

Unofficial Translation

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Notification of the Bank of Thailand

No. FPG. 13/2558

Re: Regulations on Permission for Commercial Banks to Engage in Market Derivatives

1. Rationale

The Bank of Thailand has gradually expanded scope of permitted market derivatives in accordance with the development of Thai derivatives market, which allow commercial banks to engage in market derivative transactions with specified reference variables, including interest rates, foreign exchange rates, commodity prices, debt security prices, equity prices and financial indices.

The Bank of Thailand found that the current development of Thai derivatives market has contributed toward wider range of customised transactions, in response to clients' needs, particularly those underlying variables which are foreign exchange rates, interest rates and commodities prices which the prior approval from the Bank of Thailand is required.

Therefore, the Bank of Thailand has amended the regulations on permission for commercial banks to engage in market derivatives in order to increase the business efficiency, while maintaining financial stability and banking supervision are still priority. The essences of amendments can be summarized as follows:

(1) Expanding scope of permitted market derivatives, in respond to current market development and to reduce opportunity costs that may arise while waiting for an approval, to cover those of widespread transactions with uncomplicated structures.

(2) Prescribing additional requirement for market derivatives linked to commodity prices (except gold price), where commercial banks are allowed to engage in such transactions only for the purposes of bank hedging or client hedging, in order to reduce the possibility of the commercial banks and clients to expose to a great amount of losses from undertaking the transactions that are not part of bank's core businesses.

(3) Expanding scope of market derivatives, which are exempt from leverage requirement, to cover those of transactions that may have more complicated structures than plain vanilla derivatives but are widespread in the Thai derivatives market as prescribed by the Bank of Thailand. This exemption was previously applied to only plain vanilla derivatives.

(4) Revising reporting forms and related reporting requirement, by taking into consideration banks reporting practicality, while the Bank of Thailand are enable to monitor the market development and, thus, promote the effective banking supervision on derivative transactions.

2. Statutory Power

By virtue of Section 29, Section 30, Section 32, Section 36, Section 41, Section 50, Section 52 and Section 71 of the Financial Institution Business Act B.E.2551 (2008), the Bank of Thailand hereby permits commercial banks to engage in market derivatives within the scope and regulations as prescribed herein.

3. Repealed / Amended Notification

The Bank of Thailand Notification No. FPG. 12/2551 Re: Permission for Commercial Banks to Engage in Derivative Transactions Linked to Market Variables dated 3 August 2008

4. Scope of Application

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

5. Content

5.1 Definition

In this Notification

“Commercial bank” means commercial banks under Section 4 of the Financial Institution Business Act B.E.2551 (2008) except retail banks.

“Market derivative” means derivative transactions linked to market variables, in which their market prices are used for fair values assessment and settlement between counterparties, including interest rates, foreign exchange rate, debt security prices, equity security prices, commodity prices, financial indices,

average value of market variables as mentioned, and other variables that will be further specified by the Bank of Thailand.

“Non-resident” means non-residents according to the definition prescribed in the Measures to Prevent Thai Baht Speculation according to the Circular on Seeking Cooperation for Compliance with Measures to Prevent Thai Baht Speculation.

“Resident” means those other than the non-residents according to above definition.

5.2 Principle

The Bank of Thailand permits commercial banks to engage in market derivatives with the designated type of transactions, reference variables and counterparties, as it is considered that there is an appropriate risk management practice as well as appropriate calculation approach for capital requirement to cover risk exposures from engaging in such transactions. The type of market derivatives under the current permission are plain vanilla derivatives, uncomplicated structured or widely-known derivative transactions as well as the combination of those derivative transactions.

In addition, for complicated structured market derivatives which may result in high risk exposures, the Bank of Thailand may imposed additional requirement, for instance restrict the degree of leverage not more than two, require additional provisions or require an appropriate calculation approach for capital requirement which can effectively reflects the risk exposures.

For market derivatives other than those which prescribed, commercial banks shall ask for an approval from the Bank of Thailand before engaging in such derivative transactions. The approval may be granted if the following five principles for banking supervision are satisfied, which are of efficiency, governance, micro-prudential, macro-prudential and fairness, according to the Notification of the Bank of Thailand on Supervision of Derivative Transactions for Commercial Banks.

On this, the overview and structure of the Notification of the Bank of Thailand on Permission for Commercial Bank to Engage in Market Derivatives is summarised in a figure in attachment 1.

5.3 Types of permitted market derivatives

The Bank of Thailand permits commercial banks to engage in the

following types of market derivatives:

5.3.1 Plain vanilla derivatives according to the lists and definitions as prescribed in attachment 2.

5.3.2 Additional permitted market derivatives according to the lists and definitions as prescribed in attachment 2.

5.3.3 Structured derivatives which are combinations of plain vanilla derivatives in 5.3.1 or **combinations of additional permitted derivative transactions in 5.3.2** or combinations of plain vanilla derivatives in 5.3.1 **and additional permitted market derivatives in 5.3.2.**

On this, the combinations of derivative transactions are required to take into the consideration the degree of leverage requirement of not more than two. Commercial banks, therefore, shall provide documents and prove that they have considered such degree of leverage as well as keep them as evidence for an examination by the Bank of Thailand, or submit them to the Bank of Thailand upon request.

Furthermore, the Bank of Thailand has also permitted commercial banks to engage in “Digital options¹” only if it combines with plain vanilla derivatives as prescribed in 5.3.1 or combine with **additional permitted market derivatives as prescribed in 5.3.2** or combine with **plain vanilla derivatives and additional permitted market derivatives as prescribed in 5.3.1 and 5.3.2.**

5.3.4 Loans that commercial banks offer with market derivatives as prescribed in 5.3.1 to 5.3.3 as a lender or borrower.

5.3.5 Market derivatives other than those as prescribed, including market derivatives linked to reference variables other than those prescribed in 5.4, which commercial banks engage in to hedge their risk exposures. On this, such transactions shall have opposite market risk profiles to the hedged item which can significantly reduce or limit risk exposures of such positions and must not incur other risk exposures, except counterparty credit risk. Commercial banks, therefore, shall provide documents and prove that such transactions are used for the purpose of bank’s hedging and keep them as evidence for an examination by the Bank of Thailand, or submit them to the Bank of Thailand upon request.

¹ Digital options mean the options that the settlement is made at fixed amount in case where market price of reference assets at a certain time or on maturity date is inside/outside the price range or higher/lower than the predetermined price, which is specified on the starting date of contract.

5.4 Reference variables

The Bank of Thailand permits commercial banks to engage in market derivatives linked to the following variables:

5.4.1 Interest rates

5.4.2 Foreign exchange rates

5.4.3 Debt security prices as prescribed in attachment 3

5.4.4 Equity security prices as prescribed in attachment 3

5.4.5 Commodity prices as prescribed in attachment 3

5.4.6 Financial indices with all qualifications as follows:

(1) Such indices are calculated by using the reference variables as prescribed in 5.4.1 to 5.4.5.

(2) Developed by recognised institutions

(3) Widely-known in the Thai or international financial markets.

(4) The bid-ask prices are regularly quoted and shall be available from the medias that timely broadcast and updated.

(5) Provide a clear calculation methods, sources of variables and factors used in the calculation. On this, such variables and factors shall be those of independent, which are not influenced by any individuals.

On this, commercial banks shall provide documents and prove that such financial indices meet all prescribed qualifications and keep them as evidence for an examination by the Bank of Thailand, or submit them to the Bank of Thailand upon request.

5.4.7 The average of reference variables according to 5.4.1 to 5.4.6 which is calculated by simple average approach or weighted average approach, where the specific weight is assigned during the life time of contract.

5.5 Counterparty

The Bank of Thailand permits commercial banks to engage in

market derivatives with all types of counterparties except market derivatives linked to commodity prices as prescribed in 5.4.5, commodity price index as prescribed in 5.4.6 and the average of commodity prices or commodity price index as prescribed in 5.4.7, which commercial banks are required to comply with additional regulations as prescribed in attachment 4.

5.6 Transactions that require prior approval from the Bank of Thailand

If commercial banks wish to engage in market derivatives other than those prescribed in 5.3 to 5.5, commercial banks shall seek for an approval from the Bank of Thailand before engaging in such transactions. **Commercial banks shall, therefore, submit a request application, provided in attachment 5**, which shall be signed by the managing director of commercial banks or the highest level of executive in case of foreign bank branches, or authorised persons held a position of at least assistance managing director or the highest level of executive of a unit responsible for new product development. On this, a written authorisation is required and shall be obtained by the managing director of commercial banks or the highest level of executive in case of foreign bank branches.

