BERMUDA MONETARY AUTHORITY

CONSULTATION PAPER

AMENDMENTS TO THE STANDARDISED APPROACH TO MEASURING CREDIT RISK CAPITAL CHARGES FOR BANKS

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I. INTRODUCTION

1. The Bermuda Monetary Authority (Authority or BMA) is committed to ensuring that its regulatory framework for banking is aligned with international standards while ensuring that it remains appropriate for the local banking sector to ensure that banks are able to continue to operate prudently, competitively and sustainably.

2. To achieve this goal, the Authority is seeking to adopt the Basel III reforms as introduced within the Basel Committee on Banking Supervision's (Basel or BCBS) December 2017 paper entitled; "*Basel III: Finalising post-crisis reforms*" (Basel Framework).[1]

3. Included within the Basel Framework is a revised standardised approach (RSA), which banks are required to use to calculate their minimum capital requirements for credit risk exposures.

4. The Authority proposes to largely adopt the RSA as prescribed by Basel. However, the Authority proposes to utilise national discretions for real estate exposures which better represent Bermuda's real estate market.

5. This consultation paper sets out the Authority's proposed adoption of Basel's revised standardised approach for credit risk. This was originally due to become effective on 1 January 2022; however, due to the impact of the COVID-19 global pandemic, Basel has changed the timeline for implementation to 1 January 2023. Given the extent of changes to the SCRA, the Authority will work with the industry to establish an appropriate implementation date.

6. Once a final standard has been decided the new requirements will be included in the Authority's *Basel III for Bermuda Banks – Final Rule* document. The new standards replace the current credit risk capital charge calculation requirements outlined in the Authority's 2008 issued Basel II framework, *The Revised Framework for Regulatory Capital Assessment*, as outlined in paragraphs 24 to 159 and annexes 2.7 to 2.14.

7. Industry and other stakeholders are invited to provide feedback on the proposals outlined in this paper by emailing their comments to banking@bma.bm by the close of business on 19 August 2022.

II. DUE DILIGENCE REQUIREMENTS

8. As part of a prudent credit risk management framework, banks are required to perform due diligence to ensure they have an adequate understanding, at origination and thereafter, on a regular basis[2] of their counterparties' risk profile and characteristics.

9. The sophistication of the due diligence should be appropriate to the size and complexity of a bank's activities. A bank must also take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis.

[1] The Basel Framework
[2] At least annually

10. Banks must be able to access information about their counterparties on a regular basis to complete due diligence analyses.

11. For exposures to entities belonging to consolidated groups, due diligence should, to the extent possible, be performed at the solo entity level to which there is a credit exposure. In evaluating the repayment capacity of the solo entity, a bank is expected to take into account the support of the group and the potential for it to be adversely impacted by problems in the group.

12. Banks should have effective internal policies, processes, systems, and controls in place to ensure that the appropriate risk weights are assigned to counterparties. In addition, banks must be able to demonstrate to the Authority that their due diligence analysis is appropriate. As part of the supervisory review, the Authority will seek to ensure that a bank has appropriately performed this analysis and will take supervisory measures where it has not been done.

13. When applying risk weights to credit risk exposures based on external credit ratings, banks must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparty exposure. If the analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure, (i.e., AAA to AA–; A+ to A– etc.), the bank must assign a risk weight at least one bucket higher than the "base" risk weight determined by the external rating. Due diligence analysis should not result in the application of a lower risk weight than that determined by the external rating.

III. INDIVIDUAL EXPOSURES TREATMENT

A. EXPOSURES TO SOVEREIGNS

14. The treatment of exposures to sovereigns remains unchanged from the current Basel II framework, with the below risk weights to be applied based on external ratings as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B- and Unrated	Below B-
Risk weight	0%	20%	50%	100%	150%

15. As per paragraph 27 of the Authority's Basel II framework, the Authority will continue to permit claims on the Government of Bermuda to be allocated a risk weight one category below the applicable weighting based on the external ratings. The Authority will also continue to permit the same treatment for claims on other sovereigns where the relevant supervisory authority applies the same treatment in its national rules.

