

Global Investment Manager Analysis | January 16, 2025

Active ETFs: An Introduction to the Market

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This report updates the previous version published on April 4, 2024.

Actively managed exchange-traded funds (ETFs) have been in existence for more than 15 years. Once a nascent part of the US-listed ETF ecosystem, active ETFs have experienced a meaningful uptick in terms of assets, net inflows and the number of new funds coming to market over the past few years. As of December 31, there were more than 1,800 US-listed active ETFs, with \$891 billion in assets. Net flows into active ETFs totaled \$298B in 2024 (26% of all flows) which was a record year.

If we look back to a decade ago, there were fewer than 120 active ETFs, with assets of \$17 billion, and the entire US-listed ETF industry had fewer than 1,500 funds, with under \$2 trillion in assets. In this report, we attempt to explain active ETFs and delve into topics such as the drivers of growth, recent trends and prospects for the future.

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US-Listed ETFs at a Glance

ETFs are pooled investment vehicles that trade throughout the day on an exchange and provide access to a broad array of exposures across the equity, bond and alternatives markets. ETFs have been popular securities for investors targeting relatively low expenses, diversification, tax efficiency, transparency and trade flexibility. The first US-listed ETF launched back in 1993, and in the early days of the industry, investors had fewer choices, mostly confined to sector/industry and country funds with a small number of core mandates. Fast-forward more than three decades and investors have more choices than ever and are able to implement very targeted views.

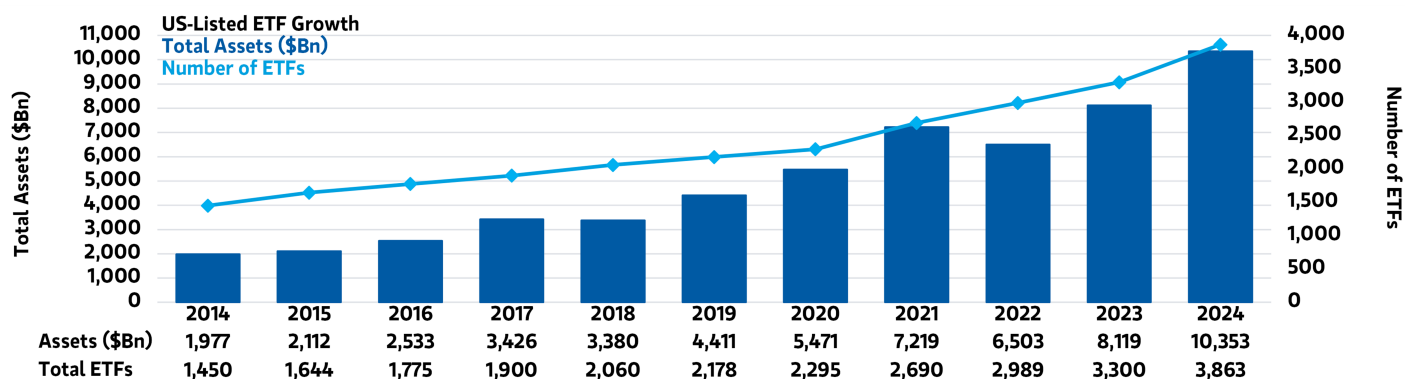
There are currently almost 3,900 US-listed ETFs in the market, with cumulative assets of \$10.4 trillion (see Exhibit 1). ETFs have reached 44% of US mutual fund assets (this excludes money market fund assets) and continue to capture market share. Historically, many investors have associated ETFs with indexes. However, times are changing.

Active ETFs now have 9% market share and account for 47% of the total number of ETFs. Exhibit 2 shows a breakout of the US-listed ETF industry by market segment. We show 15 categories including Active (the other 14 are passive).

What Are Active ETFs?

- They possess many of the same features as passive ETFs, including intraday trading, but typically have a management team overseeing portfolio construction and security selection.
- Most are fully transparent and disclose holdings on a daily basis, but some publish their holdings with a lag, similar to mutual funds.
- Actively managed ETFs generally aim to deliver some degree of outperformance compared to a benchmark and peers.
- There are rules-based active ETFs that may look to follow an index, with some portfolio management flexibility.
- Active ETFs can own constituents across a wide variety of asset classes including equities, fixed income and commodities to name a few.

