The Investor's Guide to ETFs Building Resilient Portfolios



Table of Contents

03	Overwhelmed by Investment Options? Let's Change That	With so much choice in investing, you may feel paralyzed by options. Simplify the process with our guide to ETFs.	
04	ETF Basics History and a Simple Breakdown	Learn the fundamentals, including the story of how ETFs came to be.	
07	More Tools at Your Disposal The Benefits of ETFs	Understand how ETFs can optimize your portfolio, from cost and tax efficiency to liquidity and transparency.	
10	Comparing Investment Options Why ETFs Offer the Best of Both Worlds	Distinguish between popular investments: ETFs, mutual funds, and individual stocks.	
12	Evaluating ETFs What You Need to Know (and Do)	Discover the factors that can be used to analyze ETFs and help build a personalized portfolio.	
15	How to Use ETFs in a Portfolio There's an ETF for That	Explore the diverse portfolio strategies that ETFs can unlock, such as strategic and tactical asset allocation.	

Overwhelmed by Investment Options?

Let's Change That

Investing. Everyone recognizes it's important. Financial goals are easier to reach when your money can work (and grow) for you, but acknowledgment and execution aren't one and the same.

Because we live in a digital age — with an abundance of information about available investment options — choice overload is very real. There are so many vehicles to choose from that investors may question if they're picking the right one, or worse, fall into a state of analysis paralysis.

While there's no one-size-fits-all investment solution, the exchange traded fund (ETF) helps investors reach their goals — however unique they may be — in a transparent, costeffective, and tax-efficient manner.

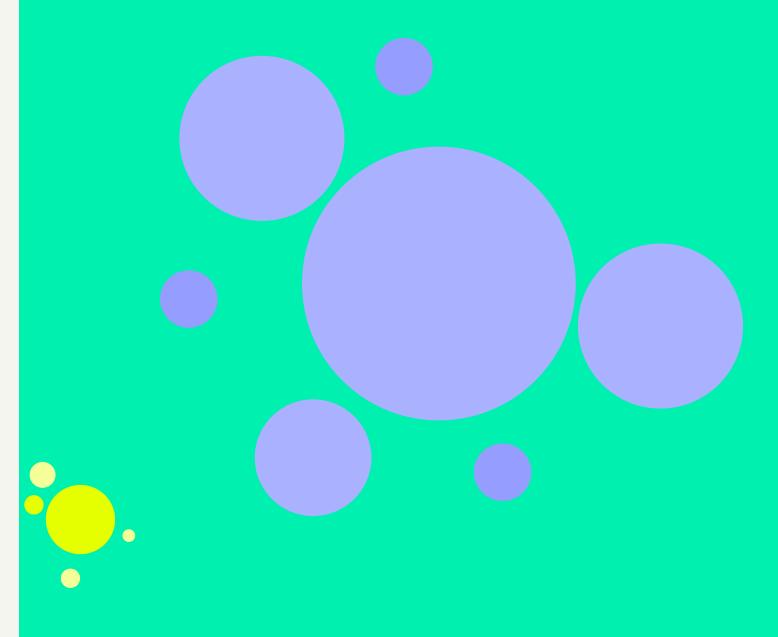
Still, you may not be familiar with the intricacies and advantages of this vehicle. With this comprehensive, digestible resource, you can confidently gain a better understanding of the expansive ETF marketplace and set a course toward your desired outcomes.

Keep reading to uncover answers to a host of questions, including:

- What is an ETF?
- What can ETFs help you do?
- What are the benefits of ETFs?
- How do ETFs compare to mutual funds and stocks?
- How should investors evaluate ETFs?
- How can investors use ETFs in a portfolio?

ETF Basics

History and a Simple Breakdown



The ETF: Offering Investors Choice and Innovation

Figure 1

ETFs Have Wide Investment Reach

On October 19, 1987, a day known as Black Monday, stock markets around the world experienced a sudden, massive crash. The S&P 500®, an index that tracks the stock performance of 500 large US companies, dropped by an unprecedented 20.5%, the largest one-day percentage decline in the index's history.¹ Wealth eroded so abruptly that the damage rivaled the Great Depression.

Black Monday led to a widespread reevaluation of regulatory policies and risk management practices, but it also catalyzed a new type of investment structure that could help avert future disaster: the ETF.

