

# ETF Report

THE MAGAZINE FOR ETF INVESTORS

JULY / AUGUST 2021

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GEN 100 ETF

**QQQM**

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# ETF Report

THE MAGAZINE FOR ETF INVESTORS

JULY / AUGUST 2021

**TEST  
YOUR ETF  
KNOWLEDGE**

Check out our  
NEW crossword!  
p.40

**SMART BETA**

**VERSUS**  
**ACTIVE**

Smart Beta Vs.  
Active Management

The Proliferation  
Of Smart Beta

Advisors On The  
Approaches They Use

The Impact Of  
Custom Baskets

Engine No. 1  
Disrupts ESG

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**FACTOR STRATEGIES**

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## Coming Next Issue

The September issue will cover how advisors are using ETFs to achieve client goals

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How smart-beta strategies stack up against active management and whether the two approaches achieve their aims

By Debbie Carlson

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By Debbie Carlson

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By ETF.com Staff

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Can anything unseat passive management?

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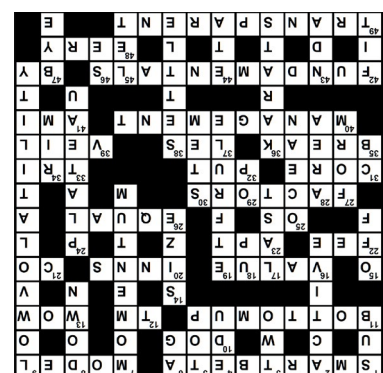
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### Crossword Answer Key | Crossword on p. 40



# ETF Launches

## Featured ETF

### BITQ

#### Bitwise Crypto Industry Innovators ETF

In May, Bitwise and Exchange Traded Concepts rolled out the first ETF to actually reference “crypto” in its name, something that the SEC has been cagey about allowing.

The **Bitwise Crypto Industry Innovators ETF (BITQ)** does not invest directly in bitcoin or other cryptocurrencies but instead focuses on the companies that make the cryptocurrency space possible by providing support services and equipment.

BITQ comes with an expense ratio of 0.85% and lists on the NYSE Arca.

Importantly, this is not a bitcoin fund. The fund tracks the Bitwise Crypto Innovators 30 Index, which covers companies that provide services and equipment to the cryptocurrency space, including crypto mining firms, crypto mining equipment suppliers and crypto financial services companies, according to the prospectus.

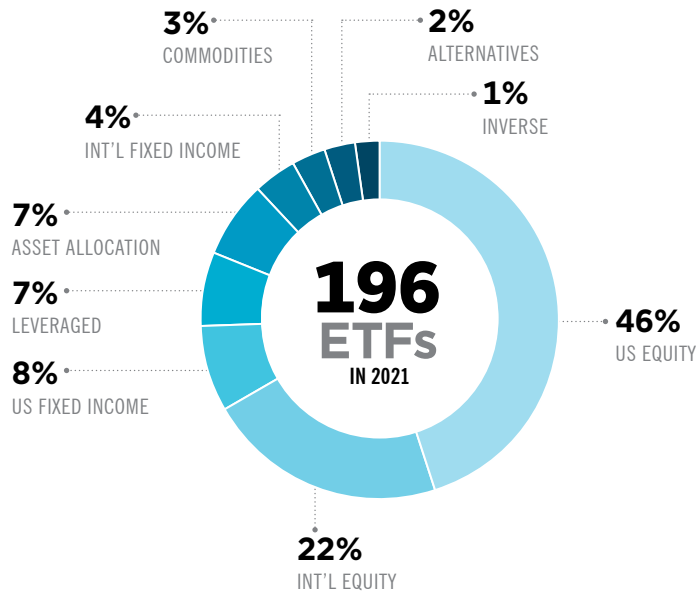
The index divides eligible companies into two tiers, with Tier 1 (85% of the index) representing pure-play companies and Tier 2 representing large cap companies that have significant business operations in the cryptocurrency space or significant assets held in cryptocurrencies (15% of the index).

The index selects the top 20 components from Tier 1 and the top 10 from Tier 2. Individual holdings are capped at 10% of the index, while reconstitutions and rebalancings take place on a quarterly basis.

#### BITQ Quick View

ISSUER	STRUCTURE
Exchange Traded Concepts	Open-Ended Fund
SEGMENT	INCEPTION
Equity: Global Digital Economy	5/12/2021
EXPENSE RATIO	
0.85%	

## Launch Allocation



## ETF Launch Activity

### U.S. EQUITIES

- 6 Meridian Quality Growth
- Dimensional US Core Equity 2
- Dimensional US Equity
- Dimensional US Small Cap
- Dimensional US Targeted Value
- Engine No. 1 Transform 500
- ETFMG US Alternative Harvest
- Fidelity Sustainability US Equity
- First Trust Choe Vest Growth-100 Buffer - June
- First Trust Expanded Technology
- First Trust TCW ESG Premier Equity
- Freedom Day Dividend
- Invesco Nasdaq Biotechnology
- Invesco PHLX Semiconductor
- Invesco S&P 500 QVM Multi-Factor
- Invesco S&P MidCap 400 QVM Multi-Factor
- Invesco SmallCap 600 QVM Multi-Factor
- Janus Henderson US Real Estate
- LGBTQ + ESG100
- Principal International Adaptive Multi-Factor
- Principal US Large-Cap Adaptive Multi-Factor
- Principal US Small-Cap Adaptive Multi-Factor
- ProShares NASDAQ-100 DW Momentum
- Putnam Focused Large Cap Growth
- Putnam Focused Large Cap Value
- Putnam Sustainable Future
- Putnam Sustainable Leaders
- Robinson Alternative Yield Pre-Merger SPAC
- Sparkline Intangible Value
- Syntax Stratified US Total Market Hedged

- T. Rowe Price US Equity Research
- The De-SPAC
- TrueShares Structured Outcome - June
- TrueShares Structured Outcome - May
- WisdomTree US Growth & Momentum

### U.S. FIXED INCOME

- Fidelity Women's Leadership
- First Trust New York Municipal High Income
- iShares BBB Rated Corporate Bond
- iShares iBonds Dec 2031 Term Corporate
- LeaderShares Dynamic Yield
- Strategy Shares Gold-Hedged Bond

### INTERNATIONAL EQUITY

- Alger 35
- Amplify Cleaner Living
- Asian Growth Cubs
- Bitwise Crypto Industry Innovators
- Defiance Hotel, Airline, and Cruise
- Defiance Next Gen Altered Experience
- Fidelity Women's Leadership
- First Trust Indxx Medical Devices
- FT Choe Vest Intl Equity Buffer - June
- iShares Cloud 5G and Tech
- KraneShares Hang Seng TECH Index
- Roundhill Ball Metaverse
- SoFi Weekly Dividend
- SonicShares Airlines, Hotels, Cruise Lines
- WisdomTree BioRevolution

### INT'L FIXED INCOME

- IQ MacKay ESG Core Plus Bond
- Fidelity Preferred Securities & Income
- First Trust Innovation Leaders

### COMMODITIES

- iShares Gold Trust Micro
- Pacer iPath Gold Trendpilot ETN

### LEVERAGED

- ETFMG Prime 2x Daily Junior Silver Miners
- ETFMG 2x Daily Travel Tech
- Direxion Daily Travel & Vacation Bull 2X
- Direxion Daily 5G Communications Bull 2X

### INVERSE

- ETFMG Prime 2x Daily Inv Jr Silver Miners
- The Short De-SPAC

### ALTERNATIVES

- Emles Alpha Opportunities
- WisdomTree Alternative Income
- Simplify Interest Rate Hedge
- Simplify Volatility Premium

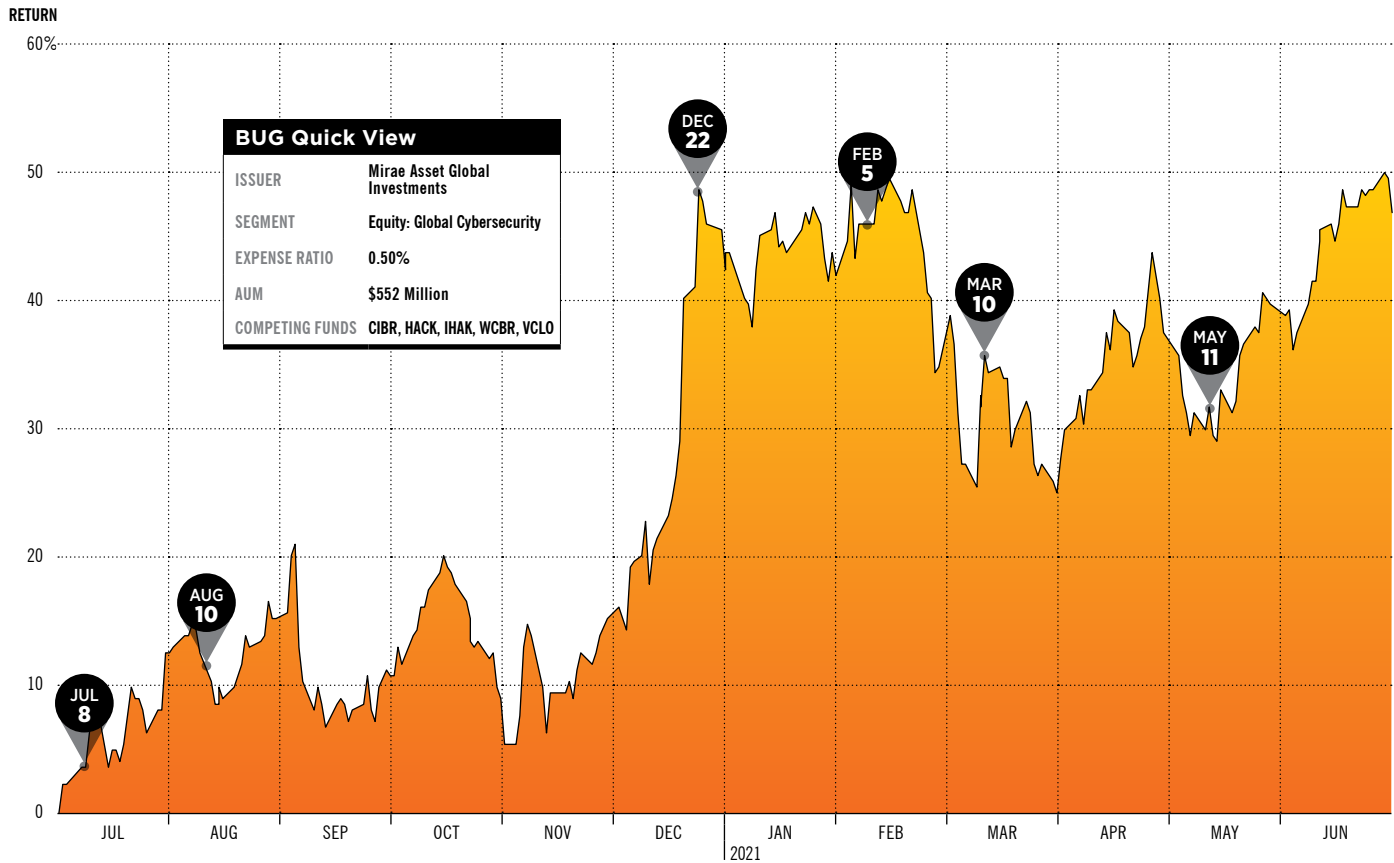
### ASSET ALLOCATION

- Adaptive Growth Opportunities
- Fat Tail Risk
- FOMO
- Simplify U.S. Equity PLUS GBTC
- WisdomTree International Efficient Core
- WisdomTree Emerging Markets Efficient Core

Source: ETF.com. Data and information as of 6/30/2021. The above sidebar covers launches for the months of May and June 2021.

# ETF Explainer

Each month, we look at an ETF selected by ETF.com based on its performance and importance to investors. This month, we consider the performance of the \$552 million **Global X Cybersecurity ETF (BUG)**, a thematic fund covering the cybersecurity space. All the companies mentioned below are holdings in BUG, unless otherwise noted (\*).



**JUL 8** Zscaler shares jump more than 6% on positive comments and upgrades by analysts. The company's stock rises more than 18% during the month.

**AUG 10** CrowdStrike's stock price plunges along with other Nasdaq-listed technology stocks over multiple trading days.

**DEC 22** Several Fortune 500 companies report being hit by the SolarWinds hack, leading to boosts in share price for Check Point Software Technologies and CyberArk.

**FEB 5** A South Korea lawmaker claims Pfizer computers in the country were breached by North Korea hackers seeking to steal COVID-19 vaccine data, sending cybersecurity stocks into a sell-off.

**MAR 10** Fortinet stock rises after it makes strong projections exceeding Wall Street estimates during its investor day.







**MAY 11** NortonLifeLock notches record revenues and profits in its 4Q earnings report, and announces a \$1.5 billion share buyback program, boosting the share price 20% over the next three days.

Source: Bloomberg; data for 6/30/2020-6/30/2021

# Cryptocurrency Corner

ETF Report takes the pulse of the cryptocurrency space, including the performance of leading cryptocurrencies and the top related news items

## Performance

 <b>Bitcoin</b> (BTC)	 <b>Ethereum</b> (ETH)	 <b>Ripple</b> (XRP)	 <b>Cardano</b> (ADA)	 <b>Polkadot</b> (DOT)	 <b>Dogecoin</b> (DOGE)
YTD ▲ <b>16.91%</b>	YTD ▲ <b>213.53%</b>	YTD ▲ <b>195.56%</b>	YTD ▲ <b>672.64%</b>	YTD ▲ <b>81.21%</b>	YTD ▲ <b>4631.76%</b>
1 YEAR ▲ <b>266.70%</b>	1 YEAR ▲ <b>869.40%</b>	1 YEAR ▲ <b>253.30%</b>	1 YEAR ▲ <b>1093.50%</b>	1 YEAR <b>N/A</b>	1 YEAR ▲ <b>7181.40%</b>
3 YEARS ▲ <b>403.60%</b>	3 YEARS ▲ <b>382.20%</b>	3 YEARS ▲ <b>35.50%</b>	3 YEARS ▲ <b>860.50%</b>	3 YEARS <b>N/A</b>	3 YEARS ▲ <b>8495.80%</b>

Data Provided By  
**COINMETRICS**

## News

By Sumit Roy

By Jamie Gordon

By Sumit Roy

### June's Crypto Plunge

**Cryptocurrency investors were reminded in late June that with the potential for great returns comes great risk.** Both bitcoin and ether tumbled to multimonth lows on June 22 before clawing back some of those losses in the days that followed.

Bitcoin briefly wiped out all of its gains for the year after it fell below \$29,000. The No. 1 cryptocurrency by market value reached a peak of more than \$63,000 in April—more than double where it stood after its big fall.

At one point, bitcoin's market capitalization was nearly \$1.2 trillion, making it more valuable than either Facebook or Tencent. As of June 24, all of the bitcoin in the world was worth about \$620 billion.

Meanwhile, ether prices tumbled to a low of \$1,700 on June 22, down nearly 60% from its record high set just a month prior, but still more than double the \$740 level where it started the year.

This year's varying performance between bitcoin and ether illustrates that while most crypto tokens tend to move in the same direction on a day-to-day basis, returns can deviate sharply over longer periods of time.

### Bitcoin Under ESG Scrutiny

**How bitcoin stacks up from an ESG perspective** is an increasing concern for investors after a coal mine shutdown in Xinjiang in mid-April shined a light on the cryptocurrency's operations and plummeted bitcoin's price 23% as the digital asset's global computing power was cut by a third.

The University of Cambridge Centre for Alternative Finance says coal power uses two-thirds of the energy in the "proof of work" process key to bitcoin's secure production process.

At present, research from Bank of America notes the carbon emissions associated with bitcoin equal that of Greece, while the Cambridge Bitcoin Electricity Consumption index said the bitcoin network consumes more energy in a year than countries like the Netherlands, Argentina and the UAE.

Other experts in the space such as CoinShares' Chris Bendiksen see the concerns as overblown, citing the use of cheap electricity sources other than coal to mine bitcoin and the ability to purchase carbon credits to offset the impact of the mining.

Other ESG-related concerns encompass bitcoin's use in money laundering and Ponzi schemes, though proponents say its structure allows it to thwart corruption and promote transparency.

### Buying Ethereum

**Ether has been around for a much shorter amount of time than bitcoin and it's a little harder to grasp exactly what it is.** But the world's second most valuable cryptocurrency has slowly made a name for itself as it's grown in importance within the broader crypto space.

Ether is the native cryptocurrency of the Ethereum platform, a blockchain-based network designed to support decentralized applications. Ether is the currency that pays for the computing power necessary to run those applications.

Initial coin offerings, decentralized finance and nonfungible tokens are some of the first use cases Ethereum has helped support, and there may be plenty more use cases to come.

While bitcoin is treated as a store of value, an investment in ether is a bet on the growth of the Ethereum ecosystem. The more applications that are built on top of the platform, the better ether should do.

Ether can be bought and sold just like bitcoin—on exchanges like Coinbase; with digital wallets like Venmo and PayPal; and via brokerages like Robinhood. While U.S. investors can also access the Grayscale Ethereum Trust (ETHE), there are more choices listed internationally, including ETFs.





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- 2** Log in to your [ETF.com](http://ETF.com) account
- 3** Update to your **current address** and submit

# ETF Comparison Tool

The ETF.com Comparison Tool allows investors to make one-to-one comparisons on a variety of features and metrics between any two ETFs [www.etf.com/etfanalytics/etf-comparison-tool](http://www.etf.com/etfanalytics/etf-comparison-tool)

## Facts & Costs

TICKER	FUND				
<b>VGK</b>	<b>Vanguard FTSE Europe ETF</b>				
ISSUER					
<b>Vanguard</b>					
AUM	EXPENSE RATIO	AVERAGE DAILY \$ VOLUME	NUMBER OF HOLDINGS		
<b>\$20.16B</b>	<b>0.08%</b>	<b>\$316.97M</b>	<b>1,320</b>		
AVERAGE SPREAD (%)	AVERAGE SPREAD (\$)	MEDIAN TRACKING DIFFERENCE (12 MO)	MAX LT/ST CAPITAL GAINS RATE		
<b>0.01%</b>	<b>\$0.01</b>	<b>0.00%</b>	<b>20.00% / 39.60%</b>		

## Performance

1 MONTH	3 MONTHS	YTD	1 YEAR	3 YEARS	5 YEARS
<b>1.66%</b>	<b>8.39%</b>	<b>15.08%</b>	<b>37.85%</b>	<b>9.00%</b>	<b>11.10</b>

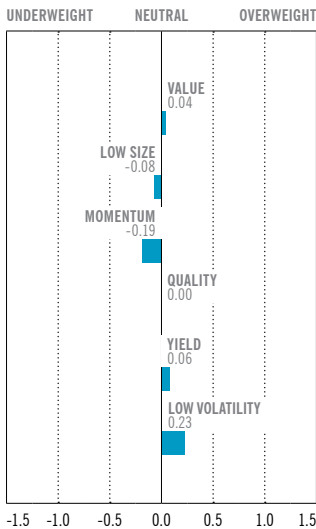
## Facts & Costs

TICKER	FUND				
<b>EZU</b>	<b>iShares MSCI Eurozone ETF</b>				
ISSUER					
<b>BlackRock</b>					
AUM	EXPENSE RATIO	AVERAGE DAILY \$ VOLUME	NUMBER OF HOLDINGS		
<b>\$8.29B</b>	<b>0.51%</b>	<b>\$220.71M</b>	<b>240</b>		
AVERAGE SPREAD (%)	AVERAGE SPREAD (\$)	MEDIAN TRACKING DIFFERENCE (12 MO)	MAX LT/ST CAPITAL GAINS RATE		
<b>0.02%</b>	<b>\$0.01</b>	<b>0.48%</b>	<b>20.00% / 39.60%</b>		

## Performance

1 MONTH	3 MONTHS	YTD	1 YEAR	3 YEARS	5 YEARS
<b>1.60%</b>	<b>8.37%</b>	<b>15.06%</b>	<b>40.45%</b>	<b>8.17%</b>	<b>11.61%</b>

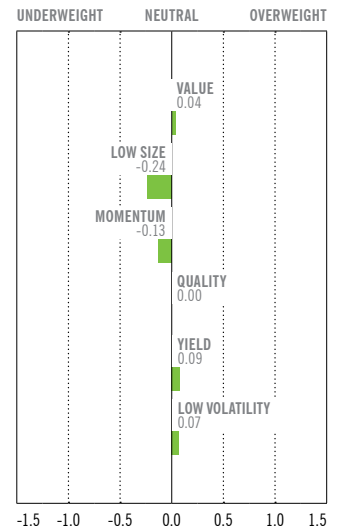
## MSCI VGK Factors



## Performance



## MSCI EZU Factors



## VGK TOP 10 SECTORS

Financials	19.09%
Industrials	14.37%
Consumer Cyclical	13.40%
Healthcare	12.62%
Consumer Non-Cyclical	11.26%
Basic Materials	8.57%
Technology	8.19%
Energy	4.99%
Utilities	4.08%
Telecommunications Services	2.59%

## VGK TOP 10 HOLDINGS

Nestle S.A.	2.69%
ASML Holding NV	2.09%
Vanguard Cash Mgmt Market Liquidity Fund	2.04%
Roche Holding Ltd	1.87%
LVMH Moet Hennessy Louis Vuitton SE	1.52%
Novartis AG	1.46%
SAP SE	1.27%
AstraZeneca PLC	1.13%
HSBC Holdings Plc	1.03%
Siemens AG	1.01%

## EZU TOP 10 SECTORS

Financials	17.23%
Consumer Cyclical	16.98%
Industrials	14.03%
Technology	13.46%
Basic Materials	8.30%
Healthcare	7.72%
Consumer Non-Cyclical	7.45%
Utilities	6.23%
Energy	4.43%
Telecommunications Services	3.33%

## EZU TOP 10 HOLDINGS

ASML Holding NV	5.03%
LVMH Moet Hennessy Louis Vuitton SE	3.90%
SAP SE	2.55%
Siemens AG	2.16%
TotalEnergies SE	2.12%
Sanofi	2.08%
L'Oreal SA	2.02%
Allianz SE	1.86%
Schneider Electric SE	1.47%
Air Liquide SA	1.43%

# ETF Stock Finder

The ETF.com Stock Finder Tool helps you find which ETFs hold a certain stock and how much of it they own.  
[www.etf.com/etfanalytics/etf-stock-finder](http://www.etf.com/etfanalytics/etf-stock-finder)

Each month, we look at selected stocks based on their performance and importance to investors.

This month, we highlight AMC Entertainment Holdings, Inc. Class A (AMC), Walmart Inc. (WMT) and Cintas Corporation (CTAS).

## Stock

# AMC

### AMC Entertainment Holdings, Inc.

ETFs Holding AMC

AMC Shares in ETFs

**35****6.7 Million**

Biggest Holder

Largest Allocation

**IWM**

iShares Russell 2000 ETF

**SFYF**

SoFi Social 50 ETF

#### Most AMC Exposure

Ticker	Fund	% of Allocation
<b>SFYF</b>	SoFi 50 ETF	1.96%
<b>CSML</b>	IQ Chaikin U.S. Small Cap ETF	0.19%
<b>PSC</b>	Principal U.S. Small-Cap Multi-Factor ETF...	0.12%
<b>FNDA</b>	Schwab Fundamental U.S. Small Company Index ...	0.10%
<b>VOX</b>	Vanguard Communication Services ETF	0.07%

#### Most AMC Shares

Ticker	Fund	# of Allocation
<b>IWM</b>	iShares Russell 2000 ETF	1.80M
<b>IWN</b>	iShares Russell 2000 Value ETF	791.41K
<b>FNDA</b>	Schwab Fundamental U.S. Small Company Index ...	744.06K
<b>VB</b>	Vanguard Small-Cap ETF	648.86K
<b>VBR</b>	Vanguard Small-Cap Value ETF	595.70K

#### Top ETF Strategies Using AMC

Strategy	# of ETFs
<b>Vanilla ETFs</b>	21
<b>Fundamental ETFs</b>	5
<b>Multi-factor ETFs</b>	3
<b>Value ETFs</b>	3
<b>ESG ETFs</b>	1

## Stock

# WMT

### Walmart Inc.

ETFs Holding WMT

WMT Shares in ETFs

**236****114 Million**

Biggest Holder

Largest Allocation

**SPY**

SPDR S&amp;P 500 ETF Trust

**XLP**

Consumer Staples Select Sector SPDR Fund

#### Most WMT Exposure

Ticker	Fund	% of Allocation
<b>XLP</b>	Consumer Staples Select Sector SPDR Fund	8.94%
<b>RTH</b>	VanEck Vectors Retail ETF	8.46%
<b>VDC</b>	Vanguard Consumer Staples ETF	7.90%
<b>FSTA</b>	Fidelity MSCI Consumer Staples Index ETF	7.75%
<b>AVDG</b>	AVDR U.S. LargeCap ESG ETF	6.75%

#### Most WMT Shares

Ticker	Fund	# of Allocation
<b>SPY</b>	SPDR S&P 500 ETF Trust	14.26M
<b>VIG</b>	Vanguard Dividend Appreciation ETF	14.07M
<b>IVV</b>	iShares Core S&P 500 ETF	10.87M
<b>VOO</b>	Vanguard S&P 500 ETF	8.44M
<b>VTI</b>	Vanguard Total Stock Market ETF	7.67M

#### Top ETF Strategies Using WMT

Strategy	# of ETFs
<b>Vanilla ETFs</b>	45
<b>Multi-factor ETFs</b>	41
<b>Active Management ETFs</b>	37
<b>Fundamental ETFs</b>	23
<b>Value ETFs</b>	19

## Stock

# CTAS

### Cintas Corporation

ETFs Holding CTAS

CTAS Shares in ETFs

**200****9.5 Million**

Biggest Holder

Largest Allocation

**QQQ**

Invesco QQQ Trust

**ENTR**

ERShares Entrepreneurs ETF

#### Most CTAS Exposure

Ticker	Fund	% of Allocation
<b>ENTR</b>	ERShares Entrepreneurs ETF	2.38%
<b>LEAD</b>	Siren DIVCON Leaders Dividend ETF	1.81%
<b>QQXT</b>	First Trust NASDAQ-100 Ex-Technology Sector ...	1.69%
<b>AVDR</b>	AVDR US LargeCap Leading ETF	1.53%
<b>KNG</b>	FT Cboe Vest S&P 500 Dividend Aristocrats Ta...	1.49%

#### Most CTAS Shares

Ticker	Fund	# of Allocation
<b>QQQ</b>	Invesco QQQ Trust	1.32M
<b>SPY</b>	SPDR S&P 500 ETF Trust	907.89K
<b>IVV</b>	iShares Core S&P 500 ETF	689.77K
<b>VO</b>	Vanguard Mid-Cap ETF	633.77K
<b>XLI</b>	Industrial Select Sector SPDR Fund	575.64K

#### Top ETF Strategies Using CTAS

Strategy	# of ETFs
<b>Vanilla ETFs</b>	41
<b>Multi-factor ETFs</b>	33
<b>Active Management ETFs</b>	21
<b>Fundamental ETFs</b>	17
<b>ESG ETFs</b>	17

# Data At A Glance

## Monthly Flows

Below are the ETFs that experienced the top and bottom flows in June 2021, as well as the net flows for major asset classes.

