

RISK DISCLOSURE REGARDING COMPLEX OR LEVERAGED EXCHANGE-TRADED PRODUCTS

Interactive Brokers ("IBKR") is furnishing this disclosure to clients to provide additional information regarding the characteristics and risks associated with Complex or Leveraged exchange-traded products ("ETPs"). Complex or Leveraged Exchange-Traded Products ("ETPs") are funds or notes that trade on an exchange but have very different characteristics from shares of stock or ordinary exchange-traded funds (ETFs) such as an S&P 500 Index ETF. Complex or Leveraged ETPs may include, but are not limited to: (1) leveraged ETFs and ETPs; (2) inverse ETFs and ETPs; (3) volatility-linked ETFs and ETPs; (4) Exchange-Traded Notes ("ETNs"); (5) cryptocurrency ETFs and ETPs; and (6) any other ETP that uses derivatives, that contains imbedded leverage, or that is based on an exotic or volatile underlying commodity or index or financial product.

In addition to providing this disclosure, IBKR strongly encourages clients to carefully review the prospectus, Key Information Document or other available disclosures relating to the specific ETF, ETN or other ETP before investing, to understand its unique features, risks, fees, tax treatment and other characteristics.

LEVERAGED FUNDS

As the name implies, leveraged mutual funds and ETFs seek to provide leveraged returns at multiples of the underlying benchmark or index they track. Leveraged funds generally seek to provide a multiple (i.e., 200%, 300%) of the daily return of an index or other benchmark for a single day excluding fees and other expenses. In addition to using leverage, these funds often use derivative products such as swaps, options, and futures contracts to accomplish their objectives. The use of leverage as well as derivative instruments can cause leveraged funds to be more volatile and subject to extreme price movements, potentially causing rapid losses.

INVERSE FUNDS

Inverse mutual funds and ETFs, which are sometimes referred to as "short" funds, generally seek to provide the opposite of the single day performance of the index or benchmark they track. Inverse funds are often marketed as a way to profit from, or hedge exposure to, downward moving markets. Some inverse funds also use leverage, such that they seek to achieve a return that is a multiple of the opposite performance of the underlying index or benchmark (i.e., -200%, -300%). In addition to leverage, these funds may also use derivative instruments to accomplish their objectives. As such, inverse funds are volatile and entail the potential for significant losses.

VOLATILITY-LINKED PRODUCTS

Volatility-linked ETPs are generally designed to track a volatility measure, typically the Chicago Board Options Exchange Volatility Index (VIX) futures. The VIX is a measure of the expected volatility of the S&P 500 index as measured by the implied volatility of options on that index. Volatility ETPs gain exposure to market volatility through futures and/or options contracts on the VIX. Volatility-linked ETPs that seek to maintain a continuous, targeted maturity exposure to VIX futures will either track or hold VIX futures contracts on a rolling basis. They will sell shorter-term contracts or contracts about to expire and replace them with contracts that have more distant or deferred maturity dates in order to maintain the desired exposure. The performance of volatility-linked ETPs may be significantly different than the performance of the VIX and the actual realized volatility of the S&P 500 Index. VIX futures contracts are among the most volatile segments of all futures markets. Volatility-linked ETPs may be subject to extreme volatility and much greater risk of loss than other traditional ETFs.

EXCHANGE-TRADED NOTES

ETNs are a type of debt security that trade on exchanges and promise a return linked to a market index or other benchmark. ETNs are unsecured debt obligations of the issuer-typically a bank or another financial institution. Unlike traditional bonds, ETNs typically do not pay any interest payments to investors. Instead, the issuer promises to pay the holder of the ETN an amount determined by the performance of the underlying index or benchmark on the ETN's maturity date (typically 10, 30 or in some cases even 40 years from issuance), minus any specified fees. In addition, unlike traditional bonds, ETNs trade on exchanges throughout the day at prices determined by the market, similar to stocks or ETFs. But unlike ETFs, ETNs do not buy or hold assets to replicate or approximate the performance of the underlying index.

Some ETNs provide exposure to familiar, broad-based indexes, while others do so to less familiar asset classes or newer, more complex, or even proprietary indexes. For example, there are ETNs linked to indexes that track emerging markets, commodities such as gold and oil, foreign currencies and market volatility. Some of the indexes and investment strategies used by ETNs can be quite sophisticated and may not have much performance history. The return on an ETN generally depends on price changes if the ETN is sold prior to maturity (as with stocks or ETFs)-or on the payment, if any, if the ETN is held to maturity or redeemed (as with some other structured products).

