Division 9—Specific requirements for certain portfolios of exposures

197. Purchased receivables

An authorized institution shall—

(*a*) classify its purchased receivables as corporate exposures or retail exposures in accordance with the nature of the receivables; and

(*b*) subject to section 199(1), calculate the risk-weighted amount for both default risk and dilution risk in respect of its purchased receivables in accordance with sections 198, 199 and 200.

198. Calculation of risk-weighted amount for default risk in respect of purchased receivables

(1) An authorized institution shall calculate the risk-weighted amount for default risk in respect of its purchased receivables—

(*a*) subject to paragraph (*c*) and subsection (2), in the case of a portfolio of purchased receivables which falls within one of the IRB subclasses of corporate exposures only, by using in accordance with Division 5 the risk-weight function which is applicable to the IRB subclass within which the portfolio of purchased receivables falls;

(*b*) subject to paragraph (*c*) and subsection (3), in the case of a portfolio of purchased receivables which falls within one of the IRB subclasses of retail exposures only, by using in accordance with Division 6 the risk-weight function which is applicable to the IRB subclass within which the portfolio of purchased receivables falls;

(*c*) subject to subsection (2) or (3), in the case of a portfolio of purchased receivables containing a mixture of exposures in respect of which the institution cannot separate the exposures into different IRB subclasses of corporate exposures or retail exposures, by using in accordance with Division 5 or 6, as the case requires, the risk-weight function which will result in the highest risk-weighted amount of the exposures in the portfolio of purchased receivables.

(2) For the purposes of subsection (1)(*a*), an authorized institution which purchases corporate receivables shall make its estimates of the PD and LGD (or, if applicable, EL) of each of the purchased receivables constituting the portfolio of purchased corporate receivables of the institution (referred to in this Division as "bottom-up approach") on the assumption that there is no recourse to, or other support from, the seller of the corporate receivables or any third-party guarantor.

(3) For the purposes of subsection (1)(*b*), an authorized institution which purchases retail receivables shall—

(*a*) make its estimates of the PD and LGD (or, if applicable, EL) of the portfolio of purchased retail receivables (referred to in this Division as "top-down approach") on the assumption that there is no recourse to, or other support from, the seller of the retail receivables or any third-party guarantor; and

(*b*) comply with section 200.

199. Calculation of risk-weighted amount for dilution risk in respect of purchased receivables

(1) An authorized institution shall calculate the risk-weighted amount for dilution risk in respect of its purchased receivables in accordance with subsection (2) unless the institution demonstrates to the satisfaction of the Monetary Authority that the dilution risk it faces in respect of its purchased receivables is immaterial.

(2) For the purposes of calculating the risk-weighted amount for dilution risk in respect of its purchased receivables, an authorized institution shall—

(*a*) if the bottom-up approach is used, estimate the EL for dilution risk for each of its purchased receivables (expressed as a percentage of the EAD of the relevant purchased receivable);

(*b*) if the top-down approach is used—

(i) estimate the EL for dilution risk for a portfolio of its purchased receivables (expressed as a percentage of the total EAD of all receivables in the relevant portfolio of purchased receivables); and

(ii) comply with section 200;

(*c*) make the estimate of EL referred to in paragraph (*a*) or (*b*) on the assumption that there is no recourse to, or other support from, the seller of the receivables or any third-party guarantor.

(3) An authorized institution shall, for the purposes of calculating the risk-weighted amount for dilution risk in respect of its purchased receivables, use the corporate risk-weight function set out in Formula 16 with—

(*a*) PD set as equal to the institution's estimate of EL for dilution risk;
(*b*) LGD set at 100%; and
(*c*) subject to subsection (4), M determined in accordance with—
(i) in the case of purchased corporate receivables—
(A) section 167 if the institution uses the foundation IRB approach;
(B) section 168 if the institution uses the advanced IRB approach;
(ii) in the case of purchased retail receivables, section 168.

(4) An authorized institution may set M at one year for the purposes of subsection (3)(*c*) if the institution demonstrates to the satisfaction of the Monetary Authority that the institution's dilution risk in respect of its purchased receivables is monitored and managed by the institution with a view to the risk being resolved within one year after the purchase.

200. Requirements for authorized institution using top-down approach to estimate probability of default, etc. of purchased receivables for default risk or dilution risk

An authorized institution which uses the top-down approach to estimate the PD and LGD (or, if applicable, EL) of its purchased receivables for default risk or dilution risk shall—
(*a*) subject to paragraph (b), group its purchased receivables into portfolios so that accurate and consistent estimates of the PD and LGD (or, if applicable, EL) for default risk and estimates of the EL for dilution risk can be determined;
(*b*) make the grouping required under paragraph (*a*) so as to reflect the seller's credit underwriting practices in respect of the receivables and the heterogeneity of the seller's customers; and
(*c*) comply with Division 6 in respect of the methods and data used for estimating the PD and LGD (or, if applicable, EL).

201. Leasing arrangements

(1) Where an authorized institution has an exposure arising from a leasing arrangement which does not expose the institution to residual value risk, the institution—
(*a*) shall treat the exposure as an exposure secured by collateral of the same type as the subject matter of the lease; and

(*b*) if the collateral referred to in paragraph (*a*) is recognized collateral in accordance with section 208, may take into account the credit risk mitigating effect of the collateral in calculating the risk-weighted amount of the exposure.

(2) Where an authorized institution has an exposure arising from a leasing arrangement which exposes the institution to residual value risk, the institution shall—

(*a*) calculate the risk-weighted amount for default risk by using the risk-weight function applicable to the IRB subclass within which an exposure to the lessee falls, with the EAD set as equal to the discounted lease payment stream, and the PD and LGD as those which the institution assigns to the exposure; and

(*b*) calculate the risk-weighted amount for residual value risk by multiplying the residual value of the leased asset by 100%.

