

Implementation of the Basel III Framework

CONSULTATION PAPER ON PILLAR I

Bank of Jamaica

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A. INTRODUCTION TO THE CAPITAL ADEQUACY FRAMEWORK

I Overview

1. One of the core responsibilities of the Bank of Jamaica ("the Bank"), is to protect the stability of the financial system in Jamaica and to avoid the recurrence of a crisis of the type experienced in the 1990s, in which costs equivalent to 40 per cent of gross domestic product ("GDP") were incurred in managing failures in the banking system.
2. As at 2014, The Banking Services Act ("BSA") granted Bank of Jamaica enhanced powers of consolidated supervision to supervise financial holding companies ("FHCs") and the financial groups of which they are a part, in line with Principle 12 of the Core Principles for Effective Banking Supervision ("BCPs") and the Basel III regulatory capital framework. This framework requires these financial groups to maintain capital adequacy on a consolidated basis.
3. However, at present, Bank of Jamaica requires deposit-taking institutions ("DTIs") to maintain prudential capital requirements consistent with the Basel I capital framework on a solo basis. While elements of the current framework are prudent (minimum level of the capital adequacy ratio, composition of Tier 1 capital), the calculation of capital requirements still reflect the analytical methodology of the Basel I Accord.
4. Consequently, the local financial landscape's capital and liquidity requirements are no longer aligned with widely observed international regulations. Current approaches focus exclusively on credit risk and foreign exchange risk and leave aside the other market and operational risks that are likely to be significant when evaluated on a consolidated basis. For that reason, introducing a broader comprehensive Basel III, Pillar I approach capturing all risks, would enhance the risk coverage of the Bank's prudential framework.
5. Particularly, market risks other than foreign exchange and banking book interest rate risk are inherent in groups of companies comprising of non-DTIs under a regulated FHC. Adopting a group-wide supervision approach necessitates that the Bank expand capital requirements and expectations for market risk management in order to address the risks, including marked to market price and valuation risks that likely reside within the financial group.
6. Similarly, the existing supervisory approach to operational risk management is fragmented and incomplete. A more comprehensive approach to operational risk quantification and management, would require bringing together the various operational risk related expectations of the Bank into a single enforceable standard along with supporting requirements for industry collection of operational risk loss data.
7. With this in mind, Bank of Jamaica is undertaking the modernization of the regulatory framework applied to banking groups, with a view to bringing the regime in line with global standards that were significantly enhanced in the reforms that followed the global financial crisis in 2007-2009, including a strengthening of prudential regulation for banks and the introduction of international standards for bank resolution¹.

International Standards

8. With regard to prudential regulation, the Basel III regulatory capital framework is the Basel Committee on Banking Supervision's ("BCBS") key response to the global 2007-2009 financial crisis. The framework's aim is to address the shortcomings of the pre-crisis regulatory framework including, among others, insufficient

¹ Resolution arrangements in Jamaica will be the subject of legislation to be brought before parliament in the fiscal year. Bank of Jamaica will publish a consultation on the implementation of the resolution regime within the same year.

high-quality capital, excessive and pro-cyclical build-up of leverage, imprudent liquidity management, high concentration of exposures, as well as “Too Big to Fail” of global systemically important banks (“G-SIBs”).

9. The Basel III regulatory capital framework was reformed in December 2010 (subsequently revised in June 2011), with the publication of “Basel III: A Global Regulatory Framework for more Resilient Banks and Banking Systems” (“June 2011 Basel document”).
10. Subsequently, on 7 December 2017, the BCBS issued the document “Basel III: Finalising Post-Crisis Reforms” (“Basel III final reform package”). A key objective of the Basel III final reform package is to reduce excessive variability of risk-weighted assets, which might affect the credibility and comparability of the reported risk-weighted capital ratios among DTIs.
11. Additionally, this reform intended to, inter alia, (i) raise the quality, consistency and transparency of the capital base, (ii) enhance risk coverage, (iii) supplement the risk-based capital requirement with a leverage ratio², (iv) reduce pro-cyclicality and promote countercyclical buffers, and (v) address systemic risk and interconnectedness. That is, the capital adequacy requirements provide a buffer against unexpected losses; protect creditors in the event of bank failures; and create disincentives for excessive risk taking.
12. This updated framework strengthens the regulatory capital requirements, building on the three pillars of the Basel framework. The reforms increase both the quality and quantity of the regulatory capital base and enhance the risk coverage of the capital framework; and is supported by the liquidity coverage ratio (“LCR”) recently implemented by the Bank.

Focus of this Consultation Paper

13. The focus of the current consultation is on the prudential regulation of DTIs and FHCs, and specifically, the capital they are required to hold in order to minimize the risk that financial institutions fail, causing damage to depositors/policy holders and the broader financial system and economy.
14. The aim is to implement in Jamaica regulations that are consistent with the requirements recently introduced by the BCBS, which will put Jamaica on the same footing as the standards applied in other advanced economies. In some cases, higher standards will be applied reflecting the particular structure and context of the Jamaican system.
15. In this regard, Bank of Jamaica seeks to consult on the following elements introduced by the Basel III final reform package:
 - (i) **Definition of regulatory capital** – make homogenous the definition of capital across jurisdictions, ensuring that the predominant forms of Tier 1 capital are common shares and retained earnings³, which will aid in enabling the market to fully assess and compare the quality of capital between institutions;
 - (ii) **Credit risk** – standardized approach: (1) improve granularity and risk sensitivity calibration of credit exposures and (2) reduce excessive reliance on external credit rating, with a more granular approach for unrated exposures;

² Jamaica has also long had a leverage ratio, a ratio the Basel Committee introduced for the first time under the Basel III capital standard.

³ The standard is reinforced through a set of principles that can also be tailored to the context of non-joint stock companies to ensure that they hold comparable levels of high-quality Tier 1 capital.

- (iii) **Market risk** – The main changes include: (1) specifications for the scope of application designed to reduce incentives for regulatory arbitrage between the trading book and the banking book; and (2) the introduction of a more risk-sensitive standardized approach; and
 - (iv) **Operational risk** – provides a single non-model based revised standardized approach with parameters more indicative of operational risk.
16. The Bank will conduct a quantitative impact study (“QIS”) on selected DTIs in 2021, the outcome of which will help to further inform policy proposals on the Bank’s Basel III implementation plan.
17. According to the original BCBS timetable, the above revised standards will take effect from 1 January 2022 with a phase-in period of 5 years. However, in order to provide additional operational capacity for DTIs and supervisors to respond to the immediate financial stability priorities resulting from the impact of the coronavirus disease (COVID-19) on the global banking system, the implementation will be deferred by one year to start from 1 January 2023. This timeline includes a transitional 12 month period⁴.

III Legal Requirement

18. The proposed capital adequacy requirements will be issued pursuant to section 131(1)(c) of the Banking Services Act (“BSA”), 2014, which allows the Supervisory Committee to make regulations that may make provision in relation to capital adequacy.

IV Scope of Application

19. Pursuant to the Banking Services (Capital Adequacy) Regulations, prudential capital adequacy requirements are proposed to apply to licensees on the following bases:
- a) For each deposit-taking institution licensed under the BSA, on a standalone (solo) basis; and
 - b) For each financial holding company licensed under the BSA, on a consolidated basis, including the consolidation of all members treated as part of the regulatory group.
20. Further, the proposed capital adequacy framework provides the Supervisor with the authority to make determinations, on a case-by-case basis, in terms of members of financial groups that should be included or excluded from the scope of consolidation for the purposes of the capital adequacy framework.
21. An FHC which is itself a DTI⁵ will be required to comply with the proposed prudential capital adequacy requirements at both the standalone level and the consolidated group level.
22. Under the proposed capital adequacy requirements, an FHC, whether non-operating or operating, will be required to ensure that sufficient regulatory capital is available to address the risks of the financial group and all its members.

⁴ There may be a parallel run where entities provide reports according to Basel I and Basel III.

⁵ A deposit-taking institution may be licensed as the FHC of the financial group at the discretion of the Supervisory Committee (Banking Services Act, section 74(2)(3)).

23. The sectoral regulatory capital requirements^{6,7} that govern individual entities in the financial group are proposed to remain applicable.
24. In addition to meeting its consolidated capital adequacy ratio requirements, each FHC will be responsible for ensuring that adequate capital and other financial resources are maintained for the operations of the financial group and that the group complies with its statutory and regulatory obligations with respect to capital⁸. This includes ensuring that:
- i. Each regulated entity in the financial group meets and maintains individual standalone and sector capital adequacy requirements; and
 - ii. The financial group maintains adequate capital on a group-wide basis that is commensurate with the risk profile of the group, and mitigates risks associated with the activities of members of the group.

BOX 1-A. COMPATIBILITY OF FSC REQUIREMENTS FOR SECURITIES DEALERS WITH PROPOSED CAPITAL ADEQUACY FRAMEWORK

Bank of Jamaica understands that securities dealers are subject to capital requirements, the Guidelines to the Securities (Prudential) Regulations, 2014, set out by the Financial Services Commission (FSC). The guidelines prescribe, inter alia, a minimum capital requirement of 10% of risk-weighted assets, where the risk weighting considers credit, market, and operational risks. The Bank invites feedback from the industry on our proposed approach that requires securities dealers to meet the FSC requirements on a solo basis, and the requirements set out in this consultative document on a consolidated basis, with the understanding that decisions regarding the transferability of capital instruments will be done based on the criteria set out in this consultation paper.

V Structure of this Consultation Paper

25. This consultation paper is set out in the following order:
- (i) Part B – the revised definition of regulatory capital;
 - (ii) Part C – the standardized approach for credit risk;
 - (iii) Part D – the standardized measurement method for market risk; and
 - (iv) Part E – the revised operational risk framework;

VI Responding to this Paper

26. This document is being circulated to DTIs and other relevant stakeholders to facilitate industry consultation and feedback. The Bank invites comments on the proposal for the Basel III Capital Adequacy Framework, and

⁶ Securities dealers are required to satisfy capital adequacy requirements under the “Guidelines to the Securities (Prudential) Regulations, 2014”, prescribed by the Financial Services Commission, on a standalone basis.

⁷ The minimum solvency requirements for life insurance and general insurance companies in Jamaica are the Minimum Continuing Capital & Surplus Requirement (“MCCSR”) and the Minimum Capital Test (“MCT”), respectively, as prescribed by the Financial Services Commission.

⁸ BSA, Section 75(1)(a) and (c)

in particular, feedback with respect to the various boxes throughout the CP which focuses on specific matters relevant to the framework. Comments are most helpful if they:

- indicate the clause and specific point to which a comment relates;
- contain a clear rationale for an amendment or state a specific area of concern;
- provide evidence to support the views expressed; and
- propose alternative regulatory approaches the Bank should consider.

Comments on the proposals will be received up to the close of business on **15 February 2021** by email to fisdfeedback@boj.org.jm.

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The Definition of Regulatory Capital

B. THE DEFINITION OF REGULATORY CAPITAL

This chapter sets out the proposed definition of regulatory capital, which is to be applied to licensees under the Banking Services Act. In 2008, the global financial system was plunged into financial crisis with financial institutions holding an insufficient level of high-quality capital. The crisis also revealed inconsistencies in the definition of capital across jurisdictions and a lack of disclosure that would have enabled the market to fully evaluate and compare the quality of capital. In response, a key element of the new definition of capital is a greater focus on common equity, the highest quality element of a financial institution's capital.

PART I – KEY ELEMENTS AND REQUIREMENTS

This part defines key terms to be used throughout this consultative document, sets out the minimum regulatory capital requirements for relevant entities, and outlines general requirements relating to this proposed capital adequacy framework for relevant entities. The main characteristics of regulatory capital are a degree of permanence, ability to absorb losses and freedom from impairments that erode value and loss absorbing capacity.

*While ensuring the loss absorbency of bank capital is a key focus of Basel III, loss absorbency is also central to effective resolution of banks. Bank of Jamaica plans to consult in 2021 on the implementation of a resolution regime in Jamaica including any requirements for loss absorbency in resolution. In the interim, **Box DC1-B** below describes the relationship between capital and loss absorbency in resolution to put the current consultation in context.*

DC1-A. ELEMENTS AND CATEGORIES OF REGULATORY CAPITAL

27. For the purposes of the proposed capital adequacy framework:

- (a) an element of capital is any form of capital determined to be eligible for inclusion in regulatory capital based on its definition and classification within this consultative document; and
- (b) a category of capital is a group of elements of capital based on its definition and classification within this consultative document.

28. Total regulatory capital is calculated by adding amounts from the following categories of capital:

- i. Tier 1 Capital, which is comprised of the highest quality capital, including a financial institution's core capital. Tier 1 Capital is also known as going-concern capital, which means it is used to absorb any losses in such a way as to allow a financial institution to continue its operations and remain solvent. Tier 1 Capital is subdivided into two further categories:
 - (a) Common Equity Tier 1 (CET1) Capital; and
 - (b) Additional Tier 1 (AT1) Capital.
- ii. Tier 2 Capital, which is considered supplementary capital for a financial institution. This capital is also known as gone-concern capital, which means it is used to repay depositors and senior creditors in insolvency. *[BCBS December 2010 par 49]*

29. Each of the three categories of capital listed above (CET1, AT1, and Tier 2) requires that instruments satisfy a single set of eligibility criteria before their inclusion in the relevant category or subcategory.

DC1-B. MINIMUM REGULATORY CAPITAL REQUIREMENTS

30. Under the proposed capital adequacy framework, licensees should maintain, net of associated regulatory adjustments:

- i. Total Regulatory Capital of 10% of risk-weighted assets (RWA) at all times; of which,

- ii. Tier 1 Capital must be at least 8% of risk-weighted assets at all times; and, of which,
- iii. Common Equity Tier 1 Capital must be at least 6.5% of risk-weighted assets at all times.

Box DC1-A. HIGHER MINIMUM CAPITAL REQUIREMENT COMPARED TO BASEL III STANDARD

Bank of Jamaica has exercised discretion by prescribing minimum capital requirements for total regulatory capital, Tier 1 Capital, and CET1 Capital of 10%, 8%, and 6.5%, respectively, after making key contemplations. The Bank has therefore opted for super-equivalency in capital requirements for financial institutions in the proposed capital adequacy framework given that there is a high degree of interconnectedness and conglomeration in Jamaica's financial system which prompts some degree of mindfulness and conservativeness in calibrating the capital requirements set out in this consultative document.

The Bank remains resolute in the commitment to maintaining the safety and soundness of the financial system and considers the above calibration a prudent and substantiated approach.

31. The Supervisor will have the authority, under the proposed capital adequacy framework, to require that licensees build up a capital conservation buffer, comprised of CET1 Capital, in normal times to ensure that adequate capital is available to absorb losses in periods of financial stress. Further, the Supervisor will be provided with the authority, under the proposed capital adequacy framework, to impose a countercyclical capital buffer which will require licensees to hold additional capital when credit growth is high to protect against future losses associated with a turning of the financial cycle (see **Box DC1-B** below).

Box DC1-B. THE CAPITAL BUFFERS – CONSERVATION AND COUNTERCYCLICAL

Bank of Jamaica reserves the authority to include capital buffers in the proposed capital adequacy framework, specifically a capital conservation buffer and a countercyclical buffer. Further, the Bank proposes that any such capital buffer consists of CET1 Capital only.

Capital Conservation Buffer (CCB)

A capital conservation buffer imposes the requirement on financial institutions of holding capital above prescribed regulatory minimum levels for the purposes of protecting financial institutions during economic and financial stress periods, and incorporates lessons from the global financial crisis beginning in 2008. Under the proposed capital adequacy framework, financial institutions will be required to build up a buffer of CET1 Capital only, equal to 2.5% of risk-weighted assets in normal times, which will then be used to cover losses in stress periods. Based on the minimum capital requirements set out in this consultation paper, in normal times, a financial institution will be required to hold minimum regulatory capital of at least 12.5% of risk-weighted assets (10% Total Capital + 2.5% CCB).

Bank of Jamaica will seek to calibrate an appropriate charge of the conservation buffer for Jamaican financial institutions based on country specific characteristics and various simulated macro-financial stress tests.

Countercyclical Capital Buffer (CCyB)

The CCyB is a macro-prudential tool which is designed to limit the effects of pro-cyclicality between financial and real economic activity and was informed by lessons from the global financial crisis. The level of a CCyB is increased in periods of excessive credit growth and is relaxed during an economic downturn with tightened financial conditions. The primary objective of the CCyB relates to ensuring that in a recession, capital can be released, which helps to maintain the flow of lending to the real economy. Similarly, the buffer can be used to help avoid excessive credit growth during the economic expansion.

A CCyB will encompass a capital add-on, expressed as a percentage of risk-weighted assets, for instance where credit growth appears to be excessive and financial imbalances exist. The Bank's strategy for implementing the CCyB is based on core principles of:

1. Ensuring that the financial system is able to withstand stress without restricting essential services such the supply of credit to the real economy;
2. Ensuring the ability to both increase or decrease capital in line with cyclical systemic risks; and
3. Setting the CCyB above zero before the level of risk becomes elevated and varying them gradually in a predetermined manner.

The Bank's approach to assessing excessive credit and financial imbalance in Jamaica will have three basic elements:

1. An assessment of the likelihood and severity of future adverse shocks to the Jamaican economic outlook. This will include analyses of domestic and global economic and financial imbalances that could have a negative impact on economic activity in Jamaica;
2. Monitoring the main features of the balance sheets for households and non-financial corporates in order to determine the impact of macroeconomic and financial shocks on defaults and losses. These features will include levels of debt relative to income, debt-servicing costs, and the term given for loans; and
3. Evaluating the sensitivity of financial institutions' balance sheets to losses on domestic exposures. The Bank will also monitor financial institutions' leverage and funding vulnerabilities along with indicators of resilience and earnings stability.

The Basel III framework requires that financial institutions have a capital buffer to protect against the cyclicity in earnings. The CCyB will vary through time depending on the risk environment facing financial institutions, ranges from 0% to 2.5% of risk weighted assets, and can only be met with CET1 Capital. Bank of Jamaica intends to, however, develop CCyB rules based on the specific conditions within Jamaica's economy. A separate consultation will be conducted on this planned CCyB regime, the methodological approach for its calibration and the principles in making buffer decisions.

The Bank has considered various mechanisms by which the capital buffers may be established. One such contemplation is to repurpose portions of the voluntary retained earnings reserve, as defined under the Banking Services Act ("BSA"), for use as capital buffers above the regulatory minimum levels of capital. Under the BSA, any such retained earnings reserve forms part of Tier 1 Capital and counts towards the regulatory minimum. Bank of Jamaica welcomes feedback on an approach that would allow portions of capital held in the retained earnings reserve to be restructured and instead used, in whole or in part, as a capital buffer above the regulatory minimum, and require that existing or additional capital be used to meet the minimum capital levels specified in this consultative document.

32. The Supervisor will have the authority, under the proposed capital adequacy framework, to adjust the qualifying elements of regulatory capital as deemed necessary.
33. Under the proposed capital adequacy framework, the Supervisor will be provided with authority to vary the minimum capital requirements set out in **Table DC-1** in response to any prevailing conditions within the financial system, including but not limited to, times of financial stress, economic downturns, and interconnectedness, or institution-specific factors such as size, complexity, and systemic importance, or for any other regulatory purpose as deemed necessary.
34. The following table summarizes the elements and categories of capital, and minimum regulatory capital requirements under the proposed capital adequacy framework. See **Appendix DC-1** for a diagrammatic representation of the elements and categories of regulatory capital.

REGULATORY CAPITAL - CATEGORIES, ELEMENTS, AND MINIMUM REQUIREMENTS			TABLE DC-1
Categories of Capital		Elements of Capital	Minimum Requirements (% of Risk Weighted Assets)
Tier 1	Common Equity	Ordinary shares, share premium, eligible reserves, retained earnings	6.5% on CET1
	Additional Tier 1	Certain preference shares, high trigger contingent convertible securities (CoCos)	8% on Tier 1
Tier 2		Subordinated debt, share premium, loan loss provisions, low trigger contingent convertible securities (CoCos)	10% on Total Capital

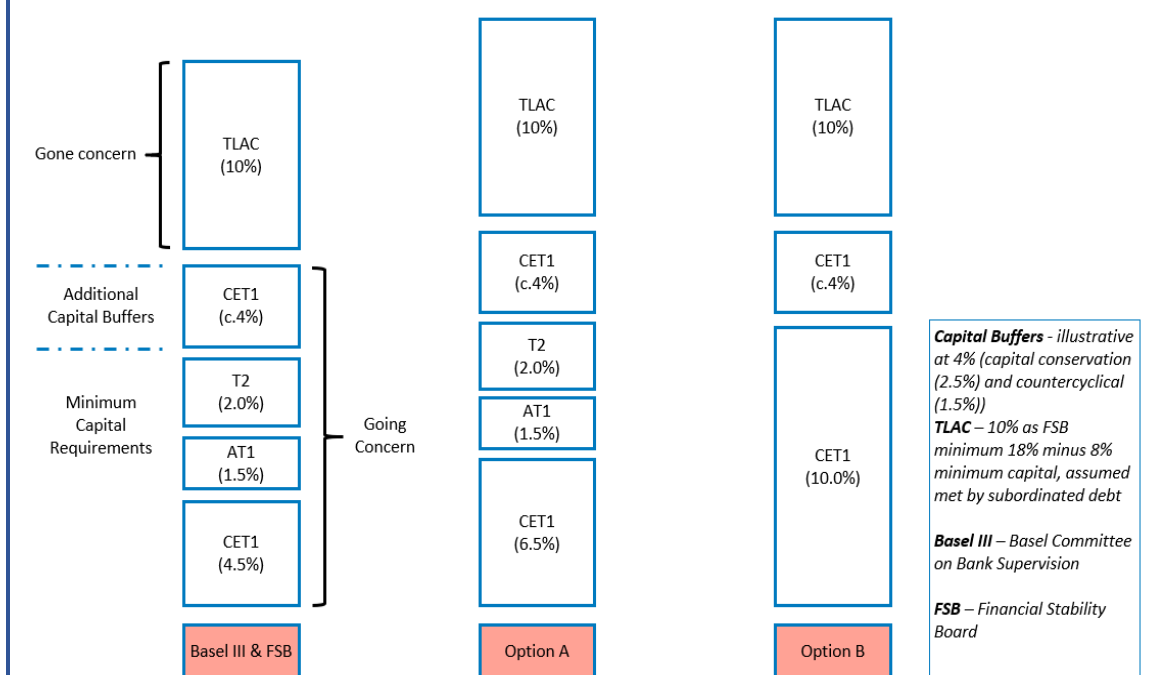
BOX DC1-C. CONSIDERATIONS TO VARY THE COMPOSITION OF REGULATORY CAPITAL

Alongside the strengthening in capital standards for banks outlined in the Basel III Capital Accords, one of the major pillars of the post-crisis reforms was the introduction of international standards for resolution (the Financial Stability Board's Key Attributes for Effective Resolution Regimes published in 2011). Coming out of a crisis in which numerous countries had been forced to bail out banks with public money and where there had been significant damage to the global financial system, the objective was simple – to ensure in future events of bank failure that the adverse impact on financial stability was minimal and to achieve that without recourse to public bailouts. The lesson from the crisis was that putting banks into insolvency when they fail (the standard manner in which enabling laws treated with such matters in most countries prior to the crisis) did not work given the interruption to the intermediation services (e.g. access to deposits and payment systems) provided by banks to the wider economy. Instead, in banks that are systemically relevant, these critical functions need to continue to serve their customers and the wider public. This is achieved by recapitalizing banks when they fail with the costs falling to shareholders and investors rather than to taxpayers. The latter point is critical to avoid the costs of bank failure falling on the state and a banking crisis escalating into a sovereign crisis as happened in Jamaica in the aftermath of the banking crisis in the 1990s.

The Financial Stability Board (FSB) published a standard in 2014 for Total Loss Absorbing Capacity (TLAC) to ensure that, for G-SIBs, the loss absorbency objective could be achieved. The TLAC is sized so that when the capital resources in a bank are consumed at the point of failure by losses, the TLAC can be bailed-in so the financial institution can continue to meet capital requirements. The relationship between buffers, minimum capital requirements and TLAC is illustrated in the chart below. TLAC resources are typically made up of long-term debt instruments. The definition of TLAC will be part of Bank of Jamaica's consultation on implementation of the resolution regime, including how much TLAC banks will be required to issue, how long they will have to build it up, and the relationship of TLAC instruments with the other components of the capital stack.

In this regard, Bank of Jamaica is considering alternative approaches for defining the composition of going concern regulatory capital (**Figure DC-1** below), given that: (i) the preponderance of instruments that would qualify as regulatory capital for deposit-taking institutions are CET1 Capital, namely ordinary shares and accumulated profits, based on the state of development of Jamaica's capital markets; and (ii) CET1 Capital has greater loss-absorbing capacity in comparison to AT1 Capital and Tier 2 Capital.

Figure DC-1. Alternatives for the Alignment of Going Concern Capital Adequacy and Gone Concern Capital Adequacy



The Bank therefore invites feedback from the industry on considerations to prescribe that CET 1 Capital comprise a larger proportion of the composition of regulatory capital, or further, the entirety of regulatory capital (10% of risk weighted assets), until there is sufficient development of capital markets in Jamaica to facilitate AT1 and Tier 2 instruments which sufficiently meet certain loss absorbency criteria (Option B). One such instrument that requires further development of capital markets to provide reasonable assurance of the proper pricing of these instruments are contingent convertible securities (COCOs). COCOs are typically a major component of AT1, and may also qualify as Tier 2 capital depending on the trigger point for conversion of these instruments from debt to equity or for the instrument to be written off.

Notwithstanding the above proposals for the composition and minima of regulatory capital, the Bank intends to consult separately on a framework for TLAC and gone concern capital.

DC1-C. GENERAL REQUIREMENTS FOR REGULATORY CAPITAL

35. Under the proposed capital adequacy framework, financial institutions must ensure that any element of capital included in the computation of total capital meet, in both form and loss-absorbing capacity, all requirements in the specific category of capital in which it is included.
36. Capital not meeting these requirements for loss-absorbing capacity will only be eligible for inclusion in a lower tier or category of capital if capital of that specific form is allowed in that tier or category of capital⁹, and such capital meets the criteria for inclusion in the lower tier or category of capital.

⁹ Determinations as to the eligibility of a specific form of capital in a lower tier or category of capital will be made on a case-by-case basis, taking into consideration the criteria for inclusion in CET1, AT1, and Tier 2 capital and any material changes to the loss-absorbing capacity of the instrument since original issuance and allocation.

37. Financial institutions must not include an element of capital in a specific category of capital if that element, when considered together with other related transactions that may degrade its economic loss-absorbing capacity¹⁰, does not materially satisfy the requirements for that category of capital.
38. Financial institutions must ensure that, under the proposed capital adequacy framework, each element of capital is included in the same category of capital at both the individual and consolidated levels.
39. The inclusion of a capital instrument in a category of capital by financial institutions must be done on the certainty that the events justifying its inclusion in that category of capital have already occurred. For the avoidance of any doubt, a capital instrument must not be included in a category of capital by a financial institution on the assumption that an event that has not yet occurred will occur. Events such as the future sale or issuance of a higher quality capital instrument should not be included in the category of capital until such time as:
 - (a) the future event occurs; and
 - (b) the payments have been irrevocably received by the financial institution.
40. Under the proposed capital adequacy framework, the Supervisor may, in writing, require a financial institution to:
 - (a) exclude any element of capital from the computation of regulatory capital that is, in the opinion of the Supervisor, not a genuine contribution to the financial strength of the financial institution; or
 - (b) reclassify any element of capital to a lower category of capital if, in the opinion of the Supervisor, the capital does not satisfy the requirements under the proposed capital adequacy framework for the element of capital to which it was originally allocated.
41. Under the proposed capital adequacy framework, financial institutions are required to, as soon as is feasible, submit copies of documentation related to the issue of Additional Tier 1 Capital and Tier 2 Capital instruments.
42. Where the terms of an instrument depart from established precedent, a financial institution must consult with the Supervisor on the eligibility of the capital instrument for inclusion in regulatory capital in advance of the issuance of the capital instrument. Financial institutions must also provide the Supervisor with all information necessary to assess whether or not the capital instrument meets the criteria for classification under the relevant category of capital.
43. Under the proposed capital adequacy framework, financial institutions must obtain written approval from the Supervisor before the terms or conditions of an instrument are amended in a way that may affect its eligibility as regulatory capital.

¹⁰ One way in which the loss-absorbing capacity of regulatory capital may be degraded is through excessive and frequent charges that erode the value of such capital.

PART II – DEFINITION OF REGULATORY CAPITAL

This part characterizes the elements and categories of regulatory capital in the proposed capital adequacy framework.

DC2-A. TIER 1 CAPITAL (COMMON EQUITY TIER 1 + ADDITIONAL TIER 1)

44. Tier 1 Capital is comprised of the highest quality capital. This capital is the most subordinated form of capital and is available to absorb losses without placing a financial institution into insolvency, or on a 'going-concern' basis. Tier 1 Capital is the amount resulting from the sum of the two following categories of regulatory capital, after prescribed regulatory adjustments¹¹:

- (a) Common Equity Tier 1 – considered to be core capital of a financial institution; and
- (b) Additional Tier 1 – instruments that are not considered core capital, but are considered going-concern capital.

Common Equity Tier 1 Capital

Elements of Common Equity Tier 1 Capital

45. Under the proposed capital adequacy framework, Common Equity Tier 1 (CET1) Capital will include: [BCBS December 2010 par 52]

- (a) Paid-up capital in the form of ordinary shares¹² issued by the financial institution that meet the criteria for classification as CET1 Capital outlined in **paragraph 39**;
- (b) Share premium arising from the issuance of instruments outlined in (a) above, if any;
- (c) Eligible reserves¹³, as defined under section 2 and section 40-42 of the BSA, 2014;
- (d) Retained earnings¹⁴, subject to the rules outlined in the proposal below;
- (e) Common shares issued by consolidated subsidiaries of the institution and held by third parties (i.e. minority or non-controlling interest) as outlined at section **DC3-A** that meet criteria for inclusion in CET1 Capital; and
- (f) Regulatory adjustments applied in the calculation of CET1 Capital as outlined at section **DC3-B**.

Proposal: Recognition of Retained Earnings as CET1 Capital

46. Bank of Jamaica proposes that retained earnings be included as regulatory capital, subject to the following conditions:

- (a) An independent external auditor must have verified any changes in retained earnings counting towards regulatory capital;

¹¹ This is to provide a clear distinction between the most loss-absorbing form of Tier 1 Capital that represents the most subordinated claim in winding-up of a licensee, now limited to the highest quality capital, and those that meet the requirement for Tier 1 but fall outside the confines of core Tier 1.

¹² CET1 Capital could also be constituted by equivalent instruments issued by entities that are not body corporates, but are companies for the purposes of section 2 of the BSA. In the case of mutually-owned building societies, the equivalent of ordinary shares is the Permanent Capital Fund as defined in section 2 of the BSA.

¹³ More information on the Statutory Reserve Fund is provided in **Appendix DC-2**.

¹⁴ "Retained earnings" is defined as accumulated net profit, for prior years and the current financial year, after taxation, dividend payments and other distributions to investors.

- (b) Quarterly financial statements are prepared using the same accounting policies and principles applied in the preparation of the annual financial statements, unless the accounting policy or principle is changed in accordance with as a result of a statutory requirement;
 - (c) All financial statements, including quarterly financial statements, are reviewed in a timely and appropriate manner by an independent external auditor; and
 - (d) The independent external auditor has not expressed a qualified opinion on any of the licensee's quarterly financial statements in the 12 months preceding the end of the interim financial reporting period.
47. There is a critical need for the risk exposures of financial institutions to be backed by a high-quality capital base. The inclusion of retained earnings as Tier 1 Capital in the proposed capital adequacy framework is partly motivated by the financial crisis which demonstrated that credit losses and write-downs came out of retained earnings, part of the tangible common equity base of financial institutions. The proposal to include retained earnings as regulatory capital departs from the status quo with respect to the mechanism by which accumulated net profits¹⁵ are counted as regulatory capital. Currently, there is no provision in the BSA that recognizes retained earnings not yet transferred into the retained earnings reserve as regulatory capital. Instead, section 42 of the BSA establishes a retained earnings reserve¹⁶ that may be included in Tier 1 capital.
48. Concomitant with the acknowledgement of retained earnings in capital is the expectation that licensees will exercise prudent capital management as part of their enterprise-wide risk management framework. Furthermore, as part of Phase 2 of the Basel III implementation, the Bank proposes to introduce a framework for Internal Capital Adequacy Assessment Process ("ICAAP"), Supervisory Review, and Evaluation Process ("SREP"). These measures will enhance the regulatory and incentives regime around capital management by licensees.

Criteria for Classification as Common Equity Tier 1 Capital

49. The following represent necessary criteria for the classification of capital as CET1 under the proposed capital adequacy framework: *[BCBS December 2010 par 53]*
- (a) Represents the most subordinated claim in the winding up of the licensee.
 - (b) Entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in winding up (that is, has an unlimited claim and variable claim, not a fixed or capped claim).
 - (c) Principal is perpetual, non-redeemable, and never repaid outside of winding up (except with the prior approval of the Supervisor).
 - (d) The licensee does nothing to create an expectation at issuance that the instrument will be bought back, redeemed, or cancelled nor do the contractual terms provide any feature, which might give rise to such an expectation.

¹⁵ Currently, loss positions arising from undistributed profits or accumulated losses for prior financial years and year-to-date profits or loss are recognized in the BSA as a deduction from capital if their aggregate together with fair value loss positions on revaluation reserves for financial assets and liabilities is a net loss.

¹⁶ The retained earnings reserve is non-distributable without prior approval from the Supervisor.

- (e) Distributions are paid out of distributable items¹⁷. The level of distributions is not in any way tied or linked to the amount paid in at issuance and is not subject to a contractual cap (except to the extent that a licensee is unable to pay distributions that exceed the level of distributable items)¹⁸.
- (f) There are no circumstances under which the distributions are obligatory. Non-payment is therefore not an event of default.
- (g) Distributions are paid only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made. This means that there are no preferential distributions, including in respect of other elements classified as the highest quality issued capital.
- (h) Instruments qualifying as CET1 absorb losses on a going-concern basis proportionately and *pari passu* with all the other CET1 instruments.
- (i) The paid in amount is recognized as equity capital (that is, not recognized as a liability) for determining balance sheet insolvency.
- (j) It is directly issued¹⁹ and paid-in²⁰, and the licensee cannot directly or indirectly have funded the purchase of the instrument.
- (k) The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity²¹ or subject to any other arrangement that legally or economically enhances the seniority of the claim.
- (l) Issuances qualifying as CET1 Capital must comply with requirements for such issuances under the Companies Act and any other relevant statute.

Additional Tier 1

Elements of Additional Tier 1 Capital

50. Under the proposed capital adequacy framework, AT1 Capital will include:

- (a) Paid-up capital instruments issued by the financial institution that meet satisfying the criteria for AT1 Capital;
- (b) Share premium arising from the issuance of instruments outlined in (a) above, if any;
- (c) Instruments issued by consolidated subsidiaries of the institution and held by third parties (i.e. minority or non-controlling interest) as outlined at section **DC3-A** that meet the criteria for inclusion in AT1 Capital; and
- (d) Regulatory adjustments applied in the calculation of AT1 Capital as outlined at section **DC3-B**. [BCBS December 2010 par 54]

¹⁷ Distributable items, in this context, are those profits, as at the end of the financial year plus those brought forward, and reserves that the licensee has available at any time for disbursement to its shareholders at that time.

¹⁸ Distributions may be paid out only of distributable items, providing that all minimum capital adequacy ratio requirements, including capital conservation buffers and countercyclical buffers, if applicable, have been met. That is, the only cap governing the payment of distributions is the natural one in the event that payable distributions exceed the amount of distributions (including reserves accumulated in prior years) available to the licensee for the purpose.

¹⁹ The instrument may not be issued by an operating entity outside the financial group or a financial holding company.

²⁰ The instrument must have been paid-in with cash (except when a licensee issues shares as payment for the take-over of entity), received with finality by the licensee, is reliably valued, under the licensee's control, and does not by any means expose the licensee to the credit risk of the investor.

²¹ A related entity may be either of: a parent company, sister company, a subsidiary or any other affiliated company of the institution. A financial holding company is a related entity irrespective of whether it forms part of the consolidated banking group.

