

# **First draft (First Batch)**

## **CAPITAL RULES**

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## **CAPITAL RULES**

(Made by the Monetary Authority under section 98A of the Banking Ordinance (Cap. 155) as amended by the Banking (Amendment) Ordinance 2005)

### **PART 1**

#### **PRELIMINARY**

##### **[1. Commencement**

These Rules shall come into operation on a day to be appointed by the Secretary for Financial Services and the Treasury by notice published in the Gazette.]

## 2. Interpretation

- (1) In these Rules, unless the context otherwise requires -
- "alternative standardised approach" ( ), in relation to the calculation of an authorized institution's operational risk, means the method of calculating that risk set out in *Division 3 of Part 5*;
- "ASA" ( ) means the alternative standardised approach;
- "asset sales with recourse" ( ), in relation to an authorized institution, means an asset sale transaction where the credit risk of the asset sold remains with the institution because the holder of the asset is entitled to put the asset back to the institution within a period agreed, or under circumstances agreed, under the transaction;
- "bank" ( ) means -
- (a) an authorized institution except an authorized institution the authorization of which is for the time being suspended under section 24 or 25 of the Ordinance; and
  - (b) a bank incorporated outside Hong Kong which is not an authorized institution except such a bank -
    - (i) which, in the opinion of the Monetary Authority, is not adequately supervised by the relevant banking supervisory authority; or
    - (ii) the licence or other authorization of which to carry on banking business is for the time being suspended;

"banking book" ( ), in relation to an authorized institution, means all the institution's on-balance sheet assets and off-balance sheet exposures except such assets and exposures which are required to be recorded in the institution's trading book;

"basic approach" ( ), in relation to the calculation of an authorized institution's credit risk, means the method of calculating that risk set out in *rules [..]*;

"basic indicator approach" ( ), in relation to the calculation of an authorized institution's operational risk, means the method of calculating that risk set out in *Division 1 of Part 5*;

"BIA" ( ) means the basic indicator approach;

"BSA" ( ) means the basic approach;

"business day" ( ) means a day which is not a public holiday;

"calendar quarter" ( ) means a consecutive period of 3 calendar months ending on the last day of March, June, September or December;

"cash items" ( ), in relation to an authorized institution, means all -

- (a) legal tender notes or other notes, and coins, representing the lawful currency of a jurisdiction held by the institution;
- (b) the institution's holdings of Government certificates of indebtedness for the issue of legal tender notes;
- (c) gold bullion -
  - (i) held by the institution; or

- (ii) held for the institution, on an allocated basis, by another person,  
to the extent that the gold bullion is backed by gold bullion liabilities;
- (d) gold bullion held for the institution, on an unallocated basis, by another person, to the extent that the gold bullion is backed by gold bullion liabilities;
- (e) gold bullion -
  - (i) held by the institution; or
  - (ii) held for the institution,  
which is not backed by gold bullion liabilities;
- (f) cheques, drafts and other items drawn on other banks that are -
  - (i) payable to the account of the institution immediately upon presentation; and
  - (ii) in the process of collection;
- (g) unsettled clearing items that are being processed through any interbank clearing system in Hong Kong;
- (h) positive current exposure incurred by the institution from transactions -
  - (i) in securities (other than repo-style transactions), foreign exchange instruments, and commodities that are entered into on a delivery-versus-payment basis; and

- (ii) that are outstanding up to and including the 4th business day after the due settlement date in respect of the transaction concerned; or
- (i) amounts receivable, and positive current exposure incurred, by the institution from transactions -
  - (i) in securities (other than repo-style transactions), foreign exchange instruments, and commodities that are entered into on a non-delivery-versus-payment basis; and
  - (ii) that are outstanding up to and including the 4th business day after the due settlement date in respect of the transaction concerned;

"collective investment scheme" ( ) -

- (a) subject to *paragraph (b)*, means a collective investment scheme within the meaning of *Schedule 1* to the Securities and Futures Ordinance (Cap.571);
- (b) does not include a restricted collective investment scheme;

"comprehensive approach" ( ), in relation to collateral, means the use by an authorized institution of collateral falling within *rule 35* to calculate the risk-weighted amount of its on-balance sheet assets and off-balance sheet exposures in accordance with the provisions of *Division 7 of Part 4*;

"corporate" ( ) means -

- (a) a partnership or limited company; or
- (b) an unincorporated business owned by a single person,

that is neither -

- (c) a public sector entity, bank or securities firm; nor
- (d) a borrower an exposure to which would fall within the definition of "regulatory retail exposure";

"counter-guarantee" ( ), in relation to an authorized institution, means a guarantee (or other payment undertaking) given by one party for the payment of money by a guarantor upon the guarantor being required to make payment under the terms of a guarantee given by the guarantor to the institution in relation to the exposure of the institution to a third party;

"country" ( ) includes -

- (a) subject to *paragraph (b)*, any part of a country; and
- (b) any jurisdiction except a restricted jurisdiction;

"credit conversion factor" ( ), in relation to an off-balance sheet exposure of an authorized institution, means a percentage by which the principal amount of the exposure is multiplied in obtaining the credit equivalent amount of the exposure;

"credit default swap" ( ) means a credit derivative contract under which the protection buyer pays a fee to the protection seller in return for compensation in the event of a default (or similar credit event) by a reference entity;

"credit derivative contract" ( ) means a forward, swap, purchased option or similar derivative contract entered into by 2 parties with the intention to transfer credit risk in relation to an underlying obligation from one party ("protection buyer") to the other party ("protection seller");



"credit equivalent amount" ( ), in relation to an off-balance sheet

exposure of an authorized institution, means the value obtained by -

- (a) in the case of an exposure that is not an OTC derivative transaction or credit derivative contract, multiplying the principal amount of the exposure, after deducting any specific provisions applicable to the exposure, by the applicable credit conversion factor;
- (b) in the case of an exposure that is an OTC derivative transaction or credit derivative contract, adding the current exposure of the OTC derivative transaction or credit derivative contract, as the case may be, to the potential exposure of the OTC derivative transaction or credit derivative contract, as the case may be;

"credit protection" ( ), in relation to an exposure of an authorized

institution, means the protection afforded the exposure by recognized credit risk mitigation;

"credit quality grade" ( ) means a grade represented by the numerals 1,

2, 3, 4, 5 or 6, as the case may be, to which the credit assessment of an ECAI is mapped for determining the appropriate risk-weight for an on-balance sheet asset or off-balance sheet exposure of an authorized institution;

"credit risk" ( ), in relation to an authorized institution, means the

institution's credit risk as referred to in paragraph (a) of the definition of "capital adequacy ratio" in section 2(1) of the Ordinance;

"currency mismatch" ( ), in relation to an exposure of an authorized institution, means the exposure and the credit protection, if any, afforded the exposure are denominated in different currencies;

"current" ( ) -

(a) in relation to an ECAI issuer rating, means the credit assessment rating concerned –

(i) has not been withdrawn; and

(ii) is not currently suspended,

by the ECAI which assigned that credit assessment rating;

(b) in relation to an ECAI issue specific rating, means -

(i) the credit assessment rating concerned –

(A) has not been withdrawn; and

(B) is not currently suspended,

by the ECAI which assigned that credit assessment rating;

and

(ii) the debt obligation to which that credit assessment rating relates is still outstanding;

"current exposure" ( ), in relation to an off-balance sheet exposure of an authorized institution which is an OTC derivative transaction ("existing transaction") or credit derivative contract ("existing contract"), means the replacement cost -

(a) which would be incurred by the institution if it were required to enter into another OTC derivative transaction or credit derivative

contract, as the case may be, to replace the existing transaction or existing contract, as the case may be, with another counterparty with substantially the same economic consequences for the institution; and

- (b) calculated by marking - to - market the existing transaction or existing contract, as the case may be, and -
  - (i) if the resultant value is positive for the institution, taking the resultant value of the existing transaction or existing contract, as the case may be;
  - (ii) if the resultant value is negative for the institution, taking the resultant value of the existing transaction or existing contract, as the case may be, as zero;

"direct credit substitute" ( ), in relation to an authorized institution -

- (a) means an irrevocable off-balance sheet exposure of the institution which carries the same credit risk to the institution as a direct extension of credit by the institution; and
- (b) includes -
  - (i) guarantees by the institution;
  - (ii) standby letters of credit serving as financial guarantees for loans;
  - (iii) acceptances; and
  - (iv) financial liabilities arising from the selling of credit protection under credit derivative contracts in the form of

total return swaps or credit default swaps booked in the institution's banking book;

"delivery-versus-payment basis" ( ), in relation to a transaction, means the service or thing provided under the transaction and the payment therefor occur simultaneously;

"domestic currency claim" ( ), in relation to an authorized institution, means a claim by the institution which is -

- (a) denominated in the local currency of the obligor under the claim;
- and
- (b) funded by liabilities entered into by the institution in that currency;

"domestic public sector entity" ( ) means a public sector entity referred to in *paragraph (a)* of the definition of "public sector entity";

"ECAI" ( ) means an external credit assessment institution;

"ECAI issue specific rating" ( ), in relation to a debt obligation issued or undertaken by a person (howsoever described), means -

- (a) in *rules 10 and 12*, a long-term credit assessment rating assigned to the obligation by an ECAI; and
- (b) in *rules 14, 15 and 16*, a short-term or long-term credit assessment rating assigned to the obligation by an ECAI;

"ECAI issuer rating" ( ), in relation to any person (howsoever described), means a long-term credit assessment rating assigned to the person by an ECAI;

"ECAI rating" ( ) means -

- (a) an ECAI issuer rating; or
- (b) an ECAI issue specific rating;

"equity contract" ( ) means a forward, swap, purchased option or similar derivative contract the value of which is derived from the value of underlying equities or equity indices;

"exchange controls" ( ) means controls or restrictions imposed by the government of a country on the exchange of the currency of that country for the currency of another country;

"Exchange Fund" ( ) means the fund established under section 3 of the Exchange Fund Ordinance (Cap. 66);

"exchange rate contract" ( ) -

- (a) means a forward foreign exchange contract, cross-currency interest rate swap, purchased currency option or similar derivative contract; and
- (b) includes a forward, swap, purchased option or similar derivative contract the value of which is derived from the value of gold;

"external credit assessment institution" ( ) means -

- (a) [Standard and Poor's Corporation];
- (b) [Moody's Investors Service, Inc.]; or
- (c) [Fitch Ratings Ltd.];

"first-to-default credit derivative" ( ) means a credit derivative contract under which -

- (a) the protection buyer obtains credit protection for a basket of reference [entities]; and
- (b) the first default among the reference [entities] triggers the credit protection and terminates the contract;

"foreign public sector entity" ( ) means a public sector entity referred to in *paragraph (b)* of the definition of "public sector entity";

"forward asset purchase" ( ), in relation to an authorized institution -

- (a) means a commitment by the institution to purchase at a specified future date, and on pre-arranged terms, a loan, security or other asset from another party; and
- (b) includes a commitment under a put option written by the institution;

"forward forward deposit placed" ( ), in relation to an authorized institution, means an agreement between the institution and another party whereby the institution will place a deposit at an agreed rate of interest with the party at a pre-determined future date;

"gold bullion held on an allocated basis" ( ), in relation to an authorized institution, means gold bullion -

- (a) held by a person other than the institution;
- (b) held for the institution; and
- (c) which is separately ascertainable;

"gross income" ( ), in relation to the calculation of an authorized institution's operational risk using the BIA, STO or ASA, means the sum of the

institution's net interest income and non-interest income before the deduction from any such income of -

- (a) the operating expenses of the institution (including any expenses incurred for outsourcing services); and
- (b) any collective provisions and specific provisions made by the institution;

"group of companies" ( ) means group of companies within the meaning of section 2 of the Companies Ordinance (Cap. 32);

"haircut" ( ), in relation to an authorized institution, means an adjustment to be applied to the credit protection held by the institution, or the institution's exposure, to take into account possible future price fluctuations or fluctuations in exchange rates;

"interest expenses" ( ), in relation to the calculation of an authorized institution's operational risk, means the sum of -

- (a) the interest paid by the institution on its interest-bearing liabilities;
- and
- (b) the accrued interest payable by the institution on its interest-bearing liabilities;

"interest income" ( ), in relation to the calculation of an authorized institution's operational risk, means the sum of -

- (a) the interest received by the institution on its interest-bearing assets;
- and

- (b) the accrued interest receivable by the institution on its interest-bearing assets;

"interest rate contract" ( ) means a single-currency forward rate agreement, interest rate swap, purchased interest rate option or similar derivative contract;

"internal ratings-based approach" ( ), in relation to the calculation of an authorized institution's credit risk, means the method of calculating that risk set out in *rules [..]*;

"IRB" ( ) means the internal ratings-based approach;

"loans and advances in the commercial banking business line" ( ), in relation to the calculation of an authorized institution's operational risk, means the amounts drawn down and for the time being outstanding in respect of borrowers from the institution who, or exposures of the institution which, fall into any of the following categories of exposures -

- (a) corporate;
- (b) sovereign;
- (c) bank;
- [(d) specialised lending;]
- [(e) small and medium-sized entities treated as corporate borrowers under the use of the IRB to calculate an authorized institution's credit risk;]
- (f) purchased receivables due from corporate borrowers; and
- (g) book value of securities booked in the institution's banking book;



"loans and advances in the retail banking business line" ( ), in relation to the calculation of an authorized institution's operational risk, means the amounts drawn down and for the time being outstanding in respect of borrowers from the institution who, or exposures of the institution which, fall into any of the following categories of exposures -

- (a) retail borrowers (including borrowers under residential mortgage loans);
- (b) small businesses treated as retail borrowers under the use of the STC to calculate an authorized institution's credit risk;
- (c) small and medium-sized entities treated as retail borrowers under the use of the IRB to calculate an authorized institution's credit risk; and
- (d) purchased receivables due from retail borrowers;

"long-term ECAI issue specific rating" ( ), in relation to a debt obligation issued or undertaken by a sovereign, bank, securities firm or corporate, means a long-term credit assessment rating assigned to the obligation by an ECAI;

"main index" ( ) means an index by reference to which futures contracts or options contracts are traded on a recognised exchange;

"market risk" ( ), in relation to an authorized institution, means the institution's market risk as referred to in paragraph (b) of the definition of "capital adequacy ratio" in section 2(1) of the Ordinance;

"mark - to - market" ( ), in relation to any transaction, contract or recognised credit risk mitigation, means the revaluation of the transaction, contract or recognised credit risk mitigation, as the case may be, at current market rates;

"minimum holding period" ( ), in relation to collateral or any other thing held by an authorized institution, or by another person, for the institution's benefit (howsoever expressed), means a period -

- (a) reasonably likely to be required by the institution to realise the collateral or thing;
- (b) commencing on the date of the default by the counterparty giving rise to the right on the part of the institution to liquidate the collateral or thing; and
- (c) terminating on the business day (being a day which is not a public holiday in any relevant market for the collateral or thing) on which the institution would be reasonably likely to be able to realise the collateral or thing;

"net credit exposure" ( ), in relation to an on-balance sheet asset or off-balance sheet exposure of an authorized institution, means the institution's exposure to the counterparty after taking into account any recognised credit risk mitigation and deducting any specific provisions in respect of the on-balance sheet asset or off-balance sheet exposure, as the case may be;

"net interest income" ( ), in relation to the calculation of an authorized institution's operational risk, means the interest income of the institution after deducting the interest expenses of the institution;

"nettable" ( ), in relation to an on-balance sheet asset or off-balance sheet exposure of an authorized institution (howsoever described), means the asset or exposure, as the case may be, is subject to a valid bilateral netting agreement;

"non-interest income" ( ), in relation to the calculation of an authorized institution's operational risk -

(a) subject to *paragraph (b)*, means -

(i) income recognised by the institution from -

(A) gains minus losses arising from the institution's trading in foreign currencies, exchange rate contracts, interest rate contracts, equity contracts, precious metal contracts, other commodity contracts, credit derivative contracts and securities;

(B) dividends recognised by the institution from its shareholdings in other companies; and

(C) fees and commissions recognised by the institution (including any fees and commissions recognised by the institution for insourcing services); and

(ii) any other income (except interest income) arising in the ordinary course of the business of the institution;

- (b) does not include -
  - (i) reversals of -
    - (A) write-downs of inventories, property, plant and equipment of the institution; or
    - (B) provisions for bad and doubtful debts of the institution;
  - (ii) income recognised by the institution from disposals of items of property, plant and equipment of the institution;
  - (iii) income recognised by the institution from disposals of non-trading investments of the institution;
  - (iv) litigation settlements in favour of the institution; and
  - (v) income recognised by the institution from insurance claims for the benefit of the institution;

"note issuance and revolving underwriting facilities" ( ) means any

facility in respect of the issue of debt securities to the market where -

- (a) a borrower may draw down funds, up to a prescribed limit, over a pre-defined period, should any issue of the debt securities prove unable to be placed in the market; and
- (b) the unplaced amount is to be taken up, or funds made available, by the underwriter of the facility;

"notional amount" ( ), in relation to an off-balance sheet exposure of an authorized institution, means the reference amount used to calculate payment streams between the parties to the exposure;

"operational risk" ( ), in relation to an authorized institution, means the institution's operational risk as referred to in paragraph (c) of the definition of "capital adequacy ratio" in section 2(1) of the Ordinance;

"OTC derivative transaction" ( ) -

- (a) subject to *paragraph (b)*, means an exchange rate contract, interest rate contract, equity contract or precious metal contract or other commodity contract;
- (b) does not include a contract referred to in *paragraph (a)* which is -
  - (i) traded on an exchange; and
  - (ii) subject to daily re-margining requirements;

"other commodity contract" ( ) means a forward, swap, purchased option or similar derivative contract the value of which is derived from the value of commodities (including energy, agricultural assets, base metals and non-precious metals);

"partly paid-up shares and securities" ( ), in relation to an authorized institution, means shares or securities the unpaid portion of which the institution may be called upon by the issuer to pay at a pre-determined or unspecified date in the future;

"past due exposure" ( ) means an exposure which -

- (a) is overdue for more than 90 days; or
- (b) has been rescheduled;

"positive current exposure" ( ), in relation to a transaction referred to in *paragraph (h) or (i)* of the definition of "cash items", means the risk of loss on the difference between -

- (a) the transaction valued at the agreed settlement price; and
- (b) the transaction valued at the current market price;

"potential exposure" ( ), in relation to an off-balance sheet exposure of an authorized institution which is an OTC derivative transaction or credit derivative contract, means the principal amount of the transaction or contract, as the case may be, multiplied by the applicable credit conversion factor;

"precious metal contract" ( ) means a forward, swap, purchased option or similar derivative contract the value of which is derived from the value of underlying precious metals (including silver, platinum and palladium);

"principal amount" ( ) -

- (a) in relation to an on-balance sheet asset of an authorized institution, means the current book value (including accrued interest or revaluations) of the asset; and
- (b) in relation to an off-balance sheet exposure of an authorized institution, means -
  - (i) subject to *subparagraph (ii)*, in the case of an exposure listed in *Table 8*, the contracted amount of the exposure;
  - (ii) in the case of an exposure listed in *Table 8* which is an undrawn or partially drawn facility, the amount of the undrawn commitment;

- (iii) subject to *subparagraph (iv)*, in the case of an exposure listed in *Table 9*, the notional amount of the exposure;
- (iv) in the case of an exposure listed in *Table 9* where the stated notional amount of the exposure is leveraged or enhanced by the structure of the exposure, the effective notional amount of the exposure taking into account that the stated notional amount is so leveraged or enhanced, as the case may be;

"prior consent" ( ) means prior consent in writing;

"property-holding shell company" ( ) means a company which does not trade or engage in any business activity except for the holding of residential properties;

"public sector entity" ( ) means an entity -

- (a) specified in a notice under *subrule (5)(b)* to be a public sector entity for the purposes of these Rules; or
- (b) specified by a relevant banking supervisory authority (whether by means of legislation or a public notice or otherwise) to be a public sector entity for the purpose of applying preferential risk-weighting treatment under capital adequacy standards formulated in accordance with -
  - (i) the International Convergence of Capital Measurement and Capital Standards published, by the Basel Committee on Banking Supervision, in July 1988; or

- (ii) the International Convergence of Capital Measurement and Capital Standards - A revised Framework published, by the Basel Committee on Banking Supervision, in June 2004;

"recognised collateral" ( ) -

- (a) in relation to the simple approach to the treatment of collateral, means collateral falling within *rule 34*;
- (b) in relation to the comprehensive approach to the treatment of collateral, means collateral falling within *rule 35*;

"recognised credit derivative contract" ( ) means -

- (a) a credit derivative contract falling within *rule 55(1)*;
- (b) a credit derivative contract falling within *rule 55(2)* to the extent that it is deemed under that rule to be a recognised credit derivative contract;

"recognised credit risk mitigation" ( ), in relation to the on-balance sheet assets or off-balance sheet exposures of an authorized institution, means the use by the institution of recognised collateral, recognised credit derivative contracts, recognised guarantees, or recognised netting, for the purpose of reducing the risk-weighted amount of the on-balance sheet assets or off-balance sheet exposures, as the case may be, pursuant to these Rules;

"recognised exchange" ( ) means a stock exchange listed in Part 3 of Schedule 1 to the Securities and Futures Ordinance (Cap. 571);

"recognised guarantee" ( ) means a guarantee falling within *rule 54*;



"recognised netting" ( ) means any netting done pursuant to a valid bilateral netting agreement;

"regulatory retail exposure" ( ), in relation to the use by an authorized institution of the STC to calculate its credit risk -

(a) subject to *paragraph (b)*, means any financial exposure of the institution -

(i) to a natural person or small business; and

(ii) where the transaction creating the financial exposure, whether drawn down or not, takes the form of an advance or extension of credit that is -

(A) an overdraft or other line of credit;

(B) an instalment loan, auto loan or lease or other personal term loan or advance by way of leasing facilities;

(C) a credit card or other revolving credit; or

(D) a credit facility or commitment to lend funds or advance a credit facility to a small business; and

(iii) where the maximum aggregate retail exposure (including any past due exposure) to a single counterparty, or to a group of counterparties considered as a group of counterparties, under section 81(1)(a), (b), (c) or (d) of the Ordinance, does not exceed HK \$10 million on the assumptions that -

