

Four big trends to drive ETF growth

Global ETF assets could reach
\$12 trillion over five years

Exchange traded funds (ETFs) have advanced a long way since the first U.S. product launched in 1993. More investors are recognizing that ETFs offer a rich diversity of investment exposures at low cost, along with transparency and liquidity.

This paper examines four ETF growth trends with a focus on the U.S. and Europe, regions that are most likely to carry global ETF assets over \$12 trillion by the end of 2023.



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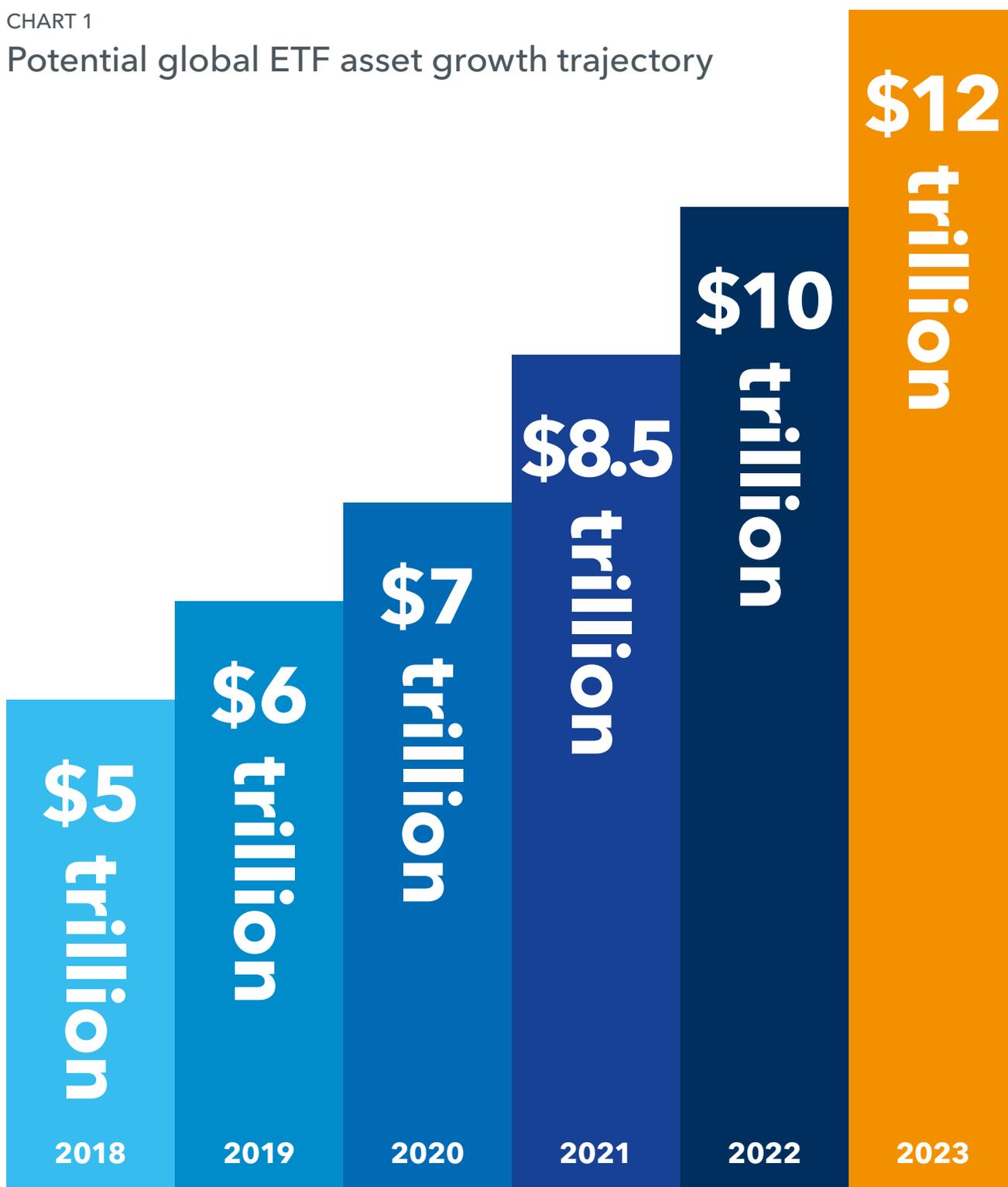
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CHART 1

Potential global ETF asset growth trajectory



Source: BlackRock; Global Business Intelligence, as of April 2018.

Introduction

Exchange traded funds (ETFs) are the most enduring investing trend in a generation. This century began with fewer than \$100 billion in ETF assets and now counts \$4.7 trillion across an ever-expanding number of products.¹ More recently, global ETFs grew at an organic annualized rate of 19% from 2009 through 2017, easily outpacing the 4.8% growth rate for other open-end fund types.²

ETFs are open-end index funds that can be bought or sold in real time, like a stock. ETFs combine the efficiency and simplicity of on-exchange trading with the merits of index-based investment strategies.

