Proshares – Capitalizing on tactical market opportunities using leveraged and inverse ETFs

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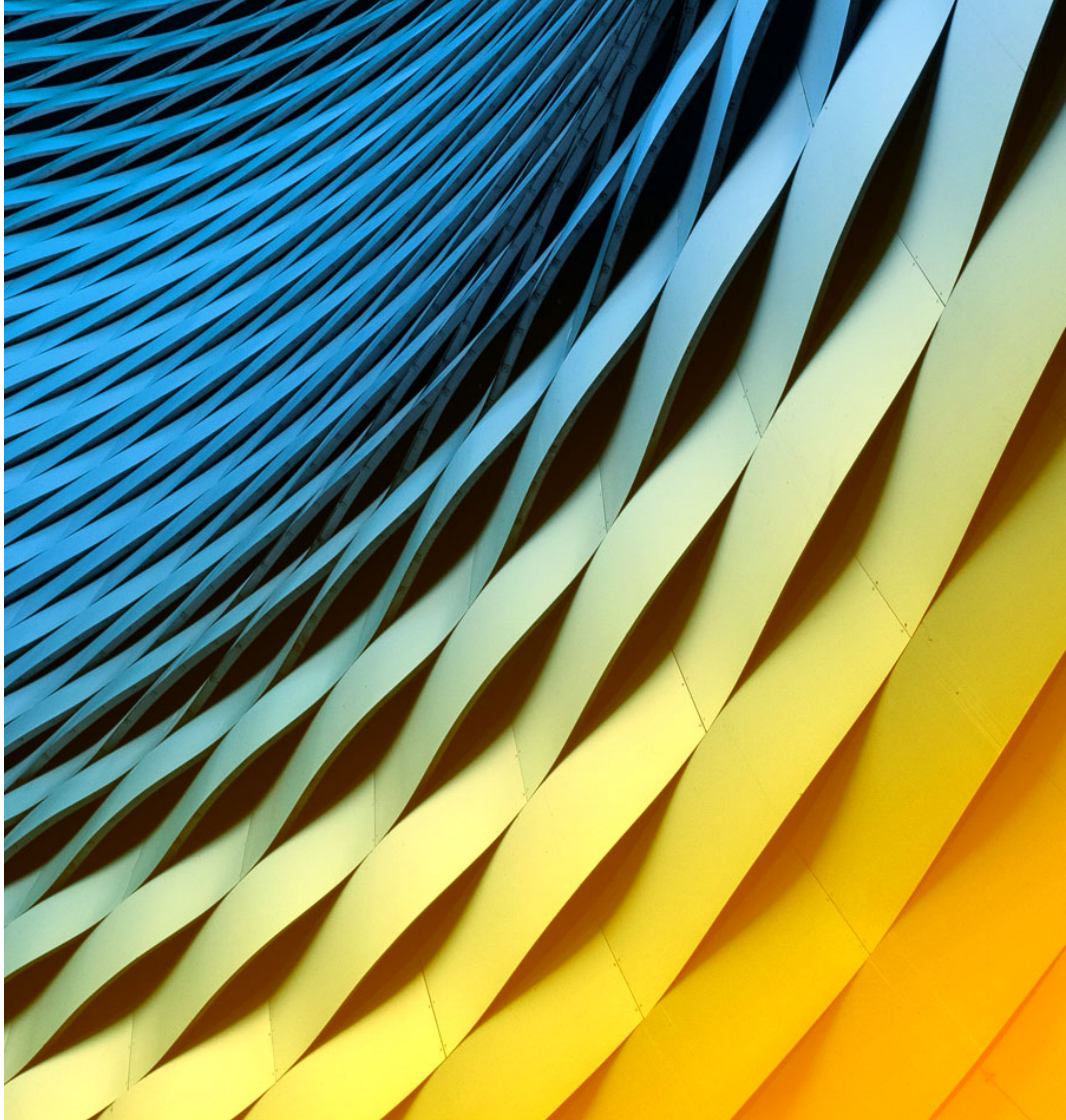

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Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

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This is a presentation focused on Leveraged/Inverse ETFs. Please review the Risk Disclosure document on IBKR's website: https://gdcdyn.interactivebrokers.com/Universal/servlet/Registration_v2.formSampleView?formdb=4155

