Nikkei-TOCOM Commodity Index Guidebook

June 2010

Tokyo Commodity Exchange, Inc. (TOCOM)

- Contents -

1 Introduction

1.1 Background

The Nikkei-TOCOM Commodity Index gives an overall indication of the price levels on the market of Tokyo Commodity Exchange, Inc. ("TOCOM"). The Nikkei-TOCOM Commodity Index was developed as a fair and reliable commodity index aimed to provide an overall picture of the price levels in the TOCOM market, so that it could serve as a benchmark to evaluate the performance of individual mutual funds and commodity funds, as well as a guideline for commercial traders when formulating comprehensive hedging strategies.

The Nikkei-TOCOM Commodity Index, designed to be practical, could also serve as a tool to hedge against inflation, because of the high correlation between commodity futures prices and price indexes (e.g: Consumer Price Index, etc…), and as such, it will contribute to enhance the functionality of commodity futures markets as a public utility.

The "Nikkei-TOCOM Commodity Index" which had originally been publicized as the "TOCOM Index" since July 24, 2006, changed its name to the current one as of the April 1, 2009 calculation, as a result of the agreement between TOCOM and Nikkei Inc. (Nikkei) to jointly manage the new "Nikkei-TOCOM Commodity Index". The new Nikkei-TOCOM Commodity Index retains continuity from the previous TOCOM Index.

TOCOM and Nikkei also started to publicize the Nikkei-TOCOM Sub Commodity Indexes since June 2, 2008, aimed to be the benchmarks for each component of the Nikkei-TOCOM Commodity Index – each commodity sector and each individual commodity which constitute the aggregate index. The Nikkei-TOCOM Sub Commodity Indexes are calculated following the same methodology applied to the Nikkei-TOCOM Commodity Index.

1.2 Index Management Special Committee

TOCOM and Nikkei, Inc. established an Index Management Special Committee (the "Committee") to administer the Nikkei-TOCOM Commodity Index, which includes making decisions on such matters as calculation methodology, component's weight, and publication of the Index, etc.

In case an unforeseen event should occur for which an action has not been stipulated in advance or a pre-arranged action is deemed inappropriate, the Committee may be convened to deliberate upon the course of action to be taken, and based on these results, TOCOM then determines the course of actions to be taken.

1.3 Nikkei-TOCOM Commodity Index Guidebook

With a view towards ensuring the credibility of the Nikkei-TOCOM Commodity Index, the calculation methods, components weight, and other parameters of the Nikkei-TOCOM Commodity Index are made public in the Nikkei-TOCOM Commodity Index Guidebook. The Nikkei-TOCOM Commodity Index is calculated in accordance with the methods described within this Guidebook.

If any event not described within this Guidebook should occur, or if TOCOM and Nikkei deem it impossible to employ the methods described therein, TOCOM and Nikkei may utilize an alternative method which it deems appropriate in order to calculate the Nikkei-TOCOM Commodity Index.

1.4 Publication of the Nikkei-TOCOM Commodity Index

The Nikkei-TOCOM Commodity Index has previously been calculated and published once a day, using the settlement price of each component, until May 1, 2009.

On and after May 7, 2009, the Index has been calculated and published on a real time basis (every fifteen seconds), based on the latest contract price of each component at the time of index calculation (if there is no applicable contract execution in the relevant clearing period, then based on the daily settlement price of the previous clearing period). In addition, when the daily settlement price is determined after the close of a Day Session, the Index shall be calculated based on the daily settlement price and published. With respect to the Nikkei-TOCOM Sub-Commodity Indexes, they shall be calculated and disseminated once a day, based on the daily settlement price of each component.

1.5 Copyrights, etc.

This Guidebook has been produced and is managed by TOCOM and Nikkei. TOCOM

and Nikkei reserve the right to change the Guidebook in whole or in part. Any such changes may be made without prior notice at the discretion of TOCOM and Nikkei. The copyright of this Guidebook is owned entirely by TOCOM and Nikkei, and no part of this Guidebook may be reproduced or duplicated without the consent of TOCOM and Nikkei.

1.6 Limited Liability

TOCOM and Nikkei made every effort possible to ensure the accuracy of the content of this Guidebook; however, TOCOM and Nikkei make no statement and warranty, neither explicit nor implied, as to the integrity or accuracy of the information stated within this Guidebook. TOCOM and Nikkei assume no responsibility for any harm or loss suffered by the user of the Guidebook that may arise through the use of any content or other information described within this Guidebook.

1.7 Licensing

The Nikkei-TOCOM Commodity Index and its sub-indexes are intellectual properties belonging to TOCOM and Nikkei. All of the rights relating to these indexes, such as the right to calculate, publicize, and otherwise utilize these indexes are reserved by TOCOM and Nikkei. A licensing agreement with TOCOM and Nikkei is necessary if a company should intend to utilize the Nikkei-TOCOM Commodity Index and its sub-indexes to create and/or market financial instruments including, but not limited to, funds and index-based funds (including derivatives such as options, swaps, and warrants on the TOCOM market). Such an agreement is also required to use the Nikkei-TOCOM Commodity Index and its sub-indexes for disseminating, providing, etc. to a third party for commercial purposes. No licensing agreement with TOCOM and Nikkei is necessary for any private use of the Nikkei-TOCOM Commodity Index and its sub-indexes as an indicator, etc. of trends within the TOCOM market.

2 Index Specifications

2.1 Name

Nikkei-TOCOM Commodity Index ("Nikkei-TOCOM Commodity Index" or "the Index")

2.2 Components

All commodities listed on TOCOM, excluding Options Transactions

2.3 Designated Contract Month

Contract month with high liquidity ("Active Contract Month"; the 5th or 6th contract month) serves as the Designated Contract Month*.

* The Designated Contract Month means, among all the contract months of each index component, the contract month(s) selected as the benchmark contract month(s) from which price data for the Index component will be obtained.

2.4 Rolling of the Designated Contract Month

Rolling generally means replacing the near-expiry futures contract with more distant futures contract, which allows an investor to keep a futures position further ahead of the futures contract's expiry date (contract month).

In Nikkei-TOCOM Commodity Index, the "Rolling" or the "Roll" means replacing the Designated Contract Month from the 5th contract month (former 6th contract month) to newly-generated 6th contract month to ensure the Index constantly tracks the price level of the Active Contract Month.

Rolls are implemented over the course of five business days, between the 5th and 9th business days of each month (hereinafter referred to as the "Roll Period"), the 5th contract month (former 6th contract month) being replaced by the new 6th contract month (i.e. increasing the weight of the 6th contract month from 0% to 20%, 40%, 60%, 80% and finally 100%).

For commodities on the precious metals market, rolling is carried out on odd months only.

2.5 Calculation Methods

Index value = the total sum of (weight ratio of each component × price return) for each component

$= W\ (gold) \times P(gold)/P_0(gold) + W(silver) \times P(silver)/P_0(silver) + \ldots + W(rubber) \times P(rubber)/P_0(rubber)$

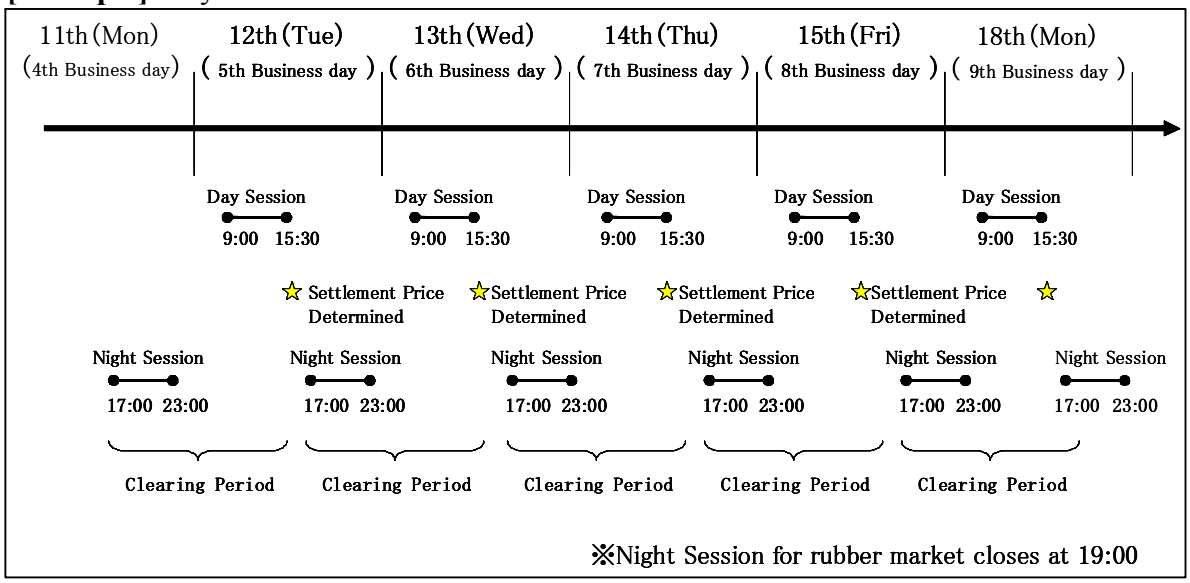
W: Weight ratio

P: Execution price or settlement price at time of index calculation

When calculating the Index during a session, the latest execution price, etc. at the time of the calculation is used (if there is no applicable execution in the relevant clearing period, then the settlement price of the previous clearing period is used; hereinafter referred to as the "execution price, etc."). When calculating the Index when the settlement price is determined after the close of a Day Session, the settlement price is used.