Expect growth to accelerate. Sweeping developments within the investment management industry mentioned throughout this paper are putting ETFs on course to potentially gather more assets over the next five years than in the previous 25 years combined.³

Global ETF assets are poised to more than double, to \$12 trillion, by the end of 2023.⁴ Extending ETFs' annual organic growth rate 10 years into the future, a time frame with an inherently higher margin of error, points to assets topping \$20 trillion, and possibly reaching \$25 trillion, by the end of 2027.⁵

1 Investment Company Institute; ETFGI as of March 2018.

2 BlackRock; Morningstar, worldwide open-end funds including money-market funds and excluding funds of funds, as of December 2017.

3 BlackRock; Global Business Intelligence, as of May 2018.

4 BlackRock; Global Business Intelligence, as of May 2018.

5 BlackRock; Global Business Intelligence, as of May 2018.

Four trends are likely to fuel future ETF growth, especially in the U.S. and Europe:



ETF investors are active investors



Investors everywhere are sensitive to cost



A transformation in the business model for financial advice



An evolution in the way bonds trade favors ETFs for efficient market access



ETF investors are active investors. ETFs are increasingly used in portfolios to seek outcomes that differ from the broad market. Investors are likely to step up their use of ETFs as building blocks in asset allocation and as vehicles to deliver factor-based investment strategies that seek to emphasize persistent drivers of returns.



Investors everywhere are sensitive to cost and demand quality. ETF adoption dovetails with the recognition by all types of investors that costs can have a significant impact on long-term returns. Lower-cost, diversified ETFs will increasingly be used by self-directed retail investors and sophisticated institutions alike as core broad market exposures.



A transformation in the business model for financial advice is

under way in the U.S. and beginning in Europe. Investors are increasingly paying wealth managers a transparent fee based on assets, instead of an indirect fee via brokerage commissions and retrocessions. A secular transition to fee-based advisory models puts a focus on lowering costs and using simple asset allocation. This backdrop could favor ETFs at the heart of portfolios.



An evolution in the way bonds trade favors ETFs for efficient market access.

The bond liquidity that many institutions once took for granted is evaporating. To facilitate large transactions, investors are increasingly likely to use bond ETFs alongside or instead of single securities.

ETF investors are active investors

Forget the “active versus passive” debate. All investment decisions are active ones. BlackRock believes that investors are poised to increase their use of ETFs as tools for beating the market in the years ahead.

ETF growth is often attributed solely to the strong performance of simple stock indexes relative to legacy active managers since the financial crisis. This view wrongly implies that investors have abandoned their attempts to beat the market and that future ETF growth is contingent on lackluster stock picking.

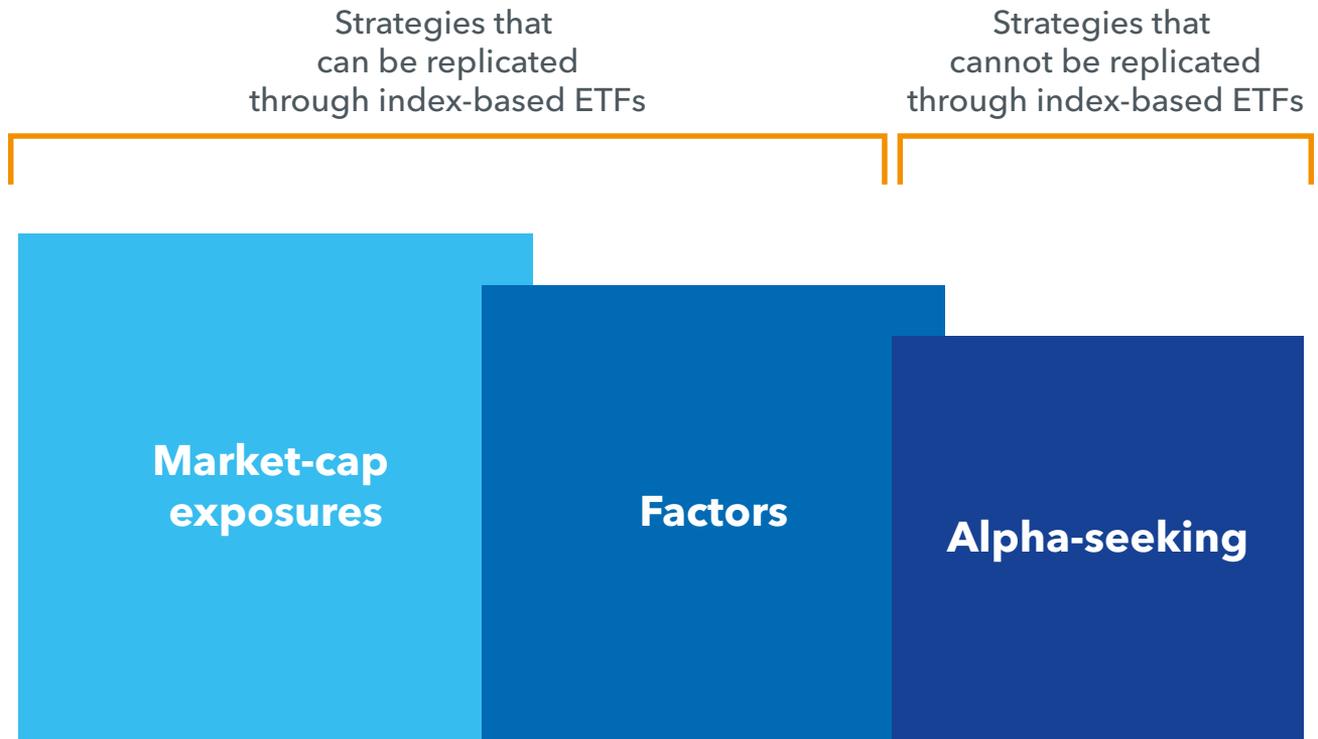
BlackRock believes that ETF growth is closely tied to the growing recognition that asset allocation is more important than individual security selection. The potential diversification benefits of portfolios divided among asset classes were recognized by Nobel laureates nearly seven decades ago. More recently, the advent of ETFs has provided transparent, lower-cost building blocks for global market portfolios.