16. For the purpose of risk weighting claims on sovereigns, the Authority also recognises the country risk scores assigned by Export Credit Agencies (ECAs). The Authority is prepared to recognise ECAs that publish their risk scores and subscribe to the OECD agreed methodology. Institutions may choose to use the risk scores published by individual ECAs that are recognised by the Authority, or the consensus risk scores of ECAs participating in

the "Arrangement on Officially Supported Export Credits". The OECD agreed methodology establishes eight risk score categories associated with minimum export insurance premiums. These ECA risk scores correspond to risk-weight categories as detailed below.

ECA Risk Scores	0-1	2	3	4-6	7
Risk weight	0%	20%	50%	100%	150%

17. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism and the European Financial Stability Facility may receive a 0% risk weight.

B. EXPOSURES TO NON-CENTRAL GOVERNMENT PUBLIC SECTOR ENTITIES

18. Claims on domestic public sector entities (PSEs) receive a risk-weighting based on the mapping below option one of the Basel rules:

External rating	AAA to AA-	A+ to A-	BBB+ to B-	Below B-	Unrated
Risk weight	20%	50%	100%	150%	100%

19. A bank may also treat a domestic PSE as a direct exposure to the Bermuda Government if it can prove that the domestic PSE retains the explicit financial support of the Bermuda Government.

20. Claims on foreign PSEs must be weighted at 100% other than where a bank can prove that the foreign PSE retains the explicit financial support of its relevant sovereign and that supervisory authority applies supervisory arrangements equivalent to those in Bermuda. In case of doubt as to the appropriate treatment, the views of the Authority should be sought.

21. An 'equivalent regulator' for the purposes of this document is considered by the Authority to regulate banks under a Basel III regime in a manner that is broadly equivalent to the Authority's regulation. The Authority has not published a list of regulators that it deems equivalent. The Authority will only assess regulators where a bank requests it.

C. EXPOSURES TO MULTILATERAL DEVELOPMENT BANKS

22. Multilateral Development Banks (MDBs) exposure treatment remains unchanged from the current Basel II framework.

23. MDBs that qualify for 0% risk weight must fulfil eligibility criteria as per paragraph 14 of the Basel III reforms.

24. MDBs that currently qualify for a 0% risk weight are as follows:

i. The World Bank Group[3]
ii. Asian Development Bank
iii. African Development Bank
iv. European Bank for Reconstruction and Development
v. Inter-American Development Bank
vi. European Investment Bank
vii. European Investment Fund
viii. Nordic Investment Bank
ix. Caribbean Development Bank
x. Islamic Development Bank
xi. Council of Europe Development Bank
xii. International Finance Facility for Immunisation
xiii. Asian Infrastructure Investment Bank

25. For exposures to all other MDBs, banks will assign the following risk weights determined by the external ratings:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	20%	30%	50%	100%	150%	50%

D. EXPOSURES TO BANKS

26. Exposures to banks will be risk-weighted based on the external credit risk assessment approach (ECRA), as is the case now under the Basel II framework. External ratings must not incorporate assumptions of implicit government support unless the rating refers to a public bank owned by its government.

27. Applicable risk weights are also based on the tenor of the exposure:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Exposures >3 months maturity	20%	30%	50%	100%	150%
Exposures <3 months maturity	20%	20%	20%	50%	150%

28. For exposures to unrated banks, the standardised credit risk assessment approach (SCRA) is used to determine the following risk weights:

Credit risk assessment of counterparty	Grade A	Grade B	Grade C

[3] International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA) and International Development Association (IDA)

Exposures >3 months maturity	40%	75%	150%
Exposures <3 months maturity	20%	50%	150%

29. Paragraphs 22 to 29 of the Basel III reforms details the criteria used to determine the Grade (A, B or C) of an unrated bank exposure.

E. EXPOSURES TO SECURITIES FIRMS AND OTHER FINANCIAL INSTITUTIONS

30. Exposures to securities firms and other financial institutions will be treated as exposures to banks provided that these firms are subject to prudential standards and a level of supervision equivalent to those applied to banks (including capital and liquidity requirements).

31. If a bank is unsure if the exposure complies with paragraph 29 above, it should seek clarification from the Authority on whether the regulatory and supervisory framework in a particular jurisdiction is equivalent to that of the Authority.