- (A) in the case of an on-balance sheet asset, the amount of the exposure is the principal amount;
  - (B) in the case of an off-balance sheet exposure that is an OTC derivative transaction or credit derivative contract, the amount of the exposure is the credit equivalent amount of the exposure; and
  - (C) in the case of an off-balance sheet exposure not falling within *sub-subparagraph (B)*, the amount of the exposure is the principal amount multiplied by the applicable credit conversion factor;
- (b) does not include any financial exposure of the institution which -
- (i) is a residential mortgage loan (other than a residential mortgage loan falling within *rule 19(4)(a)*);
  - (ii) is a holding of equity securities, whether listed or unlisted; or
  - (iii) is a past due exposure;

“relevant international organisation” ( ) means an international organisation specified in a notice under *subrule (5)(d)* to be a relevant international organisation for the purposes of these Rules;

"relevant risk" ( ), in relation to an authorized institution, means the credit risk, operational risk or market risk of the institution;

"repo-style transaction" ( ), in relation to an authorized institution, means a transaction entered into by the institution whereby the institution -

- (a) agrees to sell securities to a third party for a sum of money with a commitment to repurchase the securities at an agreed price on an agreed future date from the third party;
- (b) lends securities to a third party and receives a sum of money or other securities from the third party in exchange as collateral;
- (c) agrees to acquire securities from a third party for a sum of money with a commitment to resell the securities at an agreed price on an agreed future date to the third party; or
- (d) borrows securities from a third party and provides a sum of money or other securities to the third party in exchange as collateral;

"residential mortgage loan" ( ), in relation to an authorized institution, means a loan -

- (a) advanced by the institution to a borrower; and
- (b) secured on one or more than one residential property;

"restricted collective investment scheme" ( ) means a collective investment scheme specified in a notice under *subrule (5)(h)* to be a restricted collective investment scheme for the purposes of these Rules;

"restricted jurisdiction" ( ) means a jurisdiction specified in a notice under *subrule (5)(a)* to be a restricted jurisdiction for the purposes of these Rules;

"restricted foreign public sector entity" ( ) means a foreign public sector entity specified in a notice under *subrule (5)(c)* to be a restricted foreign public sector entity for the purposes of these Rules;

"restricted securities regulator" ( ) means a securities regulator specified in a notice under *subrule (5)(g)* to be a restricted securities regulator for the purposes of these Rules;

"restricted sovereign" ( ) means a sovereign specified in a notice under *subrule(5)(e)* to be a restricted sovereign for the purposes of these Rules;

["risk-weighted" ( ), in relation to the calculation of a relevant risk of an authorized institution -

- (a) in the case of an on-balance sheet asset of the institution, means the measure of the institution's exposure to the relevant risk in respect of the asset as calculated in accordance with *Division 3 of Part 4* in the case of credit risk;
- (b) in the case of an off-balance sheet exposure of the institution, means the measure of the institution's exposure to the relevant risk in respect of the exposure as calculated in accordance with *Division 4 of Part 4* in the case of credit risk;]

"second-to-default credit derivative" ( ) means a credit derivative contract under which -

- (a) the protection buyer obtains credit protection for a basket of reference [entities]; and
- (b) the second default among the reference [entities] triggers the credit protection and terminates the contract;

"securities firm" ( ) -

- (a) means an entity -

- (i) licensed and supervised by a relevant securities regulator;  
and
  - (ii) which is subject to supervisory arrangements regarding the maintenance of adequate capital to support its business activities comparable to those prescribed for authorized institutions under the Ordinance and these Rules; and
- (b) includes a licensed corporation that has been granted a licence to carry on a regulated activity by the Securities and Futures Commission of Hong Kong;

"securities regulator" ( ) does not include a restricted securities regulator;

"senior management" ( ), in relation to an authorized institution, includes the chief executives and managers of the institution;

"short-term ECAI issue specific rating" ( ), in relation to a debt obligation issued or undertaken by a bank, securities firm or corporate, means a short-term credit assessment rating assigned to the obligation by an ECAI;

"simple approach" ( ), in relation to collateral, means the use by an authorized institution of collateral falling within *rule 34* to calculate the risk-weighted amount of its on-balance sheet assets and off-balance sheet exposures in accordance with the provisions of *Division 6A of Part 4*;

"small business" ( ), in relation to the use by an authorized institution of the STC to calculate its credit risk -

- (a) means -

- (i) subject to *paragraph (b)*, an unlisted company with an annual turnover not exceeding HK \$50 million which has given its consent for the disclosure of its credit data to a commercial credit reference agency; or
- (ii) an unincorporated enterprise with an annual turnover not exceeding HK \$50 million which has given its consent for disclosure of its credit data to a commercial credit reference agency;
- (b) does not include an unlisted company belonging to a group of companies with an annual turnover in excess of HK \$50 million;

"sovereign" ( ) means -

- (a) the Government;
- (b) the central government of a country;
- (c) the central bank of a country;
- (d) an authority of a country which performs in the country functions similar to the functions performed by the Monetary Authority in Hong Kong; or
- (e) a relevant international organisation;

"sovereign foreign public sector entity" ( ) -

- (a) subject to *paragraph (b)*, means a foreign public sector entity which is regarded as a sovereign for the purpose of calculating the capital adequacy ratio of a bank by the relevant banking

supervisory authority of the jurisdiction in which the entity and the bank are incorporated or otherwise established;

- (b) does not include a restricted foreign public sector entity;

"specific provisions" ( ), in relation to an on-balance sheet asset or off-

balance sheet exposure of an authorized institution, means -

- (a) an allowance for impairment loss of financial assets that are individually assessed for impairment in accordance with Hong Kong Accounting Standard 39; and
- (b) provisions made in accordance with Hong Kong Accounting Standard 37;

"standardised approach" ( ) -

- (a) in relation to the calculation of an authorized institution's credit risk, means the method of calculating that risk set out in *Part 4*;
- (b) in relation to the calculation of an authorized institution's operational risk, means the method of calculating that risk set out in *Division 2 of Part 5*;

"standardised business line" ( ) means a business line specified in *rule 64(a), (b), (c), (d), (e), (f), (g) or (h)* as read with *Schedule 4*;

"standard supervisory haircut" ( ), in relation to the use by an authorized institution of the STC to calculate its credit risk, means a haircut specified in *Schedule 3*;

"STC" ( ), in relation to the calculation of an authorized institution's credit risk, means the standardised approach;

["STM" ( ), in relation to the calculation of an authorized institution's market risk, means the standardised approach;]

"STO" ( ), in relation to the calculation of an authorized institution's operational risk, means the standardised approach;

"title transfer" ( ), in relation to collateral, means an outright transfer of the legal and beneficial ownership in the collateral from the collateral provider to the collateral taker;

"total return swap" ( ) means an agreement under which one party ("total return payer") transfers the total economic performance of a reference obligation to the other party ("total return receiver");

"trade-related contingency" ( ) -

- (a) means a contingent liability which relates to trade-related obligations; and
- (b) includes liabilities arising from issuing and confirming letters of credit, acceptances on trade bills, and shipping guarantees;

"trading book" ( ), in relation to an authorized institution, means the institution's positions in financial instruments and commodities -

- (a) held -
  - (i) with the intention of trading in the financial instruments and commodities; or
  - (ii) for the purpose of hedging one or more than one of the positions; and
- (b) where -



- (i) the positions are free of any restrictive covenants or are able to be completely hedged; and
- (ii) the positions are frequently and accurately valued and actively managed;

"transaction-related contingency" ( ), in relation to an authorized institution -

- (a) means a contingent liability which involves an irrevocable obligation of the institution to pay a beneficiary when a customer fails to perform a contractual and non-financial obligation; and
- (b) includes a performance bond, bid bond, warranty and standby letter of credit related to a particular transaction;

"transfer risk" ( ) means a risk which is transferred from one party to another party by the use of risk management techniques;

["unrated" ( ), in relation to an exposure (howsoever described) of an authorized institution, means -

- (a) the exposure has never been assigned an ECAI issue specific rating; or
- (b) there is no current ECAI issue specific rating (including a current short-term ECAI issue specific rating) assigned to the exposure;]

["valid bilateral netting agreement" ( ), in relation to an authorized institution, means an agreement -

- (a) in writing;

- (b) that creates a single legal obligation for all individual contracts covered by the agreement, and provides, in effect, that the institution would have a single claim or obligation to receive or pay only the net amount of the sum of the positive and negative mark-to-market values of the individual contracts covered by the agreement in the event that a counterparty to the agreement, or a counterparty to whom the agreement has been validly assigned, fails to comply with any obligation under the agreement due to default, insolvency, bankruptcy, or similar circumstance;
- (c) in respect of which the institution has been given legal advice in writing to the effect that in the event of a challenge in a court of law, including a challenge resulting from default, insolvency, bankruptcy, or similar circumstance, the relevant court or administrative authority would find the institution's exposure to be the net amount under -
  - (i) the law of Hong Kong or, in the case of a subsidiary of the institution which is incorporated outside Hong Kong and which is included in the calculation of the capital adequacy ratio of the institution on a consolidated basis, the law of the jurisdiction in which the subsidiary is incorporated;
  - (ii) the law of the jurisdiction in which the counterparty is incorporated or the equivalent location in the case of non-corporate entities, and if a branch of the counterparty is

involved, then also under the law of the jurisdiction in which the branch is located;

- (iii) the law that governs the individual contracts covered by the agreement; and
- (iv) the law that governs the agreement;
- (d) in respect of which the institution establishes and maintains procedures to monitor developments in any law relevant to the agreement and to ensure that the agreement continues to satisfy this definition;
- (e) in respect of which the institution manages the transactions covered by the agreement on a net basis;
- (f) in respect of which the institution maintains in its files documentation adequate to support the netting of the contracts covered by the agreement; and
- (g) that is not subject to a provision that permits the non-defaulting counterparty to make only limited payment, or no payment at all, to the defaulter or the estate of the defaulter, regardless of whether or not the defaulter is a net creditor under the agreement;]

"year" ( ) -

- (a) in relation to the determination of an authorized institution's gross income; or
- (b) in relation to the determination of an authorized institution's –
  - (i) loans and advances in the retail banking business line; or

- (ii) loans and advances in the commercial banking business line,

for the purposes of calculating the institution's operational risk, means a period of 4 consecutive calendar quarters.

(2) Any reference in these Rules to a table or formula followed by a number is a reference to the table or formula, as the case may be, in these Rules bearing that number.

(3) Where under these Rules the prior consent of the Monetary Authority is required by an authorized institution in respect of any matter, the institution shall seek the prior consent by making an application in the specified form, if any, to the Monetary Authority.

(4) Where under a provision of these Rules the Monetary Authority is required to give notice of any matter to all authorized institutions incorporated in Hong Kong, or to a class of such institutions, it shall be sufficient compliance with that provision if the Monetary Authority publishes the notice in the Gazette.

- (5) The Monetary Authority may, by notice published in the Gazette -
- (a) specify a jurisdiction to be a restricted jurisdiction for the purposes of these Rules;
  - (b) specify an entity to be a public sector entity for the purposes of these Rules;
  - (c) specify a foreign public sector entity to be a restricted foreign public sector entity for the purposes of these Rules;

- (d) specify an international organisation to be a relevant international organisation for the purposes of these Rules;
- (e) specify a sovereign to be a restricted sovereign for the purposes of these Rules;
- [(f) paragraph not used;]
- (g) specify a securities regulator to be a restricted securities regulator for the purposes of these Rules;
- (h) specify a collective investment scheme to be a restricted collective investment scheme for the purposes of these Rules.

(6) For the avoidance of doubt, it is hereby declared that a notice under *subrule (4)* or *(5)* is not subsidiary legislation.

## PART 2

### APPLICATION OF THESE RULES

#### 3. Calculation of operational risk

An authorized institution shall -

- (a) subject to *paragraphs (b) and (c)*, only use the BIA to calculate its operational risk;
- (b) subject to *paragraph (c) and rule 4*, only use the STO to calculate its operational risk if it has the approval to do so under *rule 5*;
- (c) subject to *rule 4*, only use the ASA to calculate its operational risk if it has the approval to do so under *rule 5*.

**4. Monetary Authority may require authorized institution to use BIA to calculate its operational risk instead of STO or ASA**

(1) Where -

- (a) an authorized institution is using the STO or ASA to calculate its operational risk; and
- (b) the Monetary Authority is satisfied that, if the institution were to make a fresh application under *rule 5* for approval to use the STO or ASA to calculate its operational risk, such approval would be refused,

then the Monetary Authority may, by notice in writing given to the institution, require the institution to calculate its operational risk by using the BIA instead of the STO or ASA, as the case may be -

- (c) in respect of all of its business, or parts of its business, as specified in the notice; and
- (d) beginning on such date, or the occurrence of such event, as is specified in the notice and ending on such date, or the occurrence of such event, as is specified in the notice.

(2) An authorized institution shall comply with the requirements of a notice given to it under *subrule (1)*.

**5. Application by authorized institution for approval to use STO or ASA to calculate its operational risk**

(1) An authorized institution may make an application to the Monetary Authority for approval to calculate its operational risk by using the STO or ASA.

(2) Subject to *subrules (3) and (4)*, the Monetary Authority shall determine an application under *subrule (1)* from an authorized institution by -

(a) granting approval to the institution to calculate its operational risk by using the STO or ASA; or

(b) refusing to grant such approval.

(3) Without limiting the generality of *subrule (2)(b)*, the Monetary Authority shall refuse to grant approval to an authorized institution to use the STO or ASA to calculate its operational risk if any one or more of the criteria specified in *Schedule 1* applicable to or in relation to the institution are not fulfilled with respect to the institution.

(4) The Monetary Authority shall not grant approval to an authorized institution to use the ASA to calculate its operational risk unless the institution satisfies the Monetary Authority that the use of the ASA would provide a more accurate assessment of the degree of operational risk to which the institution is exposed than would the use of the STO.



**PART 3**

**DETERMINATION OF CAPITAL BASE**

(This Part is temporarily vacant)

## **PART 4**

### **CALCULATION OF CREDIT RISK**

## **Division 1 - Application**

### **6. Application of *Part 4***

This Part shall apply to an authorized institution which uses the STC to calculate its credit risk.

**Division 2 - Calculation of credit risk under STC, assets and exposures to be covered in calculation and categorisation of assets and exposures**

**7. Standardised approach to calculation of credit risk**

(1) Subject to *subrule (2)*, an authorized institution shall calculate its capital adequacy ratio, in relation to credit risk, as the ratio (expressed as a percentage) of the institution's capital base to an amount ("relevant amount") representing the degree of risk-weighted credit risk to which the institution is exposed obtained by -

- (a) calculating the risk-weighted amount of the institution's on-balance sheet assets by multiplying the principal amount of each such asset net of specific provisions by the asset's relevant risk-weight;
- (b) calculating the risk-weighted amount of the institution's off-balance sheet exposures by -
  - (i) converting the principal amount of each such exposure into its credit equivalent amount in the manner set out in *rule 23* or *25*, as the case requires; and
  - (ii) multiplying the credit equivalent amount by the exposure's relevant risk-weight after deducting, in the case of such an exposure which is an OTC derivative transaction or credit derivative contract, from that credit equivalent amount any specific provisions made in respect of such exposure; and

(c) aggregating the figures derived under *paragraphs (a) and (b)* to arrive at the relevant amount.

(2) Subject to *subrule (3)*, an authorized institution may, in calculating its capital adequacy ratio in relation to credit risk, reduce the risk-weighted amount of the institution's exposure in respect of an on-balance sheet asset or off-balance sheet exposure of the institution by taking into account the effect of any recognised credit risk mitigation in respect of the on-balance sheet asset or off-balance sheet exposure, as the case may be.

(3) Where an on-balance sheet asset or off-balance sheet exposure of an authorized institution has a current ECAI issue specific rating, the institution shall not under *subrule (2)* take into account the effect of any recognised credit risk mitigation applicable to the asset or exposure, as the case may be, which has already been taken into account in that rating.

**8. On-balance sheet assets and off-balance sheet exposures to be covered**

An authorized institution shall take into account and risk-weight -

- (a) all of its on-balance sheet assets and off-balance sheet exposures booked in its banking book except such assets or exposures -
  - (i) which under *rules [..]* and *[..]* are required to be deducted from the institution's core or supplementary capital;
  - (ii) subject to the requirements of *Part 6*; or
  - (iii) subject to the requirements of *Part 7*; and
- (b) all of its credit exposures to counterparties under credit derivative contracts, OTC derivative transactions, or repo-style transactions, booked in its trading book.

**9. Categorisation of on-balance sheet assets**

An authorized institution shall classify each of its on-balance sheet assets into one only of the following categories -

- (a) claims on sovereigns;
- (b) claims on public sector entities;
- (c) claims on multilateral development banks;
- (d) claims on banks;
- (e) claims on securities firms;
- (f) claims on corporates;
- (g) cash items;
- (h) regulatory retail exposures;
- (i) residential mortgage loans;
- (j) other assets which are not past due exposures; and
- (k) past due exposures.

**Division 3 – Calculation of risk-weighted amount of authorized institution’s  
on-balance sheet assets**

**10. Claims on sovereigns**

(1) Where a sovereign has a current ECAI issuer rating, or a debt obligation issued or undertaken by the sovereign has a current ECAI issue specific rating, then an authorized institution shall map the ECAI issuer rating or ECAI issue specific rating, as the case may be, to a scale of uniform credit quality grades represented by the numerals 1, 2, 3, 4, 5 and 6 in accordance with *Table A* set out in *Schedule 2*.

(2) Subject to *rules 11* and *22*, an authorized institution shall allocate a risk-weight to a claim on a sovereign which falls within *subrule (1)* in accordance with *Table 1*.

**Table 1**

**Risk-weighting of claims on sovereigns**

Credit quality grade (sovereigns)	1	2	3	4	5	6
Risk-weight	0%	20%	50%	100%	100%	150%

- (3) Where a sovereign has neither -
- (a) a current ECAI issuer rating; nor
  - (b) a current ECAI issue specific rating (including a current short-term ECAI issue specific rating) assigned to a debt obligation issued or undertaken by the sovereign,



then an authorized institution shall allocate a risk-weight of 100% to a claim by the institution on the sovereign.

**11. Exceptions to *rule 10***

Where -

- (a) a claim on a sovereign by an authorized institution consists of a domestic currency claim on the Government (including a claim for the account of the Exchange Fund), then the institution shall allocate a risk-weight of 0% to the claim;
- (b) a claim on a sovereign by an authorized institution consists of a domestic currency claim on a sovereign (other than the Government or a restricted sovereign) and the relevant banking supervisory authority for the jurisdiction of the sovereign permits banks carrying on banking business in the jurisdiction to allocate a risk-weight to the claim which is lower than the risk-weight which would be allocated under *rule 10* to the claim, then the institution may allocate the lower risk-weight to the claim;
- (c) a claim on a sovereign by an authorized institution consists of a claim on a relevant international organisation, then the institution shall allocate a risk-weight of 0% to the claim.

## 12. Claims on public sector entities

(1) Subject to *subrule (2)*, where a claim on a public sector entity by an authorized institution consists of a claim on a domestic public sector entity, then the institution shall allocate a risk-weight to the claim which is applicable to the credit quality grade which is the next numerically higher credit quality grade than the credit quality grade that is allocated to the Government on the basis of a current ECAI issuer rating (or, if there is no such higher credit quality grade, the credit quality grade so allocated to the Government).

(2) Where a claim on a public sector entity by an authorized institution consists of a claim on a foreign public sector entity, then -

- (a) subject to *paragraphs (b), (c) and (d)*, the institution shall allocate a risk-weight to the claim which is applicable to the credit quality grade which is the next numerically higher credit quality grade than the credit quality grade that is allocated to the sovereign of the jurisdiction in which that entity is incorporated or otherwise established on the basis of a current ECAI issuer rating (or, if there is no such higher credit quality grade, the credit quality grade so allocated to the sovereign);
- (b) if the entity is a sovereign foreign public sector entity, *rule 10* shall, with all necessary modifications, apply to the claim as if the entity were a sovereign;

- (c) if credit quality grade 5 has been allocated to a sovereign referred to in *paragraph (a)* on the basis of a current ECAI issuer rating, the institution shall allocate a risk-weight of 100% to the claim;
- (d) if no credit quality grade has been allocated to a sovereign referred to in *paragraph (a)* on the basis of a current ECAI issuer rating, the institution shall allocate a risk-weight of 100% to the claim.

**13. Claims on multilateral development banks**

An authorized institution shall allocate a risk-weight of 0% to a claim by it on a multilateral development bank.

**14. Claims on banks**

(1) Subject to *subrule (2)*, where a bank has a current ECAI issuer rating, or a debt obligation issued or undertaken by the bank has a current ECAI issue specific rating, then an authorized institution shall map the ECAI issuer rating or ECAI issue specific rating, as the case may be, to a scale of uniform credit quality grades represented by the numerals 1, 2, 3, 4 and 5 in accordance with *Table B* set out in *Schedule 2*.

(2) Where a current ECAI issue specific rating referred to in *subrule (1)* is a short-term issue specific rating as referred to in *subrule (6)*, then *subrules (6) and (7)* shall apply.

(3) Subject to *subrules (4) to (11) and rule 22*, an authorized institution shall allocate a risk-weight to a claim by it on a bank in accordance with *Table 2*.

**Table 2**

**Risk-weighting of claims on banks**

Credit quality grade (banks)	1	2	3	4	5
Risk-weight for general claims	20%	50%	50%	100%	150%
Risk-weight for 3 months' claims (other than a claim which has a current short-term ECAI issue specific rating)	20%	20%	20%	50%	150%

- (4) Where a bank has neither -
- (a) a current ECAI issuer rating; nor

- (b) a current ECAI issue specific rating (including a current short-term ECAI issue specific rating) assigned to a debt obligation issued or undertaken by the bank,

then, subject to *subrule (5)*, an authorized institution shall allocate a risk-weight of -

- (c) 50% to a general claim by it on the bank;
- (d) 20% to a 3 months' claim by it on the bank.

(5) Where a bank falls within *subrule (4)*, then -

- (a) subject to *paragraph (b)*, an authorized institution shall not allocate a risk-weight to a claim by it on the bank which is lower than the risk-weight attributable to the credit quality grade applicable to the sovereign of the jurisdiction in which the bank is incorporated or otherwise established on the basis of the sovereign's current ECAI issuer rating;
- (b) if the sovereign referred to in *paragraph (a)* does not have a current ECAI issuer rating, an authorized institution shall allocate a risk-weight of 100% to a claim by it on the bank.