In the TOCOM markets, a Day Session starts at 9:00 am and ends at 3:30 pm, and a Night Session starts at 5:00 pm and ends at 11:00 pm (or ends at 7:00 pm for the Rubber Division). One clearing period consists of the Night Session of the previous day and the Day Session of the current day.

[Example] May 2009



P_0: Base price

Initially, the settlement price on May 31, 2002 shall serve as the base price.

After the subsequent rolling of the Designated Contract Months, the settlement price of the new Designated Contract Month shall serve as the base price.

Following rebalancing of the components weight, the settlement price after the rebalancing shall serve as the base price.

2.6 Components Weight Ratio

The weight ratio is determined on the basis of the scale of the cash and futures markets for each component over the previous year (one year period from January to December).

2.7 Rebalancing Components Weight

In principle, the components weight shall be rebalanced once a year. A new weight ratio is published in late March every year, and is applied starting on the first business day of June.

The period between the first day when the new weight ratio is announced (late March) and the first day the new weight ratio is applied (the first business day of June) is hereinafter referred to as the “Advance Notice Period”.

2.8 Base Date

May 31, 2002.
The index based upon the settlement prices of this date shall be 100.00.

3 Components

3.1 Components

All commodities listed on the TOCOM market, excluding Option Transactions

3.2 Methods and Timing for Rebalancing Components

3.2.1 When a new commodity is listed

When a new commodity is listed, it will be included as a component of the Nikkei-TOCOM Commodity Index from the day when its rebalanced weight ratio, following the first rebalancing after its listing, is applied (the first business day of June), provided that it is assured in advance by the first day of the Advance Notice Period that all contract months of the newly-listed commodity exist on the day when the rebalanced weight ratio is applied.

3.2.2 When liquidity lowers

When, as a result of low liquidity, a listed commodity is suspended, the commodity remains a component of the Nikkei-TOCOM Commodity Index until the last business day of the month, which comes after one full month has elapsed following the decision (or the Regulator's approval) to suspend the contract, after which it will be excluded from the components. Accordingly, the remaining components' weight ratio will be rebalanced (Extraordinary Rebalancing).

[Example] Following the decision to suspend the listing of gas oil on September 15, 2005, gas oil remained as a component of the Nikkei-TOCOM Commodity Index (ex-TOCOM Index) until October 31, 2005, and was excluded from the components as of November 1, 2005.

3.2.3 Delisting

The procedures described in 3.2.2 above apply.

3.2.4 Treatment of a "Mini" Contract

A mini contract is a smaller version of the standard futures contract with respect to the listed commodities ("standard contract"). The underlying commodity and settlement prices for mini contracts are the same as for the standard contracts; therefore, standard contracts and mini contracts shall be deemed as one component of the index. Any new

components shall not be created specifically for mini contracts.
When calculating weight ratios of components for mini contracts, the scale of each futures market shall be calculated by adding the end-of-month open interests of mini contracts (in value terms) to the end-of-month open interests of standard contracts (in value terms). In this manner, the scale of the mini contracts market shall be reflected in the Nikkei-TOCOM Commodity Index (see Article 5. “Components Weight Ratio”).

A new mini contract shall be included in the Nikkei-TOCOM Commodity Index starting from the day on which its new weight ratio is applied, following the first rebalancing upon its listing, pursuant to the method of including a newly-listed commodity into the Index as prescribed in the above Article 3.2.1.

[Example] Platinum mini futures contract has been listed since November 2008; therefore, it was included in the Nikkei-TOCOM Commodity Index on the first business day of June 2009.

4 Designated Contract Months

4.1 Designated Contract Months

The Active Contract Month serves as the Designated Contract Month (the contract month whose prices are used to calculate the Nikkei-TOCOM Commodity Index). At the TOCOM market, the Active Contract Month is the 5th or 6th contract month.

4.2 Rolling of the Designated Contract Months

In order to ensure that the Designated Contract Months are rolled only after a certain number of days have elapsed following the generation of the new contract month, thus making it the Active Contract Month, and to reduce the impact on market prices caused by the rolling, the Designated Contract Months are rolled from the 5th contract month to the 6th contract month 20% at a time over the course of five business days (between the 5th and 9th business day of the month). Rolling is carried out for commodities on the precious metals and aluminum* markets on odd-numbered months only. During the Roll Period, a daily settlement price for each Designated Contract Month will be used to calculate the Index.

*For the Aluminum market, there used to be six consecutive contract months through April of 2004, after which the contract months were modified to even-numbered months only.

4.3 Special Rules on Rolling of the Designated Contract Month

In the event that due to the suspension of listing, etc., a new contract month is not being generated, the rolling of the Designated Contract Months for the component in question is not carried out.

5 Components Weight Ratio

5.1 Basic Concept

To take into consideration the economic importance in Japan and the market size of each component on the TOCOM market, the weight ratios are determined on the basis of the scale of the cash and futures markets for each component.

5.2 Formula

Weight ratio of each component = α × scale of the cash market + (1- α) × scale of the futures markets

(where α=0.5)

5.2.1 How W1 (scale of the cash market) is calculated

The scale of each component's cash market is calculated by dividing imports (to Japan) of said component (in value terms) in the previous year by imports (to Japan) of all the components (in value terms) in the previous year (January to December).

For refined oil products such as gasoline and kerosene, monthly domestic sales multiplied by the end-of-month price of each component is used in place of imports (in value terms).

For crude oil, the monthly domestic production volume of refined oil products such as gasoline and kerosene at refineries is subtracted from the monthly imports of crude oil, and the resulting number is then multiplied by the end-of-month crude oil price.

The settlement price as of the last business day of the first contract month of each component will serve as the end-of-month price mentioned above; with the exception that the settlement price of the second contract month will be used for crude oil (until the end of July 2003, the settlement price of the first contract month had been used).

Before the listing of a new commodity (in the TOCOM Oil Market), and during the period when there is no first contract month following the new listing, the value of monthly imports divided by the quantity of monthly imports, as published by Principal Commodity, Export and Import Statistics-Ministry of Finance, will be used (This value is used between January and October 2001 for crude oil, and between January and

October 2003 for gas oil).

With respect to the components to which mini contracts were introduced, the scale of each cash market shall be calculated pursuant to the method for the components with standard contracts only as prescribed above, since the underlying cash commodity for mini contracts are equivalent to that of standard contracts.

$$W1_y^i = Q_y^i \Big/ \sum_i^{AllComponents} Q_y^i$$

Q_y^i: Annual imports (in value terms)

Provided that:

Refined Oil products: $Q_y^i = \sum_{m=1}^{12} (q_m^i \times p'_m)$

Crude oil: $Q_y^i = \sum_{m=1}^{12} \{(q_m^i - r_m^j - r_m^k - r_m^l) \times \mathrm{p}'_m\}$ (i: crude oil; j, k, l: oil products)

q: Monthly domestic sales (monthly imports for crude oil)
r: Monthly domestic production volume of refined oil products
p: End-of-month price

5.2.2 How W2 (scale of the futures market) is calculated

The scale of the futures market is calculated by dividing the annual average of end-of-month open interests (in value terms) during the previous year (January to December) by the sum of the annual average of end-of-month open interests for all components during the previous year (January to December).