32. For exposures to securities firms and other financial institutions that do not comply with paragraph 29, they will be treated as corporate exposures.

F. EXPOSURES TO COVERED BONDS

33. Covered bonds are bonds issued by a bank or mortgage institution that are subject by law to special public supervision designed to protect bondholders.

34. Basel III introduces two sets of risk weights for eligible covered bonds based on whether they are allocated an external credit rating or are unrated.

35. For rated eligible covered bonds, risk weights are as follows:

Issue-specific rating	AAA to A-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Risk weight	10%	20%	30%	50%	100%

36. For unrated eligible covered bonds, risk weights are based on the risk weight of the issuing bank:

Risk weight of issuing bank	20%	30%	40%	50%	75%	100%	150%
Risk weight	10%	15%	20%	25%	35%	50%	100%

37. Assets eligible for the above risk weights must fulfil the prescribed requirements detailed in paragraph 33 of the Basel III reforms.[4]

[4] Paragraph 33 of the Basel Framework

G. EXPOSURES TO CORPORATES

38. Exposures to corporates include exposures (loans, bonds, receivables, etc.) to incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes. The corporate exposure class includes exposure to insurance companies and other financial corporates that do not meet the definition of exposures to banks, securities firms or other financial institutions. The corporate exposure class does not include exposure to individuals.

39. The Basel Framework reforms breakdown corporate exposures into:

    i. General corporate exposures; and
    ii. Specialised lending.

40. For general corporate exposures, banks will continue to apply applicable risk weights aligned with the counterparty's external credit rating:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB- and Unrated	Below BB-
Risk weight	20%	50%	75%	100%	150%

41. For exposures to Corporate Small Medium Enterprises (CSMEs),[5] the risk weight will be 85%. The Authority expects banks to conduct enhanced due diligence on unrated CSMEs to confirm that they indeed meet the risk profile of entities that fall within the BB+ to BB-. Where the Authority determines that the supporting analysis is insufficient, the bank may be requested to apply a 150% RW to the exposure.

42. For unrated corporate exposures that a bank has determined to meet investment grade criteria[6], the bank can assign a risk weighting of 75%.

43. Specialised lending exposures include:

    i. *Project finance* - refers to the method of funding in which the lender looks primarily at the revenues generated by a single project;

    ii. *Object finance* - refers to the method of funding the acquisition of equipment (e.g., ships, aircraft, satellites, railcars, and fleets) where the repayment of the loan is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender; and

    iii. *Commodities finance* - refers to short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (e.g., crude oil, metals, or crops), where the loan will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the loan.

[5] CSMEs are defined as entities with annual revenues of ≥$1mn and <$5mn
[6] As defined under paragraph 20.46 of the Basel Framework.

44. A corporate exposure will be treated as a specialised lending exposure if such lending possesses some or all of the following characteristics, either in legal form or economic substance:

i. Exposure is not related to real estate;

ii. Exposure is typical to an entity (e.g., SPV) created specifically to finance and/or operate physical assets;

iii. The borrower has few or no other material assets or activities and, therefore, little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed[7]; and

iv. The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates.

45. For rated specialised lending exposures, the risk weights applicable are as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	Below BB-
Risk weight	20%	50%	75%	100%	150%

46. For unrated specialised lending exposures, the risk weights applicable are as follows:

Specialised lending	Risk weight
Project finance:	
Pre-operational phase	130%
Operational phase[8]	100%
Operational phase (high quality)[9]	80%
Object finance	100%
Commodities finance	100%

H. SUBORDINATED DEBT, EQUITY & OTHER CAPITAL INSTRUMENTS

47. The below treatment applies to subordinated debt, equity and other regulatory capital instruments issued by either corporates or banks, provided that such instruments are not deducted from regulatory capital.

48. Equity exposures are defined based on the economic substance of the instrument. They include both direct and indirect ownership interests, whether voting or non-voting, in the assets and income of a commercial enterprise or of a financial institution that is not consolidated or deducted.[10]

[7] The primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of the borrowing entity
[8] As defined in paragraph 47 of the Basel Framework
[9] As defined in paragraph 48 of the Basel Framework
[10] Requirements for equity exposures outlined in paragraph 49 of the Basel Framework

49. Debt obligations and other securities, partnerships, derivatives or other vehicles structured to convey the economic substance of equity ownership are considered an equity holding.

