 legislative proposal[14], the industry response submitted to the Basel Committee on Banking and Supervision's ("BCBS") consultation on the revised CVA risk framework

[12] Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 960 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org.

[13] *https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/Consultation-Paper-on-Draft-Standards-for-Market-Risk-Capital-and-Capital-Reporting-Requirements.pdf*, MAS, Consultation paper on Market Risk Capital and Capital Reporting Requirements.

[14] https://www.isda.org/a/CkbTE/ISDA-AFME-Response-to-the-EC-Consultation-on-CRR3-Implementation.pdf

		published in February 2020[15] and further discussions at the global level with BCBS' Market Risk Group ("MRG"). We would like to highlight that the comments provided in this response should not be considered as final as these discussions continue to evolve globally. We would also request that the MAS provide the opportunity for further consultation and analysis once there is more clarity on the global implementation of these frameworks. As we note below, a key concern for our members is the timing of the overall implementation of the Basel III reform package in light of the COVID-19 pandemic. It is also of crucial importance that the standards are implemented simultaneously and harmoniously across key jurisdictions globally to avoid significant undue technological and business burdens for banks. We have discussed these concerns in more detail in section 2. ISDA hopes to continue the constructive ongoing dialogue between MAS and market participants to assist MAS in developing and finalizing the frameworks. We note that our members may have feedback which they may wish to provide separately to MAS. **B. Timing and alignment with global jurisdictions** ISDA is broadly supportive of the approach outlined by the MAS, and of proposals which do not deviate from the BCBS standards in calibration and timeline. However, in finalizing the Consultation proposals, we also request that the MAS consider international developments in the area and monitor the adoption status in other key jurisdictions. ISDA is grateful for the coordination shown amongst BCBS members in announcing[16] the deferral of the implementation of the Basel III final reform package by one year to 1 January 2023, in order to provide banks and regulators with additional operational capacity to respond to the impact of the COVID-19 pandemic. However, with the COVID-19 pandemic and its impact on economies worldwide ongoing, we acknowledge possibility of further potential challenges to financial stability and the possibility for further delay to be

[15] *https://www.isda.org/a/72oTE/ISDA_GFMA_IIF_CVA_Consultation_Response.pdf*, ISDA-GFMA-IIF, Industry Response to BCBS consultation – Credit Valuation Adjustment risk: targeted final revisions.
[16] *https://www.bis.org/press/p200327.htm*, BCBS, Governors and Heads of Supervision announce deferral of Basel III implementation to increase operational capacity of banks and supervisors to respond to Covid-19.

		considered at the BCBS level. We would encourage MAS to adjust its timeline accordingly in alignment with other key jurisdictions to ensure a level playing field for market participants and to minimise any unintended consequences of market fragmentation. We would like to highlight that on 10 June 2021, the Hong Kong Monetary Authority ("HKMA") revised its Basel III implementation timeline[17], providing the industry with an additional six-month window for the implementation of revised market and CVA risk frameworks. According to this latest timeline from HKMA, locally incorporated authorized institutions will be required to implement the new market and CVA risk frameworks for reporting purposes by 1 July 2023 (instead of the previous deadline of 1 January 2023). The new frameworks will take full effect from a date no earlier than 1 January 2024 – its timing will be fixed at a later stage, taking into account the implementation progress observed in major jurisdictions. As the revised market risk capital and CVA risk frameworks represent a significant overhaul, it is likely to have an impact on multiple areas for banks, including on systems, data, and resources. ISDA considers it important that international standards are applied consistently across jurisdictions, enabling banks to operate on a global level-playing field whilst also reflecting the specific financial and economic circumstances of Singapore and the Asia Pacific region. Furthermore, it is important for globally active banks that international standards are implemented in a coordinated way, including following a consistent timeline across jurisdictions, transitional arrangements, and with a reasonable implementation period once the legislative process is finalised. MAS' proposed implementation date of 1 January 2023 for supervisory reporting purposes is challenging for the industry. The rules are currently in the consultation stage providing banks approximately 12 months or less to create the complex infrastructure required for implementation. Therefore, we request that the MAS review the implementation timeline for the revised market and CVA risk frameworks to accommodate the significant overhaul required and furthermore consider global implementation timelines in other major jurisdictions.

