ETFs: An Evolving Toolset for U.S. Institutions

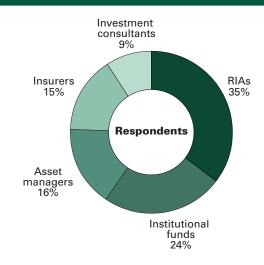




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METHODOLOGY

Greenwich Associates interviewed a total of 201 U.S.-based institutional exchange-traded fund users in an effort to track and uncover usage trends. The respondent base of ETF users included 49 institutional funds (corporate pensions, public pensions, foundations and endowments), 32 asset managers (firms managing assets to specific investment strategies/guidelines), 31 insurance companies, 70 RIAs and 19 investment consultants.



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Executive Summary

This report marks the fifth installment of Greenwich Associates annual Institutional ETF Study. Over that period, institutional views of ETFs have changed dramatically. When we first conducted this research, ETFs were perceived as mainly a retail product. Only a relative handful of institutions used ETFs, and when they did, it was most often for specific portfolio functions such as transitioning from one asset manager to another or making tactical adjustments to their portfolios. With each passing year of the study, the share of U.S. institutions using ETFs has increased—as has the number of investor applications.

The 2014 research results suggest that as a result of this steady progress, ETFs have evolved into a standard instrument in the toolboxes of institutional investors. One of the most important findings in this year's research is that a growing number of institutions are using ETFs as a means of achieving core portfolio exposures. In fact, this strategic application is now the number one use of ETFs among institutional investors. The fact that institutions are now using these vehicles to obtain critical investment exposures is just one sign of the building momentum of ETFs. The research results also show that both the overall use of ETFs and institutional allocations to ETFs continued to rise last year and are expected to climb over the next 12 months. One driver of that growth has been the adoption of ETFs by institutions in new asset classes—especially fixed income. New regulations following the financial crisis have resulted in reduced dealer inventories of fixed securities and lower levels of liquidity in the secondary market. These changes could provide opportunities for ETFs to grow among institutional investors in the coming months.

Greenwich Associates expects both usage rates and allocations to broaden as institutions embrace ETFs for an expanding number of applications and asset classes, and as ETF providers continue to innovate in ways that make their product offerings more flexible and appealing to institutional investors.

The results of Greenwich Associates latest Institutional ETF Study reveal that institutions are adopting Exchange-Traded Funds (ETFs) both as an everyday tool for use in a variety of routine portfolio functions and as a means of obtaining long-term strategic investment exposures.

ETF usage has steadily risen in each of the five years that Greenwich Associates has conducted this annual study. The 2014 results reveal five important developments suggesting that ETFs are now being integrated into institutional investors' standard toolsets:

- The share of U.S. institutions using ETFs has increased in each of the past five years and is expected to rise in the coming year.
- Nearly half of institutional ETF users now allocate more than 10% of total assets to ETFs.

- ETFs are gaining traction in asset classes outside equities, especially in fixed income, where changes in market structure could boost ETF use.
- ETF holding periods are lengthening. The share of institutions reporting average holding periods of two years or longer jumped to 49% in 2014 from 39% in 2013.
- A growing number of institutions are using ETFs to obtain core portfolio exposures.

Study Participants

Greenwich Associates interviewed 201 institutional investors that currently use ETFs in an effort to track and uncover usage trends. Respondents include 49 institutional funds, 1 32 asset managers, 31 insurance companies, 70 RIAs and 19 investment consultants.

¹ Institutional funds consist of corporate pensions, public pensions, foundations and endowments

As recently as 2011, fewer than 15% of U.S. institutions were using ETFs in their portfolios. That share climbed to 18% in 2012 and reached 21% in 2013, according to data collected in Greenwich Associates annual research among U.S. institutions.² Those overall averages understate the extent to which ETFs are used by certain types of investors. For example, 40% of U.S. endowments employ ETFs in their portfolios, as do one third of the largest public defined-benefit pension funds (those with at least \$5 billion in AUM) and roughly 25% of the largest corporate defined-benefit funds.