202. Repo-style transactions

An authorized institution shall apply sections 75 and 76, with all necessary modifications, to repo-style transactions except that—

(*a*) the institution shall determine the risk-weight to be allocated to its exposure under a repo-style transaction booked in the institution's banking book, which falls within paragraph (*a*), (*b*) or (*d*) of the definition of "repo-style transaction" in section 2(1), where the underlying securities are regarded as the institution's assets, in accordance with—

(i) the risk-weight function for corporate, sovereign and bank exposures;

(ii) the risk-weight function for retail exposures; or

(iii) the market-based approach or the PD/LGD approach for equity exposures,

as the case may be, according to the nature of the underlying securities and the IRB class within which the issuer of the securities falls; and

(*b*) the institution shall determine the risk-weight to be allocated to its exposure under a repo-style transaction booked in the institution's banking book or trading book, which falls within paragraph (*c*) or (*d*) of the definition of "repo-style transaction" in section 2(1), where the transaction is regarded as a collateralized loan, in accordance with—

(i) the risk-weight function for corporate, sovereign and bank exposures; or

(ii) the risk-weight function for retail exposures,

as the case may be, according to the IRB class within which an exposure to the counterparty to the repo-style transaction falls and in accordance with the treatment of credit risk mitigation set out in Division 10.

Division 10—Credit risk mitigation

203. Credit risk mitigation—general

(1) An authorized institution may take into account the effect of recognized credit risk mitigation in calculating the risk-weighted amount of its exposures, including—

(*a*) recognized collateral;
(*b*) recognized netting; and
(*c*) recognized guarantees and recognized credit derivative contracts.

(2) The risk-weighted amount of an exposure of an authorized institution in respect of which recognized credit risk mitigation has been taken into account by the institution shall not be higher than that of an identical exposure in respect of which recognized credit risk mitigation has not been so taken into account.

204. Recognized collateral

For the purposes of section 203(1)(*a*), an authorized institution shall only take into account the credit risk mitigating effect of recognized collateral through its determination of the LGD of a corporate, sovereign, bank or retail exposure of the institution against which recognized collateral is held in accordance with—

(*a*) section 160 if the exposure is a corporate, sovereign or bank exposure for which the institution uses the foundation IRB approach;
(*b*) section 161 if the exposure is a corporate, sovereign or bank exposure for which the institution uses the advanced IRB approach;
(*c*) section 178 if the exposure is a retail exposure for which the institution uses the retail IRB approach.

205. Recognized financial receivables

(1) A financial receivable constitutes a recognized financial receivable taken as collateral for a corporate, sovereign or bank exposure of an authorized institution only if it is a claim on the obligor in respect of the receivable (referred to in this section as "receivable obligor") with an original maturity of not more than one year and—

(*a*) the claim on the receivable obligor is legally enforceable in all relevant countries and the legal requirements for establishing the claim have been fulfilled;

(*b*) there is in place a framework which allows the institution to have the claim on the receivable obligor as a perfected first priority claim;

(*c*) the institution has taken all steps to fulfil requirements under the law applicable to the institution's interest in the claim 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 the receivable (referred to in this section as "receivable collateral");

(*d*) the agreement and the legal process underpinning the claim allow the institution to realize the value of the receivable collateral in a timely manner;

(*e*) the institution has in place clearly documented procedures to ensure that any legal conditions required for declaring the default of the obligor in respect of the exposure covered by the receivable collateral (referred to in this section as "direct obligor") and for timely collection of the receivable collateral are observed;

(*f*) in the event of the financial distress or default of the direct obligor, the institution has the legal authority to sell or assign the receivable collateral to other parties without the consent of the receivable obligor;

(*g*) subject to paragraph (*h*), the institution has in place an effective process for assessing, monitoring and controlling the credit risk of the receivable collateral;

(*h*) if the institution relies on the direct obligor to review the credit risk of the receivable obligor, the institution has reviewed the quality of the direct obligor's credit management policies;

(*i*) in the case of receivable collateral which consists of a pool of receivables, the loan-to-value ratio between the amount of the exposure covered by the pool of receivables constituting the receivable collateral and the value of the pool of receivables reflects the anticipated cost of collection of the receivables and the level of concentration on a particular receivable obligor within the pool of receivables;

(*j*) in the case of receivable collateral which consists of a pool of receivables, the institution ensures that—

(i) subject to subparagraph (ii), the pool of receivables constituting the receivable collateral is diversified and the positive correlation between the creditworthiness of the direct obligor and the receivable obligors is not unduly high;

(ii) if the positive correlation between the creditworthiness of the direct obligor and the receivable obligors is unduly high, the attendant risk is taken into account in the setting of loan-to-value ratio in respect of the pool of receivables constituting the receivable collateral; and

(*k*) the institution has—

(i) a clearly documented process for collecting payments from the receivable obligors in the event of the financial distress or default of the direct obligor; and

(ii) the resources which are required in the documented process referred to in subparagraph (i) for collecting payments from the receivable obligors.

(2) For the avoidance of doubt, it is hereby declared that financial receivables derived from securitization transactions do not fall within subsection (1).

