CONSOLIDATED CAPITAL ADEQUACY REQUIREMENTS

CONSULTATION PAPER

PREFACE

The traditional approach of focusing on capital adequacy requirements of deposit-taking institutions (DTI's) on a solo (or individual institution) basis has several shortcomings when a DTI is a part of a financial group. A number of these were manifested in the global financial crisis of 2007-2008, which included:

i. The facilitation of regulatory arbitrage, where the same risk attracts different capital charges depending on where in the financial group the risk is booked;

ii. No consideration of contagion risk across different entities within a financial group;

iii. No contemplation of the adequacy of capital vis-à-vis group-wide risks which may include risks emanating from one or more unregulated entities; and

iv. No consideration for the different primary risks arising from the activities of insurance entities.[1]

Guided principally by the Basel I Accord and the first pillar of the Basel II Accord, this consultation paper proposes the general requirements concerning the group-wide capital adequacy of financial holding companies (FHCs), the methodology to be used for computing consolidated capital requirements of the FHC, and the treatment of insurance entities where applicable within these financial groups. This methodology further introduces market (interest rate) risk exposure for the trading book that is aimed at computing group-wide risk equivalent assets, against which, Bank of Jamaica's regulatory capital requirements will be held. The next phase will focus on the full implementation of the Basel II framework by December 2018.

This document will form the basis for provisions to be set out in Capital Adequacy Regulations for FHCs under the Banking Services Act. These regulations will be issued under Section 131(1)(c) of the Act.

[1] Primary risks from activities of insurance companies (investment and insurance underwriting risks), result in significant differences in risk profile, capital positioning and leverage considerations from those of deposit-taking activities and hence their separate break-out and addition from a risk perspective and for consolidated capital adequacy purposes.

Responding to this Paper

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 Capital Adequacy 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.

Submission of Responses

Comments on the proposals will be received up to the close of business on January 31, 2017 by email to fisdfeedback@boj.org.jm

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GLOSSARY

Bank	Bank of Jamaica established by the *Bank of Jamaica Act.*
Capital base	In relation to a licensee, means Tier 1 capital.
Capital management practices	This will include the review and evaluation of the financial group's processes and ability to monitor compliance with minimum capital adequacy ratios and other regulatory capital requirements.
Corresponding deductions approach	An approach which requires a proportionate deduction from the component of the FHC's regulatory capital corresponding to the equivalent component or type of capital where the shortfall has arisen in the FHC's subsidiary.
Deposit-taking institution ("DTI")	Means a bank, a merchant bank, or a building society.
Financial group	A group that (a) includes a DTI; (b) is headed by a FHC; and (c) is comprised of companies that each undertakes one or more financial services and, where applicable, a company referred to in section 73(2) of the BSA.
Financial holding company ("FHC")	A company (a) licensed under the BSA as a FHC; and (b) under-which other companies within the financial group are held, including- a. any of that company's subsidiaries incorporated outside of Jamaica; and b. entities over which it has effective control.
Group	Means that company and- a. any other company that is its holding company; b. any other company that is a subsidiary of the holding company; c. any company that directly or indirectly controls or is controlled, directly or indirectly, by any company referred to in (a) or (b); d. any company that effectively controls or is effectively controlled by any company referred to in (a) or (b); and e. any company that is controlled by a person who directly or indirectly controls a company referred to in (a), (b) or (c).
Intermediate holding company ("IHC")	A holding company at the head of a sub-group within a larger financial group.
Licensee	A person or body that is licensed under the BSA.

Participation	Investments in, or capital down-streamed in entities within a group, and other intra-group contributions and exposures (including loans between different group entities).
Primary ratio	The ratio between a licensee's capital base and the total of its assets.
Regulator	The Bank, the Financial Services Commission (FSC), the Registrar of Cooperatives, a foreign financial regulatory authority or any authority that has functions with respect to a company which is incorporated in Jamaica or service which is offered in Jamaica that are similar to the supervisory functions of the Bank or the Financial Services Commission.
Regulatory capital	In relation to a licensee, means Tier I capital plus Tier 2 capital less any deductions prescribed under any regulations relating to capital adequacy made under the BSA.
Statement of financial position ("SOFP")	Also called the balance sheet, is one of the key financial statements and reports an entity's assets, liabilities, and the differences in their totals.

I. INTRODUCTION

1. The Banking Services Act ("BSA") at section 69(1) requires FHCs to be established where a group of financial entities includes a DTI. FHCs are required to be licensed and be subject to certain obligations pursuant to section 75 of the Act. One of the obligations of the FHC is to ensure the maintenance of adequate capital and other financial resources for the operations of the group.

2. Regulatory capital requirements seek to ensure that risk exposures of financial institutions are backed by an adequate amount of high quality capital which is loss absorbing. Currently, the Bank requires DTIs to meet regulatory capital requirements on a standalone basis. By contrast, the approach put forward in this consultative paper is geared towards addressing risks which are unique to financial groups such as removing opportunities for regulatory arbitrage, double gearing and promoting the prudent maintenance and allocation of capital across the group. The proposed consolidated capital adequacy framework is therefore intended to supplement rather than replace the framework which evaluates capital adequacy on a solo basis.

3. The proposed framework is consistent with international best practice standards on capital adequacy and will include a risk-based capital adequacy measure as well as a leverage or primary ratio requirement (a non-risk-based backstop measure), both to be assessed against group-wide exposures.

4. This paper includes proposals regarding the general requirements for capital adequacy and the methodology to be used for computing consolidated capital requirements. In assessing the requirements for group-wide capital adequacy at the FHC level, one of the objectives of this methodology is to determine whether the FHC has a surplus of available capital above the Bank's capital requirements to address group-wide risks of the FHC.

5. The methodology introduces the computation of group-wide market (interest rate) risk exposure of the trading book and the treatment of the capital adequacy and risk positions of insurance entities.

6. This approach is not intended to substitute or override sectoral requirements of other regulators in Jamaica and other jurisdictions which apply on a standalone basis. Consequently, in addition to the standalone capital results for the DTIs, the FHC shall report to the Bank at least quarterly its regulatory capital on a standalone basis as well as on a consolidated basis. In addition, the FHC shall report on at least a quarterly basis the capital requirements of the intermediate holding company where applicable.