Although ETFs represent a small percentage of total U.S. institutional assets, some institutions have begun building sizable ETF allocations. Forty-six percent of institutional ETF users participating in the 2014 Greenwich Associates ETF Study allocate 10% or more of their total assets to ETFs, with almost 3 in 10 reporting ETF allocations from 10% to 25% and nearly 1 in 5 institutions making even greater allocations. Forty-one percent of RIAs invest more than a quarter of total assets in ETFs.

The results of the study suggest ETFs will continue to gain momentum in the coming year. Among

ETF Usage by Type 21% 20% 2013 31% 13% 15% 2012 8% 2011 39% 19% 0% 10% 20% 30% 40% 50% ■ Total Institutions Corporate Public Endowments Foundations Note: Based on responses from 623 total institutional funds in 2013, 731 in 2012 and

Source: Greenwich Associates 2013 U.S. Institutional Investors Study

institutions currently employing ETFs in their portfolios, nearly half say they expect to expand use in the next year, roughly equal to the share of institutions predicting an increase to allocations in last year's study. One third of the institutions in the 2014 study expect to grow allocations by 1%-10%, while nearly 15% plan to increase by 10% or more. Fewer than 5% of current users expect to reduce allocations by 2015.

"There are more ETFs tailored to specific investment strategies, liquidity is improving and expense ratios are coming down." – Institutional fund

Institutions cited the following reasons for increasing ETF allocations:

"We have found a lot of new innovative products are available in ETF form." – RIA

"At times active managers have difficulty beating their benchmarks and ETFs are considerably less expensive." – Institutional fund

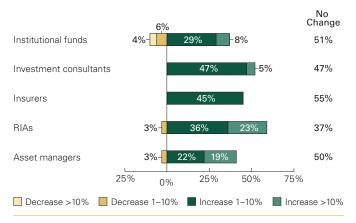
"We are making greater use of ETFs as we delve into other parts of the market that we would not access with individual stocks, such as European, international and emerging markets. Over time, we will make even greater use of ETFs as we try to tap additional areas of the market." – RIA

ETF allocations are expected to grow across all institution types, including institutional funds, asset managers, insurance companies and RIAs. Approximately 60% of the RIAs participating in the study expect ETF allocations to rise in the next 12 months, with nearly 40% of those respondents expecting increases of 10% or more. Forty-five percent of insurance companies currently using ETFs expect to increase allocations in the 1%–10% range.

In a related finding, slightly more than half of investment consultants participating in the ETF study

² Source: Greenwich Associates, based on responses from 660 institutional funds interviewed between February and April 2013.

Expected Change in Allocations to ETFs by Year End



Note: Based on 201 responses: 49 institutional funds, 19 investment consultants, 31 insurance companies, 70 RIAs and 32 asset managers in 2014. Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

expect their clients to boost allocations before the end of the year.

"Institutions have projected increasing ETF allocations for all five years we have conducted the study, and we have seen a steady increase in use and allocations throughout the subsequent periods," says Greenwich Associates consultant Andrew McCollum. "These results suggest that institutions are not using ETFs on a one-off basis. Instead, they experiment with ETFs in a specific function, discover their utility and broaden their usage to other portfolio applications."

The ETF Evolution

The theme of institutions experimenting with ETFs for a specific portfolio function and then expanding use in short order has been consistent in Greenwich Associates ETF research. As one asset manager stated, "ETFs are an evolving toolset."

Institutions participating in the study recounted how their initial short-term ETF applications evolved to include long-term core holdings:

"We first began implementing ETFs as a way to streamline transitions between managers and to expedite portfolio rebalancing." – An institutional fund that now uses ETFs to maintain strategic allocation targets and expects to further increase usage in the future.

"Our use started as a short-term way to maintain exposure while harvesting losses and has evolved into long-term holdings for asset allocation."

– An RIA that now uses ETFs as a means of obtaining cost-effective exposures in a variety of asset classes, including international bonds.

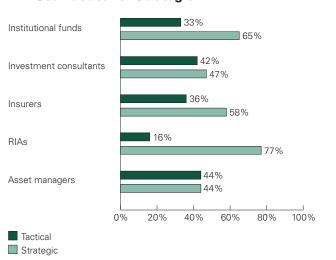
"It started out as a tactical tool to temporarily hold cash; over time our use has evolved into permanent holdings." – An insurance company that relies on ETFs as a source of liquidity and a means of achieving long-term exposures.

