

Important Information about Leveraged and Inverse Funds

The Financial Industry Regulatory Authority (FINRA) and the Securities and Exchange Commission (SEC) have jointly issued an Investor Alert entitled “Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors,” which is available on FINRA’s and the SEC’s websites. A link to those websites is provided below. Through this Investor Alert, both FINRA and the SEC seek to warn retail investors of the risks associated with investing in these highly complex products because they believe individual investors may be confused about the performance objectives of these products. Leveraged and inverse exchange traded funds (ETFs), exchange traded notes (ETNs) and mutual funds (collectively referred to as “funds”) are typically designed to achieve their stated performance objectives on a daily basis, and some investors might invest in these funds with the expectation that these funds may meet their stated daily objectives over the long term as well. Investors should be aware that the performance of leveraged and inverse funds over a period longer than one day can differ significantly from their stated daily performance objectives. This document describes the potential issues and risks associated with inverse and leveraged funds and cautions clients regarding these products.

Leveraged and Inverse Funds: Leveraged funds include both inverse and non-inverse funds that attempt to achieve the performance of an index (directionally up for leveraged funds and directionally down for inverse funds) by a multiple (such as 2x or 3x). Baird does not recommend leveraged funds to our clients and leveraged funds can only be purchased by clients on an unsolicited basis when deemed acceptable by Baird. Leveraged funds may be suitable for short term trading but can lose value quickly over longer periods of time based on market volatility and the directional trading of the index they are designed to track. The fact that leveraged funds are designed to provide multiples of the performance of the index on a daily basis makes them risky investment vehicles both for short and long term holding. Due to the effect of compounding, fees and daily resets, the performance of leveraged and inverse funds over longer periods of time can differ significantly from the performance (or inverse of the performance) of their underlying benchmark during the same period of time. The magnitude of this disparate performance is particularly high in volatile markets.

In addition, the use of leverage entails the risk that an investor’s returns may be significantly worse than the decline (or, for leveraged inverse funds, the increase) in the value of the underlying benchmark. Leverage causes the value of a fund’s shares to be more volatile than if the fund did not use leverage. The use of leverage will also cause a fund to underperform the compounded return of the underlying benchmark in a trendless or flat market. As a result, the performance of leveraged funds over longer periods of time can differ significantly from the performance of their underlying benchmark. For example, a 2X leveraged S&P 500 ETF held for several days when the S&P 500 has gone up 3% may yield much less than 6% (2 times 3%), due to daily reset of prices of the ETF and the volatility of the market during that period.

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Inverse funds are not leveraged but reset their prices on a daily basis. Sometimes referred to as “short” funds, inverse funds seek to deliver the opposite of the performance of the index or benchmark they track. Inverse funds are designed to provide -100% exposure to a specified index. Inverse funds may be used to trade short term, or to hedge a position with the belief that an index will fall over a longer term. If inverse funds are held for longer periods, investors should be aware that the inverse funds reset their price daily and volatility in the markets can affect their performance. For example, an investor that buys an inverse S&P 500 ETF and holds it over a period of a month when the S&P 500 fell by 3 percent may experience a return of less than 3 percent even before taking into account trade costs and fund expenses. Though the causes of this difference in return (daily reset and market volatility) are generally not amplified as they are with leveraged funds, they are still a factor for investors to understand and evaluate each day as they consider whether to buy or sell positions in inverse funds. If used as a hedge, it is important to review the position size relative to the exposure looking to be hedged, as market movements may require a revision to the size of the inverse position to retain the intended hedge.

Leveraged and inverse (leveraged or non-leveraged) funds are complicated instruments that should only be used by sophisticated investors who fully understand their complexities, terms, structures and risks. To accomplish their objectives, leveraged and inverse funds pursue a range of investment strategies through the use of swaps, futures contracts, options and other derivative instruments. Most leveraged and inverse funds are “reset” on a daily basis, meaning they are designed to achieve their stated objectives on a daily basis. Buy-and-hold investors with an intermediate or long-term time horizon should carefully consider whether leveraged and inverse funds are appropriate for their portfolio. It is important that individual investors seek the advice of an investment professional who understands their investment objectives and tolerance for risk, understands leveraged and inverse funds, is able to explain whether or how they fit with the investors’ objectives and is willing and able to monitor investors’ use of leveraged and inverse funds.

Due to the effect of compounding, operating expenses and daily resets, the performance of leveraged and inverse funds over longer periods of time can differ significantly from the performance (or inverse of the performance) of their underlying index or benchmark during the same period of time. The magnitude of this disparate performance is particularly high in volatile markets. Leveraged and inverse funds that have daily resets are attempting to achieve their objectives on a daily basis, not over a week, month or longer period; as a result, clients should not assume or expect the performance of a leveraged or inverse fund over a period of time in excess of one trading day to track or even resemble the performance (or the opposite performance) of the underlying index or benchmark. For example, an investor in a 2x leveraged fund that tracks the S&P 500 -- a fund that seeks to deliver twice the daily return of the S&P 500 -- should not expect his return over a one-month period to be 10% if the S&P 500 goes up 5% over that same period. Daily volatility over time will have a significant effect on performance vis-à-vis the underlying index or benchmark. Such performance deviations are often quite meaningful and unexpected.

