

A dark blue world map is centered in the background of the top half of the page. The map shows the continents in a slightly lighter shade of blue.

BOND ETFs: FINANCIAL ADVISORS DRIVE USE WITH SPECIALIZED APPLICATIONS



CERULLI
ASSOCIATES

Research | Analytics | Consulting

WWW.CERULLI.COM

20170523-162606-452601

EXECUTIVE SUMMARY

To better understand how the financial advisor community is using bond ETFs, BlackRock has sponsored this report with Cerulli Associates, a leading independent market research and consulting firm. This study was designed to help advisors share ideas and learn from their peers.

BlackRock is committed to helping advisors build better portfolios in an investment landscape that demands balancing fees and risk, and believes the key trends and insights that Cerulli has identified in this study will generate ideas for your investment strategy going forward.

Methodology

Cerulli Associates conducted an online survey of 378 financial advisors in December 2016 and January 2017 to ask them about their practices and specifically their use of bond ETFs. Respondents needed to manage at least \$50 million in assets and take discretion over at least half of client assets. Respondents are diversified among business models (wirehouse, independent B/D, registered investment advisor, etc.). The original distribution of respondents has been weighted to reflect Cerulli's overall sizing of the financial advisor marketplace.

KEY POINTS

- Growth of ETFs has been supported by broader secular trends of fee awareness, regulation, and the maturation of advisory businesses. These trends should continue into the foreseeable future.
- Use of bond ETFs is broad, but not deep. Overall, 87% of advisors report having used a bond ETF, but assets in these funds significantly lag equity ETFs.
- Advisors recognize bond ETFs for their scalability, ease of exposure, and diversification.
- Advisors who prefer individual bonds do so because they desire control over client portfolios and defined maturities. Advisors who prefer bond mutual funds generally prefer active management.
- More sophisticated users of bond ETFs have already used the vehicle to position client portfolios for expected economic conditions.

KEY IMPLICATIONS

- Advisors manage client bond portfolios in an inconsistent fashion today. Use of bond ETFs can be expanded not just through education on the mechanics of the vehicle, but also through rethinking bond portfolios in a more holistic and scalable fashion. Bond ETFs could be used in a variety of ways in this construct, including being paired with individual bonds or mutual funds.
- Demonstrating to advisors how to build better and more consistent bond portfolios could lead to better client outcomes, which is especially relevant in a heightened regulatory climate.
- ETF use begets more ETF use. Heavy users are using ETFs in a more specialized fashion. Bond ETF users often began their ETF use with equity ETFs before expanding use to include bond products.
- The growth of equity ETFs presents a potential model for bond ETFs. Use has started with broad-based core holdings, but users are beginning to shift to more specialized applications.

The U.S. exchange-traded fund (ETF) market has continued to see rapid growth over the past decade and is not showing any signs of slowing down. In 2016, ETFs brought in a record \$287 billion in net flows. One of the most noteworthy developments in the ETF market has been the growing adoption of bond ETFs among advisors.

U.S. bond ETF assets have grown from \$20.5 billion in 2006 to approximately \$447 billion as of year-end 2016, representing a compound annual growth rate of 36%. While assets have grown substantially over the past decade, bond ETFs still only represent a fraction (18%) of the \$2.53 trillion ETF market. Equity ETFs account for \$1.5 trillion, roughly 3.5 times the size of the bond ETF market. However, in 2016 a record \$93 billion of inflows came from bond ETFs, representing 32% of all U.S. ETF flows. The growth of bond ETFs sheds some light on the ongoing trend among advisors, as more turn to new ways to gain liquid and transparent exposure in the bond market.

Changing Advisory Landscape

Secular trends of growth in advisory and fee compression support continued growth of ETFs.

The growth of ETFs has been supported by broader secular trends, including heightened fee awareness, regulation, and the growth of the advisory business. Furthermore, the shift in investor preferences, including greater transparency, efficiency, and accessibility, has led to a rapid evolution within the advisory landscape. This has created a greater emphasis on costs and fees, driving more advisors to consider lower-cost vehicles, such as ETFs. In addition, the advisory model has put a greater emphasis on asset allocation, in which advisors can offer a more personalized experience to investors by using a wider range of vehicles to achieve client goals. Cerulli does not believe any of the trends will reverse themselves in the foreseeable future, which should lead to the continued growth of ETFs.

As the wealth management industry evolves from a transaction-focused environment to a more holistic advisory approach, there has been a profound shift in the role of financial advisors. This shift has had a meaningful impact on the way financial advisors are being compensated, with fee-based models becoming far more prevalent across the industry. Fee-based models incentivize advisors to use lower-cost investment products to maximize profitability, underscoring the advantages of using ETFs for their client portfolios. Accordingly, advisors predict asset-based fees will go from 53% to 62% of their revenue in the next three years. In addition, advisors' attitudes toward the shift in asset-based fees is generally positive, as 56% of advisors believe that a shift from commissions to asset-based fees will have a positive impact on their business over the next 12 months.

Recent regulatory developments have further reinforced the shift toward fee-based models. In fact, three-quarters (74%) of advisors expect an increase in fee-based advisory business as a result of the DOL Rule. While greater regulation has the potential to accelerate growth in the ETF industry, Cerulli notes that the shift in fee structures had been in place well before the rule was discussed. Cerulli believes that the overall sentiment speaks to the broader trends within the advisory landscape toward lowering costs and promoting greater transparency in portfolios, further supporting the continued growth of ETFs.



Bond ETFs only represent 18% of the \$2.53 trillion ETF market.