Today, a growing number of institutions are using ETFs for longer-term strategic purposes. Sixty-three percent of participating institutions now describe their use as strategic, as opposed to tactical—up from 58% in 2013. That 2014 share tops three-quarters among RIAs (up from two-thirds last year) and 65% among institutional funds (up sharply from 47% in 2013). Asset managers are split, with an equal 44% now describing their primary use of ETFs as either strategic or tactical.

Institutions described a variety of ETF applications that relate directly to the implementation of investment strategies and the achievement of desired investment exposures:

"ETFs are an inexpensive way of gaining exposure to a variety of asset classes. As an insurance company subject to regulation, ETFs allow us to access asset classes where we would otherwise

ETF Use: Tactical or Strategic?



Note: Based on 201 responses: 49 institutional funds, 19 investment consultants, 31 insurance companies, 70 RIAs, and 32 asset managers in 2014. Percentages may not add to 100 due to respondents preferring not to answer.

Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

Asset Managers Using ETFs More Broadly and More Strategically

Asset managers are embracing ETFs as a means of implementing their investment strategies in an expanding number of assets classes.

Virtually every asset manager that uses ETFs employs the vehicles in domestic equities. That finding has been consistent since Greenwich Associates began its ETF research five years ago. Over the past 12 months, however, the share of asset manager ETF users employing ETFs in asset classes other than domestic equities has grown—in certain cases, quite dramatically. The biggest and potentially most important increase has come in domestic fixed income, where the share of asset manager ETF users employing ETFs jumped to 72% in 2014 from 30% in 2013. (See the section of this report, "Push into Fixed Income and Other New Asset Classes Fuels ETF Growth," for possible explanations for this significant shift.) In 2013, asset managers reported virtually nothing in the way of ETF use in international fixed income. In 2014, nearly half of asset manager ETF users are employing the vehicles in that asset class. ETF use has even picked up in international equities, in which a full 80% of asset manager users were employing ETFs last year. That share climbed to 91% in 2014. Likewise, the use of ETFs in REITS increased to 53% from 30%.

The data suggest this expanding usage is occurring amid a more general shift in the way asset managers perceive and employ ETFs. Although asset managers remain approximately evenly divided in whether they describe their ETF use as mainly strategic or tactical in nature, ETF holding periods appear to be lengthening. In 2013, 30% of asset managers reported average ETF holding periods of two years or more—the threshold at which investments are typically considered strategic, as opposed to tactical holdings. In 2014 that share increased to 41%. More specifically, the share of asset managers using ETFs to obtain strategic core investment exposures increased to 75% in 2014 from 50% in 2013. ETF use is also rising sharply in other strategic functions such as liquidity management and risk management/hedging.

These developments are driving an overall increase in demand for ETFs among asset managers. Nine out of 10 of the asset managers in this year's study expect to maintain or increase their ETF allocations in the coming 12 months. A total of 41% expect to boost allocations by 2015, including almost 1 in 5 asset managers planning increases of greater than 10%.

not be able to invest [such as commodities, in which the company was prohibited from investing in commodities futures, but now invests in commodities ETFs]." – Insurance company

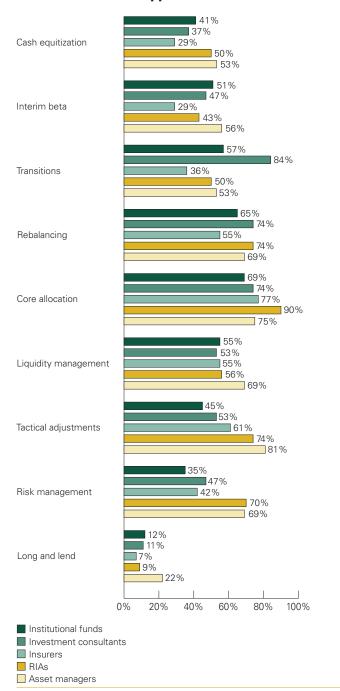
"We have seen broad acceptance of ETFs among the advisor community. They are low-cost vehicles that provide diversified exposure. We are able to buy and sell during market hours, giving us flexibility." – Insurance company

"ETFs allow me to diversify exposure to style, market capitalization and sectors that I would not be able to efficiently achieve trading individual names. The key word is diversification." – Asset manager

In 2014, approximately 80% of participating institutions that use ETFs are employing them as a means of obtaining core portfolio exposures—making it the most common ETF application among survey participants. This compares to 74% reported in 2013.

