

## Leveraged and Inverse ETFs

### 1. Definition

Leveraged ETFs are ETFs that seek to deliver a multiple of the daily return on a given index. Consider the example of a leveraged ETF with a designated multiple of 2x, i. e. seeks to deliver twice the return of its stated index: when the index goes up by 1%, the ETF should go up 2%; when the index goes down 1%, the ETF should likewise decline by 2%.

Inverse ETFs, on the other hand, seek to deliver the inverse of the performance of its stated index. For an inverse ETF with a stated multiple of 1x, when the underlying index goes up 1%, the inverse ETF will go down 1%; when the index goes down 1%, the inverse ETF will go up 1%.

### 2. First-time Investors Require Signing of Risk Disclosure Statement

Excepting institutional investors, first-time investors in leveraged and inverse ETFs must sign a risk disclosure statement, which can be completed both in written format and electronically. Entities falling under the category of

institutional investor include domestic (and foreign) banks, insurance companies, bill finance companies, securities firms, fund management companies, government investment institutions, government funds, pension funds, mutual funds, unit trusts, securities investment trust enterprises (SITEs), securities investment consulting enterprises (SICEs), trust enterprises, futures commission merchants, futures services agencies and related institutions approved and authorized by the FSC.

### 3. Investor Qualifications for Leveraged and Inverse ETFs

Excepting professional institutional investors, individual investors fulfill at least one of the following criteria:

- (1) Have a margin account
- (2) Have at least 10 transactions on call (put) warrants within the most recent 12 month period
- (3) Have at least 10 transactions on futures and options traded on TAIFEX within the most recent 12 month period

### 4. Limit Up/Down or Price Fluctuation Limits

For leveraged and inverse ETFs seeking to achieve a return that is the multiple of the performance of the stated domestic index, price fluctuation limits would occur in multiples of 10%. For example, a leveraged ETF tracking a domestic index with a stated multiple of 2x would have a price fluctuation limit of 20%. The price fluctuation limit does not apply to leveraged and inverse ETFs with a foreign underlying index.

5. Creations/Redemptions: performed on a cash basis

6. Special Properties of Leveraged and Inverse ETFs

(1) Short-term Products

Leveraged and inverse ETFs offer a different investment option from the traditional variety of ETFs. In addition to trading in margin accounts and the added flexibility they provide—especially when betting on a market rally or particular asset class—leveraged ETFs allow investors to take extra advantage of a market increase through magnified exposure to the fund's underlying index. Inverse ETFs allow investors to hedge their

exposure and otherwise enable more diverse trading strategies. It is important to note that leveraged and inverse ETFs differ from traditional ETFs in that they are designed to achieve their stated multiples on a daily basis. Investors holding leveraged and inverse ETFs over longer periods may observe that the ETF's return differs significantly from the performance of the underlying index due to the effects of compounding. Consequently, leveraged and inverse ETFs are not suitable for long-term investing and best used as short-term tactical trading instruments.

(2) Leveraged ETF with a Stated Multiple of 2x

2x Leveraged ETF Return  $\neq$  Index Return  $\times 2$

Example 1: Oscillating markets (i.e. index rises and falls sequentially)

2x Leveraged ETF Return  $>$  Index Return  $\times 2$

	Benchmark Index	2x Leveraged
Day1	5%	10%
Day2	5%	10%
Return	$(1+5\%) \times (1+5\%) - 1 = 10.25\%$	$(1+10\%) \times (1+10\%) - 1 = 21\%$
Return $\times 2$	<b>20.50%</b>	

	Benchmark Index	2x Leveraged
Day1	-5%	-10%
Day2	-5%	-10%
Return	$(1-5\%) \times (1-5\%) - 1 = -9.75\%$	$(1-10\%) \times (1-10\%) - 1 = -19\%$
Return $\times 2$	<b>-19.50%</b>	

Example 2: Index with volatile daily price swings

2x Leveraged ETF Return < Index Return $\times 2$

	Benchmark Index	2x Leveraged
Day1	5%	10%
Day2	-5%	-10%
Return	$(1+5\%) \times (1-5\%) - 1 = -0.25\%$	$(1+10\%) \times (1-10\%) - 1 = -1\%$
Return $\times 2$	<b>-0.50%</b>	

## 7. Benchmark Indexes vs. Leveraged and Inverse Indexes

- Leveraged and inverse indexes are constructed based off the multiple or inverse of the underlying benchmark's one-day return less fees and expenses, so that the daily return is reflected in the index's price fluctuations.

In this way, the performance of ETFs that track leveraged and inverse indexes align with the performance of the underlying benchmark. Investors who study the performance and trends of these leveraged and

inverse indexes will gain a better understanding of both the ETFs' special features and risk characteristics.

- Leveraged and inverse ETFs which track unleveraged indexes should be weighed carefully before investing. The impact of compounding on leveraged and inverse ETFs for regular indexes could cause the performance of these funds to diverge sharply from the benchmark return times the stated multiple in the fund's objective.
- Investors can access the Market Observation Post System (MOPS) for a SITE's most up-to-date NAV calculations as well as whether the fund is trading at a premium or discount. Weekly weightings of portfolio asset holdings, the monthly top five assets held, and NAVs of the portfolio asset classes and their corresponding proportions of the total portfolio NAV are all available on the MOPS website for investors to be able to make sound decisions concerning their investments.

## 8. Other Matters of Attention

- Because managers of these funds typically hold futures in order to achieve the fund' s stated multiple of an index' s one-day returns, the risk of backwardation and the impact of management factors could contribute to the fund' s tracking error.
- Leveraged and inverse ETFs reset daily to deliver their stated investment objectives. These daily resets could result in higher trading costs that erode the profitability of the fund and effect a larger divergence between the indicative NAV (iNAV) and the closing NAV than one would normally observe for traditional ETFs.
- Investors should refer directly to the fund issuer' s website for the most up-to-date iNAV calculation and gain a better understanding of how close the fund is trading to its NAV.
- Leveraged and inverse ETFs seek to provide a target multiple or inverse of index returns for one day. If held for periods longer than a day, returns from these funds could differ significantly from the performance of the

underlying index and may not achieve target multiple or inverse due to the effects of compounding.

- Best suited as short-term tactical instruments and for investors who devote prolonged periods to monitoring their investment and its effects on portfolio performance
- Not suitable for long-term investing