In 1993, State Street Global Advisors launched the first US-listed ETF — then, the first of its kind in the US. Since then, ETFs have captivated seasoned investors and newcomers alike, as the market continues to reach new heights in breadth, size, and capabilities.

Through both active and passive management, ETFs can offer cost-effective exposure to nearly every asset class, from core broad US equities to complex emerging market debt. As a result of this democratization, a wide range of investors can now access hard-to-reach markets once only available to the largest institutions.



Source: ETFGI Global ETF and ETP Industry Highlights Report December 2023. The information contained above is for illustrative purposes only. All figures are in US dollars.

^{1 &}quot;Biggest stock market crashes in US history." Bankrate. September 8, 2023.

What Is an ETF?

Picture an ETF as a merchant ship, carrying a mix of cargo — stocks, bonds, commodities, and other assets — out to sea. The shipbuilder (ETF manager) crafted this vessel not for one merchant (investor), but for many.

Each investor claims a share of the ship and its holdings. This collective ownership is often structured as an open-end investment with no fixed maturity date, meaning investors can sell their share(s) at any time.

In turn, the ETF can operate continuously, taking on new investors or allowing old ones to disembark at their discretion. This design provides durability and adaptability in various market conditions, whether that's calm waters or stormy seas.

Nautical analogies aside, let's break down exchange traded funds word by word.

- Exchange: A marketplace where stocks, bonds, and other assets are traded
- Traded: Bought and sold
- Fund: Pooled money that's invested in a variety of assets

All together now: ETFs are baskets of assets that trade on an exchange, much like a stock does. These baskets may track a wide range of indexes, like the S&P 500® or the Nasdaq 100.

Alternatively, they may strive to replicate the performance of a specific market segment, such as an asset class (e.g., bonds), geography (the US), sector (technology), or investment theme (innovation). Or, they could aim to outperform their benchmarks altogether — a common objective of active ETFs.

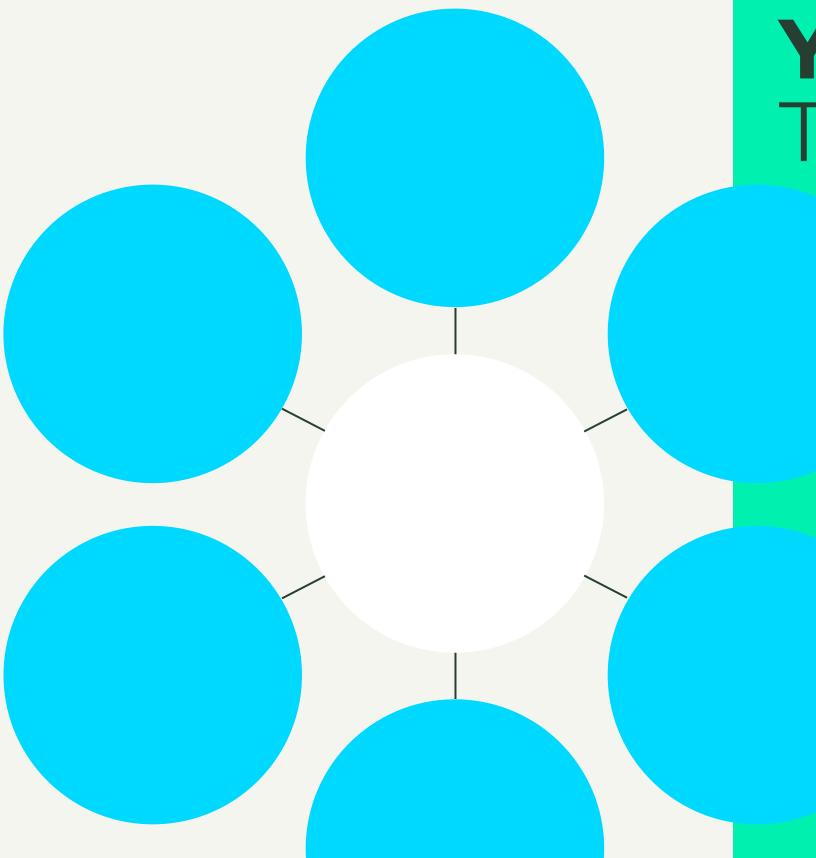
What Can ETFs Help Investors Do?