Fifty-seven percent of institutions surveyed use ETFs for liquidity management and 55% use them for risk management or hedging. Both of these applications represent critical strategic functions within institutional portfolios, and the use of ETFs for these applications is on the rise. In 2013, 30% of institutions reported using ETFs for liquidity management and 21% were using ETFs for risk

Most Common ETF Applications



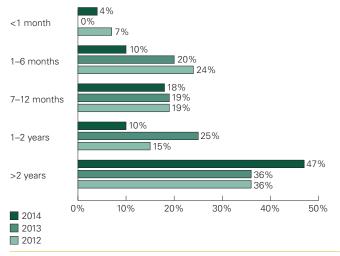
Note: Based on 201 responses: 49 institutional funds, 19 investment consultants, 31 insurance companies, 70 RIAs, and 32 asset managers in 2014.

Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

management or hedging. Today, nearly 70% of asset managers use ETFs in their risk management/hedging process.

Data on typical holding periods illustrate how the nature of ETF usage is changing as the vehicles are accepted as an important tool in implementing

Typical ETF Holding Periods of Institutional Funds



Note: Based on responses from 49 institutional funds in 2014, 59 in 2013 and 62 in 2012. Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

portfolio strategies. Average ETF holding periods are expanding. In 2013, 39% of institutions reported average holding periods of two years or longer—the period typically associated with a "strategic," as opposed to tactical, holding. In 2014, that share jumped to 49%.

That is not to say that institutions are cutting back on their use of ETFs in executing manager transitions, rebalancing and other narrower, tactical tasks. Nearly two-thirds of institutional users report employing ETFs to make tactical adjustments to their portfolios, including 81% of asset managers. Fifty-three percent of institutions use ETFs for manager transitions, 45% use the vehicles for interim beta and 44% use ETFs for cash equitization.

"What we're seeing is a broadening of ETF use," says Greenwich Associates consultant Andrew McCollum. "Institutions are finding that ETFs are an effective tool for implementing their portfolio strategies and obtaining core exposures, while at the same time they are continuing their use for the tactical applications in which many investors were first introduced to ETFs."

Product Innovation Boosting Institutional Demand

Investors say innovation in the ETF sector is contributing to the broadening of usage within institutional portfolios:

- "The growing sophistication of strategies beyond simple market cap index replication means we have more variety and opportunity within core asset classes." Institutional fund
- "There are more choices out there, there are more ETFs covering more subsectors. So I think there will be even
 more ways to express investment views with ETFs. Specific to fixed income, we will likely continue to use
 more fund-based products rather than buying individual bonds." RIA

Push into Fixed Income and Other New Asset Classes Fuels ETF Growth

One of the major drivers of ETF growth among institutions over the past several years has been the proliferation of ETFs in fixed-income portfolios. Until recently, ETFs were viewed by institutions mainly as a viable option in equity portfolios. This year, a full two-thirds of ETF users participating in the study say they are employing ETFs in domestic fixed-income portfolios, up from just 55% in 2013. Seventy-two percent of asset managers report using ETFs for domestic fixed income this year, up from just 30% in 2013. Another 35% of institutions overall are utilizing ETFs for international fixed income access, up from 29% last year.

ETFs might get another unexpected boost from liquidity shortages in individual fixed-income securities.

