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Navigating the Markets

Short ETPs at 21Shares

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Introduction

21Shares' Short Exchange Traded Products (ETPs) are tactical products that sophisticated investors can use to modify the returns of an underlying by an inverse relationship. These types of ETPs can be attractive to investors seeking hedging strategies in volatile markets. However, they come with higher risks and complexities that may not be suitable for all investors.

This paper will outline the basics of Short ETPs: Their mechanics, risks and potential benefits. An investor will have a better understanding of how these specialized ETPs work and whether they align with an investor's investment objectives and risk tolerance.

Overview

What are Short ETPs?
ETPs are investment instruments that are traded on regulated stock exchanges, designed to track the performance of an underlying asset. Short ETPs enable investors to to take a tactical position on the underlying asset. Short ETPs are intended to provide inverse returns relative to the performance of the underlying asset.

How can investors use Short ETPs?
Short ETPs can be used for various investment reasons. The table below outlines some of the potential use cases of Short ETPs.

Short ETPs
Hedging: Hedge against potential losses in case of market downturns
Tactical Asset Allocation: Take a tactical position and gain exposure quickly and effectively, e.g. in an event driven downward market

Why use a 21Shares ETP for short exposure?

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Convenient Exposure	Exposure without the need for direct borrowing, margin accounts or options trading
Accessible Investments	Small investment with a minimum investment amount of one unit, typically issued at a starting price of $20
Capped Losses	Losses are capped at the initial investment amount
Continuous Liquidity	Liquidity provided by traditional market makers, such as FlowTraders
Traditional Exchanges	Direct crypto exposure through major stock exchanges, e.g. SIX or XETRA without the need for prefunding the crypto exchanges ahead of the trade

Can Short ETPs be held for the long term?
Short ETPs are generally designed for short-term trading and are not intended for long-term investment. The performance of these products can be affected by a number of variables, including volatility, interest rates, compounding and market conditions, rendering them inappropriate for long-term investment strategies.

What is the compounding effect and how does it affect Short ETPs, in regard to the daily rebalancing of an ETP?
The compounding effect refers to the impact of daily returns on the overall performance of the short ETP over time. The daily returns from one day impact the starting point for the next day. Any subsequent gains or losses will be calculated based on the new value. This effect can become particularly significant when investors hold short ETPs over a longer period of time and can work both in favor and against an investor, depending on the direction of the underlying asset's movement. Due to the compounding effect, short ETPs are recommended for a short holding period.

Compounding example - Short ETP:
The reference price is $100. The underlying falls by -4% on the first day, -3% on the second day and rises by +5% on the third day. At the end of the period, the underlying price is $97.78, which corresponds to a total return of -2.22%. However, the -1x Short ETP is NOT up +2.22%, but +1.76%. Over a longer period of time, the compounding effect would have an even greater effect on the expected return of the ETP.

	Underlying Price	-1x Short ETP Price
Day 0	**$100.00**	**$100.00**
	-4%	+4%
Day 1	**$96.00**	**$104.00**
	-3%	+3%
Day 2	**$93.12**	**$107.12**
	+5%	-5%
Day 3	**$97.78**	**$101.76**
Total Return	**-2.22%**	**+1.76%**

Expected: **+2.22%**

What are the risks associated with Short ETPs?
Short ETPs are regarded as high-risk investments. These products are best suited for experienced investors with a high-risk tolerance willing to accept the possibility of incurring losses. Importantly, the performance of Short ETPs may differ significantly from the underlying asset due to fees, borrowing costs and market volatility.

Market Risk	Market risk is the risk of loss due to changes in the value of the underlying asset. However, losses are capped at the initial investment amount and cannot exceed 100%.
Volatility Risk	Cryptocurrencies are known for their high price volatility, which means that their prices can fluctuate significantly in a short period. Short ETPs are subject to the compounding effect due to the daily rebalancing, which might have a negative impact on the investment over a longer time period.
Tracking Error	Short ETPs may not track their underlying index or benchmark accurately due to factors such as management fees, rebalancing costs, compounding, and market conditions. This can result in significant deviations from the intended exposure, which can impact returns.

Are Short ETPs suitable for all investors?
Short ETPs are complex financial products that carry significant risks and are not suitable for all investors. These products are best suited for experienced investors who understand the risks involved and have a high tolerance for risk. It's important for investors to carefully consider their investment objectives, risk tolerance and financial situation before investing in Short ETPs.

Questions to consider before investing in Short ETPs include:
- Do I understand the risks involved with these ETPs?
- Do I understand the concept of compounding?
- Do I have the time to actively monitor my investment?

How do Short ETPs work?

