American Century Investments® | ETFs

A GUIDE TO

Getting Started with ETFs

EXCHANGE-TRADED FUNDS

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Not since the development of the mutual fund more than a century ago has a product invented by the financial services industry revolutionized investing on par with exchange-traded funds (ETFs). From humble beginnings in 1990 when the first successful ETF debuted in Toronto, they have gained popularity as a tool to help investors achieve their investment goals. ETF assets listed in the U.S. reached a record $3.4 trillion at the end of 2017 and more than 2,100 ETFs are now available in the U.S.

ETFs, like mutual funds, facilitate access to a diversified pool of underlying investments. Originally, ETFs focused on passively replicating well-known, market-capitalization-weighted benchmarks such as the S&P 500 or Nasdaq-100. Most ETFs available today continue to passively track an index, though the universe of indexes has grown significantly, including those that track various sectors, industries and geographies. More recently, ETFs tracking alternatively weighted indexes have begun to gain traction, as have actively managed strategies.

As ETFs increase in popularity and diversity, it's important to understand the pluses and minuses of the structure and how they differ from mutual funds. This understanding will help you make better-informed decisions about how and when to use them in portfolios. This paper is a good place to start.

A BRIEF HISTORY OF ETFs: THE EVOLUTION CONTINUES

In the U.S., the earliest ETFs focused on established cap-weighted domestic equity benchmarks. In 1996, ETFs that invested in single countries were introduced. In 1998, the market expanded to include ETFs that focused on sectors such as financial services and technology. The ETF universe evolved further in 2000 as globally focused ETFs came onto the market. These funds sought to track international cap-weighted indexes such as the MSCI EAFE Index, among others. In 2002, emerging markets products were launched, including trackers of the MSCI Emerging Markets Index. The range of bond and commodities ETFs has also proliferated, making convertible bonds and other more exotic market segments more accessible to investors.

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GROWING MENU OF ETFs

Today, ETF offerings span asset classes, investment styles and geographies, enabling a wide variety of portfolio objectives that may be implemented using combinations of mutual funds, ETFs and individual stocks and bonds.

Passive, Indexed ETFs

Passive ETFs seek to mirror the performance of a recognized, measurable benchmark such as a broad market (e.g. S&P 500, Russell 3000), or a group of companies (sectors or industries), fixed income instruments, currencies, or commodities, among other types of securities. As outlined above, the range of index-driven asset classes available as ETFs continues to grow.

Passively managed ETFs can also include nontraditional investment methodologies such as leveraged or inverse funds. A leveraged fund aims to achieve a return that is a multiple of the performance of the underlying index while an inverse fund pursues returns opposite of its index. The volatility of these funds makes them poorly suited for long-term investors.

Strategic Beta or Alternatively Weighted ETFs

ETFs that seek enhanced returns by altering traditional market-capitalization weighted index construction appeared in 2006 and have seen a recent surge in investor interest, growing from $103 billion in 2009 to $750 billion as of June 30, 2018.*

These ETFs leverage quantitative, fundamental research and security selection experience to construct strategic beta or alternatively weighted indexes. These index-tracking ETFs select and weight securities based on criteria other than market cap — such as quality, value, momentum and size, among others.

