Unofficial Translation
This translation is for the convenience of those unfamiliar with the Thai language
Please refer to Thai text for the official version

Notification of the Bank of Thailand
No. FPG. 17/2555
Re: Regulations on the Calculation of Counterparty Credit Risk-Weighted Assets for Derivative Transactions

---

1. Rationale

The Bank of Thailand has revised the Notification of the Bank of Thailand on Supervision of Capital for Commercial Banks by referencing the Basel III guideline: A global regulatory framework for more resilient banks and banking systems (Revised version: June 2011) of Basel Committee on Banking Supervision (BCBS) to ensure that commercial banks have high-quality and adequate capital to absorb losses that may arise in normal and stressed conditions, as well as to maintain overall financial stability. This includes the revision of the calculation methods for calculating credit risk-weighted assets to better reflect credit risks of commercial banks.

The Bank of Thailand thereby revised the regulations on the calculation of counterparty credit risk-weighted assets for derivative transactions to be in line with the Basel III standards by **extending minimum holding periods used in calculating collateral haircuts under comprehensive method for certain types of OTC derivative transactions, for instance, derivative transactions relating to illiquid collaterals. This is in order to conform to actual situations in stressed conditions where commercial banks have higher risks from being unable to close their positions of these derivative transactions in a short period of time.**

In addition, the Bank of Thailand also revised the content on the calculations of credit equivalent amounts (CEA) for certain types of derivative transactions, particularly for structured derivatives, in order to refine regulations since the previous Notification did not specify an explicit calculation method for these types of derivative transactions. Furthermore, the regulations are intended to be appropriately practicable.

2. Statutory Power

By virtue of Section 29, Section 30 and Section 32 of the Financial Institution Business Act B.E. 2551 (2008) which contains certain provisions relating to the restriction

of personal rights and liberties of persons which Section 29, in conjunction with Section 31, Section 33, Section 36, Section 39, Section 41 and Section 43 of the Constitution of the Kingdom of Thailand so permit by virtue of law, the Bank of Thailand hereby issues the Regulations on the Calculation of Counterparty Credit Risk-Weighted Assets for Derivative Transactions for commercial banks to comply with as specified in this Notification.

3. Scope of application

This Notification shall apply to all commercial banks according to the law on financial institution business.

4. Repealed Notification and Circulars

The Notification of the Bank of Thailand No. FPG. 92/2551 Re: Regulations on the Calculation of Credit Equivalent Amount for OTC Derivative Transactions, dated 27 November 2008

5. Content

5.1 Definition

In this Notification, the definitions shall be those as prescribed in attachment 1.

5.2 Principle

This Notification covers regulations on the calculation of counterparty credit risk-weighted assets for positions arising from all types of derivative transactions including positions in collaterals posted to counterparty. The counterparty credit risk-weighted assets shall be used for calculating the required capital for default risk of counterparties. Commercial banks shall calculate credit equivalent amounts using the original exposure method (OEM) or the current exposure method (CEM) and multiply the credit equivalent amounts by counterparties' risk weights to calculate the counterparty credit risk-weighted assets.

In this regard, commercial banks shall calculate the sum of counterparty credit risk-weighted assets under this Notification and credit risk-weighted assets under the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Standardised Approach (SA) and/or the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial

Banks by Internal Ratings-Based Approach (IRB), as the case may be. The result shall be used as a component to calculate the capital adequacy ratio as prescribed in the Notification of the Bank of Thailand on Supervision of Capital for Commercial Banks.

5.3 Derivative positions which are subject to the calculation of the counterparty credit risk-weighted assets

Commercial banks shall calculate the counterparty credit risk-weighted assets for positions arising from all types of derivative transactions including positions in collaterals posted to counterparties, except positions in the following derivative transactions:

5.3.1 Credit derivative positions in banking book both where commercial banks are protection sellers and protection buyers which qualify the minimum requirements as prescribed in the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Standardised Approach (SA) or the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Internal Ratings-Based Approach (IRB), as the case may be. However, commercial banks shall calculate credit risk-weighted assets for such positions in accordance with the regulations prescribed in the aforementioned Notifications.

5.3.2 Funded credit derivative positions in trading book in where commercial banks are protection sellers. However, commercial banks shall calculate market risk-weighted assets for such positions in accordance with the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk of Financial Institutions.

5.3.3 Funded credit derivative positions in trading book where commercial banks are protection buyers only for the amount that have been collateralised by cash.