Criteria for Classification as Additional Tier 1 Capital

51. The following represent necessary criteria for the classification of capital as AT1 under the proposed capital adequacy framework: *[BCBS December 2010 par 55]*

- (a) The instrument is issued and fully paid-up.
- (b) The instrument is subordinated to depositors, general creditors, and subordinated debt of the licensee.
- (c) Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis the licensee's creditors.
- (d) There is no maturity date and there are no step-ups or other incentives to redeem them.
- (e) The instrument may be callable at the initiative of the issuer after a minimum of five years.
- (f) Any repayment of principal must be with prior Supervisory approval and licensees should not assume or create market expectations that Supervisory approval will be given.
- (g) Dividend/coupon discretion:
 - (i) The licensee must have full discretion at all times to cancel distributions/payments.
 - (ii) Cancellation of discretionary payments must not be an event of default.
 - (iii) Licensees must have full access to cancelled payments to meet obligations as they fall due.
 - (iv) Cancellation of distributions/payments must not impose restrictions on the licensee except in relation to distributions to ordinary shareholders.
- (h) Dividends/coupons must be paid out of distributable items.
- (i) The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the credit standing of the licensee's organization.
- (j) The instrument cannot contribute to liabilities exceeding assets. That is, AT1 Capital issued as debt must be freely convertible to equity.
- (k) Instruments classified as liabilities for accounting purposes must have principal loss absorption through either:
 - (i) Conversion to ordinary shares at an objective pre-specified trigger point; or
 - (ii) A write-down mechanism which allocates losses to the instrument at a pre-specified trigger point.

The write-down outlined in item k (ii) above will have the following effects:

 - (a) Reduce the claim of the instrument;
 - (b) Reduce the amount re-paid when a call is exercised; and
 - (c) Partially or fully reduce the coupon/dividend payments on the instrument.
- (l) Neither the licensee nor any connected persons²² to the licensee can have purchased the instrument, nor can the licensee directly or indirectly have funded the purchase of the instrument.
- (m) The instrument cannot have any features that hinder recapitalization, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified period.

²² The meaning of "connected person", in relation to a licensee, is set out in section 2, subsection 2, of the Banking Services Act ("BSA").

- (n) If the instrument is not issued out of an operating entity within a financial group or a financial holding company (FHC), the proceeds must be immediately available without limitation to an operating entity or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in AT1 Capital.

DC2-B. TIER 2 CAPITAL

52. Tier 2 Capital is considered supplementary capital for financial institutions, reflecting that Tier 2 capital has weaker loss-absorbing capability than Tier 1 Capital. Holders of this capital rank above holders of both categories of Tier 1 Capital, CET1 and AT1, in the event of liquidation. Tier 2 Capital is therefore primarily used for loss absorption in the winding up of a financial institution, or on what is referred to as a 'gone-concern' basis.

Elements of Tier 2 Capital

53. Under the proposed capital adequacy framework, Tier 2 Capital includes:
- (a) Paid-up capital issued by the financial institution that meet satisfying the criteria for Tier 2 (but not for Tier 1 Capital);
 - (b) Share premium arising from the issuance of instruments outlined in (a) above, if any;
 - (c) General loan loss provisions, up to a maximum of 1.25% of the licensee's credit risk-weighted assets, for financial institutions using the Standardized Approach for credit risk²³ [BCBS December 2010 par 60]; and
 - (d) Excess of total eligible provisions, up to a maximum of 0.6% of the licensee's credit risk-weighted assets, for financial institutions using the Foundation Internal Ratings-based approach²⁴ [BCBS December 2010 par 61]
 - (e) Instruments issued by consolidated subsidiaries of the institution and held by third parties (i.e. minority or non-controlling interest) as outlined at section **DC3-A** that meet the criteria for inclusion in Tier 2 Capital; and
 - (f) Regulatory adjustments applied in the calculation of Tier 2 Capital as outlined at section **DC3-B**. [BCBS December 2010 par 57]

Proposal: Recognition of Jamaican resolution authority

54. Bank of Jamaica proposes, under the proposed capital adequacy framework, that all capital instruments issued by licensees that are governed by Jamaican law have contractual provisions to ensure that the powers of the Jamaican resolution authority to be established under the forthcoming Special Resolution Regime ("SRR") and third parties appointed by the Resolution Authority (RA)²⁵ to carry out resolution functions are recognized.
55. This requirement is designed to provide assurance to the RA that there will be sufficient loss absorbing capacity from capital instruments issued by licensees that are governed by Jamaican law. In conducting an orderly

²³ Under the proposed capital adequacy framework, provisions or loan-loss reserves held against future, presently unidentified losses will be freely able to meet losses which subsequently materialise and therefore satisfy the criteria for qualification as Tier 2 Capital. However, provisions ascribed to any identified deterioration of particular assets or known liabilities, whether individual or grouped, must be excluded.

²⁴ Financial institutions may, under the proposed capital adequacy framework, recognize the difference between the total expected loss amount and total eligible provisions in Tier 2 Capital up to a maximum of 0.6% of credit-risk weighted assets. It is proposed that the Supervisor reserve the authority, under the proposed capital adequacy framework, to allow the use of internal ratings based models.

²⁵ The proposed resolution authority under the forthcoming SRR will be Bank of Jamaica.

resolution process, there must be a credible mechanism by which losses and recapitalization needs are passed with legal certainty to the resolution entities.

BOX DC2-A. PROPOSAL TO FACILITATE EFFECTIVE BAIL-IN OF FINANCIAL INSTITUTIONS

The global financial crisis beginning in 2008 provided several lessons for regulators and supervisors around the world. One such lesson was the downsides of government bail-outs, which is ultimately funded by taxpayers. In response, regulatory authorities now consider that a bail-in option is preferable in most instances for recapitalizing financial institutions that are failing or likely to fail. The mechanism by which a bail-in offers protection to financial institutions from failing is by requiring losses to be absorbed by creditors and shareholders of a financial institution, instead of from taxpayers.

In keeping with the ongoing commitment to maintaining the safety and soundness of the financial system, the Bank is strongly considering including a brief framework at a later date which facilitates the effective bail-in by requiring financial institutions to hold a certain amount of instruments with the necessary features to recapitalize such institutions. Under this approach, instruments satisfying the bail-in requirements may also count towards regulatory capital in accordance with the criteria for CET1, AT1, or Tier 2 Capital outlined in this consultation paper. Key features of the proposed approach would include:

1. Prescribing that a larger proportion of regulatory capital be comprised of CET1 Capital;
2. Replacing Tier 2 Capital set out in this consultation paper with debt instruments that can be converted to equity or written down at a trigger point determined by the RA if a financial institution is deemed to be failing or likely to fail by the RA. Instead of Tier 2 Capital, therefore, there would be a segment of loss-absorbing financial instruments that would be primarily comprised of debt instruments that may be converted into equity for the purposes of recapitalizing any such financial institution which is required to be resolved;
3. Requiring financial institutions to hold a certain amount of such instruments that are able to absorb losses and recapitalize a financial institution deemed to be failing or likely to fail; and
4. May also include certain prescribed liabilities and shares that do not qualify for regulatory capital but are however eligible for conversion, in whole or part, into common shares.

Bank of Jamaica invites feedback and suggestions on the above proposal.

Criteria for classification as Tier 2 Capital

56. The following represent necessary criteria for the classification of capital as Tier 2 under the proposed capital adequacy framework: *[BCBS December 2010 par 58]*

- (a) The instrument is issued and fully paid-up.
- (b) The instrument is subordinated to depositors, general creditors, and subordinated debt of the licensee.
- (c) Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis the licensee's creditors.
- (d) Maturity:
 - (i) Original maturity a minimum of five years; and
 - (ii) In the remaining five years before maturity, recognition in regulatory capital will be amortized on a straight-line basis (the amortization table is set out in **Appendix DC-3**).
- (e) The instrument may be callable at the initiative of the issuer after a minimum of five years:

- (i) A licensee must receive the prior approval of the Supervisor before exercising a call option;
- (ii) There should be nothing done by the licensee to create an expectation that the call will be exercised; and
- (iii) An institution must not exercise the call without:
 - (a) Replacing the called instrument with capital of equal to or better quality, including through an increase in retained earnings, and the replacement of this capital is done at conditions which are sustainable for the income capacity of the licensee; or
 - (b) The licensee demonstrating that its capital position exceeds by some way the minimum capital requirements after the call option is exercised.
- (f) The investor must have no rights to accelerate the repayment of future scheduled payments (coupon or principal), except in insolvency under applicable insolvency law.
- (g) The instrument cannot have a credit sensitive dividend feature, that is, a dividend/coupon that is reset periodically based in whole or in part on the credit standing of the licensee's organization.
- (h) Neither the licensee nor a related party over which the licensee exercises control or significant influence can have purchased the instrument, nor can the licensee directly or indirectly have funded the purchase of the instrument.
- (i) If the instrument is not issued out of an operating entity or the holding company in the consolidated group, proceeds must be immediately available without limitation to an operating entity or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 Capital.
- (j) The prescribed terms and conditions of the instrument must contain a clause requiring the full and permanent conversion of the instrument into ordinary shares at the point of non-viability as prescribed under the laws governing the resolution of financial institutions.

PART III – ADJUSTMENTS TO AND REPORTING OF REGULATORY CAPITAL

This part outlines the treatment of minority or non-controlling interest and sets out regulatory adjustments to be made in the calculation of regulatory capital under the proposed capital adequacy framework.

DC3-A. TREATMENT OF MINORITY INTEREST (I.E. NON-CONTROLLING INTEREST)

57. Minority interest arising from the issue of Common Equity Tier 1 Capital, Additional Tier 1 Capital, or Tier 2 Capital by fully consolidated subsidiaries of licensees may be included in a licensee's regulatory capital under the proposed capital adequacy framework only if:
- (a) The instrument giving rise to the minority interest would, if issued by the licensee, satisfy all of the criteria for classification as CET1, AT1, or Tier 2 Capital; and
 - (b) The subsidiary that issued the instrument is itself either a financial institution or subject to the same minimum prudential standards and level of supervision as financial institutions. *[BCBS December 2010 par 62-64]*
58. The amount of minority interest that may be included in regulatory capital under the proposed capital adequacy framework is:
- (a) The total amount of the regulatory capital attributable to third party investors, minus
 - (c) Any surplus capital for the subsidiary, which are amounts above the minimum regulatory capital requirements applicable to the subsidiary. *[BCBS December 2010 par 62-64]*
59. Surplus CET1, Tier 1, and Total Capital of the subsidiary is calculated as the CET1, Tier 1, and Total Capital (i.e. Tier 1 and Tier 2 instruments) of the subsidiary, respectively, minus the lower of:
- (a) The minimum CET1, Tier 1, or Total Capital requirement of the subsidiary (i.e. 6.5%, 8%, or 10% of risk-weighted assets plus any capital conservation buffer that may be imposed by the Supervisor from time to time); and,
 - (d) The portion of the consolidated minimum CET1, Tier 1, or Total Capital requirement (i.e. 6.5%, 8%, or 10% of the consolidated risk-weighted assets plus any capital conservation buffer that may be imposed by the Supervisor from time to time) attributable to the subsidiary. *[BCBS December 2010 par 62-64]*
60. The surplus amount of CET1, Tier 1, or Total Capital attributable to minority shareholders is calculated by multiplying the result from **paragraph 51** above (the surplus CET1, Tier 1, or Total Capital of the subsidiary) by the proportion of CET1, Tier 1, or Total Capital that is held by the minority shareholders. *[BCBS December 2010 par 62-64]*
61. The treatment of minority interest above limits the amount of minority interest that a licensee may include in its regulatory capital in recognition of the fact that minority interest is generally not available to absorb losses at the consolidated level. The calculation only includes the proportion of surplus capital of the subsidiary that is attributable to the parent.

Illustrative Example: Approach to the Treatment of Minority Interest *[Example modelled from Basel III – Annex 3]*

62. A group of licensees consists of two legal entities that are both financial institutions. Licensee A is the parent and Licensee B is the subsidiary. Their unconsolidated, simplified balance sheets are shown below.

STEP 1: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION		TABLE DC-2	
Licensee A balance sheet (\$billions)		Licensee B balance sheet (\$billions)	
Assets		Assets	
Loans, after loss provisions	50	Loans, after loss provisions	80
Investments in CET1 Capital instruments of B	9		
Investments in AT1 capital instruments of B	4		
Investments in Tier 2 Capital instruments of B	8		
Other Investments	3		
	<hr/> 74		<hr/> 80
Liabilities		Liabilities	
Deposits	35	Deposits	40
AT1 capital instruments	5	AT1 capital instruments	7
Tier 2 capital instruments	10	Tier 2 capital instruments	10
Other liabilities	4	Other liabilities	8
Shareholders' Equity		Shareholders' Equity	
Common equity	20	Common equity	15
	<hr/> 74		<hr/> 80

63. From the balance sheets above, we see that Licensee A owns 60% of the ordinary shares of Licensee B, 50% of the AT1 Capital of Licensee B, and 80% of the Tier 2 Capital of Licensee B. The ownership breakdown of Licensee B is as follows:

STEP 2: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION			TABLE DC-3
Licensee B's issued capital (\$billions)			
	Amount issued to parent (Licensee A)	Amount issued to third- party investors	Total
CET1 Capital	9	6	15
AT1 Capital	4	4	8
Tier 1 Capital	13	10	23
Tier 2 Capital	8	2	10
Total Capital	21	12	33

64. The consolidated balance sheet of the banking group is set out below.

STEP 3: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION		TABLE DC-4
Consolidated balance sheet (\$billions)		
Assets		
Loans, after loss provisions		130
Other investments		3
		<hr/> 133
Liabilities and Shareholders' Equity		
Deposits		75
Common equity issued by subsidiary to third party investors (i.e. minority interest)		6
Common equity issued by parent		20
AT1 Capital issued by subsidiary to third party investors		4
AT1 Capital issued by parent		5
Tier 2 Capital issued by subsidiary to third party investors		2
Tier 2 Capital issued by parent		10
Other liabilities		11
		<hr/> 133

65. Licensee B has risk-weighted assets of 200. The minimum capital requirements of Licensee B and the subsidiary's contribution to the consolidated requirements are the same since Licensee B has not made any loans to Licensee A. In this example, it is assumed that capital adequacy requirements are aligned to the minimum requirements set out in **table DC-1**. That is, a CET1 minimum ratio of 6.5% of RWA, a Tier 1 minimum ratio of 8% of RWA, and a Total Capital minimum ratio of 10% of RWA. Therefore, Licensee B is subject to minimum plus capital conservation buffer requirements and possesses the following surplus capital:

STEP 4: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION		TABLE DC-5
Minimum and surplus capital of Licensee B		
	Minimum plus capital conservation buffer	Surplus capital (\$billions)
CET1	6.5% of 200	2 (=15-13)
Tier 1	8% of 200	7 (=23-16)
Total capital	10 % of 200	13 (=33-20)

66. The following table shows how the calculation of the amount of capital issued by Licensee B that is to be included in consolidated capital is done.

STEP 5: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION					TABLE DC-6
Licensee B: Amount of capital issued to third party investors included in consolidated capital (\$billions)					
	Total amount issued (a)	Amount issued to third party investors (b)	Surplus (c)	Surplus attributable to third party investors (i.e. amount excluded from consolidated capital) (d)=((c)*(b))/(a)	Amount included in consolidated capital (e) = (b) – (d)
CET1	15	6	2	0.80	5.20
Tier 1	23	10	7	3.04	6.96
Total capital	33	12	13	4.73	7.27

67. This table summarizes the minority interest calculations carried out above. AT1 Capital is calculated as Tier 1 Capital minus CET1 Capital, and Tier 2 Capital is the calculated as Total Capital minus Tier 1 Capital.

STEP 6: ILLUSTRATIVE EXAMPLE OF MINORITY INTEREST CALCULATION			TABLE DC-7
	Total amount issued by parent (all of which is to be included in consolidated capital) (\$billions)	Amount issued by subsidiaries to third party investors to be included in consolidated capital (\$billions)	Total amount issued by parent and subsidiary to be included in consolidated capital (\$billions)
CET1	20	5.20	25.20
AT1	5	1.76	6.76
Tier 1	25	6.96	31.96
Tier 2	10	0.31	10.31
Total Capital	35	7.27	42.27

DC3-B. REGULATORY ADJUSTMENTS (DEDUCTIONS AND PRUDENTIAL FILTERS)

68. This section details the regulatory adjustments to be made to regulatory capital under the proposed capital adequacy framework. It is to be noted that the majority of these adjustments are applied in the calculation of CET1 capital. Regulatory adjustments in the calculation of regulatory capital will be inclusive of the following: *[BCBS December 2010 par 66]*

- (a) Goodwill, start-up expenses, and other intangible assets (except mortgage servicing rights²⁶);
- (b) Deferred tax assets;
- (c) Cash flow hedge reserve;

²⁶ Refers to a contractual agreement where the right, or rights to service an existing mortgage are sold by the original lender to a third party who specializes in the functions associated with servicing mortgages.

- (d) Gain on sale related to securitization transactions;
- (e) Defined benefit pension fund assets net of any associated deferred tax liabilities;
- (f) Investments in own shares (treasury stock);
- (g) Reciprocal cross holdings in the capital of banking, financial, and insurance entities;
- (h) Investments in banking, financial, and insurance entities that are outside the scope of regulatory consolidation and where the licensee does not own more than 10% of the issued ordinary share capital of the entity;
- (i) Significant investments in the capital of banking, financial, and insurance entities that are outside the scope of regulatory consolidation;
- (j) Other prescribed deductions; and
- (k) Threshold deductions.

Accumulated other comprehensive income (AOCI)

69. Under the proposed capital adequacy framework, accumulated other comprehensive income will continue to be excluded from the calculation of regulatory capital for financial institutions, instead maintaining the status quo of a prudential filter on AOCI.

Explanatory Note: Rationale for Maintaining a Prudential Filter on AOCI

70. The prudential filter on AOCI will be maintained in the proposed capital adequacy framework, taking into consideration the following:

- (a) Current local primary and secondary market dynamics for both sovereign and corporate debt securities do not allow for the production of a clean yield curve for these debt securities due to a preponderance of participants in these markets employing a buy-and-hold strategy. This reality exacerbates the problem of limited trading within the secondary market for these securities. A clean yield curve allows for transparency in prices for debt securities that will support the determination of the fair values for these financial instruments. Therefore, fair value gains and losses relating to any types of financial instruments for which the valuations cannot be reliably computed could potentially significantly understate or overstate AOCI.
- (b) The extent to which revaluation reserves²⁷ from both financial assets and fixed assets can be relied upon as a cushion for unexpected losses depends upon, amongst other things, the level of certainty that can be placed on estimates of the market values for the relevant assets as well as any subsequent deterioration in values under difficult market conditions.

71. However, the proposed capital adequacy framework will provide for the Supervisor's authority to remove the prudential filter on AOCI in the calculation of regulatory capital for financial institutions as the local market for trading debt securities further develops and allows for reliable price discovery in such markets.

Goodwill, start-up expenses and other intangibles (excluding mortgage servicing rights)

²⁷ Treatment of revaluation reserves is at **paragraph 82(d)** with accompanying explanatory note below.

72. To be deducted from CET1 Capital are goodwill (inclusive of goodwill influencing the valuation of significant investments in the capital of banking, financial, and insurance entities²⁸ that fall outside the scope of regulatory consolidation²⁹), start-up expenses, and other intangibles. *[BCBS December 2010 par 67]*

Deferred Tax Assets

73. Licensees must deduct from its CET1 Capital, the net of:

- (a) Deferred tax assets (DTAs), minus
- (b) Deferred tax liabilities (DTLs). *[BCBS December 2010 par 69-70]*

74. The net is to be taken subject to the conditions that:

- (a) The taxes are imposed by the same taxation authority; and
- (b) Offsetting is allowed by the relevant authority. *[BCBS December 2010 par 69-70]*

75. Deferred tax liabilities cannot be used to increase CET1 Capital. That is, if DTLs exceed DTAs, the excess cannot be added to CET1 Capital. In the case of DTAs arising from temporary differences, the “threshold deductions” at **paragraphs 90 and 91** specify the amount to be deducted. DTLs netted should exclude amounts already netted against the deduction of goodwill³⁰, other intangibles, and defined benefit pension assets, and must be allocated on a proportional basis between DTAs subject to threshold deductions and DTAs that are to be deducted in full. *[BCBS December 2010 par 69-70]*

Cash flow hedge reserve

76. The amount of the cash flow hedge reserve relating to the hedging of items that are not recorded at fair value on the balance sheet (including projected cash flows) should be excluded from any calculation of CET1 Capital³¹. Therefore, for prudential purposes, any artificial volatility in common equity is removed, as in this instance the reserve only reflects the fair value of the derivative and not the changes in fair value of the hedged future cash flow. *[BCBS December 2010 par 71-72]*

Gain on sale related to securitization transactions

Any increase in equity capital resulting from a securitization transaction³² should be excluded from the calculation of CET1 Capital. That is, when a securitization increases equity capital through selling the asset at a premium³³, the resulting gain will not increase regulatory capital. *[BCBS December 2010 par 74]*

Defined benefit pension fund assets (net of any liabilities)

²⁸ For the avoidance of any doubt, goodwill included in the carrying amount of associates accounted for using the equity method must be deducted from CET1 Capital at the group level. This goodwill should be calculated as at the acquisition date by separating the excess of the acquisition cost over the licensee's share of the net fair value of the identifiable assets and liabilities of the banking, financial, or insurance entity.

²⁹ This refers to investments in subsidiaries, associates, joint operations, and joint ventures.

³⁰ Goodwill creates a temporary difference resulting in a deferred tax liability because it is an asset with a carrying value on the Group accounts without a tax base. However, IAS 12 excludes a tax liability being recognized in relation to goodwill.

³¹ Gains on hedges are to be deducted and losses on hedges are to be added back.

³² Many securitizations involve the pooling of loans such as mortgages to create securities. After the 2008 financial crisis and with Basel III, the loophole of using securitizations to increase regulatory capital has been removed.

³³ That is, a sale for more than the carrying value of the asset.

77. Defined benefit pension fund liabilities, as they are included on the balance sheet, are to be fully recognized in the calculation of CET1 Capital. As a result, it is not possible to increase CET1 Capital through derecognizing these liabilities. The net asset on the balance sheet³⁴ must be deducted in the calculation of CET1 Capital. Licensees must have unrestricted and unfettered access to any assets in the fund that may, with prior Supervisory approval, be used to offset the deduction. *[BCBS December 2010 par 76]*
78. This treatment addresses the concern that assets arising from pension funds may not be capable of being withdrawn and used for the protection. *[BCBS December 2010 par 77]*

Investments in own shares (treasury stock)

79. Any repurchases or investments by licensees in their own shares, whether directly or indirectly held, must be fully deducted in the calculation of CET1 Capital (unless already excluded under IAS 32). This includes own stock that the licensee is contractually obligated to purchase. The treatment detailed above will apply regardless of the location of the exposure in the banking book or trading book. Furthermore:
- (a) The net positive of gross long positions (purchases of shares) minus short positions (sales of shares) in the same underlying exposure is to be deducted only if the short positions involve no risk of default from either party.
 - (b) Licensees should examine holdings of index securities³⁵ for the purposes of deducting exposures to own shares. Gross long positions in own shares resulting from holdings of index securities, however, should be netted against short positions in own shares arising from short positions in the same underlying index. The short positions in these cases may involve counterparty risk. *[BCBS December 2010 par 78]*
80. This approach is mirrored for the treatment of investments in a licensee's own Additional Tier 1 Capital in their calculation of AT1 Capital and Tier 2 Capital in their calculation of Tier 2 Capital. *[BCBS December 2010 par 78]*

Cumulative fair value gains and losses arising from changes in own credit risk

81. Licensees must deduct all unrealized gains and losses arising from changes in the fair value of liabilities (including capital instruments) that are due to changes in the credit risk (creditworthiness) of the licensee. *[BCBS December 2010 par 75]*

Reciprocal cross holdings in the capital of banking, financial and insurance entities

82. Reciprocal cross holdings of capital made for the purpose of artificially inflating the capital position of licensees must be fully deducted³⁶. Licensees must apply a "corresponding deduction approach"³⁷ to such investments in the capital of other licensees, other financial institutions, or insurance entities. *[BCBS December 2010 par 79]*

³⁴ That is, each defined benefit pension fund asset less any related deferred tax liability of the licensee, which would be cancelled out if the asset were to become impaired or derecognized under IAS 12.

³⁵ Index securities represent shares of ownership in either mutual funds or unit investment trusts that hold portfolios of common stocks.

³⁶ Intra-group transactions, that is, new and existing capital issues between the licensee and one or more members of the financial group that represent, either directly or indirectly, back-to-back placements must also be fully deducted.

³⁷ The corresponding deduction approach entails a proportional deduction from the element of capital for which the capital instrument would qualify if it were issued by the licensee itself. If the capital instrument of the entity in which the financial institution has invested does not meet the criteria for Common Equity Tier 1, Additional Tier 1 or Tier 2 Capital of the financial institution, the capital is to be considered ordinary shares for the purposes of the regulatory adjustment.

Investments in banking, financial and insurance entities that are outside the scope of regulatory consolidation where the licensee does not own more than 10% of the issued ordinary share capital of the entity (further explanation in Appendix DC-4)

83. This regulatory adjustment applies to investments in the capital of banking, financial and insurance entities that fall outside the scope of regulatory consolidation and where the licensee does not own more than 10% of the issued ordinary share capital of the entity. *[BCBS December 2010 par 80]*
84. If all the holdings listed above cumulatively exceed 10% of the investing licensee's common equity (after applying all the other preceding regulatory adjustments in full listed before this one) then all holdings over 10% must be deducted, utilizing a corresponding deduction approach. Therefore, the deduction should be applied to the same element of capital for which the capital would be classified if the investing licensee itself issued it. *[BCBS December 2010 par 81]*

Common Equity Tier 1

85. Consequently, the deductible amount from CET1 Capital should be computed as the total of all holdings in investee entities which cumulatively exceeds 10% of the investing licensee's common equity (in accordance with the corresponding deduction approach) multiplied by the common equity holdings as a percentage of the total capital holdings of the investee(s). This would result in a common equity deduction which corresponds to the proportion of total capital holdings held in common equity. *[BCBS December 2010 par 81]*

Additional Tier 1

86. The deductible amount from AT1 Capital should be computed as the total of all holdings in investee entities that cumulatively exceeds 10% of the investing licensee's common equity (in accordance with the corresponding deduction approach) multiplied by the Additional Tier 1 holdings as a percentage of the total capital holdings of the investee(s). This would result in an Additional Tier 1 deduction which corresponds to the proportion of total capital holdings held in Additional Tier 1. *[BCBS December 2010 par 81]*

Tier 2

87. The deductible amount from Tier 2 Capital should be computed as the total of all holdings in investee entities that cumulatively exceeds 10% of the investing licensee's common equity (in accordance with the corresponding deduction approach) multiplied by the Tier 2 holdings as a percentage of the total capital holdings of the investee(s). This would result in a Tier 2 deduction which corresponds to the proportion of total capital holdings held in Tier 2 Capital. *[BCBS December 2010 par 81]*
88. If, under the corresponding deduction approach, an investing licensee is obligated to make a deduction from a particular category of capital and it does not have a sufficient amount of that category of capital to execute that deduction, the shortfall must be taken from the next higher category of capital. For example, if a licensee does not have enough Additional Tier 1 Capital to execute the deduction, the shortfall will be taken from Common Equity Tier 1 Capital. *[BCBS December 2010 par 82]*
89. The amounts constituting the 10% threshold and exempted from being deducted, will continue to be risk weighted at 250%. Therefore, instruments in the trading book will be treated in accordance with the market risk rules and instruments in the banking book should be treated in accordance with the standardized approach or the internal ratings-based approach (as applicable). In applying risk weights, the amount of the holdings must be apportioned on a proportional basis between those below and those above the threshold. *[BCBS December 2010 par 83]*

Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (further explanation in **Appendix DC-5**)

90. Under the proposed capital adequacy framework, this regulatory adjustment will apply to investments in the capital of banking, financial and insurance entities that fall outside the scope of regulatory consolidation, and where the licensee owns more than 10% of the issued ordinary share capital of the issuing entity or where the entity is an affiliate³⁸ of the licensee. *[BCBS December 2010 par 84]*
91. A corresponding deduction approach must be used in deducting all investments included above that are not ordinary shares. For the avoidance of any doubt, any other facility provided by the licensee that is treated as capital by unconsolidated subsidiaries and by any other unconsolidated entities or companies in which it has a significant investment are to be deducted from the capital of the licensee using a corresponding deduction approach. The full deduction should be applied to the same element of capital for which the capital would be classified if the licensee itself issued it. If a licensee is obligated to make a deduction from a particular category of capital and it does not have a sufficient amount of that tier of capital to execute that deduction, the shortfall must be taken from the next higher category of capital. For example, if a licensee does not have enough Additional Tier 1 Capital to execute the deduction, the shortfall will be taken from Common Equity Tier 1 Capital. *[BCBS December 2010 par 85]*

Significant investments in commercial entities

92. Significant minority and majority investments in commercial entities which exceed prescribed materiality levels will, under the proposed capital adequacy framework, be ascribed a 1250% risk weight. For these purposes, materiality is defined as 15% of the licensee's capital for individual significant investments in commercial entities and 60% of the licensee's capital for the aggregate of such investments. *[BCBS June 2006 par 35]*
93. Investments in significant minority and majority owned and controlled commercial entities below the materiality levels indicated above will be risk weighted at 100% for licensees. *[BCBS June 2006 par 36]*

Other prescribed deductions

94. Also to be deducted from total capital is the aggregate of:
- (a) the licensee's equity investments in unconsolidated subsidiaries;
 - (b) any substantial investment in any other unconsolidated entity or company, whether the entity or company is held directly or indirectly by the licensee;
 - (c) the licensee's proportionate share of the amount of accumulated losses of any unconsolidated subsidiary and by any other unconsolidated entity or company in which it has a substantial investment;
 - (d) any loss positions on revaluation reserves arising from fair value accounting for financial assets and liabilities; and
 - (e) any other deduction designated by the Supervisor as a "prescribed deduction". *[Banking Services (Deposit-taking institutions) (Capital Adequacy) Regulations, 2015]*

Explanatory Note: Maintaining status quo deduction of losses on revaluation reserves

³⁸ An affiliate has the meaning assigned to it in section 2 of the *Companies Act*.

95. The BSA recognized as a deduction from regulatory capital, net losses arising from the aggregate of:
- (a) any undistributed profits or accumulated losses for prior financial years;
 - (b) any financial year-to-date profit or loss; and
 - (c) any loss positions on revaluation reserves arising from fair value accounting for financial assets and liabilities.
96. The aggregate of the three items above is only recorded in regulatory capital if the aggregate is negative, effectively as a deduction from regulatory capital. Items (a) and (b) are subsumed into the proposal to recognize retained earnings. The treatment for item (c) completes the recognition of the items listed above in the proposed adequacy framework.

Threshold Deductions

97. Rather than a full deduction, the following items should receive limited recognition in the calculation of CET1 Capital, capped at 10% of the licensee's common equity – after application of all prior regulatory adjustments set out in **paragraphs 60 to 89** above:
- (a) Significant investments in the ordinary shares of unconsolidated banking, insurance and other financial entities as specified in **paragraphs 83 and 84** above;
 - (b) Mortgage Servicing Rights (MSRs); and
 - (c) Deferred Tax Assets that arise from temporary differences. *[BCBS December 2010 par 87]*
98. The treatment will be introduced in two phases. In the first³⁹, a licensee must deduct the amount by which the sum of the three items above exceeds 15% of its common equity component of Tier 1 Capital (before the deduction of these three items, but after all other regulatory adjustments for the calculation of CET1 Capital have been applied). In the second phase, the calculation of the 15% cap will be subject to the following treatment: the amount of the three items that remains after the regulatory adjustments have been applied cannot exceed 15% of CET1 Capital, calculated after all regulatory adjustments. *[BCBS December 2010 par 88]*
99. The amount of the items under **paragraph 89 (a)-(c)** subject to the threshold deduction treatment that are not deducted in the calculation of CET1 Capital will be risk weighted at 250%. *[BCBS December 2010 par 89]*

DC3-C. REPORTING REQUIREMENTS

100. In order to maintain transparency in the calculation of regulatory capital and improve market discipline, licensees are required to disclose the following:
- (a) A full reconciliation of all regulatory capital elements with the balance sheet in the audited financial statements;
 - (b) Separate and full disclosure of regulatory adjustments;
 - (c) An outline of the main features of capital instruments issued; and

³⁹ The timelines for both the first and second phase are subject to the finalization of the consultation process for the proposed capital adequacy framework.

- (d) Licensees must provide the Supervisor with comprehensive computations and explanations of capital adequacy ratios and how they are calculated in the format and frequency prescribed by the Supervisor.
[BCBS December 2010 par 91]

DC3-D. SUBMISSION REQUIREMENTS

101. A licensee issuing any new ordinary shares to be recognized as CET1 Capital must notify the Supervisor in writing of the issue:

- (a) within 21 days of the date of the resolution authorizing the share issue, or within such period as agreed with by the Supervisor; and
- (b) submitting full details surrounding the issue, including the terms and conditions of same and the classes of shares to be affected.

102. A licensee proposing to issue or recognize any AT1 capital instrument or Tier 2 Capital instrument as part of its AT1 or Tier 2 Capital, respectively, must:

- (a) consult the Supervisor sufficiently in advance so as to allow ample time for review of the capital instrument to ascertain if it has additional features which are not covered in the criteria for inclusion as AT1 or Tier 2 Capital, as is relevant; and
- (b) submit to the Supervisor the documents below before such issuance as AT1 or Tier 2 Capital:
 - (i) a declaration signed by the chief financial officer of the licensee confirming –
 - a. that the licensee has responsibility for complying with the standards and criteria for inclusion as AT1 Capital, or the issuance of the Tier 2 capital instrument as Tier 2 Capital;
 - b. that all the standards and criteria for the inclusion of the issuance of the AT1 instrument or Tier 2 instrument outlined have been satisfied;
 - c. the date in which the issuance is expected to be designated and included as AT1 Capital or Tier 2 Capital;
 - d. that the licensee is aware that the Supervisor may take action against the licensee, possibly rising to the exclusion of the issuance for inclusion as AT1 Capital or as Tier 2 Capital, in the event that the issuance does not, or subsequently does not, comply with the standards and criteria outlined;
 - (ii) all the executed contracts and offering documents governing the issuance of the AT1 instrument or Tier 2 instrument;
 - (iii) all external legal views gathered in respect of the issuance of the AT1 instrument or the Tier 2 instrument stating that the applicable standards and criteria governing AT1 Capital and Tier 2 Capital have been met;
 - (iv) a memorandum of compliance outlining how the issuance conforms to each of the applicable standards and criteria governing AT1 Capital and Tier 2 Capital and pinpointing the relevant portions of the contracts and offering documents governing the issuance of the AT1 capital instrument or Tier 2 capital instrument which address each standard and criteria; and
 - (v) in cases where the agreements and offering documents governing the issuance of the AT1 instrument or Tier 2 instrument are governed by the regulations of a jurisdiction other than Jamaica, written external legal judgement from an attorney-at-law qualified to practice Jamaican law, that he has reviewed all the

agreements and offering documents governing the issuance, including any legal opinion from overseas legal practitioners provided to confirm that the standards and criteria for inclusion as either AT1 or Tier 2 Capital have been met and the memorandum of compliance, and endorses that the memorandum of compliance read in conjunction with such agreements, offering documents, legal opinions and any letter of undertaking provided by the licensee or any deposit-taking group entity satisfies the standards and criteria for AT1 or Tier 2 Capital, whichever may be applicable.

Capital Charges for Credit Risk

C. CAPITAL CHARGES FOR CREDIT RISK

This section describes the standardized (external ratings based) approach to calculating capital charges for credit risk. The section is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel II and III frameworks, International Convergence of Capital Measurement and Capital Standards (June 2006), Basel III: A global regulatory framework for more resilient banks and banking systems (December 2010, rev June 2011), and Basel III: Finalizing post-crisis reforms (December 2017). For reference, the Basel text paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph⁴⁰.

PART I - EXTERNAL CREDIT ASSESSMENTS

The standardized approach will incorporate the recognition and usage of external ratings. This section provides guidance on how these ratings should be treated within this framework, and outlines the eligible external credit assessment institutions, whose ratings may be used by licensees for assigning risk weights under the standardized approach to credit risk.

CR1-A. ELIGIBLE EXTERNAL CREDIT RATINGS AGENCIES

103. The standardized approach to credit risk permits licensees to utilize credit ratings issued by external credit assessment institutions (ECAIs) that are recognized by national supervisors as eligible for regulatory capital purposes, in determining the risk-weights on credit exposures. [BCBS December 2017 par 98]

Proposal: Designation of External Credit Assessment Institutions (including CariCRIS)

104. This credit risk framework will recognize the ratings of Standard & Poor's Ratings Services, Moody's Investors Service, Fitch Ratings and the Caribbean Information and Credit Rating Services Limited (CariCRIS) as eligible ECAIs for the purpose of allocating risk-weights to claims on counterparties and exposures. This list is so designated based on the satisfaction of the qualifying criteria and conditions specified in **Appendix CR-1**.