### TOP GAINERS

TICKER	FUND	ISSUER	NET FLOWS (\$M)	AUM (\$M)
QQQ	Invesco QQQ Trust	Invesco	6,160.63	177,225.30
SPY	SPDR S&P 500 ETF Trust	SSGA	4,876.69	373,525.58
VTI	Vanguard Total Stock Market ETF	Vanguard	3,497.47	252,496.59
BND	Vanguard Total Bond Market ETF	Vanguard	2,888.45	78,499.82
IYR	iShares U.S. Real Estate ETF	BlackRock	2,571.05	7,482.11
VOO	Vanguard S&P 500 ETF	Vanguard	2,444.10	232,337.16
TLT	iShares 20+ Year Treasury Bond ETF	BlackRock	2,164.55	15,081.76
IVV	iShares Core S&P 500 ETF	BlackRock	1,597.28	286,606.20
IEFA	iShares Core MSCI EAFE ETF	BlackRock	1,533.40	96,608.64
EZU	iShares MSCI Eurozone ETF	BlackRock	1,519.28	8,160.74

### BIGGEST LOSERS

TICKER	FUND	ISSUER	NET FLOWS (\$M)	AUM (\$M)
XLF	Financial Select Sector SPDR Fund	SSGA	-2,294.53	40,617.37
HYG	iShares iBoxx USD High Yield Corporate Bond ETF	BlackRock	-1,886.40	20,345.42
TQQQ	ProShares UltraPro QQQ	ProShares	-1,777.52	12,476.94
LQD	iShares iBoxx USD Investment Grade Corp Bond ETF	BlackRock	-1,576.44	40,171.95
XLI	Industrial Select Sector SPDR Fund	SSGA	-1,165.31	19,167.92
JNK	SPDR Bloomberg Barclays High Yield Bond ETF	SSGA	-1,067.96	9,774.46
SOXL	Direxion Daily Semiconductor Bull 3X Shares	Direxion	-948.84	4,640.70
EWJ	iShares MSCI Japan ETF	BlackRock	-877.90	11,405.33
SHY	iShares 1-3 Year Treasury Bond ETF	BlackRock	-845.12	19,509.33
MDYV	SPDR S&P 400 Mid Cap Value ETF	SSGA	-714.20	1,635.23

### ASSET CLASSES

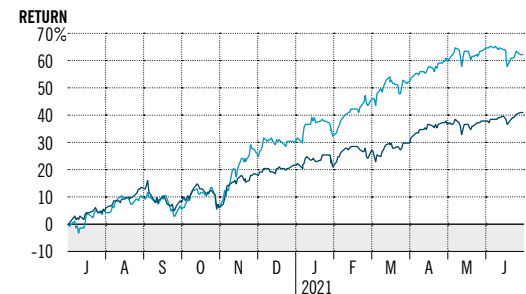
	NET FLOWS (\$M)	AUM (\$M)	% OF AUM
U.S. Equity	37,702.54	3,809,537.57	0.99%
International Equity	19,836.88	1,290,880.87	1.54%
U.S. Fixed Income	15,381.85	1,042,385.34	1.48%
International Fixed Income	3,567.11	142,642.77	2.50%
Commodities	460.19	139,890.88	0.33%
Currency	158.41	1,941.79	8.16%
Leveraged	-1,632.29	61,285.23	-2.66%
Inverse	894.64	11,730.93	7.63%
Asset Allocation	548.29	16,348.42	3.35%
Alternatives	76.41	6,417.57	1.19%

## Interesting Charts Of Past 12 Months

The below charts highlight some of the key ETF trends of the past 12 months.

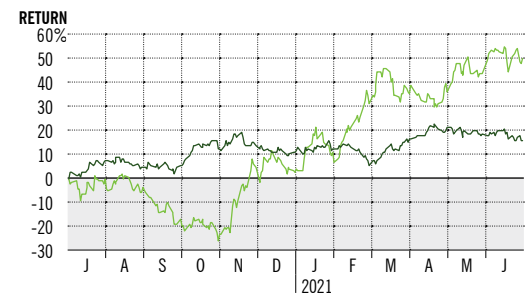
**YPS** Arrow Reverse Cap 500 ETF  
**SPY** SPDR S&P 500 ETF Trust

In a reversal, after underperforming SPY for some time, YPS has taken the lead during the past 12 months.



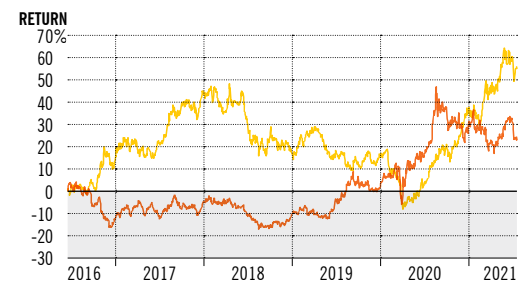
**XLE** Energy Select Sector SPDR Fund  
**XLU** Utilities Select Sector SPDR Fund

Although energy was the worst-performing sector in 2020, at around the turn of the year, it quickly became the top performer, while utilities began to trail the rest of the pack.



**DBB** Invesco DB Base Metals Fund  
**DBP** Invesco DB Precious Metals Fund

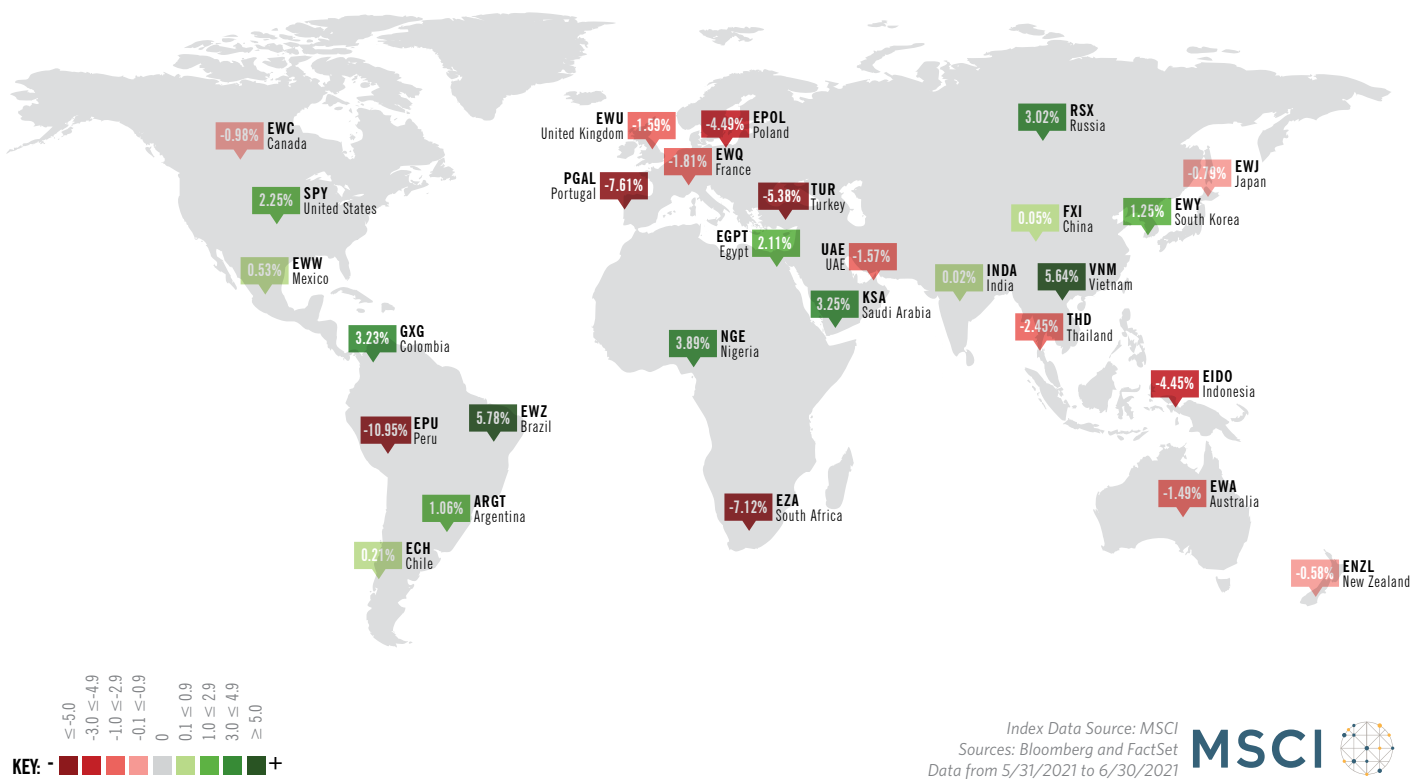
Precious metals dominated in 2020 during the worst of the pandemic, outperforming industrial metals significantly, but the trend has reversed this year.



# Countries

A Brazil-focused fund led the way in June among country ETFs, with the **iShares MSCI Brazil ETF (EWZ)** rising 5.78%, while the **VanEck Vectors Vietnam ETF (VNM)** was up 5.64% and the **iShares MSCI Saudi Arabia ETF (KSA)** rose 3.25%. The **iShares MSCI Peru ETF (EPU)** posted the worst returns in June, with a decline of 10.95%, followed by the **Global X MSCI Portugal ETF (PGAL)** and the **iShares MSCI South Africa ETF (EZA)**, with respective losses of 7.61% and 7.12%. In terms of flows, the **SPDR S&P 500 ETF Trust (SPY)** again led

gainers, with a gain of \$4.87 billion, after multiple record-high closes so far this year. SPY was followed by the **iShares China Large-Cap ETF (FXI)** with its \$278.7 million in inflows, while the **iShares MSCI India ETF (INDA)** placed third in the month, with inflows of \$193.9 million. The largest outflows in the month were from the **iShares MSCI Japan ETF (EWJ)**, with a loss of \$877.9 million. The Brazil-focused EWZ followed, with an outflow of \$442.2 million, while the **iShares MSCI United Kingdom ETF (EWU)** was third in outflows, with \$216.3 million.



## TOP INFLOWS

TICKER	FUND	NET FLOWS (\$M)	AUM (\$M)
SPY	SPDR S&P 500	4,876.7	371,893.5
FXI	iShares China Large-Cap	278.7	5,087.5
INDA	iShares MSCI India	193.9	5,831.9
EWT	iShares MSCI Taiwan	89.4	7,281.0
EWP	iShares MSCI Spain	62.9	569.3

## TOP OUTFLOWS

TICKER	FUND	NET FLOWS (\$M)	AUM (\$M)
EWJ	iShares MSCI Japan	-877.9	11,437.3
EWZ	iShares MSCI Brazil	-422.2	6,708.8
EWU	iShares MSCI United Kingdom	-216.3	3,515.1
EWY	iShares MSCI South Korea	-156.0	6,789.4
RSX	VanEck Vectors Russia	-33.6	1,942.7

Note: This list intends to capture the returns of most liquid ETFs tracking individual countries. It does not capture every country in the MSCI All Country World Index.



By Debbie Carlson

Contributor to ETF.com  
& ETF Report

# BATTLE OF THE V S APPROACHES

## WHERE'S THE ALPHA?

# Do smart beta or active management offer the opportunity for outperformance?

The concept behind both smart beta and active management is largely the same: Beat passive indexes.

Market cycles often reward certain investment styles, and for the past several years, U.S. large cap growth funds dominated, particularly growth and technology funds.

Certain actively managed exchange-traded funds benefited from this trend, with ARK Invest the poster child for active management in an ETF wrapper. Meanwhile, compared to the S&P 500 and MSCI USA Large Cap Index, the classic factors of small cap, value and quality all underperformed on a five-year basis, as did smart beta fundamental and equal-weighted indexes.

But as economies reopen globally after the pandemic, there's been a shift in market leadership for the past six months, with classic smart beta and factors mostly outperforming. That's given some investors new appreciation for smart beta funds, which generally tend to be synonymous with these two approaches.

But is one approach better than the other, or does it depend on market segment, market environment and investors' goals? Given that many ETF watchers consider smart beta "rules-based active," how different are the two approaches?

## HARD TO BEAT LARGE CAP INDEXES

Brandon Rakszawski, director, ETF product development at VanEck, doesn't think one approach is necessarily better than the other, and he says for some market segments—such as U.S. large cap equities—active management rarely outperforms, noting S&P SPIVA reports show on a five-year basis that 75% of large cap funds underperformed the S&P 500.

To dig into whether smart beta or active management gets better results overall, Elisabeth Kashner, director of global fund

analytics at FactSet, ran a performance analysis on nongear equity ETFs, split into four strategy groups, measured over one year, three years and five years.

She also ran a degree of confidence test to measure whether the alpha is statistically different from zero, using the standard threshold of 95% certainty, and separated positive and negative alpha; that is, outperformance and underperformance.

## UNDERWHELMING RESULTS

The four groups were plain vanilla, active, strategic/smart beta, which employs security selection and/or weighting schemes involving fundamental or technical analysis; and idiosyncratic, which uses nonmar-

ket cap, nonfundamental and nontechnical methods to select and/or weight securities. Common idiosyncratic strategies include single-exchange selection, such as the **Invesco QQQ Trust (QQQ)**, equal-weighting and socially responsible funds.

After five years, only 4-5% of funds in these strategies had any alpha, and negative alpha outweighed positive across all strategy groups—most heavily for strategic and active funds. For strategic funds, 5.4% produced alpha, with 4.2% underperforming and 1.1% outperforming. Of the active funds, 4.3% produced alpha, all of it negative.

Most significantly, the total amount of alpha—positive or negative—was slight for the four groups.

ANNUAL FLOWS & ALPHA STRATEGY							
1 Year	Count	Statistical significance of 90% or higher			Statistical significance of 95% or higher		
		Achieves Statistical Significance	Positive Alpha	Negative Alpha	Achieves Statistical Significance	Positive Alpha	Negative Alpha
Vanilla	327	4.3%	1.2%	3.1%	1.2%	0.3%	0.9%
Strategic	575	3.1%	1.7%	1.4%	1.6%	0.9%	0.7%
Active	101	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Idiosyncratic	123	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%
3 Year	Count	Achieves Statistical Significance	Positive Alpha	Negative Alpha	Achieves Statistical Significance	Positive Alpha	Negative Alpha
Vanilla	307	4.9%	2.3%	2.6%	2.9%	1.3%	1.6%
Strategic	449	7.6%	0.9%	6.7%	4.9%	0.7%	4.2%
Active	57	7.0%	0.0%	7.0%	7.0%	0.0%	7.0%
Idiosyncratic	90	4.4%	3.3%	1.1%	2.2%	1.1%	1.1%
5 Year	Count	Achieves Statistical Significance	Positive Alpha	Negative Alpha	Achieves Statistical Significance	Positive Alpha	Negative Alpha
Vanilla	276	6.2%	2.9%	3.3%	4.0%	1.4%	2.5%
Strategic	354	10.7%	1.7%	9.0%	5.4%	1.1%	4.2%
Active	23	4.3%	0.0%	4.3%	4.3%	0.0%	4.3%
Idiosyncratic	70	8.6%	5.7%	2.9%	0.0%	0.0%	0.0%

Source: FactSet; data as of 6/24/2021

“The vast majority of products neither outperformed nor underperformed the broad-based cap-weighted benchmark,” she said. “So is the story that 2.5% [of plain vanilla funds] had negative alpha, or is the story that 96% had no alpha whatsoever?”

Kashner suggests the data shows overwhelming odds that investors won’t get risk-adjusted outperformance or underperformance compared to a broad-based cap-weighted benchmark, but will take on additional active risk. “These statistics make it plain that additional active risk is not compensated, and if anything, is more likely to be punished,” she said.

She adds that fees are a big drag on a fund’s alpha, and help to explain these results. The reason plain vanilla ETFs may have any alpha at all may come down to a methodology difference as to how an issuer may define the sector or industry and stray a bit from the benchmark.

### NUANCED LOOK

Smart beta’s performance lag and headline-grabbing by active funds like ARK also caused flows to move from smart beta to active funds, especially in 2020, according to FactSet data.

A flows gap analysis, which is the difference between actual fund flows and proportionally allocated segment flows based on starting market share within the segment, shows active ETFs picked up flows from both smart beta and plain vanilla funds.

Whether that continues remains to be seen, but Sal Bruno, chief investment officer at IndexIQ, says active management benefits from “having a good story,” even if evidence doesn’t necessarily support the message.

Like others, he sees a lot of similarity between smart beta and active, with the main difference being stock selection. Factor-based smart beta tries to diversify the stock-specific risk by including as many stocks as possible, while active often makes concentrated bets, he notes. That’s also why active ETFs have a higher cost than smart beta strategies.

Don Bennyhoff, investment committee chair at Portfolio Solutions, considers any nonmarket-cap-weighted approach as active in some way, and says both active management and smart beta have shortcomings.

“The reason that some of these companies are the largest companies is because investors, in aggregate, put money in them. And that’s what’s being reflected ... in market cap. Whereas in these fundamental indexes, and everything that’s really not market cap weighted, someone is making a choice to not go with market participants’ views,” he said, noting both give investors higher active risk.

Sarah Abernathy, senior investment analyst at

Envestnet, still believes factors get results, based on academic research. She notes that factors go through cycles, too, which is why diversification is important. Value had its worst performance in history recently, but she points out that data on the value premium goes back almost 100 years, so context is important.

### OVERSOLD CONCEPT

Chris Brightman, chief investment officer at Research Associates, says that some of investors’ disinterest in smart beta may be the fault of issuers, as some oversold opportunities in smart beta, especially with the push to use multifactor strategies.

Combining factors is more complex than simpler smart-beta strategies, and issuers sometimes sold ETFs on the idea that a multifactor rules-based approach would slightly, but consistently, outperform the market.

“[When] you’re dealing with real-world issues of transaction costs, you find that the aggregate realized performance of these multifactor strategies doesn’t quite live up to the wonderful backtests that were sold,” he said.

The momentum-driven market of the past few years also worked against rebalancing, a hallmark of strategies such as equal weight, Brightman observes. Rebalancing works when there’s mean reversion in prices and is inherently a value strategy.

Rather than rebalance, market action rewarded those who doubled down. “In a momentum market, that’s exactly the right strategy. But history teaches us that these things tend not to end well,” he said.

John Ingram, chief investment officer and partner at Crestwood Advisors, uses passive, smart beta and active managers in portfolios. Depending on the goal, any of these strategies work.

The problem for retail investors with active ETFs is performance-chasing, usually leading them to buy high and sell low. Instead, he suggests diversification with smart beta ETFs for investors who want to buy something besides passive market-cap-weighted funds.

One of the smart beta funds he’s used for these clients is the **Invesco S&P 500 GARP ETF (SPGP)**, when Ingram wanted to focus on valuation. Ingram might pair it with a quality fund, while adding a defensive fund, such as the **iShares MSCI USA Min Vol Factor ETF (USMV)**. He also used the **iShares MSCI USA Momentum Factor ETF (MTUM)** in the past. A mix of funds may keep clients from chasing performance.

“We can’t predict where market sentiment is going go,” he said. “And that’s why I think owning that basket is so important, because hopefully it gives investors a little confidence to sort of stick with the program.” ●



# HOW DO YOU COMPARE ETFs?

At ETF.com, we understand that not all ETFs are created equal

## ETF Comparison Tool

Simply select two ETF tickers using the search boxes and you'll instantly be able to compare two ETFs

### ETF Comparison Tool

At ETF.com, we understand that not all ETFs are created equal. That's why we created the best tool to compare two ETFs at the same time, and better assist you in your due diligence investment research. Powered by the best ETF data in the industry, our partners and ETF.com are proud to introduce our new ETF comparison tool.

Simply select two ETF tickers using the search boxes below, and you'll immediately be able to compare two exchange-traded products' facts, costs, performance, portfolio, factors and ESG metrics.

SPY SPDR S&P 500 ETF Trust VS IVV iShares Core S&P 500 ETF

Popular ETF Comparisons		Recent Launches Comparisons		Best Performers Comparisons	
SPY vs IVV	VTI vs ITOT	LRNZ vs BOTZ	ECOZ vs SUSA	VIXX vs VIXY	VIXX vs VIXZ
IWM vs VB	IWD vs SCRV	HYTR vs HYG	IGM vs AIG	ESPO vs GANR	CNRG vs ACES
VYM vs DVP	HJ vs YOLO	BUIZ vs ONLN	SNUG vs PSMC	TAN vs ICLN	RING vs GOX

### Real-Time ETF Quotes

Compare the most recent price, issuer, expense ratio, AUM, underlying index and number of holdings per fund

ETF Facts

SPY vs IVV ETF Facts	IVV vs SPY ETF Facts
Last Trade <b>\$254.18</b> <span style="color:red">-7.02 (-2.69%)</span>	Last Trade <b>\$255.14</b> <span style="color:red">-7.23 (-2.76%)</span>
Issuer State Street Global Advisors	Issuer Blackrock
Expense Ratio <b>0.09%</b>	Expense Ratio <b>0.0%</b>
Assets Under Management <b>\$229.92B</b>	Assets Under Management <b>\$15.17B</b>

### ETF Cost Breakdown

Take an in-depth look at how each fund's costs compare

SPY vs IVV Costs

SPY	IVV
Expense Ratio <b>0.09%</b>	Expense Ratio <b>0.04%</b>
Average Spread (%) <b>0.00%</b>	Average Spread (%) <b>0.01%</b>
Average Spread (\$) <b>\$0.01</b>	Average Spread (\$) <b>\$0.04</b>
Median Tracking Difference <b>-0.09%</b>	Median Tracking Difference <b>-0.03%</b>
	Max LT/ST Capital Gains Rate <b>--</b>

### Fund vs. Fund Performance

Compare how each fund performed year-over-year

SPY vs IVV Performance

SPY	IVV
1 Month <b>-15.63%</b>	1 Month <b>-15.63%</b>
3 Months <b>-18.62%</b>	3 Months <b>-18.60%</b>
YTD <b>-18.35%</b>	YTD <b>-18.33%</b>
1 Year <b>-5.16%</b>	1 Year <b>-5.06%</b>
3 Years <b>5.80%</b>	3 Years <b>5.86%</b>

### Portfolio Makeup

Top 10 sector and stock holdings

SPY vs IVV Portfolio

SPY	IVV
Number of Holdings <b>500</b>	Number of Holdings <b>500</b>
Top 10 Sectors	Top 10 Sectors

Sector	SPY	IVV
Technology	29.34%	29.33%
Financials	15.36%	15.36%
Healthcare	13.60%	13.60%
Consumer Cyclical	12.84%	12.83%

### MSCI Factor Box

Easy-to-compare factor boxes

SPY vs IVV Factors

SPY SPDR S&P 500 ETF Trust	IVV iShares Core S&P 500 ETF
Value: <b>0.5</b>	Value: <b>0.5</b>
Low Size: <b>0.5</b>	Low Size: <b>0.5</b>
Momentum: <b>0.5</b>	Momentum: <b>0.5</b>
Quality: <b>0.5</b>	Quality: <b>0.5</b>
Yield: <b>0.5</b>	Yield: <b>0.5</b>
Low Volatility: <b>0.5</b>	Low Volatility: <b>0.5</b>

### MSCI ESG Metrics

Key ESG metrics breakdown

SPY vs IVV ESG Metrics

SPY	IVV
MSCI ESG Quality Score <b>5.72 / 10</b>	MSCI ESG Quality Score <b>5.72 / 10</b>
Peer Group Percentile Rank <b>61.44</b>	Peer Group Percentile Rank <b>62.48</b>
Global Percentile Rank <b>55.61</b>	Global Percentile Rank <b>55.80</b>
SRI Screening Criteria Exposure <b>11.51%</b>	SRI Screening Criteria Exposure <b>11.49%</b>
Exposure to Sustainable Impact Solutions <b>5.30%</b>	Exposure to Sustainable Impact Solutions <b>5.30%</b>



Learn more at [ETF.com/etfanalytics/ETF-comparison-tool](https://ETF.com/etfanalytics/ETF-comparison-tool)

# SMART BETA PROLIFERATES

WHAT LIES AHEAD FOR THE ALTERNATIVELY  
WEIGHTED INDEX SPACE?

**Almost half of exchange-traded funds qualify as smart beta funds under the broadest definition of the term** – anything that tracks an index that isn't weighted or selected by market capitalization.

Despite that, they only represent about 22% of total assets under management and only captured 7% of flows in 2020, according to Elisabeth Kashner, director of global fund analytics at FactSet. Market-cap-weighted ETFs are still capturing the lion's share of annual flows, at 70%, and actively managed ETFs are grabbing 12%, up from 0% five years ago.

Smart beta's skimpy flows may be partially attributed to perceptions that there are too many out there and not enough differentiation from plain vanilla funds, observes Nate Geraci, president of The ETF Store.

"One of the concerns is that a number of smart beta ETFs are simply index funds in disguise," he said. "There have been a lot of questions about, what exactly am I getting for that higher cost, and is it worth it."

Still, ETF market participants see a bright future ahead for the alternatively weighted index space, whether that's defined strictly as a way to break the link between a stock's price and its weight in a portfolio, or factor investing, or new ways to look at weighting based on theme.

## MARKET ENVIRONMENT CHANGE

The recent market environment until late last year rewarded growth-focused, market-cap-weighted indexes like the S&P 500. More recently market participants were rewarding value and small cap strategies, believing that the U.S. economy will sharply rebound following the worst of the pandemic.

Rob Arnott, founder of Research Affiliates, notes in his forecast that if the shift to value holds, strategies such as fundamental indexing and equal weighting will do well since they outperform value indexes.

These types of strategies naturally trim highly valued stocks and buy those that have lost money, earning a rebalancing alpha, he explains, all things being equal.

Alternatively weighted strategies have a value tilt, he remarks, and strategies such as fundamental indexing and equal weight outperformed value indexes.

He points to the **Invesco FTSE RAFI U.S. 1000 ETF (PRF)** as an example. It was up 51% on a one-year basis as of mid-June, up 15.4% on a three-year basis and up 14.8% on a five-year basis.