The Bank of Thailand may grant an approval if such transactions can be proved to satisfy five principles of banking supervision according to the Notification of the Bank of Thailand on Supervision of Derivative Transactions for Commercial Banks. **An approval process will be finalised within 90 days as from the date that the Bank of Thailand receives the order and complete documents.**

On this, if commercial banks are uncertain whether market derivatives to be engaged in are in accordance with this Notification, the commercial banks shall consult with the Bank of Thailand before engaging in such transactions.

5.7 Data reporting

Commercial banks which engaged in market derivatives shall comply with reporting requirement as prescribed by the Bank of Thailand, and shall submit the reports to the Bank of Thailand on a monthly basis, by the end of the following month, through the Data Management System (DMS) (Extranet).

5.7.1 Reporting on first time engaging transactions

Commercial banks shall report details of the contracts when engage in the following market derivatives for the first time (including transactions which are traded and matured during the reporting period) in “Reporting Form on

Outstanding Amounts of Market Derivatives Classified by Contracts” according to reporting instruction in attachment 6. Also, commercial banks shall report the outstanding of such market derivatives according to 5.7.2.

- (1) All types of market derivatives that linked to financial indices or average value of any reference variables for the first time
- (2) Market derivatives as prescribed in 5.3.3, 5.3.5 and 5.6
- (3) Loans that commercial banks offer with market derivatives as prescribed in 5.3.3
- (4) Market derivatives under the transitional provisions

5.7.2 Reporting on outstanding amounts of transactions

Commercial banks shall report outstanding amounts of market derivatives that remain at the end of the month as follows:

- (1) Market derivatives as prescribed in 5.3.1 and 5.3.2, and loan that commercial banks offer with market derivatives as prescribed in 5.3.1 and 5.3.2 shall be reported in “Reporting Form on Outstanding Amounts of Market Derivatives Classified by Types of Products” according to reporting instruction in attachment 6.
- (2) Market derivatives as prescribed in 5.3.3, 5.3.5 and 5.6, and loan that commercial banks offer with market derivatives as prescribed in 5.3.3, 5.3.5 and 5.6 shall be reported in “Reporting Form on Outstanding Amounts of Market Derivatives Classified by Contracts” according to reporting instruction in attachment 6.

5.8 Other related regulations

Commercial banks engaging in market derivatives shall comply with other related regulations as prescribed in attachment 7 **and attachment 8.**

5.9 Other requirements

Market derivatives which are engaged in by the overseas branches of Thai commercial banks shall be subject to laws and regulations of the host country and also those as prescribed in 5.1, 5.2, 5.7 and 5.8 of this Notification. However, this excludes the case where such oversea branches engage in transactions with Thai residents,

which the compliance of all frameworks and regulations as prescribed in this Notification are required.

6. Transitional provisions

6.1 For market derivative transactions which are not in the scope of permission under this Notification but commercial banks engaged in before the Notification came into effect, commercial banks shall be suspended to trade such transactions. However, they are allowed to maintain until maturity. These transactions shall not be renewal, unless they receive the permission from the Bank of Thailand.

6.2 “Credit-linked interest rate swaps” or “Credit-linked cross currency swaps”, which the termination of contract will be triggered by the occurrence of a specified credit event, shall be entirely back-to-back², unless otherwise approved by the Bank of Thailand. On this, commercial banks shall consider them as plain interest rate swaps and cross currency swaps when calculating capital requirements and single lending limit.

6.3 For market derivatives transactions which are not in the scope of permission under this Notification but have been approved by the Bank of Thailand before the Notification came into effect. Commercial banks are allowed to proceed such transactions in accordance with the prior approval letter.

However, except for market derivatives transactions which are combined with “foreign exchange pro-rata forwards” or “foreign exchange flexible forwards”, Commercial banks shall be suspended to trade such transactions. However, they are allowed to maintain until maturity. These transactions shall not be renewal, unless they receive the permission from the Bank of Thailand.

6.4 Commercial banks could submit the report, as prescribed in 5.7, as of the end of the first month, second month, after the Notification came into effect, together with the report as of the end of third month.

² Back-to-back means engaging in a transaction which is completely identical to the position to be hedged (Hedged item) but in the opposite position. However, if there is a difference of reference rate or value between the position for hedging risks and hedged position, commercial banks shall clearly indicate that such difference is not a limitation that may prevent the risks of such hedged positions to be completely hedged.

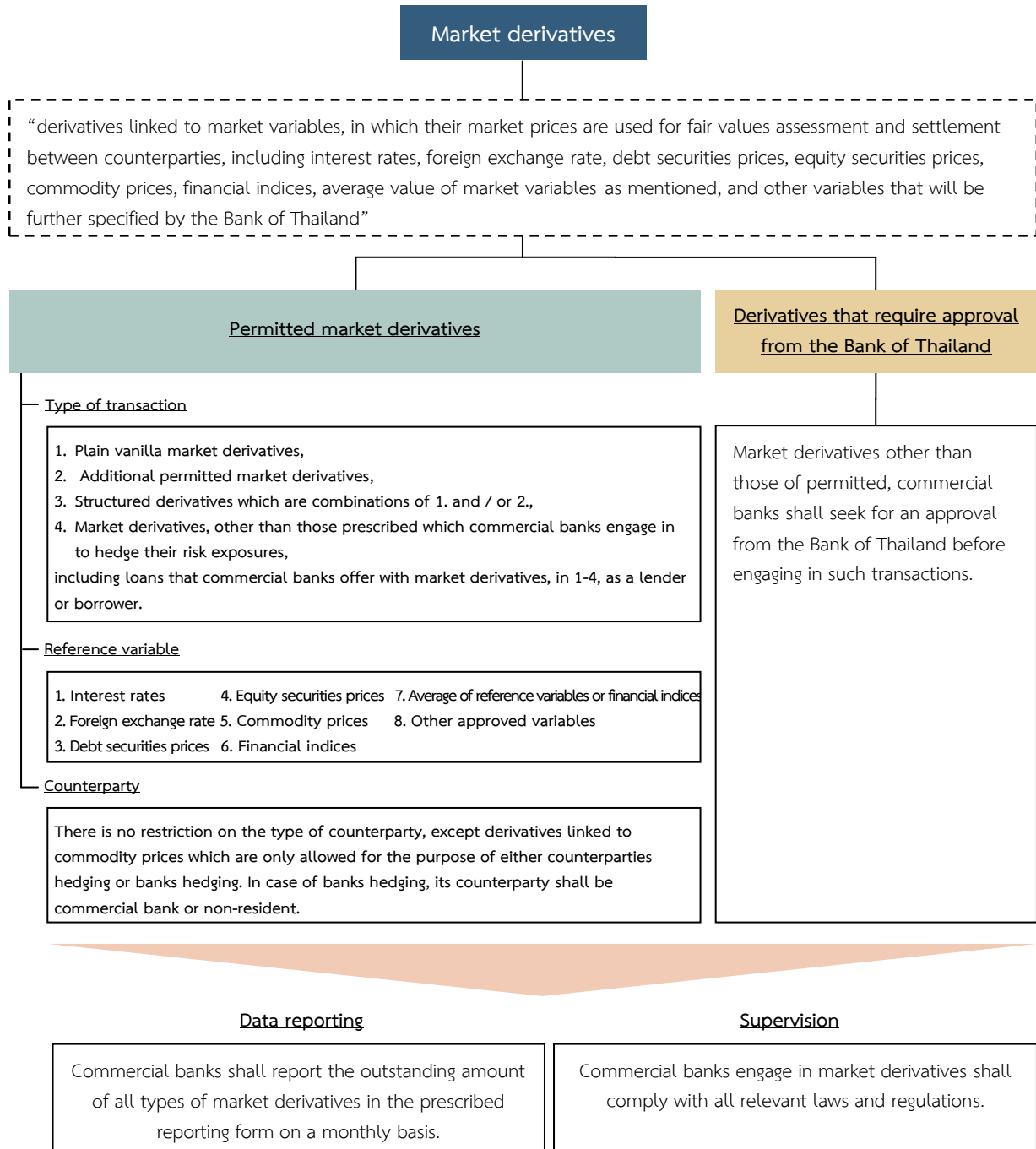
7. Effective date

This Notification shall come into force as from the day following the dates of its publication in the Government Gazette.