ETFs are well suited as tools for asset allocation because they are liquid, low cost, transparent and available in numerous exposures. ETFs’ versatility and breadth means that they are now used as buy-and-hold funds, tactical asset allocation vehicles and trading instruments. For instance, a cross-section of U.S. ETF holdings shows that aggregate investor positions deviate from the composition of market-cap-weighted indexes.⁶ This analysis highlights that many investors use ETFs with the aim of differentiating from the broad market.

⁶ MSCI, “Why index funds promote market efficiency,” April 2018; Analysis based on sample of 1,024 U.S.-listed ETFs investing in U.S. and international equity markets.

CHART 2

A spectrum of investment choices



Source: BlackRock, as of May 2018.

39%

of asset allocation strategies use ETFs.

Source:
Morningstar, as of
30 September 2017.

ETFs give asset allocators more and increasingly granular choices when it comes to accessing stocks, bonds, commodities and other assets across the globe. The proliferation of ETFs is broadening as indexes reach into all transparent and investable markets.

Global institutions such as insurance companies, pension funds, asset managers and endowments increasingly use ETFs as tools for tactical investing in addition to long-term investment vehicles. About one-third of U.S. institutional investors surveyed in 2017 plan to increase ETF allocations over the next year.⁷ A separate Europe-focused survey found that 40% of institutions plan to increase their ETF allocations over the same period.⁸

Many institutions that use ETFs cite their versatility and use them to adjust, or hedge, tactical positions. Almost half of institutional investors in the U.S. and Europe that use futures for broad exposures said in a recent survey that they have replaced at least one derivatives position with ETFs over the past year.⁹ Most say they are doing so for simplicity and to lower costs.¹⁰

Factor-based strategies are prime examples of new opportunities in indexing. Factors are market traits backed by decades of academic research that can be described as broad, persistent forces that have driven returns of stocks, bonds and other assets. Some factors, such as value, trace their roots back to the 1920s. ETFs in recent years have broadened access to other rewarded factors, including momentum, quality, size and low volatility.

7 Greenwich Associates,
"ETFs: Valuable Versatility in a Newly Volatile Market," 2018.

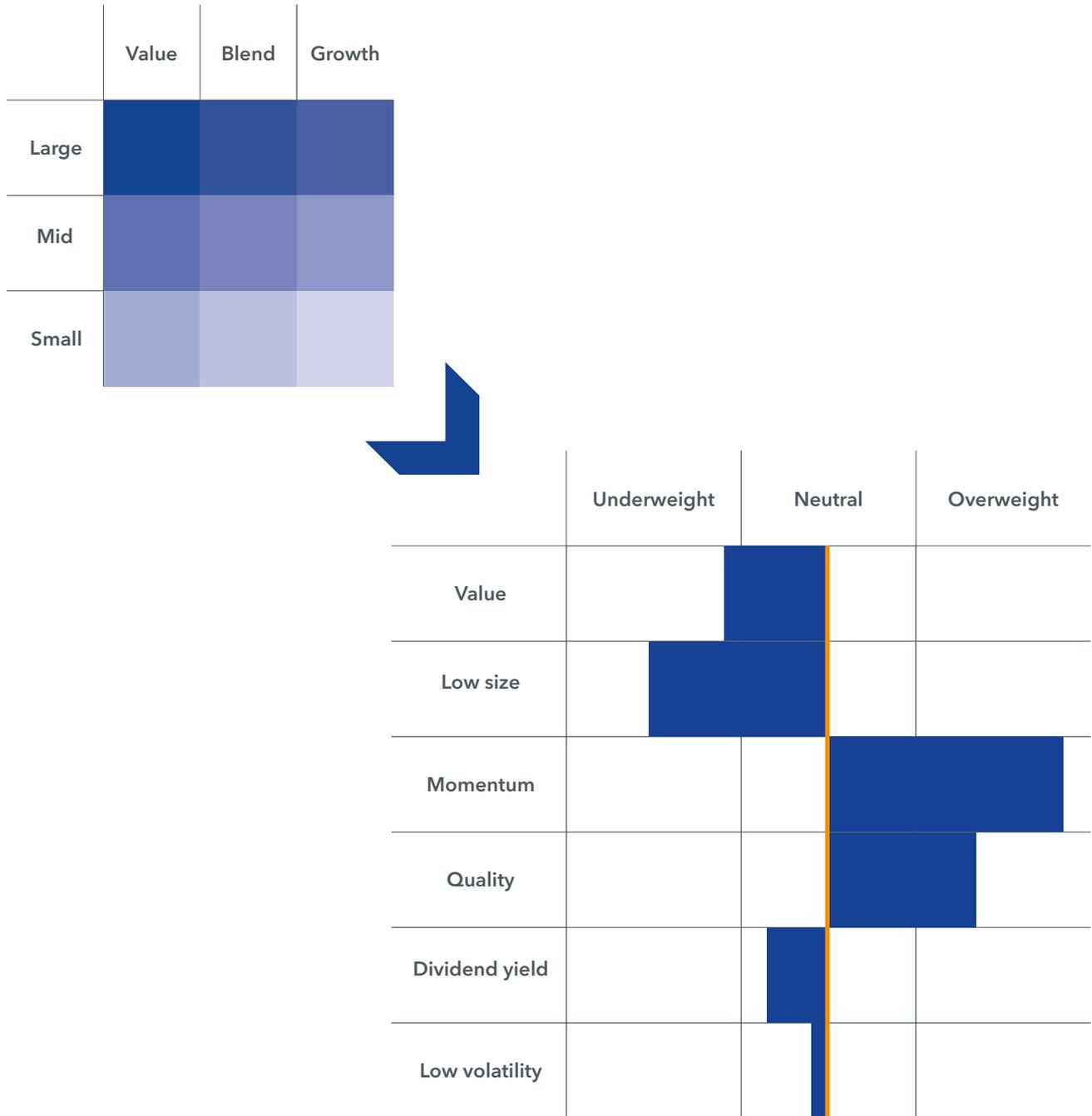
8 Greenwich Associates,
"European Institutions Explore New Asset Classes With ETFs," 2018.