Capitalizing on tactical market opportunities using leveraged and inverse ETFs

Prepared for Interactive Brokers

Today's Presenters

Troy Goldstein

Executive Director, National Accounts

Leks Gerlak, CFA

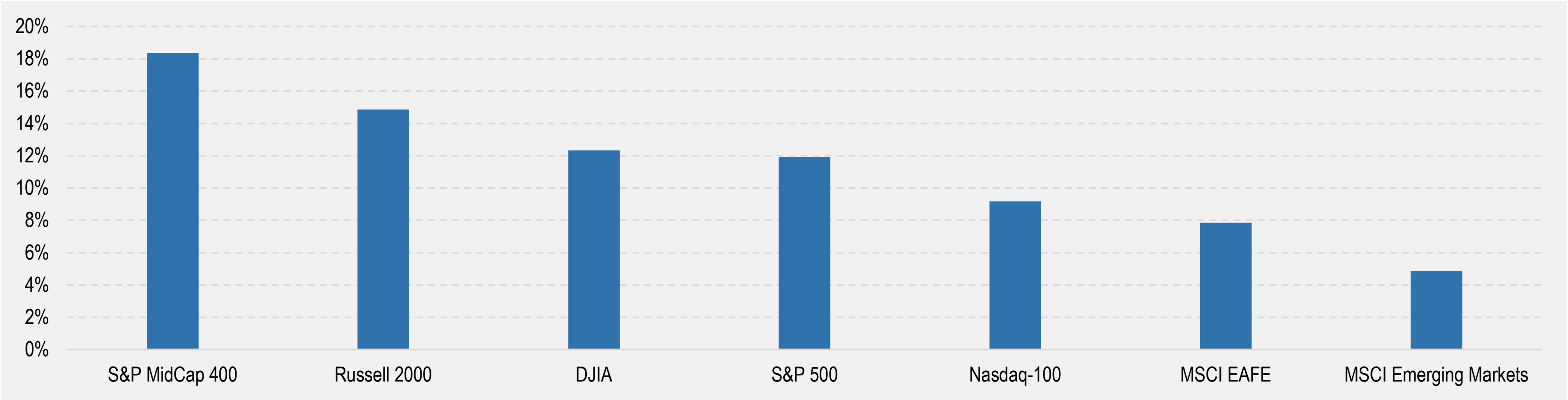
Tactical Investment Strategist

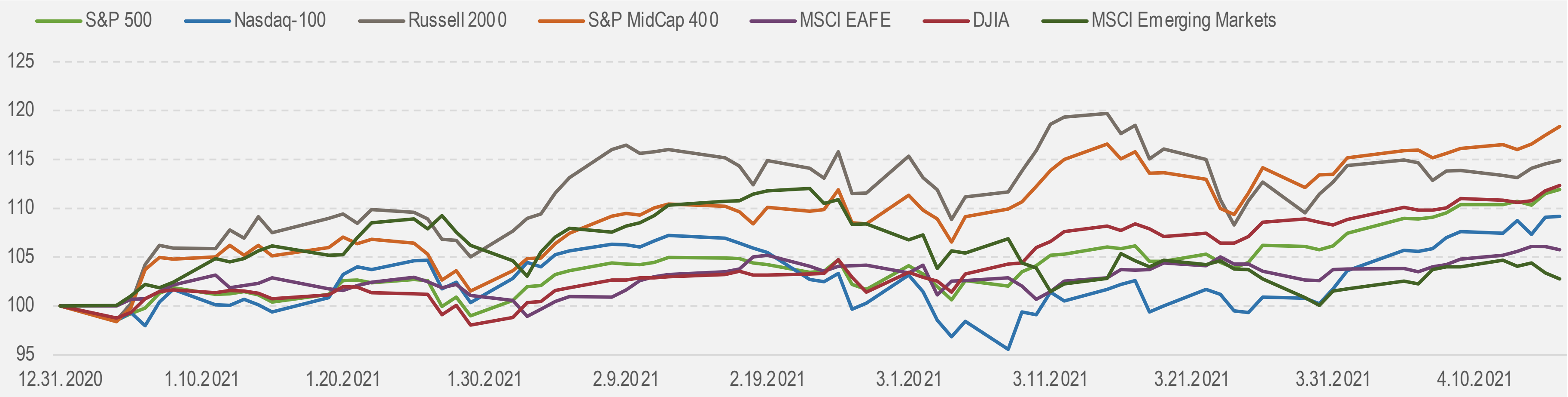
Agenda

- Tactical opportunities in the current market environment
- Leveraged and inverse investing strategies and considerations
- Mechanics and fundamental concepts of leveraged and inverse ETFs
- Case studies – hedging equity and fixed income portfolios
- Closing Remarks

Tactical opportunities in the current market environment

Broad Market YTD Returns (as of 4.16.2021)

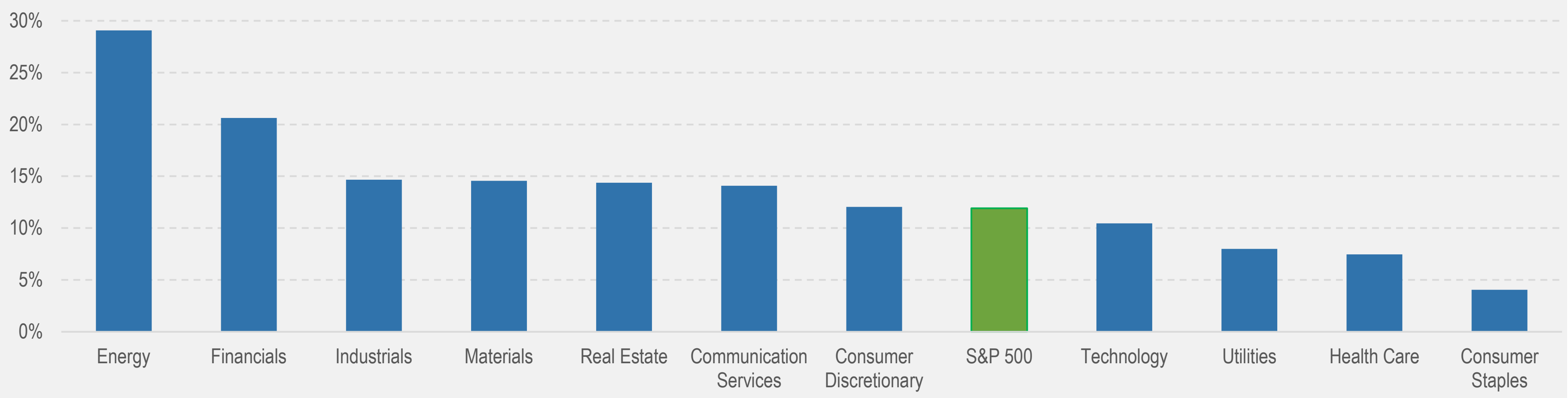


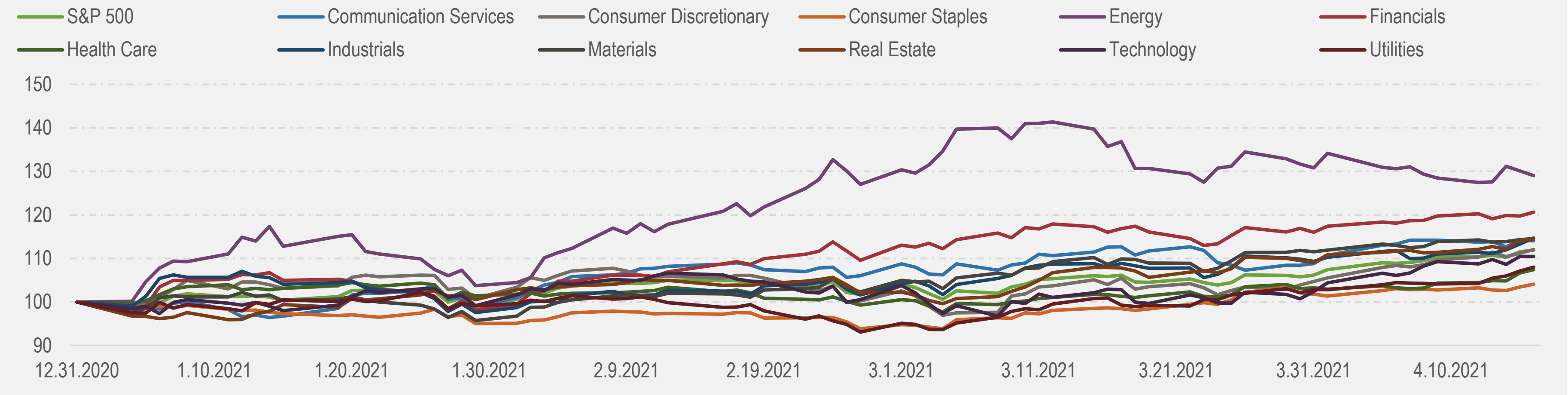


Past performance does not guarantee future results.

Source: Bloomberg, 12/31/2020 – 4/16/2021.