5.3.4 Options sold positions where commercial banks receive full premium payment.

5.3.5 Other derivative positions prescribed by the Bank of Thailand.

5.4 The calculations of counterparty credit risk-weighted assets for derivative transactions

5.4.1 Positions in exchange traded derivatives

Commercial banks shall calculate risk-weighted assets by assigning 0 risk weight to such positions until otherwise prescribed by the Bank of Thailand.

5.4.2 Positions in OTC derivatives

Commercial banks shall calculate counterparty credit risk-weighted assets in accordance with 5.5.

5.5 Regulations on the calculation of risk-weighted assets for default risk

5.5.1 For commercial banks using the standardised approach (SA) to calculate credit risk-weighted assets

Commercial banks shall calculate risk-weighted assets for default risk of each counterparty in accordance with the standardised approach, as follows:

(1) Calculate credit equivalent amounts of derivative positions (for all netting sets with the same counterparty) in accordance with 5.6.

(2) Subtracted the amounts from 5.5.1 (1) by specific provision of such derivative transactions.

(3) Calculate risk-weighted assets by multiplying net credit equivalent amounts from 5.5.1 (2) after considering the credit risk mitigations in accordance with 5.12 (if any), by risk weights of counterparties in accordance with the Notification of the Bank of Thailand on the Calculation of Credit Risk-weighted Assets for Commercial Banks by Standardised Approach (SA).

5.5.2 For commercial banks using the internal ratings-based (IRB) approach (IRB) to calculate credit risk-weighted assets

Commercial banks shall calculate unexpected loss (UL) and expected loss (EL) in accordance with the internal ratings-based approach, as follows:

(1) Calculate credit equivalent amounts of derivative positions (for all netting sets with the same counterparty) in accordance with 5.6.

(2) Specify the amounts derived from 5.5.2 (1) as exposure at default (EAD) used in calculating UL and EL in accordance with the Notification of the Bank of Thailand on the Calculation of Credit Risk-weighted Assets for Commercial Banks by Internal Ratings-Based Approach (IRB). In addition, commercial banks may consider applying the credit risk mitigations in accordance with 5.12.

5.6 Regulation on the calculation of credit equivalent amounts for derivative transactions

Commercial banks shall calculate the credit equivalent amount for each counterparty, which is equal to the sum of credit equivalent amounts from derivative positions both that are and are not included in an eligible netting agreement and positions in collaterals posted to such counterparty.

To calculate the credit equivalent amounts for derivative positions both that are and are not included in an eligible netting agreement, commercial banks shall select the calculation method in accordance with the minimum criteria in selecting the calculation method for credit equivalent amounts as prescribed in 5.7. The calculation of the credit equivalent amounts are classified into 2 methods which are the original exposure method as prescribed in 5.8 and the current exposure method as prescribed in 5.9. In addition, commercial banks shall comply with additional regulations for the calculation of credit equivalent amounts as prescribed in 5.10.

To calculate the credit equivalent amounts for positions in collaterals posted to counterparties, commercial banks shall refer to the regulations prescribed in 5.11.

5.7 Calculation method for credit equivalent amounts

5.7.1 Commercial banks that are required to maintain a capital for market risks shall adopt the current exposure method in calculating the credit equivalent amounts for all counterparties.

5.7.2 Commercial banks that are not required to maintain a capital for market risks and use the standardised approach to calculate credit risk-weighted assets shall adopt either the original exposure method or the current exposure method in calculating the credit equivalent amounts for each counterparty.

However, in case where commercial banks engage in derivative transactions other than foreign exchange and interest rate derivative transactions with any counterparty, commercial banks shall adopt the current exposure method in calculating the credit equivalent amount for all derivative transactions engage with such counterparty.

5.7.3 Commercial banks that are not required to maintain a capital for market risks and use the internal ratings-based approach to calculate credit risk-weighted assets shall calculate the credit equivalent amounts, as follows:

(1) For asset portfolios using the standardised approach (insignificant portfolios), commercial banks shall adopt either the original exposure method or the current exposure method in calculating the credit equivalent amount. However, in case where commercial banks engage in derivative transactions other than foreign exchange and interest rate derivative transactions with any counterparty, commercial banks shall adopt the current exposure method in calculating the credit equivalent amounts for all derivative transactions engage with such counterparty.

(2) Commercial banks shall adopt the current exposure method in calculating the credit equivalent amounts for all asset portfolios using the internal ratings-based approach.