Exhibit 1: DOL Conflict of Interest Rule's Impact on Advisors' Product Use, 2017

Source: Cerulli Associates

| Product/Platform | Decrease | No Change | Increase |
|---|----------|-----------|----------|
| Fee-based advisory business | 2.0% | 24.0% | 74.0% |
| Equity ETFs | 2.5% | 34.2% | 63.3% |
| Passive investment products | 5.7% | 51.3% | 43.0% |
| Digital-based advice technology for small-balance clients | 4.1% | 56.2% | 39.7% |
| Bond ETFs | 9.0% | 55.5% | 35.5% |
| Alternative investments | 18.2% | 63.1% | 18.8% |
| Actively managed mutual funds | 33.8% | 49.2% | 17.0% |
| Fixed-indexed annuities | 15.5% | 71.8% | 12.8% |
| Deferred-income annuities | 17.8% | 71.4% | 10.9% |
| Variable annuities | 36.3% | 56.0% | 7.7% |

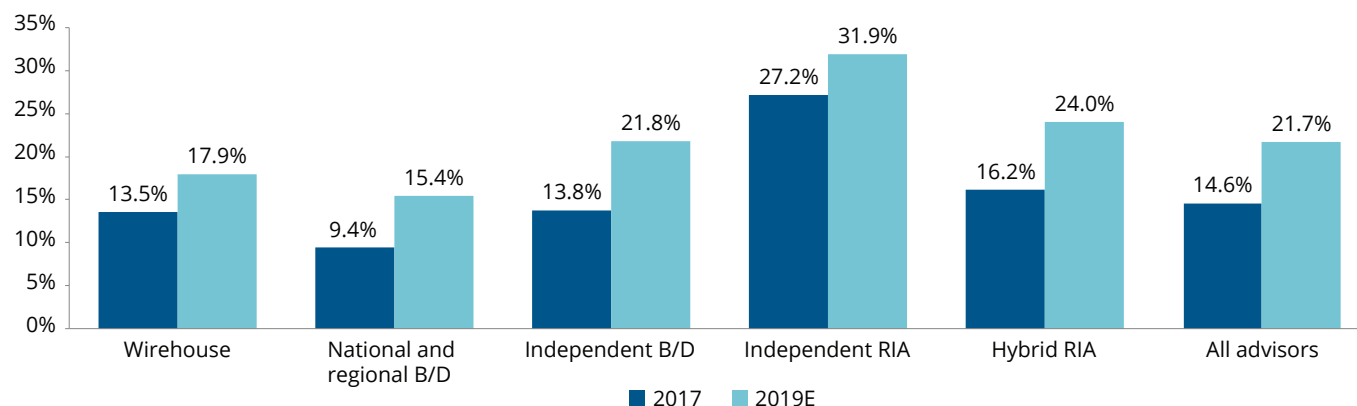
Support of Increased Advisor ETF Use

Advisors increase their use of ETFs as they get more familiar with the vehicle and find additional applications; non-users of ETFs would begin using the vehicle if they had a better understanding of the benefits.

According to Cerulli's study, the growing ETF adoption among advisors is promising. More than two-thirds (69%) of advisors have increased their usage rates for equity ETFs in the last three years, while another one-third (37%) has increased their usage rates for bond ETFs. While the rise in adoption has been driven primarily by independent and hybrid registered investment advisors (RIAs), advisors across all channels expect to increase their ETF allocations in the coming years, especially among channels that have historically been lower on the ETF adoption curve. For example, independent broker/dealers expect to see the greatest increase in ETF usage rates, a sign that these firms are starting to embrace ETFs as they transition to fee-based advice models. Advisors as a whole expect ETFs to gain a larger slice of their clients' portfolios, with average allocations to ETFs expected to grow from 14.6% in 2017 to 21.7% in 2019.

Exhibit 2: Advisor Allocation to ETFs by Channel, 2017 vs. 2019E

Source: Cerulli Associates





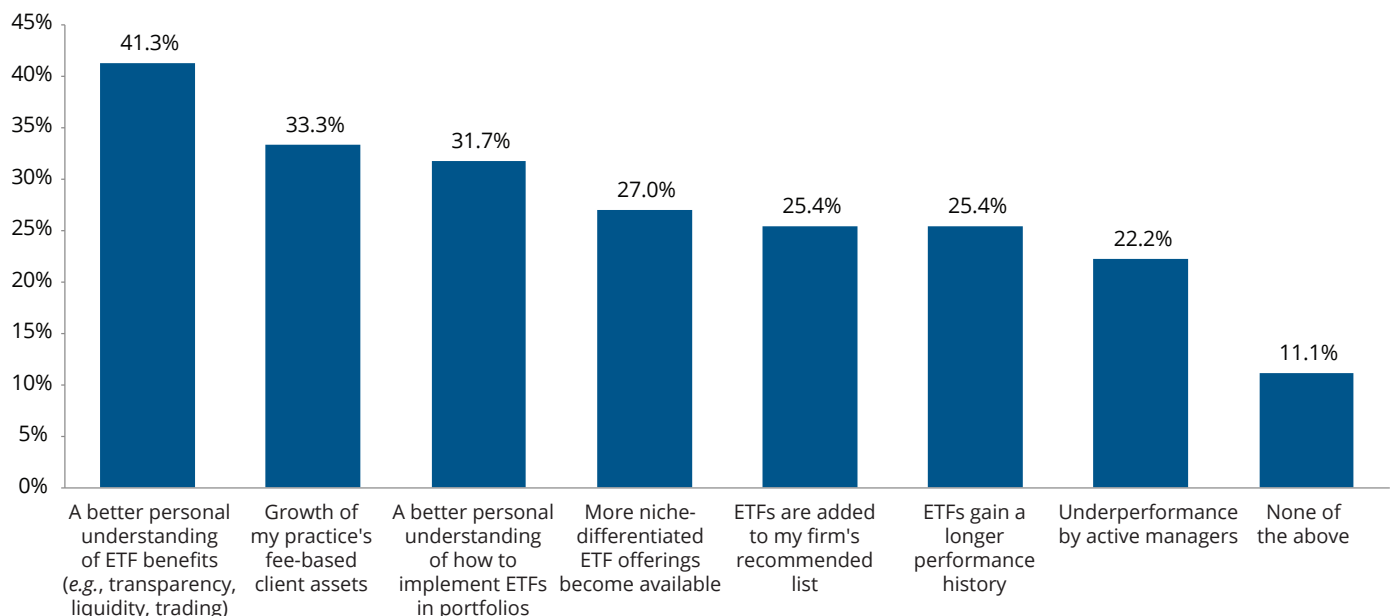
Nearly half of non-users of ETFs claim that they would use ETFs in the future if they had a better personal understanding of the benefits of ETFs. As advisors gain a greater understanding of ETFs within the broader framework of portfolio construction, they may be more inclined to use them in tandem with other actively managed funds.

For advisors using ETFs, experience with the vehicle breeds greater use. Data shows that 89% of advisors who allocate more than 30% of their portfolios to ETFs have been using the vehicle for longer than three years, suggesting that once advisors begin using the vehicle, they recognize the advantages for clients and identify ways to use ETFs more broadly. Experienced ETF users likely have a greater level of understanding and application of the vehicle, but rarely do these advisors turn away from the vehicle that has proven to be useful across a wide variety of investment objectives. Cerulli adds that low ETF users (less than 15% total allocation) typically start with small allocations that are more tactical in nature, but those advisors then quickly begin to look for more strategic areas of their portfolios in which they can implement ETFs to fit their investment needs.