With respect to the components to which mini contracts were introduced, the scale of each futures market shall be calculated by adding the end-of-month open interests of mini contracts (in value terms) to the end-of-month open interests of standard contracts (in value terms).

$$W2_y^i = V_y^i \Big/ \sum_i^{AllComponents} V_y^i$$

$$V_y^i = \left(\sum_{m=1}^{Number\ of\ months\ s} v_m^i \right) \Big/ Number\ of\ months$$

(Number of Months = The number of calendar months in which the component is traded.)

$$v_m^i = \sum_{k}^{All\ contract\ months} [End\text{-}of\text{-}month\ Open\ interests \times End\text{-}of\text{-}month\ settlement\ price \times Multiplier_k]$$

For components to which mini contracts were introduced, the following formula shall apply:

$$V_y^i = \left(\sum_{m=1}^{Number\ of\ months\ s} vs_m^i \right) \Big/ Number\ of\ months_s + \left(\sum_{m=1}^{Number\ of\ months\ m} vm_m^i \right) \Big/ Number\ of\ months_m$$

$$vs_m^i = \sum_{k}^{All\ contract\ months} [End\text{-}of\text{-}month\ open\ interest\ of\ standard\ contracts_k \times End\text{-}of\text{-}month\ Settlement\ price\ of\ standard\ contracts_k \times Standard\ contract\ multiplier_k]$$

$$vm_m^i = \sum_{k}^{All\ contract\ months} [End\text{-}of\text{-}month\ open\ interest\ of\ mini\ contracts_k \times End\text{-}of\text{-}month\ settlement\ price\ of\ mini\ contracts_k \times Mini\ contract\ multiplier_k]$$

5.3 Rebalancing of Components Weight

5.3.1 Periodic rebalancing

The weight is rebalanced annually. After each rebalancing, the new weight is applied for the twelve months between the first business day of June and the last business day of May of the following year, following the “Advance Notice Period” between late March and the end of May.

Note that the “fiscal year” stated herein refers to the period beginning from the first business day of June to the last business day of May of the following year.

5.3.2 Extraordinary rebalancing

The components weight is subject to an extraordinary rebalancing when a certain listed

commodity is excluded from the components of the Nikkei-TOCOM Commodity Index. For the purpose of calculating the weight, the statistics (imports, etc.) currently in use are employed to calculate a new weight after excluding the component in question. The new weight will remain in effect until the next periodic rebalancing.

The scale of the futures market:
The scale of the futures market of each component shall be calculated, after setting the open interest (in value terms) of components to be excluded at "zero".

The scale of the cash market:
The scale of the cash market of each component shall be calculated, after setting the imports to Japan (in value terms) of components to be excluded at "zero". For refined oil products such as gasoline and kerosene, however, the value calculated by multiplying the monthly domestic sales of oil products to be excluded with their end-of-month prices shall be set at "zero," instead of their imports to Japan (in value terms). For crude oil, the value calculated by subtracting the monthly production volume (at refineries) of refined oil products including components to be excluded, from the monthly imports of crude oil, and then multiplying with its end-of-month price shall be used.

[Example] Following the decision to suspend the listing of gas oil on September 15, 2005, a new weight was adopted between November 1, 2005 and May 31, 2006.

6 Calculation Methods

6.1 Formulas

$Index_t^y$ = *The total sum of the (Weight ratio of each component* × *price return)*

for each component = $C_{y-1} \times c_y \times 100$

C_{y-1}: Index return from the base date up to the date of most recent rebalancing of the weight (fiscal year y-1) $= \prod_{i=2002}^{y-1} c_i$

c_y: Annual index return within the fiscal year y = $\sum_{i}^{AllComponents} \left(W_y^i \times R_n^i \times p_t^i / P_n^i \right)$

W_y^i: Weight ratio of component i in the fiscal year y

$= \alpha \times W1_y^i + (1-\alpha) \times W2_y^i$

$W1_y^i$: Weight ratio according to the scale of the cash market

$W2_y^i$: Weight ratio according to the scale of the futures market

R_n^i: Price return of component i for the period from the date of last rebalancing to the date when the nth roll is completed (Price Return B) ($R_0^i = 1$)

p_t^i / P_n^i : Price return of component i for the period from the date when the nth roll is completed to the tth day (Price Return A)

p_t^i: Settlement price of component i on the tth day

P_n^i: Base price of component i upon completion of the nth Roll

α : Weight ratio for the cash market derived from the scales of cash and futures markets (α =0.5)

6.2 Calculation Steps

The Nikkei-TOCOM Commodity Index is calculated using the following steps. See 6.3 and after for details on each step.

i. Calculate the Price Return C of each component over applicable period
ii. Calculate the index return of each component in a single fiscal year
iii. Calculate the index return in a single fiscal year
iv. Calculate the index return from the base date
v. Calculate the Nikkei-TOCOM Commodity Index

6.3 Calculating Price Return C for Each Component over Applicable Period

6.3.1 Calculation during ordinary periods (The period other than the Roll Period)

If we assume that after the nth roll the price on the tth day of a component i is p_t^i, and the base price at this time is P_n^i, the price return after the nth roll up to the next (n+1)th roll (Price Return A) is p_t^i / P_n^i.

For p_t^i, the latest execution price, etc. shall be used at the time of index calculation during a session, and the settlement price shall be used at the time of determining the settlement price after the close of a Day Session.

If we then assume the price return over the period between rebalancing of weight and completion of the nth roll (Price Return B) to be R_n^i, the price return over the period between rebalancing of weight and the tth day (Price Return C) would be: $R_n^i \times p_t^i / P_n^i$

[Example] Calculating the Price Return C of gasoline as of April 1, 2009

If we assume that:
The price return until completion of the most recent roll (Price Return B) (March 12: 10th Roll completed): $R_{10}^{Gasoline} = 0.3963777$

The settlement price for the Designated Contract Month (September 2009) on April 1:

$p_{4/1}^{Gasoline}$ = ¥43,130,

And the base price (settlement price of the Designated Contract Month as of March 12):

$P_{4/1}^{Gasoline}$ = ¥37,300,

Then the Price Return C of gasoline as of April 1, 2009 would be:

$R_{10}^{Gasoline} \times p_{4/1}^{Gasoline} / P_{10}^{Gasoline} = 0.3963777 \times 43,1300/37,300 = 0.4583316.$

6.3.2 Calculation during the Roll Period

Designated Contract Month is rolled from the 5th to the 6th contract month by 20% each over the course of five business days (between the 5th and 9th business days of the month). Accordingly, the price return of each component during the Roll Period (Price Return R) is the sum of partial price returns of the Designated Contract Month's already-rolled part and yet-to-be rolled part.

If we assume the first day of the Roll Period to be Day 1, the execution price, etc. for the 5th contract month of a component i on the dth day of the Roll Period to be p_d^i, the settlement price for the 5th contract month of a component i on the dth day of the Roll Period to be p_{sd}^i, the contract price for the 6th contract month of a component i on the dth day of the Roll Period to be $p_d'^i$, and the settlement price for the 6th contract month to be $p_{sd}'^i$ the Price Return R during the (n+1)th roll would be:

(1) Day 1 (5th Business day)

1) During a trading session:

p_1^i / P_n^i (Same as the ordinary period)

2) At the time a daily settlement price is determined:

$$0.2 \times p_{s1}^i / P_n^i \times p_{s1}'^i / p_{s1}'^i + 0.8 \times p_{s1}^i / P_n^i = p_{s1}^i / P_n^i$$

(2) Day 2 (6th Business day)

1) During a trading session:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{2}^{\prime i} / p_{s1}^{\prime i} + 0.8 \times p_{2}^{i} / P_{n}^{i}$$

2) At the time a daily settlement price is determined:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s2}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{s2}^{\prime i} / p_{s2}^{\prime i} + 0.6 \times p_{s2}^{i} / P_{n}^{i}$$
$$= 0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s2}^{\prime i} / p_{s1}^{\prime i} + 0.8 \times p_{s2}^{i} / P_{n}^{i}$$

(3) Day 3 (7th Business day)

1) During a trading session:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s2}^{\prime i} + 0.6 \times p_{3}^{i} / P_{n}^{i}$$

2) At the time a daily settlement price is determined:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s3}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{s3}^{\prime i} / p_{s2}^{\prime i} + 0.2 \times p_{3}^{i} / P_{n}^{i} \times p_{s3}^{\prime i} / p_{s3}^{\prime i}$$
$$+ 0.4 \times p_{s3}^{i} / P_{n}^{i}$$
$$= 0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s3}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{s3}^{\prime i} / p_{s2}^{\prime i} + 0.6 \times p_{s3}^{i} / P_{n}^{i}$$

(4) Day 4 (8th Business day)

1) During a trading session:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{4}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{4}^{\prime i} / p_{s2}^{\prime i} + 0.2 \times p_{s3}^{i} / P_{n}^{i} \times p_{4}^{\prime i} / p_{s3}^{\prime i}$$
$$+ 0.4 \times p_{4}^{i} / P_{n}^{i}$$

