

# Factor Investing by iShares

Smart Beta strategies for  
the core of your portfolio

# Active funds are under pressure

Underperformance. High fees. Capital gains distributions.

## Active equity mutual funds

**90%** underperformed their benchmark over the last fifteen years<sup>1</sup>

**1.07%** average expense ratio<sup>2</sup>

**69%** distributed capital gains in 2017<sup>3</sup>

**\$659 billion**  
equity outflows  
past 3 years<sup>4</sup>

<sup>1</sup> Source: SPIVA U.S. Scorecard as of 6/30/18. "Active Equity Mutual Funds" comprised of equal weight composite of All Domestic Funds Category, Global Funds Category, International Funds Category, International Small-Cap Funds Category & Emerging Markets Funds Category. Actual number for All Domestic Funds underperforming their benchmark is 83.76%, for Global Funds is 91.24%, for International Funds is 93.56%, for International Small-Cap Funds is 90.00% and for Emerging Markets Funds is 90.80%. Past performance is not indicative of future results. <sup>2</sup> Source: Morningstar Direct as of 9/30/18. Based on average U.S., Global, International & Emerging Market active manager fees. <sup>3</sup> Morningstar as of 9/30/2018, uses all U.S., Global, International & Emerging market active funds. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar as of 9/30/18. 3 year net flows for all active equity U.S. mutual funds.

# Data and technology are changing everything, including investing

## Innovators transform data into insights

1 billion hours ago, **humanity emerged**

1 billion seconds ago, **IBM released first PC**

**1 billion Google searches ago, was this morning**

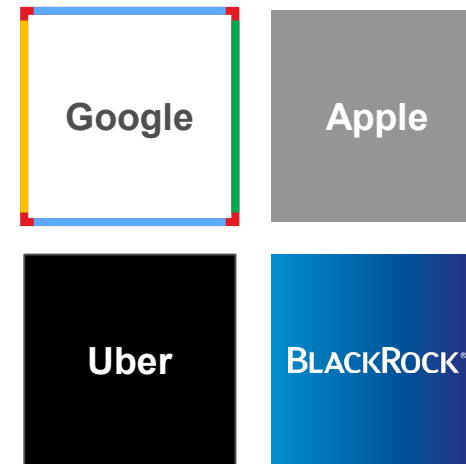


**IN 60 SECONDS\***

**159m**  
E-mails  
are sent

**4.3m**  
YouTube  
videos viewed

## When we need a better way, we innovate through technology













**Seeking outperformance at a lower cost**

Companies shown for illustrative purposes only and should not be deemed an offer to sell or a solicitation of an offer to buy shares of any security.

(2013) Hal Varian, "Beyond Big Data".  
<http://people.ischool.berkeley.edu/~hal/Papers/2013/BeyondBigDataPaperFINAL.pdf>  
\*Internet live stats as of December 2017.

# What are factors and why have they worked?

iShares Factor ETFs employ the same intuitive screens used by active managers for generations, but offer the low cost and tax efficiency of traditional ETFs.










	Factor	Objective	Screens	Usage
 <p>Seek outperformance</p>	 <p><b>Value</b></p>	Invests in stocks that are inexpensive relative to fundamentals	<ul style="list-style-type: none"> <li>• Price/forward earnings</li> <li>• Price/book</li> <li>• Enterprise value/cash flow</li> </ul>	
	 <p><b>Quality</b></p>	Invests in companies with healthy balance sheets	<ul style="list-style-type: none"> <li>• Return on equity</li> <li>• Earnings consistency</li> <li>• Debt to equity</li> </ul>	
	 <p><b>Momentum</b></p>	Invests in stocks on an upswing	<ul style="list-style-type: none"> <li>• Risk-adjusted price momentum</li> </ul>	
 <p>Reduce risk</p>	 <p><b>Minimum Volatility</b></p>	Invests in stocks that have collectively exhibited lower volatility	<ul style="list-style-type: none"> <li>• Measures volatility of each stock in the broad market index</li> <li>• Analyze correlations between stocks, sectors and countries</li> </ul>	

# HOW DO YOU BUILD PORTFOLIOS?

## U.S. Style Box

## Total Market Core

“The new style box”

		Morningstar category	Large Value	Large Blend	Large Growth
Value Blend Growth Large    Mid    Small   	Market cap weighted		<b>IUSV</b> 0.04%	<b>IVV</b> 0.04%	<b>IUSG</b> 0.04%
	Smart beta	Overall Morningstar rating (Based on risk adjusted returns) <sup>1</sup>	<b>VLUE</b> 0.15%	<b>QUAL</b> 0.15%	<b>MTUM</b> 0.15%
	Smart beta	Number of funds rated against	★★★★ 1,100	★★★★ 1,208	★★★★★ 1,247
	SEEK MARKET RETURNS				
	SEEK OUTPERFORMANCE				
	SEEK REDUCED VOLATILITY	Overall Morningstar rating (Based on risk adjusted returns) <sup>1</sup>		<b>USMV</b> 0.15%	
		Number of funds rated against		★★★★★ 1,208	

**Did you know?**  
No one is lower in large caps – a **0.04% expense ratio is the industry low** for S&P 500, Large Value, and Large Growth ETFs.<sup>2</sup>

**ETFs have stars?**  
**VLUE, QUAL** and **MTUM** have all earned 4- or 5-star Morningstar ratings

**Stay invested.**  
**USMV** has delivered **18% less risk** on average than the broad market.<sup>3</sup>

Expense ratios are shown below ticker symbols.

<sup>1</sup> Source: Morningstar as of 12/31/18. Past performance does not guarantee future results. For more information on Morningstar Ratings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18; uses all ETFs in the Large Value category for IUSV, all ETFs in the Large Blend category for IVV, and all ETFs in the Large Growth category for IUSG. <sup>3</sup> Source: Morningstar as of 12/31/18. Based on annualized risk between 11/1/11 – 12/31/18. Annualized risk represented by standard deviation which measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. Data compares USMV to the S&P 500 Index.