206. Recognized commercial real estate and recognized residential real estate

Commercial real estate or residential real estate constitutes recognized commercial real estate or recognized residential real estate respectively for a corporate, sovereign or bank exposure of an authorized institution only if—

(*a*) the institution's credit risk to the obligor in respect of the exposure is not materially dependent on the performance of the underlying property or project constituting the collateral (referred to in this section as "property collateral") but on the capacity of the obligor to repay the exposure from other sources;

(*b*) the value of the property collateral is not materially dependent on the performance of the obligor in respect of the exposure;

(*c*) the institution has—

(i) a first lien on, or a first charge over, the property collateral; or

(ii) first and subsequent liens on, or first and subsequent charges over, the property collateral if all of such liens or charges are held by the institution;

(*d*) the institution has in place clearly documented procedures to ensure that there is no prior claim, or claim of equal ranking, by another party on the property collateral;

(*e*) the institution's claim on the property collateral is legally enforceable in all relevant countries and the legal requirements for establishing the claim have been fulfilled;

(*f*) the institution has taken all steps to fulfil requirements under the law applicable to the institution's claim on the property 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 the property collateral;

(*g*) the agreement and the legal process underpinning the institution's interest in the property collateral allow the institution to realize the value of the property collateral in a timely manner;

(*h*) the institution has in place clearly documented procedures to ensure that any legal conditions required for declaring the default of the obligor in respect of the exposure covered by the property collateral and for timely collection of the property collateral are observed;

(*i*) the property collateral is valued at not more than its fair value;

(*j*) the value of the property collateral is monitored frequently and reviewed not less than once in every 12 months;

(*k*) the institution has in place clearly documented policies specifying the types of commercial real estate and residential real estate which the institution accepts as collateral for its corporate, sovereign or bank exposures and the lending criteria associated with such collateral; and

(*l*) the institution ensures that the property collateral is adequately insured against damage or deterioration.

207. Other recognized IRB collateral

Physical collateral (other than commercial real estate and residential real estate) constitutes other recognized IRB collateral for a corporate, sovereign or bank exposure of an authorized institution only if—

(*a*) a liquid market exists for the disposal of the physical collateral in an expeditious and economically efficient manner;

(*b*) well-established market prices are publicly available for the physical collateral;

(*c*) the institution has a first lien on, or a first charge over, the physical collateral;

(*d*) the institution has in place clearly documented procedures to ensure that there is no prior claim, or claim of equal ranking, by another party on the physical collateral;

(*e*) the institution's claim on the physical collateral is legally enforceable in all relevant countries and the legal requirements for establishing the claim have been fulfilled;

(*f*) the institution has taken all steps to fulfil requirements under the law applicable to the institution's claim on the physical 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 the physical collateral;

(*g*) the agreement and the legal process underpinning the institution's interest in the physical collateral allow the institution to realize the value of the physical collateral in a timely manner;

(*h*) the institution has in place clearly documented procedures to ensure that any legal conditions required for declaring the default of the obligor in respect of the exposure covered by the physical collateral and for timely collection of the physical collateral are observed;

(*i*) subject to paragraph (*j*), the loan agreement and all other documentation underpinning the institution's interest in the physical collateral include detailed descriptions of the collateral and detailed specifications of the manner and frequency of revaluation of the collateral;

(*j*) the institution performs periodic revaluation and, where practicable, periodic inspection of the physical collateral;

(*k*) the institution has in place clearly documented policies specifying the types of physical collateral which the institution accepts as collateral for its corporate, sovereign or bank exposures and the lending criteria associated with such collateral; and

(*l*) the institution ensures that the physical collateral is adequately insured against damage or deterioration.

208. Leased assets may be recognized as collateral

A leased asset of an authorized institution constitutes recognized collateral only if—

(*a*) the lease concerned does not expose the institution to residual value risk;

(*b*) the leased asset satisfies the requirements set out in—

(i) section 206 if it is commercial real estate or residential real estate;
(ii) section 207 if it is a physical asset;

(*c*) the institution has in place effective and clearly documented policies and procedures for managing the risk associated with the leased asset with respect to the location of the asset, the use to which it is put, its age and its planned obsolescence;

(*d*) there is in place a legal framework which establishes the institution's legal ownership of the leased asset and its ability to exercise its rights as the owner in a timely manner; and

(*e*) the difference between the rate of depreciation of the leased asset and the rate of amortization of the lease payments is not material to the extent that it will overstate the credit risk mitigating effect of the asset.

209. Recognized netting

(1) For the purposes of section 203(1)(*b*), 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, the institution shall only take into account the credit risk mitigating effect of recognized netting through the calculation of the EAD of its exposure to the counterparty.

(2) Subject to subsection (4), an authorized institution shall apply sections 94, 95 and 103, with all necessary modifications, to take into account the credit risk mitigating effect of recognized netting in calculating the EAD of its exposure to the counterparty in respect of—

(*a*) the institution's on-balance sheet corporate, sovereign, bank, retail or other exposures; and

(*b*) OTC derivative transactions and credit derivative contracts booked in the institution's trading book.

(3) Where a repo-style transaction entered into by an authorized institution is subject to a valid bilateral netting agreement, the institution may only take into account the credit risk mitigating effect of the recognized netting by—

(*a*) in relation to a corporate, sovereign or bank exposure of an authorized institution which uses the foundation IRB approach—

(i) subject to subparagraph (ii), calculating the net credit exposure to the counterparty (that is, $E^{\#}$ as set out in Formula 9) in accordance with section 96 as the EAD for inclusion into the risk-weight function specified in Formula 16 or 17, as the case requires;

(ii) if section 97 applies, calculating the net credit exposure to the counterparty (that is, E* as set out in Formula 10) in accordance with section 97 as the EAD for inclusion into the risk-weight function specified in Formula 16 or 17, as the case requires;

(*b*) in relation to a corporate, sovereign or bank exposure of an authorized institution which uses the advanced IRB approach or a retail exposure of an authorized institution which uses the retail IRB approach—

(i) subject to subparagraph (ii), calculating the net credit exposure to the counterparty (that is, $E^{\#}$ as set out in Formula 9) in accordance with section 96 as the EAD for inclusion into the risk-weight function specified in Formula 16 or 17, as the case requires;

(ii) if section 97 applies, calculating the net credit exposure to the counterparty (that is, E* as set out in Formula 10) in accordance with section 97 as the EAD for inclusion into the risk-weight function specified in Formula 16 or 17, as the case requires;

(iii) applying its estimate of LGD to the net credit exposure to the counterparty ($E^{\#}$ or E*, as the case may be).