[17] *https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2021/20210610e1.pdf*, HKMA, Circular on Revised Basel III Implementation Timeline.

		C. Market Risk framework (Fundamental Review of the Trading Book "FRTB") comments The Industry wishes to highlight a few key topics which have been identified as priorities for remediation in the FRTB framework. I. Investment in Funds The revised framework imposes a burdensome approach on the capitalization of equity investments in funds in the Trading Book that can impede Banks' role in facilitating an effective and liquid market. The ambiguities in the regulatory framework as well as the significant operational complexities have led many banks to capitalize these products using the conservative fallback approach under the Standardized Approach ("SA"). The industry points out that the look-through approach should not be imposed under Internal Models Approach ("IMA"), instead banks should be allowed to retain the flexibility to choose different modelling techniques as appropriate and the adequacy of those choices will be validated via the Profit and Loss Attribution Test ("PLAT") and backtesting performance. Flexibility should also be introduced for the SA look-through approach so banks can use sensitivities to underlying fund's components provided by third parties as well as to make more risk sensitive the fallback approach under the SA. II. Default Risk Charge ("DRC") and Probability of Default ("PD") The industry reiterates the inconsistency in FRTB DRC treatment between IMA and SA. In FRTB DRC SA, exposures that receive a 0% risk weight n the credit risk SA (sovereigns, public sector entities and multilateral development banks as well as international organizations that treated similarly to a sovereign in CRR), shall be assigned a 0% risk weight under the FRTB SA-DRC. However, in IMA, a 3bp probability of default floor applies to exposures that are risk weighted 0%. All counterparties to which a 0% risk weight applies in SA-DRC should not be subject to the PD 3bp floor in IMA-DRC. III. Carbon Credit Trading The FRTB in its current form disproportionately penalizes carbon credit trading by setting a high-risk weight of 60% as well as allocating a low tenor correlation parameter for carry positions. The recently published paper, *Implications of the FRTB for Carbon Certificates*[18] and the industry advocate the need for the revision of the rules by policy makers

[18] https://www.isda.org/2021/07/23/implications-of-the-frtb-for-carbon-certificates/

		as the punitive treatment of carbon credit trading could impede banks in their role as intermediaries in the transition to a carbon-neutral economy. IV. Residual Risk Add-On (“RRAO”) The RRAO continues to be a concern and the industry notes the lack of risk sensitivity that penalizes well-hedged portfolios and leads to double counting of capital charges. The RRAO framework applies to Yield Curve Spread Options making them uneconomical for most banks to continue offering these products, that are heavily traded by insurance companies, pension funds life insurance companies, corporates, and asset managers etc. In addition, the industry recommends that only truly exotic underlyings should be subject to the 1% RRAO charge and let volatility and variance derivatives be subject to the 0.1% RRAO charge, since their risk can mostly be hedged via vanilla options. An example of spread options in scope of RRAO are the simple Constant Maturity Swap (“CMS”) spread options that should be considered plain vanilla instruments and therefore be exempt from the RRAO charge. V. Non-Modellable Risk Factor (“NMRF”) More headroom should be granted in developing the NMRF capitalisation methodologies, to better reflect risk management practice, to exclude from the internal model only risk factors that are truly non-modellable and to ensure that in the spirit of IMA the NMRF should be a residual component. VI. Correlation Trading Portfolios (“CTP”) The FRTB introduces punitive charges for CTP products in terms of default and credit spread risks and limits recognition of hedges. The industry would like to reiterate that it is crucial that the FRTB standards allow decomposition of CTP products across the SBM and DRC calculations in order to align the capital charge with the bank’s hedging approach and ultimately with the underlying risk for such products. VII. Implementation of FRTB Careful implementation of the key IMA requirements using real portfolios and addressing obvious inconsistencies between the IMA and SA approach before go-live of FRTB own funds requirement to ensure the viability of IMA. This includes also ensuring that adequate supervisory flexibility is provided for authorities to exempt firms from procyclical Risk Factor Eligibility Test (“RFET”), backtesting and PLAT charges at times of stress.