Sector YTD Returns (as of 4.16.2021)



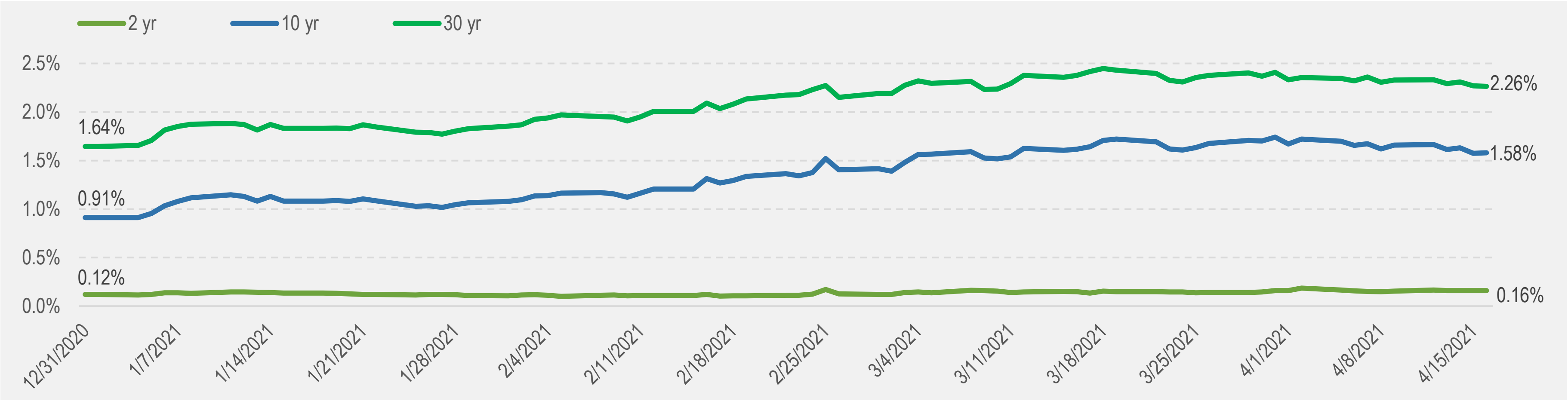


Past performance does not guarantee future results.

Source: Bloomberg, 12/31/2020 – 4/16/2021.

U.S. Treasury Yields (%) YTD (as of 4.16.2021)

US TREASURY	12.31.2020	4.16.2021	CHANGE
2 yr	0.12%	0.16%	+ 4 bps
10 yr	0.91%	1.58%	+ 67 bps
30 yr	1.64%	2.26%	+ 62 bps



Source: Bloomberg, 12/31/2020 – 4/16/2021

Leveraged and inverse investing strategies and considerations

Evolution of Leveraged and Inverse Investing

Investors have been using varying ways to get leveraged and inverse exposure for a very long time:

- Margin, short selling, options and futures were traditionally used as leveraged and inverse strategies, before other vehicles became available.
- Leveraged and inverse mutual funds were introduced in the U.S. in 1993.
- First leveraged and inverse exchange traded funds (ETFs) launched in 2006, by ProShares.

Challenges With Traditional Leverage and Inverse Strategies

These types of sophisticated strategies (i.e. margin, options, futures) have traditionally been out of reach or too risky for most investors, as they:

- Typically require margin accounts, special brokerage approval and significant collateral minimums
- Can include borrowing costs and other fees, such as premiums on options
- Can have higher risks
  - With traditional short selling, losses can exceed the amount invested.
  - With traditional leverage, investors are subject to margin calls if the security drops below a certain amount

Advantages of Leveraged and Inverse ETFs

Accessing leveraged and inverse strategies through ETFs can provide many advantages to investors, as ETFs:

- Do not require margin accounts
- Typically have no minimums or low minimums
- May have lower costs than traditional inverse and leveraged strategies (ordinary brokerage fees may apply)
- Enable investors to enter or exit positions at any time throughout the day, if desired
- Please be mindful that these ETFs can carry their own costs and risks, such as trading costs and tax consequences

Leveraged and inverse investing is not for everyone. Geared funds are generally riskier than funds without leveraged or inverse exposure. Before investing, read each fund's prospectus to fully understand all the risks and benefits. For a prospectus and other information, visit ProShares.com.

ProShares Leveraged, Inverse, Volatility ETFs

- ETF offerings cover a range of asset classes; Equities, Fixed Income, Commodities, Currency, Volatility
- Leveraged/inverse funds span a range of daily target multiples: -3x, -2x, -1x, -0.5x, 1.5x, 2x, 3x

BROAD MARKET	SECTOR/THEMATIC		INTERNATIONAL	FIXED INCOME	COMMODITIES	CURRENCY	VOLATILITY
S&P 500	Dow Jones U.S. Basic Materials	Dow Jones U.S. Health Care	MSCI EAFE	ICE U.S. Treasury 7-10 Year Bond	Bloomberg Commodity Balanced WTI Crude Oil	Euro / USD	S&P 500 VIX Short-Term Futures
Dow Jones Industrial Average	Dow Jones U.S. Financials	Dow Jones U.S. Industrials	MSCI Emerging Markets	ICE U.S. Treasury 20+ Year Bond	Bloomberg Gold Subindex	Yen / USD	S&P 500 VIX Mid-Term Futures
Nasdaq 100	Dow Jones U.S. Oil & Gas	Nasdaq Biotechnology	FTSE Developed Europe All Cap	Markit iBoxx $ Liquid High Yield	Bloomberg Silver Subindex	Australian Dollar / USD	
S&P MidCap 400	Dow Jones U.S. Real Estate	Dow Jones U.S. Semiconductors	MSCI Brazil 25/50 Capped		Bloomberg Natural Gas Subindex		
S&P SmallCap 600	S&P Communication Services Select Sector	Dow Jones U.S. Technology	MSCI Japan				
Russell 2000	Dow Jones U.S. Consumer Goods	Dow Jones U.S. Select Telecommunications	FTSE China 50				
	Dow Jones U.S. Consumer Services	Dow Jones U.S. Utilities					
	ISE CTA Cloud Computing	Nasdaq CTA Cybersecurity					
	Solactive-ProShares Brick and Mortar Retail Store						