2) At the time a daily settlement price is determined:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s2}^{\prime i} + 0.2 \times p_{s3}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s3}^{\prime i}$$
$$+ 0.2 \times p_{s4}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s4}^{\prime i} + 0.2 \times p_{s4}^{i} / P_{n}^{i}$$
$$= 0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s2}^{\prime i} + 0.2 \times p_{s3}^{i} / P_{n}^{i} \times p_{s4}^{\prime i} / p_{s3}^{\prime i}$$
$$+ 0.4 \times p_{s4}^{i} / P_{n}^{i}$$

(5) Day 5 (9th Business day)

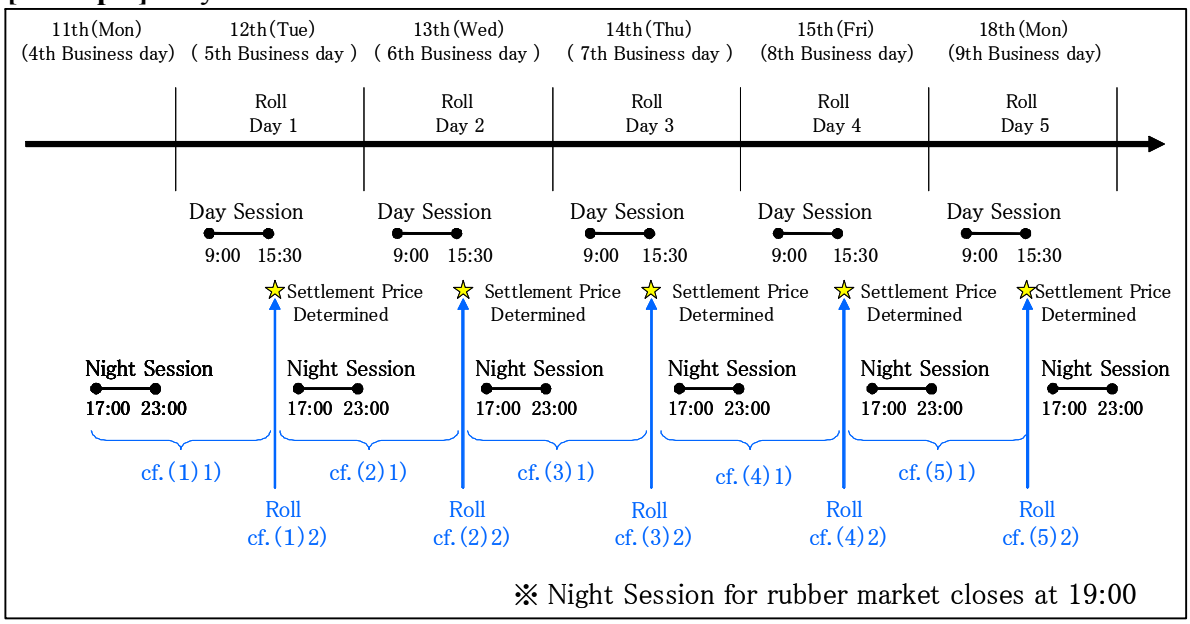
1) During a trading session:

$$0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{5}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{5}^{\prime i} / p_{s2}^{\prime i} + 0.2 \times p_{s3}^{i} / P_{n}^{i} \times p_{5}^{\prime i} / p_{s3}^{\prime i}$$
$$+ 0.2 \times p_{s4}^{i} / P_{n}^{i} \times p_{5}^{\prime i} / p_{s4}^{\prime i} + 0.2 \times p_{5}^{i} / P_{n}^{i}$$

2) At the time a daily settlement price is determined:

$$0.2\times p^{i}_{s1}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s1}+0.2\times p^{i}_{s2}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s2}+0.2\times p^{i}_{s3}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s3}$$
$$+0.2\times p^{i}_{s4}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s4}+0.2\times p^{i}_{s5}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s5}$$
$$=0.2\times p^{i}_{s1}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s1}+0.2\times p^{i}_{s2}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s2}+0.2\times p^{i}_{s3}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s3}$$
$$+0.2\times p^{i}_{s4}/P^{i}_{n}\times p'^{i}_{s5}/p'^{i}_{s4}+0.2\times p^{i}_{s5}/P^{i}_{n}$$

[Example] May 2009



If we then assume the price return over the period between rebalancing of weight and completion of the nth roll of contract months (Price Return B) to be R^{i}_{n}, the price return over the period from rebalancing of weight to the tth day (Price Return C) would be:

(1) Day 1 (5th Business day)

1) During a trading session:

$R^{i}_{n}\times p^{i}_{l}/P^{i}_{n}$ (Same as the ordinary period)

2) At the time a daily settlement price is determined:

$R^{i}_{n}\times p^{i}_{sl}/P^{i}_{n}$

(2) Day 2 (6th Business day)

1) During a trading session:

$$R_n^i \times \left(0.2 \times p_{sl}^i / P_n^i \times p_2^{'i} / p_{sl}^{'i} \times 0.8 \times p_2^i / P_n^i\right)$$

2)At the time a daily settlement price is determined:

$$R_n^i \times \left(0.2 \times p_{sl}^i / P_n^i \times p_{s2}^{'i} / p_{sl}^{'i} \times 0.8 \times p_{s2}^i / P_n^i\right)$$

(3) Day 3 (7th Business day)

1) During a trading session:

$$R_n^i \times \left(0.2 \times p_{sl}^i / P_n^i \times p_3^{'i} / p_{sl}^{'i} + 0.2 \times p_{s2}^i / P_n^i \times p_3^{'i} / p_{s2}^{'i} + 0.6 \times p_3^i / P_n^i\right)$$

2)At the time a daily settlement price is determined:

$$R_n^i \times \left(0.2 \times p_{sl}^i / P_n^i \times p_{s3}^{'i} / p_{sl}^{'i} + 0.2 \times p_{s2}^i / P_n^i \times p_{s3}^{'i} / p_{s2}^{'i} + 0.6 \times p_{s3}^i / P_n^i\right)$$

(4) Day 4 (8th Business day)

1) During a trading session:

$$R_n^i \times (0.2 \times p_{s1}^i / P_n^i \times p_4'^i / p_{s1}'^i + 0.2 \times p_{s2}^i / P_n^i \times p_4'^i / p_{s2}'^i + 0.2 \times p_{s3}^i / P_n^i \times p_4'^i / p_{s3}'^i + 0.4 \times p_4^i / P_n^i)$$

2) At the time a daily settlement price is determined:

$$R_n^i \times (0.2 \times p_{s1}^i / P_n^i \times p_{s4}'^i / p_{s1}'^i + 0.2 \times p_{s2}^i / P_n^i \times p_{s4}'^i / p_{s2}'^i + 0.2 \times p_{s3}^i / P_n^i \times p_{s4}'^i / p_{s3}'^i + 0.4 \times p_{s4}^i / P_n^i)$$

(5) Day 5 (9th Business day)

1) During a trading session:

$$R_n^i \times (0.2 \times p_{s1}^i / P_n^i \times p_5'^i / p_{s1}'^i + 0.2 \times p_{s2}^i / P_n^i \times p_5'^i / p_{s2}'^i + 0.2 \times p_{s3}^i / P_n^i \times p_5'^i / p_{s3}'^i + 0.2 \times p_{s4}^i / P_n^i \times p_5'^i / p_{s4}'^i + 0.2 \times p_5^i / P_n^i)$$

2) At the time a daily settlement price is determined:

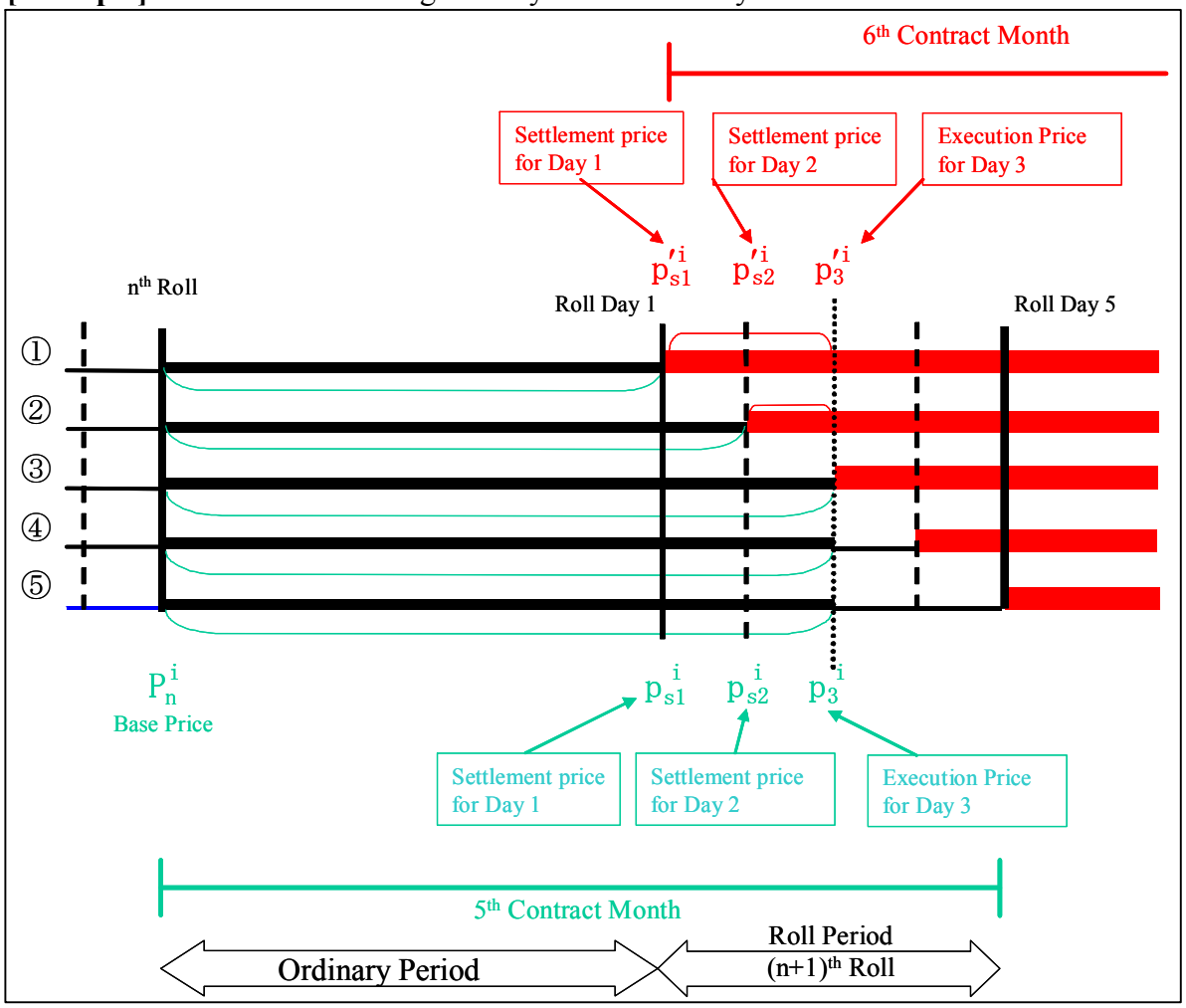
$$R_n^i \times (0.2 \times p_{s1}^i / P_n^i \times p_{s5}'^i / p_{s1}'^i + 0.2 \times p_{s2}^i / P_n^i \times p_{s5}'^i / p_{s2}'^i + 0.2 \times p_{s3}^i / P_n^i \times p_{s5}'^i / p_{s3}'^i + 0.2 \times p_{s4}^i / P_n^i \times p_{s5}'^i / p_{s4}'^i + 0.2 \times p_{s5}^i / P_n^i)$$

The $(n+1)^{th}$ roll is completed on Day 5 when the component i has been completely rolled from the 5^{th} contract month to the 6^{th} contract month.

With regard to the calculation of the Price Return C on the following business day (Day 6) and thereafter, both during the Day Session and at the time of fixing the settlement price, the Price Return C up to Day 5 will serve as the new Price Return B and the settlement price on Day 5 will serve as the new Base Price. Accordingly, the Price Return B on Day 6 and thereafter would be:

$$R^i_{n+1} \times p^i_t / P^i_{n+1}$$

[Example] Price Return C during the Day Session on Day 3 of the Roll Period



① Partial price return on Day 3 of the part (20%) of the Designated Contract Month which was rolled on Day1 of the Roll Period: $0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s1}^{\prime i}$

(product of the price return (of 5th contract month) up to the Roll p_{s1}^{i} / P_{n}^{i} and the price return (of 6th contract month) following the Roll $p_{3}^{\prime i} / p_{s1}^{\prime i}$)

② Partial Price return on Day 3 of the part (20%) of the Designated Contract Month which was rolled on Day 2 of the Roll Period: $0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s2}^{\prime i}$

(product of the price return (of 5th contract month) up to the roll p_{s2}^{i} / P_{n}^{i} and the price return (of 6th contract month) following the Roll $p_{3}^{\prime i} / p_{s2}^{\prime i}$)

③④⑤ Partial Price return on Day 3 of the parts (20%+20%+20%) of the Designated Contract Month which were yet to be rolled: $0.6 \times p_{3}^{i} / P_{n}^{i}$

Using partial price returns ① – ⑤ above, and the price return up to completion of the most recent roll of contract months (Price Return B), the Price Return C on Day 3 of the Roll Period will be:

$$R_{n}^{i} \times (0.2 \times p_{s1}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s1}^{\prime i} + 0.2 \times p_{s2}^{i} / P_{n}^{i} \times p_{3}^{\prime i} / p_{s2}^{\prime i} + 0.6 \times p_{3}^{i} / P_{n}^{i})$$

[Example] Calculating the Price Return C of gasoline during Day Session as of April 9, 2009 (Day 3 of the Roll Period)

Price return upon completion of the most recent roll (March 12: 10th roll completed)(Price Return B): $R_{10}^{Gasoline} = 0.3963777$

Base price (settlement price for the Designated Contract Month as of March 12):

$P_{10}^{Gasoline} = ¥37,300$

If we assume the settlement prices for the 5th contract month (September 2009) and the 6th contract month (October 2009) on Day 1 and Day 2 of the Roll Period are as

follows:

Day 1 (April 7): ¥45,620 for the 5th contract month,
¥45,270 for the 6th contract month
Day 2 (April 8): ¥43,950 for the 5th contract month,
¥43,680 for the 6th contract month

If we then assume the settlement price for the 5th contract month (September 2009) and the 6th contract month (October 2009) during the Day Session on Day 3 of the Roll Period are as follows:

Day 3 (April 9): ¥45,550 for the 5th contract month,
¥45,250 for the 6th contract month

Then the Price Return C of gasoline prices during the Day Session on April 9, 2009 will be:

$$0.3963777 \times (0.2 \times 45{,}620/37{,}300 \times 45{,}250/45{,}270 + 0.2 \times 43{,}950/37{,}300 \times 45{,}250/43{,}680 + 0.6 \times 45{,}550/37{,}300) = 0.4841111$$

6.4 Calculating Index Return for Each Component in a Single Fiscal Year

The index return of each component between rebalancing of weight and index calculation ("single fiscal year") is calculated by multiplying the price return of each component by the weight ratio of each component, both during the Day Session and at the time of fixing the settlement price.

Note that the "fiscal year" stated herein refers to the period beginning from the first business day of June to the last business day of May of the following year.

[Example] Calculating the index return of gasoline in a single fiscal year during the Day Session on April 1, 2009

$$W_{2008}^{Gasoline} \times R_{10}^{Gasoline} \times p_{4/1}^{Gasoline} / P_{10}^{Gasoline} = 0.1894 \times 0.3963777 \times 43{,}130/37{,}300 = 0.0868080$$

6.5 Calculating Index Return in a Single Fiscal Year

The index return in a single fiscal year is calculated by adding up the index returns of all components in a single fiscal year, both during the Day Session and at the time of fixing the settlement price.

[Example] Calculating the index return in a single fiscal year during the Day Session on April 1 , 2009

$$\sum_{i}^{AllComponents}\left(W_{2008}^{i}\times R_{n}^{i}\times p_{4/1}^{i}/P_{n}^{i}\right)$$

$$= W_{2008}^{Gold}\times R_{5}^{Gold}\times p_{4/1}^{Gold}/P_{5}^{Gold}+\cdots+W_{2008}^{Rubber}\times R_{10}^{Rubber}\times p_{4/1}^{Rubber}/P_{10}^{Rubber}$$

$$= 0.2287304+0.0085576+0.0575428+0.0030551+0.0156939+0.0868080$$
$$+0.0358571+0.0998168+0.0150039$$

$$= 0.5510656$$

6.6 Calculating Index Return from the Base Date

The index return between the base date (May 31, 2002) and the day of index calculation is calculated by multiplying the index return up to the previous year by the index return in a single fiscal year, both during the Day Session and at the time of fixing the settlement price.

[Example] Calculating the index return from the base date during the Day Session on April 1, 2009

$$C_{2007}\times\sum_{i}^{AllComponents}\left(W_{2008}^{i}\times R_{n}^{i}\times p_{4/1}^{i}/P_{n}^{i}\right) = 3.7951052\times 0.5510656$$

$$= 2.0913519$$

6.7 Calculating the Nikkei-TOCOM Commodity Index

The Nikkei-TOCOM Commodity Index is calculated by multiplying the index return between the base date and the day of index calculation by 100, both during the Day Session and at the time of fixing the settlement price.