# HOW DO YOU BUILD PORTFOLIOS?

U.S. Style Box

Total Market Core

Go global with factors



Expand your horizons

Use factors around the globe

		U.S.	Int'l	EM
Market cap weighted <b>SEEK MARKET RETURNS</b>		<b>ITOT</b> 0.03%	<b>IEFA</b> 0.08%	<b>IEMG</b> 0.14%
Smart beta <b>SEEK OUTPERFORMANCE</b>	Overall Morningstar rating (Based on risk adjusted returns) <sup>1</sup>  Number of funds rated against	Large Value <b>LRGF</b> 0.20%  ★★★ 1,100	Foreign Large Blend <b>INTF</b> 0.30%  ★★★ 639	Diversified EM <b>EMGF</b> 0.45%*  ★★★ 708
Smart beta <b>SEEK REDUCED VOLATILITY</b>	Overall Morningstar rating (Based on risk adjusted returns) <sup>1</sup>  Number of funds rated against	Large Blend <b>USMV</b> 0.15%  ★★★★★ 1,208	Foreign Large Blend <b>EFAV</b> 0.20%*  ★★★★★ 639	Diversified EM <b>EEMV</b> 0.25%*  ★★★★ 708

Expense ratios are shown below ticker symbols.

**Did you know?**

No one is lower. A **0.03%** expense ratio is the **industry low** for U.S. equity ETFs.<sup>2</sup>

**ETFs have stars?**

**LRGF, INTF, and EMGF** all have a **3-star Morningstar rating**

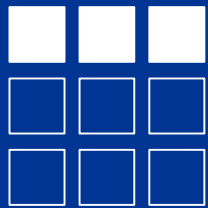
**Stay invested.**

**EFAV and EEMV** have both delivered **23% less risk** on average than the broad market.<sup>3</sup>

\*Net expense ratios shown for EMGF, EFAV and EEMV reflect contractual fee waivers in place until 12/31/21, 11/30/21, and 12/31/23, respectively. Gross expense ratios are 0.48%, 0.31%, and 0.67%, respectively. 1 Source: Morningstar as of 12/31/18. **Past performance does not guarantee future results.** For more information on Morningstar Ratings, please see the end of this document. 2 Source: Morningstar as of 12/31/18, uses all ETFs in the industry. 3 Source: Morningstar as of 12/3/18. Based on annualized risk between 11/1/11 – 12/31/18. Annualized risk represented by standard deviation which measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. Data compares EFAV to the MSCI EAFE Index and EEMV to the MSCI Emerging Markets Index.

# Factor Investing

Ways to get started



## Single Factors

SEEK OUTPERFORMANCE  
**“The New Style Box”**



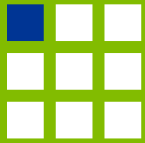
## Multifactor

SEEK OUTPERFORMANCE  
**Total Market Core**



## Minimum Volatility

REDUCE VOLATILITY  
**Keep your clients invested**



SINGLE FACTORS

# A new value for your style box

VLUE invests in stocks that are inexpensive relative to fundamentals.



Factor  
Value

Screens

Price/forward earnings

Price/book

Enterprise value/cash flow

## Strong performance

Outperformed **72%** of its peers on a 5 year basis<sup>1</sup>

Fund is rated against 937 funds in the large cap value Morningstar category, based on total return.

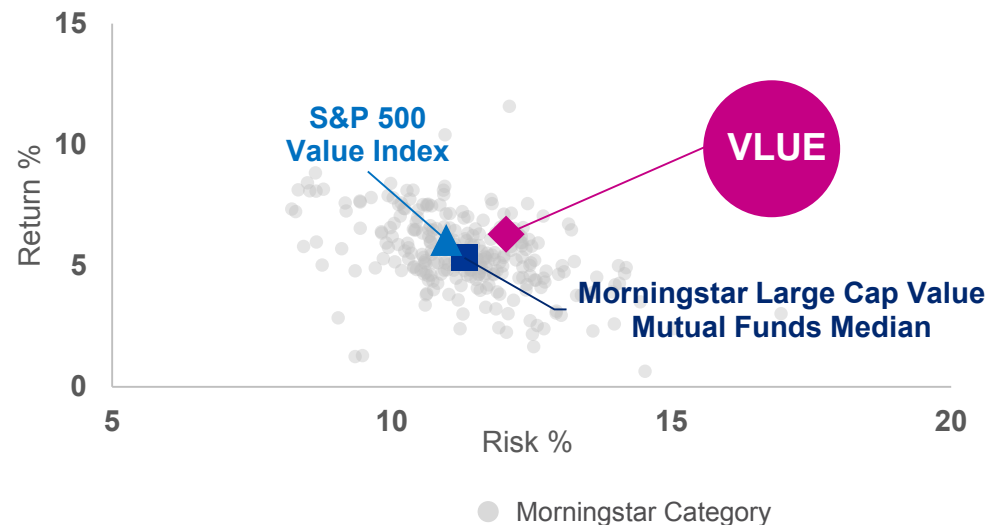
## Low cost

Expense ratio is **lower than 98%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

VLUE has **never paid a capital gains distribution**<sup>3</sup>

## VLUE vs. Morningstar competitor mutual funds<sup>4</sup> (1/1/2014-12/31/2018)



<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active large cap value mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 5 year performance for period ending 12/31/18. Universe includes the institutional share class of actively managed large cap value funds with 5 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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SINGLE FACTORS

# A new blend for your style box

QUAL invests in companies with healthy balance sheets.



Factor  
Quality

Screens

Return on equity

Earnings consistency

Debt to equity

## Strong performance

Outperformed **81%** of its peers on a 5 year basis<sup>1</sup>

Fund is rated against 1,071 funds in the large cap blend Morningstar category, based on total return.