50. Speculative unlisted equity exposures are defined as equity investments in unlisted companies that are invested for short-term resale purposes or are considered venture capital or investments that are subject to significant price volatility and are acquired in anticipation of future capital gains.[11]

51. Any liabilities that meet the definition of "other TLAC liabilities" and that are not deducted from regulatory capital are considered to be subordinated debt for the purposes of this paragraph.

52. The following risk weights are to be applied to the below exposures:

Exposure type	Risk weight
Subordinated debt	150%
Equity exposures to certain legislated programmes	100%
Speculative unlisted equity	400%
All other equity exposures	250%

53. The risk weight for investments in a significant minority or majority-owned and controlled commercial entities depends upon the application of two materiality thresholds:

i. Individual investments (15% of the bank's capital); and
ii. The aggregate of such investments (60% of the bank's capital)

54. Investments in a significant minority or majority-owned and controlled commercial entities below the materiality thresholds must be appropriately risk-weighted as per paragraph 49 above. Investments in excess of the materiality thresholds must be risk-weighted at 1250%.

I. RETAIL EXPOSURES

55. The retail exposure class includes the following types of exposures:

i. Exposures to an individual person or persons; and
ii. Exposures to SMEs[12] that are treated as retail

56. Regulatory retail exposures are defined as retail exposures that meet all of the criteria listed below:[13]

i. Product criterion
ii. Low value of individual exposures[14]

[11] For example, investments in unlisted equities of corporate clients where the bank has or intends to establish a long-term business relationship and debt-equity swaps for corporate restructuring
[12] Defined as non-financial small business customers with annual revenues of ≤$1mn in annual revenues
[13] See paragraph 55 of the Basel Framework for detailed criteria
[14] The maximum aggregated retail exposure to one counterparty cannot exceed an absolute threshold of $1 million

iii. Granularity criterion

57. The Basel Framework retail exposure classes include the following types of exposures:

i. Regulatory retail exposures to "transactors"
ii. Regulatory retail exposures to those that do not qualify as "transactors"
iii. "Other retail" exposures

58. Transactors are obligors in relation to facilities such as credit cards and charge cards where the balance has been repaid in full at each scheduled repayment date for the previous 12 months. In relation to overdraft facilities, Obligors would also be considered as transactors if there have been no drawdowns over the last 12 months.

59. The Authority expects that banks can accurately monitor data to ensure accuracy in allocating retail exposures to "transactors." If a bank is unable to track such data, all exposures that meet all the requirements in paragraph 56 above should be included in the "non-transactor" risk weight bucket.

60. "Other retail" exposures to an individual person or persons that do not meet all of the criteria in paragraph 56 above.

61. The following risk weights are applicable based on retail exposure type:

Exposure type	Risk weight
Transactors	45%
Non-transactors	75%
Other retail	100%

J. REAL ESTATE EXPOSURES

Real estate exposure definitions

62. The real estate exposure asset class consists of:

i. Exposures secured by real estate that is classified as "regulatory real estate" exposures (e.g., residential and commercial)
ii. Exposures secured by real estate that is classified as "other real estate "exposures
iii. Exposures that are classified as "land acquisition, development and construction" (ADC) exposures

63. For an exposure secured by real estate to be classified as a "regulatory real estate" exposure, the loan must meet the following requirements:[15]

i. *Finished property* - the property securing the exposure must be fully completed;
ii. *Legal enforceability* - any claim on the property taken must be legally enforceable in all relevant jurisdictions. The collateral agreement and the legal process underpinning it must be such that they provide for the bank to realise the value of the property within a reasonable time frame;

[15] Paragraph 60 of the Basel Framework

iii. *Claims over the property* - the loan is a claim over the property where the lender bank holds a first lien over the property, or a single bank holds the first lien and any sequentially lower-ranking lien(s) (i.e., there is no intermediate lien from another bank) over the same property;

iv. *Ability of borrower to repay* – borrowers must meet the requirements set according to paragraph 73 below;

v. *Prudent value of property* - the property must be valued according to the criteria in paragraphs 69 to 73 below for determining the value in the loan to value (LTV) ratio. Moreover, the value of the property must not depend materially on the performance of the borrower; and

vi. *Required documentation* - all the information required at loan origination and for monitoring purposes must be properly documented, including information on the borrower's ability to repay and the valuation of the property.