Some ETNs offer leveraged exposure to the index or benchmark they track. This means that they promise to pay a multiple of the performance of the underlying index or benchmark. For example, an ETN that offers two times-or "2x"-leverage promises to pay twice the performance of the index it tracks.

Inverse ETNs offer to pay the opposite of the performance of the index or benchmark they track, and leveraged inverse ETNs seek to pay a multiple of the opposite of the performance of the index or benchmark they track. Some leveraged, inverse or leveraged inverse ETNs are designed to achieve their stated performance objectives on a daily basis and "reset" their leverage or inverse exposure on a daily basis. Given the daily resetting of its leverage factor, an ETN that is set up to deliver twice the performance of a benchmark on a daily basis will not necessarily deliver twice the performance of that benchmark over longer periods such as weeks, months or years. Due to the effect of compounding, their performance over longer periods of time can differ significantly from the stated multiple of the performance (or inverse of the performance) of their underlying index or benchmark during the same period of time.

Generally, leveraged and inverse ETNs are designed to be short-term trading tools and are not intended for buy-and-hold investing. Other leveraged, inverse or leveraged inverse ETNs can have monthly resets or even no resets, so it is important to distinguish one type from another and understand how their performance may differ.

ETNs list on an exchange and can be bought and sold at market prices, similar to other exchange-traded investments. Market prices of ETNs may fluctuate due to movements in the indexes they track, as well as other factors, including ETN issuances and redemption activity. Issuers of ETNs issue and redeem notes as a means to keep the ETN's price in line with a calculated value, called the indicative value or closing indicative value for ETNs. This value is calculated and published at the end of each day by the ETN issuer. When an ETN is trading at a premium above the indicative value, issuing more notes to the market can bring the price down. Similarly, if an ETN is trading at a discount, redemption of notes by the issuer reduces the number of notes available in the market, which tends to raise the price.

ETN issuers have primary control over the issuance and redemption processes in the ETN market. The decision to issue additional notes is at the issuer's sole discretion. Investors may initiate the redemption process prior to an ETN's maturity date, following precise steps laid out by the issuer in the prospectus. The process generally begins by submitting a "notice of redemption" form to the issuer. Given the various steps in the process, transaction fees-and especially the large number of ETNs required to initiate a redemption (usually 25,000 or 50,000)-redemption is not generally a practical source of liquidity for most

retail investors. If a redemption occurs, the issuer will redeem the notes at the ETN's indicative value.

Indicative values are generally based on the value of the underlying index or benchmark, minus certain fees (sometimes referred to as "daily investor fees"), which vary across ETNs and can fluctuate for a given ETN. ETNs also typically have an intraday indicative value that is calculated and published every 15 seconds during the trading day under the applicable trading symbol by the market in which the ETN trades. Each ETN uses its own formula for computing its indicative value, which is generally outlined in the ETN's prospectus or pricing supplement.

An ETN's closing indicative value, as well as its intraday indicative value, are distinct from an ETN's market price, which is the price at which an ETN trades in the secondary market. In theory, an ETN's market price should closely track its closing and intraday indicative values. However, an ETN's market price can deviate, sometimes significantly, from its indicative value. Price deviations can happen for a variety of reasons. For example, an ETN might trade at a premium to its indicative value if the issuer suspends issuance of new notes. Paying a premium relative to the indicative value to purchase the ETN in the secondary market-and then selling the ETN when the market price no longer reflects the premium-can lead to significant losses for an investor. This occurred when an ETN experienced price movement that diverged significantly from its indicative value and the performance of the index it tracks, due in part to suspensions in the issuance of new notes, which caused the ETN to trade at a significant premium-nearly 90 percent. When the issuer of the ETN resumed the issuance of new notes, the market price of the ETN fell sharply-dropping by more than half in two days. For this reason, before trading in the secondary market, it's a good idea to compare an ETN's closing and intraday indicative values with the market price. If the ETN is trading at a significant premium to its closing or intraday indicative value, you might want to consider similar products that are not trading at a premium, or that provide similar exposure to the index or asset class. It's also a good idea to ask whether the issuer has suspended issuing new notes, and if so, why.

RISKS ASSOCIATED WITH COMPLEX OR LEVERAGED ETPS

Complex or Leveraged ETPs are complicated instruments that should only be used by sophisticated investors who fully understand the terms, investment strategy and risks associated with the funds. In particular, clients should be aware of certain specific risks involved. These risks include, but are not limited to:

Use of Leverage and/or Derivative Instruments: Many leveraged and inverse funds as well as volatility-linked products use leverage and derivative instruments, such as futures and options contracts, to achieve their stated investment objectives. As such, they can be extremely volatile and carry a high risk of substantial losses. Complex or Leveraged ETPs are considered speculative investments and should only be used by investors who fully understand the risks and are willing and able to absorb potentially significant losses.