[Example] Calculating the Nikkei-TOCOM Commodity Index during the Day Session on April 1, 2009

$$Index_{4/1}^{2009} = C_{2007} \times \sum_{i}^{AllComponents} \left(W_{2008}^{i} \times R_{n}^{i} \times p_{4/1}^{i} / P_{n}^{i} \right) \times 100$$
$$= 2.0913519 \times 100$$
$$= 209.13$$

6.8 Calculating the Nikkei-TOCOM Commodity Index after Rebalancing of Weight Ratio

6.8.1 Following periodic rebalancing

Following rebalancing of weight, a new weight will be applied, the index return up until the last business day of May will be C_y, and the base price will be updated to the settlement price on the last business day of May.

Calculating the Nikkei-TOCOM Commodity Index using the settlement price as of the last business day of the fiscal year y-1 (the last business day of May of fiscal year y)

$$Index_{EndofMay}^{y-1} = C_{y-1} \times \sum_{i}^{AllComponents} \left(W_{y-1}^{i} \times R_{n}^{i} \times p_{EndofMay}^{i} / P_{n}^{i} \right) \times 100 = C_{y} \times 100$$

Calculating the Nikkei-TOCOM Commodity Index on the t^{th} day of fiscal year y

$$Index_{t}^{y} = C_{y} \times \sum_{i}^{AllComponents} \left(W_{y}^{i} \times R_{n}^{i} \times p_{t}^{i} / P_{n}^{i} \right) \times 100$$

Note that on the base date of fiscal year y (the last business day of May of year y) the Nikkei-TOCOM Commodity Index will be:

$$Index_{0}^{y} = C_{y} \times \sum_{i}^{AllComponents} \left(W_{y}^{i} \times R_{0}^{i} \times p_{0}^{i} / P_{0}^{i} \right) \times 100$$
$$= C_{y} \times 1.0 \times 100 = Index_{EndofMay}^{y-1}$$

Thus this ensures the continuity of the Nikkei-TOCOM Commodity Index before and after rebalancing of weight.

[Example] Calculating the Nikkei-TOCOM Commodity Index at the time of the periodic rebalancing of weight and the switch to a new fiscal year (from fiscal 2007 to fiscal 2008, then "TOCOM Index")

Calculating the Nikkei-TOCOM Commodity Index (then TOCOM Index) as of the last business day of fiscal 2007 (May 31, 2008)

$$Index_{5/30}^{2008} = C_{2007} \times \sum_{i}^{AllComponents} \left(W_{2008}^{i} \times R_{n}^{i} \times p_{5/30}^{i} / P_{n}^{i} \right) \times 100$$
$$= 2.7607100 \times 1.3746845 \times 100$$
$$= 3.7951052 \times 100 = C_{y} \times 100$$

Thus, the Nikkei-TOCOM Commodity Index (then TOCOM Index) for fiscal 2008 will be:

$$Index_{t}^{2008} = 3.7951052 \times \sum_{i}^{AllComponents} \left(W_{2008}^{i} \times R_{n}^{i} \times p_{t}^{i} / P_{n}^{i} \right) \times 100$$

6.8.2 Following extraordinary rebalancing

The Nikkei-TOCOM Commodity Index following extraordinary rebalancing of weight is calculated in the same manner as when calculating the Nikkei-TOCOM Commodity Index following periodic rebalancing, except that at the time of applying a new weight the index return up to the last business day before the rebalancing will be defined as C_{y-1} ("-": hyphen), and the base price will be updated to the settlement price at the time of the rebalancing.

[Example] Calculating the Nikkei-TOCOM Commodity Index during extraordinary rebalancing of weight due to suspension of the listing of gas oil contract

Calculating the Nikkei-TOCOM Commodity Index (then TOCOM Index) on the last business day before the rebalancing (October 31, 2005)

$$Index_{10/31}^{2005} = C_{2004} \times \sum_{i}^{10Commodities} \left(W_{2005-1}^{i} \times R_{n}^{i} \times p_{10/31}^{i} / P_{n}^{i} \right) \times 100$$
$$= 1.9125361 \times 1.1779060 \times 100$$
$$= 2.2527877 \times 100 = C_{2005-1} \times 100$$

Thus, the Nikkei-TOCOM Commodity Index (then TOCOM Index) following extraordinary rebalancing of weight will be:

$$Index_t^{2005-2} = 2.2527877 \times \sum_{i}^{9\text{Commodties}} \left(W_{2005-2}^{i} \times R_n^i \times p_t^i / P_n^i \right) \times 100$$

7 Nikkei-TOCOM Sub Commodity Index

7.1 Calculating Nikkei-TOCOM Sub Commodity Index

To calculate Nikkei-TOCOM sub-indexes, the same formulas and component weight as those used for the Nikkei-TOCOM Commodity Index, are used.

Index Name	Components	notes
Nikkei-TOCOM Nearby Month Commodity Index	All commodities listed on TOCOM, excluding option transactions	・ Front contract month shall serve as the Designated Contract Month to be used in the Index (*1). ・ The contract month is rolled by 20% each day over the course of five business days between the 4th business day preceding the last business day of the month and the last business day of the month (*2).
Nikkei-TOCOM Precious Metals Index	Precious metals	・ Active Contract Month shall serve as the Designated Contract Month to be used in the Index (as applicable to the Nikkei-TOCOM Commodity Index). ・ The contract month is rolled from the 5th contract month to the 6th contract month by 20% each day over the course of five business days between the 5th business day of the month and the 9th business day of the month (as applicable to the Nikkei-TOCOM Commodity Index).
Nikkei-TOCOM Oil Index	Oil	
Nikkei-TOCOM Gold Index	Gold	
Nikkei-TOCOM Silver Index	Silver	
Nikkei-TOCOM Platinum Index	Platinum	
Nikkei-TOCOM Palladium Index	Palladium	
Nikkei-TOCOM Aluminum Index (*3)	Aluminum	
Nikkei-TOCOM Gasoline Index	Gasoline	
Nikkei-TOCOM Kerosene Index	Kerosene	
Nikkei-TOCOM Crude Oil Index	Crude Oil	
Nikkei-TOCOM Rubber Index	Rubber	

* 1 : In principle, this is either the first or second contract month; however, for crude oil it is the second or third contract month, since the Final Settlement Day (referred as the Last Trading Day until 7 May 2009) of each contract month is set on the first business day of every month (for the period before the Last

Trading Day was changed from "the 3rd business day preceding the last business day of the month" to "the first business day of the following month", either the first or second contract month serves as the Designated Contract Month for crude oil).
For gasoline, kerosene and rubber contracts, the Designated Contract Months may be the first, second, or third contract month if the last trading day of the first contract month falls within the Roll Period.

＊２： In order to prevent the existence of open positions without the intention of physical delivery until immediately before the Last Trading Day, and to reduce the impact of the roll of the Designated Contract Month on market prices, contract months are rolled by 20% each day over the course of five business days between the 4th business day preceding the last business day of the month and the last business day of the month. Rolling is carried out for commodities in the precious metals and aluminum* markets on even months only. During the Roll Period, a daily settlement price for each Designated Contract Month will be used to calculate Sub-indexes.

Note: For the Aluminum market, there used to be six consecutive contract months through April of 2004, after which the contract months were modified to even-numbered months only. Note that the Aluminum contract is excluded from the components of Nikkei-TOCOM Commodity Index and the Nikkei-TOCOM Sub-indexes.

＊３： Calculation and publication of the Nikkei-TOCOM Aluminum Index has been suspended since January 2010.