64. A regulatory residential real estate exposure is defined as an exposure that is secured by a property that has the nature of a dwelling and satisfies all applicable laws and regulations, enabling the property to be occupied for housing purposes. Residential real estate exposures that are not materially dependent on cash flows generated by the property are classified as General Residential Real Estate Exposures (GRRE).

65. A regulatory commercial real estate exposure is an exposure that is not a regulatory residential real estate exposure. Commercial real estate exposures that are not materially dependent on cash flows generated by the property are classified as General Commercial Real Estate Exposures (GCRE).

66. Regulatory real estate exposures (both residential and commercial) are recognised as exposures "*materially dependent on cash flows*[16] *generated by the property*" when the prospects for servicing the loan materially depend on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to service the debt from other sources. Accordingly, for residential real estate, these exposures will be classified as Income Producing Residential Real Estate (IPRRE), and for commercial real estate, these exposures will be classified as Income Producing Commercial Real Estate (IPCRE).

67. The following types of regulatory real estate exposures are not classified as exposures that are materially dependent on cash flows generated by the property:

i. An exposure secured by a property that is the borrower's primary residence;

ii. An exposure secured by an income-producing residential housing unit that is limited to a capacity of one to four families,

iii. An exposure secured by residential real estate property to associations or cooperatives of individuals that are regulated under national law and exist with the only purpose of granting its members the use of a primary residence in the property securing the loans; and

[16] These cash flows would generally be lease or rental payments

iv. An exposure secured by residential real estate property to public housing companies and not-for-profit associations regulated under national law exist to serve social purposes and to offer tenants long-term housing.

68. ADC exposures refer to loans to a company or special purpose vehicle (SPVs) for financing any land acquisition for development and construction purposes or development and construction of any residential or commercial property. ADC exposures can be treated as residential real estate exposures (GRRE or IPRRE) for residential real estate loans secured by residential property or land under construction if the:

i. construction is for a one to four-family housing unit and is the primary residence of the borrower; and
ii. the loan is not directly or indirectly financing the land acquisition.

69. Other real estate exposures are exposures that do not qualify as regulatory real estate exposures as per the criteria in paragraph 63 above or as ADC exposure as per the criteria in paragraph 68 above.

Loan-to-value and Debt Service Ratios

70. Banks must establish and implement prudent underwriting policies with respect to the issuance of mortgage loans. These will include defined metrics such as total debt service (TDSR) and loan-to-value (LTV) ratios. Where repayment of a mortgage is materially dependent on cash flows generated by the property, underwriting policies must include relevant metrics and treatment (e.g., haircuts on rental income etc.).

71. The LTV ratio is the amount of the loan divided by the value of the property. The value of the property will be maintained at the value measured at origination unless the Authority elects to require banks to revise the property value downward.

72. The value must be adjusted if an extraordinary, idiosyncratic event occurs, resulting in a permanent reduction of the property value. Modifications made to the property that unequivocally increase its value could also be considered in the LTV. When calculating the LTV ratio, the loan amount will be reduced as the loan amortises. The LTV ratio must be prudently calculated in accordance with the following requirements:

i. *Amount of loan* - includes the outstanding loan amount and any undrawn committed amount of the mortgage loan. The loan amount must be calculated gross of any provisions and other risk mitigants, except for pledged deposit accounts with the lending bank that meets all requirements for on-balance sheet netting and has been unconditionally and irrevocably pledged for the sole purposes of redemption of the mortgage loan.
ii. *Value of the property* - the valuation must be appraised independently using prudently conservative valuation criteria. To ensure that the value of the property is appraised in a prudently conservative manner, the valuation must exclude expectations of price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan.

73. While the LTV and TDSR are pertinent credit factors to be considered when underwriting a real property loan, other factors such as the borrower's employment stability, credit history and condition of the collateral property should also be documented in the loan file with evidence of how these elements were incorporated into the final lending decision.