Announced on 25th September 2015

(Mr. Prasarn Trairatvorakul)
Governor
Bank of Thailand

Summary of an overview and structure of the Notification of the Bank of Thailand on Permission for Commercial Bank to Engage in Market Derivatives



Lists and definitions of market derivatives

1. Lists of permitted market derivatives

1.1 Plain vanilla derivatives

| Category | Type of transactions |
|--|---|
| 1.1.1 Derivatives linked to interest rates | (1) Interest rate futures (2) Forward rate agreements (3) Interest rate swaps (4) Basis swaps (5) Interest rate options |
| 1.1.2 Derivatives linked to foreign exchange rates | (1) Currency futures (2) Foreign exchange forwards (3) Foreign exchange swaps (4) Cross currency swaps (5) Coupon-only cross currency swaps (6) Currency options |
| 1.1.3 Derivatives linked to debt securities prices | (1) Bond futures (2) Bond forwards (3) Bond options |
| 1.1.4 Derivatives linked to equity securities prices | (1) Equity futures (2) Equity forwards (3) Equity swaps (4) Equity options |
| 1.1.5 Derivatives linked to commodity prices | (1) Commodity futures (2) Commodity forwards (3) Commodity swaps (4) Commodity options |

1.2 Additional permitted market derivatives

| Category | Type of transactions |
|---------------------------|--|
| 1.2.1 Barrier derivatives | (1) Knock in forwards (2) Knock out forwards (3) Knock in options (4) Knock out options |

| Category | Type of transactions |
|--|--|
| 1.2.2 Average derivatives | (1) Average rate swaps or Average strike swaps (2) Average rate options or Average strike options |
| 1.2.3 Option derivatives | (1) Swaptions (2) Option on forwards (3) Compound options (Option on options) |
| 1.2.4 Foreign exchange pro-rata and flexible derivatives | (1) Foreign exchange pro-rata (or Multiple fixing) forwards (2) Foreign exchange flexible forwards |
| 1.2.5 Forward-start derivatives | Derivative transactions that value date starts at a specified date which later than trade date for more than 5 working days of commercial banks in Thailand |
| 1.2.6 Other categories | (1) Accreting or amortizing notional derivatives (2) Credit-linked interest rate swaps and Credit-linked cross currency swaps (3) In-arrear interest rate swaps and In-arrear cross currency swaps (4) Par forwards (5) Differential (or Quanto) swaps |

2. Definitions of permitted market derivatives

2.1 “Plain vanilla derivatives” mean derivative transactions, with uncomplicated structures, which reference variables are prescribed in 5.4.1 – 5.4.6 of this Notification¹. In addition, the fair value assessment practices of such derivative transactions as well as their risk management practices are widely acceptable, as follows:

2.1.1 Derivatives linked to interest rates, as follows:

(1) “Interest rate futures” mean transactions which both parties agree to use predetermined interest rate for the calculation of profits or losses on the agreed notional/principal amount in the specified time period. On this, profits/losses are daily settled based on the difference between the amount that is calculated from predetermined

¹ For plain vanilla derivatives linked to variables as specified in 5.4.7 of this Notification, they shall be categorised as market derivatives constructed by plain vanilla derivatives as specified in 5.3.3 of this Notification.

interest rate and market interest rate. In addition, the contracts are standardised structured (for instance notional amount and settlement date) and traded in the futures exchange².

(2) **“Forward rate agreements”** mean transactions which counterparties agree to use predetermined interest rate for the calculation of profits or losses on the agreed notional/principal amount in the specified time period. On this, at the settlement date, the counterparty with long position (as a borrower), shall settle the difference between the returns that are calculated by predetermined interest rate and market interest rate to other counterparty with short position, if the market interest rate is lower than the predetermined interest rate. On the contrary, the counterparty with short position (as a lender), shall settle the difference between the returns that are calculated by predetermined interest rate and market interest rate to other counterparty with long position, if the market interest rate is higher than the predetermined interest rate. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(3) **“Interest rate swaps”** mean transactions which counterparties agree to exchange fixed interest rate for floating interest rate, or vice versa, on the same of notional/principal amount in the specified time period, according to the agreed terms and conditions. On this, the settlement currency shall be the same currency as notional amount of transactions, besides, the reference interest rate shall be domestic interest rate of the country’s currency. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(4) **“Basis swaps”** mean transactions which both counterparties agree to exchange floating interest rate with different floating interest rate within the specified time period, according to the agreed terms and conditions. On this, the floating interest rate shall be currency’s interest rate and shall be domestic interest rate of the country’s currency that the principal is denominated. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

² Futures exchange means a center for futures trading that is officially established, where the contracts are standardized, for instance notional amount and delivery date etc. Also, there shall be mark-to market or calculation of profit or loss on every working day of the exchange as well as a mechanism that helps reducing counterparty credit risk, for example, posting of margin, thus an investor with high losses that causes the margin level less than the maintenance margin; such investor shall deposit additional money into a margin account, or requiring investors to settle profits/losses on a daily basis. For examples of the futures exchanges are the Thailand Futures Exchange (TFEX) or the Chicago Mercantile Exchange.

(5) “**Interest rate options**” mean options³ linked to interest rates, as follows:

5.1 “**Interest rate caps**” mean transactions that a buyer will receive returns from a seller if the reference floating interest rate is higher than the predetermined interest rate in the specified time period. The returns to be settled are calculated from the difference between market interest rate on the settlement date and predetermined interest rate, based on the agreed notional amount.

5.2 “**Interest rate floors**” mean transactions that a buyer will receive returns from a seller if the reference floating interest rate is lower than the predetermined interest rate in the specified time period. The returns to be settled are the difference between predetermined interest rate and market interest rate on the settlement date, based on the agreed notional amount.

2.1.2 Derivatives linked to foreign exchange rates, as follows:

(1) “**Currency futures**” mean transactions in which both counterparties agree to purchase or sell foreign currency according to the agreed notional amount, predetermined exchange rate, and at the date as specified in the contract. On this, the settlement regarding profits and losses will be settled on a daily basis. In addition the contracts are standardised structured (for instance notional amount and settlement date) and traded in the futures exchange.

(2) “**Foreign exchange forwards**” mean transactions which both counterparties agree to purchase or sell foreign currency according to the agreed notional amount, predetermined exchange rate, and at the date as specified in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(3) “**Foreign exchange swaps**” mean transactions which both counterparties agree to exchange one currency with other currencies, without an exchange of interest obligations, at the specified time period. Moreover, they agree to return such exchanged currency by delivering the same amount of currency that has been received in the first leg in exchange of receiving the same amount of currency that has been delivered in the first leg (reversed transaction) within specified time period and on agreed terms and conditions. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

³ “Options” mean a contracts that allow holders to have rights to buy (call options) or rights to sell (put options) variables or underlying assets at the price or rate as specified in the contract (strike price or rate) which may be exercised on the maturity date (European options), during the contract period (American options), or on the specified date during the contract period (Bermudan options).

(4) **“Cross currency swaps”** mean transactions which both counterparties agree to exchange one currency with other currencies, including an exchange of **interest obligations of such different currencies**, at the specified time period. Moreover, they agree to return the principal by delivering the same amount of currency that has been received in the first leg in exchange of receiving the same amount of currency that has been delivered in the first leg (reversed transaction) within specified time period and on agreed terms and conditions. In addition, the contracts are bilateral and, therefore, are directly traded between two parties. (Over the counter – OTC).

(5) **“Coupon-only cross currency swaps”** mean transactions which both counterparties agree to exchange **interest obligations of different currencies, without an exchange of principal of such different currencies in both first leg and second leg**, at the specified time period, according to the agreed terms and conditions. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(6) **“Currency options”** mean options that a buyer has the right, but not the obligation, to purchase or sell foreign currency according to the agreed terms and conditions in the contract.

2.1.3 Derivatives linked to debt securities, as follows:

(1) **“Bond futures”** mean transactions which both counterparties agree to purchase or sell debt securities or debt securities prices index in the future according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition the contracts are standardised structured (for instance notional amount and settlement date) and traded in the futures exchange.

(2) **“Bond forwards”** mean transactions which both parties agree to purchase or sell debt securities or debt securities prices index in the future according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(3) **“Bond options”** mean options that a buyer has the right, but not the obligation, to purchase or sell debt securities or debt securities price index according to the agreed terms and conditions in the contract.