Comparatively, using the **iShares Russell 1000 Value ETF (IWD)** as a stand-in for the Russell 1000 Value index, IWD rose 43% on a one-year basis, 12.6% on a three-year basis and 12% on a five-year basis. The **SDPR S&P 500 Trust ETF (SPY)** is up 43%



By **Debbie Carlson**

Contributor to ETF.com  
& ETF Report

## ‘THE TEMPTATION IS TO BUY WHAT’S WORKED BEST OVER THE LAST 3 YEARS’

### TOP 10 SMART BETA ETFs

TICKER	FUND	EXPENSE RATIO	AUM	INCEPTION
VTV	Vanguard Value ETF	0.04%	\$81.50B	1/26/2004
VUG	Vanguard Growth ETF	0.04%	\$77.65B	1/26/2004
IWF	iShares Russell 1000 Growth ETF	0.19%	\$67.87B	5/22/2000
VIG	Vanguard Dividend Appreciation ETF	0.06%	\$59.03B	4/21/2006
IWD	iShares Russell 1000 Value ETF	0.19%	\$53.48B	5/22/2000
VYM	Vanguard High Dividend Yield ETF	0.06%	\$37.23B	11/10/2006
IWW	iShares S&P 500 Growth ETF	0.18%	\$33.61B	5/22/2000
RSP	Invesco S&P 500 Equal Weight ETF	0.20%	\$28.45B	4/24/2003
USMV	iShares MSCI USA Min Vol Factor ETF	0.15%	\$27.48B	10/18/2011
SCHD	Schwab U.S. Dividend Equity ETF	0.06%	\$25.75B	10/20/2011

Source: FactSet; data as of 6/24/2021

Note: Defined outcome and leveraged or inverse ETFs are not included in this assessment.

on a one-year basis, up 17.2% over three years and up 17.3% on a five-year basis.

“True smart beta strategies did very well, beating the value indexes handily,” Arnott added. “Now that value is making a comeback, it’s likely that they’ll shoot the lights out.”

He’s optimistic that alternatively weighted indexes’ gains will continue since they outperformed value when value prices fell and recovered.

“That’s pretty cool, because value usually wins,” he noted. “So if the 2020s are a decade of value beating growth handily—which I think the decade will be—strategies that beat value are going to produce remarkable results.”

Arnott narrowly defines smart beta as strategies that break the link with price. That sets him apart from others in the industry who tend to lump factor investing and smart beta in the same category.

### FUND ISSUERS OUTLOOK

Big issuers originally dominated smart beta issuance, but Geraci suggests one way for smaller issuers to gain market share is by making these index-based ETFs use more active share, what he calls using “higher octane” strategies.

Some examples are the \$208 million **Alpha Alpha Architect U.S. Quantita-**

**tive Value ETF (QVAL)**, an equal-weighted index of U.S. value stocks, with screens for forensic accounting and earnings quality, and the \$91 million **Alpha Architect U.S. Quantitative Momentum ETF (QMOM)**, an equal-weighted index of U.S. stocks with strong and consistent momentum.

“I see that as a path to success, because advisors are constructing portfolios by taking a core and satellite approach—where the core of their portfolios comprises very low-cost, broad-based exposure—and then they’re taking more concentrated, higher-

### TOP 10 NEW SMART BETA ETFs

TICKER	FUND	EXPENSE RATIO	AUM	INCEPTION
IMFL	Invesco International Developed Dynamic Multifactor ETF	0.34%	\$133.58M	2/24/2021
ONOF	Global X Adaptive U.S. Risk Management ETF	0.39%	\$76.26M	1/12/2021
HKND	Humankind U.S. Stock ETF	2.09%	\$75.10M	2/24/2021
MPRO	Monarch ProCap ETF	1.36%	\$59.07M	3/23/2021
SCHY	Schwab International Dividend Equity ETF	0.14%	\$49.02M	4/29/2021
WCBR	WisdomTree Cybersecurity Fund	0.45%	\$24.58M	1/28/2021
MAMB	Monarch Ambassador Income ETF	1.47%	\$24.10M	3/23/2021
PBUG	Pacer iPath Gold Trendpilot ETN	0.65%	\$23.93M	6/15/2021
MBCC	Monarch Blue Chips Core ETF	1.25%	\$21.79M	3/23/2021
ISVL	iShares International Developed Small Cap Value Factor ETF	0.30%	\$14.45M	3/23/2021

Source: FactSet; data as of 6/24/2021

Note: Defined outcome and leveraged or inverse ETFs are not included in this assessment.

## ‘FIND CAP WEIGHTING’S ACHILLES’ HEEL AND FIX IT’

octane bets with the remaining portion of the portfolio,” Geraci explained.

Another example of a “high-octane” ETF is the **SoFi Social 50 ETF (SFYF)**. It tracks an index of 50 U.S.-listed stocks most widely held in self-directed brokerage accounts of SoFi Securities, based on highest weighted average value.

This “wisdom of the crowds” index is rebalanced monthly, so the holdings might drastically change month to month to capture new trends, explains David Dziekan-ski, portfolio manager and partner at Toroso Investments, which subadvises the SoFi fund.

He concurs with Geraci that these smart beta funds can appease a client’s interest in what’s hot, but still let an advisor keep most of the portfolio in passive, plain vanilla funds.

“If your clients are asking you about some of these hot names and what they should be doing about it,” he said, “this is a safer way to do that, rather than allowing your clients to actually buy some of these stocks on their own.”

Amrita Nandakumar, president, Vident Investment Advisory, sees more permutations based on factors and themes, such as those based on market trends. She also points to funds that combine factors and themes to affect weighting. Some of the ETFs that combine technology and momentum do that, but that could expand.

An ETF that Vident subadvises, the **Democracy International Fund ETF (DMCY)**, overweights investments in democratic countries while underweighting those in authoritarian countries: “The theme drives the weighting.”

### INCREASING RETURNS VIA SMART BETA

Rob Nestor, senior advisor to Rafferty Asset Management, forecasts a bright outlook for alternatively weighted indexes: “If we enter a period of low equity returns and/

or volatile markets—which many are predicting—I think interest in deviating away from classic market-cap-weighted indexes is only likely to increase.”

Factor investing may see greater acceptance as investors are becoming increasingly aware of areas where there is clear evidence of excess return.

“There’s been a multiyear explosion, largely driven by momentum and minimum volatility,” Nestor added. “Now with rotation recently into value, the understanding of all of that is so much more widespread. And it goes back to my first reason, the lower equity-return expectations going forward and increased volatility.”

### PICKING STRATEGIES

When it comes to alternatively weighted strategies, Arnott recommends financial advisors should research whether a particular strategy is trading cheap or rich relative to its history. He warns that cheaper strategies often have a disappointing recent performance.

“All too often, the temptation is to buy what’s worked best over the last three years,” he said. “And that’s a wonderful way to buy high and sell low.”

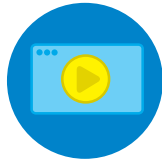
Arnott says investors ask him which RAFI index may produce the most alpha over the next 10 years. His choice is the original RAFI index because of its simple rebalancing mechanism. Humans tend to want more complex investing strategies, but the more complex those are, the greater the chances they won’t work.

“Some of the advantages that ordinary cap weighting has over all active strategies, and all smart beta strategies, are simplicity, low turnover, low costs,” Arnott noted. “And the role for any active ETF or smart beta ETF is to find cap weighting’s Achilles’ heel and fix it. With a lot of moving parts, you run a risk of not fixing it.” ●



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# WHAT TYPES OF ETFs DO YOU USE?

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**PLAIN VANILLA,  
SMART BETA OR ACTIVE ETFs,  
AND WHY?**

By ETF.com Staff



**Shana  
Sissel**

**CIO**

Spotlight Asset Group

---

We use all three—smart beta, plain vanilla passive and active ETFs—across our portfolios for various reasons. We believe that, in some places, it doesn't make sense to be anything but passive. Specifically with bonds and alternatives, we use active bonds and liquid alts in our portfolios. Both areas are very difficult to replicate in a passive way.

We also manage our portfolios from a tactical perspective. So at times, depending on market conditions and where we think we are in the economic cycle, we'll use smart beta. It might be we want to have a quality tilt or we might want to have a value tilt.

All of those things come into play when we're putting together our portfolios.



**Cathy  
Curtis**

**FOUNDER & PRESIDENT**

Curtis Financial Planning

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Currently I use plain vanilla ETF strategies. I've built them into my model portfolios where I use a mix of active and passive funds.

So far, I only use mutual funds for the active strategies and only in qualified accounts for tax efficiency. I've seen no reason to change this as of yet, but I remain open to new ideas that will benefit my clients. I prefer the tax efficiency and lower fees of ETFs over mutual funds in general.



# Tyler Mordy

**CEO & CIO**  
Forstrong Global

Our firm uses mainly plain vanilla (or market capitalization) weighted ETFs. Why? For the simple reason that we believe more value can be added through active asset allocation rather than tinkering with the underlying index. It's better to spend time on being in the right asset class than the right index.

Consider that investors now widely recognize the benefits of the ETF product structure: low cost, tax efficiency, etc. We are all believers.

But many are moving beyond that. The primary benefit of ETFs has caused a paradigm shift for active investors; that is, ETFs have colonized the world's asset classes and increased the portfolio-building conveniences of accessing them.

That means the smart money is now focused on establishing the right investment processes to build ETF portfolios. That's a challenge in an industry in which many have developed skill sets in "single silo" stock picking (e.g., they labor only in one asset class). And much of the legacy portfolio architecture erected in the 1980s and 1990s (i.e., a focus on stock picking) remains in place.

ETFs, with their extensive global reach, offer so much more for active management. Portfolio managers can establish strategies based on a wide variety of asset classes, macroeconomic regimes and behavioral conditions. The ultimate goal should be to make active decisions where it counts most.



# Ben Lavine

**CO-CIO**  
3D/L Capital Management

3D/L Capital believes that most of the risk premiums in publicly traded assets (equities, fixed income, commodities) may be captured systematically through index-based products, whether via plain vanilla indices constructed on market capitalization, or smart beta indices constructed on time-tested academically sourced risk factors such as value, size, momentum, dividend and quality.

In addition, the advent of artificial intelligence has led to thematic indices built around natural language processes and textual algorithms to determine index eligibility, allowing for more efficient capture of investment themes due to nuances that may be overlooked from standard industry categorizations (e.g., GICS).

From time to time, we'll look to active management in areas that are more challenging to systematically capture risk premiums, such as leveraged loans, or when general risk premiums have largely compressed to the point that incremental value added comes from actively traded portfolios.

The fixed income market is a current example of the latter. Credit risk premiums have compressed to such historically rich levels that security selection and trading may be more important than just investing in credit risk beta.



# John Davi

**FOUNDER & CIO**  
Astoria Portfolio Advisors

We use factor-based ETFs when constructing our multi-asset ETF portfolios. Factor ETFs are a form of active management put in a rules-based systematic form, which is something our firm believes in. We don't use [truly] active ETFs per se, mainly because we prefer to understand exactly what's under the hood of our ETFs and all the risk exposures.

There may be an instance where one of our fixed-income-oriented portfolios will use [something like the **PIMCO Enhanced Short Maturity Active ETF (MINT)** or the **JPMorgan Ultra-Short Income ETF (JPST)**], but they tend to be small [allocations].

Active ETFs tend to have a much smaller place in our multi-asset ETF portfolios. We'll look at active fixed income ETFs more in our fixed-income-heavy portfolios.

I know the world wants nontransparent active ETFs, and most of the big active fund families are going to start launching ETFs. And they should—it doesn't mean that they won't be successful.

We're an active management advisory firm—we just tend to use rules-based, systematic factor-based ETFs, and then we tilt our portfolios as macroeconomic conditions change. We think there'll be a place for [actively managed nontransparent ETFs] for those advisors that don't want to actively manage their portfolios themselves. ●

# A MORE EVEN ETF PLAYING FIELD



By **Gerrard Cowan**

Contributor to ETF.com  
& ETF Report

Custom baskets  
are a game  
changer for  
small active  
issuers

# FIELD





The SEC's ETF Rule, which was passed in September 2019, brought significant change to the ETF industry, not least through widening access to custom baskets. This levels the playing field for newer issuers, according to industry experts, and is already reshaping the sector.

Custom baskets are a crucial – though complex – tool for ETF managers. The concept is tied to the “creation/redemption” mechanism, which ETFs use to create new shares in the fund (to meet increasing market demand or to launch a new product) or to remove shares from the market.

#### HOW CUSTOM BASKETS WORK

This process relies on authorized participants (APs), that are usually large financial institutions with plenty of buying power. When new ETF shares are required, the APs buy a “creation basket,” usually containing a pro rata slice of all the ETF's underlying securities.

They deliver this to the ETF and receive new ETF shares in return, with the exchange taking place on a like-for-like basis in terms of NAV. The APs can then sell at a profit on the stock market.

APs are also key to redeeming ETFs. They'll buy ETF shares, deliver these to the fund in exchange for a portfolio of the underlying securities, and then sell these on the market. To know which securities they should buy (or which they'll receive), APs use a portfolio composition file, a list of securities that's updated daily.

The process benefits everyone. Because ETFs trade like a stock, the APs can exploit any price differences between the ETF and its holdings. The AP takes care of all the trading costs – which benefits the ETF – and in turn, benefits investors. Perhaps most importantly, these “in kind” transactions make ETFs highly tax efficient.

APs have always managed the creation/redemption process through two types of trading baskets: standard and custom. Standard baskets simply contain a proportional slice of all the securities in the ETF's index. Custom baskets, by contrast, could include cash or a collection of securities in nonrepresentative amounts.

This creates flexibility for both the AP and the ETF. For example, it means the ETF managers can dispose of securities they no longer want to hold in the fund, or acquire new securities, while still benefiting from the tax-efficient ETF wrapper.

Previously, a range of established funds were able to use custom baskets. The ETF Rule opens custom baskets up to everyone, including new funds.

#### THE RULE THAT CHANGED EVERYTHING

Chris Hempstead, director of international business development at IndexIQ, says it's like ordering a meal at a restaurant and asking for a slight change to the recipe: “They're still going to charge you \$25 a plate, but maybe they'll make it without peanuts.”

However, for most ETFs, there won't be enough daily turnover to make a difference, Hempstead says, with most passive funds likely to use custom baskets only during index rebalancing events, a long-established process.

Still, there are a few hundred index-based ETFs that could find it useful on a more regular basis. In particular, Hempstead points to the fixed income space, where the passive ETFs tend to be heavily optimized. It could be difficult finding bids for certain types of bonds in which the fund might want to cut back, for example, so the fund manager could place these bonds in the redemption basket, adding in-demand bonds to the creation basket.

There are particular advantages for active ETF managers, says Todd Rosenbluth, head of ETF and mutual fund research at CFRA. Their portfolios could include less liquid stocks, he notes.

For example, they might hold meaningful stakes in relatively small companies in niche areas. Additionally, they're more likely to see higher turnover, paring or increasing individual holdings through the day, as custom baskets give them greater leeway for changing their portfolio.

“The plumbing works better for them,” Rosenbluth said.

### 5 Reasons Custom Baskets For Active ETFs Matter

1

Adds to the tax efficiency of the ETF structure

2

Reduces expenses for actively managed strategies

3

Standardizes and facilitates the process of managing an active ETF

4

Allows managers of active ETFs to consider a wider range of opportunities

5

Evens the playing field for smaller issuers of actively managed ETFs

# ‘Custom baskets are the secret weapon of ETFs’

## WHEN THE PLUMBING IS BETTER

Due to when it first entered the market, the entirely actively managed Advisor-Shares family has long had the ability to offer custom baskets in its ETFs, which are fully transparent, said CEO Noah Hamman. However, custom baskets’ inclusion in the ETF Rule “helps normalize the process, and makes it much easier to work with service providers with similar procedures and guidelines to support custom baskets,” he explained.

Thanks to the “in-kind” nature of flows and the custom basket process, it’s estimated that an ETF can potentially operate with 75 basis points of cost improvement over the mutual fund structure, said Hamman. Expanding custom baskets “will result in much better performance for both the portfolio managers and shareholders.”

The ETF Rule is having a significant impact on the industry. In June, Dimensional Fund Advisors announced it would convert four of its mutual funds into active transparent ETFs listed on the NYSE, the largest such conversion in the sector’s history. The conversion followed the launch of Dimensional’s first three ETFs in 2020. The firm has quickly turned itself into one of the largest active ETF issuers, ranking in the top 15, with over \$30 billion in AUM.

The ability to use custom baskets within the ETF wrapper was key to Dimensional’s entrance to the market, said Nicole Hunter, DFA’s head of capital markets. The firm’s approach to implementation goes beyond standardized indexing, she notes, as “custom baskets allow us to implement our flexible approach,” which emphasizes risk management and tax efficiency.

Hunter says she applauds the SEC for harmonizing the rules across issuers: “I think we’re in a really great place now to think about the next evolution of ETFs.”

## CUSTOM BASKETS & SEMITRANSPARENCY

While ETFs are associated with transparency, a number of semitransparent structures have been launched in recent years,

which don’t have the same daily disclosure demands as more traditional funds, a significant benefit to active managers. Some of these have received approval to use custom baskets.

Earlier this year, Stance Capital launched the **Stance Equity ESG Large Cap Core ETF (STNC)**, in partnership with portfolio trading subadvisory firm Vident Investment Advisory. STNC is delivered through the Blue Tractor semitransparent wrapper.

Custom baskets have delivered significant tax advantages, says Bill Davis, portfolio manager at Stance Capital. For example, portfolio rebalancing doesn’t typically create taxable events. There’s also a one-time potential at the launch of an ETF to transition separate accounts into the fund without triggering a taxable event, “even though the underlying securities might have embedded gains,” Davis said.

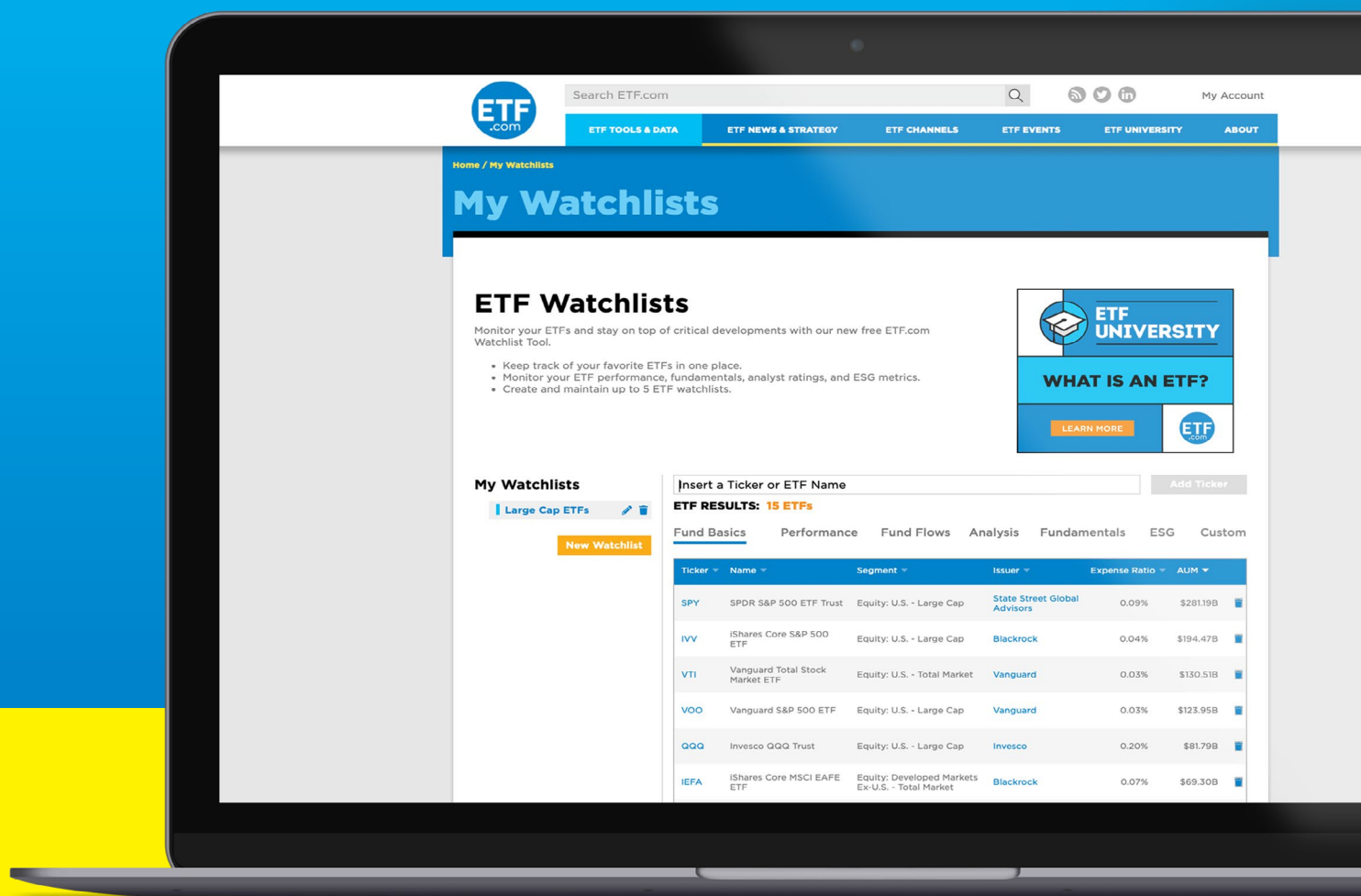
Ryan Dofflemeyer, senior portfolio manager at Vident, notes that the ability for active managers to rebalance tactically using in-kind custom baskets, while reducing capital gains tax, is likely to further fuel the growth of active ETFs in the coming years: “Custom baskets are the secret weapon of ETFs.”

Indeed, the allowance of custom baskets for all actively managed ETFs seems to have opened the floodgates. In 2020, actively managed ETFs accounted for 122 of the nearly 320 launches that took place during the year. That number doesn’t even include defined outcome ETFs, which are excluded because they largely look to replicate the returns of an index or ETF within certain buffered parameters, but are required to be actively managed. At least 125 defined outcome ETFs have been launched since 2018.

In the first six months of 2021, we’ve seen 88 actively managed ETFs that don’t use defined outcome strategies make their debut out of total launches of roughly 200. Consider the big picture: Actively managed ETFs (excluding defined outcome ETFs) overall represent less than 20% of all ETFs (and a much smaller percentage of assets). The industry has clearly hit a turning point. ●

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## YASMIN BILGER

### Engine No. 1: Using ETFs In ESG Activism

By Dan Mika



Yasmin Bilger is a managing director and head of ETFs for Engine No. 1, an investment firm that sent tremors through corporate boardrooms in June after winning three seats on Exxon-Mobil's board despite owning just 0.02% of the oil giant's shares. It won those seats by convincing the company's largest shareholders that the company needs to pivot quickly to renewables, over the fierce opposition of Exxon's management.

On June 22, Engine No. 1 launched its first ETF, the Engine No. 1 Transform 500 ETF (VOTE), as a way to bring its shareholder activism to an index of companies substantially similar to the S&P 500.

**Why does the ETF make sense for your firm to achieve the activist objective via an investment vehicle versus how Engine No. 1 did it with Exxon?**

The firm really introduced itself to market, I would say, with the campaign with Exxon and our activist work. But Engine No. 1 is a broad impact investment firm. And from a philosophical standpoint, what we believe is that positive impact can drive long-term shareholder value.

The ETF business has been one we've been working on for quite some time. It actually plays several key strategic roles for us as a broad platform. First, it's the one place where any investor—big or small—can join us in what we're doing, and really take a seat at the table for the work we're doing to transform companies.

Secondly, it's a place of scale for us. In particular, with VOTE, we're giving access to an index product—a market cap index product—that exists in virtually every investor's portfolio. And we think that addressable market is really valuable and important.

**Is there any change in the strategy of how Engine No. 1 will engage with company management using the ETF vehicle compared to what we saw a few weeks ago with the campaign to get board seats at Exxon?**

Our actual kit is really wide when we think about what we can do as active owners. Exxon is one example of how we can engage with companies, but there's a very broad spectrum, all the way to the votes we cast.

In the middle, it's just our engagement with companies, which we plan on running in a more thematic and focused fashion. You can really expect—through us as a firm generally, but also the ETF—for us to be taking advantage of that full spectrum of the toolkit, which could also happen, and will likely include less high-profile and more collaborative campaigns that we can engage with companies.

But there's something with the Exxon campaign I think is really important to note. It was a good example of how we owned 2 basis points of that company, and the success was driven off of the investors we brought along with us, the coalitions that we formed. That sentiment will absolutely flow through to the ETF and our strategy around how we're working toward the transformation we talk about.

**When you're talking to potential buyers for VOTE, what else are you telling them, other than the ESG mission? Why should they invest in this fund specifically, versus the other very large ETFs right now that track the S&P 500?**

The goal of VOTE is to really minimize friction on the investment side. That's one of the challenges that many investors feel with this space altogether—that there's this trade-off between financial performance and impact; and second, that there's a trade-off they have to make on costs.

The way we've designed this fund really solves both of those challenges. The Morningstar Index that the fund tracks gives exposure to the largest 500 companies in the U.S., and has very low tracking error to other standard benchmarks.

So we think we've achieved the goal of keeping the exposure very similar on the investment side. With our pricing strategy at 5 basis points, we're well within the range of where market cap price is really.

Also, as an index provider, Morningstar has been a great partner. I see them as a very like-minded provider along with us, really driving disruption in the industry that they operate in.

traditional asset managers, is that they treat that exercise more about quantity than impact, measuring the number of companies they met with, and tracking year-over-year growth.

We're going to take a much more focused, targeted and thematic approach to the work we do on the engagement side, really focus on where we think we have the biggest opportunity to drive change, and come with specific solutions backed by rigorous data and analysis that we tie to value.

**How exactly will Engine No. 1 measure changes from these companies in those positive social good changes? And how will it give that information to its investors?**

to them. It's not tangible to them, and they struggle with the "so what" of what their money is really fighting for.

This more impact-focused approach to engagement is going to be a really important way to engage with our investor base, and bring that to life.

**What themes will Engine No. 1 be looking to push in the near term?**

Without being able to comment specifically on our next set of campaigns and engagements, we see the whole spectrum of environmental and social issues as really what we're going to be playing in.

That includes continuing on the climate side, as well as more social issues like wages, diversity and inclu-

## The goal of VOTE is to really minimize friction on the investment side

**We saw Exxon fiercely oppose Engine No. 1 during the run-up to the shareholder meeting. If the point of this ETF is to push that kind of change, and your firm has equity in some of the biggest companies in the U.S., does that change the strategy of who you're going to look at to try and apply pressure to?**

One of the most interesting things about this product is, with the launch of this product, we'll be nearly permanent owners of the largest 500 companies in the U.S. based on the index that we track. That provides a wealth of opportunities for us to drive through the work we do on the engagement side, some of the changes that we believe will drive long-term shareholder value.

We talked a bit about the toolkit on the active ownership side. When it comes to engagement, what you tend to find at some of the larger, more

A lot of other asset managers are focusing on quantity of engagements rather than impact of engagements. And there's a variety of reasons we think that larger asset managers are constrained to that world.

We're going to take a much more thematic and focused approach to how we engage with companies. When it comes to the theme side, we'll focus on two to four environmental and social themes per year, based on where we see the largest opportunities to drive change, really grounding our arguments, not just in ideological space, but in economic space.

And while we're going to engineer a much more targeted and thematic approach, the second point, around the investor side, is critical.

One of the other gaps I see in the market right now is that, for many investors—particularly in the sustainable ETF space—the change isn't real

tion. While people know us right now in the market for what we've done with Exxon, we really see ourselves as operating across environmental and social issues.

