



ETF Foundations

An Introduction to Exchange Traded Funds

November 2017



iShares[®]
by BLACKROCK[®]

Agenda

What are
Exchange
Traded Funds
(ETFs)?



Who's using
ETFs and why?



How to use
ETFs?

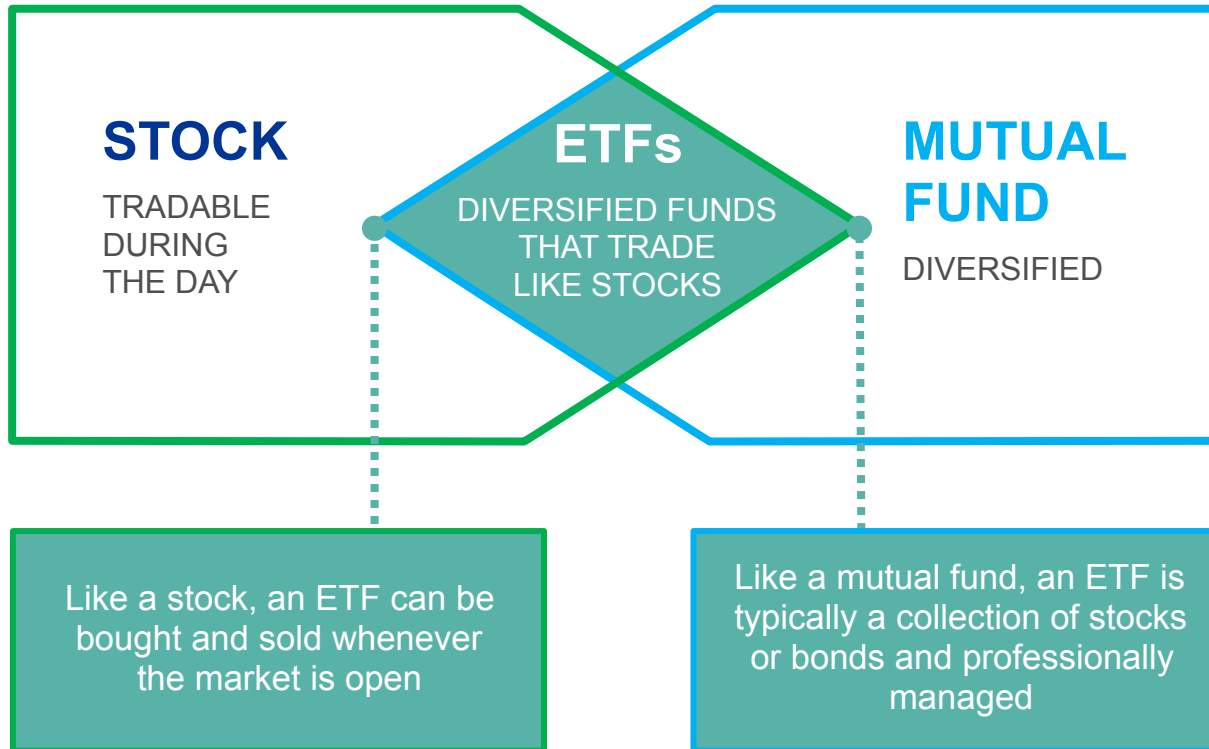




What are ETFs?

