Leveraged, Inverse, and Commodity ETFs, and Volatility-linked ETPs Disclosure

Leveraged, Inverse and Commodity ETFs, and Volatility-linked ETPs carry certain risks including leverage, derivatives, and complex investment strategies, and may not be suitable for all investors.

Leveraged and Inverse ETFs

Exchange Traded Funds ("ETFs") that offer leverage or are designed to perform inversely to an index or benchmark or both are highly complex and are typically designed to achieve their stated goals on a daily basis. They are typically referred to as leveraged or inverse ETFs.

Due to the various features, complexity and risk involved with these products, the firm would like to point out the various risk associated with purchasing non-traditional ETFs. We would like to document the various features and risks associated with the product your registered representative or advisor is recommending.

Focus on Short-Term Performance

Leveraged and inverse ETFs allow investors to participate in a product that can provide enhanced short-term performance when an investor holds a particular view of the market or sector direction over a short period of time. It's important to understand the time period for which the targeted or inverse exposure applies. Leveraged ETFs are not designed to match the return for a holding period that is longer than the objective stated in the prospectus (e.g., daily). It is also important to understand that if an investor buys the ETF at a price that differs from that at the time the leverage is reset, the actual leverage or inverse factor realized may differ from the stated objective. This is also true for monthly, quarterly and lifetime leveraged products.

Leveraged ETFs

Leveraged ETFs contain features and risks that may make the product either suitable or unsuitable for certain investors. You must understand the risks associated with these products and how they correlate to your investment objectives, time horizon and impact of the volatility on performance. Due to the complexity and structure of Leveraged ETFs, they may not perform over time in direct or inverse correlation to the underlying index. Due to the effects of compounding, their performance over longer periods of time can differ significantly from their stated daily performance objectives.

Leveraged ETFs seek to deliver multiples of the performance of the index or benchmark they track. Leveraged ETFs currently have multiples of double or triple the benchmark's or index's daily return.

Inverse or Short ETFs

The objective of some ETFs is to deliver the opposite (i.e. the inverse or -1x) of the daily performance of the index or benchmark they track. These are often referred to as inverse or "short" ETFs. (Some fixed-income ETFs may be inverse funds, but there are also "short" duration/maturity ETFs that are not inverse products. It is important to distinguish the traditional from the non-traditional offerings.) Inverse ETFs are sometimes promoted as a way for investors to hedge their exposure to or to profit from markets that are moving downward.

Some ETFs are both inverse and leveraged, or “ultra-short.” Such ETFs attempt to achieve a return that is a multiple of the inverse performance of the underlying index or benchmark (i.e., -2x or -3x).

Currently, leveraged inverse ETFs have multipliers offering the daily inverse of two or three times the benchmark or index return.

- Inverse ETF – An inverse ETF that tracks the S&P 500 seeks to deliver the inverse of the performance of the S&P 500 on a daily basis.
- Leveraged Inverse ETF – A 2x inverse S&P 500 attempts to deliver twice the opposite of that index’s performance on a daily basis. A 3x inverse would attempt to deliver three times the opposite of the index’s performance.

How Leveraged and Inverse ETFs work
Most leveraged and inverse ETFs are designed to achieve their performance objectives on a daily basis. To do this, they generally reset their leverage or inverse exposure daily, meaning that they rebalance their portfolios to re-establish their target exposure ratios (e.g., -1x or +3x) at the end of each day. That is, the manager adjusts ETF holdings each day based on the closing value of its assets, reflecting benchmark returns and product flows for that day.

Real-Life Examples
The following two real-life examples illustrate how returns on a leveraged or inverse ETF over longer periods can differ significantly from the performance (or inverse of the performance) of their underlying index or benchmark during the same period of time.

- Between December 1, 2008, and April 30, 2009, a particular index gained 2 percent. However, a leveraged ETF seeking to deliver twice that index's daily return fell by 6 percent—and an inverse ETF seeking to deliver twice the inverse of the index's daily return fell by 26 percent.
- During that same period, an ETF seeking to deliver three times the daily return of a different index fell 53 percent, while the underlying index actually gained around 8 percent. An ETF seeking to deliver three times the inverse of the index's daily return declined by 90 percent over the same period.

Effect of Compounding on Daily Reset
The performance of leveraged and inverse ETFs with daily resents over longer periods of time – such as week or months-can be significantly different than the stated performance multiple or inverse of the performance of the underlying benchmark or index during that same period. This is due to the effects of compounding and the path-dependent nature of the products, as the daily gains or losses are computed with a different reference point each day. This is not tracking error, however, provided the products meet their daily objective. The performance of these non- traditional ETFs can depend on the degree or multiple (e.g., 2x versus 3x) and the positive (+) or negative (-) direction of leverage as well as the path the index takes. Higher leverage can lead to greater differences than non-inverse leveraged ETFs.