2.1.4 Derivatives linked to equity securities, as follows:

(1) **“Equity futures”** mean transactions which both counterparties agree to purchase or sell equity securities or equity securities prices index according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition the contracts are standardised structured (for instance notional amount and settlement date) and traded in the futures exchange.

(2) **“Equity forwards”** mean transactions which both parties agree to purchase or sell equity securities or equity securities prices index in the future according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(3) **“Equity swaps”** mean transactions which both parties agree to exchange the returns of reference rate, of which are fixed rate or floating rate, or rate of return of which are linked to equity securities prices or equity securities price index, for the returns of which are linked to other equity securities prices or other equity securities prices index, within the specified time period according to the agreed terms and conditions in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(4) **“Equity options”** mean options that a buyer has the right, but not the obligation, to purchase or sell equity securities or equity securities price index according to the agreed terms and conditions in the contract.

2.1.5 Derivatives linked to commodity prices, namely:

(1) **“Commodity futures”** mean transactions which both counterparties agree to purchase or sell commodities according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition the contracts are standardised structured (for instance notional amount and settlement date) and traded in the futures exchange.

(2) **“Commodity forwards”** mean transactions which both counterparties agree to purchase or sell commodities in the future according to the agreed notional/principal amount and predetermined price as specified in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(3) **“Commodity swaps”** mean transactions which both counterparties agree to exchange cash flows which are calculated from multiplying the notional/principal

amount of reference commodities by the fixed rate price and cash flows which are the result of multiplying the notional/principal amount of reference commodities by the floating rate price, within the specified time period according to the agreed terms and conditions in the contract. In addition, the contracts are bilateral and, therefore, are directly traded between two parties (Over the counter – OTC).

(4) “**Commodity options**” mean options that a buyer has the right, but not the obligation, to purchase or sell commodities according to the agreed terms and conditions in the contract.

2.2 “**Additional permitted market derivatives**” mean over-the-counter (OTC) derivatives which reference variables are prescribed in 5.4.1 to 5.4.6 in this Notification⁴. These derivatives may have more complicated structures than plain vanilla derivatives; however, they are widespread in Thai derivatives market. Thus the Bank of Thailand thereby permits the following additional market derivative in order to facilitate commercial banks and their counterparties to engage in transactions in accordance with the development of Thai derivative market.

2.2.1 Barrier derivatives

Barrier derivatives mean market derivatives which a certain price or certain range of price are predetermined to identify the existence of the contracts (Barrier), as follows:

(1) “**Knock in forwards**” mean transactions which both counterparties have obligations to purchase or sell assets forward in the future with conditions in addition to regular obligations to purchase or sell assets. That is, the obligation of purchasing or selling assets in the future does not exist at the trade date. However, if the market rate, in the specified observation period or at the designated date, is above or below the predetermined price or in or out of the predetermined barrier (depends on agreed terms and conditions), a buyer or a seller must obligate to the agreed terms and conditions in purchasing or selling, for instance sets in the future at the predetermine price/rate.

(2) “**Knock out forwards**” mean transactions which both counterparties have obligations to purchase or sell assets forward in the future with conditions in addition to regular obligations to purchase or sell assets. That is, the obligation of purchasing or selling assets in the future exists at the trade date. However, if the market rate, in the specified observation period or at the designated date, is above or below the

⁴ For market derivatives additionally permitted by the Bank of Thailand that are linked to variables according to 5.4.7 of this Notification, such derivatives shall be categorised as market derivatives constructed by market derivatives additionally permitted by the Bank of Thailand as prescribed in 5.3.3 of this Notification.

predetermined price or in or out of the predetermined barrier (depends on agreed terms and conditions), the contracts are terminated.

(3) **“Knock in options”** mean options with exercising conditions in addition to regular options. That is, the right to exercise, to purchase or sell underlying assets at a predetermined price, for an option buyer does not exist at the trade date. However, if the market rate, in the specified observation period or at the designated date, is above or below the predetermined price or in or out of the predetermined barrier (depends on agreed terms and conditions), an option buyer have the right to purchase or sell, for instance sets at the predetermine price according to the agreed terms and conditions.

(4) **“Knock out options”** mean options with exercising conditions in addition to regular options. That is, the right to exercise, to purchase or sell underlying assets at a predetermined price, for an option buyer exists at the trade date. However, if the market rate, in the specified observation period or at the designated date, is above or below the predetermined price or in or out of the predetermined barrier (depends on agreed terms and conditions), the rights to purchase or sell, for instance sets are terminated.

2.2.2 Average derivatives

Average derivatives mean market derivatives which the average value of market prices/rate or, predetermined prices/rate in the specified period, are used for the calculation of profits or losses of the contracts, as follows:

(1) **“Average rate swaps”** or **“Average strike swaps”** mean transactions which both counterparties agree to exchange the average value of market prices/rates in the specified period for the predetermined prices (**“Average rate swaps”**) or exchange market prices/rates at the designated date for the predetermined average value of prices/rates (**“Average strike swaps”**) in the specified time period according to the agreed terms and conditions in the contract, for instance **“Commodity swaps”**, which both counterparties agree to settle the difference between fixed price and floating price of commodities, where one particular price is being determined as the average value of commodity prices according to the agreed time period as well as terms and conditions.

(2) **“Average rate options”** or **“Average strike options”** mean options that the average value of market prices/rates in the specified period and the predetermined price/rate are being compared for the calculation of profits or losses (**“Average rate options”**) or, the market prices/rates at the designated date and the predetermined average value

of prices/rates in the specified period are being compared for the calculation of profits or losses (“Average strike options”).

2.2.3 Option derivatives

Option derivatives mean market derivatives that are combination of options and other derivative transactions or options which give the additional rights to one particular counterparty, other than those of regular options, as follows:

(1) “**Swaptions**” mean options that allow an option buyer to enter into “**Interest rate swaps**” “**Basis swaps**” “**Foreign exchange swaps**” “**Cross currency swaps**” “**Equity swaps**” or “**Commodity swaps**”, as prescribed above, with an option seller, according to the agreed terms and conditions in the contract.

(2) “**Option on forwards**” mean options that allows an option buyer to enter into “**Forward rate agreements**” “**Foreign exchange forwards**” “**Bond forwards**” “**Equity forwards**” and “**Commodity forwards**”, as prescribed above, with an option seller, according to the agreed terms and conditions in the contract.

(3) “**Compound options (Option on option)**” mean options that allows an option buyer to enter into “**Interest rate options**” “**Currency options**” “**Bond options**” “**Equity options**” or “**Commodity options**”, as prescribed above, to purchase or sell assets at the predetermined price.

2.2.4 Foreign exchange pro-rata and flexible derivatives

Foreign exchange pro-rata and flexible derivatives mean market derivatives which reference variables are foreign exchange rates which allow flexibility to counterparties to purchase or sell foreign currency before the maturity date, which are widespread transactions in Thai derivatives market.

(1) “**Foreign exchange pro-rata (or multiple fixing) forwards**” mean “**Foreign exchange forwards**” that allows counterparties to purchase or sell foreign currency for the amount not exceeding the specified amount in the contract. On this, the counterparties have rights to purchase or sell foreign currency more than once before the maturity date; however, they must purchase or sell in full before the maturity date. The forward rate, used for purchasing or selling foreign currency will be vary in each day or period, which is calculated by the sum of spot rate and the difference

between forward rate and spot rate (swap point) in each days multiplied by number of days from the trade date to the day that foreign currency is purchased or sold⁵.

(2) “Foreign exchange flexible forwards” mean “Foreign exchange forwards” that allows counterparties to purchase or sell foreign currency for the amount not exceeding the specified amount in the contract. On this, the counterparties have rights to purchase or sell foreign currency more than once before the maturity date; however, they must purchase or sell in full amount before the maturity date. The forward rate or swap point used for purchasing or selling foreign currency will be flat rate during the period that counterparties have rights to purchase or sell foreign currency.

2.2.5 Forward-start derivatives

Plain vanilla market derivatives as prescribed in 2.1 or additional permitted market derivatives as prescribed in 2.2 of which value date or effective date is later than the trade date for more than 5 working days of commercial banks in Thailand.

2.2.6 Other categories

Other categories which are those of permitted market derivatives with slightly changed in details of transaction and, therefore, are different from those prescribed definitions. However, such transactions are in a widespread manner in Thai derivatives market which would not cause an increase in risk profiles significantly, as follows:

(1) Permitted market derivatives as prescribed in 2.1 and 2.2 of which notional amounts are changeable during the contract period. Such notional amounts may be accreted or amortized according to the predetermined terms and conditions at the trade date.