5.8 <u>Original exposure method</u>

The original exposure method is a method to calculate credit equivalent amounts for derivative transactions by multiplying notional amounts by relevant credit conversion factors (CCF), as follows:

5.8.1 No eligible netting agreement

In case where commercial banks do not sign an eligible netting agreement (which has qualifications as prescribed in attachment 2) with any counterparty or where commercial banks sign the netting agreement but there are some provisions that both counterparties agree not to include in the netting agreement, commercial banks shall separate derivative transactions that are not included in such netting agreement and calculate the credit equivalent amounts for those transactions by multiplying the notional amounts by the relevant credit conversion factors as prescribed by the Bank of Thailand as illustrated in the following formula:

$$CEA_{no\ netting} = \sum_{i=1}^{n} (Notional\ amount_i \times CCF_{i,no\ netting})$$

Where

$CEA_{no\ netting}$ = credit equivalent amount in case where commercial banks do not have an eligible netting agreement

$Notional\ amount_i$ = notional amount of transaction 'i'

$CCF_{i,\ no\ netting}$ = credit conversion factor under the original exposure method in case there is no eligible netting agreement for transaction 'i' (Table 1 of attachment 3)

n = number of derivative transactions engage with each counterparty

5.8.2 With an eligible netting agreement

In case where commercial banks sign an eligible netting agreement (which has qualifications as prescribed in attachment 2) with any counterparty and such netting agreement defines a condition that all derivative transactions in which commercial banks engage with such counterparty shall be offset and settled in one amount when there is any defaults on any counterparty, commercial banks shall calculate the credit equivalent amounts for those transactions by multiplying the notional amounts by the relevant credit conversion factors as prescribed by the Bank of Thailand, as illustrated in the following formula:

$$CEA_{with\ netting} = \sum_{i=1}^{n} (Notional\ amount_i \ x\ CCF_{i,with\ netting})$$

Where

$CEA_{with\ netting}$ = credit equivalent amount in case where commercial banks have an eligible netting agreement

$Notional\ amount_i$ = notional amount of transaction 'i'

$CCF_{i,\ with\ netting}$ = credit conversion factor under the original exposure method in case there is an eligible netting agreement for transaction 'i' (Table 2 of attachment 3)

n = number of derivative transactions engage with each counterparty

In this regard, if commercial banks engage in a foreign exchange forward transaction or other transactions with similar characteristics under the netting agreement with a counterparty and the notional amount of the transaction is equal to actual cash inflows and outflows, commercial banks shall offset short and long positions of such transactions with same maturity date and currency pair in accordance with the following calculation method:

(1) Commercial banks shall multiply the notional amounts of long and short positions that have the same maturity dates by the relevant credit conversion factors as prescribed by the Bank of Thailand in Table 1 and Table 2 of attachment 3.

(2) Commercial banks shall offset the amounts from 5.8.2 (1), thus the remaining amount shall be a credit equivalent amount of such counterparty.

5.9 Current exposure method

The current exposure method is a method to calculate credit equivalent amounts for derivative transactions by considering replacement costs (RC), which are equal to positive mark-to-market values of transactions, and potential future exposures (Add-on), which are calculated by multiplying notional amounts by relevant credit conversion factors as follow:

5.9.1 No eligible netting agreement

(1) Commercial banks shall calculate the sum of the RC of derivative transactions that commercial banks engage with each counterparty (Gross replacement cost: RC_{Gross}), as illustrated in the following formula:

$$RC_{Gross} = \sum_{i=1}^{n} (RC_i \; ; \; RC_i > 0)$$

Where

RC_{Gross} = sum of the RC of derivative transactions that commercial banks engage with each counterparty

RC_i = positive mark-to-market value of transaction ‘i’

n = number of derivative transactions engage with each counterparty

(2) Commercial banks shall calculate the sum of potential future exposures (Gross add-on: A_{Gross}) with each counterparty by calculating the sum of the notional amounts multiplied by the relevant credit conversion factors as prescribed by the Bank of Thailand, as illustrated in the following formula:

$$A_{Gross} = \sum_{i=1}^{n} (Notional\ amount_i\ x\ CCF_i)$$

Where

A_{Gross} = sum of the potential future exposures in the case where commercial banks do not have an eligible netting agreement

Notional $amount_i$ = notional amount of transaction 'i'

CCF_i = credit conversion factor under the current exposure method for transaction 'i' (Table 3 and 4 of attachment 3)

n = number of derivative transactions engage with each counterparty

(3) Commercial banks shall calculate the credit equivalent amount by calculating the sum of RC_{Gross} from 5.9.1 (1) and A_{Gross} from 5.9.1 (2), as illustrated in the following formula:

$$CEA_{nonetting} = RC_{Gross} + A_{Gross}$$

5.9.2 With an eligible netting agreement

For a group of derivative transactions that are under the same netting set, commercial banks shall calculate the credit equivalent amount for such group, as follows:

(1) Commercial banks shall calculate a net replacement cost (RC_{Net}) from mark-to-market values of derivative transactions that commercial banks engage with each counterparty by netting the mark-to-market gains and losses of all derivative transactions under the same netting set, as illustrated in the following formula:

$$RC_{Net} = \max(0; \sum_{i=1}^{n} MTM_i)$$

Where

RC_{Net} = the higher amount between 0 and the net replacement cost of all derivative transactions under the same netting set

MTM_i = current mark-to-market value of transaction 'i', which can be either positive or negative value

n = number of derivative transactions engage with each counterparty under the same netting set

(2) Commercial banks shall calculate the sum of the potential future exposures (Net add-on: A_{Net}) of all derivative transactions under the same netting set, as illustrated in the following formula:

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

Where

A_{Net} = sum of the potential future exposures in case where there is an eligible netting agreement[1]

A_{Gross} = sum of the potential future exposures in the case where commercial banks do not have an eligible netting agreement

NGR = net-to-gross ratio which is calculated by diving RC_{Net} by RC_{Gross} (as detailed in 5.9.2 (3))

(3) Commercial banks shall calculate the NGR by selecting either an individual approach or an aggregate approach. Once the method is selected, commercial banks shall use such method consistently. The methods are as follows;

(3.1) To calculate the NGR using the individual approach, commercial banks shall use RC_{Net} and RC_{Gross} calculated from derivative transactions under the same netting agreement with each counterparty. In case there are several netting sets with one counterparty, commercial banks shall calculate the sum of RC_{Net} and RC_{Gross} of all netting sets and use the result to calculate the NGR.

[1] A_{Net} calculated using above formula have taken into account the offsetting result of the netting agreement. If the offsetting is complete, the amount of RC_{Net} shall be equal to 0, which makes the NGR equal to 0. Therefore, the A_{Net} is equal to 0.4 of the A_{Gross}. If all contracts cannot be offset, the amount of the RC_{Net} shall be equal to the RC_{Gross}, which makes the NGR equal to 1. Therefore, the A_{Net} is equal to the A_{Gross}.

(3.2) To calculate the NGR using the aggregate approach, commercial banks shall calculate the NGR using RC_{net} and RC_{gross} calculated from the sum of RC_{Net} and RC_{Gross} of all counterparties with the netting agreement using the individual approach. Then, commercial banks shall use the NGR calculated under this method to calculate A_{Net} for all counterparties.

(4) Commercial banks shall calculate the credit equivalent amount by calculating the sum of RC_{Net} calculated under 5.9.2 (1) and A_{Net} calculated under 5.9.2 (2), as illustrated in the following formula:

$$CEA_{with\ netting} = RC_{Net} + A_{Net}$$

(5) In case where commercial banks have more than one eligible netting agreement (or more than one netting sets) with a counterparty, commercial banks shall calculate the credit equivalent amount of each netting set, and sum the credit equivalent amounts of all netting sets to calculate the total credit equivalent amount for each counterparty.

(6) If commercial banks engage in a foreign exchange forward transaction or other transactions with similar characteristics under the eligible netting agreement with any counterparty and the notional amount of the transaction is equal to actual cash inflows and outflows, commercial banks shall offset short and long positions of such transactions with same maturity date and currency pair in accordance with the following calculation method:

(6.1) RC_{Gross} and RC_{Net} calculation

Commercial banks shall offset the mark-to-market values of derivative transactions that are eligible for offsetting, then add the net mark-to-market value to RC_{Gross} and RC_{Net} of other derivative transactions to calculate the total RC_{Gross} and RC_{Net} of all derivative transactions engage with each counterparty.

(6.2) A_{Gross} and A_{Net} calculation

Commercial banks shall multiply the notional amounts of both long and short positions with the same maturity date by the relevant credit conversion factors as prescribed by the Bank of Thailand (as detailed in Table 3 and Table 4 of attachment 3), and offset the result. The amount after offsetting is equal to A_{Gross} of the derivative transactions that are eligible for offsetting. Then,

commercial banks shall add such A_{Gross} to A_{Gross} of other derivative transactions to calculate the total A_{Gross} of each counterparty.

Commercial banks shall calculate the A_{Net} using the formula as prescribed in 5.9.2 (2).

5.10 Additional regulations on the calculation of credit equivalent amounts

5.10.1 For derivative transactions that the notional amounts are leveraged or derivative transactions that are structured to create additional return to counterparties, commercial banks shall use an effective notional amount instead of the notional amount of the derivative transactions for the calculation of the credit equivalent amounts under the original exposure method or the current exposure method.