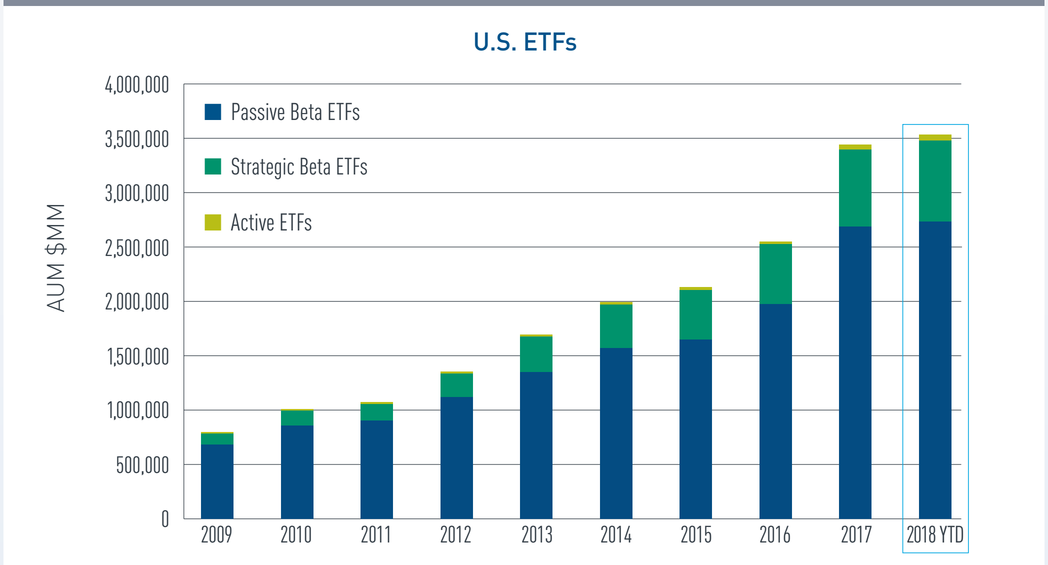
Several managers have developed alternatively weighted ETFs that address the strategic asset allocation needs of long-term investors. Many of these ETFs employ rules-based quantitative techniques to pursue a specific outcome such as capturing equity growth potential and/or generating reliable income.

Active ETFs

Starting in 2008, the Securities and Exchange Commission (SEC) has allowed ETFs to operate as actively managed funds. These ETFs apply the same fundamental expertise as many mutual funds, combining active management with the ETF structure. They may be well-suited to investors wary of the potential shortcomings of passively investing in a traditional cap-weighted index-driven portfolio. This may be especially true in areas where the available indexes inaccurately represent the investment opportunity, such as in fixed income.

*Source: Morningstar. Data as of 6/30/2018.

Continuing Growth in ETF Adoption



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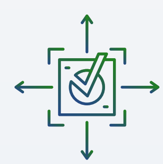


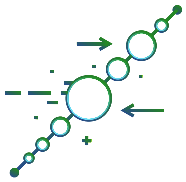
ETF assets have grown significantly over the past decade, with passively managed portfolios continuing to make up the lion's share of the universe. Over the past several years, however, alternatively weighted ETFs have begun to claim increasing assets, while actively managed ETFs have also started to appear.

EXCHANGE-TRADED PRODUCTS

ETFs are the most widely recognized type of Exchange-Traded Products (ETPs). However, the range of ETPs also include Exchange Traded Notes (ETNs), Exchanged Traded Commodities (ETCs) and other forms of Exchanged Traded Vehicles (ETVs). All ETPs share a similar structure and trade in much the same way, yet each has distinguishing characteristics, and each is subject to specific investment constraints driven by securities and tax laws, as outlined below.

	ETF	ETN	ETC	ETV
Structure	• Open-ended fund • Registered under Securities Act of 1933 and the Investment Company Act of 1940 • Voting rights • Cash dividend reinvestment • In-kind or cash purchase and redemption	• Unsecured debt of a corporation or bank • Registered under Securities Act of 1933 • No voting rights • Cash purchase and redemption	• Pooled commodity vehicles • Registered under Securities Act of 1933 Commodity Pool • Limited voting rights • Cash purchase and redemption • Contingent redemption rights	• Typically, a Grantor Trust • Registered under Securities Act of 1933 • In-kind purchase and redemptions • No voting rights • Contingent redemption rights
Investment	• May replicate or sample an index; may be managed actively • May invest in derivatives • Equities, fixed-income, financial futures, swaps, options • Securities lending available	• Tracks an index • Implies investment as well as credit risk of the underlying issuer • No securities lending	• Exchange-Traded and Over-the-Counter (OTC) commodity futures, forward contracts, options, futures, swaps • Equities, fixed income, financial futures, commodities and commodity futures, swaps, options currencies • No securities lending	• Physically held metals and foreign currencies (with interest) • No securities lending
Tax Treatment	• Conduit treatment of realized gains and income via form 1099-DIV	• Capital gains realized by note holders on sales or redemption of notes • Uncertain tax status	• Reporting on Schedule K-1	• Grantor trust pass-through treatment of the trust's gains, income, losses and expenses; variable tax consequences under Internal Revenue Code rulings
Asset Custody	• Segregated custody account	• Uncollateralized obligation	• Segregated custody account	• Potential credit exposure through depository accounts