As of March 31, 2021

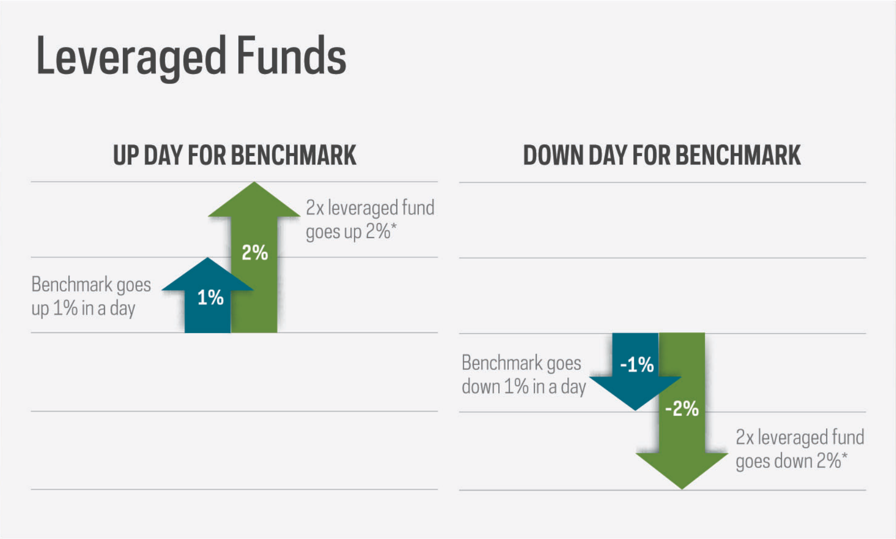
Mechanics and fundamental concepts of leveraged and inverse ETFs

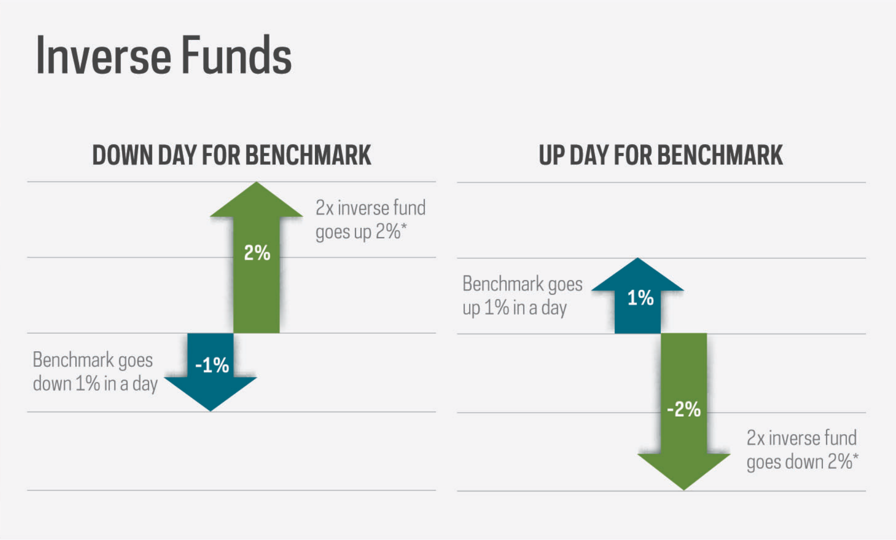
Leveraged and Inverse Funds in Action

Conventional Fund
Seeks to match index return

2x Leveraged Fund
Seeks 2x index return each day

-2x Inverse Fund
Seeks -2x index return each day





For illustrative purposes only; not representative of an actual investment. Does not include fees and expenses.

Leveraged and Inverse ETFs in portfolios

While ETFs make these strategies more accessible, investors should not use them without fully understanding how they work.

- Leveraged funds can be used by knowledgeable investors seeking to:
  - Improve returns from rising markets through directional trades
  - Overweight segments of the market
  - Increase exposure to segments of the market for less cash (capital efficiency)
- Inverse funds can be used by knowledgeable investors seeking to:
  - Improve returns from declining markets through directional trades
  - Underweight segments of the market
  - Develop a hedging or risk management strategy
- Investors should have a comprehensive understanding of the features, benefits and risks associated with leveraged and inverse funds before investing
- Investors should be prepared to monitor their positions regularly, as frequently as daily

Daily Investment Objective

- Most leveraged and inverse funds are designed to meet an investment objective for a single day, before fees and expenses
- To maintain a daily investment objective, leveraged and inverse funds rebalance their exposure to their underlying benchmarks each day by trimming or adding to their positions
- Without a one-day objective, the fund's exposure to its benchmark could float over time
- The market environment and volatility can impact performance for periods longer than a day

HYPOTHETICAL 2X FUND ON A DAY ITS BENCHMARK RISES 10%

Beginning Assets	$100
Beginning Exposure	$200 (2 x $100)
Fund Gain	20%
Ending Assets	$120
Ending Exposure	$220
New Exposure Needed	$240 (2 x $120)

How Compounding Affects Leveraged and Inverse Funds

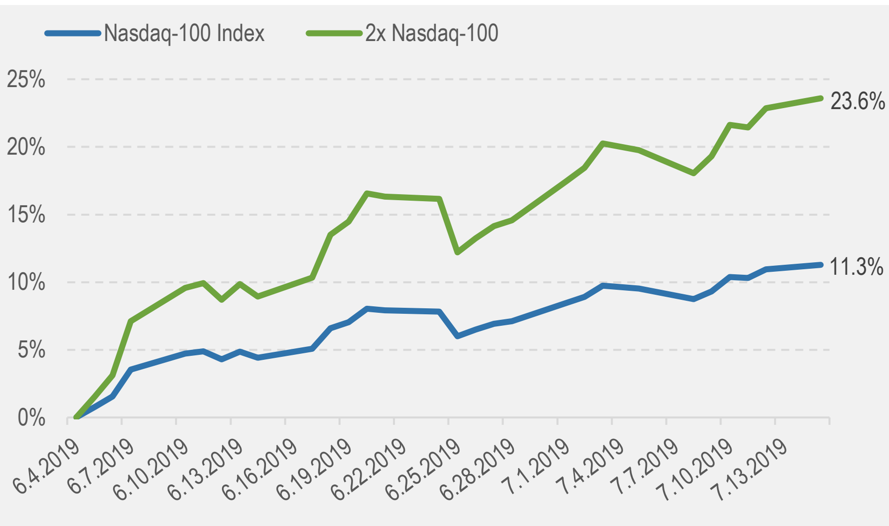
- Compounding is magnified in leveraged and inverse funds—especially those funds with larger multiples or exposure to volatile benchmarks.
- Compounding can enhance returns during trending periods, but it can hurt returns in volatile periods

	BENCHMARK RETURN	2× FUND RETURN
UPWARD TREND		
Day 1 Return	+5.00%	+10.00%
Day 2 Return	+5.00%	+10.00%
Compounded 2-Day Return	+10.25%	+21.00%
DOWNWARD TREND		
Day 1 Return	-5.00%	-10.00%
Day 2 Return	-5.00%	-10.00%
Compounded 2-Day Return	-9.75%	-19.00%
VOLATILE PERIOD		
Day 1 Return	+5.00%	+10.00%
Day 2 Return	-5.00%	-10.00%
Compounded 2-Day Return	-0.25%	-1.00%