9 Greenwich Associates,
"ETFs: Valuable Versatility in a Newly Volatile Market," 2018.

10 Greenwich Associates,
"ETFs: Valuable Versatility in a Newly Volatile Market," 2018.

CHART 3

Factors: new lenses to view portfolios



Source: BlackRock, as of May 2018. For illustrative purposes only. Factor lens compares an investment's factor exposures relative to a broader universe.



Just as traditional ETFs have chipped away at assets in traditional mutual funds over the past decade, factor-based ETFs may increasingly provide alternatives to funds that adhere to established investment styles, such as “growth.” ETFs can employ strategies that seek to capture the power of factors to deliver enhanced returns or reduced volatility at lower cost than more traditional active strategies. Among advisors that use “smart beta” ETFs, a catch-all term for strategies that use alternative weighting schemes to conventional market-cap-weighted indexes, almost two-thirds report shifting from active mutual funds.¹¹

Technology will help spread the prevalence of multi-asset allocation. Automated portfolio construction tools, or robo-advisors, generally deliver ETF-focused portfolios. Robo-advisors can be used as aids for advisors managing smaller-balance accounts, or sometimes in lieu of them. Their appeal could grow among smaller-balance investors that are underserved by traditional advisors in the U.S. and Europe. Assets in global robo-advisory platforms could rise to at least \$2.2 trillion by 2020, up from \$50 billion in 2016.¹²

¹¹ Cerulli Associates, “U.S. Exchange-Traded Fund Markets: Differentiating Strategies for Sustained Growth,” 2017.

¹² Deloitte, ETFs and Sustainability, March 2018.

Investors everywhere are sensitive to cost

ETF growth is entwined with investors' embrace of index investments as foundational strategies. Index investing is predicated partly on the notion, popularized in academia a generation ago, that costs associated with stock-picking can erode long-term returns.

First available to institutions in the 1970s, indexing as a strategy took off in the 1990s. A wave of investors recognized the potential benefits of indexing via ETFs around the time that the 2007-2008 financial crisis prompted many to reassess their investment approach. Money flows illustrate a decade-long rotation away from active mutual funds into ETFs, primarily in U.S. equities: About \$930 billion exited actively managed U.S. equity funds from 2009 through 2017, while about \$848 billion moved into comparable ETFs over the same period.¹³

This rotation underscores, in part, that self-directed retail investors, financial advisors and institutions all have become acutely cost-sensitive, unwilling to pay a premium for investment strategies that deliver little more than "beta," or broad market exposure. Gone are the days of "closet" indexing.