(4) For the purposes of subsection (2)—

(*a*) the definition of "principal amount" in section 139(1) applies to references to that expression in section 95;

(*b*) the references in sections 94 and 95 to "net credit exposure" shall be calculated without deduction of any specific provisions or partial write-offs in respect of the exposure.

210. Recognized guarantees and recognized credit derivative contracts

(1) For the purposes of section 203(1)(*c*), subject to subsection (2), an authorized institution shall only take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract in accordance with sections 211, 212, 213, 214, 215, 216, 217, 218 and 219.

(2) An authorized institution shall—

(*a*) have in place clearly documented criteria, methods and processes, which comply with sections 214, 215, 216, 217, 218 and 219, for taking into account the credit risk mitigating effect of recognized guarantees and recognized credit derivative contracts; and

(*b*) subject to section 214(2), take into account such effects consistently—

(i) both for a given type of recognized guarantee or recognized credit derivative contract; and

(ii) over time.

211. Recognized guarantees and recognized credit derivative contracts under substitution framework for corporate, sovereign and bank exposures under foundation IRB approach and for equity exposures under PD/LGD approach

(1) Subject to subsection (2), a guarantee which falls within section 98 constitutes a recognized guarantee under the substitution framework, and a credit derivative contract which falls within section 99 constitutes a recognized credit derivative contract under the substitution framework, in relation to—

(*a*) a corporate, sovereign or bank exposure of an authorized institution for which the institution uses the foundation IRB approach; and

(*b*) an equity exposure of an authorized institution for which the institution uses the PD/LGD approach.

(2) For the purposes of subsection (1), sections 98(*a*)(vi) and 99(1)(*b*)(vi) shall be deemed to read as—

"(vi) a corporate which—

(A) has an ECAI issuer rating which, if mapped to the scale of credit quality grades in Table C in Schedule 6, would result in the corporate being assigned a credit quality grade of 1 or 2; or

(B) has an exposure assessed under the institution's rating system with an estimate of PD which is equivalent to the PD of an exposure with a credit quality grade of 1 or 2 in Table C in Schedule 6,".

212. Recognized guarantees and recognized credit derivative contracts under substitution framework for corporate, sovereign and bank exposures under advanced IRB approach and for retail exposures under retail IRB approach

A guarantee or credit derivative contract, in relation to—

(*a*) a corporate, sovereign or bank exposure of an authorized institution for which the institution uses the advanced IRB approach; or

(*b*) a retail exposure of an authorized institution for which the institution uses the retail IRB approach,

constitutes a recognized guarantee under the substitution framework, or a recognized credit derivative contract under the substitution framework, as the case may be, only if—

(*c*) the guarantee or credit derivative contract is evidenced in writing, non-cancellable on the part of the credit protection provider, in force until the exposure to which the guarantee or credit derivative contract relates (referred to in this section as "underlying exposure") is satisfied in full and legally enforceable against the credit protection provider in a country where the credit protection provider has assets to attach under the enforcement of a judgment;

(*d*) the institution has in place clearly documented criteria for the types of credit protection providers which it will recognize for credit risk mitigation purposes under the substitution framework; and

(*e*) the criteria used by the institution in recognizing a credit derivative contract under the substitution framework require that the reference obligation under the credit derivative contract on which the credit protection of that contract is based cannot be different from the underlying exposure unless the conditions specified in section 99(1)(*n*) are satisfied.

213. Recognized guarantees and recognized credit derivative contracts under double default framework

A guarantee or credit derivative contract, in relation to a corporate exposure (excluding specialized lending under supervisory slotting criteria approach) or public sector entity exposure (excluding exposure to a sovereign foreign public sector entity) of an authorized institution, constitutes a recognized guarantee under the double default framework, or a recognized credit derivative contract under the double default framework, as the case may be, only if—

(*a*) subject to paragraphs (*b*) and (*c*), the guarantee or credit derivative contract covers only one single reference obligation;

(*b*) the credit derivative contract is a first-to-default credit derivative contract in respect of which the double default framework will be applied to the exposure in the basket of reference obligations specified in the contract which would carry the lowest risk-weighted amount in the absence of the credit protection within the basket;

(*c*) the credit derivative contract is an nth-to-default credit derivative contract in respect of which the credit protection obtained will only be recognized under the double default framework if—

(i) a $(n–l)^{th}$-to-default credit derivative contract which is a recognized credit derivative contract has also been entered into; or

(ii) the first to $(n–l)^{th}$ of the reference obligations within the basket have already defaulted;

(*d*) the guarantee or credit derivative contract satisfies the requirements specified in section 98 (except for paragraph (*a*) of that section) or section 99(1) (except for paragraph (*b*) of that section), as the case may be;

(*e*) the institution has the right to receive payment from the credit protection provider without having to take legal action in order to pursue the obligor in respect of the hedged exposure for payment;

(*f*) the institution has, to the extent practicable, taken steps to satisfy itself that the credit protection provider is willing to pay promptly if a credit event specified in the guarantee or credit derivative contract, as the case may be, occurs;