## Low cost

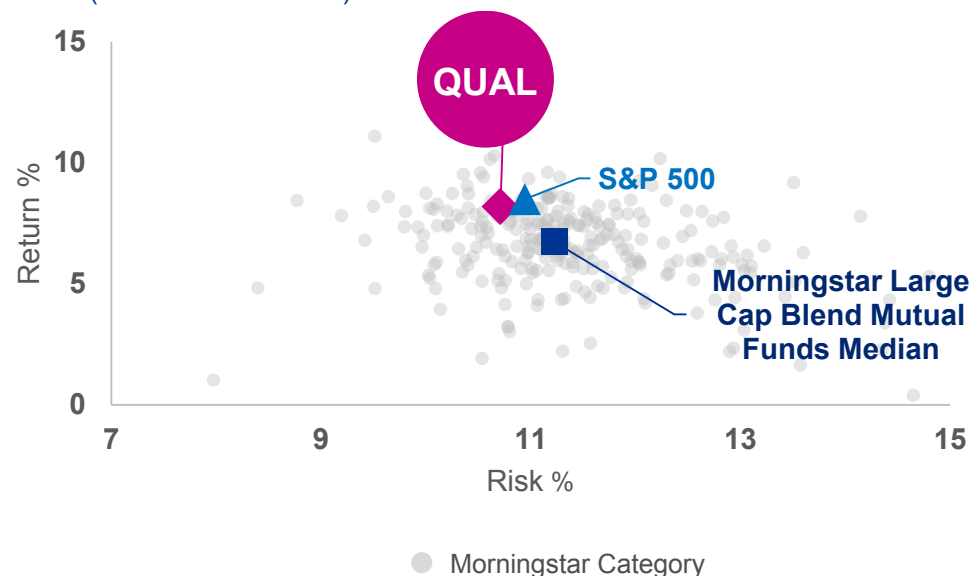
Expense ratio is **lower than 98%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

QUAL has **never paid a capital gains distribution**<sup>3</sup>

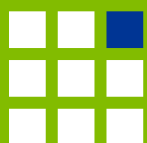
## QUAL vs. Morningstar competitor mutual funds<sup>4</sup>

(1/1/2014-12/31/2018)



<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active large cap blend mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 5 year performance for period ending 12/31/18. Universe includes the institutional share class of actively managed large cap blend funds with 5 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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SINGLE FACTORS

# A new growth for your style box

MTUM invests in stocks on an upswing.

MTUM



Factor  
Momentum

Screens

Risk adjusted price momentum

## Strong performance

Outperformed **97%** of its peers on a 5 year basis<sup>1</sup>

Fund is rated against 1,107 funds in the large cap growth Morningstar category, based on total return.

## Low cost

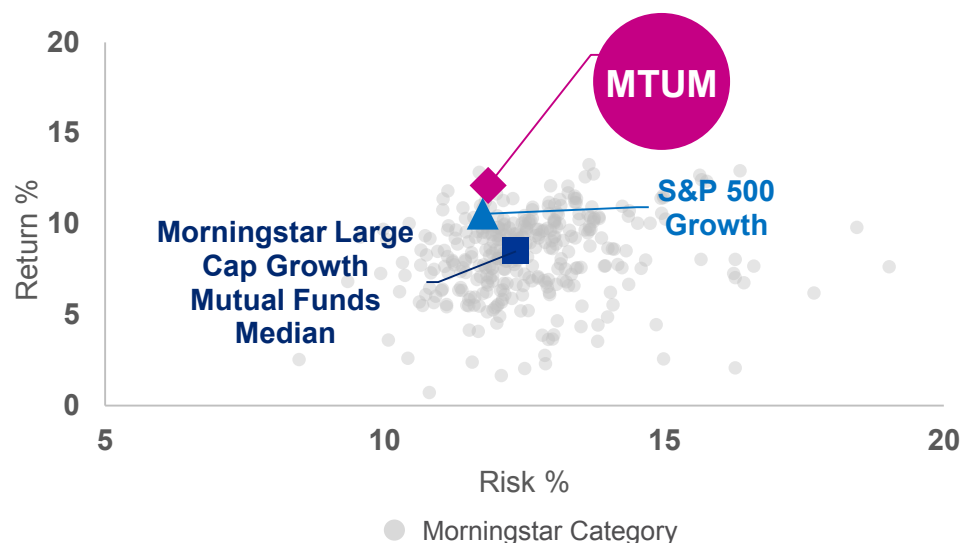
Expense ratio is **lower than 98%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

MTUM has **never paid a capital gains distribution**<sup>3</sup>

## MTUM vs. Morningstar competitor mutual funds<sup>4</sup>

(1/1/2014-12/31/2018)

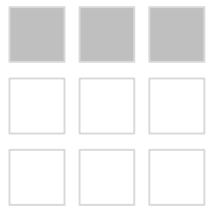


<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active large cap growth mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 5 year performance for period ending 12/30/18. Universe includes the institutional share class of actively managed large cap growth funds with 5 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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# Factor Investing

Ways to get started



**Single Factors**

SEEK OUTPERFORMANCE  
**“The New Style Box”**



**Multifactor**

SEEK OUTPERFORMANCE  
**Total Market Core**



**Minimum  
Volatility**

REDUCE VOLATILITY  
**Keep your clients invested**



MULTIFACTOR

# Combining factors can reduce volatility of returns

Single factor strategies have low historical correlation, so combining them within Multifactor ETFs can deliver greater consistency of returns.

## U.S. factors calendar year fund returns (%)

2014	2015	2016	2017	2018	Annual return 2014 – 2018
Min Vol 16.34	Momentum 9.12	Value 15.68	Momentum 37.60	Min Vol 1.36	Momentum 12.11
Size 15.78	Quality 5.56	Size 13.32	Quality 22.26	Momentum -1.77	Min Vol 10.34
Momentum 14.48	Min Vol 5.50	Min Vol 10.50	Value 21.97	Quality -5.77	Quality 8.19
Value 12.29	Size 0.37	Quality 9.18	Min Vol 18.97	Size -6.51	Size 7.92
Quality 11.62	Value -3.54	Momentum 4.89	Size 18.88	Value -11.18	Value 6.30

Source: Morningstar as of 12/31/18. Min Vol represented by the iShares Edge MSCI USA Min Vol ETF, Size represented by the iShares Edge MSCI USA Size Factor ETF, Momentum represented by the iShares Edge MSCI USA Momentum Factor ETF, Value represented by the iShares Edge MSCI USA Value Factor ETF, Quality represented by the iShares Edge MSCI USA Quality Factor ETF.