Exhibit 1: Growth of US-Listed ETFs



Source: Bloomberg, Morningstar, Morgan Stanley Wealth Management Global Investment Manager Analysis as of Dec. 31, 2024

Exhibit 2: ETFs by Market Segment

Investment Objective	Funds	Mkt Cap (\$Million)	Market Share (%)
US Broad-Market	13	594,449	6
US Large-Cap	79	3,370,783	33
US Mid-Cap	33	383,686	4
US Small- & Micro-Cap	37	390,466	4
US Sector & Industry	355	394,718	4
US Custom	44	380,513	4
US Dividend Income	170	96,185	1
Leveraged/Inverse	188	714,999	7
International - Developed	216	827,354	8
International - Emerging	142	303,841	3
Global	306	231,657	2
Fixed Income	368	1,503,225	15
Commodity	76	268,191	3
Currency	10	1,631	0
Active	1,826	891,012	9
Total	3,863	10,352,712	100

Source: Bloomberg, Morningstar, Morgan Stanley Wealth Management Global Investment Manager Analysis as of Dec. 31, 2024

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How Are Active ETFs Different From Passive ETFs?

- Active ETFs generally do not track an index, whereas passive ETFs seek to.
- While passive ETFs have portfolio managers, the teams have more of an operational role to track an index while being mindful of factors such as trading costs, liquidity and tracking error.
- Active ETFs may be less tax efficient than passive ETFs and usually have higher fees.

How Are Active ETFs Similar to and Different From Mutual Funds?

- While there are some index-based mutual funds, the majority are actively managed (more than 95%).
- ETFs trade intraday while mutual fund orders are executed after market close based on the fund's net asset value (NAV).
- While mutual fund investors transact at NAV, ETF investors transact at market price, which can deviate from NAV.
- Most ETFs have daily transparency of their holdings, while mutual fund holdings are reported with a lag.
- ETFs do not have a minimum dollar investment amount, while mutual funds often do (it varies by share class).
- ETFs tend to be more tax-efficient vehicles than mutual funds, driven by the creation/redemption process, which can result in less frequent capital gains distributions.
- Mutual funds typically have 12b-1 fees, often resulting in higher fees than ETFs, which do not.
- ETFs can be sold short and purchased on margin.

Fee Comparison Across ETFs

- ETFs have some of the lowest expenses of any registered investment product. ETF expense ratios are significantly lower than those of mutual funds, but their range has widened as some providers have cut fees and many newer products have higher fees.
- Passive equity ETFs, on average, have an expense ratio of 42 basis points (bps), on an unweighted basis. Meanwhile, the average active equity ETF has an expense ratio of 67 bps (Exhibit 3); this compares to the average actively managed open-end equity mutual fund, expense ratio of over 100 bps.
- Active ETFs that are derivatives-based may be more expensive than most other ETFs, yet still compare favorably to mutual fund peers.
- While there remains a range of expense ratios, other cost-related factors should be considered when investing in ETFs, including trading spread, premium/discount volatility and market impact costs.

Exhibit 3: Expense Ratio Comparison

Exchange-Traded Funds	Range	Avg.	Wgt. Avg.
US Equity	0 - 163	35	12
International Equity	3 - 166	46	19
Global Equity	7 - 299	56	38
Active Equity	0 - 610	67	39
Active Equity - Derivatives	25 - 128	80	86
All Equity ETFs	0 - 610	55	22
Fixed Income	0 - 198	21	10
Active Fixed Income	8 - 171	47	36
Commodity	0 - 350	61	44
Currency	40 - 77	50	55
Leveraged / Inverse	57 - 393	106	97
All ETFs	0 - 610	55	17

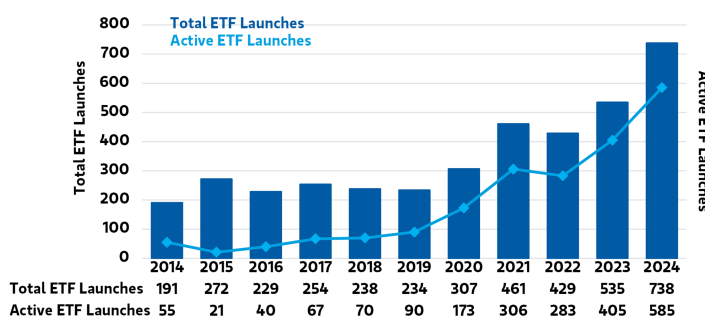
Source: Bloomberg, Morningstar, Morgan Stanley Wealth Management Global Investment Manager Analysis as of Jan. 3, 2025

Active ETF Growth

While the number of new strategies coming to market has been impressive over the past decade, the proportion of actively managed ETFs to passive ETFs is notable (Exhibit 4). A total of 2,470 new ETFs launched from 2020 to 2024, of which 1,752 (71%) were active strategies. For context, that 2,470 figure equates to 64% of all ETFs. For calendar-year 2024, a record 738 ETFs launched and 585 are active.