For derivative transactions that the notional amounts are exchanged several times, for instance, commodity swap, the effective notional amount shall be equal to the notional amount multiplied by the remaining times for such notional amounts to be exchanged.

5.10.2 Structured derivatives in which the components can be decomposed into sub-components in accordance with the Notification of the Bank of Thailand on Permission for Commercial Banks to Engage in Market Derivatives, commercial banks shall calculate the credit equivalent amounts of the structured derivatives, as follows:

(1) In case where commercial banks use the original exposure method, commercial banks shall calculate credit equivalent amounts of all derivative transactions that are sub-components of a structured derivative by using the credit conversion factors in case where commercial banks have an eligible netting agreement. Then, commercial banks shall sum the credit equivalent amounts of all sub-components to calculate the total credit equivalent amount of each structured derivative.

(2) In case where commercial banks use the current exposure method, commercial banks shall calculate the credit equivalent amount of a structured derivative as if the sub-components of the structured derivative are in the same netting set. Furthermore, commercial banks shall

apply the calculation method in case where commercial banks have an eligible netting agreement as follows:

(2.1) RC_{Net} shall be the higher amount between 0 or the current mark-to-market value of the structured derivatives.

(2.2) A_{Gross} is equal to the sum of the notional amounts of sub-components of a structured derivative multiplied by the relevant credit conversion factors.

(2.3) NGR shall be calculated in accordance with the calculation method prescribed in 5.9.2 (3).

(2.4) A_{Net} is calculated using the formula prescribed in 5.9.2 (2) by putting the A_{Gross} from 5.10.2 (2.2) and the NGR from 5.10.2 (2.3) in the formula.

(2.5) The credit equivalent amount is equal to the sum of RC_{Net} and A_{Net} from 5.10.2 (2.1) and 5.10.2 (2.4) respectively.

(3) The credit equivalent amount of a structured derivative shall not exceed the maximum payoff in which commercial banks will receive from counterparties.

5.10.3 Structured derivatives in which components cannot be decomposed into sub-components in accordance with the Notification of the Bank of Thailand on Permission for Commercial Banks to Engage in Market Derivatives and commercial banks cannot appropriately apply the original exposure method or the current exposure method for the calculation, commercial banks shall consult with the Bank of Thailand to further define an appropriate calculation method.

5.10.4 The credit equivalent amount of an interest rate swap in which counterparties agree to exchange between a floating interest rate of one curve and a floating interest rate of another curve in the same currency (Single currency floating / floating interest rate swap) and is calculated using the current exposure method shall be equal to its replacement cost (commercial banks shall not have to calculate an Add-on for this transaction).

5.10.5 The credit equivalent amount of a digital option either calculated using the original exposure method or the current exposure method shall not exceed the payoff of such digital option.

5.10.6 The A_{Gross} amount of an option sold that commercial banks have not received premium in full shall be equal to the unpaid premium.

5.10.7 For the calculation of the A_{Gross} of credit derivatives under the current exposure method, commercial banks shall refer to the calculation methods as prescribed in attachment 4[2], as well as the credit conversion factors as prescribed in Table 4 of attachment 3. Furthermore, the notional amount of a credit derivative shall be the same meaning as:

(1) "notional amount" or a "maximum compensation amount" as the case may be for a credit default swap (CDS) and a first to default swap (FTDS) and proportionate CDS.

(2) "mark-to-market value of reference obligations at the starting date of a total rate of return swap (TRORS)" or "mark-to-market value of reference obligations from the former payment" as the case may be for TRORS

5.11 <u>The calculation of credit equivalent amounts for positions in collaterals posted to counterparties</u>

(1) In case where commercial banks use the standardised approach and the foundation internal ratings-based approach (FIRB) to calculate the credit risk-weighted assets, commercial banks shall calculate the credit equivalent amounts for positions in collaterals posted to counterparties as illustrated in the following formula:

$$CEA_{Collateral} = max\,(0;\, C(1 + + H_C + H_{fx}) + MTM\ loss)$$

Where

$CEA_{Collateral}$ = credit equivalent amount for the positions in collaterals posted to each counterparty

C = value of collaterals that commercial banks posted to each counterparty

[2]These are guidelines extended from the Notification of the Bank of Thailand on Permission for Commercial Banks to Engage in Credit Derivatives.

H_c = haircut for each type of collateral as prescribed in the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Standardised Approach (SA)

H_{fx} = haircut for currency mismatch as prescribed in the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Standardised Approach (SA)

MTM loss = net mark-to-market loss of derivative transactions engaged with each counterparty (the value shall be less than 0)

In this regard, in case where commercial banks use the simple method for credit risk mitigations by financial collaterals, H_c and H_{fx} shall be equal to 0.