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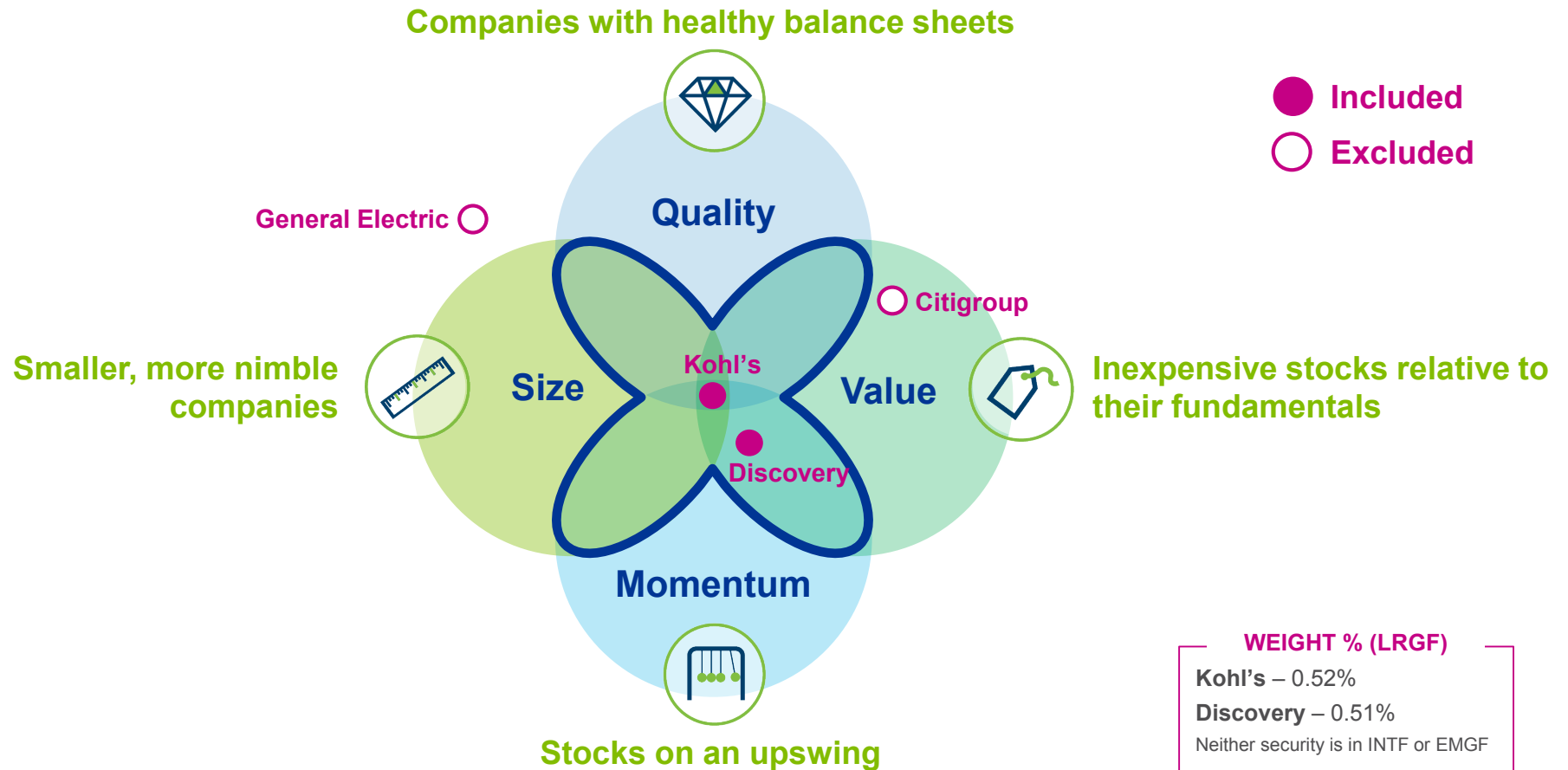


MULTIFACTOR

# iShares Multifactor ETFs

Multifactor strategies seek to invest in companies with multiple attractive characteristics. The funds employ sector and security constraints so you can use them in the core of your portfolio.

## Select stocks that exhibit multiple favorable characteristics





MULTIFACTOR

# A new core for your U.S. exposure

LRGF

LRGF is a U.S. large cap core portfolio — for investors seeking the potential for outperformance vs. the broad market.



Value



Quality



Momentum



Size

## Strong performance

Outperformed 64% of its peers on a 3 year basis<sup>1</sup>

Fund is rated against 1,100 funds in the large cap value Morningstar category, based on total return.

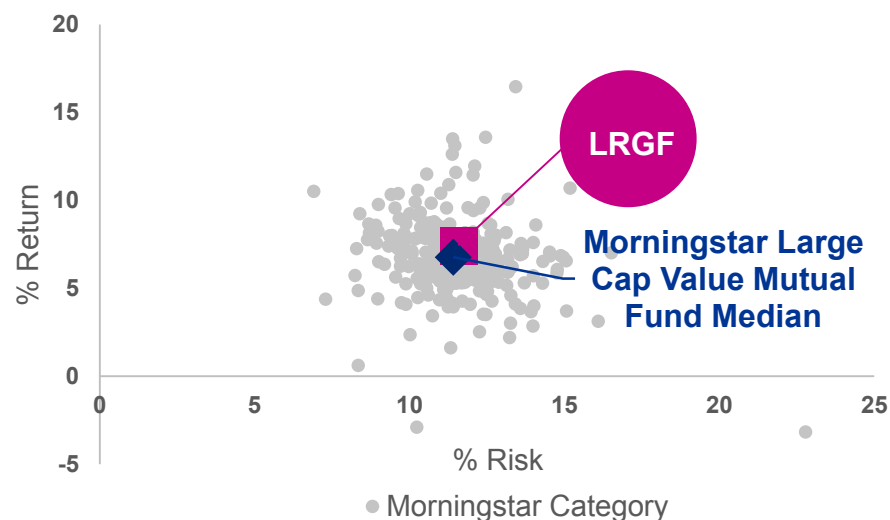
## Low cost

Expense ratio is **lower than 98%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

LRGF has **never paid a capital gains distribution**<sup>3</sup>

## LRGF vs. Morningstar competitor mutual funds<sup>4</sup> (1/1/2016-12/31/18)



<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active large cap value mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 3 year performance for period ending 12/31/18. Universe includes the institutional share class of actively managed funds with 3 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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MULTIFACTOR

# A new core for your Int'l exposure



INTF is an international core allocation—for investors seeking the potential for outperformance with the low cost and tax efficiency of traditional ETFs.



Value



Quality



Momentum



Size

## Strong performance

Outperformed 43% of its peers on a 3 year basis<sup>1</sup>

Fund is rated against 639 funds in the foreign large blend Morningstar category, based on total return.