ETF MECHANICS



To understand the benefits of ETFs, it helps to examine the mechanics under the hood. With a traditional mutual fund, an investor places an order by sending cash to the mutual fund company, which then allocates the cash across fund holdings. The investor receives new shares of the fund in return, which he or she can redeem for cash from the mutual fund company later. If the investor's need for cash requires the mutual fund to sell shares, any capital gains resulting from those sales are borne by all investors in the fund.

ETFs Work Differently

ETF shares are bought and sold on an exchange, similar to stocks, so that a single investor's buying and selling decisions have little to no impact on the other owners of the ETF. When the number of shares available for sale is in line with the demand from buyers, trades between buyers and sellers can take place on the exchange. Market makers enable this intraday liquidity. When the number of shares available doesn't match demand, Authorized Participants (APs) step in to facilitate the creation/redemption process. APs are institutional investors contractually authorized to create and redeem ETF shares directly with a fund. APs have the authority to initiate the ETF creation and redemption mechanism any time supply and demand are not aligned. This process ensures that there is a sufficient supply of ETF shares available to meet investor demand.

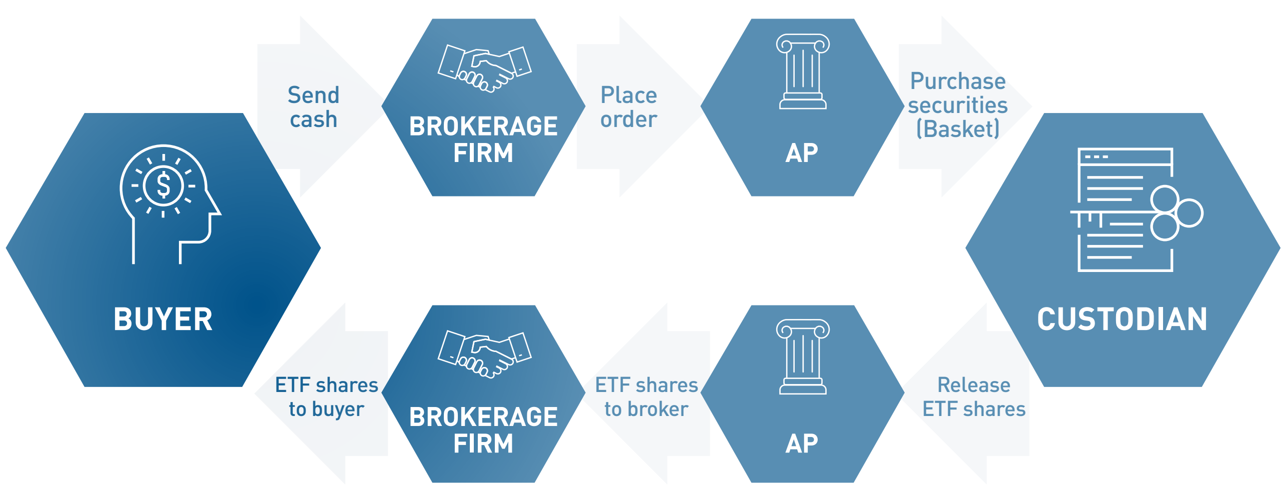
ETF Share Creation

In a creation transaction, an AP purchases or borrows the securities comprising the current holdings or a representative sampling of the securities held by the ETF. The AP assembles these securities into a "creation basket," which is then exchanged for shares of the ETF. The creation basket and the number of ETF shares delivered are equal in value. An ETF creation unit generally consists of 50,000 or 100,000 shares and represents legal claims on the shares held in the trust. These shares then become available to purchase.

