Brent Crude Oil Futures

Introduction

Crude oil is crucial to economic development. Petroleum-related products are vital to our everyday life, and prices of crude oil have become a public issue. Brent crude oil is one of the major imports in Taiwan and two-thirds of global crude-oil trading uses Brent crude oil as a benchmark for valuation. As well, large numbers of Taiwanese have traded foreign crude-oil futures and domestic crude-oil-related ETFs have already been issued, Taiwan Futures Exchange ("TAIFEX") therefore plans to launch Brent Crude Oil Futures on 2 July 2018 after obtaining license to use ICE Brent Index. The product will expand TAIFEX's commodity futures product line, meet investors need for oil-related products, and serve the real economy.

Product Features

✓ Provides a convenient trading and hedging channel

Domestic futures investors can now not only trade foreign crude-oil futures via a sub-broker, but can also trade crude-oil futures on TAIFEX through their current account, which provides a more convenient and less expensive way to participate in crude-oil futures trading.

✓ Highly convenient, TWD-denominated, no FX conversions required to pay margins

The TAIFEX Brent Crude Oil Futures is a TWD-denominated product, which reflects fluctuations in international crude oil prices and TWD exchange rates. It offers an effective channel for hedging against the risks of fluctuations in oil prices. Also, traders can also pay their margins directly in TWD without any currency conversion.

✓ Enables investors to grasp crude-oil trading opportunities

The product's regular trading session runs from 8:45 a.m. to 1:45 p.m., and its after-hours session from 3:00 p.m. to 5:00 a.m. the following morning. These trading hours cover most volatile period of the international crude-oil markets, making it easy for investors to make advantage of trading opportunities, manage their risks, and adjust their positions.

✓ Meets diverse trading needs

The product attracts traders interested in crude-oil products to the market, while also providing domestic issuers of Brent Crude Oil ETFs with a convenient hedging channel, and enabling investors to utilize strategies for inter-market trading with ICE Futures Europe's products of the same underlying.

The Product

O1: What is the Brent Crude Oil Future's underlying?

The product has the same underlying, Brent crude oil, as ICE Futures Europe's Brent Crude Futures ("ICE Brent Crude Futures"). Brent crude oil is the world's leading benchmark of light, sweet crude oil produced in the North Sea. Taiwan oil related industry uses Brent crude oil to make adjustments to domestic petroleum prices. So, Brent crude oil has a direct relationship to domestic oil consumption.

Q2: What are the product's delivery months?

For the world's major crude-oil futures, "delivery month" refers to the crude-oil physical delivery month. Because transport by ship or pipeline must be arranged prior to delivery of crude oil, most crude-oil futures cease trading 1-2 months before the delivery month. For example, a September 2018 ICE Brent Crude Futures contract, which has the same underlying as TAIFEX's Brent Crude Oil Futures, ceases trading on the last business day of July (7:30 p.m. London time, which is 2:30 a.m. on 1 August, Taiwan time).

Brent Crude Oil Futures have five delivery months: the three near months, a June contract, and a December contract. For example, the contracts listed on 2 July 2018 will be September 2018, October 2018, November 2018, December 2018, and June 2019.

Investors should note that Brent Crude Oil Futures have different characteristics from TAIFEX's stock index futures (e.g. Mini TAIEX Futures). For example, a September 2018 Mini TAIEX Futures contract can be traded until 1:30 p.m. on 19 September 2018 (Wednesday), whereas a September Brent Crude Oil Futures contract may only be traded until 2:30 a.m. on the day following the last business day of the second month preceding to the contract's delivery month, in this case, 2:30 a.m. on 1 August 2018.

For example, on 3 September 2018 an investor who intends to trade a spot month Brent Crude Oil Futures contract has to place an order for the November 2018 contract, not the September 2018 contract.

A new delivery month contract will be listed for trading at the start of the regular trading session immediately following the expiration of the spot month contract. For example, the September 2018 contract expires at 2:30 a.m. on 1 August 2018, so the new delivery month contract (December 2019) will be available for trading starting 8:45 a.m. on 1 August 2018.

Q3: What are the product's trading hours?

The product's regular trading session runs from 8:45 a.m. to 1:45 p.m. and its after-hours trading session runs from 3:00 p.m. to 5:00 a.m. on the following day. Expiring contracts on the last trading day trade until 3:30 a.m. in the after-hours trading session. During Daylight Saving Time¹ in the US, trading in the expiring contract ends at 2:30 a.m.. By fully covering the active trading hours for crude-oil futures on major international markets, the product's trading hours enable investors to

¹ Because Daylight Saving Time (DST) in the US begins before and ends after British Summer Time, and because ICE Futures Europe adjusts trading hours to account for the difference between DST and BST, the end of trading for expiring Brent Crude Oil Futures is adjusted to conform to DST.

trade or hedge in response to price fluctuations in the global market.

Q4: What is the product's last trading day?