In short, a lot. You'll sometimes hear ETFs referred to as investment vehicles. Much like their four-wheel equivalents, some can get you to your destination faster than others, but with added risk. Some won't break any speedometers, but they have a sterling track record of getting from A to B safely. Some give you protection in inclement weather and rough terrain, while others come with professional chauffeurs who charge a little more for their services.

Ultimately, their goal is to move you toward your financial goals. ETFs are particularly appealing in this regard because they can be deployed in many ways.

Specifically, you can use ETFs to:

- Gain exposure to the broader market or an index, like the S&P 500®
- · Seek ways to outperform the broader market
- · Invest in promising sectors, industries, and even themes
- · Diversify across asset classes, geographies, and strategies
- Quickly pivot and adjust portfolios as economic conditions change
- Manage risk, hedge against inflation, and reduce volatility



More Tools at Your Disposal The Benefits of ETFs

Unlocking the Power of ETFs

Adding ETF strategies to your portfolio gives you a bigger toolbox, potentially bolstering your DIY arsenal with more utility and functionality.

Diversification: If, for example, your holdings are concentrated in only a few securities, your entire portfolio could be weighed down if those securities underperform.

By diversifying across asset classes, geographies, and sectors, you may be able to mitigate concentration risk and also increase your exposure to various growth opportunities — because when one asset class or sector underperforms, another might thrive, balancing the portfolio and potentially smoothing out returns over time.

Cost Efficiency: Fees and expenses can erode returns. However, ETFs usually have lower fees and expenses compared to their mutual fund peers. Transaction costs are also minimal when portfolio turnover is low, which is often the case for ETFs that primarily track indexes.

Portfolio Turnover: The percentage of the fund's underlying securities that were sold in a given year. A high turnover rate indicates that holdings are traded frequently, perhaps due to an active management strategy.

Investment Variety: There are countless ways to invest with ETFs. You could gain broad exposure to an entire asset class or selective exposure to a subset of companies, such as biotech or financial services. Or, you could target companies focused on dividends, growth, or momentum. In essence, the expanding universe of ETFs provides ample opportunities for investors to construct a portfolio that aligns with their risk tolerance, investment goals, and values.

Transparency & Trading Flexibility: Most ETFs publish and update their holdings daily. In turn, investors know what they own in real time, which enables them to make more informed investment decisions. Further, at any time during the trading day, investors can buy and sell ETF units through brokerage accounts at their current market prices. Contrarily, mutual funds are priced and traded *after* the market closes.

Tax Efficiency: Like transaction costs and management fees, taxes can also eat into returns. Thanks to their tax-efficient structure though, ETFs can help investors with taxable accounts keep more of what they earn.

First, portfolio turnover can be minimal for ETFs that track low-maintenance indexes, which generally results in lower capital gains taxes. Second, the way ETF units are created and redeemed means ETF portfolio managers don't need to buy or sell any of the individual holdings.

In contrast, when an investor decides to sell shares of a mutual fund, the fund manager may sell a portion of the fund's holdings to cash out an investor's position. This sale could generate a realized taxable gain, leaving the remaining shareholders in the fund to absorb the associated taxes.

Enhanced Liquidity: Liquidity refers to how quick and easy it is to buy or sell an asset without significant price fluctuations. High liquidity implies that there are numerous buyers and sellers, suggesting more trading flexibility.

Because they trade throughout the day on an exchange (known as the secondary market), ETFs are considered liquid investments. However, ETFs also gain a liquidity boost from the *primary market* — this is where securities are created and initially sold.

Markets Are Generally Divided Into Two Categories

Primary Market: Where securities are created and sold for the first time (e.g., an Initial Public Offering). Investors buy securities directly from the issuer, such as a company or government, who then receives the proceeds of the sale.

Secondary Market: Where investors trade securities among themselves, without involving the issuing companies. This is the market most people think of as the stock market, where stocks, bonds, ETFs, and other securities are bought and sold after the initial issuance.

Figure 2 **Key Advantages of ETFs Diversification Tax Efficiency Cost Efficiency ETF Transparency &** Investment **Trading Flexibility Variety** Liquidity

Source: State Street Global Advisors. For illustrative purposes only.