(6) Where a bank has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall map that rating to a scale of uniform credit quality grades represented by the numerals 1, 2, 3 and 4 in accordance with *Table D* set out in *Schedule 2*.

(7) Subject to *subrule (11)* and *rule 22*, where a bank has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall allocate a risk-weight to the claim in accordance with *Table 3*.

**Table 3**

**Risk-weighting of claims on banks with a current short-term ECAI issue specific rating**

Credit quality grade (banks)	1	2	3	4
Risk-weight for claims on banks with a current short-term ECAI issue specific rating	20%	50%	100%	150%

- (8) Subject to *subrules (10) and (11) and rule 22*, where -
- (a) a 3 months' claim ("concerned claim") by an authorized institution on a bank does not have a current short-term ECAI issue specific rating;
  - (b) the bank has a current short-term ECAI issue specific rating assigned to another 3 months' claim ("reference claim") on it by the institution or by another person (including another authorized institution); and
  - (c) if *subrules (6) and (7)* applied to the reference claim, the risk-weight that would be allocated pursuant to those subrules to the reference claim would be higher than -
    - (i) the risk-weight that would be allocated to the concerned claim pursuant to *subrule (3)* if -
      - (A) the bank has a current ECAI issuer rating or a current long-term ECAI issue specific rating



assigned to a debt obligation issued or undertaken by the bank; and

(B) *subrule (3)* applied to the concerned claim;

(ii) 20% if the bank has neither a current ECAI issuer rating nor a current long-term ECAI issue specific rating assigned to a debt obligation issued or undertaken by the bank,

then the institution shall allocate to the concerned claim the same risk-weight that would be allocated to the reference claim pursuant to *subrules (6) and (7)*.

(9) Subject to *subrules (10) and (11) and rule 22*, where -

(a) a 3 months' claim ("concerned claim") by an authorized institution on a bank does not have a current short-term ECAI issue specific rating;

(b) the bank has a current short-term ECAI issue specific rating assigned to another 3 months' claim ("reference claim") on it by the institution or by another person (including another authorized institution); and

(c) if *subrules (6) and (7)* applied to the reference claim, the risk-weight that would be allocated pursuant to those subrules to the reference claim would be -

(i) lower than the risk-weight that would be allocated to the concerned claim pursuant to *subrule (3)* if -

(A) the bank has a current ECAI issuer rating or a current long-term ECAI issue specific rating

assigned to a debt obligation issued or undertaken  
by the bank; and

(B) *subrule (3)* applied to the concerned claim;

(ii) 20% if the bank has neither a current ECAI issuer rating  
nor a current long-term ECAI issue specific rating assigned  
to a debt obligation issued or undertaken by the bank,

then the institution shall allocate to the concerned claim –

(d) the risk-weight that would be allocated to the concerned claim  
pursuant to *subrule (3)* if the bank has a current ECAI issuer rating  
or a current long-term ECAI issue specific rating assigned to a debt  
obligation issued or undertaken by the bank;

(e) a risk-weight of 20% if the bank has neither a current ECAI issuer  
rating nor a current long-term ECAI issue specific rating assigned  
to a debt obligation issued or undertaken by the bank.

(10) Where -

(a) pursuant to *subrules (6)* and *(7)* an authorized institution allocates  
a risk-weight of 150% to a claim by it on a bank; or

(b) the institution knows that -

(i) the bank has a current short-term ECAI issue specific rating  
assigned to a claim on it by another person (including  
another authorized institution); and

- (ii) if *subrules (6) and (7)* applied to the claim referred to in *subparagraph (i)*, it would be allocated a risk-weight of 150% pursuant to those subrules,

then the institution shall allocate a risk-weight of 150% to each other general claim or 3 months' claim by it on the bank which does not have a current ECAI issue specific rating.

(11) Notwithstanding any other provision of this rule, an authorized institution may allocate a risk-weight of 20% to a 3 months' claim by it on a bank if the claim is denominated and funded in Hong Kong dollars.

(12) In this rule -

“general claim” ( ) means any claim by an authorized institution on a bank other than a 3 months' claim;

“3 months' claim” ( ) means a claim by an authorized institution on a bank with an original maturity of not more than 3 months from drawdown where the institution does not expect or anticipate that the facility to which the claim relates will be rolled over at the expiration of the original period.

**15. Claims on securities firms**

(1) Subject to *subrule (2)*, where a securities firm has a current ECAI issuer rating, or a debt obligation issued or undertaken by the firm has a current ECAI issue specific rating, then an authorized institution shall map the ECAI issuer rating or ECAI issue specific rating, as the case may be, to a scale of uniform credit quality grades represented by the numerals 1, 2, 3, 4 and 5 in accordance with *Table B* set out in *Schedule 2*.

(2) Where a current ECAI issue specific rating referred to in *subrule (1)* is a short-term issue specific rating as referred to in *subrule (6)*, then *subrules (6)* and *(7)* shall apply.

(3) Subject to *subrules (4)* to *(9)* and *rule 22*, an authorized institution shall allocate a risk-weight to a claim by it on a securities firm in accordance with *Table 4*.

**Table 4**

**Risk-weighting of claims on securities firms**

Credit quality grade (securities firms)	1	2	3	4	5
Risk-weight	20%	50%	50%	100%	150%

- (4) Where a securities firm has neither -
- (a) a current ECAI issuer rating; nor
  - (b) a current ECAI issue specific rating (including a current short-term ECAI issue specific rating) assigned to a debt obligation issued or undertaken by it,

then, subject to *subrule (5)*, an authorized institution shall allocate a risk-weight of 50% to a claim by it on the firm.

- (5) Where a securities firm falls within *subrule (4)*, then -
  - (a) subject to *paragraph (b)*, an authorized institution shall not allocate a risk-weight to a claim by it on the firm lower than the risk-weight attributable to the credit quality grade applicable to the sovereign of the jurisdiction in which the firm is incorporated or otherwise established on the basis of the sovereign's current ECAI issuer rating;
  - (b) if the sovereign referred to in *paragraph (a)* does not have a current ECAI issuer rating, an authorized institution shall allocate a risk-weight of 100% to a claim by it on the firm.

(6) Where a securities firm has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall map that rating to a scale of uniform credit quality grades represented by the numerals 1, 2, 3 and 4 in accordance with *Table D* set out in *Schedule 2*.

(7) Subject to *rule 22*, where a securities firm has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall allocate a risk-weight to the claim in accordance with *Table 5*.

**Table 5**

**Risk-weighting of claims on securities firms with a current short-term ECAI issue specific rating**

Credit quality grade (securities firms)	1	2	3	4
Risk-weight for claims on securities firms with a current short-term ECAI issue specific rating	20%	50%	100%	150%

(8) Where -

- (a) pursuant to *subrules (6) and (7)* an authorized institution allocates a risk-weight of 150% to a claim by it on a securities firm; or
- (b) the institution knows that -
  - (i) the securities firm has a current short-term ECAI issue specific rating assigned to a claim on it by another person (including another authorized institution); and
  - (ii) if *subrules (6) and (7)* applied to the claim referred to in *subparagraph (i)*, it would be allocated a risk-weight of 150% pursuant to those subrules,

then the institution shall allocate a risk-weight of 150% to each other claim by it on the securities firm which does not have a current ECAI issue specific rating.

(9) Where -

- (a) pursuant to *subrules (6) and (7)* an authorized institution allocates a risk-weight of 50% or 100% to a claim by it on a securities firm; or

- (b) the institution knows that -
  - (i) the securities firm has a current short-term ECAI issue specific rating assigned to a claim on it by another person (including another authorized institution); and
  - (ii) if *subrules (6) and (7)* applied to the claim referred to in *subparagraph (i)*, it would be allocated a risk-weight of 50% or 100% pursuant to those subrules,

then the institution shall not allocate a risk-weight of less than 100% to each other claim -

- (c) by it on the firm;
- (d) which does not have a current short-term ECAI issue specific rating; and
- (e) with an original maturity not greater than that of the claim referred to in *paragraph (a)* or *(b)(i)*, whichever is the greater.

**16. Claims on corporates**

(1) Subject to *subrule (2)*, where a corporate has a current ECAI issuer rating, or a debt obligation issued or undertaken by the corporate has a current ECAI issue specific rating, then an authorized institution shall map the ECAI issuer rating or ECAI issue specific rating, as the case may be, to a scale of uniform credit quality grades represented by the numerals 1, 2, 3, 4 and 5 in accordance with *Table C* set out in *Schedule 2*.

(2) Where a current ECAI issue specific rating referred to in *subrule (1)* is a short-term issue specific rating as referred to in *subrule (6)*, then *subrules (6)* and *(7)* shall apply.

(3) Subject to *subrules (4)* to *(9)* and *rule 22*, an authorized institution shall allocate a risk-weight to a claim by it on a corporate in accordance with *Table 6*.

**Table 6**

**Risk-weighting of claims on corporates**

Credit quality grade (corporates)	1	2	3	4	5
Risk-weight	20%	50%	100%	100%	150%

- (4) Where a corporate has neither -
- (a) a current ECAI issuer rating; nor
  - (b) a current ECAI issue specific rating (including a current short-term ECAI issue specific rating) assigned to a debt obligation issued or undertaken by it,



then, subject to *subrule (5)*, an authorized institution shall allocate a risk-weight of 100% to a claim by it on the corporate.

(5) Where a corporate falls within *subrule (4)*, then -

- (a) subject to *paragraph (b)*, an authorized institution shall not allocate a risk-weight to a claim by it on the corporate which is lower than the risk-weight attributable to the credit quality grade applicable to the sovereign of the jurisdiction in which the corporate is incorporated or otherwise established on the basis of the sovereign's current ECAI issuer rating;
- (b) if the sovereign referred to in *paragraph (a)* does not have a current ECAI issuer rating, an authorized institution shall allocate a risk-weight of 100% to a claim by it on the corporate.

(6) Where a corporate has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall map the ECAI issue specific rating to a scale of uniform credit quality grades represented by the numerals 1, 2, 3 and 4 in accordance with *Table D* set out in *Schedule 2*.

(7) Subject to *rule 22*, where a corporate has a current short-term ECAI issue specific rating assigned to a claim on it by an authorized institution, then the institution shall allocate a risk-weight to the claim in accordance with *Table 7*.

**Table 7**

**Risk-weighting of claims on corporates with a current short-term ECAI  
issue specific rating**

Credit quality grade (corporates)	1	2	3	4
Risk-weight for claims on corporates with a current short-term ECAI issue specific rating	20%	50%	100%	150%

- (8) Where -
- (a) pursuant to *subrules (6) and (7)* an authorized institution allocates a risk-weight of 150% to a claim by it on a corporate; or
  - (b) the institution knows that -
    - (i) the corporate has a current short-term ECAI issue specific rating assigned to a claim on it by another person (including another authorized institution); and
    - (ii) if *subrules (6) and (7)* applied to the claim referred to in *subparagraph (i)*, it would be allocated a risk-weight of 150% pursuant to those subrules,

then the institution shall allocate a risk-weight of 150% to each other claim by it on the corporate which does not have a current ECAI issue specific rating.

- (9) Where -
- (a) pursuant to *subrules (6) and (7)* an authorized institution allocates a risk-weight of 50% or 100% to a claim by it on a corporate; or
  - (b) the institution knows that -

- (i) the corporate has a current short-term ECAI issue specific rating assigned to a claim on it by another person (including another authorized institution); and
- (ii) if *subrules (6) and (7)* applied to the claim referred to in *subparagraph (i)*, it would be allocated a risk-weight of 50% or 100% pursuant to those subrules,

then the institution shall not allocate a risk-weight of less than 100% to each other claim -

- (c) by it on the corporate;
- (d) which does not have a current short-term ECAI issue specific rating; and
- (e) with an original maturity not greater than that of the claim referred to in *paragraph (a) or (b)(i)*, whichever is the greater.

## 17. Cash items

An authorized institution shall allocate a risk-weight of 0% to all cash items except that -

- (a) in the case of cash items falling within *paragraph (d)* of the definition of “cash items”, the institution shall allocate a risk-weight that is the same as the risk-weight applicable to the other person who holds the gold bullion concerned;
- (b) in the case of cash items falling within *paragraph (e)* of the definition of “cash items”, the institution shall allocate a risk-weight of 100%;
- (c) in the case of cash items falling within *paragraph (f)* of the definition of “cash items”, the institution shall allocate a risk-weight of 20%; and
- (d) in the case of cash items falling within *paragraph (i)* of the definition of “cash items”, the institution shall allocate a risk-weight applicable to the counterparty of the transaction concerned in accordance with *rules 10 to 16, 18 and 20*.

**18. Regulatory retail exposures**

(1) Subject to *subrule (2)*, an authorized institution shall allocate a risk-weight of 75% to each of its regulatory retail exposures.

(2) Where a regulatory retail exposure of an authorized institution is a claim on a small business, the institution shall comply with -

- (a) the provisions applicable to authorized institutions in the Commercial Credit Reference Agency framework set out in the Monetary Authority's Supervisory Policy Manual Module IC-7 entitled "The Sharing and Use of Commercial Credit Data through a Commercial Credit Reference Agency", as that framework is in force from time to time; and
- (b) the provisions of any guidelines relating to that framework issued by -
  - (i) the Monetary Authority;
  - (ii) the Hong Kong Association of Banks; or
  - (iii) the DTC Association.

## 19. Residential mortgage loans

- (1) Subject to *subrules (2) and (5)*, an authorized institution shall allocate a risk-weight of 35% to a residential mortgage loan where -
- (a) the borrower under the loan is -
    - (i) a natural person or persons; or
    - (ii) a property-holding shell company;
  - (b) the loan is secured by a first legal charge on a residential property or more than one residential property;
  - (c) each residential property falling within *paragraph (b)* is -
    - (i) if *paragraph (a)(i)* is applicable, used as the residence of the borrower or as a residence of a tenant of the borrower;
    - (ii) if *paragraph (a)(ii)* is applicable, used as the residence of the directors or shareholders of the borrower or as a residence of a tenant of the borrower;
  - (d) subject to *subrule (3)*, the loan-to-value ratio of the loan, if each residential property falling within *paragraph (b)* is situated in Hong Kong, does not exceed 70% at the time a commitment to extend the loan was created by the institution, or in relation to a residential mortgage loan purchased by the institution, at the time the loan was purchased;
  - (e) the loan-to-value ratio of the loan, if each residential property falling within *paragraph (b)* is situated in Hong Kong, does not exceed 100% of the current open market value of the property the

subject of the loan after the time the loan was drawn by the borrower or purchased by the institution; and

- (f) if the borrower under the loan is a property-holding shell company -
  - (i) all of the borrowed-monies obligations of the company arising under the loan are the subject of a personal guarantee –
    - (A) entered into by one or more than one director or shareholder (“guarantor”) of the company; and
    - (B) that fully and effectively covers those obligations;
  - (ii) the institution, having due regard to the guarantor’s financial obligations (including, in particular, all the guarantor’s borrowed-monies obligations and obligations of suretyship), is satisfied that the guarantor is able to discharge all the guarantor’s obligations under the guarantee; and
  - (iii) the loan has been assessed by reference to substantially similar credit underwriting standards (including loan purpose and loan-to-value and debt service ratios) as would normally be applied by the institution to an individual.

(2) Where, in respect of a residential mortgage loan by an authorized institution, any residential property falling within *subrule (1)(b)* is situated outside Hong Kong, then the institution shall allocate a risk-weight to the loan generally provided for

under the supervisory treatment, or capital adequacy requirements, applicable to banks carrying on banking business in the jurisdiction in which the residential property is situated.

- (3) Where -
- (a) a residential mortgage loan is made by an authorized institution to a member of its staff (whether solely or jointly with another person); and
  - (b) each residential property falling within *subrule (1)(b)* in respect of the loan is situated in Hong Kong,

then the loan-to-value ratio of the loan shall not exceed 90% at the time a commitment to extend the loan was created by the institution.

(4) Subject to *subrule (5)*, an authorized institution shall allocate a risk-weight of -

- (a) subject to *subrule (8)*, 75% to a residential mortgage loan made or purchased by it which does not fall within *subrule (1)* but -
  - (i) does satisfy *paragraph (a)(i)* and *(iii)* of the definition of “regulatory retail exposure”; and
  - (ii) the loan-to-value ratio of which does not exceed 90% at the time a commitment to extend the loan was created by the institution, or in relation to a residential mortgage loan purchased by the institution, at the time the loan was purchased;



- (b) 100% to a residential mortgage loan made or purchased by it which does not fall within *subrule (1)* or *paragraph (a)*.

(5) Subject to *subrule (6)*, an authorized institution shall exclude from the calculation of the loan-to-value ratio of a residential mortgage loan made or purchased by it -

- (a) any portion of the loan amount which has been provided by a property developer which is not a member of the group of companies of which the institution is a member; and
- (b) any portion of the loan amount the subject of -
  - (i) a guarantee given by a person referred to in *rule 54*;
  - (ii) insurance given by an insurer eligible for a risk-weight of not more than 20% in the use of the STC to calculate credit risk; or
  - (iii) cash on deposit falling within *rule 34(1)(a)*.

(6) The Monetary Authority may, by notice in writing given to an authorized institution, direct the institution, in calculating -

- (a) the loan-to-value ratio of a residential mortgage loan specified in the notice; or
- (b) the loan-to-value ratio of a residential mortgage loan belonging to a class of residential mortgage loans specified in the notice,

to include a portion of the loan amount which would otherwise be excluded pursuant to *subrule (5)*.

(7) An authorized institution given a notice under *subrule (6)* shall comply with the notice.

(8) *Subrule (4)(a)* shall not apply to a residential mortgage loan made or purchased by an authorized institution if the application of that subrule to the loan would cause the institution's maximum aggregate retail exposure referred to in *paragraph (a)(iii)* of the definition of "regulatory retail exposure" to exceed HK \$10 million.

(9) In this rule -  
"loan-to-value ratio" ( ), in relation to a residential mortgage loan, means the ratio of the amount of -

(a) that loan; and

(b) all other loans in respect of which the residential property falling within *subrule (1)(b)* in respect of that loan is also used as security, to the market value of the security.

**20. Other assets which are not past due exposures**

(1) This rule applies to each on-balance sheet asset of an authorized institution which -

(a) does not fall within any of *rules 10 to 19* or *21* (including accrued interest if *subrule (5)* is applicable); and

(b) is not excluded for the purposes of this Part by *rule 8(a)*.

(2) Subject to *subrules (3)* and *(4)*, an authorized institution shall allocate a risk-weight of 100% to an asset to which this rule applies.

(3) The Monetary Authority may, by notice in writing given to an authorized institution, direct the institution to allocate to an asset, or an asset belonging to a class of assets, to which this rule applies, a risk-weight specified in the notice, being a risk-weight greater than 100%.

(4) An authorized institution given a notice under *subrule (3)* shall comply with the notice.

(5) Where in respect of an on-balance sheet asset of an authorized institution, the institution has difficulty in allocating any accrued interest under the asset to the counterparties of the institution, then the institution may, with the prior consent of the Monetary Authority, treat the accrued interest as an asset to which this rule applies.

**21. Past due exposures**

(1) Notwithstanding *rules 10 to 20*, an authorized institution shall allocate a risk-weight of 150% to the relevant amount of a past due exposure.

(2) In this rule, “relevant amount” ( ), in relation to a past due exposure, means the amount -

- (a) representing the unsecured portion of the exposure; and
- (b) calculated by deducting from the gross outstanding amount of the exposure -
  - (i) the value of any specific provisions made in respect of the exposure; and
  - (ii) the sum representing the effect of any recognised credit risk mitigation on the exposure.

## **22. Application of current ECAI ratings**

(1) An authorized institution shall, in performing its function under any subrule of *rule 10, 12, 14, 15* or *16* in relation to a claim of the institution consisting of a debt obligation issued or undertaken by any person (“concerned claim A”) where the debt obligation has one or more than one current ECAI issue specific rating assigned to it, determine the rating to be used in accordance with *subrule (2)*.

(2) An authorized institution shall, in performing its function under *subrule (1)* in relation to concerned claim A -

- (a) if the claim has only one applicable current ECAI issue specific rating, use that rating;
- (b) if the claim has 2 applicable current ECAI issue specific ratings the use of which by the institution would result in the allocation by the institution of different risk-weights to the claim, use that one of those ratings which would result in the allocation by the institution of the higher of those different risk-weights;
- (c) if the exposure has 3 or more applicable current ECAI issue specific ratings the use of which by the institution would result in the allocation by the institution of different risk-weights to the claim, use that one of those ratings which would result in the allocation by the institution of the second lowest of those different risk-weights.

(3) Subject to *subrules (4A)* and *(6)*, where -

- (a) a claim (howsoever described) of an authorized institution falling within any subrule of *rule 10, 12, 14, 15 or 16* does not have a current ECAI issue specific rating;
- (b) the person against whom the institution has the claim has a current long-term ECAI issue specific rating assigned to a debt obligation issued or undertaken by the person; and
- (c) the person against whom the institution has a claim does not have a current ECAI issuer rating,

then the institution shall, in performing its function under that subrule in relation to that exposure, use the current long-term ECAI issue specific rating referred to in *paragraph (b)* in relation to the exposure subject to the condition that, if the use of that current long-term ECAI issue specific rating by the institution would result in the allocation by the institution of a risk-weight to the exposure which would be lower than the risk-weight allocated by the institution to the exposure on the basis that the person has neither a current ECAI issuer rating nor a current ECAI issue specific rating assigned to a debt obligation issued or undertaken by it, then the exposure must rank *pari passu* with, or senior in respect of payment or repayment to, the debt obligation referred to in *paragraph (b)*.

- (4) Subject to *subrules (4A) and (6)*, where -
  - (a) a claim (howsoever described) of an authorized institution falling within any subrule of *rule 10, 12, 14, 15 or 16* does not have a current ECAI issue specific rating;

- (b) the person against whom the institution has the claim has a current ECAI issuer rating; and
- (c) the person against whom the institution has the claim does not have a long-term ECAI issue specific rating assigned to a debt obligation issued or undertaken by the person,

then the institution shall, in performing its function under that subrule in relation to that claim, use the current ECAI issuer rating referred to in *paragraph (b)* in relation to the exposure subject to the condition that, if the use of that current ECAI issuer rating by the institution would result in the allocation by the institution of a risk-weight to the exposure which would be lower than the risk-weight allocated by the institution to the exposure on the basis that the person has neither a current ECAI issuer rating nor a current ECAI issue specific rating assigned to a debt obligation issued or undertaken by it, then -

- (d) the parameters of that current ECAI issuer rating must not indicate that the rating should be treated as any thing other than a rating applicable to senior, unsecured claims on the person as an issuer; and
- (e) the claim on the person must be senior and unsecured.