In principle, trading in the expiring TAIFEX Crude Oil Futures contract ends at the same time as the time when the same spot month of the ICE Brent Crude Futures contract ends the trading, which is 7:30 p.m. London time on the ICE's last business day of the second month prior to the delivery month, or 3:30 a.m. on the following day, Taiwan time (or 2:30 a.m. on the following day, Taiwan time, during Daylight Saving Time in the US).

For example, ICE's September 2018 Brent Crude Future trades until 7:30 p.m. on 31 July 2018, London time (2:30 a.m. on 1 August 2018, Taiwan time), and TAIFEX's September 2018 Brent Crude Oil Future trades until 2:30 a.m. on 1 August 2018, Taiwan time.

The end of trading of the Brent Crude Oil Future is adjusted to conform to Daylight Saving Time in the US. Since the expiration of the May-December contracts takes place in March-October (Daylight Saving Time in the US), those contracts trade until 2:30 a.m., Taiwan time, on the day after ICE's last business day of the month. The January-April contracts expire outside Daylight Saving Time in the US, and those contracts trade until 3:30 a.m., Taiwan time.

Q5: What is the contract size? What is its minimum price fluctuation?

The contract size is 200 barrels. If each barrel is USD75.5 and the USD/TWD exchange rate is 29.5, then the contract price is roughly TWD450,000. The tick size is TWD0.5/barrel, so the minimum price fluctuation is TWD100.

Q6: What is the daily price limit?

The product has a three-phase daily price limit with the tiers at $\pm 5\%$, $\pm 10\%$, and $\pm 20\%$ of the previous regular-session's daily settlement price. In consideration of the fact that there are no price limits in the spot crude-oil market, and that trading in expiring TAIFEX Brent Crude Oil contracts ends during the after-hours trading session, the third tier for expiring contracts will be increased to $\pm 30\%$ (i.e. the price-limit tiers for expiring contracts are $\pm 5\%$, $\pm 10\%$, and $\pm 30\%$) so that the expiring contract's price can better converge with the underlying's market price.

Q7: What is the ICE Brent Index price?

The ICE Brent Index price is a spot price per barrel for Brent crude oil. It is based primarily on market information on the last trading day of the ICE Brent Crude Futures contract, including crude-oil spot prices and crude-oil assessments published by commodity information services. These prices are USD-denominated and averaged. In addition, futures prices will be included into the sampling range as of 28 September 2018 (and will be applied to settlement beginning with the 201811 contract), using the spread between futures and spot prices to back-calculate crude-oil spot prices. The ICE Brent Index is managed by ICE Futures Europe and regulated by the UK's

Financial Conduct Authority. The index price is used to calculate the cash settlements of major international Brent crude oil futures, including those of ICE Futures Europe and the Moscow Exchange. For more information about the ICE Brent Index, please visit the ICE website: https://www.theice.com/.

Q8: If the end of trading of the expiring TAIFEX Brent Crude Oil Futures contract occurs on a trading session that is not open for trading due to a national holiday or force majeure event, will it be rescheduled to another day?

If Brent Crude Oil Futures expires during the after-hours trading session when it's an ICE business day, on which there is no trading in Taiwan due to a national holiday or a force majeure event, the end of trading will not be adjusted. The contract will expire as scheduled and will be settled at the corresponding final settlement price.

The ICE Brent Index price is announced only once per month (on the business day immediately following the last trading day of the ICE Brent Crude Future). In case that the after-hours trading session is closed on a national holiday, TAIFEX is not able to provide a final settlement price for reference until the ICE Brent Index price is announced. Also, in the event that a force majeure event (such as a typhoon) prevents after-hours trading, there is no need to postpone expiry because the ICE Brent Index price will have already been announced.

Q9: How are transaction taxes calculated on the product?

Brent Crude Oil Futures are commodity futures. Transactions are therefore taxed at a rate of 0.000005 of the market value per contract.

Trading

Q1: When are pre-market orders accepted for the product? How is pre-market information disclosed?

Pre-market orders are accepted from 8:30 a.m. for the regular trading session, and from 2:50 p.m. for the after-hours trading session. During the pre-market periods of the regular trading session (8:30-8:45 a.m.) and after-hours trading session (2:50-3:00 p.m.), the system uses simulated matching to estimate and disclose every five seconds the anticipated opening price and volume, best five bid/ask prices and their corresponding volumes, the total number of bid/ask contracts, and the total number of bid/ask orders. During the two minutes before the regular trading session opens (8:43-8:45 a.m.) and before the after-hours trading session opens (2:58-3:00 p.m.), no orders can be canceled or modified, but new orders can be placed.

Q2: How is the protected range for market-with-protection orders calculated for the product?

The protected range for market-with-protection orders is calculated on a percentage basis of the previous day's daily settlement price of the spot month contract: 0.5% on a single order, and 0.25% on a calendar spread order.

Q3: What are the position limits on the product?

An investor's aggregate long or short same-side open interest may not exceed the position limit announced by TAIFEX. The minimum position limit will be 1,000 contracts for individual and 3,000 contracts for institutions. The position limit for futures proprietary traders and market makers will be three times the position limit of institutions.