How the Creation and Redemption Process Works

show, you were undoubtedly treated to a mix of song, dance, and pageantry. It's called a production for a reason — a lot of effort goes unnoticed behind the curtains, from props managers and stagehands moving scenery to wardrobe design and lighting technicians ensuring a radiant, visual performance.

In many ways, ETFs are similar.

There's a complex production playing out behind the scenes known as the creation and redemption process, which allows ETFs to be more liquid and cost-effective than other investment vehicles.

Creation involves buying all the underlying securities and wrapping them into the exchange traded fund structure.

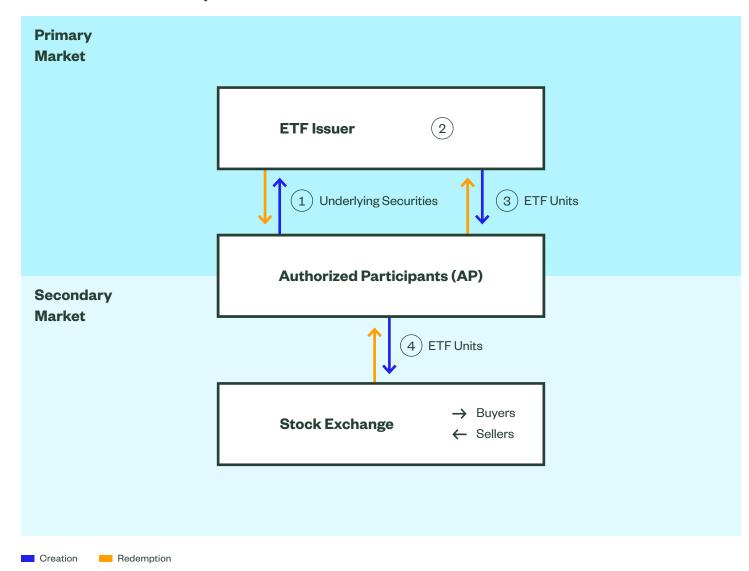
Redemption is the process whereby the ETF is unwrapped back into the individual securities.

You could think of ETFs like unopened presents. The gift is purchased, boxed, and wrapped (creation); this represents a unified ETF. Then, if you need to return the present, the gift is unwrapped and given back (redemption).

This is a back-and-forth process between two parties: ETF issuers (like us at State Street SPDR ETFs) and large financial institutions (known as authorized participants, or APs).