8 Rule of Rounding

8.1 Rounding of Figures in the Index Calculation Process

				Formula, etc.	Rounding
Price Return	Ordinary Period			p_t / P_n	Round to the eighth decimal place
	Roll Period	Day 1	①	During a trading session: p_1 / P_n	
				The time daily settlement price is set: p_{s1}^i / P_n^i	
		Day 2	②	During a trading session: $0.2 \times p_{s1} / P_n \times p_2' / p_{s1}' + 0.8 \times p_2 / P_n$	
				The time daily settlement price is set : $0.2 \times p_{s1}^i / P_n^i \times p_{s2}'^i / p_{s1}'^i + 0.8 \times p_{s2}^i / P_n^i$	
		Day 3	③	During a trading session: $0.2 \times p_{s1} / P_n \times p_3' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_3' / p_{s2}' + 0.6 \times p_3 / P_n$	
				The time daily settlement price is set : $0.2 \times p_{s1} / P_n \times p_{s3}' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_{s3}' / p_{s2}' + 0.6 \times p_{s3} / P_n$	
		Day 4	④	During a trading session: $0.2 \times p_{s1} / P_n \times p_4' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_4' / p_{s2}' + 0.2 \times p_{s3} / P_n \times p_4' / p_{s3}' + 0.4 \times p_4 / P_n$	
				The time daily settlement price is set : $0.2 \times p_{s1} / P_n \times p_{s4}' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_{s4}' / p_{s2}' + 0.2 \times p_{s3} / P_n \times p_{s4}' / p_{s3}' + 0.4 \times p_{s4} / P_n$	
		Day 5	⑤	During a trading session: $0.2 \times p_{s1} / P_n \times p_5' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_5' / p_{s2}' + 0.2 \times p_{s3} / P_n \times p_5' / p_{s3}' + 0.2 \times p_{s4} / P_n \times p_5' / p_{s4}' + 0.2 \times p_5 / P_n$	
				The time daily settlement price is set : $0.2 \times p_{s1} / P_n \times p_{s5}' / p_{s1}' + 0.2 \times p_{s2} / P_n \times p_{s5}' / p_{s2}' + 0.2 \times p_{s3} / P_n \times p_{s5}' / p_{s3}' + 0.2 \times p_{s4} / P_n \times p_{s5}' / p_{s4}' + 0.2 \times p_{s5} / P_n$	
Price Return C	Ordinary Period			$R_n \times p_t / P_n$	
	Roll Period			$R_n \times$ [① or ② or ③ or ④ or ⑤]	
Index return of each component in a single fiscal year				Weight of each component × Price Return C over an applicable period	
Index Return				(Index return up to the previous year) × (Index return in a single fiscal year)	
Nikkei-TOCOM Commodity Index				Index Return × 100	Round to the third decimal place

p_t : Settlement price on the t^{th} day

P_n : Base price after the n^{th} roll of the Designated Contract Months

p_1、p_2、p_3、p_4、p_5 : Contract prices etc. for the 5th contract month on the 1^{st} through the 5^{th} day during the Roll Period

p_{s1}、p_{s2}、p_{s3}、p_{s4} : Settlement prices for the 5th contract month on the 1st through the 4th day during the Roll Period

p'_1、p'_2、p'_3、p'_4、p'_5 : Contract prices etc. for the 6th contract month on the 1st through the 5th day during the Roll Period

p'_{s1}、p'_{s2}、p'_{s3}、p'_{s4} : Settlement prices for the 5th contract month on the 1st through the 4th day during the Roll Period

R_n : Price return of component for the period from the date of last rebalancing to the date when the n th roll is completed

8.2 Rounding of the Component Weight

	Formulas, etc.	Rounding
Scale of the cash market W1	Imports, etc./Sum of imports, etc. of all components $(Q^i / \Sigma Q^i)$	Round down to the sixth decimal place
Scale of the futures market W2	Average of end-of-month open interests /Sum of the averages of end-of-month open interests $(V^i / \Sigma V^i)$	Round down to the sixth decimal place
Component Weight Ratio W	ⅰ. $W = \alpha \times W1 + (1-\alpha) \times W2$	Round to the fifth decimal place
	ⅱ. The weight of the component with the largest weight is adjusted so that the sum of the weights of all components is 1.00	-
End-of Month Price (*)	Monthly import value/Monthly import quantity	Disregard decimals
Import quantity, etc.	Σ (Monthly domestic sales × end-of-month prices)	Not rounded**
Average end-of-month open interests V^i	Average end-of-month open interests ((Σv)/Number of Months)	Disregard decimals

* End-of-month prices: Only the prices used when there is no first contract month for the component

** Although Export and Import Statistics show import values of precious metals, aluminum, and rubber in units of 1,000 yen, the product of monthly domestic sales of oil products, etc. and their end-of-month prices are not rounded (e.g. fractions below 100 yen are not rounded off).

9 Data

9.1 Sources of Statistical Data

<table>
<tr><th>Component</th><th>Data on imports, etc.</th><th colspan="2">Sources</th></tr>
<tr><td>Gold</td><td rowspan="6">Annual imports
(in value terms)</td><td rowspan="6">・ Values by Principal Commodity, Export and Import Statistics, Ministry of Finance</td><td>Gold (excluding monetary gold)</td></tr>
<tr><td>Silver</td><td>Silver</td></tr>
<tr><td>Platinum</td><td>Platinum</td></tr>
<tr><td>Palladium</td><td>Palladium</td></tr>
<tr><td>Aluminum</td><td>Aluminum and aluminum alloy</td></tr>
<tr><td>Rubber</td><td>Natural Rubber</td></tr>
<tr><td>Crude Oil</td><td>Annual sum of
[(Monthly imports – monthly domestic sales of oil products) × end-of-month settlement prices]</td><td>・ Values by Principal Commodity, Export and Import Statistics, Ministry of Finance
・ Supply-Demand Statistics (petroleum), Mineral Resources and Petroleum Products Statistics, Ministry of Economy, Trade and Industry</td><td>・Crude Oil
① Summary of supply-demand situation for petroleum products
(4) ① Summary of supply-demand situation, Production (refineries)</td></tr>
<tr><td>Gasoline</td><td rowspan="3">Annual sum of
(Monthly domestic sales × end-of-month settlement price)</td><td rowspan="3">・ Supply-Demand Statistics (petroleum), Mineral Resources and Petroleum Products Statistics, Ministry of Economy, Trade and Industry</td><td rowspan="3">① Summary of supply-demand situation for petroleum products
(4) ① Summary of supply-demand situation, Domestic sales</td></tr>
<tr><td>Kerosene</td></tr>
<tr><td>Gas Oil</td></tr>
</table>

Figures for the imports, production (refineries) and domestic sales are adopted from the revised report of the statistics, except the domestic sales figures for gasoline, kerosene, and gas oil for the period between fiscal 2002 and 2005-2(Beginning of November 2005～End of May 2006), for which the figures are adopted from the annual revision report of the statistics.

9.2 Component

Period	Component
2002/5/31～2004/5/31	Gold、Silver、Platinum、Palladium、Aluminum、Gasoline、Kerosene、Crude Oil、Rubber
2004/6/1～2005/10/31 (※1)	Gold、Silver、Platinum、Palladium、Aluminum、Gasoline、Kerosene、Gas Oil、Crude Oil、Rubber
2005/11/1～2009/12/31 (※2)	Gold、Silver、Platinum、Palladium、Aluminum、Gasoline、Kerosene、Crude Oil、Rubber
2010/1/1～ (※3)	Gold、Silver、Platinum、Palladium、Gasoline、Kerosene、Crude Oil、Rubber

(※1) Gas oil was included in the Index components following its listing on the TOCOM market.

(※2) Gas oil was excluded from the Index components following the suspension of listing on the TOCOM market.

(※3) Aluminum was excluded from the Index components following the suspension of listing on the TOCOM market.

9.3 Component Weight Ratio

9.3.1 Nikkei-TOCOM Commodity Index and Nikkei-TOCOM Nearby Month Commodity Index

	Gold	Silver	Platinum	Palladium	Aluminum	Gasoline	Kerosene	Crude Oil	Gas Oil	Rubber
2002	9.34%	0.81%	11.51%	1.40%	5.06%	27.33%	15.97%	26.45%	—	2.13%
2003	16.27%	0.87%	8.18%	0.71%	4.62%	25.92%	14.89%	24.89%	—	3.65%
2004	15.34%	0.80%	8.10%	0.44%	4.44%	25.88%	14.88%	18.66%	8.49%	2.97%
2005-1	14.18%	1.23%	8.59%	0.55%	4.27%	26.49%	15.91%	18.39%	8.08%	2.31%
2005-2	14.36%	1.29%	8.83%	0.61%	4.96%	29.08%	16.96%	21.47%	—	2.44%
2006	17.70%	1.12%	8.15%	0.44%	3.44%	24.60%	14.77%	26.83%	—	2.95%
2007	23.20%	1.63%	8.25%	0.61%	3.81%	19.89%	10.34%	28.85%	—	3.42%
2008	23.51%	1.20%	10.28%	0.65%	3.50%	18.94%	9.11%	29.52%	—	3.29%
2009-1	24.64%	1.04%	9.24%	0.82%	2.81%	17.25%	8.48%	31.83%	—	3.89%
2009-2	24.72%	1.06%	9.32%	0.84%	—	17.92%	8.74%	33.46%	—	3.94%
2010	28.53%	0.66%	7.61%	0.45%	—	19.66%	9.13%	30.35%	—	3.61%

2005-1: End of May 2005～End of October 2005, 2005-2: Beginning of November 2005～End of May 2006, Same applies below.