7. Appendix 1 illustrates the modular applicability of the consolidated capital adequacy framework.

II. BENEFITS OF A CONSOLIDATED APPROACH TO CAPITAL ADEQUACY

8. With the introduction of consolidated supervision, the Bank will now complement the solo supervision of DTIs' capital adequacy with oversight of financial groups' capital management at the consolidated level. This will include the requirement for group-wide capital adequacy and address issues such as:

i. Group-wide risks, i.e. consideration of risks to the financial group arising from the activities of all entities within the group;

ii. The potential for multiple gearing where the same capital may be used simultaneously within a financial group to buffer against risk in two or more entities;

iii. Excessive leverage within a group where a parent could potentially issue debt and downstream the proceeds to one or more of its subsidiaries in the form of equity;

iv. Situations of excessive gearing through unregulated intermediate holding companies having participations in dependents or affiliates engaged in financial activities (which are not considered in the solo approach to capital);

v. Risks being accepted by unregulated entities within a financial group. For example, entities carrying out activities similar to the activities of regulated entities for solvency purposes (e.g. leasing); and

vi. Regulatory arbitrage across different financial subsectors in a financial group.

9. The framework will support and foster the availability of transferable capital within the group. It should be established that for capital to be deemed transferable, it must be unencumbered and available to meet regulatory requirements in different entities, subsectors or jurisdictions should the need arise, taking account of any regulatory and legal restrictions on capital, while ensuring the loss absorbing capital available within the group is not overstated.

10. The FHC framework will foster greater regulatory collaboration and cooperation with relevant domestic and overseas regulators to enable effective regulation of capital on a consolidated basis. This will permit a more efficient and effective assessment of the financial groups' capital positions and compliance with minimum capital requirements, as well as a more coordinated approach to assessing and resolving capital inadequacies where these may arise.

III. QUANTITATIVE AND QUALITATIVE CONSOLIDATED SUPERVISION REQUIREMENTS

11. The Bank will use two broad approaches to conduct consolidated supervision of licensees:

i. Quantitative consolidated supervision - extending capital adequacy requirements on a consolidated basis to the financial group.

ii. Qualitative consolidated supervision – assessing, among other things, the overall strength of the financial group's capital management practices.

12. The proposed regulatory framework for group-wide capital adequacy is set out in this consultation paper and represents the quantitative aspect of consolidated supervision.

13. In connection with the financial group's capital management practices, the FHC will be required to comply with the expectations as set out in Schedule 1. Guidance on qualitative consolidated supervision will be promulgated through Standards of Sound Practice in relation to the obligations of the FHC and will be issued at a later date.

IV. SCOPE OF APPLICATION

14. This consultation will inform the development of the consolidated capital adequacy regulations for FHCs. This will include the computation of regulatory capital, a risk-based capital adequacy ratio, and a leverage ratio (primary ratio) for each licensee on the following basis:

    a. DTI at the standalone ("solo") level;

    b. DTI operating as an intermediate holding company, that is, a holding company in the financial group which is itself a subsidiary of the FHC; and

    c. FHC on a consolidated basis including the consolidation of all members treated as part of the financial group.

15. The FHC which is itself a DTI[2] will be required to comply with prudential capital adequacy requirements at both the standalone (solo) level and the consolidated group level.

16. The FHC, whether non-operating or a DTI, will be required to ensure that sufficient capital is available to address the risks of the financial group and all its members.

17. Determination of consolidated capital requirements will be as follows:

    i. DTIs risk positions, capital rules and regulatory reporting requirements will apply at the level of the DTI consolidated with all its subsidiaries - including in respect of securities entities where these form part of the sub-consolidated group.

    ii. DTIs' risk positions, capital rules and regulatory reporting requirements will apply on a consolidated basis at the FHC level - including in respect of consolidated securities entities.

    iii. For entities not yet regulated, risk positions, capital rules and regulatory reporting requirements will apply if the entities introduce risks to the financial group, pursuant to section 71(2)(a) of the BSA.

    iv. Capital adequacy and risk positions for insurance entities and activities are:

        a) Included in the FHC's group-wide assessment of risk exposures and capital adequacy determinations at the FHC level and at the DTI intermediate group level. These risk positions and capital adequacy requirements will be:

            i. Submitted by the FHC to the Bank in such manner and form as will be prescribed;

            ii. Validated and authenticated by the FSC or equivalent functional regulators in overseas jurisdictions. These requirements will be subject to assessments, determinations and adjustments as deemed necessary by the Bank; and

            iii. Applicable at the insurance entity level (on a solo basis), on a sectoral basis and at the consolidated level.

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[2] A DTI may be licensed as the FHC of the financial group at the discretion of the Supervisory Committee [BSA, 74(2)(3)].

18. The sectoral regulatory capital requirements which govern individual entities in the financial group will remain applicable.

19. In addition to meeting its consolidated capital adequacy ratio requirements (Part X below), 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 capital in each jurisdiction in which they operate.[3] This includes ensuring that:

    i. Each regulated entity in the financial group meets and maintains individual standalone and sector regulatory capital requirements.

    ii. The financial group maintains adequate capital on a group-wide basis that is commensurate with the risk profile of the group, and adequately mitigates risks associated with the activities of members of the group.

20. Part XI below sets out the proposed method for conducting assessments of group-wide capital adequacy and for determining and dealing with capital shortfalls or deficits.

V. DOMAIN OF CONSOLIDATION

21. Consolidated capital positions, capital requirements and capital adequacy ratios at the FHC group and DTI intermediate group levels are to be determined using the consolidated SOFP capital and asset positions, and aggregate off-balance sheet positions as follows:

    1. Calculation of consolidated capital adequacy at the intermediate group level:

        i. Consolidation of the DTI and its subsidiaries (see module 3, Appendix 1);

        ii. Inclusion of insurance entities and activities, the computation of the associated values would be guided by sectoral regulators;

        iii. Inclusion of any other entity or activity where the Supervisor determines that consolidation would be appropriate for capital adequacy purposes.

    2. Calculation of consolidated capital adequacy at the FHC's level:

        i. Consolidation of the FHC and members of the financial group (module 1, Appendix 1);

        ii. Inclusion of insurance entities and activities, the computation of the associated values would be guided by sectoral regulators;

        iii. Inclusion of any other entity or activity where the Supervisor determines that consolidation would be appropriate for capital adequacy purposes.

[3] BSA, Section 75(1)(a) and (c)

VI. TREATMENT OF INSURANCE ENTITIES

22. The risk positions and capital adequacy positions of insurance entities and activities are computed on a solo and consolidated basis and, where applicable, at the sectoral and intermediate level (modules 1 and 4, Appendix 1) as prescribed by the Bank, FSC or equivalent functional regulators in overseas jurisdictions.[4]

23. The insurance entity is included in the FHC's group-wide assessment of risk exposures, capital adequacy determinations, at the FHC level (module 1, Appendix 1) and DTI intermediate group level (module 3, Appendix 1). In this regard, the Bank will be guided by the assessments and calculations of the functional regulators in making its determinations on capital positions and requirements of insurance companies.