Figure 3

The Creation and Redemption Process

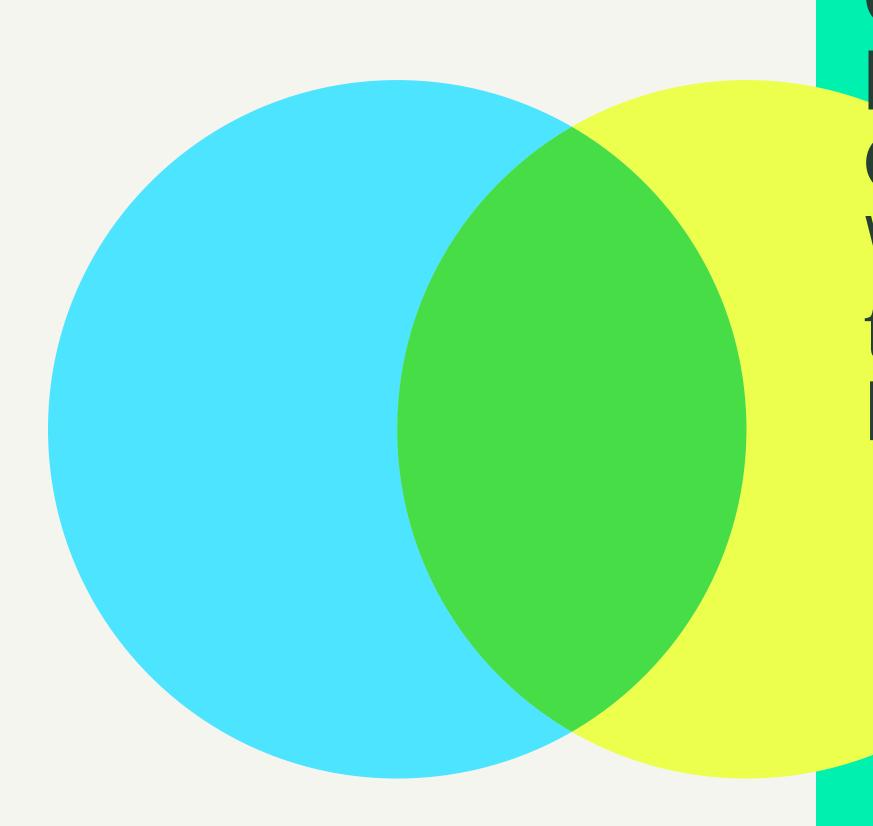


Source: State Street Global Advisors. For illustrative purposes only

- **1** AP acquires individual securities that comprise the ETF and delivers them to the ETF issuer.
- **2** ETF issuer packages these securities together, creating the ETF.
- **3** ETF issuer delivers units of the ETF to the AP.
- **4** AP introduces ETF units to the secondary market, where they are traded between buyers and sellers like any other stock.

As an investor, you don't need to deeply understand the nuances of how ETF units come to be, but it does help shed light on *why* ETFs are more liquid, tax-efficient, and accurately priced than mutual funds (which only trade once a day after the market closes).

We'll dive deeper into product differences in the next section.



Comparing
Investment
Options
Why ETFs Offer
the Best of
Both Worlds

A Best-of-Both-Worlds Structure

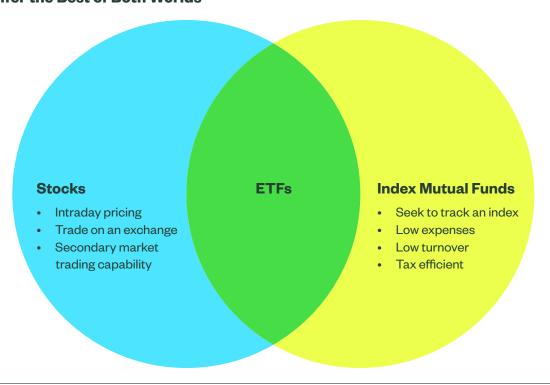
Investors often find themselves confronted by three investment options: ETFs, mutual funds, or individual stocks.

ETFs and mutual funds share several qualities — both are professionally managed, offer a variety of investment options, and can help investors diversify with a single trade. However, the structures of these fund types, as well as their investment characteristics, are very different.

ETFs integrate the real-time trading of stocks with the diversification benefits of a mutual fund. ETFs also provide cost efficiency and tax advantages, granted by their unique creation and redemption process. This can be particularly beneficial for investors looking to optimize their after-tax returns.

Moreover, the minimum investment for many ETFs is the price of just one share, providing accessibility that can be especially attractive for new or cost-conscious investors. Mutual funds, on the other hand, usually require higher minimum investments, which can be a barrier to entry for some.

Figure 4
ETFs Can Offer the Best of Both Worlds



Source: State Street Global Advisors. For illustrative purposes only.

How ETFs Compare to Mutual Funds and Individual Stocks

	ETFs	Mutual Funds	Stocks
Track an Index	Yes	Yes	N/A
Provide Diversification	Yes	Yes	Not individually
Transparency	Higher (holdings disclosed daily)	Lower (holdings disclosed bi-annually)	N/A
Liquidity	High, intraday trading	Varies, end-of-day trading	High, intraday trading
Average Net Expense Ratio	1.08%	1.29%	N/A
Pricing	Market price	Closing net asset value (NAV)	Market price
Minimum Investment	None	Some require minimum	Minimum 1 lot*

Source: Morningstar Direct, Morningstar, as of February 29, 2024.

^{*} Lot is dependant on security price and may be 100, 500, 1000 or other amount of shares.



What to Consider Before Investing in ETFs

Clothes don't fit you perfectly unless they're tailored to your exact dimensions. Portfolios are no different. Before you can explore potential investments, you should first determine your *measurements*: your financial goals, investment horizons, and risk tolerance. And remember that, just like your measurements, your investment goals may change over time.

While you don't necessarily need a concrete reason to start investing, it's generally prudent to outline life goals and their associated price tags, whether that's buying a house, having kids, retiring, or all of the above. Nothing is set in stone, but adding figures and dates gives your portfolio something to build toward.