Redemption

The ETF share redemption mechanism reverses this process when excess supply needs to be removed from the marketplace. Since these trades are typically done in-kind (securities traded for securities), they are not generally subject to capital gains tax.

ETF Share Creation and Redemption Mechanism



ETFs VERSUS MUTUAL FUNDS

Like mutual funds, ETFs are baskets or pools of individual securities, such as stocks or bonds. And like mutual funds, ETFs are structured as open-end investment companies. Both ETFs and mutual funds post net asset values (NAVs) of their underlying securities at the end of each trading day. However, there are some differences between the two vehicles that have important implications for investors.

Purchases and Sales

One of the marquee differences between ETFs and mutual funds is how they transact. ETFs are purchased and sold through a brokerage firm, and transactions take place between buyers and sellers on an exchange. With mutual funds, purchases and sales take place between the investor and the fund company.

Pricing

Seasoned mutual fund investors know, regardless of what time of the trading day a mutual fund is bought or sold, all investors get one price: the settling NAV of the underlying holdings. By contrast, ETFs trade like stocks on the secondary market and offer continuous pricing and trading during market hours.

Unlike mutual funds, an ETF can trade at a premium or a discount to the NAV of the securities it holds. In calm, efficient markets, the primary determinant of an ETF's price is its underlying securities. There may be instances, however, where the ETF's price deviates from NAV, trading at a premium or discount.

An ETF's price can move to premium of its NAV if market participants bid the ETF higher more rapidly than the underlying securities are bought. For example, if some investors are planning for big news out of the technology sector, but rather than buy large quantities of individual securities, they purchase large amounts of a related technology ETF. The price of that ETF may then rise faster than its underlying components, creating a premium. Conversely, if many investors rush to sell an ETF when there is no corresponding selling pressure in the securities, the ETF could wind up trading at a discount to its NAV.

In practice, ETFs that invest in U.S. markets tend to trade close to their NAV. By contrast, international ETFs may trade at a premium or discount because the underlying markets are closed during U.S. market hours. Moreover, fixed income ETFs also tend to trade at a premium or discount because the underlying securities have wide bid/ask spreads.

Premiums and discounts are rarely sizable or persistent thanks to the important role that APs play in ETF creation and redemption.

Capital Gains Taxes

Both ETF and mutual fund shareholders are subject to capital gains taxes when they ultimately sell their shares. However, structural differences between the two often mean lower total taxes overall for ETFs versus similarly structured mutual funds.

With mutual funds, the manager often must sell securities within a fund's portfolio to rebalance it to accommodate shareholder redemptions or to reallocate assets. These sales may create capital gains for current shareholders. These gains are taxed, even if an investor hasn't realized those gains within his portfolio. To help reduce total capital gains taxes, mutual fund managers often apply strategies such as carrying capital losses from prior years, tax-loss harvesting, and other tactics. Continued >

Key Benefits of ETFs

ETFs build on the diversification benefits offered by mutual funds and other pooled investment vehicles by offering trading flexibility, transparency, tax efficiency, and lower costs.

Trading Flexibility

Ease of trading is one reason why ETFs have been so widely embraced by investors.

Transparency

Most ETFs must list their full holdings daily.

Tax Efficiency

ETFs are often sold from one investor to another in transactions that don't require the sale of underlying securities. Secondary market transactions plus the creation/redemption process enable fewer capital gains and enhanced tax efficiency.

Lower Costs

Processing and management costs are typically reduced with the ETF vehicle, though commissions and other brokerage costs remain.

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By contrast, ETF managers accommodate investment inflows and outflows through the ETF share creation and redemption process described in ETF Mechanics on page 4. Because shares of individual securities are exchanged in-kind for ETF shares, these activities generally do not create taxable capital gains for current shareholders. When a portfolio is rebalanced, ETF managers may apply tax management strategies similar to those followed mutual fund managers.

Transaction Costs

Similar to stocks, transaction costs apply to purchases and sales of ETFs. These transaction costs include both brokerage commissions and a bid/ask spread on each purchase or sale.