24. Pursuant to section 75 (1)(a) of the BSA, the FHC is obligated to bear the full ownership risk of the insurance entity or sector in its group and recognizing these risks on a group-wide basis.[5] The activities and prescribed risk positions and capital adequacy determinations of insurance entities will be assessed individually by the FHC using entity specific or sector specific capital rules and evaluated as part of the Assessment of Group-Wide Capital Adequacy set out at Part XI.[6]

25. Accordingly, FHCs should ensure that insurance companies forming part of financial groups are adequately capitalized. Any uncorrected capital shortfall arising from the insurance holdings of a financial group should be deducted from the FHC's capital base and regulatory capital so as to be reflected in the calculation of the FHC's consolidated capital ratios.[7]

26. Conversely, in assessing group-wide capital adequacy, the relevant regulator will determine which insurance specific components of capital are transferrable by the insurance entity, if necessary. The objective of this guidance is to ensure instruments issued by insurance entities map to the closest corresponding tier of bank capital.

VII. DETERMINATION OF CONSOLIDATED CAPITAL POSITIONS AND MINIMUM CAPITAL RATIOS AT THE FINANCIAL GROUP AND DTI INTERMEDIATE GROUP LEVELS

27. The following list provides the steps for calculating the consolidated capital positions and capital adequacy ratios of the FHC and DTI. Each step is detailed in Parts IX and X below:

[4] The requirement for financial holding companies to ensure adequate capitalization of financial subsidiaries will apply, regardless of whether the subsidiary is engaged in insurance or other financial activity.
[5] According to Basel II [para, 30] this responsibility is that of a bank that owns an insurance subsidiary, however this responsibility resides with the FHC that heads the financial group in keeping with the responsibilities of a FHC set out at section 75(1) of the BSA.
[6] Using a supplemental quantitative capital adequacy assessment methodology based on financial conglomerate supervision principles.
[7] Basel II, para. 27, 34

1. Identify all relevant entities within the financial group that will be subject to consolidation.
2. Undertake consolidation in accordance with International Financial Reporting Standards (IFRS), promulgated by the Institute of Chartered Accountants of Jamaica (ICAJ).
3. Identify consolidated Tier 1 capital and Tier 2 capital components from the consolidated SOFP.

The following steps are for the calculation of the Primary Ratio:

4. Calculate the consolidated capital base, that is, Tier 1 capital (the numerator).
5. Determine consolidated total assets (the denominator).
6. Calculate the consolidated primary ratio (Part X below).

The following steps are for the calculation of the Risk-based Capital Adequacy Ratio:

7. Calculate the consolidated regulatory capital, that is, Tier 1 + Tier 2 capital less prescribed deductions (the numerator).
8. Calculate the consolidated total on-balance sheet assets and off-balance sheet assets.
9. Calculate the consolidated on-balance sheet risk-weighted assets.
10. Calculate aggregate off-balance sheet risk-weighted assets.
11. Calculate aggregate risk-weighted funds management balances.
12. Calculate aggregate risk-weighted foreign exchange exposures.
13. Calculate aggregate risk-weighted market risk exposure (trading book)
14. Calculate the summation of items 9 to 13 (the denominator).
15. Calculate the consolidated capital adequacy ratio (Part X below).

VIII. CONSOLIDATION METHODOLOGY

28. Except as otherwise provided by the Supervisory Committee using powers under section 132(1)(e) of the BSA, consolidation should be done using IFRS, promulgated by the ICAJ, [BSA, 84(2)].

29. The starting point for arriving at the consolidated capital components (numerator of the capital ratios) and the consolidated on-balance sheet asset position of the FHC and DTI is the consolidated SOFP.

30. As far as possible, the consolidated SOFP should be prepared using uniform accounting policies for like transactions and other events in similar circumstances, across all subsidiaries and entities included in the consolidation.

31. For the purposes of determining the capital adequacy position at the FHC level and at the DTI intermediate group level, the risk positions and capital adequacy positions of insurance entities shall be prescribed by the functional regulator in the relevant jurisdiction.

32. The consolidation process should ensure the elimination of:

    i. All intra-group transactions, down-streamed capital, investments and capital positions and corresponding asset positions.

ii. All investments in subsidiaries and affiliates from the parent's capital and their corresponding asset positions.

33. The resulting consolidated SOFP should show the consolidated assets, liabilities and shareholders' equity positions for the FHC.

34. The consolidated SOFP should be utilized to identify at each level:

- Components of Tier 1 capital
- Components of Tier 2 capital
- On-balance sheet assets
- Total assets

IX. DETERMINATION OF CAPITAL RATIOS COMPONENTS

35. The basis of measuring the numerator and denominator components of the consolidated capital ratios for FHCs and DTIs on a consolidated basis will be the same as for standalone DTIs, except that:

- Capital components will be derived from the consolidated SOFP.
- Total assets will be derived from the consolidated SOFP.
- Assets subject to risk adjustments (for the on-balance sheet component of the capital adequacy ratio's denominator) will be derived from the consolidated SOFP.
- The remaining denominator components of the capital adequacy ratio will be the aggregate of the positions for all entities included in the accounting consolidation.

Calculation of Consolidated Capital Base and Consolidated Regulatory Capital

36. Apply the appropriate aggregations and deductions to the consolidated capital components derived from the consolidated SOFP to arrive at the consolidated Tier 1 capital, consolidated Tier 2 capital and consolidated regulatory capital (consolidated Tier 1 capital + consolidated Tier 2 capital – prescribed deductions).

Calculation of Consolidated On-Balance Sheet Risk-Weighted Assets

37. The consolidated asset positions shall be derived from the consolidated SOFP of the FHC, or where applicable the DTI, to arrive at the on-balance sheet component of the denominator of the capital adequacy ratio.

38. The on-balance sheet assets shall be classified in one of four broad risk-weighting categories, namely, zero per cent (0%); twenty per cent (20%); fifty per cent (50%); and one hundred per cent (100%).[8]

[8] See Schedule 2 – On-Balance Sheet Assets – Risk Weight Categories

39. Classification shall be dependent on the Supervisor’s assessment of (a) the nature of the counter-party; or (b) where applicable, the guarantor or the collateral.

40. Amounts classified in each category shall be multiplied by the applicable risk-weighting, with the resulted weighted values added together to arrive at total risk-weighted assets.