		A more detailed overview of these proposals can be found in the Industry response to the EU CRR3 consultation[19]. In addition to the above policy recommendations, we would like to highlight the below which we believe should be amended to be consistent with the BCBS FRTB framework. Backtesting requirements (section 8.3.164) Section 8.3.164 states that the capital requirement for all of the positions in the trading desk must be determined using the standardised approach if a Reporting Bank counts "either more than 12 exceptions when compared against the one-day VaR measure at the 97.5th percentile, one-tailed confidence level, or more than 30 exceptions when compared against the one-day VaR measure at the 99th percentile, one-tailed confidence level, over 250 trading days". We would like to confirm that the above should be for "12 exceptions at the 99th percentile or 30 exceptions at the 97.5th percentile", which would be in line with the BCBS recommendation in Article 32.19. **D. Credit Valuation Adjustment ("CVA") framework comments** As MAS prepares to implement the finalised CVA framework, it will be important to monitor its impact. CVA risk represents a significant driver of risk-weighted assets ("RWAs") for derivatives and capital market activities, and deficiencies in the framework have an impact on banks' ability to provide key financing, liquidity and hedging services and products to end-users. As a result, it is very important that the design and calibration issues be addressed appropriately to ensure that capital requirements are in line with real economic risks incurred by banks. The industry believes that the improvements described below, which have been suggested in previous communications with supervisors, are still necessary to ensure the revised framework remains risk sensitive and proportionate to the underlying risks. I. Recognise the difference in risk profiles of separate financial institutions through the introduction of distinct risk weights per type of financial institutions, instead of their allocation to a single bucket. II. Improve the recognition of indices use to hedge CVA risk, particularly in terms of their usage linked to the hedging of systematic credit risk, rather than specific sectoral or counterparty risk.

[19] https://www.isda.org/a/CkbTE/ISDA-AFME-Response-to-the-EC-Consultation-on-CRR3-Implementation.pdf

		III. Increase alignment between regulatory and accounting CVA by revising the scope of application and modelling parameters to more closely align with industry practice to determine accounting fair value recognized in banks' financial statements. Steps to bring about this alignment include: a. adjusting the period stipulated by the Margin Period of Risk ("MPoR") to make it more aligned with accounting market practices; b. adding flexibility to the expected loss given default used for specific exposures or entities which by their nature expose derivative counterparties to lower risks than bondholders. A more detailed statement of these proposals, plus additional evidence, was described in a recent response to a BCBS consultation[20]. **E. Conclusion** As a final note, we encourage the MAS to take the changes that result from the final analysis back to BCBS and obtain the necessary revisions to the relevant BCBS standards. Changes at the Basel level are necessary to facilitate consistent implementation on a global basis. We thank the MAS for considering our comments. We look forward to continued dialogue on these issues going forward, and we remain at your disposal in the development of the final Basel III, FRTB, and CVA risk frameworks. We also welcome the opportunity to meet with MAS to further discuss any of the issues raised above in more detail. Should you have any questions, please do not hesitate to contact Panayiotis Dionysopoulos, Head of Capital at ISDA (pdionysopoulos@isda.org or at +44 203 808 9729).
2	United Overseas Bank Limited	**A. COMMENTS TO PART V (OUTPUT FLOOR)** 1. We agree with the prudential approach of limiting the amount of capital benefit from internal models relative to standardised approaches. However final capital output floor of 72.5%, severely restricts the contribution from internal models. From our study, implementing Market Risk Internal Models would have no effect on the final capital charge. To illustrate, let us assume that Credit Risk RWA from Internal Models is 60b, and from Standardised Approach is 95b. Market Risk RWA from Standardised Models is 5b. When the output floor is set at 72.5%, any improvement of the Market Risk Internal Model RWA in terms of capital requirement over Standardised