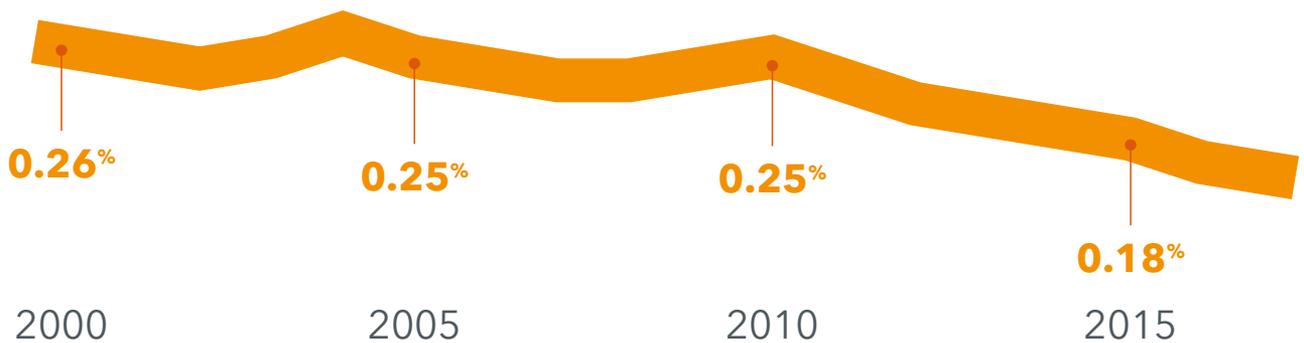
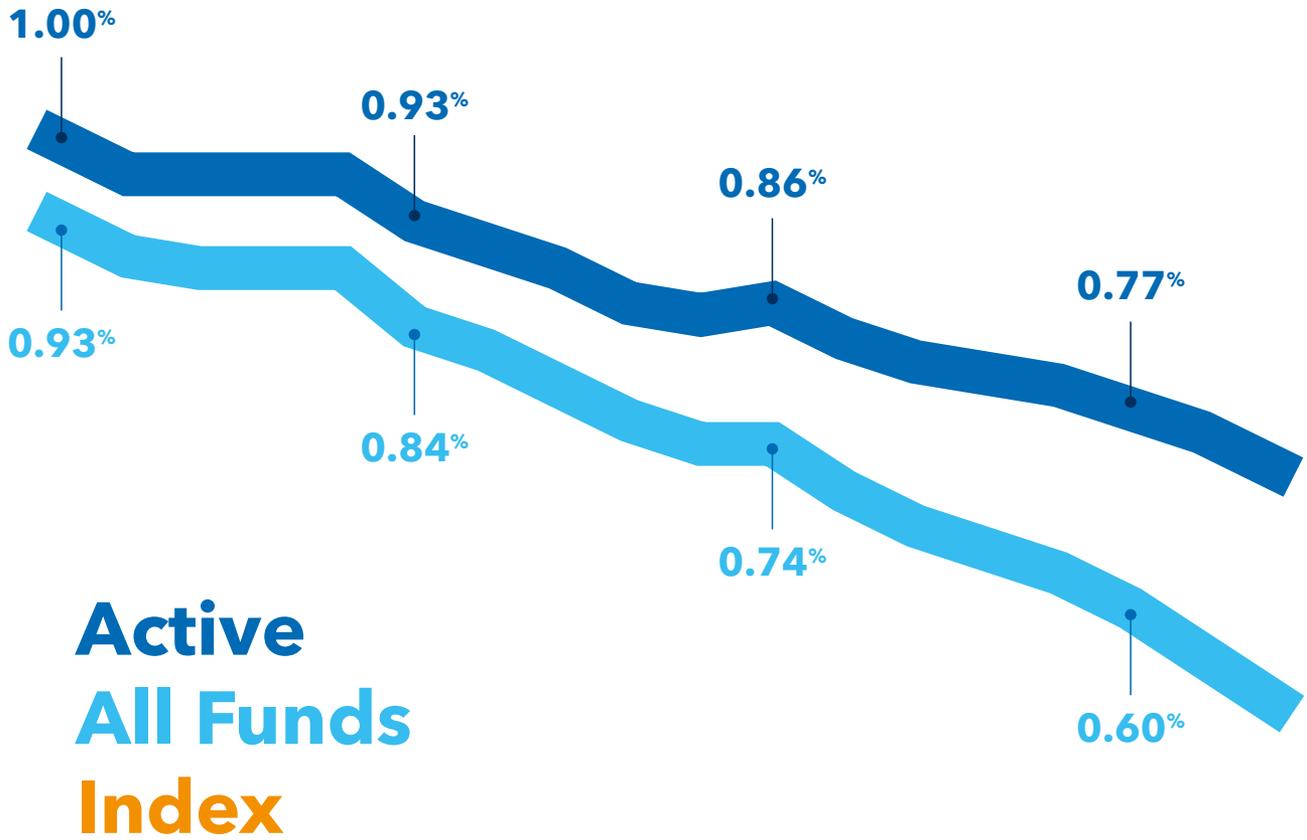
Investors paid lower fund expenses in 2017 than ever before.

Source: Morningstar, as of 26 April 2018.

¹³ BlackRock Global Business Intelligence; Simfund; Open-end funds only, excludes fund of funds and money-market funds, as of 31 December 2017.

CHART 4

Fund management fees continue to fall



Note: Asset-weighted average expense ratio across U.S. open-end funds.

Source: Morningstar Data as of 31 December 2017.

Technology has enabled investors to make informed investment decisions and discern value, which in turn has helped lower costs. An abundance of analytical tools allow fund investors to comparison-shop in ways that were impossible a decade ago. On a price-weighted basis, U.S. fund investors paid less in total expenses in 2017 than any other year in history.¹⁴

Recent investor behavior suggests that the money rotation out of traditional active funds will continue, presenting a significant opportunity for ETFs. By one estimate, there was as much as \$8 trillion in actively managed assets that effectively hugged their benchmarks in 2015.¹⁵ Future ETF assets may well be sourced, in part, from similar pools as investors seek more efficient means to obtain similar investment outcomes.