(2) “Credit-linked interest rate swaps” and “Credit-linked cross currency swaps” mean “Interest rate swaps” and “Cross currency swaps” that the termination of transactions are depend on the specified credit event.

⁵ For example, the specified forward rate of foreign exchange pro-rata or multiple fixing forward can be calculated as follows:

$$\text{Forward rate} = \text{Spot rate} + [(\text{Swap point} / N) \times n]$$

where - N means number of days from the starting date of contract to the maturity date

n means number of days from the starting date of contract to the day that foreign currency is purchased or sold

(3) “In-arrear interest rate swaps” and “In-arrear cross currency swaps” mean “Interest rate swaps” and “Cross currency swaps” that the floating interest rate will be fixing based upon the interest rates at the end of payment period.

(4) “Par forwards ”mean “Foreign exchange forwards” that the counterparties are obligated to purchase or sell foreign currency on the specified amount in the contract. On this, the delivery or settlement is made more than once according to the agreed predetermined price, which are flat, during the contract period.

(5) “Differential (or Quanto) swaps” mean transactions that both counterparties agree to exchange interest rates. On this, the floating interest rate in one leg is not the interest rate of the notional currency. On this, the settlement is made in the same currency as the notional.

Qualifications of permitted reference variables

1. Debt securities prices according to the following type of securities:

1.1 Debt securities denominated in foreign currency which shall be marketable securities. Commercial banks shall maintain documents or evidences that are used for consideration for an examination by the Bank of Thailand, or submit them to the Bank of Thailand upon request.

1.2 Debt securities denominated in local currency as follows:

- (1) Treasury bills
- (2) Government bonds
- (3) Bank of Thailand bonds
- (4) State enterprise bonds
- (5) Debt securities guaranteed by the government
- (6) Debt securities issued by international financial institutions

(7) Debt securities which have at least BBB rating or equivalent rating by **at least one** external credit assessment institutions, which recognised by the Office of the Securities and Exchange Commission, or by international institutions in case of debt securities issued abroad.

On this, commercial banks are not allowed to use their debt securities held for regulatory capital, as reference variables when engaging in market derivatives as it could result in capital reduction, without allowance by the Bank of Thailand. In addition, it can cause unfair practices regarding engaging in market derivatives as well as it cannot be hedged appropriately.

2. Equity securities prices which are traded on the recognised exchanges. Commercial banks shall maintain documents or evidences that are used for consideration for an examination by the Bank of Thailand, or submit them to the Bank of Thailand upon request.

However, commercial banks are not allowed to use their own equity securities or those of other commercial banks as reference variables when engaging in

market derivatives, except for commercial banks equity securities which are parts of qualified financial indices as prescribed in 5.4.6 of this Notification, as it could result in capital reduction, without allowance by the Bank of Thailand. In addition, holding or possessing shares of other commercial banks encounter to Section 35 of the Financial Institution Business Act B.E.2551 (2008). Moreover, it may cause unfair practices to clients regarding engaging market derivatives as well as it cannot be hedged appropriately.

3. Commodity prices as follows:

3.1 Agriculture products which are traded on the Agricultural Futures Exchange of Thailand, according to definition of Office of the Agricultural Futures Trading Commission (AFTC), **or any other official established agricultural futures exchanges in Thailand.**

3.2 Commodity products which are highly liquid and traded in active market both spot markets and futures markets that are local or foreign official exchanges, where the reliable prices are publicly available through widely- known medias, for instance, Bloomberg, Reuters, Telerate, or the Chicago Board of Trade. On this, commercial banks shall documents the proof indicating that commodities, used as reference variables of market derivatives, are marketable and traded in the official commodity futures exchanges or active market. In addition, commercial banks shall consider that they have potential counterparties or networks which they can immediately hedged such derivatives with.

Regulations on engaging in derivative transactions linked to commodity prices¹

Commercial banks engaging in market derivatives linked to commodity prices shall comply with the following requirements:

1. The transactions linked to commodity prices shall deliver and settle the difference of price in cash only (cash settlement).

2. Commercial banks shall only engage in transactions linked to commodity prices with counterparties that have the purpose of hedging risks of commodity prices. This is except for the case that commercial banks would like to hedge their commodity prices risks, their counterparties shall be commercial banks or non-residents. Moreover, such transaction shall satisfy the following conditions:

2.1 Having opposite market risk profiles to existing hedged position (hedge exposures)

2.2 Commodity prices used as reference variables shall be the same as those of hedged positions. However, if they are different, commercial banks shall justify whether such transactions can significantly reduce the risk of hedged transactions. On this, commercial banks shall provide documents used for the consideration and keep them as evidence for an examination by the Bank of Thailand or submit them to the Bank of Thailand upon request.

However, this is except for market derivatives linked to gold prices which commercial banks are not required to comply with the requirements regarding counterparties, as mentioned in this attachment.

¹ Including derivatives linked to commodity price index, average of commodity prices or price index

An application for approval of market derivatives and structured products

Commercial banks shall seek for approval from the Bank of Thailand before engaging in market derivatives or structured products other than those prescribed in related Notifications. On this, commercial banks shall complete all required information, including other information which may further requested by the Bank of Thailand. The Bank of Thailand reserves the right to disregard an incomplete application.

| |
|---|
| 1. Type of requested transactions |
| <input type="checkbox"/> 1.1 Market derivatives <input type="checkbox"/> 1.2 Structured products |
| 2. Supplement documents |
| <input type="checkbox"/> 2.1 Product program <input type="checkbox"/> 2.2 Term sheet <input type="checkbox"/> 2.3 Other supplement documents (please specify) 2.3.1 _____ 2.3.2 _____ |
| 3. Details of transaction |
| 3.1 Name of transaction 3.1.1 Academic or general name _____ 3.1.2 Trade name _____ |
| 3.2 Reference variables, please specify the type and name of reference variables (for instance, interest rate, namely <u>LIBOR and THBFIX</u>) <input type="checkbox"/> Interest rates, namely _____ <input type="checkbox"/> Foreign exchange rates, namely _____ <input type="checkbox"/> Debt security prices, namely _____ <input type="checkbox"/> Equity security prices, namely _____ <input type="checkbox"/> Commodity prices, namely _____ <input type="checkbox"/> Credit (For structured products), namely _____ <input type="checkbox"/> Performance of funds (For structured products), namely _____ <input type="checkbox"/> Inflation rates (For structured products), namely _____ |

- Qualified financial indices, namely _____
 Component of reference variables of such indices, namely _____
 (Please enclose details of financial indices and proof of qualifications)
- Average value of specified reference variables, namely _____
- Reference variables other than those of permitted, namely _____
 (Please enclose details of reference variables)

3.3 Details of the transaction (For structured products)

3.3.1 Position of commercial bank Borrower Lender

3.3.2 Type of borrowing (for instance bonds, debentures, promissory notes or bills of exchange)

3.3.3 Minimum principal amount of transactions (for instance 5 million Baht)

3.3.4 Percentage of principal protection (for instance 80%) _____

3.3.5 Conditions of transaction (more than 1 item can be chosen)

Payment of returns depends on predetermined reference variables, which is not market interest rate.

Give the borrower rights, or the lender rights to receive the repayment of principal or returns in form of debt securities, equity securities; or give rights to purchase, sell or exchange foreign currency, as follows:

(1) Type of financial assets to be repaid (please specify in details)

Debt securities, namely _____

Equity securities, namely _____

Foreign currency, namely _____

Others, namely _____

(2) Conditions for risk mitigation for retail clients

An investor shall have related underlying obligation.

Principal protection of not less than 80%.

Give the borrower rights, or the lender rights to extend the contract or to redeem before maturity, according to the terms and conditions of the contract.

Give the borrower rights, or the lender rights to top up the principal according to the terms and conditions of the contract, where the price of reference variables shall be predetermined.

3.4 Purpose and type of clients or counterparties that engage in the transactions

3.4.1 Purpose of commercial banks in engaging the transaction

- Bank's funding - a transaction in which commercial banks use for acquiring funds or managing their liquidity risks.
- Bank's hedging - a transaction in which commercial banks use for hedging against their risk exposures.
- Bank's trading - a transaction in which commercial banks use for trading or speculation purpose.
- Counterparty's hedging - a transaction in which a counterparty uses for hedging against their risk exposures.
- Counterparty's trading - a transaction in which a counterparty uses for trading or speculation purpose.
- Others – please specify _____

3.4.2 Type of clients or counterparties of the commercial banks

(1) Type of clients or counterparties (more than 1 item can be chosen)

- Institutional investors
- High net worth investors Juristic persons Natural persons)
- Retail investors

(2) Additional information, for instance name, business type or proficiency level of the clients or counterparties.