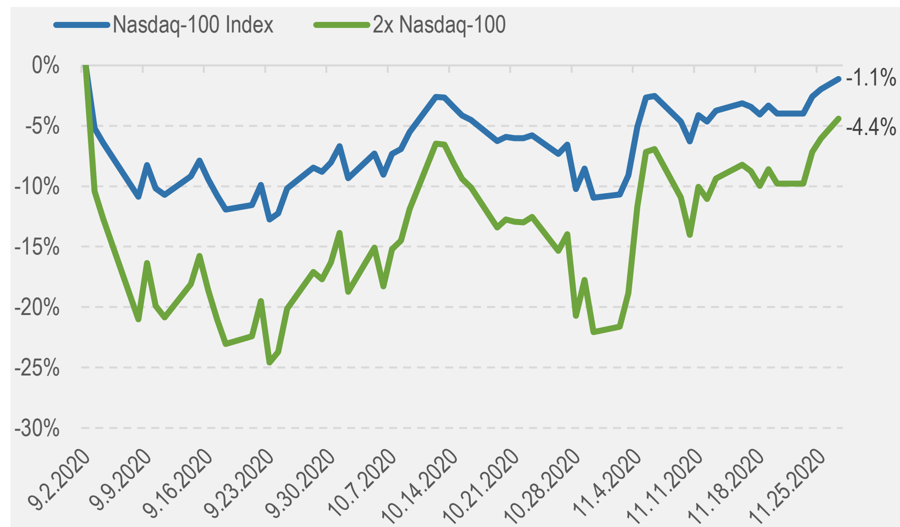
This example shows extreme hypothetical benchmark movement to illustrate the point. Actual benchmark movements can be very different, and returns would be lower after fees, expenses and taxes.

Compounding at Work

6.4.2019 – 7.15.2019: NASDAQ-100 VS 2X NASDAQ-100 UPWARD TRENDING MARKET



9.2.2020 – 11.28.2020: NASDAQ-100 VS 2X NASDAQ-100 HIGHER VOLATILITY, RANGE-BOUND MARKET



6.4.2019 – 7.15.2019	RETURN	ANNUALIZED VOLATILITY
Nasdaq 100	11.3%	11.6%
2x Nasdaq 100	23.6%	23.1%

9.2.2020 – 11.28.2020	RETURN	ANNUALIZED VOLATILITY
Nasdaq 100	-1.1%	30.5%
2x Nasdaq 100	-4.4%	61.0%

Source: Bloomberg. The performance quoted represents past performance and does not guarantee future results. For illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in any index. High short-term performance is unusual and may not be repeated.

QLD Performance as of March 31, 2021

Fund Inception 6/19/2006	Daily Objective*	1-Year	5-Year	10-Year	Since Inception	Gross Expense Ratio	Net Expense Ratio**
ProShares Ultra QQQ (QLD)—NAV	2x	161.10%	44.81%	35.61%	25.70%	0.99%	0.95%
ProShares Ultra QQQ (QLD)—Market Price	2x	161.64%	44.82%	35.61%	25.70%	0.99%	0.95%
Nasdaq-100 Index	N/A	68.88%	25.20%	20.16%	16.54%	N/A	N/A

For most recent performance, visit: https://www.proshares.com/funds/qld_performance_and_quote.html

* Before fees and expenses. **With Contractual Waiver ending 9/30/21.
Source: ProShares and Bloomberg, 3/31/2021**. The performance quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than the original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 866.776.5125 or by visiting ProShares.com.** Shares are bought and sold at market price (not NAV) and are not individually redeemed from the fund. Market returns are based on the composite closing price and do not represent the returns you would receive if you traded shares at other times. The listing date is typically one or more days after the fund inception date. Therefore, NAV is used to calculate market returns prior to the listing date. Brokerage commissions will reduce returns. Index returns are for illustrative purposes only and do not represent fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest in an index. High short-term performance of the fund is unusual and investors should not expect such performance to be repeated. Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

Considerations for using Leveraged and Inverse ETFs over time

Investors who want to hold leveraged or inverse funds longer than one day may consider a rebalancing strategy for their investment. A rebalancing strategy:

- Can buffer the negative effects of compounding (and may mitigate the positive ones)
- Requires investors to increase or decrease their positions at predetermined intervals to maintain their desired level of exposure to the benchmark
- May have transaction costs and tax consequences
- May require available capital for periods when additional share purchases are required
- Does not take the place of daily position monitoring

Choosing a Rebalancing Strategy

- There are two common rebalancing strategies: trigger-based and calendar-based

TRIGGER-BASED REBALANCING	CALENDAR-BASED REBALANCING
HOW IT WORKS	
Investors rebalance each time the difference between an investment's return and its benchmark's return reaches a certain threshold, e.g., 10%	Investors rebalance at predetermined intervals such as weekly, monthly or quarterly.
ADVANTAGES	
Attuned to market conditions–triggers a rebalance more frequently in volatile periods.	Convenience of knowing exactly when and how often to rebalance
DISADVANTAGES	
May require frequent rebalancing, especially with inverse funds and funds with volatile benchmarks or larger multiples.	Not attuned to market conditions, and performance may stray significantly from the benchmark return times the fund multiple between rebalances.

Rebalancing Step by Step

STEP 1:
Decide when to rebalance
(trigger- or calendar-based strategy)

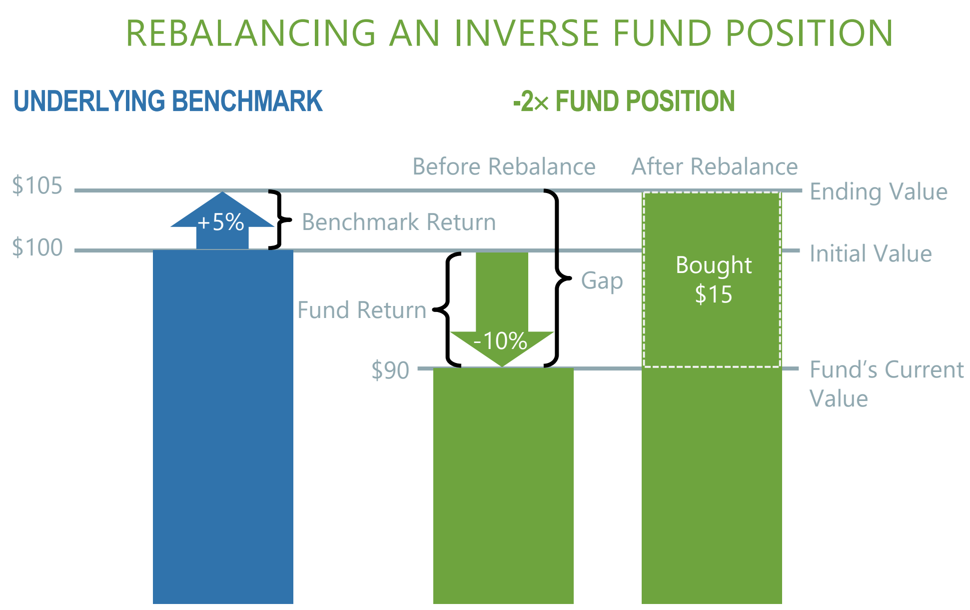
STEP 2:
Calculate the gap

Gap = Benchmark Return
– Fund Return

STEP 3:
Calculate the rebalance trade

Rebalance Trade Amount = Initial
Value x (1 + Benchmark Return)
– Fund's Current Value