**Engine No. 1 has filed for effectiveness for the Engine No. 1 Transform Climate ETF. Can you comment about that, and the future timeline scope of other ETF launches?**

We're building an ETF business for the long term, and for scale and as a platform. We're now approved for an additional ETF in the climate space. It's too early for us to talk about that, though. ●



# ETF DATA

## U.S.-LISTED ETFs BY ASSET CLASS AND YEAR-TO-DATE RETURN

- › Data as of 06/30/2021
- › Exp Ratio is annual expense ratio
- › AUM is net assets in \$US millions
- › YTD is year-to-date
- › 3YR and 5YR returns are annualized
- › Includes all U.S.-listed ETFs and ETNs with assets of \$160 million and above
- › Source: ETF.com

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
<b>U.S. EQUITY: TOTAL MARKET</b>						
Cambria Shareholder Yield	SYLD	0.59	320.0	44.61	21.92	20.23
Vident Core US Equity	VUSE	0.48	430.3	27.20	11.21	13.42
Invesco BuyBack Achievers	PKW	0.62	2,073.9	23.61	18.51	16.38
Schwab Fundamental US Broad Market	FNDB	0.25	368.1	22.05	15.96	15.14
VictoryShares MSCI USA Val Momentum	ULVM	0.20	442.8	19.86	10.09	-
VanEck Vectors Morningstar Wide Moat	MOAT	0.47	6,246.3	19.45	21.18	19.50
Avantis US Equity	AVUS	0.15	1,331.7	18.40	-	-
FlexShares Mstar US Market Factor Tilt	TILT	0.25	1,725.8	18.28	16.39	16.62
American Century STOXX US Quality Value	VALQ	0.29	239.1	18.14	10.60	-
iShares MSCI USA Equal Weighted	EUSA	0.15	448.2	17.72	16.39	15.94
iShares MSCI USA Size Factor	SIZE	0.15	854.6	17.10	17.34	15.72
Global X Adaptive US Factor	AUSF	0.27	173.4	16.94	-	-
AI Powered Equity	AIEQ	0.80	174.7	16.89	17.93	-
Xtrackers MSCI USA ESG Leaders Equity	USSG	0.10	3,652.9	16.65	-	-
iShares MSCI USA ESG Select	SUSA	0.25	3,294.4	16.61	21.00	18.95
iShares ESG Advanced MSCI USA	USXF	0.10	279.6	16.38	-	-
iShares MSCI KLD 400 Social	DSI	0.25	3,267.1	16.37	19.69	18.15
iShares ESG MSCI USA Leaders	SUSL	0.10	3,600.6	16.33	-	-
SPDR Portfolio S&P 1500	SPTM	0.03	5,175.4	15.69	18.08	17.53
FlexShares STOXX US ESG Select	ESG	0.32	173.1	15.57	19.60	-
Dimensional US Core Equity Market	DFAU	0.12	945.4	15.42	-	-
TrimTabs US Free Cash Flow Quality	TTAC	0.59	197.8	15.34	15.05	-
Schwab US Broad Market	SCHB	0.03	21,423.5	15.29	18.69	17.85
Vanguard Total Stock Market	VTI	0.03	252,496.6	15.21	18.73	17.90
iShares Core S&P Total US Stock Market	ITOT	0.03	40,063.6	15.20	18.62	17.83
iShares MSCI USA Quality Factor	QUAL	0.15	21,601.8	15.19	18.78	17.09
JPMorgan BetaBuilders US Equity	BBUS	0.02	566.5	15.16	-	-
Global X Conscious Companies	KRMA	0.43	472.8	15.14	18.08	-
Goldman Sachs MarketBeta US Equity	GSUS	0.07	400.6	15.12	-	-
iShares ESG Aware MSCI USA	ESGU	0.15	18,352.6	15.10	19.83	-
iShares Dow Jones US	IYY	0.20	1,667.4	15.08	18.58	17.60
SPDR MSCI USA StrategicFactors	QUS	0.15	950.0	15.07	17.61	16.45
iShares Russell 3000	IWV	0.20	11,901.5	15.06	18.50	17.66
Vanguard Russell 3000	VTHR	0.10	1,079.1	15.05	18.49	17.85
Invesco PureBeta MSCI USA	PBUS	0.04	2,057.9	14.69	18.97	-
IQ Candriam ESG US Equity	IQSU	0.09	446.5	14.67	-	-
FlexShares Quality Dividend	QDF	0.37	1,561.1	14.62	11.02	12.39
Vanguard ESG US Stock	ESGV	0.12	4,806.0	14.49	-	-
Etho Climate Leadership US	ETHO	0.48	169.4	14.25	20.53	19.81

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
iShares MSCI USA Multifactor	LRGF	0.20	1,042.3	14.23	12.58	14.28
iShares US Tech Breakthrough Multisector	TECB	0.40	429.9	14.21	-	-
WisdomTree US Total Dividend	DTD	0.28	932.4	13.65	11.90	11.89
iShares Core Dividend Growth	DGRO	0.08	19,128.5	13.56	16.52	15.77
Legg Mason Low Volatility High Dividend	LVHD	0.27	741.1	13.48	10.47	8.76
Timothy Plan US Large/Mid Cap Core	TPLC	0.52	193.7	13.44	-	-
American Century STOXX US Qual Growth	QGRO	0.29	270.3	13.39	-	-
FlexShares Quality Dividend Defensive	QDEF	0.37	477.4	13.27	11.15	11.86
Innovator IBD 50	FFTY	0.80	244.3	12.91	9.71	16.67
VictoryShares US Multi-Factor Min Vol	VSMV	0.35	163.7	12.69	13.17	-
iShares Morningstar US Equity	ILCB	0.03	901.3	12.68	18.67	16.87
Fidelity NASDAQ Composite	ONEQ	0.21	4,291.5	12.61	25.70	25.69
Motley Fool 100	TMFC	0.50	481.1	12.06	25.91	-
Goldman Sachs Hedge Industry VIP	GVIP	0.45	221.0	11.49	22.78	-
Invesco Dividend Achievers	PFM	0.53	640.7	11.24	14.44	12.16
WisdomTree US Quality Dividend Growth	DGRW	0.28	5,909.9	11.15	15.69	15.92
Vanguard Dividend Appreciation	VIG	0.06	59,562.7	10.53	17.21	15.42
SPDR SSGA US Sector Rotation	XLSR	0.70	173.6	10.46	-	-
iShares MSCI USA Min Vol Factor	USMV	0.15	27,615.3	9.19	13.64	11.95
First Trust US Equity Opportunities	FPX	0.57	2,098.8	7.82	21.93	21.08
iShares MSCI USA Momentum Factor	MTUM	0.15	15,268.4	7.67	17.82	19.23
Renaissance IPO	IPO	0.60	639.5	2.65	30.89	28.51
Invesco DWA Momentum	PDP	0.62	2,170.4	2.14	17.65	16.66
Dimensional US Core Equity 2	DFAC	0.19	13,292.1	-	-	-
Dimensional US Equity	DFUS	0.11	5,579.4	-	-	-
VanEck Vectors Social Sentiment	BUZZ	0.75	250.9	-	-	-
<b>U.S. EQUITY: TOTAL MARKET GROWTH</b>						
First Trust Multi Cap Growth AlphaDEX	FAD	0.63	221.8	15.23	18.75	18.90
iShares Core S&P US Growth	IUSG	0.04	11,741.2	14.23	22.43	21.52
iShare Morningstar US Growth	ILCG	0.04	2,052.2	11.85	23.43	23.37
American Century Focused Dyn Growth	FDG	0.45	240.9	9.09	-	-
Janus Henderson Sm/Mid Growth Alpha	JSMD	0.30	187.0	7.83	17.03	19.92
<b>U.S. EQUITY: TOTAL MARKET VALUE</b>						
Vanguard US Value Factor	VFVA	0.14	394.6	28.74	10.74	-
Alpha Architect US Quantitative Value	QUAL	0.49	204.8	23.02	5.31	11.72
First Trust Multi Cap Value AlphaDEX	FAB	0.70	162.8	22.45	8.28	10.94
iShares MSCI USA Value Factor	VLUE	0.15	16,153.8	22.00	11.27	14.07
SPDR S&P 1500 Value Tilt	VLU	0.12	214.2	21.88	15.45	16.65
iShares Core S&P US Value	IUSV	0.04	10,361.8	16.72	13.01	12.71
iShares Morningstar Value	ILCV	0.04	719.5	16.15	11.67	11.32
Dimensional US Targeted Value	DFAT	0.34	5,881.6	-	-	-
<b>U.S. EQUITY: EXTENDED CAP</b>						
Invesco FTSE RAFI US 1500 Small-Mid	PRFZ	0.39	2,001.7	24.33	11.73	15.39
iShares Russell 2500	SMMD	0.15	317.2	17.19	15.05	-
Vanguard Extended Market	VXF	0.06	17,622.4	15.18	18.60	18.80
<b>U.S. EQUITY: LARGE CAP</b>						
Invesco S&P 500 High Beta	SPHB	0.25	2,039.2	33.80	23.08	22.97
Pacer US Cash Cows 100	COWZ	0.49	653.5	28.19	15.42	-
SPDR Russell 1000 Yield Focus	ONEY	0.20	653.2	27.96	14.06	15.69
SPDR Portfolio S&P 500 High Dividend	SPYD	0.07	4,621.3	24.98	7.87	8.91
Schwab Fundamental US Large Company	FNDX	0.25	7,127.5	21.81	16.34	15.10
Invesco FTSE RAFI US 1000	PRF	0.39	5,220.5	21.32	15.02	14.52
VictoryShares US Lrg Cap High Div Vol Wtd	CDL	0.35	220.2	21.18	10.74	11.68
HCM Defender 500	LGH	1.23	195.5	21.00	-	-
VictoryShares US EQ Income Enh Vol Wtd	CDC	0.37	913.3	20.92	14.70	14.00
First Trust Rising Dividend Achievers	RDY	0.50	4,730.9	20.90	19.02	20.59
ALPS Sector Dividend Dogs	SDOG	0.40	1,204.3	20.76	10.14	9.82
Invesco RAFI Strategic US	IUS	0.19	180.2	20.47	-	-
Davis Select US Equity	DUSA	0.62	389.0	20.10	15.11	-
Invesco S&P 500 Revenue	RWL	0.39	1,072.0	19.23	15.34	14.70
Invesco S&P 500 Equal Weight	RSP	0.20	28,488.5	19.06	16.19	15.42
Invesco Russell 1000 Dynamic Multifactor	OMFL	0.29	1,563.4	18.33	22.33	-
First Trust Lunt US Factor Rotation	FCTR	0.65	296.9	18.29	-	-
Invesco S&P 500 High Dividend Low Vol	SPHD	0.30	3,062.2	18.25	6.62	6.99
Invesco Russell 1000 Equal Weight	EQAL	0.20	664.7	18.15	14.97	14.57

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Main Sector Rotation	SECT	0.80	905.2	18.11	15.63	-
Overlay Shares Large Cap Equity	OVL	0.79	185.1	17.96	-	-
iPath Shiller CAPE ETN	CAPE	0.45	413.1	17.69	20.16	19.55
ProShares Large Cap Core Plus	CSM	0.46	480.4	17.68	13.71	14.19
First Trust Large Cap Core AlphaDEX	FEX	0.59	1,188.1	17.31	13.24	13.84
Inspire 100	BIBL	0.35	247.0	17.12	19.01	-
WisdomTree US Dividend ex-Financials	DTN	0.38	560.9	17.08	7.27	8.27
SPDR Russell 1000 Momentum Focus	ONEO	0.20	311.7	17.06	12.47	13.31
ALPS Equal Sector Weight	EQL	0.28	209.7	17.04	15.46	14.32
Invesco Dow Jones Industrial Average Div	DJD	0.07	164.1	16.78	13.09	13.88
SPDR Russell 1000 Low Volatility Focus	ONEV	0.20	543.9	16.73	14.90	14.52
Goldman Sachs Equal Weight US Large Cap	GSEW	0.09	776.6	16.58	16.56	-
JPMorgan Diversified Return US Equity	JPUS	0.18	675.5	16.48	13.25	13.10
IQ Chaikin US Large Cap	CLRG	0.25	312.3	16.27	12.33	-
Invesco S&P 500 Quality	SPHQ	0.15	2,940.9	16.14	19.34	16.31
WisdomTree US LargeCap	EPS	0.08	578.4	15.99	16.94	17.00
SPDR S&P 500 ESG	EFIV	0.10	235.3	15.98	-	-
Global X S&P 500 Catholic Values	CATH	0.29	557.9	15.95	18.71	17.88
Xtrackers S&P 500 ESG	SNPE	0.10	632.2	15.64	-	-
Fidelity Quality Factor	FOAL	0.29	212.2	15.59	16.99	-
John Hancock Multifactor Large Cap	JHML	0.29	713.4	15.50	17.57	16.92
Distillate US Fundamental Stability/Value	DSTL	0.39	357.1	15.36	-	-
SPDR Portfolio S&P 500	SPPL	0.03	10,704.7	15.31	18.69	17.73
Vanguard S&P 500	VOO	0.03	232,337.2	15.29	18.56	17.60
SPDR S&P 500 Trust	SPY	0.09	373,525.6	15.25	18.56	17.54
Hartford Multifactor US Equity	ROUS	0.19	392.7	15.16	10.72	13.61
Goldman Sachs JUST US Large Cap Equity	JUST	0.20	241.6	15.14	18.20	-
Schwab US Large-Cap	SCHX	0.03	30,868.7	15.02	19.20	18.08
Vanguard Large-Cap	VV	0.04	24,618.3	14.97	19.33	18.12
Vanguard Russell 1000	VONE	0.08	2,442.4	14.97	19.06	17.88
iShares S&P 100	OEF	0.20	7,591.6	14.96	20.06	18.32
Pacer Trendpilot US Large Cap	PTLC	0.60	1,902.9	14.91	9.84	12.13
iShares Russell 1000	IWB	0.15	29,735.6	14.91	18.99	17.84
Vanguard Mega Cap	MGC	0.07	3,939.9	14.86	19.86	18.55
iShares Core S&P 500	IIV	0.03	286,606.2	14.86	18.31	17.43
SPDR S&P 500 Fossil Fuel Reserves Free	SPYX	0.20	1,150.1	14.85	19.23	18.50
VictoryShares US 500 Enh Volatility Wtd	CFO	0.35	937.1	14.83	14.39	15.32
Xtrackers Russell US Multifactor	DEUS	0.17	196.6	14.77	13.30	13.57
Schwab 1000	SCHK	0.05	1,913.6	14.77	18.91	-
JPMorgan US Quality Factor	JQUA	0.12	349.5	14.75	17.91	-
Invesco S&P 500 Top 50	XLG	0.20	1,886.5	14.74	21.07	19.19
VictoryShares US 500 Volatility Wtd	CFA	0.35	705.3	14.73	14.48	15.38
Day Hagan/NDR Smart Sector	SSUS	0.79	254.8	14.60	-	-
iShares Russell Top 200	IWL	0.15	949.8	14.53	19.96	18.81
ProShares S&P 500 Dividend Aristocrats	NOBL	0.35	8,565.3	14.51	14.35	11.37
Goldman Sachs ActiveBeta US Large Cap	GSLC	0.09	13,081.3	14.29	17.76	16.89
BNY Mellon US Large Cap Core Equity	BKLC	0.00	316.8	14.28	-	-
FT Cboe Vest S&P 500 Div Aristo Target Inc	KNG	0.75	195.3	14.19	14.47	-
SPDR SSGA Gender Diversity	SHE	0.20	243.9	13.97	15.92	15.23
Franklin LibertyQ US Equity	FLQL	0.15	1,359.2	13.85	15.62	-
6 Meridian Hedged Equity-Index Option	SIXH	0.87	238.6	13.57	-	-
SPDR Dow Jones Industrial Average Trust	DIA	0.16	30,274.3	13.24	14.59	16.36
Invesco QQQ Trust	QQQ	0.20	177,225.3	13.24	28.29	27.98
Invesco NASDAQ 100	QQQM	0.15	1,121.6	13.19	-	-
Simplify US Equity PLUS Downsd Convexity	SPD	0.28	222.9	13.14	-	-
First Trust Capital Strength	FTCS	0.56	8,110.2	12.64	14.55	14.09
WisdomTree US LargeCap Dividend	DLN	0.28	2,955.4	12.55	13.03	12.50
JPMorgan US Momentum Factor	JMOM	0.12	190.1	12.42	18.76	-
SPDR SSGA US Large Cap Low Volatility	LGLV	0.12	574.2	12.17	16.35	13.76
VictoryShares Dividend Accelerator	VSDA	0.35	344.0	11.83	17.28	-
Principal US Mega-Cap	USMC	0.12	1,954.1	11.79	17.23	-
JPMorgan Equity Premium Income	JEPI	0.35	1,887.6	11.74	-	-
Invesco NASDAQ Next Gen 100	QQQJ	0.15	1,223.7	11.56	-	-
Direxion NASDAQ-100 Equal Weighted	QQQE	0.35	380.8	11.46	23.61	22.59
Invesco Defensive Equity	DEF	0.53	253.6	11.43	13.85	12.67

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
First Trust Nasdaq-100 Equal Weighted	QQEW	0.58	1,286.3	11.38	22.88	21.82
Fidelity Low Volatility Factor	FDLO	0.29	473.6	11.11	16.78	-
Amplify CWP Enhanced Dividend Income	DIVO	0.55	521.7	11.06	14.47	-
Invesco S&P 500 BuyWrite	PBP	0.49	170.7	10.95	4.81	6.45
O?Shares US Quality Dividend	OUSA	0.48	686.8	10.66	13.76	11.34
Aptus Drawdown Managed Equity	ADME	0.79	244.1	10.36	6.20	9.45
FT Cboe Vest US Equity Buffer - February	FFEB	0.85	266.3	9.89	-	-
Innovator S&P 500 Buffer - January	BJAN	0.79	163.7	9.37	-	-
Aptus Collared Income Opportunity	ACIO	0.79	231.9	8.76	-	-
Invesco S&P 500 Low Volatility	SPLV	0.25	7,851.0	8.76	10.86	9.50
Innovator S&P 500 Power Buffer - Feb	PFEB	0.79	202.6	8.28	-	-
Global X S&P 500 Covered Call	XYLD	0.60	334.4	8.08	5.86	8.41
Invesco S&P 500 Downside Hedged	PHDG	0.40	181.0	7.79	9.70	10.22
FT Cboe Vest US Equity Buffer - November	FNOV	0.85	170.4	7.34	-	-
FT Cboe Vest Fund of Buffer	BUFR	1.05	220.6	6.80	-	-
Pacer Trendpilot 100	PTNQ	0.65	790.6	6.29	18.90	22.03
Innovator S&P 500 Power Buffer - January	PJAN	0.79	370.6	6.09	-	-
FT Cboe Vest US Equity Deep Buffer - Feb	DFEB	0.85	293.4	5.71	-	-
Innovator S&P 500 Power Buffer - Sept	PSEP	0.79	188.2	5.55	-	-
Nationwide Risk-Managed Income	NUSI	0.68	389.1	4.38	-	-
Innovator S&P 500 Power Buffer - April	PAPR	0.79	255.8	4.33	-	-
Innovator S&P 500 Power Buffer - May	PMAY	0.79	278.4	3.81	-	-
Innovator S&P 500 Power Buffer - June	PIJUN	0.79	201.0	3.19	-	-
Global X NASDAQ 100 Covered Call	QYLD	0.60	3,351.2	1.25	7.72	10.19
<b>U.S. EQUITY: LARGE CAP GROWTH</b>						
Invesco S&P 500 GARP	SPGP	0.34	550.9	22.17	21.33	22.98
SoFi Select 500	SFY	0.00	263.0	15.48	-	-
Nuveen ESG Large-Cap Growth	NULG	0.35	798.4	14.60	26.57	-
Vanguard S&P 500 Growth	VOOG	0.10	5,994.1	14.37	22.98	21.66
SPDR Portfolio S&P 500 Growth	SPYG	0.04	12,328.4	14.32	23.03	21.71
iShares S&P 500 Growth	IWW	0.18	34,233.3	14.27	22.88	21.61
Schwab US Large-Cap Growth	SCHG	0.04	15,206.8	13.90	25.48	23.84
Vanguard Mega Cap Growth	MGK	0.07	11,385.6	13.84	25.82	23.89
First Trust Large Cap Growth AlphaDEX	FTC	0.60	1,195.9	13.60	19.07	17.68
Vanguard Growth	VUG	0.04	79,051.4	13.53	25.36	23.08
iShares Russell Top 200 Growth	IWY	0.20	3,897.8	13.52	25.74	24.37
Vanguard Russell 1000 Growth	VONG	0.08	6,696.4	13.06	25.04	23.60
Invesco S&P 500 Pure Growth	RPG	0.35	2,761.0	13.01	17.77	18.52
iShares Russell 1000 Growth	IWF	0.19	69,315.1	12.88	24.87	23.42
Invesco Dynamic Large Cap Growth	PWB	0.56	777.2	10.20	18.90	19.71
<b>U.S. EQUITY: LARGE CAP VALUE</b>						
Invesco S&P 500 Pure Value	RPV	0.35	2,968.8	26.71	8.19	11.10
JPMorgan US Value Factor	JVAL	0.12	1,093.2	21.83	14.89	-
First Trust Large Cap Value AlphaDEX	FTA	0.60	1,050.5	20.24	8.08	10.61
Fidelity Value Factor	FVAL	0.29	404.8	19.15	15.63	-
Vanguard Russell 1000 Value	VONV	0.08	5,890.6	17.07	12.32	11.79
iShares Russell 1000 Value	IWD	0.19	53,737.7	16.91	12.21	11.70
Vanguard Value	VTV	0.04	81,348.2	16.81	12.82	13.03
SPDR Portfolio S&P 500 Value	SPYV	0.04	12,142.9	16.31	13.10	12.63
Vanguard S&P 500 Value	VOOV	0.10	2,332.8	16.31	13.01	12.40
iShares S&P 500 Value	IVE	0.18	22,177.4	16.30	12.97	12.37
Invesco Dynamic Large Cap Value	PWV	0.56	730.3	16.11	10.36	10.11
Vanguard Mega Cap Value	MGV	0.07	4,369.3	15.97	13.25	13.06
Schwab US Large-Cap Value	SCHV	0.04	9,529.4	15.97	12.18	12.02
iShares Russell Top 200 Value	IWX	0.20	1,150.7	15.75	12.27	11.70
Nuveen ESG Large-Cap Value	NULV	0.35	1,016.4	14.60	12.22	-
American Century Focused Large Cap Val	FLV	0.42	248.3	11.53	-	-
<b>U.S. EQUITY: MID CAP</b>						
Invesco S&P MidCap 400 Revenue	RWK	0.39	407.9	24.95	14.46	14.43
WisdomTree US MidCap Dividend	DON	0.38	3,047.7	21.23	7.98	9.65
WisdomTree US MidCap	EZM	0.38	730.8	20.96	11.02	13.16
First Trust Mid Cap Core AlphaDEX	FNX	0.60	1,032.7	20.77	13.58	14.70
Invesco Zacks Mid-Cap	CZA	0.69	223.7	18.11	13.15	13.73
SPDR Portfolio S&P 400 Mid Cap	SPMD	0.05	4,707.2	17.58	12.48	14.84
iShares Core S&P Mid-Cap	IJH	0.05	63,190.1	17.55	13.07	14.20

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
JPMorgan Diversified Return US Mid Cap	JPME	0.24	245.6	17.54	12.58	13.42
Vanguard S&P Mid-Cap 400	IVOO	0.10	1,432.1	17.51	13.03	14.25
SPDR S&P Midcap 400 Trust	MDY	0.23	21,289.1	17.46	12.93	14.02
iShares Russell Mid-Cap	IWR	0.19	29,651.5	16.13	16.27	15.42
Invesco S&P Midcap Quality	XMHQ	0.25	276.5	15.87	17.87	16.12
John Hancock Multifactor Mid Cap	JHMM	0.42	2,248.4	15.61	15.50	15.66
Vanguard Mid-Cap	VO	0.04	49,953.9	15.46	16.48	15.74
Schwab US Mid-Cap	SCHM	0.04	9,689.6	15.21	14.23	14.90
iShares Morningstar Mid-Cap	IMCB	0.04	895.5	15.05	15.09	14.08
ProShares S&P MidCap 400 Div Aristocrats	REGL	0.41	1,025.0	14.80	10.33	9.62
JPMorgan BetaBuilders US Mid Cap Equity	BBMC	0.07	1,691.3	14.51	-	-
Invesco S&P MidCap Low Volatility	XMLV	0.25	1,476.1	11.77	6.60	8.63
Invesco S&P Midcap Momentum	XMMO	0.34	924.0	9.50	21.12	24.25
Pacer Trendplot US Mid Cap	PTMC	0.60	441.5	8.93	4.25	8.59
<b>U.S. EQUITY: MID CAP GROWTH</b>						
First Trust Mid Cap Growth AlphaDEX	FNV	0.70	445.8	15.25	20.51	20.52
iShares S&P Mid-Cap 400 Growth	IJK	0.17	8,228.5	12.31	14.01	15.01
Vanguard S&P Mid-Cap 400 Growth	IVOG	0.15	930.2	12.26	14.04	15.05
SPDR S&P 400 Mid Cap Growth	MDYG	0.15	1,670.5	12.11	14.03	15.12
Invesco S&P MidCap 400 Pure Growth	RFG	0.35	400.3	11.79	12.50	13.85
Vanguard Mid-Cap Growth	VOT	0.07	11,275.1	11.63	21.56	19.22
Nuveen ESG Mid-Cap Growth	NUMG	0.40	340.4	10.51	24.18	-
iShares Russell Mid-Cap Growth	IWC	0.24	15,768.7	10.39	22.13	20.26
iShares Morningstar Mid-Cap Growth	IMCG	0.06	1,214.9	8.22	23.91	21.94
<b>U.S. EQUITY: MID CAP VALUE</b>						
Invesco S&P MidCap 400 Pure Value	RFV	0.35	189.9	25.54	11.36	14.23
Invesco S&P MidCap Val w/ Momentum	XVMV	0.39	243.3	24.38	15.70	12.68
iShares Morningstar Mid-Cap Value	IMCV	0.06	463.9	24.24	9.49	11.53
iShares S&P Mid-Cap 400 Value	IJ	0.18	8,752.4	22.91	11.27	12.54
Vanguard S&P Mid-Cap 400 Value	IVOV	0.15	813.8	22.91	11.39	12.66
SPDR S&P 400 Mid Cap Value	MDYV	0.15	1,635.2	22.78	11.40	12.73
Nuveen ESG Mid-Cap Value	NUMV	0.40	242.5	20.56	11.49	-
iShares Russell Mid-Cap Value	IWS	0.24	14,179.4	19.31	11.67	11.57
Vanguard Mid-Cap Value	VOE	0.07	14,392.0	19.17	11.04	12.08
<b>U.S. EQUITY: SMALL CAP</b>						
Invesco S&P SmallCap 600 Revenue	RWJ	0.39	705.3	48.93	19.46	18.24
Pacer US Small Cap Cash Cows 100	CALF	0.59	399.6	43.10	17.11	-
Principal US Small-Cap Multi-Factor	PSC	0.38	1,619.4	30.00	13.56	-
WisdomTree US SmallCap	EES	0.38	616.4	27.43	10.08	14.95
Schwab Fundamental US Small Company	FNDA	0.25	4,618.0	27.09	12.51	14.71
JPMorgan Diversfd Ret US Small Cap	JPSE	0.29	174.7	23.67	13.61	-
Vanguard S&P Small-Cap 600	VIOW	0.10	1,766.3	23.65	12.22	15.87
SPDR S&P 600 Small Cap	SLY	0.15	1,818.2	23.55	12.18	15.77
iShares Core S&P Small-Cap	IJR	0.06	71,222.2	23.52	12.22	15.80
SPDR Portfolio S&P 600 Small Cap	SPSM	0.05	4,156.2	23.39	12.62	16.24
IQ Chaikin US Small Cap	CSML	0.35	207.6	22.81	8.95	-
First Trust Small Cap Core AlphaDEX	FYX	0.63	986.5	21.54	12.31	15.24
VictoryShares US SmCap High Div Vol Wtd	CSB	0.35	250.7	21.39	13.25	15.21
VictoryShares MSCI USA SmaCap Val Mom	USVM	0.24	298.6	21.36	11.34	-
WisdomTree US SmallCap Dividend	DES	0.38	1,858.1	20.54	5.24	8.92
Goldman Sachs ActiveBeta US Small Cap	GSSC	0.20	427.8	20.33	12.55	-
iShares MSCI USA Small-Cap Multifactor	SMLF	0.30	997.0	20.26	10.95	14.53
iShares Morningstar Small-Cap	ISCB	0.04	243.1	19.46	11.07	13.31
Invesco DWA SmallCap Momentum	DWAS	0.60	625.5	19.31	18.64	20.79
SPDR SSGA US Small Cap Low Volatility	SMLV	0.12	220.6	18.85	8.78	11.90
iShares ESG Aware MSCI USA Small-Cap	ESML	0.17	999.2	18.78	15.41	-
WisdomTree US SmCap Quality Div Growth	DGRS	0.38	200.1	18.07	10.59	12.56
Nuveen ESG Small-Cap	NUSC	0.40	973.1	17.76	15.83	-
JPMorgan BetaBuilders US Small Cap	BBSC	0.09	435.4	17.59	-	-
Schwab US Small-Cap	SCHA	0.04	16,493.1	17.57	13.87	15.63
Vanguard Russell 2000	VTWO	0.10	5,259.2	17.39	13.53	16.50
iShares Russell 2000	IWM	0.19	69,741.7	17.38	13.41	16.40
Global X Russell 2000 Covered Call	RYLD	0.60	218.9	16.64	-	-
Vanguard Small-Cap	VB	0.05	47,254.8	16.31	14.75	15.95
Invesco S&P SmallCap Low Volatility	XSLV	0.25	1,152.8	15.80	1.73	7.44