Active ETFs now account for 47% of the total number of US-listed ETFs and 9% of market share. Calendar-year 2024 was a record year for flows (\$298 billion) into active ETFs (Exhibit 5).

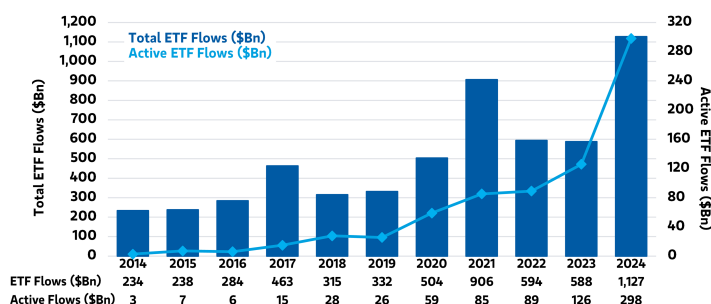
Exhibit 4: Active ETF Growth (Number of Funds)



Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Manager Analysis as of Dec. 31, 2024

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Exhibit 5: Active ETF Net Flows



Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Manager Analysis as of Dec. 31, 2024

Largest Issuers of Active ETFs

- As of December 31, BlackRock, Vanguard, State Street, Invesco and Schwab collectively accounted for \$8.6 trillion of US-listed ETF industry assets (83% of industry AUM).
- Exhibit 6 shows the top five issuers of active ETFs by assets (Dimensional, JPMorgan, First Trust, American Century and Capital Group) and net inflows for 2024.
- Total active ETF assets across the five largest active ETF issuers was \$483 billion as of December 31, which equates to 54% of total active ETF AUM.
- The above-mentioned firms (BlackRock, Vanguard, State Street, Invesco and Schwab) had \$69 billion combined in actively managed ETFs as of December 31.
- Currently, out of more than 250 total ETF issuers, nearly 90% have at least one active ETF in their lineup.

Exhibit 6: Five Largest Active ETF Issuers

ETF Issuer	AUM (\$Million)	2024 Net Inflows (\$Million)
Dimensional	168,578	38,769
JPMorgan	130,325	43,393
First Trust	79,797	14,701
American Century	55,602	16,839
Capital Group	48,927	26,122

Note: AUM and net inflows data pertains to only actively managed ETFs. Data as of Dec. 31, 2024

Source: Company data, Bloomberg, Morningstar, Morgan Stanley Wealth Management Global Investment Manager Analysis

Trends in the Active ETF Industry

Active ETF Issuer Observations and Trends

- The largest individual active ETFs include option income, US equity (large-cap blend, small-cap value), ultra-short fixed income, core bond and collateralized loan obligation (CLO) funds.
- The top 20 largest active ETFs account for 33% of all active ETF AUM.
- While accounting for 19% of the total number of active ETFs, US taxable fixed income total AUM (\$257 billion) is 29% of all active ETF assets.
- Outside of core bond funds, we have observed recent fund launches in the CLO, multi-sector and securitized spaces.
- There are fewer than 70 active municipal bond ETFs, with \$23 billion in assets.
- International/emerging markets total 170 active ETFs, with \$92 billion in assets; global funds have \$41 billion across 240-plus funds.
- Broad international, emerging markets and emerging markets ex China have been areas of new ETF launches in non-US equity.
- US option income has been a fast-growing segment of the active ETF market, as 86 of the 99 funds in the category were launched from April 2023 through December 2024.
- There are more than 340 ETFs across 10 ETF issuers that are considered to be target outcome/buffer strategies with AUM totaling \$57 billion.
- First launched in July 2022, there are almost 70 ETFs with \$18 billion AUM aiming to provide long or short exposure to single companies.
- More than 600 active ETFs have assets below \$25 million (a third of the total number of active ETFs).

Semi-Transparent Structure

- Most active ETFs are fully transparent, whereby investors can see published holdings on a daily basis.
- Semi-transparent active ETFs do not disclose daily positions, but instead report on a lagged basis (quarterly or monthly).
- The first actively managed ETFs using a semi-transparent structure were launched in April 2020.
- There are fewer than 50 semi-transparent ETFs, with \$12 billion in total assets (1% of total active ETF AUM).

