# A Comprehensive Guide to Exchange-Traded Funds (ETFs) (a summary)

Joanne M. Hill, Dave Nadig, and Matt Hougan Published 2015 by the CFA Institute Research Foundation Summary prepared by Joanne M. Hill, Dave Nadig, and Matt Hougan

The purpose of our book is to help investors understand and effectively use exchange-traded funds (ETFs) to meet their investment return and risk objectives. Introduced just over 25 years ago, ETFs are now one of the fastest-growing segments of the investment management business. The book covers the details of how ETFs work, their unique investment and trading features, their regulatory structure, the history of the product structure, and the evolution of ETFs across asset classes and into active investment products. It also covers how they fit into the portfolio management process and how best to evaluate ETFs to identify the right funds to fit any particular investment or trading objective. Separate chapters provide insights into ETFs by asset class and category, including equity, fixed-income, commodity, currency, alternative, and leveraged and inverse ETFs.

A special appendix by Deborah Fuhr, managing partner of ETFGI, details the global footprint of ETFs—covering the distribution of assets by country and region from Australia to Latin America. This section captures the differentiating features of exchange-traded products around the globe; it highlights the primary issuers, asset class breakdown, and structures, along with the size of ETF assets relative to mutual funds and institutional versus retail participation.

#### The Basics

At their core, ETFs are hybrid investment products, with many of the investment features of mutual funds married to the trading features of common stocks. Like in a mutual fund, an investor buys shares in an ETF to own a proportional interest in the pooled assets, which are generally managed by an investment adviser for a fee. But unlike mutual fund shares, ETF shares are traded in continuous markets on global stock exchanges, can be bought and sold through brokerage accounts, and have continuous pricing and liquidity

<sup>&</sup>lt;sup>1</sup>Throughout the book, we use "ETF" as a generic acronym for a range of exchange-traded products, including those organized under the Investment Company Act of 1940, various trust structures, and exchange-traded notes.

throughout the trading day. Thus, they can be margined, lent, shorted, or subjected to any other strategy used by sophisticated equity investors.

In early 2015, the assets of exchange-traded funds and notes globally were \$2.9 trillion according to ETFGI, with \$2 trillion in the United States. That amount represents over 5,000 individual ETFs from 247 providers listed on 63 exchanges in 51 different countries. In 2013, ETFs represented more than 11% of all mutual fund assets, up from 2% a decade earlier, and they have continued to attract both individual and institutional investor assets. Even more impressive is that on any given day, ETFs typically represent between 25% and 40% of the total dollar volume traded on US exchanges. In short, in just over two decades, these innovative financial products have gone from an afterthought to one of the most important forces shaping how investors invest and how the market itself functions. The outlook for continued growth is strong; now virtually all large asset managers (including such mutual fund giants as PIMCO, Fidelity, and JP Morgan Investment Management) are moving aggressively into the ETF space.

### **Benefits of Using ETFs as Investment Vehicles**

The starting point to understanding the value proposition of ETFs is consideration of the features of ETFs that have made these funds so successful. First and foremost is the *cost savings of index strategies*. Most ETFs are index funds and, therefore, do not bear the costs of discretionary, active portfolio management, but another part of the cost advantage is implied by their name: The funds are *exchange traded*. The costs of recording who the buyer or seller is, sending him or her prospectus documents, handling inquiries, and other factors are all borne by the broker. ETFs are generally cheaper to run and distribute than traditional mutual funds, active institutional strategies, and certainly hedge funds. Thus, ETFs are generally cheaper to own.

A second core benefit of ETFs is simply access. ETFs have created a wealth of new portfolio construction opportunities for a broad range of investors, regardless of the size of their investment holdings or horizon, by opening up new asset classes for investing. Prior to the growth of ETFs, owning such assets as gold bullion, emerging market bonds, currencies, volatility, or alternative assets was difficult and costly except for large institutional investors. ETFs have made all areas of the capital markets accessible for any investor with a brokerage account. In addition, ETFs can be sold short and, in some cases, have inverse exposure as an investment objective; this feature makes access possible for those seeking to profit from decreases as well as increases in price.