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Invesco S&P SmallCap Momentum	XSMO	0.39	172.1	15.44	15.17	18.82
John Hancock Multifactor Small Cap	JHSC	0.42	428.5	14.31	10.07	-
iShares MSCI USA Small-Cap Min Vol Factor	SMMV	0.20	872.3	12.73	8.53	-
ProShares Russell 2000 Dividend Growers	SMDV	0.41	882.3	11.77	4.81	6.97
Dimensional US Small Cap	DFAS	0.34	3,961.3	-	-	-
<b>U.S. EQUITY: SMALL CAP GROWTH</b>						
First Trust Small Cap Growth AlphaDEX	FYC	0.71	436.4	18.79	14.94	18.78
SPDR S&P 600 Small Cap Growth	SLYG	0.15	2,294.4	16.53	13.08	16.76
Vanguard S&P Small-Cap 600 Growth	VIQG	0.16	577.6	16.48	13.06	16.87
iShares S&P Small-Cap 600 Growth	IJT	0.18	6,379.9	16.43	12.94	16.64
Vanguard Russell 2000 Growth	VTWG	0.15	749.6	8.97	15.99	18.91
iShares Russell 2000 Growth	IWO	0.24	12,416.1	8.85	15.89	18.74
Vanguard Small-Cap Growth	VBK	0.07	16,230.8	8.46	18.83	19.38
MFAM Small-Cap Growth	MFMS	0.85	186.3	3.79	-	-
iShares Morningstar Small-Cap Growth	ISCG	0.06	512.0	2.58	16.40	18.87
<b>U.S. EQUITY: SMALL CAP VALUE</b>						
Invesco S&P SmCap Value w/ Momentum	X SVM	0.39	357.3	45.94	18.46	18.43
Invesco S&P SmallCap 600 Pure Value	RZV	0.35	384.8	43.30	8.30	11.98
Avantis US Small Cap Value	AVUV	0.25	1,397.4	34.52	-	-
Vanguard S&P Small-Cap 600 Value	VIOV	0.15	1,443.0	30.52	10.74	14.42
SPDR S&P 600 Small Cap Value	SLYV	0.15	4,097.5	30.49	10.72	15.45
iShares S&P Small-Cap 600 Value	IJS	0.18	10,066.7	30.41	10.60	14.24
Vanguard Russell 2000 Value	VTWV	0.15	1,094.5	26.45	10.26	13.69
iShares Russell 2000 Value	IWN	0.24	16,689.4	26.43	10.10	13.44
iShares Morningstar Small Cap Value	ISCV	0.06	465.0	26.16	7.54	10.32
Vanguard Small-Cap Value	VBR	0.07	24,471.8	23.05	10.82	12.79
First Trust Small Cap Value AlphaDEX	FYT	0.72	322.0	23.02	9.92	12.55
<b>U.S. EQUITY: MICRO CAP</b>						
First Trust Dow Jones Select MicroCap	FDM	0.60	169.5	29.38	6.74	13.11
iShares Micro-Cap	IWC	0.60	1,355.5	28.85	14.36	18.00
<b>U.S. EQUITY: BASIC MATERIALS</b>						
iShares North American Natural Res	IGE	0.46	463.8	32.49	-2.30	1.50
SPDR S&P Metals & Mining	XME	0.35	2,010.8	29.29	8.49	13.83
SPDR S&P North American Natural Res	NANR	0.35	553.0	26.81	7.10	7.02
Invesco DWA Basic Materials Momentum	PYZ	0.60	214.9	23.15	10.36	11.55
First Trust Materials AlphaDEX	FZX	0.67	509.4	20.14	11.38	12.32
Invesco S&P 500 Equal Weight Materials	RTM	0.40	591.4	18.92	17.39	16.55
First Trust Water	FIW	0.54	1,036.8	16.08	20.56	19.11
Fidelity MSCI Materials	FMAT	0.08	563.7	16.07	13.39	14.16
Vanguard Materials	VAW	0.10	3,655.7	15.97	13.32	14.13
iShares US Basic Materials	IYM	0.43	955.8	15.71	11.56	13.33
Invesco Water Resources	PHO	0.60	1,665.7	15.38	21.55	18.30
Materials Select Sector SPDR	XLB	0.12	9,574.5	14.67	14.71	14.47
<b>U.S. EQUITY: CONSUMER CYCLICALS</b>						
SPDR S&P Retail	XRT	0.35	965.4	51.62	27.83	20.00
Invesco Dynamic Leisure/Entertainment	PEJ	0.63	1,599.1	30.66	4.60	10.01
Invesco S&P 500 Eq Wt Consumer Discr	RCD	0.40	892.0	21.39	14.29	13.60
First Trust Consumer Discr AlphaDEX	FXD	0.63	1,846.5	19.50	12.77	12.51
ETFMG Travel Tech	AWAY	0.75	379.4	15.06	-	-
Vanguard Consumer Discretionary	VCR	0.10	6,203.2	14.30	24.51	22.51
Fidelity MSCI Consumer Discretionary	FDIS	0.08	1,562.8	13.72	24.97	22.99
Amplify Online Retail	IBUY	0.65	1,342.0	13.44	36.70	39.98
Consumer Discr Select Sector SPDR	XLY	0.12	20,190.1	11.39	19.14	19.49
iShares US Consumer Services	IYC	0.43	1,410.3	10.34	17.96	17.74
ProShares Online Retail	ONLN	0.58	1,126.0	6.62	-	-
<b>U.S. EQUITY: CONSUMER NON-CYCLICALS</b>						
First Trust Consumer Staples AlphaDEX	FXG	0.63	268.2	11.19	6.81	3.48
Invesco S&P 500 Eq Wt Consumer Staples	RHS	0.40	472.4	7.42	11.38	6.82
iShares US Consumer Goods	IYK	0.43	687.6	6.65	18.24	12.14
Vanguard Consumer Staples	VDC	0.10	5,565.5	6.10	13.65	8.02
Fidelity MSCI Consumer Staples	FSTA	0.08	800.6	5.98	13.95	8.09
Consumer Staples Select Sector SPDR	XLP	0.12	11,531.1	4.96	13.84	7.78
<b>U.S. EQUITY: ENERGY</b>						
First Trust Natural Gas	FCG	0.60	293.2	86.92	-9.50	-6.60
Invesco S&P SmallCap Energy	PSCE	0.29	213.6	83.08	-21.76	-12.79



FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Invesco DWA Energy Momentum	PXI	0.60	205.6	74.17	-9.13	-2.77
SPDR S&P Oil & Gas Expl/Prod	XOP	0.35	4,080.6	66.61	-15.92	-5.66
iShares US Oil & Gas Expl/Prod	IEO	0.42	365.1	61.13	-5.92	2.17
InfraCap MLP	AMZA	2.01	312.7	59.43	-13.99	-9.16
Vanguard Energy	VDE	0.10	5,357.5	49.05	-6.73	-1.07
Alerian MLP	AMPL	0.90	5,637.0	48.27	-1.49	-2.47
Fidelity MSCI Energy	FENY	0.08	990.7	48.19	-6.94	-1.38
Global X MLP	MLPA	0.46	1,003.4	48.02	-1.49	-2.62
Invesco S&P 500 Equal Weight Energy	RYE	0.40	203.1	47.25	-7.63	-1.75
JPMorgan Alerian MLP Index ETN	AMJ	0.85	2,290.8	46.84	-1.59	-1.86
iPath Select MLP ETN	ATMP	0.95	192.4	46.08	0.15	0.51
iShares US Energy	IYE	0.42	2,594.1	45.32	-7.17	-1.62
Energy Select Sector SPDR	XLE	0.12	25,231.9	45.07	-5.66	-0.20
First Trust Energy AlphaDEX	FXN	0.64	359.2	44.03	-12.29	-5.19
ETRACS Alerian MLP Infrastr ETN Ser B	MLPB	0.85	218.8	42.46	-0.29	-4.01
SPDR S&P Oil & Gas Equipment & Services	XES	0.35	178.9	40.09	-27.23	-18.60
Global X MLP & Energy Infrastructure	MLPX	0.45	736.4	39.57	3.76	3.59
Tortoise North American Pipeline	TPYP	0.40	492.5	33.23	4.21	4.85
First Trust North American Energy Infrastr	EMLP	0.96	2,047.0	18.73	4.11	1.20
First Trust NASDAQ Cln Edge Green Energy	QCLN	0.60	2,821.0	-1.44	52.57	37.10
SPDR S&P Kensho Clean Power	CNRG	0.45	406.2	-1.75	-	-
ALPS Clean Energy	ACES	0.55	1,016.5	-5.11	46.20	-
BlackRock US Carbon Transition Readiness	LCTU	0.15	1,393.2	-	-	-
<b>U.S. EQUITY: FINANCIALS</b>						
First Trust Nasdaq Bank	FTXO	0.60	237.6	31.38	6.18	-
Invesco KBW Bank	KBWB	0.35	2,350.0	29.13	9.13	16.60
iShares US Broker-Dealers & Sec Exch	IAI	0.42	929.4	28.98	18.78	25.10
First Trust Financials AlphaDEX	FXO	0.62	1,386.3	28.46	12.02	13.75
VanEck Vectors BDC Income	BIZD	10.23	458.6	27.87	12.24	10.92
iShares US Regional Banks	IAT	0.42	731.9	27.84	8.46	14.86
SPDR S&P Regional Banking	KRE	0.35	5,109.5	27.40	5.31	13.85
Invesco KBW High Dividend Yld Financial	KBWD	1.24	442.8	26.70	4.40	8.45
Invesco S&P 500 Equal Weight Financials	RYF	0.40	439.4	25.53	14.87	17.22
Financial Select Sector SPDR	XLF	0.12	40,617.4	25.50	13.80	16.90
Vanguard Financials	VFH	0.10	10,747.3	25.23	12.86	16.23
Fidelity MSCI Financials	FNCL	0.08	1,762.0	25.14	12.86	16.24
iShares US Financial Services	IYG	0.42	2,374.6	24.10	14.67	20.04
SPDR S&P Bank	KBE	0.35	3,361.9	24.05	5.63	13.44
iShares US Financials	IYF	0.42	2,330.0	22.12	13.46	15.55
SPDR S&P Insurance	KIE	0.35	706.3	15.95	11.17	12.31
<b>U.S. EQUITY: HEALTH CARE</b>						
SPDR S&P Health Care Services	XHS	0.35	212.7	18.20	19.21	15.61
Invesco S&P SmallCap Health Care	PSCH	0.29	536.3	14.04	14.67	22.33
iShares US Healthcare Providers	IHF	0.42	1,442.8	13.81	16.99	17.27
SPDR S&P Health Care Equipment	XHE	0.35	814.7	13.51	18.27	22.58
Invesco Dynamic Pharmaceuticals	PIP	0.56	368.1	13.12	7.22	5.82
Invesco S&P 500 Equal Weight Health Care	RYH	0.40	862.8	12.27	17.69	14.79
Health Care Select Sector SPDR	XLV	0.12	27,896.1	11.84	16.86	13.88
iShares US Healthcare	IYH	0.43	2,666.7	11.47	16.98	14.52
Vanguard Health Care	VHT	0.10	15,277.0	11.08	17.61	15.33
Fidelity MSCI Health Care	FHLC	0.08	2,702.7	11.08	17.55	15.33
iShares US Medical Devices	IHI	0.42	7,779.9	10.41	22.00	22.07
Invesco Dynamic Biotech/Genome	PBE	0.58	296.8	10.27	12.25	16.14
First Trust Health Care AlphaDEX	FXH	0.61	1,528.6	8.66	16.42	14.72
iShares Biotechnology	IBB	0.46	10,816.2	8.14	14.44	14.04
iShares US Pharmaceuticals	IHE	0.42	381.5	4.29	8.55	6.57
Invesco DWA Healthcare Momentum	PTH	0.60	688.2	3.89	23.85	30.05
Principal Healthcare Innovators	BTEC	0.42	176.6	3.68	20.74	-
First Trust NYSE Arca Biotechnology	FBT	0.55	1,953.6	2.76	7.23	14.05
SPDR S&P Pharmaceuticals	XPH	0.35	270.3	-0.26	7.10	5.06
SPDR S&P Biotech	XBI	0.35	7,372.2	-3.80	12.59	20.34
ALPS Medical Breakthroughs	SBIO	0.50	233.3	-4.51	10.54	17.75
<b>U.S. EQUITY: INDUSTRIALS</b>						
First Trust Nasdaq Transportation	FTXR	0.60	1,185.6	21.42	12.89	-
First Trust RBA American Industrial Ren	AIRR	0.70	245.7	20.80	15.45	17.78

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Invesco Dynamic Building & Construction	PKB	0.59	291.9	20.56	18.05	14.22
SPDR S&P Transportation	XTN	0.35	583.4	20.05	11.74	15.43
Invesco S&P 500 Equal Weight Industrials	RGI	0.40	602.4	18.53	19.22	17.76
iShares Transportation Average	IYT	0.42	2,010.7	18.36	13.09	15.46
First Trust Industrials/Prod Dur AlphaDEX	FXR	0.64	1,790.5	17.87	14.79	16.64
Industrial Select Sector SPDR	XLI	0.12	19,167.9	16.36	14.86	15.04
iShares US Aerospace & Defense	ITA	0.42	2,935.8	16.19	5.76	13.23
Vanguard Industrials	VIS	0.10	5,379.6	16.17	14.94	14.99
Fidelity MSCI Industrials	FIDU	0.08	869.1	16.04	15.45	15.29
SPDR S&P Aerospace & Defense	XAR	0.35	1,412.8	16.01	16.15	20.03
iShares US Industrials	IYJ	0.42	1,829.9	14.86	17.09	16.63
Invesco Aerospace & Defense	PPA	0.59	717.7	11.10	12.15	16.20
Invesco DWA Industrials Momentum	PRN	0.60	371.8	7.06	18.59	16.38
<b>U.S. EQUITY: TECHNOLOGY</b>						
Invesco Dynamic Semiconductors	PSI	0.57	632.9	22.45	35.68	37.84
iShares Semiconductor	SOXX	0.46	6,837.5	20.16	38.24	38.74
VanEck Vectors Semiconductor	SMH	0.35	5,792.2	20.06	38.57	37.41
Invesco S&P SmallCap Information Tech	PSCT	0.29	469.6	17.24	20.62	21.21
iShares US Technology	IYW	0.43	7,839.6	17.05	31.62	31.52
HCM Defender 100	QQH	1.14	208.8	17.03	-	-
iShares Expanded Tech Sector	IGM	0.46	3,569.4	15.59	28.52	30.41
First Trust Dow Jones Internet	FDN	0.51	10,889.7	15.37	21.17	27.69
First Trust NASDAQ-100 Technology Sector	QTEC	0.57	3,594.7	15.20	27.32	29.70
Invesco S&P 500 Equal Weight Technology	RYT	0.40	2,715.0	14.75	23.80	26.64
Technology Select Sector SPDR	XLK	0.12	42,335.7	14.01	30.18	29.51
SPDR S&P Kensho Smart Mobility	HAIL	0.45	233.6	13.92	29.84	-
Fidelity MSCI Information Technology	FTEC	0.08	5,932.6	13.12	30.12	30.89
Vanguard Information Technology	VGIT	0.10	47,663.2	13.08	31.46	31.53
SPDR S&P NYSE Technology	XNTK	0.35	713.4	12.76	31.55	32.77
SPDR S&P Semiconductor	XSD	0.35	995.1	12.69	39.40	34.93
Invesco NASDAQ Internet	PNQI	0.60	1,119.8	12.47	22.61	27.38
First Trust Cloud Computing	SKYY	0.60	6,422.4	11.61	25.87	28.75
SPDR S&P Software & Services	XSW	0.35	534.2	11.34	28.79	28.25
First Trust Technology AlphaDEX	FXL	0.61	2,629.8	11.03	30.49	30.83
iShares Expanded Tech-Software Sector	IGV	0.46	5,137.9	10.15	29.09	30.22
Invesco Dynamic Software	PSJ	0.56	615.1	7.14	29.31	30.19
Invesco DWA Technology Momentum	PTF	0.60	370.6	6.21	35.61	31.73
SPDR FactSet Innovative Technology	XITK	0.45	370.3	5.12	34.06	34.24
WisdomTree Cloud Computing	WCLD	0.45	1,310.2	4.31	-	-
<b>U.S. EQUITY: TELECOMMUNICATIONS</b>						
Global X US Infrastructure Development	PAVE	0.47	3,657.0	21.59	17.36	-
Communication Svcs Select Sector SPDR	XLC	0.12	14,124.3	20.41	18.86	-
Fidelity MSCI Communication Services	FCOM	0.08	861.7	20.14	25.52	14.77
Vanguard Communication Services	VOX	0.10	4,133.9	20.04	20.31	10.06
iShares US Infrastructure	IFRA	0.40	592.4	18.38	11.81	-
iShares US Telecommunications	IYZ	0.42	461.0	11.43	9.01	2.67
<b>U.S. EQUITY: UTILITIES</b>						
First Trust Utilities AlphaDEX	FXU	0.62	174.9	6.28	4.83	2.22
Invesco S&P 500 Equal Weight Utilities	RYU	0.40	202.3	4.61	9.77	6.54
Fidelity MSCI Utilities	FUTY	0.08	1,050.2	2.70	9.60	7.27
iShares US Utilities	IDU	0.43	785.9	2.56	9.11	6.71
Vanguard Utilities	VPU	0.10	4,702.1	2.55	9.47	7.24
Utilities Select Sector SPDR	XLU	0.12	11,504.9	2.38	10.35	7.30
<b>U.S. EQUITY: REAL ESTATE</b>						
SPDR S&P Homebuilders	XHB	0.35	1,961.6	27.45	24.03	17.98
iShares US Home Construction	ITB	0.42	2,307.4	24.33	22.66	20.74
iShares Residential/Multisector Real Est	REZ	0.48	670.8	24.27	13.27	8.10
Real Estate Select Sector SPDR	XLRE	0.12	3,410.2	23.23	14.58	9.46
SPDR Dow Jones REIT	RWR	0.25	1,842.0	22.79	7.85	4.92
iShares Cohen & Steers REIT	ICF	0.34	2,396.2	22.46	12.21	6.96
iShares Core US REIT	USRT	0.08	2,139.9	22.01	10.02	6.43
JPMorgan BetaBuilders MSCI US REIT	BBRE	0.11	1,473.0	21.68	10.20	-
Fidelity MSCI Real Estate	FREL	0.09	1,684.1	21.56	11.90	8.30
Vanguard Real Estate	VNQ	0.12	41,870.7	21.41	11.90	7.07
Schwab US REIT	SCHH	0.07	5,959.9	21.20	6.08	3.92

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
VanEck Vectors Mortgage REIT Income	MORT	0.40	343.5	20.57	2.59	6.86
iShares Mortgage Real Estate	REM	0.48	1,562.4	20.29	3.77	7.01
iShares US Real Estate	IYR	0.42	7,482.1	20.20	11.32	7.84
Pacer Benchmark Industrial Real Estate	INDS	0.60	206.7	17.95	21.14	-
Pacer Benchmark Data & Infrastr Real Est	SRVR	0.60	1,198.9	13.36	17.87	-
Invesco KBW Premium Yield Equity REIT	KBWY	0.35	354.8	13.18	-7.05	-1.26

#### U.S. EQUITY: HIGH DIVIDEND YIELD

Invesco S&P Ultra Dividend Revenue	RDIV	0.39	765.3	24.12	7.31	10.35
iShares Select Dividend	DVY	0.39	18,425.7	23.29	10.13	10.29
Global X SuperDividend US	DIV	0.45	688.5	21.43	-0.36	1.93
Invesco High Yld Eq Dividend Achievers	PEY	0.52	973.4	20.00	9.48	9.77
Schwab US Dividend Equity	SCHD	0.06	25,861.6	19.59	19.22	16.36
SPDR S&P Dividend	SDY	0.35	19,625.8	16.98	12.84	11.49
Vanguard High Dividend Yield	VYM	0.06	37,553.7	16.08	11.66	11.43
First Trust Value Line Dividend	FVD	0.70	11,792.4	14.48	10.60	8.73
First Trust Morningstar Dividend Leaders	FDL	0.45	1,626.8	14.14	5.71	4.71
WisdomTree US High Dividend	DHS	0.38	801.3	13.65	7.31	6.70
iShares Core High Dividend	HDV	0.08	6,996.6	12.05	8.36	7.13

#### GLOBAL EQUITY

First Trust Dorsey Wright Focus 5	FV	0.87	2,759.1	17.07	17.46	16.76
First Trust Dorsey Wright Dynamic Focus 5	FVC	0.71	229.2	16.97	10.38	12.48
SPDR Portfolio MSCI Global Stock Market	SPGM	0.09	588.5	14.87	15.15	14.79
iShares Global 100	IOO	0.40	3,287.3	13.84	17.92	17.10
Vanguard Total World Stock	VT	0.08	21,897.1	12.76	14.63	14.78
ClearBridge All Cap Growth ESG	CACG	0.53	226.4	12.69	19.33	-
T. Rowe Price Blue Chip Growth	TCHP	0.57	173.4	12.58	-	-
iShares MSCI ACWI	ACWI	0.32	16,898.0	12.34	14.65	14.70
Davis Select Worldwide	DWLD	0.63	424.6	11.19	11.52	-
iShares MSCI Global Min Vol Factor	ACWW	0.20	5,122.0	7.11	9.77	8.54
iShares MSCI Global Impact	SDG	0.49	511.2	6.92	22.24	17.89
Horizon Kinetics Inflation Beneficiaries	INFL	0.85	628.2	-	-	-

#### GLOBAL EQUITY EX-U.S.

Invesco Intl Dividend Achievers	PID	0.53	595.6	17.08	8.49	8.75
Vident International Equity	VIDI	0.59	509.3	15.13	6.21	9.43
Avantis International Small Cap Value	AVDV	0.36	916.2	14.43	-	-
Vanguard FTSE All-World ex-US Small-Cap	VSS	0.11	9,560.5	12.45	8.50	10.87
FlexShares International Quality Dividend	IQDF	0.47	611.7	11.71	7.46	8.44
First Trust Dorsey Wright Intl Focus 5	IFV	1.06	300.6	11.21	7.89	10.28
WisdomTree Gb ex-US Qual Div Growth	DNL	0.58	404.9	10.46	15.79	14.43
SPDR MSCI ACWI ex-US	CWI	0.30	1,791.2	10.37	9.85	11.05
iShares Core MSCI Total Intl Stock	IXUS	0.09	29,722.4	10.34	9.60	11.21
Vanguard Total International Stock	VXUS	0.08	48,464.8	10.30	9.64	11.15
Vanguard FTSE All-World ex-US	VEU	0.08	35,185.2	9.78	9.88	11.18
iShares MSCI ACWI ex US	ACWX	0.32	4,335.2	9.57	9.43	10.82
Vanguard ESG International Stock	VSGX	0.17	2,320.2	9.30	-	-
American Century Quality Diversified Intl	QINT	0.39	177.5	9.11	-	-
iShares International Dividend Growth	IGRO	0.15	266.2	8.36	10.25	9.61
Vanguard Intl Dividend Appreciation	VIGI	0.20	3,741.3	8.05	12.26	11.21
Davis Select International	DINT	0.65	313.3	-0.02	7.77	-
First Trust Intl Equity Opportunities	FPXI	0.70	1,266.0	-0.27	25.82	23.05

#### INTERNATIONAL EQUITY: BLENDED DEVELOPMENT

Fidelity Blue Chip Growth	FBCG	0.59	373.4	14.16	-	-
iShares MSCI All Country Asia ex Japan	AAJI	0.70	6,600.7	5.77	11.43	13.50
iShares Asia 50	AIA	0.50	2,993.4	5.66	15.72	17.75