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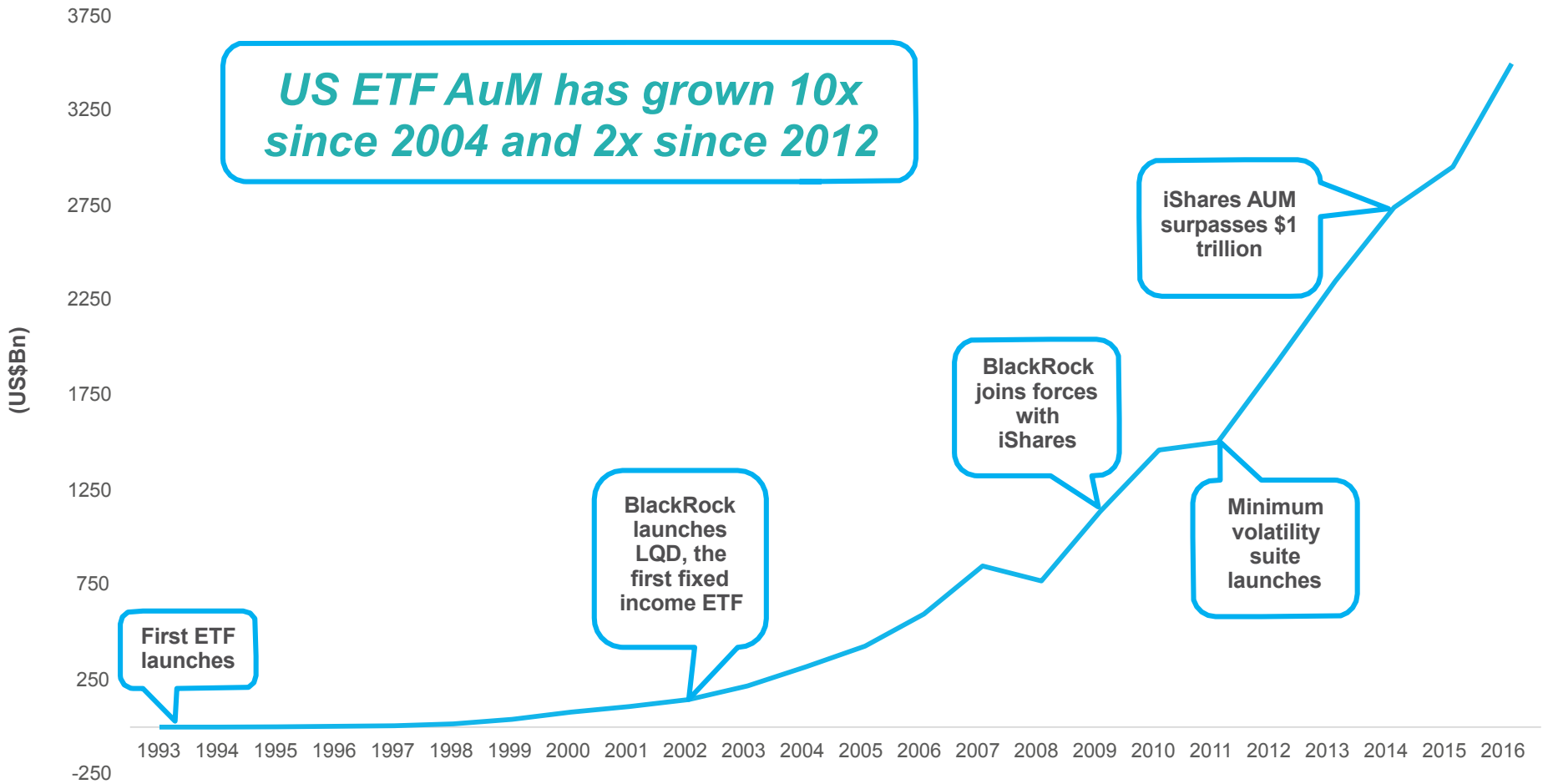
ETFs offer a **diversified, easy-to-use, low cost, and tax efficient** way to invest



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. For more information on the differences between traditional mutual funds and ETFs, see Appendix.

