

## Fundamentals of Exchange Traded Fund Investing



Investing in the securities market initially entailed buying individual shares in a company or lending to organizations through the purchase of bonds or commercial paper. As the securities market matured so did the plethora of financial instruments and products available to investors.

Over the past several decades, academic research has developed insights into market mechanics and efficiencies, leading to more sophisticated investment vehicles. Following the advent of index index-based mutual funds, the next important development was the exchange-traded fund, or ETF. At Sharper Granite we use many types of ETFs in client portfolios. Here, we explain what ETFs are, how we use them, and the key advantages of owning them.

### What is an ETF?

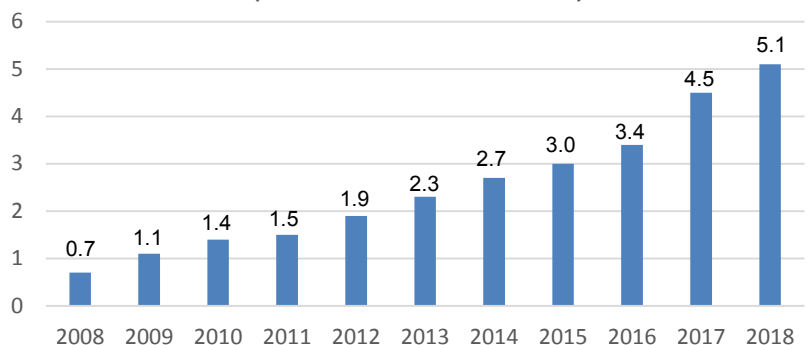
An exchange-traded fund (ETF) is a collection of securities in a certain category, such as health care stocks or high-yield bonds. ETFs usually track an underlying index. An index consists of a hypothetical portfolio of securities representing a market or market segment. One cannot invest directly in an index, so an investable version of those securities must be created using an ETF or mutual fund. An example ETF which tracks the S&P 500 Index is the SPDR S&P 500 ETF (ticker symbol: SPY).

An ETF is purchased and sold on an exchange such as the New York Stock Exchange (NYSE), like any marketable security. Its share price changes throughout the day as shares are purchased and sold. An ETF may contain any asset that is traded on a public exchange and has a market-based price. Conversely, mutual funds trade only once at day end based on the net asset values (NAV) of securities in the fund.

Although early ETFs tracked only stocks, ETFs now contain various types of investments including stocks, bonds, real estate, currencies and commodities. These baskets of assets map to a variety of indexes. For example, a health care ETF may represent the stocks of the S&P Health Care Index.

Although Sharper Granite has utilized ETFs since our beginnings in 2003, the ETF market has exploded over the past decade. As shown below, cash investments in ETFs have grown more than seven-fold from \$0.7 trillion to \$5.1 trillion. It is now possible to find an ETF for an index in almost any industry, market or geography imaginable.

Cash Invested in ETFs Worldwide  
(US Dollars in trillions)<sup>1</sup>



## ETF Share Creation

The supply of ETF shares is regulated through a mechanism known as creation and redemption, which involves large specialized investors, called authorized participants (APs). These APs maintain a basket of stocks or bonds that map to an index, operating like a mutual fund but with significant cost and tax advantages.

## How are ETFs Used in Portfolios?

Because ETFs are baskets of securities, they enable cost-effective portfolio diversification which lowers overall risk. For example, if you wanted to diversify a portfolio with large-cap stocks, you could buy many stocks across several industries, yet this would require several purchases and thus high transaction costs.

*John Bogel, founder of Vanguard, launched the first public index mutual fund in 1975 with \$11 million in assets. By 1999, the assets under management of this fund crossed \$100 billion.<sup>2</sup>*

Alternatively, you could simply buy an ETF like the SPDR S&P 500 ETF (SPY) and own a collection of 500 large-cap companies. In this case, SPY provides greater diversification across many large companies, capturing all industry segments. SPY includes stocks in tech, energy, biotech and other sectors and was the first ETF launched in 1993 by State Street. Buying an ETF like SPY is a simple, cost-effective way of acquiring many stocks with one purchase.

Beyond diversification, we also utilize ETFs to customize portfolios at very low cost. The variety of available ETFs helps us design custom strategies for individual investors. Some ETFs are designed specifically for income generation, currency hedging, tax-efficiency, or speculation in emerging industries. And the expansion of ETFs into socially responsible “flavors” allows for portfolio alignment with an investor’s core environmental, social or governance (ESG) values.

In other cases, clients may want to buy or sell a particular stock but are prohibited due to their employment within that company or industry. ETFs provide a legal way to gain the desired exposure. Unlike mutual funds, ETFs may be shorted and often have options attached so that “insurance” may be bought for clients who are locked into large holdings of a particular asset.

Finally, we use ETFs in our tax-loss harvest strategies. Because many high-quality, low-cost ETFs exist in each sector, we can swap one ETF for another, capturing a tax benefit while maintaining the desired portfolio target.

Each ETF has many characteristics which we track. These include cost, holdings, and tracking error -- the ETF price deviation from its index. Knowing these and other fund statistics allows us to determine the ETF composition for each portfolio based on client objectives.

## Advantages of Owning ETFs

Relative to mutual funds or individual securities, ETFs are better designed to provide diversification, transparency, cost-effectiveness and tax-efficiency. ETFs also allow for surgical precision in the construction of tailored portfolios.

Transparency is an important advantage of ETFs relative to mutual funds. With ETFs anyone can see which securities are held on any given day. Meanwhile, mutual funds are only required to reveal their holdings at quarter end. This can lead to a dishonest maneuver known as “window-dressing” whereby mutual fund managers change their holdings just before quarter end to include stocks that were hot that quarter.

ETFs have lower average costs than mutual funds due to their structure. Additionally, our primary custodian, TD Ameritrade Institutional, offers no-commission trading on many ETFs, reducing costs even further. Some ETFs have expense ratios (annual costs) as low as 0.04% or lower. The average index ETF expense ratio was 0.53% in 2019 compared to the index mutual fund average expense ratio of 0.83%.<sup>3</sup> Expense ratios of ETFs within Sharper Granite portfolios are typically near 0.20%.<sup>4</sup>

Finally, ETFs provide important tax advantages. While mutual funds are required to distribute taxable capital gains annually to investors, capital gains from ETFs are usually only generated when an investor sells the ETF. Because of this, capital gains may be controlled and even delayed indefinitely.

These are some of the many reasons we prefer ETFs as the building blocks for Sharper Granite portfolios. If you want to learn the details of how ETFs are utilized in your portfolio, please contact your advisor.

**Notes and Acknowledgements:**

1. “Guide for Advisors Using ETFs,” State Street; Morning Star data as of July 31, 2019
2. “A Brief History of Exchange-Traded Funds,” ETF Essentials, by Stephen D. Simpson, CFA, August 25, 2019
3. “Global ETF Survey 2017”, EY, 2017
4. A sample Sharper Granite 65% equity/35% bond target portfolio as of October 6th, 2019 has an expense ratio of 0.19%.