Risk tolerance is the degree of variability in investment returns that you are willing (and able) to withstand. Are you comfortable with the high-risk, high-reward tradeoff of a significant equity concentration, or do you prefer the steady returns of conservative investments? A self-assessment is crucial in directing the makeup of your ETF portfolio. In general, the higher the risk, the higher the reward, and vice versa.

To summarize, you're deciding what you want and need ETFs to do for you. Once you've assessed your risk tolerance and detailed your financial goals (including estimated timelines), then you can evaluate the merits of specific ETFs.

There are thousands of ETFs circulating the market though — which one makes the most sense for you?

Here are some factors to consider.

Cost

Returns matter, but, more specifically, *net* returns matter. There are costs to weigh when owning funds of any kind. The first one to know is a fund's expense ratio — this annual fee (expressed as a percentage) covers the fund's expenses, including management fees, administrative fees, and other operational costs.

Trading costs and tax implications are also important variables of ownership cost. For instance, mutual funds frequently make capital gains distributions, which could trigger steep tax liabilities. ETFs can avoid these tax hits thanks to the creation and redemption process. However, cost of ownership is not limited to expenses, fees, and taxes; the point-in-time liquidity of your investments matter, too.

In that way, you can imagine your total cost of ownership like an iceberg — there's the purchase price you see, and then there are the additional "unseen" factors lingering below the surface.

Figure 5

Expense Ratios: Only the Tip of the Iceberg in the Total Cost of Ownership Equation



Source: State Street Global Advisors. For illustrative purposes only.

Performance and Tracking Error

Of course, investment performance is understandably high on any investor's list — but there are metrics to consider beyond returns, specifically tracking error. This indicates how closely an ETF follows its benchmark index.

Tracking error occurs when there's a discrepancy between the performance of the ETF and the index it's designed to replicate. Fund expenses, transaction costs, difficulty in acquiring components of the index, dividend reinvestment timing, and sampling (a strategy in which a fund holds a representative sample instead of the entire index) can all possibly create a divergence.

Structure

There are two ETF structures to know:

Physical ETFs purchase the securities within the target index. For example, a physical ETF tracking the S&P 500® will hold shares of the companies within that index.

Synthetic ETFs use derivatives like swaps to replicate the performance of an index. They enter into a contract with a counterparty (usually a bank or another financial institution) that agrees to provide the index's return to the ETF.

Investment Risks

Any investment carries some degree of risk, ETFs included. While the individual risks of an ETF will vary depending on its holdings and structure, some to be mindful of are:

- Market Risk There's always a possibility of loss due to factors that affect an entire market or asset class. During periods of high market volatility, even the most stable ETFs can experience declines.
- Interest Rate Risk Bond ETFs are particularly susceptible to interest rate changes. Generally, when interest rates rise, bond prices fall, and vice versa.
- Credit Risk For bond ETFs, there's the risk that the bond issuers might default on their payments. In other words, they may not be able to pay back their investors. Higheryield bonds, often referred to as "junk" bonds, carry higher credit risk
- Leverage Risk Some ETFs use leverage (debt) to amplify returns. While this can offer higher potential gains, it also increases potential losses and can be more volatile.



ETFs in Action

It's easy to see the benefits of ETFs at a high level. But when push comes to shove, how are you actually supposed to implement these instruments in your portfolio? Answering this question can be like explaining all the ways to cook a gourmet meal — the possibilities are nearly endless. Still, we've highlighted several of the most relevant approaches.

Strategic Asset Allocation

Many individual investors prefer long-term, buy-and-hold strategies. Perhaps you want to add stability and recurring income to your portfolio through investment-grade bonds. Instead of sifting through and handpicking bonds to hold, investors can purchase bond ETFs to quickly and efficiently allocate a portion of their portfolio to fixed income — ETF issuers handle the "wrapping" and asset management for you.

Tactical Asset Allocation

Markets are fluid, constantly ebbing and flowing as economic cycles unfold and conditions change. The future is forever unpredictable, but sometimes it's prudent to make real-time adjustments to portfolio allocations to take advantage of short-term opportunities. For instance, during the COVID-19 pandemic, market prices broadly fell amid the social and economic uncertainty. With ETFs, investors could pivot and re-position immediately.