105. Subject to the requirements provided in **Appendix CR-1**, the Supervisor may make determinations on a continuous basis, regarding the recognition of ratings of additional ECAIs. [BCBS December 2017 par 99]

Proposal: Use of Credit Quality Steps

106. The Supervisor will map, as detailed in **Part V** of this Chapter, eligible ECAIs' ratings to the credit quality steps (CQS) under the standardized approach to credit risk. A CQS is a simplified and standardized scale of credit quality, which is represented by whole numbers from 1 to 6 for rated exposures, and 7 for unrated exposures. The CQS will be used to provide consistency across ECAI ratings.

CR1-B. SCOPE OF APPLICATION OF CREDIT ASSESSMENTS

107. Licensees should designate one or more ECAIs, whose ratings should be used for both risk weighting and risk management purposes. The designated ECAI(s) must have been declared eligible by the Supervisor.
108. Licensees should obtain the approval of the Supervisor on any subsequent change(s) to its list of designated ECAI(s).

⁴⁰ Following the format: [BCBS June 2006 par x]

109. Licensees shall consistently use the credit assessments of designated ECAI(s) within each segment, avoiding arbitrary changes or the “cherry-picking” of ECAI’s ratings with a view to create a more favourable capital position. Licensees shall use the designated ECAI’s rating for all exposures in the same category. *[BCBS December 2017 par 103]*
110. External ratings for one entity within a corporate group cannot be used to risk weight other entities within the same group. Further, in cases where a corporate is rated by one nominated ECAI and is unrated by another nominated ECAI, the licensee shall use the rated credit assessment. *[BCBS December 2017 par 115]*
111. A licensee should apply the designated ECAI’s ratings only in segments that fall within the Supervisor’s recognition for risk weighting its exposures.
112. Licensees should demonstrate a good understanding of the methodologies employed by its nominated ECAI(s), and should demonstrate that it has procedures to monitor and respond to changes in the credit ratings of its nominated ECAI(s) on its credit portfolios, as and when the information is disclosed.
113. Licensees must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparties. *[BCBS December 2017 paras 20 & 39]*
- a. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure, licensees must assign a risk weight at least one bucket higher than the “base” risk weight determined by the external rating.
 - b. Licensees’ due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating.
114. A licensee should treat all relevant exposures as “unrated” for risk weighting purposes if those exposures do not have ratings assigned to them by any of its chosen ECAI(s).

CR1-C. TREATMENT OF MULTIPLE ASSESSMENTS

115. If there is only one rating by an ECAI chosen by a licensee for a particular exposure, that rating should be used to determine the risk weight of the exposure. *[BCBS December 2017 par 104]*
116. If there are two ratings by ECAs chosen by a licensee which map into different risk weights, the higher risk weight should be applied. *[BCBS December 2017 par 105]*
117. If there are three or more ratings with different risk weights, the two ratings that correspond to the lowest risk weights should be referred to and the higher of those two risk weights should be applied. *[BCBS December 2017 par 106]*

CR1-D. TREATMENT OF ISSUE-SPECIFIC AND ISSUER RATINGS

118. Where a licensee invests in a particular issue that has an issue-specific rating, the risk weight of the exposure will be based on this rating. *[BCBS December 2017 par 107]*
119. Where the licensee’s exposure is not an investment in a specific rated issue, the following general principles apply. *[BCBS December 2017 par 107]*
- a. In circumstances where the borrower has a specific rating for an issued debt – but the licensee’s exposure is not an investment in this particular debt – a high-quality credit rating on that specific debt may only be applied to the licensee’s unrated exposure if this claim ranks in all respects pari passu or senior to the claim

with a rating. If not, the external rating cannot be used and the unassessed claim will receive the risk weight for unrated exposures.

- b. In circumstances where the borrower has an issuer rating, this rating typically applies to senior unsecured claims on that issuer. Consequently, only senior claims on that issuer will benefit from a high-quality issuer rating. Other unassessed exposures of a highly rated issuer will be treated as unrated. If either the issuer or a single issue has a low-quality rating, an unassessed exposure to the same counterparty that ranks pari passu or is subordinated to either the senior unsecured issuer rating or the exposure with a low-quality rating will be assigned the same risk weight as is applicable to the low-quality assessment.
 - c. In circumstances where the issuer has a specific high-quality rating (one which maps into a lower risk weight) that only applies to a limited class of liabilities (such as a deposit assessment or a counterparty risk assessment), this may only be used in respect of exposures that fall within that class.
120. Whether the licensee intends to rely on an issuer- or an issue-specific rating, the rating must take into account and reflect the entire amount of credit risk exposure the licensee has with regard to all payments owed to it⁴¹. *[BCBS December 2017 par 108]*
121. In order to avoid any double-counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue-specific rating. *[BCBS December 2017 par 109]*

CR1-E. DOMESTIC CURRENCY AND FOREIGN CURRENCY RATINGS

122. Where exposures are risk weighted based on the rating of an equivalent exposure to that borrower, the general rule is that⁴²: *[BCBS December 2017 par 110]*
- a. foreign currency ratings would be used for exposures in foreign currency; and
 - b. if separate, domestic currency ratings would only be used to risk weight claims denominated in the domestic currency.

CR1-F. SHORT-TERM VERSUS LONG-TERM RATINGS

123. For risk-weighting purposes, all short-term ratings are deemed to be issue-specific. They can only be used to derive risk weights for exposures arising from the rated facility. They cannot be generalized to other short-term claims, except under the conditions in **paragraph 117**. *[BCBS December 2017 par 111]*
124. In cases where short-term ratings are available, the following interaction with the general preferential treatment for short-term exposures to DTIs as described in **paragraph 143** will apply: *[BCBS December 2017 par 113]*

⁴¹ For example, if a bank is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with repayment of both principal and interest.

⁴² However, when an exposure arises through a bank's participation in a loan that has been extended, or has been guaranteed against convertibility and transfer risk, by certain MDBs, its convertibility and transfer risk can be considered by national supervisors to be effectively mitigated. To qualify, MDBs must have preferred creditor status recognized in the market and be included in **paragraph 136**. In such cases, for risk-weighting purposes, the borrower's domestic currency rating may be used instead of its foreign currency rating. In the case of a guarantee against convertibility and transfer risk, the local currency rating can be used only for the portion that has been guaranteed. The portion of the loan not benefiting from such a guarantee will be risk-weighted based on the foreign currency rating.

- a. The general preferential treatment for short-term exposures applies to all exposures to DTIs of up to three months original maturity when there is no specific short-term claim assessment.
- b. When there is a short-term assessment and such an assessment maps into a risk weight that is more favourable (lower) or identical to that derived from the general preferential treatment, the short-term rating should be used for the specific exposure only. Other short-term exposures would benefit from the general preferential treatment.
- c. When a specific short-term rating for a short-term exposure to a DTI maps into a less favourable (higher) risk weight, the general short-term preferential treatment for interbank exposures cannot be used. All unrated short-term exposures should receive the same risk weighting as that implied by the specific short-term rating.

125. **Table CR-1** below provides a framework for licensee's exposures to specific short-term facilities, such as a particular issuance of commercial paper: *[BCBS December 2017 par 111]*

SHORT-TERM RATINGS					TABLE CR-1
Credit Quality Step	Standard & Poor's	Moody's	Fitch	CariCRIS	Risk Weight
1	A-1	P-1	F1	CariP1	20%
2	A2	P-2	F2	CariP2	50%
3	A3	P3	F3	CariP3	100%
4, 5, 6.	Others				150%

126. In no event can a short-term rating be used to support a risk weight for an unrated long-term exposure. *[BCBS December 2017 par 111]*
127. Short-term ratings may only be used for short-term exposures against banks and corporates. *[BCBS December 2017 par 111]*
128. If a short-term rated facility attracts a 50% risk-weight, unrated short-term exposures cannot attract a risk weight lower than 100%. *[BCBS December 2017 par 112]*
129. If an issuer has a short-term facility with an external rating that warrants a risk weight of 150%, all unrated exposures, whether long-term or short-term, should also receive a 150% risk weight, unless the licensee uses recognized credit risk mitigation techniques for such exposures. *[BCBS December 2017 par 112]*
130. Before a short-term rating can be utilized, licensees shall ensure that the institution making the assessment met all of the eligibility criteria for recognizing ECAs, as described in **Appendix CR-1**, in terms of short-term ratings. *[BCBS December 2017 par 114]*

PART II – STANDARDIZED APPROACH FOR CREDIT RISK: RISK WEIGHT CATEGORIES

This part outlines the proposed methodology for calculating the risk-weighted credit risk capital charges of a licensee's on- and off-balance sheet exposures under the standardized approach to credit risk using external ratings.

CR2-A. GENERAL REQUIREMENTS

131. Licensees shall ensure that all exposures subject to the standardized approach be risk weighted net of specific provisions (including partial write-offs). *[BCBS December 2017 par 1]*
132. The Supervisor reserves the authority to increase the standard risk weight for any exposure where it determines that a higher risk weight is warranted by the overall default experience, or where the credit risk mitigant relied upon by the licensee in relation to such exposures is found to be inadequate. *[BCBS June 2006 par 67 (reworded)]*

Due Diligence Requirements *[BCBS December 2017 par 4 to 6]*

133. Licensees must perform due diligence to ensure that they have an adequate understanding, at origination and thereafter on a regular basis (at least annually), of the risk profile and characteristics of their counterparties. In cases where ratings are used, due diligence is necessary to assess the risk of the exposure for risk management purposes and whether the risk weight applied is appropriate and prudent. The sophistication of the due diligence should be appropriate to the size and complexity of licensees' activities. Licensees must take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty. Licensees must be able to access information about their counterparties on a regular basis to complete due diligence analyses.
134. 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, licensees are expected to take into account the support of the group and the potential for it to be adversely impacted by problems in the group.

Licensees should have in place effective internal policies, processes, systems and controls to ensure that the appropriate risk weights are assigned to counterparties. Licensees must be able to demonstrate to their supervisors that their due diligence analyses are appropriate. As part of their supervisory review, supervisors should ensure that licensees have appropriately performed their due diligence analyses, and should take supervisory measures where these have not been done.

CR2-B. EXPOSURES TO SOVEREIGNS

135. A 0% risk weight will be applied to exposures to:
 - a. The Government of Jamaica and the Bank of Jamaica provided that such exposures are denominated and funded⁴³ in Jamaican currency. *[BCBS December 2017 par 8]*
 - b. The Bank for International Settlements (BIS); the International Monetary Fund (IMF); the European Central Bank (ECB); the European Union; the European Stability Mechanism (ESM); the European Financial Stability Facility (EFSF); and other similar type agencies as approved by the Supervisor from time to time. *[BCBS December 2017 par 10]*

⁴³ That is where the licensees have corresponding liabilities denominated in that domestic currency.

136. Additionally, the 0% risk weight will apply to exposures that are fully guaranteed by the Government of Jamaica, and denominated and funded in Jamaican currency. The guarantee must be explicit, unconditional, legally enforceable and irrevocable. *[BOJ 2015 Regulations]*
137. Otherwise, exposures to sovereigns and their central banks will be risk weighted according to their external rating as set out in **Table CR-2** below: *[BCBS December 2017 par 7]*

RISK WEIGHT TABLE FOR EXPOSURES TO SOVEREIGNS AND CENTRAL BANKS							TABLE CR-2
Credit Quality Step	1	2	3	4	5	6	Unrated (7)
Risk Weight	0%	20%	50%	100%	100%	150%	100%

CR2-C. EXPOSURES TO NON-CENTRAL GOVERNMENT PUBLIC SECTOR ENTITIES

138. Public sector entity (PSE) refers to governments and all publicly controlled or publicly funded agencies, enterprises, and other entities operating in the domestic economy that deliver public programmes, goods or services. This includes any of the categories below: *[CFR Explanatory Notes]*
- Central Government;
 - Local Government;
 - Selected Public Entities, which refers to public organizations that are a part of the government and deliver public programmes, goods or services, but that exist as separate organizations in their own right, possibly as legal entities and operate with a partial degree of operational independence; and
 - Other Public Entities as designated by the Supervisor from time to time.
139. Exposures to PSEs in Jamaica which: i. are funded and denominated in Jamaican currency; and ii. have specific revenue-raising powers and have special institutional arrangements, the effect of which is to reduce their risk of default; will attract a risk weight of 0%. *[BCBS December 2017 par 12]*

Question 1

Do you agree with the revised scope of the regime in relation to the removal of the 100% risk weight applied to debt securities denominated in foreign currency which are issued by foreign public sector entities or agencies from time to time that are not guaranteed by their respective governments (prescribed by BOJ's 2015 Regulations).

140. Otherwise, exposures to PSEs will be risk-weighted based on the external rating of the respective sovereign, as set out in **Table CR-3** below: *[BCBS December 2017 par 11]*

RISK WEIGHT TABLE FOR EXPOSURES TO PUBLIC SECTOR ENTITIES							TABLE CR-3
Credit Quality Step	1	2	3	4	5	6	7 (unrated)
Risk Weight	20%	50%	100%	100%	100%	150%	100%

CR2-D. EXPOSURES TO MULTILATERAL DEVELOPMENT BANKS

141. For the purposes of calculating capital requirements, a Multilateral Development Bank (MDB) is an institution, created by a group of countries that provides financing and professional advice for economic and social development projects⁴⁴. *[BCBS December 2017 par 13]*
142. A 0% risk weight will be applied to exposures to MDBs that satisfy the eligibility criteria provided in **Appendix CR-2**⁴⁵. *[BCBS December 2017 par 14]* The Supervisor reserves the right to update this criteria from time to time in line with any BCBS revisions.
143. MDBs⁴⁶ currently eligible for a 0% risk weight are: *[BCBS December 2017 footnote 11]*
- the World Bank Group comprising the International Bank for Reconstruction and Development (IBRD),
 - the International Finance Corporation (IFC),
 - the Multilateral Investment Guarantee Agency (MIGA) and the International Development Association (IDA),
 - the Asian Development Bank (ADB),
 - the African Development Bank (AfDB),
 - the European Bank for Reconstruction and Development (EBRD),
 - the Inter-American Development Bank (IADB),
 - the European Investment Bank (EIB),
 - the European Investment Fund (EIF),
 - the Nordic Investment Bank (NIB),
 - the Caribbean Development Bank (CDB),
 - the Islamic Development Bank (IDB),
 - the Council of Europe Development Bank (CEDB),
 - the International Finance Facility for Immunization (IFFIm), and
 - the Asian Infrastructure Investment Bank (AIIB).
144. Otherwise, exposures to MDBs shall be attributed risk weights based on their external credit assessments as set out in **Table CR-4** below: *[BCBS December 2017 par 15]*

RISK WEIGHT TABLE FOR EXPOSURES TO MULTILATERAL DEVELOPMENT BANKS						TABLE CR-4
Credit Quality Step	1	2	3	4 and 5	6	7 (unrated)
Risk Weight	20%	30%	50%	100%	150%	50%

⁴⁴ MDBs have large sovereign memberships and may include both developed countries and/or developing countries. Each MDB has its own independent legal and operational status, but with a similar mandate and a considerable number of joint owners. *[BCBS December 2017 par 13]*

⁴⁵ These criteria are established by the Basel Committee on Banking Supervision, who will continue to evaluate eligibility on a case by case basis.

⁴⁶ This list is established by the BCBS, who will continue to evaluate eligibility on a case by case basis.

CR2-E. EXPOSURES TO DEPOSIT-TAKING INSTITUTIONS

145. Exposures to deposit-taking institutions (DTIs) are defined as claims on entities licensed under the BSA as commercial banks, merchant banks, or building societies; as well as claims on financial entities in other jurisdictions that perform similar functions to those licensed under the BSA and are subject to appropriate prudential standards and level of supervision.⁴⁷ [BCBS December 2017 par 16]
146. Licensees shall risk weight exposures to DTIs using the following: [BCBS December 2017 par 17]
- The *External Credit Risk Assessment Approach (ECRA)* shall be applied to all exposures to DTIs that are rated⁴⁸; and
 - The *Standardized Credit Risk Assessment Approach (SCRA)* shall be applied to exposures to DTIs that are unrated.

External Credit Risk Assessment Approach (ECRA)

147. Licensees shall assign to their rated DTI exposures the corresponding ‘base’ risk weights determined by external ratings, as set out in **Table CR-5** below. Such ratings must not incorporate assumptions of implicit government support, unless the rating refers to a public bank owned by its government⁴⁹. [BCBS December 2017 par 18]
148. Exposures to banks with an original maturity of three months or less, as well as exposures to banks that arise from the movement of goods across national borders with an original maturity of six months or less⁵⁰ can be assigned a risk weight that correspond to the risk weights for short-term exposures in **Table CR-5** below. [BCBS December 2017 par 19]

RISK WEIGHT TABLE FOR EXPOSURES TO DEPOSIT-TAKING INSTITUTIONS (ECRA)						TABLE CR-5
Credit Quality Step	1	2	3	4 and 5	6	7 (unrated)
‘Base’ Risk Weight	20%	30%	50%	100%	150%	SCRA
Risk Weight for Short-term Exposures	20%	20%	20%	50%	150%	SCRA

149. Licensees must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the bank counterparties. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure, the licensee must assign a risk weight at least one bucket higher than the “base” risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating. [BCBS December 2017, paragraph 20]
150. Short-term exposures which are expected to be restructured or rolled over (that is, where the effective maturity is longer than ninety (90) days) will not qualify for the preferential treatment outlined under this section for capital adequacy purposes. [BCBS June 2006 footnote 25]

⁴⁷ For internationally active banks, appropriate prudential standards (for example, capital and liquidity requirements) and level of supervision should be in accordance with the Basel Framework.

⁴⁸ Licensees will apply **Part I – External Credit Assessments**, to determine which rating can be used and for which exposures.

⁴⁹ Implicit government support refers to the notion that the government would act to prevent bank creditors from incurring losses in the event of a bank default or bank distress.

⁵⁰ This may include on-balance sheet exposures such as loans and off-balance sheet exposures such as self-liquidating trade-related contingent items.

151. Exposures to financial holding companies (FHCs) that are non-operational holding companies or not DTIs themselves shall be treated as corporate exposures. *[OSFI Standardized Approach par 20]*

Standardized Credit Risk Assessment Approach (SCRA)

152. Using the SCRA, licensees shall classify unrated DTI exposures into one of three risk buckets, Grades A, B and C as defined in **Appendix CR-3**, and assign the corresponding risk weights in **Table CR-6**⁵¹. *[BCBS December 2017 par 21]*
153. Exposures to DTIs with an original maturity of three months or less, as well as exposures to DTIs that arise from the movement of goods across national borders with an original maturity of six months or less⁵², can be assigned a risk weight that correspond to the risk weights for short-term exposures in Table CR-6 above. *[BCBS December 2017 par 30]*

RISK WEIGHT TABLE FOR EXPOSURES TO DEPOSIT-TAKING INSTITUTIONS (SCRA)			TABLE CR-6
Credit Risk Assessment of Counterparty	Grade A	Grade B	Grade C
'Base' Risk Weight	40% / 30% ⁵³	75%	150%
Risk Weight for Short-term Exposures	20%	50%	150%

154. To reflect transfer and convertibility risk under the SCRA, licensees shall apply a risk-weight floor based on the risk weight applicable to exposures to the sovereign of the country where the DTI counterparty is incorporated will be applied to the risk weight assigned to DTI exposures. *[BCBS December 2017 par 31]*
- Licensees shall apply the sovereign floor when the exposure is not in the local currency of the jurisdiction of incorporation of the debtor DTI and for a borrowing booked in a branch of the debtor DTI in a foreign jurisdiction, when the exposure is not in the local currency of the jurisdiction in which the branch operates.
 - Licensees shall not apply the sovereign floor to short-term (that is, with a maturity below one year) self-liquidating, trade-related contingent items that arise from the movement of goods.

CR2-F. EXPOSURES TO SECURITIES DEALERS

155. Licensees shall treat exposures on securities dealers (SDs) as exposures on DTIs, provided these institutions are subject to prudential standards and a level of supervision equivalent to those applied to DTIs (including, in particular, risk-based capital requirements and liquidity requirements). *[BCBS December 2017 par 37]*
156. Licensees shall treat all other exposures to SDs as exposures to general corporates. *[BCBS December 2017 par 37]*

⁵¹ For the purposes of the SCRA only, "published minimum regulatory requirements" in **Appendix CR-3** excludes liquidity standards.

⁵² This may include on-balance sheet exposures such as loans and off-balance sheet exposures such as self-liquidating trade-related contingent items.

⁵³ Under the Standardized Credit Risk Assessment Approach (SCRA), exposures to banks without an external credit rating may receive a risk weight of 30%, provided that the counterparty bank has a CET1 ratio which meets or exceeds 14% and a Tier 1 leverage ratio which meets or exceeds 5%. The counterparty bank must also satisfy all the requirements for **Grade A** classification.

CR2-G. EXPOSURES TO CORPORATES

157. The corporate exposure class does not include exposures to individuals and differentiates between general corporate exposures and specialized lending exposures. *[BCBS December 2017 par 38]*
158. The following corporate exposures, whether general or specialized, will be subject to the treatment prescribed in **Table CR-7** below: *[BCBS December 2017 par 38]*
- a. Exposure to business entities⁵⁴;
 - b. Exposures to insurance companies; and
 - c. Exposures to other DTIs or SDs that do not qualify for the treatment in **sections CR2-E and CR2-F** above.

General Corporate Exposures

159. Licensees shall assign “base” risk weights according to **Table CR-7** for corporate exposures.

RISK WEIGHT TABLE FOR CORPORATE EXPOSURES						TABLE CR-7
Credit Quality Step	1	2	3	4	5 and 6	7
“Base” risk Weight	20%	50%	75%	100%	150%	100%

160. Licensees will assign “base” risk weights according to **Table CR-7** and they must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparties. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (ie 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 must never result in the application of a lower risk weight than that determined by the external rating. *(BCBS December 2017, paragraph 39)*
161. Unrated exposures to corporate small and medium entities (SMEs), will receive a separate treatment as described in **paragraph 162** below *(BCBS December 2017 paragraph 40)*
162. For unrated exposures to corporate SMEs (defined as corporate exposures where the reported annual sales for the consolidated group of which the corporate counterparty is a part is less than or equal to JMD425 (or USD equivalent) for the most recent financial year), an 85% risk weight will be applied. Exposures to SMEs that meet the criteria in **paragraph 168** will be treated as regulatory retail SME exposures and risk weighted at 75%. *(BCBS December 2017, para 43)*

Specialized Lending Exposures

163. Licensees will assign to their specialized lending exposures the risk weights determined by the issue-specific external ratings, if these are available, according to **Table CR-7** above. Issuer ratings must not be used. *[BCBS December 2017 par 46]*
164. A corporate exposure will be treated as a specialized lending exposure if such lending possesses some or all of the following characteristics, either in legal form or economic substance: *[BCBS December 2017 par 44]*

⁵⁴ These include: incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes.

- a. The exposure is not related to real estate and is within the definitions of: *(BCBS 2017, paragraph 45)*
 - i. **project finance**: method of funding in which the lender looks primarily to the revenues generated by a single project (usually large, complex and expensive installations), both as the source of repayment and as security for the loan;
 - ii. **object finance**: method of funding equipment acquisition (ships, aircraft, satellites, railcars, fleets, etc.) where loan repayment is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender; or
 - iii. **commodities finance**: short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (for example, 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.
- b. The exposure is typically to an entity (often a special purpose vehicle (SPV)) that was created specifically to finance and/or operate physical assets;
- c. The borrowing entity 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. 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; and
- d. The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates.

BOX CR-1: HIGH-QUALITY PROJECT FINANCE EXPOSURE *[BCBS December 2017 par 48]*

A high-quality project finance exposure refers to an exposure to a project finance entity that is able to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. The following conditions must also be met:

- i. The project finance entity is restricted from acting to the detriment of the creditors (for example, by not being able to issue additional debt without the consent of existing creditors);
- ii. The project finance entity has sufficient reserve funds or other financial arrangements to cover the contingency funding and working capital requirements of the project;
- iii. The revenues are availability-based or subject to a rate-of-return regulation or take-or-pay contract;
- iv. The project finance entity's revenue depends on one main counterparty and this main counterparty shall be a central government, PSE or a corporate entity with a risk weight of 80% or lower;
- v. The contractual provisions governing the exposure to the project finance entity provide for a high degree of protection for creditors in case of a default of the project finance entity;
- vi. The main counterparty or other counterparties which similarly comply with the eligibility criteria for the main counterparty will protect the creditors from the losses resulting from a termination of the project;
- vii. All assets and contracts necessary to operate the project have been pledged to the creditors to the extent permitted by applicable law; and
- viii. Creditors may assume control of the project finance entity in case of its default.

165. For specialized lending exposures for which an issue-specific external rating is not available, the following risk weights will apply: *[BCBS December 2017 par 47]*
- a. Object and commodities finance exposures will be risk-weighted at 100%;
 - b. Project finance exposures will be risk-weighted at 130% during the pre-operational phase and 100% during the operational phase⁵⁵. Project finance exposures in the operational phase that are deemed to be high-quality, as described in **Box CR-1**, will be risk weighted at 80%.

CR2-H. RETAIL EXPOSURES

166. The retail exposure class differentiates between regulatory retail exposures and other retail exposures.

Regulatory Retail Exposures

167. Licensees shall risk weight retail exposures included in the regulatory retail portfolio at 75%⁵⁶. *[BCBS December 2017 par 55]*
168. To be included in the regulatory retail portfolio, exposures must meet the following four (4) criteria: *[BCBS June 2006 par 70 and BCBS December 2017 paragraph 55]*
- a. Orientation Criterion: Exposures are to an individual person or persons or to a regulatory retail micro, small and medium-sized entities (MSMEs).
 - b. Product Criterion: Exposures take the form of any of the following⁵⁷:
 - i. revolving credits and lines of credit (including credit cards and overdrafts);
 - ii. personal term loans and leases (for example, instalment loans, auto loans and leases, student and educational loans, personal finance); and
 - iii. other facilities and commitments to MSMEs.
 - c. Granularity criterion: No aggregated exposure to one counterparty⁵⁸ can exceed 0.2% of the overall regulatory retail portfolio. The Supervisor must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. Defaulted retail exposures are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion.
 - d. Low value of individual exposures: The maximum aggregated retail exposure to one counterpart cannot exceed an absolute threshold of JM\$20 million (or US\$ equivalent).
169. The Supervisor shall review at periodic intervals the risk weight assigned to the retail portfolio with reference to the default experience for these exposures. As part of the supervisory review process, the Supervisor shall

⁵⁵ Operational phase is defined as the phase in which the entity that was specifically created to finance the project has (i) a positive net cash flow that is sufficient to cover any remaining contractual obligation, and (ii) declining long-term debt.

⁵⁶ Exposures secured by residential property and past due retail loans are to be excluded from the overall regulatory retail portfolio for risk weighting purposes. See **sections CR2-I and CR2-J** below.

⁵⁷ Securities (such as bonds and equities), whether listed or not, are specifically excluded from the regulatory retail portfolio. Mortgage loans are also excluded to the extent that they qualify for treatment as claims secured by residential property.

⁵⁸ Aggregated exposure means gross amount (that is, not taking any credit risk mitigation into account) of all forms of retail exposures, excluding residential real estate exposures. In case of off-balance sheet claims, the gross amount would be calculated after applying credit conversion factors. In addition, "to one counterparty" means one or several entities that may be considered as a single beneficiary (for example, in the case of a small business that is affiliated to another small business, the limit would apply to the bank's aggregated exposure on both businesses).

consider whether the credit quality of regulatory retail claims held by individual banks should warrant a risk weight higher than 75%. Licensees will be required to furnish appropriate evidence to support the application of this treatment. *[BCBS June 2006 par 71]*

Other Retail Exposures

170. Licensees shall risk weight all “other retail” exposures to an individual person or persons that do not meet all of the criteria in **paragraph 168** at 100%. *[BCBS December 2017 par 57]*
171. Exposures to SMEs that do not meet all of the criteria in **paragraph 168** will be treated as corporate SMEs exposures under **paragraph 162**, unless secured by real estate. *[BCBS December 2017 par 58]*

Risk Weight Multiplier for Unhedged Retail Exposures with Currency Mismatch

172. For unhedged retail exposures to individuals where the lending currency differs from the currency of the borrower’s source of income, licensees will apply a 1.5 times multiplier to the applicable risk weight according to **paragraphs 168 to 171** subject to a maximum risk weight of 150%. *[BCBS December 2017 par 76]*
173. For the purposes of **paragraph 172**, an unhedged exposure refers to an exposure to a borrower that has no natural⁵⁹ or financial⁶⁰ 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. For the purposes of application of the multiplier, only these natural or financial hedges are considered sufficient where they cover at least 90% of the loan instalment, regardless of the number of hedges. *[BCBS December 2017 par 77]*

CR2-I. REAL ESTATE EXPOSURE CLASS

174. The real estate exposure class differentiates between exposures secured by residential real estate and exposures secured by commercial real estate. Both sets of exposures will be required to meet the operational requirements detailed in **paragraph 176** below.
175. The Supervisor reserves the right to increase the standard risk weight for real estate exposures where it determines that a higher risk weight is warranted based on default experience and other factors such as market price stability. *[BCBS December 2017 par 59]*

Operational Requirements for Real Estate Exposures

176. To apply the risk-weights in **Tables CR-8, CR-9, CR-10 and CR-11** below, the loan must satisfy the following requirements: *[BCBS December 2017 par 60]*
- a. **Finished property:** the property securing the exposure must be fully completed⁶¹.
 - b. **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 realize the value of the property within a reasonable time frame.

⁵⁹ A natural hedge exists where the borrower, in its normal operating procedures, receives foreign currency income that matches the currency of a given loan (for example, remittances, rental incomes, salaries).

⁶⁰ A financial hedge generally includes a legal contract with a financial institution (for example, forward contract).

⁶¹ This requirement does not apply to forest and agricultural land.

- c. **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) (there is no intermediate lien from another bank) over the same property.
- d. **Required documentation:** the terms of each exposure must be adequately and accurately documented at loan origination and for monitoring purposes, including information on the ability of the borrower to repay and on the valuation of the property.
- e. **Ability of the borrower to repay:** licensees will be required to consider the following in their underwriting process in relation to mortgage loans: *[BCBS September 2000 par 28 – Principles for the Mgmt of Credit Risk]*
 - Sources of repayment based upon documented, verified income;
 - the current risk profile (including the nature and aggregate amounts of risks) of the borrower and any sensitivity to economic and market developments;
 - the borrower's repayment history and current capacity to repay, based on historical financial trends and future cash flow projections, under various scenarios; and
 - for commercial credits, the borrower's business expertise and the condition of the borrower's economic sector as well as the borrower's position within that sector.
- f. **Prudent value of property:** the property must be valued according to the criteria in **Appendix CR-4** for determining the value in the loan to value (LTV) ratio⁶². Moreover, the value of the property must not depend materially on the performance of the borrower.
- g. **Property is adequately insured:** the property must be adequately insured. Licensees should ensure that mortgage insurance does not substitute for sound underwriting practices by lenders. Licensees should carry out prudent and independent assessments of the risks related to mortgage insurance, such as counterparty risk and the extent and details of the coverage of the mortgage insurance policies.

Exposures Secured by Residential Real Estate

177. A residential real estate exposure is an exposure secured by an immovable property that has the nature of a dwelling and satisfies all applicable laws and regulations enabling the property to be occupied for housing purposes (that is, residential property). *[BCBS December 2017 par 63]*

Repayment is not materially dependent on cash flows generated by property

178. When the prospects for servicing the loan does not materially depend on cash flows generated by the property and the requirements in **paragraph 176** are met, provided that **paragraphs 180, 189, 190, and 191** are not applicable, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio in **Table CR-8**. *[BCBS December 2017 par 64]*

RISK WEIGHT TABLE FOR RESIDENTIAL REAL ESTATE EXPOSURES ⁶³					
Repayment is not materially dependent on cash flows generated by property					TABLE CR-8
Risk Weight	LTV ≤ 50%	50% < LTV ≤ 60%	60% < LTV ≤ 80%	80% < LTV ≤ 90%	LTV > 90%
	30%	35%	40%	50%	80%

⁶² The LTV ratio is the amount of the loan divided by the value of the property.

⁶³ The risk weights are increased to be more prudent, taking into consideration Jamaica's underdeveloped real estate market. Considerations include the lengthy time it takes to legally enforce a claim on property; and failure to keep updated valuations of properties.

179. For exposures where any of the requirements in **paragraph 176** are not met and **paragraphs 180, 189, 190, and 191** are not applicable, the risk weight applicable will be the risk weight of the counterparty⁶⁴. [BCBS December 2017 par 66]

Repayment is materially dependent on cash flows generated by property

180. When the prospects for servicing the loan materially depend⁶⁵ on 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, and provided that **paragraphs 189, 190, and 191** are not applicable and all the requirements in **paragraph 176** are met, the risk weights in **Table CR-9** apply. [BCBS December 2017 par 67]

RISK WEIGHT TABLE FOR RESIDENTIAL REAL ESTATE EXPOSURES ⁶⁶					
Repayment is materially dependent on cash flows generated by property					TABLE CR-9
Risk Weight	LTV ≤ 50%	50% < LTV ≤ 60%	60% < LTV ≤ 80%	80% < LTV ≤ 90%	> 90%
	50%	55%	65%	80%	105%

181. Where a residential real estate exposure does not meet any of the requirements of **paragraph 176**, the risk weight will be 150%. [BCBS December 2017 par 67]

Risk Weight Multiplier for Unhedged Residential Real Estate Exposures with Currency Mismatch

182. For unhedged residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income, licensees will apply a 1.5 times multiplier to the applicable risk weight according to **paragraphs 178 to 180**, subject to a maximum risk weight of 150%. [BCBS December 2017 par 76]
183. For the purposes of **paragraph 182**, an unhedged exposure refers to an exposure to a borrower that has no natural⁶⁷ or financial⁶⁸ 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. For the purposes of application of the multiplier, only these natural or financial hedges are considered sufficient where they cover at least 90% of the loan instalment, regardless of the number of hedges. [BCBS December 2017 par 77]

Exposures Secured by Commercial Real Estate

184. A commercial real estate exposure is an exposure secured by any immovable property that is not a residential real estate as defined in **paragraph 177** [BCBS December 2017 par 69]

⁶⁴ For exposures to individuals the risk weight applied will be 75%. For exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty.

⁶⁵ It is expected that the material dependence condition would primarily apply to loans to corporates, SMEs or SPVs, but is not restricted to those borrower types. For example, a loan may be considered materially dependent if more than 50% of the income from the borrower used in the licensee's assessment of its ability to service the loan is from cash flows generated by the residential property.

⁶⁶ The risk weights are increased to be more prudent, taking into consideration our underdeveloped real estate market. Considerations include the lengthy time it takes to legally enforce a claim on property; and failure to keep updated valuations of properties.

⁶⁷ A natural hedge exists where the borrower, in its normal operating procedures, receives foreign currency income that matches the currency of a given loan (for example, remittances, rental incomes, salaries).

⁶⁸ A financial hedge generally includes a legal contract with a financial institution (for example, forward contract).

Repayment is not materially dependent on cash flows generated by property

185. Where the requirements in **paragraph 176** are met and provided that **paragraphs 187, 189, 190, and 191** are not applicable, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio in **Table CR-10**. *[BCBS December 2017 par 70]*

RISK WEIGHT TABLE FOR COMMERCIAL REAL ESTATE EXPOSURES		
Repayment is not materially dependent on cash flows generated by property		TABLE CR-10
Risk Weight	LTV ≤ 60%	LTV > 60%
	Min(60%, RW of counterparty ⁶⁹)	RW of counterparty

186. Where any of the requirements in **paragraph 176** are not met and **paragraphs 187, 189, 190, and 191** are not applicable, the risk weight applied will be the risk weight of the counterparty. *[BCBS December 2017 par 72]*

Repayment is materially dependent on cash flows generated by property⁷⁰

187. When the prospects for servicing the loan materially depend⁷¹ 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, and provided that **paragraphs 189, 190, and 191** are not applicable and all the requirements in **paragraph 176** are met, the exposure will be risk-weighted according to **Table CR-11**. *[BCBS December 2017 par 73]*

RISK WEIGHT TABLE FOR COMMERCIAL REAL ESTATE EXPOSURES			
Repayment is materially dependent on cash flows generated by property			TABLE CR-11
Risk Weight	LTV ≤ 60%	60% < LTV ≤ 80%	LTV > 80%
	70%	90%	110%

188. Where a commercial real estate exposure does not meet any of the requirements of **paragraph 176**, the risk weight will be 150%. *[BCBS December 2017 par 73]*

Land Acquisition, Development and Construction Exposures

189. Land acquisition, development and construction (ADC) exposures⁷² refer to loans to companies or SPVs financing any land acquisition for development and construction purposes, or development and construction of any residential or commercial property. *[BCBS December 2017 par 74]*

⁶⁹ Risk weight of the counterparty refers to 75% for exposures to individuals, and for exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty.