3.5 Subcomponents of the transaction

3.5.1 In case the transactions can be decomposed into subcomponents, please indicate subcomponents of market derivatives and structured products

3.5.2 In case the transactions cannot be decomposed into subcomponents, please explain the structure of a transactions including, indicate components which are of permitted market derivatives on best effort basis.

3.5.3 Please indicate pay-off diagrams of both commercial banks and counterparties. The pay-off diagram shall be indicated by each components, if such transaction can be decomposed.

Pay-off diagram of commercial bank

Pay-off diagram of counterparty



For those of transaction that pay-off diagram cannot be indicated, please explain a variation in profits or losses, of commercial bank and counterparty, which could arise from the possible movement of reference variables.

3.6 Risk management of derivatives

3.6.1 Please explain a pricing method of the transaction in detail.

3.6.2 Please explain an approach used for calculating exposures which could arise from the transaction. If simulation approach is deployed, please explain in details, including processes, models, assumptions or amount of historical data and timeframe being used.

3.6.3 Please explain an approach used for a consideration of the relevance of client's or counterparty's obligations or underlying assets, if the transaction is denominated in a foreign currency.

3.6.4 Please specify details on the consideration of the leverage requirement of the transaction.

3.6.5 Please identify risks associated with the transaction, including commercial bank's risk management guideline (more than 1 item can be chosen).

- Market risk

- Credit risk

- Counterparty credit risk

- Other risks (please specify)

3.7 Capital requirements and regulatory compliance

Please specify an approach used for calculating capital for the transaction including, adherence to all relevant regulations. (please specify the calculation methods in detail)

3.7.1 Calculation of risk-weighted assets for market risk

3.7.2 Calculation of risk-weighted assets for credit risk

3.7.3 Calculation of risk-weight assets for counterparty credit risk

3.7.4 Large exposure limit (single lending limit)

3.8 Other information

Please specify information, other than those provided above, that would facilitate the consideration of approval.

NNN - Bank XXXX
 Reporting Form on Outstanding Amounts of Market Derivatives Classified by Types of Products
 For reporting period ending 30 September 2015

Unit : Baht

| Group of product | Derivatives | 1. Interest rates | | 2. Foreign exchange rates | | 3. Debt security prices | | 4. Equity security prices | | 5. Commodity prices | | | | | | 6. Financial indices | | Total | |
|------------------|---|-------------------|-----|---------------------------|-----|-------------------------|-----|---------------------------|-----|------------------------------|-----|-----------------|-----|-----------------|-----|----------------------|-----|-----------------|------|
| | | Notional amount | MTM | Notional amount | MTM | Notional amount | MTM | Notional amount | MTM | Precious metal (except gold) | | Gold | | Others | | Notional amount | MTM | Notional amount | MTM |
| | | | | | | | | | | Notional amount | MTM | Notional amount | MTM | Notional amount | MTM | | | | |
| 1 | Plain vanilla derivatives | | | | | | | | | | | | | | | | | | |
| | 1.1 Futures | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 1.2 Forwards | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 1.3 Swaps | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 1.4 Options | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| 2 | Additional permitted market derivatives | | | | | | | | | | | | | | | | | | |
| | 2.1 Barrier derivatives | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 2.2 Average derivatives | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 2.3 Option derivatives | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 2.4 FX pro-rata and Time option derivatives | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 2.5 Forward-start derivatives | | | | | | | | | | | | | | | | | 0.00 | 0.00 |
| | 2.6 Others | | | | | | | | | | | | | | | | | 0.00 | 0.00 |

Prepared by

Tel.

Email

.....
 (.....)

I hereby certify that the above data is complete and correct in any respect
 Dated

NNN - Bank XXXX
 Reporting Form on Outstanding Amounts of Market Derivatives Classified by Contracts
 For reporting period ending 30 September 2015

Unit : Baht

| Ref No. | New Product | Transaction date | | | Name of product | Group of product | Counterparty | | Notional amount | | | Reference variables | | Payout | Derivative component | Type of delivery | Purpose | Effective notional amount | Mark-to-market | Gain or loss | Approval letter | Notes |
|-------------------|-------------|------------------|------------|----------|-----------------|------------------|-----------------------|-------------|-----------------|--------------|-----------------|-----------------------|---------|---|---|------------------|------------------|---------------------------|----------------|--------------|-----------------|-------|
| | | Trade date | Value date | Maturity | | | Type | Name | Outstanding | | Baht equivalent | Variables | Details | | | | | | | | | |
| | | | | | | | | | Currency | Amount | | | | | | | | | | | | |
| DL-6813 | Y | 07/09/15 | 09/09/15 | 09/09/16 | Seagull option | 3 | Other juristic person | Company ABC | USD | 1,000,000.00 | 32,000,000.00 | Foreign exchange rate | USD/THB | Please refer to an example in the instruction | 1. Sell USD Put/THB Call option @ K1 at USD 1.0 million (1 year) 2. Buy USD Put/THB Call option @ K2 at USD 1.0 million (1 year) 3. Sell USD Call/THB Put option @ K3 at USD 1.0 million (1 year) | Physical | Client's hedging | 96,000,000.00 | 41,928.00 | 17,145.00 | | |
| Total outstanding | | | | | | | | | | | 32,000,000.00 | | | | | | 96,000,000.00 | 41,928.00 | 17,145.00 | | | |

Prepared by

Tel.

Email

.....
 (.....)

I hereby certify that the above data is complete and correct in any respect
 Dated

Instructions for Reporting Form on Outstanding Amounts of Market Derivatives

1. Reporting on outstanding amounts of market derivatives classified by types of products

Commercial banks shall report the (1) Notional amount and (2) Mark-to-market values in column “Notional amount” and “MTM”, respectively, in the Reporting form of outstanding market derivatives classified by type of products. On this, the data shall be reported, in “Thai Baht” with two decimal digits, and classified by the following types of product:

Types of market derivatives products (row)

Group 1 Plain Vanilla derivatives:

- 1.1 Futures
- 1.2 Forwards
- 1.3 Swaps
- 1.4 Options

Group 2 Additional permitted market derivatives:

- 2.1 Barrier derivatives
- 2.2 Average derivatives
- 2.3 Option derivatives
- 2.4 FX pro-rata and flexible derivatives
- 2.5 Forward-start derivatives
- 2.6 Others

Reference variables (column)

- 1. Interest rates
- 2. Foreign exchange rates
- 3. Debt securities Prices

4. Equity securities Prices
5. Commodities prices, which are
 - 5.1 Precious metals (except gold), for instance silver, platinum and palladium etc.
 - 5.2 Gold
 - 5.3 Others
6. Financial indices

Commercial banks are not required to report the total amount in column “Total” as it is the formula cells which automatically aggregated the total value of each type of products.

On this, for loans that commercial banks offer with market derivatives in group 1 and group 2, commercial banks are required to report only the amount of market derivatives in the Reporting form of outstanding market derivatives classified by types of products as prescribed in 1, while the details of loan transactions are not required to report.

2. Reporting on outstanding amounts of market derivatives classified by contracts

Commercial banks shall report the outstanding amounts of market derivatives other than those of group 1 and group 2 in the Reporting Form on Outstanding Amounts of Market Derivatives classified by Contracts. On this, the reporting data shall be ordered by trade date, as follows:

2.1 Reference number: Report the reference number of transaction, for instance account number, confirmation number or contract number.

2.2 New product: Report “Y” when commercial banks engaged in such derivative transactions for the first time. On this, it is required to be reported only in the first reporting period. In case the contracts have traded and matured during the reporting period, commercial banks shall report “0” in column “Notional amount” and “Effective notional amount”, and report fair value at the maturity date of the transaction in column “Mark-to-market”.

2.3 Transaction date: Report the dates of transactions, in format of “DD/MM/YY (B.E.)”, in the following three sub-columns:

2.3.1 Trade date: Report the date on which the contract is signed.

2.3.2 Value date or effective date: Report the date on which the calculation of accrued obligation are begun.

2.3.3 Maturity: Report the date on which the contract is expired.

2.4 Name of product: Report the name of transaction that is generally known or the trade name of transaction.

2.5 Group of products: Report the group of market derivatives, as follows:

(1) Report “3” if such derivative transactions are combination of group 1 and/or group 2 market derivatives as prescribed in 5.3.3 of this Notification, including group 1 and/or group 2 market derivatives which reference variables are those of average of reference variables or average of financial indices.