## Low cost

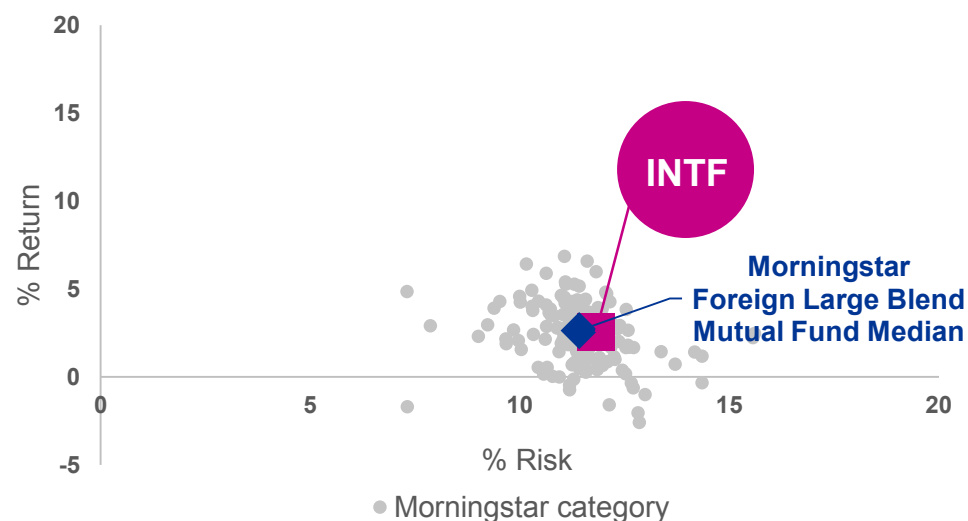
Expense ratio is **lower than 98%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

INTF has **never paid a capital gains distribution**<sup>3</sup>

## INTF vs. Morningstar competitor mutual funds<sup>4</sup>

(1/1/2015-12/31/18)



<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active foreign large blend mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 3 year performance for period ending 9/30/18. Universe includes the institutional share class of actively managed foreign large blend funds with 3 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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MULTIFACTOR

# A new core for your EM exposure

EMGF

EMGF is an emerging market core allocation for investors seeking the potential for outperformance with the low cost and tax efficiency of traditional ETFs.



Value



Quality



Momentum



Size

## Strong performance

Outperformed 55% of its peers since inception<sup>1</sup>

Fund is rated against 786 funds in the diversified emerging markets Morningstar category, based on total return.

## Low cost

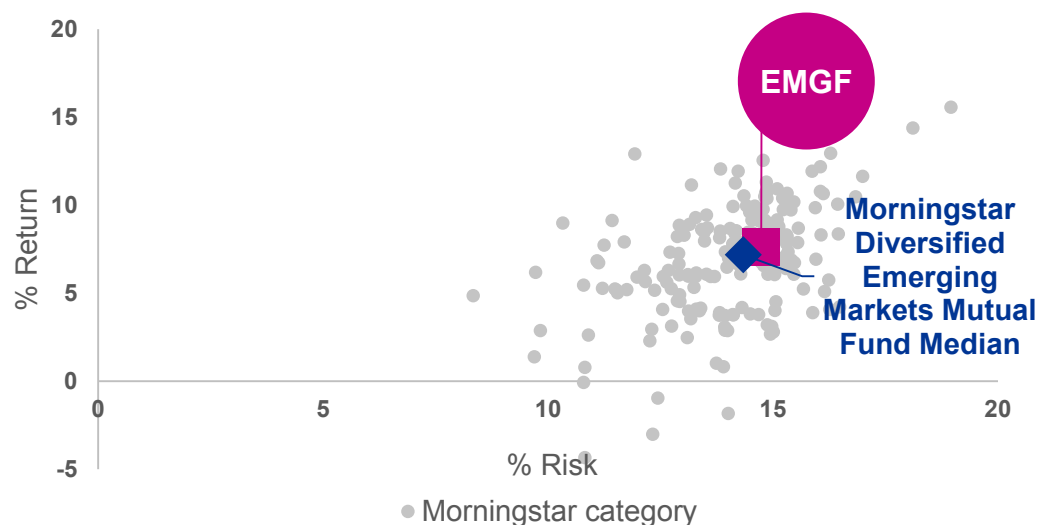
Expense ratio is **lower than 97%** of its active mutual fund peers<sup>2</sup>

## Tax efficient

EMGF has **never paid a capital gains distribution**<sup>3</sup>

## EMGF vs. Morningstar competitor mutual funds<sup>4</sup>

(1/1/2016-12/31/2018)



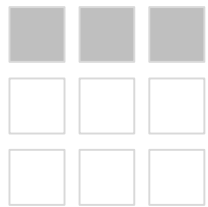
<sup>1</sup> Source: Morningstar as of 12/31/18. Comparison universe is ETFs and mutual funds in the Morningstar category. For more information on Morningstar Rankings, please see the end of this document. <sup>2</sup> Source: Morningstar as of 12/31/18, based on average prospectus net expense ratios for active diversified emerging markets mutual funds (Morningstar category). <sup>3</sup> Source: BlackRock as of 12/31/2018. **Past distributions are not indicative of future distributions.** <sup>4</sup> Source: Morningstar, 3 year performance for period ending 9/30/18. Universe includes the institutional share class of active diversified emerging markets funds with 3 years of performance. Risk, represented by standard deviation, measures how dispersed returns are around the average. A higher standard deviation indicates that returns are spread out over a larger range of values and thus, more volatile. For more information on the differences between ETFs and mutual funds, see the end of this document.