⁷⁰ The primary source of these cash flows would generally be lease or rental payments, or the sale, of the commercial property. The distinguishing characteristic of these exposures compared to other commercial real estate exposures is that both the servicing of the loan and the recovery in the event of default depend materially on the cash flows generated by the property securing the exposure.

⁷¹ It is expected that the material dependence condition would predominantly apply to loans to corporates, SMEs or SPVs, but is not restricted to those borrower types. As an example: a loan may be considered materially dependent if more than 50% of the income from the borrower used in the bank's assessment of its ability to service the loan is from cash flows generated by the commercial property.

⁷² ADC exposures do not include the acquisition of forest or agricultural land, where there is no planning consent or intention to apply for planning consent.

190. Licensees shall risk weight ADC exposures at 150%, unless they are residential real estate exposures that meet the criteria in **paragraph 191**. *[BCBS December 2017 par 74]*
191. Licensees shall risk weight ADC exposures to residential real estate at 100%, provided that the following criteria are met: *[BCBS December 2017 par 75]*
- a. prudential underwriting standards meet the requirements in **paragraph 176** where applicable;
 - b. implemented pre-sale or pre-lease contracts must be legally binding written contracts, and the purchaser/renter must have made a cash deposit of at least 35%, which is subject to forfeiture if the contract is terminated.

CR2-J. DEFAULTED EXPOSURES

192. A defaulted exposure is defined as one that is past due for more than ninety (90) days, or is an exposure to a defaulted borrower (see **Box CR-2** for definition of a defaulted borrower).

BOX CR-2: DEFINITION OF A DEFAULTED BORROWER *[BCBS December 2017 par 90]*

A defaulted borrower is a borrower in respect of whom any of the following events have occurred:

- i. Any material credit obligation that is past due for more than ninety (90) days. Note however, overdrafts will be considered as being past due once the customer has breached an advised limit or has been advised of a limit smaller than current outstandings;
- ii. Any material credit obligation is on non-accrued status (for example, the lending financial institution no longer recognizes accrued interest as income or, if recognized, makes an equivalent amount of provisions);
- iii. A write-off or account-specific provision is made as a result of a significant decline in credit quality subsequent to the financial institution taking on any credit exposure to the borrower;
- iv. Any credit obligation is sold at a substantial credit-related economic loss;
- v. A distressed restructuring of any credit obligation (that is, a restructuring that may result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees) is agreed by the financial institution;
- vi. The borrower's bankruptcy or a similar order in respect of any of the borrower's credit obligations to the financial group has been filed;
- vii. The borrower has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of any of the credit obligations to the financial group; or
- viii. Any other situation where the financial institution considers that the borrower is unlikely to pay its credit obligations in full without recourse by the financial institution to actions such as realizing security.

193. For retail exposures, the definition of default should be applied at the level of a particular credit obligation, rather than at the level of the borrower. As such, default by a borrower on one obligation does not require a licensee to treat all other obligations to the financial group as defaulted. *[BCBS December 2017 par 91]*
194. With the exception of residential real estate exposures treated under **paragraph 195**, the unsecured or unguaranteed portion of a defaulted exposure shall be risk-weighted net of specific provisions and partial write-offs as follows: *[BCBS December 2017 par 92]*

- a. 150% risk weight when specific provisions are less than 20% of the outstanding amount of the loan; and
 - b. 100% risk weight when specific provisions are equal or greater than 20% of the outstanding amount of the loan.
195. Defaulted residential real estate exposures where repayments do not materially depend on cash flows generated by the property securing the loan shall be risk-weighted net of specific provisions and partial write-offs at 100%. *[BCBS December 2017 par 93]*
196. Guarantees or financial collateral which are eligible according to the credit risk mitigation framework might be taken into account in the calculation of the defaulted exposures secured by real estate. Licensees may recognize these risk mitigants in calculating the exposure amount; however, the LTV bucket and risk weight to be applied to the exposure amount must be determined before the application of the appropriate credit risk mitigation technique.
197. For the purpose of defining the secured or guaranteed portion of the defaulted exposure, eligible collateral and guarantees will be the same as for credit risk mitigation purposes (see **Part III – Credit Risk Mitigation Techniques**). *[BCBS December 2017 par 94]*

CR2-K. OTHER ASSETS

198. Licensees shall apply the following risk weights: *[BCBS December 2017 par 95 to 97]*
- (a) 0% risk weight shall be applied to cash owned and held at the licensee or in transit (denominated in domestic and foreign currency).
 - (b) 20% risk weight shall be applied to exposures to cash items in the process of collection.
 - (c) 100% risk weight shall be applied to fixed assets, including land, buildings and equipment net of depreciation, used or held, or both by the licensee in the conduct of its business; and
 - (d) 100% risk weight shall be applied to all other exposures not otherwise classified in this approach.

CR2-L. SUBORDINATED DEBT, EQUITY, AND OTHER CAPITAL INSTRUMENTS

199. The treatment described in **paragraphs 200 to 203** 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 or risk-weighted at 250% according to **paragraphs 193, and 213 to 215** (June 2011) *[BCBS December 2017 par 49]*
200. Equity exposures are defined on the basis of the economic substance of the instrument; and include both direct and indirect ownership interests⁷³, 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. See **Appendix CR-5** for the requirements considered to qualify as an equity exposure. *[BCBS December 2017 par 49]*

⁷³ Indirect equity interests include holdings of derivative instruments tied to equity interests, and holdings in corporations, partnerships, limited liability companies or other types of enterprises that issue ownership interests and are engaged principally in the business of investing in equity instruments.

201. Licensees shall assign a risk weight of 400% to speculative unlisted equity exposures described in **paragraph 202**, and a risk weight of 250% to all other equity holdings.⁷⁴ [BCBS December 2017 par 50]
202. 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 similar investments which are subject to price volatility and are acquired in anticipation of significant future capital gains.⁷⁵ [BCBS December 2017 par 51]
203. Licensees shall assign a risk weight of 150% to subordinated debt and capital instruments other than equities. Subordinated debt for the purposes of this paragraph will include any liabilities eligible as total loss-absorbing capacity (TLAC) liabilities⁷⁶, and that are not deducted from regulatory capital. [BCBS December 2017 par 53]

CR2-M. OFF-BALANCE SHEET ITEMS

204. The categories of off-balance sheet items include guarantees, commitments and similar contracts whose full notional principal amount may not necessarily be reflected on the balance sheet. Licensees shall convert off-balance sheet items into credit exposures equivalents through the use of credit conversion factors (CCFs) as follows: [BCBS December 2017 par 78]
205. A 100% CCF will be applied to the following items: [BCBS December 2017 par 79]
- i. Guarantees given on behalf of customers to stand behind the financial obligations of the customer and to satisfy those obligations should the customer fail to do so;
 - ii. Standby letters of credit or other equivalent irrevocable obligations serving as financial guarantees for loans and securities, such as letters of credit supporting the issue of commercial paper;
 - iii. Participation in banker's acceptances (including endorsements with the character of acceptances) and participation in financial letters of credit. Participations constitute guarantees by the participating financial institution such that if there is a default by the underlying obligor, they will indemnify the selling entity for the full principal and interest attributable to them;
 - iv. Securities lending transactions where the lending entity is liable to its customer for any failure to recover the securities lent, or the posting of securities as collateral⁷⁷ by financial institutions within the financial group, including instances where these arise out of securities financing transactions (that is, repurchase or reverse repurchase agreements and securities lending or securities borrowing transactions);
 - v. Sale and repurchase agreements⁷⁸, note however that loans or other assets sold under a sale or repurchase agreement (financing for accounting purposes) shall continue to be reported on the balance sheet;⁷⁹

⁷⁴ The risk weight treatment described in **paragraph 194** will be subject to a five-year linear phase-in arrangement from the date of implementation of this standard. For speculative unlisted equity exposures, the applicable risk weight will start at 100% and increase by 60 percentage points at the end of each year until the end of Year 5. For all other equity holdings, the applicable risk weight will start at 100% and increase by 30 percentage points at the end of each year until the end of Year 5.

⁷⁵ For example, investments in unlisted equities of corporate clients with which the bank has or intends to establish a long-term business relationship and debt-equity swaps for corporate restructuring purposes would be excluded.

⁷⁶ For example, long-term, subordinated debt that may be converted into equity in order to facilitate the effective resolution of a financial institution.

⁷⁷ The calculation of the risk weighted assets where the credit converted exposure is secured by eligible collateral is covered under **section 3-B** of the Credit Risk Mitigation Techniques.

⁷⁸ A sale or repurchase agreement represents an irrevocable commitment and should be reported as an off-balance sheet item.

⁷⁹ These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

- vi. Forward asset purchases, forward forward deposits⁸⁰, partly paid shares and securities⁸¹, and any other contractual obligations to purchase assets, which represent commitments with certain drawdown;
 - vii. Asset sales with recourse⁸² where the credit risk remains with any financial institution within the financial group; and
 - viii. Any other commitments or off-balance sheet items that are credit substitutes and not explicitly included in any other category.
206. A 50% CCF will be applied to the following items: *[BCBS December 2017 par 80 & 81]*
- i. Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of the maturity of the underlying facility; and
 - ii. Certain transaction-related contingent items (for example, performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).
207. A 40% CCF will be applied to commitments, including underwriting commitments and commercial credit lines, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF. *[BCBS December 2017 par 82]*
208. A 20% CCF will be applied to both the issuing and confirming banks of short-term⁸³ self-liquidating trade letters of credit arising from the movement of goods (for example, documentary credits collateralized by the underlying shipment). *[BCBS December 2017 par 83]*
209. A 10% CCF will be applied to commitments that are unconditionally cancellable at any time without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. *[BCBS December 2017 par 84]*
210. Where there is an undertaking to provide a commitment on an off-balance sheet item, licensees will apply the lower of the two applicable CCFs⁸⁴. *[BCBS December 2017 par 85]*
211. The credit equivalent amount of Securities Financing Transactions (SFTs) that expose a bank to counterparty credit risk is to be calculated under the comprehensive approach in **Part IV.A, Counterparty Credit Risk, SFTs**. The credit equivalent amount of OTC derivatives that expose a bank to counterparty credit risk is to be calculated under the rules for counterparty credit risk in **Part IV.B, Counterparty Credit Risk, Derivative Transactions**. *[BCBS December 2017 par 86]*

⁸⁰ A forward forward is a private agreement between two parties to engage in a loan transaction in the future. The lender agrees to lend the borrower funds on a specified future date. The borrower agrees to repay the loan, plus a premium, at a date beyond the loan issue date.

⁸¹ These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

⁸² These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

⁸³ That is, with a maturity below one year.

⁸⁴ For example, if a bank has a commitment to open short-term self-liquidating trade letters of credit arising from the movement of goods, a 20% CCF will be applied (instead of a 40% CCF). Further, if a bank has an unconditionally cancellable commitment described in **paragraph 202** to issue direct credit substitutes, a 10% CCF will be applied (instead of a 100% CCF).

212. Financial institutions must closely monitor securities, commodities and foreign exchange transactions that have failed, starting from the first day they fail. A capital charge on failed transactions must be calculated in accordance with **Appendix CR-6**. [BCBS December 2017 par 87]
213. Financial institutions are exposed to the risk associated with unsettled securities, commodities, and foreign exchange transactions from trade date. Irrespective of the booking or the accounting of the transaction, unsettled transactions must be taken into account for regulatory capital requirements purposes. Where they do not appear on the balance sheet (that is, settlement date accounting), the unsettled exposure amount will receive a 100% CCF.⁸⁵ Furthermore, when such transactions are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, banks must calculate a capital charge as set forth in **Appendix CR-6**. [BCBS December 2017 par 88]
214. A financial institution providing credit protection through a first-to-default⁸⁶ or second-to-default⁸⁷ credit derivative is subject to capital requirements on such instruments. For first-to-default credit derivatives, the risk weights of the assets included in the basket must be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount. [BCBS December 2017 par 89]
215. For second-to-default credit derivatives, the treatment is similar; however, in aggregating the risk weights, the asset with the lowest risk-weighted amount can be excluded from the calculation. This treatment applies respectively for nth-to-default credit derivatives, for which the n-1 assets with the lowest risk-weighted amounts can be excluded from the calculation. [BCBS December 2017 par 89]

PART III – CREDIT RISK MITIGATION TECHNIQUES

This part outlines the credit risk mitigation techniques that can be used by an institution to reduce the credit risk associated with an exposure that institution continues to hold. The part also provides the eligibility criteria, detailed methodologies and specific requirements with respect to CRM techniques.

CR3-A. MINIMUM CONDITIONS FOR THE RECOGNITION OF CREDIT RISK MITIGATION TECHNIQUES

216. The following credit risk mitigants will be recognized for regulatory capital purposes: [BCBS December 2017 par 117]
- a. **Collateralization** – exposures may be collateralized by first priority claims, in whole or in part with cash or securities;

⁸⁵ Financial institutions are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate so that they can produce management information that facilitates timely action.

⁸⁶ In this case, an institution obtains credit protection for a basket of reference names and where the first default among the reference names triggers the credit protection and the credit event also terminates the contract. [BCBS June 2006 para 207]

⁸⁷ In this case, the second default among the assets within the basket triggers the credit protection, and the institution obtaining credit protection through such a product will only be able to recognize any capital relief if first-default-protection has also been obtained, or when one of the assets within the basket has already defaulted. [BCBS June 2006 para 209]

- b. **Guarantees, insurance contracts and/or credit derivatives** – a loan exposure may be guaranteed by a third party; insurance policies may be pledged to the lending institution; in addition licensees may buy a credit derivative to offset various forms of credit risk.
217. The framework set out in this section is applicable to banking book exposures that are risk-weighted under the standardized approach. *(BCBS 2017 par 118)*
218. No transaction in which CRM techniques are used shall receive a higher capital requirement than an otherwise identical transaction where such techniques are not used. *[BCBS December 2017 par 119]*
219. The use of CRM techniques may increase other residual risks⁸⁸. Licensees must therefore employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off⁸⁹ risks; and management of concentration risk arising from the licensee's use of CRM techniques and its interaction with the licensee's overall credit risk profile. *[BCBS December 2017 par 122]*
220. Should the Supervisor determine that residual risks are not adequately controlled, the Supervisor may impose additional capital charges or take other supervisory actions as necessary. *[BCBS December 2017 par 122]*
221. In order to obtain capital relief for use of any CRM technique, licensees must fulfil the following legal requirements: *[BCBS December 2017 par 125]*
- a. All documentation used in collateralized transactions, insurance contracts, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions;
 - b. Sufficient assurance from independent legal counsel must be obtained with respect to the legal enforceability of the documentation; and
 - c. Periodic reviews shall be undertaken to confirm the on-going enforceability of the documentation.
222. In relation to **paragraph 221** above, the Supervisor shall be entitled to request and review the most recent version of the independent, written and reasoned legal opinion or opinions that it used to establish whether its credit protection arrangement or arrangements meet the specified conditions.
223. In order for CRM techniques to provide protection, the credit quality of the counterparty must not have a material positive correlation⁹⁰ with the employed CRM technique or with the resulting residual risks. *[BCBS December 2017 par 123]*
224. If a licensee covers a single exposure using multiple CRM techniques, (for example, a licensee has both collateral and a guarantee partially covering an exposure), the licensee must subdivide the exposure into portions covered by each type of CRM technique (for example, portion covered by collateral, portion covered by guarantee) and the risk-weighted assets of each portion must be calculated separately. When credit protection

⁸⁸ Residual risks include legal, operational, liquidity and market risks.

⁸⁹ Roll-off risk occurs when the credit protection a licensee obtains differs in maturity from the underlying credit exposure. That is, the fact that the licensee will be fully exposed when the protection expires, and the associated risk that it will be unable to purchase credit protection or ensure its capital adequacy when the credit protection expires. *[BCBS January 2001 para 104]*

⁹⁰ For example, securities issued by the counterparty — or by any counterparty-related group entity — would provide little protection as collateral and so would be ineligible.

provided by a single protection provider has differing maturities, they must be subdivided into separate protection as well. *[BCBS December 2017 par 124]*

225. The Supervisor will not grant any additional supervisory recognition of CRM for regulatory capital purposes on exposures for which the risk weight already reflects that CRM (the effects of CRM will not be double-counted). *[BCBS December 2017 par 121]*
226. Consistent with **paragraph 113** above, principal-only ratings will also not be allowed within the CRM framework. *[BCBS December 2017 par 121]*
227. In order to obtain capital relief in respect of any CRM techniques, licensees shall observe these requirements in conjunction with Bank of Jamaica's guidelines on risk management and disclosure. *[BCBS December 2017 par 120]*

CR3-B. COLLATERALIZED TRANSACTIONS

228. A collateralized transaction is one in which banks have a credit exposure or potential credit exposure; and that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty. *[BCBS December 2017 par 132]*

General Requirements for Collateralized Transactions

229. Where licensees take eligible financial collateral (see **Appendix CR-7**), they may reduce their regulatory capital requirements through the application of CRM techniques, accounting for the risk mitigating effect of the collateral. *[BCBS December 2017 par 132]*
230. Licensees shall utilize the simple approach in the banking book, which replaces the risk weight of the counterparty with the risk weight of the collateral for the collateralized portion of the exposure. *[BCBS December 2017 par 133]*
231. For collateralized OTC transactions, exchange traded derivatives and long settlement transactions, licensees will use the approach for counterparty credit risk in accordance with Part IV.B, Counterparty Credit Risk, Derivatives transactions *[BCBS December 2017 par 134]*
232. Licensees that lend securities or post collateral must calculate capital requirements for both of the following: (i) the credit risk or market risk of the securities, if this remains with the licensee; and (ii) the counterparty credit risk arising from the risk that the borrower of the securities may default *[BCBS December 2017 par 139]*
233. Before capital relief is granted in respect of any form of collateral, the standards set out below in **paragraphs 234 to 240** must be met. *[BCBS December 2017 par 139]*
234. The legal mechanism by which collateral is pledged or transferred must ensure that the licensee has the right to liquidate or take legal possession of it, in a timely manner, in the event of the default, insolvency or bankruptcy (or one or more otherwise-defined credit events set out in the transaction documentation) of the counterparty (and, where applicable, of the custodian holding the collateral). *[BCBS December 2017 par 140]*
235. Licensees must take all steps necessary to fulfil those requirements under the law applicable to the licensee's interest in the collateral for obtaining and maintaining an enforceable security interest, for example, by registering it with a registrar, or for exercising a right to net or set off in relation to the title transfer of the collateral. *[BCBS December 2017 par 140]*

236. Licensees must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed, and that collateral can be liquidated promptly. *[BCBS December 2017 par 141]*
237. Licensees must ensure that sufficient resources are devoted to the orderly operation of margin agreements with OTC derivative and securities-financing counterparties, as measured by the timeliness and accuracy of its outgoing margin calls and response time to incoming margin calls. Licensees must have collateral risk management policies in place to control, monitor and report: *[BCBS December 2017 par 142]*
- a. the risk to which margin agreements expose them (such as the volatility and liquidity of the securities exchanged as collateral);
 - b. the concentration risk to particular types of collateral;
 - c. the reuse of collateral (both cash and non-cash) including the potential liquidity shortfalls resulting from the reuse of collateral received from counterparties; and
 - d. the surrender of rights on collateral posted to counterparties.
238. Where the collateral is held by a custodian, licensees must take reasonable steps to ensure that the custodian segregates the collateral from its own assets. *[BCBS December 2017 par 143]*
239. A capital requirement must be applied on both sides of a collateralized transaction. For example, both repos and reverse repos will be subject to capital requirements. Likewise, both sides of a securities lending and borrowing transaction will be subject to explicit capital charges, as will the posting of securities in connection with derivatives exposures or with any other borrowing transaction. *[BCBS December 2017 par 144]*
240. Where a licensee, acting as an agent, arranges a repo-style transaction⁹¹ between a customer and a third party and provides a guarantee to the customer that the third party will perform on its obligations, then the risk to the licensee is the same as if the licensee had entered into the transaction as a principal. In such circumstances, a licensee must calculate capital requirements as if it were itself the principal. *[BCBS December 2017 par 145]*

The Simple Approach to Collateralized Transactions

241. Under the simple approach, licensees shall replace the risk weight of the counterparty with the risk weight of the collateral instrument collateralizing, or partially collateralizing the exposure. *[BCBS December 2017 par 146]*
242. For collateral to be recognized under the simple approach, it must be: *[BCBS December 2017 par 147]*
- (a) pledged for at least the life of the exposure;
 - (b) marked to market; and
 - (c) revalued with a minimum frequency of six months.
243. Those portions of exposures collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralized portion is subject to a floor of 20% except under the conditions specified in **Appendix CR-8**. The remainder of the exposure must be assigned the risk weight appropriate to the counterparty. Maturity mismatches are not allowed under the simple approach. *[BCBS December 2017 par 147]*
244. The eligible financial collateral under the simple approach is described in **Appendix CR-7**.

⁹¹ That is, repurchase/reverse repurchase and securities lending/borrowing transactions.

245. Repo transactions that fulfil the requirement in **Appendix CR-8** receive a 10% risk weight, as an exemption to the risk weight floor described in **paragraph 243** above. If the counterparty to the transaction is a core market participant (**Box CR-3** below), financial institutions may apply a risk weight of 0% to the transaction. *[BCBS December 2017 par 152]*

BOX CR-3: CORE MARKET PARTICIPANTS *[BCBS December 2017 par 151]*

Core market participants include the following entities:

- i. Sovereigns, central banks and PSEs;
 - ii. Regulated DTIs and securities firms;
 - iii. Regulated insurance companies eligible for a 20% risk weight in the standardized approach
 - iv. Regulated mutual funds that are subject to capital or leverage requirements;
 - v. Regulated pension funds;
 - vi. Qualifying central counterparties (QCCPs); and
 - vii. and any other entity so determined by the Supervisor.
246. OTC derivative transactions subject to daily mark-to-market, collateralized by cash and where there is no currency mismatch may receive a 0% risk weight. Such transactions collateralized by sovereign or PSE securities qualifying for a 0% risk weight in the standardized approach may receive a 10% risk weight. *[BCBS December 2017 par 153]*
247. The 20% floor for the risk weight on a collateralized transaction does not apply and a 0% risk weight may be applied where the exposure and the collateral are denominated in the same currency, and either: *[BCBS December 2017 par 154]*
- (a) the collateral is cash on deposit as defined in **Appendix CR-7 A(a)**; or
 - (b) the collateral is in the form of sovereign or PSE securities eligible for a 0% risk weight, and its market value has been discounted by 20%.
248. Maturity mismatches are not allowed under the simple approach. *[BCBS December 2017 par 147]*
249. Currency mismatches are allowed under the simple approach. However, there is no specific treatment for currency mismatches, given that a minimum risk weight of 20% (floor) is generally applied. *[BCBS December 2017 par 131]*

CR3-C. GUARANTEES AND CREDIT DERIVATIVES

250. Where guarantees or credit derivatives fulfil the minimum operational conditions set out in **paragraphs 255 to 256** below, licensees may take account of the credit protection offered by such credit risk mitigation techniques in calculating capital requirements. *[BCBS December 2017 par 136]*
251. A range of guarantors and protection providers are recognized and a substitution approach applies for capital requirement calculations. Only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty lead to reduced capital charges for the guaranteed exposure, since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, whereas the uncovered portion retains the risk weight of the underlying counterparty. *[BCBS December 2017 par 137]*

252. Detailed conditions and operational requirements for guarantees and credit derivatives are given in **paragraphs 254 to 272**. *[BCBS December 2017 par 138]*

Operational Requirements for Guarantees, and Credit Derivatives

253. In calculating capital requirements, licensees will only be permitted to take account of such CRM techniques where guarantees, or credit derivatives are direct, explicit, irrevocable, legally enforceable and unconditional, and the Supervisor is satisfied that licensees fulfil certain minimum operational conditions relating to risk management processes. Credit insurance contracts with economic substance equivalent to a guarantee may qualify as such – and be employed for the purposes of CRM – subject to the fulfilment of all the relevant eligibility requirements set out for the usage of guarantees.
254. If conditions set below are met, banks can substitute the risk weight of the counterparty with the risk weight of the guarantor. *[BCBS December 2017 par 191]*
255. For a guarantee (counter-guarantee), insurance contract or credit derivative to be eligible for CRM, the following conditions must be met. A guarantee, insurance contract or credit derivative must: *[BCBS December 2017 par 192]*
- a. represent a direct claim on the protection provider;
 - b. be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
 - c. other than non-payment by a protection purchaser of money due in respect of the credit protection contract it is irrevocable; there is no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure;⁹²
 - d. be unconditional; there should be no clause in the protection contract outside the direct control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the underlying counterparty fails to make the payment(s) due.
256. In the case of maturity mismatches, the amount of credit protection that is provided must be adjusted in accordance with **Appendix CR-9**. *[BCBS December 2017 par 193]*

Specific Operational Requirements for Guarantees and Insurance Contracts

257. In addition to the legal certainty requirements in **paragraph 221** above, in order for a guarantee or insurance contract to be recognized, the following requirements must be satisfied: *[BCBS December 2017 par 194]*
- a. On the qualifying default/non-payment of the counterparty, the licensee may in a timely manner pursue the guarantor or insurer for any monies outstanding under the documentation governing the transaction. The guarantor or insurer may make one lump sum payment of all monies under such documentation to the bank, or the guarantor or insurer may assume the future payment obligations of the counterparty covered by the guarantee or insurance contract. The licensee must have the right to receive any such payments from the guarantor or insurer without first having to take legal action in order to pursue the counterparty for payment.
 - b. The guarantee or insurance contract is an explicitly documented obligation assumed by the guarantor.
 - c. Except as noted in the following sentence, the guarantee or insurance contract covers all types of payments the underlying counterparty is expected to make under the documentation governing the transaction, for example notional amount, margin payments, etc. Where a guarantee or insurance contract covers payment

⁹² There must be no possibility for the protection provider to change the maturity agreed ex post.

of principal only, interests and other uncovered payments must be treated as an unsecured amount in accordance with the rules for proportional cover described in **paragraph 267**.

Specific Operational Requirements for Credit Derivatives

258. In addition to the legal certainty requirements in **paragraph 221** in order for a credit derivative contract to be recognized, the following requirements must be satisfied: *[BCBS December 2017 par 195]*

- a. The credit events specified by the contracting parties must at a minimum cover:
 - i. failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
 - ii. bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and
 - iii. restructuring⁹³ of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (that is, write-off, specific provision or other similar debit to the profit and loss account).
- b. If the credit derivative covers obligations that do not include the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
- c. The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay. In the case of a maturity mismatch, the provisions of **Appendix CR-9** must be applied.
- d. Credit derivatives allowing for cash settlement are recognized for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation. If the reference obligation specified in the credit derivative for purposes of cash settlement is different from the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
- e. If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
- f. The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.
- g. A mismatch between the underlying obligation and the reference obligation under the credit derivative (that is, the obligation used for purposes of determining cash settlement value or the deliverable obligation) is permissible if (1) the reference obligation ranks *pari passu* with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (that is, the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

⁹³ When hedging corporate exposures, this particular credit event is not required to be specified provided that (i) A 100% vote is needed to amend maturity, principal, coupon, currency or seniority status of the underlying corporate exposure; (ii) The legal domicile in which the corporate exposure is governed has a well-established bankruptcy code that allows for a company to reorganize/restructure and provides for an orderly settlement of creditor claims. If these conditions are not met, then the treatment in **paragraph 148** may be eligible.

- h. A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if (1) the latter obligation ranks *pari passu* with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (that is, the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.
259. Partial recognition of the credit derivative will be allowed in instances where the restructuring of the underlying obligation is not covered by the credit derivative, but the other operational requirements in **paragraph 258** are met. *[BCBS December 2017 par 196]*
- a. If the amount of the credit derivative is less than or equal to the amount of the underlying obligation, 60% of the amount of the hedge can be recognized as covered.
 - b. If the amount of the credit derivative is larger than that of the underlying obligation, then the amount of eligible hedge is capped at 60% of the amount of the underlying obligation.

Range of Eligible Guarantors (Counter-Guarantors)/Protection Providers and Credit Derivatives

260. Credit protection given by the following entities can be recognized when they have a lower risk weight than the counterparty:
- i. Sovereign entities⁹⁴, PSEs, MDBs, banks, securities firms and other prudentially regulated financial institutions with a lower risk weight than the counterparty;⁹⁵ *[BCBS December 2017 par 197]*
 - ii. Other entities rated A- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor. *[BCBS June 2006 par 197]*
 - iii. when credit protection is provided to a securitization exposure, other entities that currently are externally rated BBB- or better and that were externally rated A- or better at the time the credit protection was provided. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor. *[BCBS June 2006 par 197]*
261. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees are eligible for recognition⁹⁶. *[BCBS December 2017 par 198]*
262. Where a licensee buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected

⁹⁴ This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF), as well as MDBs eligible for a 0% risk weight as referred to in **section 2-C**.

⁹⁵ A prudentially regulated financial institution is defined as: a legal entity supervised by a regulator that imposes prudential requirements consistent with international norms or a legal entity (parent company or subsidiary) included in a consolidated group where any substantial legal entity in the consolidated group is supervised by a regulator that imposes prudential requirements consistent with international norms. These include, but are not limited to, prudentially regulated insurance companies, broker/dealers, thrifts and futures commission merchants, and qualifying central counterparties as defined in Basel Committee on Banking Supervision, Regulatory capital requirements framework for bank exposures to central counterparties, July 2012, www.bis.org/publ/bcbs227.pdf.

⁹⁶ Cash-funded credit-linked notes issued by the bank against exposures in the banking book that fulfil all minimum requirements for credit derivatives are treated as cash-collateralized transactions. However, in this case the limitations regarding the protection provider as set out in **paragraph 155** do not apply.

(either through reductions in fair value or by an addition to reserves), the credit protection will not be recognized. *[BCBS December 2017 par 198]*

263. First-to-default and all other nth-to-default credit derivatives (that is, by which a bank obtains credit protection for a basket of reference names and where the first- or nth-to-default among the reference names triggers the credit protection and terminates the contract) are not eligible as a CRM technique and therefore cannot provide any regulatory capital relief. In transactions in which a bank provided credit protection through such instruments, it shall apply the treatment described in **paragraphs 214 and 215**. *[BCBS December 2017 par 199]*

Risk-weight Treatment of Transactions in which Eligible Credit Protection is Provided

General Risk-weight Treatment

264. The protected portion is assigned the risk weight of the protection provider. *[BCBS December 2017 par 200]*
265. The uncovered portion of the exposure is assigned the risk weight of the underlying counterparty. *[BCBS December 2017 par 200]*
266. Materiality thresholds on payments below which the protection provider is exempt from payment in the event of loss are equivalent to retained first-loss positions. The portion of the exposure that is below a materiality threshold must be assigned a risk weight of 1250% by the licensee purchasing the credit protection. *[BCBS December 2017 par 201]*

Proportional Cover

267. Where losses are shared pari passu on a pro rata basis between the licensee and the guarantor, capital relief is afforded on a proportional basis, that is, the protected portion of the exposure receives the treatment applicable to eligible guarantees or credit derivatives, with the remainder treated as unsecured. *[BCBS December 2017 par 202]*

Tranched Cover

268. Where the bank transfers a portion of the risk of an exposure in one or more tranches to a protection seller or sellers and retains some level of the risk of the loan, and the risk transferred and the risk retained are of different seniority, banks may obtain credit protection for either the senior tranches (for example, the second-loss portion) or the junior tranche (for example, the first-loss portion). The protected portions of the exposure receive the treatment applicable to each eligible guarantees or credit derivatives, with the remainder treated as unsecured. *[BCBS December 2017 par 203]*.

Currency mismatches

269. Where the credit protection is denominated in a currency different from that in which the exposure is denominated – ie there is a currency mismatch – the amount of the exposure deemed to be protected must be reduced by the application of a haircut H_{FX} , ie

$$G_A = G(1 - H_{FX})$$

where:

G = nominal amount of the credit protection

H_{FX} = haircut appropriate for currency mismatch between the credit protection and underlying obligation.

The currency mismatch haircut for a 10-business day holding period (assuming daily marking to market) is 8%. This haircut must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection using the formula below:

$$H = H_{10} \sqrt{\frac{N_R + (T_M - 1)}{10}}$$

Where:

H = haircut

H_{10} = 10-business day haircut for instrument

N_R = actual number of business days between remargining for capital market transactions or revaluation for secured transactions

T_M = minimum holding period for the type of transaction.

Sovereign Guarantees and Counter-Guarantees

270. As indicated in **section 2-B**, licensees will apply a 0% risk weight to exposures to the Government of Jamaica and the Bank of Jamaica, provided that such exposures are denominated and funded in Jamaican currency. This treatment will extend to portions of exposures guaranteed by the Government of Jamaica and the Bank of Jamaica where the guarantee is denominated in the domestic currency and the exposure is funded in that currency. *[BCBS December 2017 par 205]*
271. An exposure may be covered by a guarantee that is indirectly counter-guaranteed by a sovereign. Such an exposure may be treated as covered by a sovereign guarantee provided that: *[BCBS December 2017 par 205]*
- the sovereign counter-guarantee covers all credit risk elements of the exposure;
 - both the original guarantee and the counter-guarantee meet all operational requirements for guarantees, except that the counter-guarantee need not be direct and explicit to the original exposure; and
 - the supervisor is satisfied that the cover is robust and that no historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct sovereign guarantee.

PART IV. COUNTERPARTY CREDIT RISK

This part sets out the permissible methods for calculating the counterparty credit risk (“CCR”) capital charge under this framework.

CR4-A. GENERAL REQUIREMENTS.

272. **CCR** is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors. *(BCBS 2006, Annex 4, par 2)*

273. **Securities Financing Transactions (SFTs)** are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements. *(BCBS 2006, Annex 4, par 2)*

Scope of application

274. The methods for computing the exposure amount under the standardized approach for credit risk described in this Part are applicable to SFTs and OTC derivatives. *(BCBS 2006, Annex 4, par 3)*

275. Such instruments generally exhibit the following abstract characteristics (**OTC and STFs**) *(BCBS 2006, Annex 4, par 4)*

- i. The transactions generate a current exposure or market value;
- ii. The transactions have an associated random future market value based on market variables;
- iii. The transactions generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment; and
- iv. The transactions are undertaken with an identified counterparty against which a unique probability of default can be determined.⁹⁷

276. Other common characteristics of the transactions to be covered may include the following: *(BCBS 2006, Annex 4, par 5)*

- i. Collateral may be used to mitigate risk exposure and is inherent in the nature of some transactions;
- ii. Short-term financing may be a primary objective in that the transactions mostly consist of an exchange of one asset for another (cash or securities) for a relatively short period of time, usually for the business purpose of financing. The two sides of the transactions are not the result of separate decisions but form an indivisible whole to accomplish a defined objective;
- iii. Netting may be used to mitigate the risk;

⁹⁷ Transactions for which the probability of default is defined on a pooled basis are not included in this treatment of CCR.