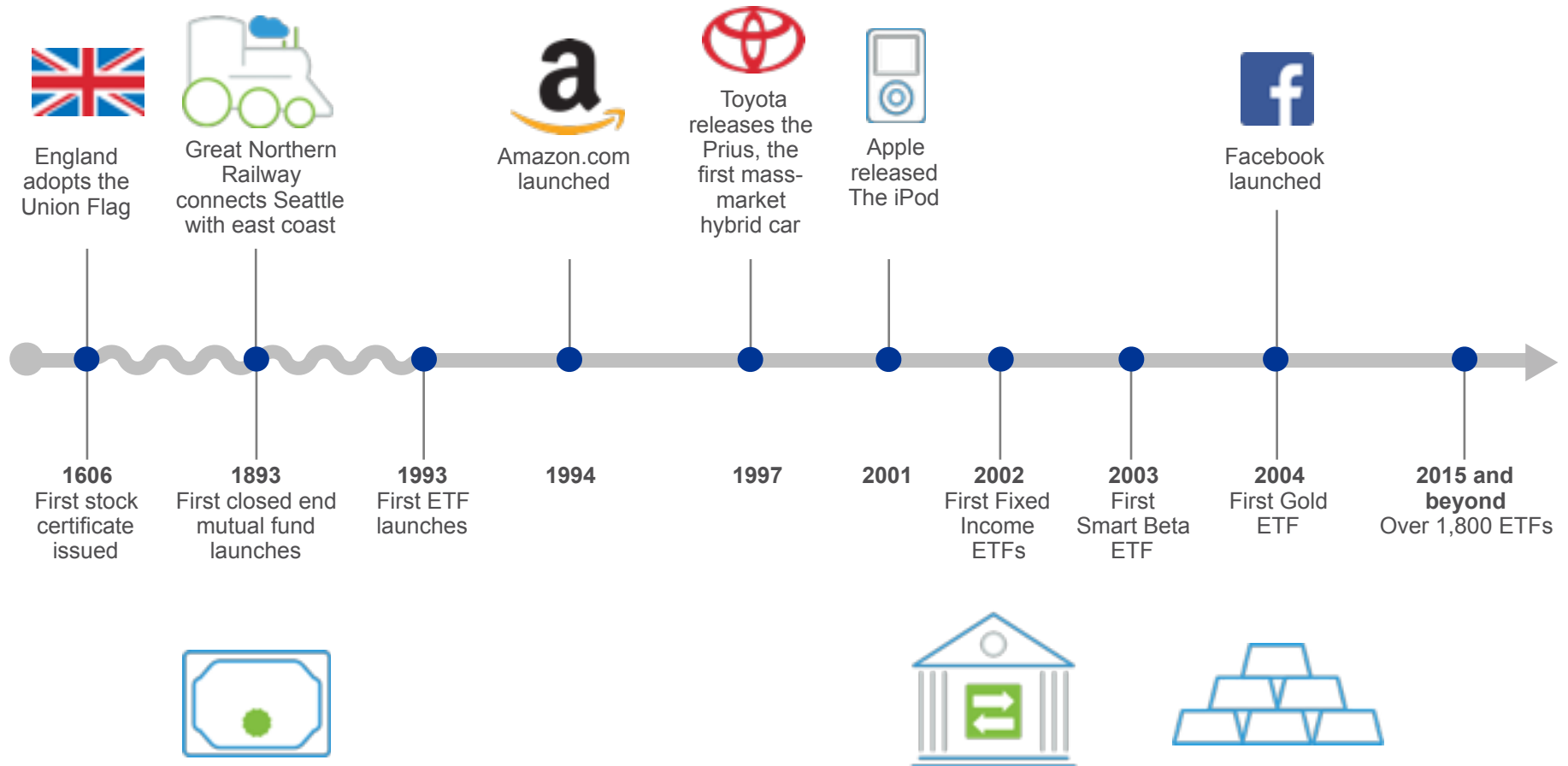
iShares Has Driven the Evolution and Growth of the ETF Industry

Launched in 1993, ETFs reached more than \$3.5 trillion in assets globally in 2016



Source: Data is as of December 31, 2016 for Europe and December 31, 2015 for the US, Canada, Latin America, and some Asia ETPs. Global ETP flows and assets are sourced using shares outstanding and net asset values from Bloomberg, as well as BlackRock internal sources, for the US, Canada, Europe, Latin America and some ETPs in Asia. For Middle East and Africa, assets and net flows data is not available.

Investing landscape is evolving



Sources: Stocks: <http://www.exploringmarkets.com/2013/12/the-first-stock-certificate-ever-issued.html> Mutual Funds: <http://www.investopedia.com/articles/mutualfund/05/mfhistory.asp> ETFs: https://en.wikipedia.org/wiki/Exchange-traded_fund; OnThisDay.com; Smart Beta: <http://www.cnbc.com/2016/01/19/10-things-investors-need-to-know-about-smart-beta.html>
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Who's using ETFs and why?

More Investors Today are Utilizing ETFs

All investor bases are driving the growth of the ETF industry

ETFs or mutual funds?