Commodity ETFs

ETFs are typically registered unit investment trusts (UITs) or open-end investment companies whose shares represent an interest in a portfolio of securities that track an underlying benchmark or index. However, some ETFs that invest in commodities, currencies, or commodity- or currency-based instruments are not registered as investment companies. Unlike traditional UITs or mutual funds, shares of ETFs typically trade throughout the day on an exchange at prices established by the market.

In some cases, the performance of the commodity futures-linked security can deviate significantly from the performance of the referenced commodity, especially over longer periods. The deviation could be either positive or negative, depending on market conditions and the product's investment strategy. This deviation can produce unexpected results for investors who are not familiar with futures markets, or who mistakenly believe that commodity futures-linked securities are designed to track commodity spot prices.

Standardized futures contracts are exchange-traded derivatives that guarantee delivery of a commodity on an agreed-upon date for an agreed-upon price. To avoid taking physical delivery of the commodity, commodity futures-linked securities that seek to provide investors with continuous exposure to commodities typically sell their next-to-expire contracts (those with the nearest delivery date) prior to expiration and replace them with contracts with more distant delivery dates—for example, those expiring in the next month. This is called rolling the position.

A futures contract reflects the expected value of the commodity upon delivery in the future, whereas the spot price reflects the immediate delivery value of the commodity. The price movements of a futures contract are typically correlated with the movements of the spot price of the referenced commodity, but the correlation is generally imperfect and price moves in the spot market may not be reflected in the futures market (and vice versa). Prices for futures contracts with more distant delivery dates can differ from each other as well as the spot price. Futures and spot prices generally converge as the futures contract expiration approaches, and they should be equal upon expiration of the futures contract, which then becomes a contract for immediate delivery. A commodity futures-linked security will typically roll its position before a contract's expiration and can face differing prices between the contract it sells and the new contract—for more distant delivery—that it buys. This difference is called the roll yield.

In some cases a commodity futures-linked security will have to roll its position into a more expensive contract (that is, the contract that is sold has a lower price than the one with which it is replaced), resulting in a loss, or negative roll yield. This is typical of a futures market in contango, in which futures contracts with more distant delivery dates are more expensive. In other cases, it may roll its position into a less expensive contract (that is, the contract that is sold has a higher price than the one with which it is replaced), resulting in a gain, or positive roll yield. This is typical of a futures market in backwardation, in which futures contracts with more distant delivery dates are less expensive.

Due to these and other market forces, commodity futures-linked securities can perform differently—either better or worse—than the spot price for the commodity itself. Moreover, over time, any performance differential can be magnified if a specific condition persists in the market for a given commodity, such as contango or backwardation. This deviation is not tracking error, because the futures-linked products are designed to track futures. However, it can lead to unexpected results for investors or registered representatives who do not understand the

product, or who mistakenly believe that the product will replicate the performance of the commodity's spot price.

Commodity futures-linked securities can have different methodologies for achieving their investment objectives, and they may or may not employ strategies that address roll yield. Some invest in a single futures contract, often the one with the closest delivery date. Others invest in multiple contracts along the futures curve (e.g., holding contracts for each of the next 12 months), which can allow them to diversify across different futures contracts. Others pursue more complicated investment strategies, such as tracking indices that attempt to optimize roll yield by minimizing the impact of contango or maximizing the impact of backwardation. Each strategy has different benefits, risks and costs, and the appropriateness of a particular methodology depends, in part, on an investor's needs and preferences.

You should understand all of the following areas before investing in commodity futures-linked securities:

- the commodity, basket of commodities or commodities index that a given product tracks;
- the product's goals, strategy and structure;
- that commodities prices, and the performance of commodity futures-linked securities, can be volatile;
- that the use of futures contracts can affect the performance of the product as compared to the performance of the underlying commodity or index;
- the product's methodology, including its strategy, if any, for managing roll yield and other factors that may affect performance; and
- the product's tax implications. (Commodity pools have different tax implications than mutual funds or exchange-traded notes.)

Volatility-linked Exchange-traded Products (ETPs)

There are significant risks associated with certain exchange-traded-products (ETPs) linked to the Chicago Board Options Exchange (CBOE) Volatility Index (VIX). Created in 1993, the VIX attempts to track broadly measured volatility in the market. It has been known as the market's "Fear Gauge" as it measures how much traders think the market will move up or down in the coming month. VIX is an index, not a security, but certain ETPs have attempted to allow investors to track the performance of the VIX index. When traders buy and sell equity derivatives, the price is based on how much they think stock prices will move around during the duration of the derivative contract. The VIX is that number, or implied volatility, for S&P derivatives. The bigger the number, the more risk the market expects.

Investing in securities based on the VIX are derivatives packaged together into an exchange-traded fund, allowing ordinary investors to make bets on market volatility, essentially a derivative of a derivative. Certain ETFs/ETPs are structured to provide investors with returns that are positive when the VIX falls, and negative when the VIX rises. The performance of the ETF/ETP linked to the VIX can deviate significantly from the performance of the underline VIX, especially over longer periods of time. This deviation can produce significant varying results from the actual VIX, and in many cases cause significant losses to occur.