- iv. Positions are frequently valued (most commonly on a daily basis), according to market variables; and
 - v. Remargining may be employed.
277. An exposure value of zero for counterparty credit risk can be attributed to derivative contracts or STFs that are outstanding with a central counterparty (e.g. a clearing house). This does not apply to counterparty credit risk exposures from derivative transactions and STFs that have been rejected by the central counterparty. Furthermore, an exposure value of zero can be attributed to licensees' credit risk exposures to central counterparties that result from the derivative transactions, SFTs or spot transactions that the licensee has outstanding with the central counterparty. This exemption extends in particular to credit exposures from clearing deposits and from collateral posted with the central counterparty. A central counterparty is an entity that interposes itself between counterparties to contracts traded within one or more financial markets, becoming the legal counterparty such that it is the buyer to every seller and the seller to every buyer. In order to qualify for the above exemptions, the central counterparty CCR exposures with all participants in its arrangements must be fully collateralized on a daily basis, thereby providing protection for the central counterparty's CCR exposures. Assets held by a central counterparty as a custodian on the bank's behalf would not be subject to a capital requirement for counterparty credit risk exposure. *(BCBS 2006, Annex 4, par 6)*
278. When a licensee purchases credit derivative protection against a banking book exposure, or against a counterparty credit risk exposure, it will determine its capital requirement for the hedged exposure subject to the criteria and general rules for the recognition of credit derivatives. Where these rules apply, the exposure amount for counterparty credit risk from such instruments is zero. *(BCBS 2006, Annex 4, par 7)*
279. The exposure amount for counterparty credit risk is zero for sold credit default swaps in the banking book where they are treated in the framework as a guarantee provided by the licensee and subject to a credit risk charge for the full notional amount. *(BCBS 2006, Annex 4, par 8)*

CR4-B. OFF BALANCE SHEET EXPOSURES, SECURITIES FINANCING TRANSACTIONS (SFTs): THE COMPREHENSIVE APPROACH

General requirements for the comprehensive approach

280. In the comprehensive approach, when taking collateral, banks must calculate their adjusted exposure to a counterparty in order to take account of the risk mitigating effect of that collateral. Banks must use the applicable supervisory haircuts to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either,⁹⁸ as occasioned by market movements. Unless either side of the transaction is cash or a zero haircut is applied, the volatility-adjusted exposure amount is higher than the nominal exposure and the volatility-adjusted collateral value is lower than the nominal collateral value. *(BCBS 2017, par 155)*
281. The size of the individual haircuts depends on the type of instrument, type of transaction, residual maturity and the frequency of marking to market and remargining. Haircuts must be scaled up using the square root of time formula depending on the frequency of remargining or marking to market. *(BCBS 2017, par 156)*

⁹⁸ Exposure amounts may vary where, for example, securities are being lent.

282. Additionally, where the exposure and collateral are held in different currencies, banks must apply an additional haircut to the volatility-adjusted collateral amount in accordance with **paragraphs 291 to 301** to take account of possible future fluctuations in exchange rates. (BCBS 2017, par 157)
283. Where the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount (including any further adjustment for foreign exchange risk), licensees shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty, as explained below.
284. The effect of master netting agreements covering repo-style transactions can be recognized for the calculation of capital requirements subject to the conditions and requirements in section (f) below. (BCBS 2017, par 158)

Calculation of capital requirement for transactions secured by financial collateral

285. For a collateralized transaction, the exposure amount after risk mitigation is calculated as follows: (BCBS 2017, par 160)

$$E^* = \max\{0; [E(1 + H_e) - C(1 - H_c - H_{fx})]\}$$

Where:

E^* = the exposure value after risk mitigation

E = current value of the exposure

H_e = haircut appropriate to the exposure

C = the current value of the collateral received

H_c = haircut appropriate to the collateral

H_{fx} = haircut appropriate for currency mismatch between the collateral and exposure

286. The treatment for transactions where there is a mismatch between the maturity of the counterparty exposure and the collateral is given in **Appendix CR-9** (BCBS 2017, par 161)
287. The exposure amount after risk mitigation will be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralized transaction. (BCBS 2017, par 162)
288. Where the collateral is a basket of assets, the haircut on the basket (H) will be:

$$H = \sum a_i H_i$$

Where a_i is the weight of the asset (as measured by units of currency) in the basket and H_i the haircut applicable to that asset. (BCBS 2017, par 168)

Standard supervisory haircuts

289. The following supervisory haircuts (assuming daily mark-to-market, daily remargining and a 10-business day holding period), expressed as percentages, must be used to determine the haircuts appropriate to the collateral (H_c) and to the exposure (H_e): (BCBS 2017, par 163)

STANDARD SUPERVISORY HAIRCUTS FOR THE COMPREHENSIVE APPROACH (He, Hc)				TABLE CR-12
ISSUE RATING FOR DEBT SECURITIES	RESIDUAL MATURITY	SOVEREIGNS ⁹⁹ (%)	OTHER ISSUERS ¹⁰⁰ (%)	SECURITIZATION EXPOSURES
AAA to AA-/A-1	≤ 1 year	0.5	1	2
	>1 year, ≤ 3 years	2	3	8
	>3 years, ≤ 5 years		4	
	>5 years, ≤ 10 years	4	6	16
	> 10 years		12	
A+ to BBB-/A-2/A-3/P-3 and unrated bank securities	≤ 1 year	1	2	4
	>1 year, ≤ 3 years	3	4	12
	>3 years, ≤ 5 years		6	
	>5 years, ≤ 10 years	6	12	24
	> 10 years		20	
BB+ to BB-	All	15	Not eligible	Not eligible
Main index equities (including convertible bonds) and Gold		20		
Other equities (including convertible bonds) listed on a recognised exchange		30		
UCITS/Mutual funds		Highest haircut applicable to any security in which the fund can invest		
Cash in the same currency ¹⁰¹		0		

290. The standard supervisory haircut for currency risk where exposure and collateral are denominated in different currencies is 8% (also based on a 10-business day holding period and daily mark-to-market) (BCBS 2017, par 165)
291. For SFTs and secured lending transactions, a haircut adjustment may need to be applied for *different holding periods and non-daily mark-to-market or remargining* in accordance with **paragraphs 294 to 296** below (BCBS 2017, par 166)
292. For SFTs in which the bank lends, or posts as collateral, non-eligible instruments, the haircut to be applied on the exposure must be 30%. For transactions in which the bank borrows non-eligible instruments, credit risk mitigation may not be applied. (BCBS 2017, par 167)

Adjustment for different holding periods and non-daily mark-to-market or remargining

293. For some transactions, depending on the nature and frequency of the revaluation and remargining provisions, different holding periods are appropriate. The framework for collateral haircuts distinguishes between repo-style transactions (i.e. repo/reverse repos and securities lending/borrowing), “other capital-market-driven transactions” (i.e. OTC derivatives transactions and margin lending) and secured lending. In capital-market-driven transactions and repo-style transactions, the documentation contains remargining clauses; in secured lending transactions, it generally does not. (BCBS 2017, par 169)
294. The minimum holding period for various products is summarized in the following table: (BCBS 2017, par 170)

⁹⁹ Includes: PSEs that are treated as sovereigns by the national supervisor, as well as multilateral development banks receiving a 0% risk weight.

¹⁰⁰ Includes PSEs that are not treated as sovereigns by the national supervisor.

¹⁰¹ Cash in the same currency refers to eligible cash collateral.

MINIMUM HOLDING PERIODS FOR VARIOUS PRODUCTS		TABLE CR-13
TRANSACTION TYPE	MINIMUM HOLDING PERIOD	CONDITION
Repo-style transaction	5 business days	daily remargining
Other capital market transactions	10 business days	daily remargining
Secured lending	20 business days	daily revaluation

295. When the frequency of remargining or revaluation is longer than the minimum, the minimum supervisory haircut numbers (Table CR-11 above) will be scaled up depending on the actual number of business days between remargining or revaluation using the square root of time formula below: (BCBS 2017, para 172)

$$H = H_M \sqrt{\frac{N_R + (T_M - 1)}{T_M}}$$

Where:

H = haircut

H_M = haircut under the minimum holding period (H₁₀ in the standard supervisory haircuts)

T_M = minimum holding period for the type of transaction (10 in the standard supervisory haircuts)

N_R = actual number of business days between remargining for capital market transactions or revaluation for secured transactions.

Exemptions under the comprehensive approach for qualifying repo-style transactions involving core market participants

296. For repo-style transactions with core market participants as defined in **paragraph 245 and BOX CR-3** and that satisfy the conditions in **Appendix CR-8**, a haircut of zero will apply. (BCBS 2017, para 173)

Treatment of repo-style transactions (SFT) covered under master netting agreements

297. The effects of bilateral netting agreements covering repo-style transactions will be recognized on a counterparty-by-counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must: (BCBS 2017, par 175)
- provide the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
 - provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
 - allow for the prompt liquidation or setoff of collateral upon the event of default; and
 - be, together with the rights arising from the provisions required in (a) to (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy.

298. Netting across positions in the banking and trading book will only be recognized when the netted transactions fulfil the following conditions: (BCBS 2017, par 176)

- i. All transactions are marked to market daily;¹⁰² and
- ii. The collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.

299. The formula below will be used to calculate the counterparty credit risk capital requirements for transactions with netting agreements. This formula includes the current exposure, an amount for systematic exposure of the securities based on the net exposure, an amount for the idiosyncratic exposure of the securities based on the gross exposure, and an amount for currency mismatch. All other rules regarding the calculation of haircuts under the comprehensive approach stated apply for banks using bilateral netting agreements for repo-style transactions. (BCBS 2017, par 177)

300. Licensees using standard supervisory haircuts for repo-style transactions conducted under a master netting agreement must use the following formula to calculate their exposure amount: (BCBS 2017, par 178)

$$E^* = \max \left\{ 0; \sum_i E_i - \sum_i C_j + 0.4 * \text{net exposure} + 0.6 \frac{\text{gross exposure}}{\sqrt{N}} + \sum_{fx} (E_{fx} * H_{fx}) \right\}$$

where:

E^* = exposure value of the netting set after risk mitigation

E_i = current value of all cash and securities lent, sold with an agreement to repurchase or otherwise posted to the counterparty under the netting agreement

C_j = current value of all cash and securities borrowed, purchased with an agreement to resell or otherwise held by the bank under the netting agreement

$$\text{net exposure} = \left| \sum_s E_s H_s \right|$$

$$\text{gross exposure} = \sum_s E_s \left| \sum_s H_s \right|$$

E_s = The net current value of each security issuance under the netting set (always a positive value)

H_s = haircut appropriate to E_s as described in **Table CR-11**

– H_s has a positive sign if the security is lent, sold with an agreement to repurchased, or transacted in manner similar to either securities lending or a repurchase agreement

– H_s has a negative sign if the security is borrowed, purchased with an agreement to resell, or transacted in a manner similar to either a securities borrowing or reverse repurchase agreement

¹⁰² The holding period for the haircuts will depend as in other repo-style transactions on the frequency of margining.

N is the number of security issues contained in the netting set (except that issuances where the value E_s is less than one tenth of the value of the largest E_s in the netting set are not included the count)

E_{fx} = absolute value of the net position in each currency fx different from the settlement currency

H_{fx} = haircut appropriate for currency mismatch of currency fx .

CR4-C. OFF BALANCE SHEET EXPOSURES, OVER THE COUNTER DERIVATIVES TRANSACTIONS: THE CURRENT EXPOSURE METHOD

301. Licensees must calculate the CCR charge for “over the counter” (OTC) derivatives in the banking and trading book. OTCs are not exposed to credit risk for the face value of their contracts and require a separate treatment. These instruments include forwards, swaps, purchased options and other similar derivatives. The credit equivalent amounts of OTC derivatives that expose licensees to counterparty credit risk are to be calculated under the rules set forth in this section.
302. Under the Current Exposure Method explained in this Section, the calculation of the counterparty credit risk charge for an individual contract will be as follows: (BCBS 2006, par 186)

$$\text{Counterparty Credit Risk Charge} = [(RC + \text{Add On}) - CA] * r * 10\%$$

where:

RC = the replacement cost

Add-on = the amount for potential future exposure calculated according to the Current Exposure Method for Counterparty Credit Risk.

CA = the volatility adjusted collateral amount under the comprehensive approach for STFs, as described , or zero if no eligible collateral is applied to the transaction, and

r = the risk weight of the counterparty.

303. When effective bilateral netting contracts are in place, RC will be the net replacement cost and the add-on will be ANet as calculated according to the rules for bilateral netting under the framework set out in this section below. The haircut for currency risk (H_{fx}) should be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where there are more than two currencies involved in the exposure, collateral and settlement currency, a single haircut assuming a 10-business day holding period scaled up as necessary depending on the frequency of mark-to-market will be applied. (BCBS 2006, par 187)

Current Exposure Method (BCBS 2006, Annex IV, Section VII)

304. The current exposure method is to be applied to OTC derivatives only; SFTs are subject to the treatments set out in Section 4.A.
305. Under the *Current Exposure Method* described in this Section, the exposure amount for a given counterparty is equal to the sum of the exposure amounts calculated for each netting set with that counterparty. (BCBS 2006, Annex 4, par 9)
306. OTC derivative transactions subject to daily mark-to-market, collateralized by cash and where there is no currency mismatch should receive a 0% risk weight. Such transactions collateralized by sovereign or PSE

securities qualifying for a 0% risk weight in the standardized approach can receive a 10% risk weight. (BCBS 2006, par 184)

307. Under the Current Exposure Method, licensees must calculate the current replacement cost by marking contracts to market, thus capturing the current exposure without any need for estimation, and then adding a factor (the "add-on") to reflect the potential future exposure over the remaining life of the contract. In order to calculate the **credit equivalent amount** of these instruments under this current exposure method, a licensee would sum: (BCBS 2006, Annex 4, par 92.i)

- The **total replacement cost** (obtained by "marking to market") of all its contracts with positive value; and
- An amount for **potential future credit exposure** calculated on the basis of the total notional principal amount of its book, split by residual maturity as follows:

ADD-ON FACTORS OTC DERIVATIVE TRANSACTIONS					TABLE CR-14
RESIDUAL MATURITY	INTEREST RATE CONTRACTS	FOREIGN EXCHANGE AND GOLD CONTRACTS	EQUITY CONTRACTS	PRECIOUS METALS EXCEPT GOLD	OTHER COMMODITIES
One year or less	0.0%	1.0%	6.0%	7.0%	10.0%
Over one year to five years	0.5%	5.0%	8.0%	7.0%	12.0%
Over five years	1.5%	7.5%	10.0%	8.0%	15.0%

308. For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract. (BCBS 2006, Annex 4, par 92.i)
309. For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate contracts with remaining maturities of more than one year that meet the above criteria, the add-on factor is subject to a floor of 0.5%. (BCBS 2006, Annex 4, par 92.i)
310. Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns of this matrix are to be treated as "other commodities". (BCBS 2006, Annex 4, par 92.i)
311. No potential future credit exposure would be calculated for single currency floating/floating interest rate swaps; the credit exposure on these contracts would be evaluated solely on the basis of their mark-to-market value. (BCBS 2006, Annex 4, par 92.i)
312. The add-ons should be based on effective rather than apparent notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, banks must use the effective notional amount when determining potential future exposure. (BCBS 2006, Annex 4, par 92.ii)
313. Licensees can obtain capital relief for collateral as described in the Credit Risk Mitigation Framework. The methodology for the recognition of eligible collateral is described in that section of this Framework. (BCBS 2006, Annex 4, par 93)

Credit derivatives

314. The counterparty credit risk exposure amount for single name credit derivative transactions **in the trading book** will be calculated using the following potential future exposure add-on factors: *(BCBS 2006, para 707)*

ADD-ON FACTORS OTC. CREDIT DERIVATIVES		TABLE CR-15
	PROTECTION BUYER	PROTECTION SELLER
TOTAL RETURN SWAP		
“Qualifying” reference obligation	5%	5%
“Non-qualifying” reference obligation	10%	10%
CREDIT DEFAULT SWAP		
“Qualifying” reference obligation	5%	5%
“Non-qualifying” reference obligation	10%	10%

315. Licensees should note that: *(BCBS 2006, para 707)*
- the definition of qualifying is the same as for the “qualifying” category for the treatment of specific risk (interest rate risk) in the Market Risk Framework;
 - there will be no difference depending on residual maturity; and
 - the protection seller of a credit default swap will only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. Add-on should then be capped to the amount of the unpaid premiums.
316. Where the credit derivative is a first to default transaction, the add-on will be determined by the lowest credit quality underlying in the basket, i.e. if there are any no qualifying items in the basket, the non-qualifying reference obligation add-on should be used. For second and subsequent to default transactions, underlying assets should continue to be allocated according to the credit quality, i.e. the second lowest credit quality will determine the add-on for a second to default transaction etc. *(BCBS 2006, para 707)*

Bilateral netting

317. Licensees should give careful consideration to the issue of bilateral netting, i.e. weighting the net rather than the gross claims with the same counterparties arising out of the full range of forwards, swaps, options and similar derivative contracts. *(BCBS 2006, Annex 4, par 96.i)*
318. For capital adequacy purposes: *(BCBS 2006, Annex 4, par 96.ii)*
- Licensees may net transactions subject to novation under which any obligation between a licensee and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.
 - Licensees may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.
 - In both cases (a) and (b), a licensee will need to satisfy the Bank of Jamaica that it has:

- i. A netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that the licensee would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;
 - ii. Written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the licensee's exposure to be such a net amount under:
 - The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
 - The law that governs the individual transactions; and
 - The law that governs any contract or agreement necessary to effect the netting.
 - iii. The Bank of Jamaica, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions
 - iv. Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.
319. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements. A walkaway clause is a provision which permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor. (BCBS 2006, Annex 4, par 96.iii)
320. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (A_{Net}) will equal the weighted average of the gross add-on (A_{Gross}) and the gross add-on (A_{Gross}) adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula: (BCBS 2006, Annex 4, par 96.iv)

$$A_{Net} = 0.4 * A_{Gross} + 0.6 * NGR * A_{Gross}$$

where:

A_{Net} = the netted figure for the weighted notional amounts on contracts with a given counterparty.

A_{Gross} = the sum of individual add-on amounts (calculated by multiplying the notional amount of each OTC derivative transaction by the appropriate add-on factor set forth in **paragraph 308** **Error! Reference source not found.**) of all OTC derivative transactions with that counterparty.

NGR = the ratio of the net current replacement cost to the gross current replacement cost for all OTC derivative transactions subject to qualifying bilateral netting agreements with that counterparty.

321. The scale of the gross add-ons to apply in this formula will be the same as those for non-netted transactions as set out under the Current Exposure Method described in this section. For purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency

maturing on the same date will have lower potential future exposure as well as lower current exposure. (BCBS 2006, Annex 4, par 96.v)

Risk weighting

322. Once the licensee has calculated the credit equivalent amounts, they are to be weighted according to the category of counterparty in the same way as in the main framework, including concessionary weighting in respect of exposures backed by eligible guarantees and collateral.

PART V – THE MAPPING PROCESS FOR EXTERNAL CREDIT ASSESSMENTS

The use of external credit assessments under the Standardized Approach requires eligible ECAI credit risk ratings to be assigned to the allowable risk weights under the Standardized Approach. This part outlines the mapping process used to assign the credit risk assessments of ECAs to the corresponding risk weights. The section is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel II framework, International Convergence of Capital Measurement and Capital Standards (June 2006), Annex 2.

The Supervisor maintains the discretion to vary the rating scales of any one or more ECAI, based on an objective assessment of the quality of those ratings when compared to international default rates.

CR5-A. GENERAL DESCRIPTION OF THE MAPPING PROCESS

323. The mapping process is the correspondence of the rating categories of an ECAI with the CQS which have been defined for prudential purposes in **Part II** of this chapter.
324. The relevance, objectivity and reliability of the different measures of creditworthiness should be carefully analyzed before their application for the purpose of the mapping exercise.
325. Rating categories should be mapped to a CQS¹⁰³ based on the comparison of their long-run default rate with the international long-run benchmark (see **Table CR-16**), and, where necessary, the information provided by the qualitative factors described in **section CR4-C**.

CREDIT QUALITY STEP	LONG-RUN BENCHMARK (3-YR TIME HORIZON)		TABLE CR-16
	LOWER BOUND	MID VALUE	UPPER BOUND
1	0.00%	0.10%	0.16%
2	0.17%	0.25%	0.54%
3	0.55%	1.00%	2.39%
4	2.40%	7.50%	10.99%
5	11.00%	20.00%	26.49%
6	26.50%	34.00%	100.00%

326. The adequacy of the mapping should be reviewed frequently because the long-run default rate could change and become representative of a different CQS. To that end, recent short run default rates experienced within a rating category should be regularly confronted with their relevant short run benchmarks ('monitoring' and 'trigger' levels), as shown in **Table CR-17**.
327. Where the 'monitoring' level benchmark is exceeded, it implies that a rating agency's current default experience for a particular credit risk-assessment grade is markedly higher than international default experience. If it is determined by the Supervisor that the higher default experience is attributable to weaker standards in assessing credit risk, a higher risk category would be assigned to the ECAI's credit risk assessment.
328. Where the 'trigger' level benchmark is exceeded, it implies that a rating agency's default experience is considerably above the international historical default experience for a particular assessment grade. Accordingly, if the observed three-year default rate exceeds the trigger level in two consecutive years, the

¹⁰³ The reference meaning of the rating categories per credit quality step is defined in **Appendix CR-10**.

Supervisor will move the risk assessment into a less favourable risk category. However, if the Supervisor determines that the higher observed default rate is not attributable to weaker assessment standards, the original risk weight may be allowed to remain¹⁰⁴.

CREDIT QUALITY STEP	SHORT-RUN BENCHMARK (3-YR TIME HORIZON)	TABLE CR-17
	MONITORING LEVEL	TRIGGER LEVEL
1	0.80%	1.20%
2	1.00%	1.30%
3	2.40%	3.00%
4	11.00%	12.40%
5	28.60%	35.00%
6	N/A	N/A

329. A breach of the short run benchmarks for a consecutive period of two years could signal a weakening of assessment standards which could imply that the new underlying long-run default rate is representative of a less favourable CQS.

Quantitative and Qualitative Factors

330. Both quantitative and qualitative factors are used to produce a mapping, with the qualitative factors being considered in a second stage, as and when necessary and especially where quantitative factors are not adequate.
331. The application of quantitative and qualitative factors is required in order to contribute to the objectivity of the mapping and to ensure that the mapping actually represents the correspondence of the rating categories of an ECAI with a regulatory scale which has been defined for prudential purposes.

Quantitative Factors

332. The quantitative factors referred to in **paragraph 330** shall be the short run and long run default rates associated with items assigned the same rating category.
333. Whenever the quantitative information supported by the available data becomes less satisfactory or is not available, the level of prudence applied to the development of that mapping should increase to compensate for the lack of empirical evidence.

Qualitative Factors

334. The meaning of the rating category and its relative position within the rating scale should be especially helpful when there is no quantitative factor available and the mapping of adjacent rating category is known. For that

¹⁰⁴ For example, if the Supervisor determines that the higher default experience is a temporary phenomenon, perhaps because it reflects a temporary or exogenous shock such as a natural disaster, then the risk weighting proposed in the standardized approach could still apply. Likewise, a breach of the trigger level by several ECAIs simultaneously may indicate a temporary market change or exogenous shock as opposed to a loosening of credit standards.

purpose, credit quality steps should be characterized in terms of aspects such as the capacity of the issuer to meet its financial obligations, its sensitivity to the economic situation or its proximity to the default status.

- 335. Consideration must be given to the general risk drivers of the items assigned a rating category. The size and the degree of activity diversification of the items assigned a rating category should be considered as relevant indicators of their underlying risk profile.
- 336. The qualitative factors referred to **paragraph 330** are detailed in **section CR4-B (II)**, and should assist in reviewing, correcting and enhancing any initial mapping done based on quantitative factors, where such review is justified and necessary.

New Market Entrants

- 337. It is necessary to avoid causing undue material disadvantage on those ECAIs which, due to their more recent entrance in the market, present limited quantitative information with the view to balancing prudential with market concerns.
- 338. For new rating agencies or for those that have compiled less than ten years of default data, the Supervisor will ask rating agencies to estimate the 10-year average of the three-year CDR would be for each risk rating, and hold them accountable for such an evaluation thereafter for the purpose of risk weighting the claims they rate. Such an estimate of the default rate provided by the ECAI should be addressed with an appropriate degree of careful consideration in order to reflect the implicit uncertainty.
- 339. With respect to small and newly established ECAIs where a sufficient number of credit rating is not available, close monitoring of performance focused on, among other things, the number of defaulted and non-defaulted items, should be scrutinized.
- 340. Updates to the mapping should be made whenever this becomes necessary, including in relation to the mapping to be applied after the three years, to reflect quantitative information collected during the three year-period.

Default Rates

- 341. The definition of default established by an ECAI to calculate the default rate associated with items assigned the same rating category is a key element of the mapping. A stricter definition of default may produce higher default rates compared to other less strict default definitions. Therefore the impact of the definition of default on the calculation of the default rate should be estimated in order to ensure an accurate mapping.
- 342. The default rate associated with items assigned the same rating category should be considered as the most representative quantitative factor and should be calculated from default data corresponding to such items. Where sufficient default data corresponding to these items is not available, an estimate of the default rate should still be calculated on the basis of the opinion of the relevant ECAI and any default evidence associated with the items assigned the same rating category for which the mapping is being performed.
- 343. Default rates should be calculated for each rating category to the extent possible over a long-term and a short-term observation period. The former should provide the basis for the mapping, whereas the latter should provide an early warning about a potential increase, or decrease, in the level of risk of the rating category.
- 344. Where a sufficient number of credit ratings is not available, only the long run default rate should be calculated due to the high degree of uncertainty regarding the calculation of short run default rates. In this case, a warning about a potential increase in the level of risk of the rating category should be provided by the qualitative factors.

345. The calculation of the default rate should meet certain requirements in order to ensure that it is comparable across ECAs. For example, it should be measured over a three-year time horizon in order to allow the observation of a significant number of defaults when risk is very low and it should account for withdrawals to avoid an underestimation of risk.
346. The calculation of default should include neither public sector ratings nor issue ratings, given the scarcity of defaults for the former type of ratings, and to avoid biasing the default rates towards issuers with higher number of issues by using the latter ratings.
347. When only scarce default data is available, the time horizon considered in a rating category should be taken into account for the purpose of the mapping to ensure consistency across ECAs. Thus, where a short-term horizon has been chosen, some items may qualify for a particular level of risk. However, these same items may represent a significantly different level of risk if evaluated over the three-year time horizon chosen for the calculation of the default rate. This factor should be recognized and appropriately reflected in the mapping.

CR5-B. THE CALCULATION OF THE MAPPING PROCESS USING QUANTITATIVE AND QUALITATIVE FACTORS

I. QUANTITATIVE FACTORS FOR MAPPING A RATING CATEGORY (SHORT-RUN AND LONG-RUN DEFAULT RATES)

Determination of whether a sufficient number of credit ratings is available

348. For the purpose of the short run default rate calculation, the number of items assigned the same rating category by the ECAI for which the mapping is being performed shall be deemed sufficiently numerous, where the items meet all of the following requirements:
- a. they are sufficient with respect to the perceived risk profile of the rating category; and
 - b. they are representative of the most recent pool of items assigned the same rating category.
349. For the purpose of the long run default rate calculation, the number of items assigned the same rating category by the ECAI for which the mapping is being performed shall be deemed sufficiently numerous where at minimum the most recent ten (10) short run default rates as referred to in **paragraph 348** are available.

Short run default rates of a rating category where a sufficient number of credit ratings is available

350. Where a sufficient number of credit ratings is available according to **paragraph 348**, the short run default rates shall be calculated in the manner described in **paragraphs 351 to 354**.
351. The short run default rates of a rating category shall be calculated over a 3-year time horizon as a ratio where:
- a. the denominator represents the number of items assigned the same rating category present at the beginning of the time horizon;
 - b. the numerator represents the number of items referred to in point (a) that have defaulted prior to the end of the time horizon.
352. Items withdrawn prior to the end of the time horizon and not defaulted shall only contribute to the denominator of the short run default rates referred to in point (a) of **paragraph 351** with a weight equal to 50%. Any item for which there is evidence that it has been withdrawn prior to the occurrence of a default shall be considered to be a defaulted item.

353. Items shall be considered to be defaulted items to be included in the numerator specified in point (b) of **paragraph 351** where any of the following types of event has occurred:
- a. a bankruptcy filing or legal receivership that will likely cause a miss or delay in future contractually required debt service payments;
 - b. a missed or delayed disbursement of a contractually required interest or principal payment, unless payments are made within a contractually allowed grace period;
 - c. a distressed exchange if the offer implies the investor will receive less value than the promise of the original securities;
 - d. the rated entity is under a significant form of regulatory supervision owing to its financial condition.
354. The short run default rates shall be calculated for each available pool of items assigned the same rating category semi-annually.

Long run default rate of a rating category where a sufficient number of credit ratings is available

355. Where a sufficient number of credit ratings is available in accordance with **paragraph 349**, the long run default rate shall be calculated according to **paragraphs 356 to 357**.
356. The long run default rate shall be calculated as the weighted average of at least the most recent (20) short run default rates calculated according to **paragraph 351**. If the available short run default rates span a longer period and they are relevant, the short run default rates for that longer period shall be used. Where less than twenty (20) short run default rates are available, the remaining short run default rates shall be estimated to span the 20 short run default rates.
357. For the purpose of producing the weighted average referred to in **paragraph 356**, the following shall apply:
- a. the short run default rates calculated according to **paragraph 350** shall be weighted based on the number of items specified in point (a) of **paragraph 351**;
 - b. the estimated short run default rates shall be weighted based on estimates of the number of items assigned the same rating category present at the beginning of the time horizon.

Calculation of the Quantitative Factors Where a Sufficient Number of Credit Ratings Is Not Available

358. Where a sufficient number of credit ratings as referred to in **paragraph 350** is not available, the calculation of the long run default rate shall be performed according to both the following:
- a. it shall be based on the estimate provided by the ECAI of the long run default rate associated with all items assigned the same rating category;
 - b. the estimate referred to in point (a) shall be complemented with the number of defaulted and non-defaulted items assigned the rating category by the ECAI for which the mapping is being performed.

II. QUALITATIVE FACTORS FOR MAPPING A RATING CATEGORY

359. The following qualitative factors detailed below in **paragraphs 360 to 368**, are to be considered in addition to quantitative factors for determining the mapping of ECAIs risk assessments to the appropriate credit quality steps:
- i. the definition of default considered by the ECAI;
 - ii. the time horizon of a rating category considered by the ECAI;
 - iii. the meaning of a rating category and its relative position within the rating scale established by the ECAI;

- iv. the creditworthiness of the items assigned the same rating category;
- v. the estimate provided by the ECAI of the long run default rate associated with all items assigned the same rating category;
- vi. the relationship established by the ECAI ('internal mapping'), where available, between, on the one hand, the rating category which is being mapped, and, on the other hand, other rating categories produced by the same ECAI,
- vii. any other relevant information that can describe the degree of risk expressed by a rating category.

Definition of Default used by the ECAI

360. The type of events considered by the ECAI for the purposes of establishing whether an item is in default situation shall be compared to those specified in **paragraph 353** by using all available information. Where the comparison indicates that not all such types of default events have been considered by the ECAI, the quantitative factors shall be adjusted accordingly.

Time Horizon of a Rating Category

361. The time horizon considered by the ECAI for assigning a rating category shall provide a relevant indication of whether the level of risk of that rating category is sustainable over the time horizon specified in **paragraph 351**.

Meaning and Relative Position of a Rating Category

362. The meaning of a rating category established by the ECAI shall be set according to the characteristics of the capacity of financial commitments as reflected in the items assigned such rating category being honoured, and more in particular by its degree of sensitivity to the economic environment and its degree of proximity to the default situation.
363. The meaning of a rating category shall be compared to the one established for each credit quality step, as set out in **Appendix CR-10**.
364. The meaning of a rating category shall be considered in combination with its relative position within the rating scale established by the ECAI.

Creditworthiness of Items Assigned the Same Rating Category

365. The creditworthiness of items assigned the same rating category shall be determined by considering at least their size and the degree of sector and geographical diversification of their business activity.
366. Different measures of creditworthiness assigned to items of the same rating category may be used, to the extent appropriate, to complement the information provided by the quantitative factors, where they are reliable and relevant for the mapping.

Estimate provided by the ECAI of the Long Run Default Rate Associated with all Items Assigned the Same Rating Category

367. The estimate provided by the ECAI of the long run default rate associated with all items assigned the same rating category shall be taken into account for the purpose of the mapping as long as it has been adequately justified.

Internal mapping of a rating category established by the ECAI

368. The corresponding credit quality step of other rating categories produced by the same ECAI for which an internal mapping exists, shall be used as a relevant indication of the level of risk of the rating category which is being mapped.

Capital Charges

for

Market Risk

D. CAPITAL CHARGES FOR MARKET RISK

This section describes the standardized measurement method to calculating capital charges for market risk. This chapter is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel II and III frameworks, International Convergence of Capital Measurement and Capital Standards (June 2006) and Basel Minimum Capital requirements for Market Risk (January 2019). For reference, the Basel text paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph¹⁰⁵. Under the Basel III text (BCBS January 2019) this methodology has been renamed as the Simplified Standardized Approach.

PART I – INTRODUCTION

This section sets out the risks subject to market risk capital requirements under the proposed capital adequacy framework.

MR1-A. SCOPE OF APPLICATION

369. The risks subject to market risks capital requirement include:

- c. any risk relating to any interest rate related instruments and equities in the trading book; and
- d. any foreign exchange risk, and commodities risk whether arising from positions in the trading book or otherwise.

PART II – BOUNDARY BETWEEN THE BANKING BOOK AND THE TRADING BOOK

This section sets out the instruments to be included in the trading book and those to be included in the banking book.

General terminology used for the purpose of this Framework

Market risk: is the risk of losses in on- and off-balance sheet risk positions arising from movements in market prices. (BCBS (2019, para 10.1)

Notional value: the notional value of a derivative instrument is equal to the number of units underlying the instrument multiplied by the current market value of each unit of the underlying. (BCBS 2019, para 10.2)

Trading desk: a group of traders or trading accounts in a business line within a bank that follows defined trading strategies with the goal of generating revenues or maintaining market presence from assuming and managing risk. (BCBS 2019 para 10.3)

Financial instrument: any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include primary financial instruments (or cash instruments) and derivative financial instruments. (BCBS 2019 para 10.5)

Instrument: the term used to describe financial instruments, instruments on foreign exchange (FX) and commodities. (BCBS 2019 para 10.6)

Embedded derivative: a component of a financial instrument that includes a non-derivative host contract. For example, the conversion option in a convertible bond is an embedded derivative. (BCBS 2019 para 10.7)

¹⁰⁵ Following the format: [BCBS June 2006 par x]

MR2-A. SCOPE OF THE TRADING BOOK

370. A trading book consists of positions in financial instruments and commodities intended for active trading or in order to hedge other elements of the trading book. *[BCBS June 2006 par 685]*
371. Instruments comprise financial instruments, foreign exchange (FX) and commodities. A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include primary financial instruments (or cash instruments) and derivative financial instruments. A financial asset is any asset that is cash, the right to receive cash or another financial asset or a commodity, or an equity instrument. A financial liability is the contractual obligation to deliver cash or another financial asset or a commodity. Commodities also include non-tangible (ie non-physical) goods such as electric power. *(BCBS 2019 para 25.2)*
372. To be eligible for trading book capital treatment, licensees may only include financial instruments, instruments on FX or commodity when there is no legal impediment against selling or fully hedging it. *[BCBS January 2019 par RBC25.3]*
373. Licensees must fair value daily any trading book instrument, recognize any valuation change in the profit and loss (P&L) account and actively manage the portfolio. *[BCBS January 2019 par RBC25.4]*

MR2-B. STANDARDS FOR ASSIGNING INSTRUMENTS TO THE TRADING BOOK AND THE BANKING BOOK

374. Licensees must designate any instrument they hold for one or more of the following purposes as a trading book instrument: *[BCBS January 2019 par RBC25.5]*
- e. if it is held for short-term resale;
 - f. if it is acquired with the intent to benefit in the short - from actual or expected differences between its buying price and selling price, or interest rate variations;
 - g. if it is taken on to lock in arbitrage profits; or
 - h. hedging risks that arise from instruments meeting (a), (b) or (c) above.
375. The following instruments are seen as being held for at least one of the purposes in **paragraph 374** above and therefore must be included in a licensee's trading book: *[BCBS January 2019 pars RBC25.6 and RBC25.9]*
- a. instruments in the correlation trading portfolio;
 - b. instruments resulting from underwriting commitments, where underwriting commitments refer only to securities underwriting, and relate only to securities that are expected to be actually purchased by the financial institution on the settlement date;
 - c. instruments that would give rise to a net short credit or equity position in the banking book¹⁰⁶;
 - d. instruments held as accounting trading assets or liabilities;¹⁰⁷
 - e. instruments resulting from market-making activities;

¹⁰⁶ A DTI will have a net short risk position for equity risk or credit risk in the banking book if the present value of the banking book increases when an equity price decreases or when a credit spread on an issuer or group of issuers of debt increases.

¹⁰⁷ Under US GAAP, these instruments would be designated as held for trading. Under IFRS 9, these instruments would be held within a trading business model. These instruments would be fair valued through the P&L account.