41. The amount of assets deducted in computing capital base (such as goodwill, investments in unconsolidated subsidiaries, or back-to-back securities) shall be risk-weighted zero per cent (0%).

42. Asset balances subject to risk-weighting must be reported net of specific provisions for loss.

43. Recognition of collateral in reducing the credit risk of claims shall be limited to cash (in which there is a secured interest) or securities issued by:

    a) The Government of Jamaica;
    b) The Government of the United States, Canada, or the United Kingdom;
    c) Central banks and other public sector entities of the G10 and CARICOM countries, specified multilateral development banks or lending agencies and denominated in the issuer’s national currency, as approved by the Supervisor. That portion of a claim that is covered by such approved collateral will be assigned the risk-weight given to the collateral (namely, 0% to 20%).

44. Loans or other exposures unconditionally guaranteed by the following shall attract the weight assigned to a direct claim on the guarantor.

    a) The Government of Jamaica;
    b) The Government of the United States, Canada, or the United Kingdom;
    c) Central banks and other public sector entities of the G10 and CARICOM countries;
    d) Approved multilateral development banks, or lending agencies; and
    e) A bank or supervised DTI incorporated in a G-10 or CARICOM country approved by the Supervisor.

Calculation of Aggregate Off-Balance Sheet Risk-Weighted Assets

45. With the exception of commitments which are unconditionally cancellable, all off-balance sheet items shall be assigned a 100% credit conversion factor to determine an on-balance sheet credit equivalent amount. The on-balance sheet equivalent amount is calculated by multiplying the respective off-balance sheet item by the relevant credit conversion factor.

46. The credit equivalent amount will then be treated as an on-balance sheet item and assigned a risk-weight appropriate to the counter-party or, if relevant, the weight assigned to the guarantor or the nature of the collateral.

47. At any time when funds are managed, capital adequacy requirements shall apply to such funds, in recognition of the risks (reputational, contagion and others) which accrue as a result of involvement in this area of business.

48. Where funds are managed on a specifically non-discretionary basis, no capital adequacy requirements will apply.

49. Where funds are managed on a discretionary basis, such portfolios shall be assigned a conversion factor of 25% to determine an on-balance sheet equivalent for the purposes of assigning risk-weights.

50. The on-balance sheet equivalents will then be assigned a risk-weight appropriate to the counter-party or the nature of the collateral as specified under the previous section.

51. These regulations shall not be deemed to grant any power or right regarding the management or investment of customers' funds which is inconsistent with the provisions of any regulations under the Bank of Jamaica Act or Standards of Sound Practices issued by the Supervisory Committee on the Investment of customers' funds.

Calculation of Aggregate Risk-Weighted Funds Management Balances

52. Group-wide funds management positions subject to risk adjustments will be the aggregate of funds management positions for all entities included in the consolidation, adjusted to eliminate all intra-group exposures for these entities.

Calculation of Aggregate *Foreign Exchange Exposures*

53. Two processes are needed to calculate the capital requirement for foreign exchange risk as follows:

   a) The measurement of exposure or net open position in a single currency;
   b) The measurement of the risks inherent in the mix of long and short positions in different currencies.

54. The exposure in a single currency or net open position in a single currency shall be the aggregate of:

   a) The net spot position (all asset items less all liability items, including accrued interest, denominated in the currency in question);
   b) The net forward position (all amounts to be received less all amounts to be paid under forward foreign exchange transactions);
   c) Guarantees (and similar transactions) that are certain to be called and are likely to be irrevocable; and
   d) Any other item representing a profit or loss (such as accrued interest or expense) in foreign currencies.

55. To measure the exposure in the mix of long and short positions, the nominal amount (or net present value) of the net position in each foreign currency is converted at spot rates into Jamaican dollars. The overall net open position is measured by aggregating separately the individual net short positions and the individual net long positions. The greater of the two sums represents the overall foreign exchange risk position which is to be included in the denominator of the capital adequacy ratio.

Calculation of Aggregate Market Risk Exposures

56. The capital requirement for interest rate risk market exposure, is the sum of two separately calculated charges (see Appendix 2): (a) **specific risk** of each security, whether it is a short or a long position, and (b) **general market risk** where long and short positions in different securities or instruments can be offset. This is completed for each currency in which the reporting institution has an exposure.

57. The measurement system should include all interest rate derivatives and off-balance sheet instruments 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). The derivatives should be converted into positions in the relevant underlying instrument and should become subject to specific and general market risk charges. In order to determine the capital charge the amounts reported should be the market value of the principal amount of the underlying or the notional underlying.

58. Futures and forward contracts, including FRAs, are treated as a combination of a long and a short position in a notional 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. Swaps will be treated as two positions in notional securities with relevant maturities.

X. CONSOLIDATED CAPITAL RATIOS AND MINIMUM RATIO REQUIREMENTS

Primary Ratio (PR)

59. The primary ratio should be calculated for each FHC, and, where applicable, each DTI on a consolidated basis as follows:

Primary Ratio
$$\frac{\text{Consolidated Capital Base}}{\text{Consolidated Total Assets}}$$

Capital Adequacy Ratio (CAR)

60. The capital adequacy ratio should be calculated for each FHC, and, where applicable, each DTI on a consolidated basis as follows:

Capital Adequacy Ratio
Consolidated Regulatory Capital ——————————————— [Consolidated risk-weighted on-balance sheet assets + Aggregate group-wide risk-weighted off-balance sheet assets + Aggregate group-wide risk-weighted funds management balances + Aggregate group-wide foreign exchange risk exposures + Aggregate group-wide market risk exposure]

Minimum Ratios

61. Each FHC, and, where applicable, each DTI shall maintain at all times the minimum ratios set out below computed on a consolidated basis:

Ratio	Deposit Taking Institution	Financial Holding Company
Consolidated Primary Ratio	6%	6%
Consolidated Capital Adequacy Ratio	10%	10%

62. The CAR requirements will be set at levels that are no lower than the standards recommended by the Basel Committee on Banking Supervision (BCBS). The Bank may, however, set higher CAR requirements where warranted, having regard to the significance of the FHC group in Jamaica and other relevant factors including size, interconnectedness, complexity, cross-jurisdictional activity and substitutability.

XI. ASSESSMENT OF GROUP-WIDE CAPITAL ADEQUACY

63. The methodology discussed in this section is complementary to the steps set out at Sections VII to X above dealing with computation of prudential consolidated capital ratios and requirements for FHCs and DTIs on a consolidated basis. It should also be interpreted as complementary to the existing solo, sectoral approaches to the assessment of capital adequacy administered by the Bank, FSC and, where relevant, other regulators.