74. Minimum LTV and TDSR jurisdictional requirements are outlined in the Authority issued guidance.[17]

Regulatory Real Estate Risk Weight Treatment

75. For both GRRE and GCRE exposures, a bank is required to use the whole loan approach, which sees the total outstanding loan exposure is allocated to a risk weight bucket based on the LTV of the loan.

76. For both IPRRE and IPCRE exposures, only the whole loan approach is permitted.

Exposures secured by residential real estate

77. For the whole loan approach, the risk weights are as follows for GRRE:

LTV	≤50%	>50% ≤ 60%	>60% ≤ 80%	>80% ≤ 90%	>90% ≤ 100%	> 100%	Other
Risk weight	20%	25%	30%	40%	60%	90%	150%

78. IPRRE risk weighting is determined by the whole loan approach with the proposed risk weights as follows:

LTV	≤50%	>50% ≤ 60%	>60% ≤ 80%	>80% ≤ 90%	>90% ≤ 100%	> 100%	Other
Risk weight	30%	35%	45%	60%	75%	105%	150%

Exposures secured by commercial real estate (CRE)

79. For the whole loan approach, the risk weights are as follows for GCRE:

LTV	≤60%	>60%	Other
Risk weight	65%	85%	150%

80. For the whole loan approach, the risk weights are as follows for IPCRE :

LTV	≤60%	>60% ≤80%	>80%	Other
Risk weight	70%	90%	110%	150%

Exposures secured by land acquisition, development and construction (ADC)

81. For ADC exposures, the risk weight is proposed to be 100% for all exposures.

[17] Supervisory Loan to Value Limits and Supervisory Guidelines on Total Debt Service Ratios – May 2014

K. SECURITISATIONS

82. The securitisation treatment framework is not included in the Basel Framework but is addressed in Basel's revised securitisation framework issued in July 2016 (2016 revisions).[18]

83. The 2008 financial crisis highlighted inherent weaknesses in the Basel II securitisation framework, including the overly mechanistic reliance on external ratings.

84. The 2016 revisions issue a hierarchy of approaches to be used by banks to determine appropriate risk weights for securitisation exposures:

    i. Securitisation of internal ratings-based approach;
    ii. Securitisation of external ratings-based approach (ERBA); and
    iii. Securitisation standardised approach.

85. The 2016 revisions introduce preferential risk weights for securitisation exposures which are considered to be Simple, Transparent and Comparable (STC). The STC criteria are intended to help transaction parties, including originators, investors and other parties with fiduciary responsibility, thoroughly evaluate the risks and returns of a particular securitisation and enable a more straightforward comparison across securitisation products within an asset class.

86. STC criteria definitions are as follows:

    i. *Simplicity* – refers to the homogeneity of underlying assets with simple characteristics and a transaction structure that is not overly complex
    ii. *Transparency* – provides investors with sufficient information on the underlying assets, the structure of the transaction and the parties involved in the transaction. Such transparency will permit a more thorough understanding of the risks involved; and
    iii. *Comparability* – criteria promoting comparability could assist investors in understanding such investments and enable a more straightforward comparison across securitisation products within an asset class.

87. Responsibility for determining if a securitisation exposure is STC compliant lies with the bank that retains the exposure. For securitisation exposures deemed STC compliant, the bank must be prepared to provide the Authority with the relevant supporting information used by the bank that led them to that conclusion.

88. STC criteria must be met at all times. As such, banks must ensure that they periodically review their securitisation exposures and in which they account for, if applicable, any developments that may invalidate the previous compliance assessment. The Authority will seek to verify compliance with the STC criteria as part of the Supervisory Review and Evaluation Process.

[18] Revisions to the securitisation framework

89. The Authority proposes to adopt the ERBA treatment for securitisations, as is the case under the current Basel II framework. The current Basel II treatment is based on the external rating of the exposure, the seniority and the granularity of the underlying pool.

90. The 2016 revisions included the following additional relevant risk characteristics designed to address the weaknesses identified in the Basel II external ratings approach. These include the following:

    i. Tranche thickness of non-senior tranches (e.g., the size of the tranche relative to the entire securitisation transaction); and
    ii. Tranche maturity.