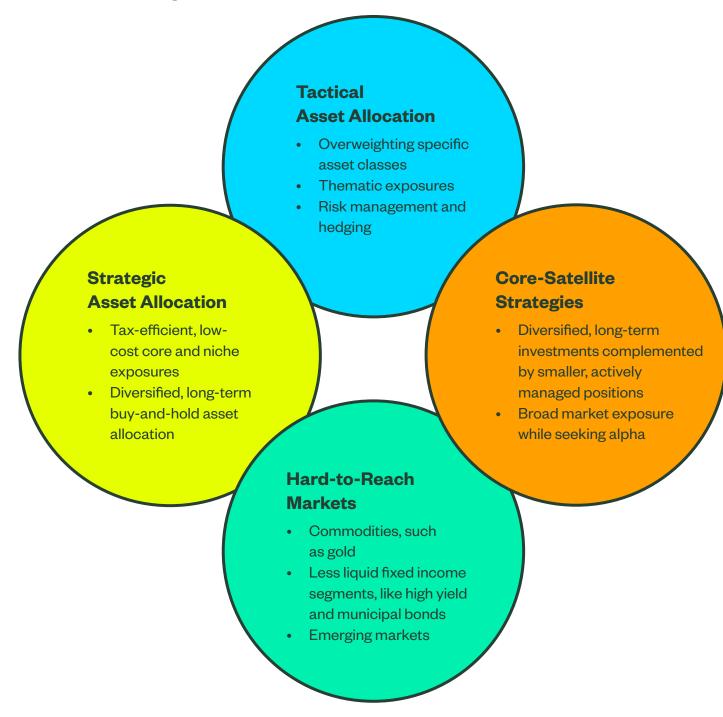
Core-Satellite Strategies

You might be familiar with the age-old active-vs-passive debate — that is, whether it's worthwhile to seek "alpha" and outperform the market (active) or to simply mirror the market's returns (passive). The core-satellite strategy is essentially a blend of the two. The first and central objective is to replicate the broader market's return, while the second objective is to find alpha and diversification opportunities. For instance, a market-based ETF (the core) could be paired with a sector, commodity-based, or other active ETF (the satellite).

Access to Hard-to-Reach Markets

Some assets are more difficult to invest in than others, at least that was the case historically. ETFs changed that, democratizing access to markets like fixed income, commodities, currencies, and even managed portfolios, which can help diversify and balance a portfolio.

ETFs Meet a Wide Range of Investor Needs



Source: State Street Global Advisors. For illustrative purposes only.

There's an ETF for That

There are innumerable paths forward. No matter which you choose, advisors are your guide and ETFs are your all-terrain vehicle. With both at your service, you can go anywhere and trailblaze a path to achieving your unique financial goals.

Talk with your advisor about ways to use these diverse, multifaceted vehicles in your portfolio.

Glossary

Active Management A portfolio-management approach that uses a human hand, such as a single manager, co-managers or a team of managers, to select and adjust a fund's holdings over time. Active managers rely on research, forecasts and their own judgment and experience to make decisions on what securities to buy, hold and sell. The opposite of active management is passive management, which includes indexing.

Alpha A gauge of risk-adjusted outperformance that is measured relative to a benchmark because benchmarks are often considered to represent the market's movement as a whole. The excess returns of a fund relative to the return of a benchmark index is the fund's alpha.

Asset Allocation An investment strategy of mixing a portfolio's stocks, bonds and cash equivalents — and sometimes other assets — to balance risk and return according to an individual's goals, risk tolerance and investment horizon.

Creation and Redemption Process The process whereby an ETF issuer takes in and disburses baskets of assets in exchange for the issuance or removal of new ETF shares.

Diversification A strategy of combining a broad mix of investments and asset class to potentially limit risk, although diversification does not guarantee protecting against a loss in falling markets.

Exchange The marketplace where securities, commodities, derivatives and other financial tools such as ETFs are traded. Exchanges, such as stock exchanges, allow for fair and orderly trading and efficient circulation of securities prices. Exchanges give firms looking to market publicly listed securities the platform to do this.

Exchange Traded Fund (ETF) An ETF is an open-ended fund that provides exposure to underlying investment, usually an index. Like an individual stock, an ETF trades on an exchange throughout the day. Unlike mutual funds, ETFs can be sold short, purchased on margin and often have options chains attached to them.