A brokerage fee is charged by a broker to execute a transaction. The bid/ask spread is paid to the market maker as compensation for facilitating an ETF trade.

With mutual funds, there are no transaction costs for no-load funds, so there is no bid/ask spread. However, fees may apply when buying or selling a mutual fund through a brokerage platform.

Client Services

With mutual funds, because purchases and sales take place through the sponsor firm, that firm generally services the client's account. With ETFs, the sponsor firm is not involved in purchases and sales since transactions occur among investors on the exchange. Consequently, servicing is handled by the selling advisor or brokerage firm rather than the fund sponsor. This difference helps reduce ETF operating costs.

A World of Differences

	MUTUAL FUNDS	ETFs
Purchases & Sales	Buyer may purchase directly from the fund company or through a brokerage firm	Must clear through a brokerage firm
Pricing	Priced once per day at the end of the day; price based on NAV of fund's holdings	Priced continuously throughout the day while financial markets are open; may be priced at a premium or discount to NAV
Capital Gains Taxes	May require manager to buy or sell underlying holdings to accommodate inflows and outflows, or to reallocate assets, which creates potential capital gains liabilities	Shares of individual securities exchanged in-kind for ETF shares to accommodate inflows and outflows generally does not create taxable capital gains
Transaction Costs	No transaction costs for no-load funds (fees may apply when buying or selling through a brokerage platform)	Brokerage commission and bid/ask spread applies on each purchase or sale
Client Services	Services provided by the fund company or advisor	Services provided by the selling advisor or brokerage firm; fund sponsor not involved in servicing accounts

DESIGNED FOR A RANGE OF INVESTOR NEEDS

Many investors follow a core-satellite method in building their portfolios. This approach is designed to minimize costs, tax liability and volatility. ETFs may play roles as both core and satellite investments. The core consists of broad exposure to major asset classes and may consist of actively managed funds, passively managed investments that track broad market indexes, or alternatively weighted/strategic beta portfolios. Satellite holdings may consist largely of actively managed vehicles that seek to outperform standard capitalization-weighted benchmarks. Examples of satellite investments include sector funds, individual commodities individual country funds, and other asset classes.

We believe ETFs may be well-suited to investors who are:

Buy-and-Hold Investors – Buying and selling ETFs triggers transaction costs outside the funds, so ETFs may better suit individuals who do not trade frequently.

Lump-Sum Investors – Because of transaction costs, ETFs may be better suited for investors looking to invest a single, larger amount versus those investing smaller amounts at regular intervals.

Investors Seeking Flexibility – ETFs offer techniques such as selling short, buying on margin, options, or placing stop and limit orders for those investors interested in applying a variety of trading strategies.

Interested in Market Niches – Some ETFs focus on narrow slices of the market, which can be suited to investors seeking specific market exposures.

Questions to Consider Before Getting Started

As more and more ETFs have become available, it's become more difficult to identify similarities or differences among approaches. To better comprehend them, it may make sense to consider these basic questions:

- What is the fund's objective? Does it achieve this objective?
- Can it be accessed at a fair price?
- Does it offer the exposure the investor needs, or are there unintended concentrations that may expose the investor to unwanted risk?
- Does it align with the investor's goals?

CONCLUSION

Even though ETFs are still relatively new investment vehicles, they've undergone unprecedented growth since their introduction in 1990. Since then, they have diversified and adapted as product innovation has sparked interest in a growing menu of investment options. There's still plenty of room to grow, and we expect continued development of solutions that better meet investor needs.

Selecting the right investments for your portfolio depends on your goals, investment horizon and personal preferences. ETFs, like mutual funds, can be combined in a diversified portfolio that offers broad exposure to multiple asset classes to help meet specific investment objectives. A financial professional can help design a portfolio that offers exposure to a combination of asset classes that best meet your needs.

GLOSSARY

Bid/Ask Spread. The bid price is the highest price that a buyer is willing to pay for the ETF. The ask (or offer) is the lowest price a seller is willing to accept for the ETF. The bid/ask spread represents the difference between the two prices.

