VOLATILITY SHARES

HOW BITX WORKS: BEYOND THE BASICS

- BITX is a daily resetting leveraged ETF.
- Leverage compounding may boost BITX performance.
- Volatility drag may dampen BITX performance.

On June 27, 2023, Volatility Shares launched the **2x Bitcoin Strategy ETF (Ticker: BITX)**, the first ETF to offer leveraged exposure to a cryptocurrency in the U.S. This article expands upon ***How BITX Works: The Basics***.

BITX IS A DAILY RESETTING LEVERAGED ETF

BITX is structured as a leveraged, daily resetting ETF. BITX's investment objective is to deliver twice (2x) the daily performance of Bitcoin. To maintain this daily 2x exposure, BITX buys or sells Bitcoin futures to reset its exposure back to 2x every day.

Like all daily leveraged ETFs, BITX exhibits two important characteristics known as leverage compounding and volatility drag. Leverage compounding may magnify the performance of the ETF beyond the expected 2x objective over periods of more than one day, while volatility drag has the opposite effect, and may dampen longer term returns. Whether BITX exhibits leverage compounding or volatility drag depends on the trend or mean reversion in Bitcoin futures daily prices. If daily prices are trending up, long term performance tends to outperform the daily 2x objective, while if daily prices are mean reverting, the long-term performance tends to lag the expected 2x objective. Let me explain.

LEVERAGE COMPOUNDING

Leveraged compounding in leveraged ETFs occurs when daily prices follow a trending path. For example, if the day-to-day price action is generally in one direction, then the rebalancing activity that BITX performs each day compounds the ETF's daily leveraged returns and tends to cause the ETF to outperform the 2x daily objective over a longer period. For example, if Bitcoin futures were to trend up 10% a day for three consecutive days, then BITX's performance could be calculated as = 1.2 * 1.2 *1.2 = 1.73, or a performance of around 73% over the three days. This is notably higher than the 60% gain some traders may expect by simply adding 20% over three days.

For leveraged funds like BITX, the larger the daily moves, the more pronounced this compounding becomes. For example, if Bitcoin futures were to rise 20% a day for three consecutive days, then BITX's expected performance could be calculated as = 1.4 *1.4 * 1.4 = 2.74, or an impressive 174% increase over three days – a whopping 54% more than the simple sum of the three 40% returns (40% + 40% + 40% = 120%).

Put simply, daily leveraged ETFs like BITX may appeal to investors who believe Bitcoin futures will consistently trend upward over time.

VOLATILITY DRAG

On the other hand, volatility drag in leveraged ETFs occurs when daily security prices follow a noisy, up-and-down path. Because leveraged ETFs must rebalance their assets at the end of every day, if the day-to-day price action is noisy, that rebalancing activity may generate losses and cause the ETF to underperform its daily objective over a longer period. For example, if Bitcoin futures were to rise 10% on day one, fall 5% on day two, and then rise 7% on day three, the expected leveraged performance of a fund like BITX over the three days would be = 1.2 * 0.9 * 1.14 = 1.23, or 23%, while the simple sum of the leveraged daily returns +20% - 10% +14% = 24%. This 1% lag is due to volatility drag.

The magnitude of volatility drag depends on the magnitude of the daily reversals. For a 2x leveraged product like BITX, the average daily volatility drag may be approximated as the daily volatility of Bitcoin squared. If the daily volatility of Bitcoin was about 4%, BITX's expected volatility drag could therefore be calculated to be around (0.04)^2 = 0.16%. If reversions like this were to happen every day, these losses may add up.

CONCLUSION

BITX may be best positioned for traders expecting an upward trend in Bitcoin futures prices, as BITX may offer leveraged exposure to Bitcoin futures of greater than 2x over periods greater than one day. On the other hand, if Bitcoin futures prices remain volatile within a range and do not trend upward, volatility drag may erode returns over longer periods.

ABOUT THE AUTHOR

Stuart Barton is the CIO of Volatility Shares and a commodity trading specialist with more than 20 years' experience building and managing portfolios. Stuart holds a PhD in Economic History from the University of Cambridge, an MBA from the University of Surrey, and a B.Sc in engineering from the University of Cape Town. Stuart is also a CFA Charter holder.

DISCLOSURE

Past performance is not necessarily indicative of future results.

An investor should consider the investment objectives, risks, and charges and expenses of the fund carefully before investing. A preliminary prospectus which contains this and other information about the fund may be obtained by calling 866-261-0273. Read it carefully before investing.

