Invesco

Discover the Power of ETFs

Discover Exchange-Traded Funds (ETFs)

Financial television programs and publications continue to give ETFs attention, heightening investors' needs to understand what they are, how they work and how to implement them in portfolios. Traded on secondary exchanges such as the NYSE ARCA, NASDAQ or BATS, ETFs have features of both mutual funds and stocks while their structure offers some unique characteristics.

01

ETF characteristics

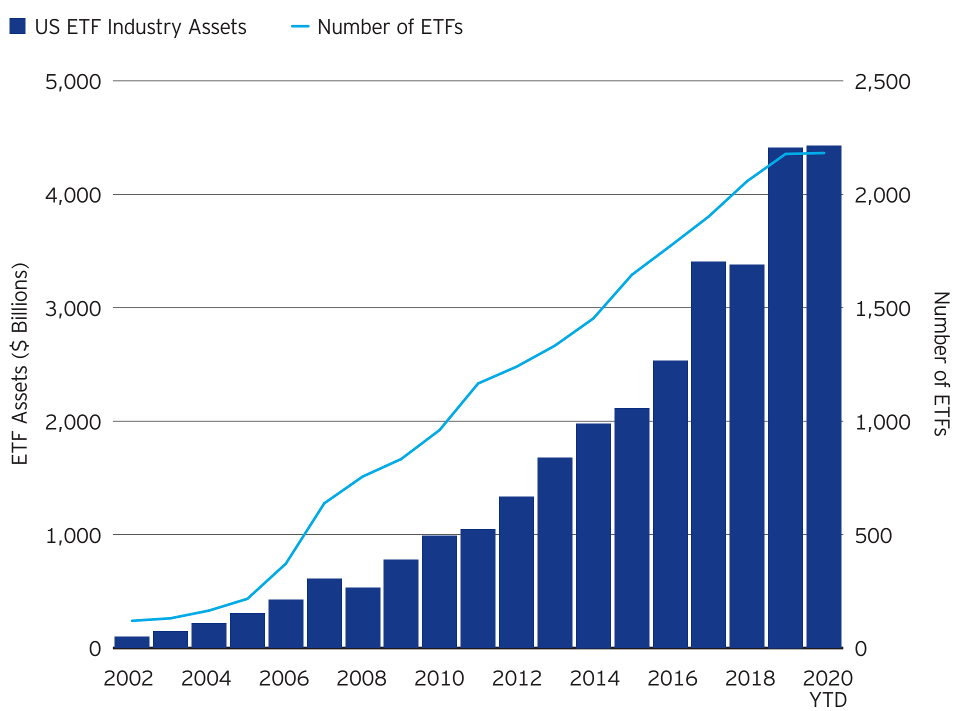
Investors are increasingly drawn to the structural characteristics of ETFs:

+ **Tax-advantaged[1] product design:** With the ETF structure, ETF shareholders can potentially defer capital gains until they sell their shares.
+ **Portfolio transparency:[2]** Most ETFs report holdings on a daily basis, allowing investors to see fund investments.
+ **Index tracking:** Index-based ETFs track indexes or baskets of securities. Therefore, performance should typically reflect performance of the underlying index.
+ **Targeted exposure:** Investors can use ETFs to dial up or down exposure to specific markets, styles, sectors, themes or strategies.
+ **Liquidity[3]/flexibility:** Investors can buy and sell shares on exchanges throughout the trading day, while also implementing trading techniques such as buying on margin, short selling and placing various order types.
+ **Accessibility:** ETFs provide access to asset classes such as commodities that were previously available only to institutional investors.
+ **Lower ownership cost:[4]** ETFs may provide lower ownership costs because of their efficient structure. Some ETFs have established expense caps to make ownership costs clear and straightforward for investors.

1993: Introduction of the first ETF, a fund that tracked the S&P 500 Index.

2020: Over 2,100 ETFs available with over $4.5 trillion in assets.[5]

Growth of ETFs (AUM)



Sources: Invesco, Bloomberg L.P., as of Jan. 31, 2020.

