Rinehart Wealth Management
Greater Trust

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The Emergence of ETFs and the Role They Have in Your Portfolio

Clients often ask us "*What are Exchange-Traded Funds (ETFs)?"* and *"How do you use them in portfolio construction?"* The purpose of this report is to answer these questions and provide additional thoughts and perspective on the evolution of the Exchange-Traded Fund.

What are Exchange-Traded Funds (ETFs)?

Exchange-Traded Funds (ETFs) are open-ended funds that track a basket of investments (or an index) and whose shares trade intraday on a stock exchange. ETFs are rapidly growing in popularity as investment vehicles that offer investors access to inexpensive beta (i.e., systematic risk), as well as specific trends, sectors, or asset classes. Additionally, they can offer significant cost, tax, and trading advantages relative to mutual funds. We often use ETFs for clients to reduce costs, diversify risk, and access particular sectors or trends. We feel ETFs are a complementary tool that, when used correctly, can accentuate risk-adjusted performance and lower portfolio management expenses.

Growth of the ETF Industry

The ETF industry has grown rapidly and undergone significant change since the introduction of the first ETF, the SPDR S&P 500 ETF (SPY), in January 1993. Charts I and II show the rapid growth of the ETF industry year-to-date (YTD), as well as longer-term. As of July 2013, there were over 1,200 ETFs available within the United States and 3,500 available internationally, according to our Morningstar® database. Given the abundance of ETFs, the task of analyzing composition and quality is becoming increasingly difficult, which is why we have a thorough process to evaluate and compare ETFs in order to find high-quality products that are suitable and appropriate for use in all client portfolios.

Chart I: Growth in ETF Industry (YTD)

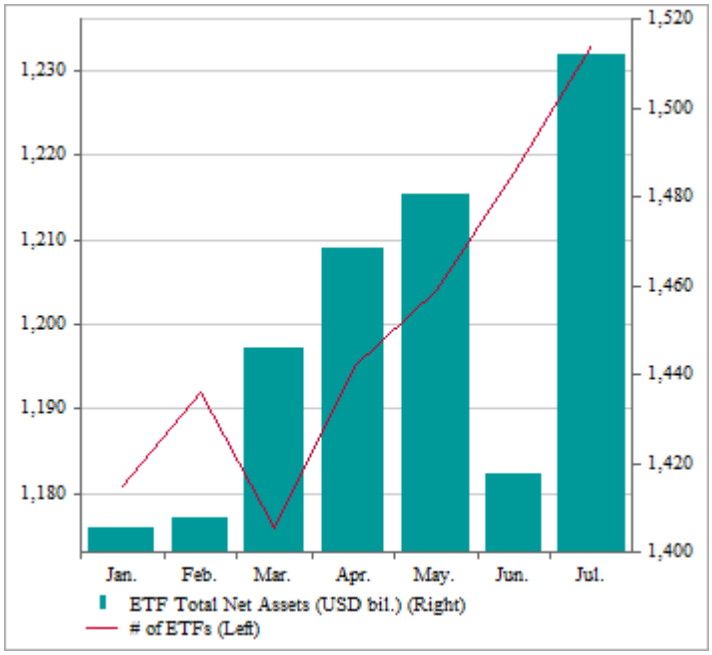
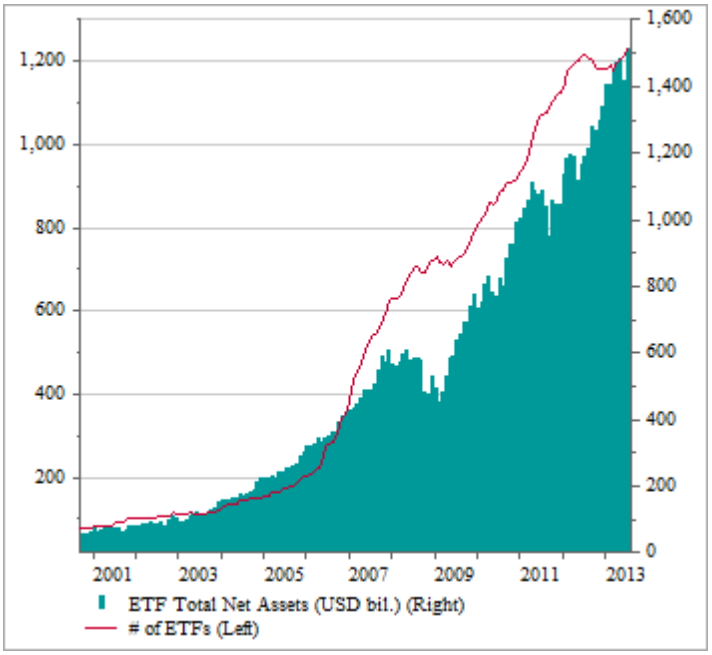