(2) Report “4” if such derivative transactions are used for bank’s hedging, as prescribed in 5.3.5 of this Notification.

(3) Report “5” if such derivative transactions are required prior approval from the Bank of Thailand, as prescribed in 5.6 of this Notification.

(4) Report “6” if such derivative transactions are permitted in accordance with the transitory provisions of this Notification.

On this, for loans that commercial banks offer with market derivatives other than those of group 1 and 2, commercial banks are required to report the outstanding amounts of each contract, according to 2, by indicating details of loans and market derivatives in column “Derivatives components” in 2.10.

2.6 Counterparty: Report the counterparties that commercial banks have engaged in derivative transactions with, in the following two sub-columns:

2.6.1 Type: Report the type of counterparties, namely:

(1) Thai commercial banks including retail banks

(2) Foreign commercial bank’s branches (in Thailand)

(3) Other branches of commercial banks, for example, a foreign commercial bank’s branch in Thailand has engaged in a transaction with its head office or its oversea branches

(4) Foreign commercial banks, for example, engaging in a transaction with other foreign commercial banks which are not the same legal entity as the reporting commercial bank

(5) Specialised financial institutions (in Thailand)

(6) Securities companies

(7) Life insurance and non-life insurance companies

(8) Government sectors, government agencies, state enterprises and central banks

(9) Juristic persons other than (1) to (8)

(10) Others

2.6.2 Name: Report the name of counterparty.

2.7 Notional amount: Report the notional amount of the transaction with two decimal digits in the following two sub-columns:

2.7.1 Outstanding: Report the currency name in column “Outstanding currency” and report remaining notional amount in column “Outstanding amount”. For market derivatives which either the receiving legs or paying legs are in a foreign currency, then the foreign currency legs shall be reported in column “Outstanding currency” and “Outstanding amount”. For market derivatives which both receiving legs and paying legs are in foreign currency, then the receiving legs shall be reported in column “Outstanding currency” and “Outstanding amount”.

2.7.2 Baht equivalent: Report the notional amount of transactions which denominated in foreign currency. On this, the commercial shall be report a Baht-equivalent amount by using mid rate of foreign exchange rates, the average buying rates of transfer and average selling rate ($[\text{average buying rate} + \text{average buying rate}] / 2$), which published on the website of the Bank of Thailand, at the end of reporting period.

2.8 Reference variables: Report the reference variables of transaction in the following two sub-columns:

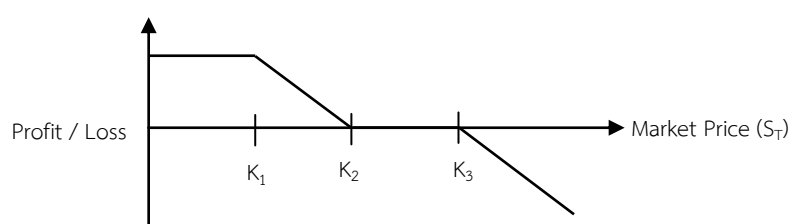
2.8.1 Variables: Report the type of permitted reference variables, including those which are not within the scope of permitted.

2.8.2 Details: Report the details of reference variables. For reference variables which are not in the scope of permitted, Commercial banks shall give details or calculation method of such variables.

2.9 Payout: Report the details (formulas) on the calculation of receiving or paying on such derivative transactions, in the view of commercial banks:

Example A commercial bank has engaged in seagull options to sell USD at 1 million USD. The transaction is constructed with 3 options. The notional amount of each option is 1 million USD, as follows:

(1) Sell put options @ K_1 (2) Buy put options @ K_2 and (3) Sell call options @ K_3



Report on payout of a transaction

| | |
|-------------------|---|
| $S_T < K_1$ | a commercial bank buys USD at 1 million USD @ K_1 according to transaction (1) and sell USD at 1 million USD @ K_2 according to transaction (2) |
| $K_1 < S_T < K_2$ | a commercial bank sells USD at 1 million USD @ K_2 according to transaction (2) |
| $K_2 < S_T < K_3$ | a commercial bank sells USD at 1 million USD @ S_T |
| $S_T > K_3$ | a commercial bank sells USD at 1 million USD @ K_3 according to transaction (3) |

2.10 Derivatives components: Report the details of embedded derivatives components of transactions, including the position of commercial banks when engaged in each individual embedded derivative for instance buyer, seller, receiver or payer. However, incase such derivative transactions cannot be decomposed, details of transaction shall be explained.

2.11 Type of delivery: Report the conditions of delivery and payment of the transactions either physical settlement or cash settlement.

2.12 Purpose: Report the purpose to engage in the transaction.

(1) Bank's funding: a transaction in which commercial banks use for acquiring funds or managing their liquidity risks.

(2) Bank's hedging: a transaction in which commercial banks use for hedging against their risk exposures.

(3) Bank's trading: a transaction in which commercial banks use for trading or speculation purpose.

(4) Counterparty's hedging: a transaction in which a counterparty uses for hedging against their risk exposures.

(5) Counterparty's trading: a transaction in which a counterparty uses for trading or speculation purpose.

(6) Others: (please specify details in column "Notes")

2.13 Effective notional amount: Report effective notional amount of market derivatives in "Thai Baht" with two decimal digits. On this, commercial banks, when calculating effective notional amount, shall refer to Notification of the Bank of Thailand on the Calculation of Counterparty Credit Risk-Weighted Assets for Derivative Transactions

2.14 Mark-to-market: Report mark-to-market values of all embedded derivatives components, at the reporting date, in "Thai Baht" with two decimal digits.

2.15 Gain or loss: Report profits or losses, which are the differences between mark to market values at the reporting date and mark to market values at the reporting date of previous month. The value shall be report in "Thai Baht" with two decimal digits. If the transaction incurred net losses, the values should be displayed with parentheses.

2.16 Approval letter: For market derivatives that require prior approval from the Bank of Thailand, commercial banks shall report the number of approval letter which received from the Financial Institution Applications Department, Bank of Thailand.

2.17 Notes: Report other details of the transaction (if any)

Other related-regulations on supervision of market derivatives

Commercial banks engaged in market derivatives shall comply with the following regulations:

1. Regulations on the capital requirement

1.1 Commercial banks shall maintain regulatory capital, corresponding with derivatives components, to cover risks from engaging in market derivatives as follows:

1.1.1 Counterparty credit risk

Commercial banks engaged in all types of market derivatives, of which are classified as either trading book or banking book position, shall comply with regulations as prescribed in the Notification of the Bank of Thailand on the Calculation of Counterparty Credit Risk-Weighted Assets for Derivative Transactions.

1.1.2 Market risk

Commercial banks engaged in all types of market derivatives, which are classified as trading book position, including market derivatives which reference variables are those of foreign exchange rates and commodity prices in the banking book position, shall comply with regulations as prescribed in the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk for Financial Institutions.

1.2 Commercial banks shall comply with additional regulations if they have engaged in market derivatives which reference variables are those of debt securities prices and equity securities prices of financial institutions and companies that undertake financial businesses or supporting businesses, as follows:

1.2.1 For locally-incorporated commercial banks

(1) For market derivatives which reference variables are those of debt securities prices or average of debt securities prices, of which are being held for regulatory capital of other commercial banks or finance companies, and market derivatives which reference variables are equity prices or average of equity prices (excluding equity securities index and average of equity securities

indices) of finance companies or credit foncier companies, where the commercial banks have long position or have a possibility of receiving such debt securities or equity securities in the future regardless of whether the delivery and settlement methods are physical settlement or cash settlement, commercial banks shall deduct such position from their total regulatory capital as specified in the Notification of the Bank of Thailand on Components of Capital for Locally-incorporated Banks.

(2) For market derivatives which reference variables are those of debt securities prices or average of debt securities prices, of which are being held for regulatory capital, or having equity securities prices or the average of equity securities prices as reference variables (excluding equity securities index and average of equity securities indices) of companies undertaking financial businesses (excluding debt securities which are counted as a regulatory capital of other commercial banks or finance companies) or undertaking supporting businesses, except companies of a financial business group, in full consolidation level, that are included when prepare a consolidated financial statement and companies undertaking supporting businesses that facilitate the banking system or companies that are acquired from debt restructuring, where the commercial banks have long position or have a possibility of receiving such debt securities or equity securities in the future regardless of whether the delivery and settlement methods are physical settlement or cash settlement, commercial banks shall deduct such position from their total regulatory capital and/or shall calculate risk weighted assets for such position in accordance with the Notification of the Bank of Thailand on Components of Capital for Locally-incorporated Banks.