STEP 4:
Monitor and repeat as needed

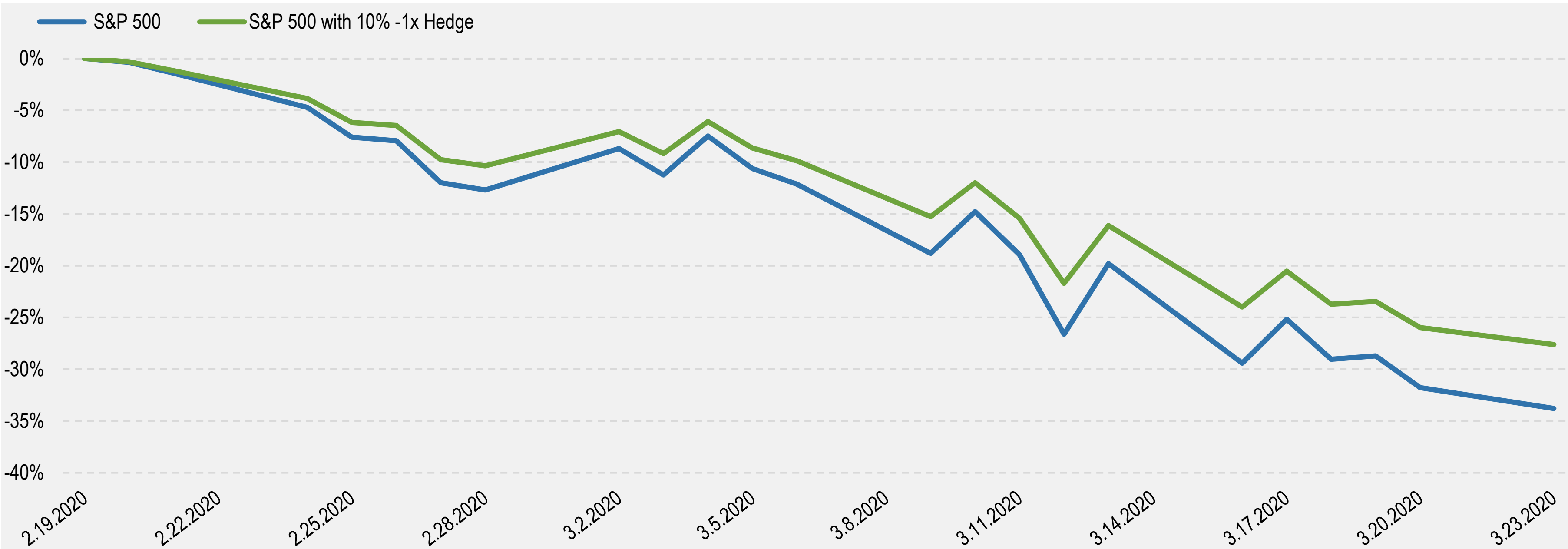


For illustrative purposes only.

Case studies – hedging equity and fixed income portfolios

Using an Inverse Equity Hedge in a Down Market

LESS DOWNSIDE, LESS VOLATILITY

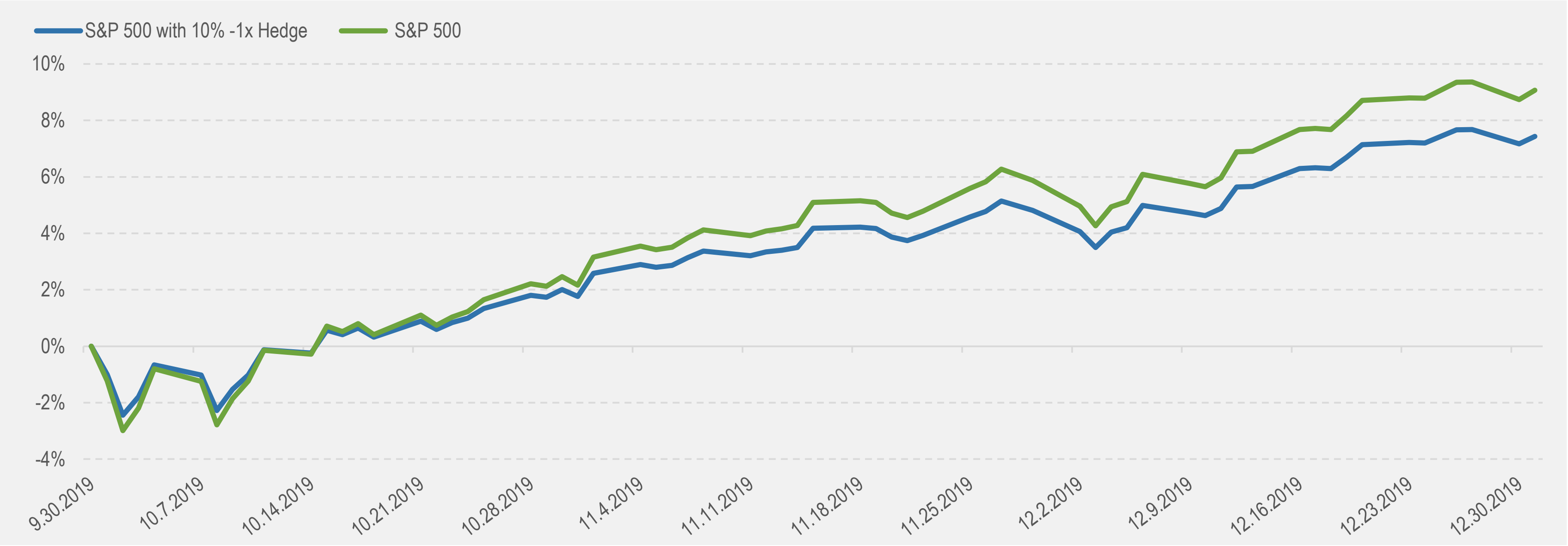


2.19.2020 – 3.23.2020	Return	Annualized Volatility
S&P 500	-33.8%	79.8%
S&P 500 with 10% Hedge in SH (-1x ETF)	-27.6%	62.4%

Source: Bloomberg, 2/19/2020 – 3/23/2020. The performance quoted represents past performance and does not guarantee future results. For illustrative purposes only. Hedging examples include a 10% hedge with 10% rebalance trigger. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in any index.