91. Banks shall use the formula outlined in the 2016 revisions to determine tranche thickness.[19]

92. Calculation of tranche maturities as per the 2016 revisions[20] includes a floor of one year and a cap of five years. Banks shall use a linear interpolation between the risk weights for one and five years to account for tranche maturity. The Authority will provide the interpolation calculation templates to be used.

93. Based on the proposed adoption of the revised ERBA, the following risk weights will apply for short-term ratings:

External credit rating	A-1/P-1	A-2/P-2	A-3/P-3	All other ratings
Risk weight	15%	50%	100%	1,250%

94. For exposures with long-term ratings, or when an inferred rating based on a long-term rating is available, the risk weights depend on (i) the external rating grade or an available inferred rating; (ii) the seniority of the position; (iii) the tranche maturity; and (iv) in the case of non-senior tranches, the tranche thickness.

95. For non-STC compliant long-term exposures, the following risk weights will be applied:

Rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	15%	20%	15%	70%
AA+	15%	30%	15%	90%
AA	25%	40%	30%	120%
AA–	30%	45%	40%	140%
A+	40%	50%	60%	160%
A	50%	65%	80%	180%
A–	60%	70%	120%	210%
BBB+	75%	90%	170%	260%
BBB	90%	105%	220%	310%
BBB–	120%	140%	330%	420%
BB+	140%	160%	470%	580%
BB	160%	180%	620%	760%
BB–	200%	225%	750%	860%

[19] Paragraph 69 of the Basel Framework
[20] Paragraph 22 of the Basel Framework

B+	250%	280%	900%	950%
B	310%	340%	1050%	1050%
B–	380%	420%	1130%	1130%
CCC+/CCC/CCC–	460%	505%	1,250%	1,250%
Below CCC–	1,250%	1,250%	1,250%	1,250%

96. For STC compliant long-term exposures, the following risk weights will be applied:

Rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	10%	10%	15%	40%
AA+	10%	15%	15%	55%
AA	15%	20%	15%	70%
AA–	15%	25%	25%	80%
A+	20%	30%	35%	95%
A	30%	40%	60%	135%
A–	35%	40%	95%	170%
BBB+	45%	55%	150%	225%
BBB	55%	65%	180%	255%
BBB–	70%	85%	270%	345%
BB+	120%	135%	405%	500%
BB	135%	155%	535%	655%
BB–	170%	195%	645%	740%
B+	225%	250%	810%	855%
B	280%	305%	945%	945%
B–	340%	380%	1,015%	1,015%
CCC+/CCC/CCC–	415%	455%	1,250%	1,250%
Below CCC–	1,250%	1,250%	1,250%	1,250%

L. PAST DUE LOANS/DEFAULTED EXPOSURES

97. This category is defined as an exposure >90 days past due or to a defaulted borrower.[21]

98. Defaulted residential real estate exposures where repayments do not materially depend on cash flows generated by the property (GRRE exposures) securing the loan shall be risk weighted net of specific provisions and partial write-offs at 100%.

99. The unsecured portion of any loan that is past due for more than 90 days, net of specific provisions, including partial write-offs, will be risk weighted as follows:

Specific Provision rate (of outstanding loan balance)	**<20%**	**≥20%**	**≥50%**
Risk weight	150%	100%	50%

[21] Paragraph 90 of the Basel Framework outlines criteria to determine if a borrower has defaulted

M. OTHER BALANCE SHEET EXPOSURES

100. Current other balance sheet exposures include (i) tangible fixed assets, (ii) equity, (iii) high-risk assets, and (iv) other, including pre-payments and debtors.[22]

101. This exposure category will be reduced to only tangible fixed assets and other, including pre-payments and debtors,, as the equity and high-risk asset line items will be classified under subordinated debt, equity and other capital instruments.

102. There is no proposed change to the current risk weight treatment for tangible fixed assets (100%) and other, including pre-payments and debtors (0% to 150%).

N. RISK WEIGHT MULTIPLIER TO CERTAIN EXPOSURES WITH CURRENCY MISMATCH

103. For unhedged[23] retail and residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income, banks will apply a 1.5 times multiplier to the applicable risk weight according to the treatment of retail and GRRE exposures, subject to a maximum risk weight of 150%.