#### INTERNATIONAL EQUITY: DEVELOPED

iShares MSCI Saudi Arabia	KSA	0.74	841.7	27.91	10.29	13.69
JPMorgan BetaBuilders Canada	BBCA	0.19	5,609.9	21.65	-	-
iShares MSCI Canada	EWC	0.51	4,346.5	21.59	11.83	11.08
iShares MSCI Sweden	EWD	0.51	532.4	19.30	18.03	14.68
Fidelity High Dividend	FDVV	0.29	953.5	19.21	13.02	-
iShares MSCI Netherlands	EWN	0.51	295.6	17.97	18.59	18.16
iShares Currency Hedged MSCI Eurozone	HEZU	0.54	714.7	16.83	10.61	12.29
WisdomTree Europe Hedged Equity	HEDJ	0.58	2,019.2	16.65	8.71	11.11
Fidelity Dividend for Rising Rates	FDRR	0.29	470.7	16.14	15.33	-
Xtrackers MSCI Europe Hedged Equity	DBEU	0.46	567.4	15.89	9.77	11.01

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
WisdomTree Europe SmallCap Dividend	DFE	0.58	338.6	15.65	7.52	11.22
iShares MSCI France	EWQ	0.51	822.6	15.07	9.38	12.80
Invesco FTSE RAFI DM ex-US	PXF	0.45	1,169.2	14.84	6.95	10.14
iShares MSCI Intl Value Factor	IVLU	0.30	1,346.3	14.67	3.90	8.17
Schwab Fundamental Intl Large Company	FNDF	0.25	6,795.6	14.57	7.46	10.11
iShares MSCI Kokusai	TOK	0.25	185.6	14.39	15.98	15.33
Invesco RAFI Strategic Developed ex-US	ISDX	0.23	312.5	14.28	-	-
FlexShares STOXX Global ESG Select	ESGG	0.42	176.1	13.97	16.38	-
First Trust Europe AlphaDEX	FEP	0.80	474.0	13.93	6.34	11.87
IQ 500 International	IQIN	0.25	243.3	13.88	-	-
iShares Currency Hedged MSCI EAFE	HEFA	0.35	2,846.7	13.69	9.62	11.55
WisdomTree Intl Hedged Qual Div Growth	IHDG	0.58	1,017.0	13.67	13.61	13.18
SPDR Euro STOXX 50	FEZ	0.29	2,795.6	13.63	9.41	11.26
Xtrackers MSCI EAFE Hedged Equity	DBEF	0.36	3,994.1	13.60	9.53	11.46
JPMorgan BetaBuilders Europe	BBEU	0.09	8,636.2	13.57	8.86	-
iShares MSCI United Kingdom	EWU	0.51	3,475.4	13.53	1.54	5.07
iShares MSCI World	URTH	0.24	1,343.6	13.49	15.30	15.05
Schwab Fundamental Intl Small Company	FNDC	0.39	2,687.6	13.45	6.73	10.31
iShares Core MSCI Europe	IEUR	0.09	5,235.1	13.36	9.30	10.84
Vanguard FTSE Europe	VGK	0.08	19,850.6	13.35	9.32	10.85
Xtrackers MSCI Kokusai Equity	KOKU	0.09	769.3	13.30	-	-
Franklin FTSE Europe	FLEE	0.09	197.5	13.12	9.16	-
iShares MSCI Europe Small-Cap	IEUS	0.40	373.4	13.02	10.22	13.61
iShares MSCI Eurozone	EZU	0.51	8,160.7	13.02	8.82	11.50
iShares MSCI Intl Multifactor	INTF	0.30	910.8	13.00	6.08	9.30
iShares Europe	IEV	0.59	1,898.4	12.99	8.73	9.96
WisdomTree Japan Hedged Equity	DXJ	0.48	1,844.9	12.99	6.49	12.20
SPDR Portfolio Europe	SPEU	0.09	337.5	12.83	10.99	10.31
Franklin FTSE United Kingdom	FLGB	0.09	233.2	12.68	2.49	-
First Trust Dev Mkts ex-US AlphaDEX	FDT	0.80	392.7	12.32	4.13	9.17
Global X AI & Technology	AIQ	0.68	172.4	12.26	27.49	-
FlexShares Mstar DM ex-US Factor Tilt	TLTD	0.39	642.6	11.98	7.01	9.96
Invesco DWA DM Momentum	PIZ	0.80	193.4	11.84	12.08	11.95
WisdomTree Dyn Currency Hedged Intl	DDWM	0.40	162.6	11.80	5.53	8.61
Invesco FTSE RAFI DM ex-US Small-Mid	PDN	0.49	417.5	11.74	7.31	10.75
iShares MSCI Intl Small-Cap Multifactor	ISCF	0.40	183.8	11.59	7.68	11.73
WisdomTree Intl SmallCap Dividend	DLS	0.58	1,449.9	11.57	4.57	9.31
Avantis International Equity	AVDE	0.23	908.2	11.50	-	-
iShares MSCI EAFE Value	EFV	0.39	14,481.0	11.46	3.79	7.57
iShares MSCI Italy	EWI	0.51	637.2	11.36	6.86	11.53
Dimensional Intl Core Equity Market	DFAI	0.18	445.7	11.31	-	-
IQ 50 Percent Hedged FTSE International	HFXI	0.20	317.1	11.08	9.23	11.18
Schwab International Small-Cap Equity	SCHC	0.11	3,631.0	11.06	7.66	10.39
First Trust RiverFront Dyn Developed Intl	RFDI	0.83	174.9	10.98	7.12	9.57
iShares MSCI Switzerland	EWL	0.51	1,584.0	10.85	16.41	12.67
iShares Core MSCI Intl Developed Markets	IDEV	0.05	5,970.0	10.85	9.21	-
iShares MSCI Germany	EWG	0.51	3,063.5	10.76	7.25	10.00
Hartford Multifactor DM (ex-US)	RODM	0.29	1,966.3	10.58	5.67	8.35
Vanguard FTSE Developed Markets	VEA	0.05	101,650.9	10.51	9.27	10.90
SPDR Portfolio Developed World ex-US	SPDW	0.04	11,560.1	10.51	9.35	10.95
Schwab International Equity	SCHF	0.06	27,194.1	10.50	9.31	10.83
WisdomTree Intl Quality Dividend Growth	IQDG	0.42	251.7	10.49	12.39	12.18
ALPS International Sector Dividend Dogs	IDOG	0.50	188.8	10.35	5.76	8.14
John Hancock Multifactor Developed Intl	JHMD	0.39	480.6	10.29	7.75	-
SPDR S&P International Small Cap	GWX	0.40	841.4	10.23	7.29	9.88
Knowledge Leaders Developed World	KLDW	0.75	193.8	10.14	12.20	13.49
IQ Candriam ESG International Equity	IQSI	0.15	192.0	10.00	-	-
iShares MSCI Australia	EWA	0.51	1,564.6	9.99	8.83	10.43
iShares MSCI Hong Kong	EWH	0.51	1,120.7	9.98	6.17	9.71
Goldman Sachs ActiveBeta Intl Equity	GSIE	0.25	2,610.0	9.91	7.95	10.12
iShares Core MSCI EAFE	IEFA	0.07	96,608.6	9.89	8.64	10.61
JPMorgan BetaBuilders Dev Asia ex-Japan	BBAX	0.19	4,019.6	9.67	-	-
WisdomTree International Equity	DWM	0.48	615.6	9.65	4.46	7.48
JPMorgan BetaBuilders Intl Equity	BBIN	0.07	3,525.4	9.65	-	-
iShares ESG Aware MSCI EAFE	ESGD	0.20	6,013.3	9.62	9.08	10.80

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
iShares MSCI EAFE	EFA	0.32	57,276.6	9.59	8.47	10.14
SPDR MSCI EAFE StrategicFactors	QEFA	0.30	744.6	9.57	9.30	9.76
iShares MSCI EAFE Small-Cap	SCZ	0.40	13,814.9	9.51	8.46	11.81
WisdomTree Intl LargeCap Dividend	DOL	0.48	362.6	9.48	4.48	7.14
iShares MSCI Singapore	EWS	0.51	669.7	9.46	2.54	4.68
iShares MSCI Intl Quality Factor	IQLT	0.30	3,530.9	9.45	12.60	11.82
VictoryShares MSCI Intl Value Momentum	UVM	0.35	360.1	9.44	3.06	-
Global X MSCI Greece	GREK	0.58	164.5	9.35	3.06	7.56
iShares MSCI Pacific ex-Japan	ESP	0.48	2,550.9	9.28	7.63	9.75
Goldman Sachs MarketBeta Intl Equity	GSID	0.20	334.7	8.82	-	-
JPMorgan Diversified Return Intl Equity	JPIN	0.37	877.5	8.82	5.73	7.67
SPDR MSCI EAFE Fossil Fuel Reserves Free	EFAX	0.20	235.5	8.60	9.12	-
Xtrackers MSCI Japan Hedged Equity	DBJP	0.46	197.1	8.50	8.51	12.63
WisdomTree Intl High Dividend	DTH	0.58	181.0	8.37	2.78	5.97
iShares Currency Hedged MSCI Japan	HEWJ	0.51	514.8	8.34	8.38	12.68
iShares ESG Advanced MSCI EAFE	DMXF	0.12	183.9	8.08	-	-
ARK Israel Innovative Technology	IZRL	0.49	321.9	7.99	18.24	-
Xtrackers MSCI EAFE High Dividend Yield	HDEF	0.20	743.9	7.72	6.08	6.07
iShares MSCI EAFE Growth	EFG	0.40	10,634.5	7.19	12.39	12.10
iShares MSCI Spain	EWP	0.51	566.7	6.61	1.05	6.05
Global X Robotics & Artificial Intelligence	BOTZ	0.68	2,607.6	5.66	17.74	-
iShares MSCI EAFE Min Vol Factor	EDAV	0.20	8,684.3	4.61	4.95	5.81
Invesco S&P Intl Developed Low Volatility	IDLV	0.25	751.3	4.58	2.05	4.28
Vanguard FTSE Pacific	VPL	0.08	5,403.5	4.23	8.29	10.94
iShares Core MSCI Pacific	IPAC	0.09	1,170.0	4.23	7.62	10.26
iShares MSCI Intl Momentum Factor	IMTM	0.30	798.1	3.54	11.09	10.39
WisdomTree Japan SmallCap Dividend	DFJ	0.58	222.5	2.75	0.93	8.05
Global X FinTech	FINX	0.68	1,328.8	2.06	22.39	-
BlueStar Israel Technology	ITEQ	0.75	219.9	1.95	27.51	24.48
Franklin FTSE Japan	FLJP	0.09	539.3	1.06	7.06	-
JPMorgan BetaBuilders Japan	BBJP	0.19	8,669.9	0.87	6.66	-
iShares MSCI Japan	EWJ	0.51	11,405.3	0.70	6.95	9.73
BlackRock World ex US Carbon Trans Ready	LCTD	0.20	609.2	-	-	-
<b>INTERNATIONAL EQUITY: EMERGING</b>						
iShares MSCI India Small Cap	SMIN	0.81	318.5	29.02	10.34	11.96
iShares MSCI Taiwan	EWT	0.59	7,314.4	20.48	24.16	20.33
iShares MSCI Russia	ERUS	0.59	573.0	20.27	15.97	15.45
VanEck Vectors Russia	RSX	0.67	1,895.3	20.00	16.17	15.18
Invesco DWA EM Momentum	PIE	0.90	228.9	19.76	13.23	13.92
SPDR S&P Emerging Markets Small Cap	EWX	0.65	651.2	19.65	11.92	12.27
iShares MSCI Emerging Markets Small-Cap	EEMS	0.71	393.5	19.41	12.29	11.50
WisdomTree India Earnings	EPI	0.84	853.6	16.37	11.56	12.02
WisdomTree EM SmallCap Dividend	DCS	0.63	2,223.8	16.01	8.96	11.22
First Trust EM Small Cap AlphaDEX	FEMS	0.80	171.9	15.94	11.61	13.82
VictoryShares MSCI EM Value Momentum	UEVM	0.45	264.7	14.89	6.02	-
Schwab Fundamental EM Large Company	FNDE	0.39	4,755.7	14.79	8.68	11.57
PIMCO RAFI Dynamic Multi-Factor EM Eq	MFEM	0.49	494.2	14.30	11.61	-
Avantis Emerging Markets Equity	AVEM	0.33	815.3	13.33	-	-
iShares MSCI Poland	EPOL	0.59	284.7	13.19	1.42	6.86
WisdomTree EM High Dividend	DEM	0.63	2,010.3	13.04	7.26	10.05
Franklin FTSE Brazil	FLBR	0.19	252.8	12.71	12.06	-
FlexShares Mstar EM Factor Tilt	TLTE	0.59	344.3	12.53	9.44	10.82
iShares MSCI Mexico	EWX	0.51	1,198.3	12.51	2.70	1.05
iShares MSCI South Africa	EZA	0.59	332.1	12.48	1.53	3.54
KraneShares MSCI China Clean Technology	KGRN	0.80	185.4	11.89	35.52	-
First Trust Emerging Markets AlphaDEX	FEM	0.80	553.4	11.87	6.11	11.11
Invesco FTSE RAFI Emerging Markets	PXH	0.50	1,485.1	11.55	7.72	10.88
iShares MSCI Brazil	EWZ	0.59	6,674.5	11.04	10.97	8.77
iShares MSCI EM Multifactor	EMGF	0.45	763.0	10.98	8.13	11.50
Dimensional Emerging Core Equity Market	DFAE	0.35	281.2	10.62	-	-
iShares ESG MSCI EM Leaders	LDEM	0.16	894.2	10.47	-	-
iShares MSCI Emerging Markets ex China	EMXC	0.25	835.9	10.15	11.34	-
iShares India 50	INDY	0.93	684.1	10.15	10.33	10.93
iShares MSCI India	INDA	0.69	5,810.5	10.12	10.78	10.49
Invesco S&P EM Low Volatility	EELV	0.30	338.3	10.03	4.33	5.48

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
JPMorgan Diversified Return EM Equity	JPEM	0.44	173.1	9.80	6.75	8.78
SPDR S&P Emerging Markets Dividend	EDIV	0.49	305.0	9.64	3.09	6.13
John Hancock Multifactor EM	JHEM	0.49	743.0	9.34	-	-
Vanguard FTSE Emerging Markets	VVO	0.10	84,372.4	9.09	11.75	11.93
SPDR Portfolio Emerging Markets	SPEM	0.11	6,418.4	8.77	11.06	12.41
iShares Core MSCI Emerging Markets	IEMG	0.11	83,902.3	8.73	11.34	12.67
iShares Latin America 40	ILF	0.48	1,837.6	8.67	4.90	6.38
iShares Emerging Markets Dividend	DVYE	0.49	879.7	8.56	6.46	9.17
iShares MSCI South Korea	EWY	0.59	6,770.3	8.29	12.82	14.25
iShares ESG Aware MSCI EM	ESGE	0.25	8,014.5	8.09	12.54	13.38
Schwab Emerging Markets Equity	SCHE	0.11	9,823.3	7.94	11.50	12.04
iShares Currency Hedged MSCI EM	HEEM	0.70	221.9	7.57	11.42	12.17
iShares MSCI Emerging Markets	EEM	0.70	32,685.1	7.20	10.70	12.18
Goldman Sachs ActiveBeta EM Equity	GEM	0.45	1,441.3	6.92	9.25	11.13
SPDR MSCI EM Fossil Fuel Reserves Free	EEMX	0.30	188.9	6.83	11.99	-
WisdomTree Emerging Markets ex-SOE	XSOE	0.32	5,037.3	6.68	14.62	17.19
SPDR S&P Emerging Asia Pacific	GMF	0.49	730.4	6.13	12.57	14.60
iShares MSCI EM Min Vol Factor	EEMV	0.25	3,866.1	5.89	6.18	7.09
First Trust Chindia	FNI	0.60	245.8	5.88	18.04	19.32
iShares MSCI Emerging Markets Asia	EEMA	0.50	997.3	5.88	12.00	14.03
iShares MSCI BRIC	BKF	0.70	174.1	5.05	10.90	14.19
iShares MSCI China A	CNYA	0.60	666.2	4.35	19.25	13.68
KraneShares Bosera MSCI China A Share	KBA	0.60	859.9	4.25	19.34	13.60
Invesco BDRS Emerging Markets 50 ADR	ADRE	0.30	230.6	3.48	14.21	15.05
WisdomTree China ex-SOE	CXSE	0.32	1,163.5	2.85	19.25	25.77
iShares MSCI Thailand	THD	0.59	394.1	2.73	0.56	5.07
SPDR S&P China	GXC	0.59	1,902.7	2.30	9.86	15.62
iShares MSCI China	MCHI	0.59	7,394.2	2.04	9.88	15.83
Xtrackers Harvest CSI 300 China A-Shares	ASHR	0.65	2,757.1	1.20	16.37	12.32
iShares MSCI Chile	ECH	0.59	474.3	-2.44	-12.45	-2.72
Invesco Golden Dragon China	PGJ	0.70	257.0	-4.13	10.28	17.84
iShares MSCI Malaysia	EWM	0.51	251.9	-8.53	-3.31	-1.70
KraneShares CSI China Internet	KWEB	0.76	4,765.0	-9.13	6.71	16.95
iShares MSCI Indonesia	EIDO	0.59	329.6	-12.86	-2.65	-2.19
iShares MSCI Turkey	TUR	0.59	249.6	-18.13	-8.95	-9.37
<b>INTERNATIONAL EQUITY: FRONTIER</b>						
VanEck Vectors Vietnam	VNM	0.66	563.3	18.87	10.00	8.52
iShares MSCI Frontier and Select EM	FM	0.79	469.5	18.84	8.11	9.32
<b>GLOBAL EQUITY: SECTOR</b>						
North Shore Global Uranium Mining	URNM	0.85	381.6	45.76	-	-
ETFMG Alternative Harvest	MJ	0.75	1,610.8	43.97	-7.74	-1.52
VanEck Vectors Oil Services	OIH	0.35	2,854.2	42.16	-23.91	-16.24
VanEck Vectors Steel	SLX	0.56	217.9	38.83	15.08	20.97
Global X Uranium	URA	0.69	736.0	38.45	19.79	11.26
Amplify Transformational Data Sharing	BLOK	0.71	1,159.2	36.28	37.37	-
iShares Global Energy	IXC	0.46	1,421.2	32.98	-6.15	0.30
VanEck Vectors Rare Earth/Strat Metals	REMX	0.59	738.4	29.08	12.12	15.70
3D Printing	PRNT	0.66	559.8	26.41	17.37	-
Davis Select Financial	DFNL	0.64	208.0	25.76	10.79	-
iShares MSCI Global Metals/Mining Prod	PICK	0.39	1,257.4	24.42	16.27	21.61
AdvisorShares Pure Cannabis	YOLO	0.75	354.5	24.06	-	-
Global X Copper Miners	COPX	0.65	1,142.5	22.90	17.75	21.16
SPDR S&P Global Natural Resources	GNR	0.40	2,196.0	19.83	5.45	10.66
iShares Global Financials	IXG	0.46	3,093.2	19.64	9.06	12.77
FlexShares Mstar Global Upstrm Nat Res	GUNR	0.46	5,480.4	19.20	7.60	10.84
Global X Autonomous & Electric Vehicles	DRIV	0.68	971.0	18.34	26.93	-
Invesco Global Listed Private Equity	PSP	1.58	238.3	18.31	15.58	16.66
iShares Global REIT	REET	0.14	3,270.7	17.81	7.25	4.84
Roundhill Sports Betting & iGaming	BETZ	0.75	422.4	17.45	-	-
Global X Social Media	SOCL	0.65	497.4	17.17	26.73	28.59
Global X Lithium & Battery Tech	LIT	0.75	3,592.8	17.14	32.84	26.33
SPDR Dow Jones Global Real Estate	RWO	0.50	1,700.3	17.07	6.11	4.14
iShares Global Comm Services	IXP	0.46	316.1	17.05	19.10	9.37
VanEck Vectors Agribusiness	MOO	0.56	1,174.5	16.93	15.14	15.43
First Trust NASDAQ Technology Dividend	TDIV	0.50	1,623.1	16.77	20.18	19.42

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
SPDR S&P Kensho New Economies	KOMP	0.20	2,142.6	16.60	-	-
Siren Nasdaq NexGen Economy	BLCN	0.68	313.6	16.59	28.37	-
FlexShares Global Quality Real Estate	GORE	0.45	377.2	16.51	5.45	4.89
Global X Millennial Consumer	MLN	0.50	202.6	15.71	25.28	23.88
KraneShares Electric Veh/Future Mobility	KARS	0.70	220.3	15.67	29.11	-
iShares Self-Driving EV and Tech	IDRV	0.47	401.9	15.47	-	-
Direxion Moonshot Innovators	MOON	0.65	192.8	15.35	-	-
First Trust Clean Edge Smart Grid Infrastr	GRID	0.70	428.0	14.82	24.40	21.82
Invesco S&P Global Water	CGW	0.57	966.7	14.64	19.02	14.25
Global X SuperDividend REIT	SRET	0.58	511.1	14.22	-6.43	-0.54
Invesco Global Water	PIO	0.75	290.4	14.07	18.04	14.38
Defiance Next Gen Connectivity	FIVG	0.30	1,282.0	13.79	-	-
Amplify Lithium & Battery Technology	BATT	0.59	197.0	13.66	2.25	-
iShares Genomics Immunology/Healthcare	IDNA	0.47	325.1	13.38	-	-
ProShares Pet Care	PAWZ	0.50	326.1	13.30	-	-
iShares Global Materials	MXI	0.45	1,020.1	13.01	13.43	15.73
ARK Autonomous Technology & Robotics	ARKQ	0.75	3,120.2	13.00	37.18	36.45
iShares Global Tech	IXN	0.46	4,431.0	12.91	28.28	29.42
iShares Robotics and AI Multisector	IRBO	0.47	450.3	12.90	24.40	-
iShares Global Industrials	EXI	0.46	448.0	12.75	12.55	13.32
Global X Internet of Things	SNSR	0.68	452.4	12.49	23.62	-
Goldman Sachs Innovate Equity	GINN	0.50	474.3	12.48	-	-
iShares MSCI ACWI Low Carbon Target	CRBN	0.20	832.1	12.35	15.13	14.85
VanEck Vectors Retail	RTH	0.35	257.4	11.78	21.63	19.22
iShares Exponential Technologies	XT	0.47	3,814.7	10.98	21.86	22.43
iShares Global Consumer Discretionary	RXI	0.46	465.1	10.65	15.59	16.70
First Trust Indxx NextG	NXTG	0.70	1,065.6	10.58	17.38	16.96
VanEck Vectors Pharmaceutical	PPH	0.35	233.3	10.47	9.35	6.46
ROBO Global Healthcare Tech/Innovation	HTEC	0.68	238.0	10.18	-	-
iShares Global Timber & Forestry	WOOD	0.46	326.6	10.10	5.57	15.88
AdvisorShares Pure US Cannabis	MSOS	0.74	949.3	9.62	-	-
iShares Global Healthcare	IXJ	0.46	3,112.2	9.42	15.58	12.24
ARK Fintech Innovation	ARKF	0.75	4,043.8	8.85	-	-
First Trust Nasdaq AI and Robotics	ROBT	0.65	247.4	8.32	23.03	-
U.S. Global Jets	JETS	0.60	3,598.8	8.04	-5.17	3.09
Global X E-commerce	EBIZ	0.50	234.0	8.01	-	-
FlexShares STOXX Global Broad Infrastr	NFRA	0.47	2,903.3	7.97	10.47	7.78
ROBO Global Robotics and Automation	ROBO	0.95	1,847.5	7.09	18.07	21.38
iShares Cybersecurity and Tech	IHAK	0.47	574.3	6.96	-	-
Invesco MSCI Sustainable Future	ERTH	0.58	428.0	6.08	24.09	22.63
iShares Global Consumer Staples	KXI	0.46	555.6	6.07	10.31	6.60
ETFMG Prime Mobile Payments	IPAY	0.75	1,258.1	5.88	22.28	25.01
SPDR S&P Global Infrastructure	GII	0.40	423.5	5.55	4.94	5.45
First Trust NASDAQ Cybersecurity	CIBR	0.60	4,111.6	5.44	21.05	22.19
ETFMG Prime Cyber Security	HACK	0.60	2,301.7	5.40	18.77	21.25
Global X Genomics & Biotechnology	GNOM	0.50	248.6	5.38	-	-
iShares Global Infrastructure	IGF	0.46	3,038.9	5.31	4.94	5.43
ARK Next Generation Internet	ARKW	0.79	6,425.4	5.27	47.10	51.82
O'Shares Global Internet Giants	OGIG	0.48	727.8	5.15	33.29	-
ALPS Disruptive Technologies	DTEC	0.50	233.2	5.09	20.99	-
ARK Innovation	ARKK	0.75	25,527.2	5.05	45.20	48.54
Global X Video Games & Esports	HERO	0.50	641.7	4.14	-	-
VanEck Vectors Video Gaming and eSports	ESPO	0.55	826.7	3.67	-	-
Global X Cloud Computing	CLOU	0.68	1,419.3	2.33	-	-
Global X Cybersecurity	BUG	0.50	561.1	2.09	-	-
Global X Telemedicine & Digital Health	EDOC	0.68	752.6	0.10	-	-
ARK Genomic Revolution	ARKG	0.75	9,791.1	-0.81	50.00	42.60
VanEck Vectors Low Carbon Energy	SMOG	0.62	313.2	-2.63	40.53	27.54
iShares MSCI Global Gold Miners	RING	0.39	524.0	-5.23	18.13	4.31
VanEck Vectors Gold Miners	GDXX	0.52	14,544.8	-5.66	15.71	4.75
Global X Silver Miners	SIL	0.65	1,363.3	-6.00	15.91	1.43
ETFMG Prime Junior Silver Miners	SILJ	0.69	930.0	-6.81	13.94	1.78
First Trust Global Wind Energy	FAN	0.62	402.4	-7.20	19.60	11.46
Sprott Gold Miners	SGDM	0.50	237.3	-7.43	14.07	2.07
iShares MSCI Global Silver/Metals Miners	SLVP	0.39	316.1	-9.43	17.48	5.11