Using an Inverse Equity Hedge in an Up Market

LESS UPSIDE, LESS VOLATILITY



9.30.2019 – 12.31.2019	Return	Annualized Volatility
S&P 500	9.1%	9.4%
S&P 500 with 10% Hedge in SH (-1x ETF)	7.4%	7.7%

Source: Bloomberg, 9/30/2019 – 12/31/2019. The performance quoted represents past performance and does not guarantee future results. For illustrative purposes only. Hedging examples include a 10% hedge with 10% rebalance trigger. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in any index.

SH Performance as of March 31, 2021

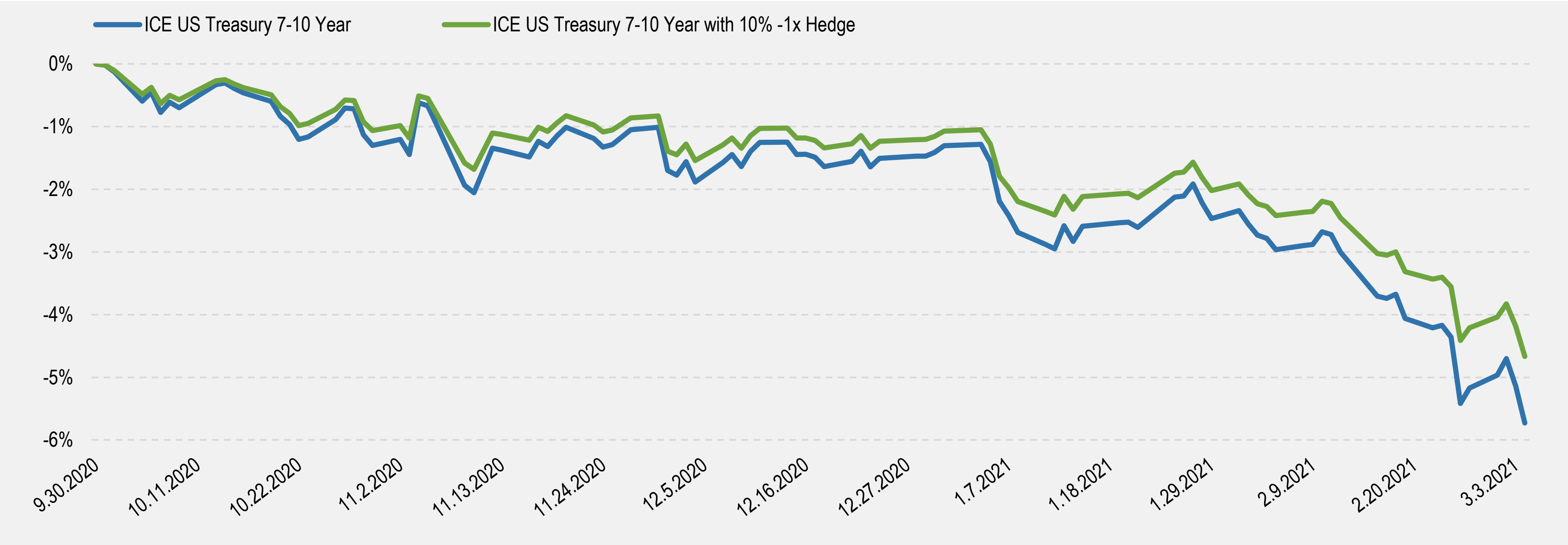
Fund Inception 6/19/06	Daily Objective*	1-Year	5-Year	10-Year	Since Inception	Expense Ratio**
ProShares Short S&P 500 (SH)—NAV	-1x	-39.34%	-15.81%	-14.46%	-11.94%	0.90%
ProShares Short S&P 500 (SH)—Market Price		-39.41%	-15.83%	-14.47%	-11.95%	
S&P 500	N/A	56.35%	16.28%	13.90%	10.39%	N/A

For most recent performance, visit: https://www.proshares.com/funds/sh_performance_and_quote.html

* Before fees and expenses. **With Contractual Waiver ending 9/30/21.
Source: ProShares and Bloomberg, 3/31/2021**. The performance quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than the original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 866.776.5125 or by visiting ProShares.com.** Shares are bought and sold at market price (not NAV) and are not individually redeemed from the fund. Market returns are based on the composite closing price and do not represent the returns you would receive if you traded shares at other times. The listing date is typically one or more days after the fund inception date. Therefore, NAV is used to calculate market returns prior to the listing date. Brokerage commissions will reduce returns. Index returns are for illustrative purposes only and do not represent fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest in an index. Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