1.2.2 For foreign commercial bank's branches

For market derivatives which reference variables are those of equity securities prices or the average of equity securities prices (excluding equity securities index and average of equity securities indices) of companies undertaking financial businesses and supporting businesses, of a financial business group, in full consolidation level, that are included when prepare a consolidated financial statement and companies undertaking supporting businesses that facilitate the banking system or companies that are acquired from debt restructuring, where the commercial banks have long position or have a possibility of receiving such debt securities or equity securities in the future regardless of whether the delivery and settlement methods are physical settlement or cash settlement, commercial banks shall deduct such position from their total regulatory capital and/or shall calculate risk weighted

assets for such position in accordance with the Notification of the Bank of Thailand on Components of Capital for Foreign Bank Branches.

On this, for the capital deduction and the calculation of risk-weighted assets for the position according to 1.2, commercial banks shall deduct the notional amounts of derivative transactions from their regulatory capital as of the trade date of derivative transactions. This is except for the case where commercial banks have been approved to calculate risk-weighted assets for market risk of options by using Delta-plus method, Contingent loss method or Internal model approach, commercial banks are allowed to use the delta equivalent amount for the deduction of capital or calculation of risk-weighted assets for such options.

2. Regulations on supervision of large exposures (single lending limit)

Commercial banks shall aggregate credit equivalent amounts from engaging in market derivatives, when calculate the ratio of single lending limit, of which commercial banks have granted credit, invested in, incur contingent liabilities or enter into transactions similar to credit granting to anyone or several persons jointly in any project, or for the same purpose, according to the Notification of the Bank of Thailand on Guidelines on Single Lending Limit, as follows:

2.1 Calculation of single lending limit for counterparty

Commercial banks shall aggregate credit equivalent amounts of counterparties engaged in market derivatives, which have been calculated according to Notification of the Bank of Thailand on Regulations on the Calculation of Counterparty Credit Risk-Weighted Assets for Derivative Transactions, as prescribed in 1.1.1, together with the calculation of the ratio of single lending limit as prescribed in the Notification of the Bank of Thailand on Guidelines on Single Lending Limit. In case where commercial banks engage in derivative transactions traded on an exchange (exchange traded derivatives), for instance Thailand Futures Exchange (TFEX), commercial banks are not required to include the exchange in the calculation of such limit.

2.2 Calculation of single lending limit for reference variables

Commercial banks shall calculate the single lending limit for reference variables when commercial banks have engaged in market derivatives which reference variables are debt securities prices, equity securities prices, average of debt securities price and/or average of equity securities price, debt securities index, equity securities

index and average of debt securities indices and/or average of equity securities indices, as follows:

2.2.1 Requirements

Commercial banks shall include debt securities issuers or equity securities issuers in the calculation of single lending limit in accordance with the Notification of the Bank of Thailand on Guidelines on Single Lending Limit, if commercial banks have long position or have a possibility of receiving such debt securities or equity securities in the future regardless of whether the delivery and settlement method are physical settlement or cash settlement. On this, Commercial banks shall use notional amounts of market derivatives when calculate such limit, **except the case where commercial banks have been approved to use Delta-plus method, Contingent loss method or Internal model approach for the calculation of risk-weighted assets for market risk of options**, the delta equivalent amount of options are allowed to use in the calculation of such limit.

In case of market derivatives which reference variables are debt securities index, equity securities index, average of debt securities index or average of equity securities index, commercial banks shall apply proportion of each debt securities or equity securities of such index when calculating the limit (look-through approach).

2.2.2 Exemption

(1) Commercial banks are not required to include certain debt securities issuers in the calculation of single lending limit, if such debt securities are under exemption according to the Financial Institution Business Act or the Notification of the Bank of Thailand on Guidelines on Single Lending Limit.

(2) Commercial banks are not required to include liquid equity indices in a given list, according to the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk for Financial Institutions, in the calculation of single lending limit.

2.2.3 Offsetting of opposite positions

(1) Commercial banks may offset long positions against short positions of market derivatives, which reference variables are debt securities prices, equity securities prices, average of debt securities prices and/or average of equity securities prices, debt securities price index, equity securities price index and average of debt securities prices indices and/or average equity securities prices indices, if those positions are the same type of market derivatives, have the same reference variables, are in the same

currency, have consistent delivery and settlement method and have the same maturity date. On this, commercial banks shall include the net long positions in the calculation of the single lending limit.

(2) Commercial banks are not allowed to offset the positions of debt securities or equity securities in the investment portfolios with short positions of market derivatives which reference variables are the same debt securities or equity securities in such investment portfolios.

3. Regulations and methods on investment of financial institutions

Commercial bank engaged in market derivatives which reference variables are equity securities prices, average of equity securities prices, equity securities index or average of equity securities indices, where the commercial banks have long position or have a possibility of receiving such equity securities in the future regardless of whether the delivery and settlement method are physical settlement or cash settlement, shall include such positions, together with other equities held or possessed, in the calculation of investment limit, according to the Notification of the Bank of Thailand on Investment Regulations for Financial Institutions, as follows:

3.1 Commercial banks shall use notional amounts of market derivatives when calculate investment limit, **except the case where commercial banks have been approved to use Delta-plus method, Contingent loss method or Internal model approach for the calculation of risk-weighted assets for market risk of options**, the delta equivalent amount of options are allowed to use in the calculation of such limit.

3.2 For equity securities index or average of equity securities indices, commercial banks shall apply a look-through approach and, therefore, adopt the proportion of equity securities of such index in the calculation of investment limit. This is except for liquid equity indices in a given list, according to the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk for Financial Institutions, commercial banks are not required to include the equity securities of such indices in the calculation of individual investment limit (5 percent of the total capital funds of such commercial bank for holding or possessing shares of each company or 10 percent of the total shares sold of such company). However, commercial banks are required to include the equity securities of such indices in the calculation of the aggregated investment limit (20 percent of the total capital funds of such commercial bank for holding or possessing shares of all companies).

4. Regulations on foreign currency positions

Commercial banks are required to maintain foreign exchange positions that could emerge from engaging in market derivatives which reference variables are foreign exchange rates, in accordance with the Notification of the Bank of Thailand on Foreign Exchange Positions for Commercial Banks excluding Retail Banks.

Furthermore, commercial banks shall also include the foreign exchange positions that could emerge from engaging in market derivatives, which are related with foreign currencies, other than those of which reference variables are foreign exchange rates. For instance, market derivatives which reference variables are in Thai Baht but their notional amount are in foreign currencies. Thus, commercial banks shall include the fair values of such derivative transactions in the calculation foreign exchange positions, according to the Notification of the Bank of Thailand on Foreign Exchange Positions for Commercial Banks excluding Retail Banks.

Additional regulations on supervision of market derivatives

Commercial banks engaging in certain types of market derivatives shall comply with additional regulations, as follows:

1. Additional permitted market derivatives

Commercial banks engaging in “Foreign exchange pro-rata (or multiple fixing) forwards” or “Foreign exchange flexible forwards” with significant amount of transactions shall reserve additional provisions to cover potential losses which could arise from the inaccuracy of valuation of fair values as well as the inaccuracy of measurement of interest rate risk when engage in such transactions. Furthermore, the Bank of Thailand does not permit commercial banks to engage in derivatives transactions that are constructed with “Foreign exchange pro-rata forwards” or “Forward exchange flexible towards”.

2. Additional regulations for options or other derivative transactions that commercial banks apply risk management process in the same manner as options

Commercial banks shall apply either contingent loss method or internal model approach, in accordance with the Notification of the Bank of Thailand on Supervision of Market Risk and Capital Requirements for Market Risk for Financial Institutions, when calculating risk-weighted assets for market risk for the following market derivatives:

2.1 Additional permitted derivatives which are barrier derivatives, average derivatives and option derivatives.

2.2 Options which are not plain vanilla derivatives.

2.3 Derivative transactions which have market derivatives as prescribed in 2.1 and 2.2 as a combination or derivatives transactions which will be further specified by the Bank of Thailand.