64. The methodology is to be applied at the FHC level to:

   i. Facilitate the assessment of the adequacy of capital on a group-wide basis, including in respect of insurance subsidiaries and activities to determine the consolidated regulatory capital and capital requirement for FHCs and DTIs; and

ii. Identify group-wide capital surplus or deficits (i.e. capital shortfall).

65. In assessing group-wide capital adequacy, the Bank will engage in collaboration and cooperation with the FSC and other functional regulators to ensure consistency in interpretation and application, as well as regulatory efficiency to minimize reporting and other regulatory burdens for members of financial groups.

66. Where, after application of the group-wide capital assessment methodology, a financial group or a member the group is determined to have a capital shortfall,[9] the Bank will require that prompt and appropriate action is taken to address capital deficiencies. This may involve a review by the FHC of the capital allocation among members of the group to ensure that this adequately addresses supervisory concerns arising from the assessment.

Assessing Group-Wide Capital Adequacy

67. The steps to be utilized in assessing the group-wide capital adequacy are set out below:

1. Calculate the regulatory capital requirement for each consolidated entity or sector in the financial group. This includes ascertaining the regulatory capital requirement and capital levels for the group's insurance subsidiaries or the insurance sector.
2. Calculate the regulatory capital requirement for consolidated unregulated entities in the financial group.
3. Compare each group member's (including the insurance entity's or sector's) sectoral capital level to its sectoral regulatory capital requirement and identify the capital surplus or deficit present.
4. Evaluate the availability of freely transferable capital across entities, sectors or jurisdictions – surplus capital not freely transferable will not be available to the FHC at the group level to offset deficits in other entities or sectors, and should be deducted from the group-wide available capital.
5. Aggregate the regulatory capital requirements of each consolidated regulated entity and the capital requirements for consolidated unregulated entities.
6. Compare the aggregate regulatory capital requirements to the FHC's consolidated regulatory capital level.
7. Determine group-wide (including insurance) capital surplus or deficit.
8. Consider the need for the FHC to source or fund additional capital or provide capital support for any member of the group after consideration of the transferability of capital and a review of the distribution of risks and capital within the group.

[9] This may be indicative of, not only the amount of capital, but the allocation and/or distribution of capital throughout the group in accordance with the group's risk profile.

Table 1: An example of the sectoral assessment of group-wide capital adequacy.

	Banking	Securities	Unregulated	Insurance	Aggregate Group-wide Total
Capital Required	**16**	**20**	**10**	**12**	**58**
Actual Capital	**35**	**22**	**7**	**15**	**79**
Surplus/Deficit	**19**	**2**	**-3**	**3**	**21**

Dealing with Capital Shortfalls

68. The sector specific capital or solvency requirements for different financial entities in a financial group should be managed in accordance with the corresponding sector rules. Where a shortfall has been identified for any entity by functional sectoral regulators,[10] the FHC should ensure that sufficient capital is available on a group-wide basis to cover the identified shortfall.

69. Where a shortfall that relates to insurance subsidiaries or other group members, included in arriving at the consolidated FHC's regulatory capital position, an additional deduction should be made to arrive at the consolidated regulatory capital and capital base of the FHC.[11] Should there be a shortfall in regulatory capital as prescribed by functional regulators, the Bank's proposed approach is for deductions to be made from the FHC's consolidated regulatory capital and capital base to address the risks and fully absorb the shortfall.

70. The methodology proposed by the Bank for reducing regulatory capital and capital base, as appropriate, is the "corresponding deductions" approach. Alternatively, the deduction could be made from the category of capital for which a funding capital instrument would qualify if issued by the FHC to address the shortfall. If there is insufficient capital for the deduction in a particular capital component or a particular Tier of capital, the deduction should be made from the next higher Tier of capital.

Additional Information which may be required to Determine Capital Shortfall

71. Information from sectoral regulators on the capital requirements for other regulated entities across the financial group and aggregated sector positions.

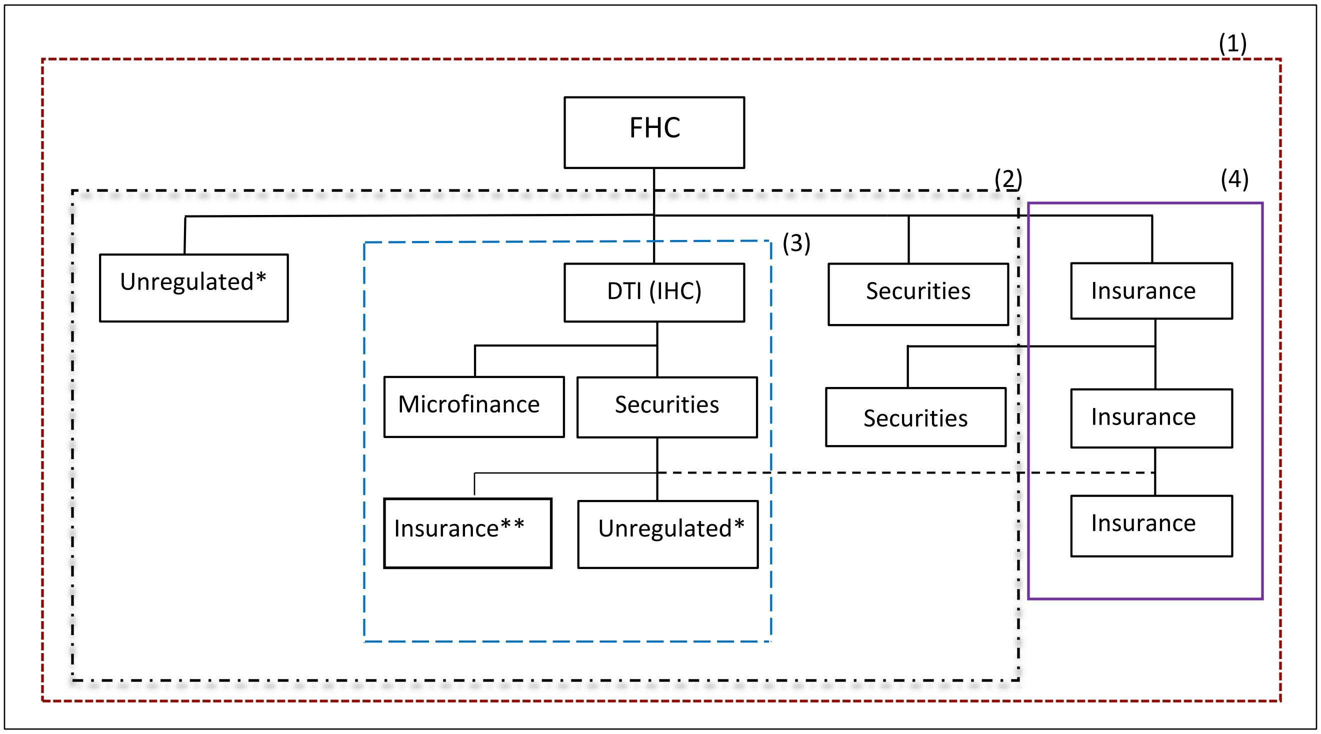
72. Regulatory capital positions of regulated banking, insurance and securities institutions in the financial group.