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Invesco WilderHill Clean Energy	PBW	0.70	2,309.0	-9.47	57.18	39.26
Invesco Global Clean Energy	PBD	0.75	427.7	-10.65	39.99	25.92
Invesco Solar	TAN	0.69	3,629.9	-13.07	57.54	35.72
VanEck Vectors Junior Gold Miners	GDXX	0.53	5,153.0	-13.81	13.65	3.48
iShares Global Clean Energy	ICLN	0.46	6,255.9	-16.46	40.83	24.13
ARK Space Exploration & Innovation	ARKX	0.75	632.4	-	-	-
<b>GLOBAL EX-U.S. EQUITY: SECTOR</b>						
VanEck Vectors Biotech	BBH	0.35	574.9	18.85	19.41	15.02
iShares Intl Developed Real Estate	IFGL	0.48	262.5	9.46	4.75	5.48
SPDR Dow Jones International Real Estate	RWX	0.59	930.2	9.03	3.65	3.35
Xtrackers International Real Estate	HAUZ	0.10	466.9	8.95	3.24	8.27
Vanguard Global ex-US Real Estate	VNQI	0.12	5,158.3	7.46	4.11	5.87
<b>INTERNATIONAL EQUITY: DEVELOPED SECTOR</b>						
Global X Cannabis	POTX	0.51	191.6	40.17	-	-
iShares MSCI Europe Financials	EUFN	0.48	1,580.5	13.73	2.24	8.27
<b>INTERNATIONAL EQUITY: EMERGING SECTOR</b>						
KraneShares MSCI All China Health Care	KURE	0.65	269.7	16.67	19.33	-
Invesco China Technology	CQQQ	0.70	1,870.8	2.27	15.18	21.14
Columbia Emerging Markets Consumer	ECON	0.59	178.1	0.09	6.18	4.90
Emerging Markets Internet & Ecommerce	EMQQ	0.86	1,743.3	-0.36	20.54	23.75
Global X MSCI China Consumer Discr	CHIQ	0.65	895.7	-0.59	27.31	28.39
<b>GLOBAL EQUITY: HIGH DIVIDEND YIELD</b>						
First Trust Dow Jones Global Select Div	FGD	0.59	495.8	20.64	3.82	4.44
SPDR S&P Global Dividend	WDIV	0.40	324.1	14.82	5.35	6.69
Global X SuperDividend	SDIV	0.59	989.2	13.41	-4.85	-0.08
<b>GLOBAL EX-U.S. EQUITY: HIGH DIVIDEND YIELD</b>						
Vanguard Intl High Dividend Yield	VYMI	0.27	2,605.3	13.82	7.11	8.94
SPDR S&P International Dividend	DWX	0.45	657.2	9.57	5.30	6.99
<b>INTERNATIONAL EQUITY: HIGH DIVIDEND YIELD</b>						
First Trust Stoxx European Select Dividend	FDD	0.58	280.8	14.43	3.71	4.62
iShares International Select Dividend	IDV	0.49	4,450.0	13.00	6.42	8.14
<b>U.S. FIXED INCOME: BROAD MARKET - BROAD MATURITIES</b>						
iShares Core Total USD Bond Market	IUSB	0.06	14,482.3	-1.25	5.60	3.33
iShares Yield Optimized Bond	BYLD	0.20	162.8	-1.26	5.27	3.63
iShares ESG Adv Total USD Bond Market	EUSB	0.12	292.8	-1.40	-	-
Fidelity Corporate Bond	FCOR	0.36	291.7	-2.10	7.91	4.92
<b>U.S. FIXED INCOME: BROAD MARKET - LONG-TERM</b>						
iShares Core 10+ Year USD Bond	ILTB	0.06	396.2	-4.22	10.19	5.45
<b>U.S. FIXED INCOME: BROAD MARKET - SHORT-TERM</b>						
VictoryShares USAA Core Short-Term Bond	USTB	0.34	272.3	0.59	3.86	-
First Trust Enhanced Short Maturity	FTSM	0.25	4,443.7	0.07	1.66	1.61
iShares Core 1-5 Year USD Bond	ISTB	0.06	5,497.5	0.04	3.97	2.51
First Trust Low Duration Strategic Focus	LDSF	0.77	183.4	0.00	-	-
<b>U.S. FIXED INCOME: GOVERNMENT/CREDIT - INTERMEDIATE</b>						
VictoryShares USAA Core Intermed Bond	UITB	0.38	893.4	-0.08	6.75	-
Vident Core US Bond Strategy	VBND	0.39	409.4	-0.67	5.11	2.63
<b>U.S. FIXED INCOME: GOVERNMENT/CREDIT - LONG-TERM</b>						
iShares Int Rate Hedged Long-Term Corp	IGBH	0.16	761.6	2.49	3.46	4.89
Vanguard Long-Term Corporate Bond	VCLT	0.05	5,367.2	-2.46	10.98	6.61
iShares 10+ Year Investment Grade Corp	IIGL	0.06	2,659.1	-2.55	10.73	6.38
SPDR Portfolio Long Term Corporate Bond	SPLB	0.07	996.8	-2.73	10.78	6.53
<b>U.S. FIXED INCOME: GOVERNMENT</b>						
WisdomTree Floating Rate Treasury	USFR	0.15	1,114.7	0.04	1.18	1.11
iShares Treasury Floating Rate Bond	TFLD	0.15	271.5	-0.01	1.15	1.09
iShares US Treasury Bond	GOVT	0.05	17,044.6	-1.98	4.58	2.06
Franklin Liberty US Treasury Bond	FLGV	0.09	433.1	-2.52	-	-
Invesco 1-30 Laddered Treasury	PLW	0.25	404.9	-5.02	6.22	2.39
<b>U.S. FIXED INCOME: TREASURY - SHORT TERM</b>						
iShares 0-3 Month Treasury Bond	SGOV	0.03	745.2	0.02	-	-
Invesco Treasury Collateral	CLTL	0.08	686.9	0.00	1.42	-
Goldman Sachs Access Treasury 0-1 Year	GBIL	0.12	1,775.8	-0.01	1.27	-
iShares Short Treasury Bond	SHV	0.15	14,643.6	-0.04	1.38	1.13
SPDR Bloomberg Barclays 1-3 Month T-Bill	BILL	0.14	11,959.3	-0.05	1.12	0.97
Vanguard Short-Term Treasury	VGSH	0.05	12,613.8	-0.11	2.65	1.53
Schwab Short-Term US Treasury	SCHO	0.05	9,399.6	-0.11	2.65	1.54

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
iShares 1-3 Year Treasury Bond	SHY	0.15	19,509.3	-0.14	2.57	1.47
SPDR Portfolio Short Term Treasury	SPTS	0.06	3,497.6	-0.15	2.68	1.35
Franklin Liberty Short Duration US Govt	FTSD	0.25	472.6	-0.40	2.13	1.52
<b>U.S. FIXED INCOME: TREASURY - INTERMEDIATE</b>						
iShares 3-7 Year Treasury Bond	IEI	0.15	10,865.8	-1.54	4.46	2.05
Vanguard Intermediate-Term Treasury	VGIT	0.05	7,641.9	-1.86	4.83	2.15
SPDR Portfolio Intermediate Treasury	SPTI	0.06	3,057.8	-1.88	4.83	2.44
Schwab Intermediate-Term US Treasury	SCHR	0.05	3,431.9	-1.89	4.81	2.13
iShares 7-10 Year Treasury Bond	IEF	0.15	13,418.6	-3.41	5.78	2.19
<b>U.S. FIXED INCOME: TREASURY - LONG-TERM</b>						
iShares 10-20 Year Treasury Bond	TLH	0.15	893.6	-7.19	6.21	2.19
Vanguard Long-Term Treasury	VGLT	0.05	2,347.9	-7.80	7.97	3.09
SPDR Portfolio Long Term Treasury	SPTL	0.06	3,568.6	-7.83	7.98	3.04
iShares 20+ Year Treasury Bond	TLT	0.15	15,081.8	-7.87	8.01	3.02
Vanguard Extended Duration Treasury	EDV	0.07	1,086.0	-10.68	9.59	3.50
PIMCO 25+ Year Zero Coupon US Treasury	ZROZ	0.15	392.5	-10.78	10.35	3.85
iShares 25+ Year Treasury STRIPS Bond	GOVZ	0.07	396.1	-10.82	-	-
<b>U.S. FIXED INCOME: AGENCIES</b>						
iShares Agency Bond	AGZ	0.20	727.6	-0.69	4.18	2.36
<b>U.S. FIXED INCOME: AGENCY MBS</b>						
First Trust Low Duration Opportunities	LMBS	0.68	7,261.0	-0.06	0.18	-0.06
Janus Henderson MBS	JMBS	0.32	743.5	-0.08	-	-
Vanguard Mortgage-Backed Securities	VMBS	0.05	15,088.2	-0.93	3.59	2.12
iShares MBS	MBB	0.06	25,699.8	-0.94	3.72	2.15
SPDR Portfolio Mortgage Backed Bond	SPMB	0.04	3,904.5	-1.04	3.83	2.07
iShares GNMA Bond	GNMA	0.15	505.7	-1.36	3.33	1.72
<b>U.S. FIXED INCOME: TIPS</b>						
iShares 0-5 Year TIPS Bond	STIP	0.05	5,859.5	2.95	4.26	2.86
PIMCO 1-5 Year US TIPS	STPZ	0.20	972.0	2.85	4.26	2.73
FlexShares iBoxx 3 Yr Target Duration TIPS	TDTT	0.18	1,474.0	2.84	4.96	3.20
Vanguard Short-Term Inflation-Protected Sec	VTIP	0.05	15,079.9	2.75	4.15	2.79
SPDR Bloomberg Barclays 1-10 Yr TIPS	TIPX	0.15	772.0	2.23	5.59	3.29
FlexShares iBoxx 5-Yr Target Duration TIPS	TDTF	0.18	628.8	2.06	6.34	3.94
Schwab US TIPS	SCHP	0.05	18,373.2	1.57	6.44	4.08
PIMCO Broad US TIPS	TIPZ	0.20	175.9	1.56	6.45	4.09
iShares TIPS Bond	TIP	0.19	28,256.4	1.47	6.32	3.99
SPDR Portfolio TIPS	SPIP	0.12	2,599.4	1.30	6.55	4.13
Quadratic Interest Rate Vol/Inflation Hedge	IVOL	0.99	3,505.2	-0.36	-	-
PIMCO 15+ Year US TIPS	LTPZ	0.20	604.1	-1.35	10.83	7.01
<b>U.S. FIXED INCOME: MUNICIPAL - BROAD MARKET</b>						
VanEck Vectors CEF Municipal Income	XMPT	2.02	196.4	7.38	10.59	5.04
First Trust Municipal High Income	FMHI	0.55	255.5	5.47	6.82	-
Hartford Municipal Opportunities	FMOP	0.29	195.6	1.61	4.68	-
First Trust Managed Municipal	FMB	0.50	2,245.1	1.47	4.98	3.57
Invesco National AMT-Free Municipal Bond	PZA	0.28	2,400.7	1.15	5.32	3.29
iShares New York Muni Bond	NYF	0.25	533.5	1.13	4.40	2.57
Invesco California AMT-Free Municipal	PWZ	0.28	508.0	0.97	5.11	3.21
Vanguard Tax-Exempt Bond	VTEB	0.06	13,282.4	0.92	4.98	3.07
IQ MacKay Municipal Insured	MMIN	0.31	453.1	0.84	6.06	-
iShares National Muni Bond	MUB	0.07	22,700.7	0.79	4.81	2.88
iShares California Muni Bond	CMF	0.25	1,849.7	0.35	4.29	2.57
SPDR Nuveen Bloomberg Barclays Muni	TFI	0.23	3,714.1	0.03	4.99	2.80
Invesco Taxable Municipal Bond	BAB	0.28	2,337.3	-0.29	7.22	4.67
<b>U.S. FIXED INCOME: MUNICIPAL - SHORT-TERM</b>						
PIMCO Short Term Municipal Bond Active	SMMU	0.35	452.8	0.31	2.48	1.81
VanEck Vectors Short Muni	SMB	0.20	303.5	0.23	3.11	1.80
iShares iBonds Dec 2023 Term Muni Bond	IBML	0.18	324.9	0.20	3.10	-
JPMorgan Ultra-Short Municipal Income	JMST	0.18	1,868.1	0.16	-	-
iShares iBonds Dec 2022 Term Muni Bond	IBMK	0.18	378.1	0.12	2.42	1.28
iShares Short-Term National Muni Bond	SUB	0.07	5,082.2	0.11	2.26	1.47
BlackRock Short Maturity Municipal Bond	MEAR	0.25	266.0	0.08	1.31	1.09
iShares iBonds Dec 2021 Term Muni Bond	IBMJ	0.18	302.6	-0.06	1.64	0.90
SPDR Nuveen Bloomberg Short Term Muni	SHM	0.20	4,809.6	-0.10	2.36	1.39
<b>U.S. FIXED INCOME: MUNICIPAL - INTERMEDIATE</b>						
IQ MacKay Municipal Intermediate	MMIT	0.30	179.9	1.12	6.09	-

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
PIMCO Intermediate Muni Bond Active	MUNI	0.35	635.5	0.75	4.69	2.92
iShares iBonds Dec 2024 Term Muni Bond	IBMM	0.18	232.0	0.01	3.84	-
iShares iBonds Dec 2025 Term Muni Bond	IBMN	0.18	160.8	-0.29	-	-
VanEck Vectors Intermediate Muni	ITM	0.24	1,869.9	-0.41	5.29	2.97
<b>U.S. FIXED INCOME: MUNICIPAL - LONG-TERM</b>						
VanEck Vectors Long Muni	MLN	0.24	238.3	1.88	6.29	3.71
<b>U.S. FIXED INCOME: MUNICIPAL - HIGH YIELD</b>						
SPDR Nuveen Bloomberg HiYield Municipal	Hymb	0.35	1,783.4	4.57	6.50	4.23
VanEck Vectors Short High Yield Muni	SHYD	0.35	354.3	3.85	4.49	3.13
VanEck Vectors High Yield Muni	HYD	0.35	3,854.2	3.36	4.26	3.77
<b>U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - BROAD MATURITIES</b>						
ProShares Inv Grade-Interest Rate Hedged	IGHG	0.30	808.8	2.12	4.23	4.39
iShares Interest Rate Hedged Corporate	LQDH	0.24	631.0	1.55	3.64	4.18
WisdomTree Int Rate Hedged US Agg Bond	AGZD	0.23	202.2	0.17	1.75	2.04
Fidelity Low Duration Bond Factor	FLDR	0.15	236.3	-0.31	2.26	-
Principal Inv Grade Corporate Active	IG	0.26	480.8	-1.14	8.15	-
PIMCO Investment Grade Corporate Bond	CORP	0.20	793.0	-1.19	7.84	4.72
iShares Broad USD Inv Grade Corporate	USIG	0.04	5,864.3	-1.24	7.53	4.56
SPDR Portfolio Corporate Bond	SPBO	0.03	347.9	-1.30	7.98	4.90
Franklin Liberty US Core Bond	FLCB	0.15	1,621.8	-1.33	-	-
Vanguard Total Corporate Bond	VTC	0.05	718.4	-1.33	7.63	-
iShares ESG Aware USD Corporate Bond	SUSC	0.18	760.8	-1.39	7.54	-
Goldman Sachs Access Inv Gr Corporate	GIGB	0.14	761.9	-1.56	7.65	-
SPDR Portfolio Aggregate Bond	SPAB	0.03	6,153.9	-1.65	5.28	2.94
Schwab US Aggregate Bond	SCHZ	0.04	8,962.6	-1.65	5.26	2.90
iShares Core US Aggregate Bond	AGG	0.04	88,729.7	-1.66	5.27	2.93
Vanguard ESG US Corporate Bond	VCEB	0.12	170.8	-1.66	-	-
iShares ESG Aware US Aggregate Bond	EAGG	0.10	1,331.2	-1.68	-	-
JPMorgan US Aggregate Bond	JAGG	0.07	1,114.0	-1.72	-	-
iShares iBoxx USD Inv Grade Corporate	LQD	0.14	40,172.0	-1.77	8.79	5.09
Vanguard Total Bond Market	BND	0.04	78,499.8	-1.78	5.41	2.98
Nuveen ESG US Aggregate Bond	NUBD	0.20	255.1	-1.86	4.96	-
Franklin Liberty Inv Grade Corporate	FLCO	0.35	1,071.1	-1.87	7.46	-
iShares Aaa-A Rated Corporate Bond	QLTA	0.15	1,191.8	-2.04	6.93	3.90
Goldman Sachs Access US Aggregate Bond	GCOR	0.14	213.0	-2.14	-	-
WisdomTree Yield Enh US Aggregate Bond	AGGY	0.12	1,064.7	-2.27	5.17	2.94
Vanguard Long-Term Bond	BLV	0.05	5,601.5	-4.57	10.41	6.73
<b>U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - SHORT-TERM</b>						
SPDR SSGA Ultra Short Term Bond	ULST	0.20	401.6	0.36	1.99	1.86
PGIM Ultra Short Bond	PULS	0.15	1,579.7	0.35	2.05	-
JPMorgan Ultra-Short Income	JPST	0.18	17,317.5	0.20	2.32	-
BlackRock Ultra Short-Term Bond	ICSH	0.08	5,643.1	0.20	2.07	1.84
SPDR Portfolio Short Term Corporate Bond	SPSB	0.07	7,715.8	0.18	3.56	2.47
Goldman Sachs Access Ultra Short Bond	GSST	0.16	286.6	0.14	-	-
PIMCO Enhanced Short Maturity Active	MINT	0.37	14,023.3	0.12	1.98	1.93
iShares 1-5 Year Inv Grade Corporate Bond	IGSB	0.06	26,627.8	0.10	4.59	2.94
ClearShares Ultra-Short Maturity	OPER	0.20	175.2	0.09	-	-
iShares iBonds Dec 2021 Term Corporate	IBDM	0.10	1,410.0	0.07	2.98	1.91
iShares iBonds Dec 2022 Term Corporate	IBDN	0.10	1,566.3	0.07	4.06	2.52
Vanguard Short-Term Corporate Bond	VCSH	0.05	40,263.8	0.03	4.51	2.90
Schwab 1-5 Year Corporate Bond	SCHJ	0.05	629.3	0.00	-	-
iShares ESG Aware 1-5 Yr USD Corporate	SUSB	0.12	1,045.8	-0.03	4.40	-
iShares 0-5 Year Inv Grade Corporate Bond	SLQD	0.06	2,566.4	-0.06	4.04	2.69
Invesco BulletShares 2021 Corporate Bond	BSCL	0.10	1,772.6	-0.32	2.67	1.85
Invesco BulletShares 2022 Corporate Bond	BSCM	0.10	2,380.6	-0.34	3.84	2.47
Vanguard Short-Term Bond	BSV	0.05	34,496.9	-0.37	3.66	2.12
Invesco BulletShares 2023 Corporate Bond	BSCN	0.10	1,986.8	-0.39	4.95	3.14
WisdomTree Yield Enh US Short-Term Agg	SHAG	0.12	183.8	-0.48	3.60	-
Vanguard Ultra-Short Bond	VUSB	0.10	999.1	-	-	-
<b>U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - INTERMEDIATE</b>						
iShares iBonds Dec 2023 Term Corporate	IBDO	0.10	1,587.8	0.04	5.22	3.14
iShares iBonds Dec 2024 Term Corporate	IBDP	0.10	1,347.1	0.02	6.07	3.64
Invesco BulletShares 2024 Corporate Bond	BSCO	0.10	1,479.4	-0.43	6.07	3.70
iShares iBonds Dec 2025 Term Corporate	IBDQ	0.10	1,130.8	-0.58	7.17	4.19
FlexShares Credit-Scored US Corporate	SKOR	0.22	291.9	-0.60	6.77	3.86

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
SPDR Portfolio Intermediate Corporate	SPIB	0.07	6,788.1	-0.62	6.06	3.75
Inspire Corporate Bond Impact	IBD	0.49	204.8	-0.89	4.38	-
iShares iBonds Dec 2026 Term Corporate	IBDR	0.10	742.4	-0.89	7.71	-
iShares iBonds Dec 2027 Term Corporate	IBDS	0.10	472.6	-0.97	7.92	-
Invesco BulletShares 2025 Corporate Bond	BSCP	0.10	1,022.8	-0.99	6.79	3.90
iShares 5-10 Yr Inv Gr Corporate Bond	IGIB	0.06	11,860.5	-1.11	7.83	4.71
iShares iBonds Dec 2028 Term Corporate	IBDT	0.10	266.9	-1.17	-	-
Vanguard Intermediate Corporate Bond	VCIT	0.05	46,351.0	-1.24	7.73	4.51
Schwab 5-10 Year Corporate Bond	SCHI	0.05	354.4	-1.26	-	-
Invesco BulletShares 2026 Corporate Bond	BSQC	0.10	535.1	-1.38	7.57	-
Invesco BulletShares 2027 Corporate Bond	BSCR	0.10	338.2	-1.59	7.80	-
Invesco BulletShares 2028 Corporate Bond	BSCS	0.10	290.4	-1.70	-	-

#### U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - FLOATING RATE

VanEck Vectors Inv Grade Floating Rate	FLTR	0.14	622.7	0.67	2.38	2.47
Invesco Variable Rate Investment Grade	VRIG	0.30	480.6	0.63	2.19	-
iShares Floating Rate Bond	FLOT	0.20	6,487.6	0.40	1.84	1.85
SPDR Bloomberg Inv Gr Floating Rate	FLRN	0.15	2,481.4	0.38	1.82	1.91

#### U.S. FIXED INCOME: CORPORATE - HIGH YIELD - BROAD MATURITIES

FlexShares High Yield Value-Scored Bond	HYGV	0.37	275.3	4.44	-	-
VanEck Vectors Fallen Angel High Yield	ANGL	0.35	5,043.1	4.32	10.37	9.11
SPDR Portfolio High Yield Bond	SPHY	0.10	407.7	3.83	7.83	6.00
iShares Fallen Angels USD Bond	FALN	0.25	2,636.1	3.41	10.21	9.20
iShares Broad USD HiYld Corp Bond	USHY	0.15	8,352.9	3.34	7.08	-
SPDR Bloomberg Barclays High Yield Bond	JNK	0.40	9,774.5	2.77	6.65	6.20
iShares iBoxx USD HiYld Corp Bond	HYG	0.49	20,345.4	2.60	6.36	6.00
Xtrackers USD HiYld Corp Bond	HYLB	0.15	6,876.5	2.56	6.44	-
JPMorgan High Yield Research Enhanced	JPHY	0.24	1,626.5	2.35	6.76	-
Franklin Liberty Senior Loan	FLBL	0.45	211.3	2.28	-	-
Pacer Trendpilot US Bond	PTBD	0.60	1,061.1	1.80	-	-
Goldman Sachs Access HiYld Corp Bond	GHYB	0.34	198.8	1.73	6.42	-
Xtrackers Low Beta High Yield Bond	HYDW	0.20	579.6	1.53	5.75	-
Invesco Senior Loan	BKLN	0.65	6,809.0	0.16	2.66	3.09

#### U.S. FIXED INCOME: CORPORATE - HIGH YIELD - SHORT-TERM

SPDR Bloomberg Short Term HiYld Bond	SJNK	0.40	5,121.5	4.13	5.94	6.11
PIMCO 0-5 Year High Yield Corporate Bond	HYS	0.56	2,239.1	3.60	5.06	5.66
iShares 0-5 Year HiYld Corp Bond	SHYG	0.30	5,301.2	3.50	5.10	5.43
Invesco BulletShares 2022 HiYld Corp Bond	BSJM	0.42	886.7	0.89	2.73	4.04
Invesco BulletShares 2021 HiYld Corp Bond	BSJL	0.42	628.5	0.03	1.70	3.52

#### U.S. FIXED INCOME: CORPORATE - HIGH YIELD - INTERMEDIATE

Invesco BulletShares 2024 HiYld Corp Bond	BSJO	0.42	316.7	2.04	5.44	-
Invesco BulletShares 2025 HiYld Corp Bond	BSJP	0.42	271.6	1.95	5.93	-
Invesco Fundamental HiYld Corp Bond	PHB	0.50	839.8	1.37	6.04	5.23
Invesco BulletShares 2023 HiYld Corp Bond	BSJN	0.42	630.8	1.28	4.00	4.77
iShares Intermediate Govt/Credit Bond	GVI	0.20	2,362.9	-1.10	4.49	2.40
Vanguard Intermediate-Term Bond	BIV	0.05	14,491.9	-1.98	6.61	3.35

#### U.S. FIXED INCOME: CORPORATE - ASSET-BACKED

First Trust TCW Securitized Plus	DEED	0.65	208.4	1.39	-	-
iShares CMBS	CMBS	0.25	707.7	-0.79	5.62	3.11

#### U.S. FIXED INCOME: CORPORATE - CONVERTIBLES

iShares Convertible Bond	ICVT	0.20	1,717.9	5.93	25.17	22.02
SPDR Bloomberg Barclays Convertible Sec	CWB	0.40	6,836.6	5.28	22.32	19.25

#### U.S. FIXED INCOME: CORPORATE - PREFERRED STOCK

VanEck Vectors Pref Sec ex Financials	PFFX	0.40	979.7	5.29	8.62	6.23
iShares Preferred and Income Securities	PFF	0.46	19,538.6	4.20	7.00	5.30
Global X US Preferred	PFFD	0.23	1,964.0	3.62	8.03	-
Invesco Variable Rate Preferred	VRP	0.50	1,781.2	2.43	6.44	5.84
SPDR ICE Preferred Securities	PSK	0.45	1,479.9	1.66	6.31	4.78
Invesco Preferred	PGX	0.52	7,243.6	1.64	6.71	5.38
Invesco Financial Preferred	PGF	0.61	1,854.3	1.62	6.34	5.21
Innovator S&P Inv Grade Preferred	EPRF	0.47	221.4	1.46	6.54	4.58

#### GLOBAL FIXED INCOME

First Trust SSI Strategic Convertible Sec	FCVT	0.95	298.1	5.64	21.72	17.91
First Trust Preferred Securities & Income	FPE	0.85	7,021.8	3.13	7.52	6.83
First Trust TCW Unconstrained Plus Bond	UCON	0.76	451.8	2.91	3.09	-
Invesco Global Short Term High Yield Bond	PGHY	0.35	241.4	0.69	2.82	3.66

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
FormulaFolios Tactical Income	FFTI	1.04	205.9	0.65	3.27	-
SPDR DoubleLine Short Dur Tot Ret Tactical	STOT	0.45	160.2	0.47	2.83	2.03
IQ Ultra Short Duration	ULTR	0.25	255.3	0.39	-	-
BlackRock Short Maturity Bond	NEAR	0.25	4,826.6	0.35	2.02	1.82
ETFMG Sit Ultra Short	VALT	0.30	191.6	0.31	-	-
JPMorgan Intl Bond Opportunities	JPIB	0.50	287.7	0.29	5.90	-
FlexShares Ready Access Variable Income	RAVI	0.25	392.5	0.19	2.22	1.81
PIMCO Enhanced Low Duration Active	LDUR	0.56	1,129.7	0.11	3.27	2.67
Invesco Ultra Short Duration	GSY	0.22	2,988.1	-0.05	2.05	2.02
Janus Henderson Short Duration Income	VNLA	0.26	2,862.0	-0.09	2.66	-
Invesco Total Return Bond	GTO	0.50	777.9	-0.59	6.46	5.34
SPDR DoubleLine Total Return Tactical	TOTL	0.55	3,187.3	-0.71	3.80	2.53
Fidelity Limited Term Bond	FLT	0.36	416.1	-0.78	4.03	2.46
Hartford Total Return Bond	HTRB	0.29	1,008.5	-0.80	6.42	-
PIMCO Active Bond	BOND	0.57	4,279.7	-0.86	5.71	3.84
JPMorgan Core Plus Bond	JCPB	0.40	169.0	-1.03	-	-
Fidelity Total Bond	FBND	0.36	1,915.4	-1.21	5.44	3.73
First Trust TCW Opportunistic Fixed Income	FIXD	0.56	5,189.5	-1.33	3.15	-
Columbia Diversified Fixed Income Alloc	DIAL	0.28	1,152.7	-1.44	7.33	-
Franklin Liberty Intl Aggregate Bond	FLIA	0.25	170.4	-1.74	2.05	-
Vanguard Total World Bond	BNDW	0.06	561.0	-1.90	-	-
iShares Core Intl Aggregate Bond	IAGG	0.08	3,970.2	-1.97	4.11	2.97
Vanguard Total International Bond	BNDX	0.08	42,725.8	-2.12	3.97	2.82
SPDR FTSE Intl Govt Infl-Protected Bond	WIP	0.50	410.7	-2.45	4.16	3.15
iShares Global Green Bond	BGRN	0.20	212.6	-2.68	-	-
SPDR Bloomberg Short Term Intl Treasury	BWZ	0.35	212.9	-3.26	1.04	0.65
SPDR Bloomberg Barclays Intl Corporate	IBND	0.50	232.4	-4.08	2.98	2.70
SPDR Bloomberg Barclays Intl Treasury	BWX	0.35	996.0	-5.68	2.99	1.36