- f. listed equities;
 - g. trading-related repo-style transaction excluding repo styled transactions entered for liquidity management and valued at accrual for accounting purposes; or
 - i. options including embedded derivatives¹⁰⁸ from instruments that the institution issued out of its own banking book and that relate to credit or equity risk.
376. For avoidance of doubt the following instruments must be assigned to the banking book: *[BCBS January 2019 par RBC25.9]*
- a. unlisted equities;
 - b. instruments designated for securitization warehousing;
 - c. real estate holdings held directly by the licensee as well as derivatives on direct holdings;
 - d. retail and small or medium-sized enterprise (SME) credit;
 - e. equity investments in a fund, unless the licensee meets at least one of the following conditions: (a) the licensee is able to look through the fund to its individual components and there is sufficient and frequent information, verified by an independent third party, provided to the financial institution regarding the fund's composition; or (b) the licensee obtains daily price quotes for the fund and it has access to the information contained in the fund's mandate or in the national regulations governing such investment funds;
 - f. hedge funds;
 - g. derivative instruments and funds that have the above instrument types as underlying assets; or
 - j. instruments held for the purpose of hedging a particular risk of a position in the types of instrument above.
377. There is a general presumption that any of the following instruments are being held for at least one of the purposes listed in **paragraph 374** and therefore are trading book instruments, unless specifically otherwise provided for in paragraph 373 or **paragraph 377**: *(BCBS 2019 para 25.9)*
- a. instruments held as accounting trading assets or liabilities¹⁰⁹
 - b. instruments resulting from market-making activities;
 - c. equity investments in a fund excluding those assigned to the banking book in accordance with **paragraph 376**
 - d. listed equities;¹¹⁰
 - e. trading-related repo-style transaction;¹¹¹ or

¹⁰⁸ An embedded derivative is a component of a hybrid contract that includes a non-derivative host such as liabilities issued out of the licensee's own banking book that contain embedded derivatives. The embedded derivative associated with the issued instrument (that is, host) should be bifurcated and separately recognised on the licensee's balance sheet for accounting purposes.

¹⁰⁹ Under IFRS (IAS 39) and US GAAP, these instruments would be designated as held for trading. Under IFRS 9, these instruments would be held within a trading business model. These instruments would be fair valued through the P&L account.

¹¹⁰ Subject to supervisory review, certain listed equities may be excluded from the market risk framework. The set of listed equities that the bank wishes to exclude from the market risk framework should be made available to, and discussed with, the national supervisor and should be managed by a desk that is separate from desks for proprietary or short-term buy/sell instruments.

¹¹¹ Repo-style transactions that are (i) entered for liquidity management and (ii) valued at accrual for accounting purposes are not part of this presumptive list.

- f. options including embedded derivatives¹¹² [5] from instruments that the institution issued out of its own banking book and that relate to credit or equity risk.
378. Licensees should submit a request to the Supervisor and receive explicit approval before it can deviate from presumptive list of trading book instruments specified in **paragraph 377**. In this request, the licensee must provide evidence that the instrument is not held for any of the purposes in **paragraph 374**.
379. The Supervisor reserves the authority to require licensees to reassign an instrument to the either the banking book or the trading book if the Supervisor believes it customarily belongs to the banking book or trading book respectively.
380. A licensee must have clearly defined policies, procedures and documented practices for determining which instruments to include in or to exclude from the trading book for the purposes of calculating their regulatory capital, ensuring compliance with the criteria set forth in this Framework, and taking into account the licensee's risk management capabilities and practices. A licensee's internal control functions must conduct an ongoing evaluation of instruments both in and out of the trading book to assess whether its instruments are being properly designated initially as trading or non-trading instruments in the context of the bank's trading activities. Compliance with the policies and procedures must be fully documented and subject to periodic (at least yearly) internal audit and the results must be available for supervisory review. *(BCBS 2019, para 25.13)*

MR2-C. RESTRICTIONS ON MOVING INSTRUMENTS BETWEEN THE REGULATORY BOOKS

381. Licensees are not allowed to move instruments between the trading book and the banking book by their own discretion after initial designation, which is subject to the process in **paragraph 383** and **paragraph 384**. Switching instruments for regulatory arbitrage is strictly prohibited. *[BCBS January 2019 par RBC25.14]*
382. The Supervisor has the authority to allow licensees to move instruments between the regulatory books in extraordinary circumstances. Examples are a major publicly announced event, such as restructuring that results in the permanent closure of trading desks, requiring termination of the business activity applicable to the instrument or portfolio or a change in accounting standards that allows an item to be fair-valued through P&L. *[BCBS January 2019 par RBC25.14]*
383. Licensees will not be allowed to gain any capital charge relieve as a result of switching in any case or circumstance. Therefore, the licensee must determine its total capital requirement (across the banking book and trading book) before and immediately after the switch. If this capital requirement is reduced as a result of this switch, the difference as measured at the time of the switch will be imposed on the licensee as a disclosed Pillar 1 capital surcharge. This surcharge will be allowed to run off as the positions mature or expire, in a manner agreed with the Supervisor and would be recalculated on an ongoing basis. Additionally, the positions would continue to also be subject to the ongoing capital requirements of the book into which they have been switched. *[BCBS January 2019 par RBC25.15]*
384. Any reassignment between books must be approved by the licensee's senior management and the Supervisor. Any reallocation of securities between the trading book and banking book, including outright sales at arm's

¹¹² An embedded derivative is a component of a hybrid contract that includes a non-derivative host such as liabilities issued out of the bank's own banking book that contain embedded derivatives. The embedded derivative associated with the issued instrument (ie host) should be bifurcated and separately recognized on the bank's balance sheet for accounting purposes

length, should be considered a reassignment of securities and is governed by requirements of this paragraph.
[BCBS January 2019 par RBC25.16]

- a. Any reassignment must be thoroughly documented; approved by the licensee's senior management; determined by internal review to be in compliance with the licensee's policies; subject to prior approval by the supervisor based on supporting documentation provided by the licensee; and publicly disclosed.
- b. Unless required by changes in the characteristics of a position, any such reassignment is irrevocable.
- c. Supervisory approval is not required if an instrument is reclassified to be an accounting trading asset or liability since there is a presumption that this instrument belongs in the trading book, as described in **Paragraph 377**.

PART III – TREATMENT OF INTERNAL RISK TRANSFERS

This section sets out the capital treatment for positions taken by a licensee to materially offset the component risk in the banking book.

MR3-A. INTERNAL RISK TRANSFERS

385. An internal risk transfer is an internal written record of a transfer of risk within the banking book, between the banking and the trading book or within the trading book (between different desks). *[BCBS January 2019 par RBC25.18]*
386. The trading book leg of the internal risk transfers must be dealt with at market conditions.
387. If a licensee engages in an internal risk transfer from the trading book to the banking book, this internal risk transfer would not be taken into account when the regulatory capital requirements are determined. *[BCBS January 2019 par RBC25.19]*
388. For internal risk transfers from the banking book to the trading book, **paragraphs 389 to 395** apply. *[BCBS January 2019 par RBC25.20]*

MR3-B INTERNAL RISK TRANSFER OF CREDIT AND EQUITY RISK FROM BANKING BOOK TO TRADING BOOK

389. In cases where a licensee uses a hedging instrument purchased through its trading book to hedge a banking book credit risk exposure or equity risk exposure:
- a. The credit exposure in the banking book will be treated as being hedged for capital requirement purposes if:
 - i. the trading book enters into an external hedge with an eligible third-party protection provider that exactly matches the internal risk transfer; and
 - ii. the external hedge meets the operational requirements for credit derivatives of **Appendix MR-I**
 - b. The equity exposure in the banking book will be treated as being hedged for capital requirement purposes if and only if:
 - iii. the trading book enters into an external hedge from an eligible third-party protection provider that exactly matches the internal risk transfer; and
 - iv. the external hedge is recognized as a hedge of a banking book equity exposure.
 - c. Licensees are allowed to use multiple transactions with multiple counterparties to hedge credit exposure in the banking book as long as the aggregate external hedge matches the internal risk transfer, and the internal risk transfer exactly matches the aggregate external hedge. *[BCBS January 2019 par RBC25.21]*
390. For the purposes of calculating capital requirements, no market risk capital charge will apply in the banking book if requirements in **paragraph 389** are met. Moreover, market risk capital requirement will still apply to both the trading book leg of the internal risk transfer and the external hedge. *[BCBS January 2019 par RBC25.22]*
391. Where the requirements in **paragraph 389** are not fulfilled, the banking book exposure is not deemed to be hedged by the banking book leg of the internal risk transfer for capital purposes in the banking book. Moreover, the third-party external hedge must be fully included in the market risk capital requirements and the trading book

leg of the internal risk transfer must be fully excluded from the market risk capital requirements. *[BCBS January 2019 par RBC25.23]*

392. A short risk position is created when banking book instruments are over-hedged by their respective documented internal risk transfer. In cases where a banking book short credit position or a banking book short equity position is not capitalized under the banking book rules these must be capitalized under the market risk rules together with the trading book exposure. *[BCBS January 2019 par RBC25.24]*

MR3-C INTERNAL RISK TRANSFER OF GENERAL INTEREST RATE RISK FROM BANKING BOOK TO TRADING BOOK

393. In cases where a licensee hedges a banking book interest rate risk exposure using an internal risk transfer with its trading book, the trading book leg of the internal risk transfer is treated as a trading book instrument under the proposed capital adequacy framework for market risk if and only if:
- a. The hedge is properly documented with respect to the interest rate risk being hedged and the sources of such risk;
 - b. the internal risk transfer is conducted with a dedicated internal risk transfer trading desk which has been specifically approved by the supervisor for this purpose; and
 - c. the internal risk transfer is subject to trading book capital requirements under this proposed capital adequacy market risk framework on a stand-alone basis for the dedicated internal risk transfer desk, separate from any other general interest rate risk or other market risks generated by activities in the trading book. *[BCBS January 2019 par RBC25.25]*
394. For interest rate risk transfers the banking book leg has to be included into the banking book's interest rate risk exposures for capital adequacy purposes if and only if the transfer is subjected to trading book stand-alone capital requirements, executed with a dedicated trading desk that is approved by the Supervisor for such purposes and documented with respect to the interest rate risk being hedge and source of such risk. *[BCBS January 2019 par RBC25.26]*
395. Internal risk transfers between the Supervisor- approved internal risk transfer desk and other trading desks will only receive capital recognition if it satisfies the requirements in **paragraph 393** and **paragraph 394**.

PART IV – SIMPLIFIED STANDARDIZED APPROACH FOR MARKET RISK: RISK WEIGHTED ASSETS AND CAPITAL CHARGES

This part outlines the Simplified Standardized Approach that licensees shall use for calculating their market risk capital requirement.

396. The capital requirement arising from the simplified standardized approach is the simple sum of the capital requirements arising from each of the four risk classes – namely interest rate risk in the trading book, equity risk in the trading book, foreign exchange risk and commodity risk, multiplied by the respective “scaling factors (SF) as detailed in the formula below: *[BCBS 2019, paragraph 40.2]*

$$\text{Capital Requirement for Market Risk} = CR_{IRR} * SF_{IRR} + CR_{EQ} * SF_{EQ} + CR_{FX} * SF_{FX} + CR_{COMM} * SF_{COMM}$$

Where:

CR_{IRR} = capital requirement for interest rate risk in the trading book, plus additional requirements for option risks from debt instruments according to the treatment of options

CR_{EQ} = capital requirement for equity risk in the trading book, plus additional requirements for option risks from equity instruments according to the treatment of options

CR_{FX} = capital requirement for foreign exchange risk, plus additional requirements for option risks from foreign exchange instruments according to the treatment of options

CR_{COMM} = capital requirement for commodities risk, plus additional requirements for option risks from commodities instruments according to the treatment of options

SF_{IRR} = Scaling factor of 1.30

SF_{EQ} = Scaling factor of 3.50

SF_{COMM} = Scaling factor of 1.90

SF_{FX} = Scaling factor of 1.20

MR4-A. INTEREST RATE RISK IN THE TRADING BOOK

397. Licensees shall include all their trading book positions in financial instruments whose market values are affected by changes in interest rates when calculating their market risk capital requirement for interest rate risk. These instruments include: *[BCBS January 2006 par 709(i)]*
- a. interest rate derivatives and off balance sheet instruments;
 - b. debt securities and instruments that behave like them including non-convertible preference shares; and
 - c. debt issues such as bonds and debentures and convertible preference shares that are traded like debt.
398. Licensees shall exclude the following instruments when calculating their market risk capital requirement for interest rate risk: *[BCBS January 2006 par 709(i)]*
- a. convertible preference shares that are traded like equity; and
 - b. instruments that are deducted from regulatory capital.

399. Licensees shall use the fair value of their positions to calculate the market risk capital requirements for interest rate risks.
400. Licensees shall calculate their market risk capital requirement for interest rate risk by taking the sum of the specific risk of each security, whether it is a short or a long position, and general market risk in the portfolio where long and short positions in different securities or instruments can be offset. *[BCBS January 2006 par 709(ii) and BCBS 2019, para 40.4)*

MR4-A.1 SPECIFIC RISK

401. Licensees shall calculate the specific risk capital requirement for each security. This is designed to protect against the risk of loss arising from changes in the price of an individual security due to factors related to the individual issuer. *(BCBS 2019, para 40.5)*
402. In measuring the charge, offsetting is restricted to match positions in an identical issue (including positions in derivatives). *BCBS 2019, para 40.5)*
403. No offsetting will be allowed for different issues from the same issuer, since difference in coupon rates, liquidity, call features can cause prices to diverge in the short run. *(BCBS 2019, para 40.5)*

EXPOSURES GOVERNMENT AND CENTRAL BANKS

404. Licensees must apply a 0% specific risk-weighting factor to exposures to the Government of Jamaica and the Bank of Jamaica, provided that such exposures are denominated and funded in Jamaican currency. *[BCBS December 2017 par 8]*
405. Additionally, the 0% specific risk weighting factor will apply to exposures that are fully guaranteed by the Government of Jamaica and denominated and funded in Jamaican currency. The guarantee must be explicit, unconditional, legally enforceable and irrevocable. *[BOJ 2015 Regulations]*
406. Otherwise, licensees must assign a specific risk weighting factor to sovereign debt position based on the external credit rating applicable to the sovereign, and as applicable the remaining time to maturity as outlined in **Table MR-1** below. *(BCBS 2019, para 40.5)*

RISK WEIGHT FACTORS FOR SOVEREIGN DEBT – TABLE MR1			
Category	External Risk Assessment ¹¹³	Residual Term to Maturity	Specific Risk Capital Charge – BOJ minimum ratio of 10% (as a % of Exposure)
Government	AAA to AA- (Credit Quality Step 1)	N/A	0.00%
	A+ to BBB- (Credit Quality Steps 2 and 3)	6 months or less	0.31%
		6 to 24 months	1.25%
		Over 24 months	2.00%
	BB+ to B- (Credit Quality Steps 4 and 5)	N/A	10.00%
	Below B- (Credit Quality Step 6)	N/A	15.00%
	Unrated (Credit Quality Step 7)	N/A	10.00%

¹¹³ Credit Quality Steps as defined in the Credit Risk Capital Framework, **Appendix 10**.

407. Government includes all forms of government paper including bonds, treasury bills and other short-term instruments. *(BCBS 2019 40.7)*
408. Licensees must apply a 0% specific risk-weighting factor to exposures to the Government of Jamaica and the Bank of Jamaica, provided that such exposures are denominated and funded in Jamaican currency. *[BCBS December 2017 par 8]*
409. Additionally, the 0% specific risk weighting factor will apply to exposures that are fully guaranteed by the Government of Jamaica and denominated and funded in Jamaican currency. The guarantee must be explicit, unconditional, legally enforceable and irrevocable. *[BOJ 2015 Regulations]*

QUALIFYING CATEGORY

410. The qualifying category includes securities issued by public sector entities, multilateral development banks and other securities that are: *(BCBS 2019 40.9)*
- a. rated investment grade by at least two of the following: (a) Standard & Poor's (b) Moody's (c) Fitch, and (d) CariCRIS;
 - b. rated investment grade by at least one rating agency and not less than investment grade by any of the rating agencies listed in (a) above; or.
 - c. unrated but are deemed to be of comparable investment quality by the licensee and are approved by the Supervisor.
411. Licensees must assign a specific risk weighting factor to a debt position that is an exposure to public sector entities, multilateral development banks, and other securities that meet the qualifying criteria, and the remaining time to maturity in accordance with **Table MR-2**.
412. The qualifying category includes securities issued by financial institutions that are deemed to be equivalent to investment grade and subjected to supervisory and regulatory arrangements comparable to those under this capital adequacy framework. Therefore, licensees must assign a specific risk capital charge to a debt position to these institutions in accordance with **Table MR-2**. *[BCBS January 2006 par 711(iii)]*
413. **Table MR-2 below** outlines the specific risk treatment that will be applied to public sector entities, multilateral development banks and other securities that meet the qualifying criteria outlined in **paragraph 411**:

TREATMENT APPLIED TO EXPOSURES THAT MEET THE QUALIFYING CRITERIA		TABLE MR-2
Category	Residual Term to Maturity	Specific Risk Capital Charge. BOJ ratio of 10% (as a % of exposure)
Exposures to public sector entities, Multilateral Development Banks and other securities	6 months or less	0.31%
	6 to 24 months	1.25%
	Over 24 months	2.00%

414. Licensees will be allowed to apply a 0% specific risk-weighting factor to a debt position that is an exposure to the Bank for International Settlements (BIS); the International Monetary Fund (IMF); the European Central Bank

(ECB); the European Union; the European Stability Mechanism (ESM); the European Financial Stability Facility (EFSF); and other similar type agencies as approved by the Supervisor from time to time.

ALL OTHER SECURITIES

415. Licensees must assign a specific risk capital charge to a debt position in an exposure that does not meet the qualifying criteria or is not covered under any other category in this subsection in accordance with **Table MR-3**.
416. **Table MR-3** below outlines the specific risk treatment that will be applied to exposures to public sector entities, multilateral development banks and other securities that does not meet the qualifying criteria outlined in **paragraph 411**:

TREATMENT APPLIED TO EXPOSURES THAT DO NOT MEET THE QUALIFYING CRITERIA		TABLE MR-3
Category	External Credit Assessment ¹¹⁴	Specific Risk Capital Charge. BOJ ratio of 10% (as a % of exposure)
All Other Securities	BB+ to B- (CQS 4 and 5)	10.00%
	Below B- (CQS 6)	15.00%
	Unrated (CQS 7)	10.00%

MR4-A2 GENERAL MARKET RISK

417. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. The methodology proposed to compute general market risk is the maturity method from the Basel framework. The general market risk capital charge is the sum of four components: *(BCBS 2019 para 40.23)*
- The net short or long position in the whole trading book;
 - A small proportion of the matched positions in each time-band (the vertical disallowance);
 - A larger proportion of the matched positions across different time-bands (the horizontal disallowance); and
 - A net charge for positions in options, where appropriate.
418. Separate maturity ladders should be used for each currency and capital requirements should be calculated for each currency separately and then summed with no offsetting between positions of the opposite sign. In the case of those currencies in which business is insignificant, separate maturity ladders for each currency are not required. Rather, the licensee may construct a single maturity ladder and slot, within each appropriate time-band, the net long or short position for each currency. However, these individual net positions are to be summed within each time-band, irrespective of whether they are long or short positions, to produce a gross position figure. *(BCBS 2019, par 40.24)*
419. The first step in the calculation is to weight the positions in each time-band by a factor designed to reflect the price sensitivity of those positions to assumed changes in interest rates. The weights for each time-band are set out in Table MR 4. Zero-coupon bonds and deep-discount bonds (defined as bonds with a coupon of less than

¹¹⁴ Credit Quality Steps (CQS) as defined in the Credit Risk Capital Framework, **Appendix 10**.

3%) should be slotted according to the time-bands set out in the second column of **Table MR 4**. (BCBS 2019 para 40.26)

420. Long or short positions in debt securities and other sources of interest rate exposures including derivative instruments, are slotted into a maturity ladder comprising 13 time-bands (or 15 time-bands in the case of low coupon instruments) as shown in **Table MR 4**. Fixed rate instruments should be allocated according to the residual term to maturity and floating-rate instruments according to the residual term to the next re-pricing date. Opposite positions of the same amount in the same issues (but not different issues by the same issuer), whether actual or notional, can be omitted from the interest rate maturity framework, as well as closely matched swaps, forwards, futures and forward rate agreements (FRAs) which meet the conditions set out in **paragraph 433 and paragraph 434** below. (BCBS 2019 para 40.25)
421. The first step in the calculation is to weight the positions in each time-band by a factor (risk weight) designed to reflect the price sensitivity of those positions to assumed changes in interest rates. The risk weights for each time-band are set out in **Table MR 4**. Zero-coupon bonds and deep-discount bonds (defined as bonds with a coupon of less than 3%) should be slotted according to the time-bands set out in the second column of **Table MR 4**. (BCBS 2019 par 40.26)

Table MR 4. Maturity method: time-bands and risk weights

	Coupon 3% or more	Coupon less than 3%	Risk weight
Zone 1	1 month or less	1 month or less	0.00%
	1 to 3 months	1 to 3 months	0.20%
	3 to 6 months	3 to 6 months	0.40%
	6 to 12 months	6 to 12 months	0.70%
Zone 2	1 to 2 years	1.0 to 1.9 years	1.25%
	2 to 3 years	1.9 to 2.8 years	1.75%
	3 to 4 years	2.8 to 3.6 years	2.25%
Zone 3	4 to 5 years	3.6 to 4.3 years	2.75%
	5 to 7 years	4.3 to 5.7 years	3.25%
	7 to 10 years	5.7 to 7.3 years	3.75%
	10 to 15 years	7.3 to 9.3 years	4.50%
	15 to 20 years	9.3 to 10.6 years	5.25%
	over 20 years	10.6 to 12 years	6.00%
		12 to 20 years	8.00%
		over 20 years	12.50%

422. The next step in the calculation is to offset the weighted longs and shorts in each time-band, resulting in a single short or long position for each band. Since, however, each band would include different instruments and

different maturities, a 10% capital requirement to reflect basis risk and gap risk will be levied on the smaller of the offsetting positions, be it long or short. Thus, if the sum of the weighted longs in a time-band is USD 100 million and the sum of the weighted shorts USD 90 million, the so-called vertical disallowance for that time-band would be 10% of USD 90 million (i.e. USD 9 million). (BCBS 2019 para 40.27)

423. The result of the above calculations is to produce two sets of weighted positions, the net long or short positions in each time-band (USD 10 million long in the example above) and the vertical disallowances, which have no sign.
- i. In addition, however, banks will be allowed to conduct two rounds of horizontal offsetting:
 - a. first between the net positions in each of three zones, where zone 1 is set as zero to one year, zone 2 is set as one year to four years and zone 3 is set as four years and over. However, for coupons less than 3%, zone 2 is set as one year to 3.6 years and zone 3 is set as 3.6 years and over; and
 - b. subsequently between the net positions in the three different zones.
 - ii. The offsetting will be subject to a scale of disallowances expressed as a fraction of the matched positions, as set out in **Table MR 5**. The weighted long and short positions in each of three zones may be offset, subject to the matched portion attracting a disallowance factor that is part of the capital requirement. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to a second set of disallowance factors.

Table MR 5. Horizontal disallowances

Zones	Time-band	Within the zone	Between adjacent zones	Between zones 1 and 3
Zone 1	0 - 1 month 1 - 3 months 3 - 6 months 6 - 12 months	40%	40%	100%
Zone 2	1 - 2 years 2 - 3 years 3 - 4 years 4 - 5 years	30%		
Zone 3	5 - 7 years 7 - 10 years 10 - 15 years 15 - 20 years over 20 years	30%		

424. In the case of residual currencies, the gross positions in each time-band will be subject to the risk weightings set out in **paragraph 421**, with no further offsets. (BCBS 2019 para 40.30)
425. **Table MR 6** summarizes the capital charges for general market risk. The total capital for general market risk according to the BCBS minimum capital ratio of 8% is calculated as the sum of the capital charges corresponding to the vertical offsetting, the horizontal offsetting and the 100 percent of the net overall position (Item D in Table

MR6). The risk weighted assets for general market risk are determined by multiplying the capital requirements calculated in Item D by 12.5. The capital charge for general market risk according to minimum capital ratio set out by Bank of Jamaica is determined by multiplying the risk weighted assets (Item E in Table MR6) by 10%.

TABLE MR 6. General Market Risk. Summary of Capital charges and risk weighted assets

Capital charges for General Market Risk (in percentage)	
In % of matched weighted positions	
A. Vertical offsetting	10%
B. Horizontal offsetting	
Zone 1	40%
Zone 2	30%
Zone 3	30%
Between Zone 1 and 2	40%
Between Zone 2 and 3	40%
Between Zone 1 and 3	100%
C. Overall net position	100%
D. Total capital requirement - Interest Rate Risk - General Risk, Basel 8% ratio = A+B+C	
E. Total Risk Weighted Assets. Interest Rate Risk- General Risk = D*12.5	
F. Total capital requirement - Interest Rate Risk - General Risk- BOJ ratio = E*10%	

MR4-A3. INTEREST RATE DERIVATIVES

426. Licensees' interest rate risk measurement system should include all interest rate derivatives and off-balance-sheet instruments in the trading book, which react to changes in interest rates, (e.g. forward rate agreements (FRAs), other forward contracts, bond futures, interest rate and cross-currency swaps and forward foreign exchange positions). *(BCBS 2019 par 40.31)*
427. The derivatives should be converted into positions in the relevant underlying and be subjected to specific and general market risk charges as described in this consultation paper. In order to calculate the capital charge, the amounts reported should be the market value of the principal amount of the underlying instrument or of the notional underlying. For instruments where the apparent notional amount differs from the effective notional amount, licensees must use the effective notional amount. *(BCBS 2019 par 40.32)*

Futures and forward contracts, including forward rate agreements

428. Futures and forward contracts (including forward rate agreements) will be treated as a combination of a long and a short position in a notional government security. The maturity of a future or a FRA will be the period until delivery or exercise of the contract, plus - where applicable - the life of the underlying instrument. For example, a long position in a June three-month interest rate future (taken in April) is to be reported as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months. Where a range of deliverable instruments may be delivered to fulfil the contract, the licensee will have the flexibility to elect which deliverable security goes into the maturity ladder but should take account of any conversion factor defined by the exchange. *(BCBS 2019 par 40.33)*

Swaps

429. Swaps will be treated as two notional positions in government securities with relevant maturities. For example, an interest rate swap under which a licensee is receiving floating rate interest and paying fixed will be treated as a long position in a floating rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument of maturity equivalent to the residual life of the swap. (BCBS 2019 par 40.34)
430. Swaps that pay or receive a fixed or floating interest rate against some other reference price, for example a stock index, the interest rate component should be slotted into the appropriate re-pricing maturity category, with the equity component being included in the equity framework. (BCBS 2019 par 40.34)
431. Separate legs of cross-currency swaps are to be reported in the relevant maturity ladders for the currencies concerned. (BCBS 2019 par 40.34)

Calculation of capital charges for derivatives under the standardized methodology

Allowable Offsetting of Matched Positions

432. Licensees will be allowed to exclude for their specific risk and general risk calculations (BCBS 2019 par 40.35)
- long and short positions (both actual and notional) in identical instruments with exactly the same issuer, coupon, currency and maturity; and
 - a matched position in a future or forward and its corresponding underlying may also be fully offset (the leg representing the time to expiry of the future should however be reported) and thus excluded from the calculation and thus excluded from the calculation.
433. In addition, opposite positions in the same category of instruments can, in certain circumstances, be regarded as matched and allowed to offset fully. To qualify for this treatment the positions must relate to the same underlying instruments, be of the same nominal value and be denominated in the same currency. In addition: (BCBS 2019 par 40.36)
- for futures: offsetting positions in the notional or underlying instruments to which the futures contract relates must be for identical products and mature within seven days of each other;
 - for swaps and FRAs: the reference rate (for floating rate positions) must be identical and the coupon closely matched (i.e. within 15 basis points); and
 - for swaps, FRAs and forwards: the next interest fixing date or, for fixed coupon positions or forwards, the residual maturity must correspond within the following limits:
 - less than one month hence: same day;
 - between one month and one year hence: within seven days;
 - over one year hence: within thirty days.

Specific risk

434. Interest rate and currency swaps, FRAs, forward foreign exchange contracts and interest rate futures will not be subject to a specific risk charge. This exemption also applies to futures on an interest rate index (e.g. LIBOR). However, in the case of futures contracts where the underlying is a debt security, or an index representing a

basket of debt securities, a specific risk charge will apply according to the credit risk of the issuer as set out in this Framework. (BCBS 2019 par 40.38)

General market risk

435. General market risk applies to positions in all derivative products in the same manner as for cash positions, subject only to an exemption for fully or very closely matched positions in identical instruments. The various categories of instruments should be slotted into the maturity ladder and treated according to the rules identified earlier. (BCBS 2019 par 40.39)
436. The table below presents a summary of the regulatory treatment for interest rate derivatives, for market risk purposes. (BCBS 2019 par 40.40)

Table MR 7. Summary of treatment of interest rate derivatives

Instrument	Specific risk charge ¹¹⁵	General market risk charge
Exchange-traded future - Government debt security - Corporate debt security - Index on interest rates (e.g. LIBOR)	No Yes No	Yes, as two positions Yes, as two positions Yes, as two positions
OTC forward - Government debt security - Corporate debt security - Index on interest rates	Yes Yes No	Yes, as two positions Yes, as two positions Yes, as two positions
FRAs, Swaps	No	Yes, as two positions
Forward foreign exchange	No	Yes, as one position in each currency

MR4-B. FOREIGN EXCHANGE RISK IN THE TRADING BOOK AND BANKING BOOK

437. This section sets out the simplified standardized approach for measuring the risk of holding or taking positions in foreign currencies, including gold.¹¹⁶ (BCBS 2019, par 40.53)
438. Two processes are needed to calculate the capital requirement for FX risk. (BCBS 2019 par 40.54)
- (1) The first is to measure the exposure in a single currency position.
 - (2) The second is to measure the risks inherent in a bank's mix of long and short positions in different currencies.

Measuring the exposure in a single currency

439. The bank's net open position in each currency should be calculated by summing: (BCBS 2019 par 40.55)

¹¹⁵ This is the specific risk charge relating to the issuer of the instrument. Under the existing credit risk rules, there remains a separate capital charge for the counterparty risk.

¹¹⁶ Gold is to be dealt with as an FX position rather than a commodity because its volatility is more in line with foreign currencies and banks manage it in a similar manner to foreign currencies.

- i. the net spot position (i.e. all asset items less all liability items, including accrued interest, denominated in the currency in question);
 - ii. the net forward position (i.e. all amounts to be received less all amounts to be paid under forward FX transactions, including currency futures and the principal on currency swaps not included in the spot position);
 - iii. guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;
 - iv. net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting bank); and
 - v. any other item representing a profit or loss in foreign currencies (depending on particular accounting conventions in different countries).
440. Positions in composite currencies need to be separately reported but, for measuring banks' open positions, may be treated either as a currency in their own right or split into their component parts on a consistent basis. Positions in gold will be converted at current spot rates into the national currency. *(BCBS 2019 para 40.56)*
441. Interest, other income and expenses should be treated as follows: Interest accrued (i.e. earned but not yet received) should be included as a position. Accrued expenses should also be included. Unearned but expected future interest and anticipated expenses may be excluded unless the amounts are certain and banks have taken the opportunity to hedge them. If banks include future income/expenses they should do so on a consistent basis, and not be permitted to select only those expected future flows which reduce their position. *(BCBS 2019 par 40.57)*
442. Forward currency and gold positions should be measured as follows: Forward currency and gold positions will normally be valued at current spot market exchange rates. Using forward exchange rates would be inappropriate since it would result in the measured positions reflecting current interest rate differentials to some extent. However, banks that base their normal management accounting on net present values are expected to use the net present values of each position, discounted using current interest rates and valued at current spot rates, for measuring their forward currency and gold positions. *(BCBS 2019 par 40.58)*

Treatment of Structural Foreign Exchange Positions

443. In circumstances where a licensee has taken a foreign currency position in order to mitigate against the effects of adverse movements in the exchange rate on its capital adequacy ratio, the Supervisor will allow the licensee to exclude this currency risk position from the calculation of net open currency risk positions, subject to fulfilment of the following requirements:
- c. the sole purpose of the position is to hedge against the effects of adverse changes in the exchange rate on the licensee's capital;
 - d. the position is of a non-dealing nature such as those stemming from investments in unconsolidated affiliated entities and consolidated subsidiaries or branches denominated in foreign currencies;
 - e. the establishment of the FX structural position and any changes to the position must adhere to the licensee's Supervisor approved risk management policy for structural position.
 - f. the exclusion from the calculation is made for at least six months and is limited to the amount of the risk position that covers the sensitivity of the capital ratio to movements in the exchange rate.

- g. any exclusion of the risk position is applied consistently, with the exclusionary treatment of the hedge remaining in place for the life of the financial instrument. *[BCBS January 2019 par 11.5]*

444. In calculating its net open position licensees must exclude the following: *[BCBS January 2019 par 11.5]*

- a. holdings of the licensee's own eligible regulatory capital instruments including treasury stock.
- b. prescribed deductions from regulatory capital;
- c. holdings of other financial institution's eligible regulatory capital instruments, as well as intangible assets, in cases where the relevant supervisor requires that such assets are deducted from regulatory capital.

Measuring the foreign exchange risk in a portfolio of foreign currency positions and gold

445. For measuring the FX risk in a portfolio of foreign currency positions and gold, the nominal amount (or net present value) of the net position in each foreign currency and in gold is converted at spot rates into the reporting currency. The overall net open position is measured by aggregating: *(BCBS 2019 par 40.60)*

- (1) the sum of the net short positions or the sum of the net long positions, whichever is the greater; plus
- (2) the net position (short or long) in gold, regardless of sign.

Capital requirement for market risk

446. The capital requirement will be 10% of the overall net open position. In particular, the capital requirement would be 10% of the higher of either the net long currency positions or the net short currency positions and of the net position in gold. *(BCBS 2019 par 40.61)*

447. A bank of which business in foreign currency is insignificant and which does not take FX positions for its own account may, at the discretion of the supervisor, be exempted from capital requirements on these positions provided that: *(BCBS 2019 par 40.62)*

- (1) its foreign currency business, defined as the greater of the sum of its gross long positions and the sum of its gross short positions in all foreign currencies, does not exceed 100% of total regulatory capital; and
- (2) its overall net open position as defined above does not exceed 2% of its eligible capital as defined in this Framework.

MR4.C COMMODITIES RISK IN THE TRADING BOOK AND BANKING BOOK

448. This section establishes a minimum capital standard to cover the risk of holding or taking positions in commodities, including precious metals, but excluding gold (which is treated as a foreign currency). A commodity is defined as a physical product which is or can be traded on a secondary market, e.g. agricultural products, minerals (including oil) and precious metals. *(BCBS 2019 par 40.63)*

449. The price risk in commodities is often more complex and volatile than that associated with currencies and interest rates. Commodity markets may also be less liquid than those for interest rates and currencies and, as a result, changes in supply and demand can have a more dramatic effect on price and volatility. These market characteristics can make price transparency and the effective hedging of commodities risk more difficult. *(BCBS 2019 par 40.64)*

450. Commodities position risk will be measured under the 'simplified approach'. The simplified approach is appropriate only for banks which, in relative terms, conduct only a limited amount of commodities business.

Under this approach, long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions. However, positions in different commodities will as a general rule not be offsettable in this fashion.

Capital charges for commodities risk

451. The capital charge for directional commodity risk will be the product of 18.75% times the net position, long or short (in absolute value), in each commodity. *(BCBS 2019 par 40.72)*
452. In order to protect the bank against basis risk, interest rate risk and forward gap risk, an additional capital charge will be levied equivalent to 3.75% of the bank's gross positions, long plus short, in that particular commodity will be added. *(BCBS 2019 par 40.73)*
453. Such capital charges for directional risk and for basis, interest and forward gap risk have been modified from the original Basel charges to be in accordance with the minimum capital ratio sets out by the Bank of Jamaica, as shown in **Table MR 8**.