94%

of advisors expect to use ETFs in their client portfolios in 2017

80%

of advisors already manage portfolios with at least one ETF investment

1/3

of millennial investors are already using ETFs to start building their portfolios

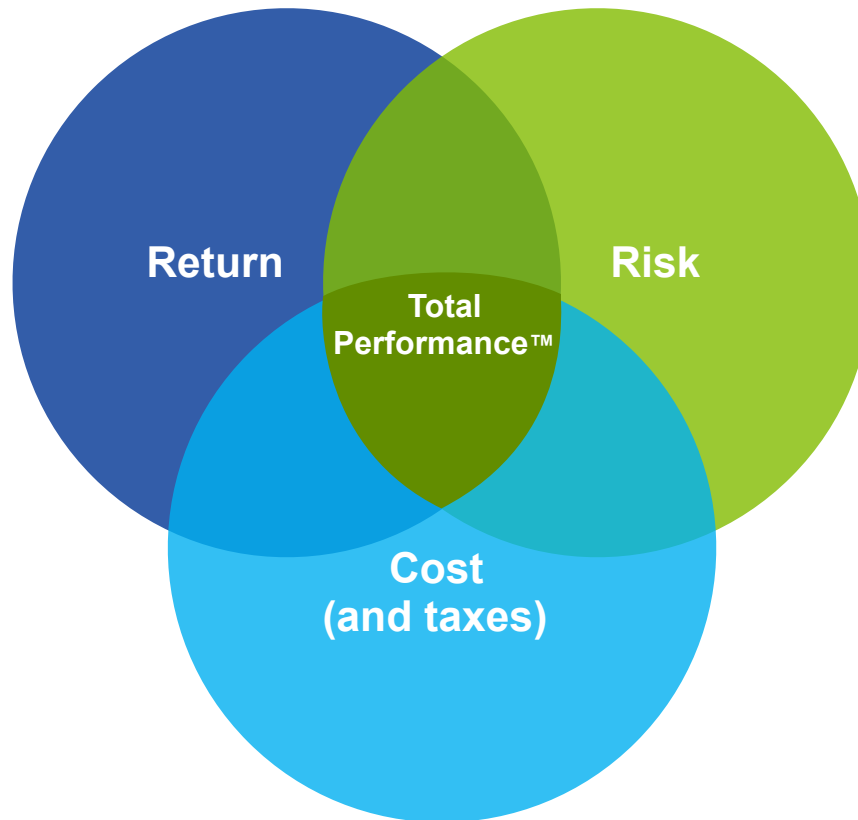
Source: BlackRock ETF Pulse Survey 2017. This study was sponsored by BlackRock.

Why do investors use ETFs?

Seek to outperform other investments

Performance vs. active funds

Expressing a view



Manage risk

Diversification

Tradability and flexibility

Knowing what you own

Keep more of what you earn

Cost effectiveness

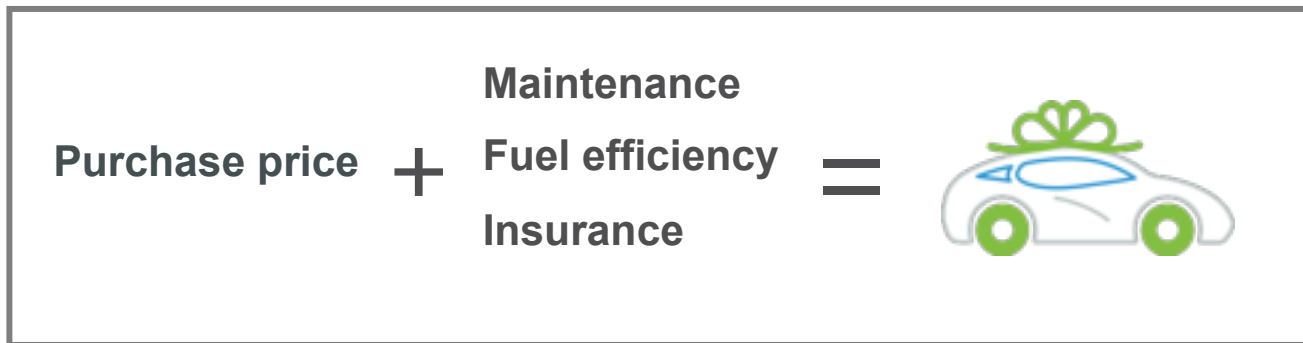
Tax efficiency

Past performance does not guarantee future results. Diversification may not protect against market risk. Transactions in shares of iShares funds may result in brokerage commissions.