As advisors continue to become more committed to using ETFs in a variety of ways, they will require greater resources and access to education. Among the advisors who do not use ETFs, 42% state that they prefer active management, and another 37% of advisors prefer the mutual fund structure. However, data also shows that nearly half (41%) of advisors claim that they would use ETFs in the future if they had a better personal understanding of the benefits of ETFs (e.g., transparency, liquidity, trading). Cerulli notes that a clear opportunity exists for ETF sponsors to further educate advisors on the benefits of ETFs within the greater context of overall client portfolios. As advisors gain a greater understanding of ETFs within the broader framework of portfolio construction, they may be more inclined to use them in tandem with other actively managed funds. Laying this groundwork for portfolio implementation will enable firms to move beyond a product-driven focus to a more advice-driven model.

Exhibit 3: Factors That Would Drive Greater Use of ETFs from Non-ETF-Users, 2017

Source: Cerulli Associates



Progression Beyond Equity ETFs

Use of bond ETFs is broad, but not deep. Advisors are using bond ETFs, but not to the same degree or in as specialized a fashion as equity ETFs.

Bond ETFs are in the unique position of being used widely, but not deeply, by financial advisors. This owes in part to the legacy of the ETF—the first ETF products introduced to the market and used by advisors were equity products. Indeed, 87% of advisors report using bond ETFs and half plan to increase their use in the next three years. While more advisors plan on increasing their use of equity ETFs, there are additional reasons for optimism in the future for bond ETFs—survey results indicate advisors plan on decreasing their use of individual bonds and bond mutual funds in the next three years.

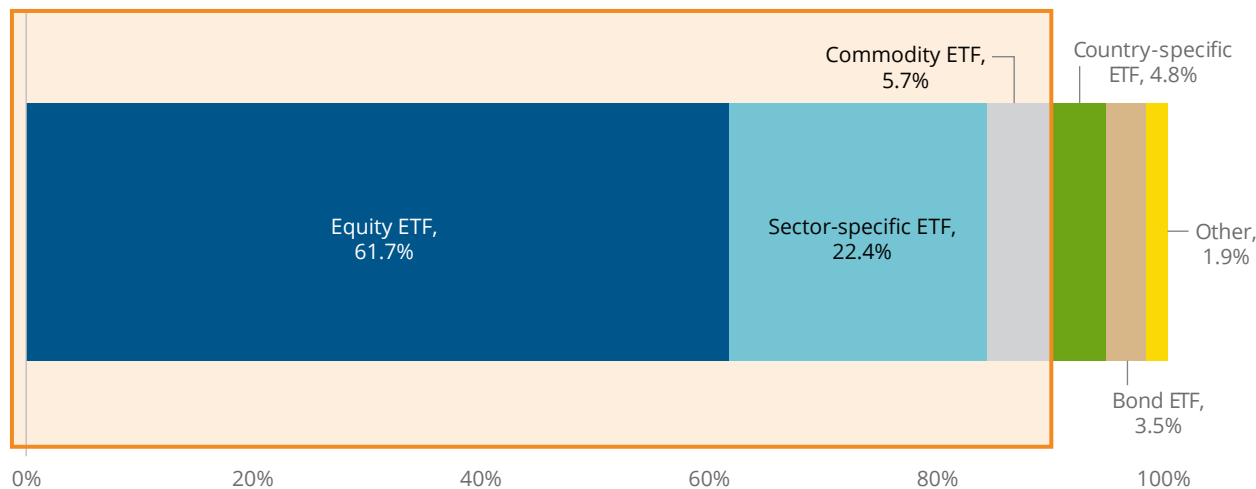
ETF manufacturers are met with a fertile market for deepening use of bond ETFs, given increasing familiarity with ETF products in general. However, advisors generally enter into the ETF market for equity and other growth investments—better than half (62%) of advisors report that the first type of ETF they used was an equity ETF. Even among those advisors who did not specifically use an equity ETF first did so with growth-oriented investments in mind—22% used a sector-specific ETF and another 5% used a country-specific ETF. As discussed later in this paper, sophisticated advisor teams are using bond ETFs to target specific investment objectives. The bond ETF story may translate well in the future for advisors who have used ETFs for targeted investment objectives.



Around one-third of advisors report that they plan on decreasing their use of individual bonds and bond mutual funds in the next three years.

Exhibit 4: First Type of ETF Used by Advisors, 2017

Source: Cerulli Associates



Once advisors begin using ETFs, they are more likely to continue. Indeed, showing moderate and heavy users of the vehicle new forms of implementation may be the clearest path to growth for ETF manufacturers. Moderate and heavy users of ETFs are more likely to report plans to increase bond ETF usage, moving further away from individual bonds. The largest advisory teams (more than \$500 million in assets under management, or AUM) are also more likely to be planning increased use of bond ETFs. These practices have not reached this asset level by accident. These practices are very process-driven—often having streamlined ways to onboard new clients, service clients, and, most relevant to this paper, manage client portfolios. As we will see, helping advisors streamline their process for managing bond portfolios is a potential avenue of growth for bond ETFs.

Exhibit 5: Advisors' Planned Changes in Product Use in the Next Three Years, 2017

Source: Cerulli Associates

| All Advisors | | | Large Advisors | | |
|---------------------|--------------|----------|---------------------|----------------|----------|
| Product | All Advisors | | Product | ≥\$500m in AUM | |
| | Decrease | Increase | | Decrease | Increase |
| Equity ETFs | 3.7% | 72.3% | Equity ETFs | 6.5% | 64.4% |
| Bond ETFs | 11.8% | 50.2% | Bond ETFs | 13.8% | 58.7% |
| Equity mutual funds | 34.3% | 22.9% | Equity mutual funds | 39.9% | 14.9% |
| Individual bonds | 29.0% | 22.7% | Individual bonds | 29.8% | 20.4% |
| Individual stocks | 35.5% | 18.1% | Individual stocks | 27.0% | 18.3% |
| Bond mutual funds | 39.2% | 18.0% | Bond mutual funds | 44.9% | 12.3% |

Heavy ETF Users

| Product | Medium Allocation to ETFs (15%–29% of client portfolios) | | High Allocation to ETFs (30%+ of client portfolios) | |
|---------------------|---|----------|--|----------|
| | Decrease | Increase | Decrease | Increase |
| Equity ETFs | 3.0% | 82.5% | 1.6% | 77.7% |
| Bond ETFs | 13.0% | 59.5% | 19.7% | 54.7% |
| Equity mutual funds | 41.5% | 17.4% | 53.1% | 10.8% |
| Individual bonds | 22.6% | 26.7% | 31.4% | 15.2% |
| Individual stocks | 41.9% | 17.2% | 36.3% | 21.1% |
| Bond mutual funds | 44.6% | 17.2% | 52.2% | 5.8% |

Bond ETFs Offer Different Benefits Than Equity ETFs

While bond ETFs have many of the same benefits as equity ETFs, advisors aren't as familiar with bond ETFs. However, they do recognize some of the unique characteristics of bond ETFs relative to equity ETFs, such as diversification and ease of exposure.