Investing involves risk; Principal loss is possible. **The Fund does not invest directly in Bitcoin. Instead, the Fund seeks to benefit from increases in the price of Bitcoin Futures Contracts for a single day.** The Fund presents different risks from other funds, may only be suitable for knowledgeable investors who understand the consequences of seeking daily (2x) investment results, including the impact of compounding on Fund performance. Investors in the Fund should actively manage and monitor their investments, as frequently as daily. An investor in the Fund could potentially lose the full value of their investment within a single day.

Bitcoin and Bitcoin futures are relatively new investments. They are subject to unique and substantial risks, and historically, have been subject to significant price volatility.

Compounding Risk. The Fund has a single day investment objective, and the Fund's performance for any other period is the result of its return for each day compounded over the period.

Leveraged Correlation Risk. Several factors may affect the Fund's ability to achieve a high degree of leveraged (2x) correlation with Bitcoin, and there is no guarantee that the Fund will achieve a high degree of correlation each day compounded over the period.

Rebalancing Risk. If for any reason the Fund is unable to rebalance all or a portion of its portfolio, or if all or a portion of the portfolio is rebalanced incorrectly, the Fund's investment exposure may not be consistent with the Fund's daily investment objective.

Bitcoin is a new technological innovation with a limited history. There is no assurance that usage of Bitcoin will continue to grow. A contraction in use of Bitcoin may result in increased volatility or a reduction in the price of Bitcoin, which could adversely impact the value of the Fund.

Futures Contracts Risk. Risks of futures contracts include: (i) an imperfect correlation between the value of the futures contract and the underlying asset; (ii) possible lack of a liquid secondary market; (iii) the inability to close a futures contract when desired; (iv) losses caused by unanticipated market movements, which may be unlimited; (v) an obligation for the Fund to make daily cash payments to maintain its required margin, particularly at times when the Fund may have insufficient cash; and (vi) unfavorable execution prices from rapid selling.

Liquidity Risk. The market for the Bitcoin futures contracts is still developing and may be subject to periods of illiquidity.

Collateral Investments Risk. The Fund's use of Collateral Investments may include obligations issued or guaranteed by the U.S. Government, its agencies, and instrumentalities, including bills, notes and bonds issued by the U.S. Treasury, money market funds and corporate debt securities, such as commercial paper.

Subsidiary Investment Risk. Changes in the laws of the United States and/or the Cayman Islands, under which the Fund and the Subsidiary are organized, respectively, could result in the inability of the Fund to operate as intended and could negatively affect the Fund and its shareholders.

Active Management Risk. The Fund is actively managed, and its performance reflects investment decisions that the Sub-Adviser and Adviser make for the Fund.

Non-Diversification Risk. The Fund is classified as "non-diversified" under the 1940 Act. As a result, the Fund is only limited as to the percentage of its assets which may be invested in the securities of any one issuer by the diversification requirements imposed by the Internal Revenue Code of 1986, as amended.

Reverse Repurchase Agreements Risk. The Fund may invest in reverse repurchase agreements. Reverse repurchase agreements are transactions in which the Fund sells portfolio securities to financial institutions such as banks and broker-dealers and agrees to repurchase them at a mutually agreed-upon date and price which is higher than the original sale price.

New Fund Risk. As of the date of this prospectus, the Fund has no operating history and currently has fewer assets than larger funds.

Tax Risk. The Fund intends to elect and to qualify each year to be treated as a RIC under Subchapter M of the Code. As a RIC, the Fund will not be subject to U.S. federal income tax on the portion of its net investment income and net capital gain that it distributes to Shareholders if it satisfies certain requirements of the Code. If the Fund does not qualify as a RIC for any taxable year and certain relief provisions are not available, the Fund's taxable income will be subject to tax at the Fund level and to a further tax at the shareholder level when such income is distributed. Commodity

Commodity Regulatory Risk. The Fund's use of commodity futures subject to regulation by the CFTC has caused the Fund to be classified as a "commodity pool" and this designation requires that the Fund comply with CFTC rules, which may impose additional regulatory requirements and compliance obligations.

Authorized Participant Concentration Risk. Only an authorized participant may engage in creation or redemption transactions directly with the Fund. The Fund has a limited number of institutions that act as authorized participants on an agency basis (i.e., on behalf of other market participants).

The value of an investment in the Fund could decline significantly and without warning, including to zero. You should be prepared to lose your entire investment within a single day. The Shares will change in value, and you could lose money by investing in the Fund. The Fund may not achieve its investment objective.

Futures generally are volatile and are not suitable for all investors. Shares are not FDIC insured, may lose value, and have no bank guarantee.

All supporting documentation will be provided upon request.

Foreside Fund Services, LLC is the distributor of the BITX ETF.

QUESTIONS

- Call us: **+1-866-261-0273**
- Email us: **contact@volatilityshares.com**
- Sign up for Insights and Announcements: **volatilityshares.com**