<sup>&</sup>lt;sup>2</sup>ETFGI Press Release (9 April 2015): etfgi.com.

Because ETFs trade like equities, they have democratized the investment process, offering *liquidity* and providing a marketplace where all types of investors, regardless of asset size or length of time horizon, can come together and transact in a transparent manner with the regulatory protections of exchange-traded stocks and, in most cases, registered investment companies.

*Transparency* is another key benefit because most ETF providers display their entire portfolios on a daily basis through their websites, and this information is also picked up by financial data services.

Another key benefit of ETFs to investors is *tax efficiency*. In most situations, ETFs have a marked advantage over mutual funds when it comes to after-tax returns. There are two reasons for greater tax efficiency with ETFs: lower portfolio turnover and the ability to do in-kind redemptions, which keeps capital gain (and loss) distributions low in contrast to mutual funds. In 2013, according to the Investment Company Institute, fully 51% of all equity mutual fund share classes paid out capital gains. Only 3.87% of ETFs did. And of that 3.87%, a tiny fraction—only seven funds—paid out gains that were significant (more than 2% of net asset value).

# **Drawbacks in Utilizing ETFs for Investing**

ETFs have numerous benefits, but investors should be aware of a number of potential drawbacks. Investors new to ETFs and their sometimes-novel asset classes and strategies may be unfamiliar with the underlying assets, drivers of return, and associated risks. Even an investor who is well versed in the international equity market may not be familiar with the inherent risks of, say, international corporate bonds, direct currency investing, or emerging market small-capitalization stocks. Those exposures have not been offered in a mutual fund package with any regularity, but they are significant and regular features of the ETF landscape.

Furthermore, many alternative ETFs—funds providing exposure through futures, notes, or swaps—involve portfolio structures, counterparty risks, and unfamiliar tax treatments, not because of the nature of the underlying exposures but because of the means of accessing them. ETFs offering exposure to commodities, leveraged and inverse returns, currency, or volatility are particularly subject to this caution. Investors considering the less-conventional investment strategies may need to dive deeper into the features of the strategies than they would when investing with stocks and bonds, which are more straightforward investments. Education is the key to understanding the various risks in certain asset classes and strategies.

Although ETFs have lower expense ratios than mutual funds, some costs must be considered that could differ from those associated with mutual funds.

With exchange tradability comes the burden of paying commissions, bid—ask spreads, and, potentially, premiums and discounts to net asset value. As with trading stocks, these costs can affect returns. In the case of an institutional mutual fund, the fund incurs the costs of buying and selling the underlying securities with each day's cash flow or changes in portfolio holdings. The trading costs of commissions and market impact show up in fund performance but are otherwise largely hidden from the mutual fund investor.

### **ETF Strategies in Portfolio Management**

Tactical strategies incorporating ETFs were among the first uses for ETFs and continue to be the most common way in which investors use ETFs. Investing excess cash (often from dividends or new investment) with ETFs allows these institutional investors to stay fully invested quickly and cheaply. In addition, many institutional investors have dedicated tactical pools to respond to short-term market conditions. Much of this tactical trading is now done with ETFs because of their low cost, liquidity, and breadth of offerings. Also, registered investment advisers and financial advisers now typically have an allocation for their client portfolios that uses ETFs for opportunistic investing. A growing category of ETF managers, now tracked by Morningstar, devote 50% or more of their portfolios to ETFs and earn fees by offering tactical and strategic allocation across the various asset classes, either as wealth managers or as part of institutional mandates.