2009-1: End of May 2009～End of December 2009, 2009-2: Beginning of January 2010～End of May 2010, Same applies below.

9.3.2 Nikkei-TOCOM Precious Metals Index

	Gold	Silver	Platinum	Palladium
2002	29.42%	5.07%	43.29%	22.22%
2003	50.10%	4.94%	33.69%	11.27%
2004	44.98%	6.23%	39.78%	9.01%
2005-1	44.59%	7.78%	40.34%	7.29%
2005-2	44.59%	7.78%	40.34%	7.29%
2006	49.30%	6.53%	37.77%	6.40%
2007	43.40%	10.21%	37.20%	9.19%
2008	41.71%	8.93%	39.69%	9.67%
2009-1	43.04%	9.49%	39.81%	7.66%
2009-2	43.04%	9.49%	39.81%	7.66%
2010	46.61%	8.95%	37.33%	7.11%

9.3.3. Nikkei-TOCOM Oil Index

	Gasoline	Kerosene	Crude Oil	Gas Oil
2002	42.32%	25.30%	32.38%	—
2003	43.17%	26.02%	30.81%	—
2004	41.60%	24.94%	22.74%	10.72%
2005-1	40.95%	26.78%	22.76%	9.51%

2005-2	44.63%	28.35%	27.02%	－
2006	41.29%	26.38%	32.33%	－
2007	38.30%	22.57%	39.13%	－
2008	38.22%	21.43%	40.35%	－
2009-1	35.09%	21.16%	43.75%	－
2009-2	35.09%	21.16%	43.75%	－
2010	36.62%	22.77%	40.61%	－

9.3.4 Nikkei-TOCOM Gold Index

Gold 100%

9.3.5 Nikkei-TOCOM Silver Index

Silver 100%

9.3.6 Nikkei-TOCOM Platinum Index

Platinum 100%

9.3.7 Nikkei-TOCOM Palladium Index

Palladium 100%

9.3.8 Nikkei-TOCOM Aluminum Index(*)

Aluminum 100%

(*)Calculation of Nikkei-TOCOM Aluminum Index has been suspended since January 2010.

9.3.9 Nikkei-TOCOM Gasoline Index

Gasoline 100%

9.3.10 Nikkei-TOCOM Kerosene Index

Kerosene 100%

9.3.11 Nikkei-TOCOM Crude Oil Index

Crude Oil 100%

9.3.12 Nikkei-TOCOM Rubber Index

Rubber 100%

9.4 Designated Contract Month

9.4.1 Nikkei-TOCOM Commodity Index and Nikkei-TOCOM Sub Commodity Index (Excluding Nikkei-TOCOM Nearby Month Commodity Index)

Period	Precious Metals	Gasoline・Kerosene	Crude Oil・Rubber
2010/6/1～2010/6/4	2011/04	2010/11	2010/10
2010/6/7～2010/6/11		2010/11 2010/12	2010/10 2010/11
2010/6/14～2010/7/6		2010/12	2010/11
2010/7/7～2010/7/13	2011/04 2011/06	2010/12 2011/01	2010/11 2010/12
2010/7/14～2010/8/5	2011/06	2011/01	2010/12
2010/8/6～2010/8/12		2011/01 2011/02	2010/12 2011/01
2010/8/13～2010/9/6		2011/02	2011/01
2010/9/7～2010/9/13	2011/06 2011/08	2011/02 2011/03	2011/01 2011/02
2010/9/14～2010/10/6	2011/08	2011/03	2011/02
2010/10/7～2010/10/14		2011/03 2011/04	2011/02 2011/03
2010/10/15～2010/11/5		2011/04	2011/03
2010/11/8～2010/11/12	2011/08 2011/10	2011/04 2011/05	2011/03 2011/04
2010/11/15～2010/12/6	2011/10	2011/05	2011/04
2010/12/7～2010/12/13		2011/05 2011/06	2011/04 2011/05
2010/12/14～2011/1/7		2011/06	2011/05
2011/1/11～2011/1/17	2011/10 2011/12	2011/06 2011/07	2011/05 2011/06
2011/1/18～2011/2/4	2011/12	2011/07	2011/06
2011/2/7～2011/2/14		2011/07 2011/08	2011/06 2011/07
2011/2/15～2011/3/4		2011/08	2011/07
2011/3/7～2011/3/11	2011/12 2012/02	2011/08 2011/09	2011/07 2011/08
2011/3/14～2011/4/6	2012/02	2011/09	2011/08
2011/4/7～2011/4/13		2011/09 2011/10	2011/08 2011/09
2011/4/14～2011/5/10		2011/10	2011/09
2011/5/11～2011/5/17	2012/02 2012/04	2011/10 2011/11	2011/09 2011/10
2010/6/1～2010/6/4	2011/04	2010/11	2010/10

9.4.2 Nikkei-TOCOM Sub Commodity Indexes

Period	Precious Metals	Gasoline・Kerosene	Crude Oil・Rubber
2010/6/1～2010/6/23	2010/08	2010/08	2010/07
2010/6/24～2010/6/30		2010/08 2010/09	2010/07 2010/08
2010/7/1～2010/7/23		2010/09	2010/08
2010/7/26～2010/7/30	2010/08 2010/10	2010/09 2010/10	2010/08 2010/09
2010/8/2～2010/8/24	2010/10	2010/10	2010/09
2010/8/25～2010/8/31		2010/10 2010/11	2010/09 2010/10
2010/9/1～2010/9/22		2010/11	2010/10
2010/9/24～2010/9/30	2010/10 2010/12	2010/11 2010/12	2010/10 2010/11
2010/10/1～2010/10/22	2010/12	2010/12	2010/11
2010/10/25～2010/10/29		2010/12 2011/01	2010/11 2010/12
2010/11/1～2010/11/22		2011/01	2010/12
2010/11/24～2010/11/30	2010/12 2011/02	2011/01 2011/02	2010/12 2011/01
2010/12/1～2010/12/22	2011/02	2011/02	2011/01
2010/12/24～2010/12/30		2011/02 2011/03	2011/01 2011/02
2011/1/4～2011/1/24		2011/03	2011/02
2011/1/25～2011/1/31	2011/02 2011/04	2011/03 2011/04	2011/02 2011/03
2011/2/1～2011/2/21	2011/04	2011/04	2011/03
2011/2/22～2011/2/28		2011/04 2011/05	2011/03 2011/04
2011/3/1～2011/3/24		2011/05	2011/04
2011/3/25～2011/3/31	2011/04 2011/06	2011/05 2011/06	2011/04 2011/05
2011/4/1～2011/4/21	2011/06	2011/06	2011/05
2011/4/22～2011/4/28		2011/06 2011/07	2011/05 2011/06
2011/5/2～2011/5/24		2011/07	2011/06
2011/5/25～2011/5/31	2011/06 2011/08	2011/07 2011/08	2011/06 2011/07

9.5 Multiplier

Component		Applied Contract Month	Multiplier
Gold	Standard	All contract months	1,000 times
	Mini	All contract months	100 times
Silver		Up to 2007/08	6,000 times
		Between 2007/10 and 2010/10	3,000 times
		2010/12 and thereafter	10,000 times
Platinum	Standard	All contract months	500 times
	Mini	All contract months	100 times
Palladium		Up to 2003/08	1,500 times
		2003/10 and thereafter	500 times
Aluminum		Up to 2007/08	10,000 times
		2007/10 and thereafter	5,000 times
Gasoline		Up to 2006/03	100 times
		2006/04 and thereafter	50 times
Kerosene		Up to 2006/03	100 times
		2006/04 and thereafter	50 times
Crude Oil		Up to 2005/10	100 times
		2005/11 and thereafter	50 times
Gas oil		All contract months	100 times
Rubber		Up to 2002/10	5,000 times
		Between 2002/11 and 2005/06	10,000 times
		2005/07 and thereafter	5,000 times

10 Inquiries

Inquiries on the Nikkei-TOCOM Commodity Index should be directed to the following:

Inquiry concerning the calculation methods, license agreements, etc. on Nikkei-TOCOM Commodity Index

Corporate Planning Section, Corporate Planning Department,
Tokyo Commodity Exchange, Inc.
10-7 Nihonbashi Horidomecho, 1-chome Chuo-ku, Tokyo 103-0012 Japan
Phone: +81-3-3661-7917 Fax: +81-3-3664-0089

Inquiry concerning the license agreements on Nikkei-TOCOM Commodity Index

Index Business Office,
NIKKEI INC.
1-3-7, Otemachi Chiyoda-ku, Tokyo 100-8066 Japan
Phone: +81-3-6256-7341