73. Details of participations by DTIs and FHCs in banking, insurance and securities entities.

[10] Including Bank of Jamaica in respect of DTIs on a solo basis.
[11] Refer to Basel II, para. 27 and 34. The deduction is an alternative way of requiring the FCH to carry the additional capital to cover the shortfall, as it reduces regulatory capital prior to calculating capital adequacy ratios.

APPENDIX 1

Illustration – The Modular Application of Consolidated Capital Adequacy Framework



Module 1: Boundary of the financial group. Regulatory capital and capital adequacy ratio requirements are to be applied up to the level of the FHC on a consolidated basis (including insurance entities).

Module 2: Boundary of the group for prudential capital adequacy purposes. Regulatory capital and capital adequacy ratio requirements are to be applied to these entities.

Module 3: Boundary of a consolidated DTI. Regulatory capital and capital adequacy ratio requirements are to be applied up to this level on a consolidated basis for entities excepting for insurance companies.

Module 4: Boundary of insurance sector. The FHC is responsible to ensure that there is sufficient capital on a group wide basis to enable insurance subsidiaries to meet their solo, sectoral and consolidated regulatory capital adequacy requirements.

**Includes support services and financial services*

***Denotes the same entity in module 4*

APPENDIX 2

Calculation of Aggregate Interest Rate Market Risk Exposures

Part A:

SPECIFIC RISK

1. Individual securities of the DTI will be classified into one of three broad categories depending on the counterparty: (a) government; (b) qualifying; and (c) other, as defined in Schedule 3.

2. The specific risk of each security is calculated by multiplying the absolute values of the debt position by their respective risk capital charges as set out in Table 1 below. The risk capital charges correspond to the category of the counterparty and the residual maturity of the instrument. Total specific risk capital charge is the sum of the specific risk capital charge of each security.

Table 2: Specific Risk Categories and their Corresponding Maturities and Weights

Category	Maturity	Specific Risk Capital Charge
Government	N/A	0.00%
Qualifying	6 months or less	0.25%
	6 to 24 months	1.00%
	Over 24 months	1.60%
Other	N/A	8.00%

3. In measuring the charge, offsetting will be restricted to matched positions in an identical issue (including positions in derivatives). Even if the issuer is the same, no offsetting will be permitted between different issues since differences in coupon rates, liquidity and call features mean that prices may diverge in the short run.

4. Interest rate and currency swaps, FRAs, forward foreign exchange contracts and interest rate futures are not subject to a specific risk charge. This exemption also applies to futures on an interest rate index. 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 as set out in paragraphs 62.

Part B:

GENERAL MARKET RISK

5. The methodology proposed to compute general market risk is the maturity method from the Basel II framework. The general market risk capital charge is the sum of four components:

   a) The net short or long position of the relevant securities;
   b) A small proportion of the matched positions in each time-band (the vertical disallowance);
   c) A larger proportion of the matched positions across different time-bands (the horizontal disallowance); and
   d) A net charge for positions in options, where appropriate.

6. Separate maturity tables should be utilized for each currency in which a reporting institution has significant positions. Capital charges are calculated for each currency separately and then summed with no offsetting between positions of opposite sign. An example of a maturity table is highlighted in Figure 1 below of which the following descriptions relate.

7. There is no distinctive treatment applied for deeply discounted or zero-coupon bonds.

8. Slot respective long or short positions in debt securities and other sources of interest exposures (including derivative instruments) into the thirteen time-bands of the maturity table as shown (Row 3). 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 repricing date.

9. Opposite positions of the same amount in the same issues (but not different issues by the same issuer), whether actual or notional, may be excluded from the interest rate maturity framework, as well as closely matched swaps, forwards, futures, and FRAs.

10. 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.

11. Amounts classified in each time-band shall be multiplied by the applicable risk-weight as prescribed by Basel (Row 6). The resulting long and short risk-weighted positions shall be slotted into the respective rows of the maturity table.

Vertical Disallowance

12. If a particular time-band reflects either exclusively long positions or short positons a capital charge is not applied – the resulting vertical disallowance is zero. This is because capital charges are only applied to the matched position within a time-band, that is, the lower of absolute long and short positions. If the positions are the same, a match will be unobtainable. Capital charges are applied to reflect the resulting basis risk and gap risk owing to different instruments and different maturities included in each time-band.

13. If the net long or net short positions are identical in amount but are different issues with different tenures within a time-band, the capital charge can be applied on either of the absolute long or short positions as they are both matched. There would be no unmatched positions to carry forward.

14. Compare absolute values of the weighted long and short positions (Rows 8 and 9) in each time band and record the matched portion (the smaller absolute value) in the respective row (Row 10), with the unmatched position recorded in the following row (Row 11).

15. The matched portion is multiplied by a 10% capital charge, resulting in **capital charge 1** – the vertical disallowance. The result is recorded (Row 13), and the total vertical disallowance is the sum of each capital charge (reflected in cell P13).

Horizontal Disallowances

Horizontal disallowance within the zone

16. Time-bands are further categorized into three time zones: (a) Zone 1 – zero to one year; (b) Zone 2 – one year to four years; and (c) Zone 3 – four years to 20 years. Capital charges 2 to 4 relate to matched positions within and across time zones and are termed horizontal disallowances.

17. From the net positions of the residual unmatched amounts within each time-band (row 11), compare the absolute values of the total long positions against the total short positions within each time zone. The matched value (or smaller of the absolute values) for each zone shall be determined and recorded, with the unmatched values (or the difference between the larger and smaller absolute values) determined and recorded (row 15).

18. The capital charges to be levied on the matched positions in each zone are forty per cent (40%), thirty per cent (30%) and thirty per cent (30%) respectively for zones 1, 2 and 3 (shown in cells F16, I16 and O16). The three resulting amounts recorded (row 17) are horizontal disallowances and **capital charge 2**. The total horizontal disallowance is the sum of each capital charge (cell P17).