Institutions using ETFs in fixed income cited the following reasons and benefits:

"Diversification, low expense ratios and low trading costs." – RIA

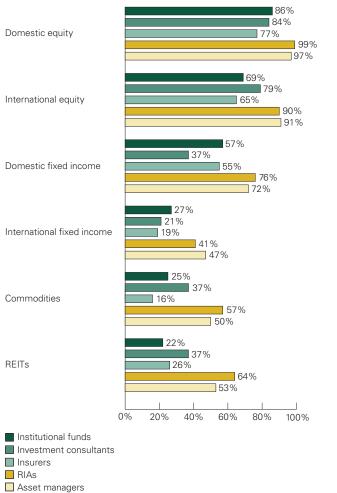
"If it is a smaller account needing diversification, we use ETFs. We have also increased use of ETFs on the corporate side, where we do not source a lot of individual bonds, so we use a fair amount of a corporate investment-grade ETFs." – RIA

"Our use of bond ETFs is likely due to increased liquidity, lower transaction costs and access to very precise segments of the market." – RIA

Additional research by Greenwich Associates suggests fixed-income ETFs could be poised to take on an even bigger role in institutional portfolios. Institutional investors of all types are making sweeping changes to their fixed-income portfolios in response to the current interest rate environment and expectations of future rate increases. The results of a 2013 study conducted by Greenwich Associates and sponsored by BlackRock suggest that these responses could provide a significant boost to ETF use by institutions. "As institutions shorten duration and seek new sources of yield, current users of fixed-income ETFs expect to increase usage and some non-users are expected to utilize ETFs to implement portfolio strategies," says Andrew McCollum.

ETFs might get another unexpected boost from liquidity shortages in individual fixed-income securities. Individual fixed-income issues are the primary vehicle for fixed-income investments for the majority of institutions participating in the 2014 ETF study, followed by mutual funds and ETFs/separate accounts. However, new bank capital rules have caused fixed-income dealers to slash inventories on corporate bonds and other fixed-income holdings. Up to this point, these reductions have caused few major disruptions—thanks mainly to relatively placid market conditions. Nevertheless, investors report decreased liquidity and say trades are more difficult and take longer to complete. Many investors are concerned about more serious liquidity breakdowns

Institutions Adopting ETFs in New Asset Classes



Note: Based on 201 responses: 49 institutional funds, 19 investment consultants, 31 insurance companies, 70 RIAs, and 32 asset managers in 2014.
Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

in the event of a spike in market volatility now that broker-dealers—the market's traditional liquidity providers of last resort—may have less room on their balance sheets during periods of stress.

ETFs are also being used with greater frequency in commodities and real estate. Forty percent of participating institutions report using ETFs for commodities, and 45% for exposure to REITs.

Of course, equities remain the primary asset class for ETF usage. Ninety-one percent of the users in this year's study employ ETFs in domestic equities and 80% use them for international equity exposure. Within equities, 33% of total institutional participants utilize non-market-cap-weighted or strategic beta ETFs, also known as smart beta.

Insurance Companies Find Diverse Uses for ETFs

Insurance companies are finding broad applications for ETFs within their diverse investment functions.

For the past several years, ETFs have been gaining significant traction among insurance companies as an efficient vehicle for surplus asset investment. From 2013 to 2014 the share of insurers in the study using ETFs to invest surplus assets nearly doubled, from approximately 30% to almost 60%. It appears that insurance companies also are now becoming more comfortable using ETFs when investing reserve assets. In 2013, approximately 6% of participating insurers reported using ETFs to invest reserve assets. That share climbed to more than a quarter in 2014. ETFs are also a common tool for insurance companies with dedicated asset management business lines. Forty-five percent of insurers overall use ETFs in the management of separate accounts or mutual funds. Smaller shares of insurance companies are using ETFs in defined-contribution funds and annuities.

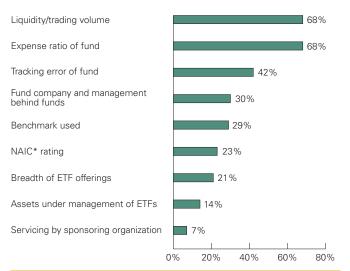
Criteria for Selecting an ETF

Institutions tend to focus on liquidity and expense ratios when evaluating ETFs. Both characteristics are cited as an important selection factor by approximately 70% of study participants. Insurance companies and institutional funds are most likely to cite liquidity as an important consideration in ETF selection. However, the share of institutions overall citing liquidity as an important selection factor declined from 76% in 2013—a shift that could indicate institutions are becoming more comfortable with the liquidity profiles of ETFs.