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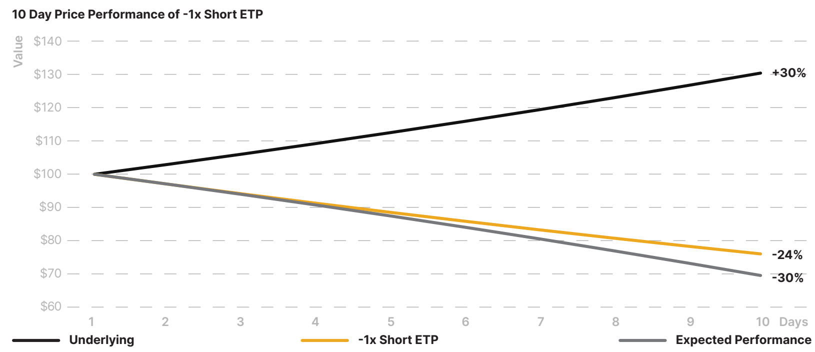
Short ETPs track the inverse daily performance of the underlying asset. For instance, a Short ETP that tracks Bitcoin will seek to provide returns that move in the opposite direction of Bitcoin. If Bitcoin falls in value, the value of the Short ETP will rise; if the Bitcoin rises in value, the value of the Short ETP will fall.

Scenario #1

Low volatility, Uptrending underlying price

If the underlying price is trending in a positive direction, the value of the short ETP will subsequently decrease every day. Compounding will lead to slightly reduced losses, as any loss is consequently applied to a lower previous ETP value.

Example: The graph below shows the performance of an underlying and its -1x Short ETP over 10 days. The underlying continuously increases by 3% per day. After 10 days, the underlying asset is up by +30%, while the short ETP is down by -24% due to compounding. The expected return without compounding would be -30%.

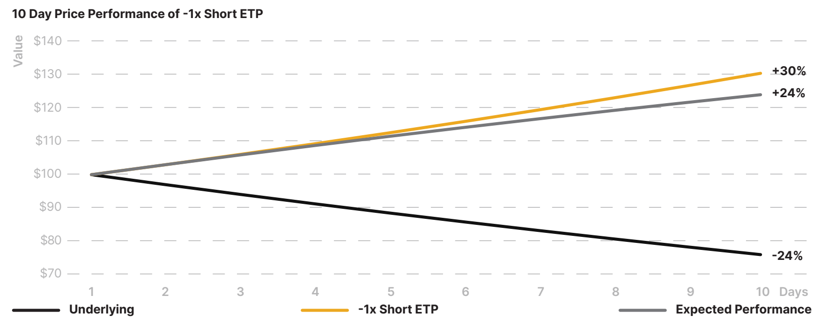


Scenario #2

Low volatility, Downtrending underlying price

If the underlying price is trending in a negative direction, the value of the short ETP will subsequently increase. Compounding will lead to enhanced gains, as any gain is consequently applied to a higher previous ETP value. This is the most beneficial scenario for a short ETP.

Example: The graph below shows the performance of an underlying and its -1x short ETP over 10 days. The underlying continuously decreases by 3% per day. After 10 days, the underlying asset is down by -24%, while the short ETP is up by 30% due to compounding. The expected return without compounding would be 24%.

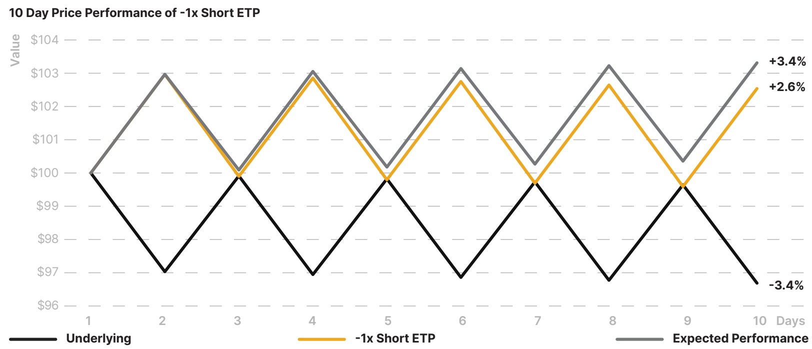


Scenario #3

High volatility, Oscillating underlying price

In a volatile market, where the underlying is continuously moving up and down, the compounding effect will have a negative effect vs the expected value for investors who hold the ETP for longer periods. The Short ETP tracks the inverse **daily** performance of the underlying. After a loss, every gain on the short ETP will be applied to a lower ETP value. After a gain, every loss will be applied to a higher ETP value. This means that the ETP will have lost value even if the price of the underlying ends up being the same.

Example: The graph below shows the performance of an underlying and its -1x short ETP over 10 days. The underlying oscillates daily between 3% increases and -3% declines. After 10 days, the underlying asset is down by -3.4%, while the short ETP is up by 2.6% due to compounding. The expected return without compounding would be +3.4%.



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