Commodity. Basic raw materials such as precious metals and natural resources.

Commodity Futures. Agreements to buy or sell a specific amount of a commodity or financial instrument at a particular price on a stipulated future date related to basic raw materials such as precious metals and natural resources.

Financial Future. A futures contract on a financial product. Examples of financial futures include trading on currencies, stock indices, and Treasury securities.

Forward Contracts (Futures). Agreements to buy or sell a specific amount of a commodity or financial instrument at a particular price on a stipulated future date.

Market Maker. A dealer in securities or other assets who undertakes to buy or sell at specified prices at all times, which enables the smooth flow of financial markets. Each market maker displays buy and sell quotations for a guaranteed number of shares. Once an order is received, the market maker sells from its own holdings or inventory of those shares to complete the order.

Net Asset Value. The total value per ETF share of all the underlying securities in an ETF's portfolio.

Open-End Mutual Fund. A type of mutual fund that does not have restrictions on the number of shares the fund can issue. The majority of mutual funds are open-end.

Option. A financial contract between two parties that gives the buyer the right, but not the obligation, to buy or sell an asset or instrument at a specified price on or before a specified date. The seller has the corresponding obligation to fulfill the transaction if the buyer exercises the option.

Swaps. Two-party contracts entered into primarily by institutional investors for periods ranging from a few weeks to more than one year. In a standard "swap" transaction, two parties agree to exchange the returns (or differentials in rates of return) earned or realized on particular predetermined investments or instruments.

ACTIVELY INVESTING IN OUR CLIENTS' SUCCESS

American Century® Investments ETFs

For 60 years we've applied our investment expertise to help clients reach their financial goals. By focusing on providing institutional-quality solutions, we seek to deliver superior, long-term, risk-adjusted performance. American Century® ETFs are the next step in the evolution of how we partner with clients to address a spectrum of long-term goals.

American Century ETFs integrate the firm's fundamental and quantitative expertise into our core portfolio solutions. Designed for investors' long-term strategic allocations, our ETFs feature both Intelligent Beta* and actively managed options. We believe these approaches help enhance long-term, risk-adjusted returns for investor portfolios.

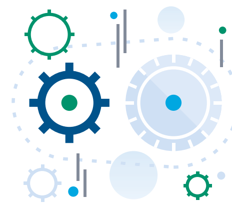
Managing Money, Making A Difference

American Century Investments® is a leading asset manager focused on delivering investment results and building long-term client relationships while supporting research that can improve human health and save lives. It's how we and our clients together **Prosper With Purpose®**

Every day people are increasingly focused on investing to make the world a better place for themselves, their families, their organizations and the world at large. It is possible to live a more meaningful and impactful life and give back something that's more valuable than money.

When you invest with us, you can also invest in the future of others and have the potential to impact the lives of millions. That's possible because of the distinct relationship with the Stowers Institute for Medical Research, which owns more than 40% of American Century. Our dividend payments provide ongoing financial support for the Institute's work of uncovering the causes, treatments and prevention of life-threatening diseases, like cancer.

Together we can become a powerful force for good.



American Century Investments® offers its expertise through a wide variety of investment products designed to meet the needs of individuals and institutions around the world. Our offerings include mutual funds, separate account strategies, private funds, collective investment trusts and ETFs.

*Intelligent Beta emphasizes the use of alternative index construction rules to traditional market capitalization based indexes. Intelligent Beta emphasizes capturing fundamental investment factors or market inefficiencies in a rules-based and transparent way.

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The information in this document does not represent a recommendation to buy, sell or hold security. The trading techniques offered in this report do not guarantee best execution or pricing.

Investment return and principal value of security investments will fluctuate. The value at the time of redemption may be more or less than the original cost. Past performance is no guarantee of future results.

Exchange Traded Funds (ETF) are bought and sold through an exchange trading at market price (not NAV), and are not individually redeemed from the fund. Shares may trade at a premium or discount to their NAV in the secondary market. Brokerage commissions will reduce returns.

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