14 Morningstar, "Investors See Largest Ever Decline in Fund Fees," 26 April 2018.

15 McKinsey & Co., "Thriving in the New abnormal," November 2016; McKinsey Global Asset Management Practice; eVestment; Simfund.

A transformation in the business model for financial advice

U.S. ETFs have benefitted from changes in the business of providing financial advice. Key to the shift is that financial advisors are increasingly compensated by clients paying a fee on total assets instead of through commissions to trade securities on clients' behalf.

The economics of fee-based advisory pricing propel financial advisors towards lower-cost investment products. In turn, advisors are looking to ETFs as solutions for clients. BlackRock estimates that about two-thirds of new cash that moved into U.S. ETFs in 2017 came from individuals and financial advisors.¹⁶

The advisory model transformation represents one of the largest global movements of investor money. Trillions of dollars could flow into ETFs and other low-cost products as a result. Assets in U.S. fee-based accounts have quadrupled since 2005 and, by some projections, could nearly double again by 2020.¹⁷ Some 46% of North American wealth management client households have at least one form of fee-based account, up from 29% in 2014.¹⁸

Market forces spurred fee-based advisory pricing in recent decades, first through Registered Investment Advisors (RIAs), then through the adoption of fee-based models by large U.S. wealth managers. U.S. banks emphasized their wealth management divisions after the financial

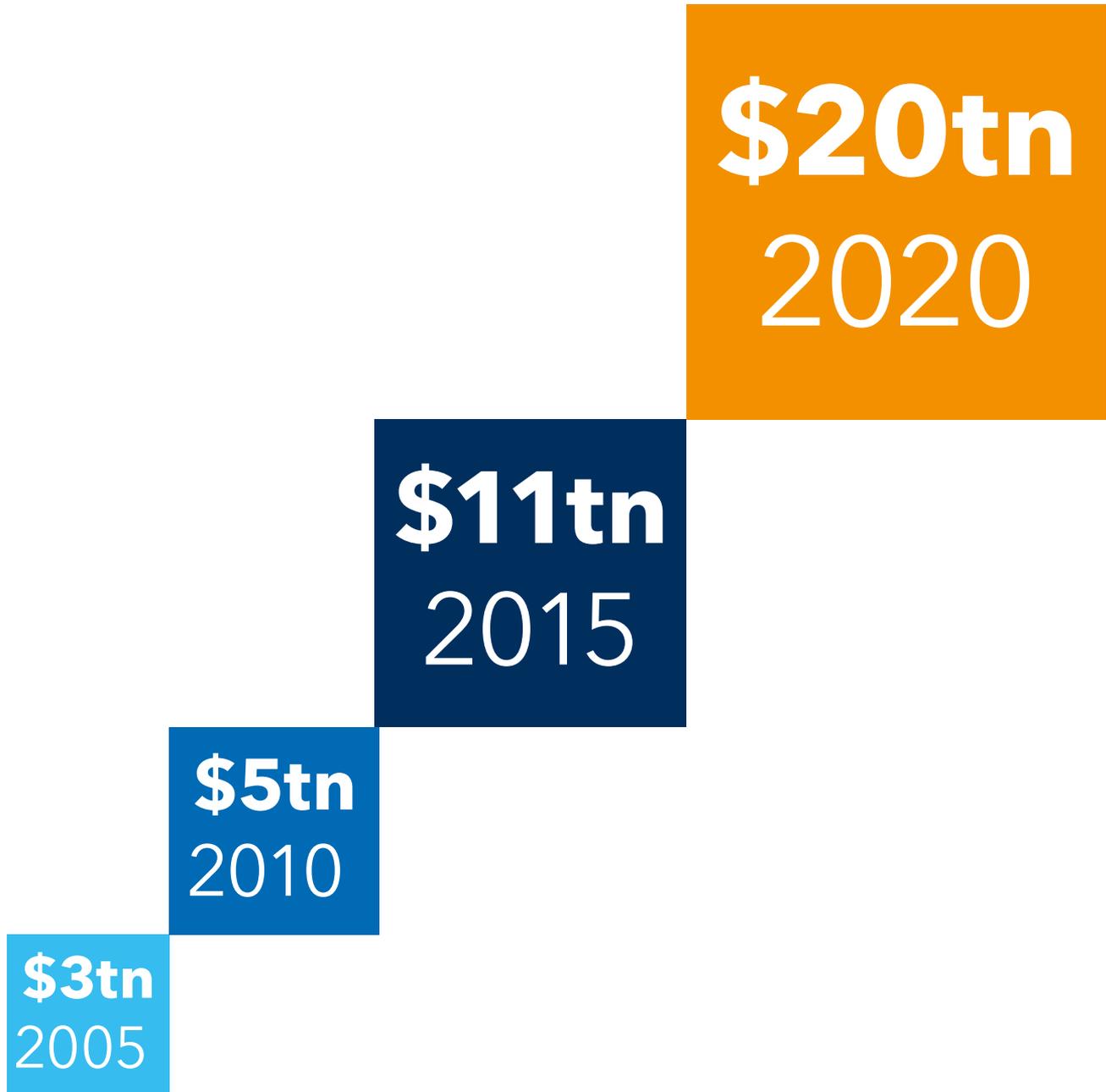
¹⁶ BlackRock, "Guess Who's Driving the ETF Bus," 31 January 2018.