Horizontal disallowance between zones

19. From the net positions of the residual unmatched amounts within each time zone (row 15), compare the absolute values of the total long positions against the total short positions across adjacent time zones (compare zone 1 to zone 2 and zone 2 to zone 3). The matched value for each zone shall be determined and recorded (row 18), with the unmatched values determined and recorded (row 19).

20. Capital charges to be levied on matched positions between adjacent zones are forty per cent (40%) each (as shown in cells I20 and O20). The two resulting amounts recorded (row 21), are also called horizontal disallowances and **capital charge 3**. The total horizontal disallowance is the sum of each capital charge (reflected in cell P21).

21. Compare absolute values of the unmatched position from zone 1 against the unmatched position resulting from the comparison of zones 2 and 3 from paragraph 19. If the comparison results in a match, a capital charge of one hundred per cent (100%) shall be levied against that matched position (cell O24). The resulting amount, recorded (in cell O35), is **capital charge 4**. This is transposed to the Total Capital column (cell P25).

Figure 1: An Example of the Calculation of General Market Risk Exposure

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1																		
2			ZONE 1				ZONE 2			ZONE 3								3 Zones
3		Time Band:	0 - 1 mth	> 1 - 3 mths	> 3 - 6 mths	> 6 - 12 mths	> 1 - 2 yrs	> 2 - 3 yrs	> 3 - 4 yrs	> 4 -5 yrs	> 5 - 7 yrs	> 7 - 10 yrs	> 10 - 15 yrs	> 15 - 20 yrs	> 20 yrs	Capital		13 Timebands
4		**Positions:**																
5	1.1	Net Long		70	150		850		680	150								
6	1.2	Net Short		250	280	400	150											
7	2.0	Risk Weight	0.00%	0.20%	0.40%	0.70%	1.25%	1.75%	2.25%	2.75%	3.25%	3.75%	4.50%	5.25%	6.00%			Basel Risk-weights
8	2.1	Weighted Long (net long * risk-weight)	0	0.14	0.6	0	10.625	0	15.3	4.125	0	0	0	0	0			Comparison 1
9	2.2	Weighted Short (net short * risk-weight)	0	-0.5	-1.12	-2.8	-1.875	0	0	0	0	0	0	0	0			
10	3.0	Matched (within the band)	0	0.14	0.6	0	1.875	0	0	0	0	0	0	0	0			
11	3.1	Unmatched (within the band)	0	-0.36	-0.52	-2.8	8.75	0	15.3	4.125	0	0	0	0	0			Comparison 2
12	3.2	Capital Required	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%			Basel Capital Charge
13	3.3	Capital Charge 1/Vertical Disallowance (capital charge * matched position)	0.00	0.01	0.06	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26		
14	4.0	Matched (within the zone)				0			0						0			
15	4.1	Unmatched (within the zone)				3.68			24.05						4.125			Comparison 3
16	4.2	Capital Required				40%			30%						30%			Basel Capital Charge
17	4.3	Capital Charge 2/ Horizontal Disallowance 1 (capital charge * matched position)				0.00			0						0	0		
18	5.0	Matched (between the zone)							0						0			
19	5.1	Unmatched (between the zone)							27.73						28.175			
20	5.2	Capital Required							40%						40%			Basel Capital Charge
21	5.3	Capital Charge 3/ Horizontal Disallowance 2 (capital charge * matched position)							0						0	0		
22	6.0	Resid. Matched (between zones 1 & 3)													0			
23	6.1	Resid. Unmatched (between zones 1 & 3)													31.855			
24	6.2	Capital Required													100%			Basel Capital Charge
25	6.3	Capital Charge 4 (capital charge * matched position)													0	0		
26	7.0	Capital Charge 5 (residual unmatched position)														31.855		
27	8.0	Total Capital Charge														32.1165		
28																		
29																		
30																		

	A	B	C
31		**Instruments**	**US$ (mn)**
32	1	GOJ Bond -long, 8%, 2 years, fixed rate	600
33	2	Interest Rate Swap - 7%, payout fixed rate 3 1/2 years, Received Variable rate 9 months	400
34	3	Futures - long, 6%, life of 1.5 years, maturing in 3 months	250
35	4	Interest Rate Swap -5%, payout fixed rate 5 years, Received variable rate 18 months	150
36	5	NWC Bond - long, 15%, 4 years, variable repricing, 6 months	280
37	6	T-Bill - long, 5%, 6 months, fixed rate	150
38	7	CD - long, 6%, 60 days, fixed rate	70
39		**Total**	**1,900**
40			

Overall Net Position Treatment

22. The remaining unmatched or overall net open position is determined and recorded as **capital charge 5** (cell O23).

23. The total capital charge in relation to general market risk in interest rate instruments is the sum of the five capital charges determined and recorded (in column P).

Part C:

24. The resulting capital required against specific market risk is summed with the capital required against general market risk to produce the total capital required against interest rate risk for the trading book.

25. The interest rate risk equivalent assets against which Bank of Jamaica's ("the Bank's") regulatory capital requirement will be held, is determined by multiplying the total capital required (as determined in paragraph 24 above) by the reciprocal of the Bank's capital adequacy ratio of 10 per cent.

SCHEDULE 1

EXPECTATIONS OF FINANCIAL HOLDING COMPANIES IN CONNECTION WITH A FINANCIAL GROUP'S CAPITAL MANAGEMENT

1. FHCs will be expected to maintain adequate capital on a group-wide basis to act as a buffer against the risks associated with the group's activities.
2. FHCs will be expected to manage capital through a comprehensive formal process to ensure it maintains adequate capital within the group and for its member entities.
3. Each FHC should ensure that the financial group develops and executes a capital management plan that is aligned to formal capital management policies for the group. Capital management policies should include a clearly documented capital management process for ensuring compliance with regulatory capital requirements on a group-wide and a standalone entity basis.
4. Capital management plans should cover, at minimum, a 2 to 3 year horizon and be subject to review at least annually. FHCs will be expected to submit capital management plans to Bank of Jamaica for review on an at least annual basis.
5. The financial group's capital management process and capital management plan should take into consideration the group-wide risk profile and risk appetite, and the possible negative impacts to its capital position from material activities and associated risk exposures.
6. The financial group's capital management policies should at minimum:
   - i. include a process to arrive at board and management decisions with respect to capital management (including dividend distribution decisions, capital issue, redemption and repurchases) and ensure that decisions reflect robust capital planning and incorporate stress scenario outcomes including the impact on risk-based capital ratios and minimum prescribed capital levels
   - ii. require the board of directors to review and approve the capital management plan at least annually, or more frequently if conditions warrant
7. FHCs will be expected to consider and assess the group-wide risk profile when undertaking capital planning, management and investments.
8. The financial group's capital planning process should, inter alia:
   - i. address the group's capital adequacy goals based on the degree and type of risk exposures facing the group
   - ii. identify and measure all material risks potentially requiring capital[12]
   - iii. consider risks not only in isolation but on an aggregate basis