Chart II: Growth in ETF Industry (Since Sept. 2000)

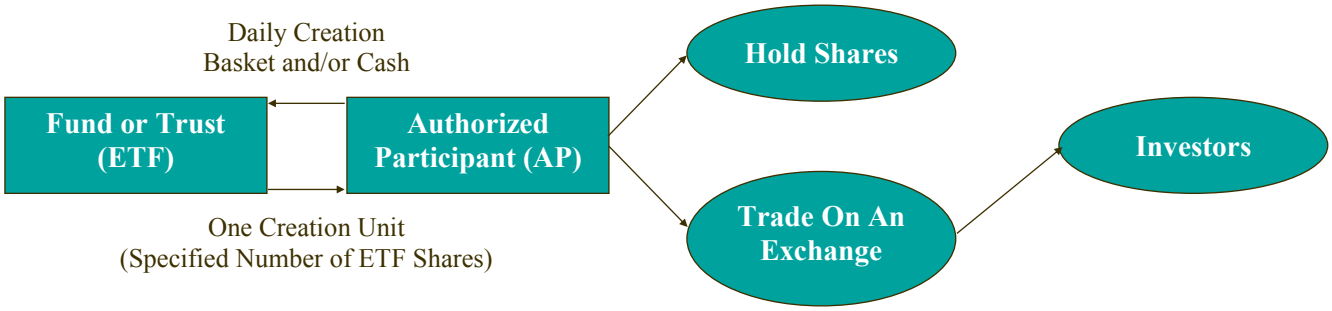


Source: FactSet & ICI Research

Construction and Liquidity

While the concept of the ETF is straightforward, the construction and liquidity (i.e., trading volume) of the ETF vehicle itself often creates confusion. Diagram III depicts the process of creating and trading shares of an ETF, which involves a somewhat complicated procedure called an "In-Kind" transfer mechanism:

Diagram III: Creation of ETF Shares – "In-Kind" Transfer Mechanism



Source: 2013 Investment Company Fact Book, Investment Company Institute (ICI)

ETFs are commonly structured as open-end investment companies (i.e., open-end funds) or unit investment trusts. As the above diagram indicates, ETF shares are created when an Authorized Participant (AP), usually a large institutional investor (e.g., a market maker or broker-dealer) deposits the 'daily creation basket' and/or cash with the fund or trust. The daily creation basket is a specific list of names and quantities of securities that either replicate or represent a sample of the ETF's portfolio *(Source: 2013 Investment Company Fact Book)*. The fund or trust issues a 'creation unit,' which consists of a specified number of ETF shares, to the AP in exchange for the aforementioned creation basket and/or cash. The arrows in the diagram above represent the transfers between the fund (ETF) and the AP. At this point, the AP has the option to do either of the following: hold the ETF shares, or sell the creation unit on a stock exchange, where investors can buy the shares.

Inherent in the ETF creation process is a liquidity mechanism as additional shares can be created in response to increased market demand. This is in contrast to shares of stock, which are finite until a structured liquidity event occurs (e.g., a capital market issuance of new shares, the block sale of secondary shares, etc.). However, it is important not to oversimplify the liquidity equation, as the underlying securities in the ETF are the main driver of fundamental liquidity. When analyzing ETFs, we are fixated on understanding how quickly we can redeem shares for cash in the event of a market crisis. An example of why this is important, was seen recently when State Street Corp. (STT), an ETF issuer, stopped accepting cash redemption orders for municipal bond ETFs from institutional trading desks, although they continued to accept and process "in-kind" redemptions of the underlying securities – meaning the AP could receive the securities. Even more concerning, certain ETF trading desks, such as Citigroup, Inc. (C), stopped accepting "in-kind" redemptions of the underlying assets due to capital requirements and risk parameters *(Source: Arash Massoudi, Tom Braithwaite, and Stephen Foley. "Bond Market Sell-Off Causes Stress in $2tn ETF Industry." Financial Times. June 21, 2013)*. This, in effect, constituted a breakdown, albeit temporary, of the liquidity mechanism between the fund or trust (State Street) and one of its APs (Citigroup). This could potentially result in a delay in the investor's ability to receive cash for his or her ETF shares. For this reason, we analyze the composition of each ETF and primarily use ETFs in large, efficient markets where liquidity is less of a concern.