Table MR 8- Capital charges for commodities risk according to the BOJ minimum ratio of 10%

	Basel capital charge	BOJ capital charge
Directional commodity risk	15%	$15\% * \frac{10\%}{8\%} = 18.75\%$
Basis risk, interest rate risk and forward gap risk,	3%	$3\% * \frac{10\%}{8\%} = 3.75\%$

MR4.D. EQUITY POSITION RISK IN THE TRADING BOOK

454. This section sets out a minimum capital standard to cover the risk of holding or taking positions in equities and all other instruments that exhibit market behaviour similar to equities, but not to non-convertible preference shares. Long and short positions in the same issue may be reported on a net basis. The instruments covered include common stocks, whether voting or non-voting, convertible securities that behave like equities, and commitments to buy or sell equity securities. *(BCBS 2019 par 40.41)*
455. The minimum capital standard for equities is expressed in terms of two separately calculated charges for the "specific risk" of holding a long or short position in an individual equity and for the "general market risk" of holding a long or short position in the market as a whole. *(BCBS 2019 par 40.42)*
456. Specific risk is defined as the bank's gross equity positions (i.e. the sum of all long equity positions and of all short equity positions) and general market risk as the difference between the sum of the longs and the sum of the shorts (i.e. the overall net position in an equity market). The long or short position in the market must be calculated on a market-by-market basis, i.e. a separate calculation has to be carried out for each national market in which the bank holds equities. *(BCBS 2019 par 40.42)*
457. Both the capital charge for specific risk and the charge for general market risk will be 10%. The original Basel ratio of 8% has been modified to be in accordance with the Bank of Jamaica minimum ratio of 10%. *(BCBS 2019 par 40.43, modified according to the minimum ratio of 10% in Jamaica)*

Equity derivatives

458. Except for options, equity derivatives and off-balance-sheet positions which are affected by changes in equity prices should be included in the measurement system.¹¹⁷ This includes futures and swaps on both individual equities and on stock indices. The derivatives are to be converted into positions in the relevant underlying. (BCBS 2019, par 40.44)

Calculation of positions

459. In order to calculate the standard formula for specific and general market risk, positions in derivatives should be converted into notional equity positions: (BCBS 2019, par 40.45)
- i. Futures and forward contracts relating to individual equities should in principle be reported at current market prices;
 - ii. Futures relating to stock indices should be reported as the marked-to-market value of the notional underlying equity portfolio;
 - iii. Equity swaps are to be treated as two notional positions¹¹⁸
 - iv. Equity options and stock index options should be either “carved out” together with the associated underlyings or be incorporated in the measure of general market risk described in this section according to the delta-plus method

Calculation of capital charges for equity derivatives

Measurement of specific and general market risk

460. Matched positions in each identical equity or stock index in each market may be fully offset, resulting in a single net short or long position to which the specific and general market risk charges will apply. For example, a future in a given equity may be offset against an opposite cash position in the same equity.¹¹⁹ (BCBS 2019, par 40.46)

Risk in relation to an index

461. Besides general market risk, a further capital charge of 2.5%¹²⁰ will apply to the net long or short position in an index contract comprising a diversified portfolio of equities. This capital charge is intended to cover factors such as execution risk. The Bank of Jamaica will take care to ensure that this 2.5% risk weight applies only to well-diversified indices and not, for example, to sectoral indices. (BCBS 2019, par 40.47)

¹¹⁷ Where equities are part of a forward contract, a future or an option (quantity of equities to be received or to be delivered), any interest rate or foreign currency exposure from the other leg of the contract should be reported as set out in the market risk framework, interest rate risk and the market risk framework, foreign exchange risk.

¹¹⁸ For example, an equity swap in which a licensee is receiving an amount based on the change in value of one particular equity or stock index and paying a different index will be treated as a long position in the former and a short position in the latter. Where one of the legs involves receiving/paying a fixed or floating interest rate, that exposure should be slotted into the appropriate re-pricing time-band for interest rate related instruments as set out in the capital treatment for interest rate risk in the trading book. The stock index should be covered by the equity treatment.

¹¹⁹ The interest rate risk arising out of the future, however, should be reported as set out in the capital treatment for interest rate risk in the trading book.

¹²⁰ 2% in the Basel Framework. The 2.5% is equivalent to $2\% \times 10\% / 8\%$ for consistency with the 10% minimum ratio in Jamaica.

Arbitrage

462. In the case of the futures-related arbitrage strategies described below, the additional 2.5% capital charge described above may be applied to only one index with the opposite position exempt from a capital charge. The strategies are: *(BCBS 2019, par 40.48)*
- i. When the licensee takes an opposite position in exactly the same index at different dates or in different market centers.
 - ii. When the licensee has an opposite position in contracts at the same date in different but similar indices, subject to supervisory oversight that the two indices contain sufficient common components to justify offsetting.
463. Where a licensee engages in a deliberate arbitrage strategy in which a futures contract on a broadly-based index matches a basket of stocks, it will be allowed to carve out both positions from the standardized methodology on condition that: *(BCBS 2019, par 40.49)*
- i. The trade has been deliberately entered into and separately controlled.
 - ii. The composition of the basket of stocks represents at least 90% of the index when broken down into its notional components.
464. In such a case the minimum capital requirement will be 5% (i.e. 2.5% of the gross value of the positions on each side) to reflect divergence and execution risks.¹²¹ This applies even if all of the stocks comprising the index are held in identical proportions. Any excess value of the stocks comprising the basket over the value of the futures contract or excess value of the futures contract over the value of the basket is to be treated as an open long or short position. *(BCBS 2019, par 40.50)*
465. If a bank takes a position in depository receipts against an opposite position in the underlying equity or identical equities in different markets, it may offset the position (i.e. bear no capital charge) but only on condition that any costs on conversion are fully taken into account. *(BCBS 2019, par 40.51)*
466. The **table MR 9** below summarizes the regulatory treatment of equity derivatives for market risk purposes.

Table MR- 9. Summary of treatment of equity derivatives

Instrument	Specific risk ¹²²	General market risk
Exchange-traded or OTC-Future		
- Individual equity	Yes	Yes, as underlying
- Index	2%	Yes, as underlying
Options		

¹²¹ 2% on each side in the Basel Framework. The 2.5% on each side is equivalent to 2%*10%/8% for consistency with the 10% minimum ratio in Jamaica.

¹²² This is the specific risk charge relating to the issuer of the instrument. Under the credit risk rules, a separate capital requirement for counterparty credit risk applies.

- Individual equity	Yes	Carve out together with the associated hedging positions: simplified approach
- Index	2%	

MR4.F. POSITION IN OPTIONS

467. Those licensees which solely use purchased options will be free to use the '*simplified approach*' described below. If a licensee will write options, it should seek permission from Bank of Jamaica and the Bank will determine the risk weight to be applied.

The Simplified approach

468. In the *simplified approach*, the positions for the options and the associated underlying, cash or forward, are not subject to the standardized methodology but rather are "carved-out" and subject to separately calculated capital charges that incorporate both general market risk and specific risk. The risk numbers thus generated are then added to the capital charges for the relevant category, i.e. interest rate related instruments, equities, foreign exchange and commodities. (BCBS 2019, par 40.75)

469. Licensees which handle a limited range of purchased options only will be free to use the simplified approach set out in the table below for particular trades. As an example of how the calculation would work, if a holder of 100 shares currently valued at \$10 each holds an equivalent put option with a strike price of \$11, the capital charge would be: $\$1,000 \times 16\%$ (i.e. 8% specific plus 8% general market risk) = \$160, less the amount the option is in the money $(\$11 - \$10) \times 100 = \$100$, i.e. the capital charge would be \$60. A similar methodology applies for options whose underlying is a foreign currency, an interest rate related instrument or a commodity. (BCBS 2019, par 40.76)

470. For options where the underlying is an interest rate, the capital charge is set equal to 20%, which is a conservative proxy of the sum of specific and general market risk for this kind of instrument. This treatment assumes that all options in securities bear general and specific risk, which is a conservative assumption.

Table MR-10. Options. Simplified approach: determination of capital charges

Position	Treatment
Long cash and Long put or Short cash and Long call	The capital charge will be the market value of the underlying security ¹²³ multiplied by the sum of specific and general market risk

¹²³ In some cases such as foreign exchange, it may be unclear which side is the "underlying security"; this should be taken to be the asset which would be received if the option were exercised. In addition the nominal value should be used for items where the market value of the underlying instrument could be zero, e.g. caps and floors, swaptions etc.

	charges ¹²⁴ for the underlying less the amount the option is in the money (if any) bounded at zero ¹²⁵
Long call or Long put	The capital charge will be the lesser of: (i) the market value of the underlying security multiplied by the sum of specific and general market risk charges for the underlying (ii) the market value of the option ¹²⁶

471. **Table MR 11** summarizes the capital charges to be applied according to the different underlying assets.

Table MR 11. Summary of capital charges (in percent) for different underlying assets

Underlying	Capital charge	Risks covered
Equities	20%	General plus specific risk
Interest rates	20%	Proxy for general plus specific risk
Foreign exchange	10%	Foreign exchange risk
Commodities	18.75%	Directional risk

¹²⁴ Some options (e.g. where the underlying is an interest rate, a currency or a commodity) bear no specific risk but specific risk will be present in the case of options on certain interest rate related instruments (e.g. options on a corporate debt security or corporate bond index for the relevant capital charges) and for options on equities and stock indices. The charge under this measure for currency options will be 10% (8% in the Basel Framework) and for options on commodities 18.75% (15% in the Basel Framework).

¹²⁵ For options with a residual maturity of more than six months the strike price should be compared with the forward, not current, price. A bank unable to do this must take the in the money amount to be zero.

¹²⁶ Where the position does not fall within the trading book (i.e. options on certain foreign exchange or commodities positions not belonging to the trading book), it may be acceptable to use the book value instead.

Capital Charges

for

Operational Risk

E. CAPITAL CHARGES FOR OPERATIONAL RISK

This section describes the standardized approach to calculating capital charges for operational risk. This chapter is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel III framework, Basel III: Finalizing post-crisis reforms (December 2017). For reference, the Basel text paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph¹²⁷.

PART I – CALCULATION OF THE CAPITAL CHARGE FOR OPERATIONAL RISK

This part outlines the proposed methodology for measuring minimum operational risk requirements under the standardized approach.

OR1-A. CALCULATION METHODOLOGY

472. The Central Bank has adopted the Basel III framework¹²⁸ recommended by the Basel Committee on Banking Supervision (BCBS) for calculating operational risk capital charge (ORC). As such, all licensees are required to use the new Standardized Approach as outlined in the framework.
473. Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.
474. Under the Standardized Approach, the minimum ORC is determined as:

$$ORC = BIC \times ILM$$

Where:

Business Indicator Component (BIC) is calculated in the manner described in paragraph 9 below; and
ILM (Internal Loss Multiplier) is calculated in the manner described in paragraph 12 below.

OR1-B. THE STANDARDIZED APPROACH

475. The Standardized Approach methodology is based on the following components: [BCBS December 2017 par 4]
- a. the Business Indicator (BI), which is a financial-statement-based proxy for operational risk;
 - b. the BIC, which is calculated by multiplying the BI by a set of regulatory determined marginal coefficients (α_i); and
 - c. the Internal Loss Multiplier (ILM), which is a scaling factor that is based on a financial institution's average historical losses and the BIC.

The Business Indicator (BI)

476. The Business Indicator (BI) is comprised of three components (defined in **Appendix OR-1**): [BCBS December 2017 par 5]

¹²⁷ Following the format: [BCBS June 2006 par x]

¹²⁸The Basel Committee on Banking Supervision, Basel III: Finalizing post-crisis reforms, December 2017, www.bis.org/publ/d424.pdf.

- i. the interest, leases and dividend component (ILDC);
- ii. the services component (SC); and
- iii. the financial component (FC).

477. The BI is defined as: *[BCBS December 2017 par 6]*

$$BI = ILDC + SC + FC$$

Where:

$$ILDC = \text{Min} \left[\overline{\text{Abs}(\text{Interest Income} - \text{Interest Expense})}; 2.25\% \cdot \overline{\text{Interest Earning Assets}} \right] + \overline{\text{Dividend Income}}$$

$$SC = \text{Max} \left[\overline{\text{Other Operating Income}}; \overline{\text{Other Operating Expense}} \right] + \text{Max} \left[\overline{\text{Fee Income}}; \overline{\text{Fee Expense}} \right]$$

$$FC = \overline{\text{Abs}(\text{Net P \& L Trading Book})} + \overline{\text{Abs}(\text{Net P \& L Banking Book})}$$

478. In the formulae above¹²⁹, the bar above each term indicates that it is calculated as the average over three (3) years: t, t-1, and t-2. *[BCBS December 2017 par 6]* However, licensees shall note that the absolute value of net items (e.g. Interest Income – Interest Expense), shall be calculated year-by-year firstly, only then shall the average of the three (3) years be calculated.

479. The following profit and loss (P&L) items do not contribute to any of the items of the BI: *[BCBS December 2017: Annex]*

- a. Income and expenses from insurance or reinsurance businesses;
- b. Premiums paid and reimbursements/payments received from insurance or reinsurance policies purchased;
- c. Administrative expenses, including staff expenses, outsourcing fees paid for the supply of non-financial services (e.g. logistical, IT, human resources), and other administrative expenses (e.g. IT, utilities, telephone, travel, office supplies, postage);
- d. Recovery of administrative expenses including recovery of payments on behalf of customers (e.g. taxes debited to customers);
- e. Expenses of premises and fixed assets (except when these expenses result from operational loss events);
- f. Depreciation/amortization of tangible and intangible assets (except depreciation related to operating lease assets, which shall be included in financial and operating lease expenses);
- g. Provisions/reversal of provisions (e.g. on pensions, commitments and guarantees given) except for provisions related to operational loss events;
- h. Expenses due to share capital repayable on demand;
- i. Impairment/reversal of impairment (e.g. on financial assets, non-financial assets, investments in subsidiaries, joint ventures and associates);
- j. Changes in goodwill recognized in profit or loss; and

¹²⁹ The definitions for each of the components of the BI are provided in the annex.

- k. Corporate income tax (tax based on profits including current tax and deferred).

The Business Indicator Component (BIC)¹³⁰

480. To calculate the BIC, it is the marginal coefficient (α_i) multiplied by the BI. The marginal coefficients increase with the size of the BI as shown in **Table OR-1** below: [BCBS December 2017 par 8]

Proposal Box 1: Proposed approach for local implementation: Recalibration of the Business Indicator (BI) Range

Bank of Jamaica (the Bank) is contemplating to deviate from the Basel recommended BI range for each bucket identified above. However, the Basel Committee does **not** provide national discretion for the recalibration of the BI range. Given the recommended range by the Basel Committee, all licensees will have a BI below the JMD174 trillion dollar (or the equivalent of one (1) Billion Euros at 9 December 2020 foreign exchange conversion rate). As a result, only the first range will apply to all licensees, i.e., bucket 1.

Also, if all licensees with different level of operational risk exposures are classified in bucket 1 with an internal loss multiplier (ILM), as per paragraph 12-16, equals 1, this may impede the risk sensitivity of the Operational Risk Framework to differentiate between the levels of operational risk exposures across institutions.

The recalibration of the BI range will provide the following benefits:

- i. Classifying licensees into different buckets based on the levels of operational risk exposures presented within each licensee; and
- ii. Incentivize licensees to lower their level of operational risk exposures having regard to the fact that the use of multiply buckets should incentivize licensees to improve their operational risk management framework.

In light of the foregoing, to preserve the risk sensitivity of the ORC framework, the Bank is proposing two options:

- i. to recalibrate the BI range by lowering the BI values for each of the three buckets so that licensees would be in different buckets based on the level of operational risk exposures; or
- ii. the ILM serves as a scaling factor that adjusts the BIC depending on the operational loss experience of a licensee. In taking a more conservative approach, the Bank is proposing to set the ILM equals 1 plus an add-on for all licensees, at least initially.

At this stage, the Bank is seeking your views on its approach to recalibrate the BI range and the possibility of an ILM add-on. The Bank has also attached an operational loss survey with the aim of collecting the necessary information to aid in the recalibration process.

Questions:

1. Do you agree with or have any comments and/or suggestions on the proposed recalibration of the Business Indicator range? If so, please explain your views and suggestions.
2. Do you have any other comments on the proposed recalibration of the Business Indicator range?

481. BIC is a financial-statement-based proxy for operational risk and is calculated from the BI as follows:

$$BIC = \sum (BI \times \alpha_i)$$

¹³⁰ The BIC corresponds to a measure of a licensee's business volume which assumes that operational risk increases at an accelerated rate with a licensee's size.

Where:

α_i is a set of marginal coefficients that are multiplied by the BI based on three buckets.

482. For banks in the first bucket (that is, with a BI less than or equal to JMD174 trillion dollar (or the equivalent of 1 bn Euros at 9 December 2020 foreign exchange conversion rate) the BIC is equal to BI x 12%. The marginal increase in the BIC resulting from a one unit increase in the BI is 12% in bucket 1, 15% in bucket 2 and 18% in bucket 3.¹³¹ [BCBS December 2017 par 8]

BI RANGES AND MARGINAL COEFFICIENTS		TABLE OR-1
Bucket	BI Range (in JMD trillion or Euros equivalent) ¹³²	BI Marginal Coefficient (α_i)
1	≤ 174	12%
2	$174 < BI \leq 5220$	15%
3	> 5220	18%

The Internal Loss Multiplier (ILM)

483. The ILM serves as a scaling factor that adjusts the BIC depending on the operational loss experience of a licensee. It gives a value larger than 1 when Loss Component is larger than the BIC, and vice versa.¹³³
484. A financial institution's internal operational risk loss experience affects the calculation of operational risk capital through the ILM. Thus, ILM is defined as: [BCBS December 2017 par 9]

$$Ln \left(\exp(1) - 1 + \left(\frac{LC}{BIC} \right)^{0.8} \right)$$

Where:¹³⁴

- The Loss Component (LC) is equal to 15 multiplied by the average annual operational risk (OR) losses incurred over the previous 10 years.
- The ILM equals one (1) when the loss and business indicator components are equal.

¹³¹ Notably, the buckets for the BI are derived by a spill-over logic. That is, a weight is assigned for each of the three buckets and the weight augments with each bucket. Accordingly, as a licensee's P&L and balance sheet positions increased, its BI will also expanded, and as a result the licensee will be placed in a higher bucket (vice-versa).

⁶ at 9 December 2020 foreign exchange conversion rate.

¹³³ When LC and BIC are identical, ILM equals 1 and thus ORC equals BIC.

¹³⁴ Where the LC is greater than the BIC, the ILM is greater than one. That is, a financial institution with losses that are high relative to its BIC is required to hold higher capital due to the incorporation of internal losses into the calculation methodology. Conversely, where the LC is lower than the BIC, the ILM is less than one. That is, a financial institution with losses that are low relative to its BIC is required to hold lower capital due to the incorporation of internal losses into the calculation methodology.

Proposal Box 2: Reporting of Operational Loss Data

The Bank proposes to require all licensees to report Operational Loss Data in a frequency similar to other statutory returns. This should enable licensees to meet the minimum loss data requirement more smoothly when licensees are required to include the loss component in its ORC calculation.

Question:

1. Do you have any comments and/or suggestions on the proposed frequency for the interim operational loss data reporting requirements? If so, please explain your views and suggestions.

Proposal Box 3: Setting of the ILM requirements.

According to the Basel Standard, national discretion is available in the following areas for the implementation of the ILM requirements:

- (1) Allowing licensees in bucket 1 to calculate their ILM based on internal loss data instead of requiring them to set the value of ILM equals 1.**

*The Bank proposes **not** to exercise this discretion, at least initially. The preference would be to observe for a period, how well licensees on a whole are able to meet the minimum operational criteria set out in this framework for loss data collection (i.e., the prerequisites for inclusion of internal loss data in calculating ORC requirement), for instance, by requiring licensees to report loss data for supervisory monitoring. When the high-quality of loss data is confirmed, the Bank may consider exercising this discretion to allow bucket 1 licensees to use ILM for calculating the ORC requirement, having regard to the fact that the use of ILM should incentivize licensees to improve their operational risk management.*

- (2) Setting the value of ILM equal to 1 for all licensees.**

The Bank proposes to exercise this discretion, at least initially, with the addition of an ILM add-on, which will otherwise require licensees in buckets 2 and 3 to set the value of ILM equal to 1 plus the add-on in its ORC calculation. Licensees that have at least five (5) years of high-quality internal loss data available to meet requirements on operational risk management should be able to meet minimum loss data standards set out in this framework. Again, the use of ILM should incentivize licensees to improve their operational risk management.

- (3) Imposing an ILM larger than 1 on licensees in bucket 2 or bucket 3 that fails to meet the minimum operational loss data quality standards.**

To motivate a licensee to meet the minimum data quality standards as soon as possible, the Bank proposes that a licensee in any of the three buckets, not meeting the minimum data quality standards after a minimum of 5 years, must apply an additional ILM add-on to calculate its operational risk capital requirements.

Questions:

- i. Do you have any comments on the proposed ILM add-on?
- ii. Do you agree with or have any comments and/or suggestions on the proposed ILM add-on for licensees that do not have at least five (5) years of high-quality internal loss data available to meet requirements? If so, please explain your views and suggestions.
- iii. Do you agree with or have any comments and/or suggestions on the proposed ILM add-on for licensees that do not meet the minimum data quality standards after a minimum of 5 years? If so, please explain your views and suggestions.

485. The calculation of average losses in the LC must be based on ten (10) years of high-quality annual loss data. The qualitative requirements for loss data collection are outlined in **Part II** of this chapter. *[BCBS December 2017 par 10]*
486. Financial institutions that do not have 10 years of high-quality loss data may use a minimum of five years of data to calculate the Loss Component. Financial institutions that do not have five years of high-quality loss data must calculate the capital requirement based solely on the BI Component. *[BCBS December 2017 par 10]*
487. The Central Bank may require that all financial institutions set the value of ILM equal to 1. However, all licensees will be subject to the full set of disclosure requirements summarized in Part III of this chapter.

OR1-C. THE OPERATIONAL RISK CAPITAL REQUIREMENT

488. The operational risk capital requirement as determined by the Basel III framework is the product of the BIC and the ILM¹³⁵ as indicated below: *[BCBS December 2017 par 11]*

Operational Risk Capital (ORC), Basel Framework = Business Indicator Component (BIC) * Internal Loss Multiplier (ILM)

489. For financial institutions in bucket 1 (i.e., with BI less than the equivalent to Euro 1 bn), internal loss data does not affect the capital calculation. That is, the ILM is equal to 1 (as required by the Central Bank), ORC is equal to the BIC (=12% *BI). *[BCBS December 2017 par 11]*
490. In order to determine the operational risk capital according to the minimum ratio of 10% set out by the Bank of Jamaica:

- i. Licensees must calculate the risk weighted assets (RWA) for operational risk by multiplying the Operational Risk Capital (ORC), Basel Framework, times 12.5

RWA Operational Risk = Operational Risk Capital (ORC), Basel Framework * 12.5

- ii. Licensees must multiply the RWA for operational risk by 10%

Operational Risk Capital (ORC), BOJ Framework = RWA Operational Risk * 10%

OR1-D. APPLICATION OF THE STANDARDIZED APPROACH WITHIN A GROUP

491. At the consolidated level, the standardized approach calculations use fully consolidated BI figures, which net all the intragroup income and expenses. The calculations at a sub-consolidated level use BI figures for the financial institutions consolidated at that particular sub-level. The calculations at the subsidiary level use the BI figures from the subsidiary. *[BCBS December 2017 par 14]*
492. Similar to financial holding companies, when BI figures for sub-consolidated or subsidiary financial institution reach bucket 2, these institutions are required to use loss experience in the standardized approach calculations. A sub-consolidated financial institution or a subsidiary financial institution uses only the losses it has incurred in the standardized approach calculations (and does not include losses incurred by other parts of the financial holding company). *[BCBS December 2017 par 15]*

¹³⁵ Risk-weighted assets for operational risk are equal to 12.5 times ORC.

493. In case a subsidiary of a financial institution belonging to bucket 2 or higher does not meet the qualitative standards for the use of the Loss Component, this subsidiary must calculate the standardized approach capital requirements by applying 100% of the BI Component. *[BCBS December 2017 par 16]*

Proposal Box 4: Consolidated Operational Risk Data Collection

The Bank is mindful of the possibility that a licensee may meet the minimum Operational Loss Data Quality Standards at the solo level but not at the consolidated level. In this case, for prudential purposes, the Bank proposes that licensees treat the ILM at the consolidated level in the following manner:

- i. If the ILM at the solo level is less than or equal to 1 then the ILM should equal to 1 plus the add-on ; or
- ii. If the ILM at the solo level exceeds 1, licensees should use the greater of 1 plus the add-on or its solo ILM.

Notably, in the interim without the application of ILM calculation in the framework, FHCs will be required to utilize an additional add-on.

Question:

1. Do you agree with or have any comments and/or suggestions on the proposed treatment of the ILM at the consolidated level? If so, please explain your views and suggestions.
2. Do you have any other comments on the proposed ILM framework?

PART II – QUALITATIVE REQUIREMENTS FOR LOSS DATA COLLECTION

Financial institutions with a BI greater than the equivalent to Euro 1bn are required to use loss data as a direct input into the operational risk capital calculations, but only in the case the requirements set out below are satisfied. The soundness of data collection and the quality and integrity of the data are crucial to generating capital outcomes aligned with the financial institution's operational loss exposure. This part outlines the minimum standards for the use of loss data under the standardized approach.

OR2-A. GENERAL CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT

494. The proper identification, collection and treatment of internal loss data are essential prerequisites to capital calculation under the standardized approach. The general criteria for the use of the LC are as follows: [BCBS December 2017 par 19]
- a. Internally generated loss data calculations used for regulatory capital purposes must be based on a ten-year observation period. When the financial institution moves to the standardized approach, a five-year observation period is acceptable on an exceptional basis when good-quality data are unavailable for more than five years.
 - b. Internal loss data are most relevant when clearly linked to a licensee's current business activities, technological processes and risk management procedures. Therefore, licensees must have documented procedures and processes for the identification, collection and treatment of internal loss data. Such procedures and processes must be subject to validation before the use of the loss data within the operational risk capital requirement measurement methodology, and to regular independent reviews by internal and/or external audit functions.
 - c. For risk management purposes, and to assist in supervisory validation and/or review, the Central Bank may request that a licensee map its historical internal loss data into the relevant Level 1 supervisory categories as defined in Annex 9 of the Basel II Framework and to provide this data upon request. The licensee must document criteria for allocating losses to the specified event types.
 - d. A financial institution's internal loss data must be comprehensive and capture all material activities and exposures from all appropriate subsystems and geographic locations. The minimum threshold for including a loss event in the data collection and calculation of average annual losses is set at JMD3,479,800 (or €20,000.00 equivalent at 9 December 2020 foreign exchange conversion rate). However, for licensees in buckets 2 and 3, the minimum threshold is set at JMD17.4 million dollar (or the equivalent of €100,000.00 at 9 December 2020 foreign exchange conversion rate).
 - e. Aside from information on gross loss amounts, the licensee must collect information about the reference dates of operational risk events, including the date when the event happened or first began ("date of occurrence"), where available; the date on which the financial institution became aware of the event ("date of discovery"); and the date (or dates) when a loss event results in a loss, reserve or provision against a loss being recognized in the licensees' profit and loss (P&L) accounts ("date of accounting"). In addition, the licensee must collect information on recoveries of gross loss amounts as well as descriptive

information about the drivers or causes of the loss event.¹³⁶ The level of detail of any descriptive information shall be commensurate with the size of the gross loss amount.

- f. Operational loss events related to credit risk and that are accounted for in credit risk RWAs shall not be included in the loss data set. Operational loss events that relate to credit risk, but are not accounted for in credit risk RWAs shall be included in the loss data set.
- g. Operational risk losses related to market risk are treated as operational risk for the purposes of calculating minimum regulatory capital under this framework and will therefore be subject to the standardized approach for operational risk.
- h. Licensees must have processes to independently review the comprehensiveness and accuracy of loss data.

Proposal Box 5: Minimum Threshold for Loss Event Inclusion

The Basel Committee provides for national discretion when setting threshold for the inclusion of a loss event. In that regard, the Basel Committee recommended that national authorities may increase the minimum threshold for including a loss event in the calculation of average annual losses for loss component from JMD3,479,800 (or €20,000 equivalent at 9 December 2020 foreign exchange conversion rate) to JMD17.4 million dollar (or €100,000 equivalent at 9 December 2020 foreign exchange conversion rate).

To preserve the risk sensitivity in this framework, the Bank proposes ***not*** to exercise this discretion. However, the Bank considers that JMD3, 479,800 (or €20,000 equivalent at 9 December 2020 foreign exchange conversion rate) is a material threshold given the current foreign exchange conversion rate. Licensees may not be collecting losses under that threshold, which may also be deemed material, especially the high frequency and low severity events. In that regard, the Bank is contemplating on recalibrating to a lower minimum threshold by using a historical conversion rate instead of current rate. Therefore the Bank proposes to translate the minimum threshold using a conversion rate of €1 to JMD\$50 for the calculation of the BIC. In that regard, the minimum threshold for including a loss event would be JMD 1,000,000.00, except for loss events stemming from fraud, forgery, and robbery.

Notably, licensees will report all events where Gross Loss is greater than or equal to the minimum threshold of one million Jamaican dollar with the exception of fraud, forgery, and robbery.

Questions:

1. Do you agree with or have any comments and/or suggestions on the proposed recalibration of the minimum threshold for the inclusion of a loss event? If so, please explain your views and suggestions.
2. Do you have any comments and/or suggestions on any loss events particulars that should be in the list of loss events? Please explain your views and suggestions.
3. Do you have any other comments on the proposed standards for “Calculation of Capital Charges for Operational Risk”?

¹³⁶ Tax effects (e.g. reductions in corporate income tax liability due to operational losses) are not recoveries for purposes of the standardized approach for operational risk.

Proposal Box 6: The Exclusion of Frauds, Forgeries, and Robberies from the Application of the Minimum Threshold Requirements.

The Bank is mindful of the incurred losses stemming from high frequency and low severity operational risk events such as fraud and forgery, which is evident in the Bank's recent thematic study on fraud. Cumulatively, these high frequency, low severity events ensued in material losses for licensees. In that regard, the Bank proposes to exclude the aforesaid events from the application of the minimum threshold requirements for loss data event inclusion. Therefore, the Bank proposes that licensees report the gross amount for all high frequency, low severity events such as frauds, forgeries, and robberies irrespective of the amount involved.

Question:

Do you agree with or have any comments and/or suggestions on the proposed exclusion of fraud, forgery, and robbery from the application of the minimum threshold for the inclusion of a loss event? If so, please explain your views and suggestions.

OR2-B. SPECIFIC CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT

The Building of the Standardized Approach Loss Data Set

495. Building an acceptable loss data set from the available internal data requires that the licensee develop policies and procedures to address several features, including gross loss definition, reference date and grouped losses. *[BCBS December 2017 par 20]*

Gross Loss, Net Loss, and Recovery Identification

496. Gross loss is a loss before recoveries of any type; *[BCBS December 2017 par 21]*
497. Net loss is defined as the loss after taking into account the impact of recoveries; *[BCBS December 2017 par 21]*
498. A recovery is an event whereby funds or inflows of economic benefits are received from a third-party to cover losses arising from operational loss. A recovery must be separated in time.¹³⁷ *[BCBS December 2017 par 21]*
499. Licensees must be able to identify the gross loss amounts, non-insurance recoveries, and insurance recoveries for all operational loss events. Licensees shall use losses net of recoveries (including insurance recoveries) in the loss dataset. However, recoveries can be used to reduce losses only after the licensee receives payment. Receivables do not count as recoveries. Verification of payments received to net losses must be provided to the Central Bank upon request. *[BCBS December 2017 par 22]*
500. The following items must be included in the gross loss computation of the loss data set: *[BCBS December 2017 par 23]*
- a. Direct charges (i.e., impairments and settlements) to the financial institution's P&L accounts, and write-downs due to operational risk event;
 - b. Costs incurred with a direct link to operational events (e.g., legal expenses directly related to the event, external expense, and fees paid to advisors, attorneys, or suppliers (including costs of repair or replacement) to restore the position that was prevailing before the operational risk event); and

¹³⁷ Examples of recoveries are payments received from insurers, repayments received from perpetrators of fraud, and recoveries of misdirected transfers.

- c. Provisions or reserves accounted for in the P&L against the potential operational loss impact;
 - d. Losses stemming from operational risk events with a definitive financial impact, which are temporarily booked in transitory and/or suspense accounts and are not yet reflected in the P&L (“pending losses”). Material pending losses shall be included in the loss data set within a time period commensurate with the size and age of the pending item;
 - e. Negative economic impacts booked in a financial accounting period, due to operational risk events impacting the cash flows or financial statements of previous financial accounting periods (timing losses”).¹³⁸ Material “timing losses” shall be included in the loss data set when they are due to operational risk events that span more than one financial accounting period and give rise to legal risk.
501. The following items shall be excluded from the gross loss computation of the loss data set: *[BCBS December 2017 par 24]*
- a. Costs of general maintenance contracts on property, plant or equipment.
 - b. Internal or external expenditures to enhance the business after the operational risk losses: upgrades, improvements, risk assessment initiatives and enhancements; and
 - c. Insurance premiums.
502. Licensees must use the date of accounting for building the loss data set. The licensee must use a date no later than the date of accounting for including losses related to legal events in the loss data set. For legal loss events, the date of accounting is the date when a legal reserve is established for the probable estimated loss in the P&L. *[BCBS December 2017 par 25]*
503. Losses caused by a common operational risk event or by related operational risk events over time, but posted to the accounts over several years, shall be allocated to the corresponding years of the loss database, in line with their accounting treatment. *[BCBS December 2017 par 26]*

OR2-C. EXCLUSION OF LOSSES FROM THE LOSS COMPONENT

504. Licensees may request supervisory approval to exclude certain operational loss events that are no longer relevant to the organization’s risk profile. The exclusion of internal loss events shall be rare and supported by strong justification.¹³⁹ *[BCBS December 2017 par 27]*
505. The total loss amount and number of exclusions must be disclosed under Pillar 3 with appropriate narratives, including total loss amount and number of exclusions. *[BCBS December 2017 par 28]*
506. A request for loss exclusions is subject to a materiality threshold. In addition, losses can only be excluded after being included in a licensees’ operational risk loss database for a minimum period of three years. Losses related to divested activities will not be subject to a minimum operational risk loss database retention period. *[BCBS December 2017 par 29]*

¹³⁸ Timing impacts typically relate to the occurrence of operational risk events that result in the temporary distortion of an institution’s financial accounts (e.g. revenue overstatement, accounting errors and mark-to-market errors). While these events do not represent a true financial impact on the institution (net impact over time is zero), if the error continues across more than one financial accounting period, it may represent a material misrepresentation of the institution’s financial statements.

¹³⁹ In evaluating the relevance of operational loss events to the bank’s risk profile, supervisors will consider whether the cause of the loss event could occur in other areas of the bank’s operations. Taking settled legal exposures and divested businesses as examples, supervisors expect the organization’s analysis to demonstrate that there is no similar or residual legal exposure and that the excluded loss experience has no relevance to other continuing activities or products.

OR2-D. EXCLUSION OF DIVESTED ACTIVITIES FROM THE BUSINESS INDICATOR

507. Licensees may request supervisory approval to exclude divested activities from the calculation of the BI. Such exclusions must be disclosed under Pillar 3. *[BCBS December 2017 par 30]*

OR2-E. INCLUSION OF LOSSES AND BI ITEMS RELATED TO MERGERS AND ACQUISITIONS

508. The measurement and losses of the BI must include losses and BI items that result from acquisitions of relevant business and mergers. *[BCBS December 2017 par 31]*

PART III – DISCLOSURE

This part outlines the disclosure requirements for financial institutions calculating operational risk charges under the standardized approach.