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# Factor Investing

Ways to get started



**Single Factors**

SEEK OUTPERFORMANCE  
**“The New Style Box”**



**Multifactor**

SEEK OUTPERFORMANCE  
**Total Market Core**



**Minimum  
Volatility**

REDUCE VOLATILITY  
**Keep your clients invested**

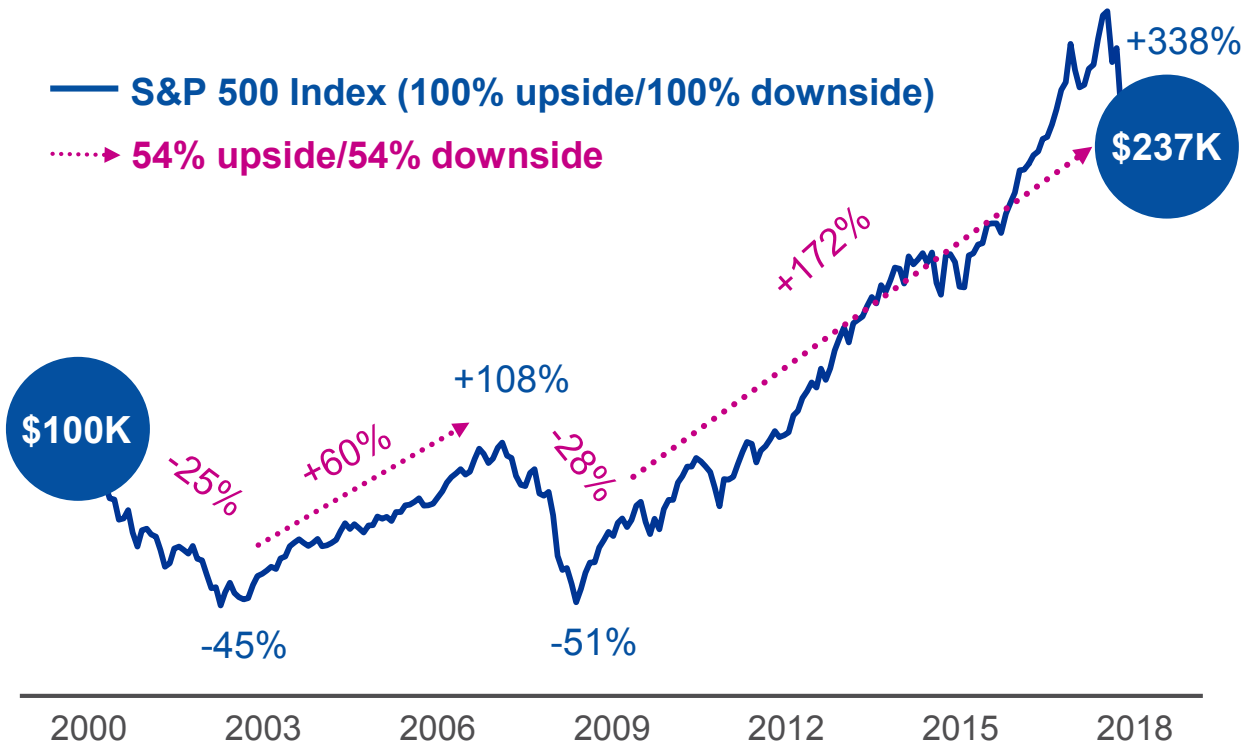


MINIMUM VOLATILITY

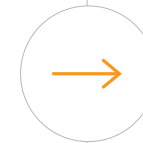
# Losing less can lead to winning more

Asymmetric upside/downside capture can lead to a better outcome.

**Growth of a hypothetical \$100k over the last two bear and bull markets for U.S. stocks**



Scenario	
Upside/downside	Ending value
S&P 500 Index 100%/100%	\$237K
Low volatility 54%/54%	\$237K



Other scenarios	
Upside/downside	Ending value
Avg. mutual fund* 101%/108%	\$206K
More up than down 60%/50%	\$278K

Source: Morningstar as of 8/31/00 – 12/31/18. Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. **Past performance does not guarantee future results.**

\* Average mutual funds include all equity funds for all Morningstar categories.

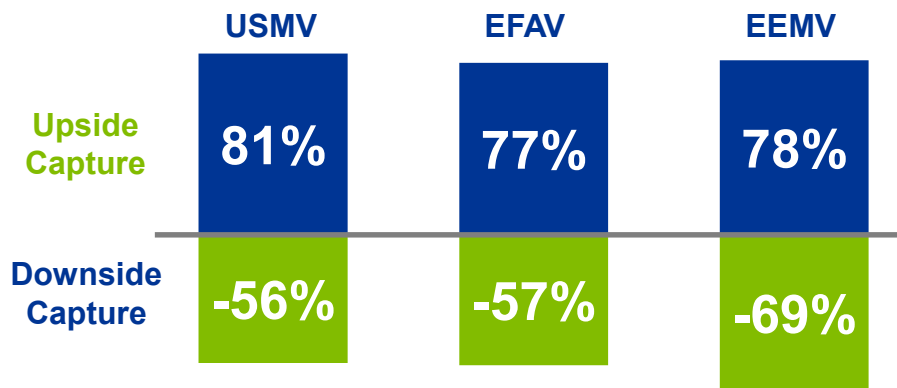


MINIMUM VOLATILITY

# Minimum Volatility ETFs have delivered market-like returns with less risk

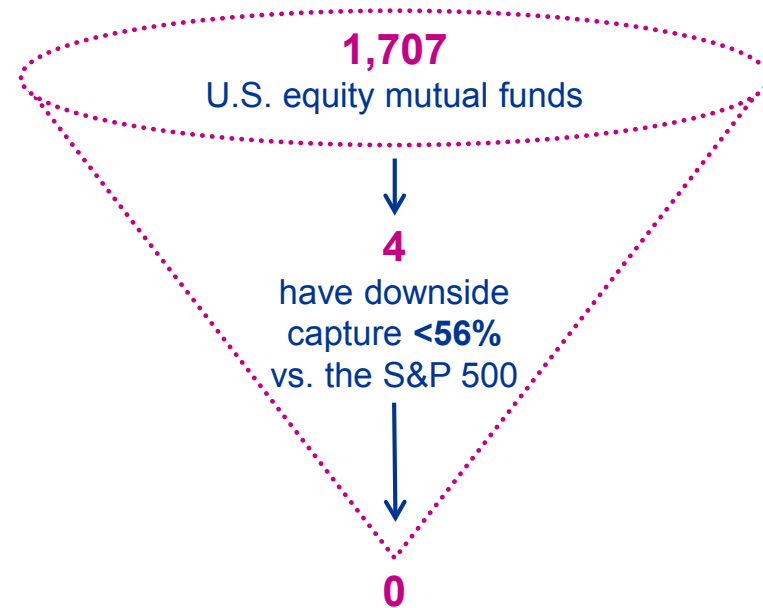
## Upside/downside capture

Since November 2011



Source: Morningstar as of 12/31/18. Based on fund and index returns from 11/1/11–12/31/18. Data compares USMV to the S&P 500 Index, EFAV to the MSCI EAFE Index and EEMV to the MSCI Emerging Markets Index.