Comparing ETFs to Mutual Funds

In a portfolio, ETFs can provide diversification and general market exposure, similar to a mutual fund. There are, however, some noticeable benefits to utilizing ETFs versus mutual funds. The data in Table IV offer a comparison of some of the main differences between trading, purchasing, and owning an ETF compared to a mutual fund:

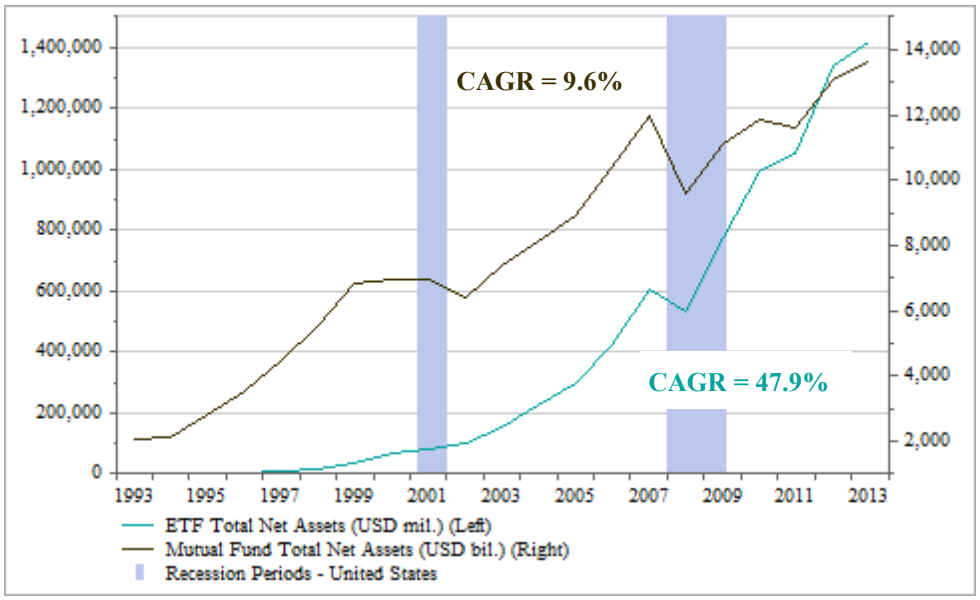
Chart IV: ETFs vs. Mutual Funds

	Exchange-Traded Funds (ETFs)	Mutual Funds
Average Total Operating Expenses*:		
US Large Cap Equity	0.47%	1.31%
US Mid Cap Equity	0.56%	1.45%
US Small Cap Equity	0.52%	1.53%
International Equity	0.56%	1.57%
Taxable Bond	0.30%	1.07%
Municipal Bond	0.23%	1.06%
Trading Fees	Brokerage Fees	Both (No-Load & Fee Funds)
Sales/Marketing Fees	None	12b-1 and/or Load Fees
Trading/Pricing	Intraday Pricing	After-Market Pricing
Transparency	Daily	Quarterly
Taxes	Lower	Higher

**Total Operating Expenses = Prospectus Net Expense Ratio Among Active US ETFs & Mutual Funds (ex. load-waived share classes)*
Source: FINRA. 2013. "Mutual Fund/ETF Fees & Expenses" (Source Data: Morningstar®)

Prior to the launch of the first ETF, mutual funds served as the primary way for investors to buy baskets of stocks in one trade. The data in Chart V show how asset growth in ETFs has significantly outpaced that of mutual funds over the past twenty years. This trend represents a marked migration of investable assets away from mutual funds toward ETFs; we expect this trend will continue due to the advantages of the ETF structure in portfolio construction.