¹⁷ Cerulli Associates; BlackRock, 2017.

¹⁸ PriceMetrix, McKinsey & Co., "The State of Retail Wealth Management," 2018.

CHART 5

Assets in U.S. fee-based advisory poised to rise



Source: Cerulli Associates; BlackRock, 2017.

46%

North American households have at least some fee-based business, up from 29% in 2014.

Source: PriceMetrix; McKinsey & Co.; Data include clients of North American Wealth Management firms, as of 2018.

crisis and post-crisis regulatory efforts constrained proprietary trading and balance sheet capital. For them, a fee-based model for wealth management offered the prospect of a stable, long-term revenue stream. At Morgan Stanley, for instance, the proportion of fee-based assets as a percentage of total wealth management client assets rose to 44% at the end of 2017 from 37% in 2013.¹⁹

Separately, regulatory initiatives intended to reduce potential conflicts of interest and increase investor transparency have accelerated the adoption of fee-based advisory models. Through the Fiduciary Rule, the U.S. Department of Labor intended to apply these principles to financial advisors on retirement accounts, requiring them to act in their clients' best interests. Although the Rule was invalidated after being challenged in court and is unlikely to remain in effect, the Securities and Exchange Commission released its own proposal to implement a "best interest" standard on all investment accounts (not just retirement accounts).

While the final form of these regulatory initiatives remains uncertain, BlackRock believes that the directional shift is more important than specific details of any given proposal. We believe that any regulatory best interest standard focused on conflict mitigation is likely to advance the trend toward fee-based advisory models, which we expect will result in an increase in demand for ETFs.

¹⁹ Morgan Stanley Form 10-K filings with the Securities and Exchange Commission, 2013-2017.

The shift to fee-based advisory goes global

Fee-based wealth advisory models are migrating to Europe. And much as it did in the U.S., this transition will likely usher in changes to the wealth management industry that could expand ETF access to retail investors.

European discretionary wealth managers and asset managers use ETFs but these products are not widespread in advisory portfolios. BlackRock believes this is because many advisors were historically paid through retrocessions, or fees paid to advisors by asset managers, which gave incentive to sell higher-cost products.

Implemented at the start of 2018, the Markets in Financial Instruments Directive II (MiFID II) shines a light on commissions and retrocessions charged by fund companies, private banks and independent financial advisors. Critically, advisors are now required to disclose all upfront and ongoing fees to clients. While MiFID II does not eliminate retrocessions in the same way that the U.K.'s Retail Distribution Review (RDR) did in 2013, its greatest immediate impact will be transparency.

In the years ahead, BlackRock expects to see new demand for lower-cost index products that will bring adoption of ETFs into advisory portfolios for the first time. Increased scrutiny on product suitability also will likely drive adoption of model ETF portfolios in Europe.

The potential for Europe's market growth is massive. Total ETF assets are less than one-quarter of those in the U.S. and began this year with about 16% of global market share.²⁰

²⁰ European Capital Markets Institute, "The European ETF Market: What can be done better?" April 2018; ETFGI.

Spotlight on Europe

ETFs in Europe have tremendous growth potential. Europe's first ETF launched in 2000 and the marketplace has reached nearly \$800 billion despite the lack of trading transparency, fragmented capital markets and adverse advisory compensation models.²¹

72%
United States

16%
Europe

9%
Asia-Pacific

3%
Rest of the World

Those headwinds are now becoming tailwinds. MiFID II is already creating more transparency in ETF trading. New disclosures for investment product fees paid to wealth advisors provide incentives to use lower-cost products including ETFs within retail investment portfolios. As adoption spreads, the European ETF market's next growth spurt is likely to be driven by investors who have been exposed to ETFs for the first time.

CHART 6

Europe has the largest ETF market outside of the U.S.

Source: Investment Company Institute: ETFGI as of 31 December 2017.

²¹ BlackRock; Global Business Intelligence as of 31 December 2017.

Key factors we believe are likely to drive acceleration of European ETF growth over the next decade:

Retail adoption through the shift to fee-based advisory.

Historically, European financial advisors were compensated more by selling higher-cost financial products. Over time, regulatory changes may create incentives to use lower-cost products including ETFs.

Capital markets framework that is better suited to ETFs.

More transparency around ETF trading will likely help foster adoption, especially by institutions. BlackRock estimates that two-thirds of ETF trading was executed in the over-the-counter marketplace prior to 2018; already, the number of reported ETF trades has more than doubled.

Europe's ETF market is approaching a scale that may attract global investors.

As European ETFs grow, the breadth of investors that utilize UCITS ETFs (Undertakings for the Collective Investment of Transferable Securities) will expand. UCITS ETFs offer a cross-border standard of disclosure and investor protection preferred by some European investors as well as those outside of Europe. Investors outside Europe, most notably in Asia and Latin America, could adopt UCITS ETFs more rapidly as liquidity and transparency improve.