## So how do other investments compare to USMV?

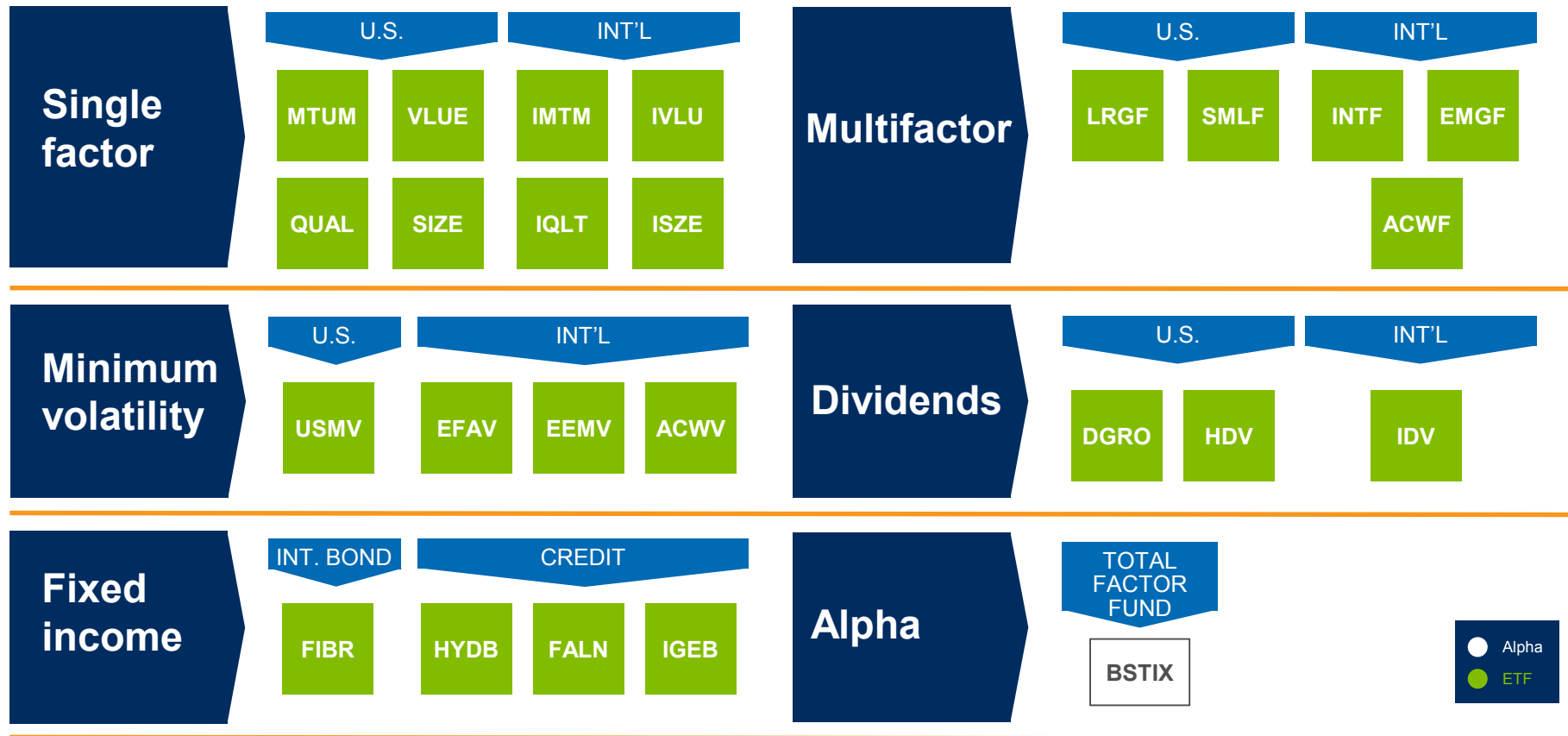


None of those 4 mutual funds have an upside capture >81% vs. the S&P 500

Source: Morningstar as of 12/31/18. Mutual Fund universe based on the oldest share class in the "U.S. Equity" Morningstar category inception before 11/1/2011. Past performance does not guarantee future results. For standardized performance, and to see how these funds performed against their benchmarks, please see Appendix.

# BlackRock's factor platform

Seek your desired outcome with our full suite of alpha and index factor strategies.



Blackrock manages over **\$209B** in factor-based strategies across equity, fixed income, and alternatives.\*

\*Source: BlackRock as of 12/31/2018.

# Appendix: ETFs and traditional mutual funds- know the differences

Criteria	Mutual funds	ETFs
<b>Management</b>	Active	Passive
<b>Performance goal</b>	Outperform a benchmark and/or deliver outcome	Track a benchmark
<b>Buying / selling shares</b>	Once per day via fund company	Intraday on exchanges
<b>Price to buy / sell</b>	End-of-day NAV, less fees	Current market price, which may differ from NAV
<b>Fees</b>	Expense ratio + any sales loads / redemption fees	Expense ratio + transaction / brokerage costs
<b>Tax impact<sup>1</sup> of buyers / sellers</b>	Shareholders may be impacted by all other shareholders' actions	Shareholders only impacted by their own action
<b>Holdings disclosure</b>	Typically monthly	Daily
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Opportunity to outperform the index</li> <li>• Potential to limiting the downside</li> <li>• Buy/sell decisions based on research</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure to market index</li> <li>• Generally lower fees</li> <li>• Typically more tax efficient</li> </ul>
<b>Trade-offs</b>	<ul style="list-style-type: none"> <li>• Potential to underperform index</li> <li>• Generally higher fees</li> <li>• Typically less tax efficient</li> </ul>	<ul style="list-style-type: none"> <li>• Does not seek to outperform index</li> <li>• Participate in all of index downside</li> <li>• Buy / sell decisions based on index, not research</li> </ul>

<sup>1</sup> Both vehicles are obliged to distribute capital gains to all shareholders.