The following two real-life examples illustrate how returns on a leveraged or inverse fund 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:

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- Between December 1, 2008 and April 30, 2009, a particular index gained 2%. However, a leveraged ETF seeking to deliver twice that index’s daily return (2x) fell by 6%--and a leveraged inverse ETF seeking to deliver twice the inverse of the index’s daily return (-2x) fell by 26%.¹ An investor unaware that these funds only try to achieve their stated performance objectives on a daily basis may have expected the 2x fund to deliver a 4% return and the -2x fund to return a flat 0% during this period.
- During that same period, an ETF seeking to deliver three times the daily return of a different index (3x) fell 53% while the underlying index actually gained about 8%. An ETF seeking to deliver three times the inverse of that index’s daily return (-3x) declined by 90% over the same period.¹

To better explain how the returns of a leveraged or inverse fund can differ dramatically over a period of more than one day from the returns of the index underlying the fund, here’s a hypothetical example over a two-trading-day period for a 2x leveraged fund that has no operating expenses:

	Value of Leveraged ETF	Index Performance
Start	\$100	100
End Day 1	\$80	90
End Day 2	\$96	99

In this hypothetical example, on Day 1, the index started with a value of 100 and a leveraged ETF that seeks to double the return of the index started at \$100. The index dropped by 10 points on Day 1, causing a 10% loss and a resulting value of 90. Assuming it achieved its stated objective, the leveraged ETF would therefore drop 20% on that day and have an ending value of \$80. On Day 2, the index rose 10%, and the index value increased to 99. For the ETF, its value for Day 2 would rise by 20%, which means the ETF would have a value of \$96. On both days, the leveraged ETF did exactly what it was supposed to do – it produced daily returns that were two times the daily index returns. But let’s look at the results over the 2 day period: the index lost 1 percent (it fell from 100 to 99) while the 2x leveraged ETF lost 4 percent (it fell from \$100 to \$96). That means that over the two day period, the ETF’s negative returns were 4 times as much as the two-day return of the index instead of 2 times the return.¹

Before investing in a leveraged or inverse fund, it is critical that investors review the historical performance of the fund as compared to the underlying index or benchmark to determine the correlation (or inverse correlation) risk and tracking error. Investors should also be mindful of the standard deviation (i.e., volatility) of an inverse or leveraged fund. Funds with higher standard deviations are more volatile.

In addition to performance tracking issues, leveraged funds involve the use of borrowing or other forms of leverage, which are designed to cause their returns to be more exaggerated than the returns (or inverse of the returns) of the underlying index or benchmark by an intended multiple (such as 2x or 3x). The use of leverage

¹ “Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors”. Securities and Exchange Commission. www.sec.gov. August 18, 2009.



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entails the risk that an investor's returns may be significantly worse than the decline (or, for leveraged inverse funds, the increase) in the value of the underlying index or benchmark. For example, if from one trading day to the next the S&P 500 loses 5%, an investor in a 2x leveraged fund that tracks the S&P 500 would lose 10%.

Leverage causes the value of a fund's shares to be more volatile than if the fund did not use leverage. The use of leverage by a fund will also cause the fund to underperform the compounded return of the underlying index or benchmark in a trendless or flat market. Leveraged funds are considered speculative and should only be used by investors willing and able to absorb potentially significant losses.

Leveraged and inverse funds involve risks associated with their respective investment objectives and principal strategies, including aggressive investment techniques and derivatives risk, correlation and inverse correlation risk (particularly for leveraged funds), counterparty risk, credit risk, non-diversification risk, market risk, equity or fixed income risk, price variation risk, liquidity risk, early close/trading halt risk, and active trading and portfolio turnover risk, which are described in their prospectuses.

Leveraged and inverse funds are generally inefficient from a tax perspective. They tend to distribute more income and short-term capital gains than other funds.

Like other ETFs and mutual funds, leveraged and inverse funds have operating fees and expenses that are paid out of their assets and thus affect their NAVs and market prices. However, leveraged and inverse funds generally have higher operating expenses as a percentage of assets than other funds.

Investors in leveraged or inverse funds should obtain and carefully read the applicable prospectuses and ask questions of their Financial Advisor before investing. Prospectuses for leveraged or inverse funds include discussions of the principal strategies used by the funds and the risks associated with those strategies and contain important information about historical performance and fees and expenses.

FINRA and SEC Alert

The FINRA and SEC Investor Alert, "Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors," can be found at the following web addresses:

<https://www.finra.org/investors/alerts/leveraged-and-inverse-etfs-specialized-products-extra-risks-buy-and-hold-investors>

www.sec.gov/investor/pubs/leveragedetfs-alert.htm