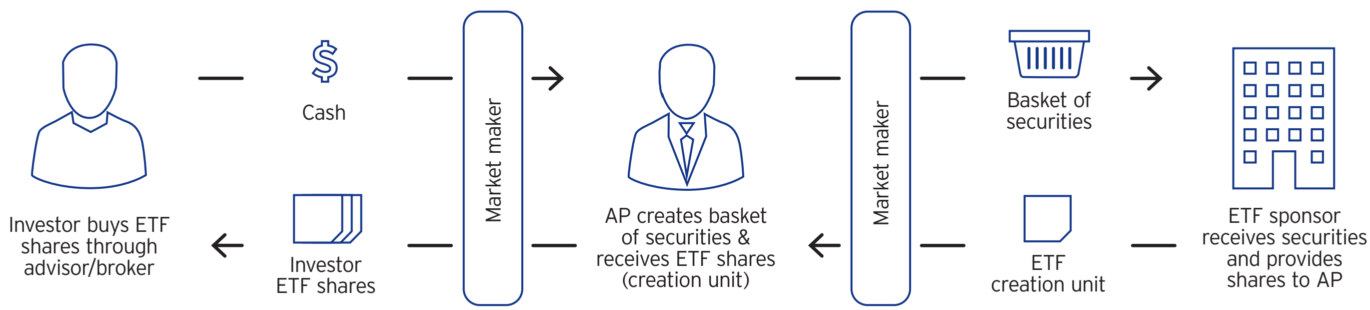
02

How ETFs work: Structure and why they are tax-efficient[1]

ETFs create and redeem existing shares through an "in-kind" process with market participants called authorized participants (APs) and market makers. APs have a legal agreement in place with an ETF trust and their custodial bank allowing them to create or redeem shares of the ETF in blocks known as creation units. In this process, the tax code provides that capital gains are not recognized at the time of the transaction and are not considered a taxable sale, making an ETF a relatively tax-efficient structure. Thus, this structure may create a meaningfully different after-tax return experience between an ETF and another type of investment vehicle – even if both replicate the same index.

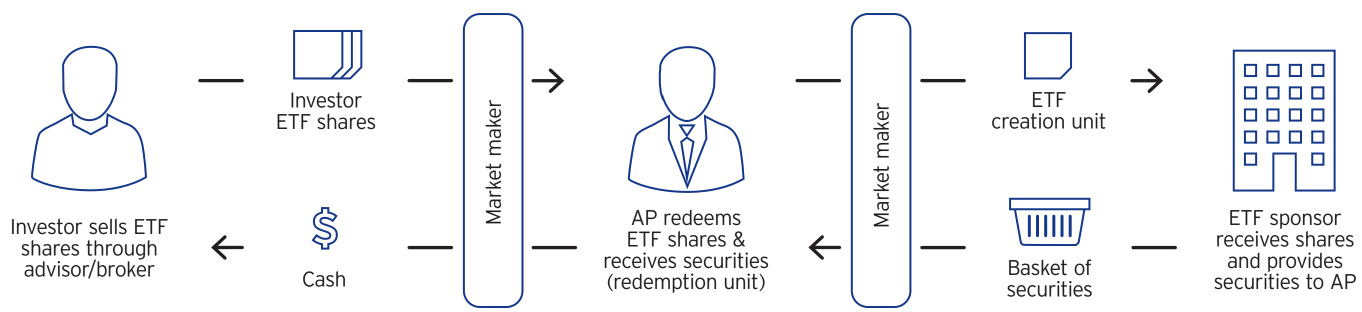
During the creation process, the market maker delivers a basket of securities held in the ETF's portfolio to the ETF sponsor in exchange for a creation unit. For a redemption, the same in-kind process is used except the market maker receives the basket, and the fund receives the creation units. Often times during the creation and redemption process, APs work directly with market makers who assume the risk of holding a certain number of shares of a particular security to facilitate the trading of that security. This process is depicted and described below.

In-kind creation process



For illustrative purposes only.

In-kind redemption process



For illustrative purposes only.

03

Taxable event treatment[1]

With ETFs, capital gains and taxes are generally recognized only upon sale. Below are common events and how they are treated within the ETF structure.

Portfolio rebalancing: Typically handled in-kind with transactions and generally not taxable for the ETF and its shareholders. If the ETF must sell securities no longer in the index and buy additional securities, this may be a cash transaction and a taxable event for the ETF.

Corporate events (stock splits, merger and acquisitions): Typically handled in-kind, but again, if the ETF must sell or buy securities for cash, there may be a taxable event for the ETF.

Shareholder redemption: When APs redeem their shares, this is usually handled with "in-kind" transactions.