(4A) An authorized institution shall, in determining pursuant to *subrule (3)* or *(4)* the risk-weight for a claim falling within *paragraph (a)* of that subrule (“concerned claim B”) based on one or more than one current ECAI issue specific rating of another debt obligation issued or undertaken by the person against whom the institution has concerned claim B (“reference claim”), or based on one or more than one current ECAI issuer rating of that person (“issuer”) -

- (a) if the reference claim has only one applicable current ECAI issue specific rating, or the issuer has only one applicable current ECAI issuer rating, as the case may be, use that rating;
  - (b) if the reference claim has 2 applicable current ECAI issue specific ratings, or the issuer has 2 applicable current ECAI issuer ratings, as the case may be, the use of which by the institution would result in the allocation by the institution of different risk-weights to concerned claim B, use that one of those ratings which would result in the allocation by the institution of the higher of those different risk-weights;
  - (c) if the reference claim has 3 or more current ECAI issue specific ratings, or the issuer has 3 or more current ECAI issuer ratings, as the case may be, the use of which by the institution would result in the allocation by the institution of different risk-weights to concerned claim B, use that one of those ratings which would result in the allocation by the institution of the second lowest of those different risk-weights.
- (5) Subject to *subrules (5A) and (6)*, where -
- (a) a claim (howsoever described) of an authorized institution falling within any subrule of any rule of this Part does not have a current ECAI issue specific rating;
  - (b) the person against whom the institution has the claim has -
    - (i) a current ECAI issuer rating; and



- (ii) a current long-term ECAI issue specific rating assigned to a debt obligation issued or undertaken by the person; and
- (c) the use, in accordance with *subrule (3) or (4)*, of the current ECAI issuer rating and the current ECAI issue specific rating referred to in *paragraph (b)* by the institution would result in the allocation by the institution of 2 different risk-weights to the claim,

then the institution, in performing its function under that subrule in relation to that exposure, may allocate the lower of the 2 risk-weights to the claim.

(5A) An authorized institution -

- (a) shall, in determining pursuant to *subrule (5)* the risk-weight for a claim falling within *paragraph (a)* of that subrule (“concerned claim C”) based on one or more than one current ECAI issue specific rating of another debt obligation issued or undertaken by the person against whom the institution has concerned claim C (“reference claim”), and one or more than one current ECAI issuer rating of that person -
  - (i) apply *subrule (4A)* to the one, or more than one, as the case may be, current ECAI issue specific rating to determine the issue specific rating to be used; and
  - (ii) apply *subrule (4A)* to the one, or more than one, current ECAI issuer rating to determine the issuer rating to be used; and

- (b) may, if the risk-weight allocated by the institution to the issue specific rating determined pursuant to *paragraph (a)(i)* is different from the risk-weight allocated by the institution to the issuer rating determined pursuant to *paragraph (a)(ii)*, allocate the lower of the 2 risk-weights to concerned claim C.

(6) The operation of *subrules (3), (4), (4A), (5) and (5A)* shall be subject to the operation of *rules 14(10) and (11), 15(8) and (9) and 16(8) and (9)* and the operation of *subrules (1) and (2)* shall be subject to the operation of *rule 14(11)*.

(7) Where an authorized institution allocates a risk-weight to an exposure of the institution pursuant to *subrule (3), (4), (4A), (5) or (5A)*, then -

- (a) subject to *paragraph (b)*, the institution shall -
  - (i) use current ECAI ratings applicable to foreign currency, if available, to the extent that the exposure is denominated in foreign currency; and
  - (ii) use current ECAI ratings applicable to domestic currency, if available, to the extent that the exposure is denominated in domestic currency;
- (b) the institution may use the counterparty's current ECAI rating applicable to the counterparty's domestic currency, if available, for the purpose of risk-weighting -
  - (i) an exposure arising pursuant to the institution's participation in a loan made by a multilateral development bank which is denominated in another currency; or

- (ii) an exposure denominated in another currency to the extent that the exposure is guaranteed by a multilateral development bank against convertibility and transfer risk.

**22A. Authorized institutions must nominate ECAIs to be used**

(1) Notwithstanding any other provision of this Part (including *rule 22*) but subject to *subrule (2)*, an authorized institution shall -

- (a) before or on the date of the commencement of this rule; or
- (b) before or on the date on which it becomes an authorized institution incorporated in Hong Kong,

whichever is the later -

- (c) nominate, for each of its ECAI ratings based portfolios not falling within *paragraph (d)*, the name of the ECAI the credit assessment ratings of which it will use, for the purposes of this Division, in respect of the ECAI ratings based portfolio concerned; or
- (d) nominate, for each of its ECAI ratings based portfolios not falling within *paragraph (c)*, the names of the ECAIs the credit assessment ratings of which it will use, for the purposes of this Division, in respect of the ECAI ratings based portfolio concerned.

(2) An authorized institution -

- (a) shall nominate under *subrule (1)(c)* the name of an ECAI in respect of an ECAI ratings based portfolio of the institution in respect of which, having regard to the counterparties to the institution's claims falling within that portfolio and to the geographical regions where those claims arise or may require to be enforced, it can reasonably be concluded that the ECAI so

nominated issues a range of credit assessment ratings which provides a reasonable coverage for that portfolio;

- (b) shall nominate under *subrule (1)(d)* the names of ECAIs in respect of an ECAI ratings based portfolio of the institution in respect of which, having regard to the counterparties to the institution's claims falling within that portfolio and to the geographical regions where those claims arise or may require to be enforced, it can reasonably be concluded that the ECAIs so nominated, and taken collectively, issue a range of credit assessment ratings which provides a reasonable coverage for that portfolio.

(3) An authorized institution shall, as soon as is practicable after making a nomination under *subrule (1)*, give notice in writing to the Monetary Authority of the nomination.

(4) An authorized institution shall not, in respect of an ECAI ratings based portfolio of the institution, use, for the purposes of this Division, the credit assessment ratings of an ECAI unless -

- (a) the ECAI has been nominated under *subrule (1)* in respect of that portfolio; and
- (b) notice of that nomination has been given to the Monetary Authority pursuant to *subrule (3)*.

(5) An authorized institution may, with the prior consent of the Monetary Authority, amend a nomination under *subrule (1)* (including a nomination amended pursuant to this subrule).

(6) *Subrules (2), (3) and (4)* shall, with all necessary modifications, apply to a nomination to be amended, or amended, pursuant to *subrule (5)* as they apply to a nomination under *subrule (1)*.

(7) For the avoidance of doubt, it is hereby declared that an authorized institution shall, for the purposes of this Division, treat as not having an ECAI rating any person, or debt obligation, which, although falling within an ECAI ratings based portfolio of the institution, does not have a current ECAI rating assigned to it by an ECAI nominated under *subrule (1)* by that institution in respect of that portfolio.

(8) In this rule -  
“authorized institution” ( ) includes (except in *subrules (4) and (7)*) a company incorporated in Hong Kong by or under the Companies Ordinance (Cap. 32) or any other Ordinance which has made an application under section 15 of the Ordinance for authorization;

“ECAI ratings based portfolio” ( ), in relation to an authorized institution, means -

- (a) the institution’s claims on sovereigns;
- (b) the institution’s claims on banks;
- (c) the institution’s claims on securities firms; or
- (d) the institution’s claims on corporates.

**Division 4 – Calculation of risk-weighted amount of authorized institution’s off-balance sheet exposures**

**23. Off-balance sheet exposures**

(1) An authorized institution, in calculating the risk-weighted amount of an off-balance sheet exposure of the institution -

- (a) specified in *column 1* of *Table 8*; and
- (b) booked in the institution’s banking book,

shall calculate the credit equivalent amount of the off-balance sheet exposure by multiplying the principal amount of the exposure, after deducting any specific provisions applicable to the exposure, by the credit conversion factor specified in *column 2* of *Table 8* opposite the exposure.

**Table 8**

**Determination of credit conversion factor for off-balance sheet exposures other than OTC derivative transactions or credit derivative contracts**

Column 1	Column 2
Off-balance sheet exposures	Credit conversion factor
1. Direct credit substitutes	100%
2. Transaction-related contingencies	50%
3. Trade-related contingencies	20%
4. Asset sales with recourse	100%
5. Forward asset purchases	100%
6. Partly paid-up shares and securities	100%

**Table 8 – continued**

7.	Forward forward deposits placed	100%
8.	Note issuance and revolving underwriting facilities	50%
9.	<p>Other commitments under which the authorized institution is obliged to provide funds in the future not falling within any of the other categories of off-balance sheet exposures listed in this Table or <i>Table 9</i> -</p> <p>(a) commitments with an original maturity of up to and including one year;</p> <p>(b) commitments with an original maturity of over one year;</p> <p>(c) commitments which may be cancelled at any time unconditionally by the authorized institution or which provide for automatic cancellation due to a deterioration in a counterparty’s creditworthiness,</p> <p>where:</p> <p>“original maturity” ( ), in relation to an off-balance sheet exposure of an authorized institution, means the period between the date on which the exposure is entered into by the</p>	<p>20%</p> <p>50%</p> <p>0%</p>



**Table 8 - continued**

institution and the earliest date on which the institution can, at its option, unconditionally cancel the exposure.	
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- (2) Subject to *rule 24*, an authorized institution, in calculating the risk-weighted amount of an off-balance sheet exposure of the institution -
- (a) specified in *column 1* of *Table 9*; and
  - (b) booked in the institution's banking book or trading book,
- shall calculate the credit equivalent amount of the off-balance sheet exposure -
- (c) subject to *paragraph (d)* and to any exceptions specified in *column 1* of *Table 9* applicable to the off-balance exposure, by multiplying the principal amount of the off-balance sheet exposure by the credit conversion factor specified in *column 2* of *Table 9* opposite the off-balance sheet exposure and aggregating the resultant figure with the current exposure of the off-balance sheet exposure;
  - (d) subject to any exceptions specified in *column 1* of *Table 9* applicable to the relevant off-balance sheet exposure, if the relevant off-balance sheet exposure is a single currency floating rate against floating rate interest rate swap, by taking the current exposure of the relevant off-balance sheet exposure as the credit equivalent amount.

**Table 9**

**Determination of credit conversion factor for OTC derivative transactions or credit derivative contracts**

Column 1	Column 2
Off-balance sheet exposures	Credit conversion factor
<p>1. Exchange rate contracts (other than an excluded exchange rate contract) -</p> <ul style="list-style-type: none"> <li>(a) with a residual maturity of up to and including one year;</li> <li>(b) with a residual maturity of over one year up to and including 5 years;</li> <li>(c) with a residual maturity of over 5 years,</li> </ul> <p>where:</p> <p>“excluded exchange rate contract” ( ) means –</p> <ul style="list-style-type: none"> <li>(a) an exchange rate contract which has an original maturity of not more than 14 calendar days; or</li> <li>(b) a forward exchange rate contract;</li> </ul>	<p>1%</p> <p>5%</p> <p>7.5%</p>

**Table 9 - continued**

<p>“forward exchange rate contract” ( ), means a contract entered into by the authorized institution pursuant to a swap deposit arrangement with a counterparty to repurchase foreign currency, which has been deposited by the counterparty with the institution, against another currency at a predetermined exchange rate on a future date;</p> <p>“swap deposit arrangement” ( ), means an arrangement entered into by the authorized institution with a counterparty whereby the institution sells foreign currency at spot rate to the counterparty against another currency, and at the same time, the counterparty deposits the foreign currency so purchased with the institution and enters into a forward exchange rate contract with the institution to sell the foreign currency so purchased back to the institution against another currency at a predetermined exchange rate on a future date.</p>	
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**Table 9 - continued**

2.	Interest rate contracts -	
(a)	with a residual maturity of up to and including one year;	0%
(b)	with a residual maturity of over one year up to and including 5 years;	0.5%
(c)	with a residual maturity of over 5 years.	1.5%
3.	Equity contracts -	
(a)	with a residual maturity of up to and including one year;	6%
(b)	with a residual maturity of over one year up to and including 5 years;	8%
(c)	with a residual maturity of over 5 years.	10%
4.	Precious metal contracts -	
(a)	with a residual maturity of up to and including one year;	7%
(b)	with a residual maturity of over one year up to and including 5 years;	7%
(c)	with a residual maturity of over 5 years.	8%

**Table 9 - continued**

<p>5. Other commodities contracts -</p> <p>(a) with a residual maturity of up to and including one year;</p> <p>(b) with a residual maturity of over one year up to and including 5 years;</p> <p>(c) with a residual maturity of over 5 years.</p>	<p>10%</p> <p>12%</p> <p>15%</p>
<p>6. Credit derivative contracts consisting of -</p> <p>(a) credit default swaps booked in the trading book -</p> <p>(i) where the authorized institution is a protection buyer and the underlying reference [obligation] is -</p> <p>(A) a qualifying reference [obligation];</p> <p>(B) a non-qualifying reference [obligation];</p> <p>(ii) where the authorized institution is a protection seller and the credit default swap is subject to close-out upon the insolvency of the protection buyer while the underlying reference [entity] is still solvent and the potential exposure is</p>	<p>5%</p> <p>10%</p>

**Table 9 - continued**

<p>capped at the amount of the unpaid premium under the contract provided that the underlying reference [obligation] is -</p> <p>(A) a qualifying reference [obligation];</p> <p>(B) a non-qualifying reference [obligation];</p> <p>(b) total return swaps booked in the trading book -</p> <p>(i) where the authorized institution is the total return receiver and the underlying reference [obligation] is -</p> <p>(A) a qualifying reference [obligation];</p> <p>(B) a non-qualifying reference [obligation];</p> <p>(ii) where the authorized institution is the total return payer and the underlying reference [obligation] is-</p> <p>(A) a qualifying reference [obligation];</p> <p>(B) a non-qualifying reference [obligation].</p>	<p>5%</p> <p>10%</p> <p>5%</p> <p>10%</p> <p>5%</p> <p>10%</p>
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**24. Provisions supplementary to rule 23**

For the purposes of the operation of *rule 23* in relation to an authorized institution and its off-balance sheet exposures -

- (a) in the case of an off-balance sheet exposure which has multiple exchanges of principal, the institution shall calculate its potential exposure to the off-balance sheet exposure by multiplying the product of the number of payments remaining to be made under the off-balance sheet exposure and the principal by the credit conversion factor required to be used under that rule in respect of the off-balance sheet exposure;
- (b) in the case of an off-balance sheet exposure -
  - (i) structured to settle the outstanding exposures under the off-balance sheet exposure following specified payment dates; and
  - (ii) the terms of which are reset so that the market value of the off-balance sheet exposure is zero on the specified payment dates referred to in *subparagraph (i)*,  
then the institution -
    - (iii) subject to *subparagraph (iv)*, shall treat the residual maturity of the off-balance sheet exposure as being equal to the period until the next reset date; and
    - (iv) if the off-balance sheet exposure is an interest rate contract of which the remaining time to final maturity of the

contract is more than one year, shall not use a credit conversion factor of less than 0.5% in respect of the off-balance sheet exposure;

- (c) in the case of an off-balance sheet exposure booked in the institution's trading book which is a first-to-default credit derivative contract, the institution shall use the credit conversion factor of the non-qualifying reference [entities] if there is at least one non-qualifying reference entity in the basket of reference [entities], otherwise the credit conversion factor of the qualifying reference [entities] is to be used;
- (d) in the case of an off-balance sheet exposure booked in the institution's trading book which is a second-to-default credit derivative contract or any other subsequent-to-default credit derivative contract, the institution shall -
  - (i) for the second-to-default credit derivative contract, use the credit conversion factor of the non-qualifying reference [entities] if there are at least 2 non-qualifying reference [entities] in the basket of reference [entities] of the second-to-default credit derivative contract, otherwise the credit conversion factor of the qualifying reference [entities] is to be used;
  - (ii) for the other subsequent-to-default credit derivative contract, determine the credit conversion factor of the other



subsequent-to-default credit derivative contract with  
reference to the corresponding number of non-qualifying  
reference [entities] in the basket of reference [entities]  
based on the approach taken in *subparagraph (i)*.

**25. Calculation of credit equivalent amount of other off-balance sheet exposures not specified in Table 8 or 9**

(1) An authorized institution shall calculate the credit equivalent amount of an off-balance sheet exposure which is not specified in *Table 8* or *Table 9* by multiplying the principal amount of the exposure, after deducting any specific provisions applicable to the exposure -

- (a) subject to *paragraph (b)*, by a credit conversion factor of 100%;
- (b) by the credit conversion factor applicable to the exposure as specified in a notice under *subrule (2)*.

(2) The Monetary Authority may, by notice published in the Gazette, specify a credit conversion factor applicable to an off-balance sheet exposure referred to in *subrule (1)*.

(3) For the avoidance of doubt, it is hereby declared that a notice under *subrule (2)* is not subsidiary legislation.

**26. Determination of risk-weights applicable to off-balance sheet exposures**

(1) Subject to *subrule (2)*, an authorized institution shall determine the risk-weight applicable to an off-balance sheet exposure by reference to the risk-weight allocated to the counterparty to the exposure in accordance with *rules 10 to 21*.

(2) Where an off-balance sheet exposure referred to in *subrule (1)* of an authorized institution is -

- (a) an assets sale with recourse;
- (b) a forward asset purchase;
- (c) partly paid-up shares and securities; or
- (d) a direct credit substitute arising from the selling of credit derivative contracts in the form of total return swaps or credit default swaps in the institution's banking book,

then the institution shall determine the risk-weight applicable to the exposure -

- (e) in the case of *paragraph (a)* or *(b)*, by reference to the risk-weight allocated to the underlying assets or the issuer of the underlying assets of the exposure;
- (f) in the case of *paragraph (c)*, as 100%;
- (g) in the case of *paragraph (d)* and subject to *subrule (3)*, by reference to the risk-weight of the relevant reference [entity] in respect of the exposure.

(3) Where an off-balance sheet exposure referred to in *subrule (2)(d)* of an authorized institution is -

- (a) a first-to-default credit derivative contract -

- (i) which has a current ECAI issue specific rating, then the institution shall allocate to the contract the risk-weight applicable as derived from the risk-weight applied to asset securitisation;
- (ii) which does not have a current ECAI issue specific rating, then the institution -
  - (A) subject to *sub-subparagraph (B)*, shall aggregate the risk-weights of the reference [entities] in the basket of reference [entities] specified in the contract to determine the risk-weight of the contract; and
  - (B) shall not allocate to the contract a risk-weight greater than 1250%;
- (b) a second-to-default credit derivative contract -
  - (i) which has a current ECAI issue specific rating, then the institution shall allocate to the contract the risk-weight applicable as derived from the risk-weight applied to asset securitisation;
  - (ii) which does not have a current ECAI issue specific rating, then the institution -
    - (A) subject to *sub-subparagraph (B)*, shall aggregate the risk-weights of the reference [entities] in the basket of reference [entities] specified in the

contract to determine the risk-weight of the contract  
but excluding the lowest of those risk-weights; and

(B) shall not allocate to the contract a risk-weight  
greater than 1250%;

(c) a credit derivative contract which provides credit protection  
proportionately to the reference [entities] in the basket of reference  
[entities] as specified in the contract, then the institution shall  
calculate the risk-weight of its exposure under the contract by  
taking a weighted average of the risk-weights attributable to the  
reference [entities] in the basket by the use of *Formula 1*.

(4) For the avoidance of doubt, it is hereby declared that where an off-balance  
sheet exposure referred to in *subrule (1)* of an authorized institution is a commitment to  
extend a residential mortgage loan, then the institution shall allocate a risk-weight in  
accordance with *rule 19* to the exposure if the institution has no reason to believe that any  
of the provisions of that rule will not be satisfied immediately after the loan that is the  
subject of that commitment is drawn down.

### Formula 1

#### Calculation of risk-weighted exposure of credit derivative contract

falling within *rule 26(3)(c)*

$$RW_a = \sum_i a_i \times RW_i$$

where:

$RW_a$  = average risk-weight in a basket of reference [entities];

$a_i$  = proportion of credit protection allocated to a reference [entity]; and

$RW_i$  = risk-weight of a reference [entity].

**27. Calculation of total aggregate risk-weighted credit exposure of authorized institution**

An authorized institution shall calculate its total aggregate risk-weighted credit exposure by adding together all of the products achieved -

- (a) by multiplying the principal amount of each of its on-balance sheet assets, after deducting any specific provisions applicable to the assets, by the risk-weights respectively allocated to the assets under *rules 10 to 21*; and
- (b) subject to *rule 26(2)*, by multiplying the credit equivalent amount of each of its off-balance sheet exposures (after, in the case of those exposures listed in *Table 9*, deducting any specific provisions applicable to such exposures) by the risk-weights respectively allocated to the counterparties to the exposures under *rules 10 to 21*.

[28. **Provision not used**].



**29. Calculation of risk-weighted exposure of repo-style transactions booked in banking book**

An authorized institution shall calculate the risk-weighted exposure of a repo-style transaction booked in its banking book by -

- (a) in the case of a repo-style transaction falling within *paragraph (a)* or *(b)* of the definition of “repo-style transaction”, treating the securities sold or lent under the transaction as an asset of the institution as if the institution had never entered into the transaction and, accordingly, calculating the risk-weighted exposure of the transaction by reference to the risk-weight attributable to the securities;
- (b) in the case of a repo-style transaction falling within *paragraph (c)* of the definition of “repo-style transaction”, treating the funds paid by the institution under the transaction as a loan to the counterparty secured on the securities which are provided to, or to the order of, the institution under the transaction and, accordingly, calculating the risk-weighted exposure of the transaction by reference to the risk-weight attributable to the counterparty subject to the application of any recognised credit risk mitigation in respect of collateralised transactions;
- (c) in the case of a repo-style transaction falling within *paragraph (d)* of the definition of “repo-style transaction” -

- (i) if and to the extent the institution has provided collateral in the form of money under the transaction, treating the funds paid by the institution under the transaction as a loan to the counterparty secured on the securities borrowed by the institution and, accordingly, calculating the risk-weighted exposure of the transaction by reference to the risk-weight attributable to the counterparty subject to the application of any recognised credit risk mitigation in respect of collateralised transactions;
- (ii) if and to the extent the institution has provided collateral in the form of securities under the transaction, treating those securities as its asset as if the institution had never entered into the transaction and, accordingly, calculating the risk-weighted exposure of the transaction by reference to the risk-weight attributable to the securities.