Chart V: Compound Annual Growth Rate of US Mutual Funds vs. ETFs



Source: FactSet & ICI Research

Tax Efficiency

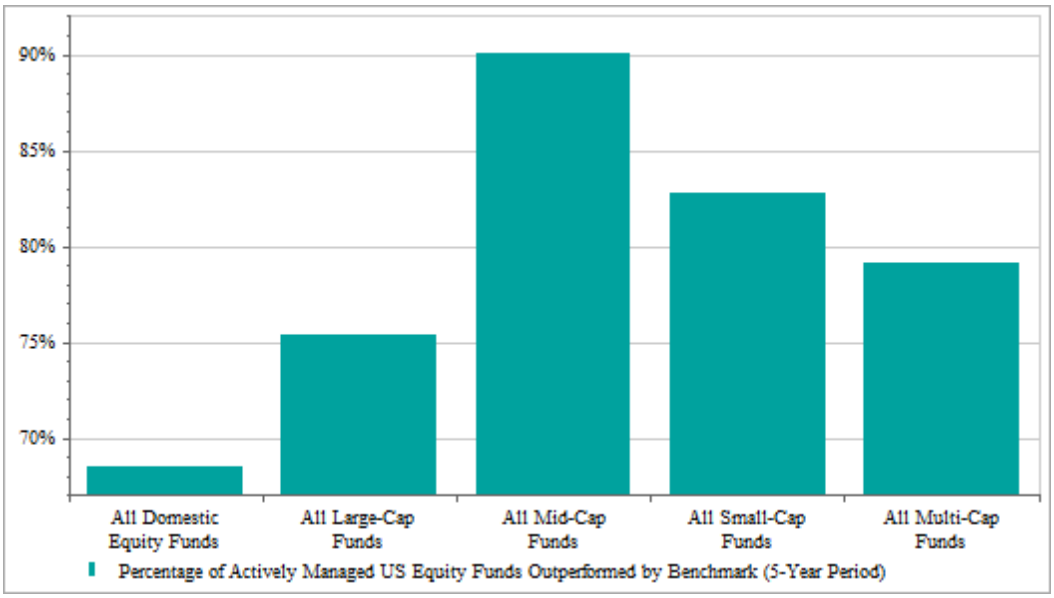
For the most part, ETFs are more tax efficient than mutual funds given lower turnover due to favorable construction. Mutual funds tend to generate more capital gains distributions as a result of higher turnover given frequent shareholder redemptions and portfolio rebalancing: one shareholder's trading activities often trigger capital gains for other shareholders. This can be inconvenient, especially when investors are hit with capital gains distributions, despite experiencing considerable unrealized losses in the market, as was the case in 2008. The long-term average cost of mutual fund capital gain distributions can be considerable. From 2000 to 2010, taxable mutual fund investors gave up approximately 1.0-2.0% annually in return due to taxes *(Source: Tom Roseen, Taxes in the Mutual Fund Industry – 2010: Assessing the Impact of Taxes on Shareholders' Returns. Lipper, A Thomas Reuters Company, April 2010)*. ETFs minimize this scenario by means of the aforementioned "in-kind" transfer mechanism (Diagram III), which ties the individual shareholder's tax liability to the purchase price paid for the ETF shares in the open market and not the fund's internal cost basis.

Active versus Passive Management

Active management is an investment strategy where a portfolio manager targets outperformance of a stated benchmark in exchange for a management fee. This is in contrast to passive management, which targets only the return of the index. We use ETFs for passive management to cost-effectively replicate market beta, quickly access trends, and target improved risk-adjusted returns. Many ETFs track indexes (e.g., the SPY tracks the S&P 500 Index), whereas most mutual funds are actively managed by a portfolio manager relative to a benchmark. Active portfolio manager compensation should be based on his or her ability to exceed or outperform the fund's designated benchmark, which should result in a higher cost structure.

We accept the extra cost of active management if the manager produces performance in excess of the benchmark (i.e., alpha). Chart VI illustrates that, over the five-year period ended December 2012, approximately 68.6% of all actively-managed, domestic equity mutual funds ***failed*** to beat their respective benchmarks. This hardly justifies paying a portfolio manager an extra fee for underperforming the benchmark; in fact, under this scenario, the higher cost structure merely cannibalizes portfolio returns.