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ETF portfolio construction counts

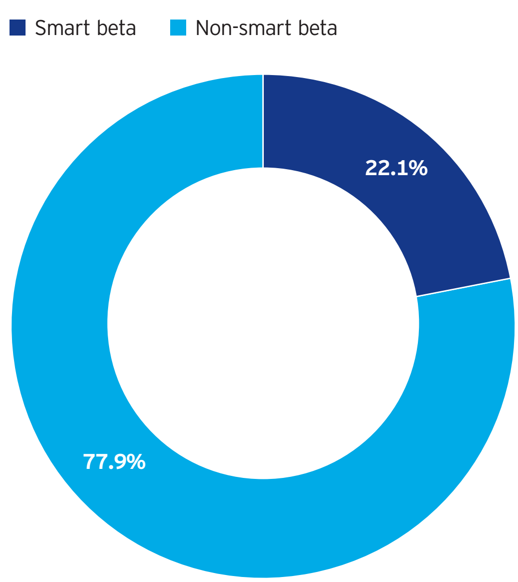
In addition to offering investors targeted exposure, ETFs can be constructed to be market-cap-weighted, alternatively weighted or actively managed.

Market-cap-weighted ETFs are passively managed with the goal to replicate the characteristics and performance of the target index or benchmark and are rebalanced regularly. They are inertia-driven, meaning security weights are calculated by multiplying share price by the number of shares outstanding. With automatic index selection, they are designed to produce average performance for the group of securities they track. As an example, the S&P 500 Index is a traditional index that seeks to mirror the performance of the average US stock market investor.

The portfolio composition of **actively managed ETFs** can be changed at the discretion of an investment team. Because they do not have to mirror a specific index, they are free to pursue the ETF's objective by adjusting securities as they see fit.

ETFs based on alternative weighting are called **smart beta ETFs.** In contrast to market-cap-weighted ETFs, smart beta ETFs sever the link between price and portfolio weight. They are rules-based and provide access to a variety of risk factors such as dividend yield, momentum, quality, value and size. Smart beta ETFs may provide better risk-adjusted returns relative to cap-weighted indexes. While some smart beta ETFs are actively managed with the goal of outperforming a stated index, the majority are passively managed with the objective of tracking their respective indexes.

2019 ETF Industry Flows



Source: Bloomberg L.P., as of Dec. 31, 2019.

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Why smart beta?

As an ETF industry innovator, Invesco is a smart beta pioneer with the goal of bringing factor-based investing to the ETF world.

An intersection of active and passive worlds, smart beta offers a menu of portfolio construction tools that:

+ Provide exposure to risk factors across asset classes that historically provided additional sources of returns over the long term.
+ Strive to make risk factors available to investors in a systematic way.
+ Attempt to provide different risk/return characteristics than the broad market. Through smart beta ETFs, investors can access certain markets at a lower cost[4] and have the ability to express market views, fine-tune exposures or diversify exposure through core and satellite positions in pursuit of building better investment portfolios.

In addition to offering investors targeted exposure, ETFs can be constructed to be market-cap-weighted, alternatively weighted or actively managed.

Smart beta ETFs provide:

+ Single-factor strategies such as low volatility, dividend yield, momentum, quality, value and size.
+ Multi-factor strategies combining factors that may provide optimal exposure.
+ Non-market-cap-weighting, including fundamentals-weighted, equal-weighted and alternatively weighted fixed income.
+ Access to commodities and alternatives.

06

Portfolio applications

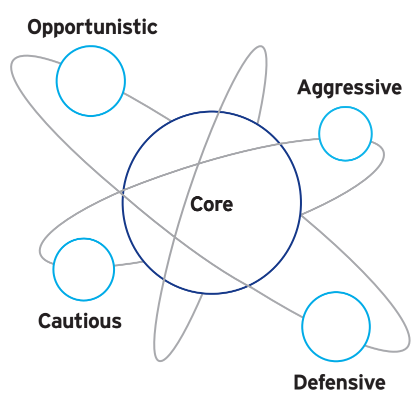
Satellites can be:

+ Factor-based ETFs
+ Style-based ETFs
+ Sector or industry group ETFs
+ International or global ETFs
+ Thematic ETFs

Core and satellite: This approach recognizes that overall market trends account for a large part of total returns over time. The core, designed to track closely with the market as a whole, seeks to add increments of performance value while also adjusting overall portfolio risk with the addition of "satellite" positions.

ETFs can be used as core and/or satellite investments in virtually unlimited ways to construct portfolios in pursuit of desired outcomes. Many investors may implement traditional long-term core holdings to access market returns and help reduce costs while aligning with individual risk tolerances. The satellite portion of a portfolio can be used to capture specific market segments and beliefs either through lower correlation of asset classes or attempts to enhance performance or reduce volatility.