The path to further adoption for bond ETFs lies in education. Advisors are often reluctant to recommend an unfamiliar strategy or product to their clients, concerned about a question they can't answer or how the product might react in a difficult market. When asked about their familiarity with different types of ETF products, 81% report being "very familiar" with equity ETFs. While more than 60% of advisors also report being very familiar with sector-specific or bond ETFs, there is still a gap that needs to be closed for these products. In contrast, less than 5% of advisors tell Cerulli they are unfamiliar with these products. While not drastic, familiarity with the various types of ETFs is greater in larger advisory practices and those focused on wealthier clients, both of which are more likely to have internal investment staff.

Exhibit 6: Advisor Familiarity with ETFs by Type, 2017

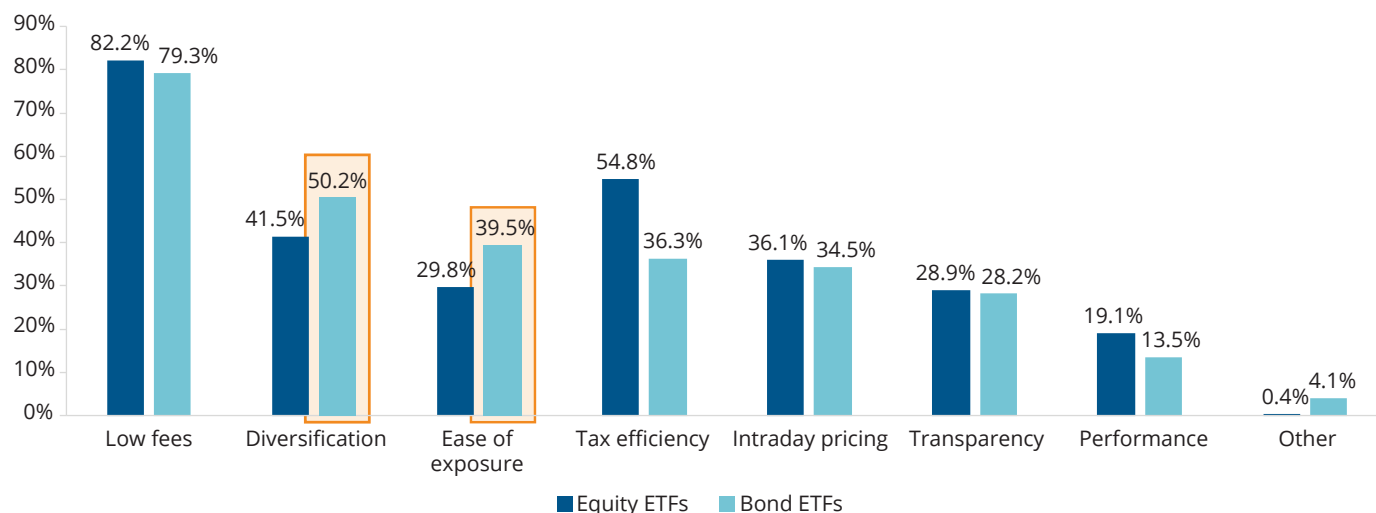
Source: Cerulli Associates

| ETF Type | Not Familiar | Somewhat Familiar | Very Familiar |
|----------------------|--------------|-------------------|---------------|
| Equity ETF | 1.4% | 17.5% | 81.1% |
| Sector-specific ETF | 2.9% | 29.1% | 68.0% |
| Bond ETF | 3.5% | 34.7% | 61.8% |
| Country-specific ETF | 6.2% | 45.5% | 48.3% |
| Commodity ETF | 12.2% | 48.2% | 39.6% |

Low fees are the most widely recognized benefit of ETFs—around 80% of advisors name fees as a benefit of both equity and bond ETFs, the most common answer. However, this quickly begins to diverge for equity and bond products. The divergence should not necessarily be viewed as a negative, however, but rather a path for bond ETFs to broaden adoption. For example, 55% of advisors name tax efficiency as a benefit of equity ETFs, compared to 36% for bond ETFs. This is logical as bonds, regardless of vehicle, will push off ordinary income, making them, in general, less tax-efficient than equities and the associated capital gains.

Exhibit 7: Advisors' Beliefs of Benefits of Equity and Bond ETFs, 2017

Source: Cerulli Associates



Digging deeper, it is instructive to see what advisors are more likely to consider as a benefit of bond ETFs. First, advisors are more likely to believe that diversification (50% for bond ETFs vs. 42% for equity ETFs) is a benefit of bond ETFs. This is most notable for those advisors with a legacy of buying individual bonds for their clients. While they might believe they are managing costs and attempting to more closely direct the client portfolio, they may not be maximizing diversification. Holding a bond ETF can give advisors and their clients ownership of potentially thousands of individual issues. Many advocates of bond ETFs also believe that the relative scale of these products can minimize trading costs associated with managing a portfolio of individual bonds. Touting the value of diversification also suggests that some advisors may see bonds as a necessary evil in diversifying client portfolios, while placing more attention on managing the equity portion of client portfolios.

Second, 40% of advisors report that ease of exposure is a benefit of bond ETFs, compared to 30% who ascribe this benefit to equity ETFs. It is the ease of exposure that suggests the potential for diversified uses of bond ETFs going forward. Bond ETFs are largely used as a core holding today, but sophisticated users are using the vehicle as a way to tilt and diversify client bond portfolios.



Bond ETFs are largely used as a core holding today, but sophisticated users are using the vehicle as a way to tilt and diversify client bond portfolios.