**30. Calculation of risk-weighted exposure of repo-style transactions booked in trading book**

An authorized institution shall calculate the risk-weighted exposure of a repo-style transaction booked in its trading book by -

- (a) reference to the [market risk regime] in any case where the transaction would fall within *rule 29(a)* or *(c)(ii)* if it were booked in the institution's banking book;
- (b) the application of the comprehensive approach to the treatment of collateral in any case where the transaction would fall within *rule 29(b)* or *(c)(i)* if it were booked in the institution's banking book.

**[Division 5 – Division not used]**

**[31. Provision not used].**

## **Division 6 – Use of collateral in credit risk mitigation**

### **32. Credit risk mitigation which is collateral**

Collateral is recognised for the purposes of calculating the risk-weighted amount of an authorized institution's on-balance sheet assets or off-balance sheet exposures where -

- (a) all documentation creating the collateral and providing for the obligations of the parties with respect to each other in respect of the collateral is binding on all the parties and legally enforceable in all the relevant jurisdictions;
- (b) the legal mechanism by which the collateral is pledged or transferred ensures that the institution has the right to liquidate, or to take legal possession of, the collateral in a timely manner in the event of a default by, or the insolvency or bankruptcy of, or other credit event applicable to the counterparty (and, where applicable, of the custodian holding the collateral);
- (c) the institution has clear and adequate procedures for the timely liquidation of collateral in respect of an event referred to in *paragraph (b)*;
- (d) the institution has taken all steps to fulfil requirements under the law applicable to the institution's interest in the collateral which are necessary to obtain and maintain an enforceable security

- interest, whether by registration or otherwise, or to exercise a right to set-off in relation to title transfer collateral;
- (e) if the collateral is to be held by a custodian, the institution has taken reasonable steps to ensure that the custodian segregates the collateral from the custodian's assets;
  - (f) there is no material positive correlation between the credit quality of the counterparty in respect of which the institution has an exposure in respect of the on-balance sheet asset or off-balance sheet exposure, as the case may be, and the value of the collateral provided in respect of the exposure such that the value of the collateral would be likely to fall in the case of any material deterioration in the financial condition of the counterparty;
  - (g) if the simple approach to the treatment of collateral applies to the collateral, the collateral -
    - (i) is pledged for not less than the life of the exposure;
    - (ii) subject to *subparagraph (iii)*, is re-valued not less than every 6 months from the date upon which the collateral is taken in respect of the exposure; and
    - (iii) in the case of an exposure which is a past due exposure, is re-valued not less than every 3 months from the date upon which the exposure is categorised as a past due exposure;
  - (h) if the simple approach to the treatment of collateral applies to the collateral, the institution may, in the case of a past due exposure,

take into account collateral in the form of real property (whether residential or otherwise) the value of which is subject to re-valuation not less than every 3 months from the date upon which the exposure is categorised as a past due exposure; and

- (i) if the comprehensive approach to the treatment of collateral applies to the collateral, the institution has in place a written internal policy and systems and procedures -
  - (i) adequate to enable the institution to manage collateral provided to it in respect of any relevant exposure; and
  - (ii) to revalue the collateral as necessary and take account of the assumed minimum holding periods for collateral in the calculation of risk-weighted assets and risk-weighted exposures for collateralised transactions.

**33. Capital treatment of recognised collateral**

(1) Subject to *subrule (2)*, an authorized institution may adopt the simple approach or the comprehensive approach in respect of the treatment of recognised collateral.

(2) An authorized institution shall -

- (a) for all exposures in the institution's banking book which are not past due exposures, adopt only the simple approach or only the comprehensive approach in respect of the treatment of recognised collateral;
- (b) for a past due exposure in the institution's banking book, adopt only the simple approach in respect of the treatment of recognised collateral; and
- (c) for an exposure in the institution's trading book, adopt only the comprehensive approach in respect of the treatment of recognised collateral.



### 34. Recognised collateral under simple approach

(1) Where an authorized institution adopts the simple approach to the treatment of collateral, only the following recognised collateral may be used under that approach -

- (a) cash on deposit with the institution or held at a third-party bank in a non-custodial arrangement;
- (b) certificates of deposit issued by the institution against exposures in its banking book;
- (c) cash-funded credit-linked notes -
  - (i) which fulfil requirements for credit derivative contracts specified in *rule 55* (except that the notes do not have to fulfil the requirements of *rule 55(1)(a)* or those requirements of *rule 55* that only apply to credit default swaps and total return swaps); and
  - (ii) issued by the institution against exposures in its banking book;
- (d) instruments issued by the institution which are comparable to instruments referred to in *paragraph (b)* or *(c)*;
- (e) gold;
- (f) debt securities issued by a sovereign that have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table A* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 4;

- (g) subject to *subrule (2)*, debt securities issued by a sovereign foreign public sector entity which have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table A* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 4;
- (h) debt securities issued by a domestic public sector entity, or a foreign public sector entity which is not a sovereign foreign public sector entity, that have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table A* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 3;
- (i) debt securities issued by a multilateral development bank;
- (j) debt securities issued by a bank or securities firm which have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table B* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 3;
- (k) debt securities issued by a corporate which have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table C* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 3;
- (l) debt securities issued by a bank, securities firm or corporate which have a current short-term ECAI issue specific rating which, if

mapped to the scale of credit quality grades in *Table D* set out in *Schedule 2*, would result in the debt securities being assigned a credit quality grade of not more than 3;

- (m) debt securities issued by a bank or securities firm which do not have a current ECAI issue specific rating where -
  - (i) the debt securities rank as senior debt of the issuer of the debt securities;
  - (ii) the debt securities are listed on a recognised exchange and the institution is of the reasonable opinion that, having regard to current market conditions, there is sufficient liquidity in the market for the debt securities to enable the institution to dispose of the debt securities at an open market price;
  - (iii) other issues of debt securities issued by the same issuer, and which rank pari passu with the first-mentioned debt securities, have a current ECAI issue specific rating which, if mapped to the scale of credit quality grades in *Table B* set out in *Schedule 2* (or, in the case of claims with current short-term ECAI issue specific ratings, in *Table D* set out in *Schedule 2*) would result in the debt securities being assigned a credit quality grade of not more than 3; and
  - (iv) the institution is not aware, and has no reason to be aware, of information suggesting that an assignment of a credit

quality grade of higher than 3 would be justified in respect of the debt securities;

- (n) equities (including convertible bonds) that are included in any main indices;
- (o) units or shares in a collective investment scheme where -
  - (i) the price of the units or shares in that scheme is quoted publicly on a daily basis; and
  - (ii) that scheme is restricted by its investment guidelines or objects to investing in those items listed in these Rules as being recognised collateral for the purposes of adopting the simple approach to the treatment of collateral; and
- (p) collateral in the form of real property (whether residential or otherwise) insofar as the collateral relates to a past due exposure.

(2) The Monetary Authority may, by notice published in the Gazette, specify debt securities, or debt securities belonging to a class of debt securities, which do not fall within *subrule (1)(g)*.

(3) For the avoidance of doubt, it is hereby declared that a notice under *subrule (2)* is not subsidiary legislation.

**35. Recognised collateral under comprehensive approach**

Where an authorized institution adopts the comprehensive approach to the treatment of collateral, only the following recognised collateral may be used under that approach -

- (a) collateral falling within *rule 34*;
- (b) equities (including convertible bonds) which are not included in a main index but are listed on a recognised exchange;
- (c) collective investment schemes which may invest in equities referred to in *paragraph (b)*; and
- (d) assets received by the institution under a transaction -
  - (i) falling within *paragraph (c)* or *(d)* of the definition of “repo-style transaction”; and
  - (ii) booked in the institution’s trading book.

**Division 6A – Provisions applicable to credit risk mitigation under  
simple approach to treatment of collateral**

**36. Calculation of risk-weighted assets and risk-weighted exposures taking into account recognised credit risk mitigation effect of simple approach to treatment of collateral**

(1) Where an authorized institution adopts the simple approach to the treatment of collateral, then the institution shall, in respect of an on-balance sheet asset or off-balance sheet exposure of the institution to which the recognised collateral relates -

- (a) subject to *paragraphs (b) and (c) and subrule (2)*, substitute the risk-weight of the collateral for the risk-weight of the counterparty for that proportion of the on-balance sheet asset or off-balance sheet exposure, as the case may be, that is equivalent to the value of the collateral (“credit protection covered portion”);
- (b) if the collateral consists of collateral -
  - (i) falling within *rule 34(1)(a), (b), (c) or (d)*,
  - (ii) held at a third-party bank in a non-custodial arrangement;  
and
  - (iii) unconditionally and irrevocably pledged or assigned to the institution,

substitute the risk-weight attributable to the third-party bank for the risk-weight of the counterparty for that proportion of the on-balance sheet asset or off-balance sheet exposure, as the case may

be, that is equivalent to the value of the collateral (“credit protection covered portion”);

- (c) allocate a risk-weight of 100% to the credit protection covered portion of the on-balance sheet asset or off-balance sheet exposure, as the case may be, if -
  - (i) the asset or exposure, as the case may be, is a past due exposure; and
  - (ii) the collateral provided in respect thereof is real property;
- (d) allocate to that proportion of the on-balance sheet asset or off-balance sheet exposure (“uncovered portion”), as the case may be, which is not the credit protection covered portion -
  - (i) subject to *subparagraph (ii)*, the risk-weight of the counterparty;
  - (ii) in the case of a past due exposure, a risk-weight of 150%.

(2) An authorized institution shall, for the purposes of making a substitution pursuant to *subrule (1)(a)* where the collateral concerned is real property, reduce the value of the real property by –

- (a) 10% in the case of residential property;
- (b) 20% in the case of any other real property.

**37. Determination of risk-weight to be allocated to recognised collateral under simple approach to treatment of collateral**

(1) Where an authorized institution adopts the simple approach to the treatment of collateral, then the institution -

- (a) subject to *paragraph (b)*, shall determine the risk-weight to be allocated to the recognised collateral in accordance with *rules 10 to 21*; and
- (b) subject to *subrules (2), (3) and (4)*, shall not allocate a risk-weight of less than 20% to the recognised collateral.

(2) Subject to *subrule (3)*, an authorized institution may under *subrule (1)* allocate a risk-weight of 0% to recognised collateral provided under a repo-style transaction in the institution's banking book falling within *paragraph (c) or (d)* of the definition of "repo-style transaction" where -

- (a) the counterparty ("core market participant") is -
  - (i) a sovereign;
  - (ii) a public sector entity;
  - (iii) a multilateral development bank;
  - (iv) a bank or securities firm;
  - (v) a corporate which is a financial institution (other than a bank or securities firm) eligible for a risk-weight of 20% in the use of STC to calculate credit risk; or
  - [(vi) a recognised clearing organisation;]
- (b) the exposure to which the collateral relates and the collateral are -



- (i) cash; or
  - (ii) securities issued by a sovereign, or a sovereign foreign public sector entity, which would be allocated a risk-weight of 0% in the use of STC to calculate credit risk;
- (c) the exposure and the collateral are denominated in the same currency;
- (d) either -
  - (i) the exposure is only an overnight exposure; or
  - (ii) the exposure and the collateral are re-valued daily by marking-to-market and the value of any excess collateral (“margin”) is subject to daily adjustment based upon the value of the exposure and the collateral;
- (e) the institution reasonably expects, if the counterparty fails to deliver any margin required to be delivered to the institution under the terms of the transaction, to be able to liquidate the collateral for its benefit within 4 business days of the date upon which the exposure and collateral were last marked-to-market prior to the counterparty’s failure to deliver the margin;
- (f) the transaction is settled by means of a settlement system customarily used for repo-style transactions;
- (g) the transaction is documented using standard market documentation for the securities which are the subject matter of the transaction; and

- (h) the documentation setting out the transaction provides that the institution -
  - (A) may terminate the transaction immediately if-
    - (I) the counterparty commits an event of default under the transaction; or
    - (II) an event of default occurs in respect of the counterparty; and
  - (B) has, immediately upon any such default, an unfettered and legally enforceable right to seize and liquidate the collateral for its benefit and whether or not the counterparty is insolvent or bankrupt.

(3) Where the recognised collateral provided to an authorized institution under a repo-style transaction which satisfies all the provisions of *subrule (2)* except *paragraph (a)* of that subrule, then the institution may under *subrule (1)* allocate a risk-weight of 10% to the collateral.

- (4) An authorized institution may under *subrule (1)* allocate a risk-weight of -
  - (a) 0% to recognised collateral provided under an OTC derivative transaction where -
    - (i) the transaction is marked-to-market daily and is collateralised by cash provided to the institution; and
    - (ii) the settlement currency of the transaction is the same currency as the cash provided to the institution as collateral;

- (b) 10% to recognised collateral which is provided under an OTC derivative transaction where the collateral provided to the institution is debt securities issued by a sovereign, or a sovereign foreign public sector entity, which would under *rule 10* or *12*, as the case may be, be allocated a risk-weight of 0%;
- (c) 0% to recognised collateral which falls within *paragraph (c)* of the definition of “cash items”;
- (d) 0% to recognised collateral provided in the case of any financial transaction where the collateral is -
  - (i) denominated in the same currency as the exposure to which the collateral relates; and
  - (ii) either -
    - (A) cash on deposit with the institution; or
    - (B) debt securities -
      - (I) issued by a sovereign, or sovereign foreign public sector entity, which would under *rule 10* or *12*, as the case may be, be allocated a risk-weight of 0%; and
      - (II) the current market value of which has been reduced by a haircut of 20%.

**38. Calculation of risk-weighted amount of on-balance sheet assets**

An authorized institution shall calculate the risk-weighted amount of each of its on-balance sheet assets by -

- (a) dividing the principal amount of the asset, net of any specific provisions in respect of it, into -
  - (i) the credit protection covered portion; and
  - (ii) the uncovered portion;
- (b) multiplying the credit protection covered portion by the risk-weight allocated to the recognised collateral and multiplying the uncovered portion by the risk-weight attributable to the counterparty; and
- (c) adding together the 2 products derived from the application of *paragraph (b)*.

**39. Off-balance sheet exposures other than OTC derivative transactions**

An authorized institution shall calculate the risk-weighted amount of each of its off-balance sheet exposures which is not an OTC derivative transaction by -

- (a) dividing the principal amount of the exposure , net of any specific provisions in respect of it, into -
  - (i) the credit protection covered portion; and
  - (ii) the uncovered portion;
- (b) multiplying the credit protection covered portion and the uncovered portion by the credit conversion factor applicable to the off-balance sheet exposure to produce 2 credit equivalent amounts;
- (c) multiplying the credit equivalent amount of the credit protection covered portion by the risk-weight attributable to the recognised collateral and multiplying the credit equivalent amount of the uncovered portion by the risk-weight attributable to the counterparty; and
- (d) adding together the 2 products derived from the application of *paragraph (c)*.

**40. OTC derivative transactions**

An authorized institution shall calculate the risk-weighted amount of each of its off-balance sheet exposures which is an OTC derivative transaction by -

- (a) multiplying the principal amount of the transaction by the applicable credit conversion factor to ascertain the potential exposure of the institution pursuant to the transaction and adding the current exposure of the institution in relation to the transaction to derive the credit equivalent amount of the transaction;
- (b) dividing the credit equivalent amount, net of any specific provisions in respect of the transaction, into the credit protection covered portion and the uncovered portion;
- (c) multiplying the credit equivalent amount of the credit protection covered portion by the risk-weight attributable to the collateral and multiplying the credit equivalent amount of the uncovered portion by the risk-weight attributable to the counterparty; and
- (d) adding together the 2 products derived from the application of *paragraph (c)*.

**Division 7 – Provisions applicable to credit risk mitigation under comprehensive approach to treatment of collateral**

**41. Calculation of risk-weighted assets and risk-weighted exposures taking into account recognised credit risk mitigation effect of comprehensive approach to treatment of collateral**

Where an authorized institution adopts the comprehensive approach to the treatment of collateral, then the institution shall calculate the risk-weighted amount of its on-balance sheet assets and off-balance sheet exposures in accordance with *rules 42 to 48*.

#### 42. On-balance sheet assets

An authorized institution shall calculate its net credit exposure to a counterparty in respect of an on-balance sheet asset by the use of *Formula 2*.

##### Formula 2

##### Calculation of net credit exposure to counterparty under on-balance sheet asset

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

where:

$E^*$  = net credit exposure;

$E$  = principal amount of on-balance sheet asset net of specific provisions, if any;

$H_e$  = haircut applicable to the authorized institution's exposure to the counterparty pursuant to the standard supervisory haircuts for the comprehensive approach to treatment of collateral subject to adjustment as set out in *rule 47*;

$C$  = value of the recognised collateral before adjustment required by the comprehensive approach to treatment of collateral;

$H_c$  = haircut applicable to the recognised collateral pursuant to the standard supervisory haircuts for the comprehensive approach to treatment of collateral subject to adjustment as set out in *rule 47*;  
and

$H_{fx}$  = haircut applicable in consequence of a currency mismatch, if any, between the on-balance sheet asset and the recognised collateral subject to adjustment as set out in *rule 47*.



**43. Off-balance sheet exposures other than credit derivative contracts booked in trading book or OTC derivative transactions**

An authorized institution shall calculate its net credit exposure to a counterparty in respect of an off-balance sheet exposure (other than a credit derivative contract booked in the trading book of the institution or an OTC derivative transaction) by the use of *Formula 3*.

**Formula 3**

**Calculation of net credit exposure to counterparty under off-balance sheet exposures other than credit derivative contracts booked in the trading book and OTC derivative transactions**

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

where:

$E^*$  = net credit exposure;

$E$  = principal amount of off-balance sheet exposure net of specific provisions, if any;

$H_e$  = haircut applicable to the authorized institution's exposure to the counterparty pursuant to the standard supervisory haircuts for the comprehensive approach to the treatment of collateral subject to adjustment as set out in *rule 47*;

$C$  = value of the recognised collateral before adjustment required by the comprehensive approach to the treatment of collateral;

- $H_c$  = haircut applicable to the collateral pursuant to the standard supervisory haircuts for the comprehensive approach to the treatment of collateral subject to adjustment as set out in *rule 47*;
- $H_{fx}$  = haircut applicable in consequence of a currency mismatch, if any, between the off-balance sheet exposure and the recognised collateral subject to adjustment as set out in *rule 47*; and
- CCF = credit conversion factor applicable to the off-balance sheet exposure.

**44. Credit derivative contracts booked in trading book and OTC derivative transactions**

An authorized institution shall calculate its net credit exposure to a counterparty in respect of a credit derivative contract booked in the institution's trading book, or an OTC derivative transaction, by the use of *Formula 4*.

**Formula 4**

**Calculation of net credit exposure to counterparty under credit derivative contracts booked in trading book and OTC derivative transactions**

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

where:

$E^*$  = net credit exposure;

$E$  = credit equivalent amount of the exposure (calculated by aggregating the potential exposure and current exposure of the authorized institution in relation to the credit derivative contract or OTC derivative transaction, as the case may be) net of specific provisions, if any;

$H_e$  = haircut applicable to the authorized institution's exposure to the counterparty pursuant to the standard supervisory haircuts for the comprehensive approach to the treatment of collateral subject to adjustment as set out in *rule 47*;

$C$  = value of the recognised collateral before adjustment required by the comprehensive approach to the treatment of collateral;

$H_c$  = haircut applicable to the collateral pursuant to the standard supervisory haircuts for the comprehensive approach to the treatment of collateral subject to adjustment as set out in *rule 47*;  
and

$H_{fx}$  = haircut applicable in consequence of a currency mismatch, if any, between the off-balance sheet exposure and the recognised collateral subject to adjustment as set out in *rule 47*.

#### 45. Haircuts

Where more than one type of recognised collateral is provided to an authorized institution in respect of an exposure of the institution to an on-balance sheet asset or off-balance sheet exposure of the institution, then the institution shall calculate the haircuts applicable to the collateral by the use of *Formula 5*.

#### Formula 5

**Calculation of haircuts where more than one type of recognised collateral is provided in respect of the same exposure**

$$H_a = \sum_i a_i \times H_i$$

where:

$H_a$  = haircuts applicable to the recognised collateral;

$a_i$  = weight of a given type of recognised collateral provided in respect of the exposure in relation to the aggregate value of all types of recognised collateral provided in respect of that exposure; and

$H_i$  = haircut applicable to that given type of recognised collateral subject to adjustment as set out in *rule 47*.

**46. Minimum holding periods**

Where in respect of an exposure of an authorized institution to an on-balance sheet asset or off-balance sheet exposure of the institution, there is -

- (a) a daily re-valuation of the exposure and the recognised collateral provided in respect of the exposure; or
- (b) a daily adjustment of the margin of the recognised collateral provided in respect of the exposure,

then the institution shall take the assumed minimum holding periods to be as set out in

*Table 10.*

**Table 10**

**Assumed minimum holding periods**

Type of transaction	Assumed minimum holding period	Condition
Repo-style transactions	5 business days	Daily remargining
Other capital market transactions	10 business days	Daily remargining
Secured lending transactions	20 business days	Daily revaluation

**47. Adjustment of standard supervisory haircuts in certain circumstances**

Where for the purposes of *rule 42, 43, 44, 45, 49 or 51* -

- (a) the assumed minimum holding period of an on-balance sheet asset or off-balance sheet exposure of an authorized institution is not 10 business days; or
- (b) the exposure of an authorized institution to an on-balance sheet asset or off-balance sheet exposure of the institution, and the recognised collateral provided to the institution in respect of the exposure, are not subject to daily remargining or revaluation as assumed in the standard supervisory haircuts,

then the institution shall adjust the standard supervisory haircuts by the use of *Formula 6*.

**Formula 6**

**Adjustment of standard supervisory haircuts for circumstances set out in *rule 47***

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

where:

H = haircut after adjustment for differences in assumed minimum holding period and remargining and revaluation frequency;

H<sub>10</sub> = standard supervisory haircuts based on an assumed minimum holding period of 10 business days;

T<sub>M</sub> = assumed minimum holding period for a particular type of transaction (that is, 5 business days for repo-style transactions or 20 business days for secured lending transactions); and

$N_R$  = actual number of days between each remargining or each revaluation of the recognised collateral.