But ETFs are becoming increasingly popular for long-term holdings as well. In fact, many asset owners (such as pension funds, endowments, and foundations) are increasingly using ETFs for strategic asset allocation and as strategy tools within asset classes. Another long-term strategic application of ETFs is to use a "strategy index" ETF or actively managed ETF within an asset class, replacing a more traditional mutual fund or separate account option—after considering the relative performance, risk profile, fees, transparency, and liquidity of the ETF versus competitors. The choices here are expanding as ETF managers work with index providers to design innovative rules-based strategies, some of which have been labeled "smart beta," that are usually quantitative rules packaged in an ETF wrapper. In addition, many mutual fund managers have been following the lead of PIMCO and have begun offering ETF versions of their most popular mutual fund products.

Thematic or style tilting is another strategy that is increasingly implemented with ETFs for both short- and long-term investment horizons. These themes may include strategies based on fundamental or dividend-based stock weighting, quantitative stock selection factors, low-volatility stocks, or even stocks of companies doing buybacks or achieving dividend growth.

Fixed-income indexes have also been constructed around securities from debt issuers with high yields or with hedged duration exposures. International investing can be pursued without currency risk by using ETFs that employ currency hedging, and so on.

Finally, the rise of liquid alternative ETFs has opened up multi-asset and derivative strategies, with improved liquidity and generally lower fees over mutual funds or separate accounts. ETFs here are benchmarked to indexes that replicate the performance of hedge funds, long—short equity strategies, and liquid private equity. Other categories available include market-neutral, managed futures, multi-alternative, and volatility-based strategies.

## ETFs as a Disruptive Innovation

In some ways, the growth of the ETF market is a manifestation of the battle for the heart and soul of investing. ETFs have boosted index-based investing tremendously. Their widespread adoption has the potential to shake up legacy practices that have been entrenched in asset management for many years—including the role of consultants in finding investment products, mutual fund distribution through financial advisers and registered investment advisers, and the central role of actively managed, bottom-up, stock and bond management.

In summary, it is not hyperbole to say that ETFs have changed the face of investing. With lower fees, greater transparency, expanded access, and greater tax efficiency than traditional mutual funds, they are attracting assets from those funds and threatening classic fund distribution models. With ETFs' inherent liquidity, they are also altering the trading landscape by providing a market where hedge funds, pension funds, and other institutional investors can connect their order flow with that of high-net-worth and other individual investors and can engage in price discovery for illiquid assets.

ETFs have also made top-down and cross-market investing more accessible by providing tools that can be used in asset or sector allocation, factor-tilt strategies, and thematic investing. They have helped many investors incorporate dynamic strategies into their portfolio management processes by allowing them to adapt to shifting return and risk opportunities. Broadly, ETFs are encouraging a new approach to investing that focuses on macroeconomic and thematic developments rather than single-stock investing. And as a product without a load-based commission structure, ETFs are also accelerating the transition to fee-based fiduciary adviser—investor relationships.

Nevertheless, obstacles still impede ETF asset growth, and if the obstacles are removed, the adoption of ETFs will accelerate. In the United States, major obstacles are the inability of most 401(k)/defined-contribution

investment programs to handle ETFs and the lack of expertise in ETF analysis among the institutional consulting community. In addition, the current regulatory framework allows for ETF issuance and trading as a subcategory of *both* mutual fund and equity products, creating a Byzantine approval and oversight environment.

Over the past few years, instances of backlash against ETFs and their role in the marketplace have occurred. People have accused them of corrupting the price discovery mechanism of the stock market, of posing a systemic risk to finance, and of steering investors into inappropriate and complex investments. In the end, the harshest parts of these criticisms do not hold water. But they do highlight that whenever a new and disruptive technology comes along, significant and in-depth education is needed. ETFs are powerful tools that offer lower costs, expand strategic choices, and provide ease of access with transparency. When investors use ETFs appropriately, they can improve their return–risk profiles. Like any powerful tool, however, ETFs can be dangerous if not properly understood.

The complete book can be found at http://www.cfapubs.org/toc/rf/2015/2015/3.

\* \* \* \* \* \*



Use your smartphone to scan the QR code to go straight to the webpage.