Expense ratios, meanwhile, are of particular importance to institutional funds, with more than three quarters of these respondents citing expense as a key selection factor. Fifty-three percent of asset managers, 58% of insurance companies and 73% of RIAs also included expense ratios as an important criterion for ETF selection. "Given this emphasis on costs, ETF providers are making an effort to shift the conversation to one of total cost of ownership which includes the cost of purchasing, holding and selling an ETF, rather than singularly focusing on the expense ratio," says Andrew McCollum.

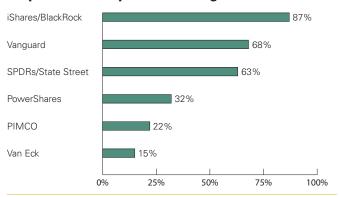
After liquidity and expense ratios, the most frequently cited selection factor was tracking error at 42%.

Most Important Factors When Selecting an ETF (Criteria cited as one of top 3)



Note: *The NAIC does not endorse or recommend any securities or products. NAIC designations are issued for specific regulatory purposes and these designations are not equivalent to credit ratings issued by nationally recognized statistical rating organizations. NAIC designations are suitable only for NAIC members. Based on 182 responses: 49 institutional funds, 31 insurance companies, 70 RIAs, and 32 asset managers in 2014. Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

Proportion of Respondents Using Each ETF Provider



Note: Based on 201 responses: 49 institutional funds, 19 investment consultants, 31 insurance companies, 70 RIAs, and 32 asset managers in 2014. Source: Greenwich Associates 2014 U.S. Exchange-Traded Funds Study

BlackRock's iShares Remains Institutions' Preferred Provider

Based on these criteria, most institutions participating in the study name iShares, the exchange-traded fund division of BlackRock, as their preferred provider of ETFs. iShares is cited most frequently by institutions as being their preferred provider in terms of ETF liquidity, broad product offerings, index tracking and high-quality client service. iShares and Vanguard are named as providing the best value for the management fees.

As a result, approximately 9 out of 10 institutions employing ETFs use iShares, followed by Vanguard (68%) and State Street/SPDRs (63%). Eighty-three percent of the institutions name iShares as their top ETF provider by assets.

Conclusion

ETFs are increasingly viewed by institutions as an effective means of implementing broad portfolio management and investment strategies. Although ETFs first gained traction among institutions as a tool for use in tactical portfolio functions, they are now being used to achieve core strategic portfolio exposures. Both usage rates and allocations are expected to continue rising as institutions discover new applications for the vehicles and innovation by providers make ETFs more flexible. One of the biggest drivers of growth will be the proliferation of ETFs in fixed-income portfolios and in other asset classes. One investor put it best when he summed up his own institution's experience. "We have evolved as the ETF market has evolved. We started five years ago with zero ETF assets and have experienced a lot of asset growth. Over that period, our ETF use has grown in tandem with the market."

Consultant Andrew McCollum advises on the investment management market in the United States.

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Transactions in shares of ETFs will result in **brokerage commissions** and will generate **tax consequences**. All regulated investment companies are obliged to distribute portfolio gains to shareholders. In addition to the normal risks associated with investing, **international investments** may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. **Narrowly focused investments** typically exhibit higher volatility. **Bonds and bond funds** will decrease in value as interest rates rise and are subject

to credit risk, which refers to the possibility that the debt issuers may not be able to make principal and interest payments or may have their debt downgraded by ratings agencies.

Diversification and asset allocation may not protect against market risk or loss of principal. Shares of ETFs may be sold throughout the day on the exchange through any brokerage account. However, shares may only be redeemed directly from a Fund by Authorized Participants, in very large creation/redemption units. There can be no assurance that an active trading market for shares of an ETF will develop or be maintained.

iShares index ETFs are passively managed; they seek to track a market index, before fees and expenses, and do not attempt to outperform during rising or take defensive positions during declining markets. iShares ETF performance may diverge from the ETF's underlying index.

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