**48. Calculation of risk-weighted amount of collateralised transactions under comprehensive approach to treatment of collateral**

An authorized institution shall calculate the risk-weighted amount of each of its on-balance sheet assets and off-balance sheet exposures which is a collateralised transaction by multiplying the net credit exposure of the institution to the counterparty by the risk-weight applicable to the counterparty.

## Division 8 – Use of netting in credit risk mitigation

### 49. On-balance sheet netting

(1) Where an authorized institution is entitled pursuant to a valid bilateral netting agreement to net amounts owed by the institution to a counterparty against amounts owed by the counterparty to the institution in respect of on-balance sheet assets of the institution, then the institution -

- (a) may take into account the effect of the netting in calculating its exposure to the counterparty; and
- (b) if a net credit exposure for the institution is the result of so taking into account the effect of the netting, shall use the net credit exposure in calculating the risk-weighted amount of the exposure.

(2) Subject to *subrule (3)*, an authorized institution shall calculate its net credit exposure, if any, referred to in *subrule (1)(b)* by the use of *Formula 7*.

#### Formula 7

#### Calculation of net credit exposure under valid bilateral netting agreement

$$\text{Net credit exposure} = \max [0, \text{assets} - \text{liabilities} \times (1 - H_{fx})]$$

where:

assets = the amounts covered by the valid bilateral netting agreement owed by the counterparty to the authorized institution;

**Formula 7 - continued**

liabilities = the amounts covered by the valid bilateral netting agreement owed by the authorized institution to the counterparty; and

$H_{fx}$  = the 8% haircut to be applied in consequence of a currency mismatch, if any, between the currencies in which the assets and liabilities are denominated.

(3) An authorized institution shall adjust the haircut referred to in *Formula 7* in accordance with *rule 47* if the circumstances specified in that rule apply.

(4) Where an authorized institution has a net credit exposure pursuant to a valid bilateral netting agreement, it shall calculate the risk-weighted amount of an on-balance sheet asset to which the net credit exposure relates by multiplying the net credit exposure by the risk-weight attributable to the counterparty.

**50. Netting of OTC derivative transactions and netting of credit derivative contracts booked in trading book**

(1) Where an authorized institution's exposure to a counterparty is under a nettable derivative transaction (and whether or not the valid bilateral netting agreement concerned relates to more than one type of nettable derivative transaction), then the institution may in accordance with *subrules (2) to (3)*, take into account the effect of the netting in calculating its risk-weighted exposure to the counterparty.

(2) Subject to *subrule (3)*, an authorized institution shall calculate the credit equivalent amount of a nettable derivative transaction by adding together -

- (a) the net current exposure (being the net amount of the sum of the positive and negative mark-to-market values of the individual nettable derivative transactions covered by the valid bilateral netting agreement concerned if the net amount is positive); and
- (b) the net potential exposure calculated by the use of *Formula 8*.

**Formula 8**

**Calculation of net potential exposure under nettable derivative transactions**

$$A_{\text{Net}} = 0.4 \times A_{\text{Gross}} + 0.6 \times \text{NGR} \times A_{\text{Gross}}$$

where:

$A_{\text{Net}}$  = the net potential exposure;

$A_{\text{Gross}}$  = the sum of the individual amounts derived by multiplying the principal amount of all of the individual nettable derivative transactions by the applicable credit conversion factor; and

NGR = the ratio of net replacement cost for the nettable derivative transactions (that is, the non-negative sums of positive and negative mark-to-market values of the transactions) to gross replacement cost for the nettable derivative transactions (that is, the sums of the transactions which have positive mark-to-market values).

(3) An authorized institution, in the application of *Formula 8* in respect of its nettable derivative transactions, shall calculate NGR by reference to the individual counterparty (“per counterparty basis”), or by reference to the counterparties in aggregate (“aggregate basis”), but not both.

(4) In this rule -  
“aggregate basis” ( ), in relation to NGR, means the ratio of total net replacement costs to total gross replacement costs for all nettable derivative transactions with individual counterparties;

“derivative transaction” ( ) means -

- (a) an OTC derivative transaction; or
- (b) a credit derivative contract booked in the trading book;

“per counterparty basis” ( ), in relation to NGR, means the ratio of net replacement cost to gross replacement cost for the nettable derivative transactions with a particular counterparty.

## **51. Netting of repo-style transactions**

(1) An authorized institution which has adopted the comprehensive approach to the treatment of collateral shall not take into account valid bilateral netting agreements covering the institution's repo-style transactions in the calculation of its capital adequacy ratio insofar as it relates to credit risk other than in accordance with the provisions of this rule.

(2) Where under nettable repo-style transactions the subject of one valid bilateral netting agreement an authorized institution has the same counterparty, then the institution shall calculate –

- (a) the aggregate value of all financial assets sold, transferred, loaned or paid to the counterparty; and
- (b) the aggregate value of financial collateral received by the institution consisting of -
  - (i) in the case of repo-style transactions in the institution's banking book, financial instruments which would be recognised collateral under the comprehensive approach to the treatment of collateral; and
  - (ii) in the case of repo-style transactions in the institution's trading book, any financial instrument.

(3) Subject to *rule 52*, where, in respect of a calculation under *subrule (2)* made by an authorized institution in respect of a counterparty, the aggregate value referred to in *paragraph (a)* of that subrule is greater than the aggregate value referred to

in *paragraph (b)* of that subrule, then the institution shall calculate its exposure to the counterparty by the use of *Formula 9*.

### **Formula 9**

#### **Calculation of exposure to counterparty where aggregate value referred to in *rule***

##### ***51(2)(a)* is greater than aggregate value referred to in *rule 51(2)(b)***

$$E^{\#} = \text{Max } \{0, [(\Sigma(E) - \Sigma(C)) + \Sigma(E_s \times H_s) + \Sigma(E_{fx} \times H_{fx})]\}$$

where:

- $E^{\#}$  = counterparty exposure after netting;
- $E$  = value of financial assets sold, transferred, loaned or paid;
- $C$  = value of financial collateral received by the authorized institution;
- $E_s$  = absolute value (irrespective of positive or negative) of the net position in the same securities;
- $H_s$  = haircut appropriate to the absolute value of the net position in the same securities (that is,  $E_s$ ) subject to adjustment as set out in *rule 47*;
- $E_{fx}$  = absolute value of the net position in a currency different from the settlement currency; and
- $H_{fx}$  = haircut applicable in consequence of a currency mismatch, if any, using standard supervisory haircuts subject to adjustment as set out in *rule 47*.

(4) An authorized institution shall allocate to its net exposure to a counterparty, calculated in accordance with *subrule (3)*, the risk-weight attributable to the counterparty.

(5) An authorized institution -

(a) subject to *paragraph (b)*, shall net its nettable repo-style transactions in its banking book separately from netting its nettable repo-style transactions in its trading book and vice versa;

(b) may net repo-style transactions in its banking book with repo-style transactions in its trading book in respect of the same counterparty if -

(i) all those repo-style transactions are marked-to-market daily; and

(ii) all the collateral received by the institution in respect of all those repo-style transactions is recognised collateral under the comprehensive approach to the treatment of collateral.



**[52. Use of value-at-risk model instead of *Formula 9***

(1) Where under *Part 6* the Monetary Authority has approved the use by an authorized institution of an internal value-at-risk (“VaR”) model to measure the institution’s exposure to market risk, the institution may, with the approval of the Monetary Authority under *subrule (3)* and in accordance with that approval, adopt a VaR model as an alternative to the use of *Formula 9* for the purposes of calculating the institution’s exposure to a given counterparty under nettable repo-style transactions the subject of one valid bilateral netting agreement.

(2) An authorized institution referred to in *subrule (1)* may make an application in the specified form to the Monetary Authority for the Monetary Authority’s approval to the institution adopting a VaR model for the purposes referred to in that rule.

(3) Subject to *subrules (4)* and *(5)*, the Monetary Authority shall determine an application under *subrule (2)* by an authorized institution by notice in writing given to the institution granting, or refusing to grant, the approval sought.

(4) The Monetary Authority shall not grant approval under *subrule (3)* to an authorized institution unless the institution satisfies the Monetary Authority that, in the case of the VaR model in respect of which the approval is sought -

- (a) the model will take into account any price relationship between the value of financial assets in the form of securities sold, transferred, loaned and paid by the institution and the value of financial collateral received by the institution under nettable repo-style transactions, and, in particular in this regard, whether the prices have a positive relationship (that is, their prices move in the same

- direction) negative relationship (that is, their prices move in the opposite direction) or have no relationship at all;
- (b) the model will adopt a minimum holding period of 5 days and this minimum holding period will be subject to increase to the extent that the liquidity of the financial instruments provided by way of collateral under the nettable repo-style transactions is such that a longer minimum holding period should be assumed; and
  - (c) the quality of the model has proved acceptable pursuant to a prescribed demonstration of the model carried out by the institution.

(5) The Monetary Authority shall, in deciding whether or not to grant approval under *subrule (3)* in respect of a VaR model, take into account quantitative and qualitative criteria, including criteria similar to those set out in the Monetary Authority's Supervisory Policy Manual module CA-G-3 on Use of Internal Models to Measure Market Risk, as in force from time to time.

(6) Where an authorized institution is granted approval under *subrule (3)* to use a VaR model for the purposes referred to in *subrule (1)*, the institution shall calculate its exposure to the counterparty under a nettable repo-style transaction by the use of *Formula 10*.

### Formula 10

#### Calculation of exposure to counterparty under nettable repo-style transaction using

#### VaR model

$$E^* = \max \{0, [(\Sigma(E) - \Sigma(C)) + VaR \text{ output from internal market risk model} \times \text{multiplier}]\}$$

where:

$E^*$  = counterparty exposure after netting;

$E$  = current value of exposure;

$C$  = value of collateral received by the authorized institution; and

$VaR$  output = the  $VaR$  number generated by the  $VaR$  model in respect of the previous business day subject to adjustment by reference to the relevant multiplier derived as set out in *Table 11*.

(7) In this rule, “prescribed demonstration” ( ), in relation to a  $VaR$  model proposed to be adopted by an authorized institution for the purposes referred to in *subrule (1)*, means a demonstration –

- (a) back-testing the output of the model using a sample of 20 counterparties with data covering a one year period where the counterparties include –
  - (i) the institution’s 10 largest counterparties as determined by the institution using the usual model of measuring its exposures; and
  - (ii) 10 counterparties selected at random;
- (b) in which for each day and each counterparty the institution compares the previous day’s  $VaR$  estimate of the institution’s

exposure in respect of each counterparty (in aggregate the counterparty portfolio) to the change in the institution's actual exposure in respect of the counterparty portfolio in the previous day;

- (c) where the change is calculated as the difference between the net value of the counterparty portfolio on the previous day calculated using today's market prices and the net value of that counterparty portfolio calculated using the previous day's market prices;
- (d) where if the change exceeds the previous day's estimate, an exception occurs; and
- (e) where, depending on the number of exceptions in the observations for the 20 counterparties over the most recent 250 days, the output of the model will be scaled up by using a multiplier as specified in *Table 11.*]

**Table 11**  
**Multiplier for exceptions**

<b>Zone</b>	<b>Number of exceptions</b>	<b>Multiplier</b>
Green Zone	0 – 19	None (=1)
	20 – 39	None (=1)
	40 – 59	None (=1)
	60 – 79	None (=1)
	80 - 99	None (=1)
Yellow Zone	100 – 119	1.13
	120 – 139	1.17
	140 – 159	1.22
	160 – 179	1.25
	180 - 199	1.28
Red Zone	200 or more	1.33

**Division 9 - Use of guarantees and credit derivative contracts in  
credit risk mitigation**

**53. Application**

An authorized institution may take into account the effect of recognised guarantees and recognised credit derivative contracts in calculating the institution's risk-weighted exposure.

#### **54. Recognised guarantees**

A guarantee provided to an authorized institution is recognised if –

- (a) the guarantee is provided by –
  - (i) a sovereign;
  - (ii) a public sector entity;
  - (iii) a multilateral development bank;
  - (iv) a bank;
  - (v) a securities firm; or
  - (vi) a corporate which has a current ECAI issuer rating which, if mapped to the scale of uniform credit quality grades in Table C set out in Schedule 2, would result in the corporate being assigned a credit quality grade of 2 or lower, in each case having allocated to it a lower risk-weight than the obligor in respect of whose obligations to the institution the guarantee has been provided;
- (b) the guarantee gives the institution a direct claim against the guarantor;
- (c) the credit protection provided by the guarantee relates to a specific exposure, specific exposures, or specific pools of exposures, of the institution;
- (d) the undertaking of the guarantor to make payment in specified circumstances relating to the underlying exposure is clearly

- documented so that the extent of the credit protection provided by the guarantee is clearly defined;
- (e) there is no clause in the guarantee which would allow the guarantor to cancel the guarantee unilaterally or which would increase the effective cost of the credit protection offered by the guarantee as a result of the deteriorating credit quality of the underlying exposure except for a clause permitting termination in the event of a failure by the institution to pay sums due from it under the terms of the guarantee;
  - (f) there is no clause in the guarantee that could operate to prevent the guarantor from being obliged to pay out promptly in the event that the obligor in respect of the underlying exposure to which the guarantee relates defaults in making any payments due to the institution in respect of the exposure;
  - (g) the country in which the guarantor is located and from which the guarantor may be obliged to make payment has no existing exchange controls in place or, if there are existing exchange controls in place, approval has been obtained for the funds to be remitted freely in the event that the guarantor is called upon under the terms of the guarantee to make payment to the institution; and
  - (h) the guarantor has no recourse to the institution for any losses suffered as a result of the guarantor being obliged to make any payment to the institution pursuant to the guarantee.



**55. Recognised credit derivative contracts**

(1) A credit derivative contract entered into by an authorized institution as the protection buyer is recognised if –

- (a) the counterparty to the credit derivative contract is –
  - (i) a sovereign;
  - (ii) a public sector entity;
  - (iii) a multilateral development bank;
  - (iv) a bank;
  - (v) a securities firm; or
  - (vi) a corporate which has a current ECAI issuer rating which, if mapped to the scale of uniform credit quality grades in Table C set out in *Schedule 2*, would result in the corporate being assigned a credit quality grade of 2 or lower, in each case having allocated to it a lower risk-weight than the obligor in respect of whose obligations to the institution the credit derivative contract has been entered into;
- (b) in the case of a credit derivative contract which is a credit default swap or total return swap (other than a restricted return swap), the economic benefit derived by the institution would make good the economic loss suffered by the institution in consequence of the default of the obligor in a manner substantially similar to that of a recognised guarantee;

- (c) the credit derivative contract gives the institution a direct claim against the protection seller;
- (d) the credit protection provided by the credit derivative contract relates to a specific exposure, specific exposures, or specific pools of exposures, of the institution;
- (e) the undertaking of the protection seller under the credit derivative contract to make payment in specified circumstances relating to the underlying exposure is clearly documented so that the extent of the credit protection provided by the credit derivative contract is clearly defined;
- (f) there is no clause in the credit derivative contract which would allow the protection seller to cancel the contract unilaterally or which would increase the effective cost of the credit protection offered by the credit derivative contract as a result of the deteriorating credit quality of the underlying exposure except for a clause permitting termination in the event of a failure by the institution to pay sums due from it under the terms of the credit derivative contract;
- (g) there is no clause in the credit derivative contract that could operate to prevent the protection seller from being obliged to pay out promptly in the event that the obligor in respect of the underlying exposure to which the credit derivative contract relates

defaults in making any payments due to the institution in respect of the exposure;

- (h) the country in which the protection seller is located and from which the protection seller may be obliged to make payment has no existing exchange controls in place or, if there are existing exchange controls in place, approval has been obtained for the funds to be remitted freely in the event that the protection seller is called upon under the terms of the credit derivative contract to make payment to the institution;
- (i) the protection seller has no recourse to the institution for any losses suffered as a result of the protection seller being obliged to make any payment to the institution pursuant to the credit derivative contract;
- (j) the credit derivative contract obliges the protection seller to make payment to the institution in the following circumstances (“credit events”) –
  - (i) any failure by the obligor in respect of the underlying exposure to pay amounts due under the terms of the underlying exposure (subject to any grace period in the contract which is of substantially similar duration to any grace period provided for in the terms of the underlying exposure);

- (ii) the bankruptcy or insolvency of (or analogous events affecting) the obligor in respect of the underlying exposure or the obligor's failure or inability to pay its debts as they fall due or the obligor's admission in writing of the obligor's inability generally to pay its debts as they fall due; or
- (iii) subject to *subrule (2)*, the underlying exposure is restructured, involving forgiveness or postponement of payment of any principal or interest or fees, that results in the institution making a deduction or specific provision(s) or other similar debit to the institution's profit and loss account;
- (k) in any case where the underlying exposure provides a grace period within which the obligor may make good a default in payment, the credit derivative contract is not capable of terminating prior to the expiry of the grace period;
- (l) in any case where the credit derivative contract provides for settlement in cash, it provides an adequate mechanism for valuation of the loss occasioned to the institution in respect of the underlying exposure and specifies a reasonable period within which that valuation is to be arrived at following a credit event;
- (m) in any case where the credit derivative contract has an underlying reference obligation (that is, the obligation used for the purposes of

determining any cash settlement value, any deliverables or whether a credit event has occurred) that does not include or is different from the underlying exposure –

- (i) the underlying reference obligation of the credit derivative contract ranks for payment or repayment *pari passu* with, or junior to, the underlying exposure; and
  - (ii) the obligor in respect of the underlying exposure is the same person as the obligor for the underlying reference obligation and legally enforceable cross default or cross acceleration clauses are included in the terms of both the underlying exposure and the underlying reference obligation;
- (n) in any case where under the terms of the credit derivative contract it is a condition of settlement that the institution transfers its rights in respect of the underlying exposure to the protection seller, the terms of the underlying exposure provide that any consent that may be required from the obligor shall not be unreasonably withheld; and
- (o) the credit derivative contract specifies clearly the identity of the person who is empowered to determine whether a credit event has occurred, that person is not solely the protection seller and the institution is, under the terms of the underlying exposure, entitled to inform the protection seller of the occurrence of a credit event.

(2) Where any restructuring of the underlying exposure of a credit derivative contract does not, under the terms of the contract, require payment by the protection seller to the authorized institution concerned but –

- (a) the amount payable to the institution under the credit derivative contract is more than the underlying exposure, then the contract shall be deemed to be a recognised credit derivative contract to the extent of 60% of the underlying exposure; or
- (b) the amount payable to the institution under the credit derivative contract (“payable amount”) is less than, or equal to, the underlying exposure, then the contract shall be deemed to be a recognised credit derivative contract to the extent of 60% of the payable amount.

(3) In this rule –  
“restricted return swap” ( ), in relation to an authorized institution, means, a total return swap where –

- (a) the institution is the total return receiver under the swap; and
- (b) the institution records the net payments received by it under the swap as net income but does not record, through deductions in fair value in the accounts of the institution or by an addition to reserves or provisions, the extent to which the value of the obligor’s obligations have deteriorated.

**56. Capital treatment of guarantees and credit derivative contracts**

(1) Subject to *subrules (2), (6) and (7)*, where an authorized institution's exposure to an on-balance sheet asset or off-balance sheet exposure of the institution is covered by a recognised guarantee or recognised credit derivative contract, then the institution may allocate to the on-balance sheet asset or off-balance sheet exposure, as the case may be, the risk-weight attributable to the guarantor or protection seller, as the case may be, instead of the risk-weight attributable to the counterparty.

(2) Subject to *subrules (3) to (7)*, where –

- (a) only part of an authorized institution's exposure (“covered portion”) to an on-balance sheet asset or off-balance sheet exposure of the institution is covered by a recognised guarantee or recognised credit derivative contract; and
- (b) the covered portion and the remainder of the exposure (“uncovered portion”) rank *pari passu*,

then the institution shall –

- (c) allocate to so much of the on-balance sheet asset or off-balance sheet exposure, as the case may be, as constitutes the covered portion, the risk-weight attributable to the guarantor or protection seller, as the case may be;
- (d) allocate to the remainder of the on-balance sheet asset or off-balance sheet exposure, as the case may be, as constitutes the uncovered portion, the risk-weight attributable to the counterparty.

(3) *Rules 38, 39 and 40* shall, with all necessary modifications, be used by an authorized institution to calculate the risk-weighted amount under *subrule (1)* or *(2)(c)*.

(4) Subject to *subrule (5)*, where under a recognised guarantee or recognised credit derivative contract there is a currency mismatch, then, to the extent that a calculation required by *subrule (3)* by an authorized institution relates to that guarantee or contract, as the case may be, the institution shall reduce the covered portion by a standard haircut by the use of *Formula 11*.

### **Formula 11**

#### **Calculation of haircut for recognised guarantee or recognised credit derivative contract where there is currency mismatch**

$$G_a = G \times (1 - H_{fx})$$

where:

$G_a$  = the covered portion adjusted for a currency mismatch;

$G$  = the amount payable to the authorized institution under the credit protection; and

$H_{fx}$  = the haircut applicable in consequence of a currency mismatch between the credit protection and the exposure.

(5) For the purposes of the use of *Formula 11* –

(a) subject to *paragraph (b)*, the haircut represented by  $H_{fx}$  shall be taken to be 8%;

(b) that haircut shall be adjusted in accordance with *Formula 6* if the credit protection has a minimum holding period which is shorter or



longer than 10 business days or is not revalued or remargined daily as assumed in the standard supervisory haircuts.

- (6) Where -
- (a) a relevant banking supervisory authority permits banks within the jurisdiction in which it operates as such authority to allocate a lower risk-weight to claims on its sovereign that are denominated and funded in the lawful currency of that jurisdiction (“domestic currency”); and
  - (b) the covered portion of an authorized institution’s exposure -
    - (i) is funded in the domestic currency; and
    - (ii) is the subject of a recognised guarantee by that sovereign denominated in the domestic currency,

then the institution may allocate the lower risk-weight to that covered portion.