[20] https://www.isda.org/a/72oTE/ISDA_GFMA_IIF_CVA_Consultation_Response

		Approach would make no difference to the final capital charge. Internal models will then only be deployed by Banks in order to achieve more accurate risk measures and for better risk management. 2. Para 5.1.5 Table 5-2, column (b) Standardised approach: "SA(MR) set out in Division 2 of Part VIII of MAS Notice 637 in force immediately before 1 January 2023, except that …" "CVA standardised method set out in Section 2 of Annex 7AI of MAS Notice 637 in force immediately before 1 January 2023, except that …" For Standardised approach, technically prior to the effective date, the rules remain unchanged before and after 1 January 2023. However, the use of 'except that' within column (b) has the connotation of deviation from rules in force immediately before 1 January 2023. For your consideration to adopt 'including' or 'for avoidance of doubt' instead. **B. COMMENTS TO PART VIII (MARKET RISK)** <u>Division 1: Overview of Market RWA Calculation</u> 1. Regarding the closed consultation for SFX treatment and analysis, a. We would like to confirm that these changes will be incorporated to 8.1.5. b. For Schedule 3-1G, Structural FX positions to be excluded must be reported. Can we confirm that the subsequent Net Weighted Sensitivities is net of Structural FX exclusions? 2. The Bank has structured products which originate in the trading book for self-funding purposes. Therefore both liability and embedded derivative reside in the trading book and attract market risk capital. This would also avoid the use of internal risk transfers when the position is closed out. 3. 8.1.29 states that in the event either the liability position is closed out or where the embedded derivative is exercised, both legs of the product must be terminated. For such structures, retail investors may continue to hold deposits with the bank even after the embedded derivative is exercised. Therefore we would like to enquire if requirement for immediate termination of the liability can be relaxed. 4. Under 8.1.27, funds which do not have daily price and which the Bank is not able to look-through will be assigned to the banking book. At the same time, 8.1.2 (b) requires commodities risk for instruments in the

		banking book to be included in market risk capital requirements. We would like to clarify the correct approach in the following situation. For example, a bank has a holding in the Banking Book of a multi-asset fund that has exposure in commodities. At the same time the bank cannot look through the fund and does not have daily price on the fund, despite knowing its mandate. Should we adopt the interpretation that because look-through cannot be performed and there is absence of daily price, the fund will be subject to treatment as a single unit under the banking book? Therefore commodity components of this multi-asset fund will not be included in market risk capital requirements. <u>Division 2: Standardised Approach</u> 1. 8.2.9 When computing curvature, bond yield curves will be shocked upward and downward by the appropriate risk weights. Shifting credit spreads down by the prescribed shocks may result in corporate bond yields falling below risk free rates, despite their having higher credit risk. The downward shifts may also result in bond yields turning negative. Hence we would like to request that flooring be allowed for CSR (securitisation: non-CTP) and CSR (securitisation: CTP) curvature. 2. The Bank would like to clarify the treatment for Exchange Traded Funds (ETF) which are based on equity stocks in specific segments e.g. energy sector stocks. If the ETF satisfies conditions laid out in 8.3.80 (a) to (f), can it be considered a qualified index? 3. 8.2.113 assigns CTP products as well hedges (include single name CDS or CDS indices) to the CSR (securitisation: CTP) risk class. 8.2.114 does not allow delta risk buckets 17 and 18 to be applied to the hedges, and hence they must be subject to look-through. This will however, contradict the requirement in 8.2.83 that the same look through approach must be applied on all identical instruments that reference the same index. Where credit indices are used to hedge CTP products, can we request that MAS allow delta risk buckets 17 and 18 to be used? 4. Under 8.2.210, clear definitions were provided for the features of RRAO instruments in sub-paragraphs (b) and in sub-paragraphs (d) to (f). However, products can contain more than one of these features. For instance a Bermudan option may also have multiple strikes. Due to the Bermudan feature, it will fall under sub-paragraph (b) footnote 706. This product will also fall under sub-paragraph (f) which refers to options that have multiple strike prices or barriers. For the purpose of reporting, we would like to suggest that Schedule 3-1K be simplified to reflect