Expense ratio is only one part of the total cost of ownership



Costs to consider:

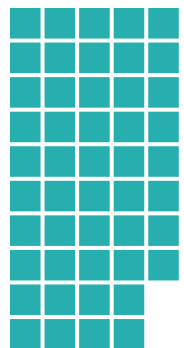


Explicit costs are predetermined based on the ETF's fees and brokerage firm's commission schedule. Implicit costs may vary based on market events and trading volume. Implicit costs may change continuously based on current market conditions.

iShares ETFs have been more tax efficient

Percentage of funds that paid capital gains in 2016

Active mutual funds*



48%

All
ETFs

Vanguard

11%



State Street

14%

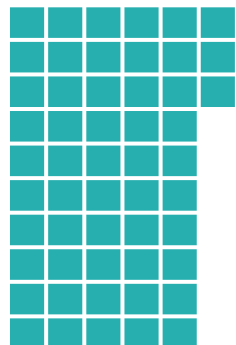


iShares

6%



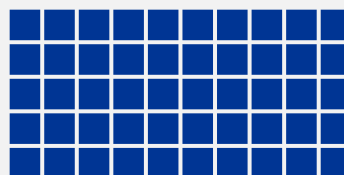
Index mutual funds*



53%

Fixed
Income
ETFs

50%



16%



9%

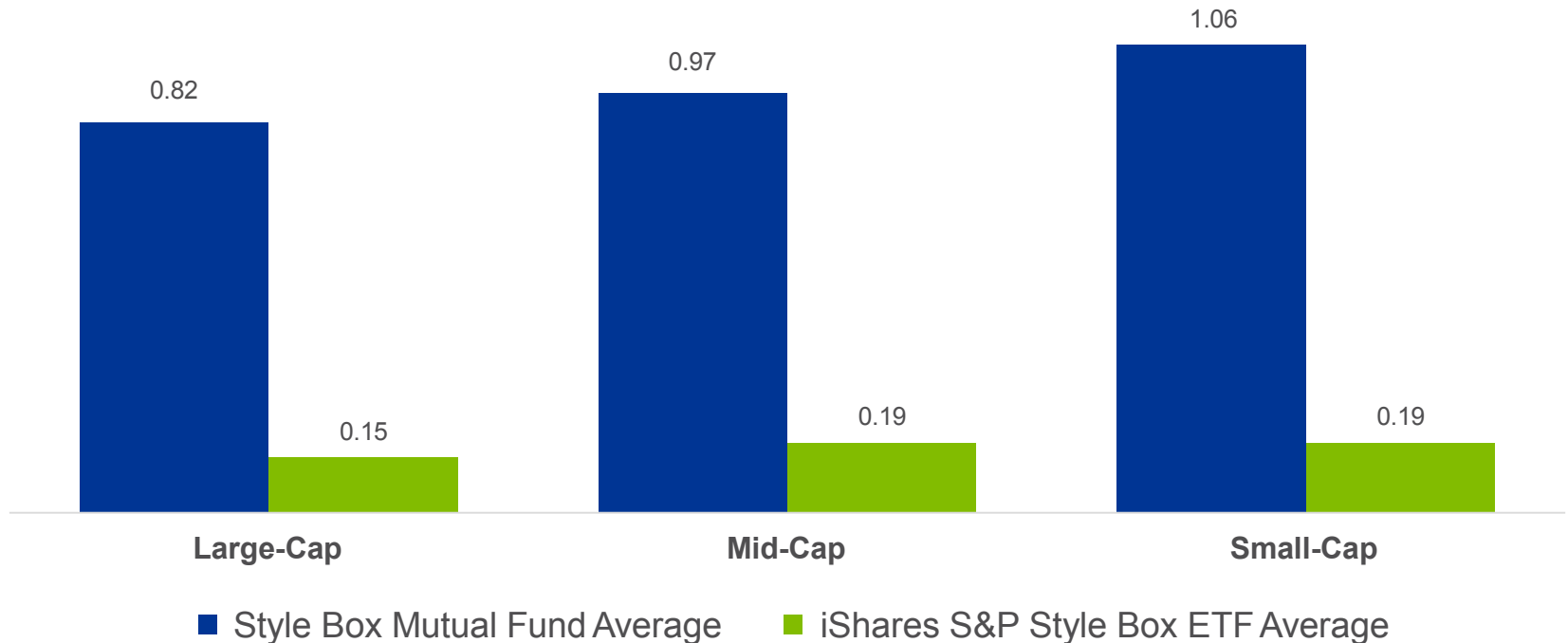


* Represented by the oldest share class of each Open-End Mutual Fund in the United States that inceptioned on or before 10/31/15.

Sources: BlackRock, Morningstar as of 12/31/16. **Past distributions are not indicative of future distributions.** Transactions in shares of the iShares Funds will generate tax consequences. iShares Funds are obliged to distribute portfolio gains to shareholders. Information on Vanguard and State Street ETFs is provided strictly for illustrative purposes and should not be deemed an offer to sell or a solicitation of an offer to buy shares of any funds, other than iShares ETFs, that are described in this material.

Low Cost: Don't Overpay for Style Box Exposure

Average Mutual Fund Costs by Style Box Category vs. iShares Style Box ETFs



Source: Morningstar as of 06/30/2017. Comparison is between the prospectus net expense ratio for the oldest share class of active U.S. mutual funds and oldest share class iShares ETFs. Past performance not indicative of future distributions.

iShares Core ETFs