- (7) Where the covered portion of an authorized institution’s exposure -
- (a) is such covered portion by virtue of a recognised guarantee (“original guarantee”); and
  - (b) is the subject of a counter-guarantee issued by a sovereign,

then the institution may, in respect of the covered portion, treat the counter-guarantee as if it were the original guarantee if –

- (c) the counter-guarantee –
  - (i) covers all credit risk elements of the exposure to the extent that it relates to the covered portion; and

- (ii) is granted in such terms that it can be called if for any reason the obligor fails to make payments due in respect of the underlying exposure and if the original guarantee could be called;
- (d) the original guarantee and the counter-guarantee meet all of the requirements for guarantees set out in *rule 54* (except that the counter-guarantee need not be a guarantee given directly and explicitly with respect to the institution's underlying exposure); and
- (e) the institution reasonably considers the cover of the counter-guarantee to be adequate and effective and there is no evidence to suggest that the coverage of the counter-guarantee is less effective than that of a direct and explicit guarantee by a sovereign.

**57. Credit derivative contracts which are credit default swaps or total return swaps**

(1) Where the credit protection in respect of an authorized institution's underlying exposure consists of a recognised credit derivative contract which is a credit default swap or total return swap, then –

- (a) if upon the happening of a credit event the protection seller is obliged to pay the principal amount specified in the credit derivative contract to the institution in exchange for delivery by the institution of deliverable obligations of the same principal amount, then the institution may treat the underlying exposure as being fully covered;
- (b) if upon the happening of a credit event the protection seller is obliged to pay the principal amount specified in the credit derivative contract to the institution less the market value of the underlying reference obligation, calculated by specified calculation agents at some predetermined point in time after the credit event has occurred, then the institution may treat the underlying exposure as being fully covered; and
- (c) if upon the happening of a credit event the protection seller is obliged to pay a fixed amount to the institution, then the institution may only treat that amount of the underlying exposure that is equivalent to the fixed amount as being fully covered.

(2) Where the credit protection in respect of an authorized institution's underlying exposure takes the form of an issue of cash-funded credit linked notes by the institution, then the institution –

- (a) may only treat that amount of the underlying exposure that is equivalent to the cash funding received from the notes as being fully covered; and
- (b) shall treat the covered portion of the underlying exposure as an exposure collateralised by cash deposit.

(3) Where the credit protection in respect of an authorized institution's underlying exposure consists of a recognised credit derivative contract which provides that, upon the happening of a credit event, the protection seller is not obliged to make a payment in respect of any loss –

- (a) until the loss exceeds a specified amount (“first loss portion”); and
  - (b) except to the extent that the loss exceeds the first loss portion,
- then the institution shall, in calculating its capital adequacy ratio, deduct the first loss portion from its capital base.

(4) Where the credit protection in respect of an authorized institution's underlying exposure consists of a recognised first-to-default credit derivative contract, the institution shall only recognise that credit protection, in respect of the basket of reference entities specified in the credit derivative contract, in relation to the reference entity which carries the lowest risk-weighted exposure amongst the exposures to all the reference entities in the relevant basket in accordance with these Rules if, and only if, the

principal amount of the exposure to that reference entity is not more than the notional amount of the credit derivative contract.

(5) Where the credit protection in respect of an authorized institution's underlying exposure consists of a recognised second-to-default credit derivative contract, then the institution may, in respect of so much of that exposure as is covered by the credit protection, substitute the risk-weight of the protection seller for the risk-weight of the reference [entity] which carries the second lowest risk-weighted exposure amongst the exposures to all reference [entities] in the basket of reference entities specified in the contract ("relevant basket") only if -

- (a) the institution has, as a protection buyer, entered into a first-to-default credit derivative contract in respect of which the basket of reference [entities] specified in the contract is the same as the relevant basket; or
- (b) a reference [entity] in the relevant basket has defaulted.

(6) Where the credit protection in respect of an authorized institution's underlying exposure is a credit derivative contract which provides credit protection proportionately to reference [entities] in the basket of reference [entities] as specified in the contract, then the institution shall calculate the risk-weighted amount of its exposure under the contract by taking a weighted average of the risk-weights attributable to the reference [entities] in the basket by the use of *Formula 1*.

## Division 10 – Multiple recognized credit risk mitigation and maturity mismatches

### 58. Multiple recognised credit risk mitigation

(1) Where in respect of a single exposure of an authorized institution to a counterparty –

- (a) 2 or more forms of recognised credit risk mitigation have been used by the institution; or
- (b) there is an overlap of coverage between 2 or more forms of recognised credit risk mitigation used by the institution,

then -

- (c) in the case of *paragraph (a)*, the institution shall calculate the risk-weighted amount of the exposure in accordance with these Rules by dividing the exposure into the portions that respectively represent the proportions of the exposure covered by each of the forms of credit risk mitigation so used;
- (d) in the case of *paragraph (b)*, the institution may select, in respect of the portion of the exposure covered by the overlap, the credit risk mitigation that will result in the lowest risk-weighted on-balance sheet asset or lowest risk-weighted off-balance sheet exposure, as the case may be.

(2) Where an authorized institution has an exposure to a counterparty in respect of which credit protection has been provided by a single protection provider in circumstances where the relevant credit protection has different maturities, then the

institution shall calculate the risk-weighted amount of the exposure in accordance with these Rules by dividing the exposure into different portions reflecting the maturity of the credit protection respectively attributable to the different portions.

(3) Where an authorized institution has an exposure to a counterparty in the form of a general banking facility consisting of 2 or more credit lines, then –

- (a) the institution may, in calculating its risk-weighted assets in respect of the credit lines, allocate any credit protection taken in respect of the exposure amongst the individual exposures under each of the credit lines; and
- (b) if the institution exercises its discretion under *paragraph (a)*, shall aggregate the risk-weighted assets to determine the total amount of its risk-weighted assets in respect of the general banking facility.

## 59. Maturity mismatches

(1) Where the credit protection provided in respect of an underlying exposure of an authorized institution (other than the netting of repo-style transactions, OTC derivative transactions and credit derivative contracts) has a residual maturity which is shorter than the residual maturity of the underlying exposure (“maturity mismatch”), then the institution shall adjust the value of the credit protection by the use of *Formula 12*.

### Formula 12

#### Adjustment of calculation of value of credit protection where there is maturity mismatch

$$P_a = P \times (t - 0.25) / (T - 0.25)$$

where:

$P_a$  = value of credit protection adjusted for maturity mismatch;

$P$  = value of credit protection adjusted for haircuts for price volatility of collateral and foreign currency mismatch (if applicable);

$t$  = Min (T, residual maturity of recognised credit risk mitigation protection) expressed in years; and

$T$  = Min (5, residual maturity of the underlying exposure) expressed in years.

(2) Where there is a maturity mismatch between credit protection and the underlying exposure of an authorized institution, the institution, in calculating its risk-weighted on-balance sheet assets and risk-weighted off-balance sheet exposures –

- (a) shall only take into account the credit protection if the credit protection has an original maturity of not less than one year;



- (b) shall not take into account the credit protection once it has a residual maturity of not more than 3 months; and
- (c) shall not take into account the credit protection if the underlying exposure is secured by recognised collateral and the risk-weighted amount is calculated by using the simple approach to the treatment of collateral.

(3) For the purposes of calculating the respective maturities of an exposure of an authorized institution and any credit protection covering the exposure, the institution shall –

- (a) if the credit protection is in the form of recognised collateral, guarantees or credit derivative contracts –
  - (i) adopt a conservative approach;
  - (ii) at any time before the obligor in respect of the underlying exposure performs the obligor's obligations, take the effective maturity of the underlying exposure to be the longest possible remaining time after taking into account any applicable grace period provided for in the terms of the underlying exposure;
- (b) if the terms of the credit protection provide for an option which may reduce the term of that credit protection, take into account the option and the earliest possible date upon which it may be exercised;

- (c) if the terms of the credit protection provide that the protection seller may terminate the credit protection before its maturity, take the maturity of the credit protection to be the first date upon which the protection seller may so terminate the credit protection; and
- (d) if the terms of the credit protection permit the institution to terminate the credit protection before its maturity and there is a positive incentive for the institution to exercise its discretion so to do, take the maturity of the credit protection to be the time left to run before the earliest date upon which the institution may exercise the discretion.

(4) For the purposes of this rule, the residual maturity of credit protection which is recognised collateral falling within *rule 34(1)(a)* shall be taken to be the period for which it will continue to fulfil the requirements of *rule 32* applicable to the credit protection.

## **PART 5**

### **CALCULATION OF OPERATIONAL RISK**

#### **Division 1 - Basic indicator approach to calculation of operational risk**

##### **60. Application of *Division 1***

This Division shall apply to an authorized institution which uses the BIA to calculate its operational risk.

## **61. Calculation of capital charge**

(1) Subject to *subrule (2)*, an authorized institution shall at the end of each calendar quarter (“calendar quarter end date”), determine its gross income for the 3 years (“last 3 years”) ending on the calendar quarter end date by –

- (a) aggregating the gross income recognised by the institution in the calendar quarter ending on the calendar quarter end date and in each of the immediately preceding 3 calendar quarters (“first year”);
- (b) aggregating the gross income recognised by the institution in the 4 calendar quarters immediately preceding the first year (“second year”);
- (c) aggregating the gross income recognised by the institution in the 4 calendar quarters immediately preceding the second year (“third year”);
- (d) multiplying the gross income of the institution in each of the first, second and third years, where positive, by a capital charge factor of 15%; and
- (e) aggregating the capital charges calculated under *paragraph (d)* for the last 3 years and dividing that aggregate figure by the number of the last 3 years in which gross income has been positive.

(2) Subject to *subrule (3)*, an authorized institution shall, under *subrule (1)*, for the purposes of calculating the capital charge for its operational risk, use *Formula 13*.

### Formula 13

#### Calculation of capital charge for operational risk

$$K_{BIA} = [\Sigma(GI_{1...n} \times \alpha)] / n$$

where:

$K_{BIA}$  = the capital charge under the BIA for calculating operational risk;

GI = gross income, where positive, of the last 3 years;

n = number of the last 3 years for which gross income is positive; and

$\alpha$  = 15%

(3) An authorized institution shall, in using the formula set out in *subrule (2)*, exclude from the numerator (GI) and the denominator (n) any of its gross income for a year that is negative or zero.

**62. Calculation of risk-weighted amount**

An authorized institution shall calculate its risk-weighted amount for operational risk by multiplying the capital charge for its operational risk as calculated under *rule 61* by 12.5.

## **Division 2 - Standardised approach to calculation of operational risk**

### **63. Application of *Division 2***

This Division shall apply to an authorized institution which uses the STO to calculate its operational risk.

**64. Mapping of authorized institution's business activities into standardised business lines**

An authorized institution shall, based on the principles specified in *paragraph 2* of *Schedule 1*, map its business activities, and the gross income derived from each of those business activities, into the following 8 standardised business lines as read with the provisions of *Schedule 4* –

- (a) corporate finance;
- (b) trading and sales;
- (c) retail banking;
- (d) commercial banking;
- (e) payment and settlement;
- (f) agency services;
- (g) asset management; and
- (h) retail brokerage.



**65. Calculation of capital charge**

(1) Subject to *subrule (3)*, an authorized institution shall, at the end of each calendar quarter (“calendar quarter end date”), determine the capital charge for each standardised business line for the 3 years (“last 3 years”) ending on the calendar quarter end date by –

- (a) aggregating –
  - (i) the gross income recognised by the institution in respect of each of the standardised business lines in the calendar quarter ending on the calendar quarter end date; and
  - (ii) the gross income recognised by the institution in respect of each of the standardised business lines in each of the immediately preceding 3 calendar quarters (“first year”);
- (b) aggregating the gross income recognised by the institution in respect of each of the standardised business lines in the 4 calendar quarters immediately preceding the first year (“second year”);
- (c) aggregating the gross income recognised by the institution in respect of each of the standardised business lines in the 4 calendar quarters immediately preceding the second year (“third year”); and
- (d) multiplying the gross income of the institution for each standardised business line in each of the first, second and third years calculated in *paragraphs (a), (b) and (c)* by the capital charge factor assigned to the business line set out in *Table 12*.

**Table 12**

**Capital charge factor applicable to standardised business lines**

<b>Standardised business lines</b>	<b>Capital charge factors</b>
Corporate finance	18%
Trading and sales	18%
Retail banking	12%
Commercial banking	15%
Payment and settlement	18%
Agency services	15%
Asset management	12%
Retail brokerage	12%

(2) Subject to *subrule (3)*, an authorized institution shall calculate the capital charge for the institution's operational risk by –

- (a) adding together the 8 capital charges calculated under *subrule (1)* in respect of each of the standardised business lines for each of the last 3 years; and
- (b) aggregating the capital charges calculated under *paragraph (a)* for the last 3 years and obtaining the mean average of the aggregate capital charges for the last 3 years by dividing that aggregate figure by 3.

(3) Subject to *subrule (4)*, an authorized institution shall, for the purposes of calculating under *subrules (1) and (2)* the capital charge for its operational risk, use *Formula 14*.

#### **Formula 14**

##### **Calculation of capital charge for operational risk**

$$K_{STO} = \{ \sum_{\text{years 1-3}} \max [\Sigma(GI_{1-8} \times \beta_{1-8}), 0] \} / 3$$

where:

$K_{STO}$  = the capital charge under the STO for calculating operational risk;

$GI_{1-8}$  = gross income for each of the standardised business lines for each of the last 3 years; and

$\beta_{1-8}$  = the capital charge factor assigned to each of the standardised business lines as specified in *Table 12*.

- (4) An authorized institution, in using *Formula 14* -
- (a) may, in any given year of the last 3 years, offset a positive capital charge for any standardised business line in the given year with a negative capital charge for any other standardised business line in the given year;
  - (b) shall not offset positive or negative capital charges for standardised business lines between any of the last 3 years;
  - (c) if the aggregate capital charge for all the standardised business lines in any given year of the last 3 years is negative, shall assign a zero value to that aggregate capital charge and count the given year in the denominator when calculating the last 3 years mean average.

**66. Calculation of risk-weighted amount**

An authorized institution shall calculate its risk-weighted amount for operational risk by multiplying the capital charge for its operational risk as calculated under *rule 65* by 12.5.

### **Division 3 - Alternative standardised approach to calculation of operational risk**

#### **67. Application of *Division 3***

This Division shall apply to an authorized institution which uses the ASA to calculate its operational risk.

**68. Application of *rule 65* to all standardised business lines of authorized institution except retail banking and commercial banking**

An authorized institution shall comply with *rule 65* (including *subrule (3)* of that rule) in respect of all of its standardised business lines except retail banking and commercial banking.

**69. Calculation of capital charge for operational risk in retail banking**

(1) Subject to *subrule (4)*, an authorized institution shall, at the end of each calendar quarter (“calendar quarter end date”), calculate the amount outstanding in respect of loans and advances in its retail banking business line for the 3 years (“last 3 years”) ending on the calendar quarter end date by –

- (a) taking the mean average of the amount outstanding in respect of the loans and advances as at the calendar quarter end date and as at the end of each of the immediately preceding 3 calendar quarters (“first year”);
- (b) taking the mean average of the amount outstanding in respect of the loans and advances as at the end of each of the 4 calendar quarters immediately preceding the first year (“second year”); and
- (c) taking the mean average of the amount outstanding in respect of the loans and advances as at the end of each of the 4 calendar quarters immediately preceding the second year (“third year”).

(2) An authorized institution shall multiply each of the 3 figures calculated under *subrule (1)(a), (b) and (c)* by a factor of 0.035.

(3) Subject to *subrule (4)*, an authorized institution shall calculate the capital charge for operational risk in respect of its retail banking business line for each of the last 3 years by multiplying the figures obtained by the application of *subrule (2)* for the first, second and third years by a capital charge factor of 12%.

(4) An authorized institution shall, for the purposes of calculating under *subrules (1), (2) and (3)* the capital charge for operational risk in its retail banking business line, use *Formula 15*.

**Formula 15**

**Calculation of capital charge for operational risk in retail banking**

$$K_{RB} = LA_{RB} \times 0.035 \times \beta_{RB}$$

where:

$K_{RB}$  = the capital charge for the retail banking business line;

$LA_{RB}$  = loans and advances in the retail banking business line for each year; and

$\beta_{RB}$  = the capital charge factor for the retail banking business line.



**70. Calculation of capital charge for operational risk in commercial banking**

An authorized institution shall comply with *rule 69* in respect of its commercial banking business line as if -

- (a) every reference in that rule (including *Formula 15*) to retail banking business line were a reference to commercial banking business line; and
- (b) a capital charge factor of 15% were substituted in *subrule (3)* of that rule for the capital charge factor of 12% specified in that subrule.

## **71. Calculation of capital charge**

- (1) Subject to *subrules (2), (3) and (4)*, an authorized institution shall calculate its capital charge for operational risk by -
  - (a) adding together the capital charges for its operational risk calculated under *rules 68, 69 and 70* for each of the last 3 years;  
and
  - (b) taking the mean average of the aggregate capital charges obtained under *paragraph (a)*.
- (2) Subject to *subrule (3)*, an authorized institution may, in any given year of the last 3 years, offset a positive capital charge for any standardised business line, other than retail banking and commercial banking, in the given year with a negative capital charge for any other standardised business line, other than retail banking or commercial banking, in the given year.
- (3) Where the aggregate capital charge for all the standardised business lines, other than retail banking and commercial banking, of an authorized institution in any given year of the last 3 years is negative, the institution –
  - (a) shall assign a zero value to that aggregate capital charge; and
  - (b) shall not offset the capital charge for the retail banking or commercial banking business line with that negative aggregate capital charge.
- (4) An authorized institution may -
  - (a) aggregate the total gross income for all of its standardised business lines except retail banking and commercial banking if the

institution applies a capital charge factor of 18% to those standardised business lines;

- (b) aggregate the loans and advances for its retail banking business line and commercial banking business line if the institution applies a capital charge factor of 15% to those standardised business lines.

**72. Calculation of risk-weighted amount**

An authorized institution shall calculate its risk-weighted amount for operational risk by multiplying the capital charge for its operational risk as calculated under *rule 71* by 12.5.

#### **Division 4 – Exceptions**

**73. Provisions applicable where certain authorized institutions have difficulties with BIA, STO or ASA**

Where an authorized institution -

- (a) has been in operation for less than 18 months on any calendar quarter end date subsequent to the date on which this rule comes into operation;
- (b) has recorded negative gross income for the last 3 years immediately preceding that date; or
- (c) is undergoing a merger, acquisition or material restructuring,

then the institution –

- (d) shall not adopt the BIA, STO or the ASA to calculate its operational risk except with the prior approval of the Monetary Authority;
- (e) may, with the prior approval of the Monetary Authority, adopt an alternative to the BIA, STO or ASA to calculate its operational risk.

**74. Transitional**

Where on any calendar quarter end date subsequent to the date on which this rule comes into operation an authorized institution has been in operation -

- (a) for 18 months or more but less than 3 years, the institution shall treat any partial year of operation of 6 months or more as a full year, and any partial year of operation of less than 6 months as zero, for the purposes of calculating, under the BIA, STO or ASA, the last 3 years mean average of its gross income, loans and advances in the retail banking business line or loans and advances in the commercial banking business line, as the case requires;
- (b) for 2½ years or more but less than 3 years, the institution shall –
  - (i) annualize the gross income of the partial year and use a denominator of 3;
  - (ii) in the case of an institution adopting the ASA, calculate the aggregate of its loans and advances in the retail banking business line and its loans and advances in the commercial banking business line for the partial year by taking the mean average of the amount outstanding at the end of each full calendar quarter within the partial year;
- (c) for 18 months or more but less than 2 years, the institution shall–
  - (i) annualize the gross income of the partial year and use a denominator of 2;

- (ii) in the case of an institution adopting the ASA, calculate the aggregate of its loans and advances in the retail banking business line and its loans and advances in the commercial banking business line for the partial year by taking the mean average of the amount outstanding at the end of each full calendar quarter within the partial year;
- (d) for more than 2 years but less than 2½ years, the institution shall treat its gross income for the partial year or its loans and advances in the retail banking business line and its loans and advances in the commercial banking business line, for the partial year, as the case requires, as zero and use a denominator of 2.

**PART 6**

**CALCULATION OF MARKET RISK**

**(This Part is temporarily vacant)**



**PART 7**

**ASSET SECURITISATION**

**(This Part is temporarily vacant)**

## SCHEDULE 1

[rule 5]

### MINIMUM CRITERIA FOR APPROVAL UNDER *RULE 5* TO USE *STO* OR *ASA* TO CALCULATE OPERATIONAL RISK OF AUTHORIZED INSTITUTION

1. The Monetary Authority is satisfied that -
  - (a) the board of directors and senior management of the authorized institution are actively involved in -
    - (i) the oversight of the institution's entire risk management framework; and
    - (ii) the management of the institution's operational risk;
  - (b) the authorized institution has a dedicated operational risk management function to which specific duties have been assigned, including -
    - (i) the development of strategies to identify, assess, monitor, control and mitigate the degree of operational risk to which the institution is exposed;
    - (ii) the establishment of policies and procedures, in writing, applicable to the matters referred to in *subparagraph (i)*; and
    - (iii) the development and implementation of -
      - (A) an operational risk assessment methodology appropriate for the institution; and

- (B) a reporting system for operational risk that is appropriate for the institution; and
- (iv) ensuring that the persons involved in the matters referred to in *subparagraph (i)* have ready access to the policies and procedures referred to in *subparagraph (ii)*;
- (c) the authorized institution has all of its policies, and controls and procedures, relating to its system for the management of its operational risk well documented, including policies to deal with any failure to comply with such policies or such controls and procedures;
- (d) the authorized institution has implemented a system to ensure compliance with the policies, and controls and procedures, referred to in *paragraph (c)*;
- (e) the authorized institution has implemented a system requiring regular reports to be made -
  - (i) of information concerning the institution's operational risk, including -
    - (A) the results of any self-risk assessment of the institution's operational risk;
    - (B) the key risk indicators;
    - (C) information concerning the actual or potential losses that have arisen or may arise as a result of the institution's operational risk that are, in the context

- of the volume of the institution's business, material;
- and
- (D) information concerning major operational events affecting the institution's operational risk;
- (ii) to the managers of the various business units of the institution and the chief executives and directors of the institution; and
- (iii) of information of such a nature and within such time frame as will support the proactive management of the institution's operational risk;
- (f) the authorized institution has established procedures for taking appropriate and timely action in response to the information provided pursuant to reports referred to in *paragraph (e)*;
- (g) the authorized institution has an established assessment system for its operational risk which is -
- (i) capable of systematically keeping track of relevant data concerning the institution's operational risk, in particular any material losses arising due to operational risk in different business lines of the institution; and
- (ii) closely integrated into the institution's processes for the management of its operational risk;
- (h) the authorized institution has resources sufficient to –

- (i) properly use the STO or ASA to calculate its operational risk in relation to the institution's major business lines;
  - (ii) properly control such use of the STO or ASA; and
  - (iii) audit such use, and audit such control of such use, of the STO or ASA;
- (i) the authorized institution's process for the management of its operational risk and the system for assessing its operational risk are subject to validation and regular independent reviews by the institution's internal auditors or by external auditors; and
  - (j) the reviews referred to in *paragraph (i)* include the activities of particular business units of the institution and of the operational risk management function of the institution.