(*g*) the credit protection will compensate all credit losses incurred on the hedged exposures due to the occurrence of a credit event specified in the guarantee or credit derivative contract;

(*h*) in any case where the payout structure of a guarantee or credit derivative contract provides for physical settlement, there is a mechanism to ensure the deliverability of a loan, bond or contingent liability, as the case may be;

(*i*) in any case where the institution intends to deliver under a credit derivative contract which provides for physical settlement an obligation other than the hedged exposure in respect of which the credit protection is held by the institution, the institution has ensured that the deliverable obligation is sufficiently liquid so that the institution would be able to purchase it for delivery in accordance with the relevant contract;

(*j*) the terms and conditions of the credit protection are confirmed in writing by the credit protection provider and the institution;

(*k*) in the case of credit protection against dilution risk, the seller of purchased receivables is not a member of a group of companies, of which the credit protection provider is a member;

(*l*) subject to paragraph (*m*), there is no excessive positive correlation between the creditworthiness of a credit protection provider and the creditworthiness of the obligor in respect of the hedged exposure due to their close financial or legal relationship; and

(*m*) the institution has in place a process to detect excessive positive correlation referred to in paragraph (*l*).

214. Capital treatment of recognized guarantees and recognized credit derivative contracts

(1) Subject to subsection (2) and section 219, an authorized institution which takes into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract in calculating the risk-weighted amount of an exposure of the institution shall do so using the substitution framework.

(2) An authorized institution may use the double default framework to take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract for each exposure which falls within section 218.

215. Provisions supplementary to section 214(1)—substitution framework (general)

An authorized institution which uses the substitution framework in respect of a corporate, sovereign, bank, retail or equity exposure of the institution (referred to in this section as "underlying exposure")—

(*a*) shall not reflect the effect of double default when taking into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract in calculating the risk-weighted amount of the underlying exposure; and

(*b*) shall, to the extent that the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract is taken into account by the institution in calculating the risk-weighted amount of the underlying exposure, ensure that the risk-weight of the underlying exposure concerned, as adjusted after taking into account the credit risk mitigating effect of the

recognized guarantee or recognized credit derivative contract, is not less than that of a comparable direct exposure to the credit protection provider.

216. Provisions supplementary to section 214(1)—substitution framework for corporate, sovereign and bank exposures under foundation IRB approach and for equity exposures under PD/LGD approach

(1) An authorized institution shall, in relation to—

(*a*) a corporate, sovereign or bank exposure for which the institution uses the foundation IRB approach; or

(*b*) an equity exposure for which the institution uses the PD/LGD approach,

(in each case referred to in this section as "underlying exposure") take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract in respect of the exposure in accordance with subsections (2), (3), (4), (5) and (6).

(2) An authorized institution shall divide the EAD of an underlying exposure into the portion covered by the recognized guarantee or recognized credit derivative contract (referred to in this section as "covered portion") and the portion not covered by the recognized guarantee or recognized credit derivative contract (referred to in this section as "uncovered portion") such that—

(*a*) where the covered portion and uncovered portion of the underlying exposure are of equal seniority in terms of ranking for payment to the institution, the covered portion of the underlying exposure receives the treatment set out in subsection (3) and the uncovered portion of the underlying exposure receives the treatment set out in subsection (4);

(*b*) where—

(i) the institution has entered into a transaction under which a portion of the credit risk of an exposure of the institution is transferred in one or more than one tranche to one or more than one credit protection provider, and the remaining portion of the credit risk of the exposure is retained by the institution; and

(ii) the portion of the credit risk transferred and the portion of the credit risk retained are of different seniority in terms of ranking for payment to the institution,

the institution treats the transaction as a securitization transaction and determines the treatment of its exposure under the transaction in accordance with Part 7.

(3) An authorized institution shall, in the case of a covered portion of an underlying exposure—

(*a*) subject to paragraph (*b*), derive a risk-weight by using the risk-weight function applicable to the IRB subclass within which the exposure to the credit protection provider falls, and the PD of the obligor grade to which the exposure to the credit protection provider is assigned;

(*b*) in any case where the institution considers that it is not appropriate in assessing the credit risk to which the institution is exposed to substitute the obligor grade of the exposure to the credit protection provider for that of the underlying exposure, use the PD of an obligor grade which falls between the obligor grade of the underlying exposure and the obligor grade of the exposure to the credit protection provider;

(*c*) replace, at the institution's discretion, the estimate of the LGD of the underlying exposure with the estimate of the LGD of the recognized guarantee or recognized credit derivative contract after taking into account the seniority in terms of ranking for payment, and any recognized collateral provided by the credit protection provider to the institution in respect of the recognized guarantee or recognized credit derivative contract.

(4) An authorized institution shall, in the case of an uncovered portion of an underlying exposure, assign a risk-weight calculated in the same manner as for any other direct exposure to the obligor in respect of the underlying exposure.

(5) Where there is a currency mismatch between an underlying exposure of an authorized institution and a recognized guarantee or recognized credit derivative contract covering the underlying exposure, the institution shall adjust the value of the credit protection, with all necessary modifications, in accordance with section 100.

(6) Where there is a maturity mismatch between an underlying exposure of an authorized institution and a recognized guarantee or recognized credit derivative contract covering the underlying exposure and the residual maturity of the recognized guarantee or recognized credit derivative contract is shorter than the residual maturity of the underlying exposure, the institution shall adjust the value of the credit protection, with all necessary modifications, in accordance with section 103.