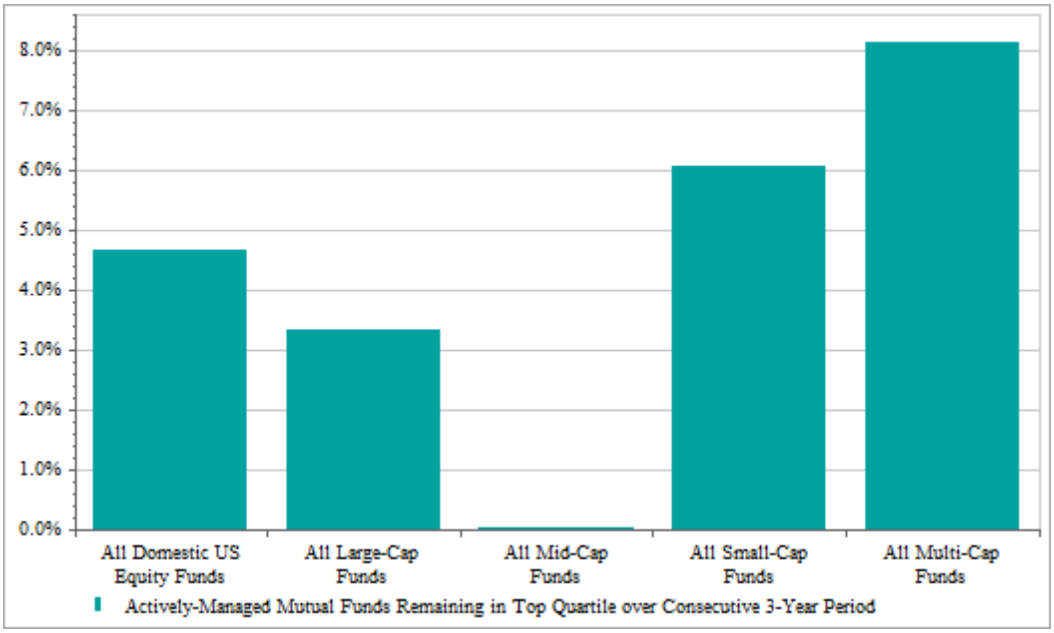
Chart VI: Performance of Actively Managed Mutual Funds vs. Benchmarks



Source: S&P Dow Jones Indices, LLC. "SPIVA Scorecard: Year-End 2012."

Taking the passive-versus-active management debate one step further, Chart VII shows the performance persistence of actively managed domestic US equity funds over three consecutive, twelve-month periods: from March 2011 to March 2013. The results indicate that less than 5.0% of the 703 funds in the top performance quartile as of March 2011 managed to remain in that top quartile over the three consecutive twelve-month periods ending March 2013. Additionally, no mid-cap funds remained in the top performance quartile over the three-year period from March 2011 to March 2013. This clear lack of performance persistence in the domestic market indicates that even if a portfolio manager outperforms his or her benchmark in a given year, the probability of he or she achieving similar excess returns is extremely low.

Chart VII: Actively Managed Mutual Funds—Performance Persistence (3-Year Period)



Source: S&P Dow Jones Indices, LLC. "Does Past Performance Matter? – The Persistence Scorecard." July 2013.

Because passively-managed ETFs replicate a market index, they offer a cost-effective way to access market risk (i.e., beta) when financial markets are efficient. Efficient markets are those in which quoted market prices accurately, completely and instantaneously reflect all available information to all market participants. We believe the real-time availability of information due to the Internet and increased trading transparency make domestic securities' markets relatively efficient. Beta is a natural occurrence in financial markets, which is why we try to minimize paying for beta and use ETFs for passive management in efficient markets. The data from Charts VI & VII argue that, while an actively managed mutual fund may be able to achieve relative outperformance during singular periods, investors are often better served over time to maintain exposure to broad market beta via passively managed investment vehicles, such as ETFs. As such, an area where we have increasingly shifted from mutual funds to ETFs is in the domestic equity markets, specifically large- and mid-cap. We see value in actively managed products in less efficient markets where managers generate considerable alpha due to information scarcity and illiquidity. For this reason, we generally prefer actively managed funds for small cap, emerging markets, and certain hybrids.

Why use ETFs in Portfolio Construction?

We use broad ETFs to fulfill the portfolio's need for beta, while we accentuate the portfolio with core holdings based on proprietary research to add alpha, in effect, driving down portfolio management costs. We also utilize ETFs to quickly access large macro, sector or factor trends without taking unwanted unsystematic (company-specific) risk. For example, if we believed that the price of oil were attractive, and we wanted isolated exposure to oil, we would use an oil ETF, such as the Vanguard Energy ETF (VDE). In this way we get exposure to a broad basket of companies with exposure to oil prices, while diversifying away much of the company-specific risk. Additionally, if we felt a particular factor was set to outperform, such as quality or dividend yield, we could use an ETF to quickly access a basket of companies with the desired factor. An example of this would be using the Vanguard Dividend Appreciation ETF (VIG) to quickly introduce

dividend yield exposure to portfolios.

It is important to utilize innovative investment vehicles, while adhering to our core philosophy of creating high-quality portfolios through disciplined research and diversification. ETFs have revolutionized portfolio construction and trading. We are constantly researching new investment products such as ETFs in an attempt to improve the risk-adjusted performance and expense structure of client portfolios. Please contact us if you have additional questions or would like to discuss this topic in more detail.

The Rinehart Wealth Management Investment Team