Commodity Futures ETFs

1. Characteristics of Futures-based ETFs

   i. Definition

      Traditional ETFs represent baskets of securities that track, or replicate, the performance of an underlying index. Futures-based ETFs, on the other hand, invest in futures contracts to track, or replicate, the performance of a futures index. Like traditional ETFs, they can be bought and sold intraday on an exchange and created and redeemed in the primary market.

      TWSE’s inaugural futures-based ETFs will track foreign commodities futures indices for raw materials markets such as gold and crude oil. Hence, this document will hereinafter refer to these futures-based ETFs as Commodity Futures ETFs.

   ii. First-time investors require signing of Risk Disclosure Statement

      First-time investors in Commodity Futures ETFs must sign a Risk Disclosure Statement before brokers can accept order placement. Institutional investors are not exempt from this requirement for investing in Futures-based Commodity ETFs.

iii. Daily Price Fluctuation Limit

Commodity Futures ETFs that track foreign futures commodity indices are not subject to the restrictions imposed by the daily price fluctuation limit.

iv. Creations/Redemptions: Performed on a cash basis

v. Tax Treatment

Save for the 0.1% transaction tax levied by the TWSE, Commodity Futures ETFs are not subject to additional taxes.

2. Benefits of Investing in Commodity Futures ETFs

i. Repackaging a Derivatives Product

- Commodities Futures ETFs effectively package, or securitize, the commodity markets that they track, enabling investors to use their brokerage account to add futures contracts on gold, crude oil, or other raw materials to their portfolios without having to open a separate futures trading account. Commodities Futures ETFs can also be traded on margin.

- Investors can trade Commodity Futures ETFs, which track foreign commodity futures indices, during the Regular Trading Session Hours on the TWSE. Investors on the TWSE who never ventured over to the futures market due to unfamiliarity with derivatives and futures instruments now have easy access to a new asset class via Commodity Futures ETFs.

ii. Asset Allocation Allows for Effective Diversification to Reduce Risk

Commodities like gold, crude oil and other raw materials historically have had low correlations with mainstream financial instruments like stocks and bonds. Adding commodities to an investment portfolio may provide greater diversification and therefore more effectively reduce risk as well as enhance returns. Commodity Futures ETFs can enable investors to obtain exposure to raw materials markets previously inaccessible to investors.

iii. No Roll Risk or Margin Calls

- Investment vehicles linked to commodity futures follow the performance of commodity baskets and obtain exposure to the underlying commodities by using a combination of commodity futures contracts and other cash positions. As futures contracts have expiry dates, ETF fund managers holding futures in their portfolios have to roll, or sell, those contracts as they get close to their expiration date, and buy new contracts for a future date, in accordance with the target index rules. As a result, investors in these Commodity Futures ETFs do not have to take on this roll risk.
- The value of the futures contracts that comprise Taiwan's current futures-based ETFs are backed nearly 100% in capital, with the majority of underlying assets consisting of cash and margin receivables. Therefore, Taiwan's Commodity Futures

ETFs are not leveraged, and only the ETF fund manager is responsible for dealing with margin calls, rather than the investor.

3. Matters of Attention When Investing in Futures ETFs

   i. Roll Costs and Contango

      Since Futures ETFs track futures indices, ETF fund managers must roll their contract positions ahead of expiry into new ones based on the underlying index structure on a monthly basis. When new commodity futures contracts are more expensive than the expiring contracts (longer-dated futures prices are higher than near-dated futures, a situation known as contango), then fund managers have to sell out of their maturing contracts at lower prices and reinvest in the new forward contracts at higher prices to replace them. The ETF will necessarily produces negative roll returns from the price difference and the investor will incur losses.

   ii. Differences in North American/European Market Trading

Hours

Due to limited availability of and liquidity for commodity-linked products in Taiwan, most commodity futures ETFs in Taiwan track foreign commodity futures indices. As a result, the time differences in these markets can pose some risk, since the NAV for these ETFs will be calculated at the close these markets in North America or Europe. In accordance with the disclosure rules of the TWSE, issuers of commodity futures ETFs will be required to make relevant trading information public and post investor alerts.

iii. Commodity Futures ETF Price Volatility

Since foreign commodity futures are not subject to TWSE’s daily price fluctuation limit, foreign investment vehicles will exhibit more price volatility compared to other instruments. Investors should take note that Commodity Futures ETFs which track foreign commodity futures indices are likewise not subject to the price restriction, so that owning these vehicles is a considerably riskier investment.

iv. Divergence between Prices of Futures Contracts and Spot Prices

Rather than holding the physical commodity itself, Futures-based ETFs replicate the performance of the underlying commodity markets by investing in futures contracts of futures indices. In this way, while the price of the futures contracts and the spot price of the commodity should converge over time, investors should note that they can diverge in certain price environments.

Investors should read the ETF’s prospectus and any other supplemental material on the benefits and risks of owning a Commodity Futures ETF before making any investment decisions. Further information on these funds’ issuers, NAVs, the ETF’s premium and discounts, etc. can be found online on the Market Observation Post System（http://mops.twse.com.tw/mops/web/index）. Investors can also go to MOPS for the latest information including the weekly report of the underlying holding ratio by asset, the monthly report of top five holdings and its ratio to the total asset value, etc.

Asset Class	Commodity Futures ETF	Equity-based ETF
Investment Objective	Commodity futures listed on domestic or foreign futures markets	Stocks listed on foreign or domestic equity exchanges
Underlying Index	Commodity futures index	Stock index
Trading Hours	TWSE Regular Trading Session (9:00~13:30)	TWSE Regular Trading Session (9:00~13:30)
Price Fluctuation Limit	Not applicable	ETFs with domestic underlying are subject to a 10% daily price fluctuation limit. ETFs with foreign underlying abide by home market rules.
Trading Prerequisites	An activated equity account and the signing	An activated equity account

	of a Risk Disclosure Statement	
Tax Treatment	Save for the 0.1% transaction tax, not subject to additional taxes	Save for the 0.1% transaction tax, not subject to additional taxes
Transaction Costs	Brokerage commissions and the 0.1% transaction tax	Brokerage commissions and the 0.1% transaction tax
Creation/ Redemption	Cash-basis	Cash-basis or in-kind