217. Provisions supplementary to section 214(1)—substitution framework for corporate, sovereign and bank exposures under advanced IRB approach and for retail exposures under retail IRB approach

(1) Subject to subsection (2) and sections 210(2) and 215, an authorized institution shall, in relation to—

(*a*) a corporate, sovereign or bank exposure for which the institution uses the advanced IRB approach; or

(*b*) a retail exposure for which the institution uses the retail IRB approach,

(in each case referred to in this section as "underlying exposure") take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract in respect of the underlying exposure by adjusting the institution's estimate of the PD or LGD of the underlying exposure.

(2) Subject to subsection (3), an authorized institution shall ensure that its criteria and processes for making adjustments pursuant to subsection (1) to its estimates of the PD or LGD—

(*a*) subject to paragraphs (*b*), (*c*) and (*d*) and subsection (3), satisfy the requirements set out in this Part applicable to the institution for assigning exposures to obligor grades and facility grades;

(*b*) reflect the willingness and ability of the credit protection provider to perform its contractual obligations under the guarantee or credit derivative contract;

(*c*) address the likely timing of any payments under the guarantee or credit derivative contract and the degree to which the ability of the credit protection provider to perform its contractual obligations under the guarantee or credit derivative contract is positively correlated with the ability of the obligor in respect of the underlying exposure to repay; and

(*d*) take into account the extent to which residual risk to the obligor in respect of the underlying exposure remains (including any currency mismatch and maturity mismatch between the recognized guarantee or recognized credit derivative contract and the underlying exposure).

(3) An authorized institution may only make an adjustment to the estimate of PD pursuant to subsection (1) in accordance with section 216.

218. Provisions supplementary to section 214(2)—double default framework

(1) Subject to subsection (2), where a corporate exposure or public sector entity exposure of an authorized institution is covered by a recognized guarantee or recognized credit derivative contract (referred to in this section as "underlying exposure"), the institution may take into account the credit risk mitigating effect of the recognized guarantee or recognized credit derivative contract in accordance with subsection (3).

(2) An authorized institution shall only apply the double default framework to an underlying exposure of the institution covered by a recognized guarantee or recognized credit derivative contract if—

(*a*) the risk-weight which would be allocated to the underlying exposure prior to the application of the double default framework does not already take into account any aspect of credit protection;

(*b*) the credit protection provider is a financial firm;

(*c*) the underlying exposure is—

(i) a corporate exposure except for exposure which falls within any of the IRB subclasses of specialized lending under the supervisory slotting criteria approach; or

(ii) a public sector entity exposure which falls within the IRB subclass of public sector entities (excluding sovereign foreign public sector entities);

(*d*) the obligor in respect of the underlying exposure is not—

(i) a financial firm; or

(ii) a member of a group of companies, or a member of a group of corporates that the institution consolidates for its risk management purposes, of which the credit protection provider is also a member.

(3) An authorized institution shall take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract by—

(*a*) dividing the EAD of the underlying exposure to which the recognized guarantee or recognized credit derivative contract relates into—

(i) a hedged exposure; and

(ii) an unhedged exposure;

(*b*) calculating the risk-weighted amount of the hedged exposure by using the risk-weight function set out in Formula 17; and

(*c*) calculating the risk-weighted amount of the unhedged exposure in the same way as it calculates the risk-weighted amount of its other exposures to the obligor in respect of the underlying exposure.

219. Capital treatment of recognized guarantees and recognized credit derivative contracts in respect of purchased receivables

(1) Subject to subsections (2), (3), (4), (5) and (6), an authorized institution may take into account the credit risk mitigating effect of a recognized guarantee or recognized credit derivative contract for its exposures in respect of purchased receivables—

(*a*) in accordance with sections 210, 211, 212, 213, 214, 215, 216, 217 and 218; and

(*b*) without regard to whether the guarantee or contract covers default risk or dilution risk, or both.

(2) Where—

(*a*) an authorized institution is the beneficiary of a recognized guarantee or has entered into a recognized credit derivative contract as protection buyer in respect of its exposure in respect of purchased receivables; and

(*b*) the guarantee or contract covers both default risk and dilution risk in respect of a purchased receivable or a portfolio of purchased receivables,

the institution shall, for the purposes of calculating the risk-weighted amount of its exposure in respect of the purchased receivable or the portfolio of purchased receivables, as the case may be, substitute the risk-weight of the exposure to the credit protection provider for the sum of the risk-weights for default risk and dilution risk which would otherwise be allocated to the exposure in respect of the purchased receivable or the purchased receivables in the portfolio, as the case may be, in accordance with sections 197, 198, 199 and 200.

(3) Subject to subsection (6), where a recognized guarantee or recognized credit derivative contract covers only default risk or dilution risk, but not both, in respect of a purchased receivable or a portfolio of purchased receivables of an authorized institution, the institution shall, for the purposes of calculating the risk-weighted amount of its exposure for default risk and dilution risk in respect of the purchased receivable or the portfolio of purchased receivables, as the case may be—

(*a*) substitute the risk-weight of the exposure to the credit protection provider for the risk-weight which would otherwise be allocated for default risk or dilution risk covered by the guarantee or contract in respect of the purchased receivable or the purchased receivables in the portfolio, as the case may be;

(*b*) calculate the risk-weighted amount of the institution's exposure for the other risk component (being default risk or dilution risk not covered by the guarantee or contract) in respect of the purchased receivable or the purchased receivables in the portfolio, as the case may be, in accordance with sections 197, 198, 199 and 200; and

(*c*) aggregate the risk-weighted amount calculated under paragraph (*a*) with the risk-weighted amount calculated under paragraph (*b*).