Using an Inverse Fixed Income Hedge in a Rising Rate Market

LESS DOWNSIDE, LESS VOLATILITY

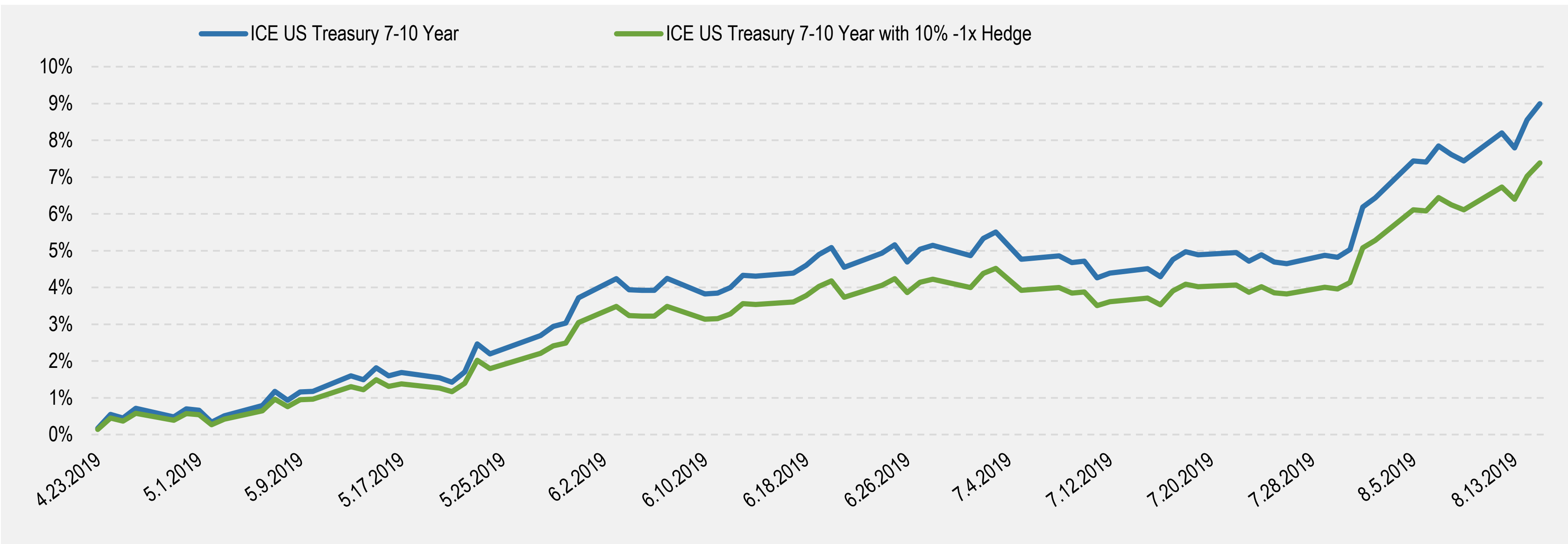


SEPTEMBER 30, 2020 – MARCH 4, 2021	RETURN	ANNUALIZED VOLATILITY
ICE US Treasury 7-10 Year Index	-5.7%	4.6%
ICE US Treasury 7-10 Year Index with 10% Hedge in TBX (-1x ETF)	-4.7%	3.7%

Source: Bloomberg, 9/30/2020 – 3/4/2021. The performance quoted represents past performance and does not guarantee future results. For illustrative purposes only. Hedging examples include a 10% hedge with 10% rebalance trigger. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in any index.

Using an Inverse Fixed Income Hedge in a Falling Rate Market

LESS UPSIDE, LESS VOLATILITY



APRIL 22, 2019 – AUGUST 15, 2019	RETURN	ANNUALIZED VOLATILITY
ICE US Treasury 7-10 Year Index	9.0%	5.2%
ICE US Treasury 7-10 Year Index with 10% Hedge in TBX (-1x ETF)	7.4%	4.3%

Source: Bloomberg, 4/22/2019 – 8/15/2019. The performance quoted represents past performance and does not guarantee future results. For illustrative purposes only. Hedging examples include a 10% hedge with 10% rebalance trigger. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in any index.

TBX Performance as of March 31, 2021

Fund Inception 4/4/11	Daily Objective*	1-Year	5-Year	10-Year	Since Inception	Gross Expense Ratio	Net Expense Ratio**
ProShares Short 7-10 Year Treasury (TBX)—NAV	-1x	4.99%	-1.68%	N/A	-4.28%	1.22%	0.95%
ProShares Short 7-10 Year Treasury (TBX)—Market Price		4.99%	-1.69%	N/A	-4.28%		
ICE U.S. Treasury 7-10 Year Bond Index	N/A	-6.10%	2.35%	N/A	3.95	N/A	N/A

For most recent performance, visit: https://www.proshares.com/funds/tbx_performance_and_quote.html

* Before fees and expenses. **With Contractual Waiver ending 9/30/21.
Source: ProShares and Bloomberg, 3/31/2021**. The performance quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than the original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 866.776.5125 or by visiting ProShares.com.** Shares are bought and sold at market price (not NAV) and are not individually redeemed from the fund. Market returns are based on the composite closing price and do not represent the returns you would receive if you traded shares at other times. The listing date is typically one or more days after the fund inception date. Therefore, NAV is used to calculate market returns prior to the listing date. Brokerage commissions will reduce returns. Index returns are for illustrative purposes only and do not represent fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest in an index. Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

Closing Remarks

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Appendix

Traditional Leverage Strategies

- **EXPECTED VOLATILITY:** The underlying volatility that is anticipated over the life of a derivative contract such as an option, a futures contract, etc. It is the amount by which a derivative is expected to fluctuate or change value in a given period of time. This measure of volatility is calculated using analytical tools, taking into consideration a number of factors including the expected volatility of underlying assets. Expected volatility is also known as forecast volatility.
- **MARGIN:** When brokerage firms lend investors the cash to purchase securities, it is called buying "on margin." Investors typically pay interest and are asked to keep a certain level of assets in a brokerage margin account.
- **BUYING CALL OPTIONS:** "Buying a call" option gives investors the opportunity to buy a security at an agreed-upon price during a certain time period. For the price of the call contract, investors can control more shares than investing directly in the security, earning a larger percentage profit if the price of the security rises. If the price falls, call buyers could lose the amount paid for the contract.
- **BUYING FUTURES CONTRACTS:** Buying a futures contract involves buying a security in the future at a price level set now. Investors buying futures may control a larger position than they could by buying the security itself and could earn a larger percentage of profit if the price of the security increases. Investors may be required to maintain a certain account balance. If the price of the security falls, it is possible to lose more than the amount invested.

Traditional Inverse Strategies

- **SHORT SELLING:** "Shorting" a security involves borrowing shares, immediately selling them, and buying them back later to return to the lender. Short selling usually requires a margin account with a certain level of assets. If the price of the security has fallen in the specified time, investors profit from the difference, less the borrowing costs and any dividends paid. If the price has risen, investors could lose an unlimited amount of money to buy the shares back to return to the lender.

- **BUYING PUT OPTIONS:** "Buying a put" option gives investors the opportunity to sell a security at an agreed-upon price during a specified time period. Owners of put contracts hope to profit from a decline in the price of a security. And, put options allow investors to control more shares. However, if the price of the security rises, put buyers could lose the amount paid for the contract.

- **SELLING FUTURES CONTRACTS:** Selling a futures contract involves selling a security in the future at a price level set now, hoping to benefit if the price of the security goes down. Investors selling futures may control a larger amount of shares. Investors are typically required to keep a certain amount of assets in a margin account. If the price of the security rises, investors could lose more than the amount invested.

A Reminder About Risk

Investing involves risk, including the possible loss of principal. Most leveraged and inverse funds seek returns that are a multiple of (e.g., 2x or -2x) the return of a benchmark (target) ***for a single day***, as measured from one NAV calculation to the next. Due to the compounding of daily returns, leveraged and inverse fund returns over periods other than one day will likely differ in amount and possibly direction from the target return for the same period. These effects may be more pronounced in funds with larger or inverse multiples and in funds with volatile benchmarks. Investors should monitor their holdings as frequently as daily. Most leveraged and inverse funds are non-diversified and each entails certain risks, which may include risk associated with the use of derivatives (swap agreements, futures contracts and similar instruments), imperfect benchmark correlation, leverage and market price variance, all of which can increase volatility and decrease performance. Inverse funds should lose money when their benchmarks or indexes rise. Please see their summary and full prospectuses for a more complete description of risks.

To Get a Prospectus

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