+ Build a diversified core with single-factor or multi-factor/alternatively weighted strategy.
+ Tactically adjust exposure based on market outlook with the objective of achieving portfolio outperformance.



Smart beta represents an alternative and selection index-based methodology that may outperform a benchmark, reduce portfolio risk, or both. Smart beta funds may underperform cap-weighted benchmarks and increase portfolio risk. There is no assurance that an investment strategy will outperform its investment objectives. Beta is a risk measure representing how a security is expected to respond to general market movements.

This doesn't constitute a recommendation of investment strategy suitability for any particular investor. Investors should consult their financial advisors before making any investment decisions. Diversification does not ensure a profit or eliminate the risk of loss.

Terms and definitions

Beta: A risk measure representing how a security is expected to respond to general market movements.

Correlation: The degree to which two investments have historically moved in the same direction or magnitude.

Dividend Yield: Reflects stocks that have paid higher yields and generated higher total returns over time than lower-yielding assets.

Equal weighted: Assigns constituents in equivalent amounts.

Fundamentals weighted: Ranks all publicly listed companies according to four fundamental measures of company size: sales, cash flow, book value and dividends.

Low volatility: Describes investments that consistently demonstrated lower volatility than securities in the same asset class.

Momentum: Identifies investments with positive momentum (recent strong returns) or negative momentum (recent weak returns) to calibrate portfolio exposure to either.

Quality: Characterizes companies with strong measures of financial health, including a strong balance sheet and stable earnings growth.

Sharpe ratio: Risk-adjusted measure calculated using standard deviation and excess return to determine reward per unit of risk. A higher Sharpe ratio indicates better risk-adjusted performance.

Size: Represents the potential higher-than-benchmark returns associated with relatively smaller stocks within the universe being considered.

Standard deviation: Measures a range of total returns and identifies the spread of short-term fluctuations.

Value: Applies to investments trading at discounts to similar securities, based on measures like book value, earnings or cash flow.

Volatility: Volatility is a statistical measure of the magnitude of up and down asset price fluctuations over time.

The S&P 500® Index is an unmanaged index considered representative of the US stock market.

1 Invesco does not offer tax advice. Please consult your own tax advisor for information regarding your own tax situation. While it is not Invesco's intention, there is no guarantee that a fund will not distribute capital gains to its shareholders.
2 ETFs disclose their holding daily.
3 Shares not individually redeemable and owners of the shares may acquire those shares from the fund and tender those shares for redemption to the fund in Creation Unit aggregations consisting of 10,000, 50,000, 75,000, 80,000, 100,000, 150,000 or 200,000 shares.
4 Since ordinary brokerage commissions apply for each buy and sell transaction, frequent trading activity may increase the cost of ETFs.
5 Source: Bloomberg L.P., as of Jan. 31, 2020.

Important risk information

There are risks involved with investing in ETFs, including possible loss of money. Index-based ETFs are not actively managed. Actively managed ETFs do not necessarily seek to replicate the performance of a specified index. Both index-based and actively managed ETFs are subject to risks similar to stocks, including those related to short selling and margin maintenance. Ordinary brokerage commissions apply. The fund's return may not match the return of the Underlying Index. The funds are subject to certain other risks. Please see the current prospectus for more information regarding the risk associated with an investment in the funds.

There can be no guarantee that companies will declare dividends in the future or that if declared, they will remain at current levels or increase over time.

Factor investing is an investment strategy in which securities are chosen based on certain characteristics and attributes.

Foreign securities have additional risks, including exchange-rate changes, decreased market liquidity, political instability and taxation by foreign governments.

A fund concentrated in a single industry involves substantially greater risk of loss and price fluctuations than an investment diversified across multiple industries or sector segments.

Fixed income investments are subject to credit risk of the issuer and the effects of changing interest rates. Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa. An issuer may be unable to meet interest and/or principal payments, thereby causing its instruments to decrease in value and lowering the issuer's credit rating.

Investments focused in a particular industry or sector, such as the industrials sector are subject to greater risk, and are more greatly impacted by market volatility, than more diversified investments.

Commodities, currencies and futures are volatile and not suitable for all investors.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

Before investing, investors should carefully read the prospectus/summary prospectus and carefully consider the investment objectives, risks, charges and expenses. For this and more complete information about the funds call 800 983 0903 or visit invesco.com for prospectus/summary prospectus.

Note: Not all products available through all firms.

Questions on ETFs?

p: 800-983-0903

For more information, please visit us at **invesco.com.**