2. The Monetary Authority is satisfied that -

- (a) the authorized institution has, for the purposes of using the STO or ASA to calculate its operational risk, policies and criteria in writing applicable to the institution's mapping of the gross income it recognises from its current business lines into the standardised business lines;
- (b) the authorized institution has in place a system for regularly reviewing and revising the policies and criteria referred to in *paragraph (a)* to ensure that they continue to be appropriate for new or changing activities or products;

- (c) the authorized institution has categorized, or is capable of categorizing, all its business activities into the 8 standardised business lines by the application of the following principles -
- (i) each business activity of the institution is to be mapped into only one of the standardised business lines;
  - (ii) any business activity of the institution which cannot be readily mapped into one of the standardised business lines but which is ancillary to one only of the standardised business lines is allocated to the standardised business line to which it is so ancillary;
  - (iii) any business activity of the institution which cannot be readily mapped into one of the standardised business lines but which is ancillary to 2 or more standardised business lines (“relevant business lines”) is allocated to one only, or to 2 or more, of the relevant business lines by the application of objective mapping criteria (which may be, or include, allocation to that relevant business line to which the business activity is principally ancillary, or to 2 or more relevant business lines in proportion to the time spent on the respective relevant business lines);
  - (iv) where none of the principles set out in *subparagraphs (i), (ii) and (iii)* enables the institution to map gross income in respect of a particular business activity (“relevant business

activity”) into a particular standardised business line, the institution -

- (A) attributes the gross income to any standardised business line allocated the highest capital charge factor under the calculation framework set out in *rule 65(1)(d)* of these Rules; and
  - (B) also allocates to that standardised business line any business activity which is ancillary to the relevant business activity;
- (v) if the institution uses internal pricing methods to allocate gross income between standardised business lines, the total gross income for the institution must still equal the sum of the gross income for the 8 standardised business lines;
- (vi) the institution’s mapping of its business activities into standardised business lines for the purposes of calculating its operational risk is consistent with the definitions of standardised business lines used for the calculation of the institution’s credit risk or market risk or, if there is an inconsistency -
- (A) the inconsistency is readily identified as such in writing; and
  - (B) the reasons for the inconsistency are set out in writing;

- (vii) the institution keeps a record in writing of -
  - (A) the definitions used by it of its standardised business lines for the purposes of calculating its operational risk;
  - (B) the processes used by it to map its business activities into the standardised business lines; and
  - (C) any exceptions (including inconsistencies) to the policies or criteria applied by the institution in mapping its business activities into the standardised business lines;
- (viii) the institution has established systems, policies and procedures to readily map into its standardised business lines any new business activity carried out or to be carried out by the institution or any new product provided or to be provided by the institution;
- (ix) the senior management of the institution is responsible for the development, implementation and oversight of the institution's policy in relation to mapping its business activities into the standardised business lines and the board of directors of the institution are responsible for approving the principal elements of that policy and any major revision to those elements; and



- (x) the process by which the institution maps its business activities into the standardised business lines is regularly reviewed by a party independent from that process.

[SCHEDULE 2

[rules 10, 14, 15, 16, and 34]

UNIFORM CREDIT QUALITY GRADES

TABLE A

CLAIMS ON SOVERIGNS

Credit quality grade (sovereigns)	Standard and Poor's Corporation	Moody's Investors Service, Inc.	Fitch Ratings Ltd.
1	AAA AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-
2	A+ A A-	A1 A2 A3	A+ A A-
3	BBB+ BBB BBB-	Baa1 Baa2 Baa3	BBB+ BBB BBB-
4	BB+ BB BB-	Ba1 Ba2 Ba3	BB+ BB BB-
5	B+ B B-	B1 B2 B3	B+ B B-
6	CCC+ CCC CCC- CC C D	Caa1 Caa2 Caa3 Ca C D	CCC+ CCC CCC- CC C D

**TABLE B****CLAIMS ON BANKS AND SECURITIES FIRMS**

<b>Credit quality grade (banks and securities firms)</b>	<b>Standard and Poor's Corporation</b>	<b>Moody's Investors Service, Inc.</b>	<b>Fitch Ratings Ltd.</b>
1	AAA	Aaa	AAA
	AA+	Aa1	AA+
	AA	Aa2	AA
	AA-	Aa3	AA-
2	A+	A1	A+
	A	A2	A
	A-	A3	A-
3	BBB+	Baa1	BBB+
	BBB	Baa2	BBB
	BBB-	Baa3	BBB-
4	BB+	Ba1	BB+
	BB	Ba2	BB
	BB-	Ba3	BB-
	B+	B1	B+
	B	B2	B
	B-	B3	B-
5	CCC+	Caa1	CCC+
	CCC	Caa2	CCC
	CCC-	Caa3	CCC-
	CC	Ca	CC
	C	C	C
	D		D

**TABLE C**

**CLAIMS ON CORPORATES**

<b>Credit quality grade (corporates)</b>	<b>Standard and Poor's Corporation</b>	<b>Moody's Investors Service, Inc.</b>	<b>Fitch Ratings Ltd.</b>
1	AAA AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-
2	A+ A A-	A1 A2 A3	A+ A A-
3	BBB+ BBB BBB-	Baa1 Baa2 Baa3	BBB+ BBB BBB-
4	BB+ BB BB-	Ba1 Ba2 Ba3	BB+ BB BB-
5	B+ B B- CCC+ CCC CCC- CC C D	B1 B2 B3 Caa1 Caa2 Caa3 Ca C	B+ B B- CCC+ CCC CCC- CC C D

**TABLE D**

**SHORT-TERM CLAIMS (CORPORATES, BANKS AND SECURITIES FIRMS)**

<b>Short-term credit quality grade (corporates, banks and securities firms)</b>	<b>Standard and Poor's Corporation</b>	<b>Moody's Investors Service, Inc.</b>	<b>Fitch Ratings Ltd.</b>
1	A-1	P-1	F-1
2	A-2	P-2	F-2
3	A-3	P-3	F-3
4	Others	Others	Others]

### SCHEDULE 3

[rule 2(1)]

#### STANDARD SUPERVISORY HAIRCUTS FOR

#### COMPREHENSIVE APPROACH TO TREATMENT OF COLLATERAL

1. Authorized institutions using the comprehensive approach to treatment of collateral for collateralised transactions are required to use the haircuts provided in the table below to take account of the price volatility of both the underlying exposure and the collateral. These haircuts assume daily marking-to-market, daily remargining and a 10-business day minimum holding period.

(Figures below are in percentages)

**Table**

Exposure/Recognised Collateral for Credit Risk Mitigation		Sovereigns <sup>1</sup>	Other issuers <sup>2</sup>
Credit Quality Grade / Short-term Credit Quality Grade	Residual Maturity		
<ul style="list-style-type: none"> <li>• Grade 1</li> </ul>	≤ 1 year	0.5	1
	> 1 year, ≤ 5 years	2	4
	> 5 years	4	8
<ul style="list-style-type: none"> <li>• Grades 2 &amp; 3</li> <li>• Unrated securities issued by banks (or entities treated as banks) satisfying the criteria for recognised collateral</li> </ul>	≤ 1 year	1	2
	> 1 year, ≤ 5 years	3	6
	> 5 years	6	12
<ul style="list-style-type: none"> <li>• Grade 4 for sovereigns</li> </ul>	All	15	
<ul style="list-style-type: none"> <li>• Equities in main index (including convertible bonds) and gold</li> </ul>		15	
<ul style="list-style-type: none"> <li>• Other equities (including convertible bonds) listed on a recognised exchange</li> </ul>		25	

<sup>1</sup> Haircuts for sovereigns should be applied to multilateral development banks and to sovereign foreign public sector entities.

<sup>2</sup> Other issuers include public sector entities that are not sovereign foreign public sector entities. For the purpose of applying haircuts to such public sector entities, authorized institutions should refer to the credit quality grade assigned to the sovereigns in which the public sector entities are incorporated or established. Where the credit quality grade assigned to the sovereign is grade 4 or below, the securities issued by the public sector entities will not be recognised for banking book transactions (but will still be recognised in the case of repo-style transactions in the trading book, with the application of a 25% haircut – see paragraph 2 of this Schedule).

**Table - continued**

<b>Exposure/Recognised Collateral for Credit Risk Mitigation</b>		<b>Sovereigns<sup>1</sup></b>	<b>Other issuers<sup>2</sup></b>
<b>Credit Quality Grade / Short-term Credit Quality Grade</b>	<b>Residual Maturity</b>		
<ul style="list-style-type: none"> <li>• Collective investment schemes</li> </ul>		Highest haircut applicable to any financial instruments in which the scheme can invest	
<ul style="list-style-type: none"> <li>• Cash in the same currency</li> </ul>		0	

2. For transactions in which an authorized institution lends to a counterparty instruments that are not included in this table (for example, non-investment grade corporate debt securities) the haircut to be applied to the exposure should be the same as the haircut for equity traded on a recognised exchange that is not part of a main index (that is, 25%).
3. In cases where the underlying exposure and collateral are denominated in different currencies, a standard supervisory haircut for currency risk of 8% should be imposed to further reduce the value of the collateral. This haircut is also based on daily marking-to-market and a 10-business day minimum holding period.
4. In the case of repo-style transactions, haircuts reflecting price volatility of the underlying exposure and collateral involved in the transactions could be lowered to 0% if the criteria specified in *rule 37(2)* are satisfied.
5. For repo-style transactions that are treated as collateralized loans in the authorized institution's trading book, the category of recognised collateral may be expanded to include all assets received by the authorized institution (as mentioned in *rule 35(d)* of these Rules). Assets falling outside the definition of recognised collateral (as set out in this table) should be subject to a 25% haircut.

## SCHEDULE 4

[rules 2(1) and 64]

### DETAILED DEFINITION OF EACH STANDARDISED BUSINESS LINE

Business lines under the Standardised Approach and the Alternative Standardised Approach to the calculation of operational risk	Major business segments	Activity groups
<b>Corporate Finance</b>	Corporate Finance	mergers and acquisitions, underwriting, privatizations, securitisation, research, debt (sovereign, high yield), equity, syndications, IPO, secondary private placements
	Municipal/Government Finance	
	Merchant Banking	
	Advisory Services	
<b>Trading and Sales</b>	Sales	fixed income, equity, foreign exchange, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage
	Market Making	
	Proprietary Positions	
	Treasury	
<b>Retail Banking</b>	Retail Banking	retail lending and deposits, banking services, trust and estates
	Private Banking	private lending and deposits, banking services, trust and estates, investment advice
	Card Services	merchant/commercial/corporate cards, private labels and retail
<b>Commercial Banking</b>	Commercial Banking	project finance, real estate, export finance, trade finance, factoring, leasing, lending, guarantees, bills of exchange
<b>Payment and Settlement<sup>1</sup></b>	External Clients	payments and collections, fund transfer, clearing and settlement
<b>Agency Services</b>	Custody	escrow, depository receipts, securities lending (customers), corporate actions
	Corporate Agency	issuer and paying agents
	Corporate Trust	
<b>Asset Management</b>	Discretionary Fund Management	pooled, segregated, retail, institutional, closed, open, private equity
	Non-Discretionary Fund Management	pooled, segregated, retail, institutional, closed, open
<b>Retail Brokerage</b>	Retail Brokerage	execution only and full service

<sup>1</sup> Payment and settlement losses related to an authorized institution's own activities would be allocated to the standardised business lines to which the transaction occasioning the payment and settlement loss is most closely related.



Dated this      day of                      2006

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Monetary Authority

## **Explanatory Note**

1. These Rules are made under section 98A of the Banking Ordinance (Cap. 155) (as amended by the Banking (Amendment) Ordinance 2005) and prescribe the manner in which authorized institutions incorporated in Hong Kong shall calculate their capital adequacy ratio under section 98 of the Banking Ordinance. (See the definition of "capital adequacy ratio" inserted into section 2(1) of the Banking Ordinance by section 1 of Part 1 of the Schedule to the Banking (Amendment) Ordinance 2005).

### ***Part 1 - Preliminary***

2. *Rule 1* specifies that the Rules shall come into operation on a day to be appointed by the Secretary for Financial Services and the Treasury.

3. *Rule 2(1)* defines the terms used in the Rules. The definitions of "credit risk", "market risk" and "operational risk" should, in particular, be noted, because they cross-reference to the 3 kinds of risk specified in the definition of "capital adequacy ratio" as the risks to be taken into account in calculating an authorized institution's capital adequacy ratio. The Rules, in essence, consist of provisions setting out various approaches which may be adopted by authorized institutions to calculate those risks and other provisions which enable or assist any such calculation. It should also be noted that a number of acronyms are used as shorthand to describe the various approaches. (For

example, "STO" means the standardised approach to the calculation of an authorized institution's operational risk).

## ***Part 2 - Application of these Rules***

4. *Rule 3* specifies that an authorized institution must use the basic indicator approach to calculate its operational risk (see *Division 1 of Part 5*) unless it has the approval of the Monetary Authority ("MA") to use the standardised approach to calculate its operational risk (see *Division 2 of Part 5*) or the alternative standardised approach to calculate its operational risk (see *Division 3 of Part 5*). *Rule 4* empowers the MA, in the circumstance specified in *rule 4(1)(b)*, to require an authorized institution which is using the standardised or alternative standardised approach to calculate its operational risk to use the basic indicator approach to calculate its operational risk in respect of all of its business or such parts of its business as the MA specifies. *Rule 5* provides for applications to the MA by authorized institutions seeking the MA's approval to use the standardised or alternative standardised approach to calculate their operational risk and the MA's determination of the applications. It should be noted that the MA is prohibited from granting any such approval if the authorized institution concerned is unable to satisfy the MA that the relevant criteria specified in *Schedule 1* to the Rules are fulfilled with respect to the institution.

### ***Part 3 - Determination of Capital Base***

5. This Part is temporarily vacant.

### ***Part 4 - Calculation of Credit Risk***

#### ***Division 1 - Application***

6. *Rule 6* specifies that *Part 4* applies to authorized institutions which use the standardised approach to calculate their credit risk.

#### ***Division 2 - Calculation of credit risk under STC and assets and exposures to be covered in calculation***

7. *Rule 7* specifies how an authorized institution shall calculate its credit risk under the standardised approach and *rule 8* specifies the on-balance sheet assets and off-balance sheet exposures of the institution which are required to be taken into account for the purposes of any such calculation. *Rule 7* also specifies that an authorized institution may take into account the effect of any recognised credit risk mitigation for the purposes of calculating its risk-weighted assets and risk-weighted exposures. (See the definition of "recognised credit risk mitigation" in *rule 2(1)* as read with the definitions of "credit

protection", "nettable", "recognised collateral", "recognised credit derivative contract", "recognised guarantee", "recognised netting" and "valid bilateral netting agreement" in that rule). *Rule 9* requires an authorized institution to classify each of its on-balance sheet assets into one only of the categories specified in that rule (for example, claims on sovereigns, claims on banks and residential mortgage loans).

***Division 3 - Calculation of risk-weighted amount of authorized institution's on-balance sheet assets***

8. *Division 3* relates to *paragraph (a)* of *rule 7(1)*. The assets and exposures falling within *rule 8* are risk-weighted (by reference to the categories set out in *rule 9*) as specified in *rules 10* to *21*. In the case of *rules 10, 12, 14, 15* and *16*, the risk-weighting is done by reference to credit assessment ratings assigned by external credit assessment institutions to various persons or to debt obligations issued or undertaken by various persons. (In this respect, see the definitions of "credit quality grade", "current", "ECAI", "ECAI issue specific rating", "ECAI issuer rating", "ECAI rating", "external credit assessment institution", "long-term ECAI issue specific rating" and "short-term ECAI issue specific rating" in *rule 2(1)* as read with *Schedule 2* to the Rules). *Rule 22(2)* to *(5A)* specifies what an authorized institution must do if there is more than one applicable current ECAI rating falling within a subrule of any rule of *Part 4*. *Rule 22A* requires an authorized institution to use only the credit assessment rating of ECAs nominated by it for the purposes of *Part 4*.

***Division 4 - Calculation of risk-weighted amount of authorized institution's off-balance sheet exposures***

9. *Division 4* relates to *paragraph (b)* of *rule 7(1)*. An authorized institution is required to calculate the credit equivalent amount (see definition of "credit equivalent amount" in *rule 2 (1)*) of its off-balance sheet exposures in accordance with *rules 23, 24* and *25* and to determine the risk-weights of those exposures in accordance with *rule 26*. *Rule 27* then specifies how the institution calculates its total aggregate risk-weighted amount of credit exposure using those credit equivalent amounts and risk-weights. *Rules 29* and *30* specify how an authorized institution shall calculate the risk-weighted exposure of a repo-style transaction (see definition of "repo-style transaction" in *rule 2(1)*) booked in its banking book or trading book (see the definitions of "banking book" and "trading book" in *rule 2(1)*).

***Division 6 - Use of collateral in credit risk mitigation***

10. *Rule 32* specifies the collateral which is recognised for the purposes of calculating the risk-weighted amounts of an authorized institution's on-balance sheet assets or off-balance sheet exposures. *Rule 33* specifies the circumstances in which an authorized institution may or must use the simple or the comprehensive approach in respect of the treatment of recognized collateral (see the definitions of "comprehensive approach" and

“simple approach” in *rule 2(1)*). *Rule 34* specifies the recognised collateral which may be used under the simple approach while *rule 35* specifies the recognised collateral that may be used under the comprehensive approach.

***Division 6A – Provisions applicable to credit risk mitigation under simple approach to treatment of collateral***

10A. *Rule 36* specifies how an authorized institution shall calculate its risk-weighted assets and risk-weighted exposures taking into account the effect of recognised credit risk mitigation under the simple approach to the treatment of collateral. *Rule 37* specifies how an authorized institution shall determine the risk-weight to be allocated to recognised collateral under the simple approach. *Rule 38* specifies how an authorized institution shall calculate the risk-weighted amount of each of its on-balance sheet assets having regard to the portions of the assets concerned which have or do not have credit protection. Similarly, *rules 39* and *40* specify how an authorized institution shall calculate the risk-weighted amount of each of its off-balance sheet exposures having regard to the extent to which they have credit protection.

***Division 7 - Provisions applicable to credit risk mitigation under comprehensive approach to treatment of collateral***

11. *Division 7* specifies how an authorized institution shall calculate the risk-weighted amounts of its on-balance sheet assets and off-balance sheet exposures under the comprehensive approach to the treatment of recognised collateral. The provisions of the Division need to be read in conjunction with the definitions of "haircut" and "standard supervisory haircut" in *rule 2(1)* and *Schedule 3* to the Rules.

***Division 8 - Use of netting in credit risk mitigation***

12. *Division 8* specifies the circumstances in which, and how, an authorized institution may take account of the effect of valid bilateral netting agreements in respect of calculating the risk-weighted amount of its exposures to the counterparties under the agreements.

***Division 9 - Use of guarantees and credit derivative contracts in credit risk mitigation***

13. *Division 9* specifies the guarantees (*rule 54*) and credit derivative contracts (*rule 55*) that are recognised for the purposes of taking into account the effect of credit risk



mitigation in calculating the risk-weighted amounts of an authorized institution's on-balance sheet assets and off-balance sheet exposures. *Rule 56* specifies that if an authorized institution's exposure to an on-balance sheet asset or off-balance sheet exposure is covered by a recognised guarantee or recognised credit derivative contract, then the institution may allocate the guarantor's or protection seller's risk-weight to the on-balance sheet asset or off-balance sheet exposure instead of the risk-weight of the counterparty. *Rule 57* contains special provisions in respect of credit protection consisting of recognised credit derivative contracts which are credit default swaps or total return swaps. (See the definitions of "credit default swap" and "total return swap" in *rule 2(1)*).

#### ***Division 10 - Multiple recognised credit risk mitigation and maturity mismatches***

14. *Rule 58* specifies what an authorized institution must do where an exposure of the institution has 2 or more distinct or overlapping forms of recognised credit risk mitigation in respect of a single exposure of the institution to a counterparty. *Rule 59* specifies what an authorized institution must do when there is a maturity mismatch between the credit protection provided in respect of an underlying exposure of the institution and the underlying exposure (see the definition of "maturity mismatch" in *rule 2(1)*).

## **Part 5 - Calculation of Operational Risk**

### ***Division 1 - Basic indicator approach to calculation of operational risk***

15. *Division 1* specifies that an authorized institution shall calculate its risk-weighted amount for operational risk under the basic indicator approach by multiplying the capital charge for operational risk calculated under *rule 61* by the factor of 12.5 specified in *rule 62*.

### ***Division 2 - Standardised approach to calculation of operational risk***

16. *Division 2* specifies that an authorized institution shall calculate its risk-weighted amount for operational risk under the standardised approach by mapping its business activities (and the gross income derived from those business activities) into the 8 standardised business lines specified in *rule 64* as read with *Schedule 4* to the Rules, calculating an aggregate capital charge for its operational risk in respect of those standardised business lines in accordance with *rule 65*, and then multiplying that aggregate capital charge by a factor of 12.5 as specified in *rule 66*.

### ***Division 3 - Alternative standardised approach to calculation of operational risk***

17. The alternative standardised approach to the calculation of operational risk set out in *Division 3* is essentially the same as the standardised approach except the commercial banking business line and the retail banking business line where loans and advances (instead of gross income) will be used to calculate the operational risk capital charge (see *rules 69 and 70*).

### ***Division 4 - Exceptions***

18. *Division 4* specifies that authorized institutions may, in certain circumstances and with the prior approval of the MA, adopt alternatives to the approaches to operational risk specified in *Part 5 (rule 73)*. The Division also specifies transitional provisions for the purposes of *Part 5*.

### ***Part 6 - Calculation of Market Risk***

19. This Part is temporarily vacant.

***Part 7 - Asset Securitisation***

20. This Part is temporarily vacant.