An evolution in the way bonds trade favors ETFs

Money is moving into bond ETFs at a faster pace than equities in the U.S. and Europe

ETFs linked to bond indexes increasingly offer solutions to investors who are adjusting to structural shifts in the way individual bonds trade. These changes mean that investors of all types may increasingly adopt bond ETFs for liquid, efficient exposure over the next decade.

The first bond ETFs launched roughly a decade after the first equity ETFs and assets relative to equities reflect their youth. At \$550 billion, the U.S. bond ETF market is roughly one-fifth the assets of U.S. equity ETFs; in Europe, bond ETF assets are \$184 billion, about one-third those in equities.²²

Money is moving into bond ETFs at a faster pace than equities in both regions. Over the past five years, organic annualized growth in bond ETFs expanded at rate of 19% in the U.S. and 24% in Europe, compared with 16% and 14% in equities, respectively.²³

The bond market has traditionally been a decentralized confederation of trading desks that work orders to buy and sell over the phone. This over-the-counter bond market structure is far different than in equities, where prices are quoted in decimals and orders executed in milliseconds.

²² BlackRock Global Business Intelligence as of 31 December 2017.

²³ BlackRock Global Business Intelligence as of 31 December 2017.

CHART 7

It is more expensive to trade many single EM bonds compared to one large EM bond ETF.

Trading individual emerging market bonds from more than 50 countries can be as much as 65 times more expensive than an ETF tracking an index.

Source: BlackRock, Bloomberg, Barclays, NYSE Arca, as of 29 December 2017. For illustrative purposes only.

Historically, investors bought and sold bonds through broker-dealers as principals that utilized balance sheet capital to stockpile bond inventory. Global regulatory reforms enacted after the financial crisis have had profound spillover effects on trading. Broker-dealers have pulled back as market makers following tighter rules on capital at the same time that corporations have issued record debt.²⁴

²⁴ BlackRock, "The Next Generation Bond Market," 2017.



Investors must be more deliberate in this environment about choosing fixed income securities to build portfolios and manage risk. Many appear to be turning to bond ETFs in an increasingly electronic market that utilizes agency trading, a model in which banks and broker-dealers locate and match buyers and sellers.

BlackRock believes that there is tremendous growth potential in bond ETFs as institutions find it more difficult to access individual bonds. ETFs that trade on an exchange are a clear alternative.²⁵

Bond ETFs allow efficient trading of bundles of securities that would otherwise be difficult and expensive to access individually. One large U.S. high yield bond ETF tends to trade with an average bid/ask spread of a penny, or about 0.01%, to buy or sell. By contrast, accessing the underlying high-yield securities by themselves costs 0.50%-0.85%.²⁶ Trading individual emerging market bonds from more than 50 countries can be as much as 65 times more expensive than an ETF tracking an index.²⁷

25 EY, "Global ETF Survey 2017: Reshaping around the investor."

26 BlackRock; Bloomberg; Average cost estimate a composite of long-term and 20-day averages, as of 9 May 2018.

27 BlackRock, Bloomberg, Barclays, NYSE Arca, as of 29 December 2017.

Although bond ETFs account for less than 1% of the global bond markets, concerns seem to persist that bond ETFs could be associated with liquidity issues.²⁸ In fact, evidence suggests that ETFs can help enhance price discovery and increase bond market liquidity and transparency.²⁹ ETF liquidity is incremental to the underlying bond market liquidity because buyers and sellers can offset each other's transactions without necessarily having to trade in the underlying market.³⁰ Even during periods of market stress, ETF shares are at least as liquid as the underlying portfolio securities.³¹ Some 81% of institutional bond ETF users say that liquidity is a top reason that they use ETFs.³²

28 World Federation of Exchange Database (WFED), BIS (data as of Q2 2017), HFR, Cerulli, Simfund (data as of Nov 2017), iShares GBI (data as of Nov 2017), Global Heat Map, McKinsey Cube.

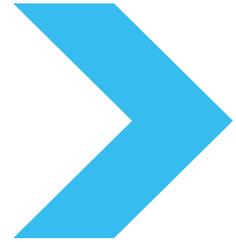
29 The Journal of Portfolio Management, Volume 39 Number 2, "Bond Market Price Discovery: Clarity Through the Lens of the Exchange," Winter 2013.

30 Investment Company Institute, "High-Yield Bond ETFs: A Source of Liquidity," December 2015.

31 BlackRock, "ETF Trading in a High-Velocity Market," March 2018; BlackRock, "Addressing Market Liquidity: A broader Perspective on Today's Bond Markets," February 2016.

32 Greenwich Associates, "ETFs: Valuable Versatility in a Newly Volatile Market," 2Q 2018.

Conclusion



ETFs have come a long way since a first-of-its-kind product linked to the performance of large U.S. stocks hit the market in 1993.

Over the past two and a half decades, it appears global investors have recognized the potential benefits of ETFs. This financial technology affords a rich diversity of investment exposures at low cost, along with transparency and liquidity.

On the shoulders of past growth, BlackRock believes there is tremendous future potential, with global ETF assets poised to more than double, to \$12 trillion, by the end of 2023.³³ Four trends have aligned and, together, represent a decades-in-the-making ETF movement that BlackRock believes is only getting started.

³³ BlackRock; Global Business Intelligence, as of May 2018.

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