		8.2.210 (a), 8.2.210 (b) (ii), 8.2.210 (c) and single row for all other instruments bearing residual risks under 8.2.210 (b) (i), (d), (e), (f). Division 3: Internal Models Approach 1. Under 8.3.98 on model validation requirements calls for the independent construction of a benchmark model. The bank currently builds an independent model in validating valuation models which underpin IMCC and SES, and intend to continue doing so. IMCC and SES models are governed by rules specified in the Guidelines, and will be rigorously tested to ensure they conform to these requirements. We propose to put in place checks on system behaviour, instead of building separate benchmark models for them. 2. Under 8.3.114 (a), any 'constructed risk factor' is classified as an NMRF, even if it is a combination of one or more modellable risk factors. This would have the effect of categorizing a risk factor as modellable, and as non-modellable when it is combined with other modellable risk factors. We do not consider this to be a possible scenario as risk factors should be clearly defined as either modellable or non-modellable. 8.3.114 (a) also appears to contradict 8.3.128, which follows BIS MAR 31.26 Principle one, and treats combinations of modellable factors as a modellable risk factor. Hence we would like to request that 8.3.114 (a) be replaced with the statement in 8.3.128. 3. In the previous feedback, MAS has confirmed that the Bank is required to re-generate ES results for revised reduced set of risk factors over the 12 week period preceding the calculation date. The Bank would like to suggest doing so using Taylor series approximation, as permitted under 8.3.138 ("need not require all products to be simulated using full revaluation and may use simplifications") 4. In 8.3.196, equity and credit indices are assigned liquidity horizons equal to or longer than the weighted average liquidity horizon of the index. As illustrated in footnote 770, if an index has all of its components with liquidity horizon of 10 days and only a single component with liquidity horizon of 20 days – it will be penalised and default to use the longer liquidity horizon of 20 days. We would like to suggest that for qualified indices, the liquidity horizon for equity indices be set to 10 days, and the liquidity horizon for credit indices be set to 20 days for sovereign indices and 40 days for corporate indices.

		5. We note that under 8.3.164, the requirement for backtesting should read as "more than 30 exceptions when compared against the one-day VaR measure at the 97.5th percentile, one-tailed confidence level, or more than 12 exceptions when compared against the one-day VaR measure at the 99th percentile". 6. Under the Standardised Approach, "central governments, central banks, entities referred to in paragraph 7.3.15B, PSEs, or MDBs" are allowed 0% risk weight. However, IMA DRC includes "all exposures to central governments, central banks and PSEs, including those denominated in the domestic currency of a country or jurisdiction". We would like to clarify if consistent treatment of these entities can be adopted. We can therefore allow 0% default probability to be applied to these exposures under IMA DRC. **C. COMMENTS TO PART XII (REPORTING REQUIREMENTS)** 1. We have reviewed the transitional templates and system enhancement is needed to meet the requirements. We would like to request to retain Schedule 3-1A to 3-1F and rename as 3T-1A to 3T-1F, with the adoption of CVA to total MRWA under Schedule 3T and new 3T-2A for CVA details. This will aid in reducing operational changes for the transitional period. 2. We would like to request that the proposed SA(MR) Schedules 3-1A to 3-1I be simplified to the same level of granularity in current QIS templates. The templates require details on cross-terms and the sum of squares for delta and vega in sensitivities based method aggregation, as well as the sum of CVR+ and CVR- for curvature in sensitivities based method aggregation. These are not exposed by the Bank's current system, which adopts a more efficient computation method to arrive directly at bucket level charges. We believe the bucket-level charges across all risk classes give an effective presentation on the spread of exposures.

Consultation paper on draft public disclosure requirements for regulatory capital published on 30 March 2022

- ***Question 1.*** *MAS seeks comments on the draft provisions relating to public disclosure requirements for regulatory capital in Part XI (Public Disclosure Requirements) of MAS Notice 637 in Annex B.*

<table>
<tr><th>S/N</th><th>Respondent</th><th>Response from Respondent</th></tr>
<tr><td>1</td><td>Maybank Singapore Limited</td><td>We have the following questions with respect to Table 11-48: Asset Encumbrance, and would appreciate MAS' advice:
1. Regarding the requirement "The assets on the balance sheet, as disaggregated", is the bank required to provide a breakdown of the assets? Or is the requirement just at total asset level? If breakdown of the assets is required, should the bank follow the asset classification as per financial statements or as per MAS 610?

2. MAS 610 Appendix B3 Annex 6 is a report on Assets Pledged and one of the response to feedback received on MAS 610 provided that this Annex or report is related to the assets encumbered (see below extract). We have considered both MAS 610 Appendix B3 Annex 6 and MAS 637 Table 11-48 and would think there's no difference. Hence, for consistency, the numbers reported should be the same. We would like to enquire if MAS has a different view.

MAS Response to Feedback - Proposed Revisions to MAS Notice to Banks 610 (Feb 2017)
<table>
<tr><td colspan="3">Assets Pledged (Appendix B3 Annex 6)</td></tr>
<tr><td>22.1</td><td>Please confirm this Annex should be related to our assets encumbered?</td><td>Yes.</td></tr>
</table></td></tr>
</table>