O. OFF-BALANCE SHEET EXPOSURES (NON-MARKET RELATED)

104. Non-market related off-balance sheet (OBS) exposures[24] are converted into credit exposure equivalents through the use of credit conversion factors (CCF). For undrawn commitment amounts, the exposure would be multiplied by the CCF.

105. As per the Basel Framework, the CCFs to be changed include the following exposures:

   i. Commitments with an original maturity of one year or less of which balances available for redraw under redraw facilities of term loans (20% to 40% CCF)
   ii. Commitments with an original maturity of over one year of which balances are available for redraw under redraw facilities of term loans (50% to 40% CCF).

106. CCFs for all other OBS exposures remain unchanged.

P. OFF-BALANCE SHEET EXPOSURES (MARKET-RELATED)

107. Market-related off-balance sheet exposures[25] are converted into potential future credit exposures through the use of CCFs. The latter total is then added with current exposures[26] to determine the credit equivalent amount (CVA).

108. Treatment of these exposures remains unchanged from the current Basel II treatment.

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[22] PIR line item 200
[23] An unhedged exposure refers to an exposure to a borrower that has no natural or financial hedge against the foreign exchange risk resulting from the currency mismatch between the currency of the borrower's income and the currency of the loan
[24] PIR line items 210 to 340
[25] PIR line items 1060 to 1120
[26] The current exposure amount for each type of market-related off-balance sheet exposure is the sum of the positive mark-to-market value (or replacement cost) of each individual contract within each classification

IV. CREDIT RISK MITIGATION

109. The credit risk mitigation (CRM) framework is applicable to the banking book exposures subject to the standardised approach for credit risk.

110. The effects of CRM will not be double-counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM.

111. While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks)[27]. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy, consideration of the underlying credit, valuation, policies and procedures, systems, control of roll-off risks, and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile. Where these risks are not adequately controlled, the Authority may impose additional capital charges or take other supervisory action(s).

112. In the case where a bank has multiple CRM techniques covering a single exposure (e.g., a bank has both collateral and a guarantee partially covering an exposure), the bank must subdivide the exposure into portions covered by each type of CRM technique (e.g., the portion covered by collateral and the portion covered by the guarantee), and the risk-weighted assets of each portion must be calculated separately. In addition, when credit protection provided by a single protection provider has differing maturities, they must also be subdivided into separate protection.

113. In order for banks to obtain capital relief for any use of CRM techniques, all documentation used in collateralised transactions, on-balance sheet netting agreements, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal review to verify this and have a well-founded legal basis to reach this conclusion, and undertake such further review as necessary to ensure continuing enforceability.

114. Under the Basel Framework, CRM guidance remains largely unchanged from the current Basel II framework guidance, with the following additions proposed to be adopted:

    i. Banks need to ensure sufficient resources are devoted to orderly operations of margin agreements with over the counter derivative and securities financing counterparties (including adequate collateral management policies);[28]
    ii. *Collateralised transactions* - overall framework and minimum conditions (repo and reverse repo transactions);[29]
    iii. *Collateralised transactions* - overall framework and minimum conditions under the simple approach;

[27] Including legal, operational, liquidity and market risks
[28] Paragraph 142 of the Basel Framework
[29] Paragraphs 144 to 145 of the Basel Framework

iv. *Eligible financial collateral* - re-securitisations (as defined in the securitisation framework), irrespective of any credit ratings, are not eligible financial collateral[30]

v. *Standard supervisory haircuts* - inclusion of supervisory haircuts for securitisation exposures;[31]

vi. Regarding the minimum holding periods, if a netting set includes both repo-style and other capital market transactions, the minimum holding period of ten business days must be used. This also includes criteria in which a higher minimum holding period must be used;[32]

vii. *The comprehensive approach* - conditions for zero H – is not applicable as the Authority does not permit the option of a zero haircut for repo-style transactions with defined core market participants, as is the case now; and

viii. Range of eligible guarantors (counter-guarantors)/protection providers.[33]

[30] Paragraph 149 of the Basel Framework
[31] Paragraph 163 of the Basel Framework
[32] Paragraphs 170 to 172 of the Basel Framework
[33] Paragraph 197 of the Basel Framework