Conversions

- There have been more than 125 mutual-fund-to-active-ETF conversions from March 2021 through December 2024, with combined current assets totaling \$136 billion.
- Dimensional, Fidelity and JPMorgan have collectively converted 27 funds that make up 88% of the aforementioned conversion asset total.
- We expect to see additional conversions, albeit selectively.

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- A few ETFs that were passively managed have converted to active.
- Tortoise Capital recently completed the merger of three MLP/midstream closed-end funds (CEFs) with and into an actively managed ETF.

Fund Closures

- Closures are not uncommon in the ETF industry, as more than 1,600 ETFs have liquidated since 2008.
- Nearly 50% of these closures have occurred from 2020 through 2024; over 240 active ETFs have shut down during this time.
- As active ETFs become a larger part of the ecosystem, we expect a higher percentage of closures to skew to active funds.

Investor Adoption

- Potential for passive ETF and mutual fund investors to embrace actively managed ETFs.
- Model adoption/use in firm discretionary portfolios.

Suggested Practices When Evaluating Active ETFs

- Review the ETF issuer, portfolio management team, investment process and portfolio construction (akin to mutual fund due diligence).
- Examine the track record of the strategy. If the ETF has a limited track record, has the same team been managing the portfolio in a different wrapper?
- Compare historical performance to peer funds on both the passive and active ETF side, as well as to mutual funds.
- While more applicable to smaller-cap strategies, consider what the potential capacity is for the ETF. An ETF, unlike mutual funds, cannot soft-close to new investors.
- Consider how the ETF has traded since inception, noting factors such as premium/discount, dollar volume and bid-ask spread.
- Consider the asset manager's road map for distribution and asset growth over time.

Potential Advantages of Active ETFs

- Active ETFs may benefit from both the ETF wrapper and active management overlay.
- Active ETFs generally have lower cost and are more tax efficient compared to mutual funds.
- Most active ETFs offer daily transparency of holdings.

- Active ETFs have the potential to deliver outperformance over both passive ETF and mutual fund peers.
- Active ETFs trade on an intraday basis, allowing investors to react to changing market conditions; they are also not reliant on a market close to determine transaction execution.

Potential Pitfalls of Active ETFs

- While we acknowledge the benefits of the ETF wrapper, they do not negate the potential challenges faced by actively managed products in terms of delivering some degree of outperformance compared to a benchmark and peers.
- As noted previously, many active ETFs have limited track records, which can complicate the manager evaluation process.
- During periods of market stress, ETFs may trade further away from NAV, so investors may be transacting while the fund is trading at a premium or discount.
- If an ETF were to stop the issuance of shares (if it runs into capacity problems), it could trade significantly away from NAV (similar to a closed-end fund).
- ETFs may trade with very low volume and can have wide bid-ask spreads.
- Active ETFs typically have higher fees than passive ETF peers.

Conclusion

We anticipate continued growth in active ETFs (in terms of both number of funds launched and flows). We believe passive ETFs will maintain a dominant market share position but acknowledge the tide is gradually turning through product proliferation and incremental investor adoption. Individual investors and model allocators may embrace active ETFs in more traditional equity spaces, such as US large-cap, developed international and emerging markets.

Active fixed income ETFs were the first to market back in 2008, and we forecast increased use in portfolios. Semi-transparent ETFs are not likely to become a dominant part of the active ETF space. Liquid alternatives (e.g., option income, target outcome/buffer and hedged strategies) are likely to remain a meaningful source of ETF product development. Additionally, as the ETF industry evolves to include more trading-oriented strategies, we anticipate continued product launches targeting single company exposure.

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Disclosure Section

Glossary of Terms

Expense ratio a measure of what it costs an investment company to operate an exchange-traded fund or mutual fund.

Tracking Error - Measures the projected variation of portfolio return versus benchmark return, based on the holdings. The higher the tracking error, the less closely a portfolio is projected to track its benchmark. An annualized tracking error of 2%, for example, roughly means there is a 2/3rds chance the portfolio will perform within +/- 2% of the benchmark over the next year.

Volatility - Projected annualized standard deviation, based on the model and portfolio holdings. Commonly, the higher the volatility is, the riskier the security or portfolio.

Important Disclosures

The summary at the beginning of the report may have been generated with the assistance of artificial intelligence (AI).