quality at a low cost

iShares Core ETFs offer the product breadth, low cost and tax-efficiency to help create a strong foundation for your portfolio, including:

iShares ETFs			Vanguard ETFs			
			Expense Ratio			
S&P 500	iShares Core S&P 500 ETF	IVV	0.04%	0.04%	VOO	Vanguard S&P 500 ETF
Total Market	iShares Core S&P Total U.S. Stock Market ETF	ITOT	0.03%	0.04%	VTI	Vanguard Total Stock Market
Mid-Cap	iShares Core S&P Mid-Cap ETF	IJH	0.07%	0.06%	VO	Vanguard Mid-Cap ETF
Small-Cap	iShares Core S&P Small-Cap ETF	IJR	0.07%	0.06%	VB	Vanguard Small-Cap ETF
High Dividend	iShares Core High Dividend ETF	HDV	0.08%	0.08%	VYM	Vanguard High Dividend ETF
Dividend Growth	iShares Core Dividend Growth ETF	DGRO	0.08%	0.08%	VIG	Vanguard Dividend Appreciation ETF
Total Int'l Market	iShares Core MSCI Total International Stock ETF	IXUS	0.11%	0.11%	VXUS	Vanguard Total International Stock ETF
Int'l Developed	iShares Core MSCI EAFE ETF	IEFA	0.08%	0.07%	VEA	Vanguard FTSE Developed Markets ETF
Emerging Markets	iShares Core MSCI Emerging Markets ETFs	IEMG	0.14% ¹	0.14%	VWO	Vanguard FTSE Emerging Markets ETFs
Investment Grade	iShares Core U.S. Aggregate Bond ETF	AGG	0.05% ¹	0.05%	BND	Vanguard Total Bond Market ETF

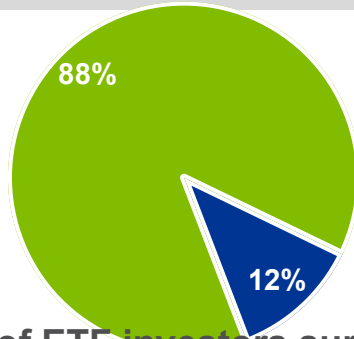
¹Net expense ratios shown for AGG and IEMG reflect contractual fee waivers in place until 6/30/26 and 12/31/17, respectively. Gross expense ratios are 0.06 and 0.15, respectively. Investment comparisons are for illustrative purposes only. This comparison is based upon and limited to the net expense ratios of the selected ETFs. To better understand the similarities and differences between investments, including investment objectives, risks, fees and expenses, it is important to discuss with your financial advisor and read the products' prospectuses.