(4) Where a recognized guarantee or recognized credit derivative contract covers only a portion of default risk or dilution risk in respect of a purchased receivable or a portfolio of purchased receivables of an authorized institution, the institution shall, for the purposes of calculating the risk-weighted amount of its exposure for default risk and dilution risk in respect of the purchased receivable or the portfolio of purchased receivables, as the case may be—

(*a*) divide the exposure into a covered portion and an uncovered portion for default risk and dilution risk in accordance with section 216(2);

(*b*) calculate the risk-weighted amount of the uncovered portion of the exposure in respect of default risk and dilution risk in accordance with sections 197, 198, 199 and 200;

(*c*) calculate the risk-weighted amount of the covered portion of the exposure in respect of default risk and dilution risk in accordance with subsection (2); and

(*d*) aggregate the risk-weighted amount calculated under paragraph (*b*) with the risk-weighted amount calculated under paragraph (*c*).

(5) Where a recognized guarantee or recognized credit derivative contract covers only dilution risk in respect of a purchased receivable or a portfolio of purchased receivables of an authorized institution and constitutes a recognized guarantee or recognized credit derivative contract under the double default framework, the institution may take into account the credit risk mitigating effect of the guarantee or contract, as the case may be, under the double default framework for the hedged exposure.

(6) For the purposes of subsection (5), the risk-weighted amount of an exposure which falls within that subsection shall be calculated—

(*a*) using the risk-weight function specified in Formula 17;

(*b*) with—

(i) PD_o equal to the estimate of the EL for dilution risk;

(ii) LGD_g equal to 100%; and

(iii) M_{os} set out in accordance with section 169.

Division 11—Treatment of expected losses and eligible provisions

220. Calculation of expected losses and eligible provisions for corporate, sovereign, bank and retail exposures

(1) An authorized institution—

(*a*) shall compare the institution's total EL amount and the institution's total eligible provisions, as calculated in accordance with subsections (2), (3), (4) and (5) and section 221;

(*b*) if the total EL amount exceeds the total eligible provisions, shall deduct the difference from the institution's core capital and supplementary capital in accordance with section 48(2)(*b*); and

(*c*) if the total EL amount is less than the total eligible provisions, may, in accordance with section 45(3), include the difference in its supplementary capital up to a maximum of 0.6% of the institution's risk-weighted amount for credit risk calculated by using the IRB approach.

(2) Subject to subsections (3), (4) and (5), an authorized institution—

(*a*) shall calculate the EL as the PD multiplied by the LGD of each of its corporate, sovereign, bank and retail exposures which are not in default;

(*b*) subject to paragraph (*c*), shall determine and use its best estimate of the EL for each of its corporate, sovereign, bank and retail exposures which are in default based on current economic circumstances and the exposure's default status;

(*c*) may, if it uses the foundation IRB approach and has the prior consent of the Monetary Authority to do so, use the supervisory estimate for the LGD as the EL for its corporate, sovereign and bank exposures which are in default.

(3) Subject to subsection (4), where an authorized institution uses the supervisory slotting criteria approach for its specialized lending, the institution shall determine the EL of the specialized lending by multiplying the risk-weighted amount of the specialized lending by 8%.

(4) Subject to subsection (5), an authorized institution shall, for the purposes of subsection (3), determine the risk-weight to be used in the calculation of the risk-weighted amount of the specialized lending (being the EAD multiplied by the risk-weight) in accordance with Table 22 by reference to the relevant supervisory rating grade to which the exposure has been mapped.

TABLE 22

RISK-WEIGHTS FOR DETERMINATION OF EL
OF SPECIALIZED LENDING

Strong	Good	Satisfactory	Weak	Default
5%	10%	35%	100%	625%

(5) Where an authorized institution assigns preferential risk-weights to its specialized lending which falls within the "strong" and "good" grades in accordance with section 158(3), then, in the calculation of the risk-weighted amount of the specialized lending, the institution may assign preferential risk-weights of 0% and 5% to the specialized lending which falls within the "strong" and "good" grades respectively in calculating the EL.

221. Determination of eligible provisions for calculation of total eligible provisions

Where an authorized institution which uses the IRB approach also uses the STC approach or BSC approach, or both, to calculate its credit risk for a portion of its corporate, sovereign, bank or retail exposures, the institution shall exclude from the calculation of total eligible provisions those eligible provisions which are attributable to that portion of its exposures subject to the STC approach or BSC approach, or both, as the case requires, in accordance with section 45(2).

222. Equity exposures—market-based approach

An authorized institution which uses the market-based approach for its equity exposures shall deem the EL amount of the equity exposures to be zero.

223. Equity exposures—PD/LGD approach

(1) Subject to subsection (2), an authorized institution which uses the PD/LGD approach for its equity exposures shall deduct from its core capital and supplementary capital the EL amount of the equity exposures in accordance with section 48(2)(*i*).

(2) For the purposes of subsection (1), an authorized institution shall—

(*a*) in determining the EL amount for each of its equity exposures which are not in default, calculate the EL as the PD multiplied by the LGD if the risk-weighted amount of the equity exposure concerned is not calculated using the risk-weights set out in section 194(1)(*e*), (*f*) or (*g*);

(*b*) if the minimum risk-weight set out in section 194(1)(*e*) or (*f*), or the maximum risk-weight set out in section 194(1)(*g*)(i), is applied in respect of an equity exposure of the institution which is not in default, deem the EL amount of the equity exposure to be zero;

(*c*) if section 194(1)(*g*)(ii) applies to an equity exposure of the institution, treat the EAD of the equity exposure as the EL amount of the equity exposure; and

(*d*) in the case of its equity exposures which are in default, determine and use its best estimate of the EL for each of the exposures based on current economic circumstances and the exposure's default status.