#### GLOBAL FIXED INCOME: CORPORATE - PREFERRED STOCK

Global X SuperIncome Preferred	SPFF	0.58	218.0	4.75	6.67	4.17
First Trust Institutl Pref Securities/Inc	FPEI	0.85	379.0	2.57	7.58	-
Principal Spectrum Preferred Sec Active	PREF	0.55	361.7	1.92	7.90	-

#### GLOBAL FIXED INCOME: HIGH YIELD

SPDR Blackstone Senior Loan	SRLN	0.70	6,263.2	3.27	4.72	4.60
First Trust Senior Loan	FTSL	0.86	2,327.8	2.44	0.78	0.49
Franklin Liberty High Yield Corporate	FLHY	0.40	359.6	2.41	-	-
First Trust Tactical High Yield	HYLS	1.01	2,360.2	2.29	1.91	0.89
Fidelity High Yield Factor	FDHY	0.45	259.4	1.70	8.43	-

#### INTERNATIONAL FIXED INCOME: DEVELOPED

iShares US & Intl High Yield Corp Bond	GHYG	0.40	197.3	2.17	6.34	6.37
iShares International Treasury Bond	IGOV	0.35	1,263.7	-6.08	2.21	1.25

#### INTERNATIONAL FIXED INCOME: EMERGING

VanEck Vectors EM High Yield Bond	HYEM	0.40	1,216.1	2.03	7.55	6.12
iShares J.P. Morgan EM High Yield Bond	EMHY	0.50	443.1	0.91	6.24	4.54
iShares J.P. Morgan EM Corporate Bond	CEMB	0.50	435.9	0.25	7.13	4.94
iShares China Large-Cap	FXI	0.74	5,051.8	0.11	4.83	8.90
iShares JP Morgan USD EM Bond	EMB	0.39	19,741.8	-1.43	6.64	4.25
Vanguard EM Government Bond	VWOB	0.25	2,974.7	-1.44	6.64	4.48
Invesco EM Sovereign Debt	PCY	0.50	2,805.8	-3.11	5.89	3.21
iShares JP Morgan EM Local Currency Bond	LEMB	0.30	523.0	-3.54	2.08	1.00
SPDR Bloomberg Barclays EM Local Bond	EBND	0.30	1,351.0	-4.43	3.71	2.30
VanEck Vectors JPM EM Loc Currency Bond	EMLC	0.30	3,565.7	-5.68	2.42	1.51
First Trust EM Local Currency Bond	FEMB	0.85	290.5	-7.18	2.41	1.23
SPDR Bloomberg Emrg Markets USD Bond	EMHC	0.23	181.2	-	-	-

#### COMMODITIES: BROAD MARKET

Teucrium Corn	CORN	2.19	166.5	37.16	9.14	0.83
Invesco Opt Yld Divrsfd Commodity No K-1	PDBC	0.59	6,113.1	31.65	3.69	5.04
Invesco DB Commodity Index Tracking	DBC	0.88	2,495.5	30.95	3.87	5.24
iShares S&P GSCI Commodity	GSG	0.85	1,351.6	30.49	-3.51	0.72
iShares GSCI Commodity Dyn Roll Strategy	COMT	0.48	2,429.7	29.36	0.23	4.97
iPath Bloomberg Commodity ETN	DJP	0.70	737.9	24.20	3.76	1.92
United States Commodity	USCI	1.03	230.6	23.64	-2.61	-1.33
First Trust Global Tactical Commodity	FTGC	0.95	1,606.9	22.35	5.10	2.36
GraniteShares Commodity Broad No K-1	COMB	0.25	218.7	20.82	3.71	-
Aberdeen Std All Commodity K-1 Free	BCI	0.25	667.0	20.41	3.73	-

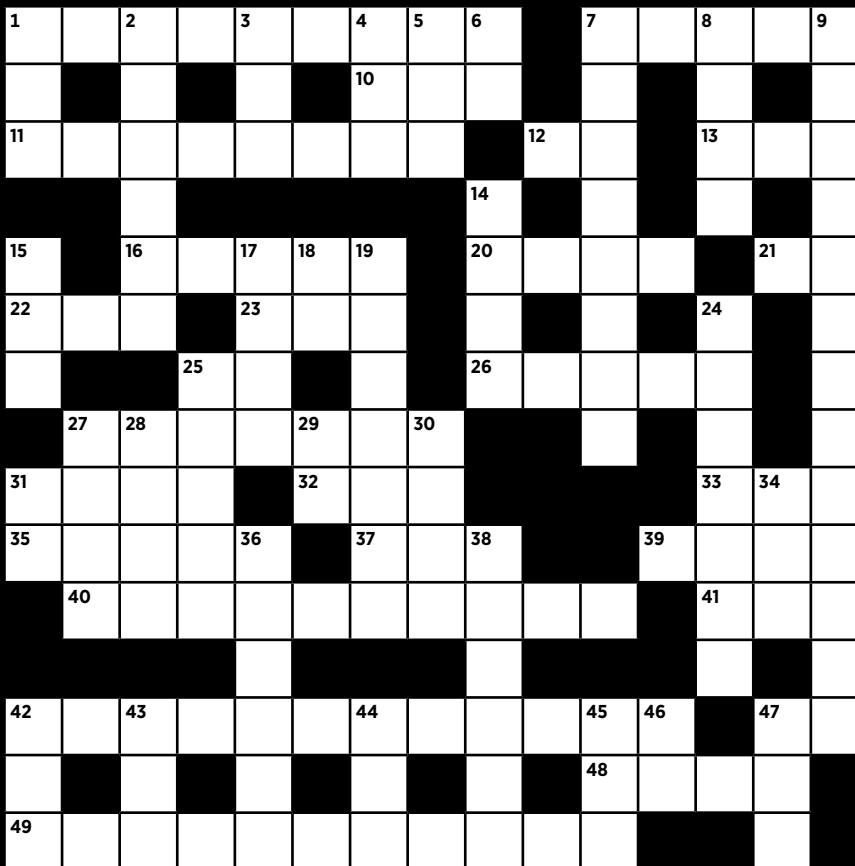
FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Direxion Auspice Broad Commodity Strat	COM	0.70	206.4	20.15	7.82	-
WisdomTree Enhanced Commodity Strat	GCC	0.55	197.7	16.26	5.54	1.60
Multi-Asset Diversified Income	MDIV	0.73	489.1	14.25	2.73	3.03
Strategy Shares NASDAQ 7 HANDL	HNDL	1.17	692.1	3.84	9.65	-
<b>COMMODITIES: AGRICULTURE</b>						
Invesco DB Agriculture	DBA	0.94	890.4	15.43	1.99	-2.82
<b>COMMODITIES: ENERGY</b>						
Invesco DB Oil	DBO	0.78	515.5	52.91	2.24	7.77
United States Oil	USO	0.79	3,059.0	51.11	-25.47	-11.63
KraneShares Global Carbon	KRBN	0.79	509.3	50.18	-	-
United States Brent Oil	BNO	0.90	318.0	49.46	-4.61	5.28
United States 12 Month Oil	USL	0.88	187.6	48.81	0.34	5.74
United States Natural Gas	UNG	1.28	276.3	42.17	-17.97	-17.66
<b>COMMODITIES: INDUSTRIAL METALS</b>						
United States Copper	CPER	0.80	309.8	20.70	11.92	12.59
Invesco DB Base Metals	DBB	0.80	382.4	17.15	5.93	9.27
<b>COMMODITIES: PRECIOUS METALS</b>						
Aberdeen Standard Physical Palladium	PALL	0.60	498.9	13.11	42.04	35.14
Credit Suisse Silver Covered Call ETN	SLVO	0.65	258.1	7.01	10.01	2.64
Aberdeen Standard Physical Platinum	PPLT	0.60	1,373.1	-0.47	7.31	0.27
Aberdeen Standard Physical Silver	SIVR	0.30	1,044.2	-1.41	17.17	6.47
iShares Silver Trust	SLV	0.50	14,479.3	-1.42	16.93	6.28
Aberdeen Standard Phys Precious Metals	GLTR	0.60	1,018.7	-2.53	16.16	7.95
GraniteShares Gold Trust	BAR	0.17	1,005.1	-6.88	12.00	-
VanEck Merk Gold Trust	OUNZ	0.25	464.0	-7.02	11.85	5.58
SPDR Gold MiniShares Trust	GLDM	0.18	4,307.4	-7.02	12.03	-
iShares Gold Trust	IAU	0.25	28,487.4	-7.03	11.93	5.72
Aberdeen Standard Physical Gold	SGOL	0.17	2,341.7	-7.06	11.99	5.67
SPDR Gold Trust	GLD	0.40	59,003.7	-7.14	11.76	5.54
Goldman Sachs Physical Gold	AAAU	0.18	363.2	-	-	-
<b>CURRENCY: DEVELOPED</b>						
Invesco DB US Dollar Index Bullish	UUP	0.76	428.2	2.43	0.88	0.62
Invesco CurrencyShares Canadian Dollar	FXC	0.40	209.9	2.38	2.22	0.91
Invesco CurrencyShares British Pound	FXB	0.40	166.8	0.99	1.37	0.50
Invesco CurrencyShares Euro	FXE	0.40	294.9	-3.43	-0.37	0.48
Invesco CurrencyShares Swiss Franc	FXF	0.40	260.8	-4.92	1.10	-0.08
Invesco CurrencyShares Japanese Yen	FXJ	0.40	183.2	-7.36	-0.68	-1.97
<b>ASSET ALLOCATION</b>						
DeltaShares S&P 500 Managed Risk	DMRL	0.35	413.4	13.40	11.47	-
Amplify High Income	YYY	2.45	453.0	13.25	7.83	7.72
WisdomTree US Efficient Core	NTSX	0.20	516.4	11.54	-	-
Cabana Target Drawdown 13	TDSX	0.68	276.7	11.46	-	-
Invesco CEF Income Composite	PECF	2.34	931.9	11.10	9.50	9.28
iShares Core Aggressive Allocation	AOA	0.25	1,437.7	10.27	12.23	12.10
DeltaShares S&P Intl Managed Risk	DMRI	0.50	188.4	9.00	3.30	-
Merlyn.AI SectorSurfer Momentum	DUDE	1.32	173.9	8.99	-	-
Cabana Target Drawdown 10	TDSC	0.69	720.1	8.81	-	-
SPDR SSGA Global Allocation	GAL	0.35	283.9	8.61	9.58	9.29
iShares Core Growth Allocation	AOR	0.25	1,817.1	7.51	10.61	9.90
Principal Active Income	YLD	0.49	232.1	6.93	6.39	6.76
Cabana Target Drawdown 7	TDSB	0.68	339.6	4.87	-	-
iShares Core Moderate Allocation	AOM	0.25	1,679.5	4.55	8.84	7.69
Amplify BlackSwan Growth/Treasury Core	SWAN	0.49	780.7	4.50	-	-
iShares Core Conservative Allocation	AOK	0.25	926.8	3.14	7.98	6.56
iShares Mstar Multi-Asset Income	IYLD	0.60	240.4	1.67	4.51	4.38
Aptus Defined Risk	DRSK	0.78	717.8	1.18	-	-
Cambria Tail Risk	TAIL	0.59	307.6	-8.97	-3.25	-
<b>ALTERNATIVES: ABSOLUTE RETURN</b>						
First Trust Long/Short Equity	FTLS	1.60	373.3	11.58	8.33	9.58
Core Alternative	CCOR	1.09	184.6	3.28	7.74	-
RPAR Risk Parity	RPAR	0.51	1,313.3	3.07	-	-
IQ Hedge Multi-Strategy Tracker	QAI	0.78	805.6	1.03	3.98	3.22
IQ Merger Arbitrage	MNA	0.77	743.6	0.57	3.75	3.86
<b>ALTERNATIVES: TACTICAL TOOLS</b>						
iPath Ser B S&P 500 VIX Short Tm Futs ETN	VXX	0.89	1,009.7	-56.13	-41.57	-

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
ProShares VIX Short-Term Futures	VIXY	0.85	275.5	-56.19	-41.79	-49.50
<b>LEVERAGED</b>						
MicroSectors US Big Oil 3X Lev ETN	NRGU	0.95	586.7	184.80	-	-
Direxion S&P Oil & Gas Exp/Prod Bull 2X	GUSH	1.17	868.8	152.08	-81.83	-62.95
ProShares Ultra QQQ	QLD	0.95	4,917.7	149.54	88.14	74.54
ProShares Ultra Bloomberg Crude Oil	UCO	0.95	1,293.8	115.69	-55.02	-33.71
ProShares Ultra Oil & Gas	DIG	0.95	226.7	100.10	-30.34	-16.98
Direxion Daily Energy Bull 2x	ERX	1.00	639.5	99.06	-57.32	-37.15
Direxion Daily Financial Bull 3x	FAS	0.99	3,569.9	80.29	21.19	34.66
Direxion Daily Regional Banks Bull 3X	DPST	0.99	475.0	78.21	-33.44	-2.43
Direxion Daily MSCI Real Estate Bull 3x	DRN	0.99	164.9	70.85	1.60	-2.06
Direxion Daily HomeBldrs/Suppl Bull 3X	NAIL	1.00	470.2	68.70	12.19	26.02
ProShares UltraPro Russell2000	URTY	0.95	401.4	48.09	6.61	25.97
Direxion Daily Small Cap Bull 3x	TNA	1.12	1,705.5	47.60	6.33	25.71
ProShares UltraPro S&P500	UPRO	0.93	2,560.3	47.58	34.76	38.96
Direxion Daily S&P 500 Bull 3X	SPXL	1.01	2,464.4	47.57	34.71	38.78
ProShares Ultra Financials	UYG	0.95	855.4	46.17	15.30	22.93
Direxion Daily Aerospace/Defense Bull 3X	DFEN	0.99	356.8	44.80	-17.50	-
Direxion Daily Semiconductor Bull 3X	SOXL	0.96	4,640.7	43.29	68.57	91.16
ProShares UltraPro Dow30	UDOW	0.95	1,029.9	42.79	19.97	33.30
Credit Suisse Monthly 2xLev Mort REIT ETN	REML	1.30	242.7	42.38	-20.70	-
ProShares Ultra Semiconductors	USD	0.95	288.9	39.73	50.36	58.79
Direxion Daily Technology Bull 3X	TECL	1.08	2,537.6	36.82	61.64	72.98
Direxion Daily Healthcare Bull 3x	CURE	1.08	167.4	35.80	32.70	27.45
ProShares Ultra MidCap400	MVV	0.95	174.7	34.78	14.65	20.25
ProShares UltraPro QQQ	TQQQ	0.95	12,476.9	34.76	62.59	72.54
ProShares Ultra Technology	ROM	0.95	881.6	34.41	55.60	59.74
ProShares Ultra Russell2000	UWM	0.95	774.1	33.58	15.03	24.70
MicroSectors FANG+ 3X Leveraged ETN	FNGU	0.95	2,022.6	33.31	74.20	-
ProShares Ultra S&P 500	SSO	0.91	4,178.9	30.78	29.05	29.27
ProShares Ultra Dow30	DDM	0.95	480.6	27.70	20.69	26.88
MicroSectors FANG+ Index 2X Lev ETN	FNGO	0.95	238.3	27.20	-	-
Credit Suisse FI Large Cap Growth Enh ETN	FLGE	1.52	245.1	25.79	39.27	40.56
ProShares Ultra Health Care	RXL	0.95	177.5	23.27	27.41	23.91
Direxion Daily MSCI Brazil Bull 2X	BRZU	1.29	228.2	16.47	-39.76	-31.75
Virtus InfraCap US Preferred Stock	PFFA	1.47	423.3	15.67	7.96	-
Direxion Daily MSCI EM Bull 3x	EDC	1.33	249.8	14.96	6.65	16.58
ProShares Ultra NASDAQ Biotechnology	BIB	0.95	268.5	14.16	19.88	20.47
Direxion Daily FTSE China Bull 3X	YINN	1.37	408.1	-7.71	-8.85	6.17
ProShares Ultra Silver	AGQ	0.93	647.2	-10.06	15.85	-0.66
ProShares Ultra Gold	UGL	0.95	241.3	-16.10	16.10	4.91
Direxion Daily Gold Miners Index Bull 2X	NUGT	1.17	890.6	-16.28	-21.57	-34.93
Direxion Daily 20+ Year Treasury Bull 3X	TMF	1.05	282.3	-24.58	12.54	-0.38
Direxion Daily S&P Biotech Bull 3X	LABU	1.02	774.0	-26.67	-7.89	21.37
Direxion Daily Junior Gold Miners Bull 2X	JNUG	1.12	580.2	-32.06	-50.53	-53.90
ProShares Ultra VIX Short-Term Futures	UVXY	0.95	855.5	-97.37	-83.44	-85.72
<b>INVERSE</b>						
ProShares Short VIX Short-Term Futures	SVXY	1.38	585.3	34.05	2.97	-10.75
Direxion Daily 20+ Year Treasury Bear 3x	TMV	1.04	295.2	20.64	-29.47	-16.78
ProShares UltraShort 20+ Year Treasury	TBT	0.92	1,511.7	14.68	-18.58	-9.30
ProShares Short 20+ Year Treasury	TBF	0.94	613.4	6.97	-8.55	-3.80
ProShares Short Dow30	DOG	0.95	237.3	-13.09	-16.54	-16.39
ProShares Short QQQ	PSQ	0.95	554.9	-14.02	-26.35	-24.76
ProShares Short S&P500	SH	0.90	1,367.8	-14.36	-18.70	-16.77
ProShares Short Russell2000	RWM	0.95	264.5	-17.55	-18.12	-18.27
ProShares UltraShort S&P500	SDS	0.91	612.4	-27.04	-37.61	-33.40
ProShares UltraShort QQQ	QID	0.95	205.9	-27.32	-49.66	-46.27
ProShares UltraPro Short Dow30	SDOW	0.95	358.4	-35.45	-51.66	-48.46
Direxion Daily S&P 500 Bear 3X	SPXS	1.07	369.3	-38.36	-54.72	-48.76
ProShares UltraPro Short S&P500	SPXU	0.93	513.6	-38.48	-54.60	-48.58
ProShares UltraPro Short QQQ	SQQQ	0.95	1,740.0	-39.79	-67.96	-63.53
Direxion Daily Small Cap Bear 3X	TZA	1.07	358.4	-47.83	-57.25	-54.11

# Crossword Puzzle

**ACROSS**

- 1. A blend of passive and active investing, 2 words
- 7. Portfolio that uses a passive investment framework to offer low-cost market exposure
- 10. “\_\_\_s of the Dow”
- 11. Investment approach that focuses on the analysis of individual stocks rather than macroeconomic or market cycles, 2 words (hyphenated)
- 12. Trademark, abbr.
- 13. “Awesome!”
- 16. Investment strategy that involves picking stocks that appear to be trading less than their intrinsic or book worth
- 20. B&B’s
- 21. \_\_\_-owner
- 22. 12b-1 \_\_\_ (mutual fund charge)
- 23. Appropriate
- 25. Operating system, abbr.
- 26. \_\_\_ weighting: all the stocks in a portfolio are given the same importance
- 27. Persistent and well-documented asset characteristics that have historically driven investment risk and return
- 31. Nucleus
- 32. \_\_\_ option



**DOWN**

- 1. Ticker symbol for the iShares Short-Term National Muni Bond
- 2. ETF for which a management team makes decisions on portfolio allocation (see 40 across)

- 3. Sole even prime number
- 4. College email ending
- 5. Type of investing that focuses first on macroeconomic factors (see 8 down)
- 6. Silver symbol
- 7. Type of trading in which investors buy securities that are rising and sell them when they look to have peaked
- 8. See 5 down
- 9. Strategy that avoids the sharper ups and downs of other stocks, 2 words
- 14. Factor that targets smaller stocks
- 15. \_\_\_ the table (no longer offered)
- 17. Endure
- 18. Opposite of down
- 19. It allows ETFs that meet certain conditions to go to market without the delay of obtaining an exemptive order, 2 words
- 24. State of no-growth
- 25. Large expanse of sea
- 27. Regulatory document submitted to the SEC
- 28. Field
- 29. \_\_\_ ed piece
- 30. Originate (from)
- 31. Chubb Limited’s ticker symbol
- 34. Edge
- 36. Gold quality measures
- 38. Agree to terms ending a dispute
- 42. Qualified
- 43. Confidentiality agreement, abbr.
- 44. Airport info
- 45. Permit
- 46. Ticker symbol for Sea Limited
- 47. “So long!”

Crossword Answers on p. 5



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The screenshot shows the 'ETF Basics' section of the website. At the top left, there is a header 'ETF Basics' and a large illustration featuring books, a hand pointing to a chart, an hourglass, and a calculator. Below this is a text block: 'Read all about the ins and outs of ETFs, from how the ETF structure works, to asset class details, to best practices in ETF selection. Our comprehensive library has it all.' To the right of this text is a yellow and blue call-to-action box with the text 'ETF.com Education Center', 'ETF Basics Read all about the ins and outs of ETFs', and a 'Learn Now!' button. Below the main text are four article cards, each with an icon and a 'More Info' link: 1. 'What Is An ETF?' with a document icon, describing exchange-traded funds as a new type of mutual fund. 2. 'Why Are ETFs So Cheap?' with a stack of coins and an upward arrow, stating that low fees are the first thing people talk about. 3. 'ETFs Vs. Mutual Funds: Which Is Right For You?' with a clock and dollar sign icon, suggesting ETFs are often the right choice for many investors. 4. 'Fixed Income Investing ETFs: The Basics' with an hourglass icon, noting that fixed income securities are a mainstay of investor portfolios. At the bottom right of the article grid is a 'More articles' link with a right-pointing arrow. On the right side of the screenshot is a vertical sidebar with the 'ETF.com Education Center' logo, a 'Start Today!' button, and a list of icons representing different educational topics.



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# THE LAST WORD

## PASSIVE STILL REIGNS IN ETFs



**BY HEATHER BELL**  
Editor

Passive management still claims the lion's share of new flows into ETFs, but it's increasingly a drying well for issuers when it comes to innovation. In plain vanilla exposures, the only place to compete today is price. That's a rapidly disappearing playground when the basis points are already in the single digits for most asset classes.

It's in smart beta and active management where we're seeing real competition unfold these days. And with the advent of the "ETF Rule," which opened up custom baskets to all active management newcomers, the red carpet has been rolled out for small and new issuers to enter the space.

ETFs may have been originally designed for the passive investor and, as of today, that's where the bulk of the assets lay. But for any firm wanting to innovate and differentiate itself in the crowded ETF playing field, active management and smart beta are two areas that seem to offer opportunity.

### ACTIVE WAVE

Active management has recently been where we're seeing the most newcomers and the most ETF launches. Long an overlooked segment of the predominantly passive ETF market, 80 new actively managed ETFs launched in the first half of this year alone, excluding the slew of defined outcome ETFs (which are technically actively managed) that debuted in that period. If you include all ETFs launched in the first half of 2021—nearly 200—almost half are actively managed.

That's not a surprise. Between the semitransparent phenomenon lurking in larger mutual fund managers and the new rules around custom baskets, there are many reasons for issuers to be drawn to active ETF approaches.

Yet anyone involved in the financial industry has borne witness to the long and disappointing history of active management in the mutual fund space. Out-performance of passive strategies is rare, and when it happens, it's almost never sustained over the long term. ETFs have been

pulling assets away from mutual funds for years because of this.

They don't seem to do a much better job than mutual funds at achieving alpha, but their associated costs are lower—and cost is a key factor undermining active performance.

### SMART BETA'S UNCERTAIN APPEAL

Smart beta often seems like a compromise between active and passive management, as it pushes beyond the simplicity of cap-weighted indexes but shies away from active investment decisions, as it still relies on an index, albeit sometimes a complex one.

Yet smart beta seems to provide sporadic—rather than sustained—out-performance versus plain vanilla cap-weighted strategies. Asset flows into these products have dwindled, suggesting investors are skeptical of paying extra basis points to track some enhanced index that isn't guaranteed to outperform a simpler one.

While smart beta aims to provide a different path of returns, it's often associated with the pursuit of alpha—that extra juice you may find as you veer away from simply tracking the market. Paying more (most smart beta ETFs are more expensive than their plain vanilla counterparts) to take on extra risk without the guarantee of extra return is anathema to many investors.

Yet alongside active management, smart beta has been a historic hotbed of innovation, and many interesting strategies have come from this space. But the bar for success is very high. Plain vanilla ETFs have much to recommend them, and all indicators suggest they won't be overtaken by other strategies for some time—if ever.

Investors may love the thrill of a cool, innovative idea—and as industry watchers, we love them too—but they know that passive vanilla ETFs needn't be boring. Many investors use them in their own active strategies because their beta is a known quantity, meaning they have a "plug and play" aspect that can appeal to tactical strategists. ●

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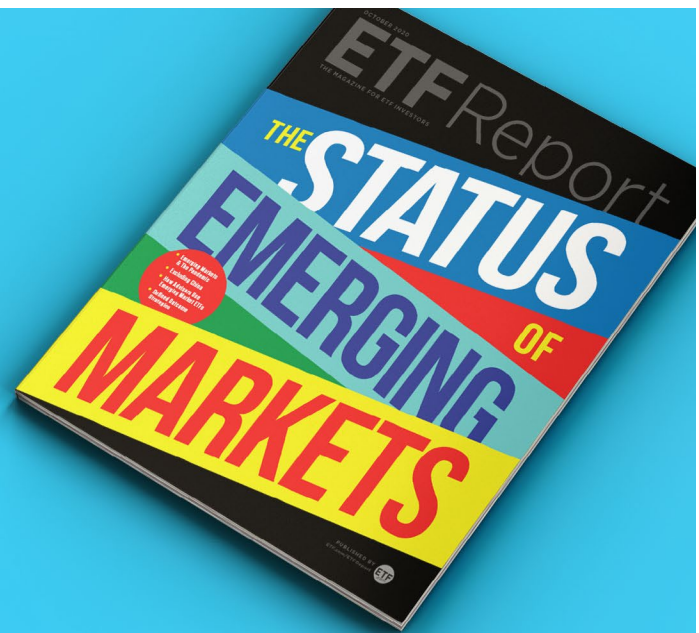


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