What Is Prompting Advisors to Use Bond ETFs?

Advisors use bond ETFs for many of the same reasons as equity ETFs, such as low fees and diversification; users of bond ETFs see them as easier to use than individual bonds.

As we have seen, on the surface, advisors tend to see similar advantages to equity and bond ETFs. Indeed, nearly half of advisors cite the benefits of ETFs over mutual funds as a major reason why they began to use bond ETFs. Digging deeper, however, advisors also see the advantage of bond ETFs relative to individual bonds. About one-third of advisors say that the scalability of ETFs relative to individual bonds was a major reason why they began using bond ETFs. Independent RIA firms are most likely to

name scalability as a factor. Another one-quarter of advisors cite difficulty in sourcing individual bonds as a major factor in beginning to use bond ETFs. This was particularly prevalent among wirehouse advisors, a business model in which buying bonds from internal inventories has traditionally been a key element of their value proposition.

Exhibit 8: Advisors' Reasons for Beginning to Use Bond ETFs, 2017

Source: Cerulli Associates

| Reasons for Beginning Use of Bond ETFs | Not a Factor | Somewhat of a Factor | Major Factor |
|--|--------------|----------------------|--------------|
| Benefits ETFs offer over mutual funds (low fees, tax efficiency, etc.) | 8.5% | 43.6% | 47.9% |
| More scalable than individual bonds | 23.1% | 43.3% | 33.7% |
| Difficulty sourcing individual bonds | 29.8% | 43.9% | 26.3% |
| Recommendation from model provider | 51.6% | 36.7% | 11.7% |
| Client requested | 69.4% | 23.9% | 6.7% |
| Suggested by wholesaler | 63.9% | 30.4% | 5.7% |
| Other | 75.8% | 20.9% | 3.3% |

The growth of bond ETFs comes at a pivot point for the broader bond market. Bond trading has lagged equity trading in its shift from an inventory-based broker/dealer model to more transparent equity exchanges. While transparency and speed can create better client outcomes, it also becomes more difficult for smaller investors to navigate.

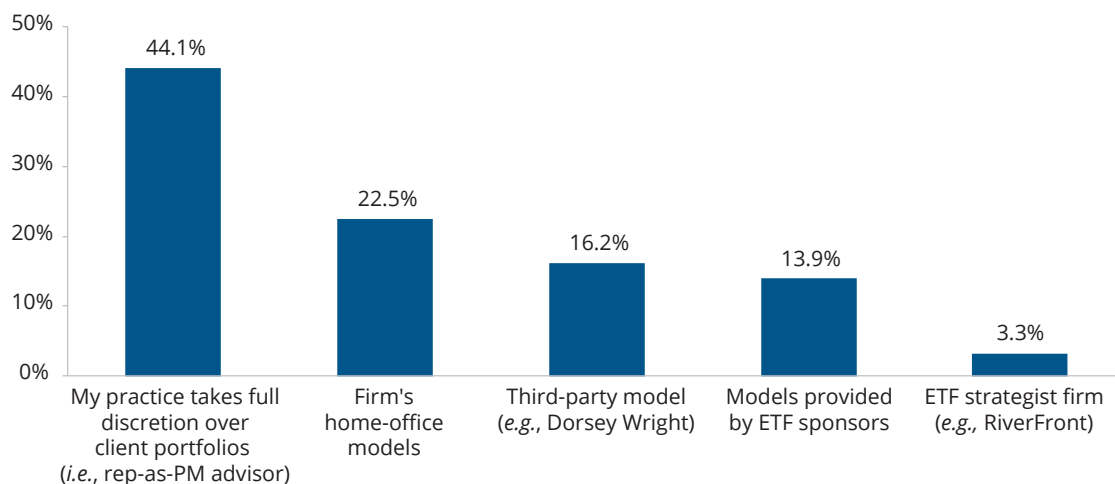
The source of influence for advisors to begin using bond ETFs is unclear. Approximately one-quarter of advisors cite their firm's home-office models as a reason for beginning to use bond ETFs. Another 16% cite third-party model providers. However, advisors are most likely to report that all investing decisions are made inside their practice. The size of an advisor practice and the prevalence of internal resources drives not just ETF use, but also the sophistication and specialization with which they use the vehicle. However, while these advisory teams might have investment analysts or a CIO on staff, they are in fact at least partially reliant on home-office and third-party guidance to make their investing decisions. In fact, as the portfolio construction process has grown more complex, a wide array of resources—including models provided by asset managers, home offices, and third parties—have popped up across the industry to help advisors build client portfolios. Thus, while advisors purport to be self-reliant regarding investing decisions, the vast array of resources they use to make decisions is often more complex.



About one-third of advisors say that the scalability of ETFs relative to individual bonds is a major reason why they began using bond ETFs.

Exhibit 9: Advisors' Primary Influence on Use of Bond ETFs, 2017

Source: Cerulli Associates



ETF sponsors must be aware of misconceptions around bond liquidity and the potential effect they have on bond ETF trading. The vast majority of bond ETF trades are between buyers and sellers of existing ETF shares—in other words, typically individual bonds are not being bought or sold when an ETF is traded. The challenges advisors have in trading against major institutions in the bond market are largely addressed by bond ETFs.

However, bond ETF sponsors must be aware of overcoming the perception of illiquidity when it comes to bond ETFs. The fear of unexpected negative outcomes is a significant barrier for advisors recommending new products to their clients. One way to address this concern is for ETF sponsors to emphasize their capital markets capabilities. Better than one-third of advisors named capital markets capabilities as a major factor in selecting an ETF sponsor. Sponsors must address how bond ETFs trade and why liquidity is less of a concern compared to individual bonds. While there have been limited examples of equity ETFs being affected by large trading spreads, to date, this has not affected bond ETFs. This is in part by design—sponsors are not going to design and release products wherein they cannot support the underlying holdings.

Why Advisors Do Not Use Bond ETFs

Advisors prefer active management from mutual funds and the control and defined maturities provided by individual bonds.

Nevertheless, there remains a segment of advisors who prefer mutual funds and individual bonds. The advisors who prefer bond mutual funds resemble those who prefer equity mutual funds over ETFs as well. These advisors cite active management and familiarity with the mutual fund structure as their primary reasons for using mutual funds. Familiarity is not just at the advisor level, either; about 20% of advisors cite client familiarity with mutual funds as a major reason for preferring this structure.