(2) In case where commercial banks use the advanced internal ratings-based approach (AIRB) to calculate credit risk-weighted assets, commercial banks shall set the EAD equal to the excess values of collaterals posted to counterparties over the net mark-to-market loss of derivative transactions.

5.12 <u>Credit risk mitigation for derivative positions</u>

5.12.1 There are two credit risk mitigation methods that the Bank of Thailand allows commercial banks to use for positions arising from derivative transactions which are financial collateral, and guarantee and credit derivative. Commercial banks shall refer to the regulations on credit risk mitigations as prescribed in the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Standardised Approach (SA) and the Notification of the Bank of Thailand on the Calculation of Credit Risk-Weighted Assets for Commercial Banks by Internal Ratings-Based Approach (IRB)

5.12.2 For credit risk mitigation by financial collaterals, commercial banks shall comply with the following guidelines:

(1) Commercial banks which calculate the credit risk-weighted asset by the standardised approach can use either of the two following methods for credit risk mitigation which are the simple method, and the

comprehensive method. However, commercial banks shall use only the comprehensive method for derivative positions in trading books.

(2) Commercial banks which calculate the credit risk-weighted asset by the foundation internal ratings-based approach shall use only the comprehensive method.

(3) Commercial banks which calculate the credit risk-weighted asset by the advance internal ratings-based approach shall use their own estimated loss given default (LGD).

5.12.3 In calculating the haircuts for collaterals of derivatives transactions under the comprehensive method, commercial banks shall use the haircuts that are in accordance with the minimum holding periods and the conditions on the remargining frequency as prescribed by the Bank of Thailand. The minimum holding period for each netting set shall be equal to 10 working days and shall subject to daily remargining, except for the following cases:

(1) For netting sets consisting of more than 5,000 derivative transactions at any time during the previous quarter, the minimum holding period for the subsequent quarter shall be equal to 20 working days.

(2) For netting sets consisting of derivative transactions related to illiquid collaterals or derivative transactions that can hardly be replaced, the minimum holding period shall be equal to 20 working days. In this regard, the definition of "illiquid collaterals" and "derivative transactions that can hardly be replaced" shall be considered under stressed market conditions where the market is illiquid and market participants are not able to find proper bid or offer prices from multiple price quotes within two working days. Furthermore, such proper prices shall not cause irregular market movements. Moreover, in case of financial collaterals, such prices shall not have market discount, and in case of derivative transactions, such prices shall not have market premium.

(3) For netting sets that have experienced more than 2 margin call disputes over the previous 2 quarters, the minimum holding period for the subsequent 2 quarters for such netting set shall be equal to 20 working days.

(4) Commercial banks shall consider whether derivative transactions or assets held as collaterals are concentrated with any particular counterparty. Commercial banks shall then consider whether the derivative transactions can be replaced if such counterparty defaults immediately. If commercial banks determine that there is a concentration to any counterparty or that derivative transactions engage with any counterparty cannot be replaced, commercial banks shall apply a longer minimum holding period for such cases and shall be able to provide clarifications for such longer minimum holding period to the Bank of Thailand upon request.

5.13 <u>Foreign exchange rates for currency conversion</u>

In calculating the counterparty credit risk-weighted assets, the credit equivalent amounts, and reporting to the Bank of Thailand, commercial banks shall convert notional amounts that are in foreign currency to Thai Baht by using the foreign exchange rates on the reporting date in accordance with the Notification of the Bank of Thailand on Guidelines on Accounting of Financial institutions, as follows:

5.13.1 In case where derivative transactions referencing one foreign currency, commercial banks shall convert the foreign currency notional amount by using the foreign exchange rate on the reporting date.

5.13.2 In case where derivative transactions referencing more than one foreign currencies, commercial banks shall use the notional amount of a long position and convert such amount by using the foreign exchange rate on the reporting date.

6. Effective date

This Notification shall come into force as from 1 January 2013.

Announced on 8th November 2012

(Mr. Prasarn Trairatvorakul)
Governor
Bank of Thailand

Attachment 1

Definition

"Default risk" means the risk that commercial banks will have losses when a counterparty cannot make a scheduled payment or cannot fulfill obligations in the contract.

"Exchange" means a center or any network established to trade derivative transactions by matching potential counterparties, or an establishment of a system or facility for those wishing to trade derivative transactions to make an agreement or to be matched as counterparties. The aforementioned shall be done as normal means of business and is licensed in accordance with relevant laws; for example, the Thailand Futures Exchange Public Company Limited (TFEX) and the Agricultural Futures Exchange of Thailand (AFET).