Index An indicator or measure of something — typically securities prices. An index is typically an imaginary portfolio of securities (stocks, bonds or even futures contracts) that represent a specific market, such as, say, the US equities market by way of the MSCI USA Total Return Index.

Liquidity The ability to quickly buy or sell an investment in the market without impacting its price. Trading volume is a primary determinant of liquidity.

Passive Investing An investment strategy that removes the active human hand from the process and replaces it with systematic, rules-based approaches to securities selection. Passive investing, notably index investing, is relatively cheap because it typically limits portfolio turnover and because the passive investing does not involve relatively costly research.

Primary Market The market where authorized participants (APs) create and redeem ETF units in-kind, typically in blocks of 50,000 shares, which are known as creation units.

Real Asset Investments Physical or tangible assets that have value and often are investable. Real assets include precious metals, commodities, real estate, agricultural land and oil, and their inclusion in most diversified portfolios is considered appropriate.

Risk The possibility that an investment's return will differ from expected returns, especially the possibility of losing some or all of an investment. Risk is typically measured by calculating the standard deviation on historical, or average, returns of a given investment.

Secondary Market A market where investors purchase or sell securities or assets from or to other investors, rather than from issuing companies themselves. The New York Stock Exchange and the NASDAO are secondary markets.

S&P 500 Index The S&P 500 Index is composed of 500 selected stocks, all of which are listed on the Exchange, the NYSE or NASDAQ, and spans over 24 separate industry groups. Since 1968, the S&P 500 Index has been a component of the US Commerce Department's list of Leading Indicators that track key sectors of the US economy. Current information regarding the market value of the S&P 500 Index is available from market information services. The S&P 500 Index is determined, comprised and calculated without regard to the Trust.

Sector Investing An investor or portfolio that invests assets into one or more sector of the economy such as financials, energy, or health care.

Swap A derivative contract involving the exchange of financial instruments of almost any kind by two parties, usually businesses and financial institutions and not retail investors. The most common kind of swap is an interest rate swap, and swaps don't trade on exchanges.

Tracking Error Tracking error is a measure of how consistent a portfolio's return is with that of its benchmark. In reality, no indexing strategy can perfectly match the performance of the index or benchmark, and the tracking error quantifies the degree to which the strategy differed from the index or benchmark, by measuring the standard deviation between the two values, annualized.

Volatility The tendency of a market index or security to jump around in price. Volatility is typically expressed as the annualized standard deviation of returns. In modern portfolio theory, securities with higher volatility are generally seen as riskier due to higher potential losses.

Important Information

Hong Kong: State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200.

Investing involves risk including the risk of loss of principal.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All material has been obtained from sources believed to be reliable. The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

Frequent trading of ETFs could significantly increase commissions and other costs, such that they may offset any savings from low fees or costs.

These investments may have difficulty in liquidating an investment position without taking a significant discount from current market value, which can be a significant problem with certain lightly traded securities.

Diversification does not ensure a profit or guarantee against loss.

There can be no assurance that a liquid market will be maintained for ETF shares.

In general, ETFs can be expected to move up or down in value with the value of the applicable index.

Equity securities may fluctuate in value and can decline significantly in response to the activities of individual companies and general market and economic conditions.

Passively managed funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to experience tracking errors relative to performance of the index.

While the shares of ETFs are tradable on secondary markets, they may not readily trade in all market conditions and may trade at significant discounts in periods of market stress.

The S&P 500° Index is a product of S&P Dow Jones Indices LLC or its affiliates ("S&P DJI") and have been licensed for use by State Street Global Advisors. S&P°, SPDR°, S&P 500°,US 500 and the 500 are trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones° is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones") and has been licensed for use by S&P DJI and sublicensed for use by S&P DJI and sublicensed for certain purposes by State Street Global Advisors. The fund is not sponsored, endorsed, sold or promoted by S&P DJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of these indices.

This document is issued by State Street Global Advisor Asia Limited and has not been reviewed by the Securities and Futures Commission ("SFC").

© 2024 State Street Corporation. All Rights Reserved. ID2084500-6512122.1.1.APAC.RTL 0424 Exp. Date: 31/03/2025