More relevant are those advisors who prefer using individual bonds to manage client bond portfolios. About one-third of non-users say their preference for using individual bonds is why they do not use bond ETFs. Three-quarters of these advisors cite control over client portfolios and defined maturities as a reason to use individual



Niche bond ETFs may be a way for advisors seeking control to introduce greater diversification into client portfolios.

bonds, although defined maturity ETFs have been available for some time. Another half of advisors name transparency as a major reason. The themes of control, defined maturities, and transparency all tie together. The ability to reinvest client funds as bonds mature give the advisor the feeling of control.

A two-tiered argument must be made to those advisors who insist on managing individual bonds. The first and most powerful is that of scalability. Managing constantly maturing bonds across an entire book of business can be time-consuming. These advisors can be shown how large advisory practices have begun to transition to more packaged delivery structures for efficiency, allowing them to reallocate their time toward more client-facing activities.

Just as importantly, the use of bond ETFs is beginning to expand from simple replacement of a core bond portfolio to more specialized niches designed to managed specific market risks. Niche bond ETFs may be a way for advisors seeking control to introduce greater diversification into client portfolios. This may be best accomplished by showing advisors how bond ETFs can be used as a complement to their existing portfolios to increase diversification and reduce risk for their clients.

Exhibit 10: Advisors' Reasons for Individual Bond Use, 2017

Source: Cerulli Associates

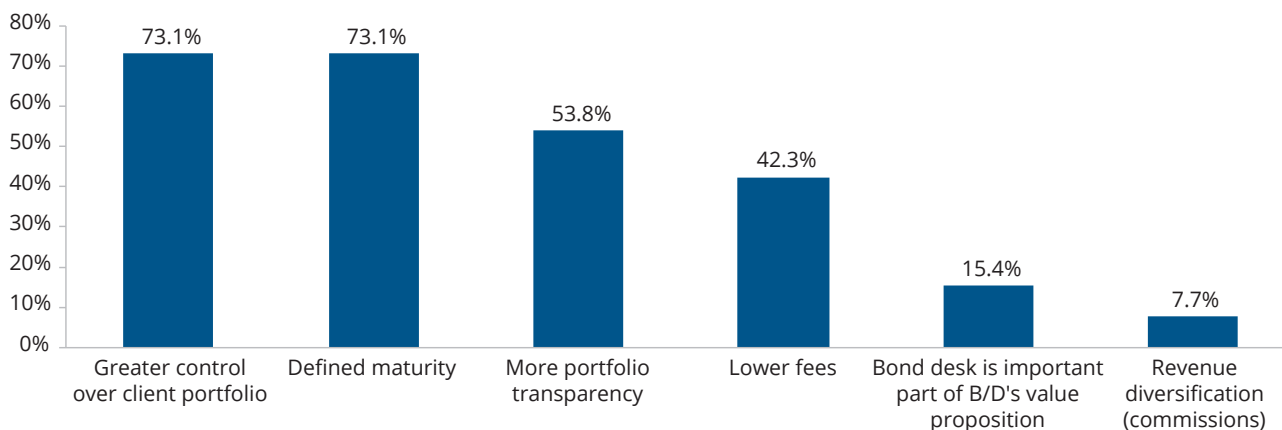


Exhibit 11: Advisors' Reasons for Preferring Bond Mutual Funds, 2017

Source: Cerulli Associates

| Reasons for Preferring Bond Mutual Funds | Not a Reason | Moderate Reason | Significant Reason |
|---|--------------|-----------------|--------------------|
| Active management | 4.8% | 33.3% | 61.9% |
| I am more familiar with mutual funds | 19.0% | 47.6% | 33.3% |
| Clients are more familiar with mutual funds | 47.6% | 33.3% | 19.0% |
| Ability to generate total return | 33.3% | 52.4% | 14.3% |
| Complication of transitioning vehicles | 76.2% | 9.5% | 14.3% |
| Recommended by model provider | 90.5% | 0.0% | 9.5% |

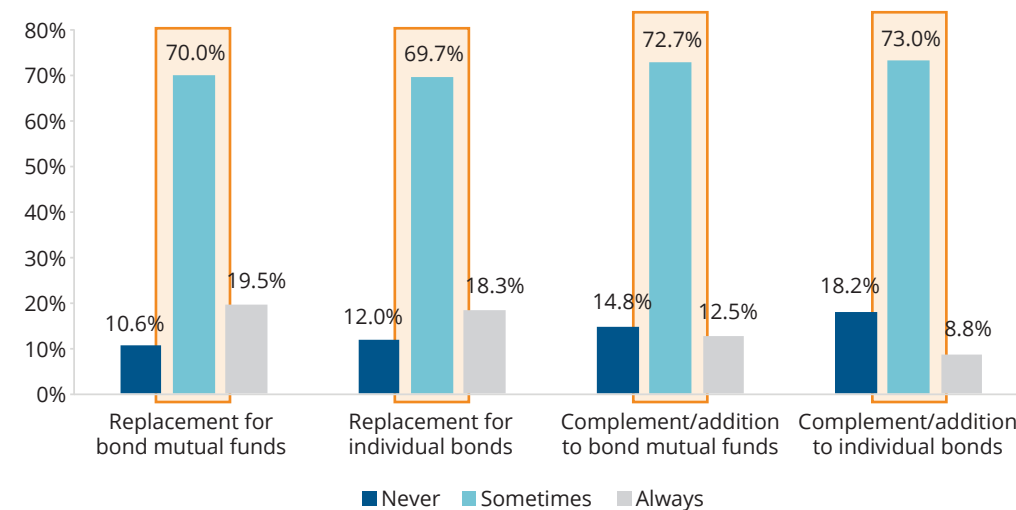
How Advisors Use Bond ETFs

Advisors use bond ETFs both as a complement and a replacement for other bond products. However, the wide range of uses for bond ETFs also reveals a lack of consistency in how advisors manage bond portfolios.

Current use of bond ETFs does not just explain the lack of depth of penetration, it also reveals inconsistency in how advisors create bond portfolios today. Roughly 20% of advisors say that they are always using bond ETFs as a replacement for bond mutual funds and only 18% are outright replacing individual bonds. However, the majority of respondents tell Cerulli that they are sometimes using bond ETFs in four very different ways: as a replacement for individual bonds; as a replacement for bond mutual funds; as a complement to individual bonds; and as a complement to bond mutual funds. For so many advisors to be using bond ETFs in so many ways in conjunction with different products suggests that advisors do not manage the bond portion of client portfolios in a consistent fashion.