"Over the counter derivative (OTC derivative)" means the derivative transactions agreed to trade outside the exchange.

"Exchange traded derivative" means the derivative traded in the exchange.

"Notional amount" means the notional amount of derivative transactions

"Effective notional amount" means the actual notional amount of derivative transactions derived from adjusting notional amount of derivative transactions to reflect the true exposure of the derivative transactions in which the notional amounts are leveraged or are structured to create additional return to counterparties. For example, a derivative transaction with notional amount of 1,000,000 Baht, but is to receive a return from the counterparty equal to the notional amount multiplied by two times of the LIBOR. The effective notional amount of this transaction is thereby equal to 2,000,000 Baht

"Credit equivalent amount" means the amount that indicates counterparty credit risk of derivative transactions calculated in accordance with the calculation methods as prescribed by the Bank of Thailand in this Notification. Credit equivalent amount is then used to calculate the counterparty credit risk-weighted assets.

"Netting agreement" means an agreement between counterparties that allow the netting within a group of derivative transactions engage with the same counterparty and only one amount is to be settled in case where one counterparty defaults on a contract. The eligible netting agreement shall have all the qualifications as prescribed by the Bank of Thailand in attachment 2.

"Netting set" means a group of derivative transactions engage with a particular counterparty under a netting agreement. For derivative transactions that are not covered under the netting agreement, each derivative transaction shall be regarded as one netting set.

"Funded credit derivative" means a credit derivative[1] that a protection seller has to pay the notional amount to a protection buyer on a trade date as a collateral against the protection provided when a credit event occurs, for instance, credit linked note (CLN), first to default note (FTDN) and proportional CLN.

"Credit event" means the event related to solvency of reference entity as specified in the credit derivatives contract. Thus, the protection seller is required to make a credit event payment to the protection buyer, such as bankruptcy, default on payment of principal or interest, inability to perform the obligation, or debt restructuring related to reference entity.

"Specific provision" means reserves for assets and all off-balance sheet items. Commercial banks shall be able to identify the reserves of each specific asset or off-balance sheet item. In this regard, the specific provision includes reserves for mark-to-market loss from fair valuations of debt instruments and equities with trading intent and available-for-sale, as well as reserves for impairments. However, this excludes reserves for assets classified as normal that commercial banks have already counted as Tier 2 capital.

[1] Commercial banks shall refer to the definition of credit derivatives and other relevant definitions as prescribed in the Notification of the Bank of Thailand on Permission for Commercial Banks to Engage in Credit Derivatives.

Attachment 2

Qualifications of eligible netting agreement

An eligible netting agreement shall have the following qualifications:

1. It shall be a written agreement and legally enforceable. It shall also be a master agreement that covers all OTC derivatives commercial banks engage with a particular counterparty are agreed to be offset.

2. In the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances, a netting agreement with the counterparty must define a single legal obligation such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions.

3. Lawyers who have knowledge and understanding of the netting agreement have provided written and reasoned legal opinions that the netting agreement according to 2 is legally enforceable and is not contrary to the following laws:

3.1 The law of the jurisdiction in which the head office of the counterparty is located and if the counterparty is a foreign branch, then also under the law of jurisdiction in which the branch is located.

3.2 The law that governs any contract or agreement and other laws necessary to affect the netting.

4. The netting agreement shall not contain any walkaway clause which is a provision that permits a non-defaulting counterparty to make only limited payments or no payment at all, to the defaulting counterparty, even if the defaulting counterparty is a net creditor.

Attachment 3

Credit conversion factor (CCF) for derivative transactions

Table 1

Credit conversion factors for foreign exchange and interest rate derivatives under the original exposure method in case of no eligible netting agreement

Unit: Percent

Maturity[1]	Foreign exchange derivatives	Interest rate derivatives
not more than 14 days	0	0
not more than 1 year	2	0.5
more than 1 year to 2 years	5	1
for every additional year	3	1

Table 2

Credit conversion factors for foreign exchange and interest rate derivatives under the original exposure method in case with an eligible netting agreement

Unit: Percent

Maturity1	Foreign exchange derivatives	Interest rate derivatives
not more than 14 days	0	0
not more than 1 year	1.5	0.35
more than 1 year to 2 years	3.75	0.75
for every additional year	2.25	0.75

[1] Maturity of derivative transactions is counted from trade date to maturity date