Division 12—Scaling factor

224. Application of scaling factor

An authorized institution shall multiply the risk-weighted amount of—

(*a*) the institution's non-securitization exposures as calculated under the IRB approach in accordance with Divisions 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10; and

(*b*) the institution's securitization exposures as calculated under the IRB(S) approach in accordance with Divisions 4, 5 and 6 of Part 7,

by a scaling factor of 1.06 to arrive at the institution's risk-weighted amount for credit risk calculated under the IRB approach and IRB(S) approach.

Division 13—Capital floor

225. Application of Division 13

(1) Subject to subsection (2), this Division applies to an authorized institution until the third anniversary of the date on which it commenced using the IRB approach to calculate its credit risk.

(2) Where an authorized institution fails to fully comply with the sections of this Part which are applicable to it, the Monetary Authority may, for the purposes of mitigating the effect of that failure, by notice in writing given to the institution—

(*a*) extend the period for which the institution shall be subject to this Division; or

(*b*) again apply this Division to the institution,

for such period, or until the occurrence of such event, as specified in the notice, and may, in that notice, specify an adjustment factor which shall be used by the institution for those purposes.

226. Calculation of capital floor

(1) An authorized institution shall—

(*a*) calculate the difference between—

(i) the floor amount of capital calculated under subsections (2), (3), (4), (5) and (6); and

(ii) the actual amount of capital calculated under subsection (7);

(*b*) if the floor amount of capital referred to in paragraph (*a*)(i) is larger than the actual amount of capital referred to in paragraph (*a*)(ii), multiply the difference by 12.5 and add the resulting figure to its total risk-weighted amount for credit risk, market risk and operational risk for the calculation of its capital adequacy ratio.

(2) An authorized institution which starts to use the IRB approach during the transitional period shall, for the purposes of subsection (1), calculate the floor amount of capital by multiplying the amount determined under subsection (3) in respect of the institution by an adjustment factor determined under subsection (6).

(3) An authorized institution shall arrive at the relevant amount for the purposes of subsection (2) by—

(*a*) determining its risk-weighted amount for credit risk by using—

(i) the BSC approach or, with the prior consent of the Monetary Authority, the STC approach for non-securitization exposures; and

(ii) the STC(S) approach for securitization exposures;

(*b*) determining its risk-weighted amount for market risk by using the calculation approach used by the institution for market risk;

(*c*) aggregating the amounts determined under paragraphs (*a*) and (*b*); and

(*d*) taking 8% of that aggregated amount and—

(i) adding to it all the deductions made from any of the institution's core capital and supplementary capital; and

(ii) subtracting from it the amount of regulatory reserve for general banking risks and collective provisions which is included in the institution's supplementary capital.

(4) An authorized institution which starts to use the IRB approach after the transitional period shall, for the purposes of subsection (1), calculate the floor amount of capital by multiplying the amount determined under subsection (5) in respect of the institution by an adjustment factor determined under subsection (6).

(5) An authorized institution shall arrive at the relevant amount for the purposes of subsection (4) by—

(*a*) determining its risk-weighted amount for credit risk by using—

(i) the STC approach for non-securitization exposures; and

(ii) the STC(S) approach for securitization exposures;

(*b*) determining its risk-weighted amount for market risk by using the calculation approach used by the institution for market risk;

(*c*) determining its risk-weighted amount for operational risk by using the calculation approach used by the institution for operational risk;

(*d*) aggregating the amounts determined under paragraphs (*a*), (*b*) and (*c*); and

(*e*) taking 8% of that aggregated amount and—

(i) adding to it all the deductions made from any of the institution's core capital and supplementary capital; and

(ii) subtracting from it the amount of regulatory reserve for general banking risks and collective provisions which is included in the institution's supplementary capital.

(6) Subject to section 225(2), an authorized institution which uses the IRB approach (whether during or after the transitional period) shall use the adjustment factors specified in Table 23.

TABLE 23

ADJUSTMENT FACTORS

Date of implementation of IRB approach	First year of implementation	Second year of implementation	Third year of implementation
During transitional period	95%	90%	80%
After transitional period	90%	80%	70%

(7) An authorized institution shall, for the purposes of subsection (1), calculate the actual amount of capital by—

(*a*) determining its risk-weighted amount for credit risk by using the calculation approach used by the institution for credit risk;
(*b*) determining its risk-weighted amount for market risk by using the calculation approach used by the institution for market risk;
(*c*) determining its risk-weighted amount for operational risk by using the calculation approach used by the institution for operational risk;
(*d*) aggregating the amounts determined under paragraphs (*a*), (*b*) and (*c*); and
(*e*) taking 8% of that aggregated amount and—
(i) either subtracting from it the excess amount included in the institution's supplementary capital under section 45(3) if the institution's total eligible provisions exceeds the institution's total EL amount as calculated under section 220(1)(*c*) or adding to it any shortfall amount deducted from the institution's supplementary capital under section 48(2)(*b*) if the institution's total eligible provisions is less than the institution's total EL amount as calculated in section 220(1)(*b*);
(ii) adding to it all other deductions made from any of the institution's core capital and supplementary capital; and
(iii) subtracting from it the amount of regulatory reserve for general banking risks and collective provisions which is included in the institution's supplementary capital if the institution uses the STC approach or BSC approach to calculate its credit risk for any portion of its non-securitization exposures or the STC(S) approach for any portion of its securitization exposures.

PART 7

CALCULATION OF CREDIT RISK FOR SECURITIZATION EXPOSURES

Division 1—General

227. Interpretation of Part 7

(1) In this Part, unless the context otherwise requires—

"ABCP programme" (ABCP 計劃) means an asset-backed commercial paper programme;

"asset-backed commercial paper programme" (有資產支持的商業票據計劃) means a programme under which—