Q4: Is block trading available for the product?

The minimum buy/sell block-trading quote volume for the product is 200 contracts of the same type. Please see the "Taiwan Futures Exchange Corporation Operational Regulations for Block Trading" for details.

Clearing

Q1: What currencies can be used for margin payments?

The Brent Crude Oil Future is TWD-denominated. Domestic investors should pay the initial margin on orders in TWD. Offshore foreign institutional investors should pay the margin in one of seven accepted foreign currencies announced by TAIFEX.

Q2: Does the product use combined margin for spread positions?

Brent Crude Oil Futures use combined-position margin calculation for positions in different delivery months. For example, if an investor buys one Brent Crude Oil Futures contract, and sells one Brent Crude Oil Futures contract expiring in a different month, margin will be collected on only one Brent Crude Oil Futures contract.

Q3: How is the product's final settlement price set?

- (1) The final settlement price for Brent Crude Oil Futures is based on the ICE Brent Index price announced by ICE Futures Europe for the ICE Brent Crude Futures contract with the same delivery month after that ICE's contract ceases trading. This price is converted into TWD using the USD/TWD spot exchange rate and rounded half up to two decimal places. The referred USD/TWD spot exchange rate shall be the one announced by Taipei Forex Inc. at 11 a.m. on the business day preceding the end of trading of the expiring Brent Crude Oil Futures.
- (2) If the ICE Brent Index price is restated, TAIFEX will announce adjustments to the final settlement price accordingly.

- (3) If the ICE Brent Index price is unannounced for any reason, TAIFEX will set the final settlement price with reference to the settlement prices of major international Brent Crude futures.
- (4) If for any reason Taipei Forex Inc. fails to announce the USD/TWD spot exchange rate at 11:00 a.m. as referred in paragraph 1, TAIFEX will use the first USD/TWD spot exchange rate announced by Taipei Forex Inc. after 11:00 a.m. on the same day as the basis for its calculation.

Q4: What is the final settlement date? When does settlement take place? How is the product settled?

The final settlement price for TAIFEX's Brent Crude Oil Futures is based on the ICE Brent Index price, which is announced around 12:00 p.m. London time (8:00 p.m., Taiwan time, and one hour earlier during British Summer Time) on the first ICE Futures Europe business day following the last trading day for the ICE Brent Crude Futures contract. Therefore, the final settlement day is the first TAIFEX business day following the announcement of the ICE Brent Index price. TAIFEX will announce the final settlement price at 9:30 a.m. on the final settlement day, and begins the settlement process after that announcement.

Settlement is in cash. Investors pay or receive the net amount of the price differential in cash based on the final settlement price. The contract value of the expired contracts is the final settlement price multiplied by the 200-barrel contract size.

For example: The Ice Brent Index price is announced at 7:00 p.m. on Wednesday, 1 August 2018 (Taiwan time). TAIFEX then calculates the final settlement price, announces it at 9:30 a.m. on Thursday, 2 August 2018, and begins the settlement process.

Q5: Will the final settlement price be adjusted after the contract has been settled? If ICE restates its final settlement price, how will settled contracts be adjusted? When will this happen?

Under the ICE Brent Index Restatement Policy, if a mistake discovered in the data or calculation used to determine the ICE Brent Index price after the price has been announced, ICE will restate the announced index price. ICE Futures Europe will do so within three business days.

If, after the Brent Crude Oil Futures contract has been settled, ICE Futures Europe restates the ICE Brent Index price and TAIFEX adjusts the final settlement price of the contract, TAIFEX will carry out the settlement adjustment process and adjust the cash amount received or paid according to the difference between the pre-restatement and post-restatement final settlement price.

If TAIFEX obtains the restated price before 9:30 a.m. on a business day, the settlement adjustment process will be carried out beginning at 2:30 p.m. of that day. If TAIFEX is unable to obtain the

restated price before 9:30 a.m., the settlement adjustment process will be carried out beginning at 2:30 p.m. on the next business day.

Q6: What should FCMs accepting investor orders to trade Brent Crude Oil Futures be aware of?

- (1) To make sure that investors trading Brent Crude Oil Futures understand the relevant trading rules, the possibility of adjustment to the final settlement price, and the obligation to settle the trades accordingly, FCMs should provide a "Statement by Futures Trader Trading Taiwan Futures Exchange Brent Crude Oil Futures" to investors to read carefully and sign. Investors who have not signed the statement may not trade Brent Crude Oil Futures.
- (2) The trading hours for Brent Crude Oil Futures include both a regular trading session and an after-hours trading session. FCMs should remind investors to pay attention to the risk control principles in the regular and after-hours trading sessions for "products not exempt from forced liquidation." Investors who have already signed the "Checklist for Futures Traders Participating in the TAIFEX After-hours Session" may trade Brent Crude Oil Futures. Investors who have not signed the checklist cannot trade products not exempted from forced liquidation, including Brent Crude Oil Futures, in either the regular or after-hours trading session.