Table 3

Credit conversion factors for OTC derivatives under the current exposure method

Unit: Percent

Remaining maturity[1]	Derivatives (except credit derivatives)[2]							
	Foreign exchange and gold	Interest rate	Equity	Commodity and precious metal[3]	Other commodities	Bond[4]		
						Government	Eligible	Not eligible
not more than 14 days	0	0	6	7	10	0	5	10
not more than 1 year	1	0	6	7	10	0	5	10
more than 1 year – 5 years	5	0.5	8	7	12	0.5	5	10
over 5 years	7.5	1.5	10	8	15	1.5	5	10

[1] **In case of derivative transactions that are structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is 0, for instance, equity index swap, the remaining maturity shall equal to the time until the next reset date. The exception is given to the case of interest rate swap that has contractual remaining maturity more than one year and has a structure as aforementioned, the minimum credit conversion factor shall be 0.5 percent**

[3] For credit derivatives, the credit conversion factors shall be those as prescribed in Table 4.

[4] Precious metal excludes gold

[5] Derivatives linked to debt instrument shall be classified into three categories according to the reference instruments which are derivatives linked to government bonds, derivatives linked to other qualifying bonds and derivatives linked to non-qualifying bonds according to the guidelines on capital requirement calculation for specific risk of interest rate risk as prescribed in the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk of Financial Institutions.

Table 4

Credit conversion factors for credit derivatives in trading book

Unit: Percent

	Protection buyer	Protection seller
1. Total rate of return swaps (TRORS)		
- qualifying reference obligations[5]	5	5
- non-qualifying reference obligations	10	10
2. Credit default swaps (CDS), First to default swaps, and Proportionate CDS		
- qualifying reference obligations[6]	5	5[6]
- non-qualifying reference obligations	10	10[7]

[5] Qualifying reference obligations according to the guidelines on capital requirement calculation for specific risk of interest rate risk as prescribed in the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk of Financial Institutions

[6] Only in case where there is an agreement between protection buyer and seller that the mark-to-market value shall be settled if the protection buyer is unable to make a repayment while the credit event is not yet occurred. In this regard, if a commercial bank is a protection seller, gross add-on for credit default swaps (CDS), first to default swaps, and proportionate CDS shall not exceed the premium that the protection seller has not yet received from the protection buyer.

Attachment 4

Guidelines for the calculation of add-on for credit derivatives[1] in trading book

Type of transaction	Position	Counterparty credit risk (risk exposure)	Calculation of gross add-ons[2]
Credit default swaps (CDS)	Protection buyer	- Risk from not receiving credit event payment	Face value or maximum amount to be received for compensation x CCF
	Protection seller[3]	- Risk from not receiving premium in case where a buyer defaults on an agreement before making a full payment, while the close out amount is required to be paid.	Face value or maximum amount to be received for compensation x CCF (up to an unpaid premium from a protection buyer)
First to default swaps (FTDS)	Protection buyer	- Risk from not receiving credit event payment (for the first reference obligation in the basket that a credit event occurs)	Face value or maximum amount to be received for compensation x CCF (use the maximum CCF of reference obligations in the basket; for example, if a particular obligation in a basket is a non-qualifying reference obligation, commercial banks shall use the CCF equal to 10%)
	Protection seller3	- Risk from not receiving premium in case where a buyer defaults on an agreement before making a full payment, while the close out amount is required to be paid.	Face value or maximum amount to be received for compensation x CCF (up to an unpaid premium from a protection buyer)

[1] Definitions of terms in this attachment shall be referred to the definitions as prescribed in the Notification of the Bank of Thailand on Permission for Commercial Banks to Engage in Credit Derivatives

[2] CCF are as prescribed in the Table 4 of attachment 3

[3] Only in the case where there is an agreement between protection buyer and seller that the mark-to-market value shall be settled if the protection buyer is unable to make a repayment while the credit event is not yet occurred.

Type of transaction	Position	Counterparty credit risk (risk exposure)	Calculation of gross add-ons[2]
Proportionate CDS	Protection buyer	- Risk from not receiving credit event payment (for all reference obligations in the basket that credit events occur)	Face value or maximum amount to be received for compensation of each reference obligation x CCF of such reference obligation
	Protection seller3	- Risk from not receiving premium in case where a buyer defaults on an agreement before making a full payment, while the close out amount is required to be paid.	Face value or maximum amount to be received for compensation x CCF (up to an unpaid premium from a protection buyer
Total rate of return swaps (TRORS)	Protection buyer	- Risk from not receiving "a net return" and "a compensation for a reduction in the value of reference obligations"	Mark-to-market value of reference obligations on a starting date of a contract or on the latest payment date, as the case may be x CCF
	Protection seller	- Risk from not receiving "a net return" and "a compensation for an increase in the value of reference obligations"	Mark-to-market value of reference obligations on a starting date of a contract or on the latest payment date, as the case may be x CCF