Seek Daily Target Returns: Many Complex or Leveraged ETPs "reset" daily, meaning that they are designed to achieve their stated objectives on a daily basis. Due to the effect of compounding, the return for investors who invest for a period longer than one trading day may vary significantly from the stated goal as well as the target benchmark's performance. This is especially true in very volatile markets or if an ETP is tracking a very volatile underlying index. Investments in any ETP must be actively monitored on a daily basis and are typically not appropriate for a buy-and-hold strategy.

Higher Operating Expenses and Fees: Investors should be aware that these ETPs typically rebalance their portfolios on a frequent basis, often daily, in order to compensate for anticipated changes in overall market conditions. For example, volatility-linked ETPs will rebalance their exposure to futures of different maturities to maintain the targeted maturity. This rebalancing can result in frequent trading and increased portfolio turnover. These ETPs will therefore generally have higher operating expenses and investment management fees than other funds or products.

Tax Treatment May Vary: In many cases, Complex or Leveraged ETPs may generate their returns through the use of derivative instruments. Because derivatives are taxed differently from equity or fixed-income securities, investors should be aware that these ETPs may not have the same tax efficiencies as other funds or products.

Credit Risk: ETNs are unsecured debt obligations of the issuer. If the issuer defaults on the note, investors may lose some or all of their investment.

Market Risk: ETPs are market-linked: the value of an ETP is largely influenced by the value of the index it tracks or underlying investments it is based on. Make sure you understand what underlying or index is being tracked by the ETP—for example, some indices reflect a dynamic trading strategy and others are based on futures markets. Also, some indices reflect "total returns" while others may not.

Liquidity Risk. Although ETPs are exchange-traded, they do carry some liquidity risk. As with other exchange-traded products, a trading market may not develop. In addition, under some circumstances, issuers can delist an ETP. If this happens, the market for the ETP can dry up or evaporate entirely.

- **Price-Tracking Risk.** ETPs typically trade at prices that closely track their indicative values, but this might not always be the case. When trading in the secondary market, check market prices against indicative values, and be wary of buying at a price that varies significantly from closing and intraday indicative values.
- **Holding-Period Risk.** Some ETPs, particularly some leveraged, inverse and inverse leveraged ETNs, are designed to be short-term trading tools (with holding periods as short as one day) rather than buy-and-hold investments. Because of the effects of compounding, the performance of these products over long periods can differ significantly from the stated multiple of the performance (or inverse of the performance) of the underlying index or benchmark during the same period.
- **Call, Early Redemption and Acceleration Risk.** Some ETNs are callable at the issuer's discretion. In some instances ETNs can be subject to early redemption or an "accelerated" maturity date at the discretion of the issuer or one of its affiliates. Since ETNs may be called at any time, their value when called may be less than the market price that you paid or even zero, resulting in a partial or total loss of your investment.
- **Conflicts of Interest.** There are a number of potential conflicts of interest between you and the issuer of these products. For example, the issuer of ETNs may engage in trading activities that are at odds with investors who hold the notes (shorting strategies, for instance). Search the ETN's prospectus for any mention of "conflicts of interest" and evaluate whether these conflicts are worth the risk.

BEFORE YOU INVEST

Make sure you have answers to the following questions so that you can better assess whether an ETP investment is right for you:

- **Who is the issuer?** Once you know, be sure to research the issuer's credit rating and financial situation. If the issuer is publicly traded, use the [SEC's EDGAR database](#). Keep in mind that for ETNs, they are not registered investment companies and therefore are not subject to the same registration, disclosure and other regulatory requirements as most ETFs or mutual funds.
- **What index or benchmark does the ETP track?** If it involves an unfamiliar market or asset class, ask yourself whether you feel informed enough about the market or asset to effectively assess the risks involved.
- **Is the ETP callable by the issuer?** You can find this out by reading the prospectus or asking your financial professional.
- **Does the ETP offer leveraged or inverse exposure to the underlying index or benchmark?** If so, how frequently does it "reset"? One clue may be in the ETP's name: words like "daily" and "short-term" often indicate that the product resets daily and is not intended to be held for long periods of time.
- **What fees and costs are associated with the ETP?** ETPs differ widely with respect to fees,

including the investor fee charged in connection with redemptions. Read the prospectus and ask your investment professional to clearly explain any fees and expenses associated with a given ETN.

- **What are the tax consequences?** The tax treatment of ETPs can vary depending on the nature of the ETN. Check with your tax advisor if you are unsure about the tax implications of a particular investment.