# Appendix: Standardized performance as of 12/31/18

Fund Name	Fund Inception Date	Gross Expense Ratio	1-Year Returns		5-Year Returns		10-Year Returns		Since Inception	
			NAV	Mkt Price	NAV	Mkt Price	NAV	Mkt Price	NAV	Mkt Price
iShares Edge MSCI USA Quality Factor ETF (QUAL)	7/16/2013	0.15%	-5.77%	-5.79%	8.19%	8.20%	--	--	10.02%	10.03%
iShares Edge MSCI USA Value Factor ETF (VLUE)	4/16/2013	0.15%	-11.18%	-11.25%	6.30%	6.30%	--	--	8.97%	8.97%
iShares Edge MSCI USA Momentum Factor ETF (MTUM)	4/16/2013	0.15%	-1.77%	-1.80%	12.11%	12.12%	--	--	13.69%	13.70%
iShares Edge MSCI Min Vol USA ETF (USMV)	10/18/2011	0.15%	1.36%	1.32%	10.34%	10.34%	--	--	12.91%	12.91%
iShares Edge MSCI Multifactor USFA ETF (LRGF)	4/28/2015	0.20%	-9.79%	-9.79%	--	--	--	--	4.90%	4.91%
iShares Edge MSCI Multifactor Intl ETF (INTF)	4/28/2015	0.30%	-15.67%	-15.81%	--	--	--	--	0.96%	0.88%
iShares Edge MSCI Multifactor Emerging Markets ETF (EMGF)	12/08/2015	0.48%	-18.64%	-19.67%	--	--	--	--	7.09%	6.81%
iShares Edge MSCI Min Vol EAFE ETF (EFAV)	10/18/2011	0.31%	-5.80%	-5.69%	4.86%	4.74%	--	--	7.15%	7.15%
iShares Edge MSCI Min Vol Emerging Markets ETF (EEMV)	10/18/2011	0.67%	-6.07%	-5.84%	1.75%	1.68%	--	--	4.35%	4.38%
MSCI USA Minimum Volatility Index	--	--	1.55%	--	10.52%	--	13.41%	--	13.10%	--
MSCI EAFE Minimum Volatility (USD) Index	--	--	-5.69%	--	4.93%	--	--	--	7.24%	--
MSCI Emerging Markets Minimum Volatility Index	--	--	-5.78%	--	1.98%	--	--	--	4.58%	--

Fees as of Current Prospectus. All Other Data as of 12/31/18.

The performance quoted represents past performance of specific funds and does not guarantee future results for such funds. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than the original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by visiting [www.iShares.com](http://www.iShares.com) or [www.blackrock.com](http://www.blackrock.com). Shares of iShares Funds are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. Market returns are based upon the midpoint of the bid/ask spread at 4:00 p.m. eastern time (when NAV is normally determined for most iShares Funds), and do not represent the returns you would receive if you traded shares at other times. **Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.**

# Important information on Morningstar Ratings

The Morningstar Rating™ for funds, or "star rating", is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange-traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure (excluding any applicable sales charges) that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

Total return represents changes to the NAV and accounts for distributions from the funds (excluding any applicable sales charges).

In reference to slide 5: USMV received a Morningstar Rating of 5 and 5 stars rated against 1,208 and 1,071 Large Blend funds for the 3- and 5-year periods, respectively. VLUE received a Morningstar Rating of 3 and 4 stars rated against 1,100 and 937 Large Value funds for the 3- and 5-year periods, respectively. QUAL received a Morningstar Rating of 3 and 4 stars rated against 1,208 and 1,071 Large Blend funds for the 3- and 5-year periods, respectively. MTUM received a Morningstar Rating of 5 and 5 stars rated against 1,247 and 1,107 Large Growth funds for the 3- and 5-year periods, respectively.

In reference to slide 6: LRGF received a Morningstar Rating of 3 stars rated against 1,100 Large Value funds for the 3-year period. INTF received a Morningstar Rating of 3 stars rated against 639 Foreign Large Blend funds for the 3-year period. EMGF received a Morningstar Rating of 3 stars rated against 708 Diversified Emerging Mkts funds for the 3-year period. EFAV received a Morningstar Rating of 4 and 5 stars rated against 639 and 508 Foreign Large Blend funds for the 3- and 5-year periods, respectively. EEMV received a Morningstar Rating of 3 and 4 stars rated against 708 and 533 Diversified Emerging Mkts funds for the 3- and 5-year periods, respectively.

In reference to slide 8: VLUE outperformed 21% of its peers on a 1 year basis. Fund is rated against 1,244 large cap value Morningstar category ETF and mutual funds based on total return.

In reference to slide 9: QUAL Outperformed 48% of its peers on a 1 year basis. Fund is rated against 1,402 large cap blend Morningstar category ETF and mutual funds based on total return.

In reference to slide 10: MTUM Outperformed 53% of its peers on a 1 year basis. Fund is rated against 1,405 large cap growth Morningstar category ETF and mutual funds based on total return.

In reference to slide 14: LRGF Outperformed 33% of its peers on a 1 year basis. Fund is rated against 1,244 large cap value Morningstar category ETF and mutual funds based on total return.

In reference to slide 15: INTF Outperformed 34% of its peers on a 1 year basis. Fund is rated against 741 foreign large blend Morningstar category ETF and mutual funds based on total return.

In reference to slide 16: EMGF Outperformed 25% of its peers on a 1 year basis. Fund is rated against 836 diversified emerging markets Morningstar category ETF and mutual funds based on total return.

# Important information regarding iShares ETFs

**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](http://www.iShares.com) or [www.blackrock.com](http://www.blackrock.com). Read the prospectus carefully before investing. Investing involves risk, including possible loss of principal.**

The creation/redemption mechanism of ETFs helps insulate shareholders from transaction costs and capital gains created by other shareholders. Additionally, with iShares ETFs, one shareholder's actions do not create capital gains distributions for other shareholders. 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. Certain traditional mutual funds can also be tax efficient.

There can be no assurance that performance will be enhanced or risk will be reduced for funds that seek to provide exposure to certain quantitative investment characteristics ("factors"). Exposure to such investment factors may detract from performance in some market environments, perhaps for extended periods. In such circumstances, a fund may seek to maintain exposure to the targeted investment factors and not adjust to target different factors, which could result in losses.

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.

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.

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

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.

Investment comparisons are for illustrative purposes only. To better understand the similarities and differences between investments, including investment objectives, risks, fees and expenses, it is important to read the products' prospectuses.

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