OR3-A. DISCLOSURE

509. Although the Central Bank has set the ILM equal to 1, all licensees are required to disclose their annual loss data for each of the ten years in the ILM calculation window. *[BCBS December 2017 par 32]*
510. Loss data is required to be reported on both a gross basis and after recoveries and loss exclusions. All licensees are required to disclose each of the BI sub-items for each of the three years of the BI component calculation window. *[BCBS December 2017 par 32]*

Appendices

CONSULTATION PAPER

Bank of Jamaica

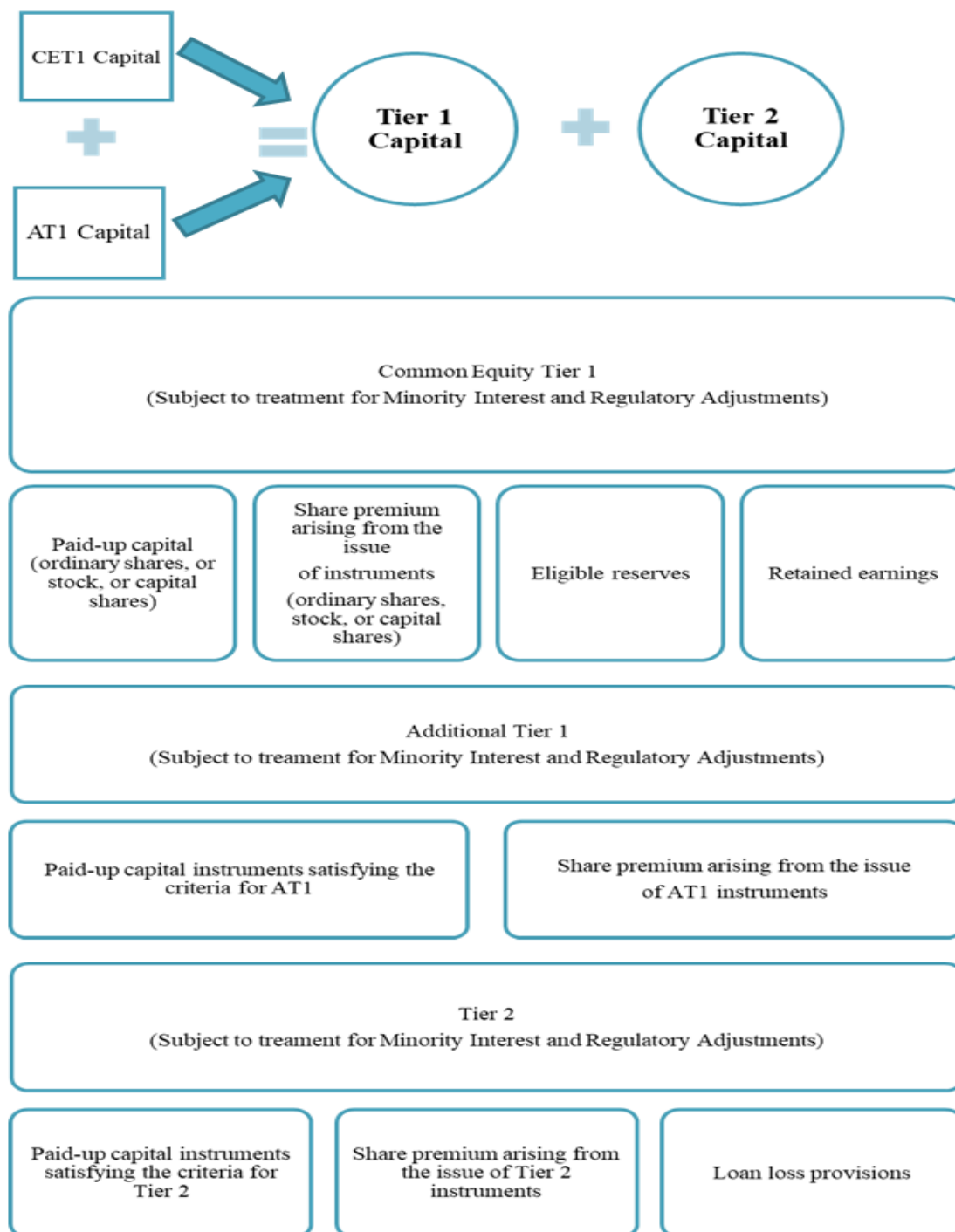
December 2020

APPENDICES

DEFINITION OF REGULATORY CAPITAL

Appendix DC-1

Diagrammatic Representation of Regulatory Capital under the Capital Adequacy Framework



Appendix DC-2

Statutory Reserve Fund

1. Under the proposed capital adequacy framework, every deposit-taking institution, other than a foreign bank, will maintain a reserve fund in Jamaica into which, at the end of each financial year, there will be transferred:
 - (a) Fifteen *percent* of the net profits of the institution earned in that year until the reserve equals fifty *percent* of its paid-up capital; and
 - (b) Thereafter, ten *percent* of the net profits of the institution earned in that year until the amount at the credit of the reserve fund is equal to the paid-up capital of the institution.
2. Under the proposed capital adequacy framework, every foreign bank will maintain a reserve fund in relation to its branch operations in Jamaica into which, at the end of the financial year, there will be transferred:
 - (a) Fifteen *percent* of net profits earned in that year from its branch operations in Jamaica until the reserve equals fifty *percent* of its assigned capital; and
 - (b) Thereafter, ten *percent* of the net profits earned in that year from its branch operations in Jamaica until the amount at the credit of the reserve fund is equal to the assigned capital of the foreign bank.

The reserve fund will, under the proposed capital adequacy framework, consist of unencumbered assets that are specifically and exclusively assigned by the foreign bank to the financing of its branch operations in Jamaica and are not available to finance any other operation of the foreign bank.
3. Nothing in **paragraph (1) or (2)** of this appendix shall prevent a deposit-taking institution or a foreign bank in relation to its branch operations in Jamaica from:
 - (a) transferring more than the prescribed percentage of the net profits in any year to its reserve fund; or
 - (b) maintaining a reserve fund in an amount in excess of its paid-up capital or its assigned capital, as the case may be.
4. For the purposes of this section, references to paid-up capital will, in relation to building societies, mean the total amount paid-up on their capital share and permanent capital fund, as the case may be.
5. For the purposes of this section, "net profits" means profits after the deduction of income tax, but will not include:
 - (a) any unrealized surplus arising from a revaluation of the assets of the deposit-taking institution, other than foreign currency; and
 - (b) profits arising from-
 - (i) a sale of the assets of the deposit-taking institution to a connected person, where the sale is not for cash or is funded in whole or in part by a loan from the institution or another entity within the same financial group;
 - (ii) any resale, other than for cash, by the deposit-taking institution of assets purchased from a connected person; or

- (iii) any profit or gain, whether resulting from an artificial or fictitious transaction or otherwise, that the Supervisor is satisfied does not in fact result in an increase to the net capital position of the deposit-taking institution,

so, however, that the Supervisor may, in writing, permit profits referred to in **paragraph 5(b)** in this appendix to be treated as net profits for the purposes of this section.

6. The deposit-taking institution shall act in accordance with **paragraph 7** of this appendix, where:
 - (a) The amount at the credit of the reserve fund of the deposit-taking institution exceeds its paid-up capital or assigned capital; and
 - (b) The deposit-taking institution intends to reduce its reserve fund.
7. The deposit-taking institution shall, in writing:
 - (a) Notify the Supervisor; and
 - (b) Apply, in writing, to the Supervisor for permission to reduce its reserve fund.
8. The Supervisor may permit the deposit-taking institution to reduce its reserve fund by an amount not exceeding the amount of the excess referred to in **paragraph 6(a)** of this appendix.

Appendix DC-3

Amortization of Tier 2 Capital

Tier 2 Capital Calculations: Determination of Capital Value of Tier 2 Instruments with an Original Term to Maturity of Five Years or More.

AMORTIZATION OF TIER 2 CAPITAL	TABLE DC-4
Remaining Term to Maturity	% of value included in Tier 2 Capital
5 years or more	100%
4 years or more but less than 5 years	80%
3 years or more but less than 4 years	60%
2 years or more but less than 3 years	40%
1 year or more but less than 2 years	20%
Less than 1 year	0%

Appendix DC-4

Further Explanation:

Investments in banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the licensee does not own more than 10% of the issued ordinary share capital of the entity *[Basel III-Paragraph 80]*

- A. Investments are comprised of direct, indirect and synthetic holdings of capital instruments. For example, licensees should examine holdings of index securities to establish their underlying holdings of capital.
- B. To be included are holdings in both the banking book and trading book. Capital is inclusive of ordinary stock, and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that must be included. That is, the net positive of gross long position minus short positions in the same underlying exposure where the maturity of the short position either mirrors the maturity of the long position or has a residual maturity of at least one year.
- C. Underwriting positions held for five working days or less may be excluded whereas underwriting positions held for more than five working days must be included.
- D. If the capital instrument of the entity in which the licensee has invested fails to meet the criteria for Common Equity Tier 1, Additional Tier 1, or Tier 2 Capital of the licensee, the capital is to be classified as ordinary shares for the purposes of this regulatory adjustment.
- E. Under the proposed capital adequacy framework, licensees will be allowed, with prior approval of the Supervisor, to exclude temporarily certain investments made in the context of resolving or providing financial assistance to reorganize a distressed institution from the treatment outlined in **paragraphs 71 to 77** of this consultation paper.

Appendix DC-5

Further Explanation:

Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation *[Basel III- Paragraph 85]*

- A. Investments are comprised of direct, indirect and synthetic holdings of capital instruments. For example, licensees should examine holdings of index securities to establish their underlying holdings of capital.
- B. To be included are holdings in both the banking book and trading book. Capital is inclusive of ordinary stock, and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that must be included. That is, the net positive of gross long position minus short positions in the same underlying exposure where the maturity of the short position either mirrors the maturity of the long position or has a residual maturity of at least one year).
- C. Underwriting positions held for five working days or less may be excluded whereas underwriting positions held for more than five working days must be included.
- D. If the capital instrument of the entity in which the licensee has invested fails to meet the criteria for Common Equity Tier 1, Additional Tier 1, or Tier 2 Capital of the licensee, the capital is to be classified as ordinary shares for the purposes of this regulatory adjustment.

There is an allowance for national discretion for licensees, with prior Supervisory approval, to omit temporarily certain investments that have been made with the purpose of resolving or providing financial assistance to reorganize a distressed institution.

- E. Under the proposed capital adequacy framework, licensees will be allowed, with prior approval of the Supervisor, to exclude temporarily certain investments made in the context of resolving or providing financial assistance to reorganize a distressed institution from the treatment outlined in **paragraphs 78 and 79** of this consultation paper. *[Basel III-Paragraph 80]*

CREDIT RISK CAPITAL CHARGE

Appendix CR-1

The Eligibility Criteria for External Credit Ratings Agencies

An ECAI must satisfy each of the following eight criteria. *[BCBS December 2017 par 99]*

1. **Objectivity:** The methodology for assigning external ratings must be rigorous, systematic and subject to some form of validation based on historical experience. Moreover, external ratings must be subject to ongoing review and responsive to changes in financial condition. Before being recognized by supervisors, a rating methodology for each market segment, including rigorous back testing, must have been established for at least one year and preferably three years.
2. **Independence:** An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. In particular, an ECAI should not delay or refrain from taking a rating action based on its potential effect (economic, political or otherwise). The rating process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the CRA may be seen as creating a conflict of interest. Furthermore, an ECAI should separate operationally, legally and, if practicable, physically its rating business from other businesses and analysts.
3. **International access/transparency:** The individual ratings, the key elements underlining the assessments and whether the issuer participated in the rating process should be publicly available on a non-selective basis, unless they are private ratings, which should be at least available to both domestic and foreign institutions with legitimate interest and on equivalent terms. In addition, the ECAI's general procedures, methodologies and assumptions for arriving at ratings should be publicly available.
4. **Disclosure:** An ECAI should disclose the following information: its code of conduct; the general nature of its compensation arrangements with assessed entities; any conflict of interest¹⁴⁰, the ECAI's compensation arrangements¹⁴¹, its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the ratings, for example, the likelihood of 'CQS 1' ratings becoming 'CQS 2' over time. A rating should be disclosed

¹⁴⁰ At a minimum, the following situations and their influence on the ECAI's credit rating methodologies or credit rating actions shall be disclosed:

- The ECAI is being paid to issue a credit rating by the rated entity or by the obligor, originator, underwriter, or arranger of the rated obligation;
- The ECAI is being paid by subscribers with a financial interest that could be affected by a credit rating action of the ECAI;
- The ECAI is being paid by rated entities, obligors, originators, underwriters, arrangers, or subscribers for services other than issuing credit ratings or providing access to the ECAI's credit ratings;
- The ECAI is providing a preliminary indication or similar indication of credit quality to an entity, obligor, originator, underwriter, or arranger prior to being hired to determine the final credit rating for the entity, obligor, originator, underwriter, or arranger; and
- The ECAI has a direct or indirect ownership interest in a rated entity or obligor, or a rated entity or obligor has a direct or indirect ownership interest in the ECAI.

¹⁴¹ An ECAI should disclose the general nature of its compensation arrangements with rated entities, obligors, lead underwriters, or arrangers.

When the ERA receives from a rated entity, obligor, originator, lead underwriter, or arranger compensation unrelated to its credit rating services, the ECAI should disclose such unrelated compensation as a percentage of total annual compensation received from such rated entity, obligor, lead underwriter, or arranger in the relevant credit rating report or elsewhere, as appropriate.

An ECAI should disclose in the relevant credit rating report or elsewhere, as appropriate, if it receives 10% or more of its annual revenue from a single client (for example, a rated entity, obligor, originator, lead underwriter, arranger, or subscriber, or any of their affiliates).

as soon as practicably possible after issuance. When disclosing a rating, the information should be provided in plain language, indicating the nature and limitation of credit ratings and the risk of unduly relying on them to make investments.

5. **Resources:** An ECAI should have sufficient resources to carry out high-quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. In particular, ECAIs should assign analysts with appropriate knowledge and experience to assess the creditworthiness of the type of entity or obligation being rated. Such assessments should be based on methodologies combining qualitative and quantitative approaches.
6. **Credibility:** To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI's external ratings by independent parties (investors, insurers, trading partners) is evidence of the credibility of the ratings of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.
7. **No abuse of unsolicited ratings:** ECAIs must not use unsolicited ratings to put pressure on entities to obtain solicited ratings. Supervisors should consider whether to continue recognizing such ECAIs as eligible for capital adequacy purposes, if such behaviour is identified.
8. **Cooperation with the Supervisor:** ECAIs should notify the Supervisor of significant changes to methodologies and provide access to external ratings and other relevant data in order to support initial and continued determination of eligibility.

Appendix CR-2

Multilateral Development Bank Eligibility Criteria to get 0% Risk-weighting

Exposures to MDBs that fulfil to the BCBS' satisfaction the eligibility criteria provided below, will be risk weighted at 0%: *[BCBS December 2017 para 14]*

- a. very high-quality long-term issuer ratings, that is, a majority of an MDB's external ratings must be AAA (CQS 1);
- b. a shareholder structure that comprises a significant proportion of sovereigns with long-term issuer external ratings of AA– (CQS 1) or better; or, the majority of its fund-raising in the form of paid-in equity/capital and there is little or no leverage;
- c. strong shareholder support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continued capital contributions and new pledges from sovereign shareholders;
- d. adequate capital and liquidity levels (a case-by-case approach is necessary in order to assess whether each MDB's capital and liquidity are adequate); and,
- e. strict statutory lending requirements and conservative financial policies, which would include among other conditions a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, and individual exposure and credit category), large exposures approval by the board or a committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process, and rigorous assessment of risk and provisioning to loan loss reserve.

Appendix CR-3

Criteria for Determining the Applicable Risk Weight Bucket under the Standardized Credit Risk Assessment Approach (SCRA) *[BCBS December 2017 paras 22 to 29]*

Grade A

1. Grade A refers to exposures to DTIs, where the counterparty DTI has adequate capacity to meet their financial commitments (including repayments of principal and interest) in a timely manner, for the projected life of the assets or exposures and irrespective of the economic cycles and business conditions.
2. A counterparty DTI classified into Grade A must meet or exceed the published minimum regulatory requirements and buffers established by its national supervisor as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements or buffers that may be imposed through supervisory actions (for example, via Pillar 2) and not made public. If such minimum regulatory requirements and buffers (other than bank-specific minimum requirements or buffers) are not publicly disclosed or otherwise made available by the counterparty DTI then the counterparty DTI must be assessed as Grade B or lower.
3. If, as part of its due diligence, a DTI assesses that a counterparty DTI does not meet the definition of Grade A in paragraphs 1 and 2, exposures to the counterparty DTI must be classified as Grade B or Grade C.

Grade B

4. Grade B refers to exposures to DTIs, where the counterparty DTI is subject to substantial credit risk, such as repayment capacities that are dependent on stable or favourable economic or business conditions.
5. A counterparty DTI classified into Grade B must meet or exceed the published minimum regulatory requirements (excluding buffers) established by its national supervisor as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements that may be imposed through supervisory actions (for example, via Pillar 2) and not made public. If such minimum regulatory requirements are not publicly disclosed or otherwise made available by the counterparty DTI then the counterparty DTI must be assessed as Grade C.
6. DTIs will classify all exposures that do not meet the requirements outlined in paragraphs 1 and 2 into Grade B, unless the exposure falls within Grade C under paragraphs 7 and 8.

Grade C

7. Grade C refers to higher credit risk exposures to DTIs, where the counterparty DTI has material default risks and limited margins of safety. For these counterparties, adverse business, financial, or economic conditions are very likely to lead, or have led, to an inability to meet their financial commitments.
8. At a minimum, if any of the following triggers is breached, a DTI must classify the exposure into Grade C:
 - The counterparty DTI does not meet the criteria for being classified as Grade B with respect to its published minimum regulatory requirements, as set out in paragraphs 4 and 5; or
 - Where audited financial statements are required, the external auditor has issued an adverse audit opinion or has expressed substantial doubt about the counterparty DTI's ability to continue as a going concern in its financial statements or audited reports within the previous 12 months.

Even if these triggers are not breached, a DTI may assess that the counterparty DTI meets the definition in paragraph 7 above. In that case, the exposure to such counterparty DTI must be classified into Grade C.

Appendix CR-4

Criteria for Determining the Value in the Loan to Value Ratio [BCBS December 2017 par 62]

1. The LTV ratio is the amount of the loan divided by the value of the property. Licensees shall maintain the value of the property at the value measured at origination unless the Supervisor elects to require licensees to revise the property value downward¹⁴². 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 amortizes. [BCBS December 2017 par 62]
2. The LTV ratio must be prudently calculated in accordance with the following requirements:
 - a. **Amount of the loan:** includes the outstanding loan amount and any undrawn committed amount of the mortgage loan¹⁴³. The loan amount must be calculated gross of any provisions and other risk mitigants.
 - b. **Value of the property:** the valuation must be appraised independently¹⁴⁴ 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 on 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. If a market value can be determined, the valuation should not be higher than the market value¹⁴⁵. Licensees should have appropriate mechanisms in place for regularly assessing the market value of the property.
3. A guarantee or financial collateral may be recognized as a credit risk mitigant in relation to exposures secured by real estate if it qualifies as eligible collateral under the credit risk mitigation framework. This may include mortgage insurance¹⁴⁶ if it meets the operational requirements of the credit risk mitigation framework for a guarantee. Licensees may recognize these risk mitigants in calculating the exposure amount; however, the LTV bucket and risk weight to be applied to the exposure amount must be determined before the application of the appropriate credit risk mitigation technique.

¹⁴² If the value has been adjusted downwards, a subsequent upwards adjustment can be made but not to a higher value than the value at origination.

¹⁴³ If a bank grants different loans secured by the same property and they are sequential in ranking order (that is, there is no intermediate lien from another bank), the different loans should be considered as a single exposure for risk-weighting purposes, and the amount of the loans should be added to calculate the LTV ratio.

¹⁴⁴ The valuation must be done independently from the bank's mortgage acquisition, loan processing and loan decision process.

¹⁴⁵ In the case where the mortgage loan is financing the purchase of the property, the value of the property for LTV purposes will not be higher than the effective purchase price.

¹⁴⁶ A bank's use of mortgage insurance should mirror the *FSB Principles for sound residential mortgage underwriting* (April 2012).

Appendix CR-5

Criteria for an Instrument to be considered an Equity Exposure (BCBS December 2017, paragraph 49)

An instrument is considered to be an equity exposure if it meets all of the following requirements:

- (a) It is irredeemable in the sense that the return of invested funds can be achieved only by the sale of the investment or sale of the rights to the investment or by the liquidation of the issuer;
- (b) It does not embody an obligation on the part of the issuer; and
- (c) It conveys a residual claim on the assets or income of the issuer.

Additionally any of the following instruments must be categorized as an equity exposure:

- 1. An instrument with the same structure as those permitted as Tier 1 capital for banking organizations.
- 2. An instrument that embodies an obligation on the part of the issuer and meets any of the following conditions:
 - (a) The issuer may defer indefinitely the settlement of the obligation;
 - (b) The obligation requires (or permits at the issuer's discretion) settlement by issuance of a fixed number of the issuer's equity shares;
 - (c) The obligation requires (or permits at the issuer's discretion) settlement by issuance of a variable number of the issuer's equity shares and (ceteris paribus) any change in the value of the obligation is attributable to, comparable to, and in the same direction as, the change in the value of a fixed number of the issuer's equity shares;¹⁴⁷ or,
 - (d) The holder has the option to require that the obligation be settled in equity shares, unless either (i) in the case of a traded instrument, the supervisor is content that the bank has demonstrated that the instrument trades more like the debt of the issuer than like its equity, or (ii) in the case of non-traded instruments, the supervisor is content that the bank has demonstrated that the instrument should be treated as a debt position. In cases (i) and (ii), the bank may decompose the risks for regulatory purposes, with the consent of the supervisor.

Debt obligations and other securities, partnerships, derivatives or other vehicles structured with the intent of conveying the economic substance of equity ownership are considered an equity holding.¹⁴⁸ This includes liabilities from which the return is linked to that of equities.

Conversely, equity investments that are structured with the intent of conveying the economic substance of debt holdings or securitization exposures would not be considered an equity holding.

¹⁴⁷ For certain obligations that require or permit settlement by issuance of a variable number of the issuer's equity shares, the change in the monetary value of the obligation is equal to the change in the fair value of a fixed number of equity shares multiplied by a specified factor. Those obligations meet the conditions of item 3 if both the factor and the referenced number of shares are fixed. For example, an issuer may be required to settle an obligation by issuing shares with a value equal to three times the appreciation in the fair value of 1,000 equity shares. That obligation is considered to be the same as an obligation that requires settlement by issuance of shares equal to the appreciation in the fair value of 3,000 equity shares.

¹⁴⁸ Equities that are recorded as a loan but arise from a debt/equity swap made as part of the orderly realization or restructuring of the debt are included in the definition of equity holdings. However, these instruments may not attract a lower capital charge than would apply if the holdings remained in the debt portfolio.

Appendix CR-6

Capital Treatment for Failed Trades and Non-Delivery versus Payment System Transactions (BCBS 2006, Annex 3 and BCBS 2017 par 87)

A. Overarching Principles

1. Licensees should continue to develop, implement and improve systems for tracking and monitoring the credit risk exposures arising from unsettled and failed transactions as appropriate for producing management information that facilitates action on a timely basis, pursuant to **paragraph 106 and 107** of this Framework.
2. Transactions settled through a delivery-versus-payment system (DvP)¹⁴⁹, providing simultaneous exchanges of securities for cash, expose firms to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, gold, or commodities) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or free-delivery) expose firms to a risk of loss on the full amount of cash paid or deliverables delivered. The current rules set out specific capital charges that address these two kinds of exposures.
3. The following capital treatment is applicable to all transactions on securities, foreign exchange instruments, and commodities that give rise to a risk of delayed settlement or delivery. This includes transactions through recognized clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.
4. In cases of a system wide failure of a settlement or clearing system, a national supervisor may use its discretion to waive capital charges until the situation is rectified.
5. Failure of a counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this Framework.

B. Capital Requirements

6. For DvP transactions, if the payments have not yet taken place five business days after the settlement date, licensees must calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate factor, according to **Table CR-14** below.

A reasonable transition period may be allowed for licensees to upgrade their information system to be able to track the number of days after the agreed settlement date and calculate the corresponding capital charge.

7. For non-DvP transactions (i.e. free deliveries), after the first contractual payment or delivery leg, the bank that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business day¹⁵⁰. Licensees under the standardized approach will use the standardized risk

¹⁴⁹ For the purpose of this Framework, DvP transactions include payment-versus-payment (PvP) transactions.

¹⁵⁰ If the dates when two payment legs are made are the same according to the time zones where each payment is made, it is deemed that they are settled on the same day. For example, if a bank in Tokyo transfers Yen on day X (Japan Standard Time)

weights set forth in this Framework. However, when exposures are not material, licensees may choose to apply a uniform 100% risk-weight to these exposures, in order to avoid the burden of a full credit assessment.

CAPITAL REQUIREMENTS	TABLE CR-14
Number of Working Days after the agreed Settlement Date	Corresponding Risk Multiplier
From 5 to 15	8%
From 16 to 30	50%
From 31 to 45	75%
46 or more	100%

8. If five business days after the second contractual payment/delivery date the second leg has not yet effectively taken place, the bank that has made the first payment leg will deduct from capital the full amount of the value transferred plus replacement cost, if any. This treatment will apply until the second payment/delivery leg is effectively made.

and receives corresponding US Dollar via CHIPS on day X (US Eastern Standard Time), the settlement is deemed to take place on the same value date.

Appendix CR-7

Eligible Financial Collateral under the Simple Approach for Credit Risk Mitigation (BCBS December 2017, para 148)

- A. The following collateral instruments are eligible for recognition in the simple approach:** *[BCBS December 2017 par 148]*
- a. Cash (as well as certificates of deposit or comparable instruments issued by the lending bank) on deposit with the bank that is incurring the counterparty exposure.^{151,152}
 - b. Gold.
 - c. Debt securities rated by a recognized ECAI where these are either:
 - i. at least BB– when issued by sovereigns or PSEs that are treated as sovereigns by the national supervisor; or
 - ii. at least BBB– when issued by other entities (including banks and other prudentially regulated financial institutions); or
 - iii. at least A-3/P-3 for short-term debt instruments.
 - d. Debt securities not rated by a recognized ECAI where these are:
 - i. issued by a bank; and
 - ii. listed on a recognized exchange; and
 - iii. classified as senior debt; and
 - iv. all rated issues of the same seniority by the issuing bank are rated at least BBB– or A-3/P-3 by a recognized ECAI; and
 - v. the bank holding the securities as collateral has no information to suggest that the issue justifies a rating below BBB– or A-3/P-3 (as applicable); and
 - vi. the Supervisor is sufficiently confident that the market liquidity of the security is adequate.
 - e. Equities (including convertible bonds) that are included in a main index.
 - f. Undertakings for Collective Investment Schemes and mutual funds where:
 - a price for the units is publicly quoted daily; and
 - the collective investment schemes/mutual fund is limited to investing in the instruments listed in this Appendix¹⁵³

¹⁵¹ Cash-funded credit-linked notes issued by the bank against exposures in the banking book that fulfil the criteria for credit derivatives are treated as cash-collateralized transactions.

¹⁵² When cash on deposit, certificates of deposit or comparable instruments issued by the lending bank are held as collateral at a third-party bank in a non-custodial arrangement, if they are openly pledged/assigned to the lending bank and if the pledge/assignment is unconditional and irrevocable, the exposure amount covered by the collateral (after any necessary haircuts for currency risk) receives the risk weight of the third-party bank.

¹⁵³ However, the use or potential use by a collective investment schemes/mutual fund of derivative instruments solely to hedge investments listed in this **Part** shall not prevent units in that collective investment schemes/mutual fund from being eligible financial collateral.

Appendix CR-8

Exemptions to the Risk Weight Floor under the Simple Approach (BCBS December 2017 para 150)

Repo-style transactions that fulfil all of the following conditions are exempted from the risk-weight floor under the simple approach: *[BCBS December 2017 par 150]*

- a. Both the exposure and the collateral are cash or a sovereign security or PSE security qualifying for a 0% risk weight under the standardized approach;
- b. Both the exposure and the collateral are denominated in the same currency;
- c. Either the transaction is overnight or both the exposure and the collateral are marked to market daily and are subject to daily remargining;
- d. Following a counterparty's failure to remargin, the time that is required between the last mark-to-market before the failure to remargin and the liquidation of the collateral is considered to be no more than four business days;
- e. The transaction is settled across a settlement system proven for that type of transaction;
- f. The documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;
- g. The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable; and
- h. Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the bank has the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.

Appendix CR-9

General Treatment of Maturity Mismatches (BCBS December 2017 para 126 to 130)

For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a credit protection arrangement (for example, hedge) is less than that of the underlying exposure. (BCBS 2017, par 126)

1. In the case of financial collateral, maturity mismatches are not allowed under the simple approach.
2. For guarantees and credit derivatives, in the case of maturity mismatches, the amount of credit protection that is provided must be adjusted in accordance with the following paragraphs. When there is a maturity mismatch the credit protection arrangement may only be recognized if the original maturity of the arrangement is greater than or equal to one year, and its residual maturity is greater than or equal to three months. In such cases, CRM may be partially recognized as detailed below. (BCBS 2017, par 128)
3. When there is a maturity mismatch with recognized credit risk mitigants, the following adjustment applies:

$$P_a = P \cdot \frac{t - 0.25}{T - 0.25}$$

Where:

P_a = value of the credit protection adjusted for maturity mismatch

P = credit protection amount (for example, guarantee amount) adjusted for any haircuts

t = min { T , residual maturity of the credit protection arrangement expressed in years}

T = min {five years, residual maturity of the exposure expressed in years}

4. The maturity of the underlying exposure and the maturity of the hedge must both be defined conservatively.
5. The effective maturity of the underlying must be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period.
6. For the hedge, (embedded) options that may reduce the term of the hedge must be taken into account so that the shortest possible effective maturity is used. For example: where, in the case of a credit derivative, the protection seller has a call option, the maturity is the first call date.
7. Likewise, if the protection buyer owns the call option and has a strong incentive to call the transaction at the first call date, for example because of a step-up in cost from this date on, the effective maturity is the remaining time to the first call date.

Appendix CR-10

Reference meaning of the Rating Categories per Credit Quality Step

REFERENCE MEANING OF THE RATING CATEGORIES PER CREDIT QUALITY STEP		TABLE CR-15
Credit Quality Step	Meaning of the Rating Category	
1	The rated entity has extremely/very strong capacity to meet its financial commitments and is subject to minimal/very low credit risk	
2	The rated entity has strong capacity to meet its financial commitments and is subject to low credit risk but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than rated entities in CQS 1.	
3	The rated entity has adequate capacity to meet its financial commitments and is subject to moderate credit risk. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the rated entity to meet its financial commitments.	
4	The rated entity has the capacity to meet its financial commitments but is subject to substantial credit risk. It faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions, which could lead to the rated entity's inadequate capacity to meet its financial commitments.	
5	The rated entity has the capacity to meet its financial commitments but is subject to high credit risk. Adverse business, financial, or economic conditions will likely impair the rated entity's capacity or willingness to meet its financial commitments.	
6	The rated entity is currently vulnerable or highly vulnerable and is subject to very high credit risk, including in or very near to default. It is dependent upon favourable business, financial, and economic conditions to meet its financial commitments.	
7	Unrated entity	

Mapping of Long-Term Issuer Rating Scales to Credit Quality Steps¹⁵⁴

MAPPING OF RATING SCALES TO CREDIT QUALITY STEPS				TABLE CR-16
Credit Quality Step	S&P's	Moody	Fitch	CariCRIS
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA
2	A+ to A-	A1to A3	A+ to A-	AAA
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	AA+ to AA-
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	A+ to A-
5	B+ to B-	B1 to B3	B+ to B-	BBB+ to BBB-
6	CCC+ and below	Caa1 and below	CCC+ and below	BB+ and below
7	Unrated	Unrated	Unrated	Unrated

¹⁵⁴ This was crafted using CariCRIS' own mapping of the Rating Scales.

MARKET RISK CAPITAL CHARGE

Appendix MR-1

Operational requirements for hedging instrument purchased through the trading book and admitted for internal transfers (BCBS 2006 para 191 to 194, and BCBS 2019 para 25.21)

1. In order for a hedging instrument contract to be recognized, the following conditions must be satisfied: (BCBS 2006 paragraph 191 and BCBS 2019 para 25.21)
 - (a) The credit events specified by the contracting parties must at a minimum cover:
 - failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
 - bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and
 - restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account). When restructuring is not specified as a credit event, refer to paragraph 2 below.
 - (b) If the credit derivative covers obligations that do not include the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
 - (c) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay.
 - (d) Credit derivatives allowing for cash settlement are recognized for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit event valuations of the underlying obligation. If the reference obligation specified in the credit derivative for purposes of cash settlement is different than the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
 - (e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
 - (f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.
 - (g) A mismatch between the underlying obligation and the reference obligation under the credit derivative (i.e. the obligation used for purposes of determining cash settlement value or the deliverable obligation) is permissible if (1) the reference obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

- (h) A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if (1) the latter obligation ranks *pari passu* with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross acceleration clauses are in place.
2. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in paragraph 1 are met, partial recognition of the credit derivative will be allowed. If the amount of the credit derivative is less than or equal to the amount of the underlying obligation, 60% of the amount of the hedge can be recognized as covered for capital purposes. If the amount of the credit derivative is larger than that of the underlying obligation, then the amount of eligible hedge for capital purposes is capped at 60% of the amount of the underlying obligation. *This cap of 60% on a credit derivative without a restructuring obligation only applies with regard to recognition of credit risk mitigation of the banking book instrument for regulatory capital purposes and not with regard to the amount of the internal risk transfer. (BCBS 2006 para 192 and BCBS 2019 para 25.21 footnote 7)*
 3. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees will be eligible for recognition. The following exception applies. Where a bank buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected (either through reductions in fair value or by an addition to reserves), the credit protection will not be recognized. *(BCBS 2006 paragraph 193)*
 4. Other types of credit derivatives will not be eligible for recognition at this time. *(BCBS 2006 paragraph 194)*

OPERATIONAL RISK CAPITAL CHARGE

Appendix OR-1

Definition of Business Indicator Components

BUSINESS INDICATOR DEFINITIONS			TABLE OR-2
BI Component	P&L or balance sheet items	Description	Typical sub-items
Interest, Lease and Dividend	Interest Income	Interest income from all financial assets and other interest income (includes interest income from financial and operating leases and profits from leased assets)	<ul style="list-style-type: none"> ○ Interest income from loans and advances, assets available for sale, assets held to maturity, trading assets, financial leases and operational leases ○ Interest income from hedge accounting derivatives ○ Other interest income ○ Profits from leased assets
	Interest Expenses	Interest expenses from all financial liabilities and other interest expenses (includes interest expense from financial and operating leases, losses, depreciation and impairment of operating leased assets)	<ul style="list-style-type: none"> ○ Interest expenses from deposits, debt securities issued, financial leases, and operating leases ○ Interest expenses from hedge accounting derivatives ○ Other interest expenses ○ Losses from leased assets ○ Depreciation and impairment of operating leased assets
	Interest earning assets (balance sheet item)	Total gross outstanding loans, advances, interest bearing securities (including government bonds), and lease assets measured at the end of each financial year	
	Dividend income	Dividend income from investments in stocks and funds not consolidated in the financial institution's financial statements, including dividend income from non-consolidated subsidiaries, associates and joint ventures.	
Services	Fee and commission income	Income received from providing advice and services. Includes income received by the financial institution as an outsourcer of financial services.	Fee and commission income from: <ul style="list-style-type: none"> ○ Securities (issuance, origination, reception, transmission, execution of orders on behalf of customers) ○ Clearing and settlement; Asset management; Custody; Fiduciary transactions; Payment services;

BUSINESS INDICATOR DEFINITIONS			TABLE OR-2
BI Component	P&L or balance sheet items	Description	Typical sub-items
			Structured finance; Servicing of securitizations; Loan commitments and guarantees given; and foreign transactions.
	Fee and commission expenses	Expenses paid for receiving advice and services. Includes outsourcing fees paid by the financial institution for the supply of financial services, but not outsourcing fees paid for the supply of non-financial services (e.g. logistical, IT, human resources)	Fee and commission expenses from: <ul style="list-style-type: none"> ○ Clearing and settlement; Custody; Servicing of securitizations; Loan commitments and guarantees received; and Foreign transactions
	Other operating income	Income from ordinary financial institution's operations not included in other BI items but of similar nature (income from operating leases shall be excluded)	<ul style="list-style-type: none"> ○ Rental income from investment properties ○ Gains from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37)
	Other operating expenses	Expenses and losses from ordinary financial institutions operations not included in other BI items but of similar nature and from operational loss events (expenses from operating leases shall be excluded)	<ul style="list-style-type: none"> ○ Losses from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37) ○ Losses incurred as a consequence of operational loss events (e.g. fines, penalties, settlements, replacement cost of damaged assets), which have not been provisioned/reserved for in previous years ○ Expenses related to establishing provisions/reserves for operational loss events
Financial	Net profit (loss) on the trading book	<ul style="list-style-type: none"> ○ Net profit/loss on trading assets and trading liabilities (derivatives, debt securities, equity securities, loans and advances, short positions, other assets and liabilities) ○ Net profit/loss from hedge accounting 	

BUSINESS INDICATOR DEFINITIONS			TABLE OR-2
BI Component	P&L or balance sheet items	Description	Typical sub-items
		<ul style="list-style-type: none"> ○ Net profit/loss from exchange differences 	
	Net profit (loss) on the banking book	<ul style="list-style-type: none"> ○ Net profit/loss on financial assets and liabilities measured at fair value through profit and loss ○ Realized gains/losses on financial assets and liabilities not measured at fair value through profit and loss (loans and advances, assets available for sale, assets held to maturity, financial liabilities measured at amortized cost) ○ Net profit/loss from hedge accounting ○ Net profit/loss from exchange differences 	

THE END