Exhibit 12: Advisor Use of Bond ETFs in Client Portfolios, 2017

Source: Cerulli Associates



For so many advisors to be using bond ETFs in so many ways in conjunction with different products suggests that advisors do not manage the bond portion of client portfolios in a consistent fashion.

The irregularity in application of advisor bond portfolio management presents an opportunity for both advisors and bond ETF sponsors. First, by introducing consistency to how advisors create bond portfolios, it can add scalability to advisor practices. While every client's needs are different, delivering bespoke investment portfolios on a client-by-client basis places a productivity drag on advisors' practices. Ideally, by scaling processes and freeing time, advisors can reallocate this time to client-facing activities. Advisors should also consider the benefits of consistency in managing client portfolios in a heightened regulatory environment.

Also of benefit to these advisors is refining the way in which they manage their clients' bond allocations. Around one-third of advisors say they are looking for implementation education. Education providers, such as broker/dealers or sponsors, should approach these conversations in a holistic fashion. In other words, they should help advisors assemble bond portfolios using a variety of vehicles and management styles that can be managed in a scalable, consistent fashion and reflect that advisor's economic outlook. It may not fully be represented as ETFs, but rather using ETFs in conjunction with other types of bond products. To see how this might work, one can look at how the largest advisory practices and the most sophisticated ETF users are using ETF features to customize the positioning of bond portfolios.

Bond ETF Use from "Experienced" Bond ETF Users

Experienced and sophisticated users provide a more specialized and targeted framework for future bond ETF use.

Advisors are most likely to tell Cerulli that they are currently using bond ETFs as a relatively simple way to establish a bond core holding—25% "always" use bond ETFs for broad market exposure and other 21% use bond ETFs to diversify equities. Indeed, there is value to this application and the value of the ETF as a low-cost, diversified vehicle. Bond ETF providers can often manage trading costs and buying a bond ETF gives investors and advisors access to more issues than they reasonably could on their own. It is likely that the bond ETF will continue to be used in this fashion, particularly in packaged portfolios.

However, Cerulli believes that more specialized applications of the bond ETF will be a driver of its next wave of growth. One must look no further than the equity ETF market to understand what this growth curve might look like. Early equity ETFs largely represented low-cost broad-based equity indices. The next wave of product development included more specialized products, such as country-specific and sector-specific products. Bond ETFs could follow a similar path—operating not just as a core holding, but also broadening adoption to more targeted use.

The optimistic future view of more diversified use of bond ETFs can be seen in the types of problems that sophisticated advisors try to solve with these products. While it is difficult to measure sophistication of an advisory practice's approach, Cerulli looks to a few key markers. The first is AUM. This reflects not just the appeal of the practice, but also its ability to have specialized resources in place to address specific client needs. The second is the presence of dedicated investment staff or a CIO. This represents the advisory practice's investment acumen and the degree to which it can dedicate resources to developing investment strategies. Finally, Cerulli examined those advisors who are heavy users of ETFs, defined as those allocating 30% or more of client portfolios to the vehicle.



Early equity ETFs largely represented low-cost broad-based equity indices. The next wave of product development included more specialized products, such as country-specific and sector-specific products. Bond ETFs could follow a similar path—maintaining its position as a core holding, but broadening adoption to more targeted use.

Advisory practices that match these descriptors—those managing more than \$500 million or those that have a CIO are more likely to use more specialized application of bond ETFs. These advisory practices are more likely than the advisor population as a whole to always use bond ETFs to manage sector exposure, manage duration, manage maturities, or manage credit risk. When looking at how these advisors are using bond ETFs, it suggests that time spent on education not just around the benefits of bond ETFs, but also creating scalable, diversified bond portfolios can pay off not just in more bond ETF assets, but also in the potential for better client solutions.

There is also a small swath of intermediaries using bond ETFs for sophisticated trading strategies. For example, they might buy the ETF to establish an immediate position, but then slowly buy individual bonds, weaning down the ETF holding. Likewise, if they want to exit an individual bond position, they might sell bonds to an ETF sponsor, but take newly created ETF shares in return.



The optimistic future view for more diversified use of bond ETFs can be seen in the types of problems that sophisticated advisors try to solve with these products.

Exhibit 13: Advisors: Investment Objectives Targeted with Bond ETFs, 2017

Source: Cerulli Associates

| Investment Objective | All Advisors | | | |
|------------------------------------|--------------------------------------|-----------|-----------------|--------------|
| | Not Currently, But Considering Using | Not Using | Sometimes Using | Always Using |
| Core or broad market exposure | 4.7% | 12.9% | 57.8% | 24.6% |
| Diversify equities | 2.2% | 8.8% | 64.9% | 24.1% |
| Generate income | 4.3% | 13.6% | 61.2% | 20.9% |
| Manage sector exposure | 4.6% | 24.3% | 57.6% | 13.5% |
| Manage duration | 5.6% | 20.6% | 60.5% | 13.2% |
| Bond laddering/managing maturities | 10.1% | 35.1% | 45.2% | 9.6% |
| Manage credit risk | 5.0% | 29.4% | 56.7% | 8.8% |
| Manage cash | 10.0% | 34.5% | 48.0% | 7.4% |

| Investment Objective | ≥\$500m in AUM | Practices with CIO | Heavy ETF Users (30%+) |
|------------------------------------|----------------|--------------------|------------------------|
| | Always Using | Always Using | Always Using |
| Core or broad market exposure | 31.7% | 41.3% | 27.2% |
| Diversify equities | 36.1% | 43.1% | 26.3% |
| Generate income | 22.8% | 37.4% | 29.4% |
| Manage sector exposure | 21.0% | 14.2% | 16.5% |
| Manage duration | 20.5% | 19.5% | 17.1% |
| Bond laddering/managing maturities | 21.3% | 21.1% | 9.9% |
| Manage credit risk | 9.0% | 24.3% | 7.8% |
| Manage cash | 3.5% | 16.4% | 9.4% |

What Types of Bond ETFs Are Advisors Using?

Bond ETFs are largely used in broad bond categories today, such as corporate and high-yield bonds. But advisors are expressing interest in more specialized bond categories, in part due to their economic outlook.