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Investing in *stocks*, *mutual funds* and *exchange-traded funds ("ETFs")* entails the risks of market volatility. The value of all types of investments may increase or decrease over varying time periods.

Like any investment, ETFs have risks. These include, but are not limited to, the general risks associated with investing in securities, potential tracking error, and the possibility that particular indexes may lag other market segments or active managers.

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Besides the general risk of holding securities that may decline in value, *closed-end funds* may have additional risks related to declining market

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prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

Value and **growth investing** also carry risks. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

International securities may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in **emerging markets and frontier markets**.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets and frontier markets, since these countries may have relatively unstable governments and less established markets and economies.

Commodities: The commodities markets may fluctuate widely based on a variety of factors including, but not limited to, changes in supply and demand relationships; governmental programs and policies; national and international political and economic events, war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence, technological change and weather; and the price volatility of a commodity.

Small- and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies.

Companies paying **dividends** can reduce or cut payouts at any time.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which allows the issuer to retain the right to redeem the debt, fully or partially, before the scheduled maturity date. Proceeds from sales prior to maturity may be more or less than originally invested due to changes in market conditions or changes in the credit quality of the issuer.

High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues.

Ultra-short bond funds generally invest in fixed income securities with very short maturities, typically less than one year. They are not money market funds. While money market funds attempt to maintain a stable net asset value, an ultra-short bond fund's net asset value will fluctuate, which may result in the loss of the principal amount invested. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Interest on **municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Alternative/hedged strategies may use various investment strategies and techniques for both hedging and more speculative purposes such as short selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative/hedged strategies are not appropriate for all investors. A short sales strategy includes the risk of loss due to an increase in the market value of borrowed securities. Such a strategy may be combined with purchasing long positions in an attempt to improve portfolio performance. A short sales strategy may result in greater losses or lower positive returns than if the portfolio held only long positions, and the portfolio's loss on a short sale is potentially unlimited. The use of leverage can magnify the impact of adverse issuer, political, regulatory, market, or economic developments on a company. A decrease in the credit quality of a highly leveraged company can lead to a significant decrease in the value of the company's securities. In a liquidation or bankruptcy, a company's creditors take precedence over the company's stockholders.

Hedge funds may involve a high degree of risk, often engage in leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

Investments in securities of **MLPs** involve risks that differ from an investment in common stock. MLPs are controlled by their general partners, which generally have conflicts of interest and limited fiduciary duties to the MLP, which may permit the general partner to favor its own interests over the MLPs. The potential return of MLPs depends largely on the MLPs being treated as partnerships for federal income tax purposes. As a partnership, an MLP has no federal income tax liability at the entity level. Therefore, treatment of one or more MLPs as a corporation for federal income tax purposes could affect the portfolio's ability to meet its investment objective and would reduce the amount of cash available to pay or distribute to you. Legislative, judicial, or administrative changes and differing interpretations, possibly on a retroactive basis, could negatively impact the value of an investment in MLPs and therefore the value of your investment. MLPs carry interest rate risk and may underperform in a rising interest rate environment.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

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Because of their narrow focus, *sector investments* tend to be more volatile than investments that diversify across many sectors and companies.

Environmental, Social and Governance ("ESG") investments in a portfolio may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. Certain issuers of investments may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. ESG designations are as of the date of this material, and no assurance is provided that the underlying assets have maintained or will maintain and such designation or any stated ESG compliance. As a result, it is difficult to compare ESG investment products or to evaluate an ESG investment product in comparison to one that does not focus on ESG. Investors should also independently consider whether the ESG investment product meets their own ESG objectives or criteria. There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results.

Derivatives, in general, involve special risks and costs that may result in losses. The successful use of derivatives requires sophisticated management, in order to manage and analyze derivatives transactions. The prices of derivatives may move in unexpected ways, especially in abnormal market conditions. In addition, correlation between the particular derivative and an asset or liability of the manager may not be what the investment manager expected. Some derivatives are "leveraged" and therefore may magnify or otherwise increase investment losses. Other risks include the potential inability to terminate or sell derivative positions, as a result of counterparty failure to settle or other reasons.

An investment in an *exchange-traded fund* involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs, along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

Please consider the investment objectives, risks, charges and expenses of the fund(s) carefully before investing. The prospectus contains this and other information about the fund(s). To obtain a prospectus, contact your Financial advisor. Please read the prospectus carefully before investing.

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RSI1736976157773 01/2025