[12] These could arise from both on and off-balance sheet exposures, as well as the activities and exposures of unregulated entities within the group, and from members of the wider group

iv. determine quantifiable internal capital targets, practical plans for achieving and maintaining these targets under both normal and adverse conditions, and a process for alerting management of potential breaches and deviations from targets
v. identify the potential management actions when its capital position falls below, or is expected to fall below, the internal capital budget
vi. take into consideration the availability of capital across entities within the group - this should include regulatory, legal and other impediments to the transfer of capital across entities, sectors and jurisdictions in which the financial group operates
vii. take into consideration the current and forecasted business and macroeconomic environment, and incorporate forward-looking stress testing that identifies possible events or changes in market conditions that could adversely impact the group's capital position

9. Capital adequacy assessments undertaken within financial groups should consider group-wide risks which could impact the financial group, including those emanating from unregulated entities within the financial group and wider group[13] and material third party relationships.

10. Capital adequacy assessment techniques should:

i. address multiple gearing,[14] and excessive leveraging, where a parent issues debt and down-streams the proceeds in the form of equity to a subsidiary[15]
ii. evaluate limitations on intra-group transfers of capital, as potential impediments to executing these transfers could constrain their suitability for inclusion in the assessment of the group's capital

11. Financial groups will be expected to have an independent review process to assure the integrity of the overall capital management process, taking into account the requirements for individual entities within the group and the overall group.

[13] These could, inter alia, arise where ownership structures that are opaque and/or complex organizational structures obscure instances of multiple gearing within the group.
[14] Problems similar to those posed by intra-group multiple gearing could arise when different financial groups hold cross participations in each other or in each other's dependents
[15] Bank of Jamaica will be concerned with situations whereby there is pressure on the FHC or a subsidiary in the group to service its parent's debt (e.g. by the imposition of an obligation of a regulated subsidiary to pay dividends to its parent)

SCHEDULE 2

On Balance Sheet Assets-Risk- Weight Categories

1. 0% Risk-weight

a. Cash (denominated in domestic and foreign currency) on hand;

b. Deposits with and other claims on Bank of Jamaica, including cash reserves and current account balances (in domestic and foreign currency);

c. Government of Jamaica debt securities denominated in Jamaican currency;

d. Loans granted to, or which are guaranteed by, the Government of Jamaica denominated in Jamaican currency;

e. Debt securities which are issued by statutory bodies or companies owned or controlled by the Government of Jamaica, or an agency of the Government of Jamaica, and are also guaranteed by the Government of Jamaica denominated in Jamaican currency;

f. Debt securities issued by governments and central banks of the United States of America, Canada or United Kingdom and other governments and central banks of the G-IO countries approved by the Supervisor from time to time, and denominated in the issuer's national currency and funded in that currency;

g. Debt securities issued by public sector entities or agencies of the governments of the United States of America, Canada or the United Kingdom and other governments of G-I 0 and CARICOM countries as approved by the Supervisor from time to time that carry the full guarantee of the respective governments;

h. Debt securities issued by CARICOM country governments and central banks as approved by the Supervisor from time to time and denominated in the issuer's national currency;

i. Claims fully secured by cash or Government of Jamaica securities denominated in Jamaican currency

2. 20% Risk-Weight

a. claims on DTIs and other financial institutions specified under the Bank of Jamaica Act. Such claims (other than capital instruments) shall include deposits/ loans, cheques and other items in transit, and loans guaranteed by such institutions;

b. claims (other than capital instruments) with residual maturity of less than twelve months on deposit-taking financial institutions incorporated in and supervised by the appropriate banking supervisory or monetary authority of the United States, Canada, United Kingdom or CARICOM country, as approved by the Supervisor from time to time;

c. claims (other than capital instruments) with residual maturity of less than twelve months on banks and deposit taking financial institutions incorporated in and supervised by the appropriate banking supervisory or monetary authority of any other country as approved by the Supervisor from time to time;

d. debt securities issued by:-

i. governments and central bank of CARICOM countries;

ii. governments and central banks of the United States of America, Canada or the United Kingdom; and

iii. other governments and central banks of the G-IO countries, approved by the Supervisor from time to time and denominated in a currency other than the issuer's national currency

e. claims including claims guaranteed or collateralized by securities issued by, other governments, central banks and multilateral development banks or lending agencies as approved by the Supervisor from time to time;

f. debt securities issued by public sector entities or agencies of the Governments of the United States of America, Canada or the United Kingdom and other governments of the G-IO and CARICOM countries as approved by the Supervisor from time to time, that are not guaranteed by their respective government.

3. 50% Risk-Weight

a. First legal mortgages to owner-occupiers fully secured on their residences (except for those where the arrears on the mortgage exceed three (3) months, in which case, the mortgage is assigned a 100% risk-weight).

4. 100% Risk-Weight

a. Government of Jamaica debt securities denominated in foreign currency;

b. Debt securities denominated in foreign currency which are issued by statutory bodies or companies owned or controlled by the Government of Jamaica or an agency of the Government and are also guaranteed by the Government;

c. Other claims, loans and mortgages not otherwise classified in this Schedule, less specific provisions for losses;

d. Holding of ordinary and preference shares;

e. Other securities not otherwise classified in this Schedule;

f. Fixed assets, including land, buildings and equipment net of depreciation, used or held, or both by the bank in the conduct of its business; and

g. All other assets.

SCHEDULE 3

1. The category "government" will include all forms of government paper including bonds, Treasury Bills and other short-term instruments, but national authorities reserve the right to apply a specific risk weight to securities issued by certain foreign governments, especially to securities denominated in a currency other than that of the issuing government.

2. The "qualifying" category includes securities issued by public sector entities and multilateral development banks, plus other securities that are:

    – rated investment-grade by at least two credit rating agencies specified by the national authority; or

    – rated investment-grade by one rating agency and not less than investment-grade by any other rating agency specified by the national authority (subject to supervisory oversight); or

    – subject to supervisory approval, unrated, but deemed to be of comparable investment quality by the reporting bank, and the issuer has securities listed on a recognized stock exchange.

3. Furthermore, the "qualifying" category shall include securities issued by institutions that are deemed to be equivalent to investment grade quality and subject to supervisory and regulatory arrangements comparable to those under this Framework.