As reflected in broad current use, advisors primarily use bond ETFs for broadly used categories, such as investment-grade corporate and high-yield bonds. The top-three bond ETF strategies advisors are currently using are investment grade, short term, and high yield. But, future use of specific bond strategies correlate to sentiment about bond market conditions. Overall, 88% of advisors believe interest rates will continue to increase and 80% believe that inflation will rise in the current market environment. First and fourth among planned increases in bond ETF strategies are floating-rate and short-duration bonds, both of which would help to protect portfolios in a rising rate environment. Second on the list of planned increases are inflation-protected securities, which would be affected in a period of rising inflation.



The most sophisticated users of bond ETFs have already positioned bond ETFs in client portfolios in ways that most advisors are only starting to consider.

Exhibit 14: Advisors: Investment Objectives Targeted with Bond ETFs, 2017

Source: Cerulli Associates

| Expected Changes Post-Election | Decrease | Stay the Same | Increase | Unsure |
|--------------------------------|----------|---------------|----------|--------|
| Interest rates | 1.1% | 8.1% | 88.0% | 2.8% |
| Inflation | 1.4% | 14.8% | 79.8% | 3.9% |
| Monetary policy rates | 3.8% | 18.2% | 65.5% | 12.5% |
| Credit risk | 11.5% | 45.0% | 32.0% | 11.5% |
| Default rates | 17.7% | 43.8% | 25.3% | 13.2% |
| U.S. sovereign credit risk | 13.7% | 50.4% | 23.5% | 12.4% |
| Liquidity | 13.5% | 54.0% | 18.8% | 13.7% |

Examining which bond ETFs the largest advisory practices are using, inflation-protected, floating-rate, and bank-loan bond ETFs are more likely to be used by the \$500 million-plus AUM firms than advisors as a whole. Likewise, heavy users of bond ETFs are more likely to use inflation-protected bond, floating-rate bond, emerging markets bond, and bank-loan ETFs than advisors as a whole. In other words, the most sophisticated users of bond ETFs have already positioned client portfolios in way that most advisors are only considering. As the broader advisor population seeks to prepare client portfolios for expected market changes, the liquidity and ease of sourcing of bond ETFs could play a role.

Exhibit 15: Advisor Use and Expected Change by Type of Bond ETF, 2017

Source: Cerulli Associates

| Bond ETF Use | Yes | Expected Change in Bond ETF Use | Decrease | Stay the Same | Increase |
|--------------------------------|-------|---------------------------------|----------|---------------|----------|
| Investment-grade bond | 77.1% | Investment-grade bond | 6.6% | 66.5% | 26.8% |
| Short-term bond | 69.6% | Short-term bond | 8.7% | 62.9% | 28.4% |
| High-yield bond | 67.4% | High-yield bond | 10.7% | 62.1% | 27.1% |
| Municipal bond | 64.1% | Municipal bond | 6.6% | 66.1% | 27.3% |
| Government bond/U.S. Treasurys | 55.1% | Government bond/U.S. Treasurys | 11.3% | 72.8% | 15.8% |
| Multi-sector bond | 52.2% | Multi-sector bond | 4.7% | 71.0% | 24.3% |
| Inflation-protected bond | 49.5% | Inflation-protected bond | 4.2% | 60.2% | 35.7% |
| Floating-rate bond | 48.8% | Floating-rate bond | 3.7% | 59.4% | 36.8% |
| Emerging markets bond | 44.8% | Emerging markets bond | 6.8% | 62.9% | 30.3% |
| Bank-loan | 36.5% | Bank-loan | 5.5% | 70.9% | 23.6% |
| Unconstrained bond | 29.8% | Unconstrained bond | 7.2% | 77.0% | 15.8% |

Exhibit 16: Advisor Use by Type of Bond ETF, 2017

Source: Cerulli Associates

| Bond ETF Type | ≥\$500m in AUM | All Advisors |
|--------------------------------|----------------|--------------|
| Investment-grade bond | 84.2% | 77.1% |
| Short-term bond | 74.3% | 69.6% |
| High-yield bond | 64.5% | 67.4% |
| Municipal bond | 62.3% | 64.1% |
| Government bond/U.S. Treasurys | 68.7% | 55.1% |
| Multi-sector bond | 48.3% | 52.2% |
| Inflation-protected bond | 58.0% | 49.5% |
| Floating-rate bond | 52.6% | 48.8% |
| Emerging markets bond | 43.4% | 44.8% |
| Bank-loan | 47.2% | 36.5% |
| Unconstrained bond | 36.8% | 29.8% |

Conclusion

- ETF use begets ETF use. As advisors become familiar with ETFs, they are more likely to find additional ways to use the vehicle.
- ETF usage may still be dominantly controlled by equities, but advisors' use of bond ETFs is rapidly developing. There is growing awareness that bond ETFs can also offer advantages such as scalability and liquidity.
- Survey data reveals an inconsistency in how advisors currently construct bond portfolios, in some cases treating them as an afterthought to equity allocations. Bond ETFs, in conjunction with other vehicles, can help create more scalable and consistent bond portfolios that reflects an advisor's economic outlook, whether it be managing inflation or protecting against rising interest rates.
- The optimistic future view for more diversified use of bond ETFs can be seen in the types of problems that sophisticated advisors try to solve such as managing credit risk, duration, or maturity. These experienced users provide a more specialized and targeted framework for future bond ETF use.



CERULLI
ASSOCIATES

Research | Analytics | Consulting

Cerulli Associates

699 Boylston Street, Boston, MA 02116

+1 617-437-0084

info@cerulli.com

www.cerulli.com

Reprinted with permission of Cerulli Associates, May 2017. The opinions expressed in this reprint are intended to provide insight or education and are not intended as individual investment advice.

Carefully consider the iShares Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting www.iShares.com or www.blackrock.com. Read the prospectus carefully before investing.

Investing involves risk, including possible loss of principal.

Fixed income risks include interest-rate and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments.

Transactions in shares of ETFs will result in brokerage commissions and will generate tax consequences. There can be no assurance that an active trading market for shares of an ETF will develop or be maintained.

The strategies discussed are strictly for illustrative and educational purposes and are not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. There is no guarantee that any strategies discussed will be effective.

This study was sponsored by BlackRock.

The iShares Funds are distributed by BlackRock Investments, LLC (together with its affiliates, "BlackRock"). BlackRock is not affiliated with Cerulli Associates or any other firms mentioned in this report, or their affiliates.

iSHARES and **BLACKROCK** are registered trademarks of BlackRock, Inc., or its subsidiaries. All other marks are the property of their respective owners. 162606