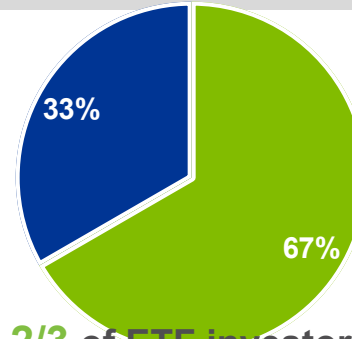
How to use ETFs?

88% of ETF investors surveyed consider ETFs a part of their long-term strategy, as they can be put to a variety of uses in a portfolio

ETFs are extremely versatile:



88% of ETF investors surveyed consider ETFs part of their long-term strategy



2/3 of ETF investors surveyed hold them for at least 3 years



Investors may use them to pursue **long term goals**, such as funding their retirement or growing wealth



ETFs can help achieve **specific objectives**, such as generating income or cushioning against choppy markets



Those with strong market views use ETFs to seek to **capture timely opportunities**, instead of picking individual stocks or bonds

Source: GfK conducted interviews with a total of 1,015 investor and 251 advisors. To qualify, investors had to be 25 years old or older, have investable assets of at least \$100,000, be an investment decision-maker, and not delegate all decisions to an investment professional. Advisors had to provide clients with investment advice, work directly or on a team with retail clients and personally manage at least \$25MM in assets. Interviewing took place July 17 - July 31, 2014.

The flexibility of ETFs enables you to create diversified, low cost portfolios



Build a stronger Core



Invest internationally



Seek a steady source of income



Act on opportunities



Prepare for choppy markets

In summary



ETFs are funds that trade like a stock, which can be bought and sold whenever the market is open

ETFs are a diversified, low cost, and tax efficient way to invest



Use ETFs in many different ways:

- ▶ Build a **stronger Core** portfolio
- ▶ Seek a steady **source of income**
- ▶ **Prepare for choppy markets**
- ▶ Invest **internationally**
- ▶ Act on **opportunities**



The iShares difference

- ▶ Largest ETF provider in the world¹
- ▶ 800+ ETFs listed globally²
- ▶ Over \$1 trillion in assets²

1. Source: Based on number of ETFs, AUM and market share. Source: BlackRock as of 12/31/2016.

2. Based on 804 ETFs and \$1.29 trillion in assets under management globally as of 12/31/16.

Appendix

ETFs and traditional mutual funds: know the differences

ETFs AND TRADITIONAL MUTUAL FUNDS: KNOW THE DIFFERENCES

Criteria	iShares ETFs	Active Mutual Funds
Performance Goal	Track a benchmark	Outperform a benchmark
Management	Passive	Active
Performance Risks	<ul style="list-style-type: none"> ▶ Performance may differ from benchmark ▶ Holdings not altered during rising/falling markets 	<ul style="list-style-type: none"> ▶ May not meet performance goals ▶ May underperform due to manager's holdings selection
Buying/Selling Shares	Intraday on exchanges	Once per day via fund company
Price to Buy/Sell	Current market price, which may differ from NAV	End-of-day NAV, less fees
Fees	Expense ratio + transaction/brokerage costs	Expense ratio + any sales loads/redemption fees
Tax Impact ¹ of Buyers/Sellers	Shareholders only impacted by their own action	Shareholders may be impacted by all other shareholders' actions
Holdings Disclosure	Daily	Typically quarterly

1. Both vehicles are obliged to distribute capital gains to all shareholders.

Carefully consider the 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.

International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. These risks often are heightened for investments in emerging/ developing markets, and in concentrations of single countries.

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. Non-investment-grade debt securities (high-yield/junk bonds) may be subject to greater market fluctuations, risk of default or loss of income and principal than higher-rated securities.

There is no guarantee that any fund will pay dividends.

The iShares Minimum Volatility ETFs may experience more than minimum volatility as there is no guarantee that the underlying index's strategy of seeking to lower volatility will be successful.

When comparing stocks or bonds and iShares Funds, it should be remembered that management fees associated with fund investments, like iShares Funds, are not borne by investors in individual stocks or bonds.

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.

Diversification and asset allocation may not protect against market risk or loss of principal.

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.

The iShares Funds are distributed by BlackRock Investments, LLC (together with its affiliates, "BlackRock").

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